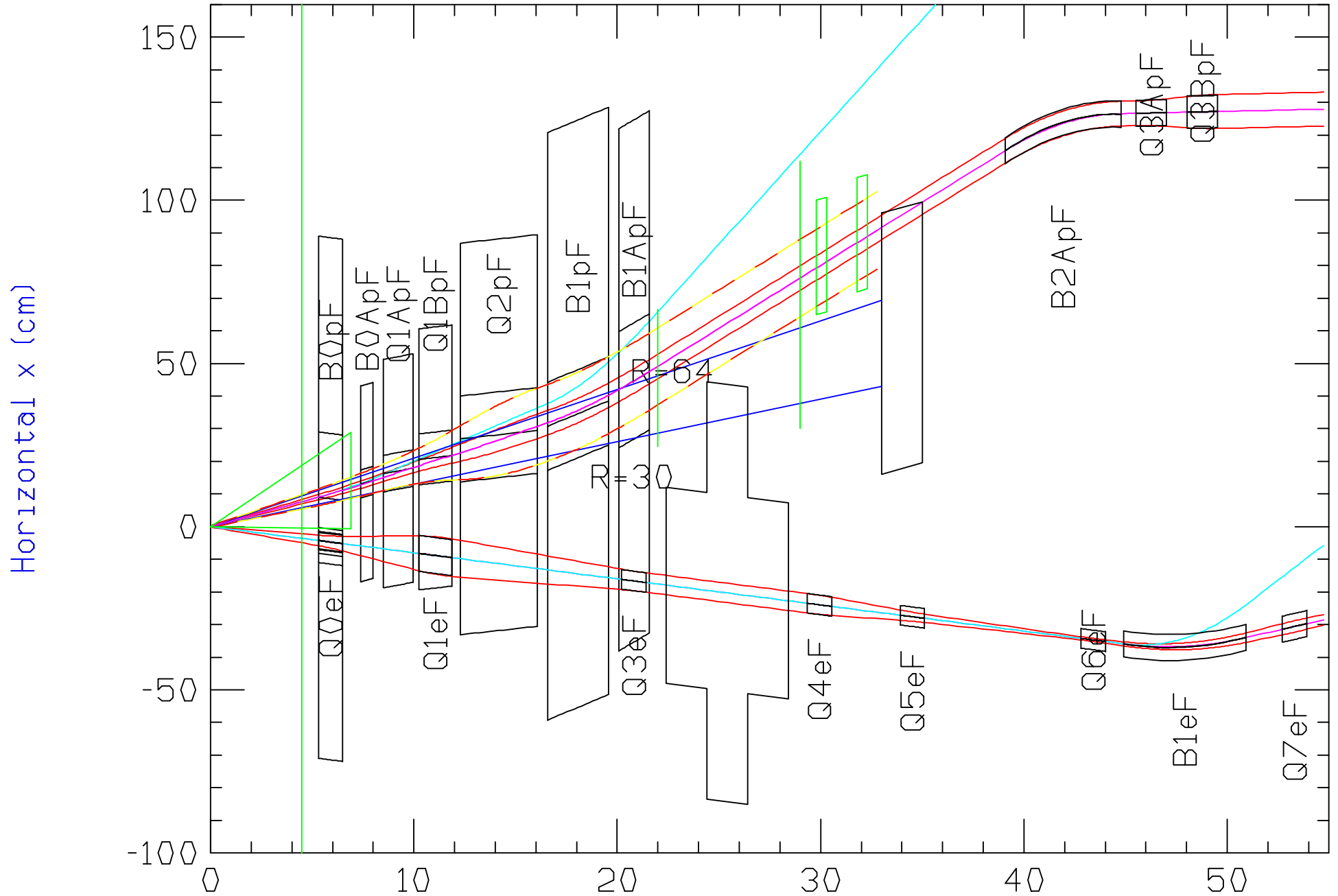


9/27/2019

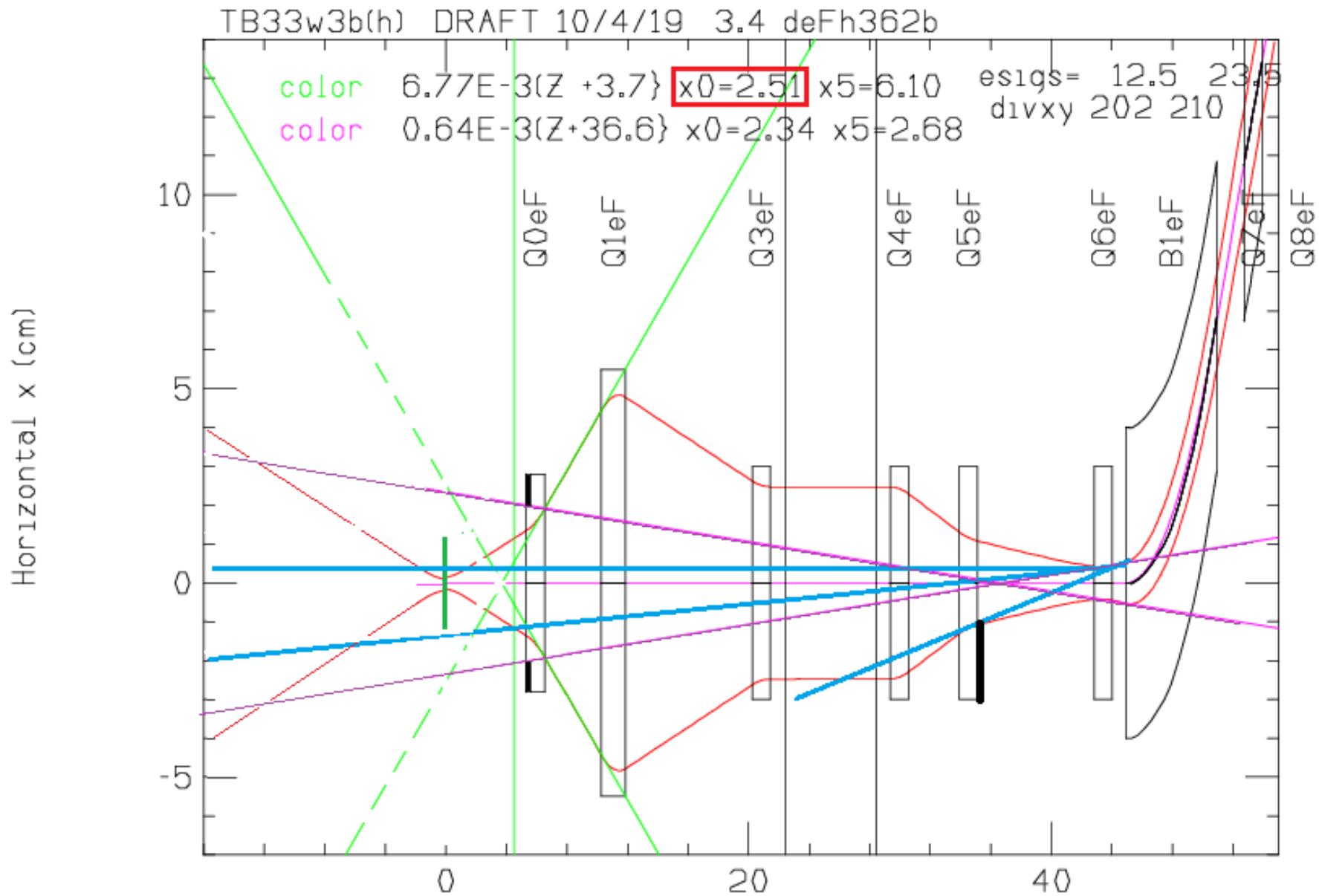
After Mike's visit

Add bend in Steve's lattice

TB33w3b(h) DRAFT 10/4/19 3.3 dbFh362b



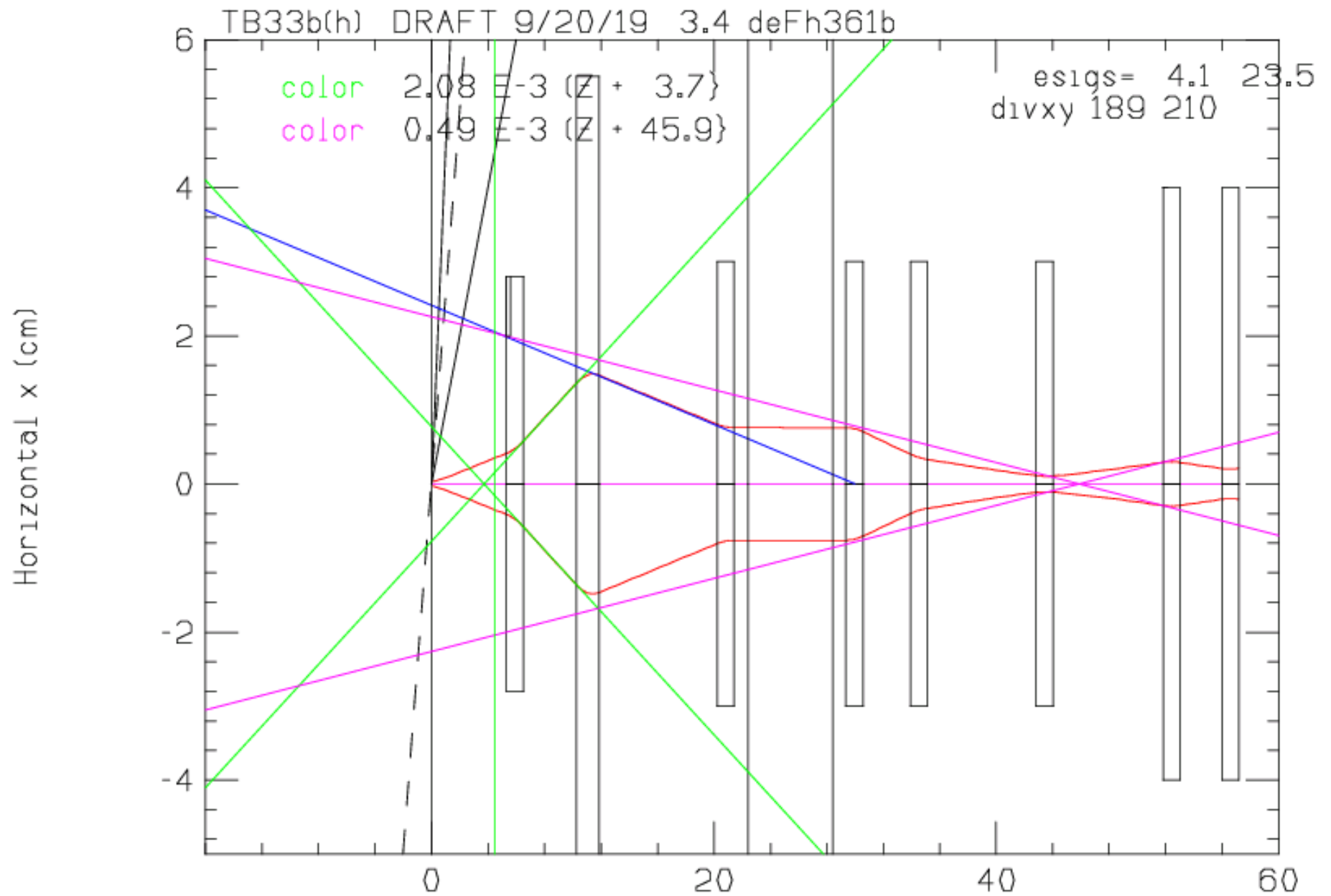
X Fans from the bend



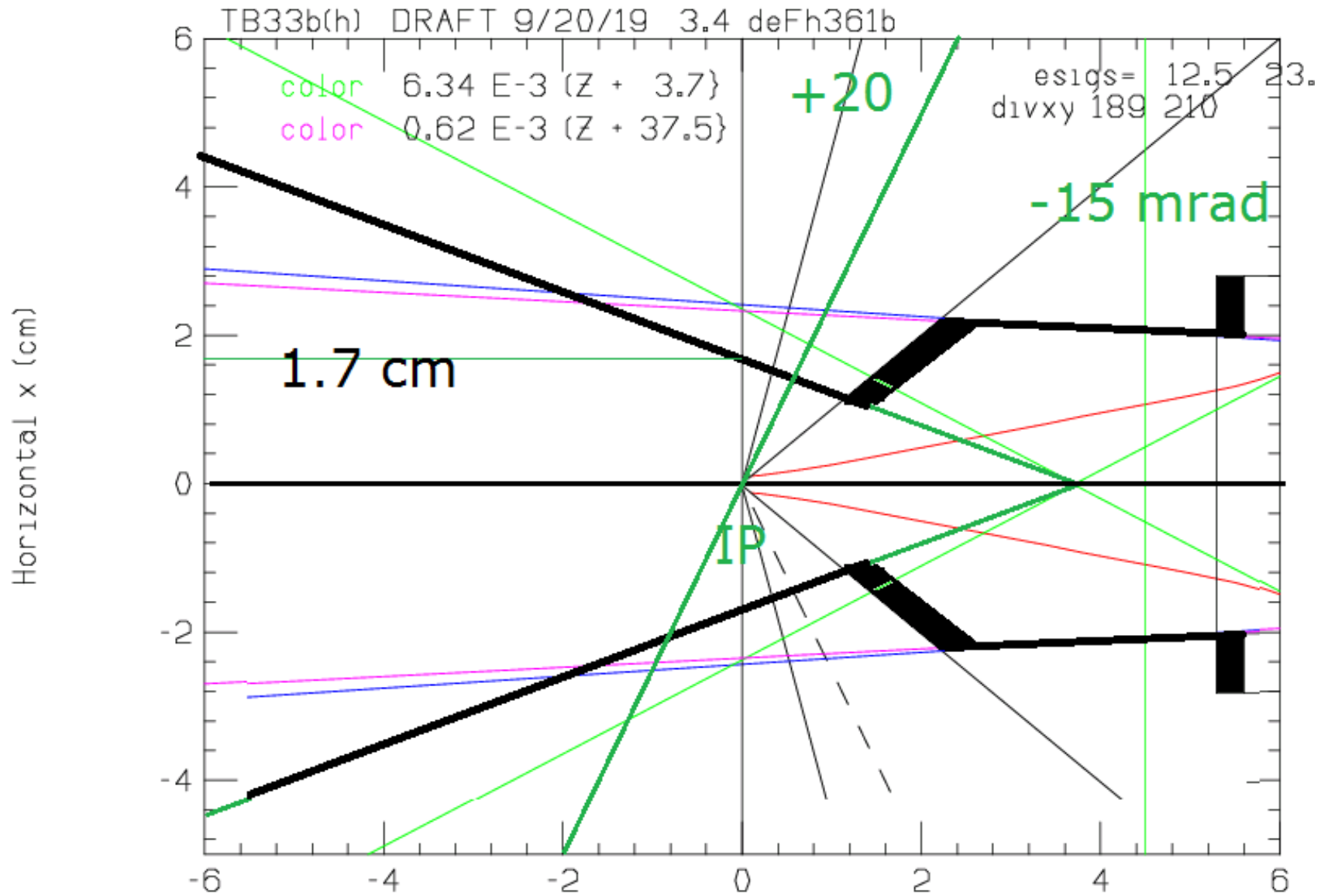
min IP pipe size > 5.02 cm

SR in crab

Fan at IP in x even at 4.1 sigma

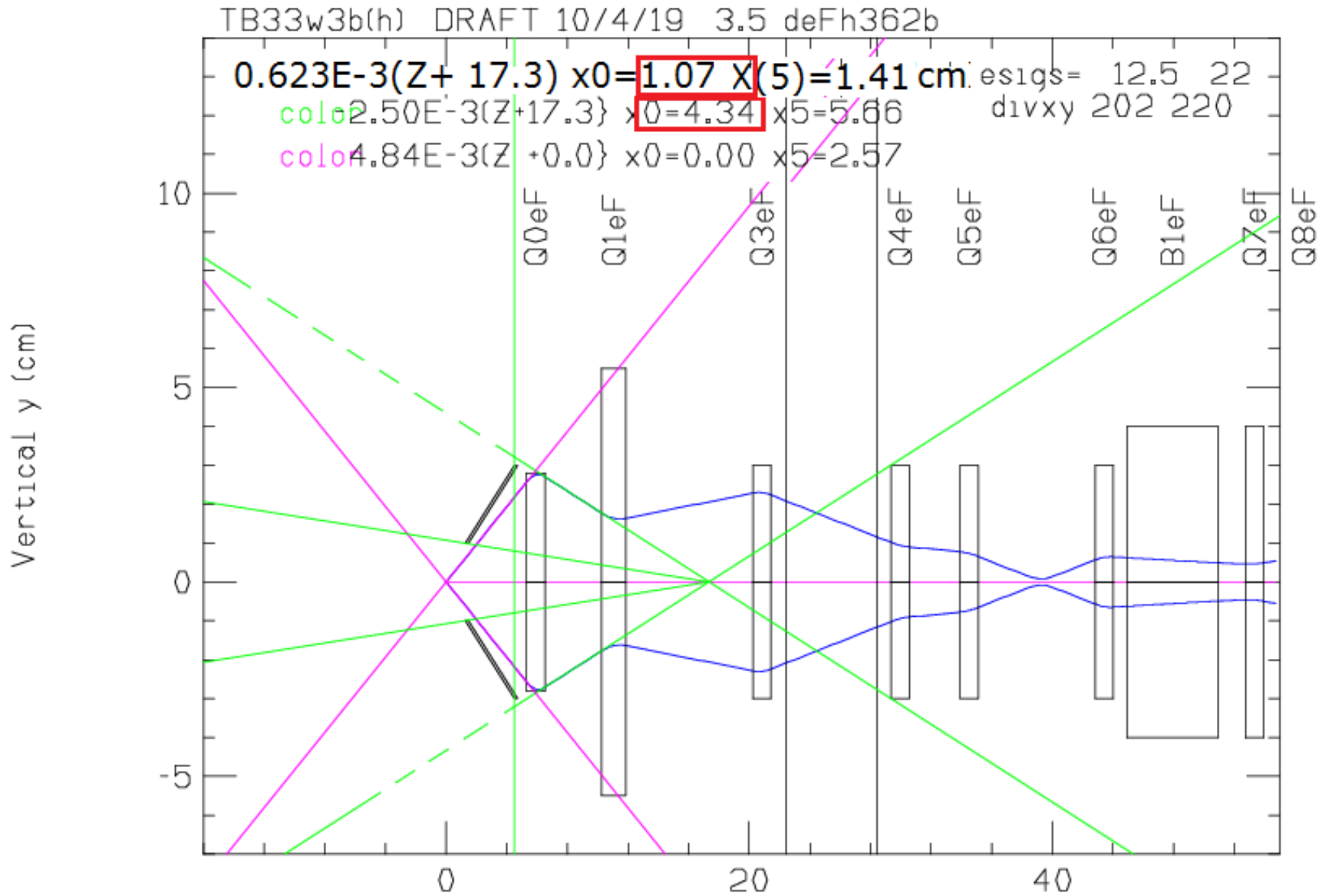


Proposed conical mask near IP



allows x pipe rad of 3.4 cm

Fan in y and 22 sigma with conical mask



No mask at Q0eF to allow the 22 sig

Comments

- SR in Crab needs mask and modified quads
- As before, some masking needed or pipe at $IR > 5$ cm
- Conical mask near IP allows ≈ 3.4 cm pipe
- This also reduces fan and thus aperture of Rear quads
- And allows 15 sigma instead of 12.5 sigma

Comments

- Above study uses Steve's e lattice.
e Crab at 20-30 m interfering with n beam.
- Option 1: move crab down 7 m
s crab at 29-36 m
- Option 2 My old unmatched lattice
e crab at 40-50 m

But

Option 1 brings crab much closer to bend

Option 2 has crab on top of bend

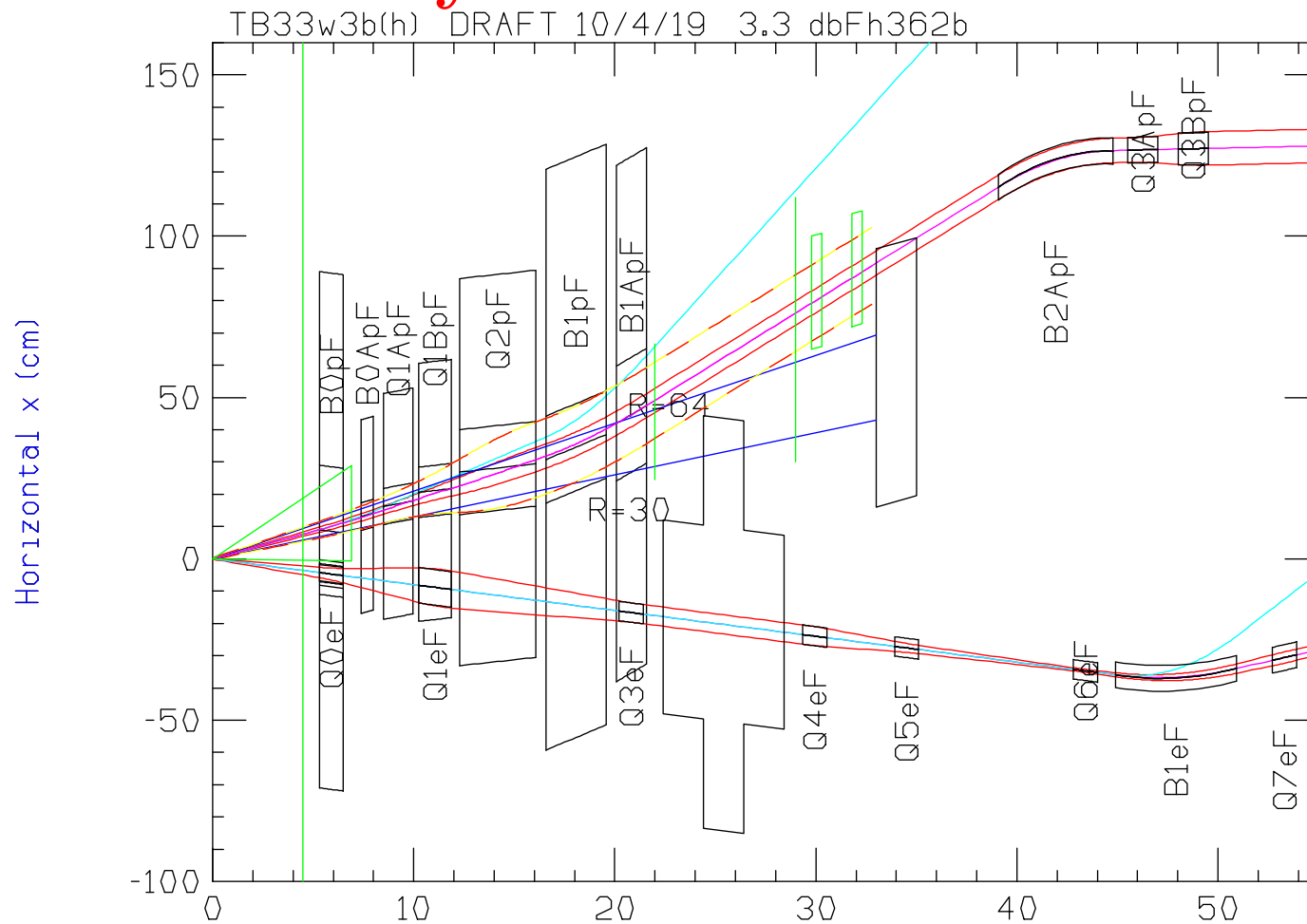
Can Steve move the bend back 7 m for Option 1?
or the crab beyond the bend for option 2 ?

Baseline Layout

No room for crab eF

(p magnet outlines, when shown, are of the yoke dimensions.)

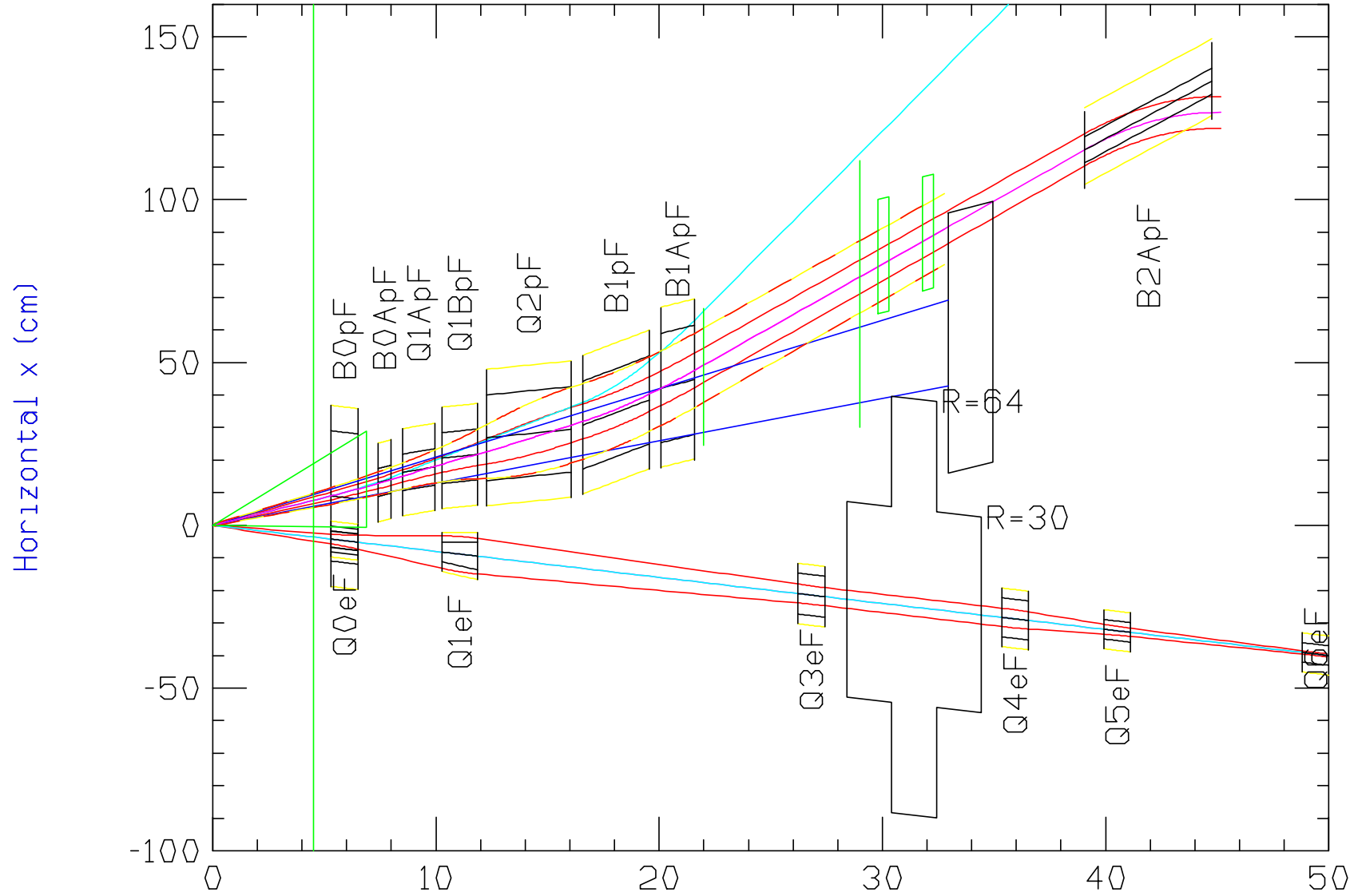
Baseline Layout



No room for e crab
(p magnet outlines, when shown, are of the yoke dimensions.)

Suggestion 1 Layout Modify eF lattice, leave ZDC

TB30c(h) 3.3 dbFh362c



Suggestion 2 Modify eF lattice, move ZDC

