

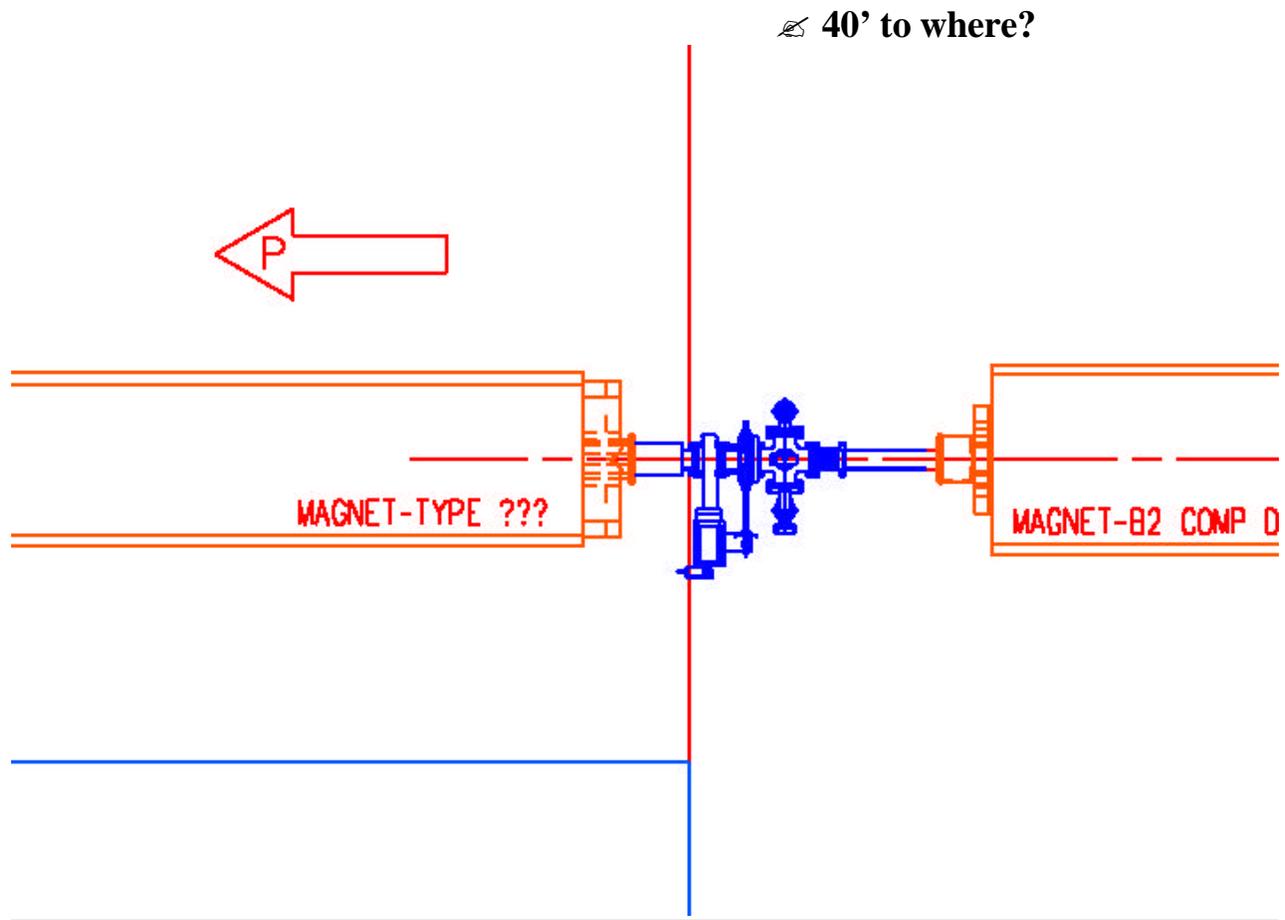
Comments on current design M Church 11/13/03

Corrector packages:

- Number and type of correctors (H,V,SQ,S,SS,O coils) may not be suitable
 - no S coils between B44 and C16; no SS or O coils specified
 - more SQ coils than necessary (in my opinion)
 - this will be difficult to specify exactly, therefore strategy should be to put in more extra coils. This has been the strategy in the past – ie, there are more installed corrector coils than used corrector coils
- should we use a “nested coil” design to make room for more correctors?
- **Question: how many coils/BPMs can we reasonably fit into a 56” and 72” (slot length) package?**

Location of Q1/Q2/Q3:

- 40' keep-clear distance from IR.... Measured to where?



drawing from http://www-btev.fnal.gov/DocDB/0002/000203/002/C0_collision_hall.pdf

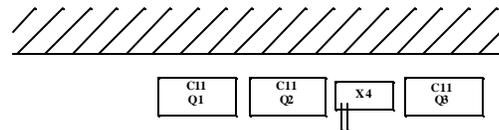
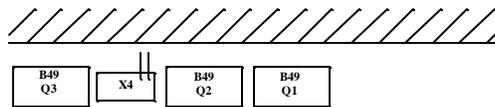
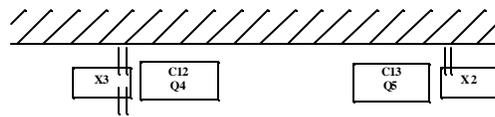
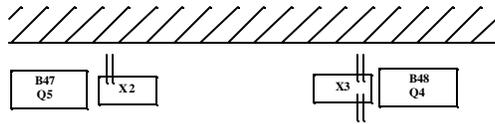
High power leads:

- where are they located? On quad, on adjacent spool,

- Q5 + d.s. 56" spool (10KA)

- Q4 + u.s. 56" spool (10KA, 5KA)

- Q1 + Q2 + 56" spool + Q3 (10KA, 200A)



Orientation of power leads for C0 IR
(ISP power leads are oriented toward the tunnel wall)

1) Item names: most of these are from JJ's MAD file, but not all. Naming convention is certainly open for discussion.

2) Item location: I have tried to stick with standard practice. I have only attached a "location" to magnetic elements.

3) Corrector packages: There appear to be 2 new types of spools -- a 72" model, which I have called X1 and a 56" model which I have called X2. If we keep the presently proposed corrector packages then: a) we have no sextupole correctors between B44 and C16 (39 dipoles); I am not sure this is a good idea. b) In my opinion there are more skew quad correctors than necessary. c) in my opinion there are unneeded dipole correctors in a few locations. d) we are abandoning 2 skew sextupole correctors and 3 octupole correctors.

4) BPM's: The number and location appear to be adequate. **Quad pickups might be used....**

5) High power leads: It is not clear to me where these are intended to be located.

6) Safety leads: These occur at every other spool. On the C-side I have shifted them a half-cell from their current locations in order to meet the "end condition" near the IR. Is this ok?