

REFUELING LEVEL
FLOOR EL. 228'-0"

Version: 9.0 | Date: 4/8/19

REVISED PER ABN
SN435914E159, VER. 1.0

REV	DATE	BY	CHKD	DESCRIPTION
1	06/22/70	JLO	RAW	CYN

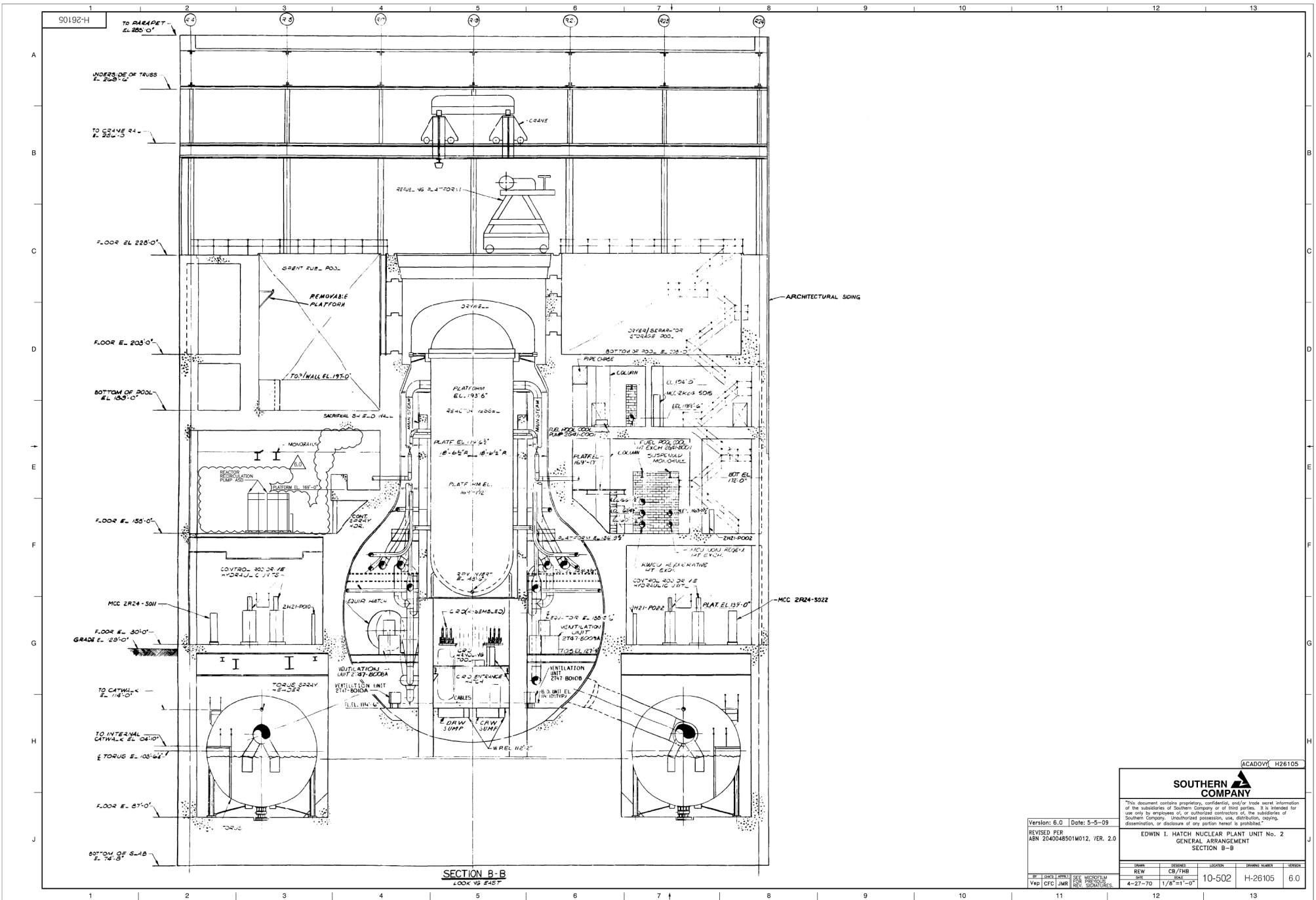
OWNER	DESIGNER	LOCATION	ISSUING NUMBER	SCALE
REW	FHB	10-502	H-26103	9.0

ACADOVY H26103

SOUTHERN COMPANY

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EDWIN I. HATCH NUCLEAR PLANT UNIT No. 2
GENERAL ARRANGEMENT
REACTOR BUILDING PLAN EL. 228'-0"

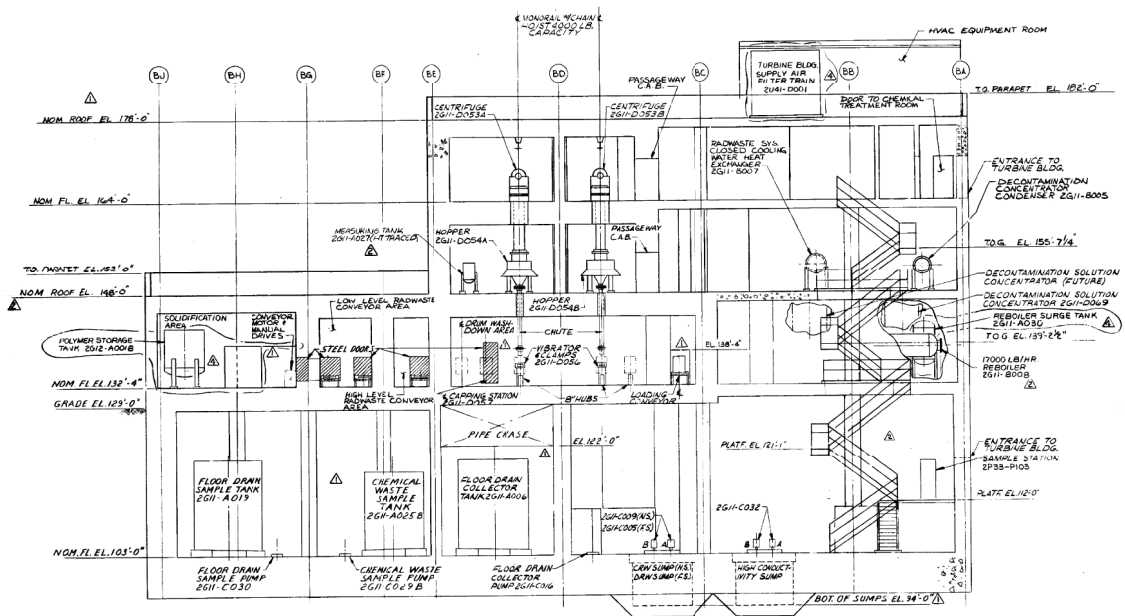


ACAD00V H26105

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Version: 6.0		Date: 5-5-09	
REVISED PER: BEN 2040048501M012, VER. 2.0			
EDWIN I. HATCH NUCLEAR PLANT UNIT No. 2 GENERAL ARRANGEMENT SECTION B-B			
DRAWN	DESIGNED	LOCATION	DRAWING NUMBER
REV	BY/DATE	SCALE	SHEET
10-502	H-26105	1/8"=1'-0"	6.0
BY: JCF/JMR	SEE MICROFILM FOR PREVIOUS REV. SIGNATURES		



ELEVATION C-C
LOOKING SOUTH

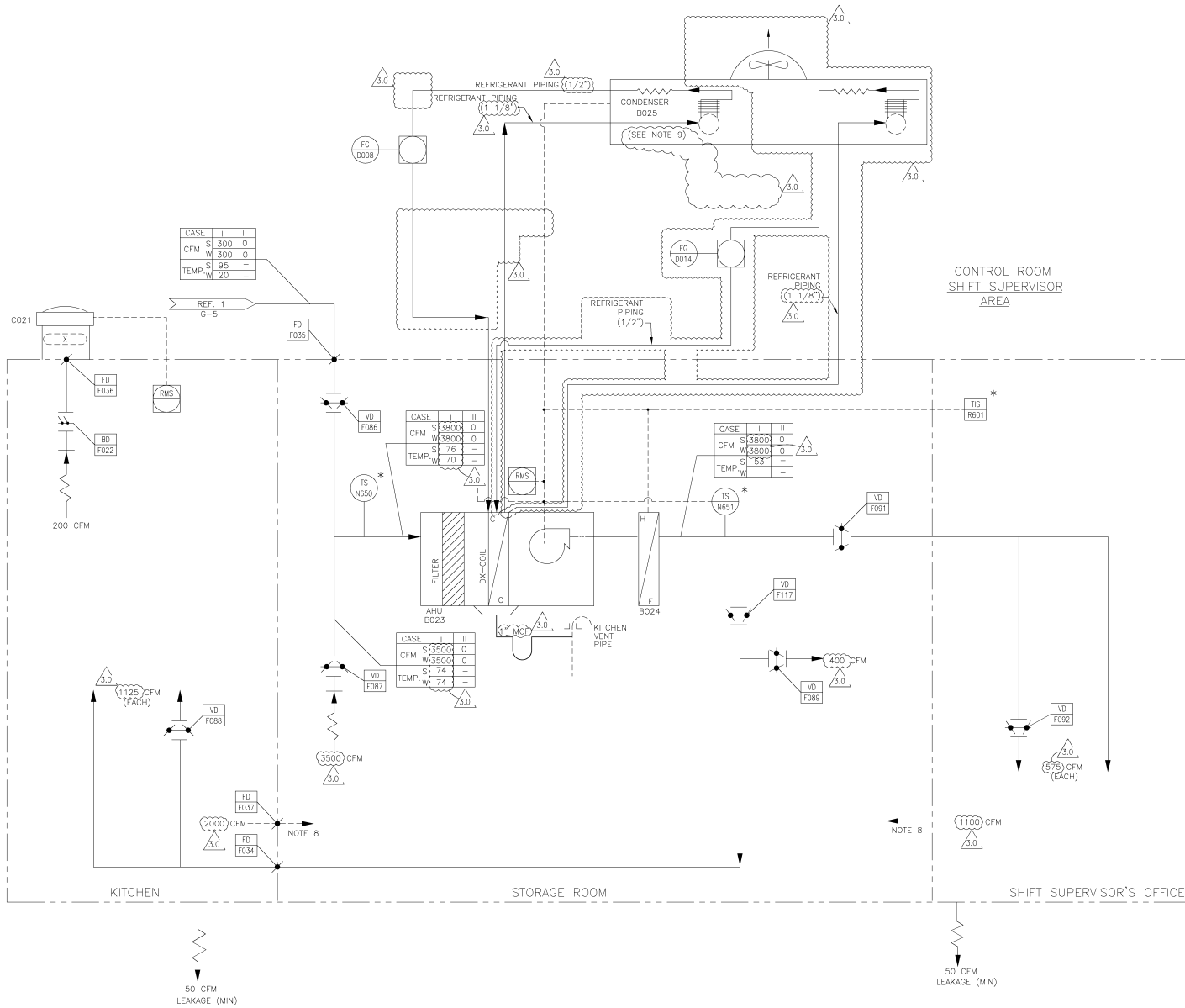
RICHEL ASSOCIATES JOB 6511	
SOUTHERN SERVICES INC. FOR	
GEORGIA POWER CO., ATLANTA, GA. GENERAL ENGINEERING DEPARTMENT	
EDWIN L. HATCH NUCLEAR PLANT UNIT N.R. 2 GENERAL ARRANGEMENT RADWASTE BUILDING SECTION 'C-C'	
DRAWN BY <i>[Signature]</i>	CHECKED BY <i>[Signature]</i>
DATE 10-5-62	SCALE 1/8" = 1'-0"
LOCATION 10-502	SHEET NO. H-26106

NOTES

- ALL EQUIPMENT AND INSTRUMENT NUMBERS ON THIS DRAWING PRECEDED BY 241.
- DESCRIPTION OF CASES: I NORMAL MODE II EMERGENCY MODE
- ALL CFM FLOW VALUES DEPICTED ARE DESIGN FLOW VALUES. FLOW VALUES LESS THAN OR EQUAL TO DEPICTED FLOWS ARE ACCEPTABLE IF MEASURED TEMPERATURE IS LESS THAN DESIGN RM TEMP OF 72 DEG. F.
- DUCTING TO BE WELDED CONSTRUCTION UP TO FD-F035
- DELETED
- FURNISHED WITH ASSOCIATED EQUIPMENT.
- DELETED
- RETURN AIR PENETRATES WALL THROUGH OPENING LOCATED ABOVE THE DROP CEILING. RETURN AIR ENTERS CEILING SPACE THROUGH REGISTERS
- HEAD PRESSURE CONTROL KIT PROVIDED FOR LOW AMBIENT COOLING.

REFERENCES

- | TITLE | MPL No. | DWG. |
|--|----------|---------|
| 1. CONTROL BLDG. - CONTROL & CABLE SPREADING ROOMS A.C. P&ID | Z41-1050 | H-16042 |
| 2. DELETED | | |
| 3. CONTROL BLDG. - CABLE SPREADING ROOM EL. 147'-0" A/C PROCESS FLOW DIAGRAM | Z41-1090 | H-16046 |
| 4. CONTROL ROOM SHIFT SUPERVISOR OFFICE HVAC - PLANS & SECTION | | H-26117 |



CONTROL ROOM
SHIFT SUPERVISOR
AREA

CRITICAL DOCUMENT

MPL NO. Z41-1010 (ACA02016) H26116



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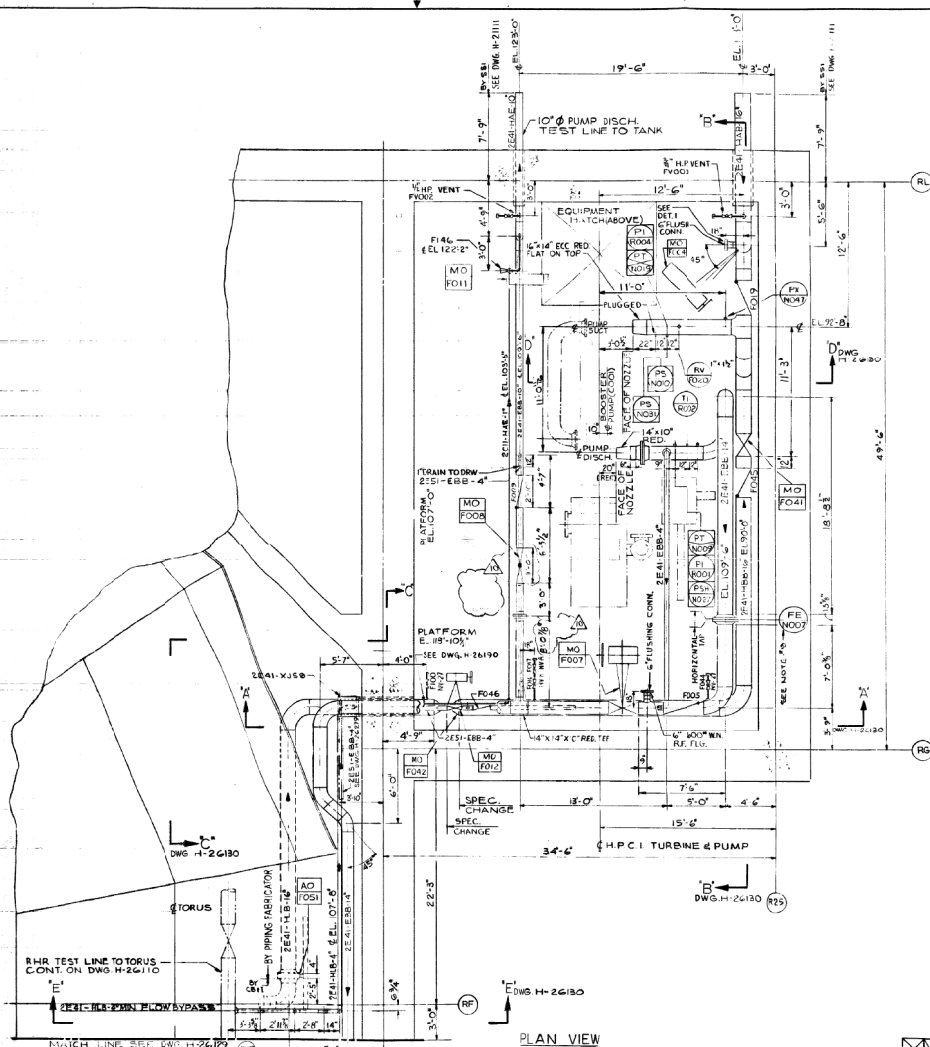
EDWIN I. HATCH NUCLEAR PLANT UNIT No. 1 & 2
CONTROL ROOM SHIFT SUPERVISOR'S AREA
H.V.A.C. P&ID & P.F.D.

Version: 3.0 Date: 04/22/19

REVISED PER:
SNC106319M012, VER 3.0

BY	DATE	APP.
GTR	JRC	BOW

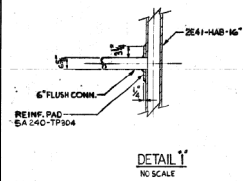
DESIGN	DESIGNED	LOCATION	DESIGN NUMBER	VERSION
DGA	KRL	10-502	H-26116	3.0
DATE	SCALE			
10/27/81	None			



- NOTES**
1. ALL EQUIPMENT AND VALVE NUMBERS ARE PRECEDED BY MPL NO. 2.41 UNLESS OTHERWISE NOTED.
 2. FOR WEIGHT AND MATERIAL OF PIPE, VALVE, AND FITTINGS, SEE MATERIAL SPECIFICATION DWG. C.S. 200-1.
 3. FOR PIPING AND INSTRUMENT DIAGRAMS THE SYSTEM SEE DWGS. H-2600 AND H-2602.
 4. UNLESS NOTED OTHERWISE NO ALLOWANCE HAS BEEN MADE FOR WELDED JOINTS AND GASKETS.
 5. SUITABLE HANGERS, ANCHORS, AND SUPPORTS, ARE TO BE PROVIDED BY THE PIPING CONTRACTOR AND WILL BE INSTALLED TO ELIMINATE VIBRATION AND PREVENT EXCESSIVE STRESSES IN THE PIPING AND DISTORTION IN CONNECTED EQUIPMENT.
 6. ALL PIPING 2\"/>
9. ORIFICE FLANGES 2E41-1007 WILL BE PROVIDED BY GE.

REFERENCES

REFERENCE DWG.	MPL NO.	S.S. NO.
1. H.P.C.I. SYS. P&ID SHT 1 2E41-100	H-26020	H-26020
2. H.P.C.I. SYS. P&ID SHT 2 2E41-100	H-26021	H-26021
3. PENETRATIONS BELOW BL 180'-0\"/>		



REV. TO DATE 3-31-83
 REVISED PER WCN 91063-002

BY: [Signature]
 DATE: 12-11-82

NO.	DESCRIPTION	DATE	BY	CHECKED
1	ISSUED FOR CONSTRUCTION	12-11-82	[Signature]	[Signature]
2	REVISION			
3	REVISION			
4	REVISION			
5	REVISION			
6	REVISION			
7	REVISION			
8	REVISION			
9	REVISION			
10	REVISION			
11	REVISION			
12	REVISION			

WORK THIS DWG. WITH DWGS. H-26129, H-26130, H-26131, H-26132, H-26133, H-26134, H-26135, H-26136, H-26137, H-26138, H-26139, H-26140, H-26141, H-26142, H-26143, H-26144, H-26145, H-26146, H-26147, H-26148, H-26149, H-26150, H-26151, H-26152, H-26153, H-26154, H-26155, H-26156, H-26157, H-26158, H-26159, H-26160, H-26161, H-26162, H-26163, H-26164, H-26165, H-26166, H-26167, H-26168, H-26169, H-26170, H-26171, H-26172, H-26173, H-26174, H-26175, H-26176, H-26177, H-26178, H-26179, H-26180, H-26181, H-26182, H-26183, H-26184, H-26185, H-26186, H-26187, H-26188, H-26189, H-26190, H-26191, H-26192, H-26193, H-26194, H-26195, H-26196, H-26197, H-26198, H-26199, H-26200.

DECHTEL ASSOCIATES JOB 6511	
SOUTHERN SERVICES INC. FOR	
GEORGIA POWER CO., ATLANTA, GA. GENERAL ENGINEERING DEPARTMENT	
DRAWN: HATCH NUCLEAR PLANT UNIT NO. 2 H.P.C.I. SYSTEM-PLAN VIEW 4.001 R.C.M. 3 REACTION BLDG-EAST	
SCALE: 1/8\"/>	DATE: 12-11-82
LOCATION: 10-51-2	SHEET NO.: H-26128

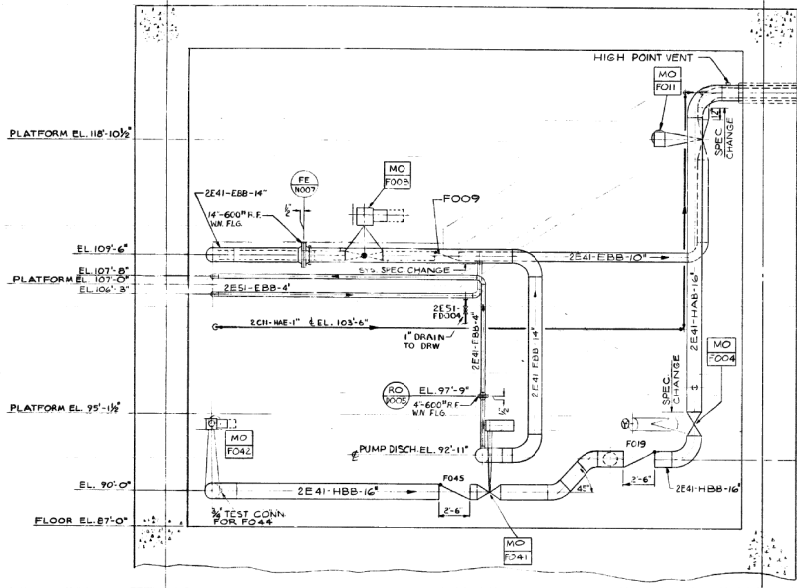
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RG

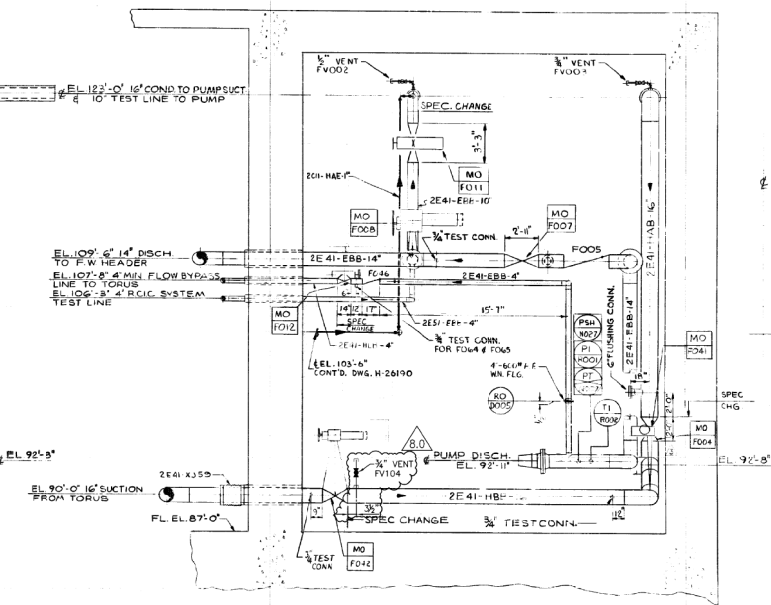
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R24

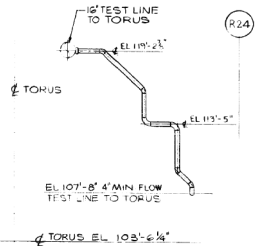
R25



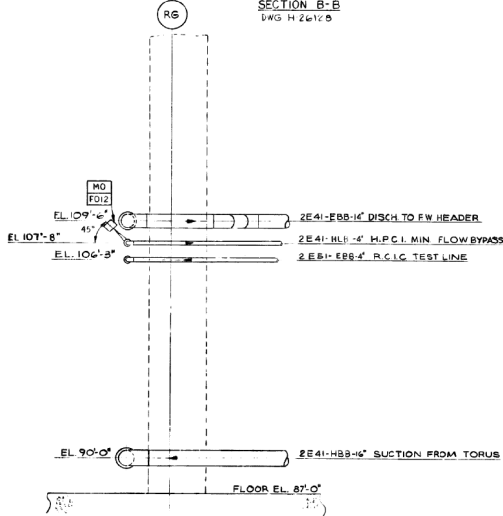
SECTION B-B
DWG H-2612B



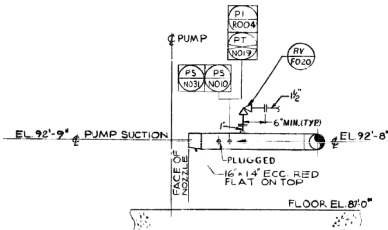
SECTION A-A
DWG H-2612B



SECTION E-E
DWG H-2612B



SECTION C-C
DWG H-2612B



SECTION D-D
DWG H-2612B

FOR NOTES REFERENCES SEE DWG H-2612B

WORK THIS DWG WITH DWGS H-2612B, H-2612C, H-2613A, H-2627A, H-2627S & H-2627E

ACAD004 H26130

SOUTHERN COMPANY

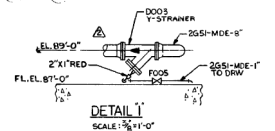
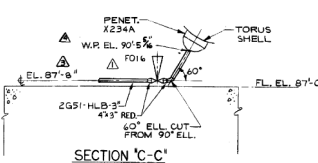
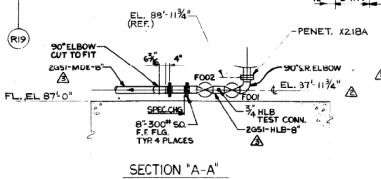
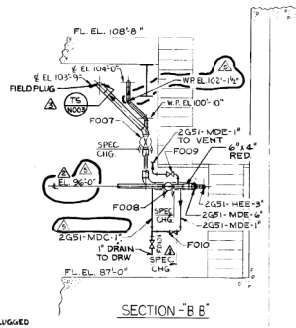
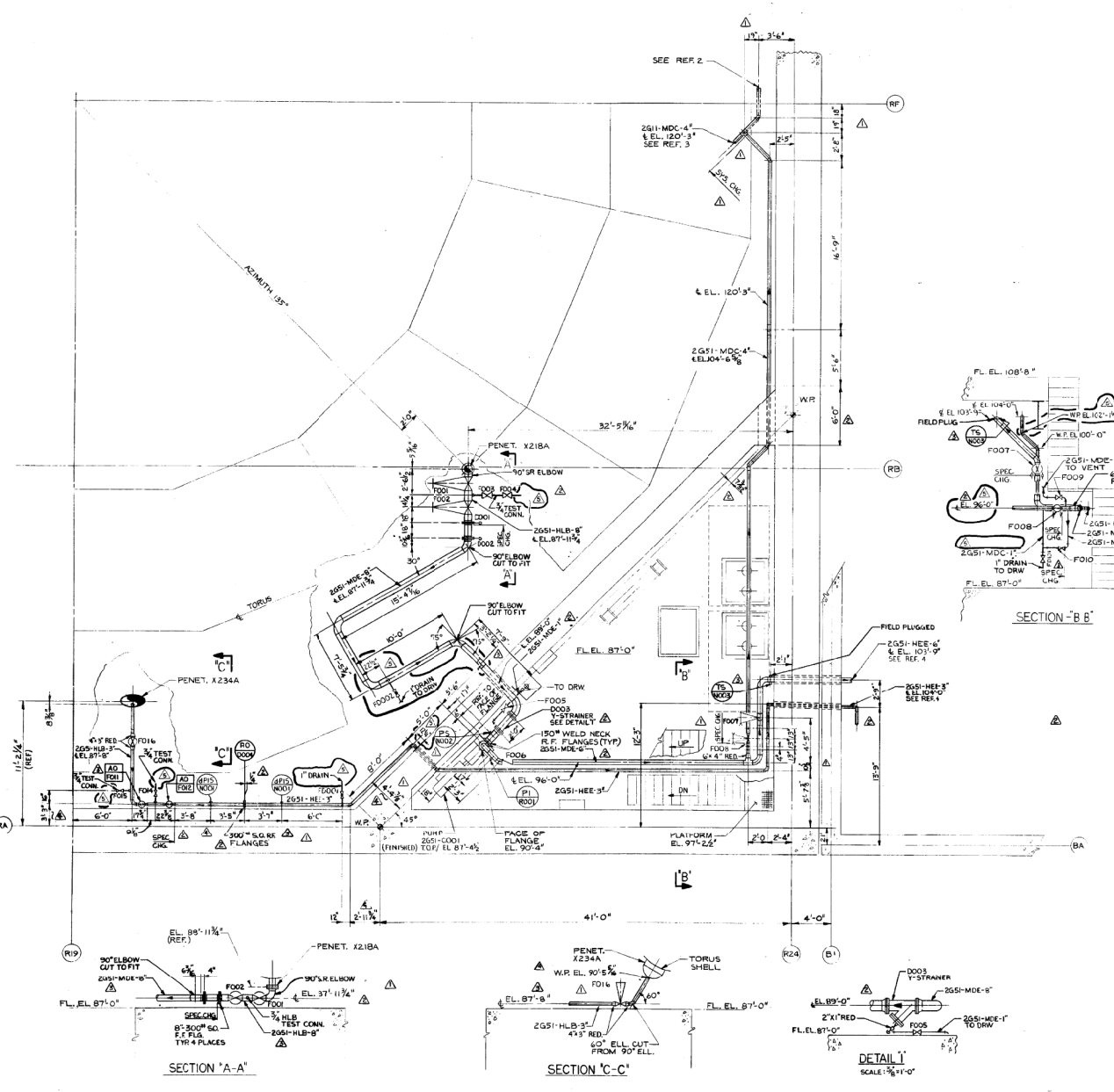
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EDWIN I. HATCH NUCLEAR PLANT UNIT No. 2
H. P. C. I SYSTEM
SECTIONS

Version: 8.0 Date: 05/01/09
REVISED PER AEN 2081711101M014, VER. 0

DATE	ISSUED	LOCATION	ISSUE NUMBER	ISSUED
None	None	None	None	None
None	None	10-502	H-26130	8.0

DRW JWM JMR FOR PRODUCTION REV SIGNATURES



1. ALL EQUIPMENT AND VALVE NUMBERS ARE PRECEDED BY MPL NO. ZG51 UNLESS OTHERWISE NOTED.
2. FOR WEIGHT AND MATERIAL OF PIPE, VALVES AND FITTINGS, SEE MATERIAL SPECIFICATION 15-2108-1.
3. FOR PIPING AND INSTRUMENT DIAGRAM THIS SYSTEM SEE DRAWING H-26042.
4. UNLESS OTHERWISE INDICATED NO ALLOWANCE HAS BEEN MADE FOR WELDED JOINTS AND GASKETS.
5. SUITABLE HANGERS, ANCHORS, AND SUPPORTS ARE TO BE PROVIDED BY PIPING CONTRACTOR AND WILL BE INSTALLED TO ELIMINATE VIBRATION.
6. ALL PIPING 2" AND UNDER WILL BE FIELD RUN FROM THE FIELDS. THOSE SHOWN ARE ONLY DIAGRAMATIC, EXCEPT WHERE SPECIFICALLY LOCATED USE BENDS WHEREVER POSSIBLE TO ELIMINATE FITTINGS.
7. WHERE G.V. NUMBERS ARE USED THE VALVES ARE TO BE TAGGED WITH THESE NUMBERS; WHERE G.V. NUMBERS ARE NOT USED THE VALVES ARE TO BE TAGGED WITH THE MPL NUMBER.

REFERENCES

REFERENCE DWG.	MPL NO.	SSI. NO.
1. TORUS DRAINAGE & PURIFICATION SYSTEM P.I.D. AND P.F.D.	ZG51-1010/020	H-26042
2. R.H.R. SYSTEM PLAN BELOW EL. 130'-0"		H-26110
3. REACTOR BLDG. CLOSED COOLING WATER SYS. BELOW EL. 130'-0"		H-26132
4. RADWASTE BLDG. PIPING AREA NO. 4 PLAN BELOW EL. 132'-4"		H-26347

NO.	DATE	BY	CHKD.	APP'D.	REVISION
1					ISSUED AS NOTED
2					REVISIONS TO BE MADE AS NOTED
3					REVISIONS TO BE MADE AS NOTED
4					REVISIONS TO BE MADE AS NOTED

BECHTEL
 JOB 8511 GAITHERSBURG, MARYLAND
 SOUTHERN SERVICES INC.
 FOR
 GEORGIA POWER CO., ATLANTA, GA.
 GENERAL ENGINEERING DEPARTMENT
 EDWIN HATCH NUCLEAR PLANT UNIT NO. 2
 TORUS DRAINAGE & PURIFICATION SYSTEM

DATE: 11/20/78
 DRAWING NUMBER: H-26142
 SHEET NO: 10 502

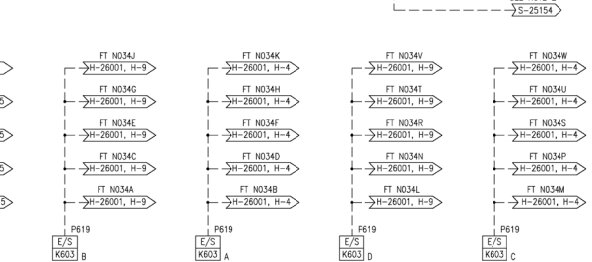
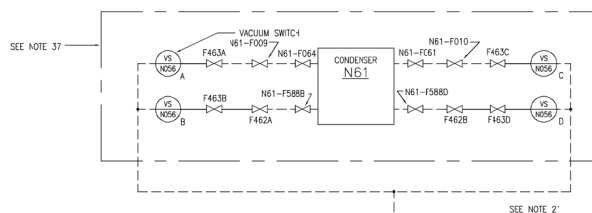
TABLE 6

JET PUMP	ISOLATION VALVE	EFCV	DRAIN VALVE
J1	F058B	F059B	F099B
J2	F058D	F059D	F099D
J3	F058F	F059F	F099F
J4	F058H	F059H	F099H
J5	F058B	F059B	F099B
J6	F058M	F059M	F099M
J7	F058P	F059P	F099P
J8	F058S	F059S	F099S
J9	F058U	F059U	F099U
J10	F058D	F059D	F099D
J11	F058A	F059A	F099A
J12	F058C	F059C	F099C
J13	F058E	F059E	F099E
J14	F058G	F059G	F099G
J15	F058A	F059A	F099A
J16	F058L	F059L	F099L
J17	F058N	F059N	F099N
J18	F058R	F059R	F099R
J19	F058T	F059T	F099T
J20	F058C	F059C	F099C
	F052C	F053C	F095C

TABLE 5

TYPE T THERMOCOUPLE TAG NO'S

2821-N028A	2821-N030D
2821-N028B	2821-N030E
2821-N028C	2821-N030F
2821-N028D	2821-N030G
2821-N028E	2821-N030H
2821-N028F	2821-N030I
2821-N028G	2821-N030J
2821-N030A	2821-N030B
2821-N030B	2821-N030C
2821-N030C	2821-N030D



- SAMPLE PROBE(S) AND FEEDWATER SAMPLE STATION TO COMPLY WITH REF. 20, WATER SAMPLING SECTION 8.
- ALTERNATE TAP SET ON FEEDWATER FLOW ELEMENT.
- TRIP RECORD PUMP (REF. 21).
- LOW CONDENSER VACUUM SWITCHES CONNECTED THROUGH SEPARATE CALIBRATION VALVS. TO OPPOSITE SIDES OF THE CONDENSER ABOVE THE HIGH CONDENSATE LEVEL. THE VACUUM SWITCHES MUST BE ACCESSIBLE DURING PLANT OPERATION.
- AN ORIFICE (1/4" MIN.) IS TO BE PROVIDED WITHIN THE PRIMARY CONTAINMENT IN EACH INSTRUMENT LINE WHICH CONNECTS TO THE REACTOR COOLANT PRESSURE BOUNDARY. TO BE 3/4" INSTALLED IN A STRAIGHT RUN OF PIPE AS FAR AS POSSIBLE FROM ELBOWS, ETC. AND LOCATED SO THAT 2" IS FROM THE TAPS TO THE VESSEL SURFACE. TAPS TO MEET ASME PTC 6, 1964 STEAM TURBINE PARA. 4.74. TWELVE WIRES ARE TO BE PROVIDED PENETRATING THE DRYWELL FOR READOUT OF TEMPORARY PRESSURE TRANSMITTERS DURING START-UP.
- SOLENOID VALVE F113 IS LOCATED IN H.P. CONNECTION OF SENDING LINE TO 2821-FT-N033C ONLY.
- COMPUTER INPUT TO SOLENOID VALVE FOR AUTOMATIC CONTROL.
- DELETED.
- THE AIR ACCUMULATOR AND AIR LINE VALVS ASSOCIATED WITH EACH SAFETY RELIEF VALVE ARE ASSIGNED THE SAME SUFFIX AS THE SAFETY RELIEF VALVE.
- FOR TRIP SETTINGS-SEE RHP-2 INSTRUMENT SETPOINT INDEX.
- INITIATE CLOSURE OF RECIRCULATION PUMP DISCHARGE VALVE.
- RHR PERMISSIVE (SHUTDOWN COOLING MODE)
- SCRAM (REF. 18) AND CLOSE PRIMARY CONTAINMENT ISOLATION SYSTEM (POS) VALVS EXCEPT FOR THE FOLLOWING:
 - MSV'S
 - MSL DRAW ISOLATION VALVES
 - REACTOR WATER SAMPLE ISOLATION VALVES
 - RWCU ISOLATION VALVES
- DELETED
- THE FOLLOWING DRAIN VALVES ARE ON THE CORRESPONDING ACCUMULATORS: 2821-F448-----2821-A002A
2821-F451-----2821-A002B
2821-F454-----2821-A002C
2821-F457-----2821-A002D
- INITIATES ARI SYSTEM (REF. 1)
- B21-N024A & B AND B21-N025A & B ARE LOCAL REACTOR LEVEL INDICATORS ONLY.
- INITIATES LIS
- ELECTRICAL CONNECTIONS ARE NOT UTILIZED IN EXCESS FLOW CHECK VALVES F342A, B
- VALVES 2821-F011A AND 2821-F011B ARE NOT TO BE ISOLATED UNLESS 2C11-F072 AND 2C11-F082 ARE ISOLATED.
- SYSTEM 2E32 HAS BEEN ABANDONED IN PLACE. 2E32 COMPONENTS SHOWN ON THIS DRAWING HAVE BEEN ELECTRICALLY AND MECHANICALLY DISABLED.

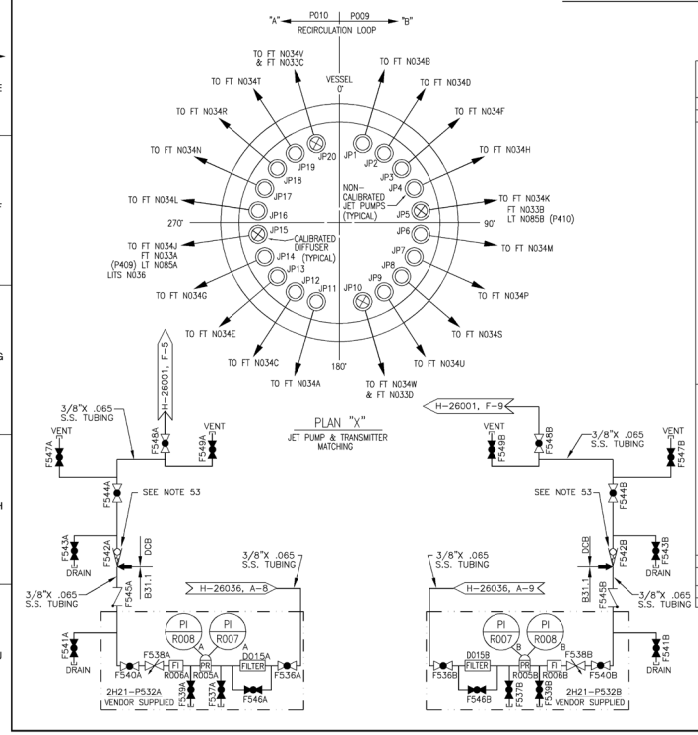


TABLE 2
ELEVATION CORRELATION CHART (SEE NOTE 5)

REFERENCE	(COLD VESSEL) INCHES ABOVE VESSEL ZERO	DESCRIPTION OF TRIPS	INSTRUMENT (S) PROVIDING TRIP	REACTOR VESSEL LEVEL (2821-28213)	INDICATED LEVEL (NOTE 44)
NOZZLE N3A, B, C, D	640.0				
NOZZLE N12A, B	586.75				
FEEDWATER SYSTEM & REACTOR PROTECTION SYSTEM FULL SCALE	577.2	1. TRIP HPCI TURBINE 1. TRIP RCIC TURBINE 1. TRIP REACTOR FEED PUMPS 2. CLOSE MAIN TURBINE STOP VALVES	LS N693B LS N693D LS N693A LS N693C 2C32-FY-K624A-C		+60 +60
FEEDWATER SYSTEM & REACTOR PROTECTION SYSTEM INSTRUMENT ZERO BOTTOM OF UPPER SKIRT	517.2	1. HIGH LEVEL ALARM 1. NORMAL LEVEL 1. LOW LEVEL ALARM 1. SCRAM 2. CLOSE POS VALVES (SEE NOTE 47) 3. CLOSE RHR SHUTDOWN COOLING ISOLATION VALVES 1. AUTO DEPRESSURIZATION SYS. (ADS) PERMISSIVE	2C32-L/PR-6E08 FEEDWATER LEVEL CONT. SYS. 2C32 LS-N680A-D LS-N695A, B		+37.0 +37.0
NOZZLE N11A, B	509.0	1. INITIATE HPCI 2. INITIATE RCIC 3. INITIATE ATWS-ARI	LS N692A-D		0 0
REACTOR PROTECTION SYSTEM FULL SCALE	367.0	1. CLOSE RWCU ISOL VALVES 2. START SBRT SYSTEM 3. CLOSE REACTOR BLDG. VENTILATION SYSTEM DAMPERS	LS N682A-D LS N694A-D		RPT
NOZZLE N16A,B	358.0	1. INITIATE RHR SYSTEM 2. INITIATE CORE SPRAY SYSTEM 3. CONTRIBUTE TO ADS 4. START STANDBY DIESEL	LS N681A-D		1
TOP OF ACTIVE FUEL	358.55	1. CLOSE MSV'S 2. CLOSE MSL DRN ISOL VALVES 3. CLOSE REACTOR WATER SAMPLE ISOL VALVES	LS N681A-D		-150.0
LOWER JET PUMP TAP	143.0				
NOZZLE N8A,B	132.0	1. CONTAINMENT SPRAY PERMISSIVE	LS N685A,B		0

- IN SUPPORT OF AST (10CFR50.67), THE HIGHLIGHTED EQUIPMENT, PIPING AND ASSOCIATED SUPPORTS HAVE BEEN REVIEWED AS MECHANICALLY ADEQUATE FOR HATCH U2 1/2 SIZE EXHAUSTIVE TO THE EXTENT REQUIRED TO PERFORM THEIR REQUIRED SAFETY FUNCTION. FUTURE REPAIRS OR MODIFICATIONS SHOULD BE PERFORMED IN A MANNER WHICH MAINTAINS THIS SEISMIC QUALIFICATION. REFERENCE ENCLOSURE 10 OF N-50-167.
- FOR REFERENCES SEE DWG. H-26000 (SHT. 1) AND H-26001 (SHT. 2).
- THIS DWG. DEVELOPED FROM G.E. DWG. NO. 761E2508A REV. 6, SHT. 1 & 2.

CRITICAL DOCUMENT
MPL NO. 2821-1010 [ACAD2010] H26189

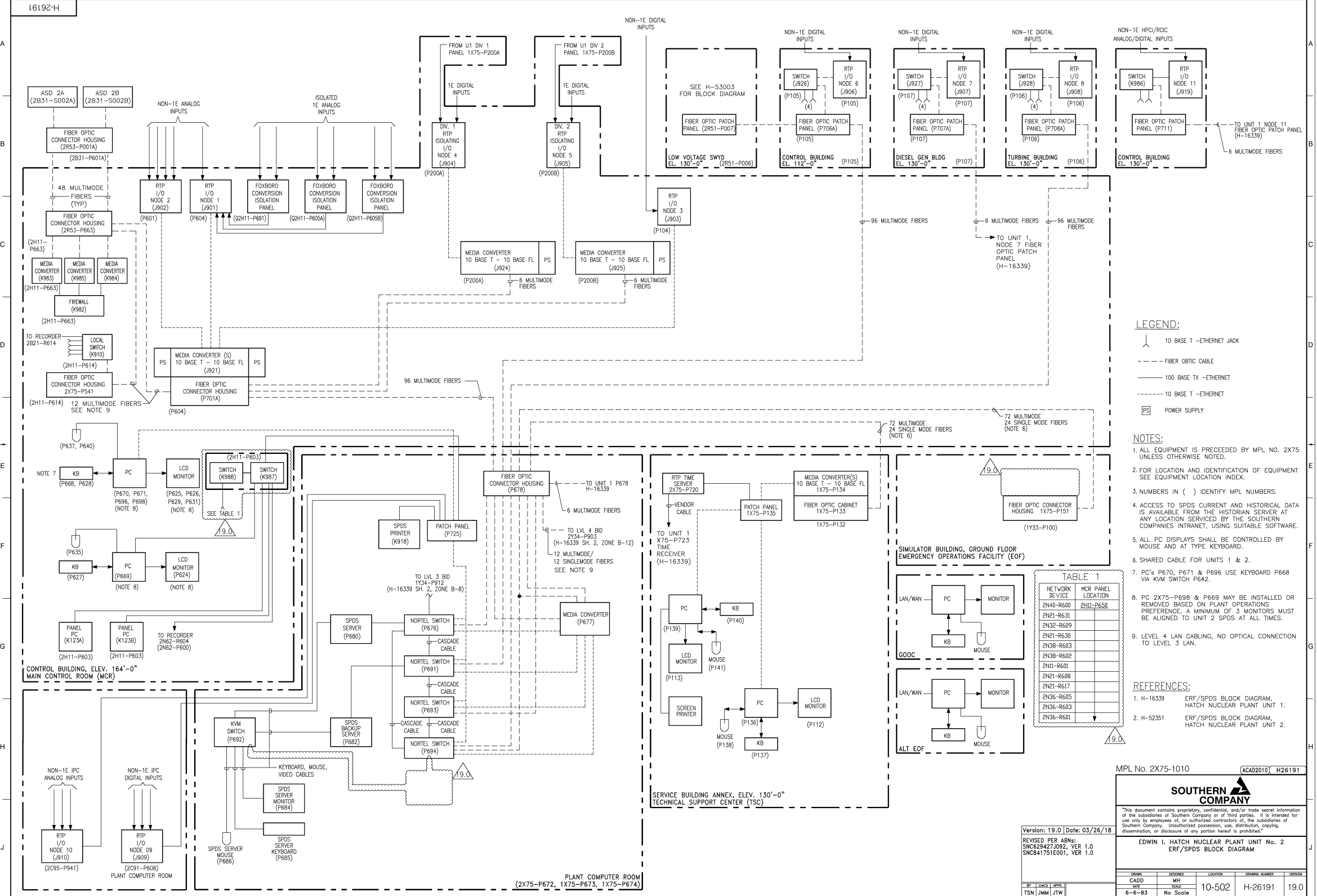
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Version: 23.0 | Date: 05/04/20
REVISED PER ASN SNC1043161MOD1, VER 1.0/0

NO.	DATE	BY	REASON	LOCATION	DRAWING NUMBER	VERSION
1	05/04/20	HP	LC	LC	10-502	H-26-89
2	07-63	HP	LTZ	None		23.0

EDWIN I. HATCH NUCLEAR PLANT UNIT No. 2
NUCLEAR BOILER SYSTEM P&ID
SHEET 3



LEGEND:

- 10 BASE T - ETHERNET JACK
- FIBER OPTIC CABLE
- 100 BASE TX - ETHERNET
- 10 BASE T - ETHERNET
- POWER SUPPLY

NOTES:

1. ALL EQUIPMENT IS PRECEDED BY MPL NO. 2X75 UNLESS OTHERWISE NOTED.
2. FOR LOCATION AND IDENTIFICATION OF EQUIPMENT SEE EQUIPMENT LOCATION INDEX.
3. NUMBERS IN () IDENTIFY MPL NUMBERS.
4. ACCESS TO SPDS CURRENT AND HISTORICAL DATA IS AVAILABLE FROM THE HISTORIAN SERVER AT ANY LOCATION SERVICED BY THE SOUTHERN COMPANIES INTRANET, USING SUITABLE SOFTWARE.
5. ALL PC DISPLAYS SHALL BE CONTROLLED BY MOUSE AND AT TYPE KEYBOARD.
6. SHARED CABLE FOR UNITS 1 & 2.
7. PC'S P670, P671 & P696 USE KEYBOARD P668 VIA KVM SWITCH P642.
8. PC 2X75-P698 & P669 MAY BE INSTALLED OR REMOVED BASED ON PLANT OPERATIONS PREFERENCE. A MINIMUM OF 3 MONITORS MUST BE ALIGNED TO UNIT 2 SPDS AT ALL TIMES.
9. LEVEL 4 LAN CABLING, NO OPTICAL CONNECTION TO LEVEL 3 LAN.

REFERENCES:

1. H-16339 ERF/SPDS BLOCK DIAGRAM, HATCH NUCLEAR PLANT UNIT 1.
2. H-52351 ERF/SPDS BLOCK DIAGRAM, HATCH NUCLEAR PLANT UNIT 2.

TABLE 1

NETWORK DEVICE	MCR PANEL LOCATION
2N40-R600	2H11-P650
2N21-R631	
2N32-R609	
2N21-R630	
2N38-R603	
2N38-R602	
2N11-R601	
2N21-R608	
2N21-R617	
2N36-R605	
2N36-R603	
2N36-R601	

MPL No. 2X75-1010 ACAD2010 H26191



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EDWIN I. HATCH NUCLEAR PLANT UNIT No. 2
ERF/SPDS BLOCK DIAGRAM

Version: 19.0 | Date: 03/26/18
REVISED PER ABNs:
SNC622427J092, VER 1.0
SNC841751E001, VER 1.0

DATE	DESIGNED	LOCATION	DRAWING NUMBER	VERSION
CADD	MH	10-502	H-26191	19.0
DATE	SCALE	6-6-83	No Scale	

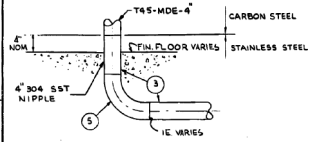
BY: JMM | JTW
TSN:

PLANT COMPUTER ROOM
(2X75-P672, 1X75-P673, 1X75-P674)

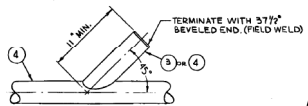
CONTROL BUILDING, ELEV. 164'-0"
MAIN CONTROL ROOM (MCR)

SIMULATOR BUILDING, GROUND FLOOR
EMERGENCY OPERATIONS FACILITY (EOF)

SERVICE BUILDING ANNEX, ELEV. 130'-0"
TECHNICAL SUPPORT CENTER (TSC)

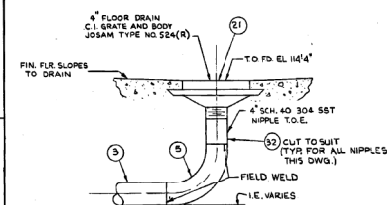


DETAIL 1
NO SCALE
CLOSED DRAINS ONLY
3 REQ'D - DRW
6 REQ'D - CRW

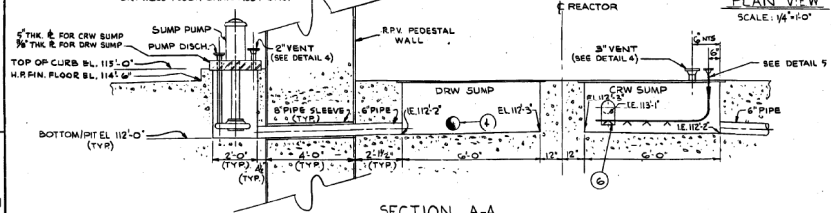


DETAIL 2
NO SCALE
TYPICAL BRANCH STUB-IN

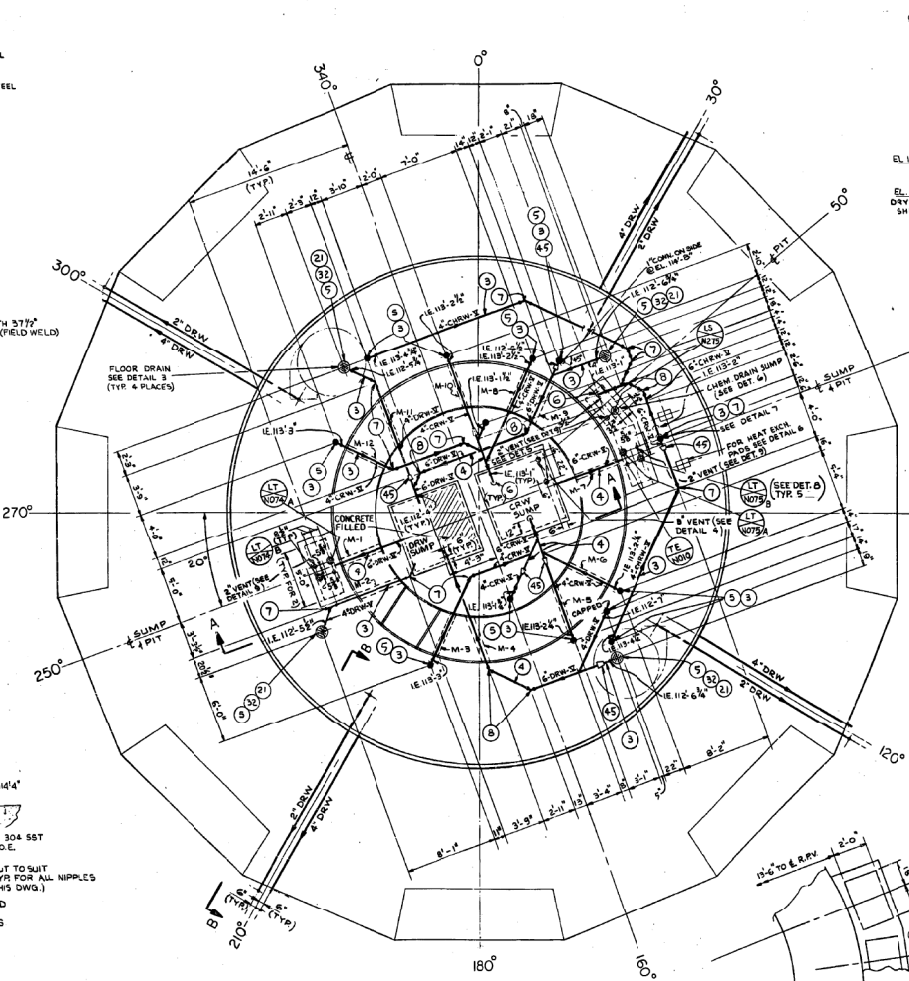
MARK	INNER (OUTER)	AXIAL W/TH	OFFSET	BELLE DIA
M-1	112-3/4"	112-3/4"	230"	2"
M-2	112-3/4"	112-3/4"	230"	2"
M-3	113-5/8"	113-5/8"	205"	-11-7/8"
M-4	112-7/8"	112-7/8"	160"	+41-0"
M-5	113-3/8"	113-3/8"	160"	-21-0"
M-6	113-3/8"	113-3/8"	115"	+11"
M-7	112-4 1/4"	112-3 3/4"	70"	-
M-8	113-3/8"	113-3/8"	25"	-11-5"
M-9	112-3/4"	112-3/4"	25"	+10"
M-10	113-3/8"	113-3/8"	340"	+2-0"
M-11	112-3/8"	112-7/8"	340"	-41-0"
M-12	113-4 1/2"	113-5"	295"	-0"



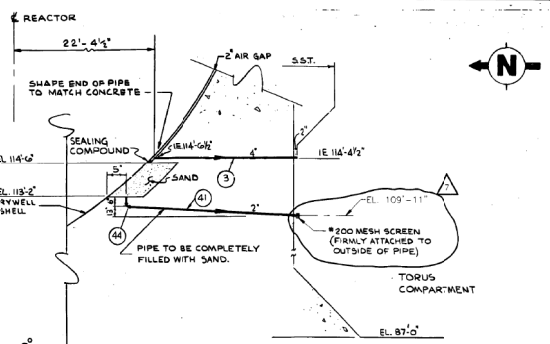
DETAIL 3
NO SCALE
DRYWELL FLOOR DRAIN ASSY ONLY



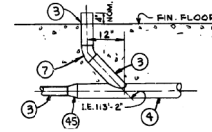
SECTION A-A
SCALE: 1/2" = 1'-0"



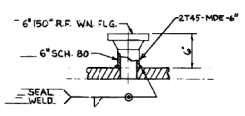
PLAN VIEW
SCALE: 1/4" = 1'-0"



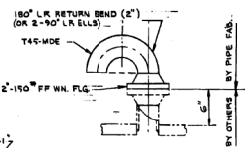
SECTION B-B
SCALE: NON IS
TYPICAL 4 PLACES



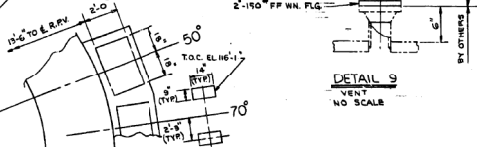
DETAIL 7
NO SCALE



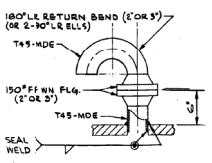
DETAIL 8
NO SCALE



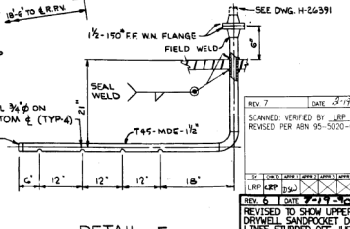
DETAIL 9
NO SCALE



DETAIL 6
CHEMICAL DRAIN SUMP
NO SCALE



DETAIL 4
VENT
NO SCALE



DETAIL 5
HEAT EXCHANGER RETURN SPARGER
NO SCALE

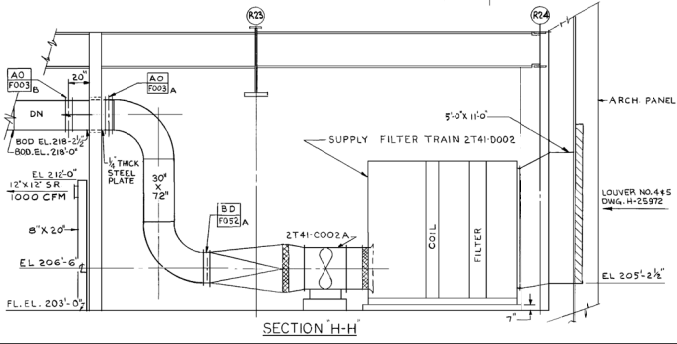
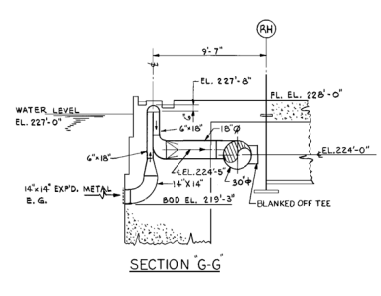
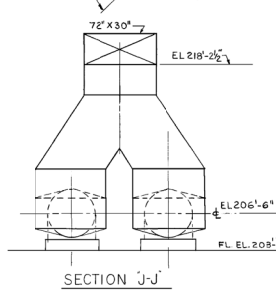
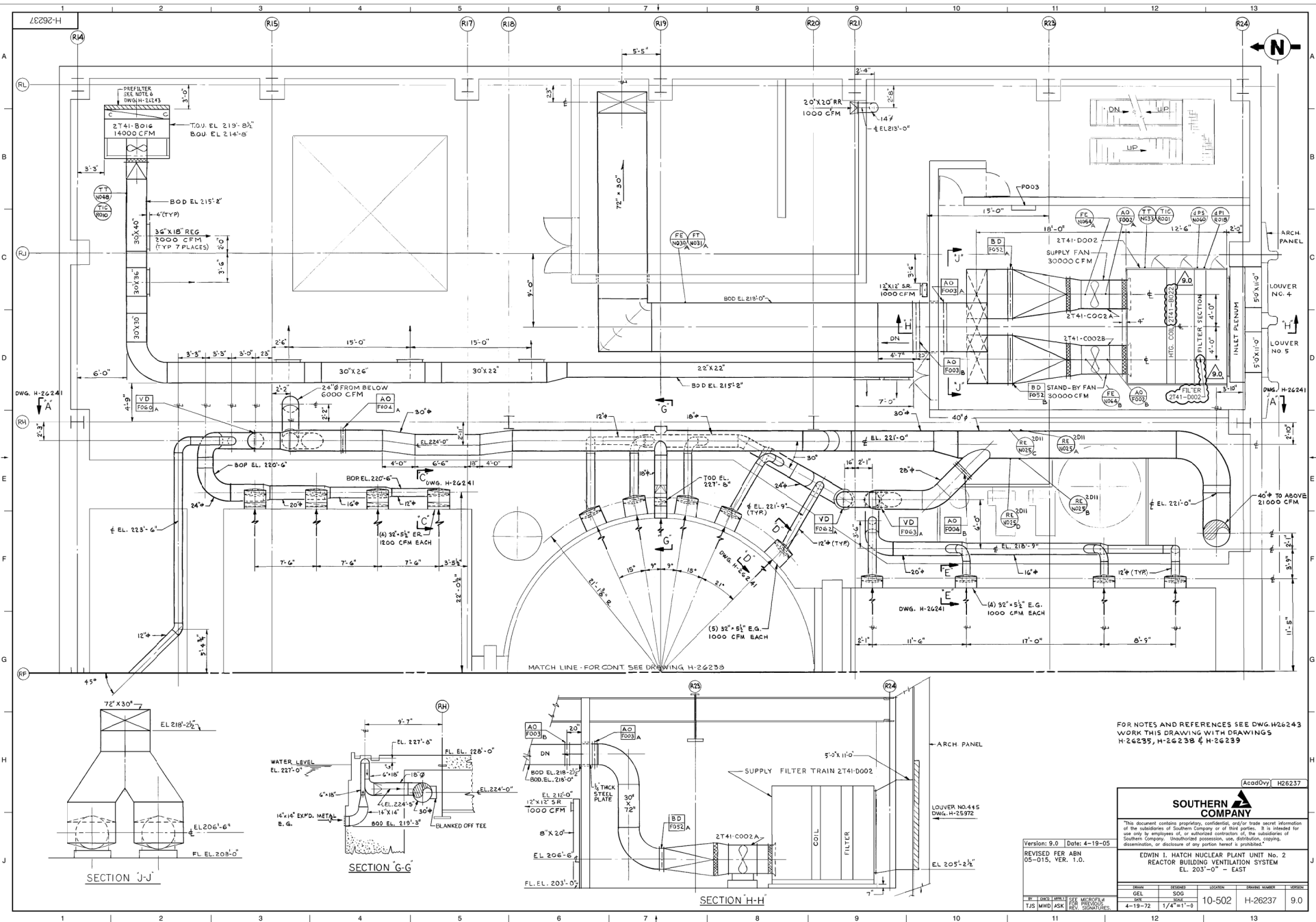
NOTES:
1. ALL DRAINAGE LINES 4" LARGER SHALL HAVE A MINIMUM UNIFORM SLOPE OF 1/8" PER FOOT.
2. TOP OF ALL FLOOR DRAINS EL. 114'-4".
3. ROMAN NUMERAL SHOWN WITH LINE NUMBER INDICATES THE RADIATION ZONE BEING SERVED BY THAT LINE. ZONE II > 100 MR/HR.
4. MINOR INTERFERENCES BETWEEN DRAIN LINES AND STRUCTURAL REINFORCING MAY BE RESOLVED BY MOVING BARS UP TO 3/8" EITHER WAY.
5. ALL EMBEDDED PIPING AND FITTINGS DESIGNATED BY MARK NUMBERS ARE FURNISHED BY GEORGIA POWER COMPANY. ALL OTHER PIPING AND FITTINGS ARE FURNISHED BY THE PIPING CONTRACTOR.
6. ALL LOCATING DIM'S. ROUNDED-OFF TO NEAREST 1/8".
ALL INVERT ELEV'S. ROUNDED-OFF TO NEAREST 1/4".

REFERENCE DWGS:
H-26026-- RADWASTE SYSTEM P&ID SHT. 1 OF 7.
MPL. NO. 2811-1010.
H-26184-- REACTOR & RADWASTE BLDGS EMBEDDED FLOOR & EQUIPMENT DRAINAGE SYSTEM.
H-26290-- EQUIPMENT DRAINAGE IN DRYWELL.
H-26538-- REACTOR BLDG DRYWELL SUMP DISCH. PIPING.
H-25655-- R.P.V. FOUNDATION CONCRETE PEDESTAL BASE HEAT LINES.
H-26565-- R.P.V. FOUNDATION CONCRETE REINFORCING PLANS, SECTIONS & DETAILS.

LEGEND:
O-- DRAIN STUB-UP, SEE DETAIL 1.
O-- FLOOR DRAIN (F.O.), SEE DETAIL 3.
CRW-- CLEAN RADIOACTIVE WASTE
DRW-- DIRTY RADIOACTIVE WASTE
CRW-- CHEMICAL (ACID) RADIOACTIVE WASTE
IE-- INVERT ELEVATION

SIGHTTEL ASSOCIATES JOB 6511	
SOUTHERN SERVICES INC. FOR	
GEORGIA POWER CO., ATLANTA, GA. GENERAL ENGINEERING DEPARTMENT	
EDWIN I. HATCH NUCLEAR PLANT UNIT NO. 2 DRYWELL FLOOR & EQUIPMENT DRAINAGE SYSTEM, EL. 114'-6"	
REV. 7 DATE: 3-7-74 CHECKED BY: J. L. BROWN DRAWING NUMBER:	SHEET NO. 10-502 H-26202

U:\YARN\HATCH\AS-FOUND\05-0015\DRAWINGS\CALS\H26237.CAL 4/21/2005 3:20:57 PM



FOR NOTES AND REFERENCES SEE DWG. H26243
 WORK THIS DRAWING WITH DRAWINGS
 H-26235, H-26238 & H-26239

AcadDvy H26237

SOUTHERN COMPANY

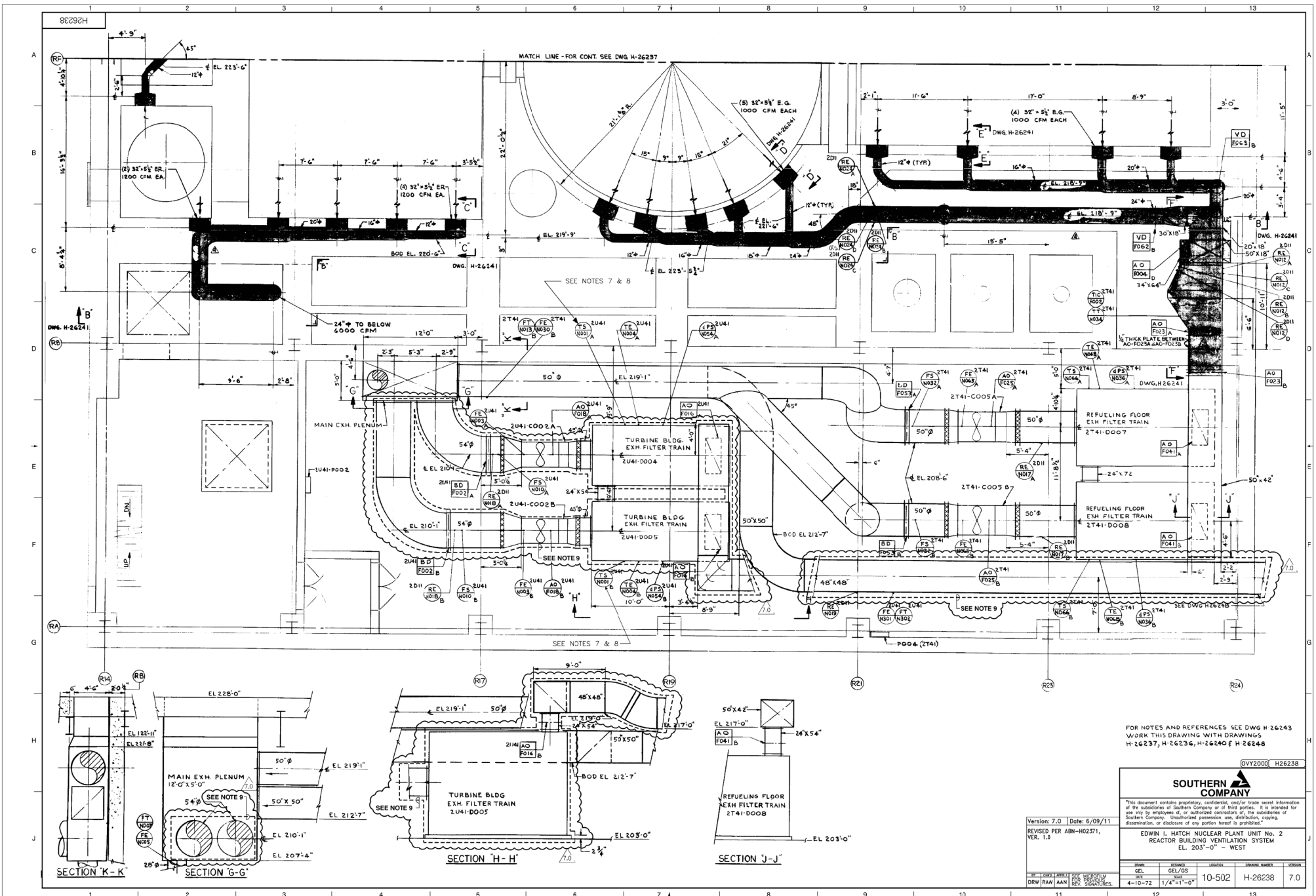
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EDWIN I. HATCH NUCLEAR PLANT UNIT No. 2
 REACTOR BUILDING VENTILATION SYSTEM
 EL. 203'-0" - EAST

ISSUE	DATE	DESCRIPTION	BY	CHKD	APP'D
1	4-19-05	REVISED PER ABN 05-015, VER. 1.0.	TJS	MWD	ASK
2	4-19-72	1/4"=1'-0"			

10-502 H-26237 9.0

Version: 9.0 Date: 4-19-05
 Revised for ABN 05-015, Ver. 1.0.



FOR NOTES AND REFERENCES SEE DWG H 26243
 WORK THIS DRAWING WITH DRAWINGS
 H-26237, H-26238, H-26240 & H-26248

0VY2000 H26238

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Version: 7.0 | Date: 6/09/11
 REVISED PER AIN-H02371, VER. 1.3

EDWIN I. HATCH NUCLEAR PLANT UNIT No. 2
 REACTOR BUILDING VENTILATION SYSTEM
 EL. 203'-0" - WEST

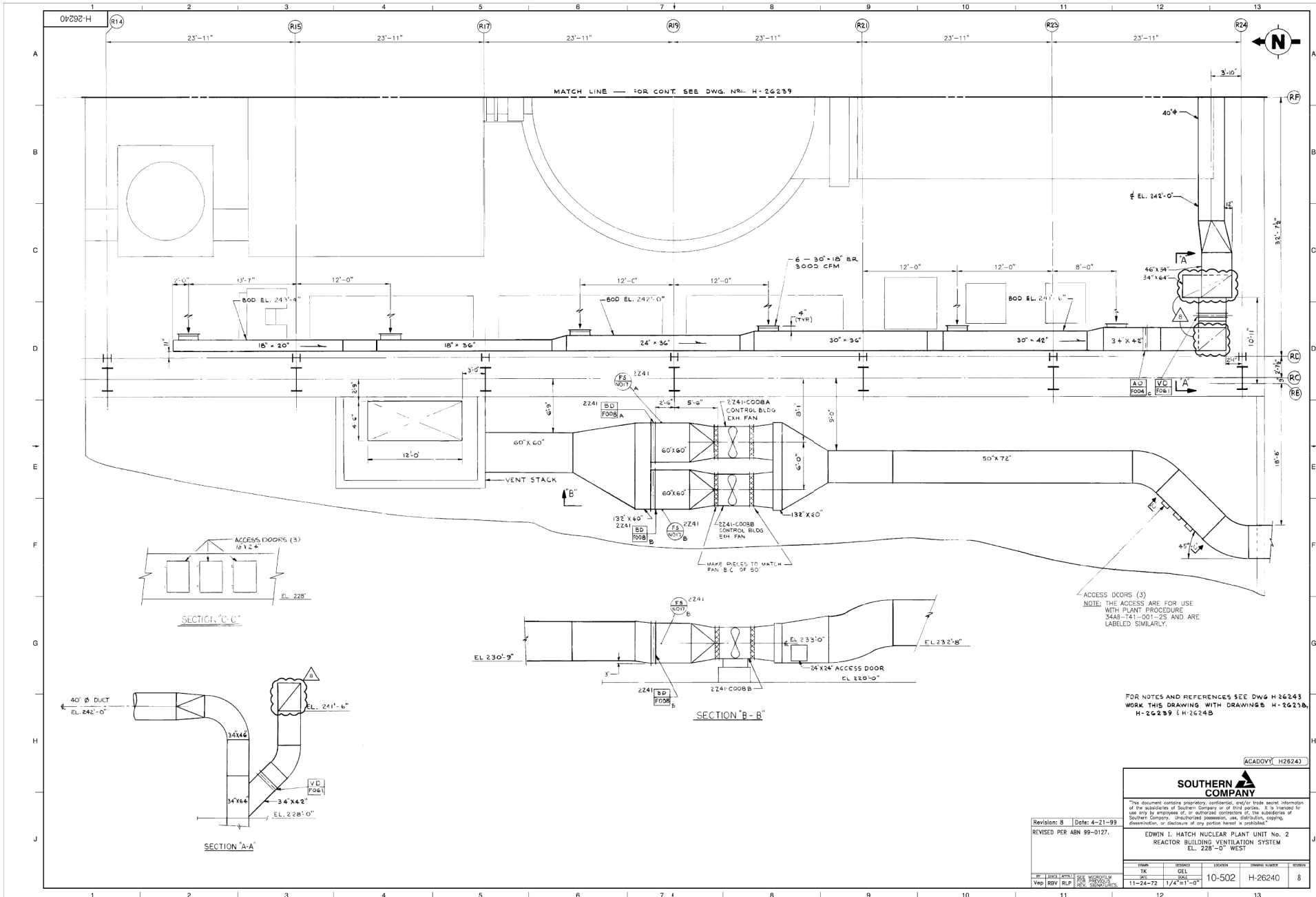
REV.	DATE	BY	CHKD.	LOCUS	ISSUE NUMBER	VERSION
1	4-10-72	AW	OS		10-502	H-26238
7.0						

SECTION K-K

SECTION G-G

SECTION H-H

SECTION J-J



FOR NOTES AND REFERENCES SEE DWG H 26243
 WORK THIS DRAWING WITH DRAWINGS H-26239,
 H-26239 & H-26248

ACAD07Y H26243

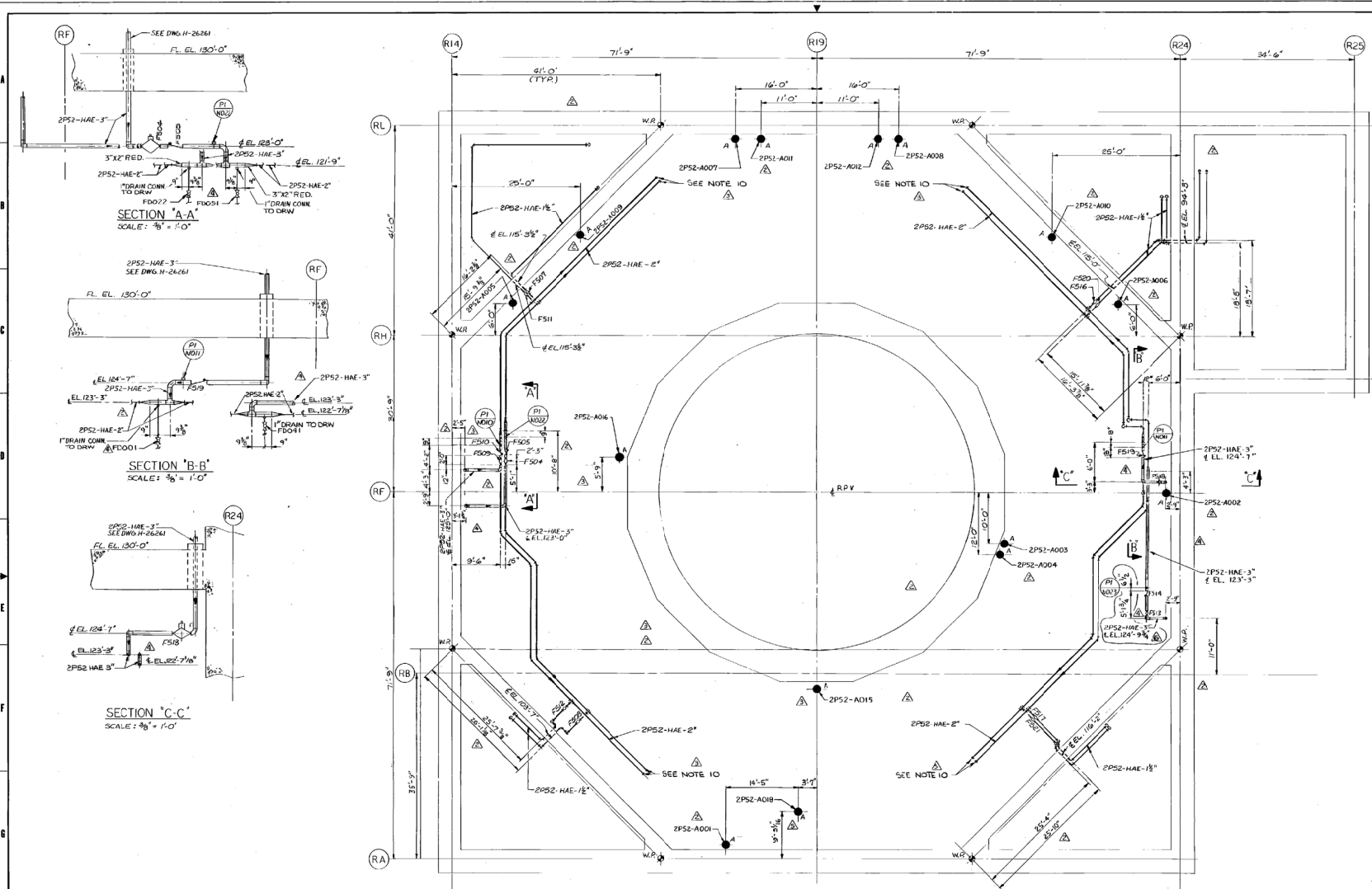
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EDWIN I. HATCH NUCLEAR PLANT UNIT No. 2
 REACTOR BUILDING VENTILATION SYSTEM
 EL. 228'-0" WEST

Revision: 8 Date: 4-21-99
 REVISED PER ABN 99-0127.

REV	DATE	APP'D	CHK'D	REV	DESCRIPTION	LOGSHEET	DWG NUMBER	REVISION
11	11-24-72						10-502	8



PLAN BELOW EL.130'-0"

- NOTES:**
1. ALL ITEM NUMBERS ARE PRECEDED BY MPL NO 2P52 UNLESS OTHERWISE NOTED.
 2. BLACK DISCS INDICATE AIR RECEIVERS, I.E. ACCU.
 3. ALL PIPING 1" AND UNDER TO BE FIELD RUN AND THOSE SHOWN ARE DIAGRAMMATIC EXCEPT WHERE SPECIFICALLY LOCATED. USE BENDS WHEREVER POSSIBLE TO ELIMINATE FITTINGS.
 4. LOCATION OF ACCUMULATORS ARE APPROX. FIELD WILL DETERMINE FINAL LOCATION.
 5. ACCUMULATORS TO BE LOCATED A MAX. DISTANCE OF 10'-0" FROM VALVE ACTUATOR AND SUPPORTED BY FIELD.
 6. 1" L.P. DRAINS TO BE FIELD LOCATED WHERE APPLICABLE.
 7. SUITABLE HANGERS, ANCHORS AND SUPPORTS ARE TO BE PROVIDED BY PROCESS CONTRACTOR AND WILL BE INSTALLED TO ELIMINATE VIBRATION.
 8. UNLESS OTHERWISE INDICATED, NO ALLOWANCE HAS BEEN MADE FOR WELDED JOINTS OR GASKETS.
 9. FOR WEIGHT AND MATERIAL OF PIPE, VALVES, FITTINGS, SEE MATERIAL SPECIFICATION DWG 55-6909-1.
 10. END CAPS ON BREAKERS TO BE SCREWED FITTINGS. BRICK-WELDED AFTER COMPLETION OF FLUSHING OPERATION.

REFERENCES:

REFERENCE	MPL No.	SSI No.
1. REACTOR BLDG. INST. AIR SYS. SHT. 142	2P52-1020	H-26060
2. REACTOR BLDG. INST. AIR SYSTEM TABLES	2P52-1020	H-26062
3. N ₂ INERTING SYSTEM 2749-100		H-26168-69
4. TURBINE BLDG. INST. AIR SYSTEM (SOMET)	2P52-1020	H-21127

WORK THIS DRAWING WITH DWGS. H-26261, H-26262, H-26263 & H-26264.
MPL NO. 2P52-1020

SECTION 'A-A'
SCALE: 3/8" = 1'-0"

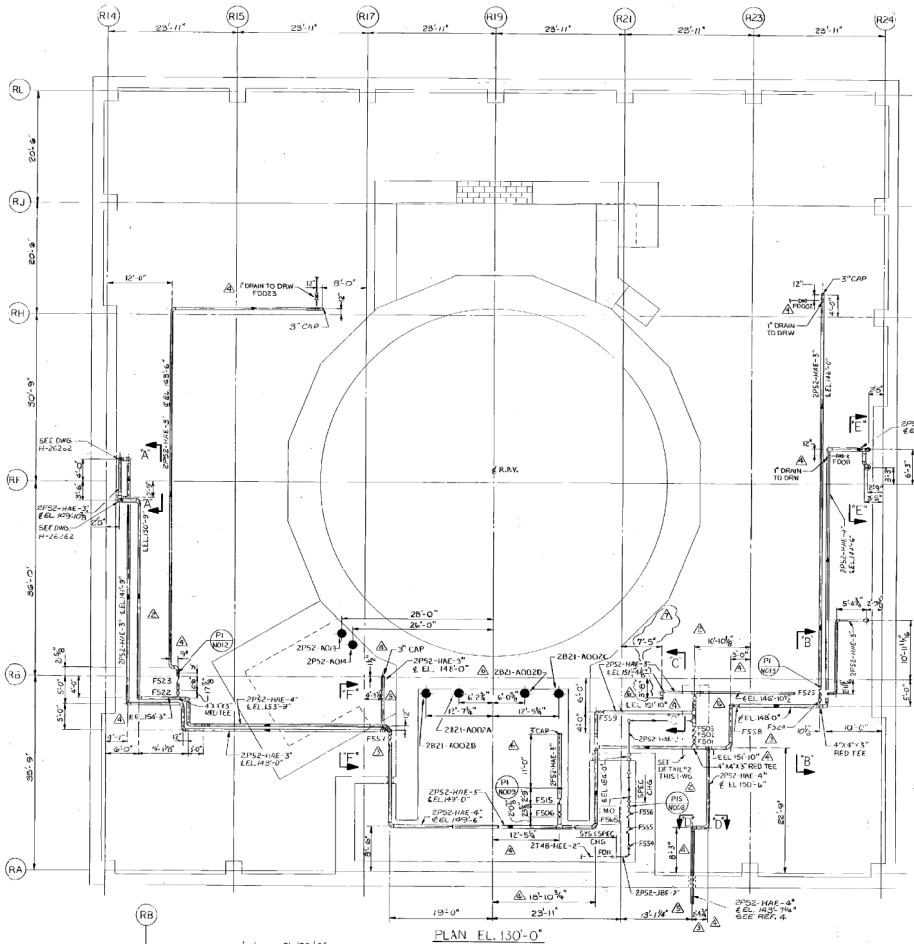
SECTION 'B-B'
SCALE: 3/8" = 1'-0"

SECTION 'C-C'
SCALE: 3/8" = 1'-0"

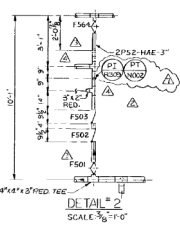
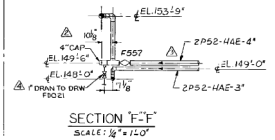
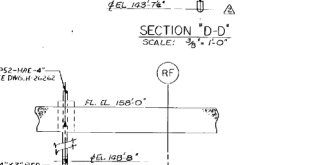
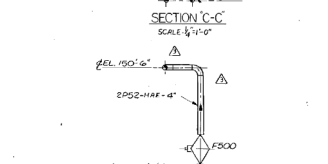
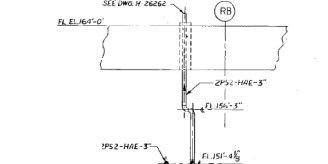
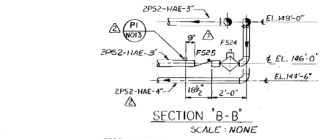
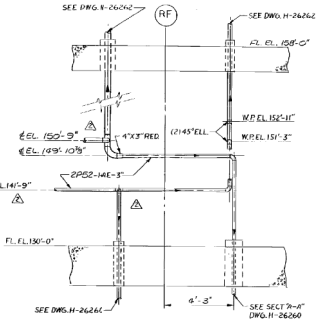
BECHTEL
100 6511 GAITHERSBURG, MARYLAND
SOUTHERN SERVICES INC.
FOR

GEORGIA POWER CO., ATLANTA, GA.
GENERAL ENGINEERING DEPARTMENT
EDWIN I. HATCH NUCLEAR PLANT UNIT NO.2
REACTOR BLDG INSTRUMENT AIR SYSTEM
PLAN & SECTIONS BELOW EL.130'-0"

NO.	REVISION	DATE	BY	CHKD.	APP'D.
1	ISSUED FOR LATEST GENERAL REVIEW				
2	ISSUED FOR LATEST GENERAL REVIEW				
3	ISSUED FOR LATEST GENERAL REVIEW				
4	ISSUED FOR LATEST GENERAL REVIEW				
5	ISSUED FOR LATEST GENERAL REVIEW				
6	ISSUED FOR LATEST GENERAL REVIEW				
7	ISSUED FOR LATEST GENERAL REVIEW				
8	ISSUED FOR LATEST GENERAL REVIEW				
9	ISSUED FOR LATEST GENERAL REVIEW				
10	ISSUED FOR LATEST GENERAL REVIEW				
11	ISSUED FOR LATEST GENERAL REVIEW				
12	ISSUED FOR LATEST GENERAL REVIEW				
13	ISSUED FOR LATEST GENERAL REVIEW				
14	ISSUED FOR LATEST GENERAL REVIEW				
15	ISSUED FOR LATEST GENERAL REVIEW				
16	ISSUED FOR LATEST GENERAL REVIEW				
17	ISSUED FOR LATEST GENERAL REVIEW				
18	ISSUED FOR LATEST GENERAL REVIEW				
19	ISSUED FOR LATEST GENERAL REVIEW				
20	ISSUED FOR LATEST GENERAL REVIEW				



NOTES:
1. FOR NOTES AND REFERENCES SEE DWG. H-2626-0.



WORK THIS DRAWING WITH DWGS. H-2626-0, H-2626-1, H-2626-2, H-2626-3, H-2626-4, H-2626-5, H-2626-6, H-2626-7, H-2626-8, H-2626-9, H-2626-10, H-2626-11, H-2626-12, H-2626-13, H-2626-14, H-2626-15, H-2626-16, H-2626-17, H-2626-18, H-2626-19, H-2626-20, H-2626-21, H-2626-22, H-2626-23, H-2626-24, H-2626-25, H-2626-26, H-2626-27, H-2626-28, H-2626-29, H-2626-30, H-2626-31, H-2626-32, H-2626-33, H-2626-34, H-2626-35, H-2626-36, H-2626-37, H-2626-38, H-2626-39, H-2626-40, H-2626-41, H-2626-42, H-2626-43, H-2626-44, H-2626-45, H-2626-46, H-2626-47, H-2626-48, H-2626-49, H-2626-50, H-2626-51, H-2626-52, H-2626-53, H-2626-54, H-2626-55, H-2626-56, H-2626-57, H-2626-58, H-2626-59, H-2626-60, H-2626-61, H-2626-62, H-2626-63, H-2626-64, H-2626-65, H-2626-66, H-2626-67, H-2626-68, H-2626-69, H-2626-70, H-2626-71, H-2626-72, H-2626-73, H-2626-74, H-2626-75, H-2626-76, H-2626-77, H-2626-78, H-2626-79, H-2626-80, H-2626-81, H-2626-82, H-2626-83, H-2626-84, H-2626-85, H-2626-86, H-2626-87, H-2626-88, H-2626-89, H-2626-90, H-2626-91, H-2626-92, H-2626-93, H-2626-94, H-2626-95, H-2626-96, H-2626-97, H-2626-98, H-2626-99, H-2626-100.

NO.	REVISION	DATE	BY	CHKD.	APP'D.
1	ISSUED FOR CONSTRUCTION	11/26/64	W. J. HATCH	J. W. HATCH	J. W. HATCH
2	REVISED TO REFLECT CHANGES	12/15/64	W. J. HATCH	J. W. HATCH	J. W. HATCH
3	REVISED TO REFLECT CHANGES	1/10/65	W. J. HATCH	J. W. HATCH	J. W. HATCH
4	REVISED TO REFLECT CHANGES	1/10/65	W. J. HATCH	J. W. HATCH	J. W. HATCH
5	REVISED TO REFLECT CHANGES	1/10/65	W. J. HATCH	J. W. HATCH	J. W. HATCH
6	REVISED TO REFLECT CHANGES	1/10/65	W. J. HATCH	J. W. HATCH	J. W. HATCH
7	REVISED TO REFLECT CHANGES	1/10/65	W. J. HATCH	J. W. HATCH	J. W. HATCH
8	REVISED TO REFLECT CHANGES	1/10/65	W. J. HATCH	J. W. HATCH	J. W. HATCH
9	REVISED TO REFLECT CHANGES	1/10/65	W. J. HATCH	J. W. HATCH	J. W. HATCH
10	REVISED TO REFLECT CHANGES	1/10/65	W. J. HATCH	J. W. HATCH	J. W. HATCH
11	REVISED TO REFLECT CHANGES	1/10/65	W. J. HATCH	J. W. HATCH	J. W. HATCH
12	REVISED TO REFLECT CHANGES	1/10/65	W. J. HATCH	J. W. HATCH	J. W. HATCH

WORK THIS DRAWING WITH DWGS. H-2626-0, H-2626-1, H-2626-2, H-2626-3, H-2626-4, H-2626-5, H-2626-6, H-2626-7, H-2626-8, H-2626-9, H-2626-10, H-2626-11, H-2626-12, H-2626-13, H-2626-14, H-2626-15, H-2626-16, H-2626-17, H-2626-18, H-2626-19, H-2626-20, H-2626-21, H-2626-22, H-2626-23, H-2626-24, H-2626-25, H-2626-26, H-2626-27, H-2626-28, H-2626-29, H-2626-30, H-2626-31, H-2626-32, H-2626-33, H-2626-34, H-2626-35, H-2626-36, H-2626-37, H-2626-38, H-2626-39, H-2626-40, H-2626-41, H-2626-42, H-2626-43, H-2626-44, H-2626-45, H-2626-46, H-2626-47, H-2626-48, H-2626-49, H-2626-50, H-2626-51, H-2626-52, H-2626-53, H-2626-54, H-2626-55, H-2626-56, H-2626-57, H-2626-58, H-2626-59, H-2626-60, H-2626-61, H-2626-62, H-2626-63, H-2626-64, H-2626-65, H-2626-66, H-2626-67, H-2626-68, H-2626-69, H-2626-70, H-2626-71, H-2626-72, H-2626-73, H-2626-74, H-2626-75, H-2626-76, H-2626-77, H-2626-78, H-2626-79, H-2626-80, H-2626-81, H-2626-82, H-2626-83, H-2626-84, H-2626-85, H-2626-86, H-2626-87, H-2626-88, H-2626-89, H-2626-90, H-2626-91, H-2626-92, H-2626-93, H-2626-94, H-2626-95, H-2626-96, H-2626-97, H-2626-98, H-2626-99, H-2626-100.

MPL. 10" 2P52-1080

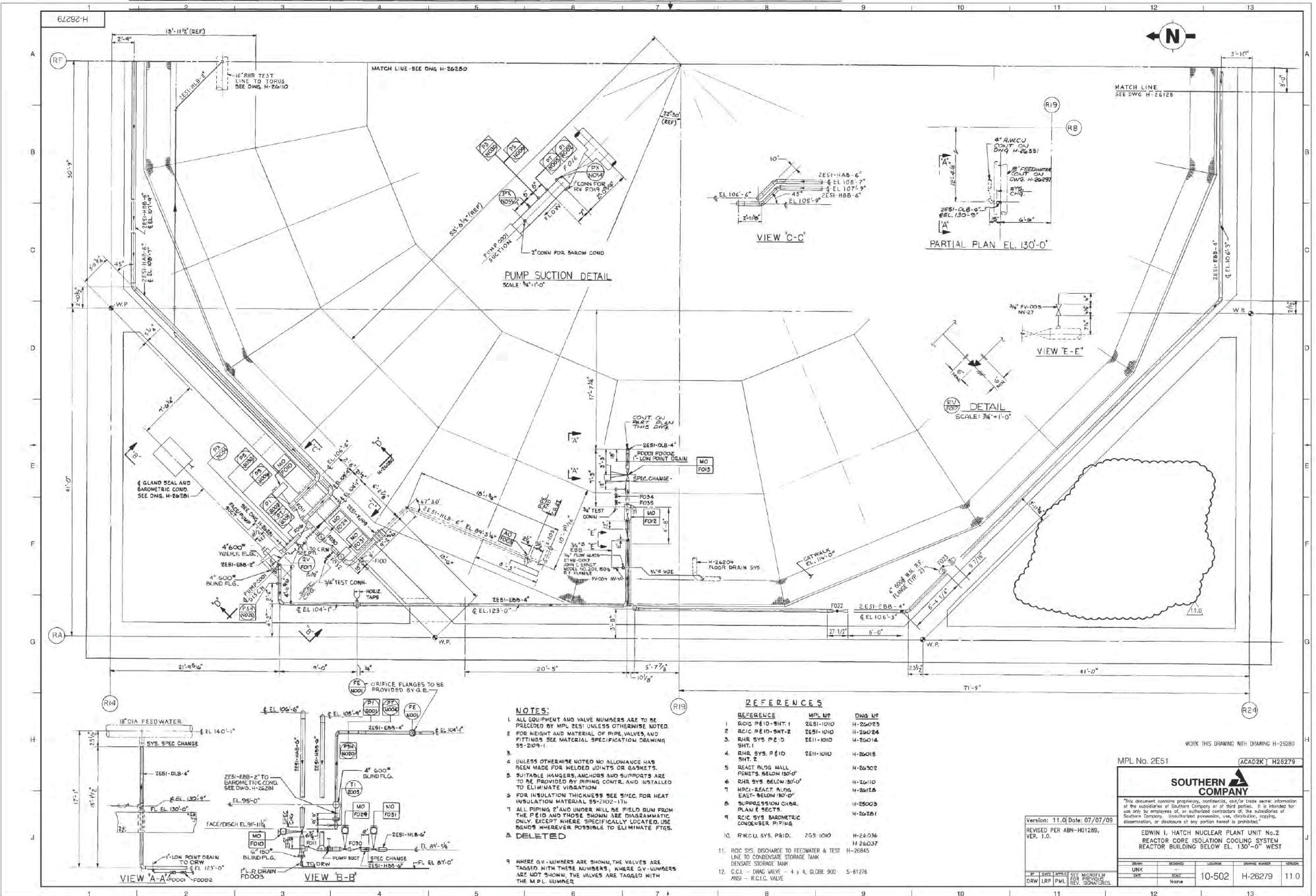
BECHTEL
JOB 6511 GATHERSBURG, MARYLAND

SOUTHERN SERVICES INC.
FOR

GEORGIA POWER CO., ATLANTA, GA.
GENERAL ENGINEERING DEPARTMENT

EDWIN HATCH NUCLEAR PLANT UNIT NO.2
REACTOR BLDG. INSTRUMENT AIR SYSTEM
PLAN & SECTIONS EL.130'-0"

DATE: 11/26/64
SCALE: AS SHOWN
DRAWING NUMBER: 10-502
SHEET NO.: H-26261



PUMP SECTION DETAIL
SCALE: 1/4"=1'-0"

VIEW C-C'

PARTIAL PLAN EL. 130'-0"

VIEW E-E'

DETAIL
SCALE: 3/4"=1'-0"

VIEW A-A'

VIEW B-B'

NOTES:

1. ALL EQUIPMENT AND VALVE NUMBERS ARE TO BE PRECEDED BY MPL 2E51 UNLESS OTHERWISE NOTED.
2. FOR HEIGHT AND MATERIAL OF PIPE, VALVES AND FITTINGS SEE MATERIAL SPECIFICATION DRAWING S5-2009-1.
- 3.
4. UNLESS OTHERWISE NOTED NO ALLOWANCE HAS BEEN MADE FOR WELDED JOINTS OR GASKETS.
5. BUTT JOINTS, HANGERS AND SUPPORTS ARE TO BE PROVIDED BY PIPING CONTR. AND INSTALLED TO ELIMINATE VIBRATION.
6. FOR INSULATION THICKNESS SEE SPEC. FOR HEAT INSULATION MATERIAL S5-2102-17b.
7. ALL FITTINGS AND VALVES WILL BE FIELD RUN FROM THE P&ID AND THOSE SHOWN ARE DIAGRAMMATIC ONLY EXCEPT WHERE SPECIFICALLY LOCATED, USE NUMBER HOWEVER POSSIBLE TO ELIMINATE FITS.
8. DELETED
9. WHERE GV-NUMBERS ARE SHOWN, THE VALVES ARE TAGGED WITH THESE NUMBERS, WHERE SV-NUMBERS ARE NOT SHOWN, THE VALVES ARE TAGGED WITH THE M.P.L. NUMBER.

REFERENCES

REFERENCE	MPL. NO.	DWG. NO.
1	RCIC P&ID-SHT.1	2E51-1010
2	RCIC P&ID-SHT.2	2E51-1010
3	RHR SYS P&ID	2E11-1010
4	RHR SYS P&ID	2E11-1010
5	REACT. RODS WALL	H-26032
6	RHR SYS. BELOW 100'-0"	H-26010
7	RHR SYS. BELOW 80'-0"	H-26016
8	SUPPRESSION CHAR. PLAN & SECTS.	H-26003
9	RCIC SYS. BAROMETRIC CONDENSER PIPING	H-26261
10	R.W.C.U. SYS. PAID.	2E51-1010
11	RCIC SYS. DISCHARGE TO FEEDWATER & TEST LINE TO CONDENSATE STORAGE TANK	H-26237
12	C.C.I. - DRG. W/VE - 4 x 4, GLOBE 300	S-61276

MPL No. 2E51 (ACAD2K) H26279



EDWIN I. HATCH NUCLEAR PLANT No.2
REACTOR CORE ISOLATION COOLING SYSTEM
REACTOR CORE DISCHARGE BELOW EL. 130'-0" WEST

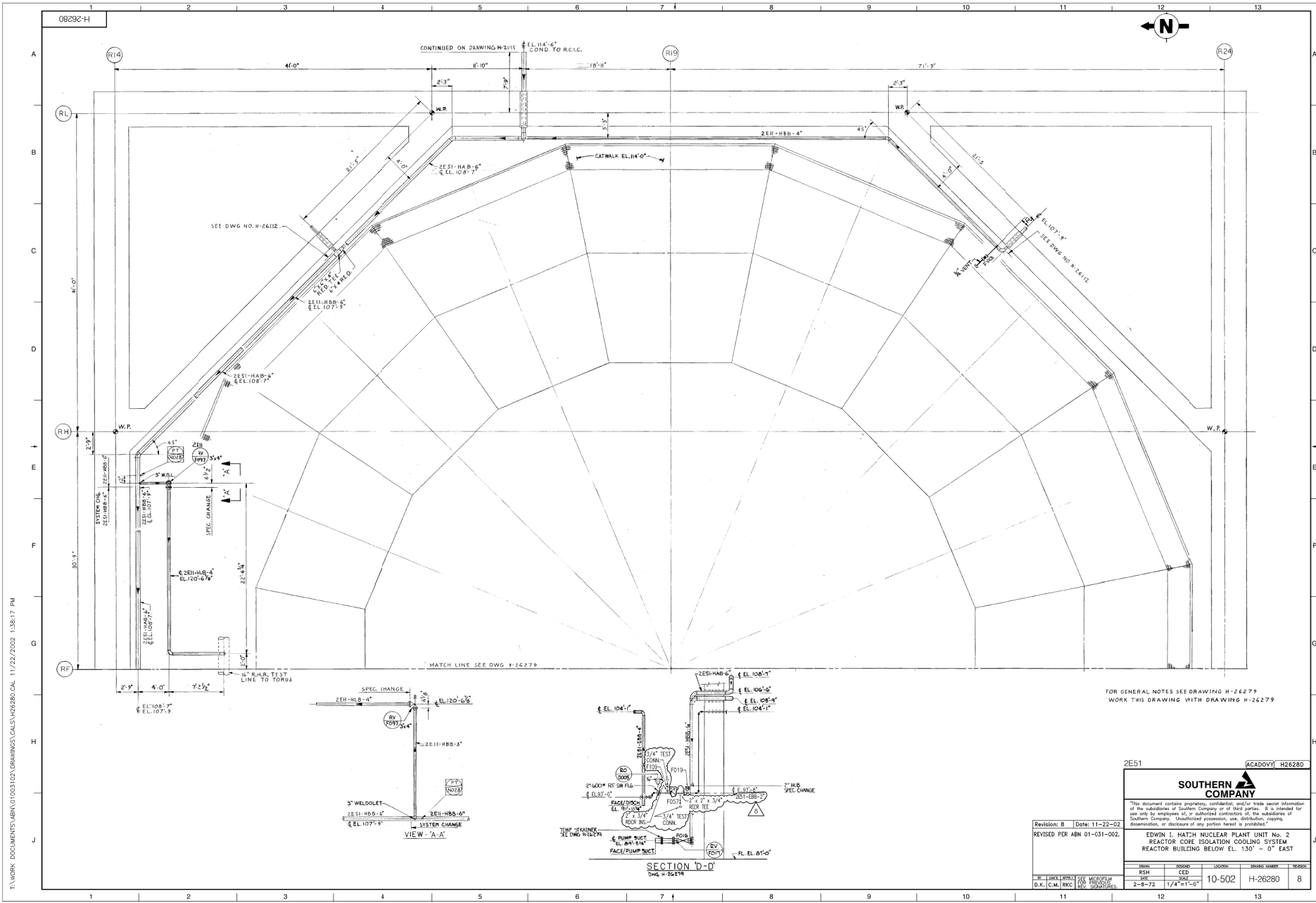
NO.	DATE	BY	CHKD.	REVISION
1	11-0	ABN	HOT285	VER. 1.0

NO.	DATE	BY	CHKD.	REVISION
1	10-502	H-26279	11-0	

WORK THIS DRAWING WITH DRAWING H-26289

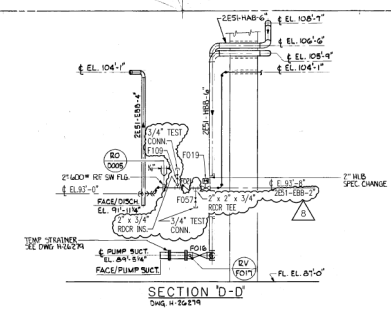
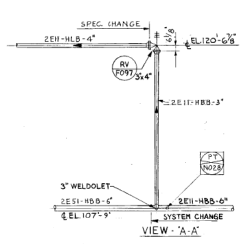
REVISION: 11-0 Date: 07/07/09
REVISED PER ABN-HOT285, VER. 1.0

NO.	DATE	BY	CHKD.	REVISION
1	10-502	H-26279	11-0	



T:\WORK DOCUMENTS\BANK\01003102\DRAWINGS\CAL\H26280.CAL 11/22/2002 1:38:17 PM

FOR GENERAL NOTES SEE DRAWING H-26279
WORK THIS DRAWING WITH DRAWING H-26279



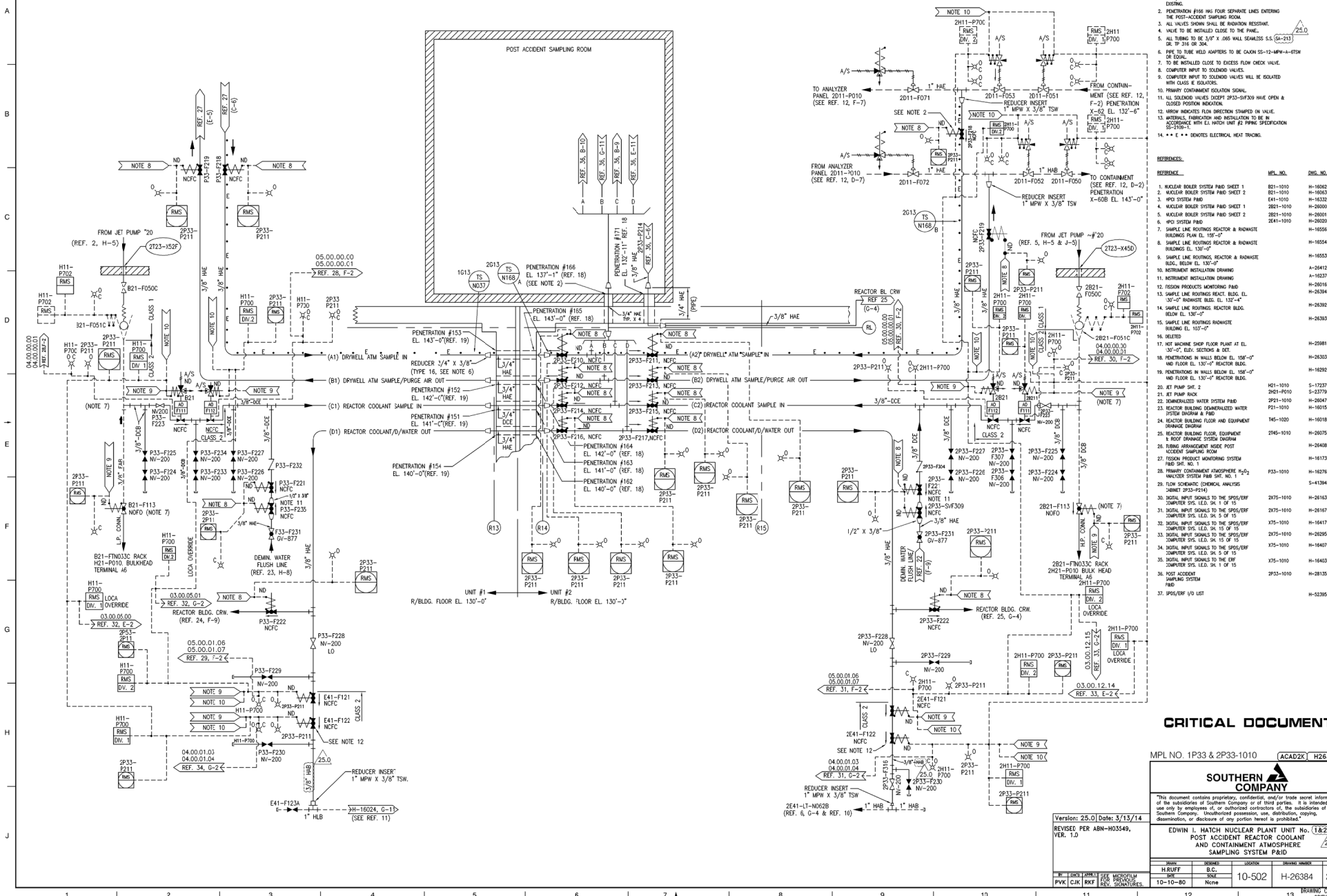
2E51 ACADOVY H26280

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EDWIN I. HATCH NUCLEAR PLANT UNIT No. 2
REACTOR CORE ISOLATION COOLING SYSTEM
REACTOR BUILDING BELOW EL. 130' - 0\"/>

REVISION	DATE	BY	CHKD	ISSUED	ISSUE NUMBER	REMARKS
8	11-22-02					
REVISED PER AEN 01-031-002.						
DR	CHKD	ISSUED	ISSUE NUMBER	REVISION		
D.K.	C.M.	RKC	2-8-72	1/4\"/>		



- NOTES:**
1. LINES/VALUES SHOWN IN DOTTED LINE ARE ALREADY EXISTING.
 2. PENETRATION #166 HAS FOUR SEPARATE LINES ENTERING THE POST-ACCIDENT SAMPLING ROOM.
 3. ALL VALVES SHOWN SHALL BE BRONZE RESISTANT.
 4. VALVE TO BE INSTALLED CLOSE TO THE PENE.
 5. ALL TUBING TO BE 3/4" X .065 WALL SEAMLESS S.S. (G-213) OR 3/4" X .065 S.S.
 6. PIPE TO TUBE WELD ADAPTERS TO BE CAJON SS-12-MPW-A-CSTM OR LOU.
 7. TO BE INSTALLED CLOSE TO EXCESS FLOW CHECK VALVE.
 8. COMPUTER INPUT TO SIZING VALVES.
 9. COMPUTER INPUT TO SIZING VALVES WILL BE ISOLATED WITH CLASS 4 ISOLATORS.
 10. PRIMARY CONTAINMENT ISOLATION SIGNAL.
 11. ALL SIZING VALVES DESIPT 3P33-3P309 HAS OPEN & CLOSED POSITION INDICATION.
 12. ARROW INDICATES FLOW DIRECTION SHOWN ON VALVE.
 13. INSTRUMENT FABRICATION AND INSTALLATION TO BE IN ACCORDANCE WITH ELI WATCH UNIT #2 P&ID SPECIFICATION 25.0-1.
 14. * * * * * DENOTES ELECTRICAL HEAT TRACING.

REFERENCES:

REF. NO.	MPL. NO.	FIG. NO.
1.	KUOLAR BOILER SYSTEM P&ID SHEET 1	801-1010
2.	KUOLAR BOILER SYSTEM P&ID SHEET 2	801-1010
3.	HPO SYSTEM P&ID	841-1010
4.	KUOLAR BOILER SYSTEM P&ID SHEET 1	2801-1010
5.	KUOLAR BOILER SYSTEM P&ID SHEET 2	2801-1010
6.	HPO SYSTEM P&ID	2801-1010
7.	SAMPLE LINE ROUTINGS REACTOR & RADWASTE BUILDING PLAN EL. 130'-0"	281-1010
8.	SAMPLE LINE ROUTINGS REACTOR & RADWASTE BUILDING EL. 130'-0"	H-10554
9.	SAMPLE LINE ROUTINGS REACTOR & RADWASTE BLDG. BELOW EL. 130'-0"	H-10553
10.	INSTRUMENT INSTALLATION DRAWING	A-2412-080
11.	ISSON PRODUCTS MONITORING P&ID	H-26330
12.	SAMPLE LINE ROUTINGS REACTOR BLDG. EL. 130'-0" RADWASTE BLDG. EL. 132'-4"	H-26309
13.	SAMPLE LINE ROUTINGS REACTOR BLDG. BELOW EL. 130'-0"	H-26308
14.	SAMPLE LINE ROUTINGS RADWASTE BUILDING EL. 107'-0"	H-26303
15.	SAMPLE LINE ROUTINGS RADWASTE BUILDING EL. 107'-0"	H-25981
16.	NOT MACHINE SHOP FLOOR PLAN AT EL. 300'-0". ELEC. SECTIONS A-D-E.	H-26303
17.	PENETRATIONS IN WALLS BELOW EL. 106'-0" AND FLOOR EL. 130'-0" REACTOR BLDG.	H-16292
18.	PENETRATIONS IN WALLS BELOW EL. 106'-0" AND FLOOR EL. 130'-0" REACTOR BLDG.	H-16292
19.	JET PUMP SHEET 2	S-12323
20.	JET PUMP SHEET 1	261-1010
21.	DEMINERALIZED WATER SYSTEM P&ID	H-20047
22.	REACTOR BUILDING DEMINERALIZED WATER SYSTEM P&ID	H-10105
23.	REACTOR BUILDING FLOOR AND EQUIPMENT ROOMS P&ID	H-10108
24.	REACTOR BUILDING FLOOR AND EQUIPMENT ROOMS P&ID	H-26075
25.	REACTOR BUILDING FLOOR AND EQUIPMENT ROOMS P&ID	H-26408
26.	ISSON PRODUCT MONITORING SYSTEM P&ID SHEET NO. 1	H-16173
27.	PRIMARY CONTAINMENT ATMOSPHERE H ₂ O ANALYZER SYSTEM P&ID SHEET NO. 1	H-16276
28.	FLOW SIZING VALVES (SIZING) ANALYZERS SHEET 3P33-P214	A-41394
29.	DIGITAL INPUT SIGNALS TO THE SPOUSEY/COMPUTER SYS. I.E.D. 9A 9 OF 15	H-16163
30.	DIGITAL INPUT SIGNALS TO THE SPOUSEY/COMPUTER SYS. I.E.D. 9A 9 OF 15	H-16167
31.	DIGITAL INPUT SIGNALS TO THE SPOUSEY/COMPUTER SYS. I.E.D. 9A 9 OF 15	H-16295
32.	DIGITAL INPUT SIGNALS TO THE SPOUSEY/COMPUTER SYS. I.E.D. 9A 9 OF 15	H-16407
33.	DIGITAL INPUT SIGNALS TO THE SPOUSEY/COMPUTER SYS. I.E.D. 9A 9 OF 15	H-16403
34.	POST ACCIDENT SAMPLING SYSTEM P&ID	H-28135
35.	SPOUSEY I/O LIST	H-52395

CRITICAL DOCUMENT

MPL. NO. 1P33 & 2P33-1010 (ACAD2K) H26384

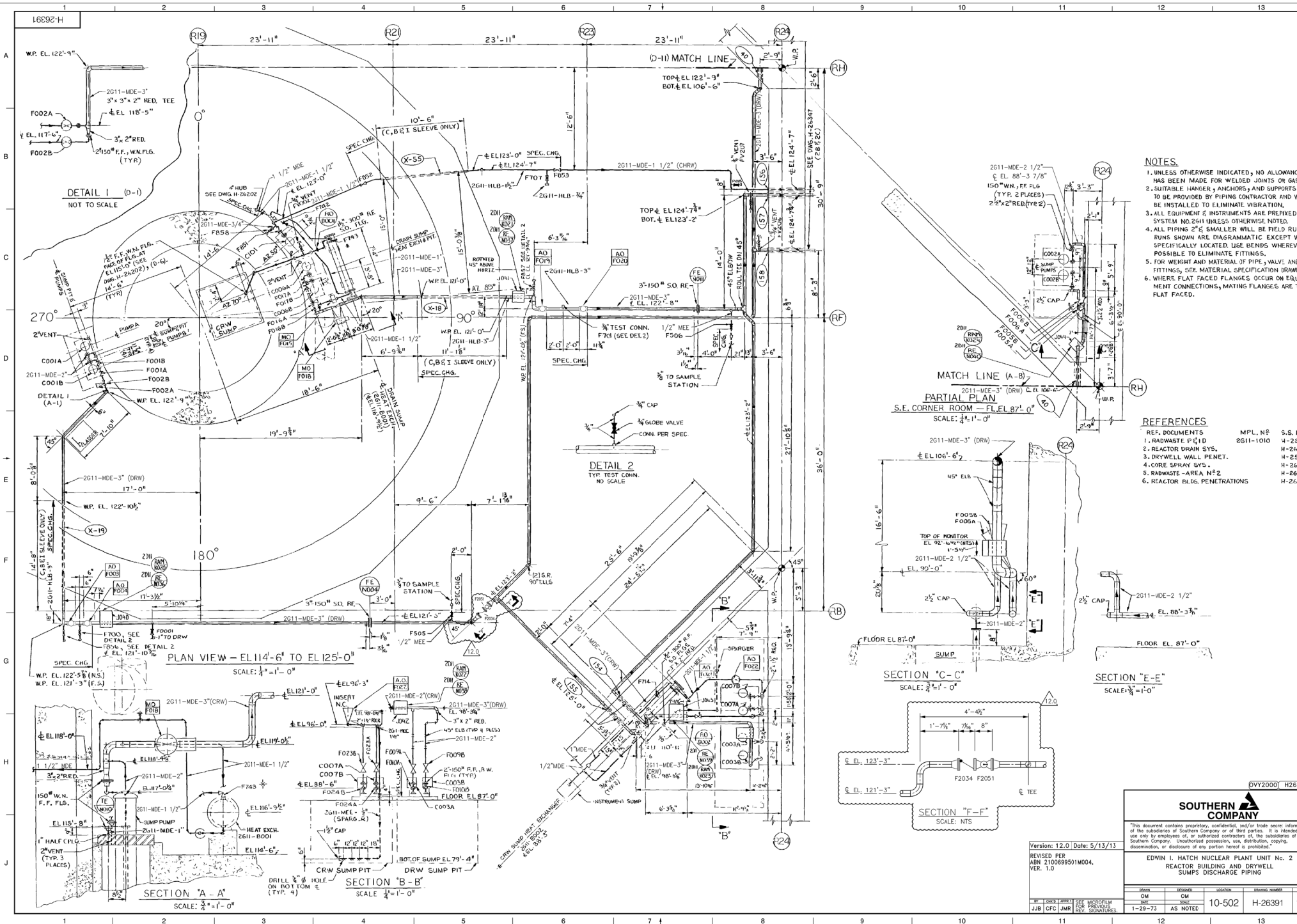


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EDWIN I. HATCH NUCLEAR PLANT UNIT NO. 1 (1&2)
 POST ACCIDENT REACTOR COOLANT
 AND CONTAINMENT ATMOSPHERE
 SAMPLING SYSTEM P&ID
 25.0

Version: 25.0 Date: 5/13/14
 REVISED PER ABN-H03549,
 VER. 1.0

NO.	DATE	BY	REASON	LOCATION	ISSUED NUMBER	ORIGINAL
1	10-10-80	None	None	10-502	H-26384	25.0



DETAIL 1 (D-1)
NOT TO SCALE

DETAIL 2
TYP. TEST CONN.
NO SCALE

PLAN VIEW - EL114'-6" TO EL125'-0"
SCALE: 1/4" = 1'-0"

SECTION "A-A"
SCALE: 3/4" = 1'-0"

SECTION "B-B"
SCALE: 1/2" = 1'-0"

PARTIAL PLAN
S.E. CORNER ROOM - FL. EL. 87'-0"
SCALE: 1/4" = 1'-0"

SECTION "C-C"
SCALE: 3/4" = 1'-0"

SECTION "E-E"
SCALE: 3/8" = 1'-0"

SECTION "F-F"
SCALE: NTS

- NOTES.**
1. UNLESS OTHERWISE INDICATED, NO ALLOWANCE HAS BEEN MADE FOR WELDED JOINTS OR GASKETS.
 2. SUITABLE HANGER, ANCHORS AND SUPPORTS ARE TO BE PROVIDED BY PIPING CONTRACTOR AND WILL BE INSTALLED TO ELIMINATE VIBRATION.
 3. ALL EQUIPMENT & INSTRUMENTS ARE PREFIXED BY SYSTEM NO. 2011 UNLESS OTHERWISE NOTED.
 4. ALL PIPING 2" & SMALLER WILL BE FIELD RUN. RUNS SHOWN ARE DIAGRAMATIC EXCEPT WHERE SPECIFICALLY LOCATED. USE BENDS WHEREVER POSSIBLE TO ELIMINATE FITTINGS.
 5. FOR WEIGHT AND MATERIAL OF PIPE, VALVE AND FITTINGS, SEE MATERIAL SPECIFICATION DRAWINGS.
 6. WHERE FLAT FACED FLANGES OCCUR ON EQUIPMENT CONNECTIONS, MATING FLANGES ARE TO BE FLAT FACED.

REFERENCES

REF. DOCUMENTS	MPL. NO.	S.S. NO.
1. RADWASTE P&ID	2011-1010	H-26026
2. REACTOR DRAIN SYS.		H-26202
3. DRWELL WALL PENET.		H-25004
4. CORE SPRAY SYS.		H-26118
5. RADWASTE - AREA N#2		H-26347
6. REACTOR BLDG. PENETRATIONS		H-26302

Version: 12.0 Date: 5/13/13

REVISED PER
ABN 210089501M004,
VER. 1.0

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EDWIN I. HATCH NUCLEAR PLANT UNIT No. 2
REACTOR BUILDING AND DRYWELL
SUMP DISCHARGE PIPING

NO.	DATE	BY	CHKD	APP'D	REVISION
1	1-29-73	JJB	CFC	JMR	AS NOTED
10					10-502
12					H-26391
13					12.0

NOTES

1. BUBBLES WITH AN ASTERISK (*) DENOTE INSTRUMENT LOCATIONS, ALL OTHER BUBBLED CALLOUTS ARE PRIMARY POINTS

REFERENCE

TITLE: LOOSE PARTS MONITORING SYSTEM I.E.D.
 M.P.L. NO.: 10-502
 DRAWING NO.: 4-26424

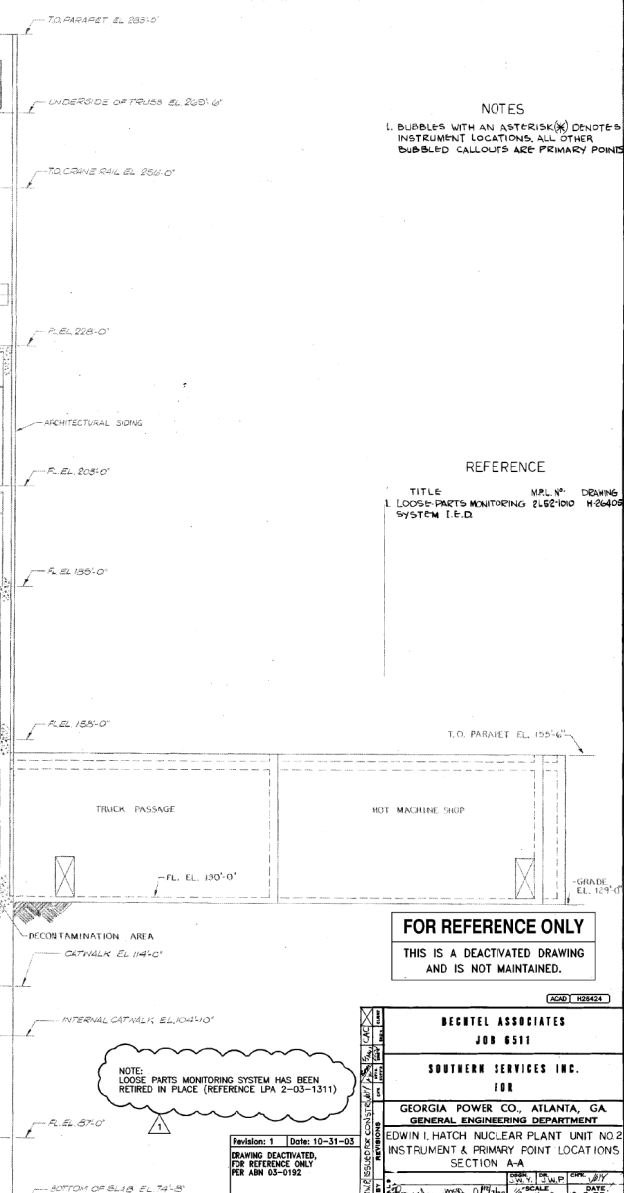
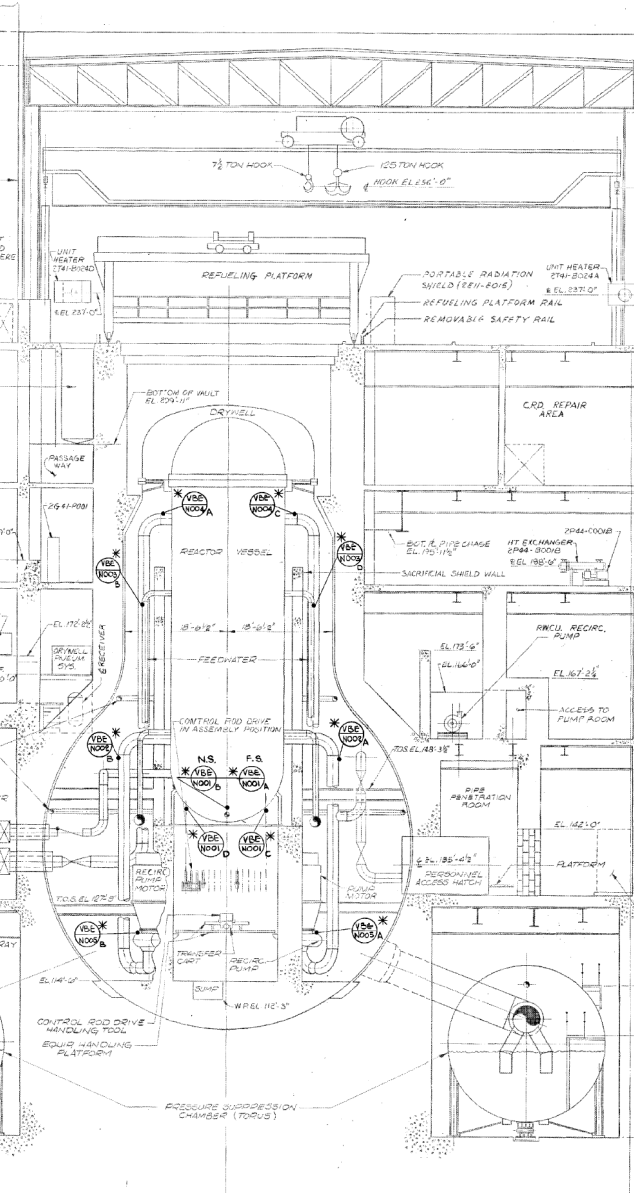
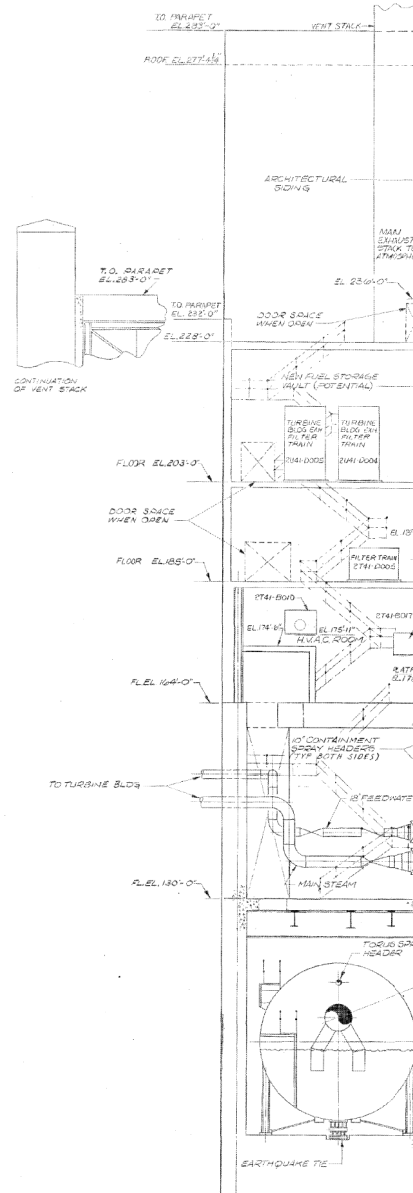
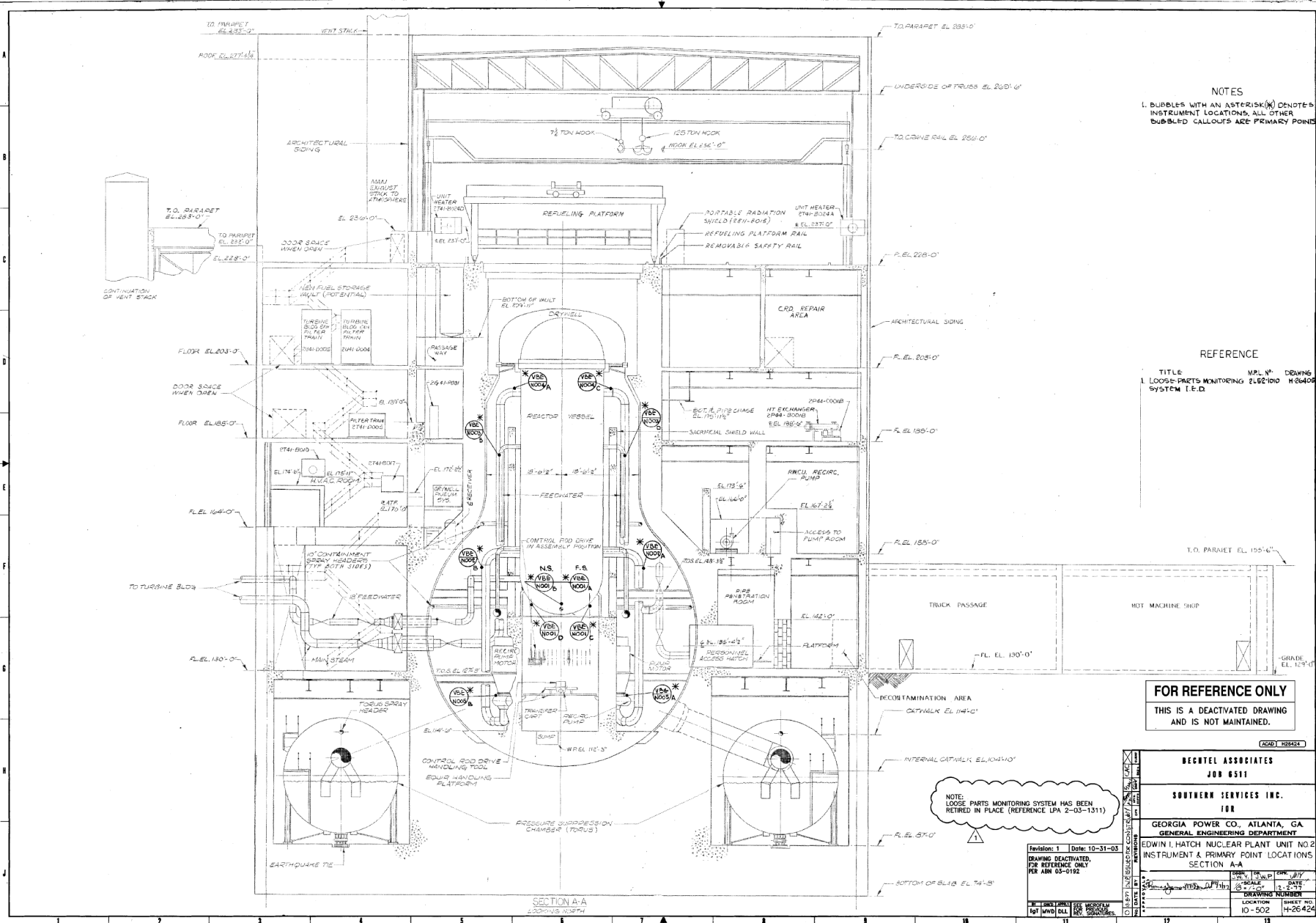
FOR REFERENCE ONLY
 THIS IS A DEACTIVATED DRAWING AND IS NOT MAINTAINED.

NOTE: LOOSE PARTS MONITORING SYSTEM HAS BEEN RETIRED IN PLACE (REFERENCE LPA 2-03-1311)

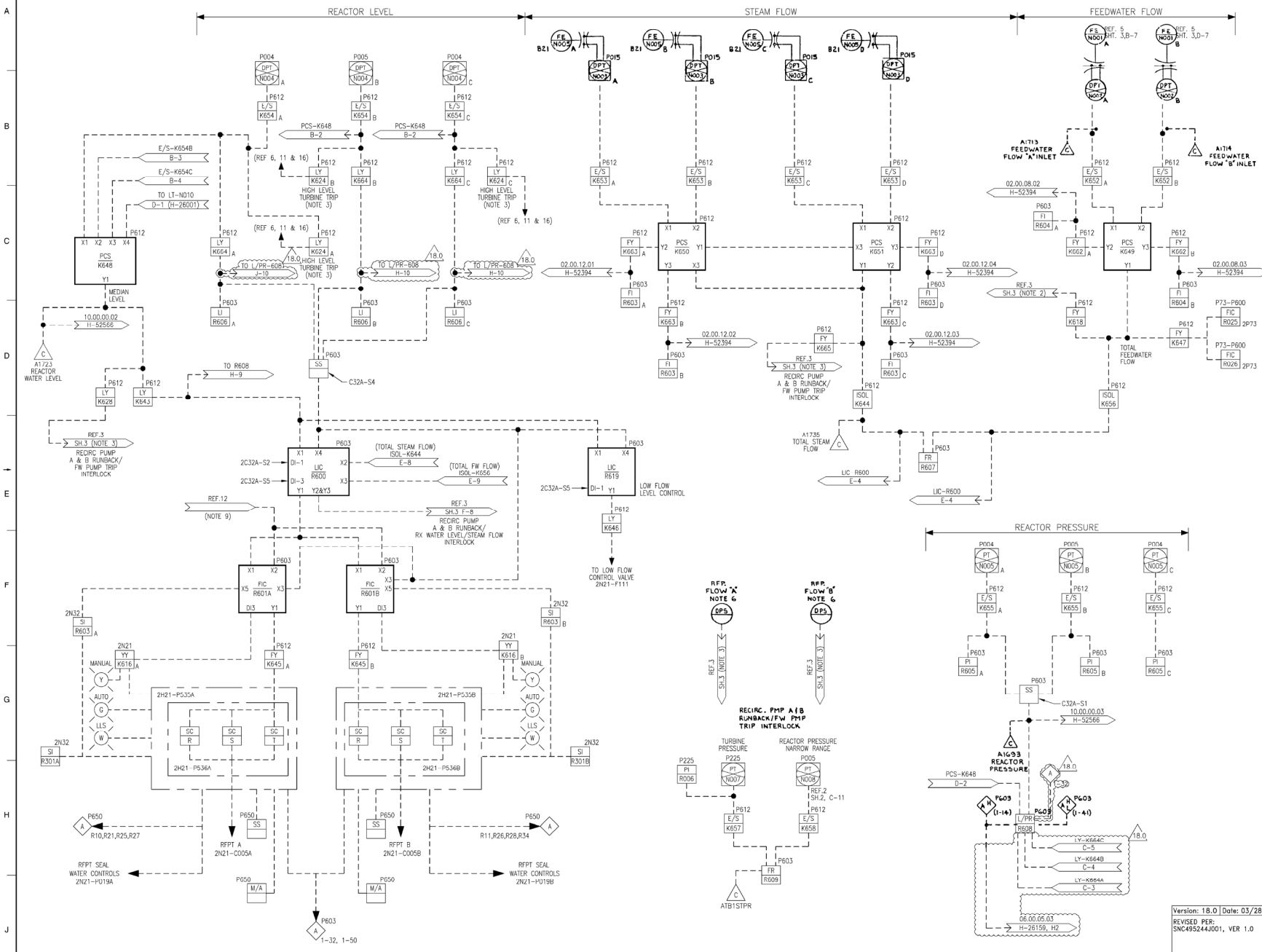
RECVTEL ASSOCIATES JOB #511	
SOUTHERN SERVICES INC. 108	
GEORGIA POWER CO., ATLANTA, GA GENERAL ENGINEERING DEPARTMENT	
EDWIN I. HATCH NUCLEAR PLANT UNIT NO. 2 INSTRUMENT & PRIMARY POINT LOCATIONS SECTION A-A	
DATE: 10-31-03 SCALE: 1/2" = 1'-0"	DRAWN BY: J.P.H. CHECKED BY: J.P.H. DATE: 10-31-03
LOCATION: 10-502	SHEET NO.: 4-26424

Revision: 1 Date: 10-31-03
 DRAWING DEACTIVATED FOR REFERENCE ONLY
 PER ABN 03-0192

SECTION A-A
 200000-10374



- ALL EQUIPMENT AND INSTRUMENTS ARE PREFIXED BY SYSTEM NO. 2C32, UNLESS OTHERWISE NOTED.
- REMOVED.
- DEVICES K624A, B AND C TRIP CONTACTS TO BE WIRED IN A 2 OUT OF 3 TRIP SO THAT ANY TWO DEVICES MUST TRIP TO INITIATE MAIN AND RFP TURBINE STOP VALVE CLOSURES. MAIN TURBINE TRIP LOGIC AND INITIATION IS PERFORMED IN MARK VI EDC.
- REMOVED.
- THE POWER SOURCE FOR THE FEEDWATER INSTRUMENTATION AND CONTROL SYSTEM SHALL HAVE AT LEAST THE SAME DEGREE OF RELIABILITY AS THE POWER SOURCES FOR THE REACTOR/FEED/BOOSTER/CONDENSATE PUMPS.
- A/CUSTOMER SHALL PROVIDE TWO NORMALLY OPEN CONTACTS PER TURBINE DRIVEN REACTOR FEED PUMP TO OPERATE WHEN TURBINE FEED PUMP UNIT HAS TRIPPED OR BEEN SHUT DOWN. THE CONTACTS SHALL PREFERABLY BE DERIVED FROM A FLOW SWITCH MOUNTED ACROSS THE RFP LOW OR R.F.P. DISCHARGE VALVES. IF THESE AUTOMATICALLY RUN CLOSED ON RFP TRIP, G.E. (SQUIRS) REQUIRES THESE CONTACTS FOR INITIATION ON REACTOR RECIRCULATION PUMP RUNBACK IN EVENT ONE OUT OF TWO RFP TRIP AT HIGH LOADS.
- REMOVED.
- A/C POWER TO THE C/C POWER SUPPLIES MUST BE FROM INDEPENDENT SOURCES.
- TRIP SWITCH ON C/C POWER SUPPLIES THREE ELEMENT - PUMP DIFFERENTIAL PRESS. CONTROL, CONTROLLER MOOD NOT USED IN DIFFERENTIAL PRESSURE CONTROL. CONTROL FROM REF. 12.
- DELETED.



REFERENCES

- | TITLE | DWG. NO. | DATE |
|--|-------------------|--|
| 1. FEEDWATER CONTROL SYS. DESIGN SPEC. | 2C32-4010 | 11-26-80 |
| 2. NUCLEAR BOILER SYS. P.F.I.D. | (SHT.1) 2A21-1010 | H-26001 |
| 3. REACTOR RECIRC. SYS. P.F.I.D. | (SHT.1) 2A31-1010 | H-26003 |
| 4. CONTROL ROD DRIVE HYDRAULIC SYS. P.C.D. | (SHT.1) 2A12-1010 | H-26004 |
| 5. FEEDWATER SYS. P.F.I.D. TRIP LOGIC ELEM. | (SHT.1) 2A11-1010 | H-21038 |
| 6. MAIN TURBINE GENERATOR TRIP LOGIC ELEM. | (SHT.1) 2A11-1010 | H-21038 |
| 7. RFP TURBINE SPEED CONTROLLER MCH. DIAG. | (SHT.1) 2A11-1010 | H-21038 |
| 8. RFP TURBINE SPEED CONTROLLER WIRING DIAG. | (SHT.1) 2A11-1010 | H-21038 |
| 9. INSTRUMENT SYMBOLS | 2A41-1010 | H-26000 |
| 10. PIPING / INSTRUMENT SYMBOLS TRIP LOGIC ELEM. | 2A41-1010 | H-26000 |
| 11. AUX. TURBINE FEED PUMP TRIP LOGIC ELEM. | (SHT.1) 2A11-1010 | H-26003 |
| 12. AUX. SYS. BOP I.E.D. | 1210131 | H-26155 |
| 13. ANNUNCIATOR SIGNALS TO T.S.C. I.E.R. | 2A15-1010 | H-26155 |
| 14. DELETED | | |
| 15. DELETED | | |
| 16. GE ELEMENTARY DIAGRAM - MARK VI I/O | | S-62834 |
| 17. GE WIRING DOCUMENTATION - MARK VI I/O | | RFP1 2A: S-64107 & S-64108, RFP2 2B: S-64108 & S-64110 |

THIS DRAWING WAS DEVELOPED FROM G.E. DRAWING NO. 761836, SHEET 1, REV. 4 5/81. ACCESSION DRAWING NO. S-2539B

CRITICAL DOCUMENT

MPL NO 2C32-1010 (REV. 03/28/87) H26991



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EDWIN I. HATCH NUCLEAR PLANT UNIT NO.2 FEEDWATER CONTROL SYSTEM TURBINE DRIVEN FEEDPUMPS I.E.D.

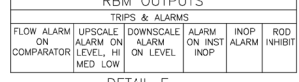
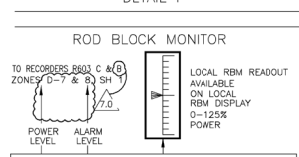
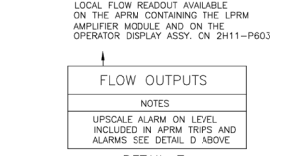
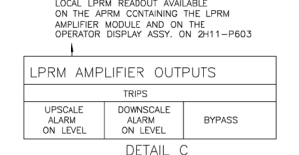
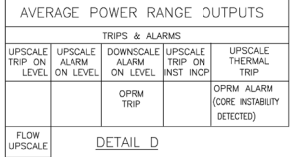
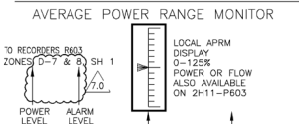
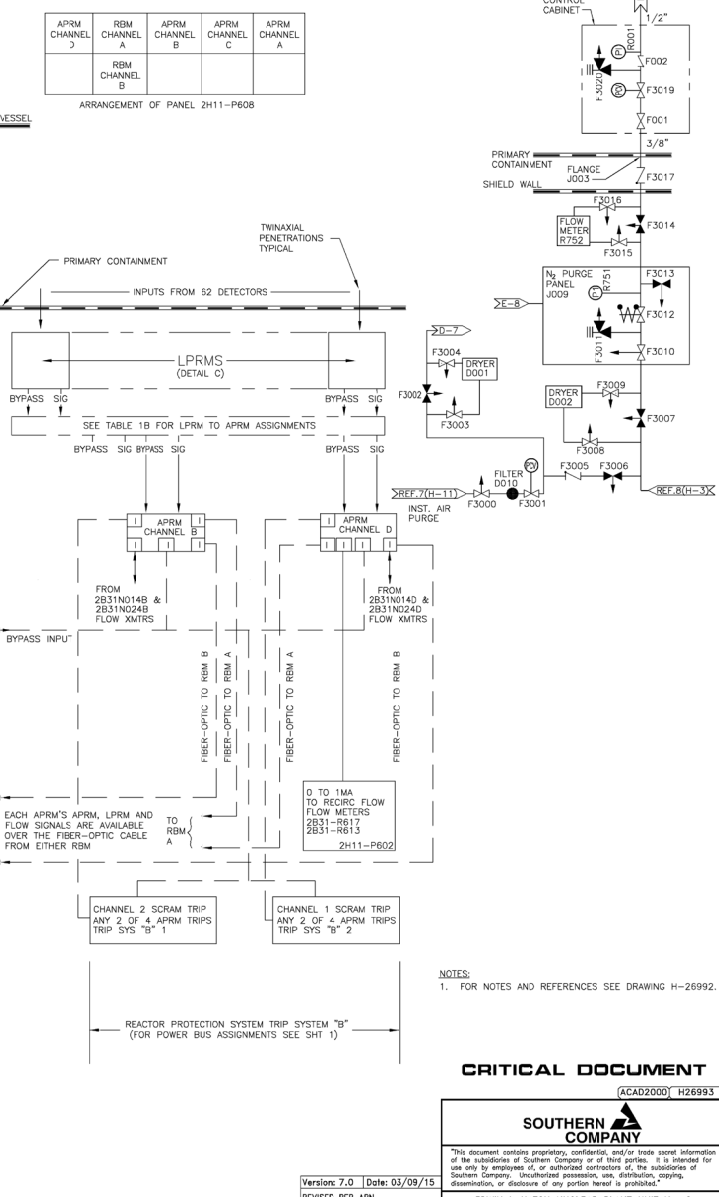
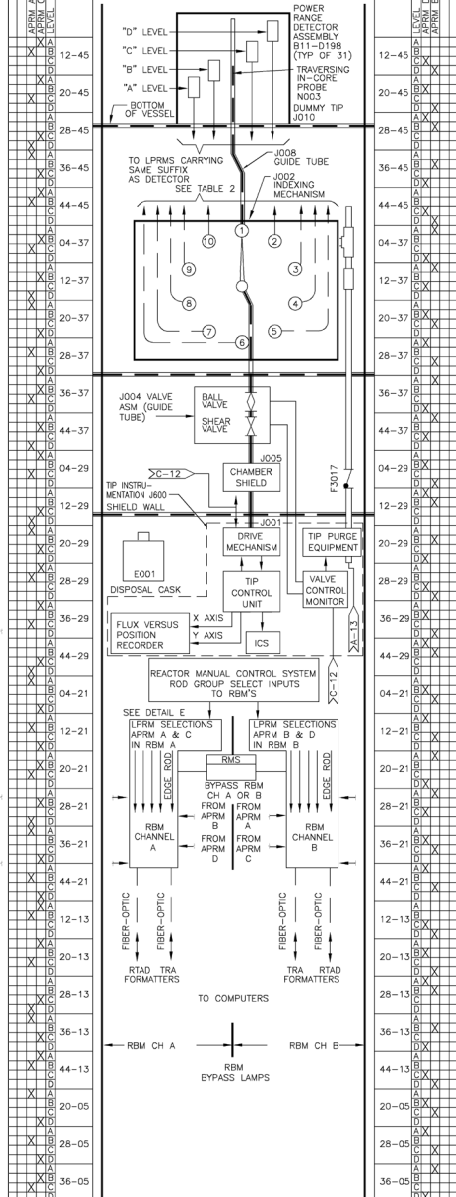
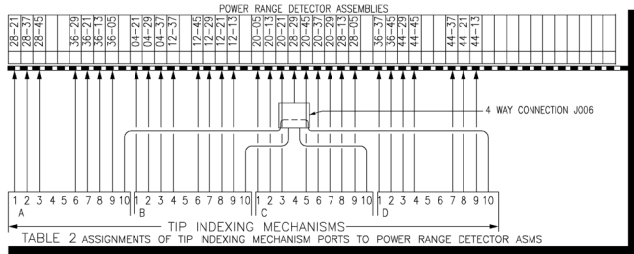
Version: 18.0 Date: 03/28/17
REVISED PER: SNC455244001, VER 1.0

ISSUED	DESIGNED	LOCATED	DRAWING NUMBER	VERSION
S. RHZ			10-502	H-26991 18.0
10/20/82		No Scale		

13 DRAWING CATEGORY: CRITICAL

TABLE 1A

TABLE 1B



POWER RANGE NEUTRON MONITORING

NOTES: 1. FOR NOTES AND REFERENCES SEE DRAWING H-26992.

CRITICAL DOCUMENT
 (ACAD2000) H26993

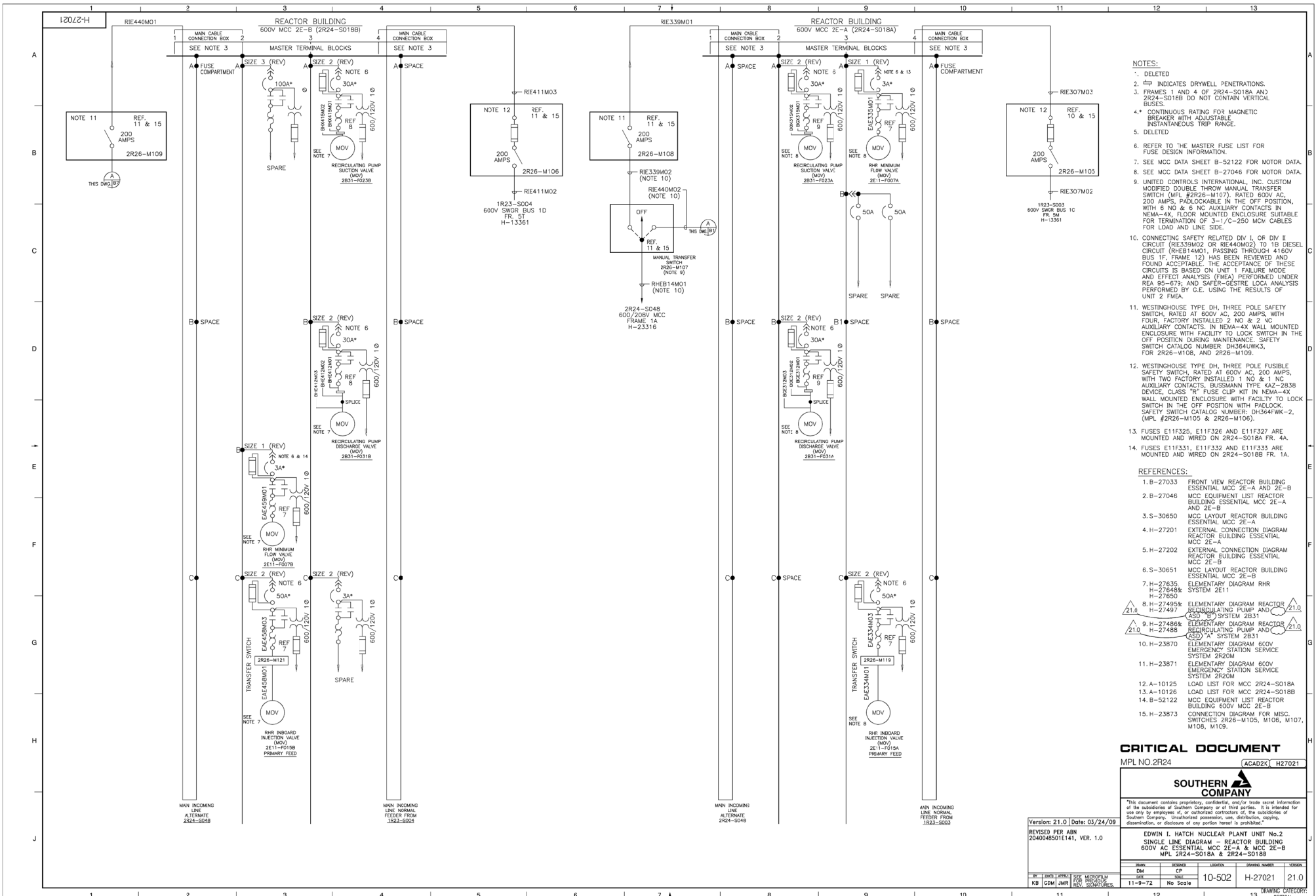
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Version: 7.0 Date: 03/09/15
 REVISED PER ASN
 SNC43312J035, VER. 1.0

EDWIN I. HATCH NUCLEAR PLANT UNIT No. 2
 NEUTRON MONITORING
 SYSTEM IED SHEET 2 OF 2

NO.	DATE	BY	CHK'D BY	LOCATION	DRAWING NUMBER	VERSION
D. KINBROUGH					10-502 H-26993	7.0
JZF		DAB	JTL	None		



- NOTES:**
- DELETED
 - INDICATES DRYWELL PENETRATIONS.
 - FRAMES 1 AND 4 OF 2R24-S018A AND 2R24-S018B DO NOT CONTAIN VERTICAL BUSES
 - CONTINUOUS RATING FOR MAGNETIC BREAKER WITH ADJUSTABLE INSTANTANEOUS TRIP RANGE.
 - DELETED
 - REFER TO THE MASTER FUSE LIST FOR FUSE DESIGN INFORMATION.
 - SEE MCC DATA SHEET B-52122 FOR MOTOR DATA.
 - SEE MCC DATA SHEET B-27046 FOR MOTOR DATA.
 - UNITED CONTROLS INTERNATIONAL, INC. CUSTOM MODIFIED DOUBLE THROW MANUAL TRANSFER SWITCH (MFL #2R26-M107), RATED 600V AC, 200 AMPS, PADLOCKABLE IN THE OFF POSITION, WITH 6 NO & 6 NC AUXILIARY CONTACTS IN NEMA-4X, FLOOR MOUNTED ENCLOSURE SUITABLE FOR TERMINATION OF 3-1/2"-250 MCM CABLES FOR LOAD AND LINE SIDE.
 - CONNECTING SAFETY RELATED DIV I, OF DIV II CIRCUIT (RIE339M02 OR RIE440M02) TO 1B DIESEL CIRCUIT (RHE14M01), PASSING THROUGH 4160V BUS 1F, FRAME 12) HAS BEEN REVIEWED AND FOUND ACCEPTABLE. THE ACCEPTANCE OF THESE CIRCUITS IS BASED ON UNIT 1 FAILURE MODE AND EFFECT ANALYSIS (FMEA) PERFORMED UNDER REA 95-679; AND SAFER-GESTRE LOCK ANALYSIS PERFORMED BY G.E. USING THE RESULTS OF UNIT 2 FMEA.
 - WESTINGHOUSE TYPE DH, THREE POLE SAFETY SWITCH, RATED AT 600V AC, 200 AMPS, WITH FOUR, FACTORY INSTALLED 2 NO & 2 NC AUXILIARY CONTACTS, IN NEMA-4X WALL MOUNTED ENCLOSURE WITH FACILITY TO LOCK SWITCH IN THE OFF POSITION DURING MAINTENANCE. SAFETY SWITCH CATALOG NUMBER: DH364FWK3, FOR 2R26-M108, AND 2R26-M109.
 - WESTINGHOUSE TYPE DH, THREE POLE FUSIBLE SAFETY SWITCH, RATED AT 600V AC, 200 AMPS, WITH TWO FACTORY INSTALLED 1 NO & 1 NC AUXILIARY CONTACTS, BUSSMANN TYPE KAZ-2838 DEVICE, CLASS "R" FUSE CLIP KIT IN NEMA-4X WALL MOUNTED ENCLOSURE WITH FACILITY TO LOCK SWITCH IN THE OFF POSITION WITH PADLOCK. SAFETY SWITCH CATALOG NUMBER: DH364FWK-2, (MFL #2R26-M105 & 2R26-M106).
 - FUSES E11F325, E11F326 AND E11F327 ARE MOUNTED AND WIRED ON 2R24-S018A FR. 4A.
 - FUSES E11F331, E11F332 AND E11F333 ARE MOUNTED AND WIRED ON 2R24-S018B FR. 1A.

- REFERENCES:**
- B-27033 FRONT VIEW REACTOR BUILDING ESSENTIAL MCC 2E-A AND 2E-B
 - B-27046 MCC EQUIPMENT LIST REACTOR BUILDING ESSENTIAL MCC 2E-A AND 2E-B
 - S-30650 MCC LAYOUT REACTOR BUILDING ESSENTIAL MCC 2E-A
 - H-27201 EXTERNAL CONNECTION DIAGRAM REACTOR BUILDING ESSENTIAL MCC 2E-A
 - H-27202 EXTERNAL CONNECTION DIAGRAM REACTOR BUILDING ESSENTIAL MCC 2E-B
 - S-30651 MCC LAYOUT REACTOR BUILDING ESSENTIAL MCC 2E-B
 - H-27635 ELEMENTARY DIAGRAM RHR SYSTEM ZE11
 - H-27495& ELEMENTARY DIAGRAM REACTOR RECIRCULATING PUMP AND ASD "B" SYSTEM ZB31
 - H-27488& ELEMENTARY DIAGRAM REACTOR RECIRCULATING PUMP AND ASD "A" SYSTEM ZB31
 - H-23870 ELEMENTARY DIAGRAM 600V EMERGENCY STATION SERVICE SYSTEM ZR20M
 - H-23871 ELEMENTARY DIAGRAM 600V EMERGENCY STATION SERVICE SYSTEM ZR20M
 - A-10125 LOAD LIST FOR MCC 2R24-S018A
 - A-10126 LOAD LIST FOR MCC 2R24-S018B
 - B-52122 MCC EQUIPMENT LIST REACTOR BUILDING 600V MCC 2E-B
 - H-23873 CONNECTION DIAGRAM FOR MISC. SWITCHES 2R26-M105, M106, M107, M108, M109.

CRITICAL DOCUMENT
MPL NO.2R24 (ACAD2C) H27021

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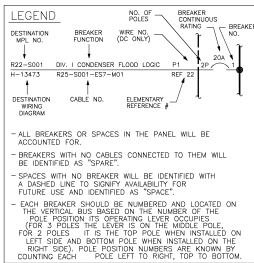
EDWIN I. HATCH NUCLEAR PLANT No.2
SINGLE LINE DIAGRAM - REACTOR BUILDING
600V AC ESSENTIAL MCC 2E-A & MCC 2E-B
MPL 2R24-S018A & 2R24-S018B

Version: 21.0 Date: 03/24/09
REVISED PER AEN 2040045501E141, VER. 1.0

NO.	DATE	BY	CHKD	APPV	REV.	DESCRIPTION
10-502	11-9-72	JMR	JMR	JMR	1	No Scale

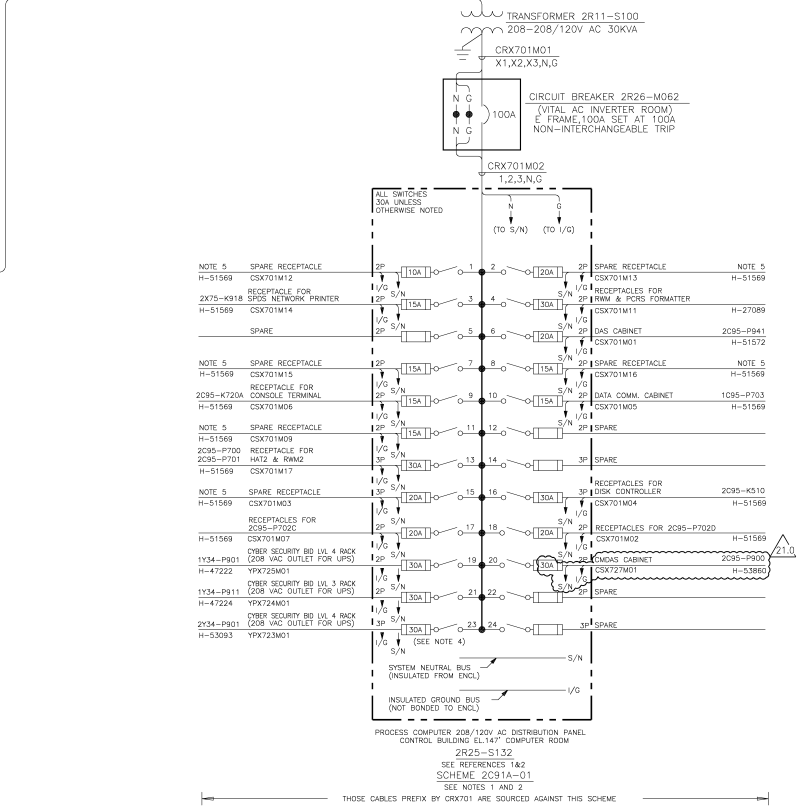
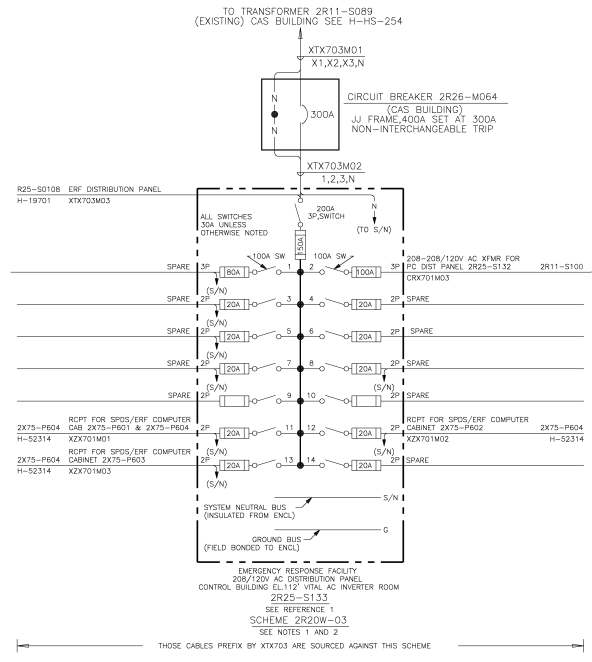
DRAWING CATEGORY: CRITICAL

H-2705-H



- NOTES:**
1. THE LEGEND ESTABLISHED FOR 120/208V AC DISTRIBUTION PANELS HAS CIRCUIT BREAKERS, DISTRIBUTION PANELS 2R25-S132 AND 2R25-S133 HAVE A FUSE AND SWITCH COMBINATION INSTEAD OF CIRCUIT BREAKERS, THEREFORE THE NUMBERING SCHEME WILL NOT AGREE WITH THE ESTABLISHED LEGEND.
 2. DISTRIBUTION PANEL 2R25-S133 HAS ADDITIONAL SPACE FOR FUSED DISCONNECT SWITCHES.
 3. 2R44-S005 IS NORMALLY IN THE BYPASS MODE.
 4. CIRCUIT #23 HAS A 3 POLE DISCONNECT, 2 POLES ARE BEING USED, THE THIRD POLE IS SPARE (NOT USED).
 5. NAME PLATE IS ADDED TO SPARE RECEPTACLE BOX ENGRAVED WITH "PRIOR TO USE CONTACT C95 SYSTEM ENGINEER."

- REFERENCES:**
1. H-27089 WIRING DIAGRAM ERF & PROCESS MINI COMPUTER (2R25-S132 & 2R25-S133)
 2. S-42501-A GENERAL SPECIFICATIONS FUSIBLE SWITCH PANELBOARD (2R25-S132)
 3. H-24559 ELEMENTARY DIAGRAM ERF SYSTEM 2X75 SHEET 1
 4. H-24560 ELEMENTARY DIAGRAM ERF SYSTEM 2X75 SHEET 2
 5. A-20252 LOAD LIST FOR DISTRIBUTION PANEL 2R25-S132
 6. A-20253 LOAD LIST FOR DISTRIBUTION PANEL 2R25-S133
 7. S-42883 INSTRUCTION MANUAL ELGAR MODEL 752-1-105
 8. H-47222 CYBER SECURITY BID RACKS-SYSTEM 1Y34-WIRING DIAGRAM-PANEL 1Y34P901 (SHEET 1 OF 2)
 9. H-47224 CYBER SECURITY BID RACKS-SYSTEM 1Y34-WIRING DIAGRAM-PANEL 1Y34P911 (SHEET 1 OF 2)
 10. H-53093 CYBER SECURITY BID RACKS-SYSTEM 2Y34-WIRING DIAGRAM-PANEL 2Y34P901 (SHEET 1 OF 2)



CRITICAL DOCUMENT

MPL NO. 2R25 (ACAD2K) H27057

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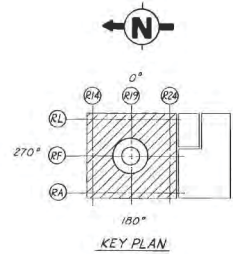
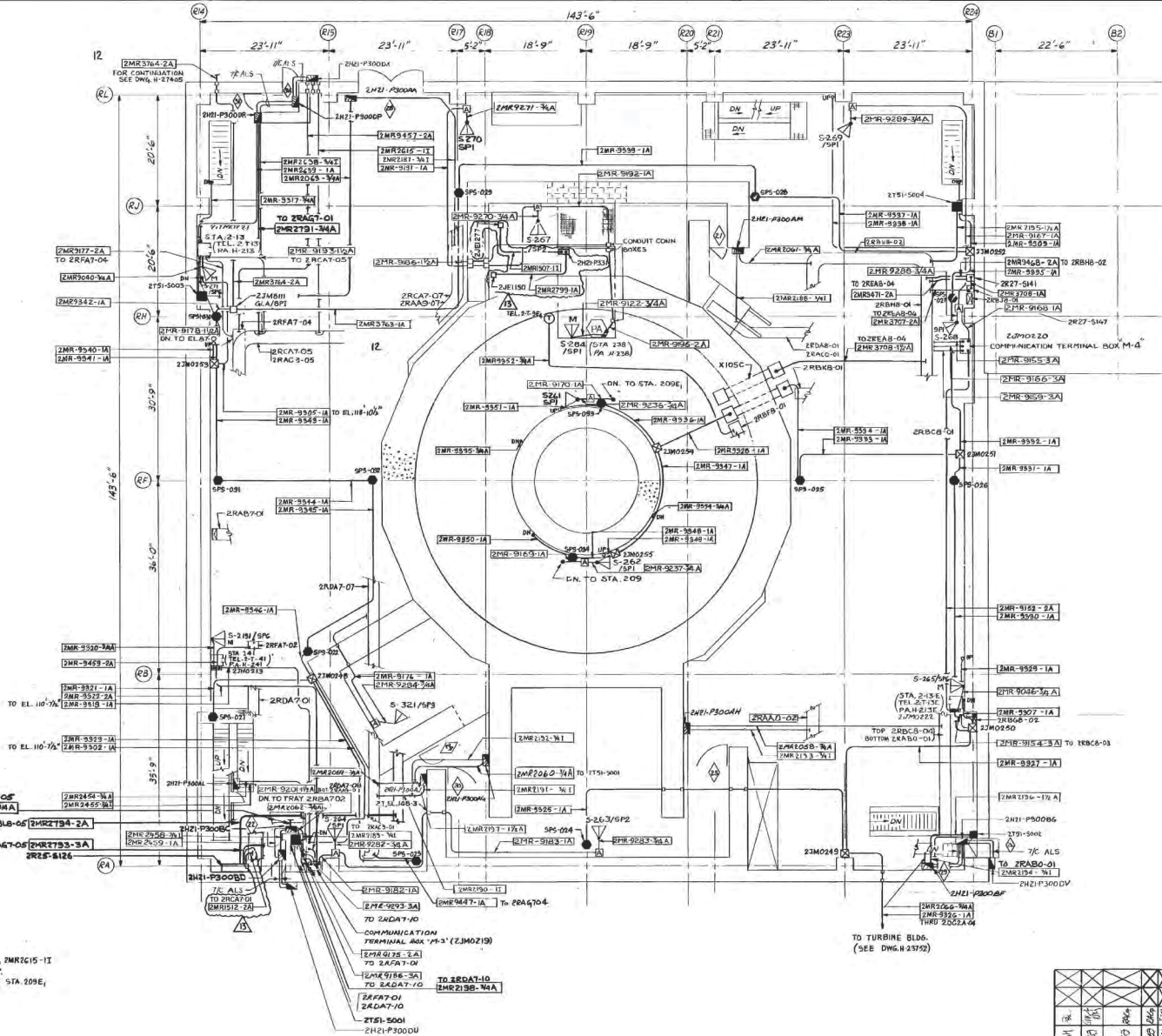
EDWIN I. HATCH NUCLEAR PLANT UNIT No. 2
EMERGENCY RESPONSE FACILITY AND PROCESS
MINI COMPUTER SINGLE LINE DIAGRAM
MPL'S 2R25-S132 AND 2R25-S133

DATE	DESIGNED	ISSUED	ISSUED NUMBER	ISSUED
CAD	RM	10-502	H-27057	21.0
CHK	CHK	None		
4-30-82				

Version: 21.0 Date: 1-4-18
 REVISED PER ABN
 SNC98436E132, VER. 1.0
 SEE MICROFILM FOR PREVIOUS EDITIONS

THOSE CABLES PREFIX BY 05X701 ARE SOURCED AGAINST THIS SCHEME

THOSE CABLES PREFIX BY XTX703 ARE SOURCED AGAINST THIS SCHEME



NOTES:

FOR NOTES AND REFERENCES SEE DWG H-27380 & H-27389

REVISION NOTES:
 1. ADDED: 2MR-9459-2A, 2MR-9457-2A, 2MR-9451-1I
 2MR-1-P3000A, 2MR-1-P3000P.
 REVERSE LOCATION OF STA. 209 & STA. 209E.

REV 13 DATE 5-24-86
 ADDED: 2MR-9459-2A, 2MR-9457-2A, 2MR-9451-1I
 2MR-1-P3000A, 2MR-1-P3000P.
 REV 01 & 2A SUB E
 (DCH 78-403, REV 1)

BY CKD AP1 AP2 AP3 AP4
 JRD KRI C4F RVV

NO.	DATE	BY	CHKD	APP	REV	DESCRIPTION
1	12/15/85	JRD	CKD	AP1	1	ISSUED FOR CONSTRUCTION
2	12/15/85	JRD	CKD	AP1	2	REVISIONS
3	12/15/85	JRD	CKD	AP1	3	REVISIONS
4	12/15/85	JRD	CKD	AP1	4	REVISIONS
5	12/15/85	JRD	CKD	AP1	5	REVISIONS
6	12/15/85	JRD	CKD	AP1	6	REVISIONS
7	12/15/85	JRD	CKD	AP1	7	REVISIONS
8	12/15/85	JRD	CKD	AP1	8	REVISIONS
9	12/15/85	JRD	CKD	AP1	9	REVISIONS
10	12/15/85	JRD	CKD	AP1	10	REVISIONS
11	12/15/85	JRD	CKD	AP1	11	REVISIONS
12	12/15/85	JRD	CKD	AP1	12	REVISIONS
13	12/15/85	JRD	CKD	AP1	13	REVISIONS

MPL NO. 2R51

BECHTEL

JOB 6511 GAITHERSBURG, MARYLAND
 SOUTHERN SERVICES INC.
 FOR

GEORGIA POWER CO., ATLANTA, GA.
 GENERAL ENGINEERING DEPARTMENT
 EDWIN HATCH NUCLEAR PLANT UNIT NO. 2
 COMMUNICATION
 REACTOR BLDG. EL. 130'-0"

DRAWING NUMBER
 LOCATION SHEET NO.
 10-502 H-27384



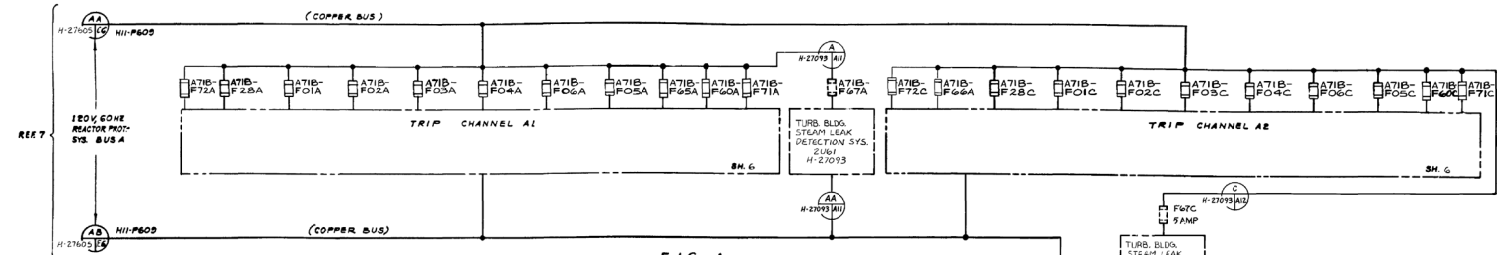


FIG. 1

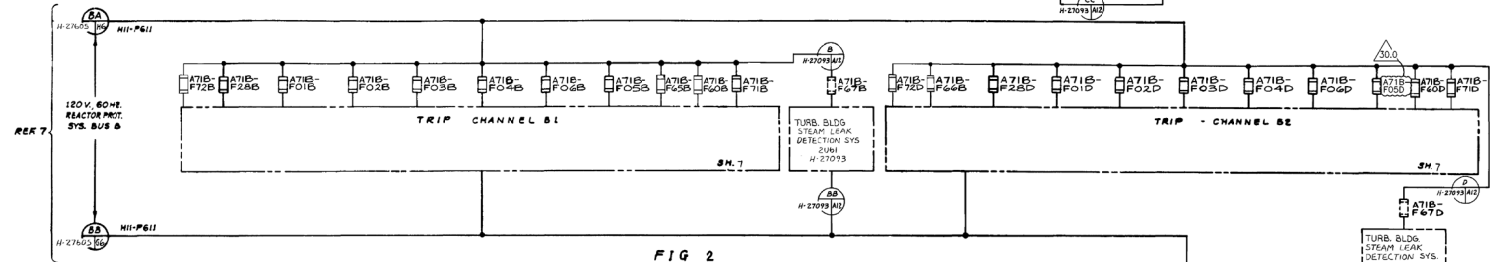


FIG. 2

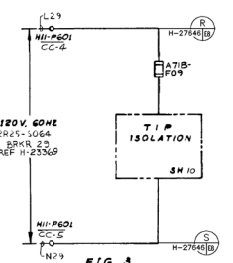


FIG. 3 (PART OF SCHEME 14)

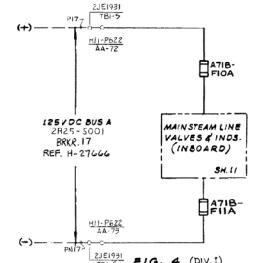


FIG. 4 (DIV. I) SCHEME 29

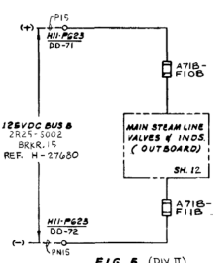


FIG. 5 (DIV. II) SCHEME 30

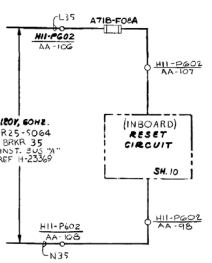


FIG. 6 (PART OF SCHEME 13)

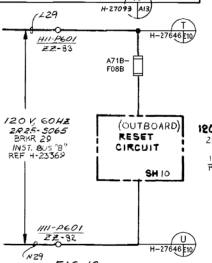


FIG. 7 (PART OF SCHEME 31)

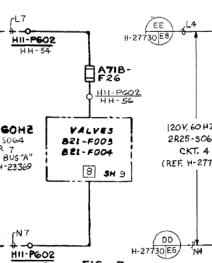


FIG. 8 (PART OF SCHEME 12)

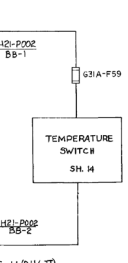


FIG. 9 (DIV. II) (PART OF SCHEME 24)

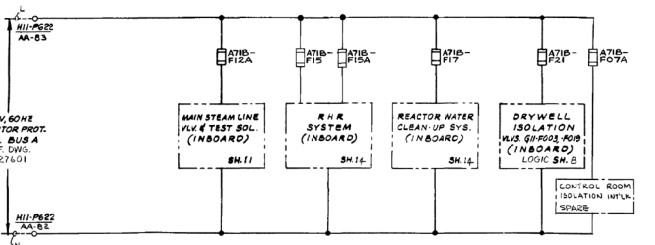


FIG. 10 (PART OF SCHEME 15)

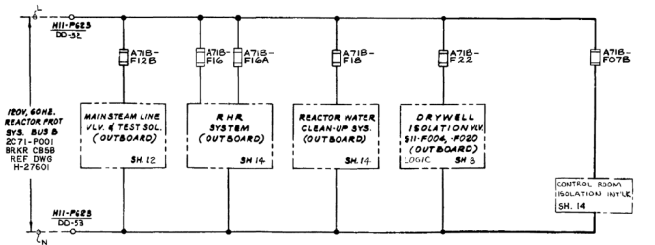


FIG. 11 (PART OF SCHEME 16)

POWER DISTRIBUTION DIAGRAM

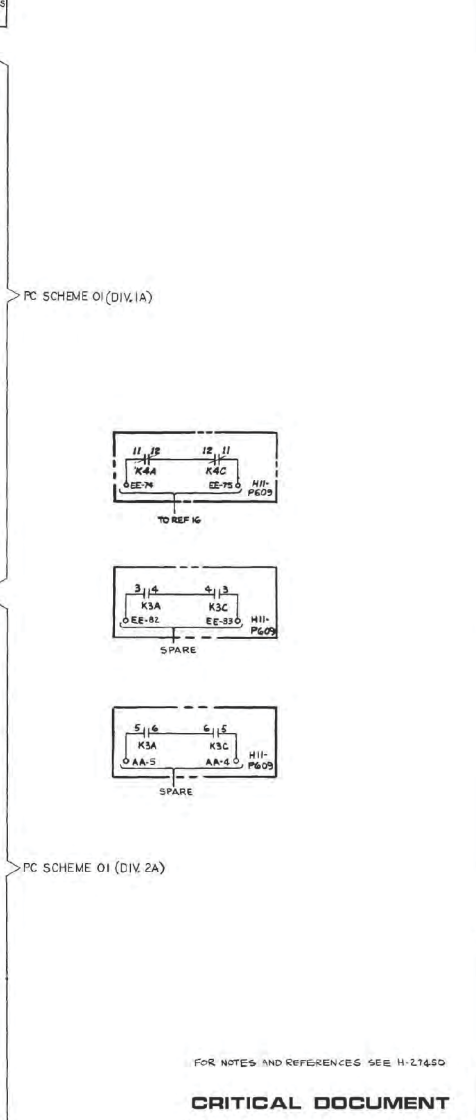
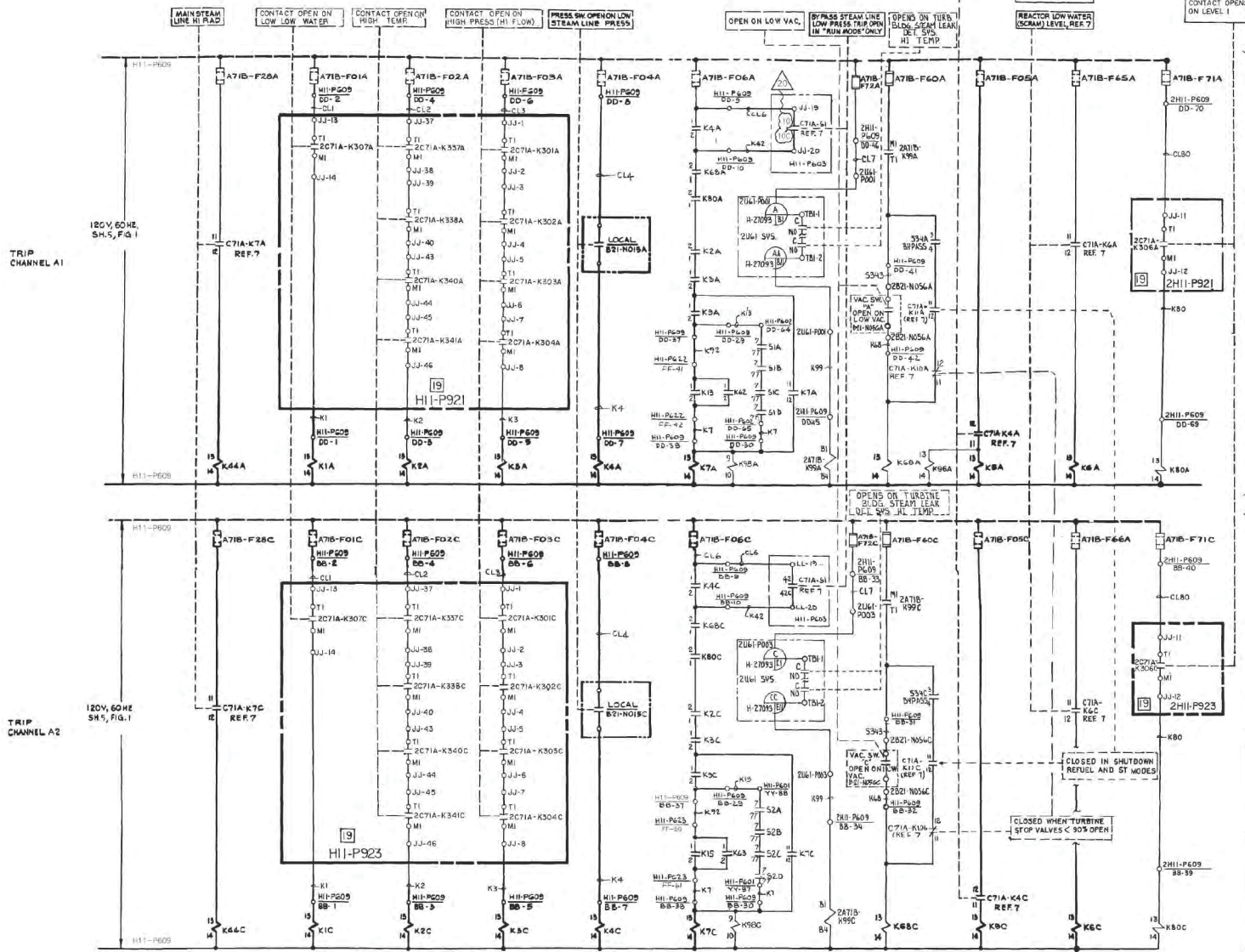
FOR NOTES AND REFERENCES SEE H-27450.

CRITICAL DOCUMENT
 MPL NO. 2A71 (ACADOVY) H27454
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 EDWIN I. HATCH NUCLEAR PLANT UNIT No.2
 NUCLEAR STEAM SUPPLY SHUTOFF SYS. 2A71
 ELEMENTARY DIAGRAM SH. 5 OF 20

Version: 30.0 Date: 1/24/13
 REVISED PER ABN-H03-27, VER. 1.0

REV	DATE	BY	CHKD	DESCRIPTION	ISSUED
1	9-21-73	JEM	RK	REV. SIGNATURES	30.0

DWG. CATEGORY: CRITICAL



- CHANNEL POWER H11-P609
- MAIN STEAM LINE HI RAD. REF 7
- LOW WATER LEVEL 2
- STEAM TUNNEL HI TEMP.
- STEAM LINE HI FLOW
- MAIN STEAM LINE LOW PRESS (PRESS. REG. FAILURE) REF 8
- 1. CLOSE MAIN STEAM LINE ISOL. VALVES.
- 2. CLOSE MAIN STEAM LINE DRAIN VALVES.
- 3. CLOSE REACTOR WATER SAMPLE VALVES. REF. 5
- LOW CONDENSER VACUUM AND HIGH TURBINE ANV. TEMPERATURE
- DRYWELL PRESS TRIP
- LEVEL 3 TRIP CLOSE SHUTDOWN ISOLATION VALVES.
- BT-FO08- OUTBOARD EIH-FO03- OUTBOARD EIH-FO09- INBOARD EIH-FO02- INBOARD AND
- 1. CLOSE DRYWELL VENT SOL. VALVE.
- 2. INITIATE TRIP WITHDRAWAL.
- 3. CLOSE PROCESS SAMPLE VALVES.
- 4. CLOSE RADWASTE DISCHARGE VALVES.
- MSIV CLOSURE ON VESSEL WATER LEVEL 1

FOR NOTES AND REFERENCES SEE H-27450

CRITICAL DOCUMENT
MPL NO. 2A71 AUTOCAD H27455

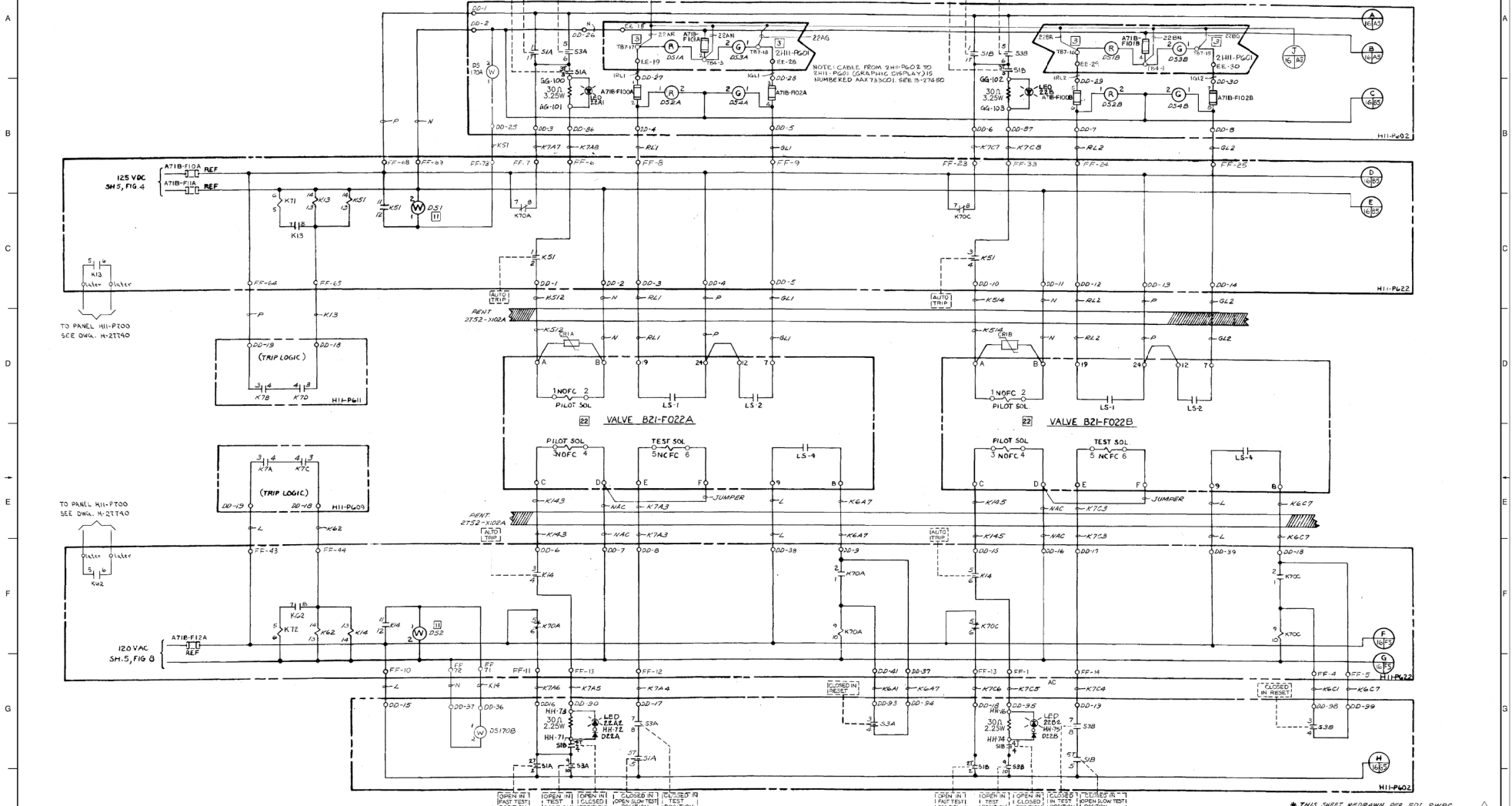
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EDWIN I. HATCH NUCLEAR PLANT UNIT No. 2
NUCLEAR STEAM SUPPLY SHUTOFF SYS. 2A71
ELEMENTARY DIAGRAM SH. 5 OF 20

Revision: 20 Date: 3-3-03
REVISED PER AEN 03-0061

USER	DESIGN	ISSUED	ISSUE NUMBER	REVISION
GAW	SH			
DFV	PWG	ASK	9-21-73	NONE



MAIN STEAM LINE VALVES (INBOARD) 22
PART OF P.C. SCHEME 02 (DIV 1A) (INCLUDES SCHEME 53 OF A71)
(SEE SH. 16)

LS1 - CLOSED FROM 10% TO 100% OPEN
LS2 - CLOSED FROM 0% TO 40% OPEN
LS4 - CLOSED FROM 40% TO 100% OPEN

SEE H-27610 & H-27611 FOR ADDITIONAL MSV CONNECTIONS

* THIS SHEET REDRAWN FOR RDI RWG 19.0
CRITICAL DOCUMENT
MPL NO.2A71 (ACADOVY) H27460

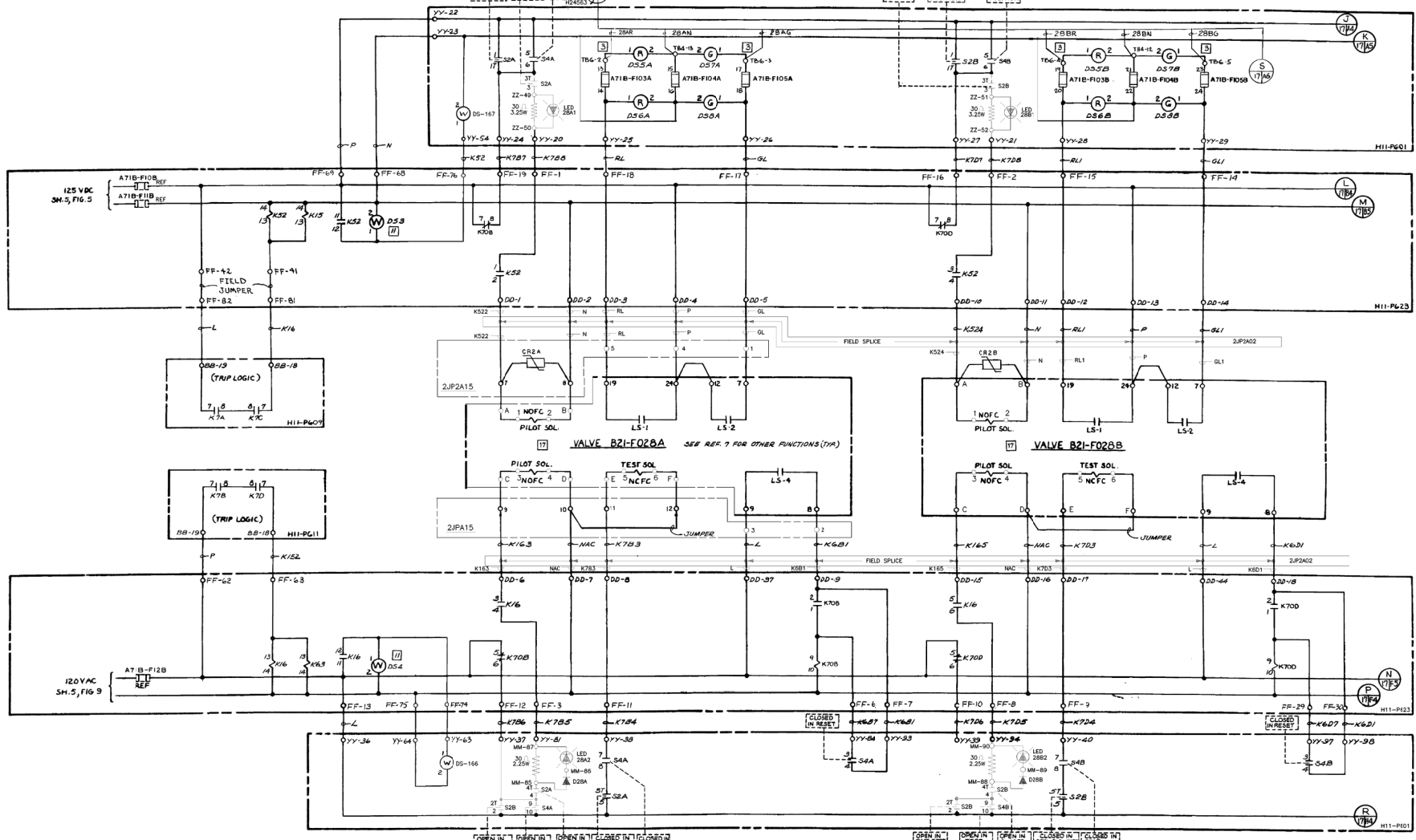


EDWIN I. HATCH NUCLEAR PLANT UNIT No.2
NUCLEAR STEAM SUPPLY SHUTOFF SYSTEM 2A71
ELEMENTARY DIAGRAM
SHEET 11 OF 20

Version: 19.0 Date: 10-16-06
REVISED PER: HEN-100230, VER. 1.0

REV	DATE	BY	CHKD	DESCRIPTION
1		DEW	None	None

NAME	DESIGN	LOCATION	ISSUED NUMBER	VERSION
10-502	H-27460	19.0		



MAIN STEAM LINE VALVES (OUTBOARD) [17]
 PART OF PC SCHEME 02 (DIV 2A)
 (SEE 3M 17)

SEE H-27610 & H-27611 FOR ADDITIONAL MSV CONNECTIONS

- LS1 - CLOSED FROM 10% TO 100% OPEN
- LS2 - CLOSED FROM 0% TO 90% OPEN
- LS3 - CLOSED FROM 90% TO 100% OPEN

* THIS SHEET REDRAWN PER FDI R1W.8
CRITICAL DOCUMENT

ACADOVY H27461

SOUTHERN COMPANY

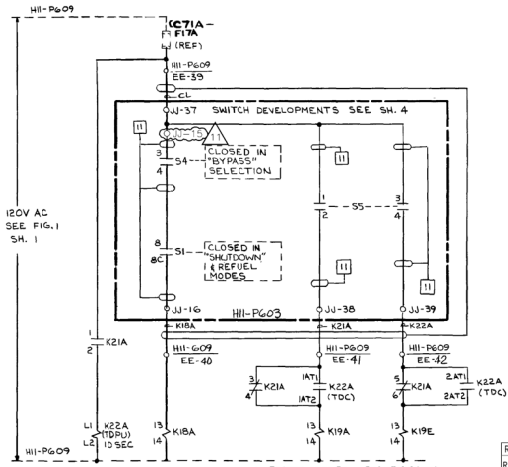
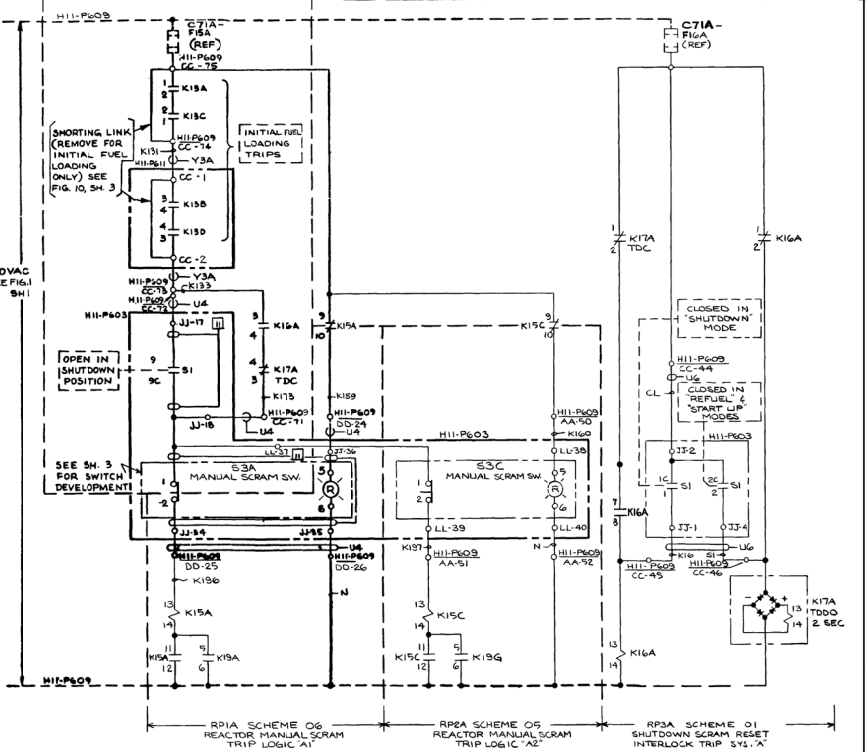
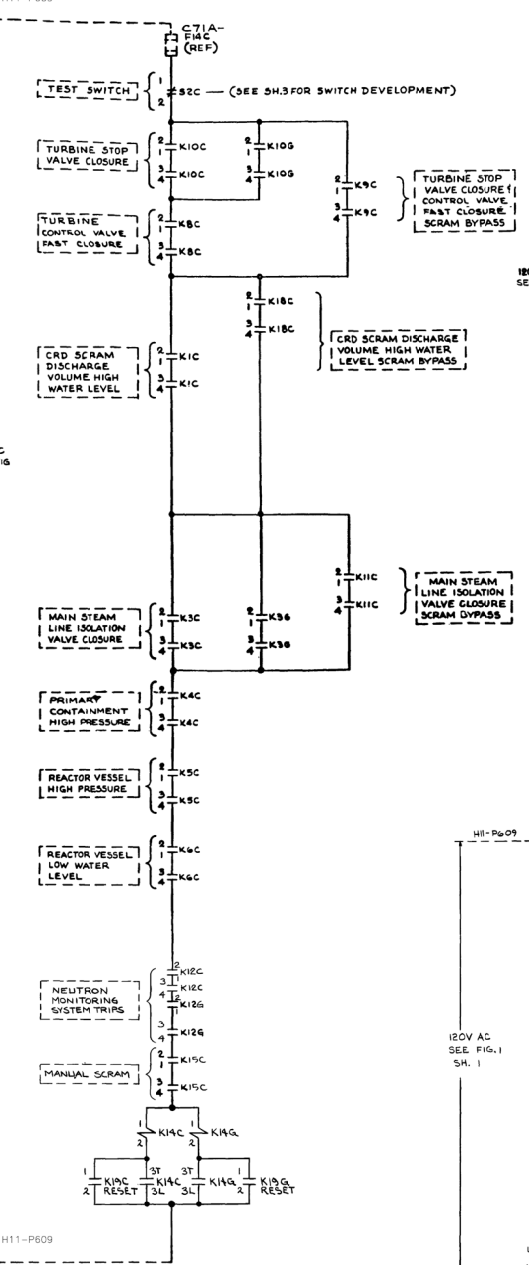
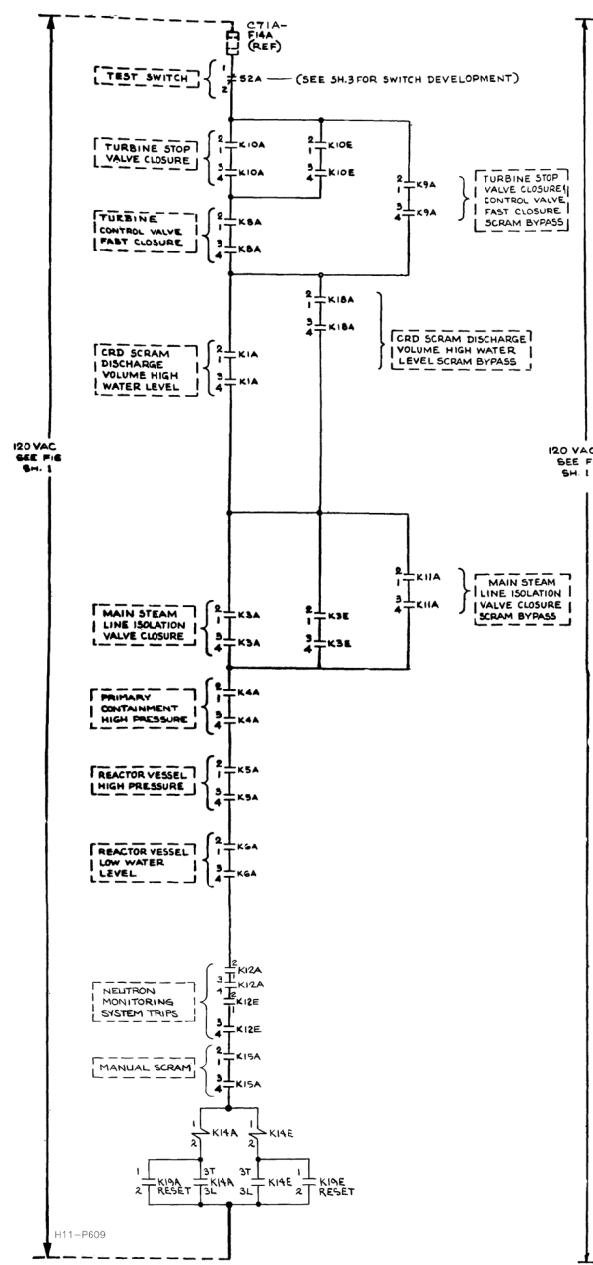
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EDWIN I. HATCH NUCLEAR PLANT UNIT No.2
 NUCLEAR STEAM SUPPLY SHUT OFF SYS. 2A71
 ELEMENTARY DIAGRAM SH1. 12 OF 20

Version: 20.0 Date: 09-29-06
 REVISED PER
 RBN-H00004, VERSION 1.0

REV	DATE	BY	CHK	APP	DESCRIPTION
1	10-12-73	None			

MARK	REV	LOCATION	ISSUED NUMBER	ORIGIN
10-502	H-27461			20.0



FOR NOTES AND REFERENCE SEE DRAWING H-27605

CRITICAL DOCUMENT AUTOCAD H27612

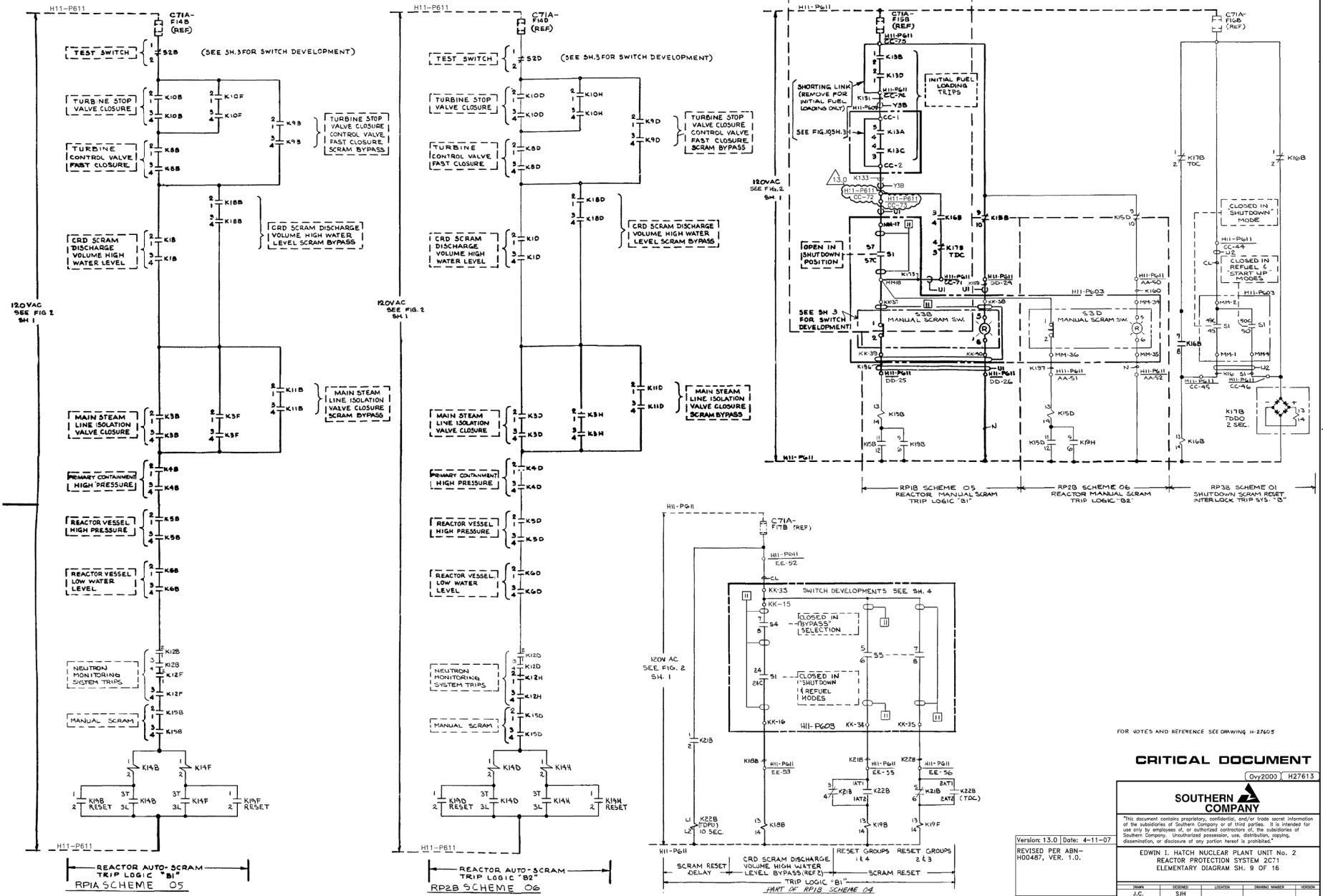


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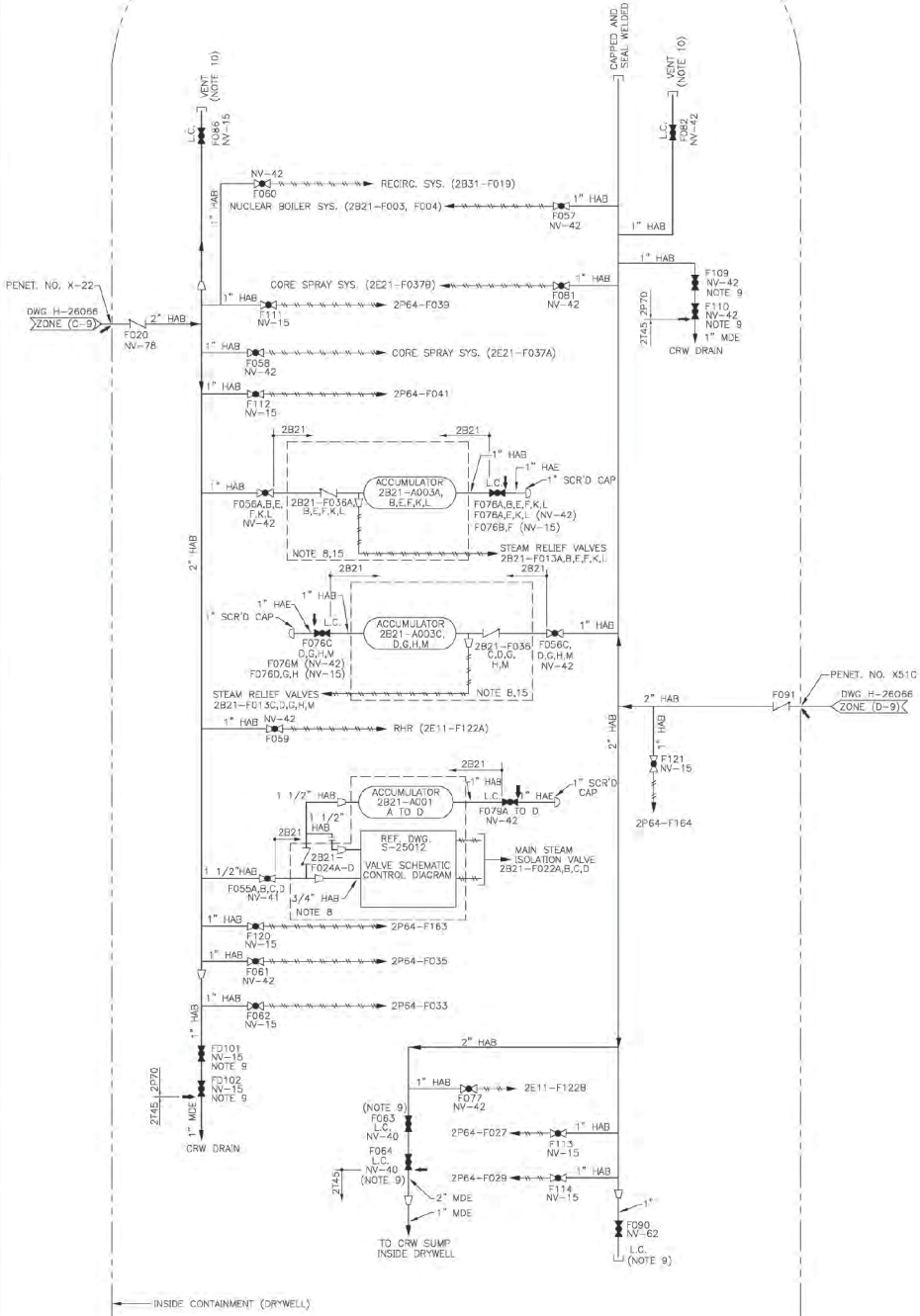
EDWIN L. HATCH NUCLEAR PLANT UNIT No. 2 REACTOR PROTECTION SYSTEM 2C71 ELEMENTARY DIAGRAM S-1, 8 OF 16

Revision: 11 Date: 3-3-03 REVISED PER ABN 03-0061

ISSUED	DESIGNED	LOGICIAN	DRAWN	REVISION
J.C.	G.H.			
DFV	FWG	ASK	REV	SIGNATURES
9-24-73	NONE	10-502	H-27612	11



82002-H



NOTE:
FOR NOTES AND REFERENCES SEE Dwg. H-26056

CRITICAL DOCUMENT

MPL NO. 2P70-1020 (ACAD14) H-28023

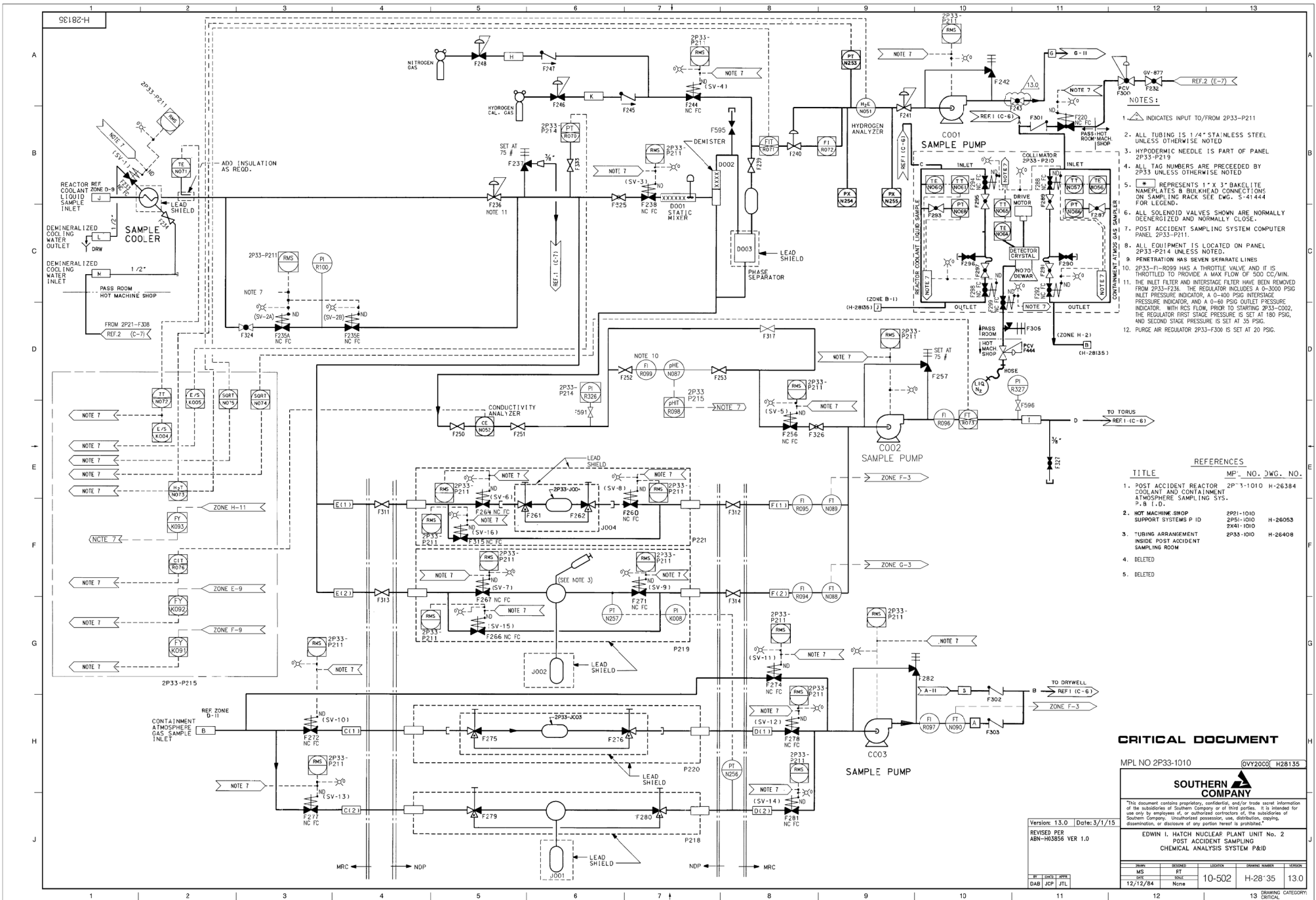


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EDWIN I. HATCH NUCLEAR PLANT UNIT No.2
DRYWELL PNEUMATIC SYSTEM
P&ID SHT. 2

Revision: 7 Date: 9-22-99
Converted To Vector Format,
Verified by JRM.

NO.	DATE	BY	CHKD.	REASON	LOCATION	ISSUED	REVISION	REVISION
1	4/25/83	None						



- NOTES:**
1. Δ INDICATES INPUT TO/FROM 2P33-P211
 2. ALL TUBING IS 1/4" STAINLESS STEEL UNLESS OTHERWISE NOTED
 3. HYPODERMIC NEEDLE IS PART OF PANEL 2P33-P215
 4. ALL TAG NUMBERS ARE PRECEDED BY 2P33 UNLESS OTHERWISE NOTED
 5. □ REPRESENTS 1" X 3" BAKELITE NAMEPLATES @ BULKHEAD CONNECTIONS ON SAMPLING RACK SEE DWG. 5-41444 FOR LEGEND.
 6. ALL SOLENOID VALVES SHOWN ARE NORMALLY DEENERGIZED AND NORMALLY CLOSE.
 7. POST ACCIDENT SAMPLING SYSTEM COMPUTER PANEL 2P33-P211.
 8. ALL EQUIPMENT IS LOCATED ON PANEL 2P33-P214 UNLESS NOTED.
 9. PENETRATION HAS SEVEN SEPARATE LINES
 10. 2P33-FI-R099 HAS A THROTTLE VALVE AND IT IS THROTTLED TO PROVIDE A MAX FLOW OF 500 CC/MIN.
 11. THE INLET FILTER AND INTERSTAGE FILTER HAVE BEEN REMOVED FROM 2P33-F236. THE REGULATOR INCLUDES A 0-3000 PSIG INLET PRESSURE INDICATOR, A 0-400 PSIG INTERSTAGE PRESSURE INDICATOR, AND A 0-60 PSIG OUTLET PRESSURE INDICATOR. WITH RCS FLOW, PRIOR TO STARTING 2P33-C002, THE REGULATOR FIRST STAGE PRESSURE IS SET AT 100 PSIG, AND SECOND STAGE PRESSURE IS SET AT 35 PSIG.
 12. PURGE AIR REGULATOR 2P33-F300 IS SET AT 20 PSIG.

- REFERENCES**
- | TITLE | MP# | NO. | JWG. | NO. |
|---|-----------|---------|------|-----|
| 1. POST ACCIDENT REACTOR COOLANT AND CONTAINMENT ATMOSPHERE SAMPLING SYS. | 2P33-1010 | H-26384 | | |
| 2. HOT MACHINE SHOP SUPPORT SYSTEMS P ID | 2P21-1010 | H-26053 | | |
| 3. TUBING ARRANGEMENT INSIDE POST ACCIDENT SAMPLING ROOM | 2P33-1010 | H-26408 | | |
| 4. DELETED | | | | |
| 5. DELETED | | | | |

CRITICAL DOCUMENT

MPL NO 2P33-1010 0VY20C0 H28135

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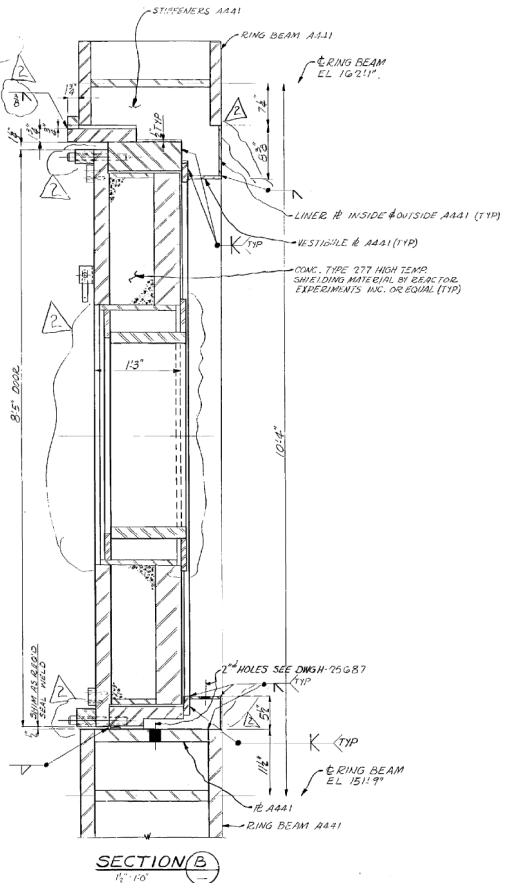
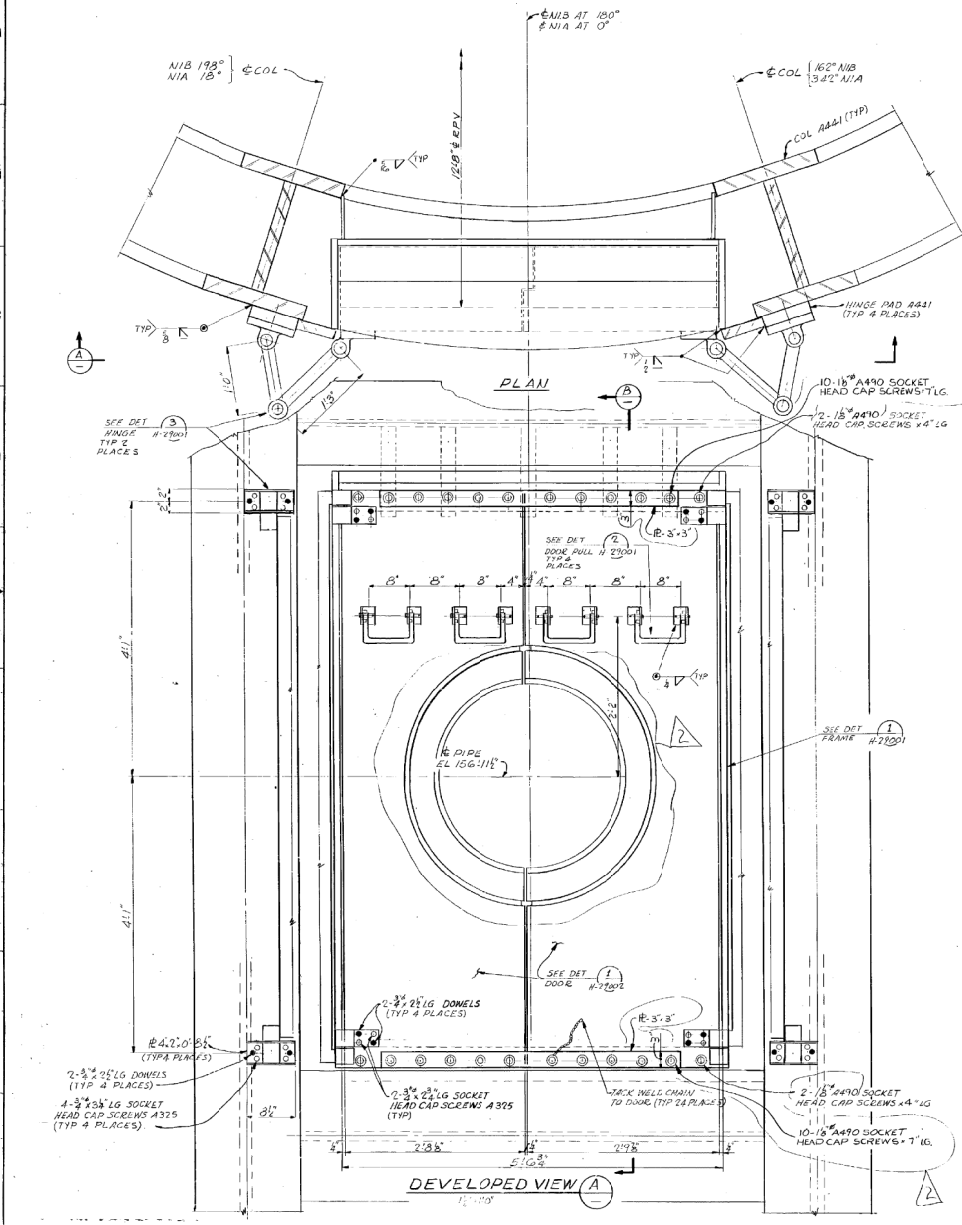
EDWIN I. HATCH NUCLEAR PLANT UNIT No. 2
POST ACCIDENT SAMPLING
CHEMICAL ANALYSIS SYSTEM P&ID

REV	DATE	BY	CHKD	APPD
1	12/12/84	JEP	JTL	

MS	PT	LOCKED	DRAWN NUMBER	VERSION
10-502	H-28-35			13.0

Version: 13.0 Date: 3/1/15
 REVISED PER ABN-INUS56 VER 1.0

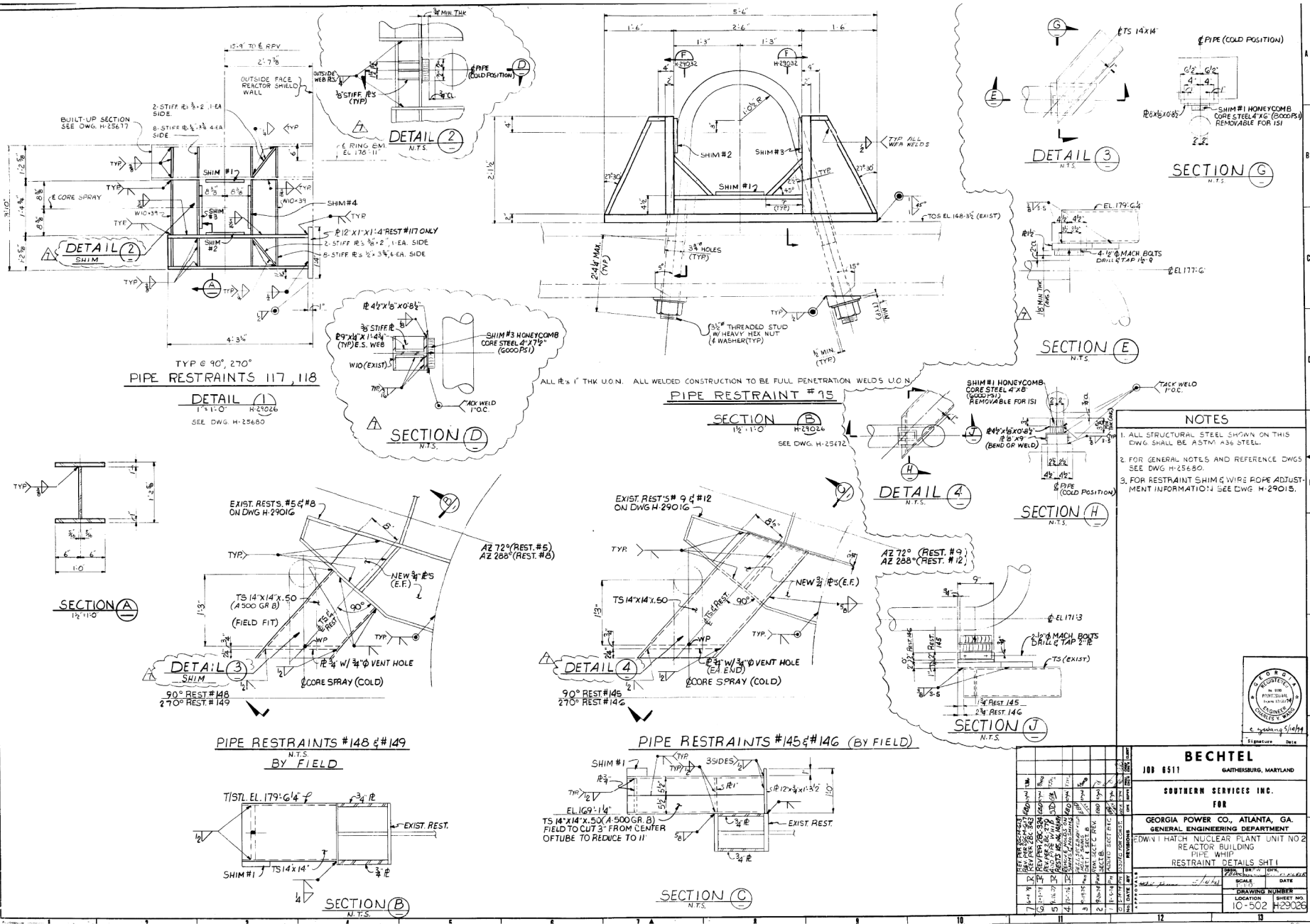
NOTES
 1. FOR GENERAL NOTES AND REFERENCE DWGS.
 SEE DWG. H-23001

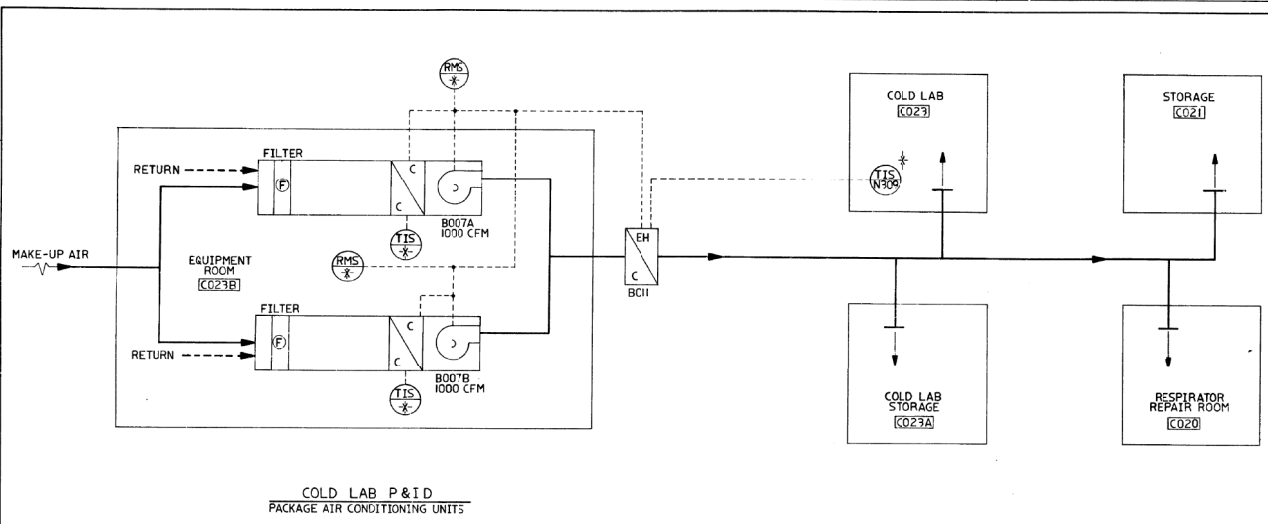


DEVELOPED VIEW A

SECTION B

		BECHTEL	
		JOB 6511 GAITHERSBURG, MARYLAND	
DRAWN BY: <i>[Signature]</i> CHECKED BY: <i>[Signature]</i> DESIGNED BY: <i>[Signature]</i> DATE: 10-5-02 SHEET NO. 10-5-02 R-3003		SOUTHERN SERVICES INC. FOR	
		GEORGIA POWER CO., ATLANTA, GA. GENERAL ENGINEERING DEPARTMENT EDWIN WATTS NUOVE FAR PLANT UNIT NO. 7 REACTOR BUILDING IN SERVICE INSPECTION DOORS NIA & NIB SHT 1	





COLD LAB P&ID
PACKAGE AIR CONDITIONING UNITS

- NOTES:
1. SEE DWG H40050 FOR SYMBOL REFERENCES.
 2. ALL EQUIPMENT AND INSTRUMENT NOS. ON THIS DWG PRECEDED BY Z41- EXAMPLE: Z41-B004B
 3. FOR EQUIPMENT LOCATION SEE DWG H-16053 & H-16055
 4. WORK THIS DWG WITH DWG H-16035

REFERENCES:	MPL NO.	SCS DWG NO.
CONTROL BLDG COMPUTER	Z41-1020	H-16035
WATER ANALYSIS HOT		
INSTRUMENT SHOP ROOMS P&ID		

SYSTEM NO Z41

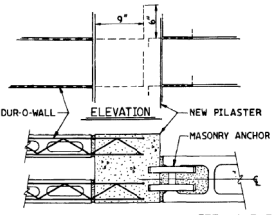
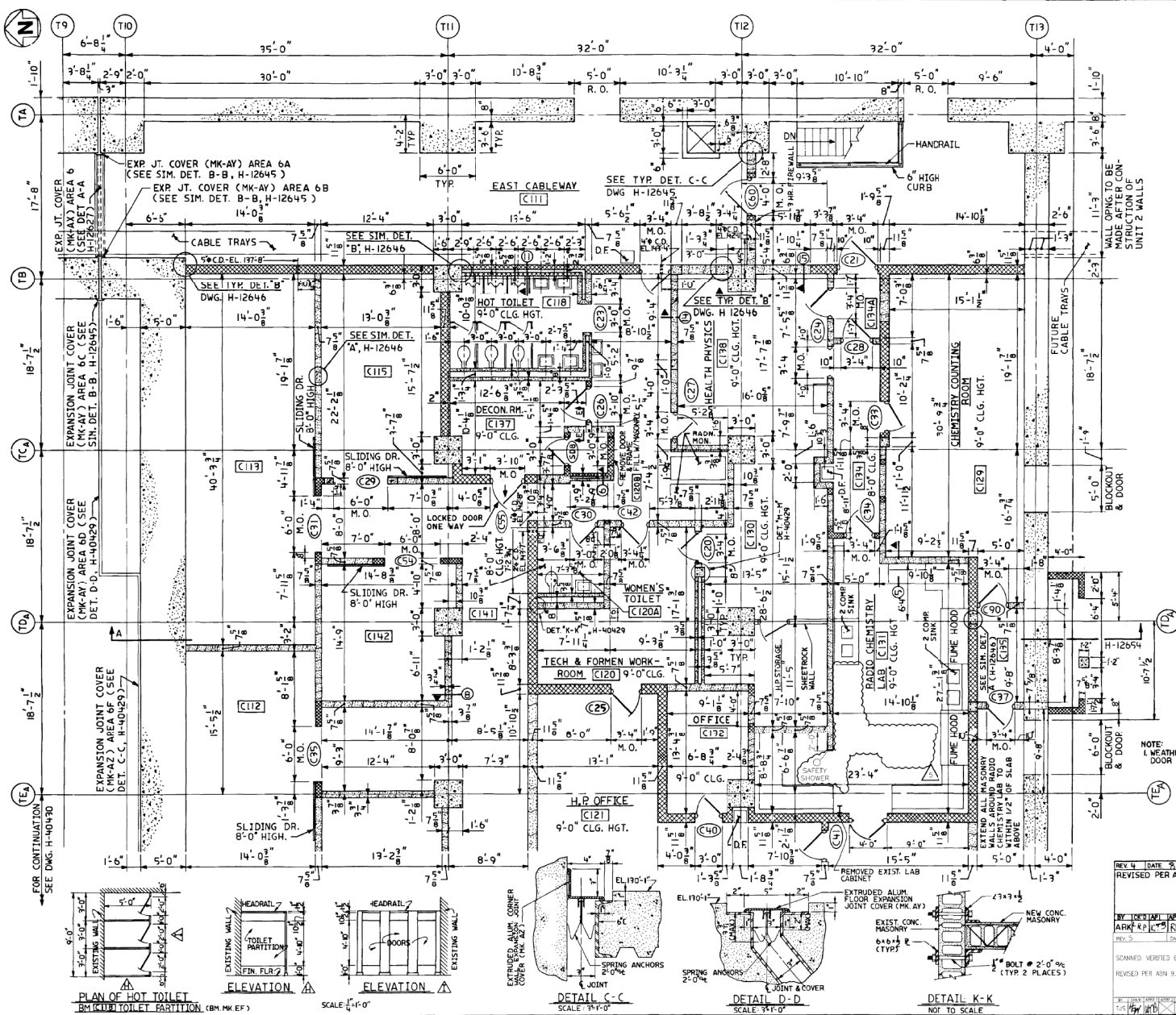
Southern Company Services, Inc. 204

Georgia Power Company, Atlanta, Ga.
General Engineering Department

EDWIN I. HATCH NUCLEAR PLANT-UNIT 1
CONTROL BLDG. COLD LAB
EL 112'-0" HVAC P&ID

DATE	BY	CHKD	DATE
10/25/85	W. J. [Signature]	EPD [Signature]	10/25/85
REVISION	BY	DATE	
1	NONE		1-25-85
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			

LOCATION: 10-502 SHEET NO: H40056



DETAIL M-M
SCALE: 1/2"=1'-0"

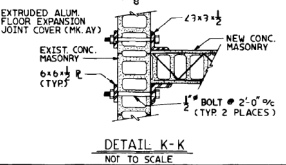
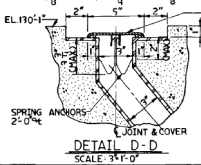
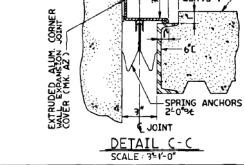
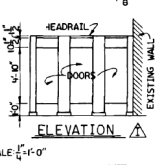
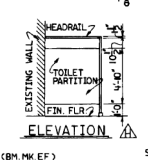
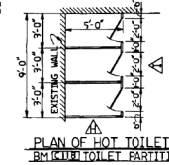
- LEGEND:
- CORED BLOCK WITH JOINT REINF. EACH BLOCK COURSE & #5 BARS @ 2'-0" VERTICALLY. FILL CELLS SOLID WITH CONC. WHERE VERTICAL #5 BARS OCCUR.
 - FULL BLOCK SOLID WITH CONC. & PROVIDE JOINT REINF. EACH BLOCK COURSE & #5 BARS @ 16" O.C. ± 1 VERTICALLY.
 - CONCRETE.

- NOTES:
1. THERE SHALL BE NO FLY ASH USED IN THE CONSTRUCTION OF THE MASONRY CELLS THAT MAKE UP THE FOLLOWING ROOMS: C-131 RADIO CHEMISTRY ROOM & C-129 COUNTING ROOM.
 2. ALL WALLS WITH CEILING ON BOTH SIDES TO EXTEND ABOVE HIGHEST CEILING AS DETAILED. ALL OTHER WALLS TO EXTEND WITHIN 1/2" (MAX.) OF INTERIOR-FLOOR SURFACE.
 3. FILL ALL HOLDUP MASONRY CELLS WITHIN 1/2" OF SLIDING PINE DOOR OPENING SOLID WITH CONC. & PROVIDE (3) #4 VERTICAL BARS IN EACH JAMB. FILL ALL CELLS ALONG SLIDING DOOR TRACK SOLID WITH CONCRETE.
 4. PROVIDE (2) #5 BARS IN EACH MASONRY JAMB AT ALL MASONRY WALL OPENINGS AND FILL SOLID WITH CONC. A MINIMUM WALL LENGTH OF 8".
 5. ALL VENTILATION OPENINGS SHALL BE VERIFIED AND COORDINATED IN FIELD WITH ACTUAL DUCT INSTALLATIONS.
 6. CHIP SLOTS IN CONCRETE FLOOR FOR WALLS TO EL. 129'-11".
 7. WHEN REMOVING MASONRY WALL LEAVE 1'-3" OF DUR-O-WALL EXTENDING TO ACT AS ANCHORAGE TO NEW PILASTER.

- REFERENCES:
- H-12628 ARCH. - TURBINE & CONTROL BUILDINGS GENERAL PLAN # EL. 130'-0".
 - H-12632 ARCH. - TURBINE & CONTROL BUILDINGS GENERAL PLAN # EL. 164'-0" & EXP. JOINT COVER SCHEDULE.
 - H-12637 ARCH. - CONTROL BUILDING CABINET LAYOUT FOR COUNTING ROOM, HEALTH PHYSICS & RADIO CHEMISTRY LAB.
 - H-12642 ARCH. - DETAILED PLAN OF HEALTH PHYSICS AREA 9 EL. 130'-0".
 - H-12646 ARCH. - INTERIOR WALL SECTIONS # EL. 130'-0".
 - H-12648 ARCH. - CONTROL BUILDING FREIGHT ELEVATOR LAYOUT & DETAILS.
 - H-12653 ARCH. - CONTROL BUILDING DUMPMATERIAL LAYOUT, PLANS & SECTIONS.
 - H-16054 MECH. - CONTROL BUILDING HVAC SYSTEM PLAN # EL. 130'-0".
 - H-40383 - EDWIN I HATCH NUCLEAR PLANT UNITS 1 & 2 CONTROL BUILDING EL. 130'-0" - CONC. MASONRY WALLS - GENERAL ARRANGEMENT.

NOTE:
WORK THIS DWG. WITH H-40430 FOR AS-BUILT OF WALL PENETRATIONS SEE WALK-DOWN GEN. ARR'G. DWG. H-40383.

REV. 4	DATE	9-23-73																								
	REVISED PER	ABN 93-0156																								
BY IDENTICAL DATE 10/23/74																										
ARK	REP	REV																								
REV. 5	DATE	1-10-75																								
SCANNED, VERIFIED BY: EJS																										
REVISED PER ABN 93-5055-002																										
<table border="1"> <tr> <td>WPI # 222</td> <td colspan="2">Southern Company Services, Inc. Form</td> </tr> <tr> <td colspan="3">Georgia Power Company, Atlanta, Ga.</td> </tr> <tr> <td colspan="3">Edwin I. Hatch Nuclear Plant - Unit 1</td> </tr> <tr> <td colspan="3">Architectural</td> </tr> <tr> <td colspan="3">CONTR. BLDG. PARTIAL PLAN @ EL. 130'-0"</td> </tr> <tr> <td>DES</td> <td>JRS</td> <td>EPL</td> </tr> <tr> <td>1/4" = 1'-0"</td> <td>12-72-84</td> <td></td> </tr> <tr> <td>10-502</td> <td colspan="2">H-40429</td> </tr> </table>			WPI # 222	Southern Company Services, Inc. Form		Georgia Power Company, Atlanta, Ga.			Edwin I. Hatch Nuclear Plant - Unit 1			Architectural			CONTR. BLDG. PARTIAL PLAN @ EL. 130'-0"			DES	JRS	EPL	1/4" = 1'-0"	12-72-84		10-502	H-40429	
WPI # 222	Southern Company Services, Inc. Form																									
Georgia Power Company, Atlanta, Ga.																										
Edwin I. Hatch Nuclear Plant - Unit 1																										
Architectural																										
CONTR. BLDG. PARTIAL PLAN @ EL. 130'-0"																										
DES	JRS	EPL																								
1/4" = 1'-0"	12-72-84																									
10-502	H-40429																									



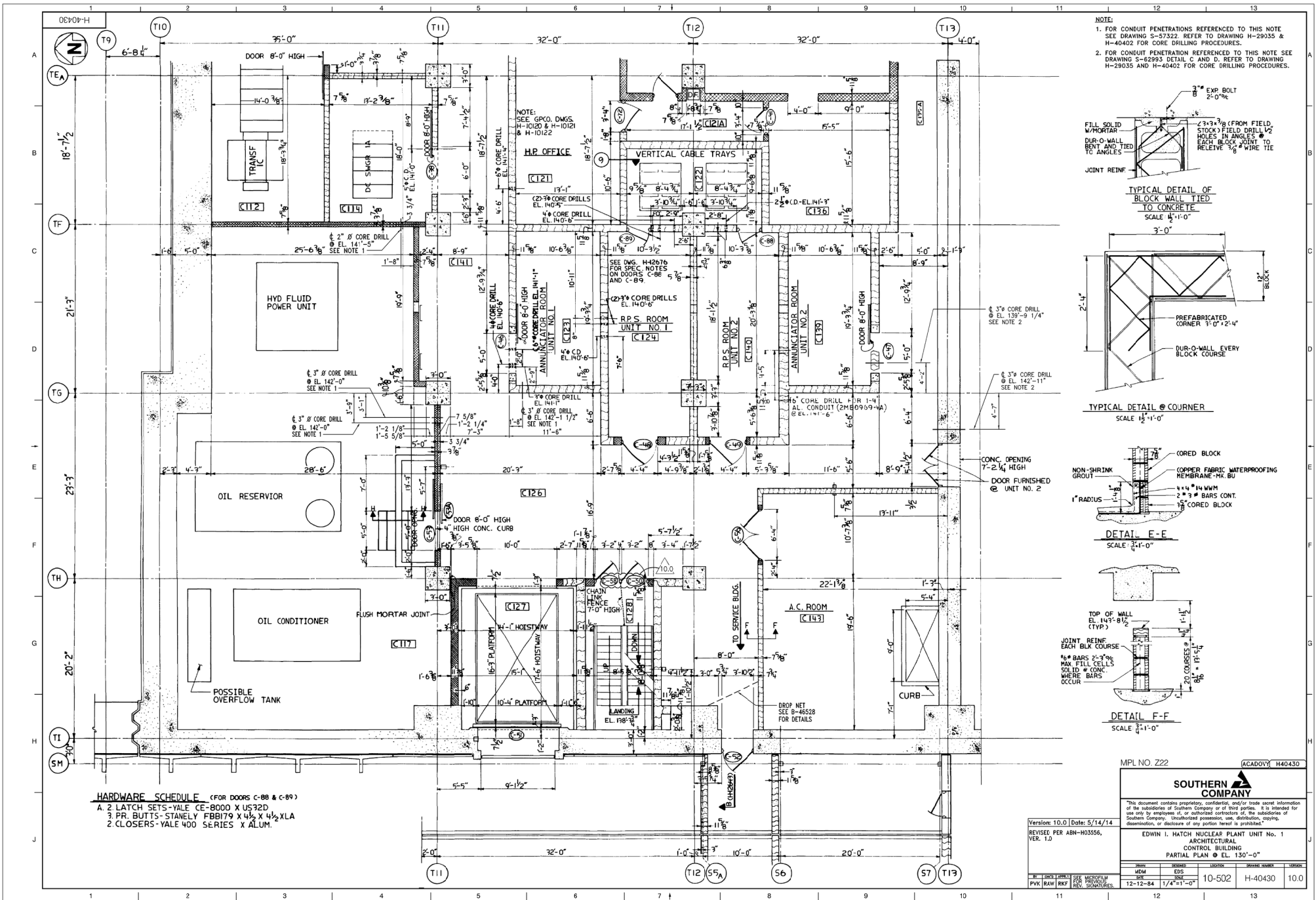
PLAN OF HOT TOILET
B.M.C. TOILET PARTITION (BY MK EF)

ELEVATION
SCALE: 1/4"=1'-0"

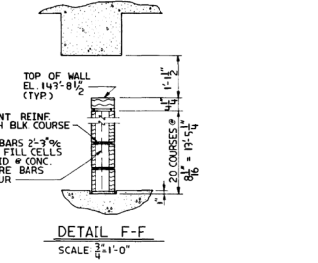
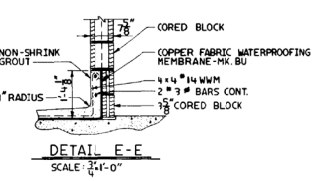
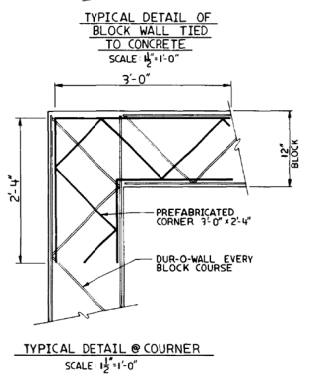
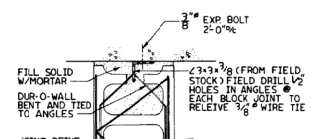
DETAIL C-C
SCALE: 3/4"=1'-0"

DETAIL D-D
SCALE: 3/4"=1'-0"

DETAIL K-K
NOT TO SCALE



- NOTE:
- FOR CONDUIT PENETRATIONS REFERENCED TO THIS NOTE SEE DRAWING S-57352. REFER TO DRAWING H-29035 & H-40402 FOR CORE DRILLING PROCEDURES.
 - FOR CONDUIT PENETRATION REFERENCED TO THIS NOTE SEE DRAWING S-62993 DETAIL C AND D. REFER TO DRAWING H-29035 AND H-40402 FOR CORE DRILLING PROCEDURES.



MPL NO. Z22 (ACAD0VY) H40430

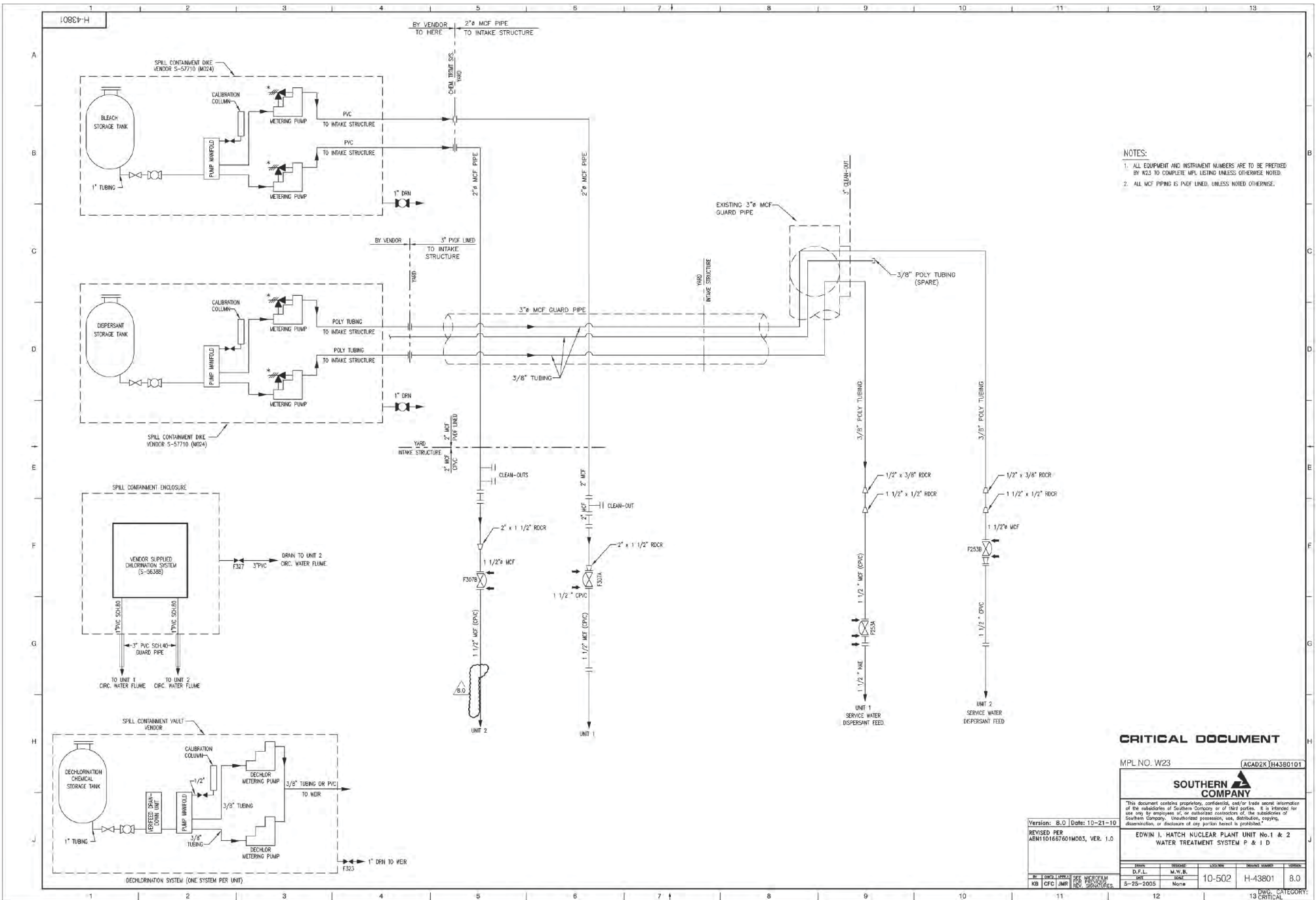
SOUTHERN COMPANY

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Version: 10.0 Date: 5/14/14
 REVISED PER ABN-H03556, VER. 1.0

EDWIN I. HATCH NUCLEAR PLANT UNIT No. 1
 ARCHITECTURAL CONTROL BUILDING
 PARTIAL PLAN @ EL. 130'-0"

NO.	DATE	BY	CHKD.	REV.	DESCRIPTION
1	12-12-84	PKV	RAW	PKV	ISSUE FOR CONSTRUCTION
2	1/4/81				



- NOTES:**
1. ALL EQUIPMENT AND INSTRUMENT NUMBERS ARE TO BE PREFIXED BY W23 TO COMPLETE MPL LISTING UNLESS OTHERWISE NOTED.
 2. ALL MCF PIPING IS PVEF LINED, UNLESS NOTED OTHERWISE.

CRITICAL DOCUMENT

MPL NO. W23 ACAD2K104380101



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EDWIN I. HATCH NUCLEAR PLANT UNIT No. 1 & 2
WATER TREATMENT SYSTEM F & D

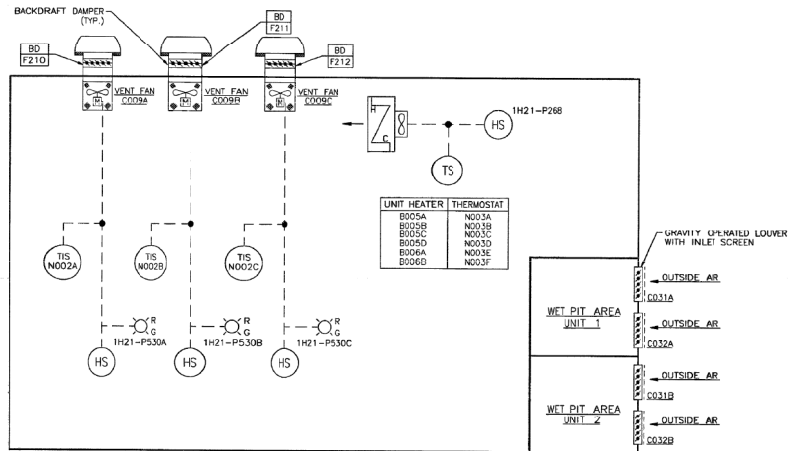
Version: 8.0 Date: 10-21-10

REVISED PER
AGENT101657601M003, VER. 1.0

REV	DATE	BY	DESCRIPTION	ISSUED BY	REVISION NUMBER	ISSUED
8	10-21-10	None	None	None	8.0	
7	5-25-2005	None	None	None	8.0	

DWG. CATEGORY:
13 CRITICAL

5209PH



NOTE:
 1. ALL EQUIPMENT/INSTRUMENTS ARE PREFIXED WITH 1X41, UNLESS OTHERWISE SPECIFIED

REFERENCES:
 H-12610..... RIVER INTAKE STRUCTURE ARCHITECTURAL
 H-12613..... RIVER INTAKE STRUCTURE PUMP ROOM - HEATING AND VENTILATION
 H-13610..... ELEMENTARY DIAGRAM

CRITICAL DOCUMENT

AutoCAD H4407301

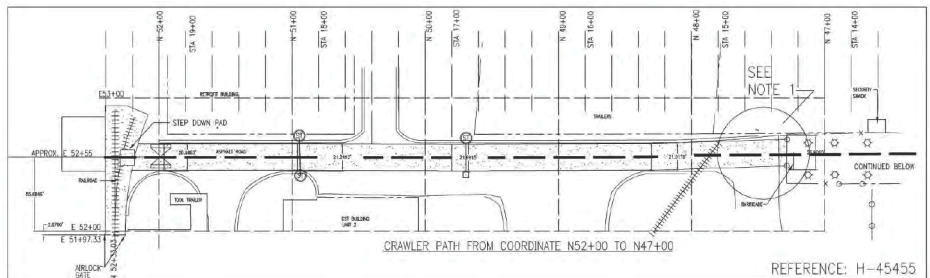
Southern Company Services, Inc. for
 Georgia Power Company, Atlanta, GA
 General Engineering Department
 EDWIN L HATCH NUCLEAR PLANT UNIT NO.
 RIVER INTAKE STRUCTURE
 HVAC P & ID

REV. D DATE 6/93
 APPROVED PER
 WCN 92-0144-002

NO.	DESCRIPTION	DATE	BY	CHKD.
1	ISSUED FOR CONSTRUCTION	5-24-93	None	None
2	REVISED	6/1/93	None	None

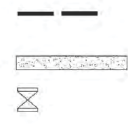
10-502 H-44073

85454-H



REFERENCE: H-45455

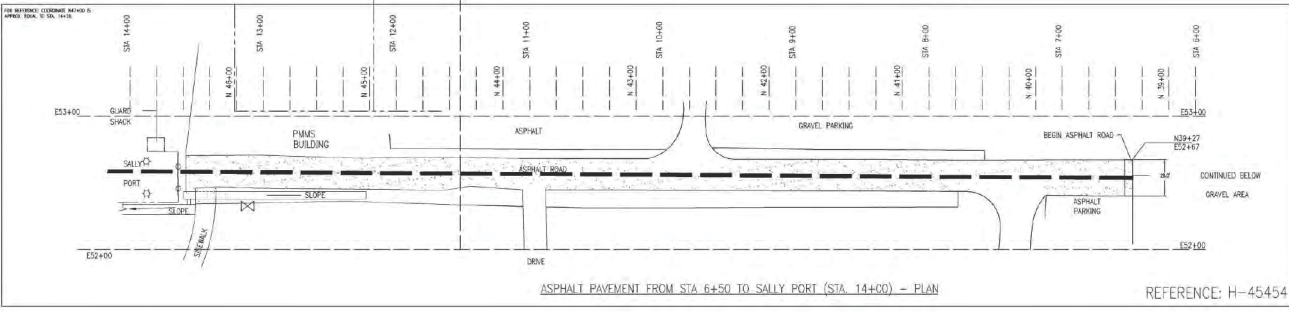
- LEGEND:
1. HEAVY LINE DENOTES CRAWLER OPTIMUM TRAVEL PATH
 2. DENOTES ACCEPTABLE TRAVEL PATH FOR A CRAWLER WITH A FULL SPENT FUEL CASK
 3. TRANSPORTER CRAWLER



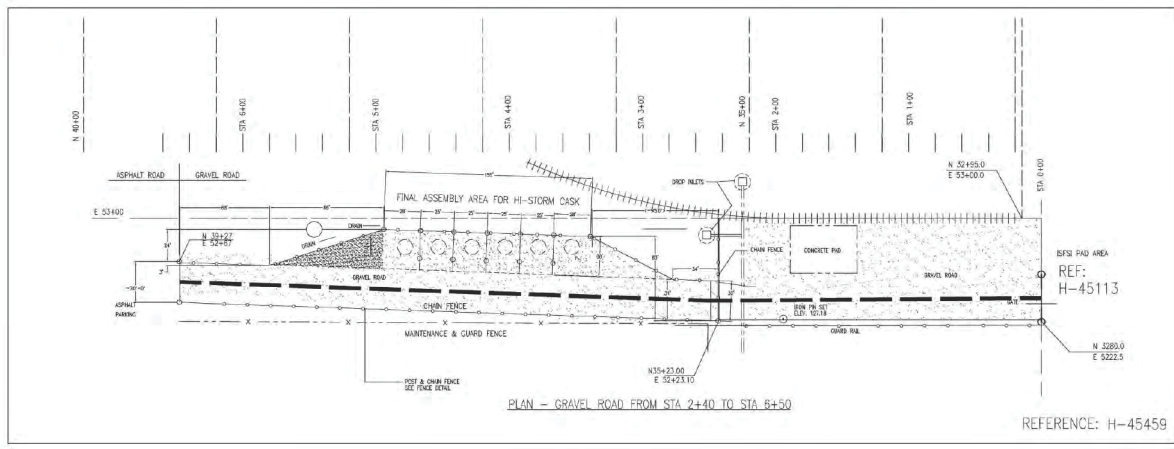
REFERENCE:
H-45454
H-45455
H-45459

NOTES:

- 1) ALL BURIED ITEMS RUNNING TRANSVERSE TO THE CRAWLER PATH AND THAT ARE ENCASED IN A MAX. DEPTH OF 5 FT. OF CONCRETE (ASSUMING 4000 PSI 28 DAY CONCRETE MIX DESIGN). THE TOP OF CONCRETE IS ASSUMED TO BE AT GRADE OR JUST BENEATH THE ASPHALT PAVING. THE ASSUMED WIDTH OF CONCRETE IS THE WIDTH OF CASK. ANY NEAR-GRADE TRANSVERSE CONCRETE ENCASEMENT GREATER THAN 5 FT. DEEP OR > 4000 PSI CONCRETE MIX SHALL REQUIRE ADDITIONAL EVALUATION BY DESIGN ENGINEERING.
- 2) CARRY HEIGHT OF CASK FROM GRADE TO BOTTOM OF CASK TO BE < OR = 11 INCHES.
- 3) 11' - 6" X 11' - 6" X 3" THICK PLYWOOD STEP DOWN PAD IS PLACED TO KEEP BOTTOM OF HI-STORM CASK <= 11" ABOVE PLYWOOD WHEN THE CASK IS REMOVED FROM THE ROLLER PAD.
- 4) REFERENCE CALCULATION SCNH 00-028 FOR THE CASK DROP EVALUATION ALONG THE TRAVEL PATH.
- 5) HOLTIC INTERNATIONAL CERTIFICATE OF COMPLIANCE 72-1014, APPENDIX A, SECTION 5.5 DESCRIBES THE CASK TRANSPORT EVALUATION PROGRAM. THE TRAVEL PATH IS CLASSIFIED AS ITS-C TO MEET THE PROGRAM PARAMETERS.



REFERENCE: H-45454



REFERENCE: H-45459

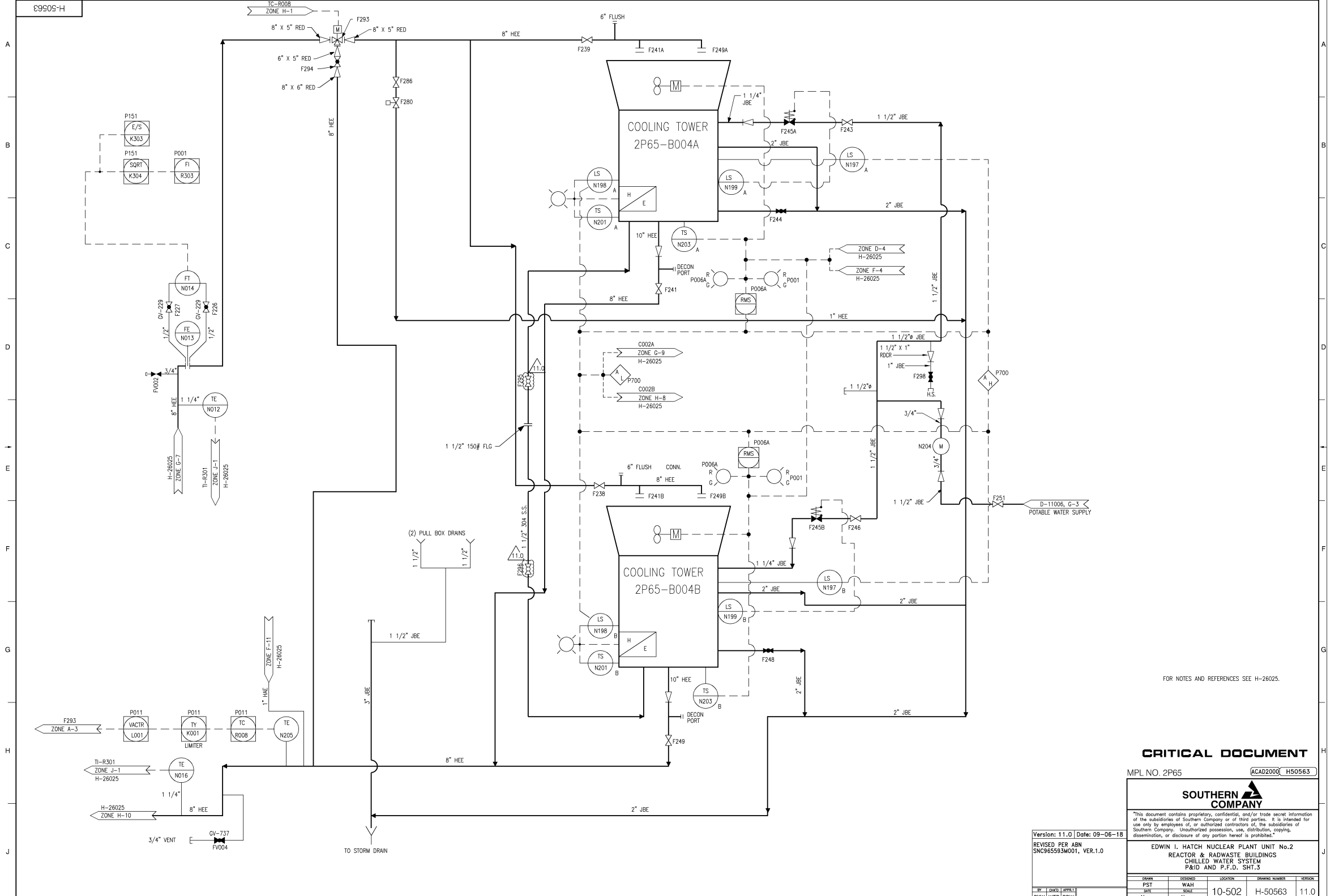
F18 ACAD2K H45458

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Revision: 0	Date: 7-16-01
APPROVED, ISSUED PER AEM 00-0035-001.	
EDWIN I. HATCH NUCLEAR PLANT UNIT No.1 & 2 DRY CASK SPENT FUEL STORAGE CRAWLER TRAVEL PATH FROM RR AIRLOCK TO ISFSI	
BY: JAS RLP	DATE: None
CHK: JAS RLP	DATE: None
APP: JAS RLP	DATE: None
DES: None	DATE: None
DRAWN: JPH	DATE: None
CHECKED: JPH	DATE: None
SCALE: 10-502	PROJECT: H-45458
SHEET: 0	TOTAL SHEETS: 0

T:\WORK\DOCUMENTS\HATCH\000355\DRAWINGS\CALS\H45458.DWG 07/16/2001 3:28:31 PM



FOR NOTES AND REFERENCES SEE H-26025.

CRITICAL DOCUMENT

MPL NO. 2P65 ACAD2000_H50563



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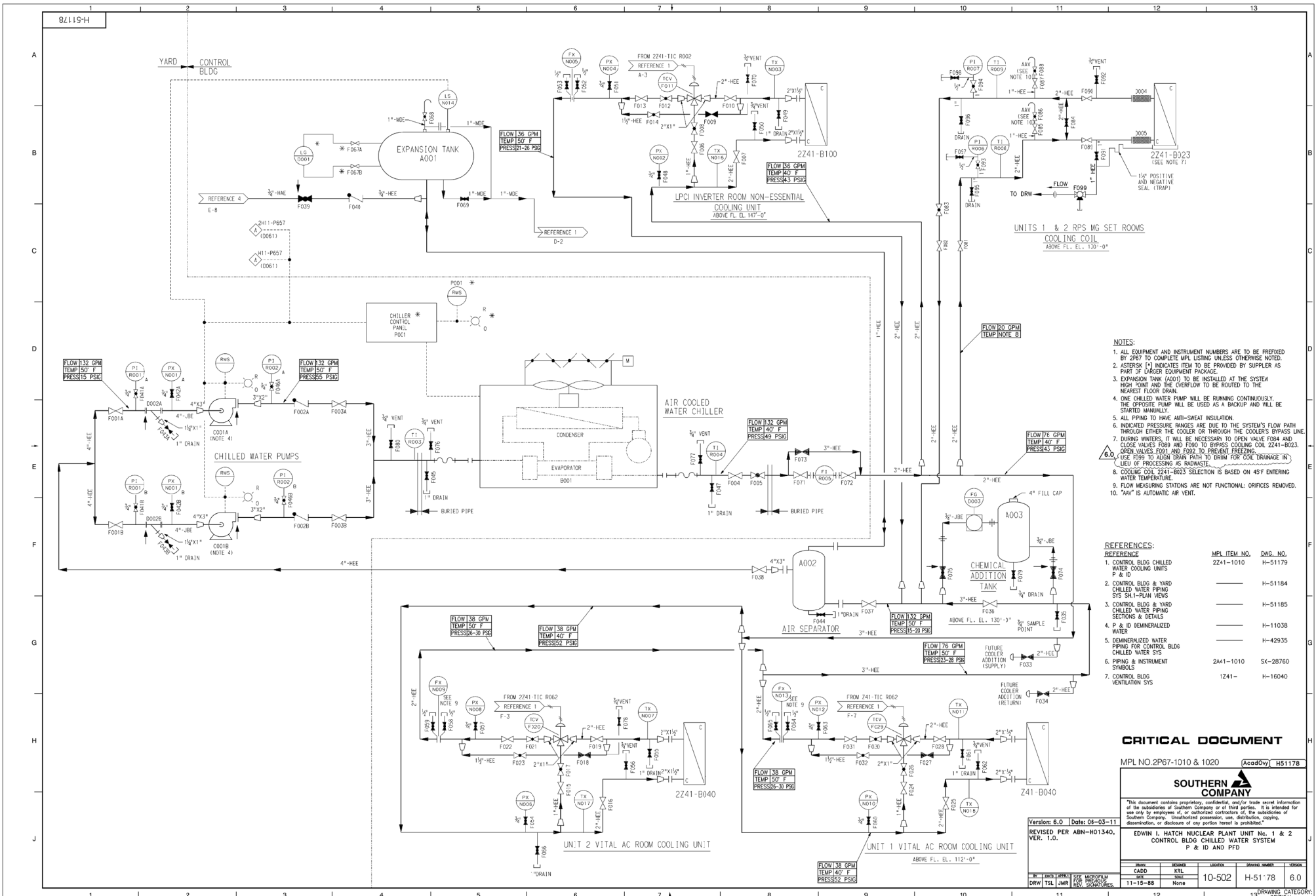
Version: 11.0 | Date: 09-06-18

REVISED PER ABN SNC95593M001, VER.1.0

BY	CHKD	APPR
RW	WTB	BDW

**EDWIN I. HATCH NUCLEAR PLANT UNIT No.2
REACTOR & RADWASTE BUILDINGS
CHILLED WATER SYSTEM
PAID AND P.F.D. SHT.3**

DRAWN	DESIGNED	LOCATION	DRAWING NUMBER	REVISION
PST	WAH		10-502	H-50563
DATE	SCALE			11.0
None	None			



- NOTES:**
1. ALL EQUIPMENT AND INSTRUMENT NUMBERS ARE TO BE PROVIDED BY SUPPLIER AS PART OF LARGER EQUIPMENT PACKAGE.
 2. EXPANSION TANK (A001) TO BE INSTALLED AT THE SYSTEM HIGH POINT AND THE OVERFLOW TO BE ROUTED TO THE NEAREST FLOOR DRAIN.
 3. ONE CHILLED WATER PUMP WILL BE RUNNING CONTINUOUSLY. THE OPPOSITE PUMP WILL BE USED AS A BACKUP AND WILL BE STARTED MANUALLY.
 4. ALL PIPING TO HAVE ANTI-SWEAT INSULATION.
 5. INDICATED PRESSURE RANGES ARE DUE TO THE SYSTEM'S FLOW PATH THROUGH EITHER THE COOLER OR THROUGH THE COOLERS BYPASS LINE.
 6. DURING WINTERS, IT WILL BE NECESSARY TO OPEN VALVE F048 AND CLOSE VALVES F089 AND F090 TO BYPASS COOLING COIL Z241-B023. OPEN VALVES F091 AND F092 TO PREVENT FREEZING. USE F099 TO ALIGN DRAIN PATH TO DRAIN FOR COIL DRAINAGE IN LIEU OF PROCESSING AS INDICATED.
 7. COOLING COIL Z241-B023 SELECTION IS BASED ON 45°F ENTERING WATER TEMPERATURE.
 8. FLOW MEASURING STATIONS ARE NOT FUNCTIONAL: ORIFICES REMOVED.
 9. "AAV" IS AUTOMATIC AIR VENT.

REFERENCES:

REFERENCE	MPL ITEM NO.	FIG. NO.
1. CONTROL BLDG CHILLED WATER COOLING UNITS P & ID	2241-1010	H-51179
2. CONTROL BLDG & YARD CHILLED WATER PIPING SYS SH-1-PLAN VIEWS		H-51184
3. CONTROL BLDG & YARD CHILLED WATER PIPING SECTIONS & DETAILS		H-51185
4. P & ID DEMINERALIZED WATER		H-11038
5. DEMINERALIZED WATER PIPING FOR CONTROL BLDG CHILLED WATER SYS	2441-1010	SC-28760
6. PIPING & INSTRUMENT SYMBOLS		
7. CONTROL BLDG VENTILATION SYS	1241-	H-16040

CRITICAL DOCUMENT

MPL NO. 2P67-1010 & 1020 (Acad) H51178



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EDWIN I. HATCH NUCLEAR PLANT UNIT No. 1 & 2 CONTROL BLDG CHILLED WATER SYSTEM P & ID AND PFD

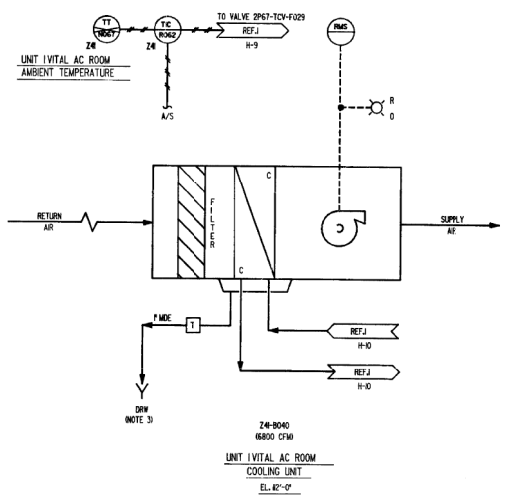
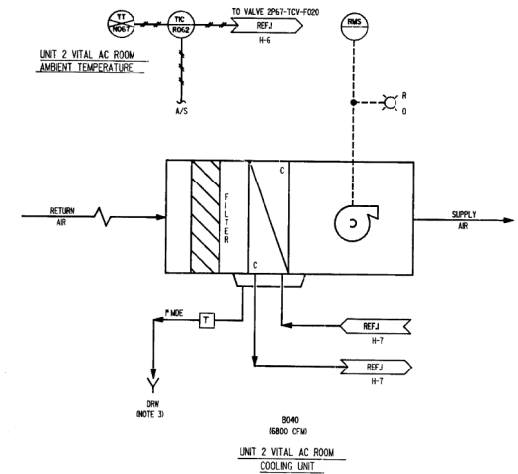
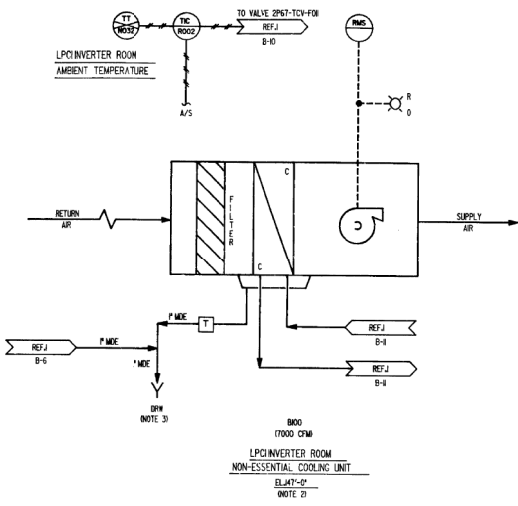
Version: 6.0 | Date: 08-03-11
REVISED PER ABN-H01340, VER. 1.0.

NO.	DATE	BY	CHKD	REV.	DESCRIPTION
11-15-88					None

NO.	DATE	BY	CHKD	REV.	DESCRIPTION
10-502					H-51178

DRAWING CATEGORY: CRITICAL

62115-H



- NOTES:**
1. ALL EQUIPMENT AND INSTRUMENT NUMBERS ARE TO BE PROVIDED BY 224 TO COMPLETE MFL LISTING UNLESS OTHERWISE NOTED. EXAMPLE: 224-8000
 2. SEE H-8040 FOR ESSENTIAL LPC INVERTER ROOM COOLING UNITS AND TEMPERATURE MONITORING THESE ESSENTIAL COOLING UNITS UTILIZE PLANT SERVICE WATER.
 3. ALL DRAINS FROM COOLING COILS SHALL BE ROUTED TO THE NEAREST FLOOR DRAIN.
 4. REVISION "A" ISSUED FOR REVIEW ONLY, NOT FOR CONSTRUCTION.

REFERENCES:

REFERENCE	MFL NO.	DRG. NO.
1. CONTROL BLDG CHILLED WATER SYSTEM P&ID AND PFD	2917-001 2917-020	H-5078 H-8040
2. CONTROL BUILDING VENTILATION P&ID	24-8030	H-8040
3. TURBINE BLDG INSTRUMENT AIR SYSTEM P&ID	2952-800	H-2077
4. CONTROL BLDG HVAC SYSTEM PLAN AT EL. 82'-0"	—	H-8053
5. CONTROL BLDG VENTILATION AND FIRE DAMPER DETAILS	—	H-26250
6. CONTROL BLDG & YARD CHILLED WATER PIPING - PLAN VES-1	—	H-5884
7. CONTROL BLDG & YARD CHILLED WATER PIPING - SECTIONS & DETAILS	—	H-5885
8. PIPING SERVICE & INST. AIR AT H2-AIR COMPRESSORS	—	H-2825
9. INST. AIR PIPING FOR CONTROL BLDG CHILLED WATER SYSTEM	—	H-5876

CRITICAL DOCUMENT

MFL No. 224-800

BECHTEL

JOB 65H GAITHERSBURG, MARYLAND

SOUTHERN SERVICES INC. FOR

GEORGIA POWER CO., ATLANTA, GA.
GENERAL ENGINEERING DEPARTMENT

EDWIN L HATCH NUCLEAR PLANT UNITS 1 & 2
CONTROL BLDG CHILLED
WATER COOLING UNITS P & ID

REV. 0 | DATE: 02/13/72

APPROVED IN RESPONSE TO WCN 88-146-01.

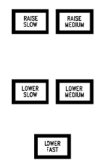
BY: [Signature] | DATE: 02/13/72

NO.	DATE	BY	CHKD	APP'D	DESCRIPTION
1	02/13/72	[Signature]	[Signature]	[Signature]	ISSUED FOR REVIEW ONLY
2	02/13/72	[Signature]	[Signature]	[Signature]	ISSUED FOR REVIEW ONLY
3	02/13/72	[Signature]	[Signature]	[Signature]	ISSUED FOR REVIEW ONLY
4	02/13/72	[Signature]	[Signature]	[Signature]	ISSUED FOR REVIEW ONLY

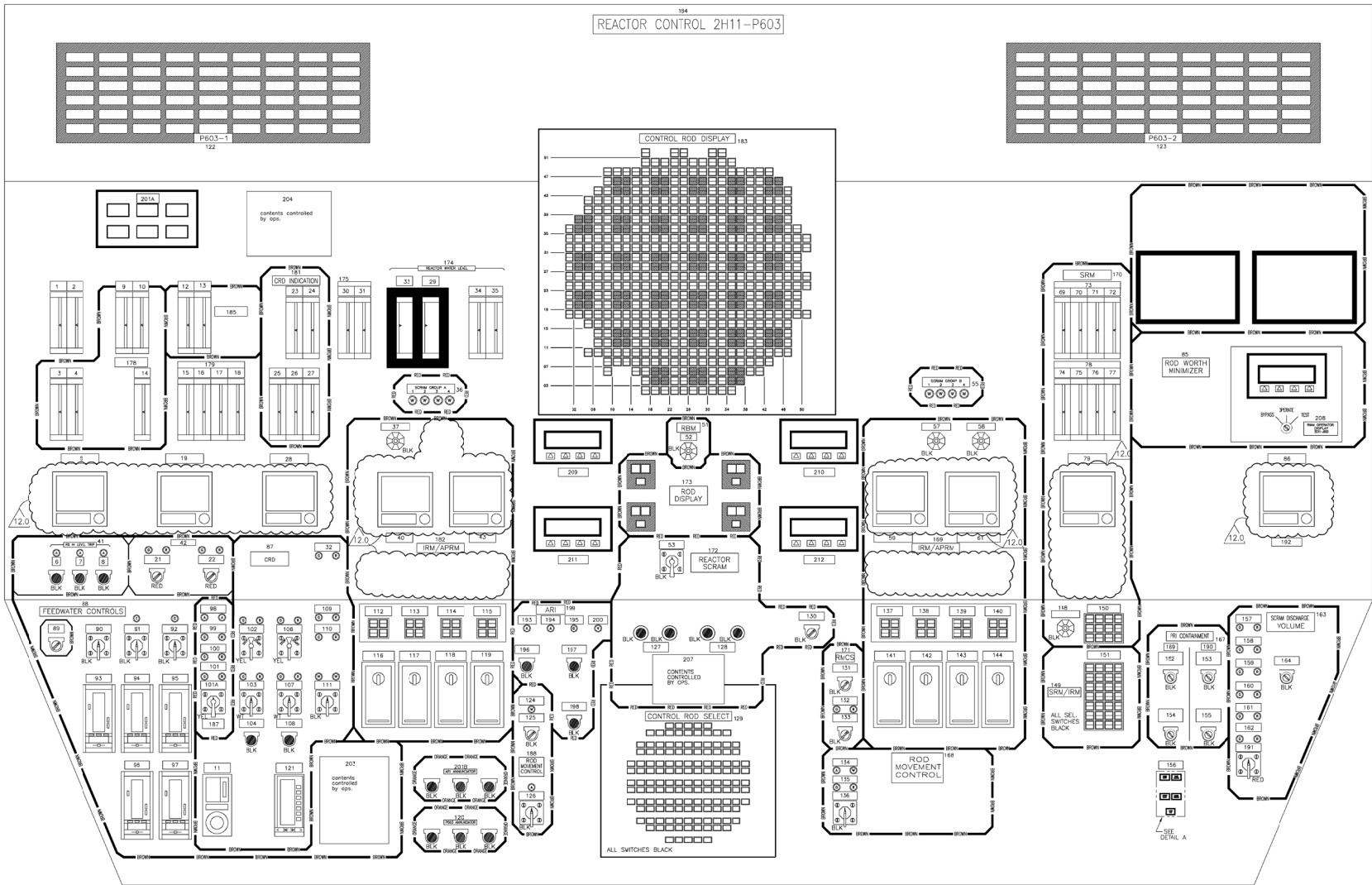
BY: [Signature] | DATE: 02/13/72

10-502 H-5879

REACTOR CONTROL 2H11-P603



DETAIL A
NOTE 3 TYP FOR ALL



- NOTES:**
- 1) THIS DRAWING IS INTENDED FOR LAYOUT AND DEMARCATION USE ONLY.
 - 2) CONTROL COLOR CODING PER HUMAN FACTORS DESIGN STANDARD A-51141 EXCEPT AS NOTED.
 - 3) GUARD AM,76F10T01P MAY BE USED AT LOCATIONS INDICATED AT OPERATIONS DISCRETION.

- REFERENCES:**
- S-27723 REACTOR CONTROL (2H11-P603)
 - A-21603 NAMEPLATE ENGRAVING LIST
 - H-51348 ANNUNCIATOR WINDOW ARRANGEMENT
 - S-26986 CONTROL ROD DISPLAY DETAIL
 - S-26984 REACTOR CONTROL CABINET 2H11-P603
 - S-26984 REACTOR CONTROL CABINET 2H11-P603

ACAD2000 H51307

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EDWIN I. HATCH NUCLEAR PLANT UNIT No. 2
PANEL 2H11-P603 REACTOR CONTROL
DEMARCATION AND LAYOUT

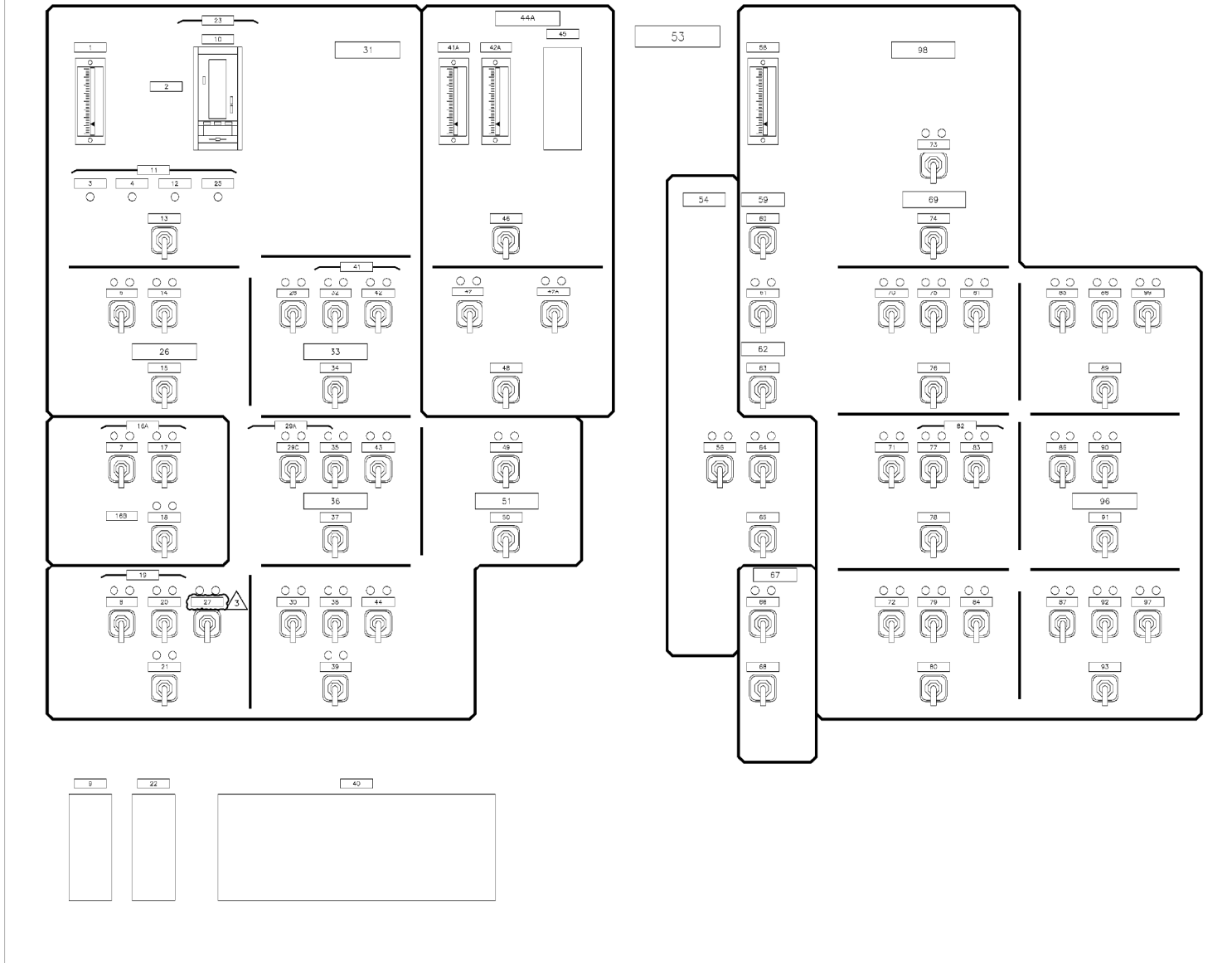
ISSUED	REVISION	LOCATION	REVISION NUMBER	VERSION
KRP				
JTB				
8-25-89	None	10-502	H-51307	12.0

Version: 12.0 Date: 04/21/15
REVISED PER: SNC45312003, VER 1.0

BY	CHKD	APPV
GTR	HBF	JTL

REMOTE SHUTDOWN 2C82-P001

52



NOTES:

1) THIS DRAWING IS INTENDED FOR LAYOUT AND DEMARICATION USE ONLY.

REFERENCES:

S-28871 REMOTE SHUTDOWN VB ARRANGEMENT
A-21726 NAME PLATE ENGRAVING LIST

ACAD2K H51357



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Revision: 3 Date: 2-07-03
REVISED PER AIN 02-0371.

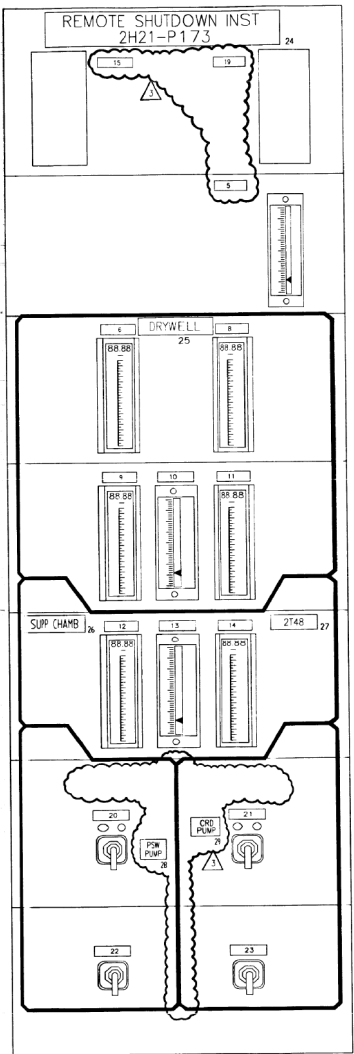
EDWIN I. HATCH NUCLEAR PLANT UNIT No.2
PANEL 2C82-P001
REMOTE SHUTDOWN
DEMARICATION AND LAYOUT

REV	ISSUED BY	DATE	REASON	ISSUED TO	ISSUED BY	REVISION
3	ASK	10-19-03	None	10-502	H-51357	3

RCR PWG ASK

10-19-03 None 10-502 H-51357 3

85C19-H



NOTES:
 1) THIS DRAWING IS INTENDED FOR LAYOUT AND DEMARCATION USE ONLY.

REFERENCES:
 SX-28709 INTERNAL LAYOUT & STEEL DETAILS FOR SHUTDOWN INSTRUMENT PANEL 2H21-P173
 A-21725 NAMEPLATE DRAWING LIST

AutoCAD H51358

REV. 3	REV. 2	REV. 1	REV. 0
REVISED PER ASN 11-0517	REVISED PER NEN 88-0085-003	REVISED NAMEPLATE PER ASN 90-571	

Southern Company Services, Inc. for Georgia Power Company, Atlanta, GA General Engineering Department			
EDWIN I. HATCH NUCLEAR PLANT UNIT No. 2 PANEL 2H21-P173 REMOTE SHUTDOWN INST. DEMARCATION AND LAYOUT			
NO.	BY	DATE	REVISION
1	J. E. Davis	7-26-90	BASE
2	W. J. Davis	7-26-90	OK
3	R. J. Davis	7-26-90	None
4	B. E. Davis	7-26-90	None
5	B. E. Wilson	7-26-90	10-502 H-51358

REFERENCES

1. REACTOR WATER CLEANUP SYS PD	MPL NO. G31-1030	SSI NO. S25285
2. PLANT REQUIREMENTS	A61-4020	H-16062
3. NUCLEAR BOILER SYSTEM P & ID	SHT 1 E51-1010	H-16334
	SHT 2 E51-1010	H-16335
4. ROIC SYSTEM P & ID	SHTS 1-7 G11-1010	H-16176 THRU H-16182
5. RADWASTE SYS P & ID	SHT 1 E41-1010	H-16332
6. REACTOR WATER CLEANUP SYSTEM FCD	SHT 2 E11-1010	H-16333
7. PIPING & INSTRUMENT SYMBOLS	SHT 1 E11-1010	H-16329
8. PROCESS INSTRUMENT PIPING & TUBING INSTALLATION SPEC.	SHT 2 E11-1010	H-16330
9. HPCI SYSTEM P & ID	SHT 1-3 B31-1010	H-16066 THRU H-16068
10. RHR SYSTEM P & ID	SHT 1-3 B31-1010	H-16066 THRU H-16068
11. PRESSURE INTEGRITY OF PIPING AND EQUIPMENT PRESSURE PARTS	G31-4010	S25161
12. REACTOR RECIRC SYSTEM P & ID	P33-2010	H-16281
	P11-1010	H-16016
	H-16003	H-16003
	H-16199	H-16199
	H-16064	H-16064
	H-16065	H-16065
	H-16066	H-16066
	H-16067	H-16067
	H-16068	H-16068
13. REACTOR WATER CLEANUP SYS DESIGN SPEC	G31-4010	S25161
14. LIQUID SAMPLING SYS.	P33-2010	H-16281
15. COND. STOR. & TRANS. SYS.	P11-1010	H-16016
16. FUEL POOL FILT./DEMIN. SYS.	H-16003	H-16003
17. DRYWELL VALVE & EQUIP DRAINAGE SYS P&ID	SHT 1 C11-1010	H-16064
18. CONTROL ROD DRIVE SYS.	SHT 2 C11-1010	H-16065
19. P&ID - HYDROGEN WATER CHEMISTRY CRACK ARREST VERIFICATION SYSTEM	X75-1010	H-16408
20. DIGITAL INPUT SIGNALS TO THE ERF/SPDS COMPUTER SYS. I.E.D. SHT. 6 OF 15		

BOUNDARY DIAGRAM NO.: 1B21-B02-11
FUNCTION(S) NO.: 1B21-02, 1C61-01
PREPARED BY: Willie Jennings
DATE: 04/22/98
REVIEWED BY: William P. Evans
DATE: 05/18/98

- NOTES
- ALL EQUIPMENT AND INSTRUMENTS ARE PRECEDED BY MPL NO. G31 UNLESS OTHERWISE NOTED.
 - WHERE GV-NUMBERS ARE SHOWN, THE VALVES ARE TAGGED WITH THESE NUMBERS; WHERE DV-NUMBERS ARE NOT SHOWN, THE VALVES ARE TAGGED WITH THE MPL NUMBER.
 - VENT, DRAIN & RELIEF VALVE DISCHARGE SYSTEMS, DRAIN TO CRW, CHRW, OR DRW WHERE APPLICABLE.
 - MOTOR OPER. ISOLATION VALVES CLOSE ON ANY OF THE FOLLOWING SIGNALS:
 (A) HIGH TEMP FOLLOWING NON REG HEAT EXCHANGER (ONLY F004)
 (B) STANDBY LIQUID CONTROL SYS ACTUATION (ONLY F004)
 (C) LOW REACTOR WATER LEVEL
 (D) HIGH ΔTEMP-LEAK DETECTION
 (E) HIGH FLOW-LEAK DETECTION
 (F) HIGH AMBIENT TEMP - LEAK DETECTION
 - CHEMICAL CLEANING AND DECONTAMINATION CONNECTIONS SHALL BE PROVIDED TO GIVE OPTIMUM DECONTAMINATION. CONNECTIONS SHALL BE ARRANGED TO PROVIDE DECONTAMINATION OF ONE PIECE OF EQUIPMENT SEPARATELY FROM ALL OTHER EQUIPMENT. (I.E. FILTER-DEMINERALIZER VALVE MANIFOLD, SEPARATELY FROM THE FILTER-DEMINERALIZER, HEAT EXCHANGER)
 - NON-REGENERATIVE HEAT EXCHANGER ES & PIPING DESIGNED TO RBCCW SYSTEM CONDITIONS.
 - HIGH POINT VENTS AND LOW POINT DRAINS ARE TO BE PROVIDED WHERE NECESSARY AS PROVIDED BY PHYSICAL ROUTING OF PIPE.
 - TEMPORARY STRAINER SCREENS SHALL BE PROVIDED ON THE SUCTION SIDE OF ALL PUMPS IN ACCORDANCE WITH REFERENCE 2, SECTION 9.
 - PIPING TO BE DESIGNED FOR SAME PRESSURE & TEMP AS MAIN FEED PIPING.
 - FOR LOCATION AND IDENTIFICATION OF INSTRUMENTS, SEE INSTRUMENT DATA SHEET LISTED IN MPL FOR EACH INSTRUMENT.
 - WHERE TWO VALVES ARE INDICATED IN A DOUBLE BLOCK ARRANGEMENT ON VENTS AND DRAINS, BOTH VALVES SHALL BE THE SAME RATING AND COMPATIBLE WITH UPSTREAM SYSTEM SERVICE SPECIFICATIONS.
 - AIR OPERATED VALVES SHOWN IN FILTERING PROCESS STATUS, ARE FAIL CLOSE ON LOSS OF AIR PRESSURE TO VALVE OPERATOR OR LOSS OF ELECTRICAL POWER TO THE VALVE PILOT, EXCEPT HOLDING VALVE F071 WHICH FAILS OPEN.
 - USE NORMAL AC POWER FOR ELECTRICAL DEVICES AND ELECTRIC POWERED VALVES UNLESS OTHERWISE NOTED.
 - TWO SENSOR SYSTEMS PER ROOM.
 - SAMPLE STATIONS MUST COMPLY WITH WATER SAMPLING REQUIREMENTS (SEE REF. 2, SECT. 8). EQUIPMENT SHOWN IN PHANTOM IS SUGGESTED DESIGN.

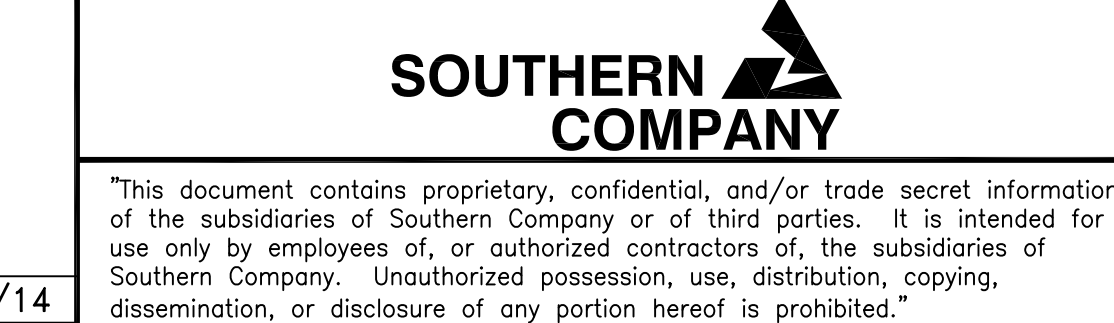
PRESSURE TEMPERATURE INDEX
SEE REF. 7 & 11

P-T INDEX	DESIGN PSIG	DESIGN °F	PEAK PSIG	PEAK °F	MIN °F
1	1150	562	1375	562	70
2	1300	563	1567	563	
3	1300	150	1553	150	
4	(SEE NOTE 9)		448	40	
5	150	150	150	150	

LICENSE RENEWAL DOCUMENT

FOR INFORMATION ONLY

MPL NO. G31-1010 ACAD2000 HL16188



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EDWIN I. HATCH NUCLEAR PLANT UNIT No. 1
REACTOR WATER CLEAN-UP
SYSTEM P & ID
SHEET 1

DATE	SCALE	LOCATION	DRAWING NUMBER	VERSION
1-28-02	None	10-502	HL-16188	9.0

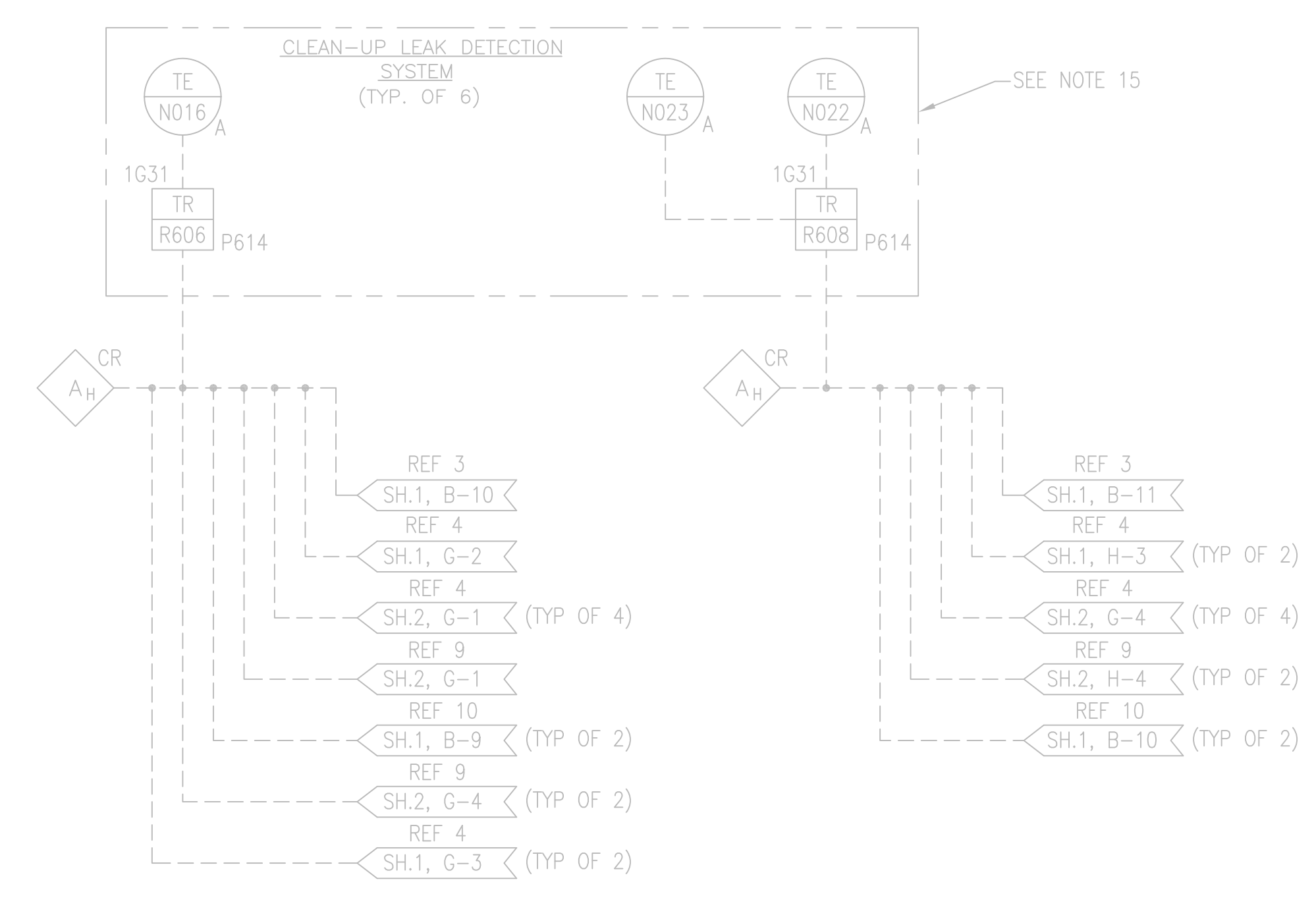
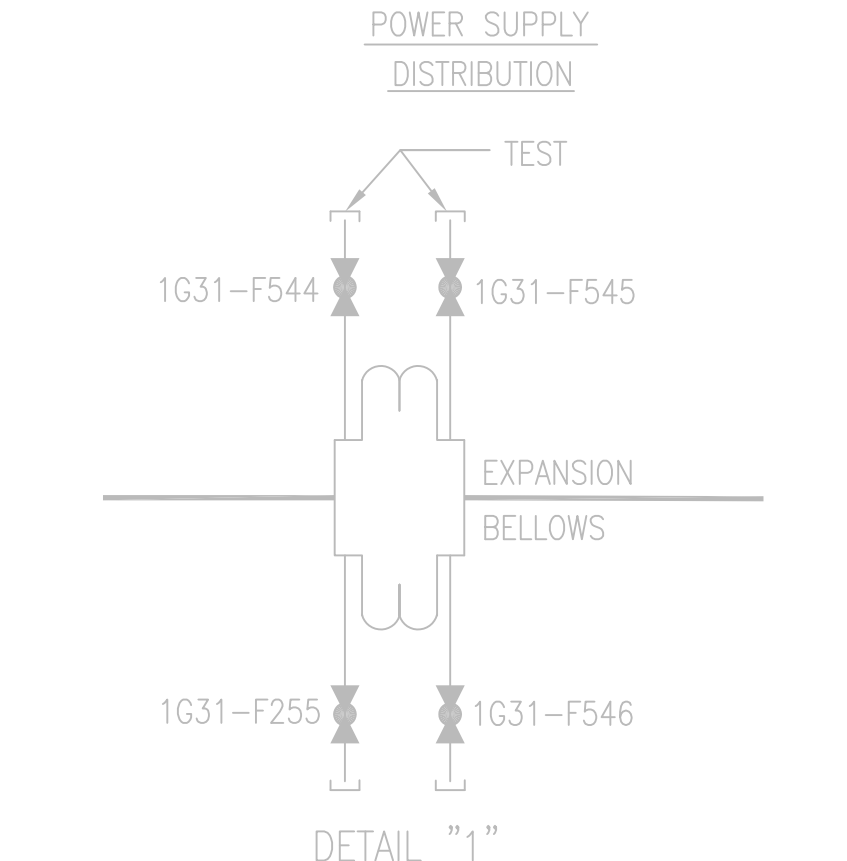
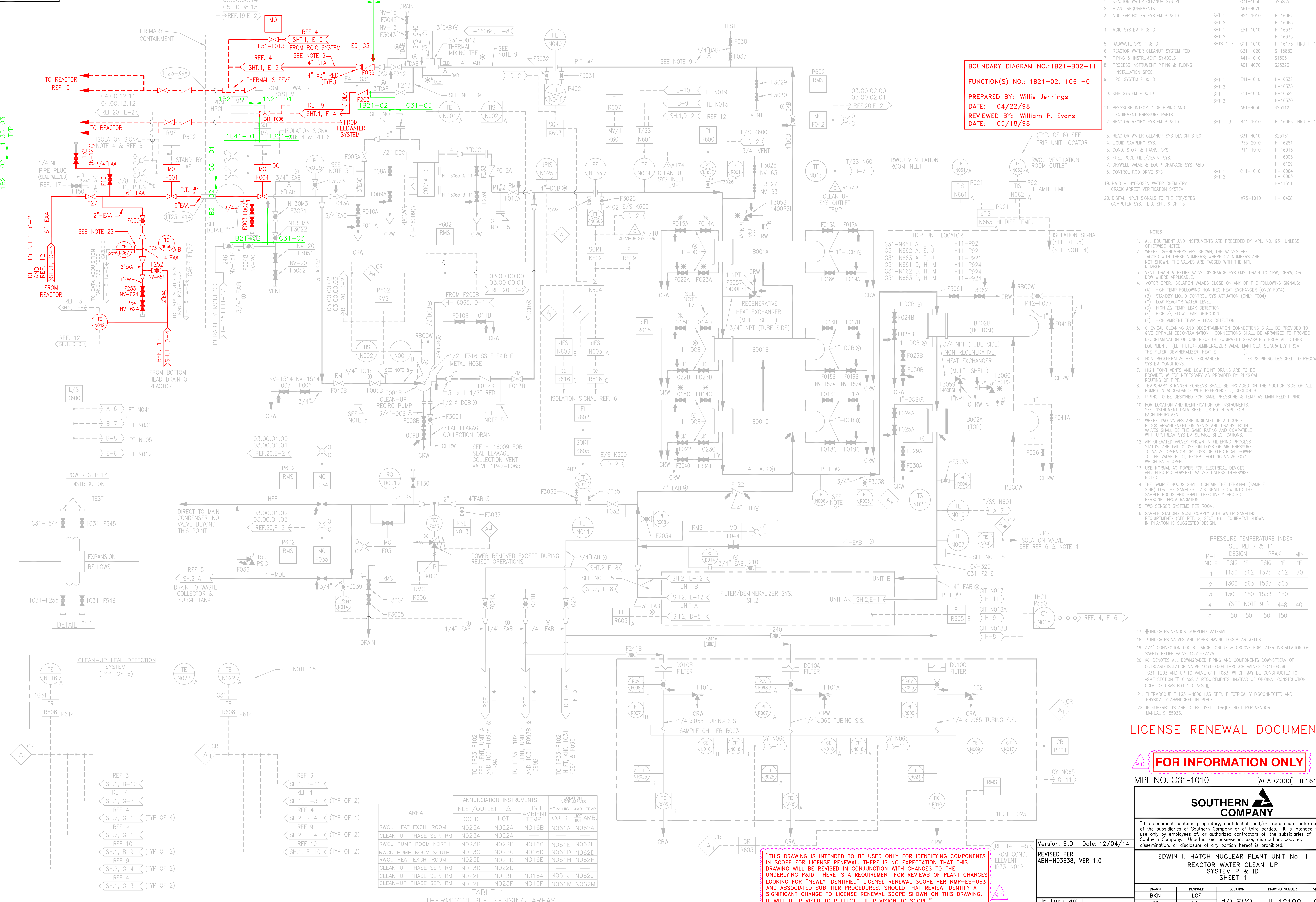
Version: 9.0 Date: 12/04/14
 REVISED PER ABN-H03838, VER 1.0

"THIS DRAWING IS INTENDED TO BE USED ONLY FOR IDENTIFYING COMPONENTS IN SCOPE FOR LICENSE RENEWAL. THERE IS NO EXPECTATION THAT THIS DRAWING WILL BE REVISED IN CONJUNCTION WITH CHANGES TO THE UNDERLYING P&ID. THERE IS A REQUIREMENT FOR REVIEWS OF PLANT CHANGES LOOKING FOR "NEWLY IDENTIFIED" LICENSE RENEWAL SCOPE PER NMP-ES-063 AND ASSOCIATED SUB-TIER PROCEDURES. SHOULD THAT REVIEW IDENTIFY A SIGNIFICANT CHANGE TO LICENSE RENEWAL SCOPE SHOWN ON THIS DRAWING, IT WILL BE REVISED TO REFLECT THE REVISION TO SCOPE."

ANNUNCIATION INSTRUMENTS

AREA	INLET/OUTLET ΔT		HIGH AMBIENT TEMP.		AMB. TEMP.	
	COLD	HOT	COLD	HIGH	AMB.	TEMP.
RWCW HEAT EXCH. ROOM	N023A	N022A	N016B	N061A	N062A	
CLEAN-UP PHASE SEP. RM	N023A	N022A				
RWCW PUMP ROOM NORTH	N023B	N022B	N016C	N061E	N062E	
RWCW PUMP ROOM SOUTH	N023C	N022C	N016D	N061D	N062D	
RWCW HEAT EXCH. ROOM	N023D	N022D	N016E	N061H	N062H	
CLEAN-UP PHASE SEP. RM	N023D	N022D				
CLEAN-UP PHASE SEP. RM	N022E	N022E	N016A	N061J	N062J	
CLEAN-UP PHASE SEP. RM	N022F	N023F	N016F	N061M	N062M	

TABLE 1
THERMOCOUPLE SENSING AREAS
LEAK DETECTION SENSING INSTRUMENTATION



MEASURED VARIABLE (FIRST LETTER)	CONTROLLING (SECOND AND THIRD LETTER)										MEASURING (SECOND AND THIRD LETTER)										REF. NOTE		
	RECORDING	INDICATING	NON-INDICATING	CONTROL VALVE	SHUTTER	FUNCTION GENERATOR	RECORDER	INDICATOR	OBSERVATION G. SUP.	PRIMARY ELEMENT	TEST POINT	TRANSMITTER	INTEGRATOR	AMPLIFIER	SHUTTLE	INDICATING SWITCH	NON-INDICATING	FLARES	TRANSDUCER	TRANSDUCER		TEMPERATURE	
AIR	A	-AC	-IC	-CV	-E	-T	-R	-H	-B	-E	-Y	-T	-D	-AM	-SM	-S	-A	-R	-M	-M	-M	-M	
CONDUCTIVITY	C	DC	DC	CCV	-	-	CR	CI	-	CE	CA	CT	-	-	CSM	CS	CA	-	-	-	-	-	
DENSITY	D	DC	DC	CCV	-	-	DR	DI	-	DE	DA	DT	-	-	-	DS	DA	-	-	-	-	-	
DIFF. PRESS.	DP	PC	PC	CCV	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FLOW	F	PC	PC	CCV	-	-	FR	FI	FE	FA	FT	FT	-	-	FS	FA	FR	FM	-	-	-	-	
HYDROGEN	H	PC	PC	CCV	-	-	HR	HI	HE	HA	HT	HT	-	-	HS	HA	HR	HM	-	-	-	-	
HYDROGEN KON. CONC.	HK	PC	PC	CCV	-	-	HR	HI	HE	HA	HT	HT	-	-	HS	HA	HR	HM	-	-	-	-	
LEVEL	L	LC	LC	CCV	-	-	LR	LI	LE	LA	LT	LT	-	-	LS	LA	LR	LM	-	-	-	-	
MISTURURE	M	PC	PC	CCV	-	-	MR	MI	ME	MA	MT	MT	-	-	MS	MA	MR	MM	-	-	-	-	
MULTIPOINT FLUX	M	PC	PC	CCV	-	-	MR	MI	ME	MA	MT	MT	-	-	MS	MA	MR	MM	-	-	-	-	
PH	P	PC	PC	CCV	-	-	PR	PI	PE	PA	PT	PT	-	-	PS	PA	PR	PM	-	-	-	-	
PHOSPHORUS KON. CONC.	PK	PC	PC	CCV	-	-	PR	PI	PE	PA	PT	PT	-	-	PS	PA	PR	PM	-	-	-	-	
POSITION	P	PC	PC	CCV	-	-	PR	PI	PE	PA	PT	PT	-	-	PS	PA	PR	PM	-	-	-	-	
RADIATION	R	-	-	-	-	-	RR	RI	RE	RA	RT	RT	-	-	RS	RA	RR	RM	-	-	-	-	
SPEED	S	PC	PC	CCV	-	-	SR	SI	SE	-	-	-	-	-	-	-	-	-	-	-	-	-	
TEMPERATURE	T	PC	PC	CCV	-	-	TR	TI	TE	TA	TT	TT	-	-	TS	TA	TR	TM	-	-	-	-	
TIME	T	-	-	-	-	-	TR	TI	TE	TA	TT	TT	-	-	TS	TA	TR	TM	-	-	-	-	
VIBRATORY	V	-	-	-	-	-	VR	VI	VE	VA	VT	VT	-	-	-	-	-	-	-	-	-	-	
WINDITION	W	-	-	-	-	-	WR	WI	WE	WA	WT	WT	-	-	-	-	-	-	-	-	-	-	
WEIGHT FACTOR	WF	PC	PC	CCV	-	-	WR	WI	WE	WA	WT	WT	-	-	-	-	-	-	-	-	-	-	

MISCELLANEOUS ABBREVIATIONS:

ADJ AUTOMATIC DEPRESSURIZATION
 A/S AIR SUPPLY
 AWJ AIR WASTE (CONDUIT/PIPE, CALIBRATED)
 C/T CONDUCTIVITY INDICATOR TRANSMITTER
 CRD CONTROL ROD DRIVE
 CRDS CONTROL ROD DRIVE HYDRAULIC SYSTEM
 CS CONDUCTIVITY RECORDING SWITCH
 CW CLEAN RADWASTE
 CC CYCLE TIMER
 CWV CLEAN RADWASTE
 DTB DIFFERENTIAL TEMPERATURE SWITCH
 E/P CONVERTER (ELECTRIC/PNEUMATIC)
 E/S SPECIAL ELECTRIC SUPPLY REQUIRED
 F/D FILTER DEMONSTRATOR
 FC INDICATES CLOSURE OF AIR OR ELECTRICAL FAILURE
 FI FLOW INDICATOR TRANSMITTER
 FO INDICATES OPEN OR AIR OR ELECTRICAL FAILURE
 FRC FLOW RECORDING CONTROLLER SWITCH
 HX HEAT EXCHANGER
 IP CONVERTER (ELECTRIC/PNEUMATIC)
 LC LOCK C-LOSD
 L/DMS LEVEL B BURNOUT INDICATOR SWITCH
 LMS LIMIT SWITCH
 LHM SW LIMIT SWITCH
 LD LEVEL INDICATOR RECORDING SWITCH
 LRB LEVEL RECORDING SWITCH
 MS STEAM ISOLATION VALVE
 MVI MULTIPOINT VIBRATION CONVERTER
 NC NORMALLY CLOSED
 NO NORMALLY OPEN
 NSS NORMALLY SENSITIVE SYSTEM
 NO NORMAL WASTE (CONVENTIONAL)

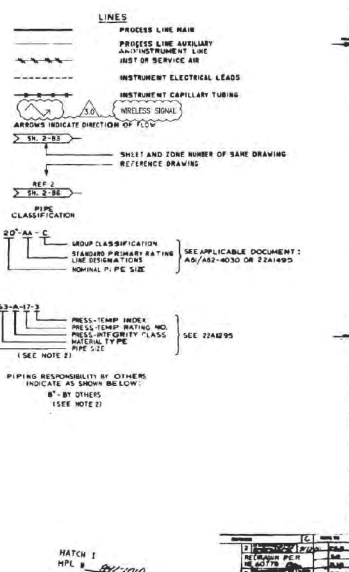
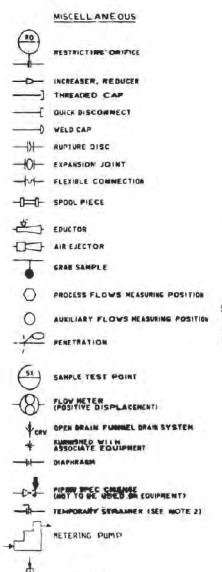
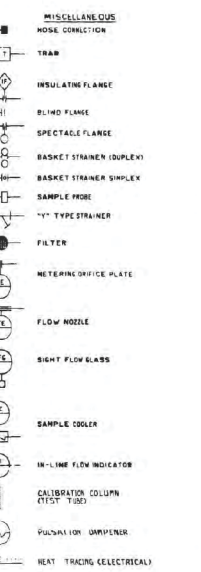
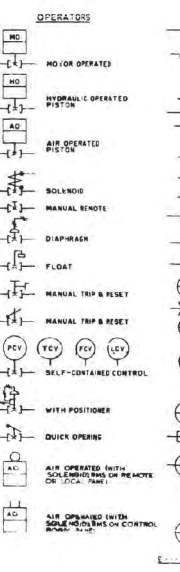
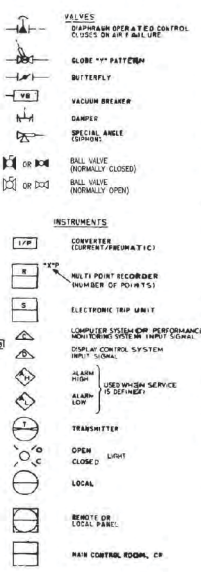
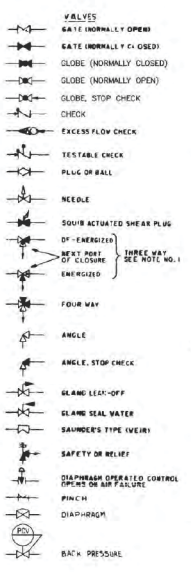
MISCELLANEOUS ABBREVIATIONS:

BRCCW REACTOR BUILDING CLOSED COOLING WATER
 BRDET REACTOR BUILDING EQUIPMENT DRAIN TANK
 RM REMOTE MANUAL
 RMC REMOTE MANUAL CONTROL
 RMB REMOTE MANUAL SWITCH
 RMP REACTOR PROTECTION SYSTEM
 RPV REACTOR PRESSURE VESSEL
 SS SELECTOR SWITCH
 SSA SELECTIVE SWITCH AUTOMATIC
 SG RT SQUARE ROOT CONVERTER
 TRCCW TORBINE BUILDING CLOSED COOLING WATER
 TRS TURBIDITY RECORD SWITCH
 TRS TORQUE OVERLOAD SWITCH
 TRS TORQUE TRANSMITTER
 TRS TORQUE RECORDER SWITCH
 TRS TORQUE TRANSMITTER
 TRS TEMPERATURE RECORDER SWITCH

FAI FAIL AS IS
 H/S HAND SWITCH } SEE NOTE 2

NOTES:

- ALL SENSITIVE VALVES SHOWN AS BE ENERGIZED POSITION. "BE" CONVERTER SOLIDID IS NORMALLY ENERGIZED DURING PLANT OPERATION.
- SYMBOLS INACTIVE FOR NEW DESIGN.
- FROM THE TYPE OF TRANSDUCER (SENSOR OR TRANSMITTER) REFER TO THE PARTICULAR SYSTEM MASTER PARTS LIST.



THIS DWG. REFERENCED IN
 VENDOR MANUAL N/A

REVISIONS:

NO.	DATE	DESCRIPTION
1	02/2004	JUB

S15051
 02/2004 JUB

Southern Nuclear Operating Company, Inc.
 EDWIN I. HATCH NUCLEAR PLANT
 UNIT NO. 1

VERSION 3.0 DATE 6-5-12
 REVISIONS BY SNC PER AEM-102836, VER. 1.0

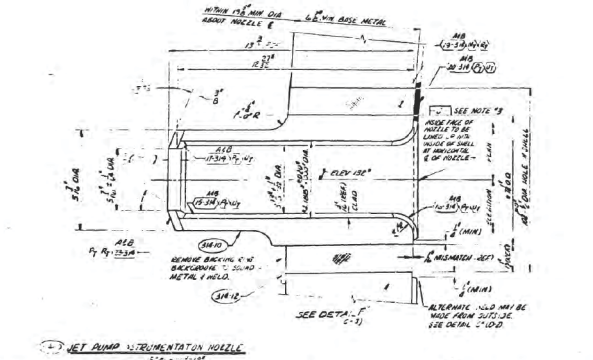
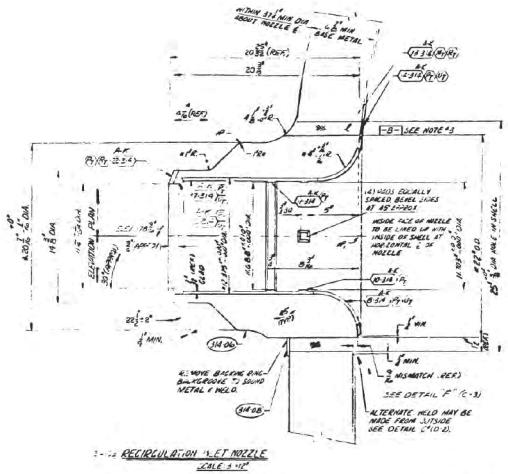
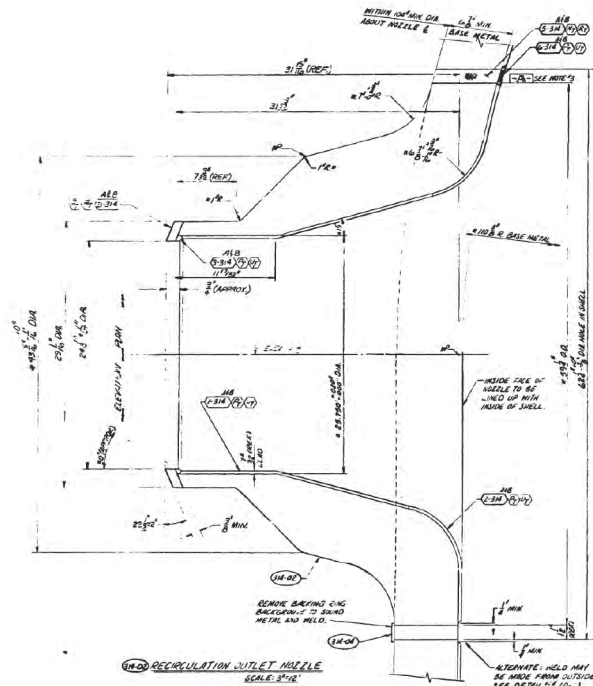
INFORMATION DOCUMENT -
 PIPING AND INSTRUMENTATION SYMBOLS

SEE MODFORM FOR PREVIOUS VER. SIGNATURES

BY	CHK'D	APPR. 1	APPR. 2
JUB	SO	AAN	[Signature]

VENDOR: GENERAL ELECTRIC P.O.F. PEH-00000302
 DRAWING NO. S-15051

E-234-243



REVISIONS		
NO.	DESCRIPTION	DATE
1	ISSUED FOR BIDDING 10/15/72	10/15/72
2	ISSUED FOR BIDDING 10/15/72	10/15/72
3	ISSUED FOR BIDDING 10/15/72	10/15/72

RB11-001 E234-243
6511-01 10-502 315062C
 FILE
KPU NOZZLE DET'S
 JOB: **UNIT 1, NAYOK NUCLEAR PLANT-UNIT 1**
 RFR: **CE** **PEH-2**
 REU-2
 VPF 1483-52

Rev: 2
 Date: 1/1/72
 JWG phone
 8/34/72



VENDOR'S DRAWING REVIEW

- 1 No comment - MFG may proceed.
 - 2 Comments as noted - Make changes and resubmit drawing per comments.
 - 3 Text not retained - MFG may proceed.
- Approval of this drawing does not constitute an endorsement by the purchaser. All drawings are subject to the requirements of the contract.
 By: *(Signature)* Date: 2-11-72
 BECHTEL

JOB NO. 6511 **BECHTEL ASSOCIATES**
POWER & INDUSTRIAL DIVISION
 P. O. BOX 507 GAITHERSBURG, MD.

CERTIFIED
 BY: *(Signature)*
 APPROVED
 FOR: *(Signature)*
 DATE: 1/1/72

1483-52-4

NOTE NO.	DESCRIPTION	DATE	BY
SEE NOTE 10	ALTERNATE BACKING RING 1/4" DIA. BE BEAD	1/1/72	CE
SEE NOTE 10	REMOVE BACKING RING 1/4" DIA. BE BEAD	1/1/72	CE
SEE NOTE 10	REMOVE BACKING RING 1/4" DIA. BE BEAD	1/1/72	CE
SEE NOTE 10	REMOVE BACKING RING 1/4" DIA. BE BEAD	1/1/72	CE

GENERAL NOTES
 1. ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED ARE IN INCHES.
 2. ALL DIMENSIONS SHALL BE TO UNLESS OTHERWISE SPECIFIED.
 3. ALL DIMENSIONS SHALL BE TO UNLESS OTHERWISE SPECIFIED.
 4. ALL DIMENSIONS SHALL BE TO UNLESS OTHERWISE SPECIFIED.
 5. ALL DIMENSIONS SHALL BE TO UNLESS OTHERWISE SPECIFIED.
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 9. ALL DIMENSIONS SHALL BE TO UNLESS OTHERWISE SPECIFIED.
 10. ALL DIMENSIONS SHALL BE TO UNLESS OTHERWISE SPECIFIED.

CONTRACT NO.	REF. DWG. NO.	REF. DWG. NO.	REF. DWG. NO.	REF. DWG. NO.	REF. DWG. NO.	REF. DWG. NO.
CE 100-104	CE 100-104	CE 100-104	CE 100-104	CE 100-104	CE 100-104	CE 100-104
CE 100-104	CE 100-104	CE 100-104	CE 100-104	CE 100-104	CE 100-104	CE 100-104
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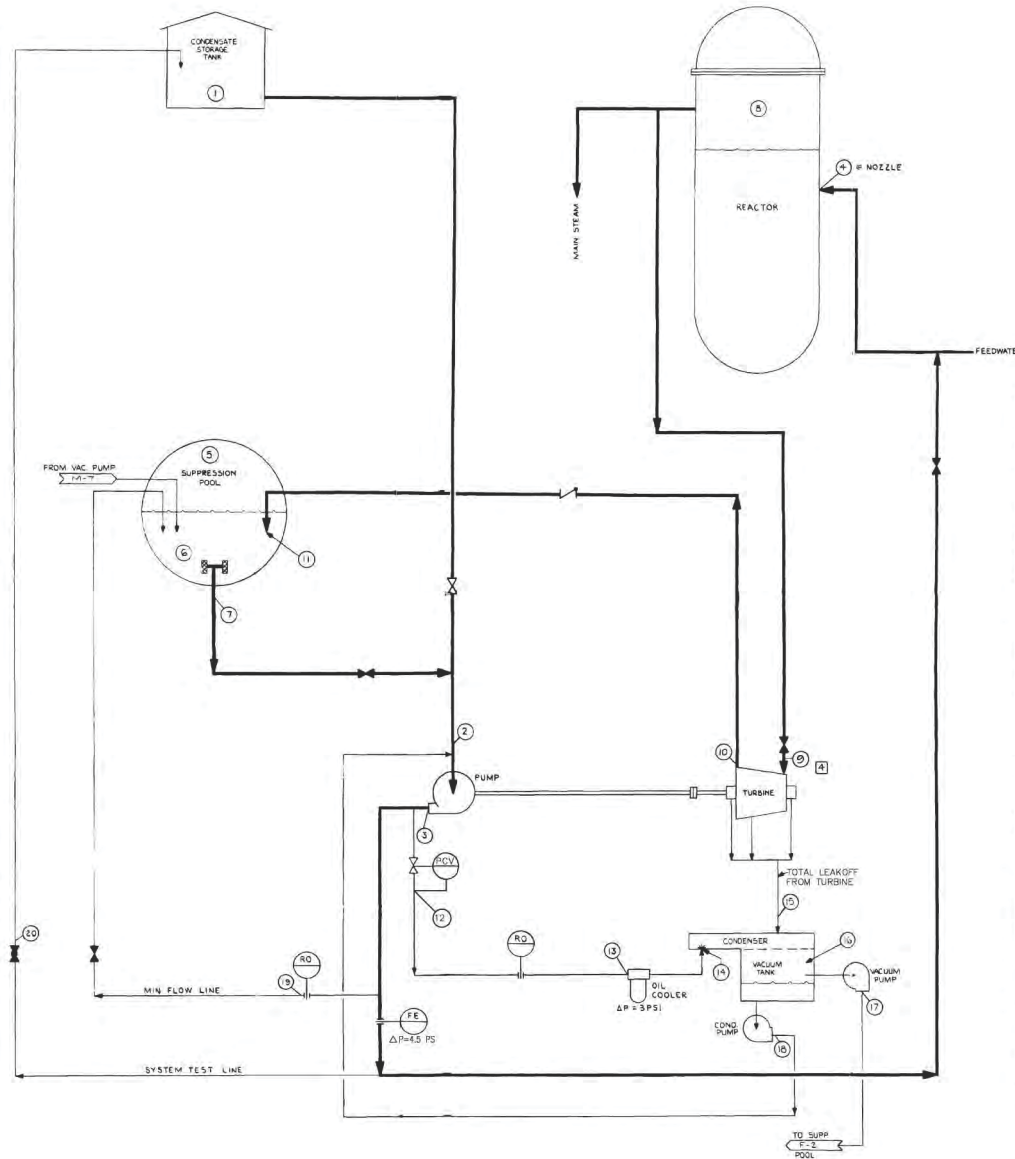
DATE	BY	FOR	DATE	BY	FOR
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1/1/72	CE	APPROVED	1/1/72	CE	APPROVED
1/1/72	CE	APPROVED	1/1/72	CE	APPROVED

NOTES:

1. ATMOSPHERIC PRESSURE OF 14.7 PSIA WAS USED IN CALCULATIONS.
2. WATER FLOWS ARE SHOWN IN GPM, STEAM FLOWS IN 1000 LB/HR.
3. THE MAXIMUM POOL WATER TEMPERATURE FOR CONTINUOUS SYSTEM OPERATION WILL NOT EXCEED 140°F; HOWEVER, DUE TO POTENTIAL SHORT TERM OPERATION AT HIGHER TEMPERATURES, PIPING EXPANSION SHALL BE BASED ON 170°F.
4. THE UNRECOVERED FLOW NOZZLE PRESSURE DROP OF 4.5 PSI IS A FIXED LOSS BETWEEN LOCATIONS ① AND ②.
5. THE LUBE OIL COOLER PRESSURE DROP OF 3.0 PSI IS A FIXED LOSS BETWEEN LOCATIONS ⑬ AND ⑭.
6. THE CONTROLLING MODES FOR LINE SIZING AND ARRANGEMENT ARE:
SUCTION FROM COND STORAGE MODE A
SUCTION FROM SUPPRESSION POOL MODE C
PUMP DISCHARGE MODE C
STEAM SUPPLY MODE A & B
TURBINE EXHAUST MODE A C & D
TEST LINE MODE E
COOLING SYSTEM MODE A
7. THERE ARE OTHER POTENTIAL OPERATING MODES WHICH DO NOT CONTROL PIPE OR VALVE SIZING, OR SYSTEM OPERATION AND NO DATA IS SHOWN. AMONG THESE MODES ARE OPERATION WITH THE PUMP SUCTION TAKEN FROM THE RHR STEAM CONDENSING HEAT EXCHANGERS AND OPERATION WITH INTERMEDIATE PRESSURES IN THE REACTOR VESSEL AND SUPPRESSION POOL.
8. PUMP MINIMUM FLOW REQUIREMENT MAY OCCUR DURING ANY OPERATING MODE. FLOW REQUIREMENT IS 50 GPM MINIMUM, DURING MODE A.

REFERENCE DOCUMENTS:

1. RDC SYSTEM P&ID - MPL ITEM NO. E51-1010



MODE A SUCTION FROM CONDENSATE STORAGE, REACTOR AT HIGH PRESSURE, SUPPRESSION POOL AT HIGH PRESS.

LOCATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
FLOW - SEE NOTE 2	-	400	416	400	-	0	-	22.00	18.87	18.87	16	16	0.15	-	0.01	16*	-	0	-	-
PRESSURE - PSIA	14.7	*	117.5	6	-	-	-	117.0	*	75	*	45	*	9.8	*	*	*	*	*	*
TEMPERATURE °F	100	100	100	140	-	-	-	156	SAT	228	100	100	100	230	120	120	100	-	-	

MODE B SUCTION FROM CONDENSATE STORAGE, REACTOR AT LOW PRESSURE, SUPPRESSION POOL AT HIGH PRESS.

LOCATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
FLOW - SEE NOTE 2	-	400	416	400	-	0	-	4.5	6.50	6.50	16	16	0.15	-	0.01	16*	-	0	-	-
PRESSURE - PSIA	14.7	*	170	6	-	-	-	165	*	75	*	45	*	5.5	*	*	*	*	*	*
TEMPERATURE °F	100	100	100	140	-	-	-	164	SAT	228	100	100	100	230	120	120	100	-	-	

MODE C SUCTION FROM SUPPRESSION POOL, REACTOR AT HIGH PRESSURE; SUPPRESSION POOL AT LOW PRESS.

LOCATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
FLOW - SEE NOTE 2	-	400	416	400	-	0	-	400	21.46	21.31	21.31	16	16	0.15	-	0.01	16*	-	0	-
PRESSURE - PSIA	*	*	117.5	4.7	17.1	17.1	117.0	*	75	*	45	*	9.8	*	*	*	*	*	*	*
TEMPERATURE °F	-	140	140	140	140	140	156	SAT	215	140	140	140	230	160	160	140	140	-	-	

MODE D SUCTION FROM SUPPRESSION POOL, REACTOR AT LOW PRESSURE; SUPPRESSION POOL AT LOW PRESS.

LOCATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
FLOW - SEE NOTE 2	-	400	416	400	-	0	-	400	6.10	5.98	5.98	16	16	0.15	-	0.01	16*	-	0	-
PRESSURE - PSIA	*	*	170	14.7	17.1	17.1	165	*	75	*	45	*	9.8	*	*	*	*	*	*	*
TEMPERATURE °F	-	140	140	140	140	140	166	SAT	218	140	140	140	230	160	160	140	140	-	-	

MODE E TEST MODE: SUCTION FROM CONDENSATE STORAGE, REACTOR AT HIGH PRESSURE, SUPPRESSION POOL AT LOW PRESS.

LOCATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
FLOW - SEE NOTE 2	-	400	416	0	-	0	-	1000	18.70	18.50	18.50	16	16	0.15	-	0.01	16*	-	0	-
PRESSURE - PSIA	14.7	*	*	-	4.7	-	-	100	*	75	*	45	*	9.8	*	*	*	*	*	*
TEMPERATURE °F	100	100	100	-	100	-	-	251	SAT	218	100	100	100	230	120	120	100	-	-	

* THE PRESSURE AT THIS LOCATION DEPENDS ON PIPING ARRANGEMENT, AND MAY BE VARIED WITHIN THE FOLLOWING LIMITS.

- LOCATION
- ① MINIMUM NPSH AT PUMP SUCTION = 20 FEET
 - ② MAXIMUM PRESSURE RISE ACROSS PUMP (250) FEET FOR MODES A & C
 - ③ 525 FEET FOR MODES B & D
 - ④ MAXIMUM PRESSURE DROP BETWEEN LOCATION ① AND ② = 11 PSI
 - ⑤ MAXIMUM PRESSURE ALLOWED = 23 PSIA
 - ⑥ MAXIMUM PRESSURE ALLOWED = 75 PSIA
 - ⑦ SUFFICIENT VACUUM TO PREVENT TURBINE SHUT-OUT/LEAKAGE, TO BE SPECIFIED ON TURNING VENDOR DRAWINGS.
 - ⑧ MAXIMUM PRESSURE AVAILABLE = 25 PSIA
 - ⑨ MAXIMUM PRESSURE AVAILABLE = 45 PSIA
 - ⑩ SUFFICIENT PRESSURE TO RETURN TO SUPPRESSION POOL
 - ⑪ SUFFICIENT PRESSURE TO RETURN TO COND. STORAGE.

REVISION	DATE	BY	CHKD	APPV
1	12/20/80	APR	APR	APR
2	12/20/80	APR	APR	APR
3	12/20/80	APR	APR	APR
4	12/20/80	APR	APR	APR
5	12/20/80	APR	APR	APR
6	12/20/80	APR	APR	APR
7	12/20/80	APR	APR	APR
8	12/20/80	APR	APR	APR
9	12/20/80	APR	APR	APR
10	12/20/80	APR	APR	APR
11	12/20/80	APR	APR	APR
12	12/20/80	APR	APR	APR
13	12/20/80	APR	APR	APR
14	12/20/80	APR	APR	APR
15	12/20/80	APR	APR	APR
16	12/20/80	APR	APR	APR
17	12/20/80	APR	APR	APR
18	12/20/80	APR	APR	APR
19	12/20/80	APR	APR	APR
20	12/20/80	APR	APR	APR

CAD: AutoCAD S15066

Southern Company Services, Inc.

PROJECT: HATCH

UNIT: 1

TITLE: PROCESS DIAGRAM-REACTOR CORE ISOLATION COOLANT SYSTEM

VENDOR: GENERAL ELECTRIC CO. P.O.# PEH-0000002

S-15066 D

THIS DWG. PART OF VENDOR MANUAL N/A

TAB/SECT: N/A

PAGE: N/A

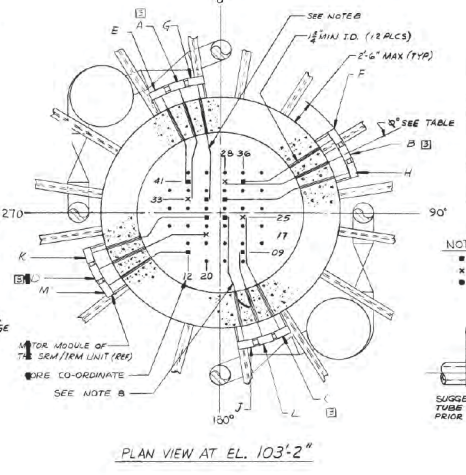
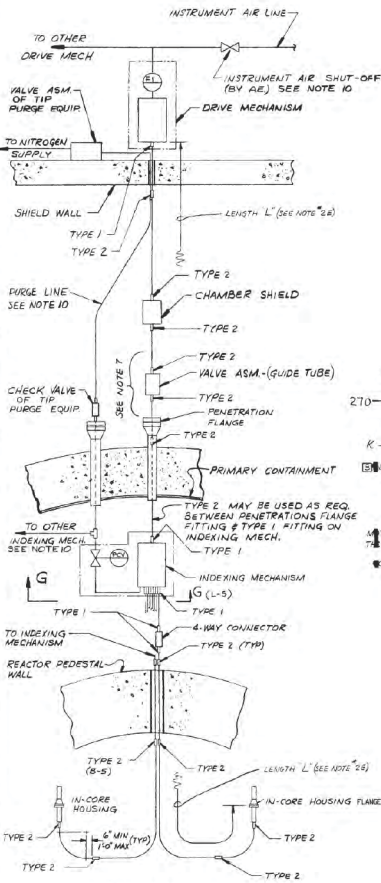
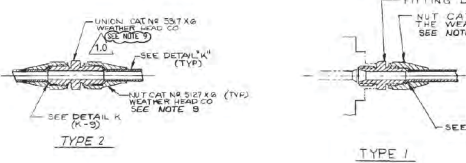
FIGURE: N/A

REVISION	DATE	REVISION	DATE	REVISION	DATE	REVISION	DATE	REVISION	DATE	REVISION	DATE	REVISION	DATE	REVISION	DATE	REVISION	DATE	REVISION	DATE	REVISION	DATE		
BY: CHKD	APR/1	APR/2	APR/3	APR/4	APR/5	BY: CHKD	APR/1	APR/2	APR/3	APR/4	APR/5	BY: CHKD	APR/1	APR/2	APR/3	APR/4	APR/5	BY: CHKD	APR/1	APR/2	APR/3	APR/4	APR/5

REVISED PER REA HT-96660.

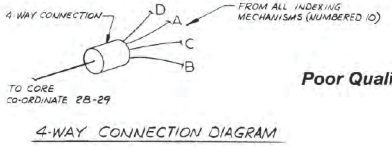
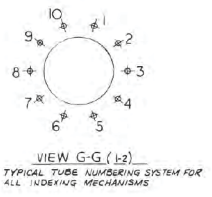
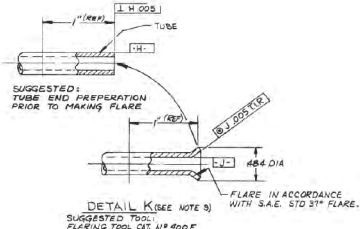
SEE MICROFILM FOR PREVIOUS REV. SIGNATURES (VENDOR REV. 6 BY SC5)

- NOTES
- 1. TUBE UNITS MAY BE LOCATED AS REQUIRED BETWEEN CONCRETE CYLINDER (CS) AND DRIVE MECHANISM.
 - 2. THE NUMBER OF TIP GUIDE TUBE RINGS SHALL BE HELD TO A MINIMUM.
 - 3. THE TOTAL NUMBER OF RINGS SHALL NOT EXCEED 15. THE MINIMUM BEND RADIUS SHALL BE 2'-6" INSIDE PERISTAL, 5'-0" RADIUS OUTSIDE PERISTAL.
 - 4. RINGS MUST BE SMOOTH AND MADE WITH A FINISH OF POLISHED AND A SERIES OF SMALLER BENDS AND FREE OF ALL BURRS AND DEFECTS.
 - 5. TUBE FLARES TO BE FORMED WITH PROPER FLAMING TOOLS AND CAREFULLY ASSEMBLED INTO FITTINGS.
 - 6. COLLAR SET OF ALL FITTINGS MUST BE CHECKED FOR PROPER ALIGNMENT AND TIGHTNESS.
 - 7. ALL TUBES MUST BE TESTED FOR LEAKS AT ALL POINTS.
 - 8. ALL TUBES MUST BE TESTED FOR LEAKS AT ALL POINTS.
 - 9. ALL TUBES MUST BE TESTED FOR LEAKS AT ALL POINTS.
 - 10. ALL TUBES MUST BE TESTED FOR LEAKS AT ALL POINTS.
 - 11. ALL TUBES MUST BE TESTED FOR LEAKS AT ALL POINTS.



MOTOR MODULE #	AZIMUTH DEG	CORE CO-ORDINATE	MIN LENGTH OF FLEET SHEET
SEM F	56°	36-41	16'-0"
SEM B	64°	28-41	21'-0"
SEM H	72°	28-33	22'-0"
SEM C	154°	36-25	21'-0"
SEM L	162°	36-09	18'-0"
SEM J	170°	28-25	22'-0"
SEM M	236°	18-09	18'-0"
SEM D	244°	20-17	22'-0"
SEM K	282°	20-25	21'-0"
SEM E	334°	12-91	18'-0"
SEM A	342°	12-33	21'-0"
SEM G	350°	20-33	21'-0"

- NOTE:
- INTERMEDIATE RANGE MONITORING SYSTEM (IRM)
 - SOURCE RANGE MONITORING SYSTEM (SRM)
 - TRAVERSING IN CORE PROBE SYSTEM (TIP)



REFERENCE LISTINGS

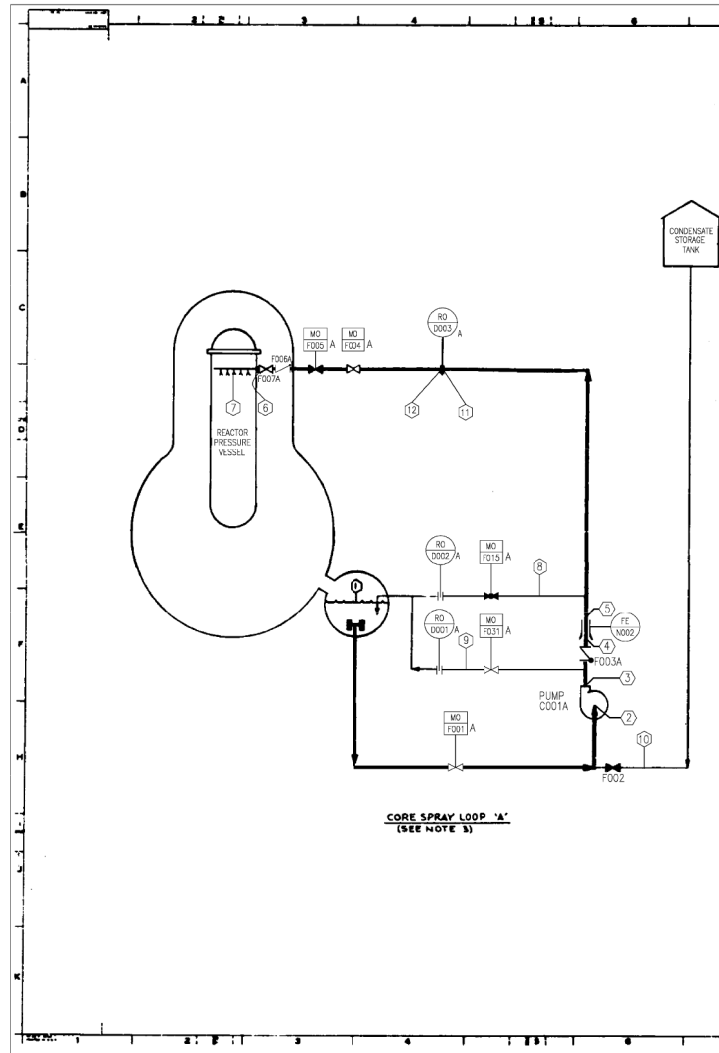
1	WIRE MESHING	Q14 4-31
2	CHAMBER SHIELD	Q11 2905
3	PENETRATIONS	Q11 2906
4	INDEXING MECHANISM	Q11 2907
5	FOUR-WAY CONNECTION	Q11 2908
6	FLARE END PREPARATION	Q11 2909
7	VALVE ASSEMBLY	Q11 2910
8	REACTOR ARM	Q11 2911
9	TIP FORMING ASSEMBLY	Q11 2912
10	GUIDE TUBE	Q11 2913
11	WINDING MECHANISM	Q11 2914
12	REACTOR CASK	Q11 2915
13	TIP PURGE EQUIP.	Q11 2916
14	INDEXING MECH.	Q11 2917

Poor Quality Original

Poor Quality Original

Z1191-S

DESIGNED BY: [Signature] DATE: 3-22-99
 PROJECT: 161F267BA
 CORE SPRAY SYSTEM
 238-129BA (E21-1020)



CONDITION I NORMAL SYSTEM TEST

LOCATION	1	2	3	4	5	6	7	8	9	10	11	12
FLOW-GPM	N/A	4250			4250	0	4250	0				0
PRESS-PSIA	14.7				N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TEMP-°F	AMB				AMB	N/A	N/A	AMB	N/A	N/A	N/A	N/A
SEE NOTE												
ΔP - FT		• 500 •	• 14 •	• 14 •	• 341 •							

CONDITION II TEST USING CONDENSATE STORAGE TANK

LOCATION	1	2	3	4	5	6	7	8	9	10	11	12
FLOW-GPM	N/A	6200					6200	0	0	6200	6200	6200
PRESS-PSIA	14.7						14.7					
TEMP-°F	AMB	95					95	N/A	N/A	95	95	95
SEE NOTE												
ΔP - FT		• 500 •	• 14 •	• 14 •	• 341 •							

CONDITION III PUMP OPERATING ON BYPASS

LOCATION	1	2	3	4	5	6	7	8	9	10	11	12
FLOW-GPM	N/A	475	475	0				0	475	0	0	0
PRESS-PSIA	14.7											
TEMP-°F	140	140	140					140				
SEE NOTE												
ΔP - FT		• 900 •										

CONDITION IV CORE SPRAY INJECTING AT REACTOR PRESS.

LOCATION	1	2	3	4	5	6	7	8	9	10	11	12
FLOW-GPM	N/A	4725					4725	0	0	0	4725	4725
PRESS-PSIA	19.3						132.3					
TEMP-°F	195						195				195	195
SEE NOTE												
ΔP - FT		• 633 •	• 14 •	• 14 •	• 198 •							

- NOTES:**
- FINAL VALUES SHALL BE REPORTED "BY OTHERS" FOR ALL POINTS LISTED.
 - THE BYPASS FLOW IS APPROXIMATE & WILL BE SPECIFIED BY THE PUMP VENDOR.
 - ONLY ONE CORE SPRAY LOOP IS SHOWN. THE SECOND LOOP IS IDENTICAL.
 - IN CONDITION II THE NET POSITIVE SUCTION HEAD (NPSH) AVAILABLE AT THE PUMP INLET (LOCATION 2) MUST BE 32 FEET (ADEQUATE NPSH MUST BE DEMONSTRATED FOR PUMP OPERATION WITH POOL TEMPERATURE AT 100°F AND CONTAINMENT PRESSURE AT 2.1 PSIA).
 - IN CONDITION IV THE NET POSITIVE SUCTION HEAD (NPSH) AVAILABLE AT THE PUMP INLET (LOCATION 2) MUST BE 24 FT. UNDER THE SAME TEMPERATURE & PRESSURE CONDITIONS THE NPSH AVAILABLE WITH A FLOW OF 6200 GPM MUST BE AVAILABLE WITH A FLOW OF 4725 GPM. THESE TWO NPSH REQUIREMENTS ASSUME THAT ADEQUATE SUCTION PRESSURE IS AVAILABLE UNDER ALL CONDITIONS OF FLOW FROM THE SUPPRESSION POOL. ADEQUATE NPSH MUST BE DEMONSTRATED FOR PUMP OPERATION WITH POOL TEMPERATURE AT 207°F AND CONTAINMENT PRESSURE AT 4.2 PSIA.
 - 100 GPM IS INCLUDED IN THE FLOW RATE GIVEN FOR MODE IV TO ALLOW FOR LEAKAGE IN THE REACTOR INTERNALS.
 - THE ΔP BETWEEN LOCATION (1) AND (2) WILL BE DETERMINED IN PRE-OPERATIONAL TEST. THE ΔP WILL BE ADJUSTED TO MEET THE FLOW REQUIREMENTS OF CONDITION IV.

VALVE POSITIONS

CONDITION	VALVE NO.	1	2	3	4	5	6	7	8	9	10	11	12
I	C	C	C	P	C								
II	C	C	O	C	C								
III	C	C	C	C	O								
IV	C	C	O	C	C								

O-FULL OPEN
 C-FULL CLOSED
 P-PARTIALLY OPEN

REV 3 DATE 3-22-99
 REVISED PER ADIF 89-067 BASED ON G.E. CALCULATIONS IN NEDO-30832. BY SCS.

S-15117

REV 4
 BY: GK, BKL, [Signature]
 DATE: 3-22-99

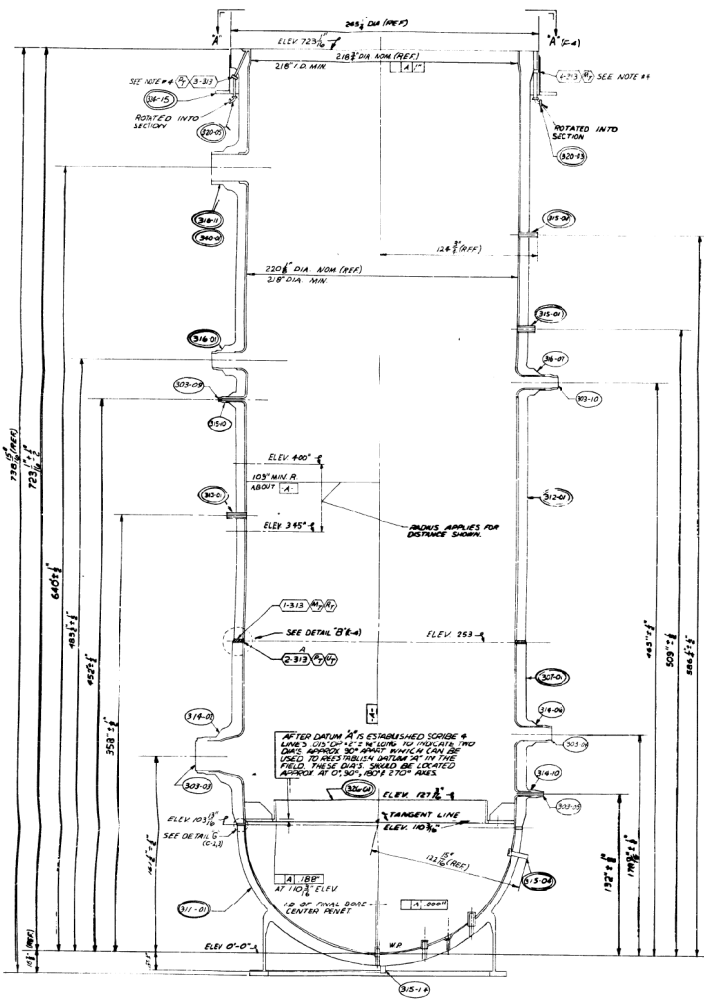
CAD AutoCAD S15117

Southern Company Services, Inc.
 for
 PLANT: HATCH
 UNIT: 1
 TITLE: CORE SPRAY SYSTEM PROCESS DIAGRAM
 VENDOR: G.E. P# PEH-002
 S-15117 F

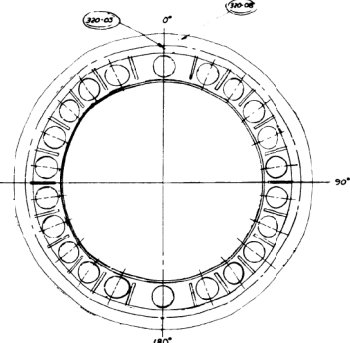
THIS DWG. PART OF VENDOR MANUAL N/A
 TAB/SECT. N/A
 PAGE N/A
 FIGURE N/A

REVISION	DATE	REVISION	DATE	REVISION	DATE	REVISION	DATE	REVISION	DATE	REVISION	DATE	REVISION	DATE
BY CHK'D APPR.1 APPR.2 APPR.3 APPR.4 APPR.5		BY CHK'D APPR.1 APPR.2 APPR.3 APPR.4 APPR.5		BY CHK'D APPR.1 APPR.2 APPR.3 APPR.4 APPR.5		BY CHK'D APPR.1 APPR.2 APPR.3 APPR.4 APPR.5		BY CHK'D APPR.1 APPR.2 APPR.3 APPR.4 APPR.5		BY CHK'D APPR.1 APPR.2 APPR.3 APPR.4 APPR.5		BY CHK'D APPR.1 APPR.2 APPR.3 APPR.4 APPR.5	

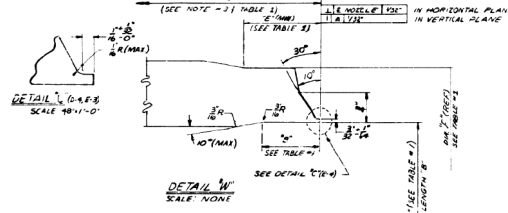
REVISION F DATE 10-27-99
 REVISED PER REA HT-96860.
 SEE MICROFILM FOR PREVIOUS REV SIGNATURES (VENDOR REV. 7 BY SCS)



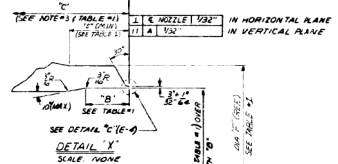
218 1/2" VESSEL ASSEMBLY - SECTIONAL ELEVATION
NOZZLES ARE ROTATED INTO SECTION FOR CLARITY
SCALE 1/4" = 1'-0"



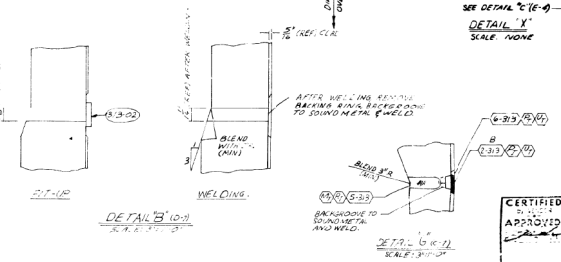
VIEW A-A (1/4) SCALE 1/4" = 1'-0"



DETAIL W SCALE NONE



DETAIL X SCALE NONE



DETAIL B SCALE NONE

ASST. NO.	SEE DETAIL	QUANTITY	DIAM. (IN.)	DIAM. (IN.)	DIAM. (IN.)	DIAM. (IN.)	DIAM. (IN.)
303-01	"A"	2	150"	2550"	1.700"	28 1/2"	
303-04	"C"	10	190"	1150"	1.000"	12 1/2"	
303-05	"D"	2	190"	1800"	1.000"	14 1/2"	
303-08	"E"	1	194 1/2"	2.014"	1.000"	2 1/2"	
303-11	"F"	1	175"	1.750"		3"	
303-12	"G"	4	197"	11.25"	1.000"	13"	
303-10	"H"	2	191 1/2"	1.812"	1.000"	10 1/2"	
303-11	"I"	1	196"	2.027"		24 1/2"	

GENERAL NOTES	CONTRACT	REF. DWG. #1	REF. DWG. #2	REF. DWG. #3	REF. DWG. #4	REF. DWG. #5
1. FOR STANDARD NOTES SEE REF. DWG. #2 2. ALL DIMENSIONS SHALL BE IN ACCORDANCE WITH 3. ALL DIMENSIONS SHALL BE IN ACCORDANCE WITH 4. ALL DIMENSIONS SHALL BE IN ACCORDANCE WITH 5. ALL DIMENSIONS SHALL BE IN ACCORDANCE WITH 6. ALL DIMENSIONS SHALL BE IN ACCORDANCE WITH 7. ALL DIMENSIONS SHALL BE IN ACCORDANCE WITH 8. ALL DIMENSIONS SHALL BE IN ACCORDANCE WITH 9. ALL DIMENSIONS SHALL BE IN ACCORDANCE WITH 10. ALL DIMENSIONS SHALL BE IN ACCORDANCE WITH	3167	2-200-118	2-210-107	2-210-108	2-210-109	2-210-110

COMBUSTION ENGINEERING INC. WINSTON-SALEM, N.C.	COMBUSTION ENGINEERING INC. CHATTANOOGA DIVISION
DATE: 8-18-68 BY: J.L.B. CHECKED BY: J.L.B. APPROVED BY: J.L.B.	DATE: 8-18-68 BY: J.L.B. CHECKED BY: J.L.B. APPROVED BY: J.L.B.
VESSEL ASSEMBLY 218 1/2" BWR	
APPROVED DATE: 8-18-68	DATE: 8-18-68
CONTRACT 3167	234-273 6

NO.	REVISION	DATE
1	REVISED PER REVISIONS IN TABLE I DIM. 11 FOR NO. 303-01 WAS 218 1/2" DIM. 12 FOR NO. 303-02 WAS 10 1/2"	JUL 24 1968
2	"C" FOR NO. 303-03 WAS 10 1/2" DIM. 13 FOR NO. 303-04 WAS 12 1/2" DIM. 14 FOR NO. 303-05 WAS 14 1/2" DIM. 15 FOR NO. 303-06 WAS 16 1/2" DIM. 16 FOR NO. 303-07 WAS 18 1/2" DIM. 17 FOR NO. 303-08 WAS 20 1/2" DIM. 18 FOR NO. 303-09 WAS 22 1/2" DIM. 19 FOR NO. 303-10 WAS 24 1/2" DIM. 20 FOR NO. 303-11 WAS 26 1/2" DIM. 21 FOR NO. 303-12 WAS 28 1/2" DIM. 22 FOR NO. 303-13 WAS 30 1/2" DIM. 23 FOR NO. 303-14 WAS 32 1/2" DIM. 24 FOR NO. 303-15 WAS 34 1/2" DIM. 25 FOR NO. 303-16 WAS 36 1/2" DIM. 26 FOR NO. 303-17 WAS 38 1/2" DIM. 27 FOR NO. 303-18 WAS 40 1/2" DIM. 28 FOR NO. 303-19 WAS 42 1/2" DIM. 29 FOR NO. 303-20 WAS 44 1/2" DIM. 30 FOR NO. 303-21 WAS 46 1/2" DIM. 31 FOR NO. 303-22 WAS 48 1/2" DIM. 32 FOR NO. 303-23 WAS 50 1/2" DIM. 33 FOR NO. 303-24 WAS 52 1/2" DIM. 34 FOR NO. 303-25 WAS 54 1/2" DIM. 35 FOR NO. 303-26 WAS 56 1/2" DIM. 36 FOR NO. 303-27 WAS 58 1/2" DIM. 37 FOR NO. 303-28 WAS 60 1/2" DIM. 38 FOR NO. 303-29 WAS 62 1/2" DIM. 39 FOR NO. 303-30 WAS 64 1/2" DIM. 40 FOR NO. 303-31 WAS 66 1/2" DIM. 41 FOR NO. 303-32 WAS 68 1/2" DIM. 42 FOR NO. 303-33 WAS 70 1/2" DIM. 43 FOR NO. 303-34 WAS 72 1/2" DIM. 44 FOR NO. 303-35 WAS 74 1/2" DIM. 45 FOR NO. 303-36 WAS 76 1/2" DIM. 46 FOR NO. 303-37 WAS 78 1/2" DIM. 47 FOR NO. 303-38 WAS 80 1/2" DIM. 48 FOR NO. 303-39 WAS 82 1/2" DIM. 49 FOR NO. 303-40 WAS 84 1/2" DIM. 50 FOR NO. 303-41 WAS 86 1/2" DIM. 51 FOR NO. 303-42 WAS 88 1/2" DIM. 52 FOR NO. 303-43 WAS 90 1/2" DIM. 53 FOR NO. 303-44 WAS 92 1/2" DIM. 54 FOR NO. 303-45 WAS 94 1/2" DIM. 55 FOR NO. 303-46 WAS 96 1/2" DIM. 56 FOR NO. 303-47 WAS 98 1/2" DIM. 57 FOR NO. 303-48 WAS 100 1/2" DIM. 58 FOR NO. 303-49 WAS 102 1/2" DIM. 59 FOR NO. 303-50 WAS 104 1/2" DIM. 60 FOR NO. 303-51 WAS 106 1/2" DIM. 61 FOR NO. 303-52 WAS 108 1/2" DIM. 62 FOR NO. 303-53 WAS 110 1/2" DIM. 63 FOR NO. 303-54 WAS 112 1/2" DIM. 64 FOR NO. 303-55 WAS 114 1/2" DIM. 65 FOR NO. 303-56 WAS 116 1/2" DIM. 66 FOR NO. 303-57 WAS 118 1/2" DIM. 67 FOR NO. 303-58 WAS 120 1/2" DIM. 68 FOR NO. 303-59 WAS 122 1/2" DIM. 69 FOR NO. 303-60 WAS 124 1/2" DIM. 70 FOR NO. 303-61 WAS 126 1/2" DIM. 71 FOR NO. 303-62 WAS 128 1/2" DIM. 72 FOR NO. 303-63 WAS 130 1/2" DIM. 73 FOR NO. 303-64 WAS 132 1/2" DIM. 74 FOR NO. 303-65 WAS 134 1/2" DIM. 75 FOR NO. 303-66 WAS 136 1/2" DIM. 76 FOR NO. 303-67 WAS 138 1/2" DIM. 77 FOR NO. 303-68 WAS 140 1/2" DIM. 78 FOR NO. 303-69 WAS 142 1/2" DIM. 79 FOR NO. 303-70 WAS 144 1/2" DIM. 80 FOR NO. 303-71 WAS 146 1/2" DIM. 81 FOR NO. 303-72 WAS 148 1/2" DIM. 82 FOR NO. 303-73 WAS 150 1/2" DIM. 83 FOR NO. 303-74 WAS 152 1/2" DIM. 84 FOR NO. 303-75 WAS 154 1/2" DIM. 85 FOR NO. 303-76 WAS 156 1/2" DIM. 86 FOR NO. 303-77 WAS 158 1/2" DIM. 87 FOR NO. 303-78 WAS 160 1/2" DIM. 88 FOR NO. 303-79 WAS 162 1/2" DIM. 89 FOR NO. 303-80 WAS 164 1/2" DIM. 90 FOR NO. 303-81 WAS 166 1/2" DIM. 91 FOR NO. 303-82 WAS 168 1/2" DIM. 92 FOR NO. 303-83 WAS 170 1/2" DIM. 93 FOR NO. 303-84 WAS 172 1/2" DIM. 94 FOR NO. 303-85 WAS 174 1/2" DIM. 95 FOR NO. 303-86 WAS 176 1/2" DIM. 96 FOR NO. 303-87 WAS 178 1/2" DIM. 97 FOR NO. 303-88 WAS 180 1/2" DIM. 98 FOR NO. 303-89 WAS 182 1/2" DIM. 99 FOR NO. 303-90 WAS 184 1/2" DIM. 100 FOR NO. 303-91 WAS 186 1/2" DIM. 101 FOR NO. 303-92 WAS 188 1/2" DIM. 102 FOR NO. 303-93 WAS 190 1/2" DIM. 103 FOR NO. 303-94 WAS 192 1/2" DIM. 104 FOR NO. 303-95 WAS 194 1/2" DIM. 105 FOR NO. 303-96 WAS 196 1/2" DIM. 106 FOR NO. 303-97 WAS 198 1/2" DIM. 107 FOR NO. 303-98 WAS 200 1/2" DIM. 108 FOR NO. 303-99 WAS 202 1/2" DIM. 109 FOR NO. 303-100 WAS 204 1/2"	

1983-L3-8

CERTIFIED APPROVED

1983-L3-8

1983-L3-8

COMBUSTION ENGINEERING INC. CHATTANOOGA DIVISION

218 1/2" BWR

DATE: 8-18-68

BY: J.L.B.

CHECKED BY: J.L.B.

APPROVED BY: J.L.B.

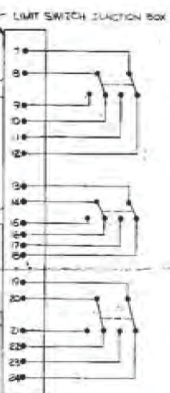
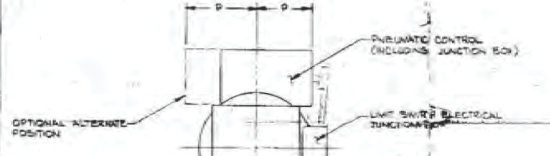
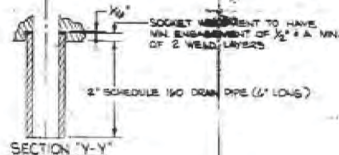
CONTRACT 3167

234-273 6

GENERAL ELECTRIC 73E 66

SOLUTION VALVE
 PRIMARY STEAM SPRING
 DISCHARGED RATE
 180-FOZ 2-DC
 90-FOZ 2-DC

NO.	DESCRIPTION	DATE	BY	CHKD
1	PLANT SIZE			
2	VALVE SIZE (NOMINAL)			
3	VALVE SIZE (ACTUAL)			
4	3 WAY D.A.			
5	2 1/2"			
6	1.800			
7	2.250			
8	1.000			
9	1.000			
10	1.000			
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88	1.000			
89	1.000			
90	1.000			



7, 12 & 13 NORMALLY CLOSED OPEN WHEN VALVE IS 90% OPEN & REMAIN OPEN BETWEEN VALVE POSITIONS 90% OPEN & FULL OPEN

7, 11 & 12 NORMALLY OPEN CLOSE WHEN VALVE IS 90% OPEN & REMAIN CLOSED BETWEEN VALVE POSITIONS 90% OPEN & FULL OPEN

13, 16 & 14 NORMALLY CLOSED OPEN WHEN VALVE IS 90% OPEN AND REMAIN OPEN BETWEEN VALVE POSITIONS 90% OPEN & FULL CLOSED

13, 17 & 14 NORMALLY OPEN CLOSE WHEN VALVE IS 90% OPEN AND REMAIN CLOSED BETWEEN VALVE POSITIONS 90% OPEN & FULL CLOSED

19, 24 & 20, 22 NORMALLY CLOSED OPEN WHEN VALVE IS 10% OPEN AND REMAIN OPEN BETWEEN VALVE POSITIONS 10% OPEN & FULLY CLOSED

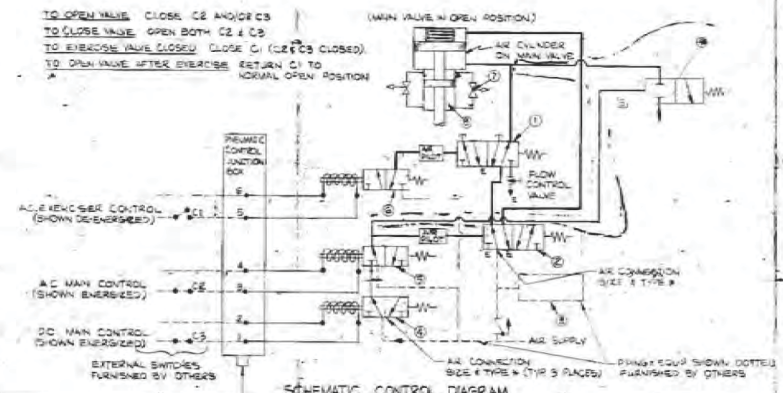
19, 25 & 20, 21 NORMALLY OPEN CLOSE WHEN VALVE IS 10% OPEN AND REMAIN CLOSED BETWEEN VALVE POSITIONS 10% OPEN AND FULLY CLOSED

LIMIT SWITCH DIAGRAM

ALL SWITCHES ELECTRICALLY ISOLATED; SWITCHES SHOWN IN NORMAL (SHIELD) POSITION SWITCH RATINGS 50 AMP @ 500 V-AC (FIVE-000 POWER FACTOR)

ALL SWITCHES NAMED MODEL EXACT TYPE LIMIT SWITCHES

TO OPEN VALVE CLOSE C2 AND (OR) C3
 TO CLOSE VALVE OPEN BOTH C2 & C3
 TO ENERGIZE VALVE CLOSED CLOSE C1 (C1, C2'S CLOSED)
 TO DEENERGIZE VALVE AFTER OVERCURE RETURN C1 TO NORMAL OPEN POSITION



SCHEMATIC CONTROL DIAGRAM

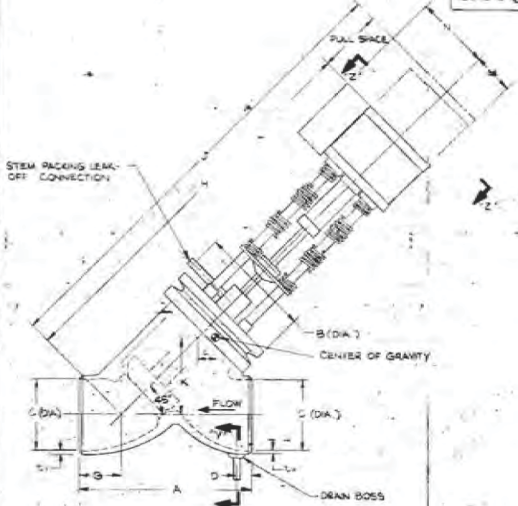
LEGEND

- (1) - 3 WAY VALVE ON 4 WAY VALVE (SEE NOTE 3)
- (2) - 4 WAY VALVE (SEE NOTE 3)
- (3) - AIR STORAGE TANK (FURNISHED BY OTHERS)
- (4) - 5 WAY VALVE
- (5) - 5 WAY VALVE BY SELLER TO SPECIFY W/ANAM CONTINUOUS W/INATE (SEE NOTE 4)
- (6) - 3 WAY VALVE
- (7) - 3 WAY VALVE
- (8) - SPRING CONTROL VALVE(S) (INCLUDING CHECK VALVES F 282(2))
- (9) - HYDRAULIC CYLINDER(S) (INCLUDING HYDRAULIC ACCUMULATOR OR EQUIV)
- (10) - 2 WAY VALVE (SEE NOTE 3)

EXTERNAL SWITCHES FURNISHED BY OTHERS

ELECTRICAL CONDUIT CONNECTION FOR WIRING TO EXTERNAL SWITCHES

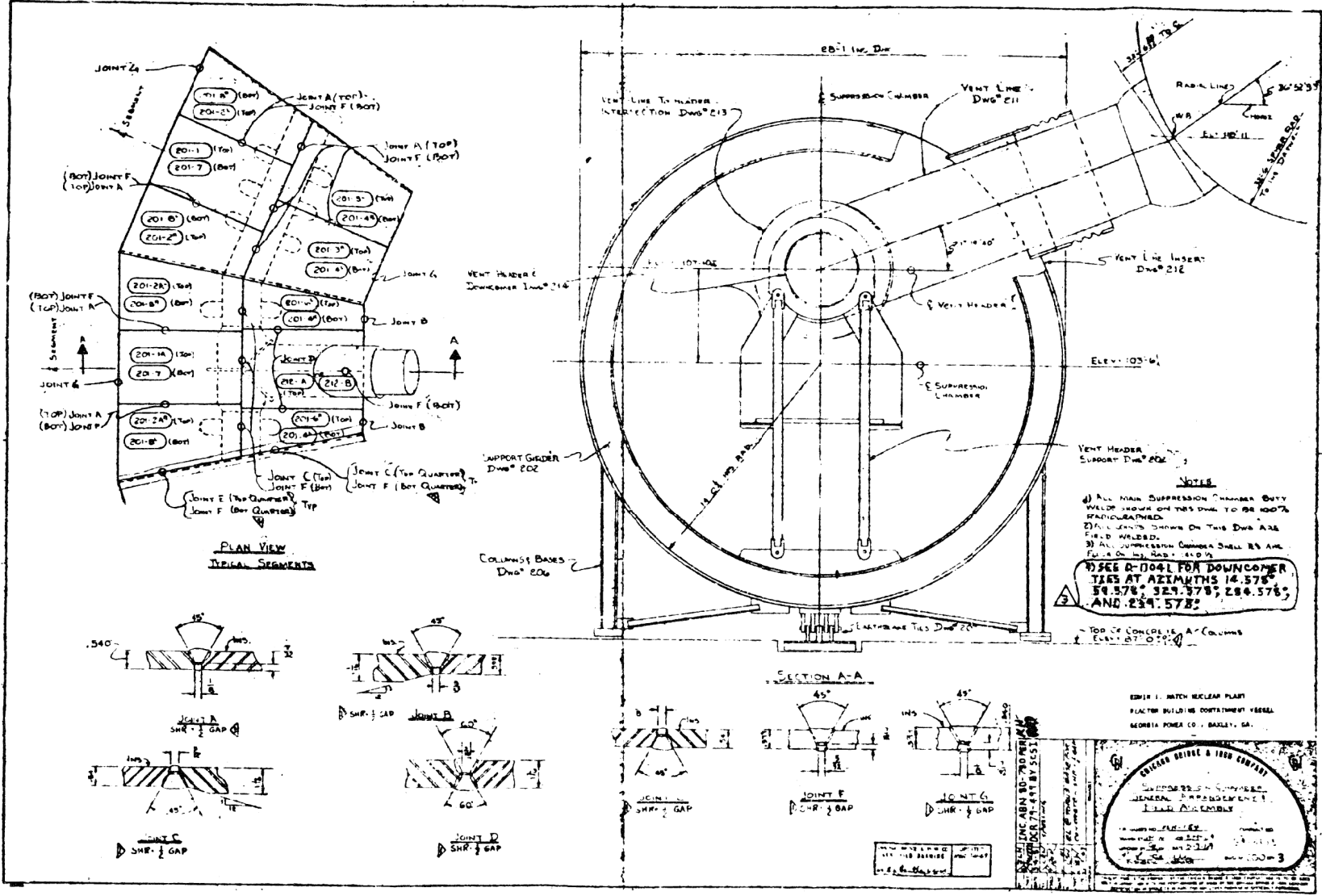
DRINKING FLOW SHOWN DOTTED LINES FURNISHED BY OTHERS



Poor Quality Original

S-15247

NO.	DESCRIPTION	DATE	BY	CHKD
1	REVISION			
2	REVISION			
3	REVISION			
4	REVISION			
5	REVISION			
6	REVISION			
7	REVISION			
8	REVISION			
9	REVISION			
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16	REVISION			
17	REVISION			
18	REVISION			
19	REVISION			
20	REVISION			



Southern Company Services

REVISE AS MARKED, RESUBMIT
 APPROVED, MFG. MAY PROCEED
 APPROVED EXCEPT AS NOTED, MFG. MAY PROCEED
 APPROVAL NOT REQUIRED

RECORD COPY
 A TRUE COPY OF THIS DRAWING IS TO BE MAINTAINED AT ALL TIMES.
 PURCHASE ORDER NO. [] DATE 9-25-97
 BY: J.K.H.

PLANT HATCH	
S15265 D	
UNIT NO. 1	
DOCUMENT TITLE:	SUPPRESSION CHAMBER-GEN ARRGT FIELD ASSY
VENDOR:	CRI
	PEH-154

Hatch S-15265-D

