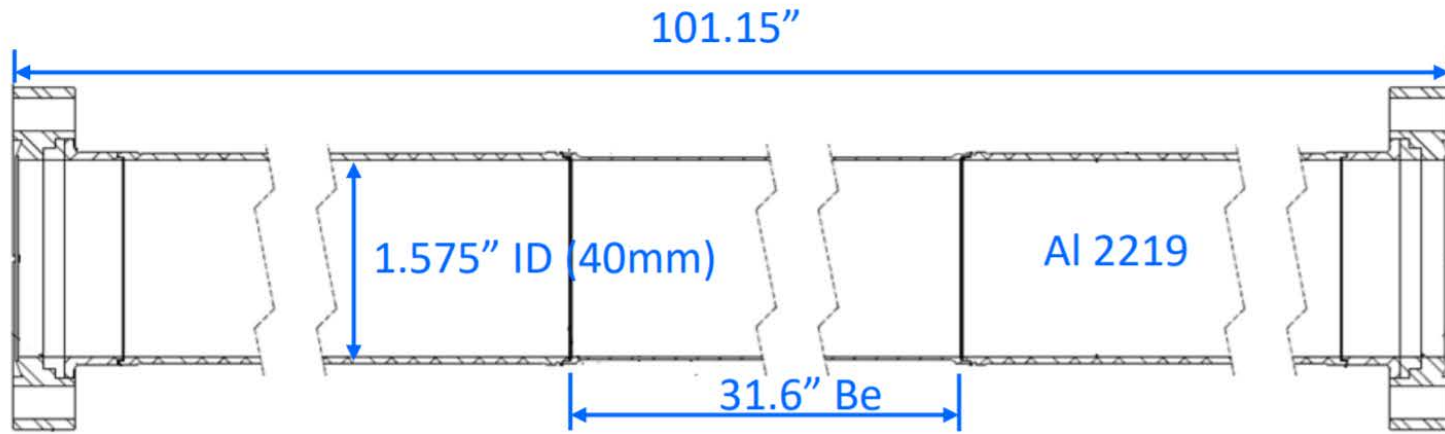
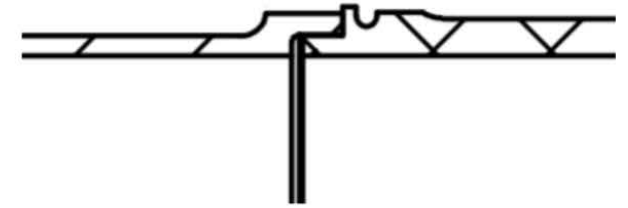


sPHENIX New Beam Pipe.

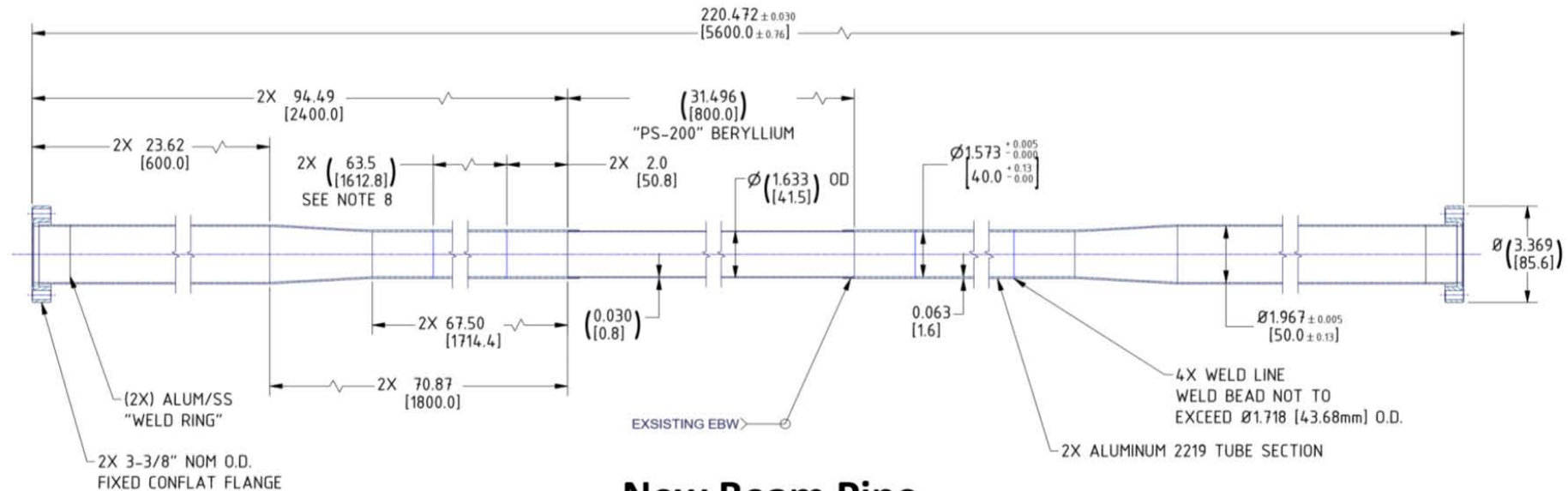
# Al-Be Beam Pipe Details



**Existing Beam Pipe**



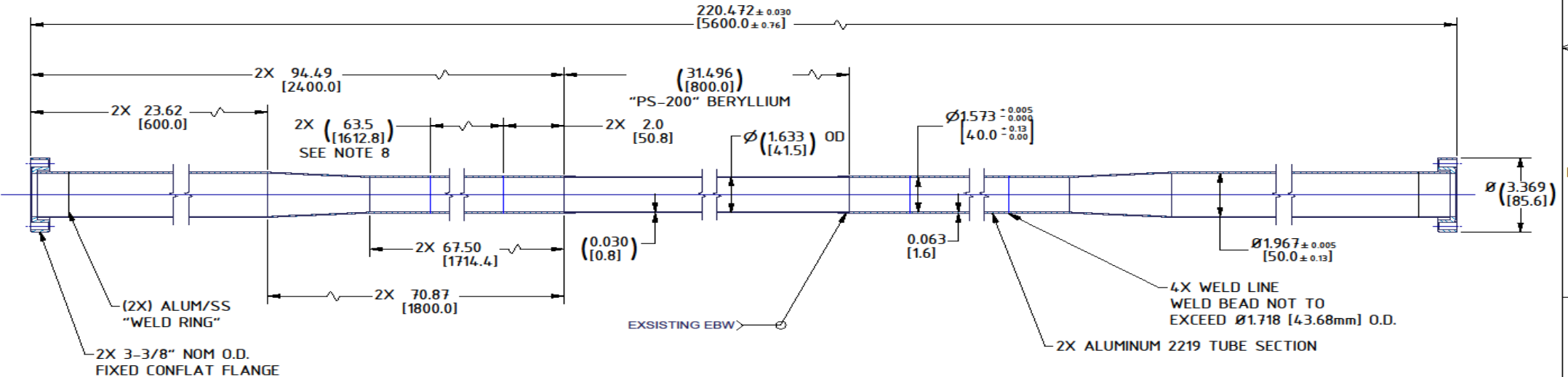
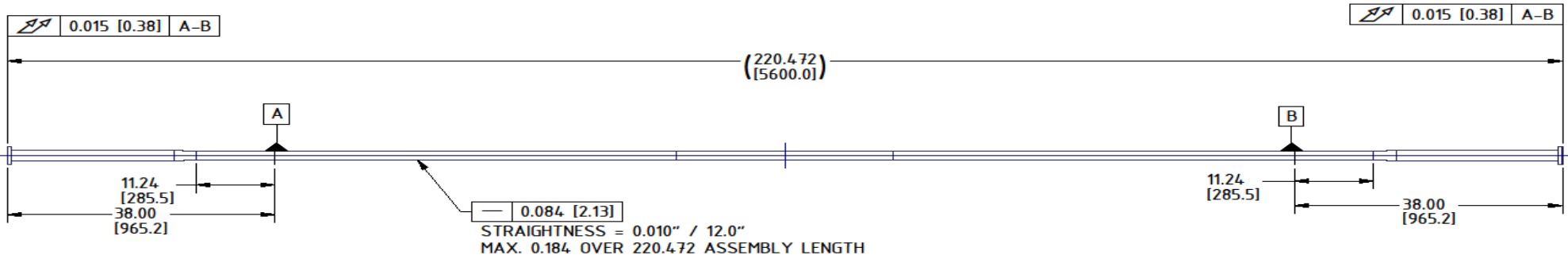
**Al-Be weld joint details**



**New Beam Pipe**

- NOTES:**
1. Material: Beryllium PS-200, 2219 Aluminum, Alum/SST Transition, & 304L Fixed ConFlat Flanges, as specified.
  2. Assembly to be bakeable to 300<sup>o</sup> C.
  3. Assembly to be vacuum tight; Mass Spec. Leak Rate not to exceed 1 E-10 Std cc/sec He.
  4. Assembly I.D. to be NEG coated and bakeable to 250<sup>o</sup> C. (BNL to be responsible for NEG coating)
  5. Beryllium section O.D. to be coated with Beryllcoat D and bakeable to 250<sup>o</sup> C.  
Beryllium surface contamination to be below 10 CFR 850 limit of 3 ug/100cm<sup>2</sup>.
  6. Flange Runout and overall Straightness to be measured with assembly unrestrained and simply supported at datums A & B.
  7. Modify existing beam pipe, Brush Wellman drawing #22906 RevB.
  8. Weld Seam location is for reference. Actual location to be decided by Manufacturer.

REVISION HISTORY					
REV	ECN NUMBER	ZONE	DESCRIPTION	DATE	APPROVED
A			INITIAL RELEASE	4/9/2020	rfeder



<p>THIRD ANGLE PROJECTION</p>		BROOKHAVEN NATIONAL LABORATORY BROOKHAVEN SCIENCE ASSOCIATES UPTON, NY 11973	
		PROJECT: FACILITIES DESCRIPTION: sPhenix Beam Pipe	
INTERPRET IN GENERAL ACCORDANCE WITH ASME Y14.5-2009 UNLESS OTHERWISE SPECIFIED. ALL DIMENSIONS ARE IN INCHES (mm) DECIMAL TOLERANCES: X.X ± 0.05 X.XX ± 0.01 X.XXX ± 0.005 ANGLES ± 0.5	DRAWN BY: A. DELANTO CHECKED BY: A. HERRERA DESIGNER APPROVAL: A. FISHER SUPERVISOR APPROVAL: J. PELLIS DESIGN APPROVAL: A. HAYES P.E. APPROVAL: C. GUNTERMAN SAFETY NUMBER: C-176848	DATE: 4/9/2020 REVISION NUMBER: 205-0800-002 Q.A. CATEGORY: A3	SCALE: 375% WEIGHT: 19 lbmss SHEET: 1 OF 1