

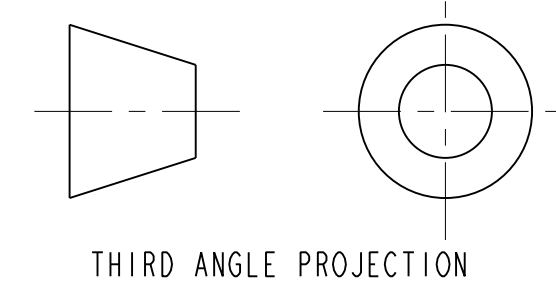
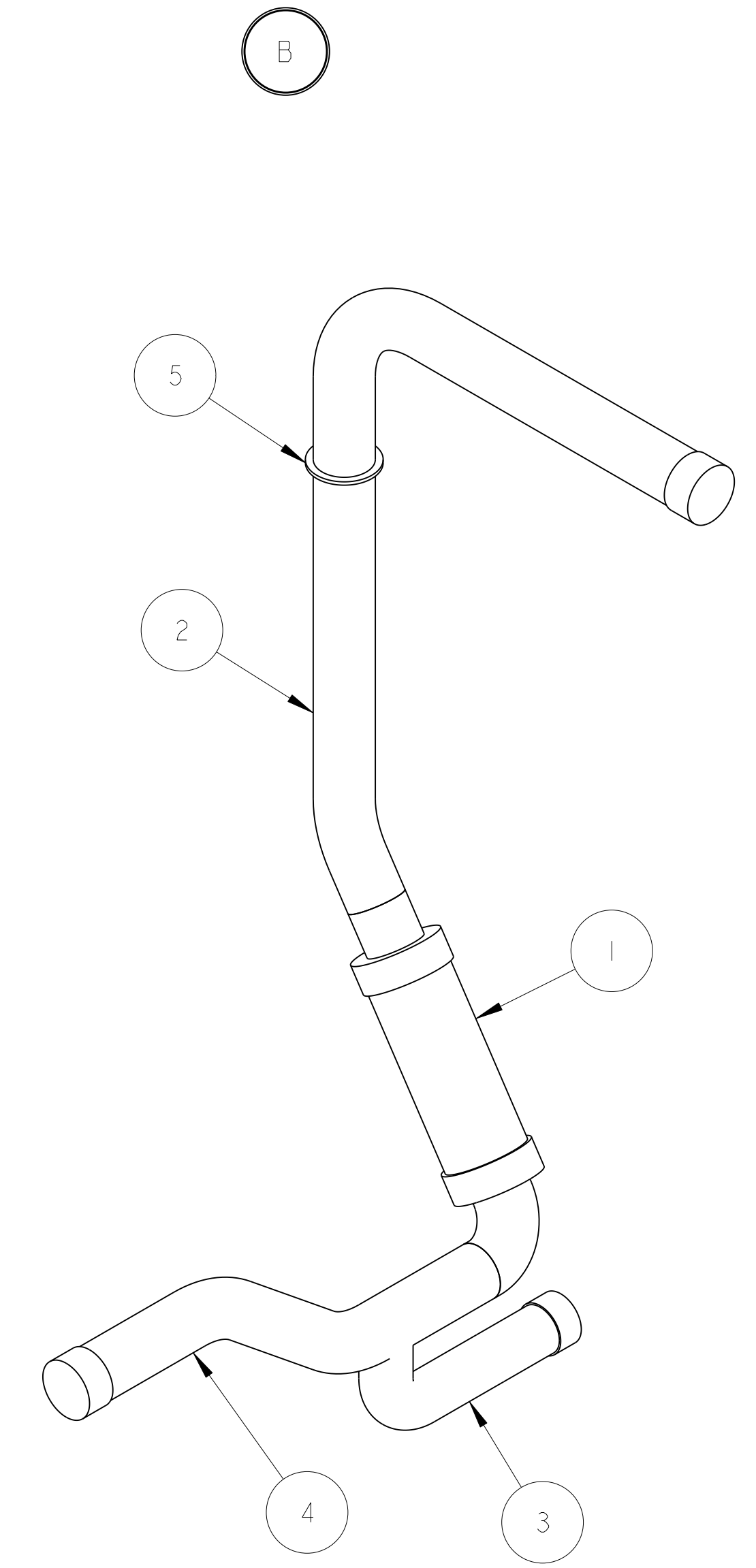
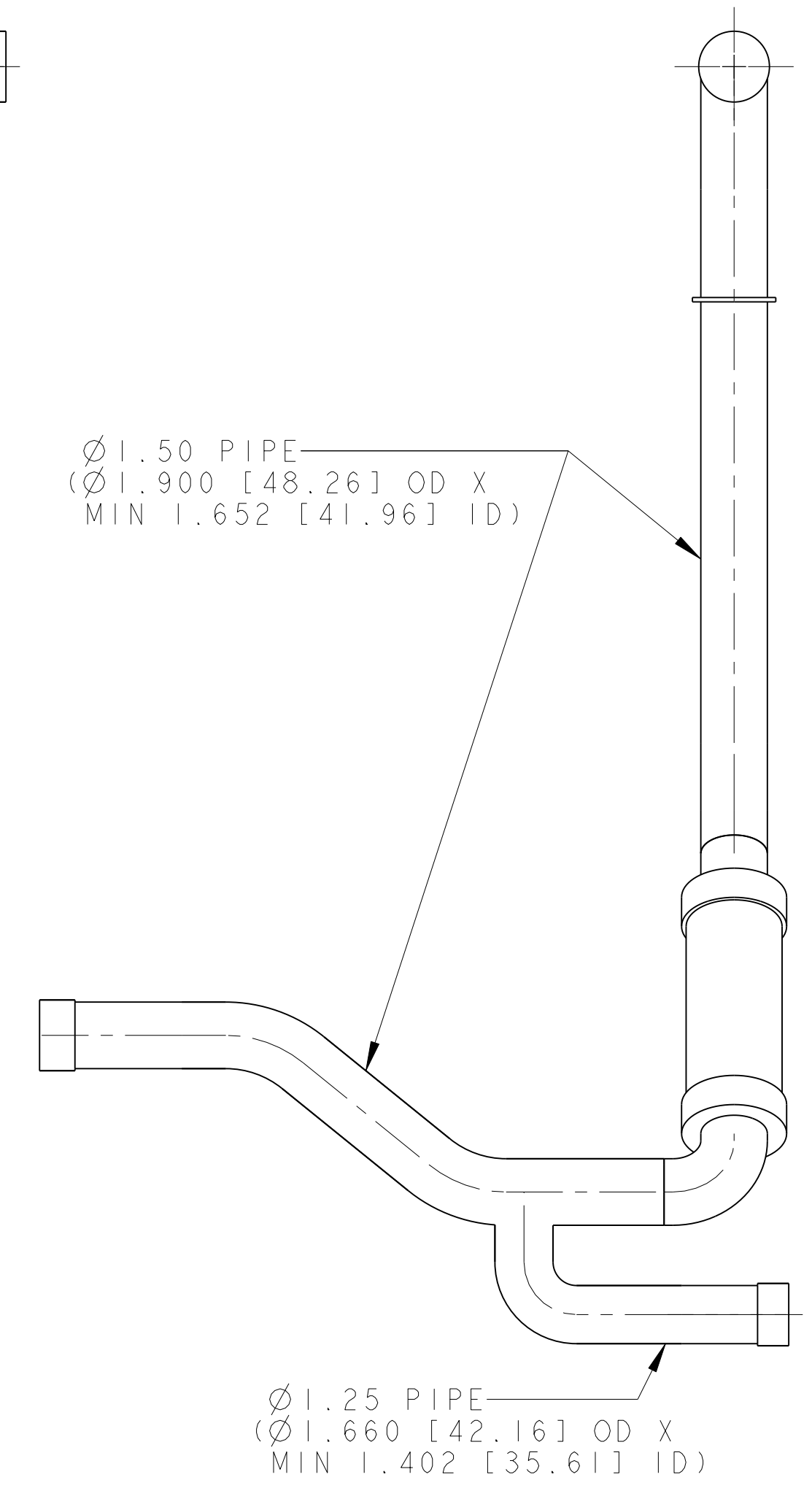
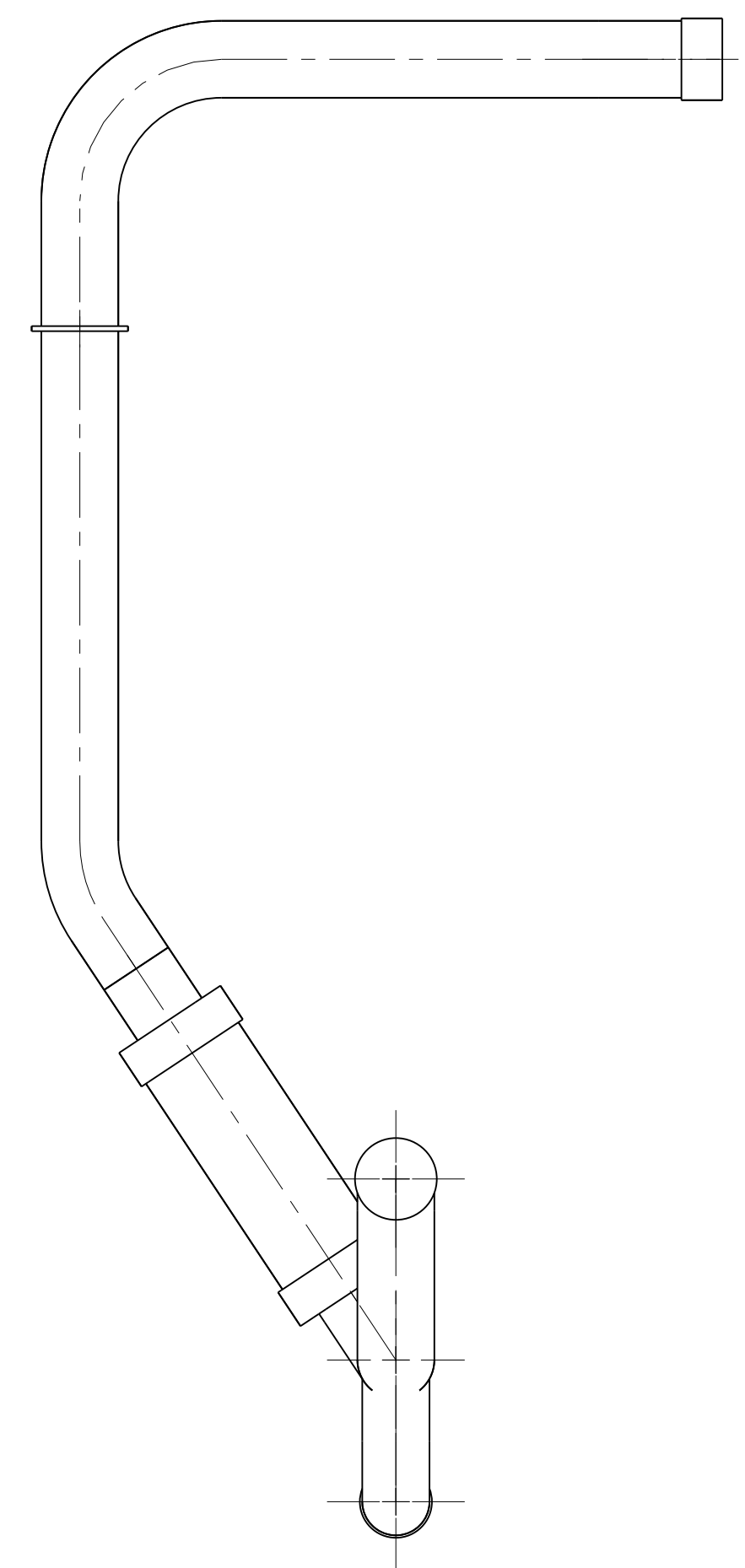
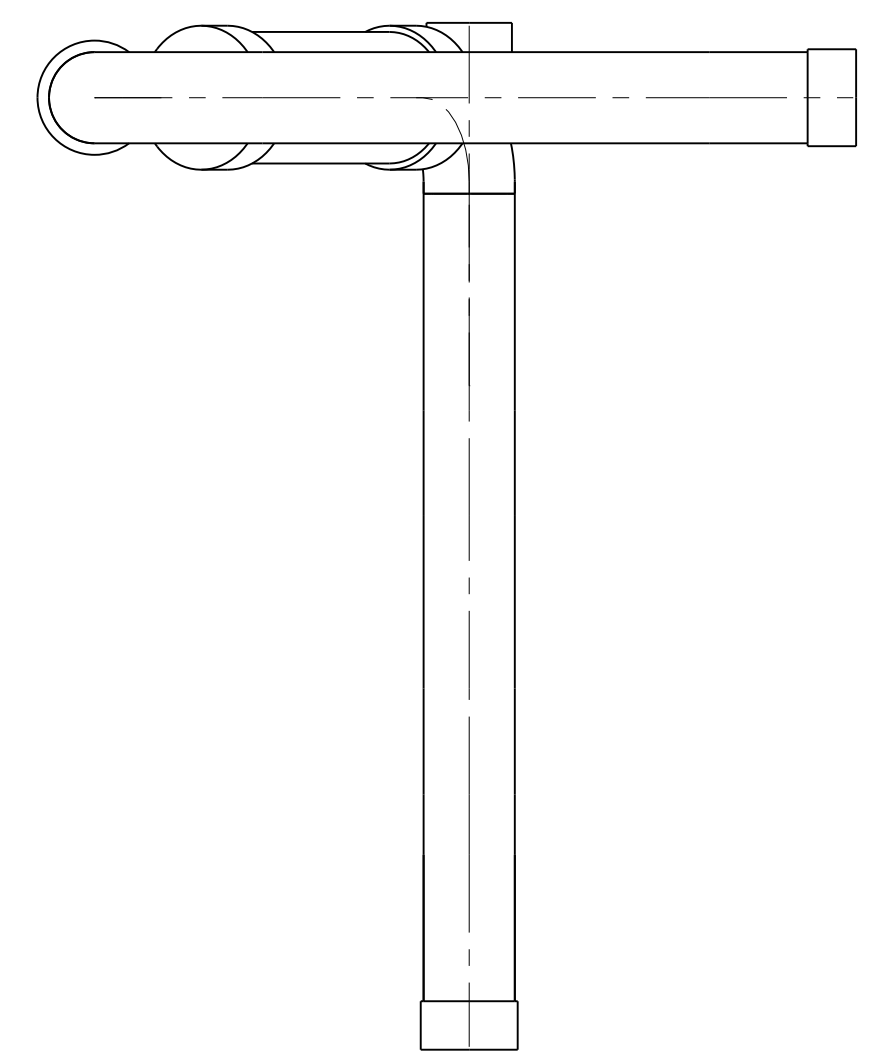
NAME: ARHARRIS OBJECT: 251208_1 DATE: 05-Dec-02 08:56:28

DWG. NO. 2512084 SIZE REV. SH. B 1

5	-	1	SUPPORT FLANGE	SS 304L
4	-	1	PIPE, PER ASTM A312	SS 304L
3	-	1	PIPE, PER ASTM A312	SS 304L
2	-	1	PIPE, PER ASTM A312	SS 304L
1	-	1	BRAIDED FLEX HOSE, 2" ID X 6.1 LL	SS 300 SERIES
ITEM	PART NO	REOD	DESCRIPTION	MATERIAL

NOTES: (UNLESS OTHERWISE SPECIFIED)

- THIS IS A CRYOGENIC VACUUM COMPONENT.
- WELDING PROCEDURE: PER VENDOR SPECIFICATION WITH LBNL APPROVAL.
- CLEANING PROCEDURE: PER VENDOR SPECIFICATION WITH LBNL APPROVAL.
- PACKAGING AND STORAGE PROCEDURE OF THE COMPONENTS: PER VENDOR SPECIFICATION WITH LBNL APPROVAL.
- DIMENSIONS AND TOLERANCING PER ANSI Y14.5M-1982. UNITS ARE IN INCHES [mm] UNLESS OTHERWISE SPECIFIED.
- USE OF SULFUR OR SILICONE BEARING OILS, LUBRICANTS, OR COOLANTS ARE STRICTLY PROHIBITED.
- USE OF RESIN OR RUBBER BONDED ABRASIVES UNDER POWER IS STRICTLY PROHIBITED. USE VITREOUS BONDED ABRASIVES ONLY.
- VENDOR SUGGESTED CHANGES TO WELD PREPS; SUBJECT TO LBNL APPROVAL.
- FITTINGS MAY BE USED IN PLACE OF BENDS; SUBJECT TO LBNL APPROVAL.
- VENDOR SUGGESTED CHANGES TO TOLERANCES TO FACILITATE FABRICATION OR ASSEMBLY; SUBJECT TO LBNL APPROVAL.
- REMOVE ALL THE BURRS AND REAM THE ENDS FOR CIRCULARITY AND CLEAN ENDS.
- TUBE END SURFACE MUST BE PERPENDICULAR TO THE TUBE AXIS WITHIN +/- .010.
- PERFORM ACCEPTANCE TESTS PER SECTION 3.2 OF LBNL SPECIFICATION M856.
- A MARK DESIGNATING THE INSTALLED LENGTH WILL BE UTILIZED DURING FINAL INSTALLATION OF THE FEEDBOX ASSEMBLY. MARK, SCRIBE OR ETCH THIS LOCATION IN A PERMANENT MANNER, SUBJECT TO LBNL APPROVAL, TO AN ACCURACY OF ±0.063".
- 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.
- PIPE MUST BE STRAIGHT AND SMOOTH (NO BUMPS) FOR 0.5" ON EITHER SIDE OF THE CENTER-PLANE OF THE SUPPORT.
- CAP BOTH ENDS OF PIPE AFTER ACCEPTANCE TESTS PER SECTION 3.2 OF LBNL SPECIFICATION M856.



REV	DWG	CHK	ZONE	DATE	CHANGES
B	ARH	SPV		11-21-02	MODIFIED FLANGE LOCATION IS 6.72 WAS 6.41, ADDED CERN BOX TO SHT 2, ADDED NOTE 15 CALLOUT TO VIEW, SHT 2.
A	ARH	DPO		9-17-02	INITIAL RELEASE

UNLESS OTHERWISE SPECIFIED		SHOP ORDERS		SER NO.	-
X.X ± 0.1	FRAC. ± 1/64	ACCT NO.	NO. REOD	DATE ISSD	-
X.XX ± 0.03	Angles ± 1.00°	DEL TO		DATE REOD	-
X.XXX ± 0.010	FINISH 125 \sqrt{Ra}	SURFACE TREATMT			
DO NOT SCALE PRINT					
TOLERANCES		TIDENT METHOD		TAG	
THREADS ARE CLASS 2		PROJECT NUMBER		N/A	
CHAMFER ENDS OF ALL SCREW THREADS 30°		PROJECT NAME		N/A	
CUT ROUND, 1.5 THREAD RELIEF ON MACHINED THREADS		DWG BY		R LA MANTIA	
BREAK EDGES .016 MAX. ON MACHINED WORK		CHK BY		Jon Zbosnik/S.Virostek	
REMOVE BURRS, WELD SPLATTER & LOOSE SCALE		APR BY		Jon Zbosnik/D.Oshatz	
IN ACCORDANCE WITH ASME Y14.5M & B46.1		DATE		15-Jul-02	
		DATE		4-02-02	
		DATE		4-02-02	

ERNEST ORLANDO LAWRENCE BERKELEY NATIONAL LABORATORY
UNIVERSITY OF CALIFORNIA - BERKELEY

LHC IR FEEDBOX
CRYOGENICS
PIPE, LD2

MICROFILMED: [] DWG. TYPE: ASSEM SHOWN ON: [] SCALE: 1/4 DO NOT SCALE PRINTS

PATENT CLEAR: [] DESIGN ACCT. NO. Z5LCE2 CATEGORY CODE LH2003

DWG. NO. 2512084 SIZE REV. B

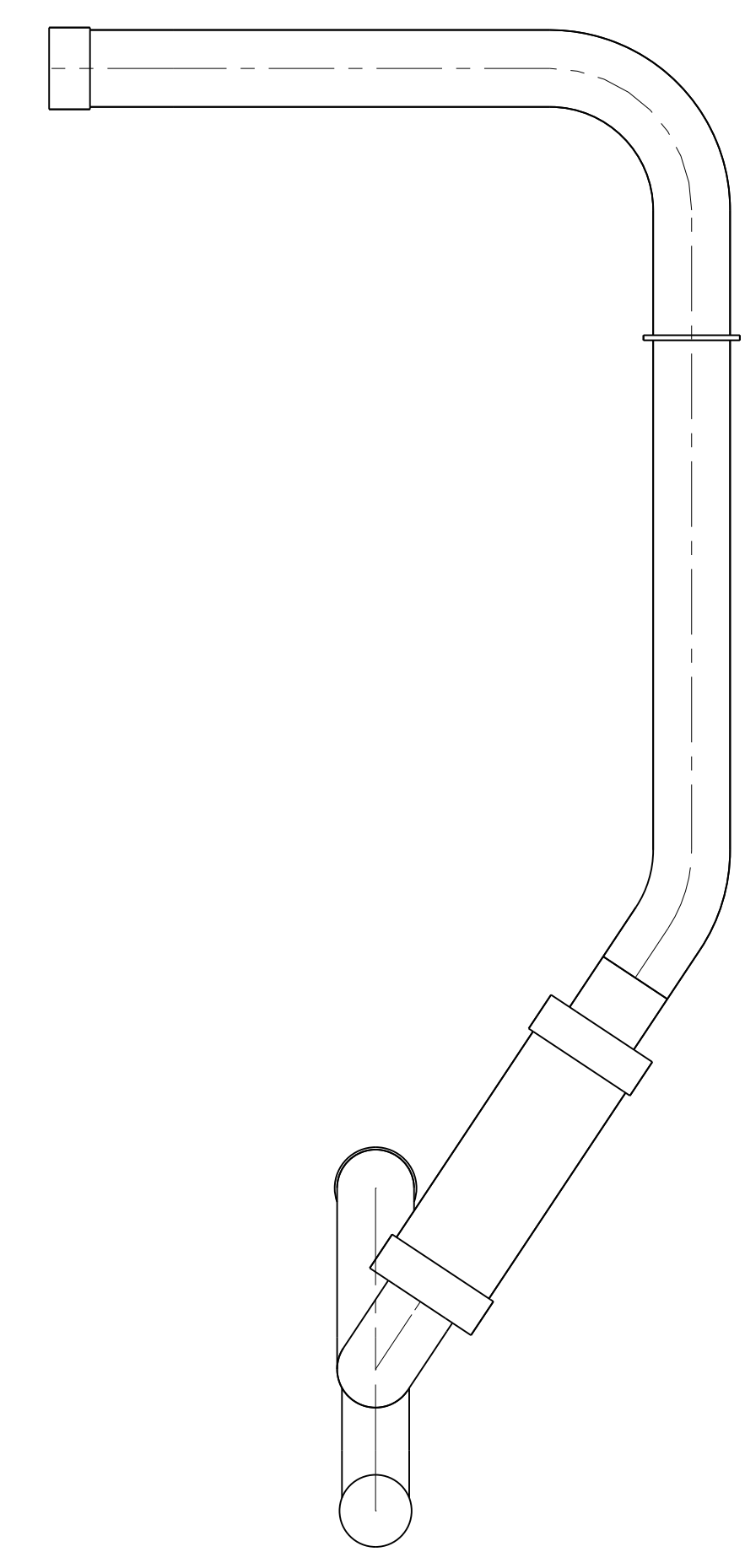
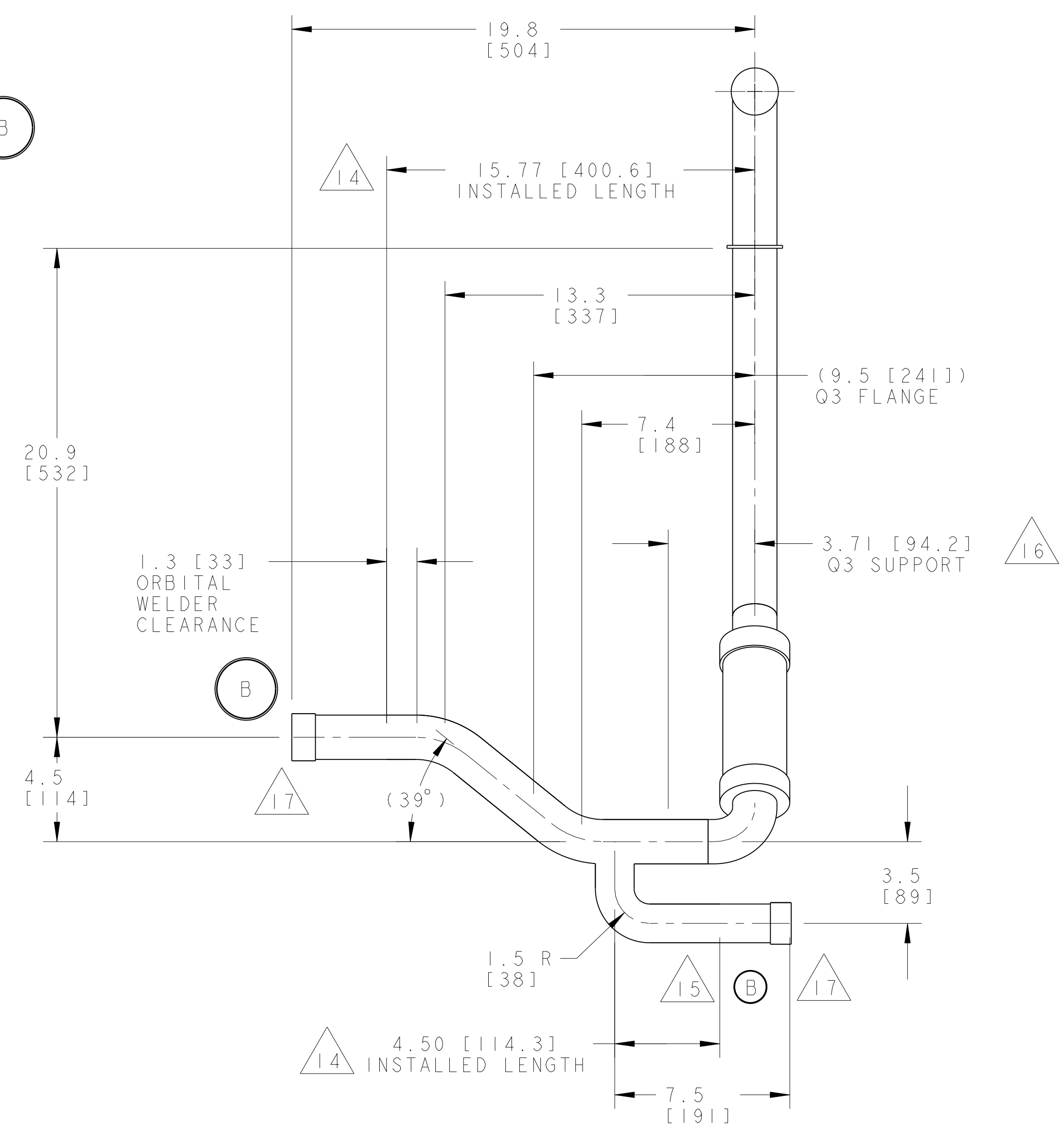
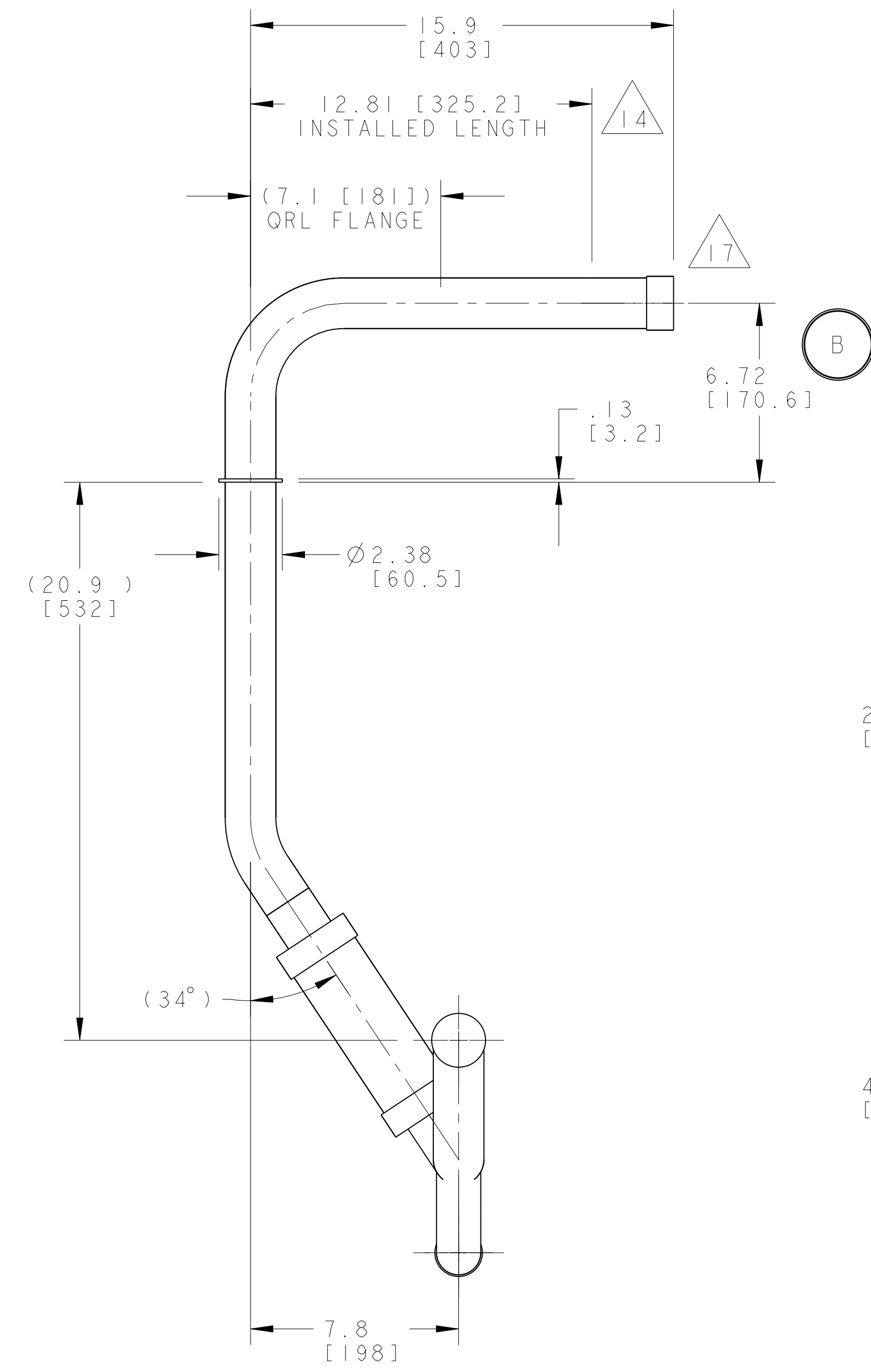
SHEET 1 OF 2

***FOR ADDITIONAL TUBE DIMENSIONS, SEE SHEET 2

NAME: APHARRIS OBJECT: 251208-2 DATE: 05-Dec-02 08:56:29

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A

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C
B
A



ERNEST ORLANDO LAWRENCE BERKELEY NATIONAL LABORATORY UNIVERSITY OF CALIFORNIA - BERKELEY				
LHC IR FEEDBOX CRYOGENICS PIPE, LD2				
MICROFILMED:	DWG. TYPE	SHOWN ON	SCALE: 1/4	DO NOT SCALE PRINTS
	ASSEM	-	SHEET 2 OF 2	
PATENT CLEAR:	DESIGN ACCT. NO.	CATEGORY CODE	DWG. NO.	SIZE REV.
	Z5LCE2	LH2003	2512084	B