

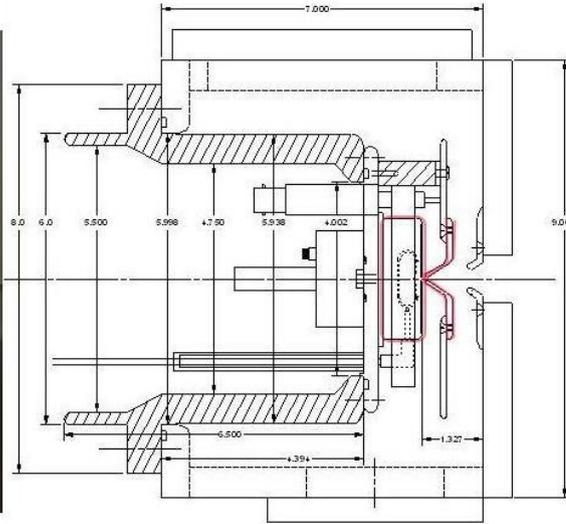
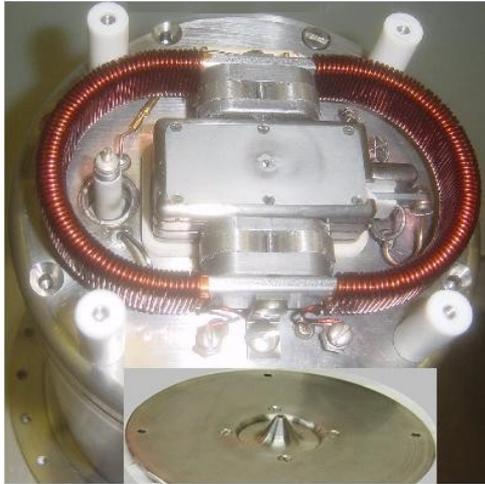
# Pre-injector Upgrade Updates (29 Sep – 13 Oct 2010)

C.Y. Tan  
13 Oct 2010

# Storage Area of our documents

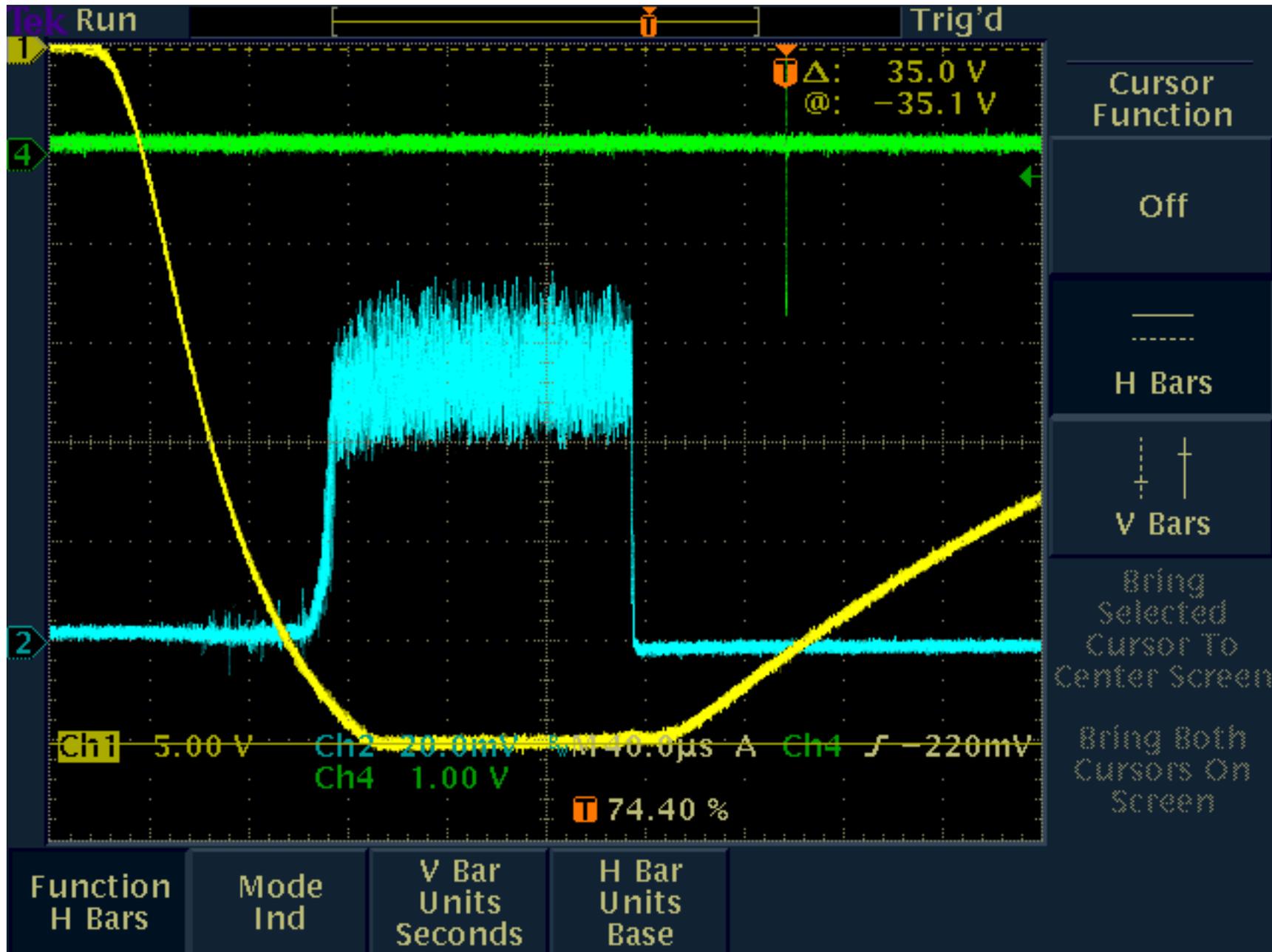
- \\Beamssrv1\booster.bd\public\RFQ Project

# Source Status

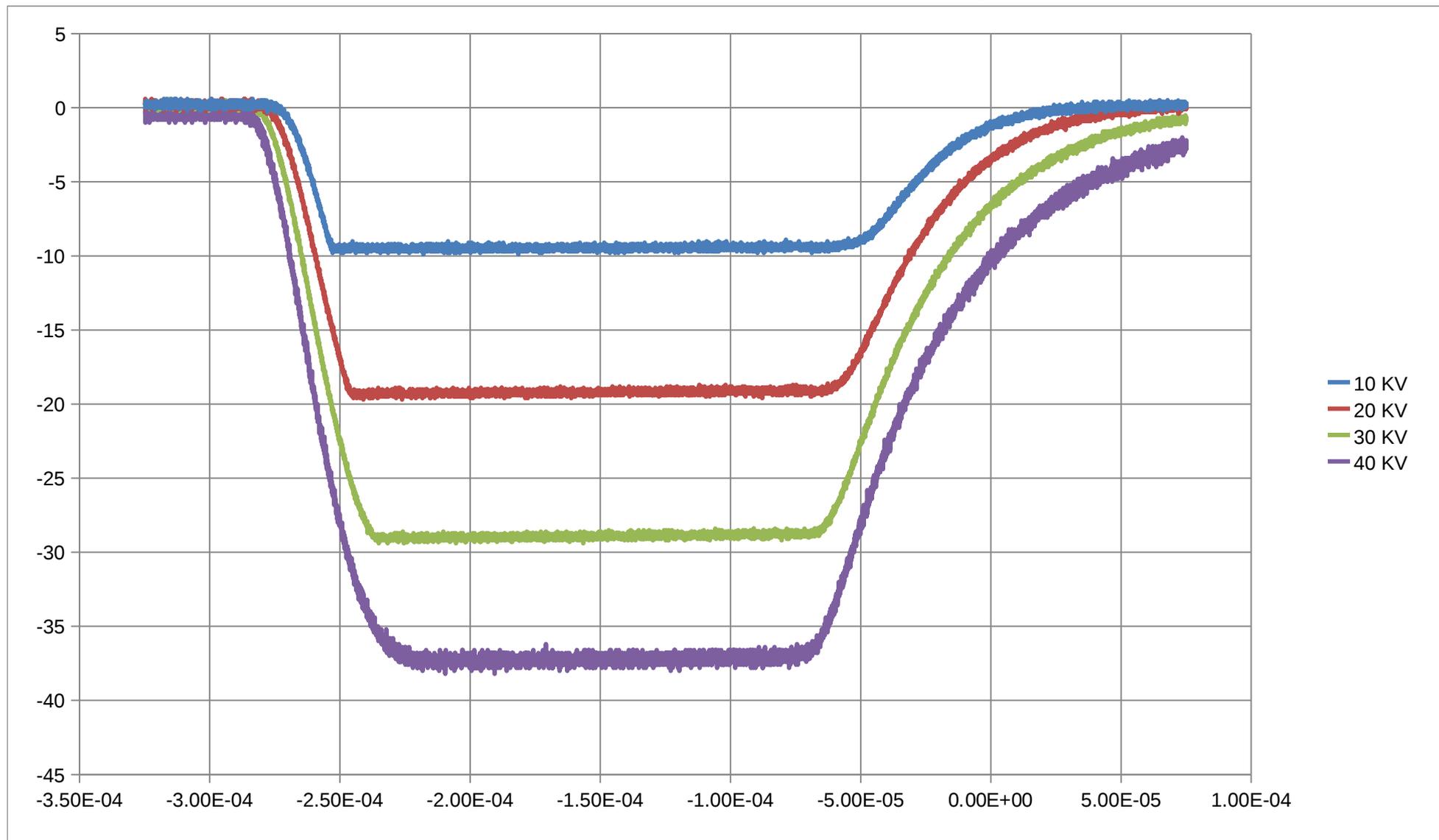


Device	Status	Comments
Source	Installed with HINS cone. 35KV extraction achieved on 12 Oct 2010.	New cone being manufactured. Turbo controller replaced, turbo is working. Problem with magnetic field strength for electrons. Moved it closer to cone.
Pulser	Tested up to 40kV with dummy load	Installed with new caps. Much less droop, 1V/us

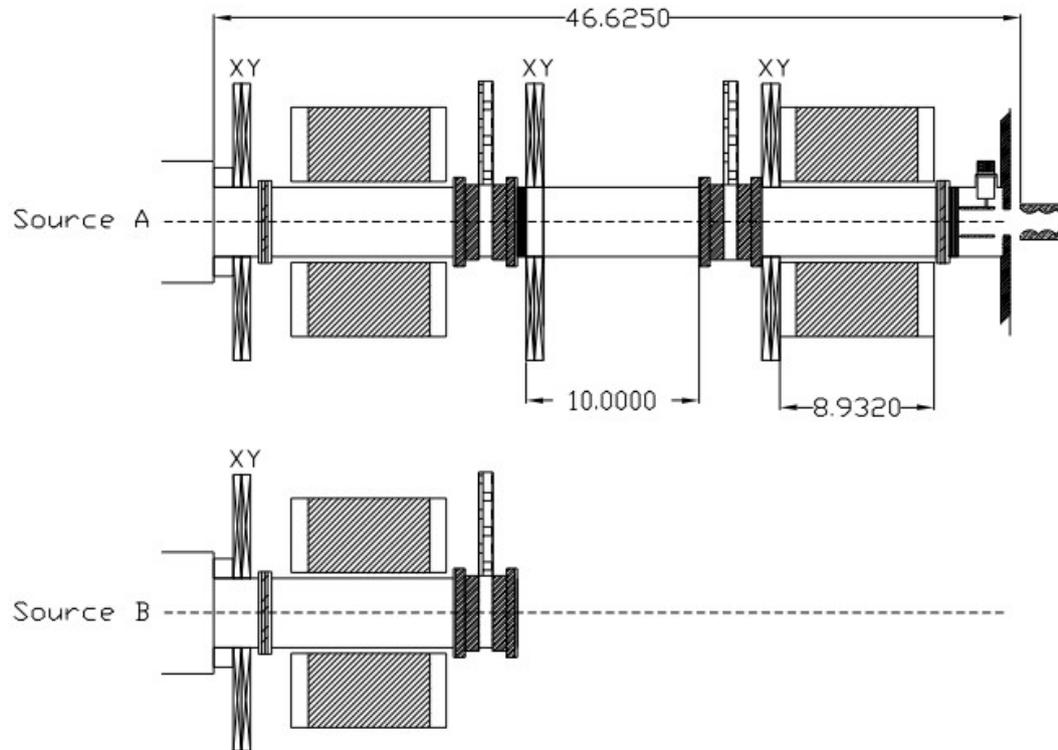
# 35 kV extraction



# Pulser with 2 caps

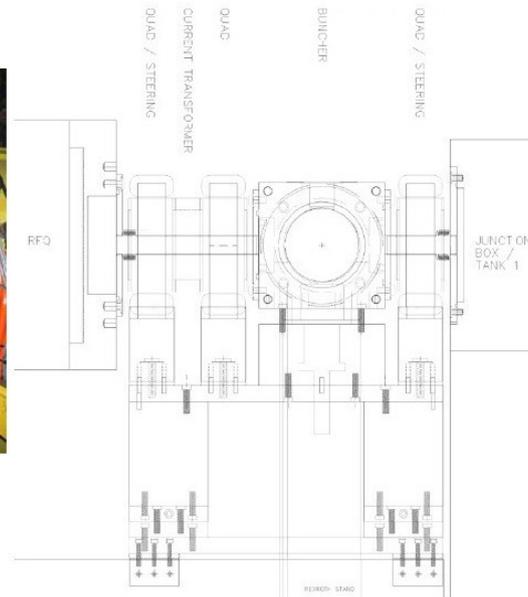
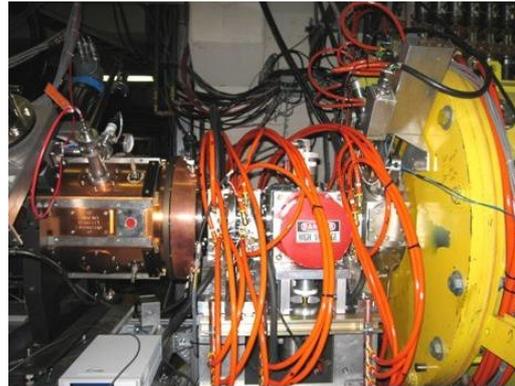


# LEBT Status



Device	Status	Comments
Power for solenoids	First pass at specs	Progress???
Correctors	Bdl=186.5 gauss inches	Specs being looked at before vendor bidding.
Einzel Lens		Beam shot at it at >35kV. No sparking
Pulser for Einzel	Being built for test	
Solenoids		Expect 1 <sup>st</sup> solenoid Jan 2011
Toroid	before sol 2	Cannot be inside tank

# MEBT Status

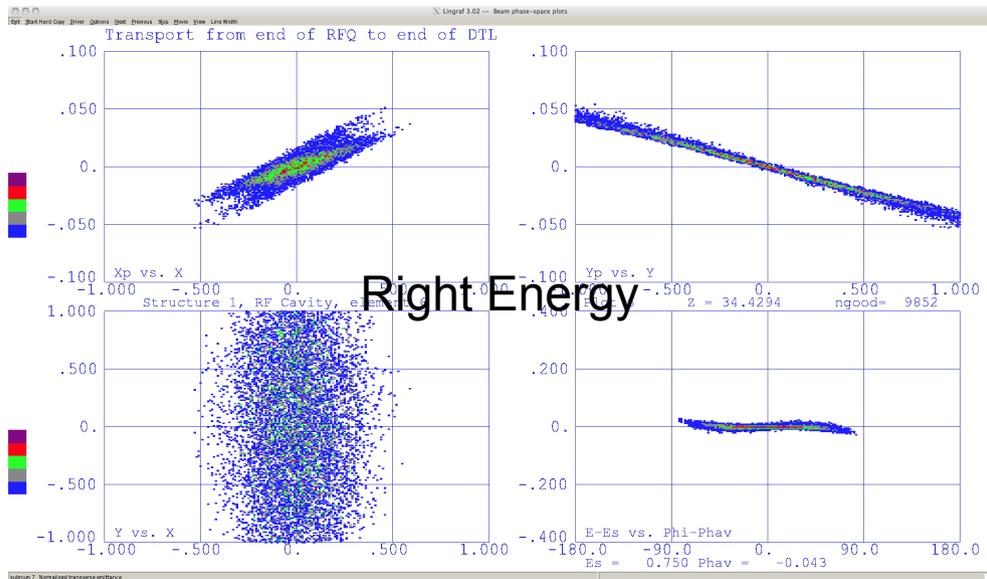


Device	Status	Comments
Quads	Design in progress. Includes dipole corrector in quad.	Sextupole problem solved with saddle correctors. Length of quad is 70mm.
Buncher	On order	
Power for quads	Specs to follow	Quads being redone.
Power for buncher		Use present buncher supply in the line.
Connection to Tank	Remove large flange of Tank1	

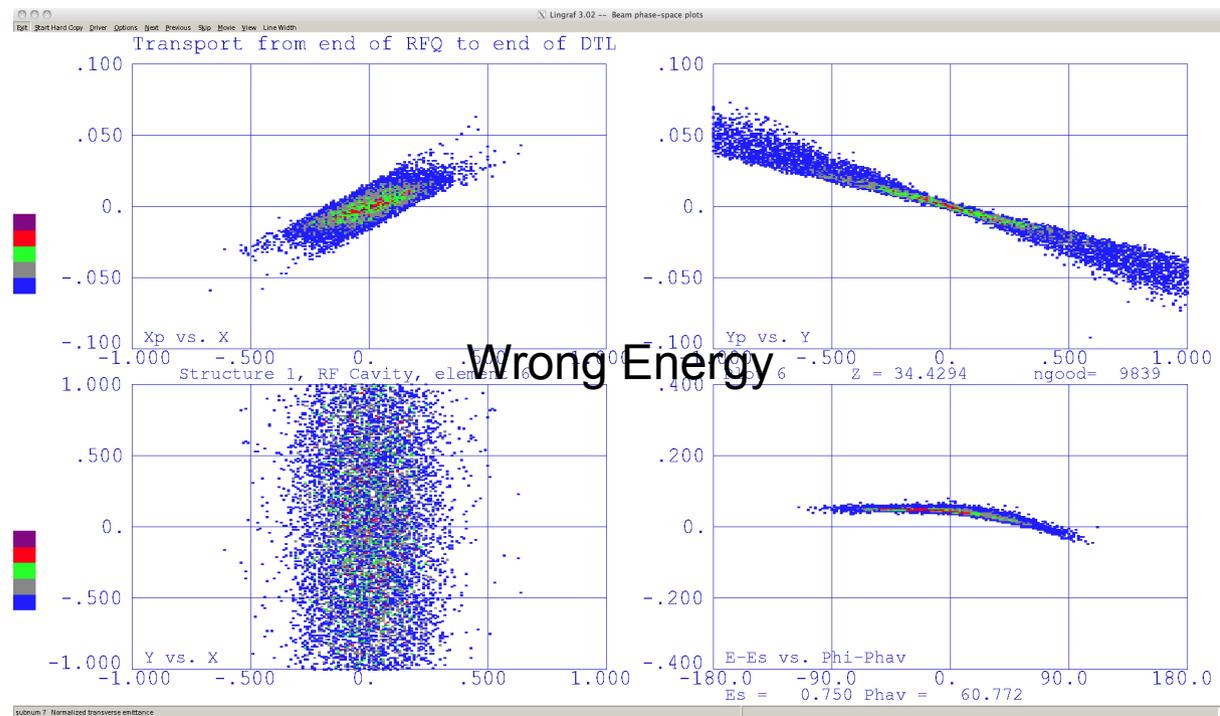
# RFQ Status

- PA being assembled.
- Schempp (05 Oct 2010)
  - Received PARI debug file
    - Differences between my output and his. Needs investigation.
    - Output energy is 760.8keV and not 750keV. Why?

# Right vs Wrong Energy



Right Energy

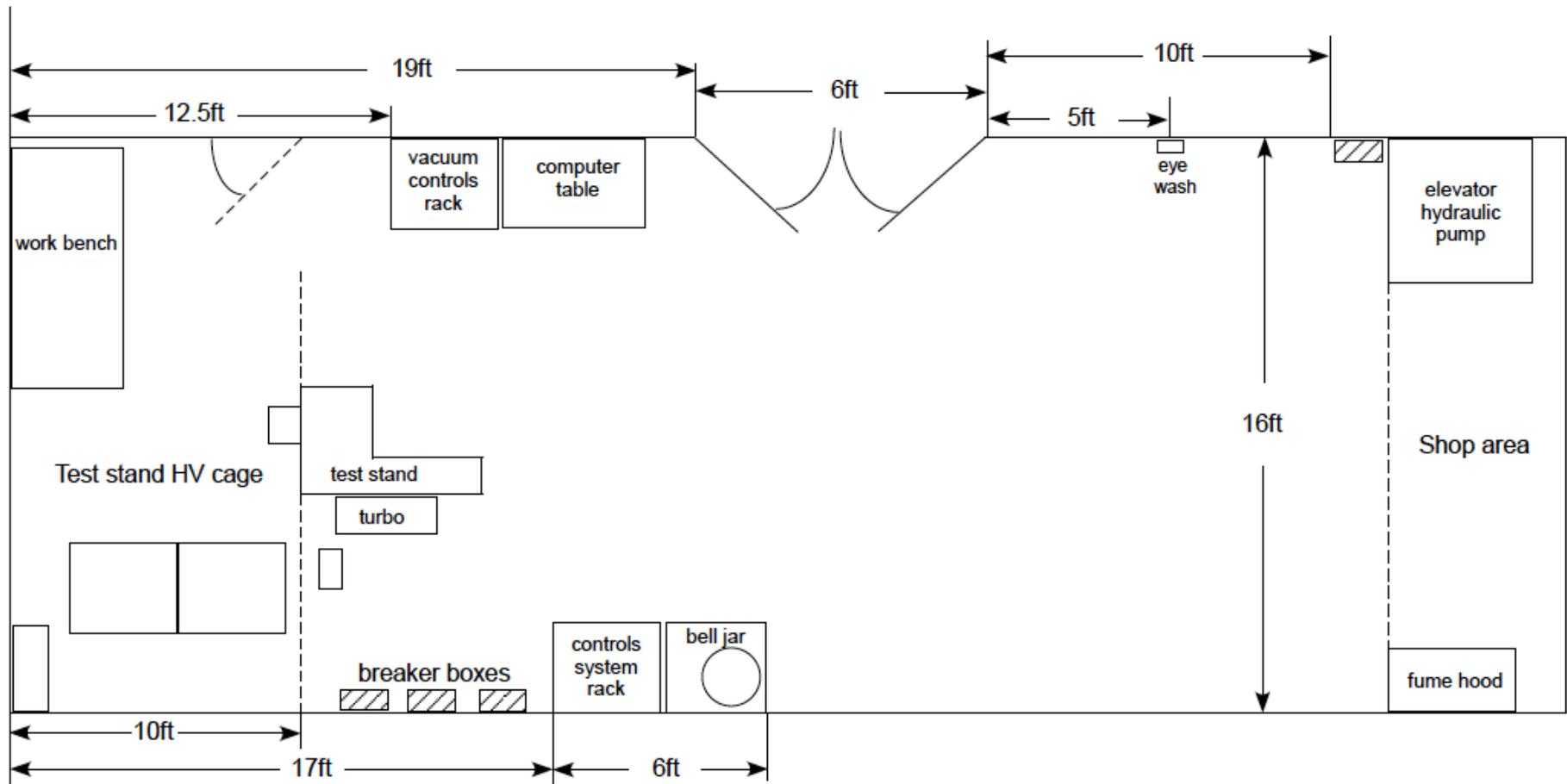


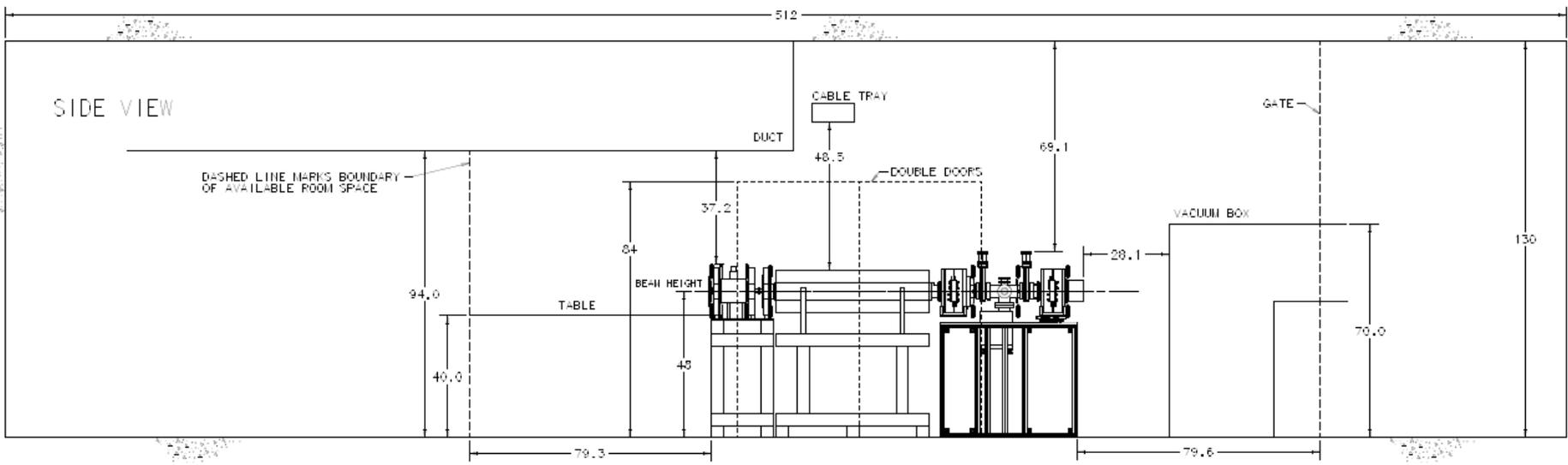
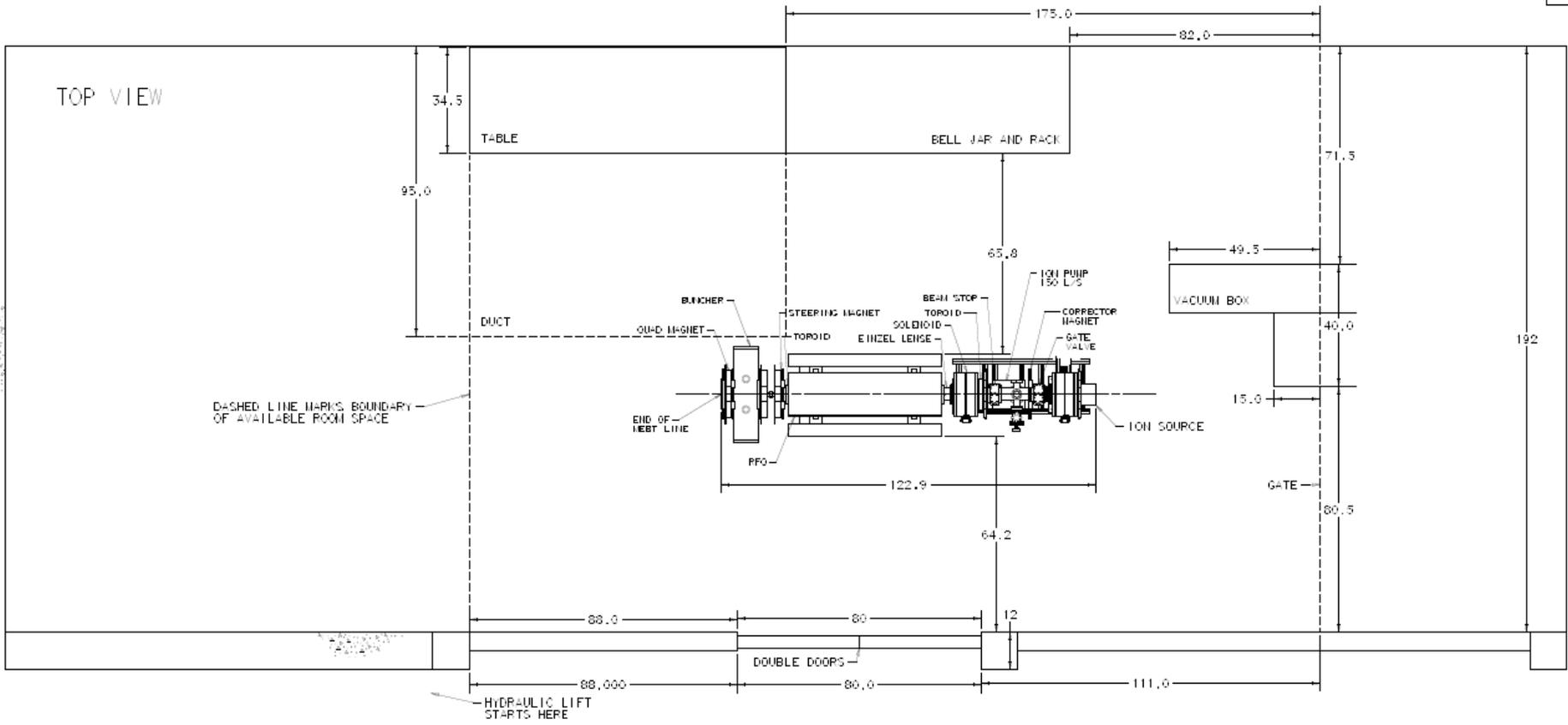
Wrong Energy

# Test Stand

- Room has been cleaned up.
  - Beam line layout in progress
    - Water – Bob Slazak
    - Electrical – Jim Ranson
- Need to test LEBT before RFQ connection
  - Wires, toroids at the end of the LEBT, same position as the RFQ.
- Design diagnostic line.
- Are drawings from Schempp sufficient to build table?

# Test Area





# Instrumentation

- Vic will give status.

# Safety

- When can the beam line layout in test area be done?

# Controls

- Elmie has been asked to make the first pass at putting in the required monitoring devices for the RFQ.

# RFQ reminders

- Schempp is vendor
  - Make sure that the vanes are cleaned! See ISIS email.
    - Some cleaning details supplied by ISIS.
  - Review and verify on site mechanical design and construction (already in contract).