

Conventional facilities and construction schedule

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Part 1

Infrastructure

Items

Design of the radiation shielding was done and that of the floor refurbishment was done.
Design of others will be discussed.

- Radiation shields
- Cabling
- Cooling water
- Room temperature
- AC Power lines

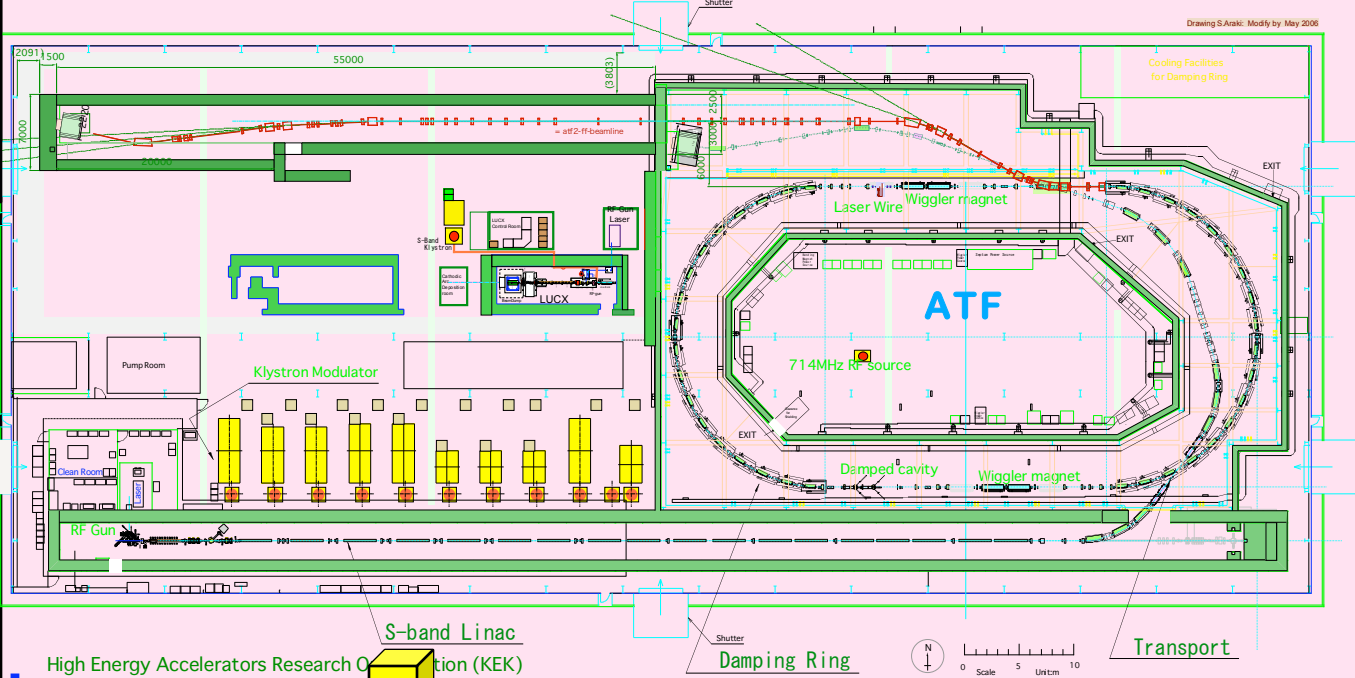
Extend in Dec. 2007?

Radiation Control Area
20 $\mu\text{Sv/h}$

ATF2 LAYOUT

For KEKB

ATF Control Room

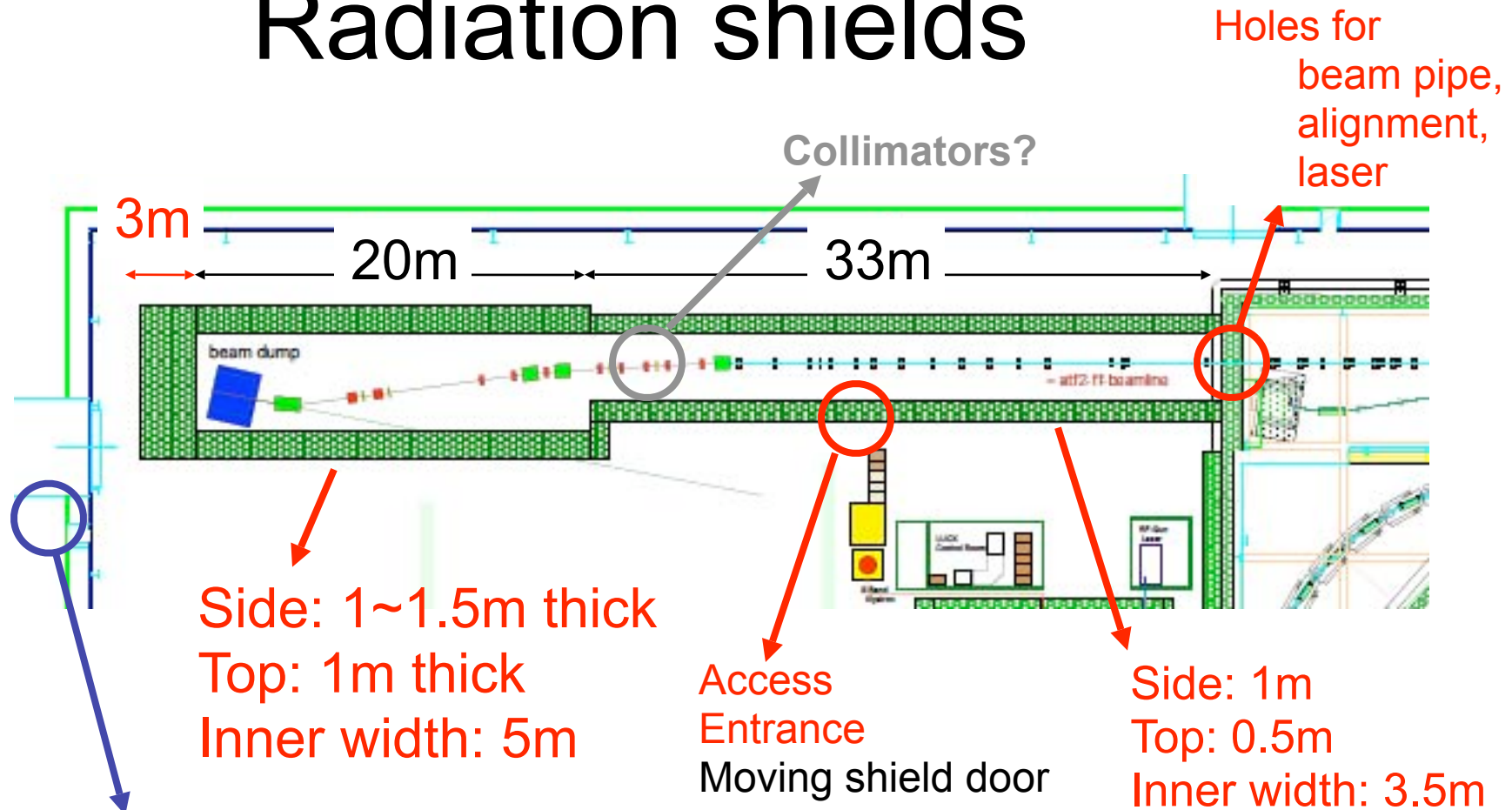


Non Radiation Control Area
< 0.2 $\mu\text{Sv/h}$

Radiation monitor

We have to reduce the radiation doze $\sim 1/100$ behind the dump shield.

Radiation shields



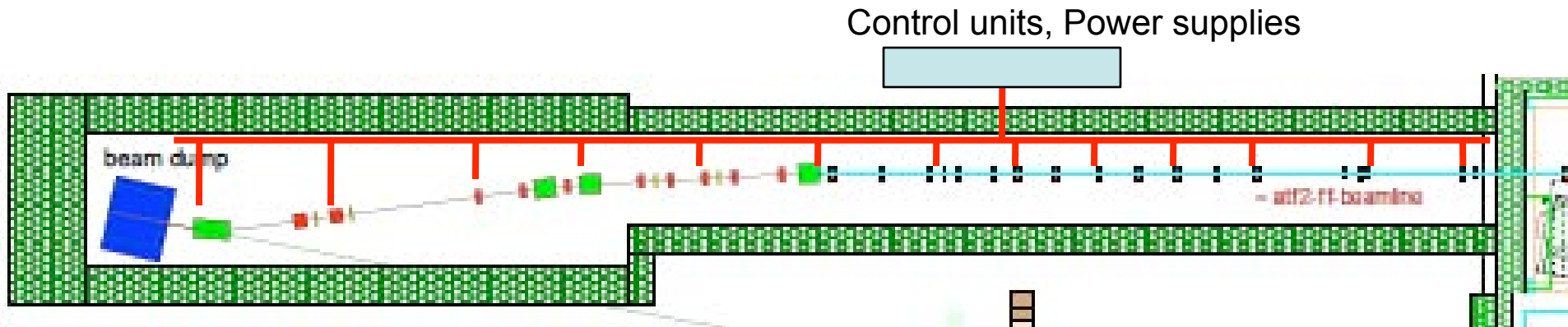
Public area: $< 0.2\mu\text{Sv/h}$

Penetration holes (water pipe, cables,...) should be well designed.

Cabling



Cabling



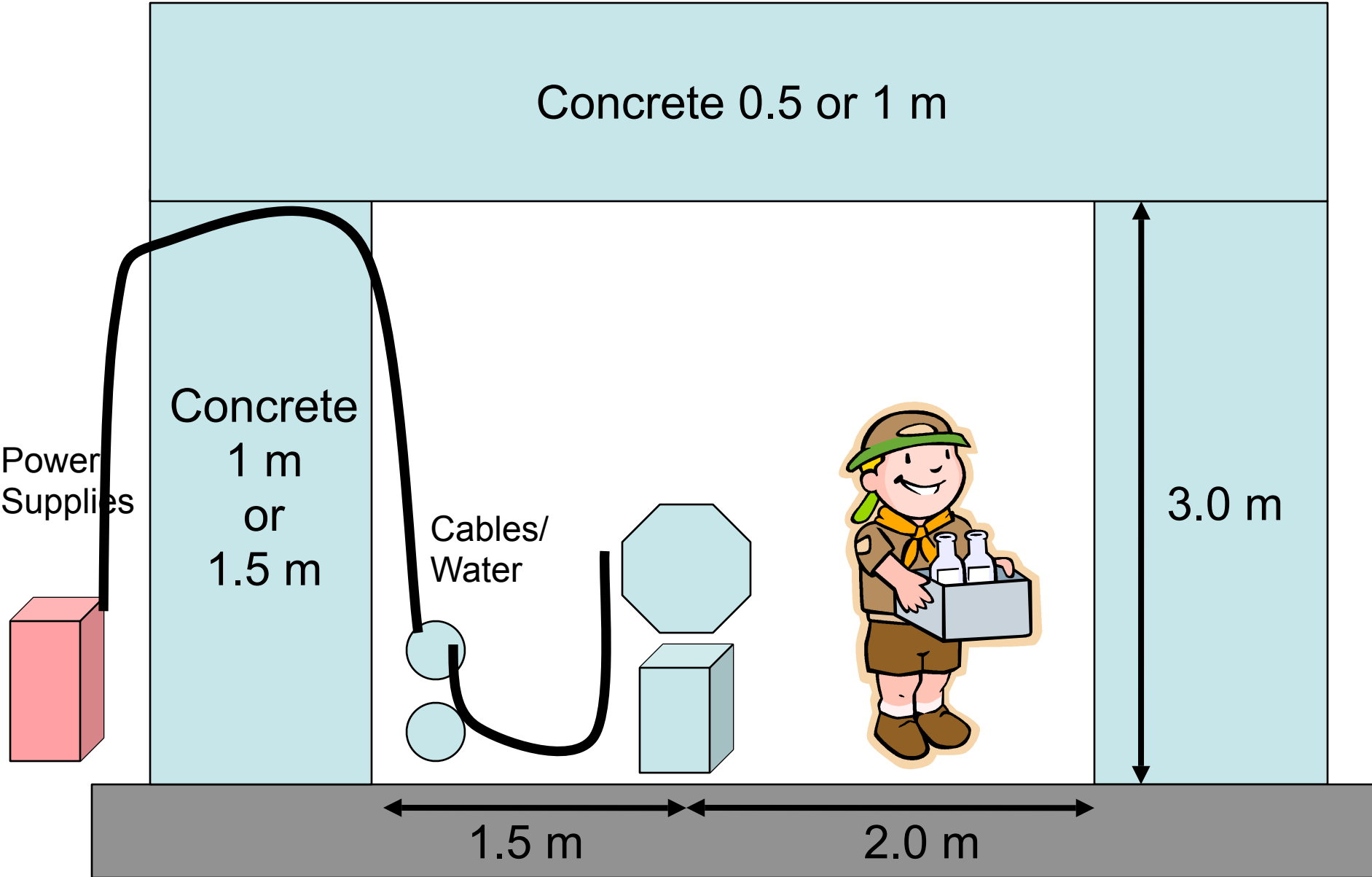
No obstructive cabling for alignments; No cables above magnets.

Along the north wall.

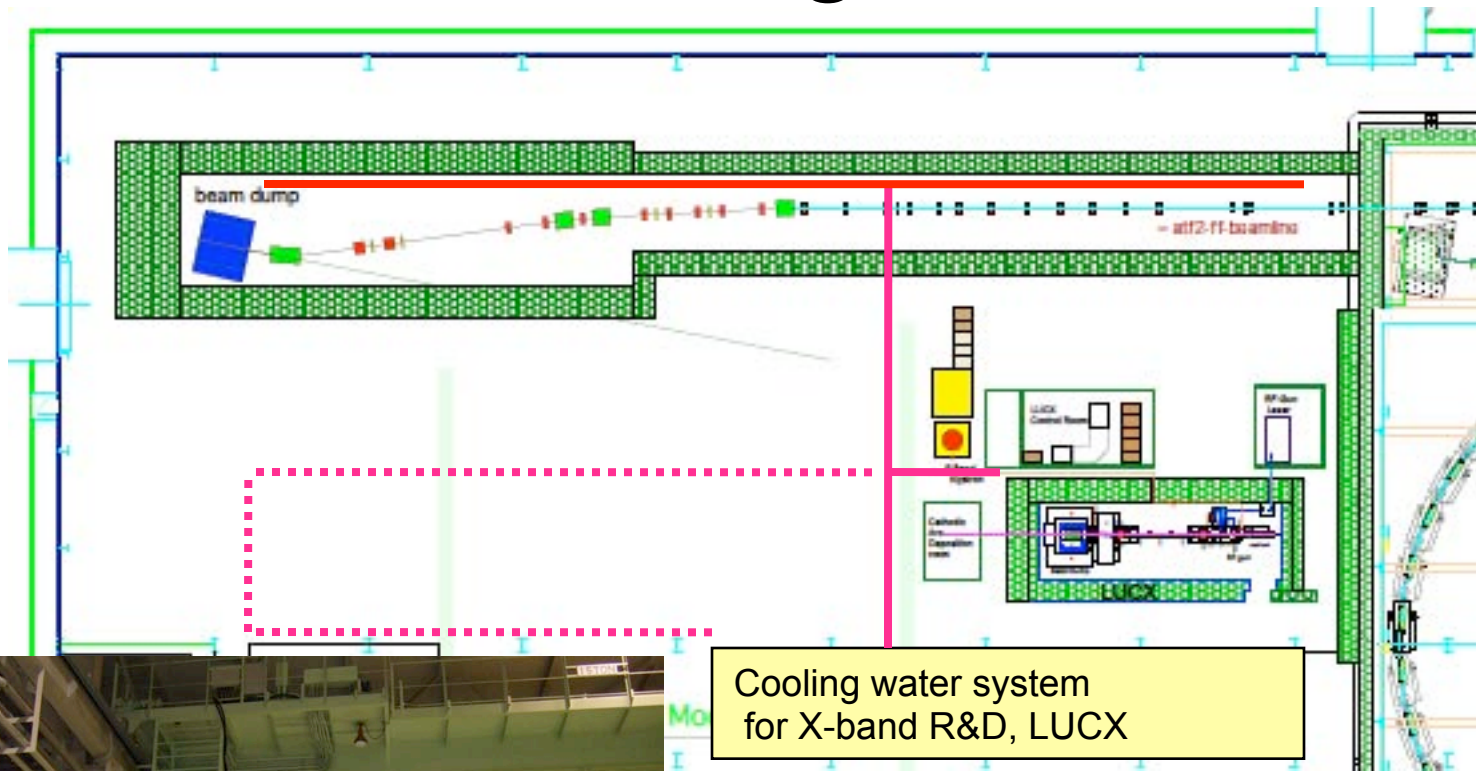
At least 10cm high from floor <- water leak.

Grouping/separating cables (Magnets, monitors, HV)

Air tubes for actuator (GV, Wire scanners) will share the tray.



Cooling water



Three water units;

for Magnets(2)

for RF(1), 0.1degree

Re-route the pipes for X-band system.

Room temperature

Not yet discussed with vendor.

Beam line

Use commercial available air conditioners for office.

Indoor units will be in the beam-line area.

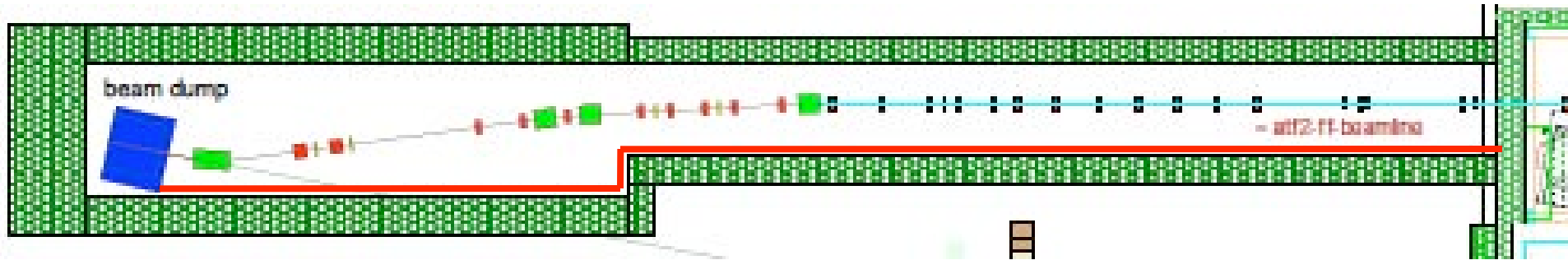
Temperature will be 25 degree; same as that for DR/
EXT.

Electronics huts

Almost same as above.

Huts will be constructed with the aluminum frames
and plastic sheets.

AC power lines



100/200V

There will be several service outlets along the passageway (on the south wall).

Some outlets dedicated for special devices will come through the north side.

400V

For HA power supplies and Laser(?)

Lights

Both of north and south walls, every ~ 5m.

Part 2

Construction schedule

Announced schedule for ATF2 Construction

Beam-on schedule for ATF2 was announced at previous meeting as **February 2008**, however **we need to extend the construction period.**

You may know that ...,

Budget profile from FY06 to FY08 says the delay of construction.

Others

Long ATF shutdown will be expected for the ATF2 construction if we do it at once.

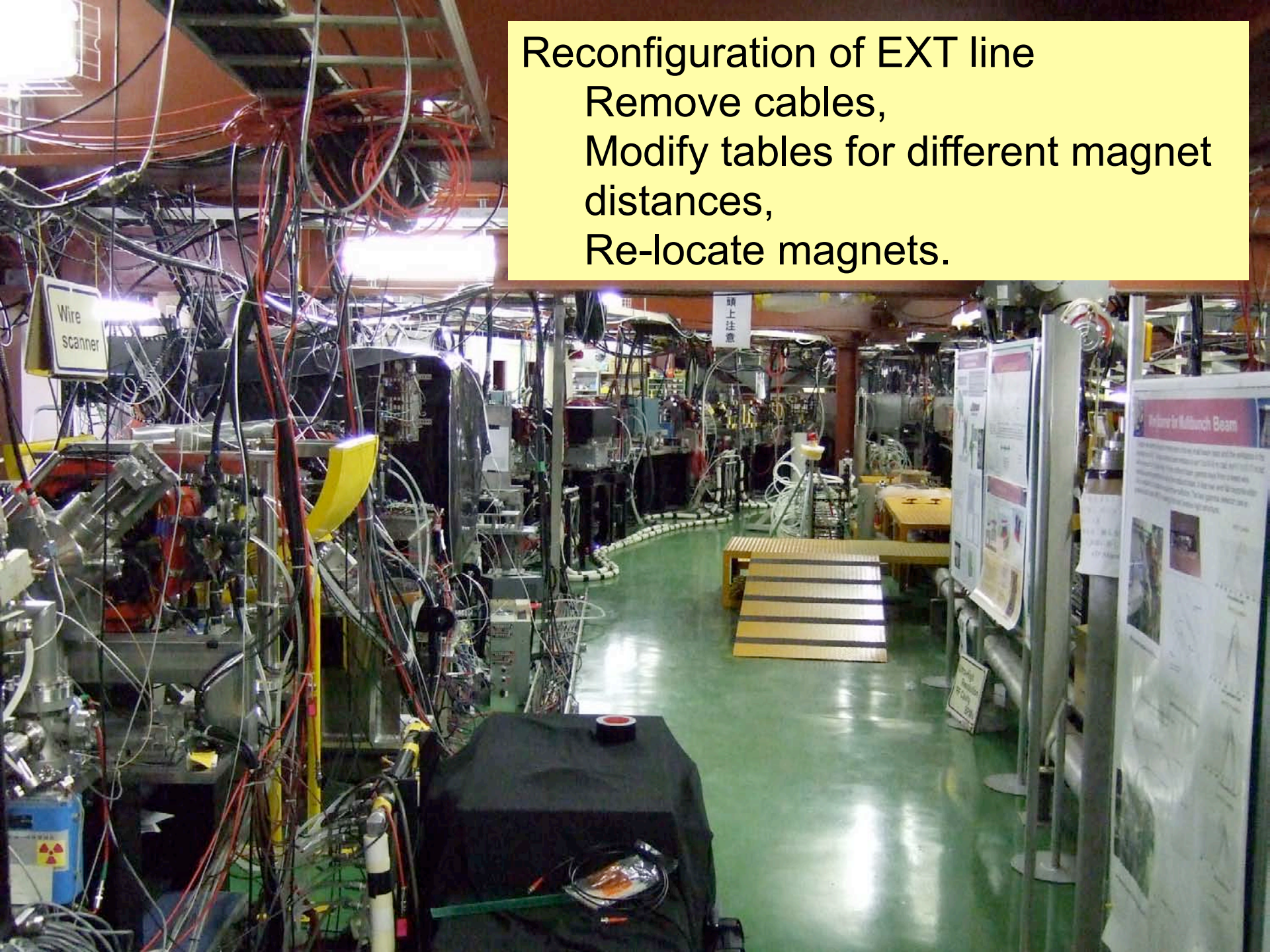
We would like to lengthen the current ATF operation as reasonably long as possible for running R&D programs.

Restarting the R&D program at new beam line may need the long commissioning of R&D devices. (optics, environment are different.)

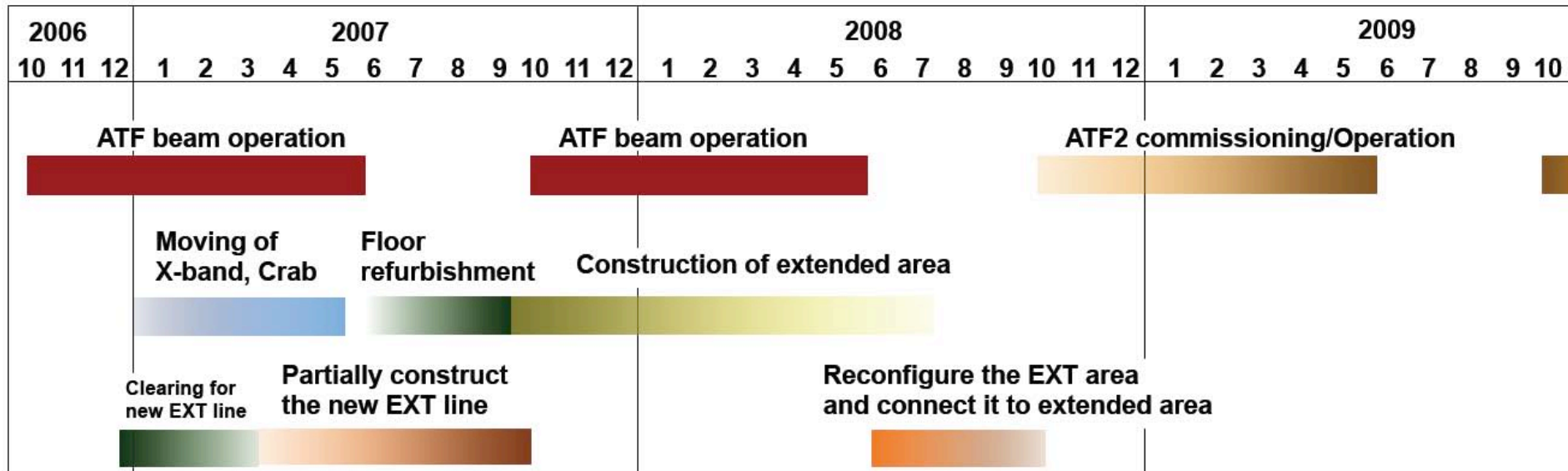
Therefore, we need new schedule for the ATF2 project.

Reconfiguration of EXT line

Remove cables,
Modify tables for different magnet
distances,
Re-locate magnets.



New schedule for construction



- **Construction of the extended shield area for final focus system can be done during the ATF beam operation.**
- Partial construction beside the current EXT line in shutdown week will release the work load for reconfiguration of the EXT line in summer of 2008.
- **ATF2 beam will come in October, 2008.**

What should we do before the floor refurbishment?

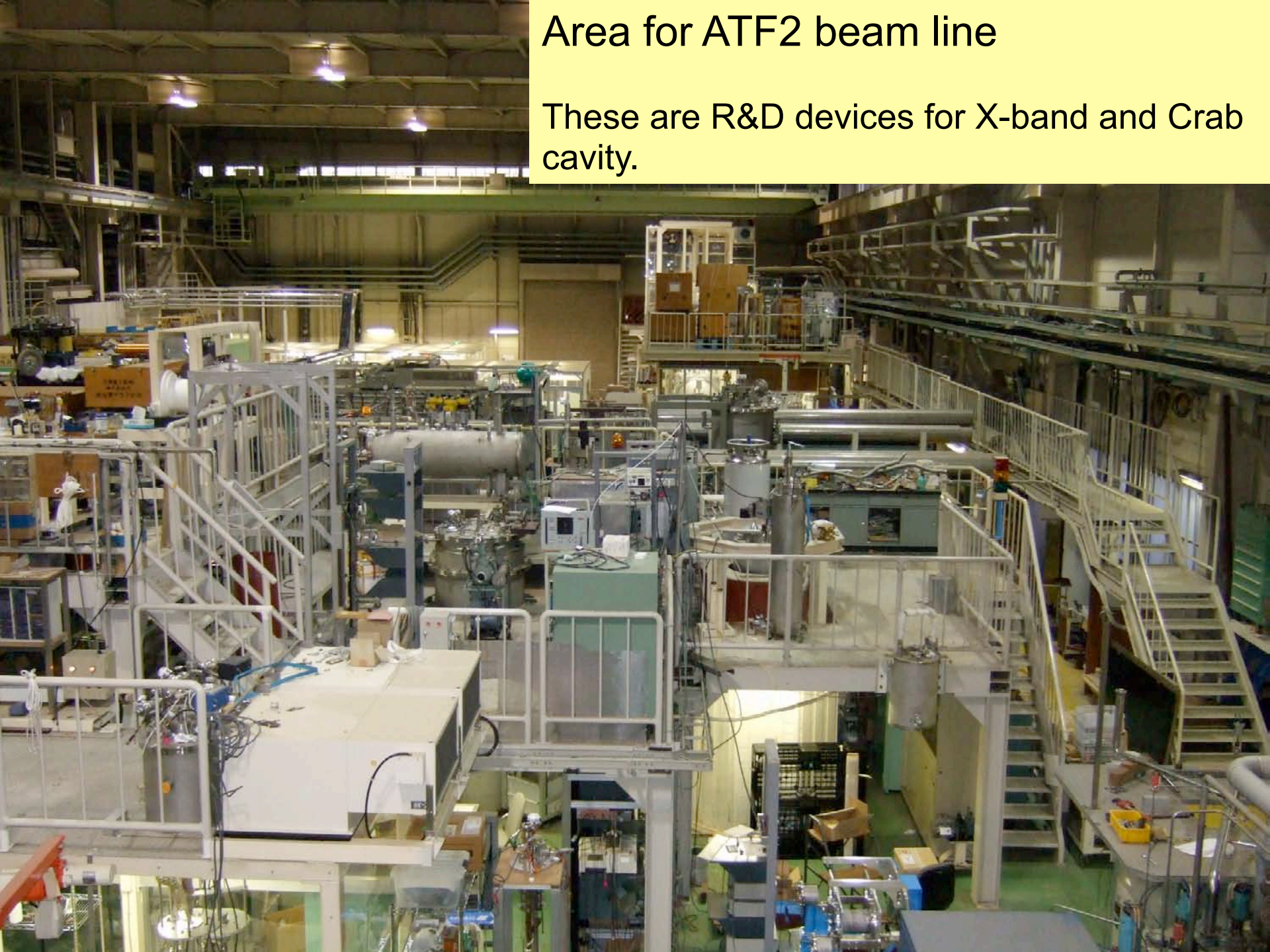
Floor refurbishment will start in June 2007.

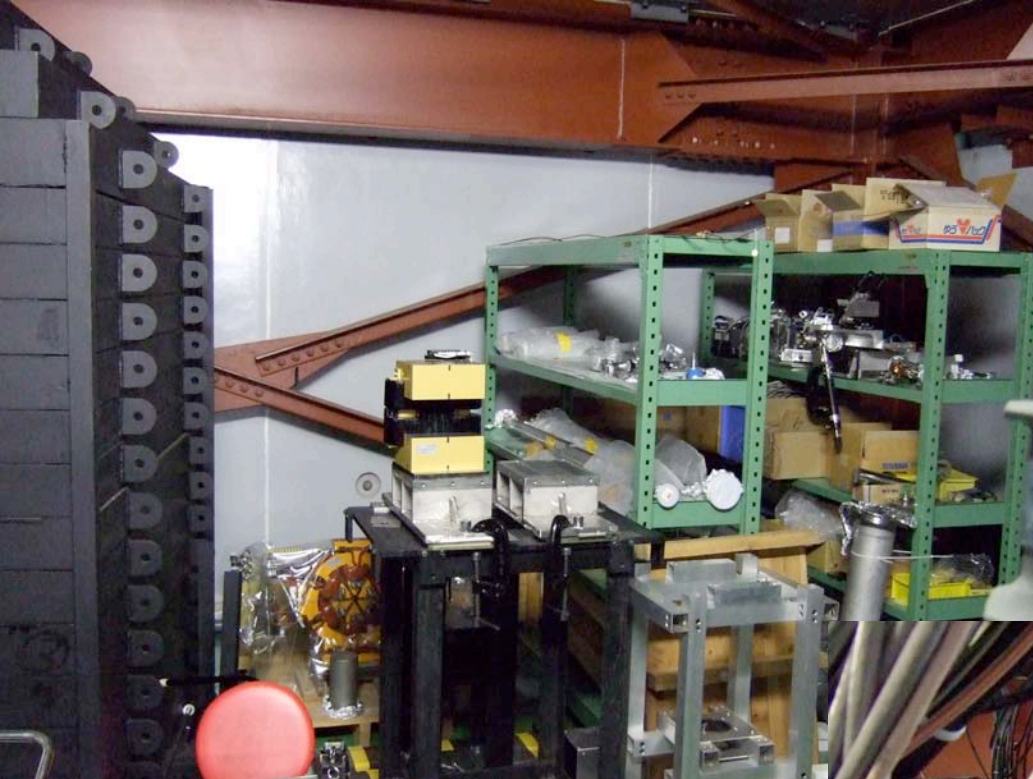
We have to

- move the X-band test facility and the R&D system for Crab Cavity,
- Clear the area around the end of current EXT line to sketch the beam line on above floor,
- cleanup the space above the radiation shields for ATF to store the devices fabricated in FY06,

Area for ATF2 beam line

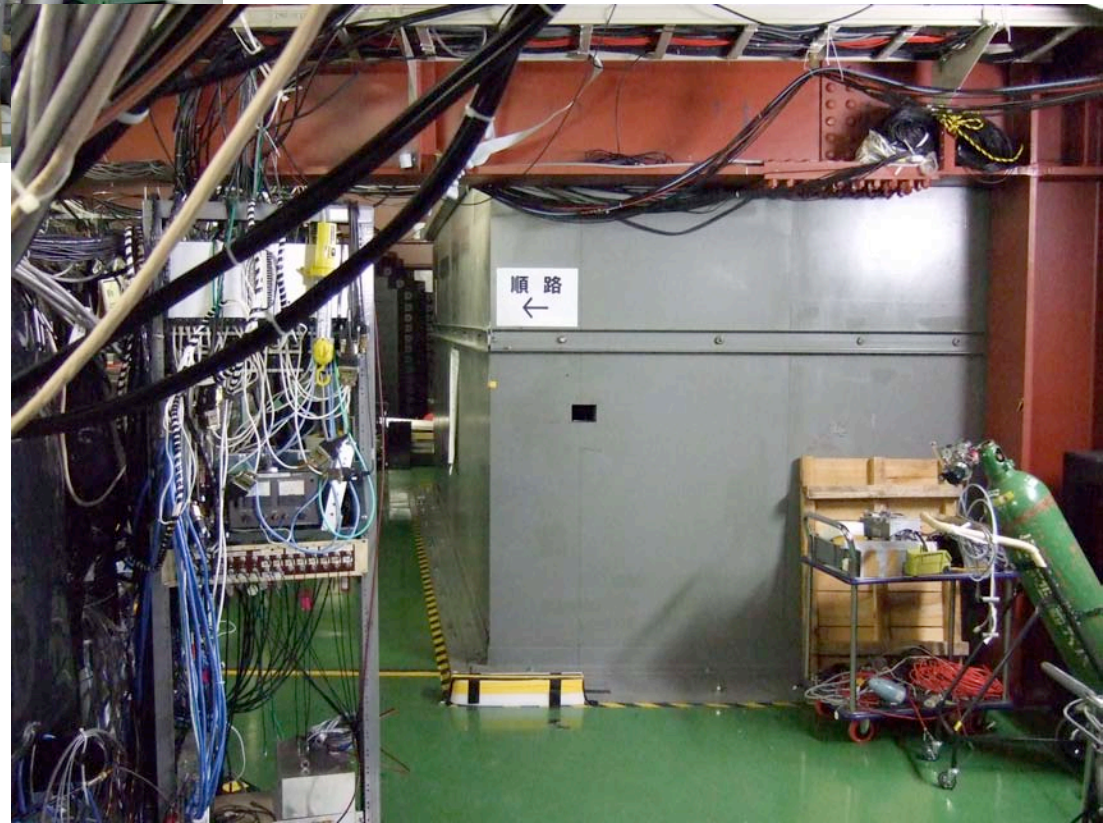
These are R&D devices for X-band and Crab cavity.





Near the current
Beam dump

Have to clear soon!



We need your help!

