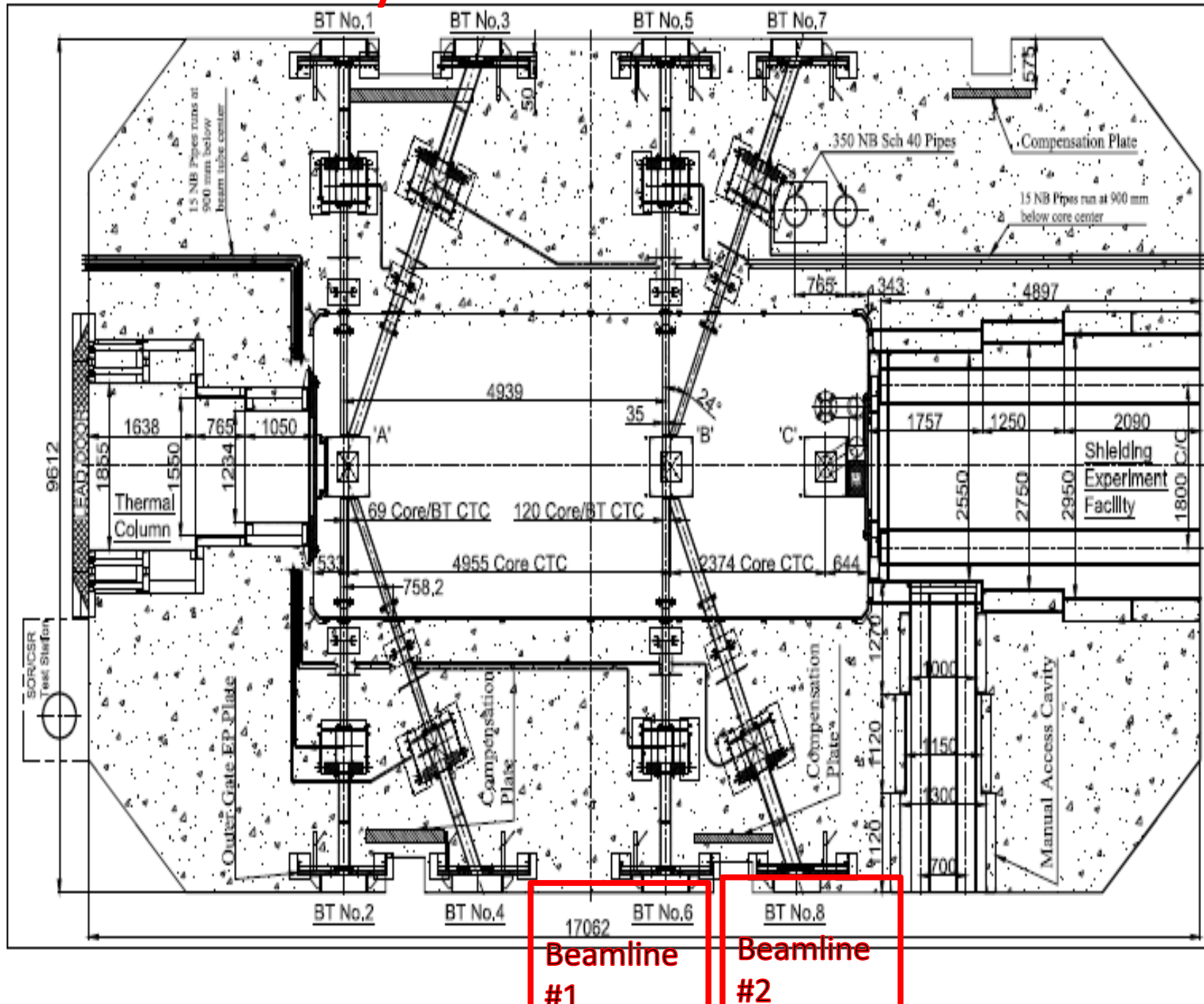


Layout of the beam holes at APSARA-U



Beamlines at APSARA-U

Beamline 1: (Beam Tube # 8): Neutron Detector Test facility

Beamline 2: (Beam Tube # 6) : Single-crystal Alignment Facility

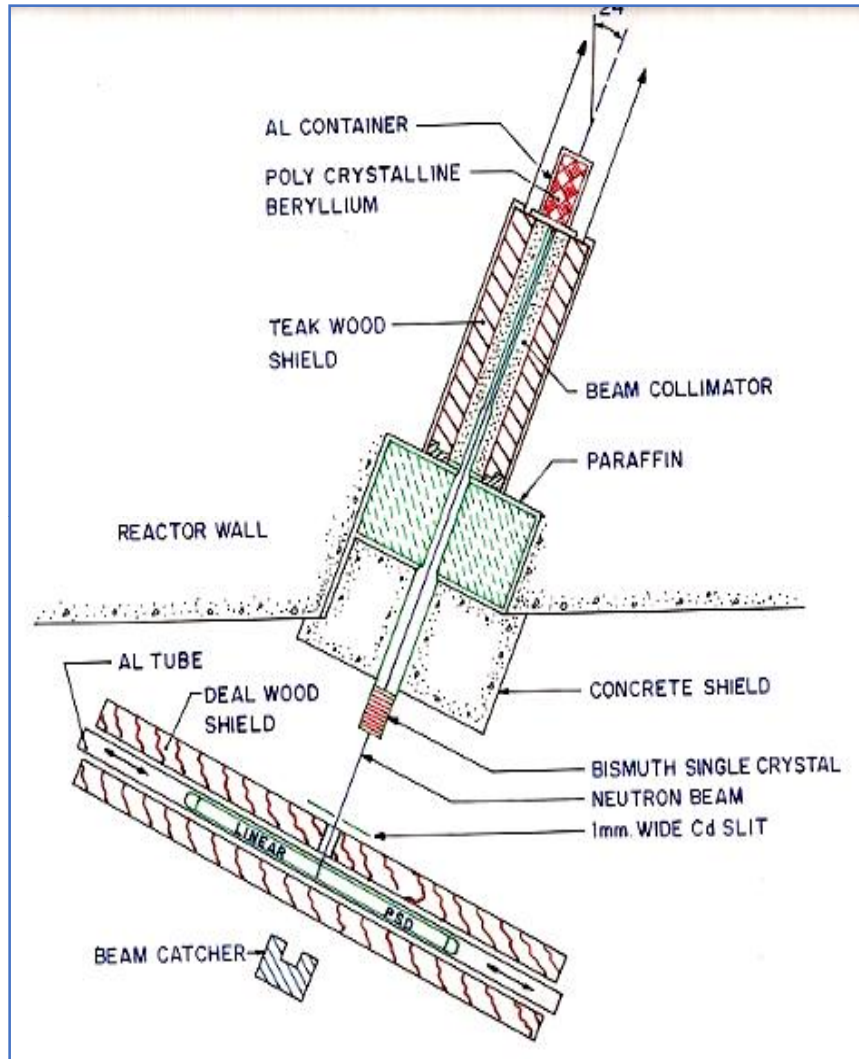
Single-crystal Alignment Facility

- To check the quality of single crystals grown by the optical floating technique
- Align single crystals or multi-crystal arrays prior to neutron scattering experiments.
- In this facility the beam would take off by a monochromator in a W-configuration
- Would also have a four circle goniometer and an adjustable sample table.



- Support large sample environments (CCR, dilution fridges)
- Wavelength = 1.7 \AA (Ge 311)
- Scattering Angle (2θ) = 60 deg
- ^3He -based detectors

(Beam Tube No. 8):Detector testing Facility



Detector testing facility at APSARA (Beam hole 9)

- Beam line would be built around the transmitted beam from the monochromator
- Facility will employ a fine collimated beam of 1-2 mm diameter.
- A detector shield box (2.2 m long) made of deal wood, borated rubber, cadmium and filled with paraffin, will constitute the shield for Position Sensitive Detectors (PSDs) from background and scattered neutrons.
- Beamline will be regularly and extensively used for primary tests of all in-house built neutron counting detectors and PSDs, before they are mounted at the neutron spectrometers at Dhruva reactor.