Muon Collaboration

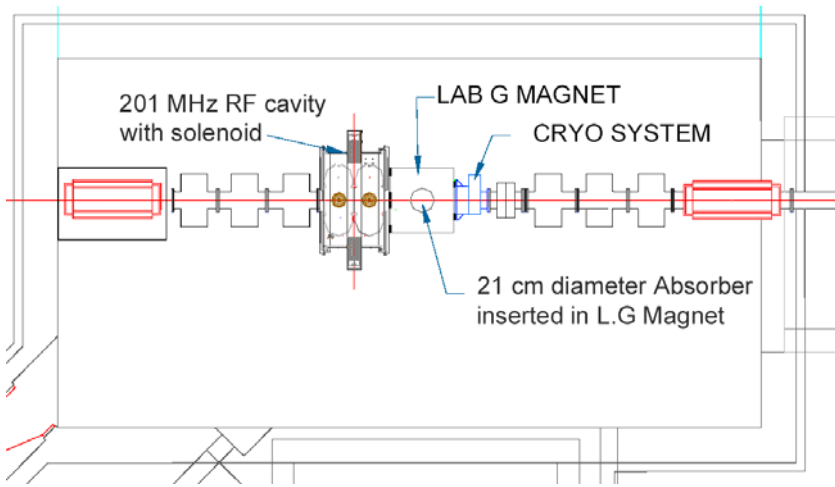
MuCool Test Area

400 MeV High-Intensity Proton Beam line

Muon Collaboration

MuCool Test Area (MTA)

- Facility to test all components of cooling channel (not a test of ionization cooling)
  - At high beam power
    - Designed to accommodate full Linac Beam
    - 1.6 X 10^{13} p/pulse @15 Hz
      - 2.4 X 10^{14} p/s
      - ≈ 600 W into 35 cm LH_2 absorber @ 400 MeV
  - RF power from Linac (201 and 805 MHz test stands)
    - Waveguides pipe power to MTA



Muon Collaboration

MuCool Test Area (MTA)

- Construction of facility slightly ahead of schedule
- Beneficial occupancy is expected to be in September
- First Use
  - Convective LH_2 absorber tests
- 201 and 805 MHz RF testing towards end of FY 04
  - Installation of LH_2 and LHe systems in FY 04 depends on funding
- Beam to area in FY 06

Status as of May 20

MUCOOL Test Facility

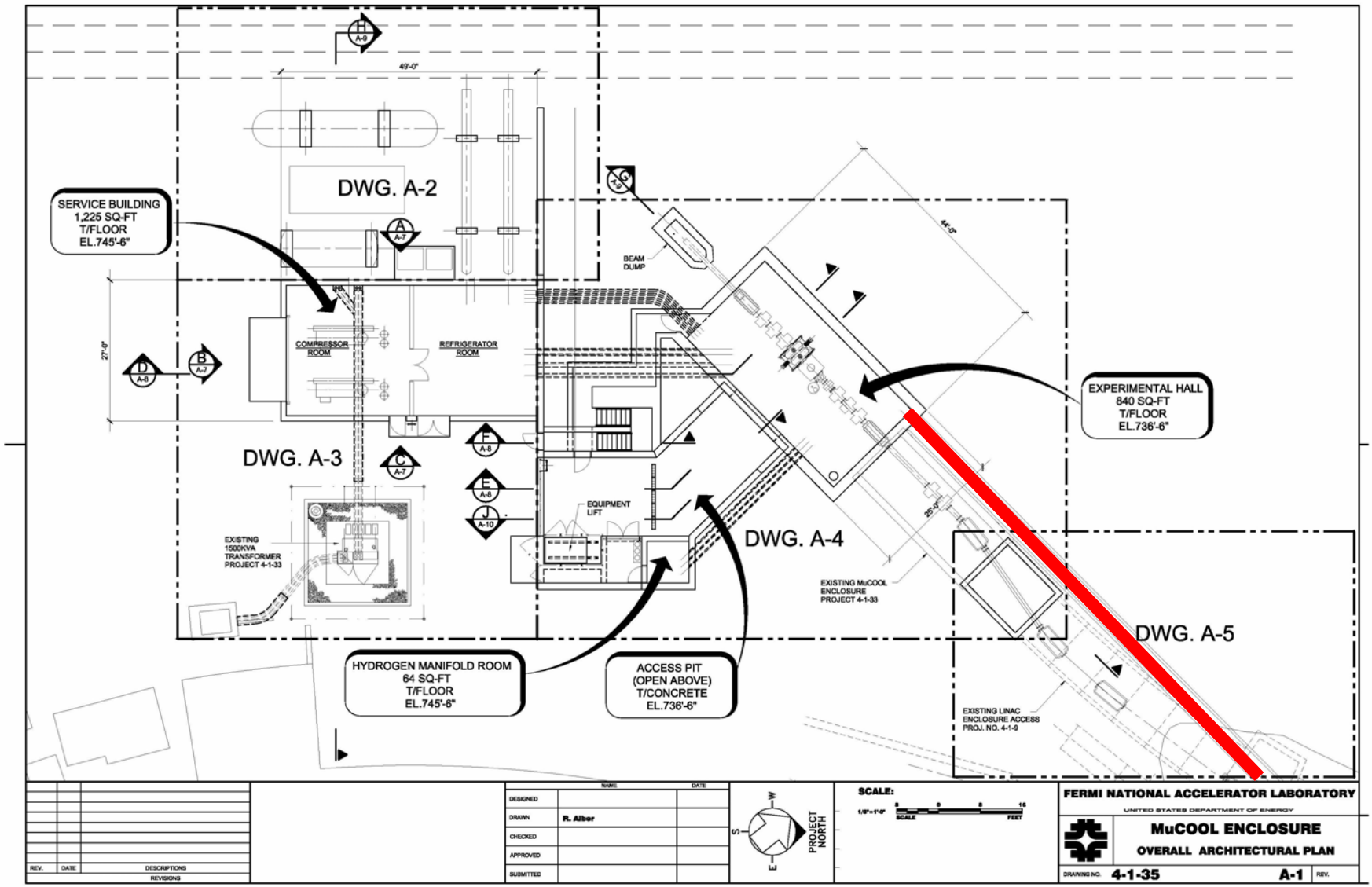
Status Report

Milorad Popovic
Project Manager
May-03

MuCool Site, 2-May-03

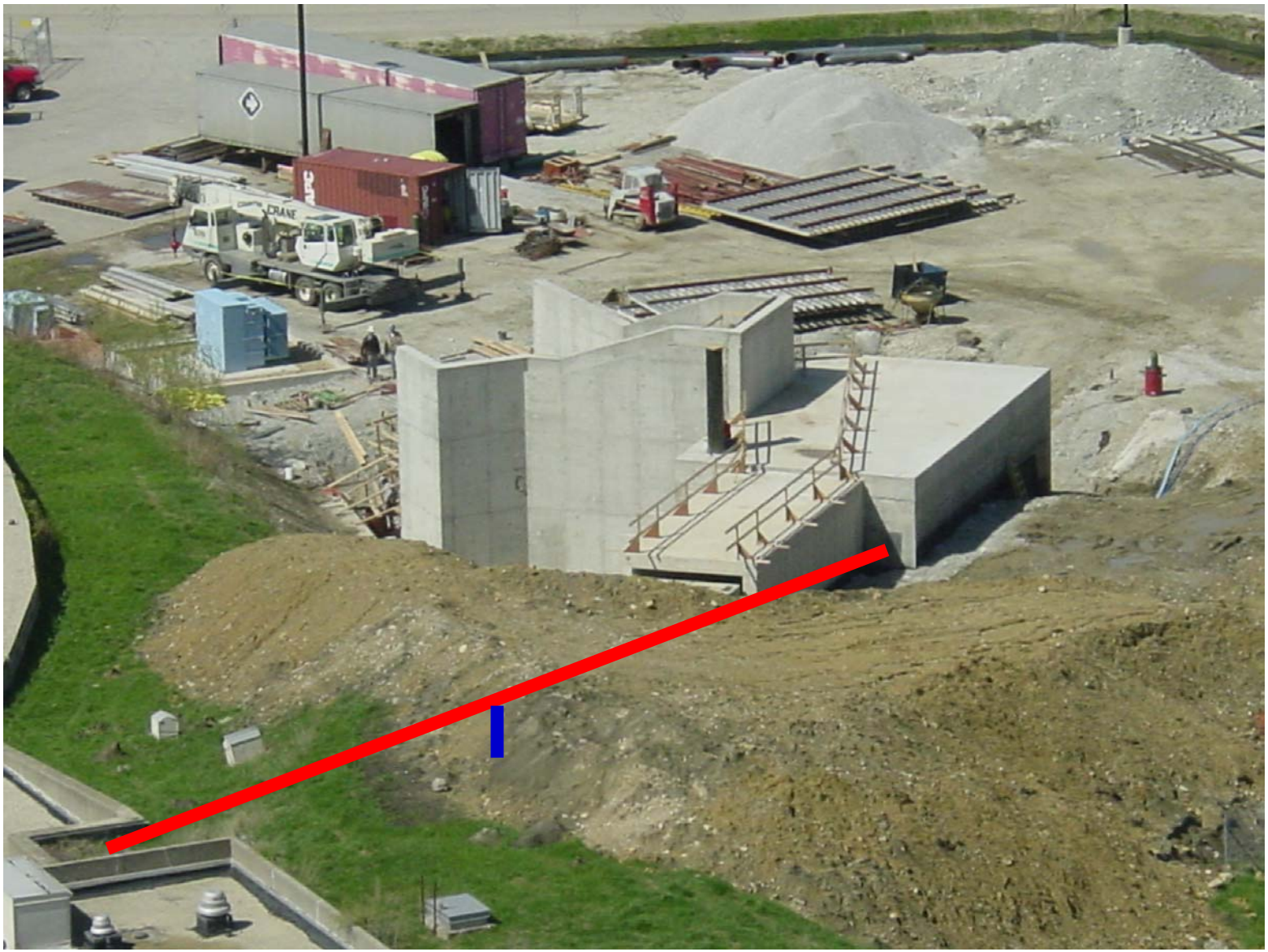
RF Trench

MuCool Site Plan, as May-03

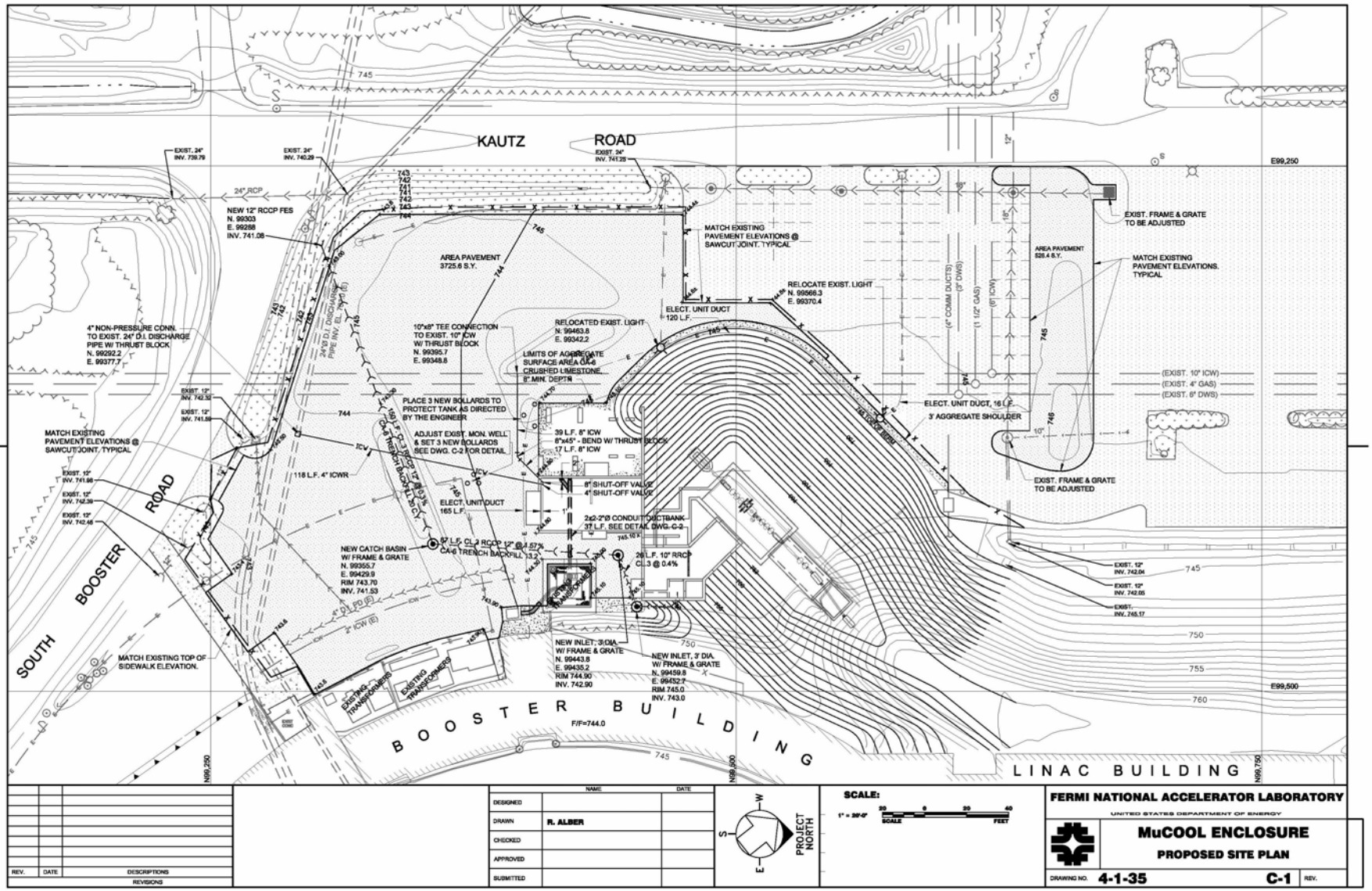


RF Trench & Linac

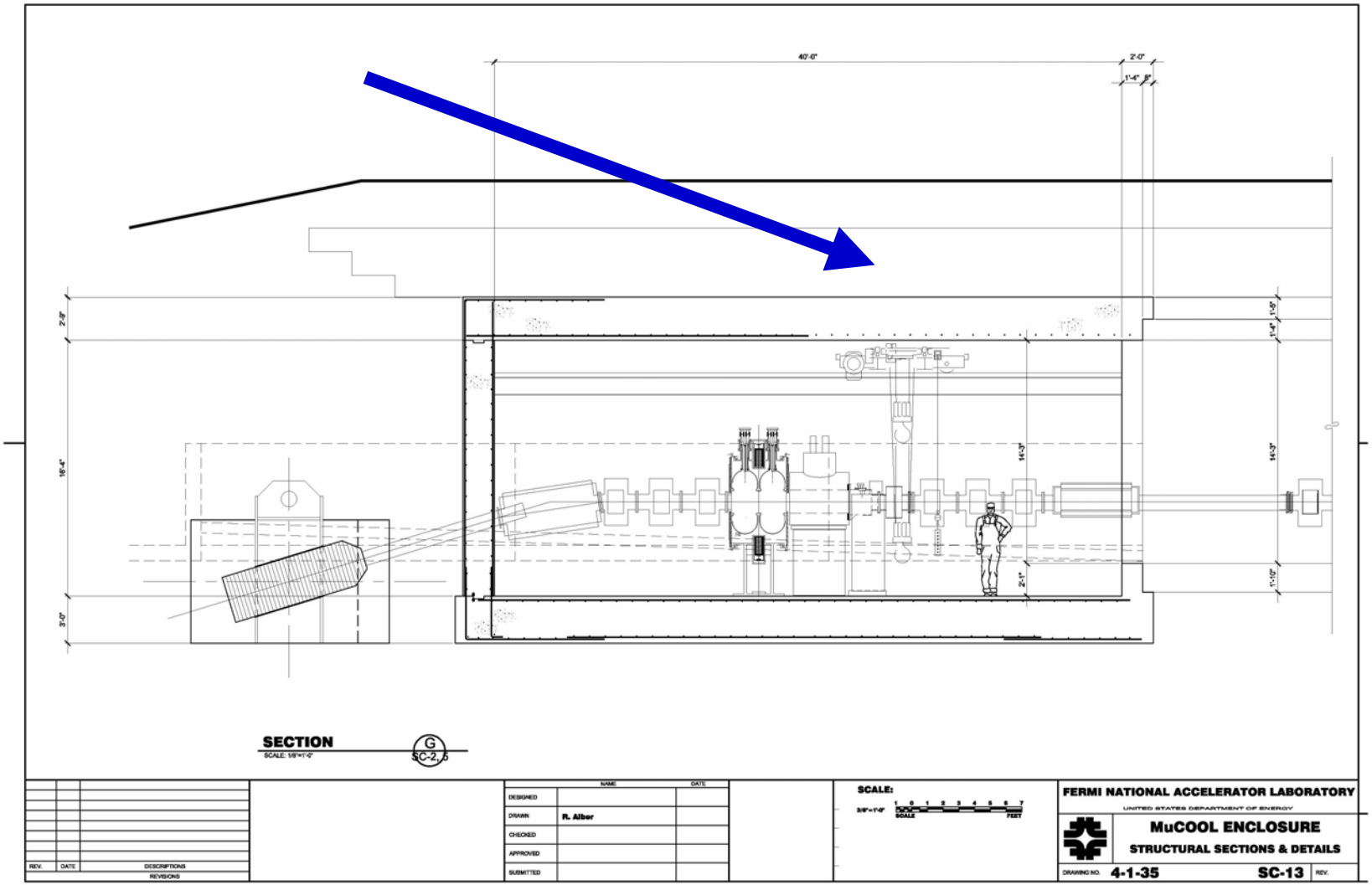
RF Trench & Linac Berm



MuCool Site, Roads, Utilities, Berm…



Shielding Steel



Shielding Steel