MuCool Test Area

400 MeV High-Intensity Proton Beam line
MuCool Test Area (MTA)

(Artist's conception)

- 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 \times 10^{13} \text{ p/pulse} \at 15 \text{ Hz}
      - 2.4 \times 10^{14} \text{ p/s}
      - \approx 600 \text{ W into} 35 \text{ cm LH}_2 \text{ absorber} \at 400 \text{ MeV}
  - RF power from Linac (201 and 805 MHz test stands)
    - Waveguides pipe power to MTA
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 Site, 2-May-03
RF Trench
RF Trench & Linac
Shielding Steel
Shielding Steel