

South Texas Project Electric Generating Station P.O. Box 289 Wadsworth, Texas 77483

November 18, 2004
NOC-AE-04001823

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
One White Flint North
11555 Rockville Pike
Rockville, MD 20852

South Texas Project
Units 1 and 2
Docket Nos. STN 50-498, STN-499
Addition of Welded Attachments to Piping Systems from which
Arbitrary Intermediate Breaks were Previously Eliminated

Section 3.6.2.1 of the South Texas Project Safety Evaluation Report, Supplement 3, states:

In addition, during ongoing and future design work, any relocations of, modifications to, or additions of welded attachments to the piping systems in which AIBs are eliminated should be reviewed by the staff to ensure that the enveloping assessments described above still provide adequate protection against pipe breaks resulting from high local stresses due to welded attachments.

As a result of the steam generation replacement plant modifications, there are two locations in each unit where welded attachments were added to piping systems from which arbitrary intermediate breaks (AIBs) were previously eliminated. No welded attachments were relocated or modified. The additional welded attachments are for spring hangers on the rerouted feedwater piping as documented in the following Design Change Notices (DCNs):

Unit 1	DCN 9704761	Unit 2	DCN 0000065
	DCN 9704763		DCN 0000067
	DCN 9800678		DCN 0001956

These DCNs have been submitted separately to the Project Manager.

The changes are within previous enveloping assessments provided to the NRC for feedwater piping welded attachments (References 1 and 2) and conform with the stress criteria for elimination of AIBs given in UFSAR Section 3.6.2.1.1.

A001

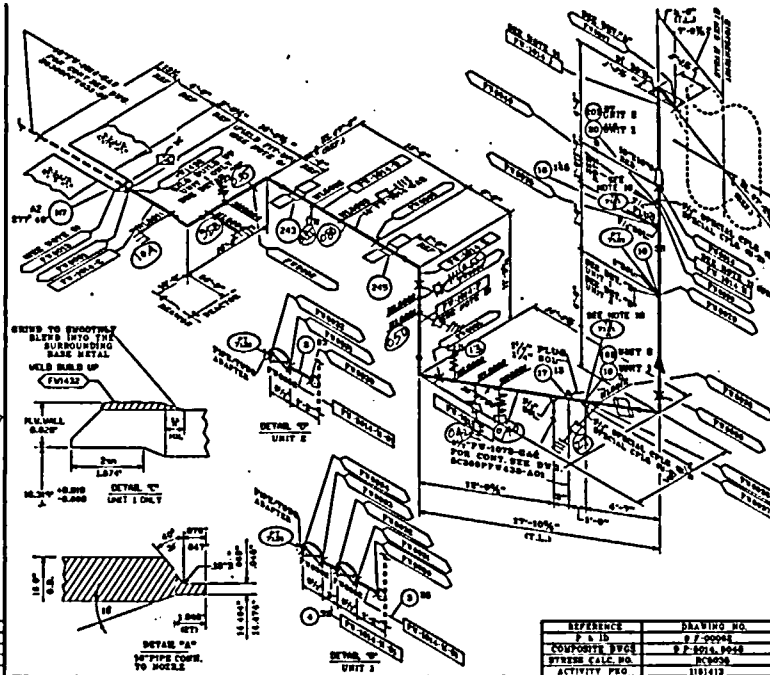
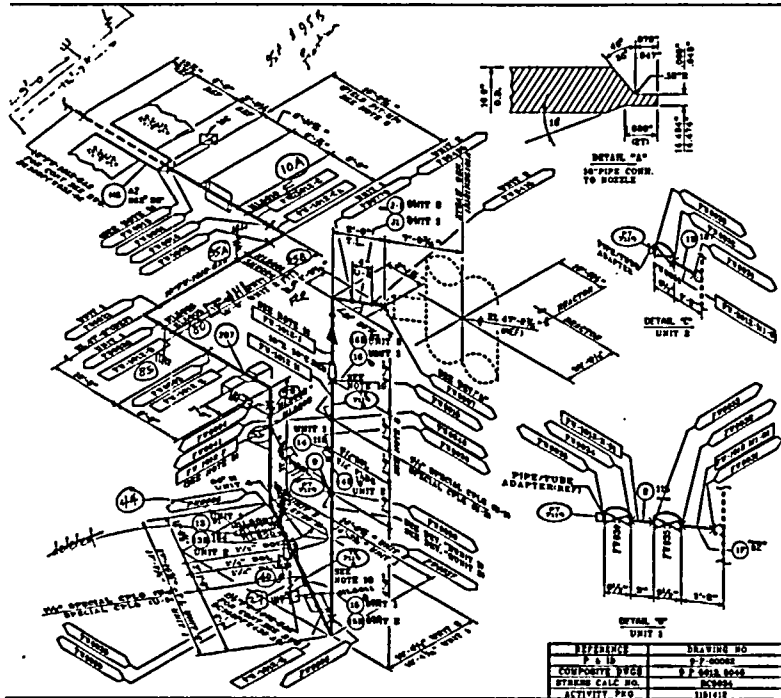
If there are any questions regarding these added welded attachments, please contact John Conly at (361) 972-7336 or me at (361) 972-7162.



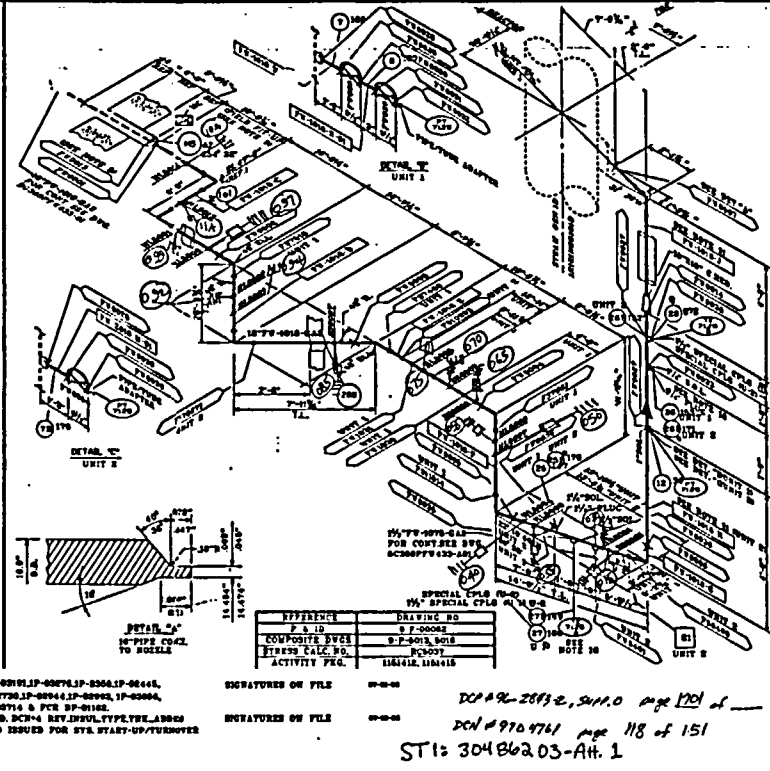
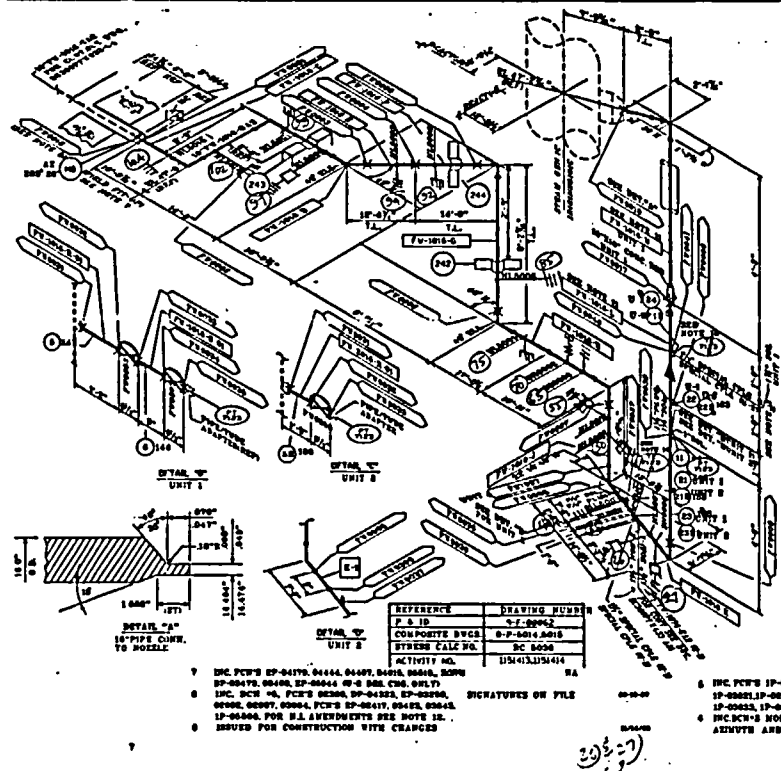
S. E. Thomas
Manager, Design Engineering

References:

1. Letter, M. R. Wisenburg to NRC Document Control Desk, "Elimination of Arbitrary Intermediate Breaks," ST-HL-AE-2025, dated April 8, 1987
2. Letter, M. R. Wisenburg to NRC Document Control Desk, "Elimination of Arbitrary Intermediate Breaks," ST-HL-AE-2290, dated July 8, 1987



- IF APPLIED TO CALC. DIM. OF 9" PIP. THE CLEARANCE SHOWN TO BE CUT BACK TO 1/2" CLEAR OUT. FOR UNIT 2 INSTALLATION OF SPOOLS ARE TO BE HELD FOR FLUSH AND CLASSIFIED INSPECTION. THEREFORE THE 1/2" SPACES ARE NOT REQUIRED.
- DELETED
- FLUSH HEAD PENETRATION CLASS SPC WELD DOES NOT PERMITS WELD FLUSH WELD PREPARATION.
- IF APPLIED TO CALC. DIM. OF 1 1/2" PIP.
- IF APPLIED TO CALC. DIM. OF 1 1/2" PIP.
- BASE PLATE OF SUPPORT MARK NO. 17-1015-BL/00 17-1015-BL/00 INSTALLATION OF PIPE SPOOLS PV-002-7 & PV-004-7.
- ALL UNIT 1 INDICATORS SHOWN ON THIS DRAWING SHALL BE INTERPRETED AS BEING UNIT 2 DEMONSTRATED UNDER EXISTING UNIT 2 COMPONENTS.
- FOR THERMOWELL DETAIL SEE INSTRUMENT INDEX 0000000000.
- STARTUP TO INSPECT SPOOLS PV-002-7, PV-004-7, PV-006-7 & PV-008-7 NOTIFY PLUMBING INSPECTOR PRIOR TO INSTALLATION. FOR UNIT 2 INSTALLATION OF PTFE SPOOLS PV-001-7, PV-003-7 & PV-005-7, PV-009-7 & PV-011-7 TO BE HELD UNTIL START-UP INSPECTS FOR CLEANSING/FLUSH AND RELIABLE.
- THE FOLLOWING 1/2" AMENDMENTS ARE LISTED AGAINST THIS Dwg.
- ITEM 2-1 ON SPOOL PV-001-7 IS 1/2" DIA. 17-1015-BL/00 CRACK LINE. SEAMLESS PIPE WAS USED IN LVO OF 330, CLASS 2.



PLAN UNIT NO.	FIELD PER IN.	UNIT NO.	DATE FROM	SUPPLY UNIT NO.
1	1/4"	1	07-0004	07-0004
2	1/4"	2	07-0004	07-0004
3	1/4"	3	07-0004	07-0004

LINE NUMBER

SEE LINE LIST - SHEET 7 OF 10 - 1101412

0000	07-0004	07-0004	07-0004
0001	07-0004	07-0004	07-0004
0002	07-0004	07-0004	07-0004
0003	07-0004	07-0004	07-0004
0004	07-0004	07-0004	07-0004
0005	07-0004	07-0004	07-0004
0006	07-0004	07-0004	07-0004

Attached By 4

Calc. No. SC-2032-7-100 Rev. 0000

Sheet No. 0000

Rev. 0000 Origin 0000 Date 2/10/78

Chk'd WSS Date 7/20/80

11000-001
RE REQUIRED
TERM NO.0

REVISION AFFECTS
ON DRAWING

11000-001
11000-002
11000-003
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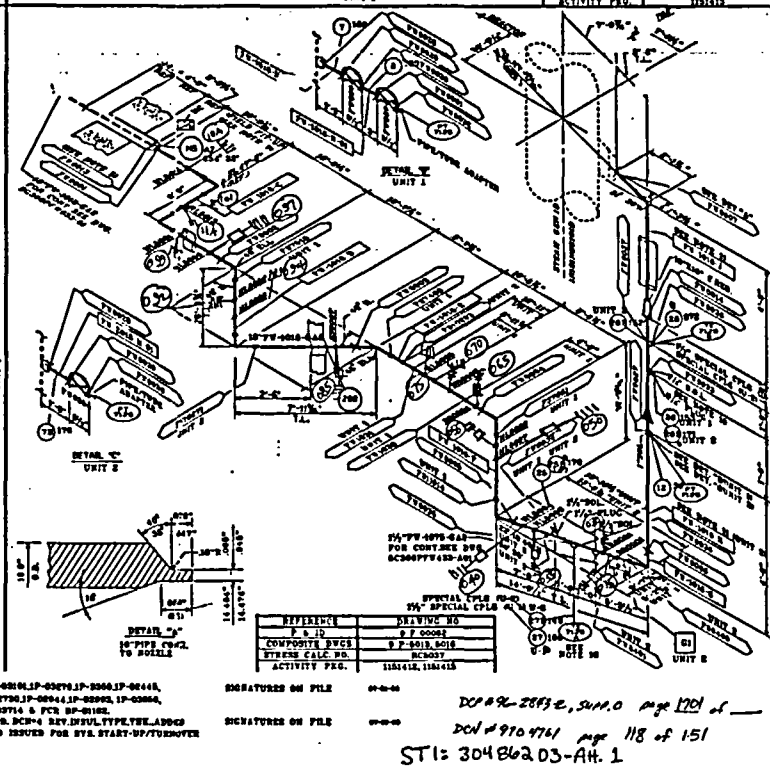
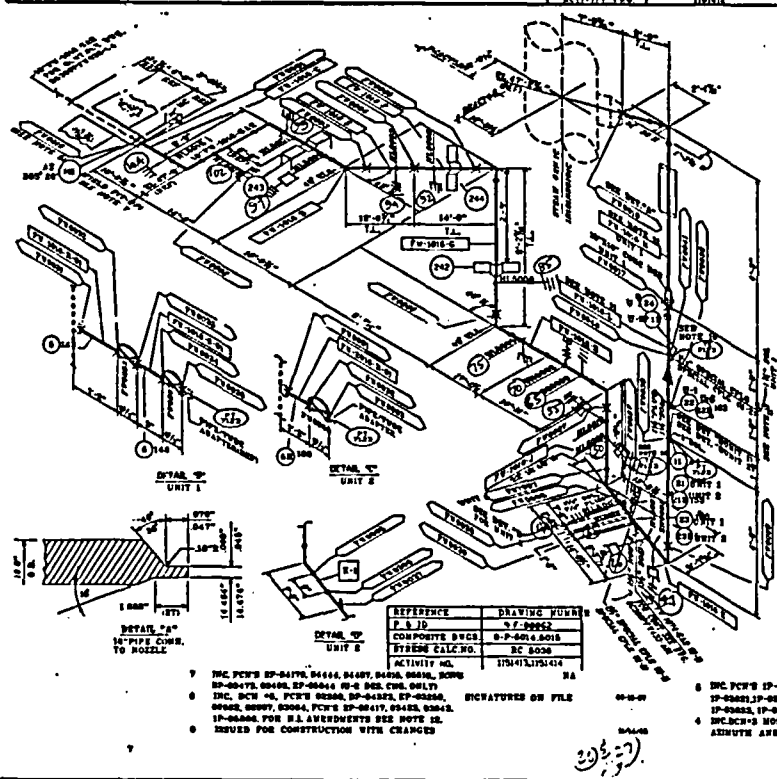
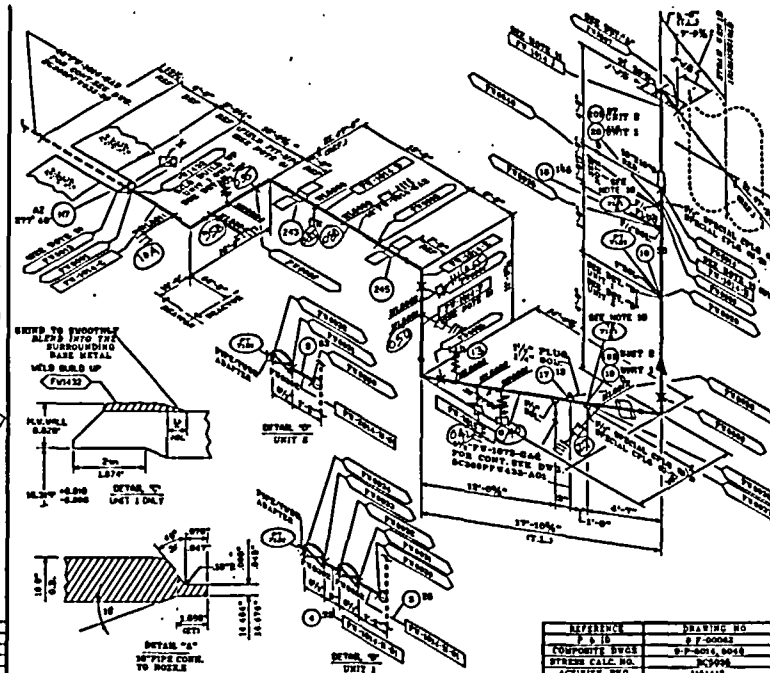
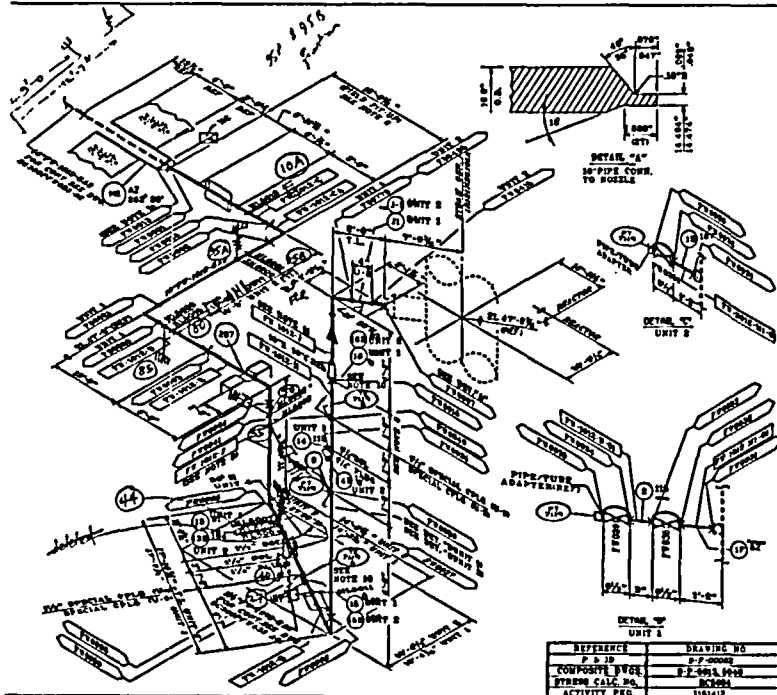
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11000-007

DCP#9-28732, 24110 Page 120 of 151

DCN#9704761 Page 118 of 151

ST1: 304B62.03-AH.1

THIS Dwg. CONTAINS 100% OF THE INFORMATION REQUIRED FOR CONSTRUCTION.



- IF ACC'D TO CALC. ON OF 27-0002 FOR THE CLEANING ADAPTER TO BE CUT BACK WITH CLEAN OUT. FOR UNIT 2 INSTALLATION OF SPOOLS ARE TO BE HELD FOR FLOW AND CLEANLINESS INSPECTION. THEREFORE THE 1" PIPES ARE NOT REQUIRED.
- DELETED
- FIELD HEAD PENETRATION CLASS 2 PVC WELD DOES NOT REQUIRE CLASS 2 FIBER WELD PREPARATION.
- IF ACC'D TO CALC. ON OF 27-0002
- IF ACC'D TO CALC. ON OF 27-0002
- BASE PLATE OF SUPPORT WARE FOR PV-012-BLADDER PV-012-BLADDER INSTALLATION OF PIPE SPOOLS PV-012-F & PV-012-G.
- ALL UNIT 1 DESIGNATORS SHOWN ON THIS DRAWING SHALL BE INTERPRETED AS BEING UNIT 2 DESIGNATORS UNLESS DESIGNATING UNIT 2 COMPONENTS.
- FOR THERMOWELL DETAIL, SEE INSTRUMENT INDEX 808124000.
- STARTUP TO INSPECT SPOOLS PV-012-J, PV-012-L, PV-012-M, & PV-012-N. STARTUP INSPECTION PRIOR TO INSTALLATION. FOR UNIT 2 INSTALLATION OF PIPE SPOOLS PV-012-J, PV-012-K, & PV-012-L, PV-012-M, & PV-012-N TO BE HELD WITH STARTUP INSPECTS FOR CLEANLINESS/FLOW AND RELEASE.
- THE FOLLOWING 21.2 AMENDMENTS ARE LISTED AGAINST THIS DWG.

REV	DATE
27-0002	6-22-97
27-0002	8-8-97

REV	DATE	BY	CHKD
1	8-8-97		
2	8-8-97		
3	8-8-97		

REV	DATE	BY	CHKD
1	8-8-97		
2	8-8-97		
3	8-8-97		

Attached to
Calc. No. 27-0002
Sheet No. 1

Rev Origin Date
CNA WSS Date 7/20/98

REV	DATE	BY	CHKD
1	8-8-97		
2	8-8-97		
3	8-8-97		

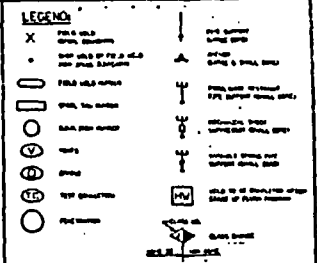
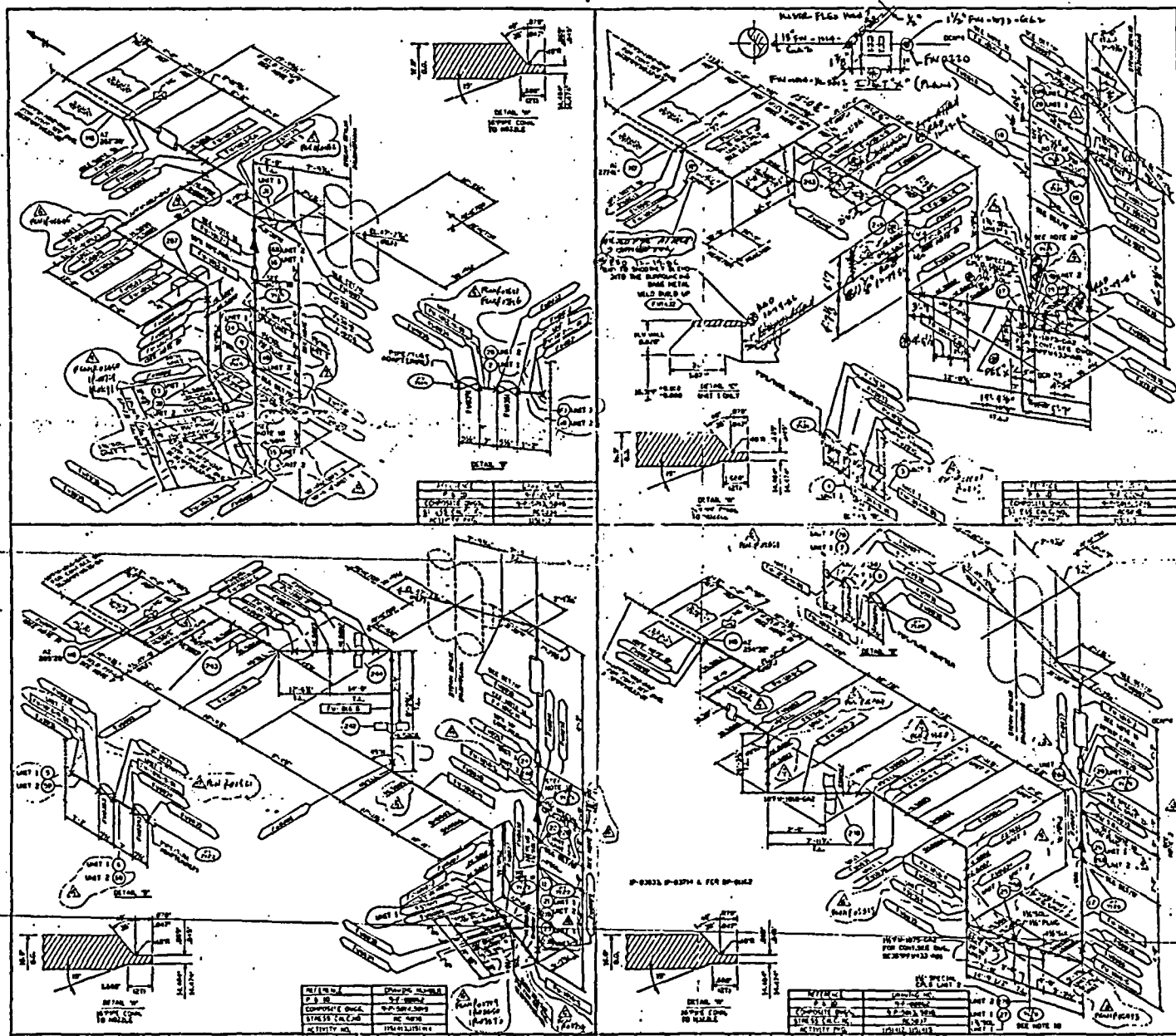
11800-000
NO SPOOLS
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REVISION AFFECTS
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FEEDWATER "FV"

27-0002-28832, 2411.0 Page 120 of 151
201 970 4761 Page 118 of 151
ST1: 304862.03-AH.1

2048 90-2853-2, CONNO. FIG. 1202, 2
 DASH 904761, FIG. 119 & 151
 STI: 301816203-AH, 2



NOTES:

- FOR ALL OF MATERIAL, SEE DRAWING NUMBER 2048 90-2853-2-20
- FOR DESIGN PRESSURE AND TEMPERATURE, SEE DRAWING NUMBER 2048 90-2853-2-20
- AS APPLICABLE TO THE SIZE OF PIPE, THE CLEANING APPLICABLE TO BE ON ONE SIDE ONLY.
- PLEASE READ DIMENSIONS CAREFULLY. DO NOT ASSUME UNLESS STATED OTHERWISE.
- APPLICABLE TO CALCULATION OF WEIGHT.
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RC 5035
 ABR Package
 Sub. BB.

LINE TEMP. SCHEDULE

ALL INFORMATION MUST BE FURNISHED AT TIME OF ORDERING

LINE NO.	TEMP. RANGE	INSULATION	PAINT
100	200-300	Asph/Flt	Asph/Flt
101	300-400	Asph/Flt	Asph/Flt
102	400-500	Asph/Flt	Asph/Flt
103	500-600	Asph/Flt	Asph/Flt
104	600-700	Asph/Flt	Asph/Flt
105	700-800	Asph/Flt	Asph/Flt
106	800-900	Asph/Flt	Asph/Flt
107	900-1000	Asph/Flt	Asph/Flt

NO.	REVISION	DATE	BY	CHKD.	APP'D.
1	AS SHOWN	9/2/81	J.P. Johnson		
2	REVISION	9/2/81	D. D. D. D.		
3	REVISION	9/2/81	D. D. D. D.		
4	REVISION	9/2/81	D. D. D. D.		
5	REVISION	9/2/81	D. D. D. D.		
6	REVISION	9/2/81	D. D. D. D.		
7	REVISION	9/2/81	D. D. D. D.		
8	REVISION	9/2/81	D. D. D. D.		
9	REVISION	9/2/81	D. D. D. D.		
10	REVISION	9/2/81	D. D. D. D.		
11	REVISION	9/2/81	D. D. D. D.		
12	REVISION	9/2/81	D. D. D. D.		

BECHTEL ENERGY CORPORATION
 HOUSTON, TEXAS
HOUSTON LIGHTING & POWER CO.
 SOUTH TEXAS PROJECT

SPEC.	NO.	REVISION	DATE
GAZ	14926	2C369PW433	B1

Attached to 4
 Ctr. No. 2048 90-2853-2-100 Rev. 0
 Sheet No.

Original Date 9/2/81
 Date 9/2/81

ABR-FW-RC-6035-B-A1-5-A1
 Not well done by:
 J. P. Johnson 9/2/81
 Donald D. D. D. 9-2-81

12 14.5 16 18 20

