Outline

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Questions

A new MRI machine

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YNiC & CHyM

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General Features

The aim is to procure and install a new MRI scanner in a purpose built extension to the Imaging Centre

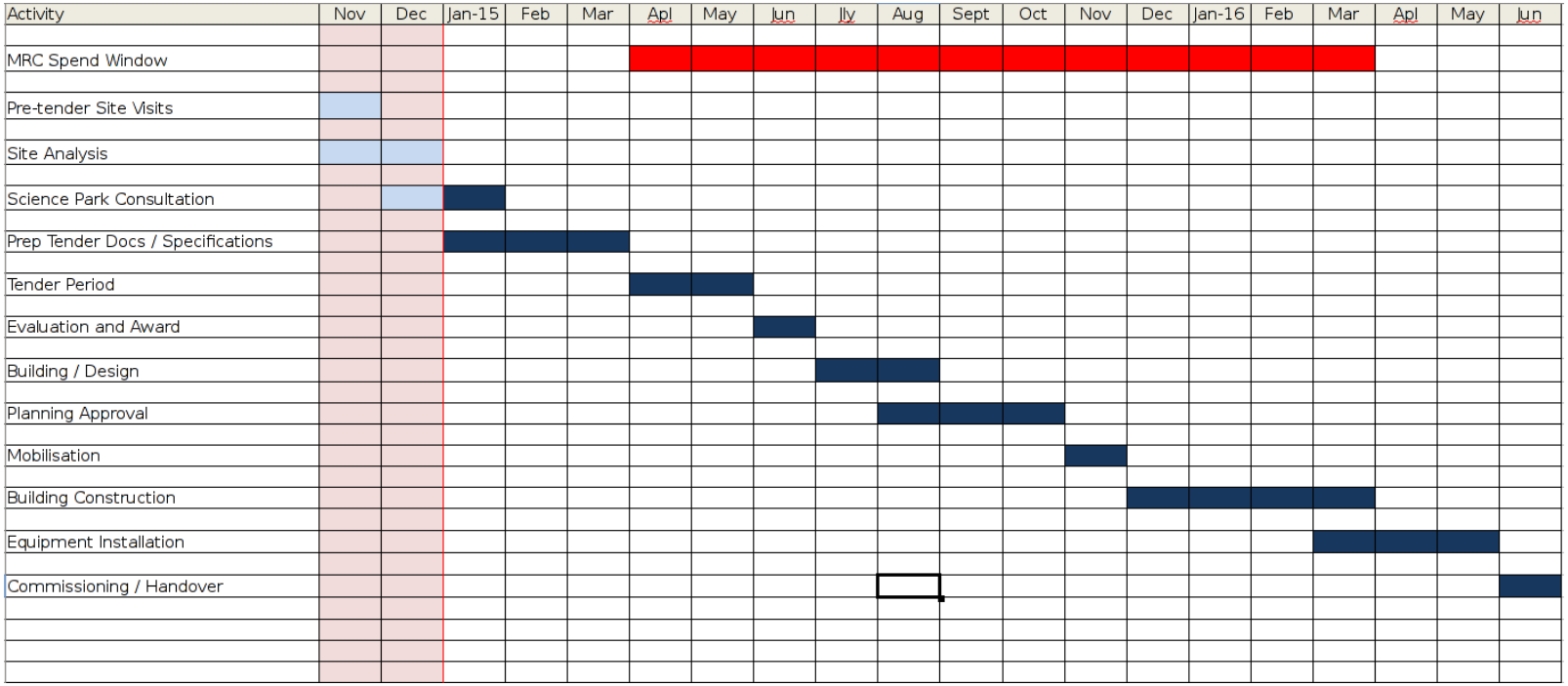
- New 3T scanner
- Funded by the MRC as a joint project with Leeds
- Primary funding is for making hyperpolarisation available for clinical diagnostics
- of course, it is also the aim to make the scanner available to all MRI users
- Would be all singing/all dancing facility

Events

Wiki page
https://www.ynic.york.ac.uk/docs/TechInfo/MRI/Procurement
Contains information about

- the procurement
- the various stages and events
- the specification of the building and machine
- issues we need feedback about

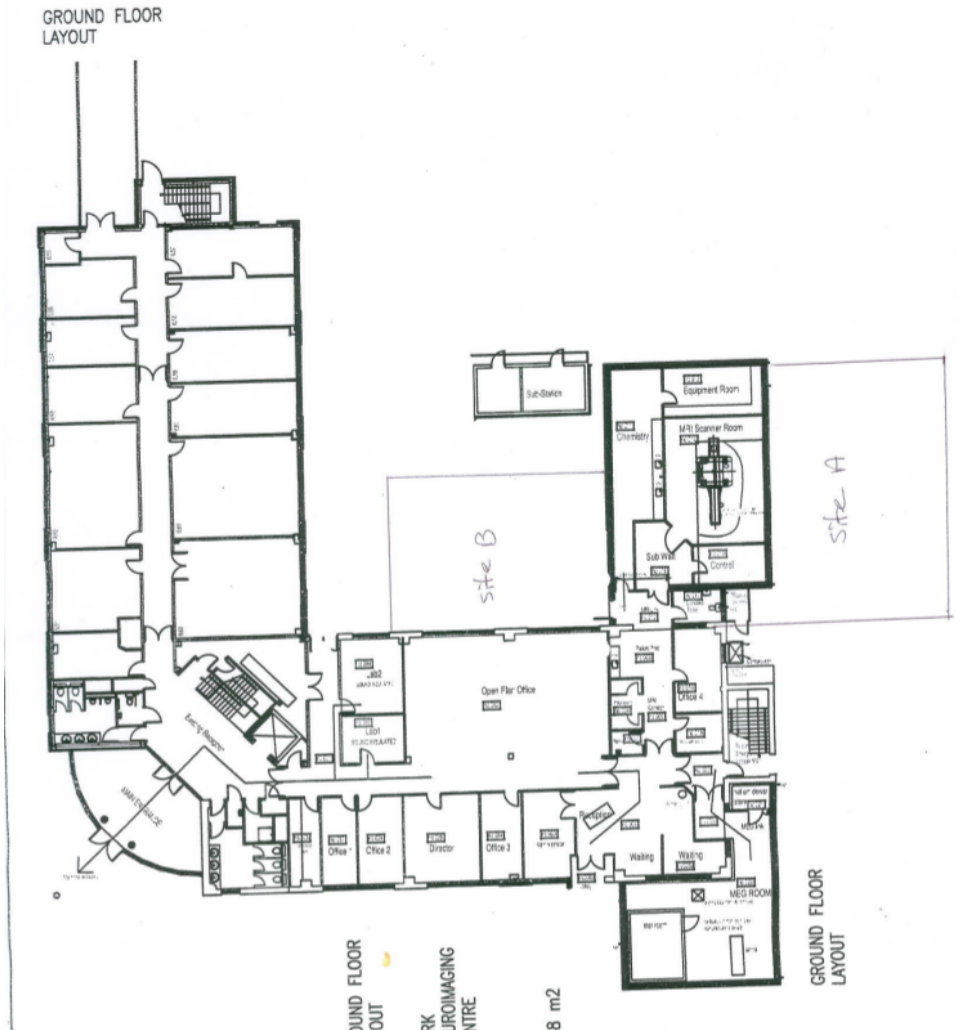
Events



Activity	Nov	Dec	Jan-15	Feb	Mar	Apl	May	Jun	Jly	Aug	Sept	Oct	Nov	Dec	Jan-16	Feb	Mar	Apl	May	Jun
MRC Spend Window																				
Pre-tender Site Visits																				
Site Analysis																				
Science Park Consultation																				
Prep Tender Docs / Specifications																				
Tender Period																				
Evaluation and Award																				
Building / Design																				
Planning Approval																				
Mobilisation																				
Building Construction																				
Equipment Installation																				
Commissioning / Handover																				

Where?

- Two locations next to YNiC
- Site A is parallel to existing scanner
- Site B is outside Open Plan area



Where?

- Site A
  - attractive because it is less disruptive during the building phase
  - the scanner and control room would be significantly distant from the clinical prep and recovery area
  - there is a pipe buried 4 Metres down which would have to be moved
  - it is much more difficult to provide the key utilities to this location
  - issue about fire escape and access to rear of building
- Site B
  - offers better patient/participant management
  - is better for utilities provision
  - may be more likely to be approved by the planners
  - would need to carefully consider acoustic noise affecting the working environment in the open plan area
  - would be disruptive during the building phase
  - would have to consider the way daylight would enter the open plan area

The Machine

- 3T
- Control room
- Magnet room
- Pharmaceutical room
- Equipment room
- Stimulus room
- Full maintenance contract
- Research agreement

Features of the machine

- Multinuclear capability (^{1}H, ^{13}C, ^{19}F, ^{15}N, ^{31}P...)
- All standard (clinical) coils, to meet YDI needs and new MRC work needs
- New head coil(s)

Hardware

- Physiological Monitoring
- Head tracking
- Stim pc, projector(s) and sound delivery
- Response box(es)
- Phantoms
- Parahydrogen generator
- Polariser
- Injector(s)

Software and Pulse sequences

- We need list of standard/required protocols
- We will be employing person for 4.5 years for MRI physics
- We need to know which programmes/devices the scanner needs to be able to interface to (sync pulses etc..)

What is happening now

- Consulting with York Science Park about the location of the extension and the lease arrangements
- Preparing the Tender Documents and Specifications
- Obtaining outline planning permission
- Completing the site surveys
- Preparing the design of the building extension

The Future

- Update seminar specifically on Hyperpolarisation
- Specific meeting on building design
- Specific meeting on scanner specs
- Presentations by bidders
- ?Site visits
- Discussions about fate of existing scanner

Summary

- Plan is to install in York by the end of 2015
- Multinuclear 3T
- New building
- Exciting times ahead

Questions

- Thank you for your attention
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- Any Questions?

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