

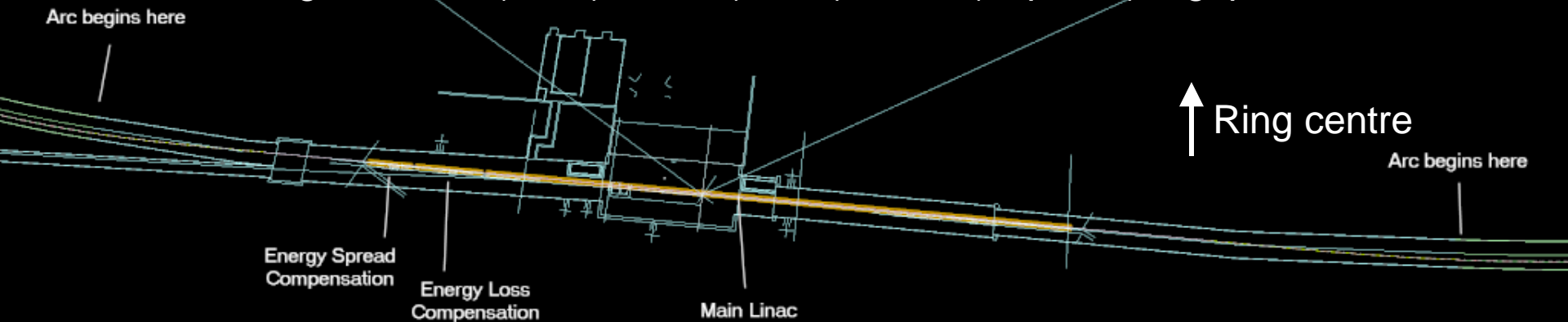
eRHIC Linac in 2 o'clock Tunnel Drawings

Muon1 Layout on RHIC Tunnel Plan

This is Sergey's linac placed in the centre of the straight

Transverse and longitudinal position can be adjusted by changing the FFAGs and the splitters respectively

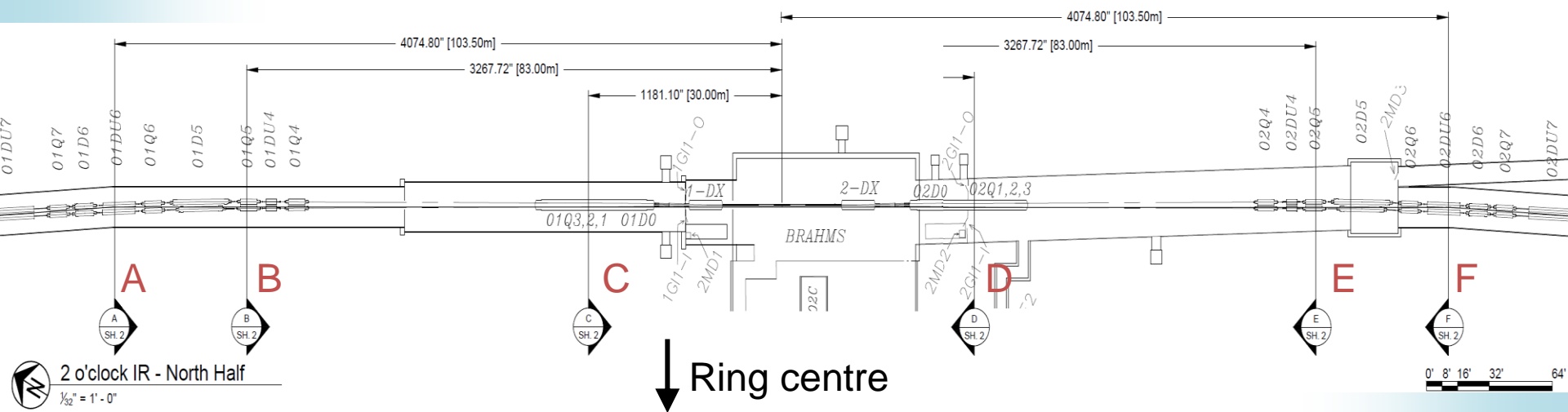
Length = 120m(main) + 15m(Eloss) + 10m(Espread) + gaps \leq 150m



Note: on left, linac finishes before tunnel split. Looks like if the linac started at the tunnel split, it would not go into thinner tunnel section on right.

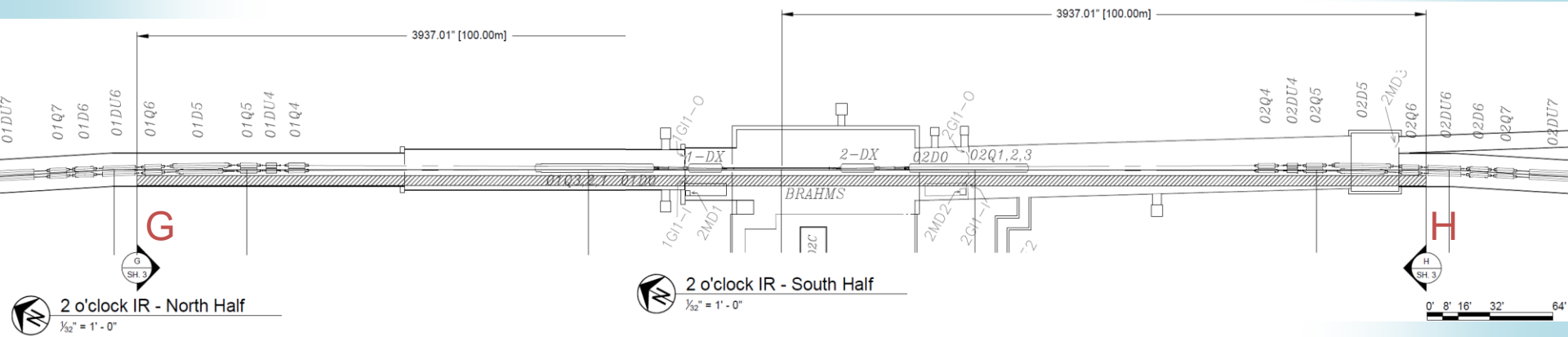
2 o'clock Drawing: Plan View

- Drawing Vadim sent me (other way up)
- True straight section is $\pm 103.5\text{m}$ (207m total)
 - Cross section points A-F
- Followed by angled straight and then arcs



Plan View with Old 200m Linac

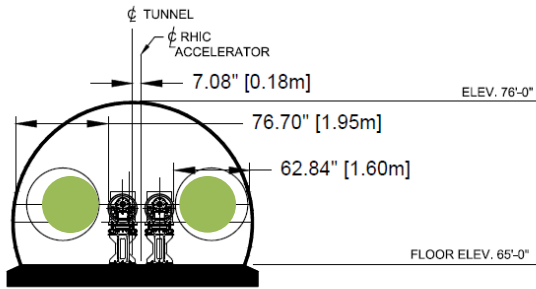
- This shows the linac (shaded) was planned to go on the inside of the hadron rings
 - Cross section points **G**, **H** are ends of this old linac



↓ Ring centre

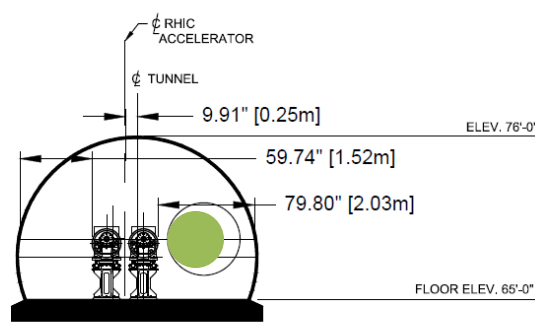
Cross Sections with 1.6m Ø Circles

2 o'clock IR - Sections



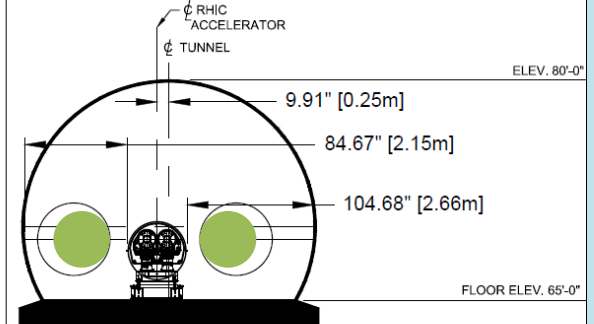
RING CENTER
→

A Section A
SH. 2
1/8" = 1' - 0"



RING CENTER
→

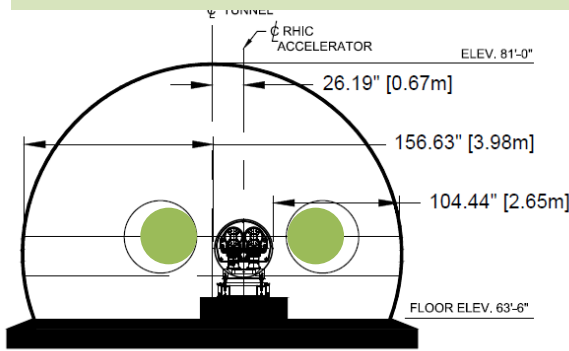
B Section B
SH. 2
1/8" = 1' - 0"



RING CENTER
→

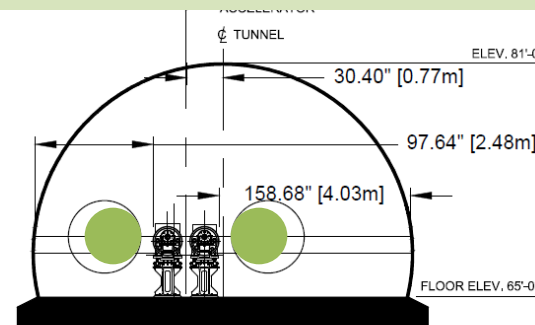
C Section C
SH. 2
1/8" = 1' - 0"

Sergey said 1.2m diameter instead. Smaller green circles show this to scale.



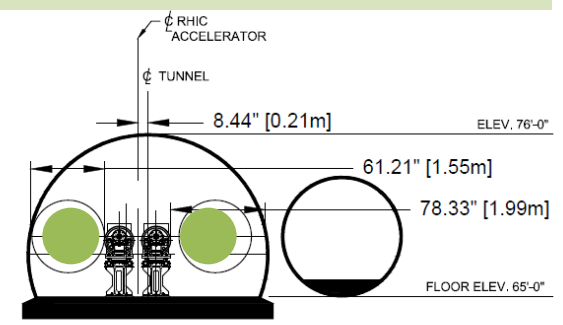
RING CENTER
←

D Section D
SH. 2
1/8" = 1' - 0"



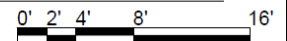
RING CENTER
←

E Section E
SH. 2
1/8" = 1' - 0"



RING CENTER
←

F Section F
SH. 2
1/8" = 1' - 0"



Which is the Yellow Ring?

- Removing the yellow ring may help slightly around inner corner of point E

