Specifications of the He3 lab enclosure

- The enclosure must be self-supporting and made up of high-quality acoustic material. The desired level of acoustic isolation is STC 60. This must be tested and guaranteed for the material. Test certificates must be provided along with the quote.

- The enclosure must attenuate high frequency electromagnetic noise (with no metallic penetration). The desired attenuation is 100 dB at 10 GHz.

- Physical dimensions: Total length of the enclosure will be 48 ft and width will be 12 ft. There will be a partition at the center dividing the enclosure into two independent units. The ceiling clearance inside the enclosure must be at least 20'.

- Doors: Two acoustic nad RF-shielding doors each 8' tall and 4'wide (clearance) will have to be provided. The doors must also meet the desired (above-mentioned) acoustic and RF attenuation level.

- Room should be provided to run electrical power lines, vacuum lines, gas lines, water lines etc. in and out of the enclosure without compromising on the acoustic performance. The number of penetrations will be discussed during the design stage of the enclosure.

- Two electrically controlled heavy duty hoists (capacity: 2 Ton each) must be provided inside the enclosure. Appropriate mechanism should be provided such that the hoists can be moved along the length and the width of the enclosure. This is to ensure that the hoist can lift heavy material from any point inside the enclosure.

- Necessary mechanism must be provided to ensure continuous flow of fresh breathable air inside the enclosure.

- The vendor should also **separately** quote for required number of air-conditioners (split or tower) such that the temperature inside the enclosure can be maintained at 23 degree Celcius.

- A 5'x5'x5' heavy block of concrete should be installed inside the enclosure. No

magnetic material can be used in this block. Use of non-magnetic SS316 is must for the concrete structure. Test report for SS316 must be provided. The drawing of the same with exact dimentions will be provided later on.

- Inside of the enclosure must be painted with a pleasant color.
- The exact design will be discussed with the vendor after they pass the technical requirement.