





# **LBNF Primary Beam Project Update**

**Anne Norrick** Friday 9am 5 April 2024

## **Primary Beam**

## Magnets

#### What is included

All conventional magnets needed for extracting the beam from the Main Injector/Recycler and moving the protons to the target. Includes stands to hold the magnets, and plans for installation.

#### **Ongoing Work**

- » Magnet current leads established.
- » Tooling refurbishment work will begin when HAB roof replacement and Mu2e materials moved from the building.
- » Kicker capacitor PO issued, ferrite bids currently being decided.
- » Kicker prototype magnet reassembly begun.
- » Testing alternative bearing plates for magnet stands.
- » Working on updated quotes on the magnet vehicle

## Magnet Power Supplies

#### What is included

Power supplies needed for any and all magnets used in the primary beam.

#### **Ongoing Work**

- » Drafting specification documents for E:207 Power Supply.
- » Proceeding with Dipole and Quad power supply filter designs.
- » Addressed action items from AD Reliability Workshop.



## **Primary Beam**

## Primary Water System

#### What is included

All water cooling for all magnets and power supplies.

### **Ongoing Work**

- » Continuing work on LCW piping and bus routing to the primary beam enclosure for magnets and through the power supply room.
- » Continuing work on the pump room equipment and LCW piping layout and modeling.

### Vacuum

#### What is included

Beam pipes and all of equipment needed to create and maintain vacuum in the beam pipes.

### **Ongoing Work**

- » Releasing drawings for the beam line vacuum.
- » Ceramic beam tube samples are being tested for outgassing.
- » Phase II coated tube samples are expected from the vendor in the end of may.
- » Work is ongoing to ensure that ceramic beam tubes will not be damaged in transit.

