

4

Design Strategy

4.3

Design Approach

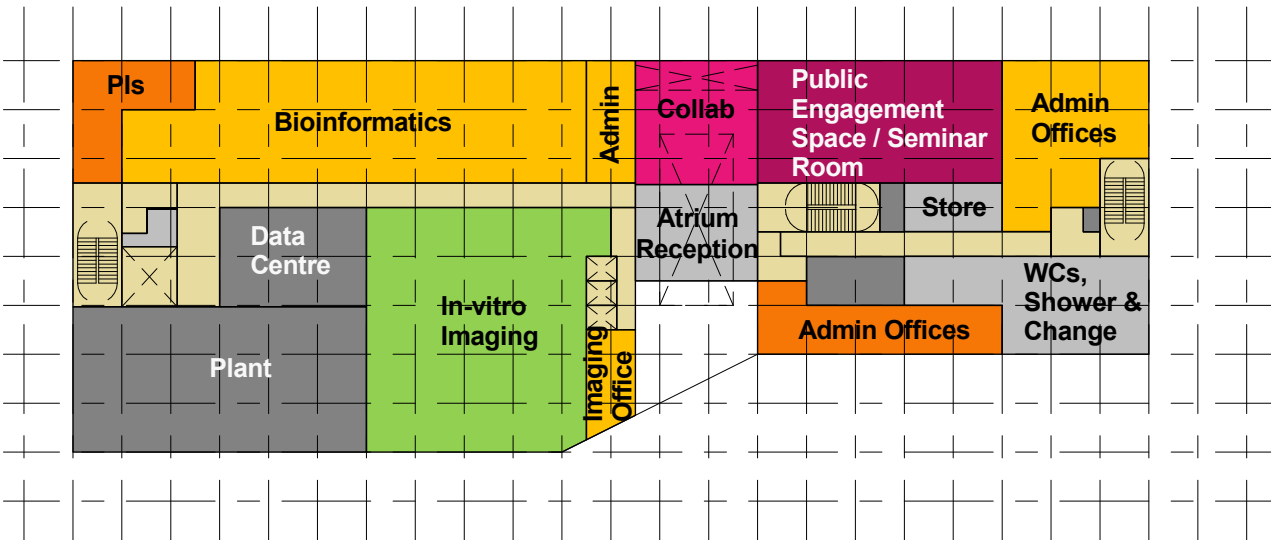
4.3.6

Options 01 & 02 - First Floor/ Atrium

Stage 01 Proposals

First Floor Options

In both developed options, the first floor represents the welcome point of the institute. After moving up past the functional ground floor, visitors and researchers are welcomed by open reception areas at the foot of full height atria. Options 1 & 2 approach these spaces quite differently, the pros and cons of which are evaluated below:



Option 01

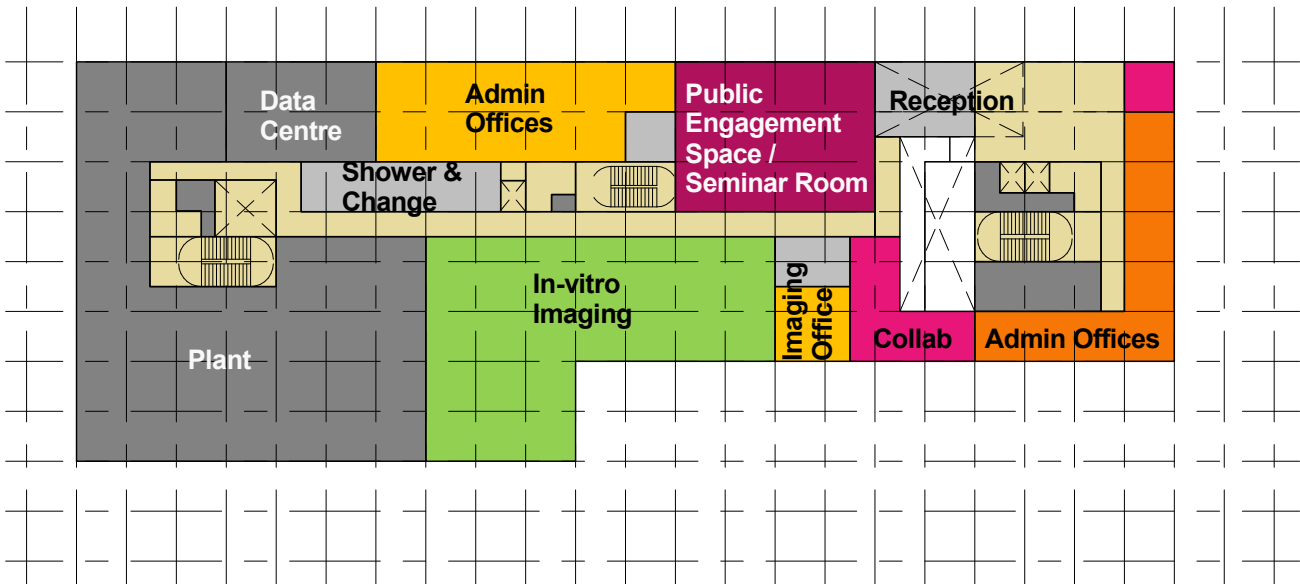
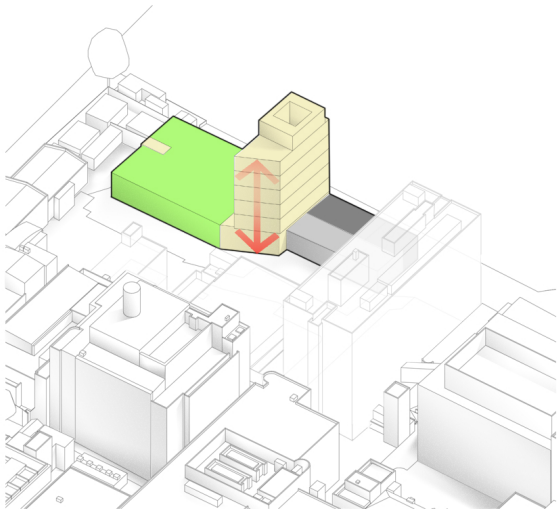
Option 01 is a continuation of the initial bid design. A central atrium splits the building in two. The reception and public engagement space is adjacent to the atrium.

Pros:

- Plant room and data centre adjacent for ease of servicing
- Bio-informatics benefit from views out over the school playing fields
- Spill out from public engagement space into the foot of the atrium for larger events
- Admin offices benefit from views over school playing fields

Cons:

- Cellular directors office have a poor view over the Wolfson Education Centre roof and are not very 'present' and accessible from the reception
- Large atrium floor could become static when public engagement space is not in use
- In-vitro imaging suite may need to be structurally isolated from main super-structure



Option 02

Option 02 incorporates a more dynamic atrium space up the building. This allows the reception to be pushed to one side of the building, with the journey up through the lab spaces becoming more animated.

Pros:

- Admin offices benefit from excellent views over the school playing fields and have a connection to the entrance
- Spill out from public engagement space into the foot of the atrium for larger events
- Plant room and data centre adjacent for ease of servicing
- Large plant room at first floor and at roof level relieves the pressure for on-floor plant up the building
- Dynamic and animated atrium all the way up the building

Cons:

- In-vitro imaging suite may need to be structurally isolated from main super-structure
- Cellular directors office views onto the Commonwealth building.

4

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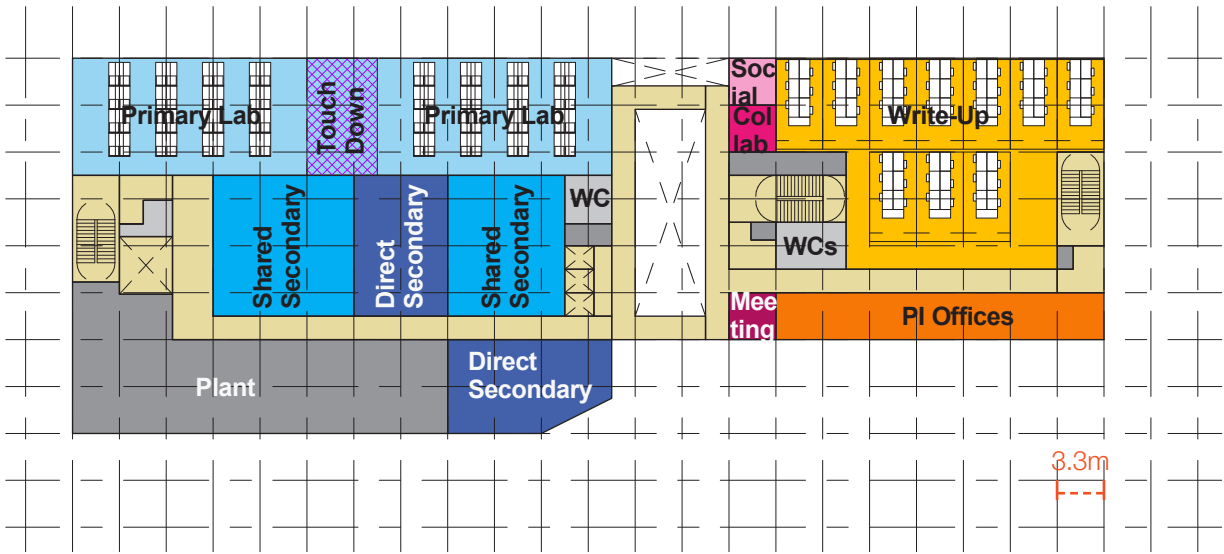
4.3.7

Option 01 - Typical Floor

Stage 01 Proposals

Typical Floor Options

It is on a typical floor plan that the fundamental differences between the two options become most apparent. Option 1 uses the atrium to split the building in two parts with lab spaces to one side and write-up on the other.



Option 01

Option 01 is a continuation of the initial bid design. A central atrium splits the building in two with labs and technical spaces on the north side, with write-up and offices to the south of the atrium.

Pros:

- Resilient services arrangement with easy to access, maintain and replace plant equipment
- Large vertical atrium allows light to penetrate the centre of the plan
- Social spaces around the atrium activate the space
- PI offices adjacent to write-up areas
- Option of adding a further write-up floor within the larger floor to ceiling heights of the lab
- Users more likely to share laboratories as well as keeping laboratory spaces more organised and tidy

Cons:

- Longer distances between lab and write-up benches however smaller than other buildings on the campus
- Deep plan write-up areas will not benefit so much from natural light/ ventilation
- PI offices do not benefit from views out from the campus
- Large portion of the western facade taken up by plant space
- Building control would need to be worked with closely to ensure that fire control and access are well resolved across the full height atrium.

The LMS vs. Existing Facilities

The drawing here aims to illustrate the scale, proportion and key layout differences between the LMS Stage 1 design, CRB & ICTEM.

User consultations raised a concern about a building modelled around an atria as this already exists within ICTEM. The ICTEM users often feel that they are isolated within large expansive labs, a ‘goldfish bowl’ is often cited as the experience of being in the labs at night when the atrium lights turn off. The LMS proposal (Option 1) addresses this by rotating the atrium along the short length. This puts the focus toward the facade and views out of the building rather than inward facing to the atrium.

The diagram also illustrates how the LMS proposal here has a similar write-up floor depth and scale.

