

The general concept to date

- The present extraction of the Main Injector into the NuMI primary beam-line will be used.
- An additional tunnel will be constructed starting from the approximate location of the NuMI lower Hobbit door, at the end of the carrier tunnel, in order to transport the proton beam to the west.
- The radius of curvature of the tunnel bending west will be similar to the Main Injector curvature which will enable protons with energies up to 120 GeV to be steered along the bend using conventional magnets
- The target hall length is ≤ 45 m.
- A decay tunnel length of up to 400 m can be accommodated on the site assuming the near detector is 300m from the end of the decay pipe.
- The low energy neutrino flux can be enhanced by increasing the decay pipe radius. A radius of ~ 2 m would be desirable.
- For a ~ 2 MW beam the concrete shielding needed around the decay pipe will be ~ 2.5 m