

THIS LOG DOCUMENTS CURRENT FILES FOR NuMI EXTRACTION / PRIMARY BEAM DESIGN, ALONG WITH DESCRIPTION OF CHANGES SINCE PREVIOUS RELEASE.

OFFICIAL BEAM DESIGN RELEASE IS DESIGNATED BY

- **NuMI0x_Vx.x beam design** with release date.



Working updates are listed with

- *file name and date, plus changes since previous release [affected systems]*

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Working update - 082504;

- *NuMI_121102_g.ces0.doc (TRANSPORT)*
[Impacts string HV101 rolls and alignment – 1.1.6]

Changes are:

1. Rolls of magnets HV101-2,-3,-4 and -6 changed to account for altered fields due to magnetic shielding.
2. Vacuum devices downstream of HV112 are included. BEWARE, this beamsheet is inconsistent in the inclusion of vacuum devices..
3. Precise locations of some trims and instrumentation, as required to fit all components together in the tunnel, included. BEWARE, locations of trims and instrumentation are more precise in some parts of the beamline than others.

Working update - 050704;

- *NuMI_121102_f.ces0.doc (TRANSPORT)*
[Impacts instrumentation stand placement, alignment – 1.1.6, ACNET name inputs, locations - 1.1.8, vacuum layout design – 1.1.7]

Changes are:

1. PM111 moved upstream ~ 1.2 meters to elevate better above floor for stand clearance.
2. VT113 renamed VT114 to be in sync with naming convention.
3. Move upstream BPM's (HP101, VP101) downstream by ~ 1.5 meters to just upstream of PM101. Move TOR101 to downstream of PM101 for better stand clearance.
4. Add resistive wall monitor. Position downstream of PM101.
5. Add OTR monitor. Position with downstream instrumentation station. (HPTGT, VPTGT, PMTGT).

Working update – 012204:

- *NuMI_121102_e.ces0.doc(TRANSPORT)*

Changes are:

1. Extraction region updated to most recent MI parameters – proper length MI BPM, MI quad offsets and trim dipole values.
2. Horizontal tune changed as a result of the above. Necessitated new rolls in HV101 of up to 2 milliradians.
- 3 Accurate instrumentation positions and device separations in stub region implemented.
4. .253” added to line just before shield wall, to return target region station values to previous norms.
5. Ds and Fs added to quadrupole names.