OFFICIAL COPY

1.0 SCOPE

To provide the engineering requirements for the verification of the "as-built" condition of the Control Rod Drive Scram Discharge Volume Piping System.

This verification will include the primary flow path of the scram discharge from the SDV inlet of all control rod drives to the reactor building sump. All branch lines and instrument lines will be included. Any interfaces with other systems will be identified.

2.0 PURPOSE

To assure the Company that the Scram Discharge Volume is built according to design. To provide assurance that there are no built-in hydraulic problems which may prevent the control rod drives from full scram upon demand. And to provide a means to document the results of the survey.

Completion of the procedure as is set forth in the specification will provide the documentation as requested in IE Bulletin 80-17.

3.0 REFERENCES

1. P&ID 8856-M-147, Rev. 9
2. P&ID 8856-M-161, Rev. 13
3. CRD Piping Arrangement 8856-M-164-83-(1)2, Rev. 2
4. CRD (Isometric) Piping Arrangement 8856-M-164-83-(6)-1, Rev. NC
5. CRD (Isometric) Scram Header Vent Line 8856-M-164-158-5, Rev. 5 3 12/2/80
6. CRD (Isometric) Scrar Header Drain Line 8856-M-164-157-6, Rev. 3
7. CRD (Isometric) Scram Header Drain Line 8856-SP-HBD-1130-1, Rev. 0
8. CRD (Isometric) Scram Header Drain Line 8856-SP-HBD-1130-2, Rev. 0
9. CRD (Isometric) Scram Header Vent Line 8856-SP-HBD-1131-1, Rev. 0

10. CRD (Isometric) Scram Header Vent Line 8856-SP-HBD-1131 -2, Rev. 0

11. CRD (Isometric) Scram Header Vent Line 8856-SP-HBD-1131 -3, Rev. 0

12. PP&L Quality Assurance Manual Procedure 16.0, Rev. 5

13. PP&L Quality Assurance Manual Procedure 16.1, Rev. 3

14. PP&L Quality Assurance Manual Procedure 19.0, Rev. 2

15. NRC I&E Bulletin Number 80-17 with Supplement Nos. 1 & 2

16. CRD Piping Arrangement 8856-MKH-83(4)-2

4.0 PREREQUISITES

4.1 Inspection Personnel

Personnel selected for the survey of the "as-built" condition of the piping system will be qualified to perform the function they are designated to perform. Reference AD-00-051.

4.2 Quality Assurance

Assure all survey personnel have been briefed on the PP&L Quality Assurance Manual Procedures 16.0, 16.1, and 19.0, latest revision, at time of the survey.

4.3 Lighting

Assure adequate lighting is provided to obtain the information required.

5.0 PRECAUTIONS

5.1 Assure system is not above atmospheric pressure.

5.2 Assure no systems in close proximity to the SDV system is currently undergoing a pressure test.

6.0 TEST EQUIPMENT

1. Tape measure, with English units, and sub-division to 1/8", minimum.

2. Two (2) foot long ~~(minimum)~~ omit gmb 12-12-80 carpenter level or engineering equivalent. Calibrate before and after use.

3. Flashlight. or a 9" spirit level gmb 12-12-80

7.0 TEST PROCEDURE

Measurements of the existing Scram Discharge Volume (SDV) and associated piping systems are to be made. Items to be recorded are:

1. Size of pipe
2. Length of pipe
3. Slope of pipe
4. Type of valve
5. Direction of flow through valve
6. Interconnection of SDV system with any other system

Assumptions to be made are:

1. Referenced building coordinates are accurate.
2. Referenced building elevations are accurate.
3. Referenced contractor did the work indicated.
4. Referenced pipe schedules and classifications are correct.
5. Referenced scale of drawings are accurate.
6. Ignore pipe and equipment supports.
7. Ignore switch actuation positions.

7.1 Utilizing the referenced isometric drawings identified in Section 3, Items 3 thru 11 and Item 16 thru 12-1200, yellow line all correct dimensions, slopes, valve and instrument identification. Whatever dimensions or verifications are incorrect, correct using a red pencil. Any additional piping attained will be red lined.

7.2 The completed marked-up drawings will become attachments to this procedure.

7.3 Each drawing shall have the following statement filled out by the qualified inspector:

I, _____, certify that this drawing is accurate, as marked. Assumptions made are indicated in PLI- 10942.

Date: _____

JMS/kes

QUALITY INSPECTION REPORT

QIR NO. (1) 80-627	CALL NO. (2) N/A	DATE (3) 12-12-80
W.A. (SWA) NO. (4) N/A	SUSQUEHANNA S.E.S. X	SYSTEM NAME/NO. (5) Control Rod Hydraulic /55
RESPONSIBLE DEPT/GROUP (6) NPE	ACTIVITY LOCATION (7) Unit 1 React BLDG EL 719	
PROCEDURE TITLE/NO./REV. (8) Control Rod Drive System, Verification PLI-10942 Attachment A		
RIR NO.(S) (9) N/A		NCR NO. (10) N/A

REASON FOR ACTIVITY (11)
Verification of "AS-BUILT" Condition of the CRD Scram Discharge Volume Pipi

INSPECTION DESCRIPTION: (12)

Levels to be used in performing test procedure were checked by I & C cal. shop. Level indication was compared to water level in U-shaped tygon tube by positioning each end of the level at a meniscus in the tube. Two 2' levels were checked; they were identified PLI 1 & PLI 2. Two 9" levels were then compared to the level indication of a 2' level; they were identified as PLI 3 & PLI 4. All levels were accurate prior to use. All levels were checked, using the same method, at completion of procedure; all levels were accurate.

Measurements of Scram Discharge Volume and associated piping were made per the Test Procedure. Isometric drawings as listed in section 3.0 of the procedure were used to verify system as-built configuration. Drawings were yellow lined where correct, and red lined where incorrect.

(13) QUALITY INSPECTOR _____ DATE 12-15-80

(14) QUALITY SUPERVISOR _____ DATE 12/15/80 (15) PAGE 1 OF 4

QUALITY INSPECTION REPORT
CONTINUATION SHEET

QIR # 80-627

The following dwgs. differ from the as-built configuration as indicated:

- 8856-M-164-83-(6)-1 Rev NC

The 1" EBB line between valve F092C and F092D has a 0" slope; dwg. indicates 1/8" slope /12"

The line between the scram discharge instrument volume and valve F103 has a 0" slope; dwg. indicates 1/8" slope /12"

Four capped lines, each with 2 valves, are installed in the instrumentation lines of the hydraulic control units on both North and South sides of the containment. The dwg. does not indicated these lines and valves.

A 1" line is upstream of instrumentation lines; dwg. indicates a 2" line.

QUALITY INSPECTION REPORT
CONTINUATION SHEET

QIR #
80-627

- 8856-M-164-157-6 Rev 3

A line at 713' 5 7/16" elev. has a 0" slope; dwg. indicates 3/16" slope /12".

The line between 714' 10 11/16" and 714' 8 7/8" elevations is sloped in the direction opposite that indicated by dwg.

- SP-HBD-1181-1 Rev 0

The line at 743' 5 5/8" elev. has a 0" slope; dwg. indicates that it should be sloped.

An abnormal condition of valve F010 (ref. dwg. 8856-M-164-158-5 Rev 3) was found during inspection. The valve is physically blocked in the open position by a piece of metal against the valve operator. It was noted by PP&L Construction Engineer that NISCO had the valve blocked open to maintain a flow path for

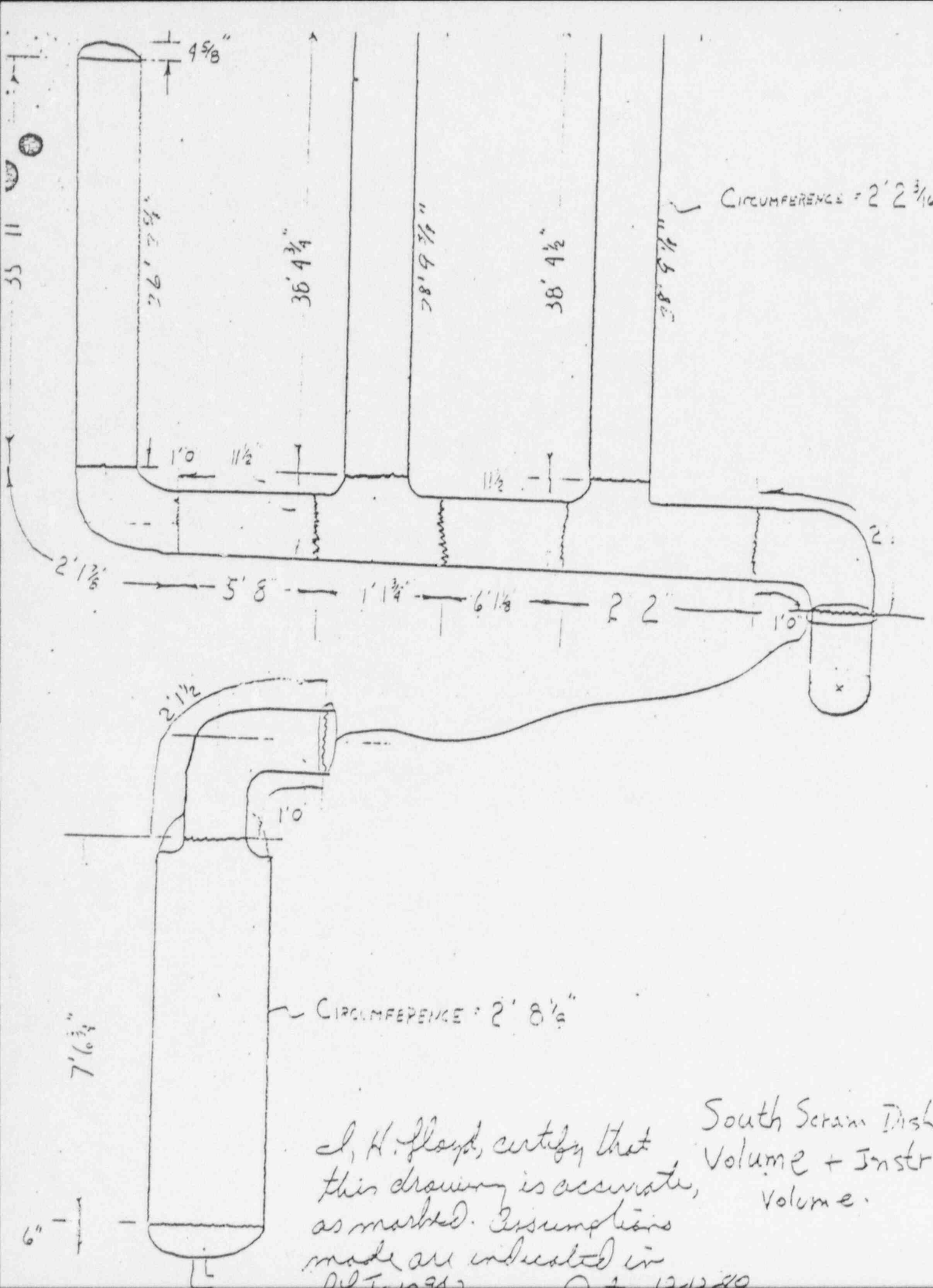
QUALITY INSPECTION REPORT
CONTINUATION SHEET

QIR #
80-627

Testing.

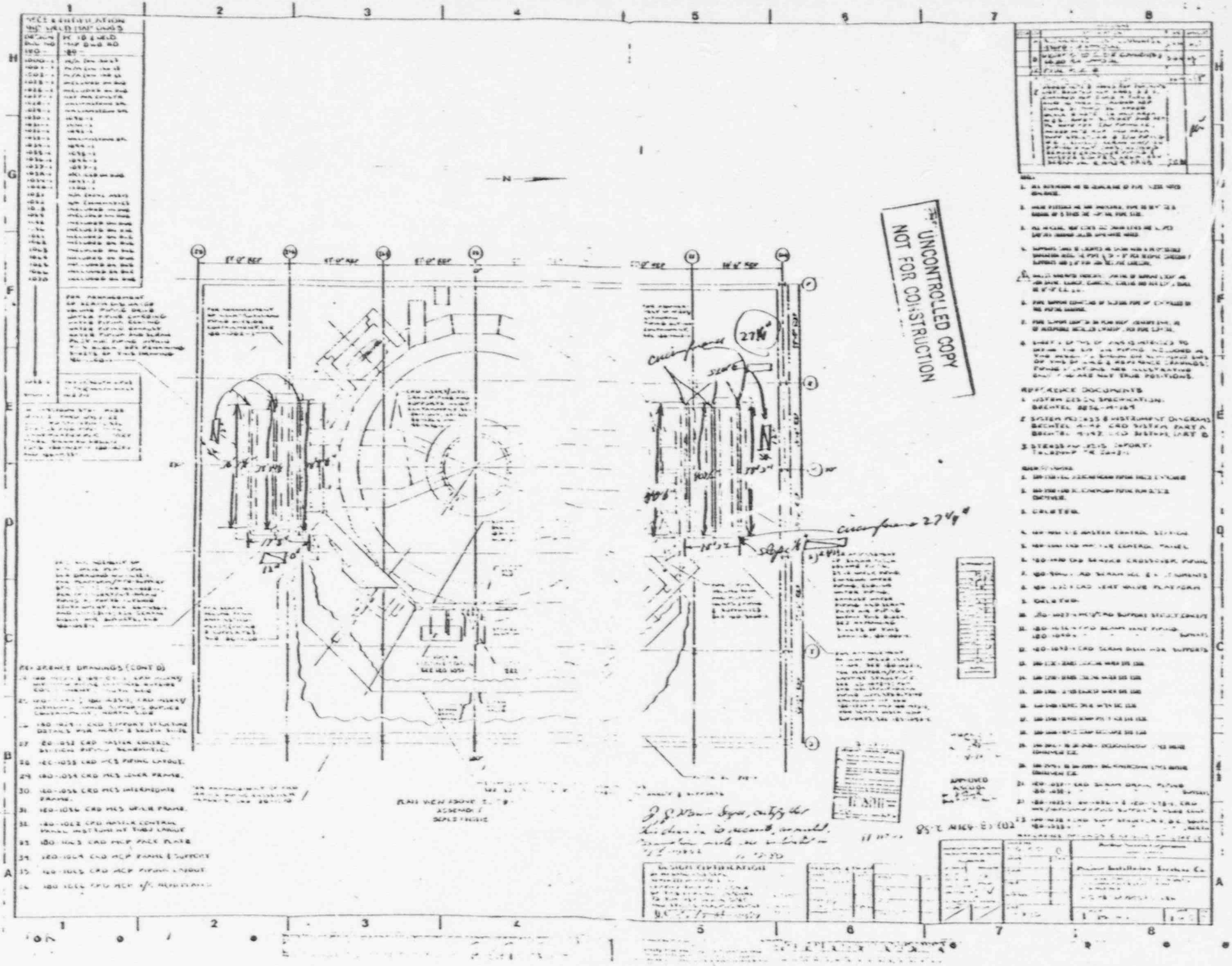
This System is not completely turned over. There are turn over exceptions documenting that "as-built" drawings are not updated. (Exception #7024 is for SUS 55B).

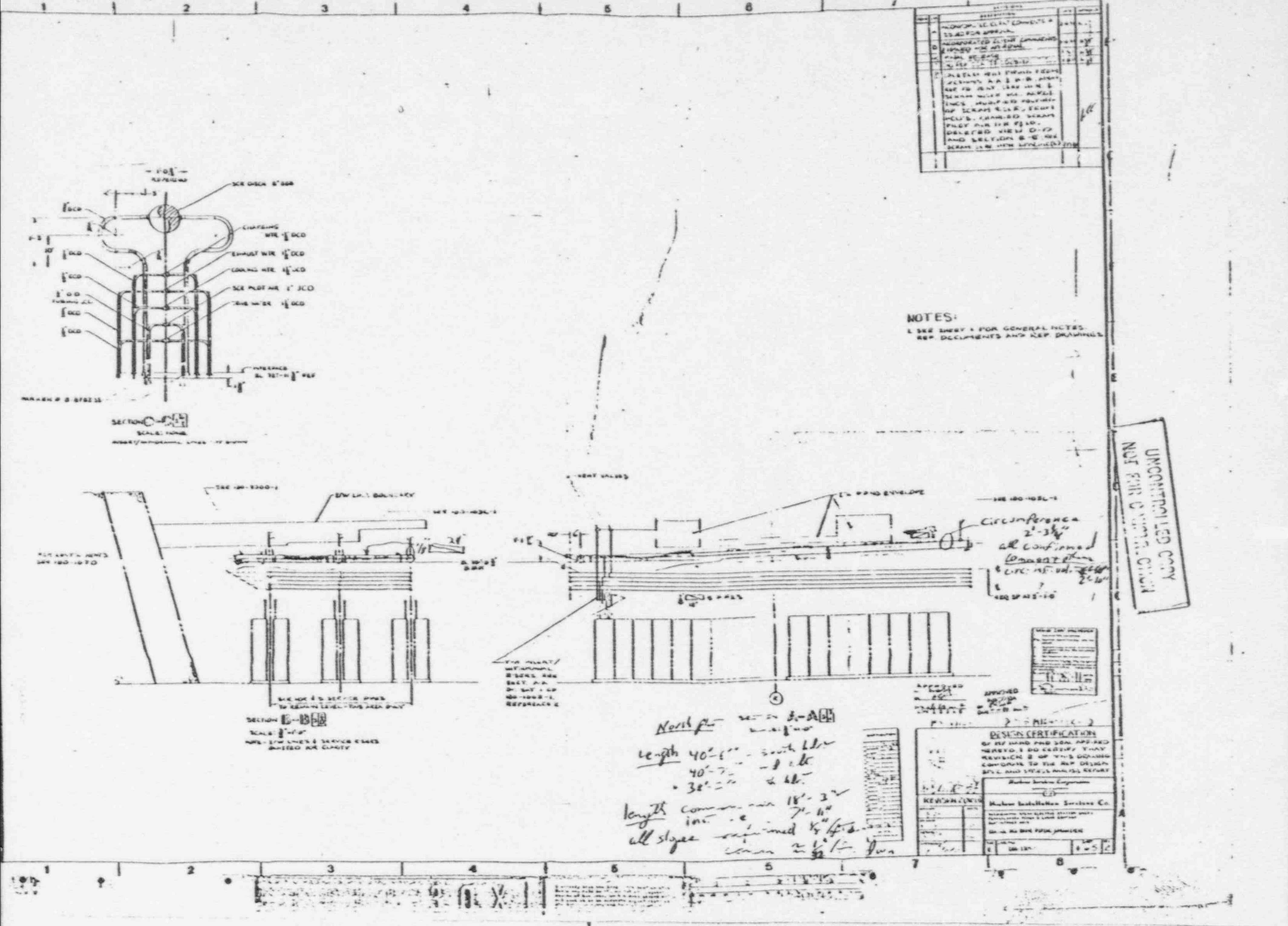
Copies of this report and drawings will be sent to NQA-Construction.

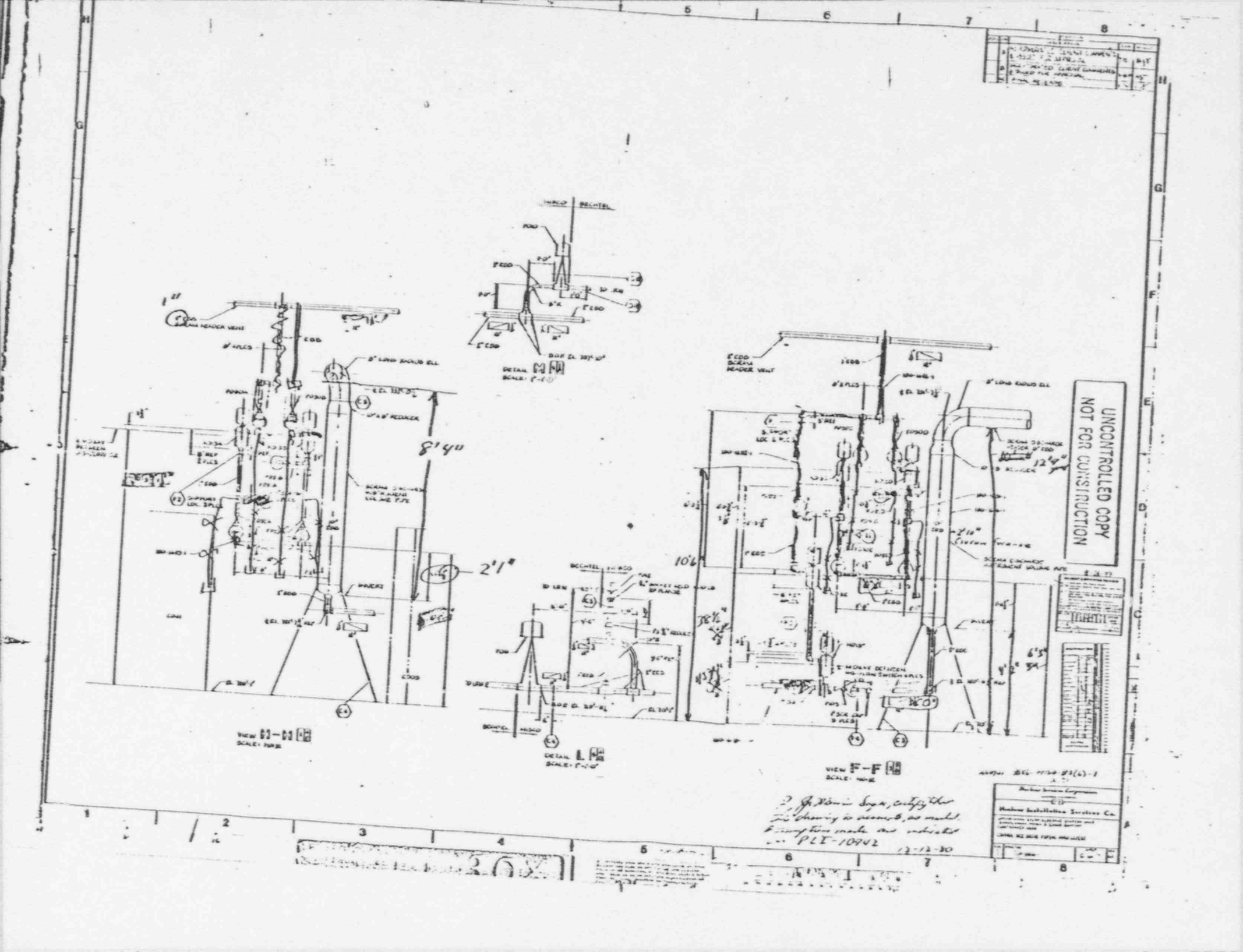


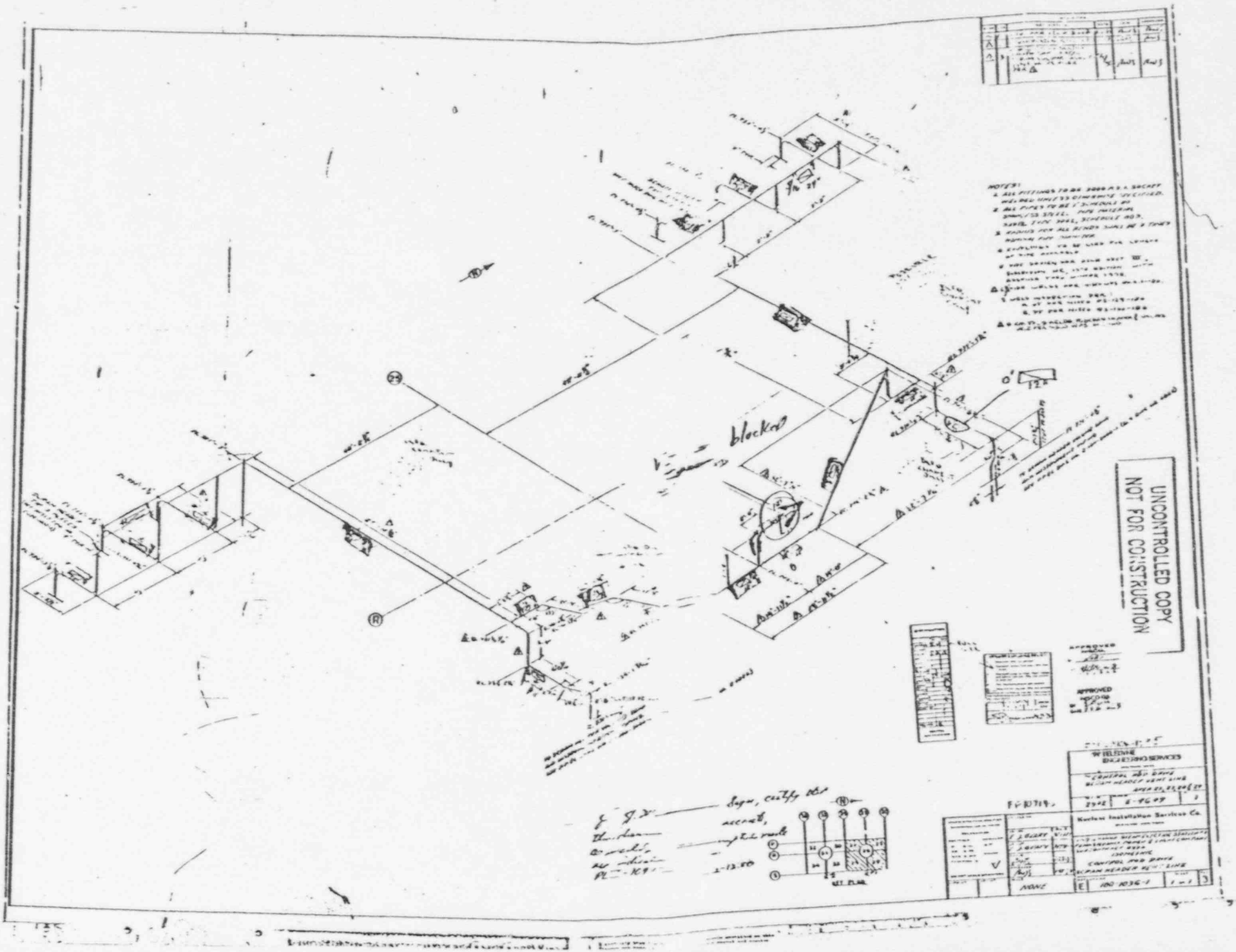
I, H. Floyd, certify that this drawing is accurate, as marked. Assumptions made are indicated in

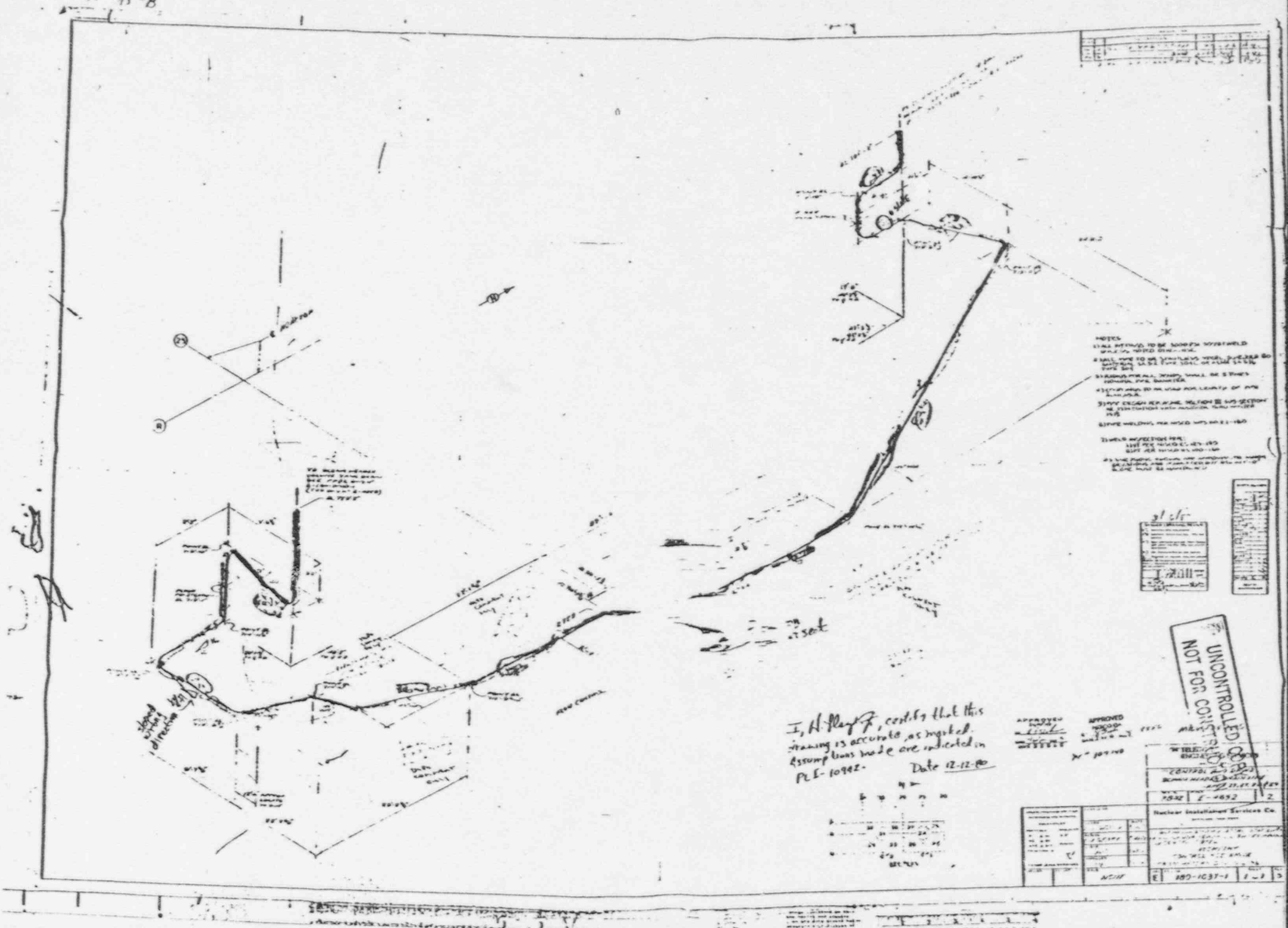
South Scram Disch. Volume + Instr. Volume.

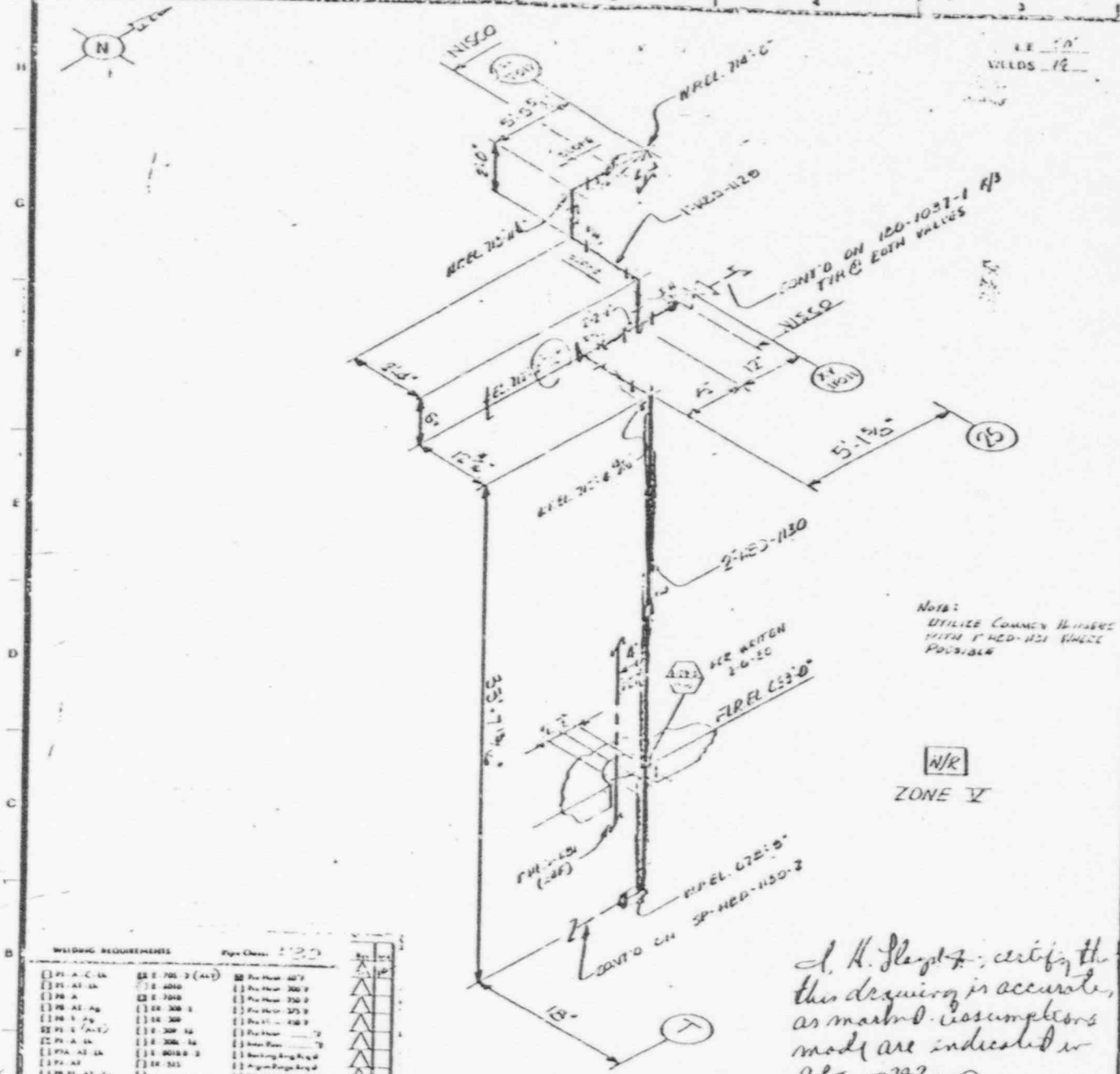

UNCONTROLLED COPY
NOT FOR CONSTRUCTION
PLAN VIEW ABOVE EL. 9'
ASSEMBLY
SCALE: 1/4"=1'-0"


NOTES:
1. SEE SHEET 1 FOR GENERAL NOTES, REF. DOCUMENTS AND REF. DRAWINGS.
UNCONTROLLED COPY
SECTION B-B
DESIGN CERTIFICATION
Circumference 2'-3"
all confirmed
North


UNCONTROLLED COPY
NOT FOR CONSTRUCTION
8'4"
2'1"
10'
12'6"
6'5"


blocked
UNCONTROLLED COPY
NOT FOR CONSTRUCTION


UNCONTROLLED COPY
NOT FOR CONSTRUCTION
I, H. Flagg, certify that this drawing is accurate, as marked. Assumptions made are indicated in PCE-10982.
Date 12-12-80



Note:
Utilize Conner Weldbox with 1"-WES-1131 where possible

N/R

ZONE V

WELDING REQUIREMENTS

Pipe Class 1122

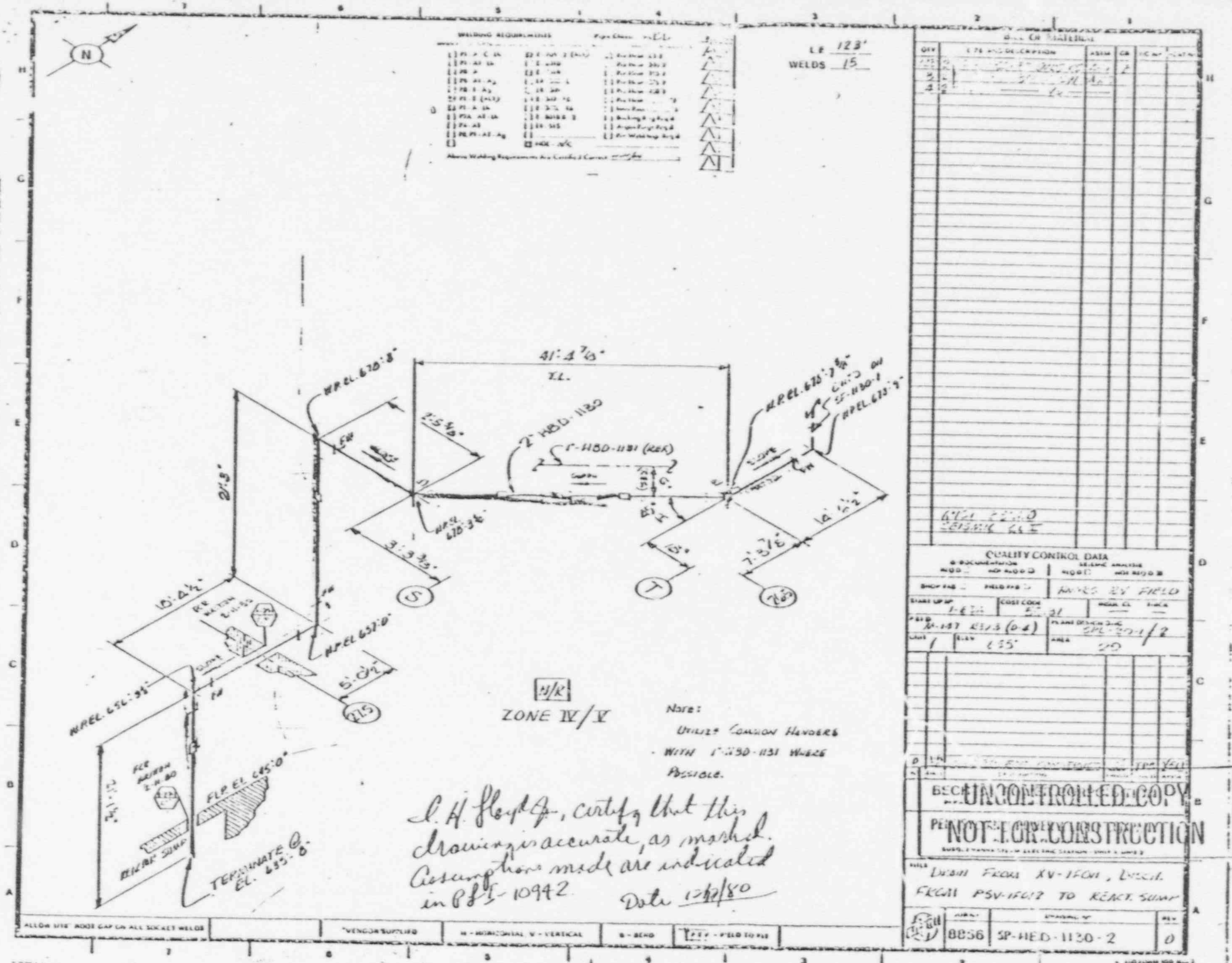
ALLOY STEEL POST CAP ON ALL SOCKET WELDS | *VENDOR SUPPLIED | H - HORIZONTAL V - VERTICAL | B - BEND | F.F.F. - FIELD TO FIT

I, K. Sleight, certify that this drawing is accurate, as marked. Assumptions made are indicated in PFI-10792. Date 1/12/80

BECHTEL CONTROLLED COPY

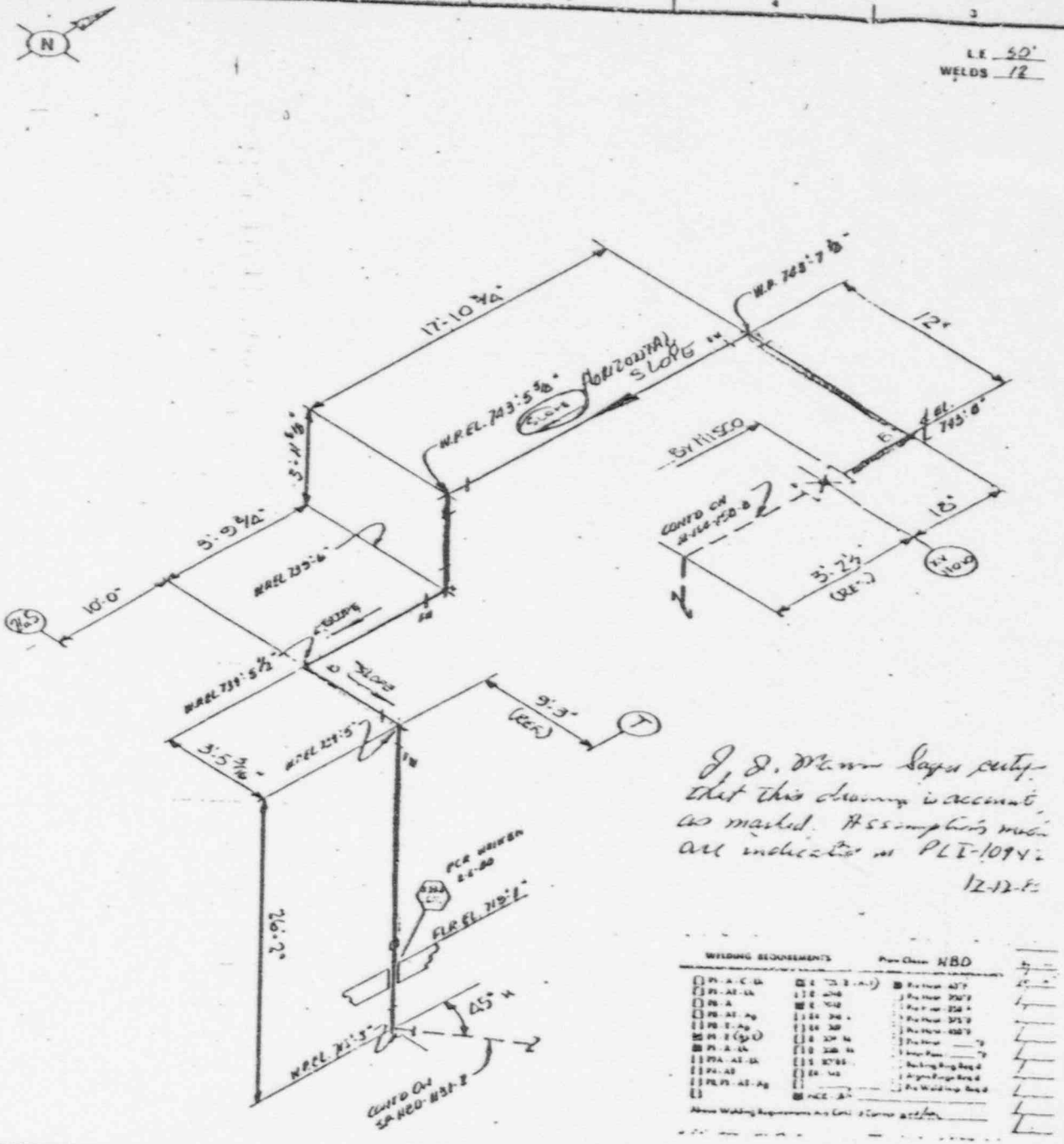
NOT FOR CONSTRUCTION

8856 | SP-WES-1130-1 | 0



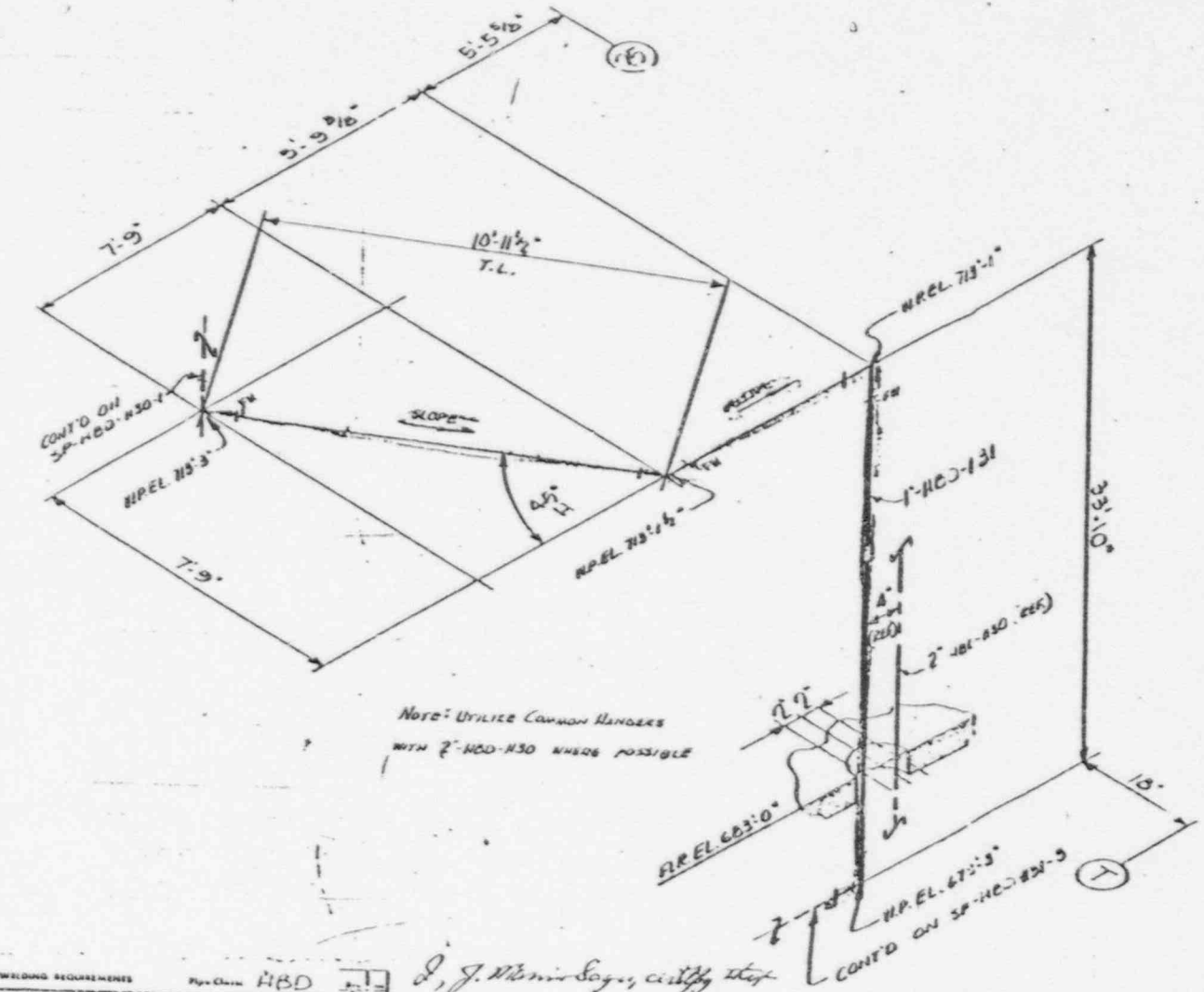
I, H. Floyd Jr., certify that this drawing is accurate, as marked. Assumptions made are indicated in PBI-10942

Date 12/2/80



J. D. Mann says petty that this drawing is accurate as marked. Assumptions made are indicated on PLE-1094-2

12-12-80



LE 42
WELDS 8

BILL OF MATERIAL

QTY	SIZE AND DESCRIPTION	ASTM	CR	PC NO	HEAT NO
42	1" A312 TP 316 SCH 80 SMLS PIPE	A-376	3		
2	1" 90° LONG RADIUS BUTT WELD ELL	A-403 WP316 SW			
1	1" 45° ELL	"			
1	1" CPLG	"			

ALL 1" EQUIP SEISMIC CAT I & II

QUALITY CONTROL DATA

QA DOCUMENTATION: REQ'D ☐ NOT REQ'D ☒	SEISMIC ANALYSIS: REQ'D ☐ NOT REQ'D ☒		
SHOP FAB ☐ FIELD FAB -	HANGS BY FIELD		
SELECT UP NO 1-69A	COST CODE 05-1	WELD CL	SPEC
P&ID M-147-PE:0 B-3	PLANT DESIGN DWG SPL 32-3		
UNIT 1	ELEV 653'-0	AREA 29	

NO	DATE	REVISION	BY	TRB	YEN
0	12-12-80	ISSUED FOR CONSTRUCTION	JF		

BECHTEL POWER CORPORATION
GAITHERSBURG MARYLAND - SAN FRANCISCO CALIFORNIA

PENNSYLVANIA POWER & LIGHT COMPANY
ALLENTOWN PENNSYLVANIA
SUSQUEHANNA STEAM ELECTRIC STATION - UNITS 1 AND 2

TITLE: VENT FROM XV-1F010 TO REACTOR SUMP

JOB NO	DRAWING NO	REV
8856	SP-HBD-1131-2	0

WELDING REQUIREMENTS — Pipe Class: HBD

ALLOW 1/16" ROOT GAP ON ALL SOCKET WELDS | *VENDOR SUPPLIED | H - HORIZONTAL V - VERTICAL | B - BEND

I, J. Marin Sager, certify that this drawing is accurately as marked. Assumptions made as indicated in PLI-10942.
12-12-80

N/R

ZONE V

UNCONTROLLED - NOT FOR CONSTRUCTION