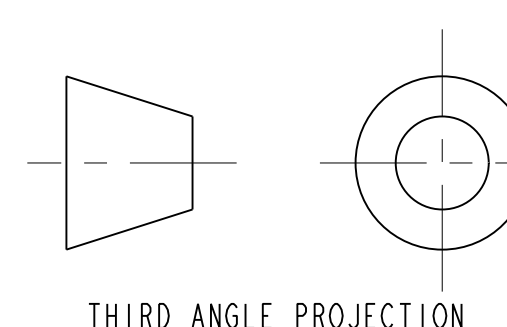
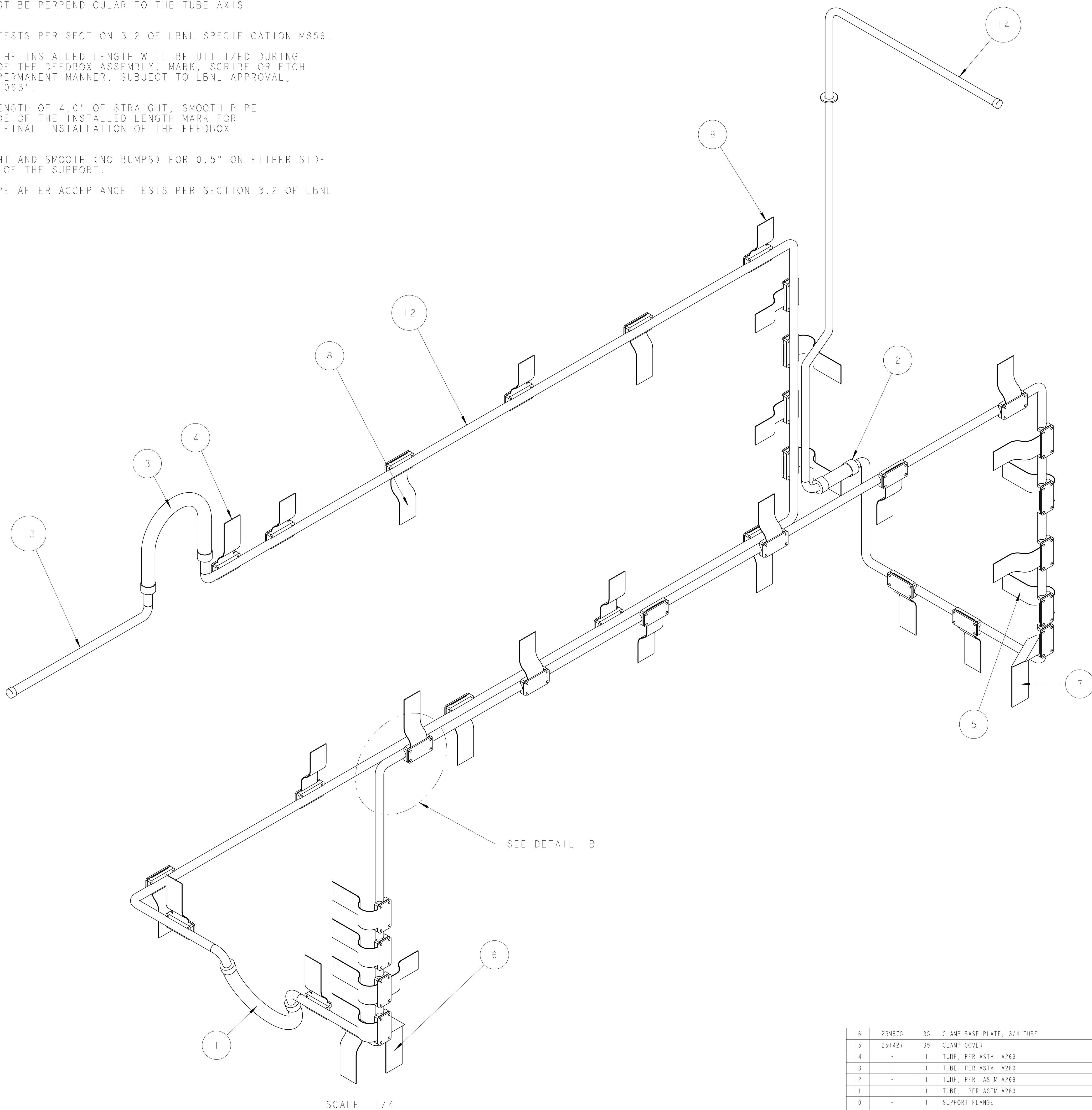
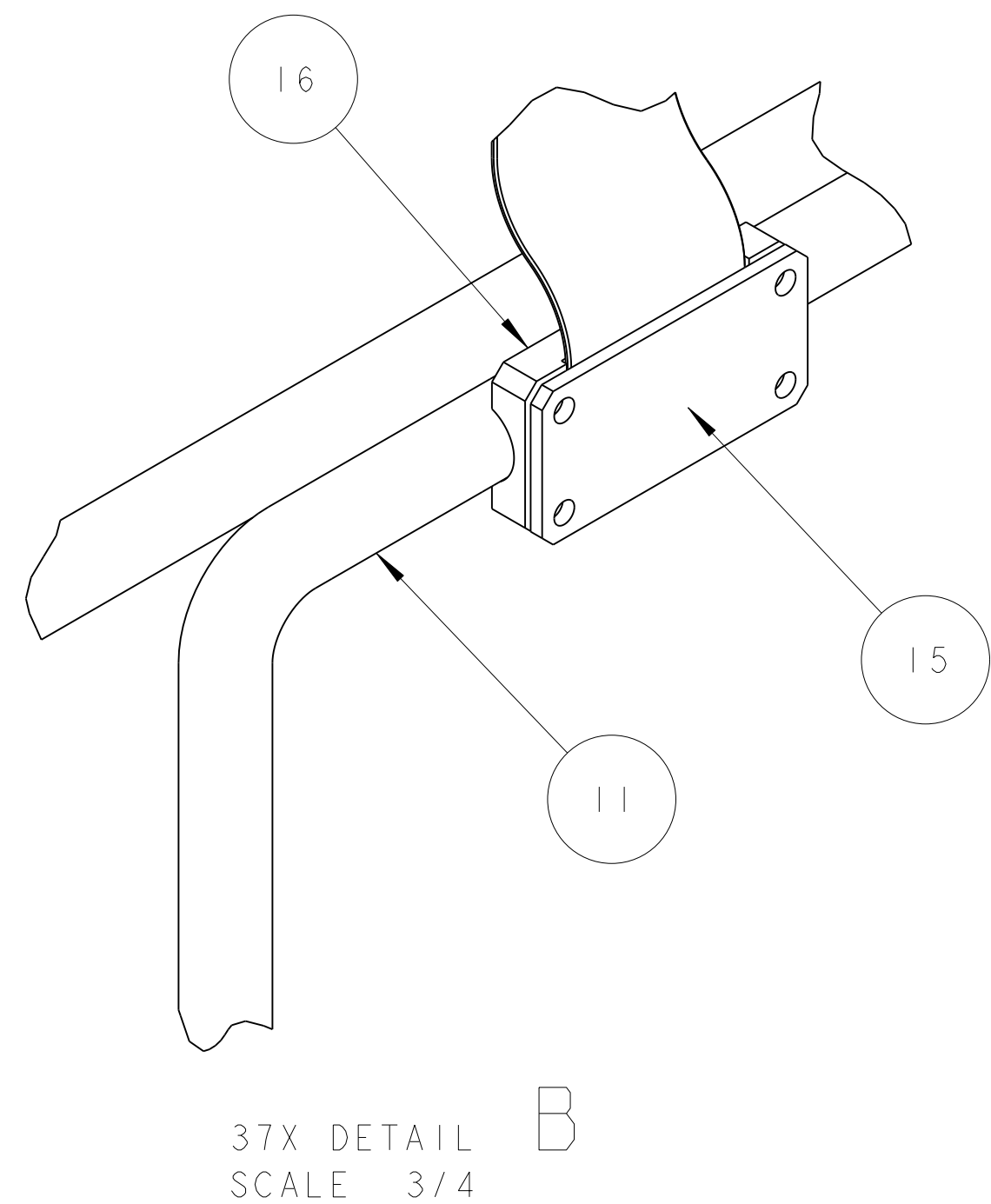


NOTES: (UNLESS OTHERWISE SPECIFIED)

- 1. THIS IS A CRYOGENIC VACUUM COMPONENT.
- 2. WELDING PROCEDURE: PER VENDOR SPECIFICATION WITH LBNL APPROVAL.
- 3. CLEANING PROCEDURE : PER VENDOR SPECIFICATION WITH LBNL APPROVAL.
- 4. PACKAGING AND STORAGE PROCEDURE OF THE COMPONENTS: PER VENDOR SPECIFICATION WITH LBNL APPROVAL.
- 5. DIMENSIONS AND TOLERANCING PER ANSI Y14.5M-1982. UNITS ARE IN INCHES [mm] UNLESS OTHERWISE SPECIFIED.
- 6. USE OF SULFUR OR SILICONE BEARING OILS, LUBRICANTS, OR COOLANTS ARE STRICTLY PROHIBITED.
- 7. USE OF RESIN OR RUBBER BONDED ABRASIVES UNDER POWER IS STRICTLY PROHIBITED. USE VITREOUS BONDED ABRASIVES ONLY.
- 8. VENDOR SUGGESTED CHANGES TO WELD PREPS; SUBJECT TO LBNL APPROVAL.
- 9. FITTINGS MAY BE USED IN PLACE OF BENDS; SUBJECT TO LBNL APPROVAL.
- 10. VENDOR SUGGESTED CHANGES TO TOLERANCES TO FACILITATE FABRICATION OR ASSEMBLY; SUBJECT TO LBNL APPROVAL.

- 11. REMOVE ALL THE BURRS AND REAM THE ENDS FOR CIRCULARITY AND CLEAN ENDS.
- 12. TUBE END SURFACE MUST BE PERPENDICULAR TO THE TUBE AXIS WITHIN +/- .010.
- 13. PERFORM ACCEPTANCE TESTS PER SECTION 3.2 OF LBNL SPECIFICATION M856.
- 14. A MARK DESIGNATING THE INSTALLED LENGTH WILL BE UTILIZED DURING FINAL INSTALLATION OF THE DEEDBOX ASSEMBLY. MARK, SCRIBE OR ETCH THIS LOCATION IN A PERMANENT MANNER, SUBJECT TO LBNL APPROVAL, TO AN ACCURACY OF 0.063".
- 15. PROVIDE A MINIMUM LENGTH OF 4.0" OF STRAIGHT, SMOOTH PIPE ON THE INDICATED SIDE OF THE INSTALLED LENGTH MARK FOR PIPE WELDING DURING FINAL INSTALLATION OF THE FEEDBOX ASSEMBLY.
- 16. PIPE MUST BE STRAIGHT AND SMOOTH (NO BUMPS) FOR 0.5" ON EITHER SIDE OF THE CENTER-PLANE OF THE SUPPORT.
- 17. CAP BOTH ENDS OF PIPE AFTER ACCEPTANCE TESTS PER SECTION 3.2 OF LBNL SPECIFICATION M856.



REV	DWG	CHK	ZONE	DATE	INITIAL RELEASE	CHANGES
A	ARH	SPV		29-31-02		

UNLESS OTHERWISE SPECIFIED
 X.X ± 0.1 FRACTION ± 1/64
 X.XX ± 0.03 ANGLES ± 1.00°
 X.XXX ± 0.010 FINISH
 DO NOT SCALE PRINT
 TOLERANCES ARE CLASS 2
 CHAMFER ENDS OF ALL SCREW THREADS 30°
 CUT ROUNDS, 1.5 DIA RELIEF ON MACHINED THREADS
 BREAK EDGES .156 MAX. ON MACHINED WORK
 REMOVE BURRS, WELD SPATTER & LOOSE SCALE
 IN ACCORDANCE WITH ASME B16.9 & B31.1

ITEM	PART NO	REQD	DESCRIPTION	MATERIAL
16	25M075	35	CLAMP BASE PLATE, 3/4" TUBE	COPPER, OFHC, C101
15	25142T	35	CLAMP COVER	OFHC, C101
14	-	1	TUBE, PER ASTM A269	SS 304L
13	-	1	TUBE, PER ASTM A269	SS 304L
12	-	1	TUBE, PER ASTM A269	SS 304L
11	-	1	TUBE, PER ASTM A269	SS 304L
10	-	1	SUPPORT FLANGE	SS 304L
9	-	6	STANDARD BRAIDED COPPER STRAP, 1/8" X 1.00"	OFC COPPER BRAID
8	-	10	STANDARD BRAIDED COPPER STRAP, 1/8" X 1.00"	OFC COPPER BRAID
7	-	1	STANDARD BRAIDED COPPER STRAP, 1/8" X 1.00"	OFC COPPER BRAID
6	-	1	STANDARD BRAIDED COPPER STRAP, 1/8" X 1.00"	OFC COPPER BRAID
5	-	8	STANDARD BRAIDED COPPER STRAP, 1/8" X 1.00"	OFC COPPER BRAID
4	-	11	STANDARD BRAIDED COPPER STRAP, 1/8" X 1.00"	OFC COPPER BRAID
3	-	1	BRAIDED FLEX HOSE, .625" ID X 3/4" STR, 17MM ELBOW	SS 309 SERIES
2	-	1	BRAIDED FLEX HOSE, .625" ID X 3/4" STR, 17MM ELBOW	SS 309 SERIES
1	-	1	BRAIDED FLEX HOSE, .625" ID X 3/4" ELBOW WELD ENDS	SS 309 SERIES

SHOP ORDERS

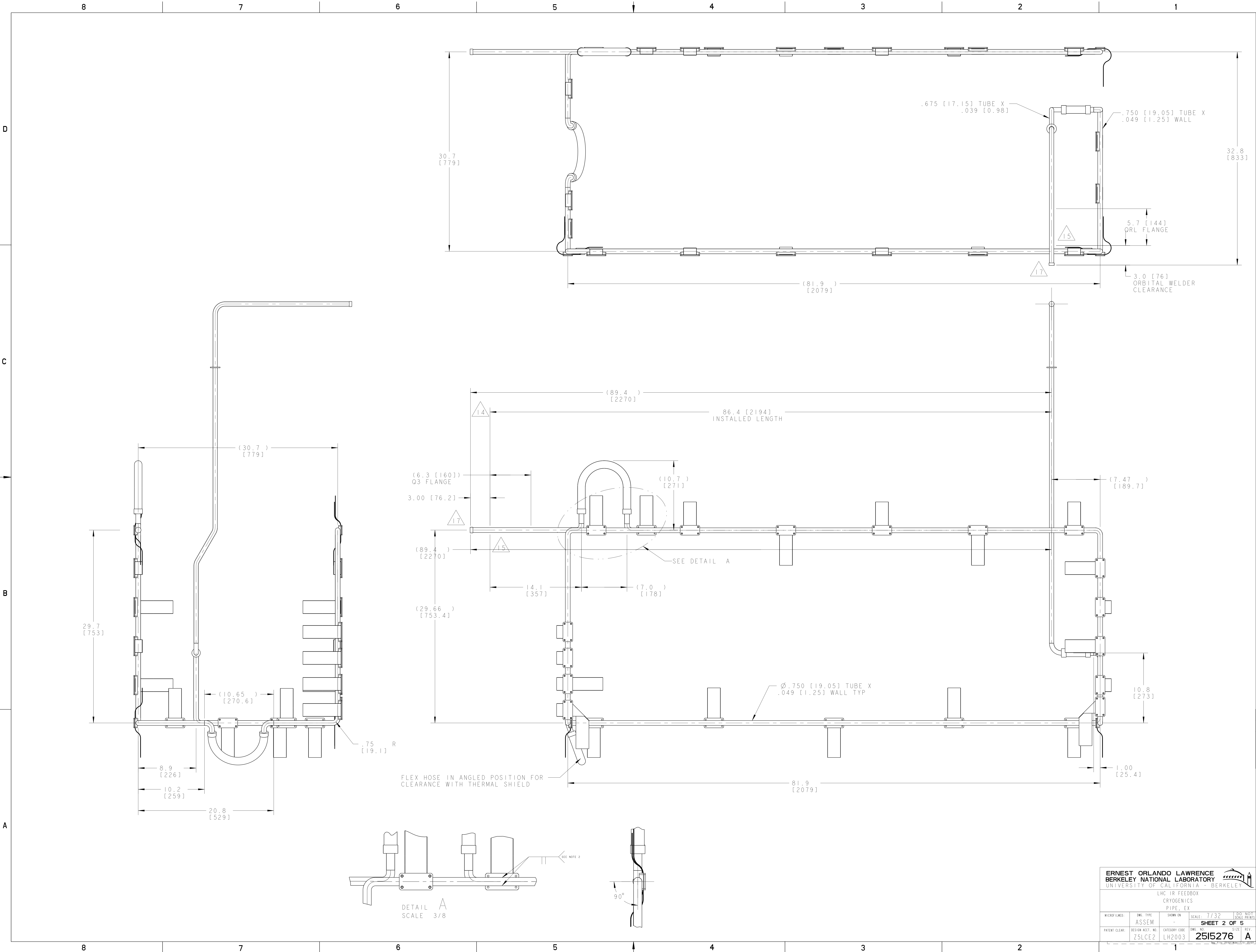
ERNEST ORLANDO LAWRENCE BERKELEY NATIONAL LABORATORY
 UNIVERSITY OF CALIFORNIA BERKELEY

LHC IR FEEDBOX
 CRYOGENICS
 PIPE, EX

SCALE: 7/32

SHEET 1 OF 5

DATE: 29-Jul-02
 DATE: 31-Oct-02
 DATE: 4-02-02



ERNEST ORLANDO LAWRENCE BERKELEY NATIONAL LABORATORY UNIVERSITY OF CALIFORNIA BERKELEY				
LHC IR FEEDBOX CRYOGENICS PIPE, EX				
MICROFILMED:	DWG. TYPE:	SHOW ON:	SCALE:	DO NOT SCALE PRINTS
	ASSEM		7/32	
PATENT CLEAR:			REVISION NO.:	SIZE:
Z5LCE2	LH2003	2515276	5	A

8

7

6

5

4

3

2

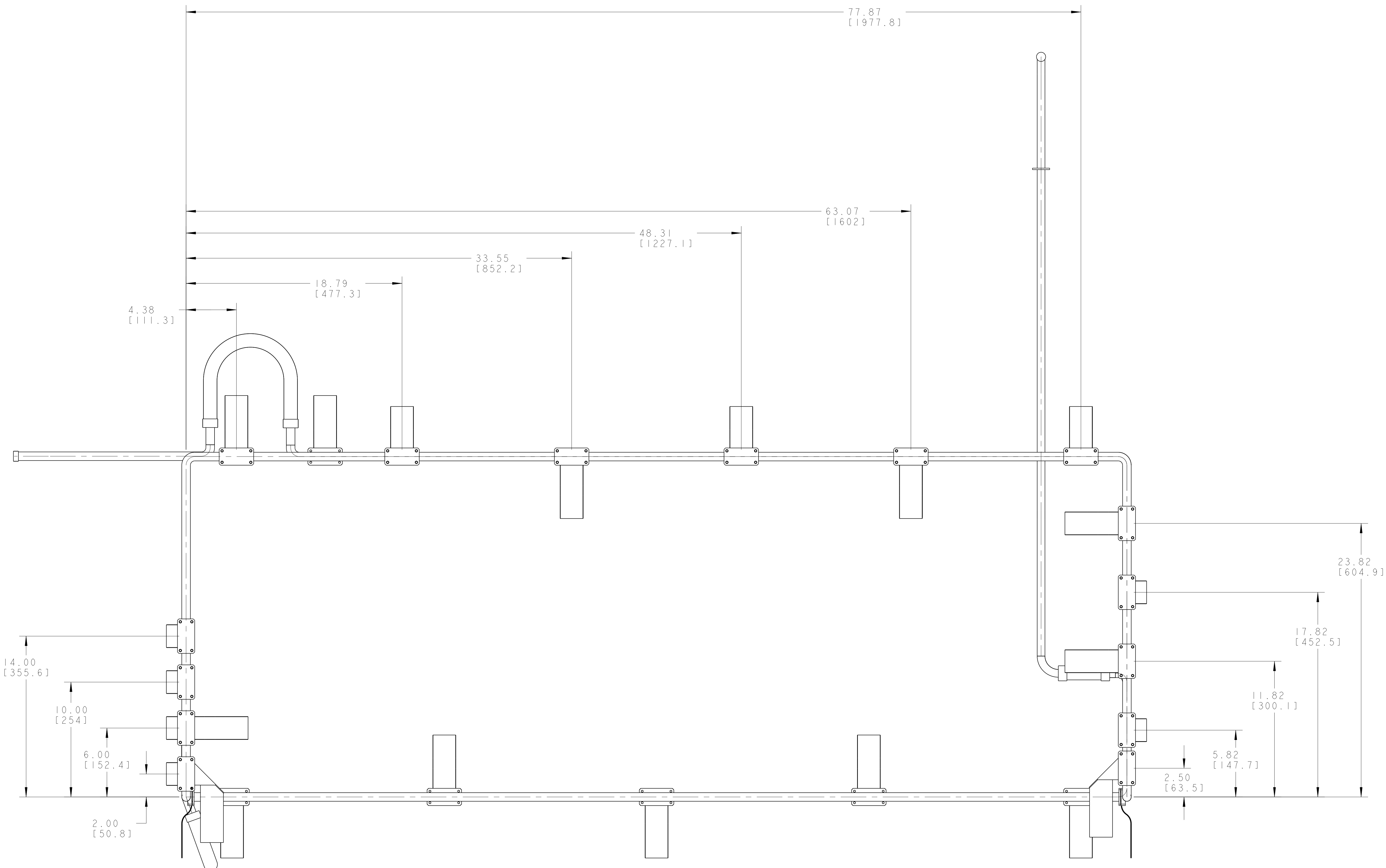
1

D

C

B

A



RIGHT SIDE VIEW SCALE 1/4

2515276 A 3

ERNEST ORLANDO LAWRENCE
 BERKELEY NATIONAL LABORATORY
 UNIVERSITY OF CALIFORNIA BERKELEY

LHC IR FEEDBOX
 CRYOGENICS
 PIPE, EX

MICROFILMED:	DWG. TYPE	SHOW ON	SCALE	DO NOT SCALE PRINTS
	ASSEM		7/32	
PATENT CLEAR:	REVISION NO.	CATEGORY CODE	DWG. NO.	SIZE
	Z5LCE2	LH2003	2515276	A

SHEET 3 OF 5

NAME: ARHARRIS OBJECT: 2515276 DATE: 26-Nov-02 09:53:58

8

7

6

5

4

3

2

1

D

C

B

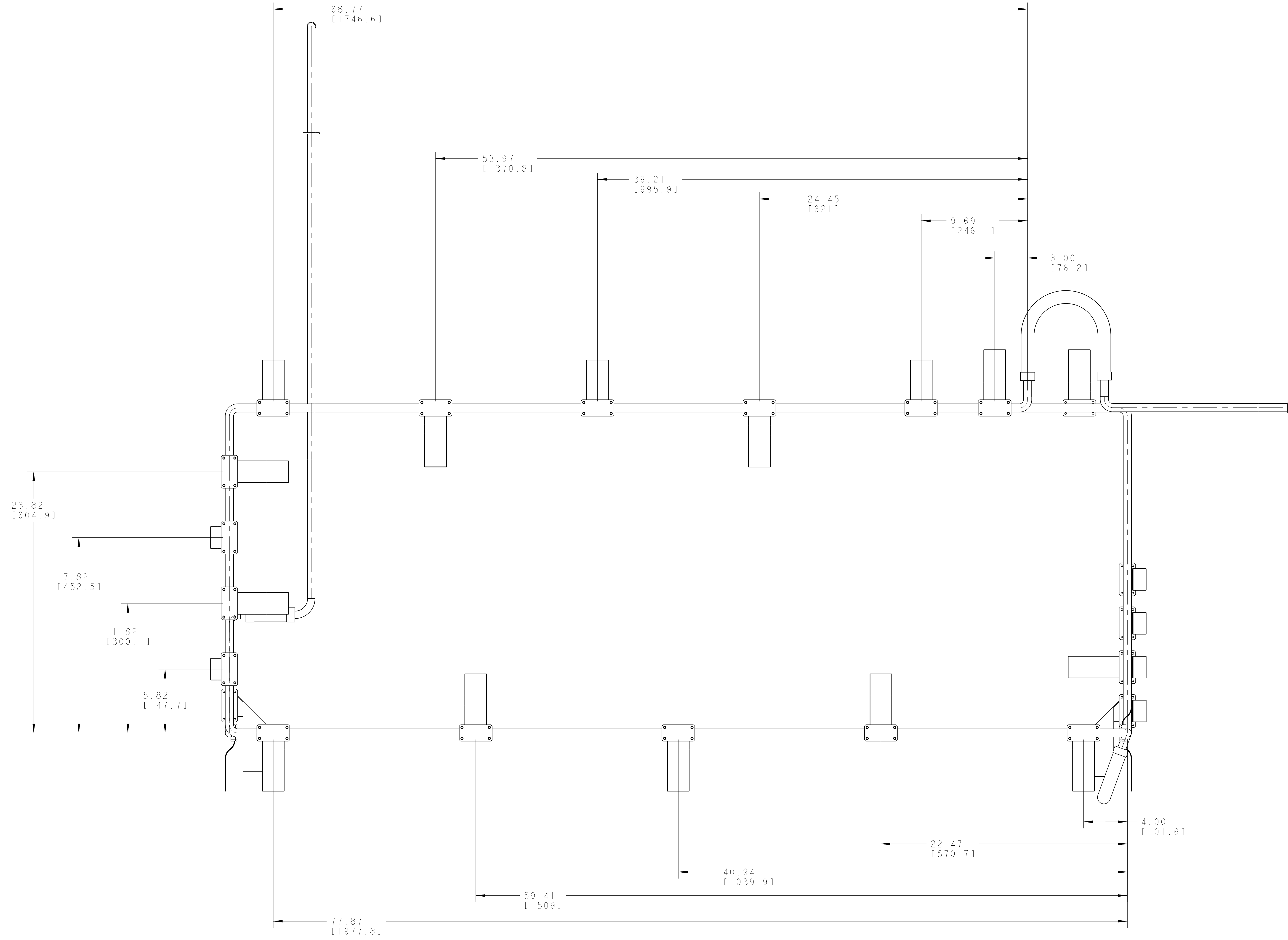
A

D

C

B

A



LEFT SIDE VIEW SCALE 1/4

ERNEST ORLANDO LAWRENCE BERKELEY NATIONAL LABORATORY <small>UNIVERSITY OF CALIFORNIA BERKELEY</small>			
LHC IR FEEDBOX CRYOGENICS PIPE, EX			
MICROFILMED:	DWG. TYPE	SHOW ON	SCALE
	ASSEM		7/32
PATENT CLEAR:	DESIGN ACCT. NO.	CATEGORY CODE	DWG. NO.
	Z5LCE2	LH2003	2515276
			DO NOT SCALE PRINTS
SHEET 4 OF 5			SIZE
			A

2515276 A 4

8

7

6

5

4

3

2

1

NAME: ARHARRIS OBJECT: 2515276_4 DATE: 26-Nov-02 09:53:59

8

7

6

5

4

3

2

1

D

C

B

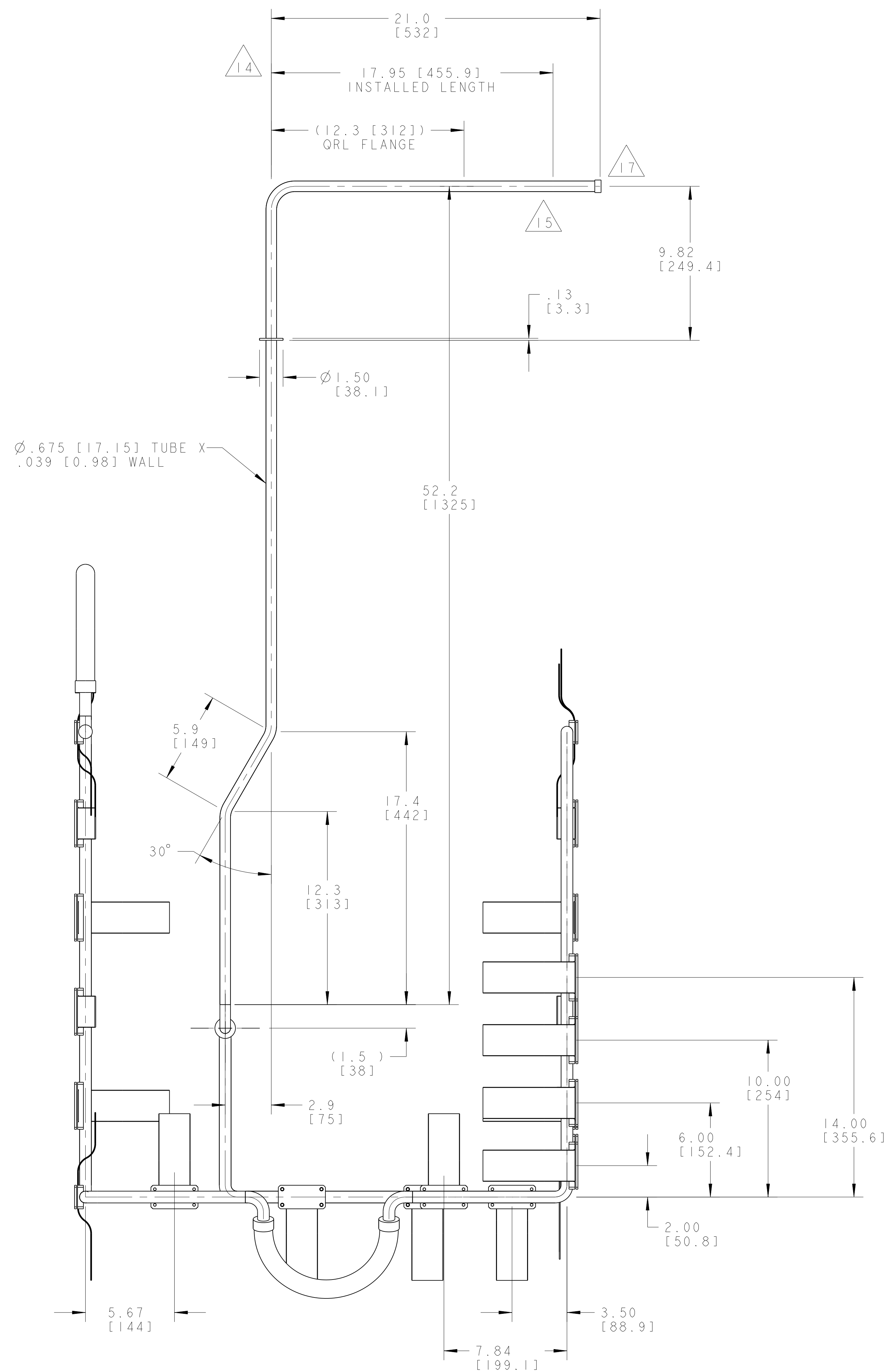
A

D

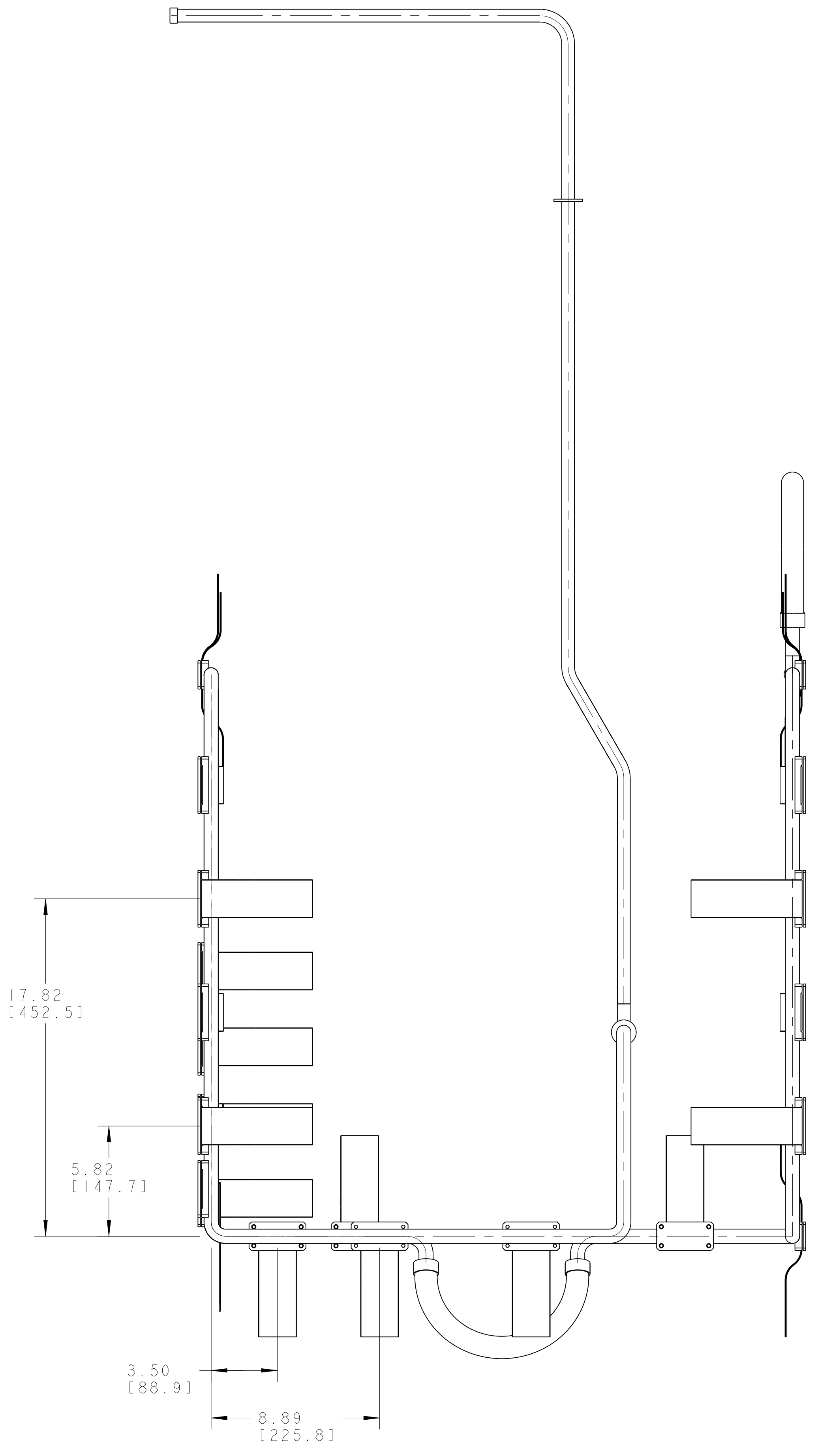
C

B

A



FRONT VIEW SCALE 1/4



REAR VIEW SCALE 1/4

ERNEST ORLANDO LAWRENCE BERKELEY NATIONAL LABORATORY UNIVERSITY OF CALIFORNIA BERKELEY			
LHC IR FEEDBOX CRYOGENICS PIPE, EX			
MICROFILMED:	DWG. TYPE:	SHOW ON:	SCALE: 7/32
	ASSEM		DO NOT SCALE PRINTS
PATENT CLEAR: Z5LCE2		DESIGN ACCT. NO: CATEGORY CODE: LH2003	DWG. NO.: 2515276
		SHEET 5 OF 5	SIZE: A

NAME: ARHARRIS OBJECT: 2515276 DATE: 26-Nov-02 09:54:00

2515276 A 15

8

7

6

5

4

3

2

1