

4.2.2 WORKING WITH THE WIDER CAMPUS

**'The university masterplan includes a significant area of open space between the Institute, Informatics Building and New Radcliffe House. This presents a unique opportunity to transform the campus that will be lost if the design process is not extended beyond the site boundary. Doing so will not only help to shape a new outdoor 'room' for the campus - which would be as important as any new building -but will also improve the approaches to, and settings of the Institute, the planned Informatics and Humanities buildings and that of the Observatory.'** (ODRP Feedback - November 2023).

It is important that the design of public realm for the Institute of Digital Health considers the wider context and works to create a unified campus masterplan. The following components have driven the design development:

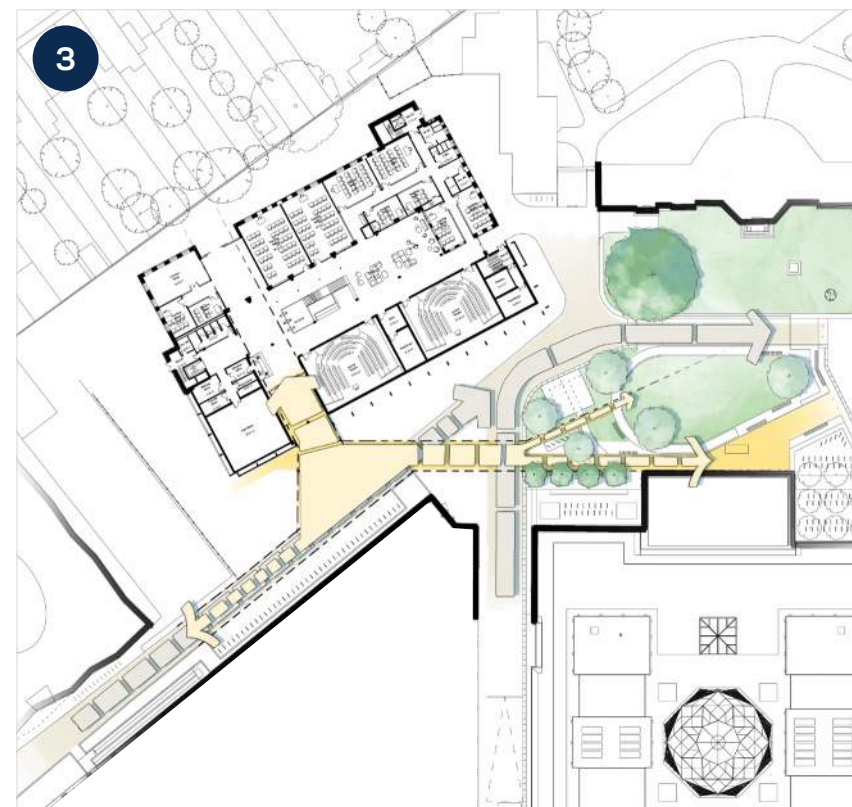
1. Preservation of important sight lines towards the Radcliffe Observatory: This constraint has informed the placement of trees and other physical elements which might obstruct views or visually harm the setting of the observatory.
2. Vehicular movement: The strategy for vehicular movement is based on the retention of a one-way system around the New Humanities development and access from Walton Street being allowed only for pedestrians, cyclists and emergency vehicles. The street space between OIDH and the Informatics development is to be preserved as a shared space for pedestrians and cyclists, with vehicular usage kept to an absolute minimum.
3. Pedestrian linkages: Pedestrian movement between Walton Street, the OIDH site, and future and New Humanities developments, results in a layout as shown on this diagram. Where pedestrian routes cross roads, priority will be given to pedestrians. Low vehicular speeds will be enforced where vehicular and pedestrian movement overlaps.
4. Public realm features: This strategic plan maps the relationship between the OIDH site, Informatics and Humanities development and starts to illustrate opportunities for distribution of hard and soft landscape, seating and facilities such as cycle parking.



(Above) Key view from Walton Street towards Radcliffe Observatory



(Above) vehicular access diagram



(Above) Pedestrian and cycle linkages between OIDH and New Humanities



(Above) potential relationship between development entrance areas



4.2.3. PLANNING APPLICATION & ODRP ENGAGEMENT

Extensive engagement with Oxford local planning authority, University stakeholders, members of the public and a review with the Oxford Independent Design Review Panel has informed the development of the submitted landscape design. A summary of initiatives has been outlined in response to recommendations raised during these forums:

**'Without a more holistic design strategy that extends beyond the site boundary, the building and its landscape risks sitting in the wider campus as an isolated fragment. This will mean that, irrespective of the quality of design within the site boundary, the Institute will not fully integrate with rest of the campus or make a full contribution to the development of a distinctive sense of place, the value of which we have seen powerfully displayed in other contemporary campuses, for example, the London School of Economics. A critical next step, therefore, is for the wider university client body or bodies to think holistically, facilitate dialogue between the various design teams and foster collaboration to realise this opportunity.'** (ODRP feedback - November 2023).

The design development has looked beyond the application boundary to inform the creation of a connected campus and avoid treating the space as an isolated fragment.

**'The retention of the building creates a triangular pocket of open space to the front of the Institute which lacks a clear function or identity associated with digital health. It also feels defensive because of the orthogonal hedges, the hard edge, and the location of the disabled parking. Addressing these issues would make this space more welcoming, and the addition of benches would help to signal that this south facing garden is an area to walk into and spend time in.'** (ODRP feedback - november 2023).

Entrance legibility has been enhanced through use of hard and soft landscape to establish a well defined entry point. A range of street furniture and amenity features have been proposed at the entrance to create a welcoming environment and

make the frontage more open and publicly focused.

**'A study should be carried out to define how people move through the open space between the building and the street, where people sit, and which areas provide some privacy.'** (ODRP feedback - november 2023).

Contrasting spaces have been defined through use of planting, edges and changes in scale.

**'The character of this space should be sufficiently distinct so that someone meeting a friend or colleague who has not visited before can suggest a recognisable meeting place.'** (ODRP feedback - November 2023)

A prominent parkland tree has been used to define a memorable 'meeting point' and assist with way-finding.

**'The walled garden to the rear of the Institute lacks a distinct character. The principle of reusing this space and providing a shaded area is positive, but the planting conceals the important historic wall rather than celebrating it. The character of this space should be more clearly differentiated from the open space to the front and that of the courtyard. Movement from the entrance to the rear garden, with views of the exposed wall, should celebrate the combination of new and old, and this juxtaposition should inform the character of the garden itself.'** (ODRP feedback - November 2023).

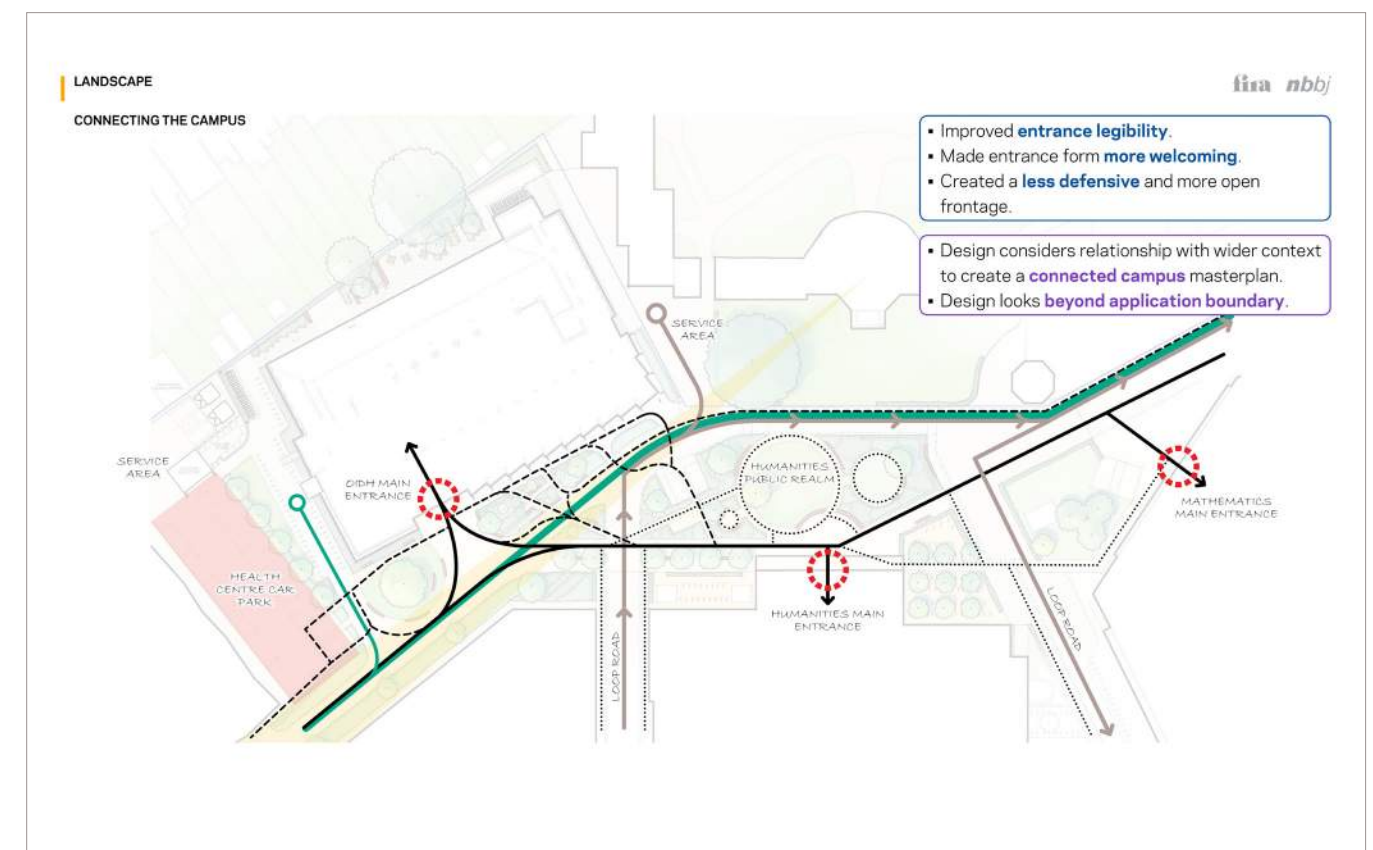
The walled garden (to the site rear) has been given a distinct and contrasting character, derived from the character of the boundary wall.

**'The references to digital symbols and barcodes to describe the evolution of the elevation design is equally relevant to that of the landscape. Creating a digital landscape would announce that this is a new digital era of which the Institute is at the forefront.'** (ODRP feedback - November 2023).

Opportunities to incorporate digital technology and interactive elements have been explored through the treatment of the architectural elevations at the entrance.



Slide from pre-application meeting mapping spatial functionality.



Slide from pre-application meeting illustrating pedestrian movement.



4.2.3. PLANNING APPLICATION & ODRP ENGAGEMENT

**'Except for hedges, there is a lack of greenery in the area of the campus in which the Institute sits and few mature trees with canopies to help with shading. We suggest that a specialist helps to develop the planting strategy to inform the selection of species.'** (ODRP feedback - November 2023).

Diverse planting areas have been provided to provide functions including habitat creation, visual amenity, shade provision, defensive edges and drainage.

**'Unlike the cedar tree in front of the Observatory, it will be possible to stand or sit close to the tree next to the entrance, and its canopy could act as an external room, providing another memorable meeting point. However, the location of the tree should be modelled and carefully considered so that it neither obstructs movement nor results in or over-shading. We recommend that single tree planting in hardscape is avoided, and would favour a small group of trees in a rain-garden setting with ground-cover vegetation.'** ODRP feedback - November 2023).

Seating has been provided within the canopy of the proposed specimen parkland tree to provide closer interaction.

**'A further benefit of thinking holistically and not compartmentalising the public realm into specific sites is that connected sustainable urban drainage systems, a connected soil realm and other environmental measures could be created across the campus, helping to define its identity and support climate resilience in the face of drought and flood events. Nature does not work in compartments, and the public realm strategy should reflect this and draw from university research and best practice.'** ODRP feedback - November 2023).

The character, functionality and spatial form of soft and hard landscape has been influenced by the surrounding landscape to create a unified approach to green infrastructure.

**'The provision of trees should be part of a coordinated site-wide strategy with species types curated across the campus in support of maximum biodiversity and resilience, and to create a strong age profile for all species. This will also enable tree deficiencies, such as on the Blavatnic School of Government site, to be**

**addressed.'** (ODRP feedback - November 2023).

Arrangements of trees have been provided to provide features such as: way-finding, shade, seasonal interest, to strengthen or direct movement routes, and provide food and habitats for birds and invertebrates.

**'Although several new trees are proposed, we suggest using wisteria and other climbers to provide greenery at height, which will also contribute cooling to the building and support the sustainability strategy.'** (ODRP feedback - November 2023).

Vertical planting has been proposed to soften architectural elevations.

**'This collaborative work will also help to address issues like the 'road' that passes in front of the Institute. This should be integrated within the wider public realm as a space for pedestrians and cyclists to use, with only occasional vehicular use. It should be a shared surface using materials suited to walking and likely to slow traffic. If kerbs are required, these should be lowered, and there should be no 'road' markings and minimal use of vehicular signage.'** (ODRP feedback - November 2023).

The street space to the site entrance is to be treated as a shared space, prioritising pedestrians and cyclists over vehicular use.

**'The south-west corner of the site is compromised by the location of the car and cycle parking. As part of the development of a holistic, collaborative approach to the public realm, we suggest negotiating a change in the boundary line between the Institute and New Radcliffe House to increase the width and efficiency of the existing New Radcliffe House car park so that the parking for the Institute can be accommodated.'** (ODRP feedback - November 2023).

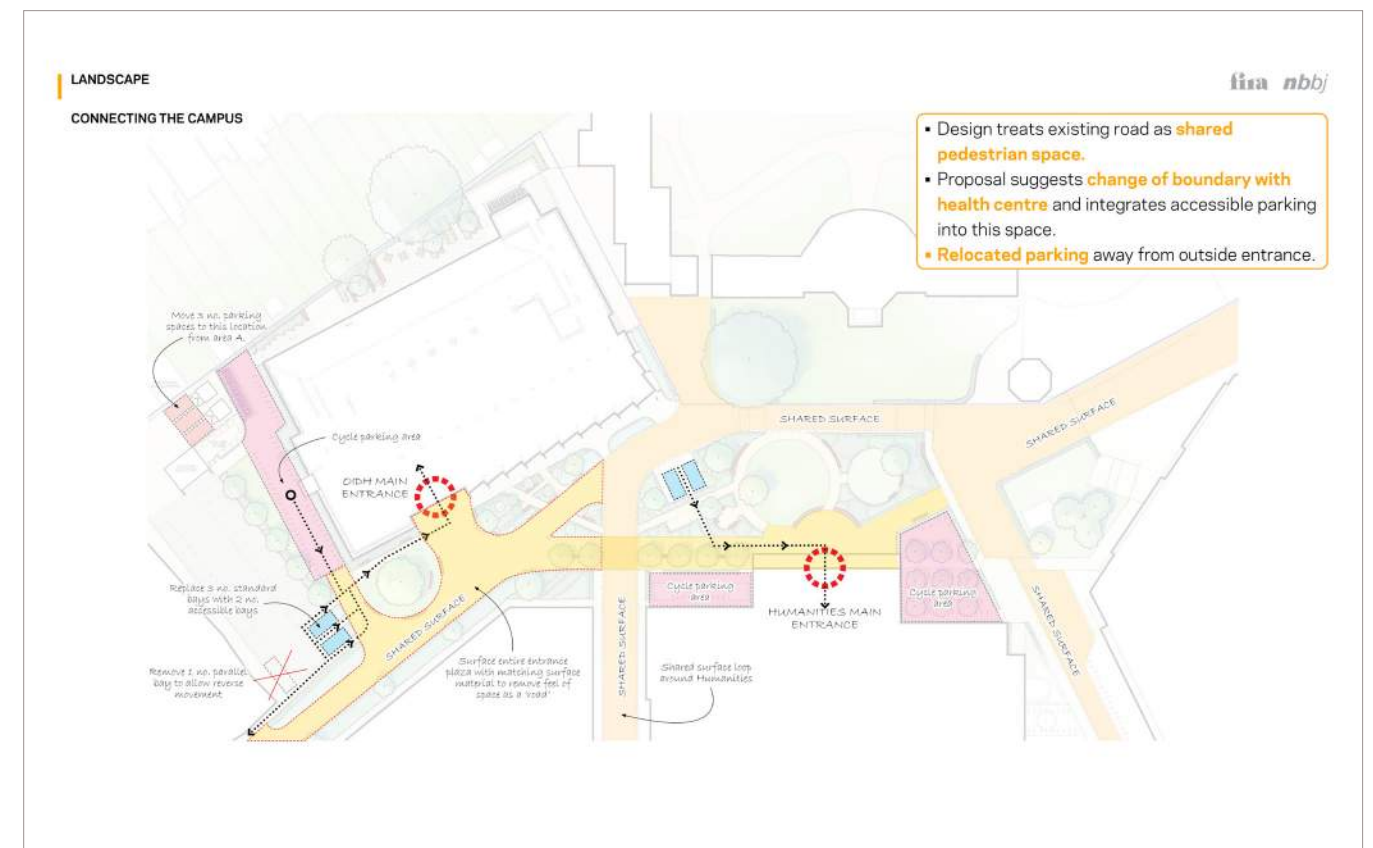
A negotiation with the adjacent leased Health Centre land has been considered, however this has been ruled out following solicitor advice.

**'The disabled parking located next to the entrance to the Institute should be relocated away from the front entrance to this shared car park.'** (ODRP feedback - November 2023).

Parking has been relocated as far away from the main entrance while still meeting building regulations.



Slide from pre-application meeting illustrating soft landscape strategy.



Slide from pre-application meeting illustrating vehicular movement.



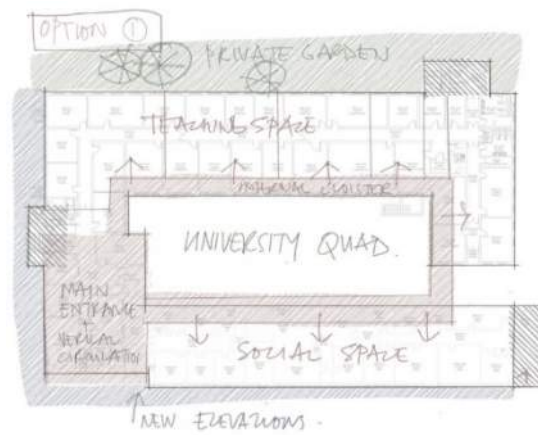
### 4.3 ENTRANCE LOCATION

'OCC Noted the north-eastern corner of the building was a key node/hot spot with the Observatory, Humanities and the Information Sciences Building as well as main route through the site for pedestrians and cyclists. JN questioned the location of the main entrance at the other end of the block. The location of the entrance in relation to the Information Sciences Building and emerging street layout needs coordination and testing in local views.' (Feedback from Pre-app 01 - June 2023).

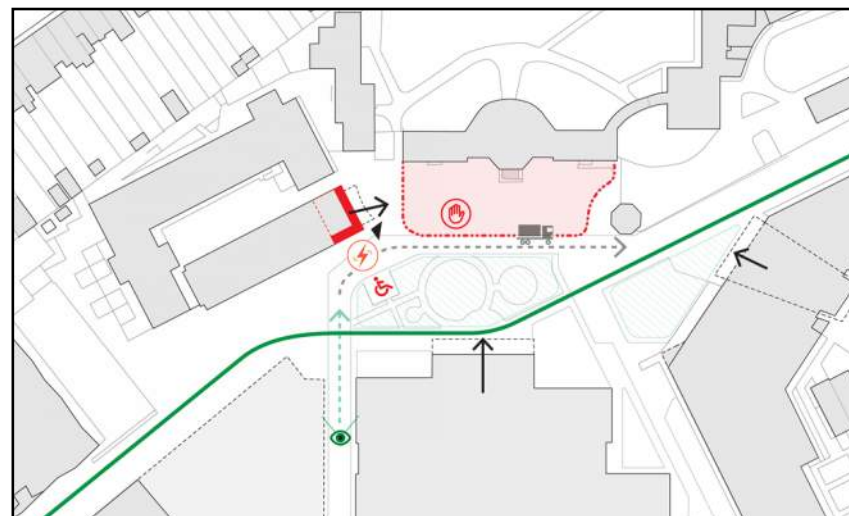
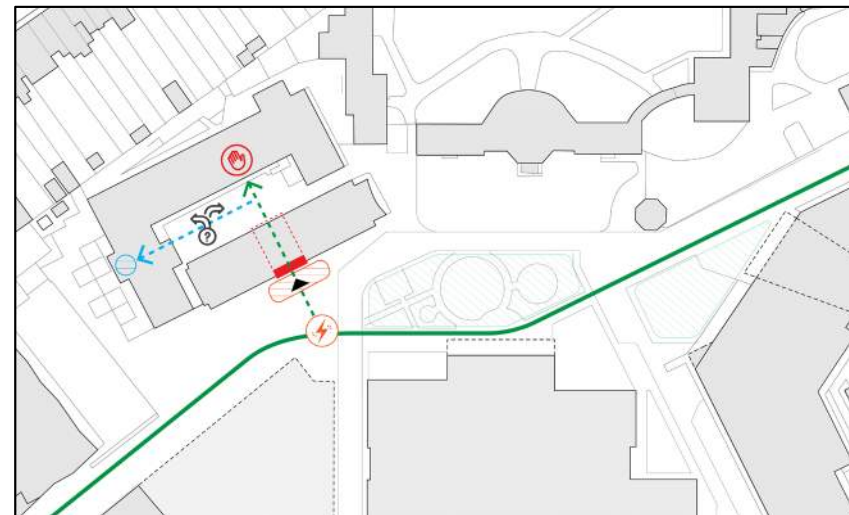
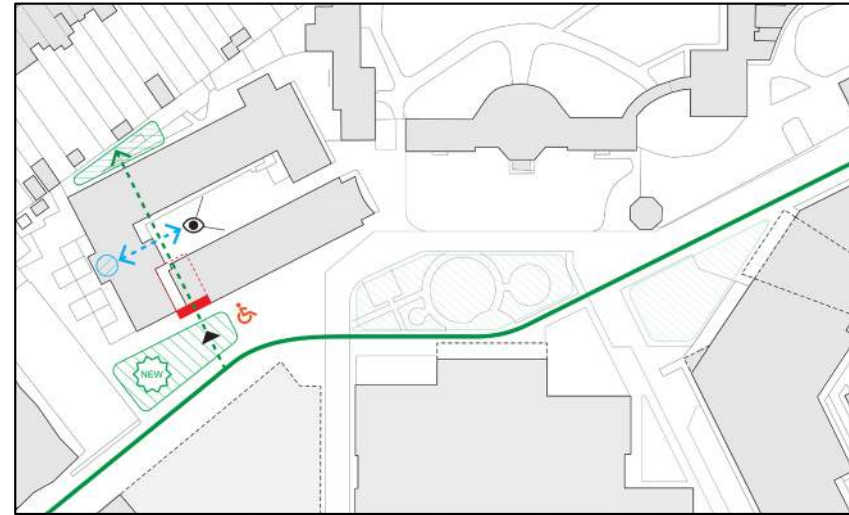
Given the setting of the building the team further explored the setting of the entrance in relation to the wider context. Three options included:

1. Between Harkness & Gibson (as existing)
2. Central
3. Radcliffe Observatory Corner.

The team explored the various pros and cons of each option which are outlined below:



Early entrance location and expression studies



### 1. BETWEEN HARKNESS AND GIBSON

- Space for shared landscaping, creating welcoming arrival, place making - additional node on east west route
- Entrance has clear view through atrium to external terrace
- Same location as existing entrance, reduced structural implications. Close to accessible parking
- Way finding around building made easy as entry into void space with view of vertical circulation.
- ● OIDH entrance further from ROQ centre / Humanities

### 2. CENTRAL

- Entrance location with similar presence for Walton Street and Woodstock Road approach
- ● Potential relationship to Informatics Building Entrance
- ● Entrance and spatial pinch point facing Informatics corner - less space for arrival space/landscaping
- ● Splits/disrupts Harkness ground floor usable space.
- ● Increased structural alterations
- ● Not enough space for possible 380 people congregations

### 3. RO CORNER

- Central ROQ 'Address' alongside Math and Humanities
- In line with southern approach from Blavatnik School
- ● Congested corner conflicting with forthcoming service route, refuse and disabled parking
- ● Less opportunity for arrival space/landscaping
- ● Does not interface with new Humanities Proposal
- ● Not enough space for possible 380 people congregations



### 4.4 BUILDING FORM & MASSING

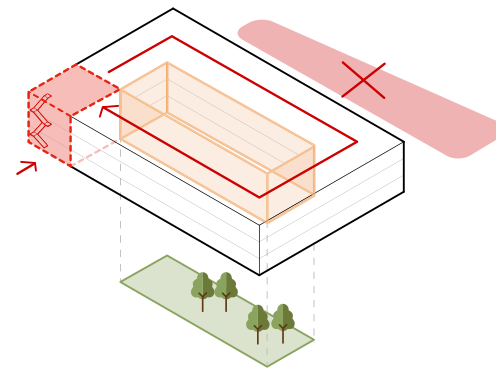
The design team have developed a strategy for unifying the two buildings into one single form, taking into consideration quality of space, sustainability and cost. By combining the Harkness and Gibson, a single identifiable entity will be created that maximises the development potential of the site.

A key consideration is the circulation routes and building access. The design team evaluated three possible options at design stage.

In all options, care was taken that the south elevation (front entrance) responds to the context of the site and visually unifies the two buildings. This includes a new elevation to this face and the removal of the existing stairs at the southwest corner to open up views to the Observatory. **Option C** forms the basis of the proposals.

#### Option A

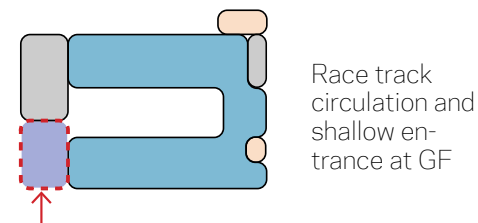
The external courtyard will need insulating on all elevations



**1.29** Form Factor  
**0.35** Surface to Volume Ratio  
**3.51** % reduction in envelope

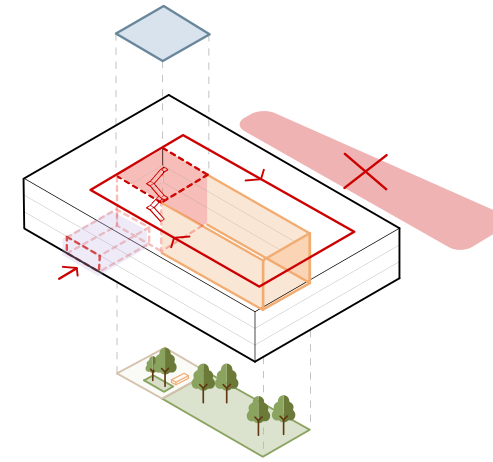
Reconfigure main entrance and primary vertical circulation at front of building in southwest corner. Connect two buildings in southeast corner. All elevations upgraded (appearance and insulation) including those to the courtyard, and courtyard space enhanced.

- + Unify the main facade
- + Rationalize circulation
- Maximize flexibility
- Activate the courtyard
- Place-making



#### Option B

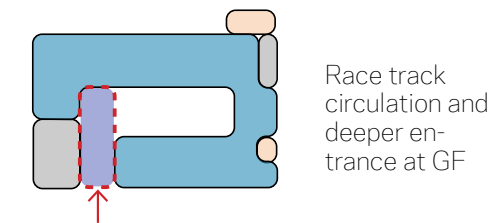
A partially enclosed courtyard will need less insulation



**1.26** Form Factor  
**0.33** Surface to Volume Ratio  
**3.17** % reduction in envelope

Relocate main entrance to open into courtyard. Partially enclose courtyard with all primary vertical circulation in enclosed space. Connect two buildings in southeast corner. All elevations upgraded (appearance and insulation) including those to the courtyard, and courtyard space enhanced.

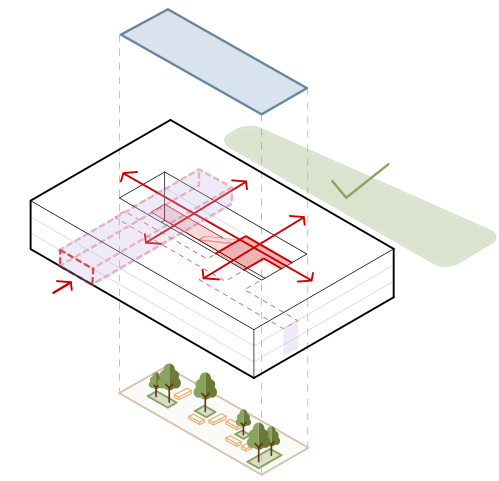
- + Unify the main facade
- + Rationalize circulation
- + Maximize flexibility
- + Activate the courtyard
- Place-making



#### Option C

*(Including additional space for Information Engineering)*

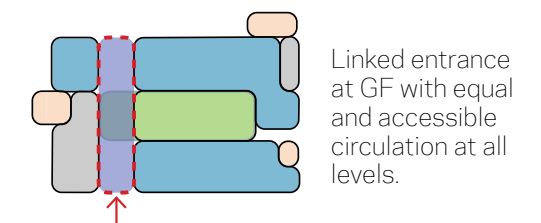
The most cost effective option, a fully enclosed courtyard maximises area and needs no additional insulation



**1.15** Form Factor  
**0.27** Surface to Volume Ratio  
**6.07** % reduction in envelope

Relocate main entrance to open into courtyard. Fully enclose courtyard with all primary vertical circulation in enclosed space, together with meeting spaces and collaboration areas. Entry at all levels via courtyard. Elevations upgraded (appearance and insulation) but those in the courtyard will become internal partitions.

- + Unify the main facade
- + Rationalize circulation
- + Maximize flexibility
- + Activate the courtyard
- + Place-making



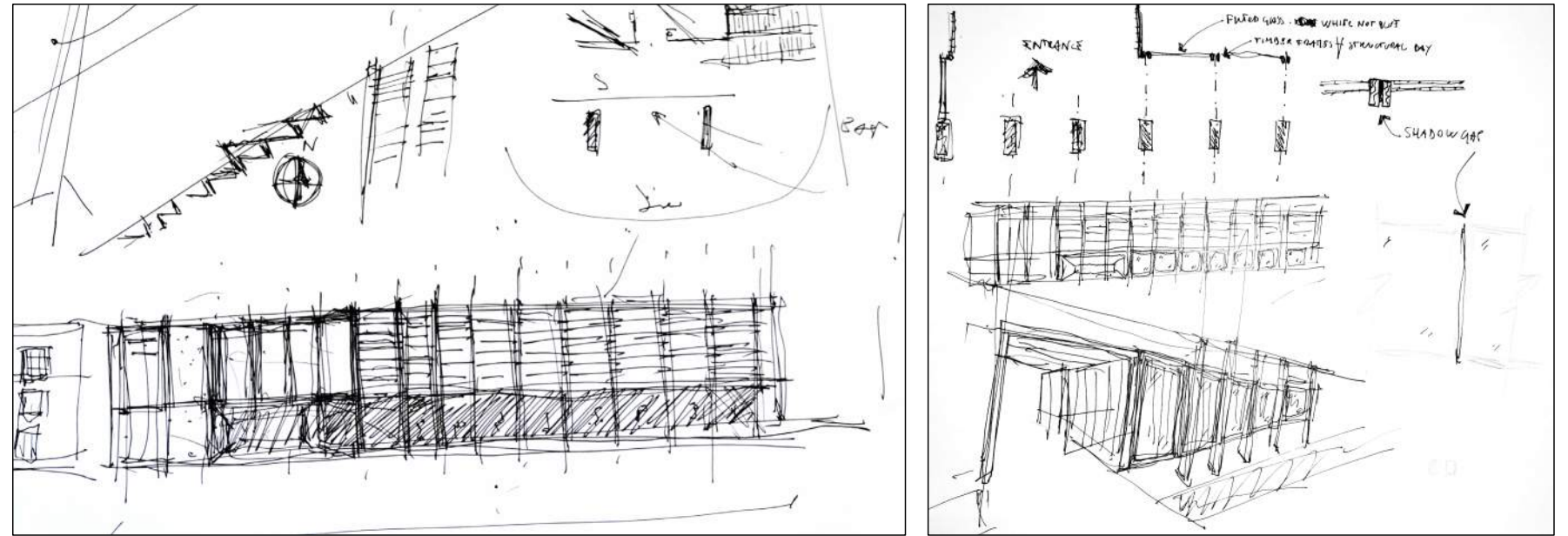
Building form and massing studies



## 4.5 ENVELOPE DESIGN

### 4.5.1. NEW FACADE DESIGN EVOLUTION

The following page explores some of the early concept sketches and design ideas for the proposed OIDH facade. The new facade has undergone a thorough evolution throughout the design process addressing not only the planning context but also the clients' aspirations. These factors have played crucial in the evolution of a design which complements the wider context but also represents the departments vision for the future building.



Early fenestration and layering sketch studies



Early client visioning test scheme to explore mood and identity



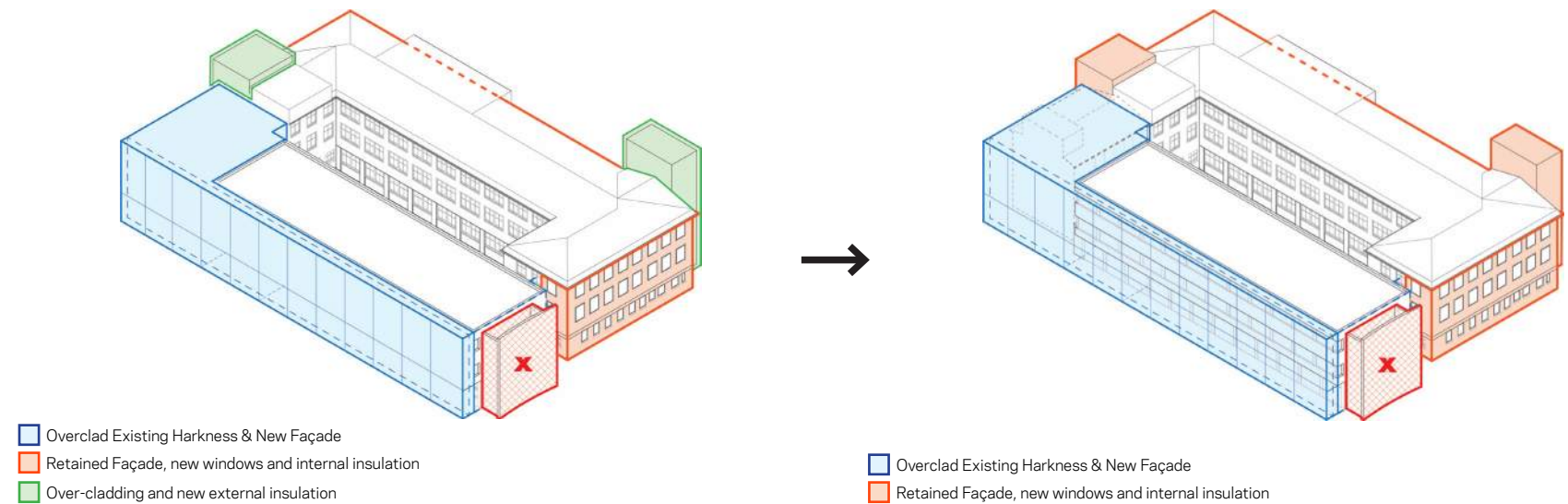


4.5.2. FACADE INTERVENTIONS

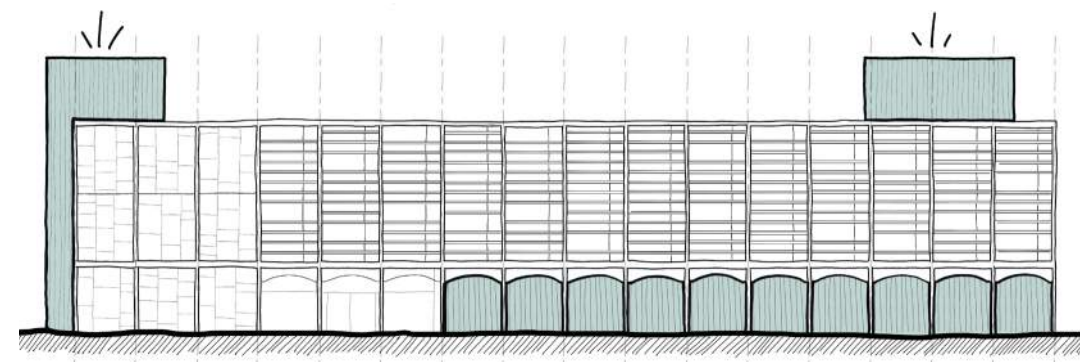
The initial concept involved three distinct interventions for the existing envelope, with the primary focus on preserving the existing Gibson building and overcladding its cores and the Harkness building.

The proposal explored unifying the south facade ground floor with the two cores which protruded higher. This was achieved through the use of a reglit glazing system which is semi-transparent and would provide a glow when light passed through it.

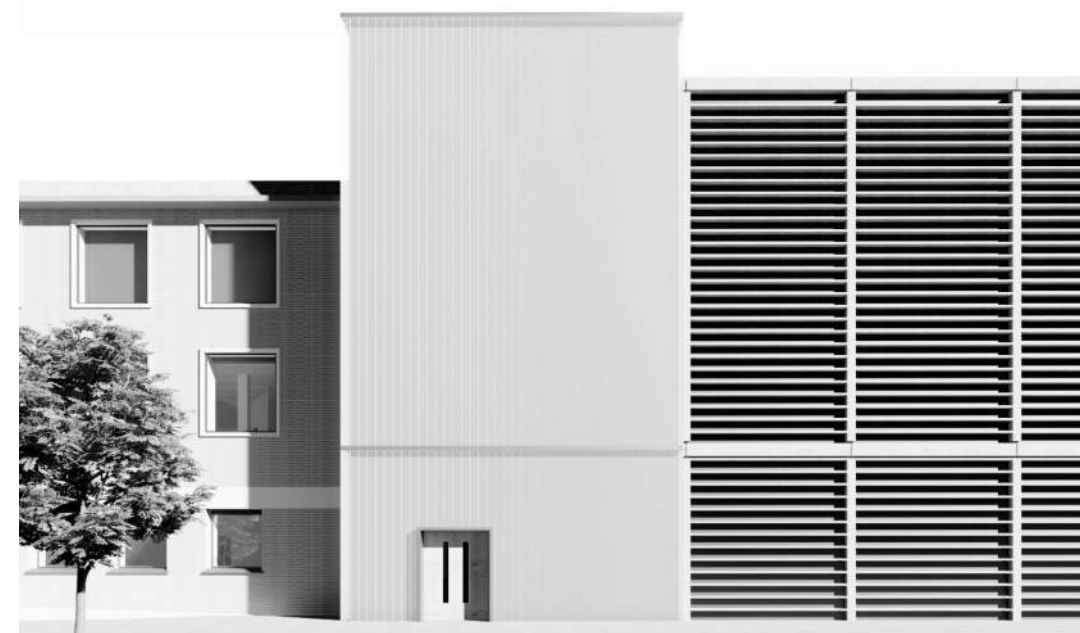
However, the team decided to shift away from over cladding the existing Gibson core blocks and instead opted for internal insulation. This shift was viewed positively by the planners, as it indicated a reduction in harm to the building due to less bulk being added to the existing facade.



Proposed envelope interventions diagram evolution



Early facade concept sketch showing reglit overcladding - now not in scheme



Early facade proposal including reglit overcladding to Gibson cores - now not in scheme



Examples of reglit glazing - not in scheme

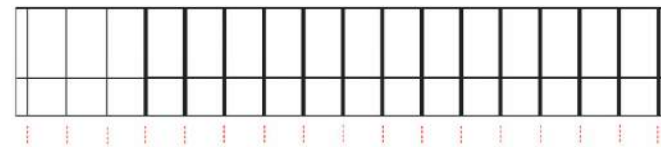


4.5.3. MODULE AND ARTICULATION TESTS

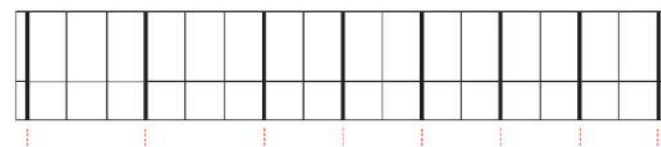
**'Initial feedback on the façade - still reads as very horizontal and as a very big mass. Seems there is a primary material. When you look at the Andrew Wiles Building there are a few more layers - primary, secondary and tertiary elements that help to break up the building. There is a challenge around getting the finer grain. (Feedback from Pre-app 02 - August 2023).**

Considering the importance of the South facade, achieving an optimal balance has been paramount. This entails ensuring the building presents a unified frontage with appropriate depth and aesthetic appeal, all while avoiding any competition with the Grade 1 Radcliffe Observatory and the planned new humanities building. Furthermore, it necessitated in-depth explorations into the articulation of the new facade and the strategic use of vertical and horizontal elements to effectively break down the overall length of the facade.

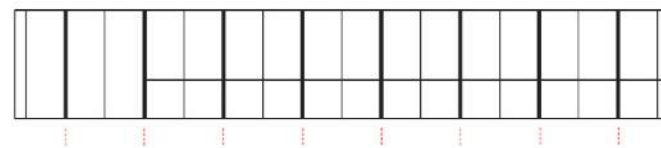
The accompanying studies illustrate various articulation explorations focused on breaking down the facade's scale. This involves experimenting with diverse vertical elements of varying sizes, incorporating solid stone panels and varying metal or glazed spandrels to enhance the overall depth.



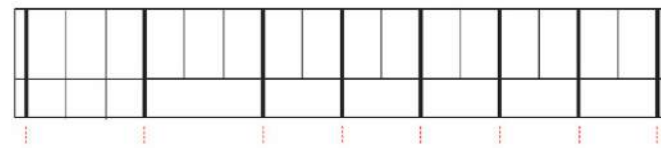
**Study A** - as shown at Pre-App 2  
 • strong horizontality, reads as single volume  
 • test with shading omitted: more depth but relentless colonnade



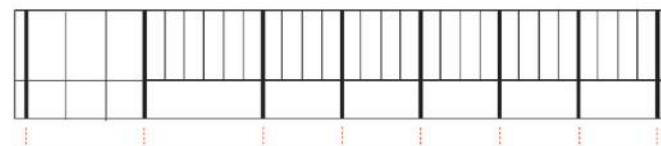
**Study B**  
 • Hierarchy between uprights - primary v. secondary  
 • Double bays do not read when viewed obliquely, still relentless



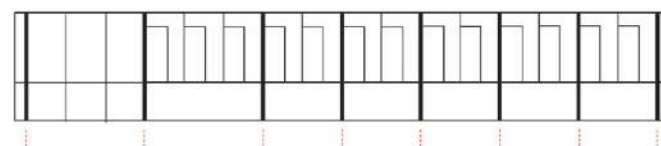
**Study C**  
 • Shift in main grid omits triple bays but results in partial end bays  
 • Entrance hard to identify



**Study D**  
 • ground floor intermediate posts omitted to form wider bays  
 • opaque cladding portion mirrored within bays (compromises shading)



**Study E**  
 • as D, but with opaque cladding in stone and additional stone fins  
 • symmetric bays contradict / clash with asymmetric façade composition



**Study F**  
 • as D, but with opaque cladding retained on exposed side.  
 • test of recessed wall hosting plants/creepers, and stone to top spandrel





#### 4.5.4. RESPONDING TO THE CONTEXT

**'Does the building grab your attention or sit back and frame other buildings.'** (Feedback from Pre-app 02 - August 2023).

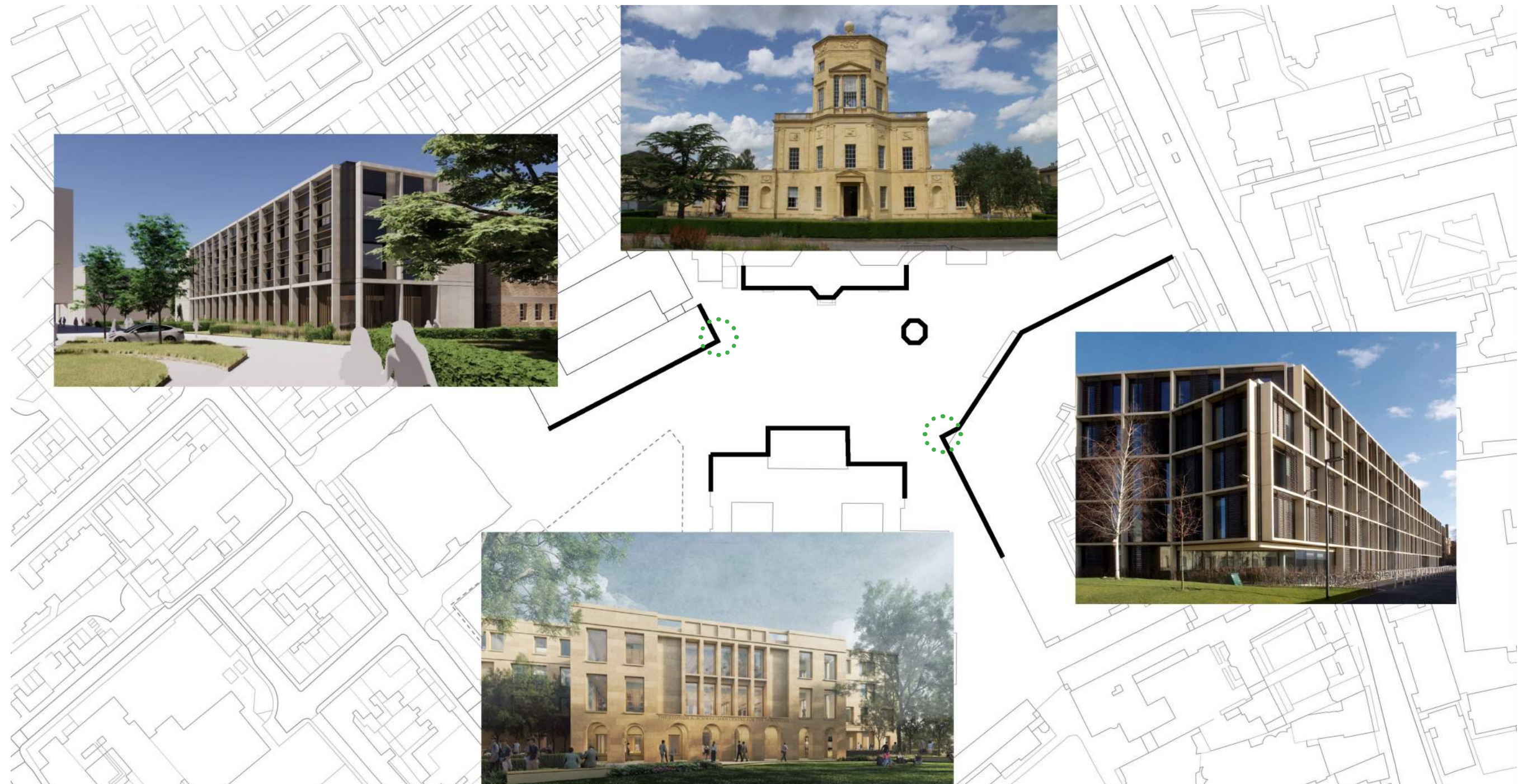
Given the significance of the site and the adjacent buildings the team were encouraged to decide and commit to whether the building would fight for attention or indeed sit as a backdrop to

frame the other buildings on the site.

Since the project's inception, the fundamental idea has been for the building to serve as a backdrop to the Observatory, carefully crafted to complement the surrounding context. Taking into account the proximity of the new humanities and Maths buildings, positioned adjacent to the Observatory, the design evolved to align with the site dynamics. The Humanities and Observatory, situated opposite each other, naturally emerged

as the focal buildings on the site, while the Maths and the new OIDH serve as contemporary backdrops. The architectural languages of both pairs seamlessly communicate, contributing to a unified visual experience.

By considering the corner studies completed in section 02, the proposal draws inspiration from the Andrew Wiles building and St Anthony's College open bookend corners to reduce the overall bulk minimising the impact on the Radcliffe Observatory.



Radcliffe Observatory and Humanities grab attention and proposed OIDH and Maths Building become a back drop

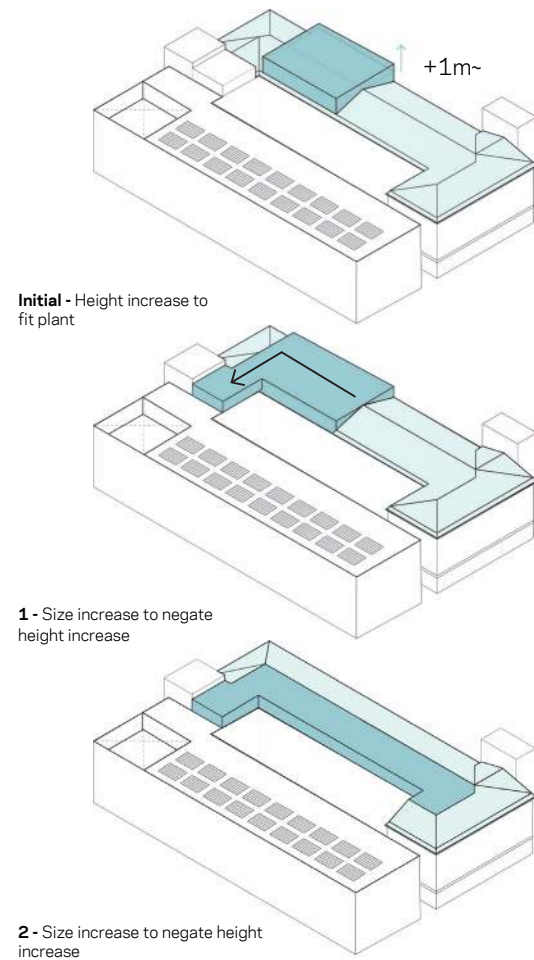


4.6 ROOF DESIGN

4.6.1. GIBSON ROOF

**'View out of observatory is an important view and concern the roof could end up looking messy.'** (Feedback from Pre-app 02 - October 2023).

The development of the roof design underwent significant changes during the design process responding to both service needs and the planners requirements. Initially, the plan involved increasing the height and extending the existing dormer, but the council expressed concerns about potential negative impacts on Observatory Street residents and views from the Observatory. To address this, the team explored an alternative by widening the room to negate the height increase. However, this raised concerns about the overall architectural unity of the roof. Consequently, the decision was made to remove the existing dormer and create a larger plant room on the internal face of the Gibson building. This not only improved the cohesion of the varied roof elements but also enhanced views for both residents and the Observatory.



Roof evolution diagrams



1 - visualisation 1



2 - visualisation 1



1 - visualisation 2



2 - visualisation 2



1 - visualisation 3



2 - visualisation 3

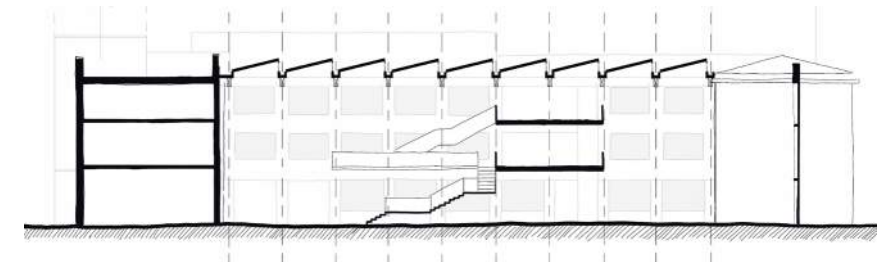


4.6.2. COURTYARD ROOF

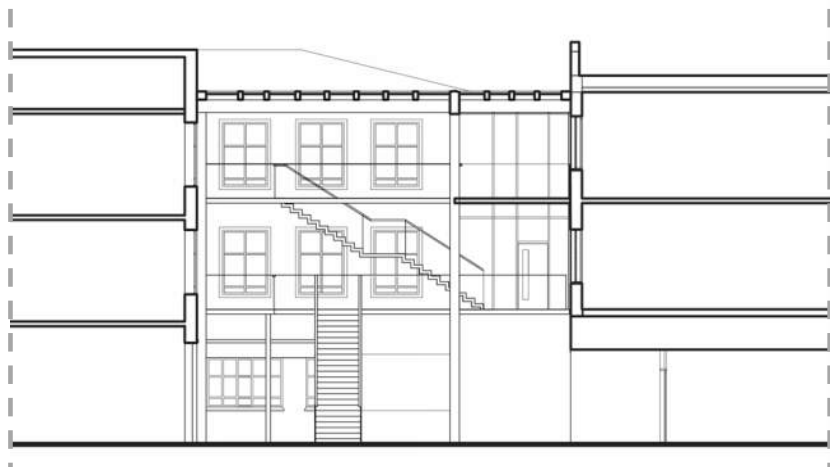
**'Less concerned if the front block and back block were different and courtyard unifies them. Plant room on top of Gibson is not aesthetically pleasing. Courtyard roof is a third element at the moment.'** (Feedback from Pre-app 02 - October 2023).

The courtyard roof plays a crucial role in establishing a unified internal and external space between the two buildings. Throughout the design process, the roof has undergone significant evolution, progressing from an early conceptual stage with a lightweight, flat timber roof to an off-centred pitch.

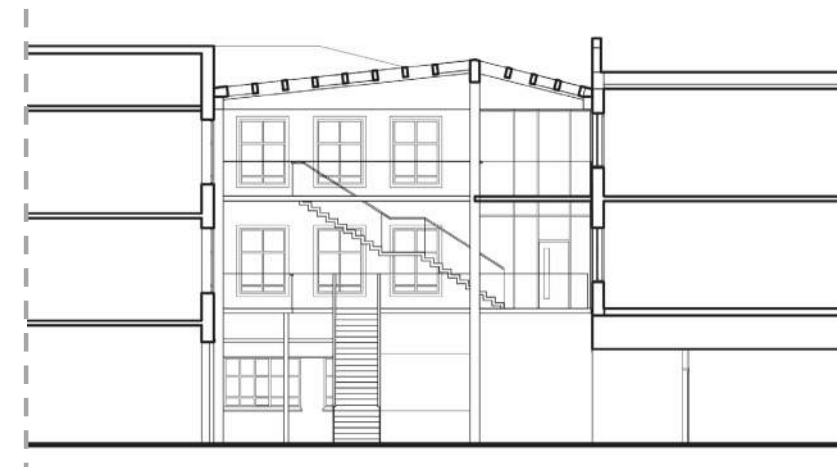
Later, it was discovered that the Harkness roof was constructed with timber and covered in asbestos, necessitating its removal. This presented an opportunity to extend a new roof from the Harkness through to the Gibson. Introducing punctures and incorporating north lights in the roof offered a clean solution, maximising natural daylight (max 50% glazing) within the space, improving the detail of the connections between the buildings, and serving as an acoustical surface for the area. This meant the Harkness roof and Gibson roof read as two distinct elements rather than three.



Exploration of solid to glazed proportions



Early roof design



Stage 2 roof design



Stage 3 roof design



4.7 INTERNAL STRATEGIES

4.7.1. GROUND FLOOR

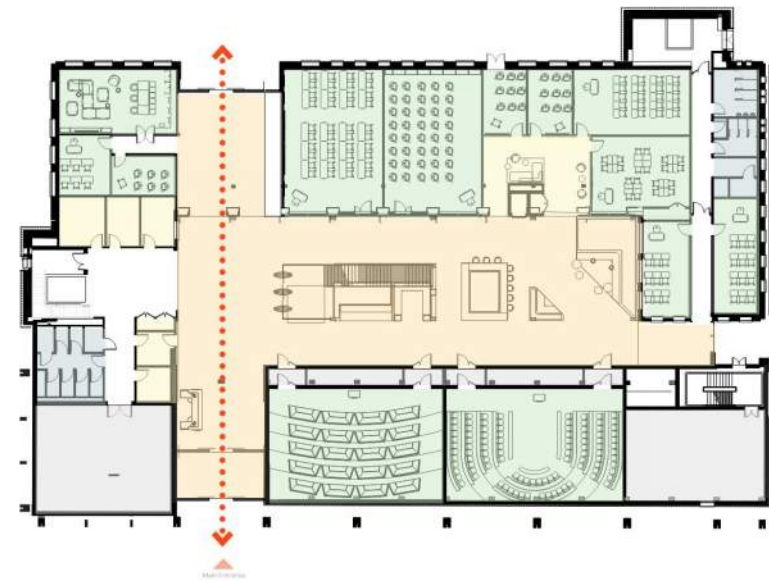
**'OCC raised concerns about the entrance location and south east corner of the building... - The south eastern corner at the end of a view is a prominent corner where we have said it would be best to pull back, now proposing plant room there so will have louvres etc, which raises concern. Don't feel previous advice has been digested. Would expect the plant room to be to the rear, not facing an active frontage.'** (Feedback from Pre-app 02 - October 2023).

Although there haven't been significant changes to the ground floor layout, a notable evolution involves the relocation of the lecture theatre Air Handling Unit (AHU) plant room. Previously situated in the southeast corner, this plant room occupied a substantial portion of the building's GF at a particularly important corner, presenting challenges during the planning process. In response, the team explored options to move the room to the new southwest plant tower, necessitating the northward relocation of the WC and amenity space to create room for the shift.

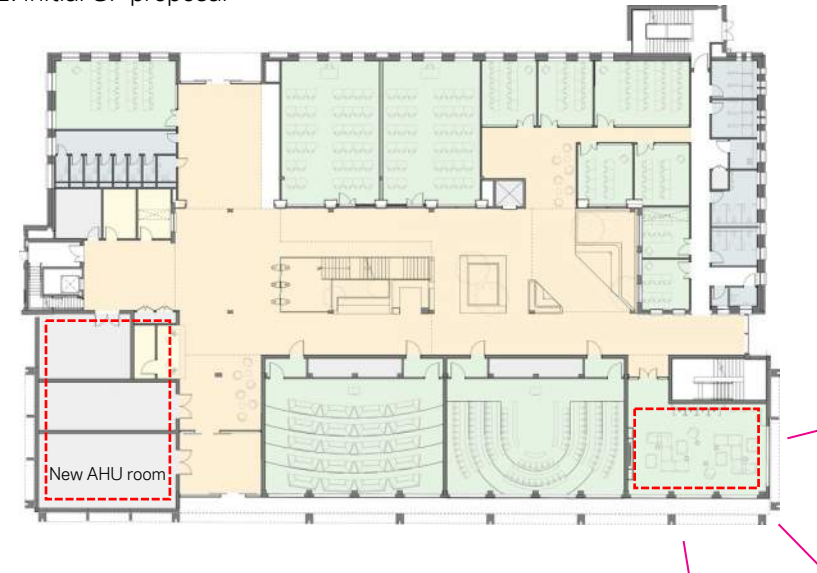
This relocation of the plant space has, in turn, freed up space in the east corner (adjacent to the Radcliffe Observatory and the new humanities plot), proving beneficial for enhancing the building's relationship with the external campus. By moving a larger teaching space to this area, the concept of activating the ground floor from the outside has been strengthened, making education visible from the street.

**'Noted it is interesting to see how the frontage is activated by windows.'** (Feedback from Pre-app 02 - October 2023).

A significant enhancement to the ground floor occurred with the transformation of the south facade. Initially proposed as a reglit semi-transparent glazing system, it evolved in response to the client's desire to activate the ground floor and showcase the activities within. The design progressed to feature glazed units within a solid wall, enabling the lecture halls and new multi-functional space to be visible from the outside. To infuse dynamism into the facade and establish a stronger relationship with the surroundings, a sawtooth design was integrated, aligning with the observatory axis. This allowed for the introduction of solid elements in the shorter face, reducing the glazing ratio.



1. Initial GF proposal



2. Updated GF proposal - relocation of plant room



3. Current GF proposal - Introduction of serrated GF facade



Initial GF experience externally



Current proposed GF experience externally



View from SE corner looking out to Humanities plaza



4.7.2. LEVEL 01 & 02 OFFICE RESEARCH FLOORS

'OCC queried the distance between the rear elevation of the Gibson building and the Observatory Street rear boundaries and rear elevation walls and how the upper floors are proposed to be utilised i.e. would the use be intensified and what are the implications for overlooking/perceived overlooking. Consideration needs to be given to how the glazing treatment could mitigate this harm.' (Feedback from Pre-app 01 - June 2023).

Given the existing use of the building is office on both level 1 and 2 there is no change to the use of the floors. A study was complete to establish if there was any potential of intensifying the space but as illustrated adjacent there will be none. Therefore, as the use is not being intensified there won't be a perception of more overlooking to neighbouring properties.

'OCC noted they understand there are a lot of people coming in from other departments, is it critical for all these people to have an office in the building? Do they have offices in other places? Can people share offices? Do they need to be of this size? How will people work in the building and how is it different from a traditional department?' (Feedback from Pre-app 02 - August 2023).

Information of departmental headcounts and potential rates of occupancy (FTE - full time equivalent) was received. As the groups that form the department are likely to shift and change in size between now and the completion of the project, this data was taken as the starting point and has been translated into standardised and anonymised research groups.

Research departments with similar ratios of DPhils to staff were grouped into ranges of sizes:

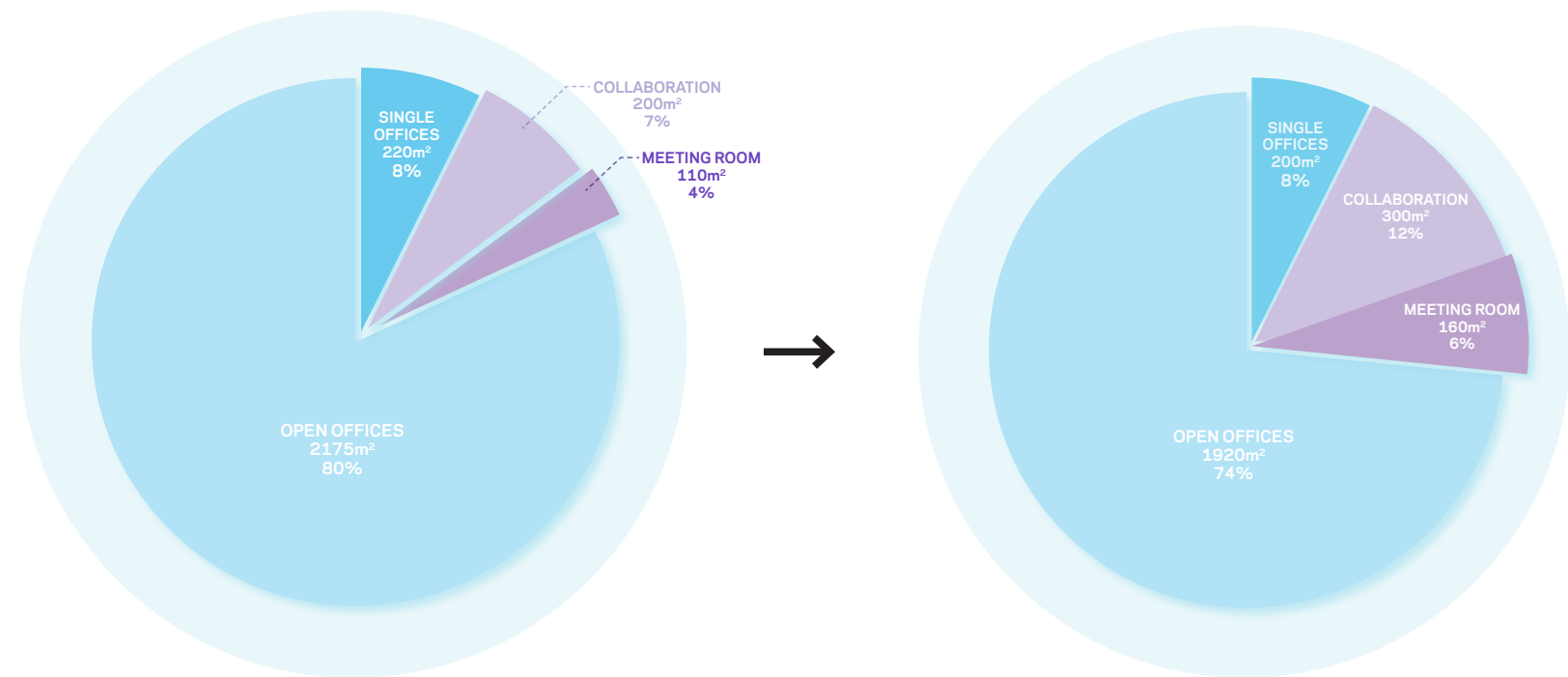
- 1-3 Staff per DPhil
- 4-7 Staff per DPhil
- 8-10 Staff per DPhil
- 11-14 Staff per DPhil
- Additional staff in groups of 8 to 16.

Based on this analysis of the office space requirements in comparison to the outcomes of user engagement sessions and concerns raised by OCC, some adjustments to the brief for the Schedule of Accommodation have been accommodated.

A larger proportion of collaboration and meeting spaces is proposed for the future department in order to support different modes of working, providing a mixture of environments for building users, and supporting the ongoing shift towards hybrid meetings and part time remote working. By minimising the quantity of conventional office chairs, the department moves closer to its goal of fostering work flexibility and the building becomes more efficient by not over providing unnecessary workstations.



Existing and proposed use studies



Example of early briefing adjustment to office areas to improve efficiencies



4.7.3. INTERNAL COURTYARD DESIGN

The development of the design for the new covered courtyard has undergone continual refinement throughout the design process, adapting to requirements, usage considerations, cost constraints, and the overall aesthetic. Initially conceived as a CLT structure, the shift to steel became necessary. It was also recognised that excessive space savings could be achieved by reducing the amount of new walkway space.

Furthermore, the joinery underwent a rationalisation process to not only reduce costs but also enhance the user experience and navigation within the space. This was achieved by integrating security barriers more seamlessly and creating more accessible and usable seating at the GF.



Introduction of steel structure



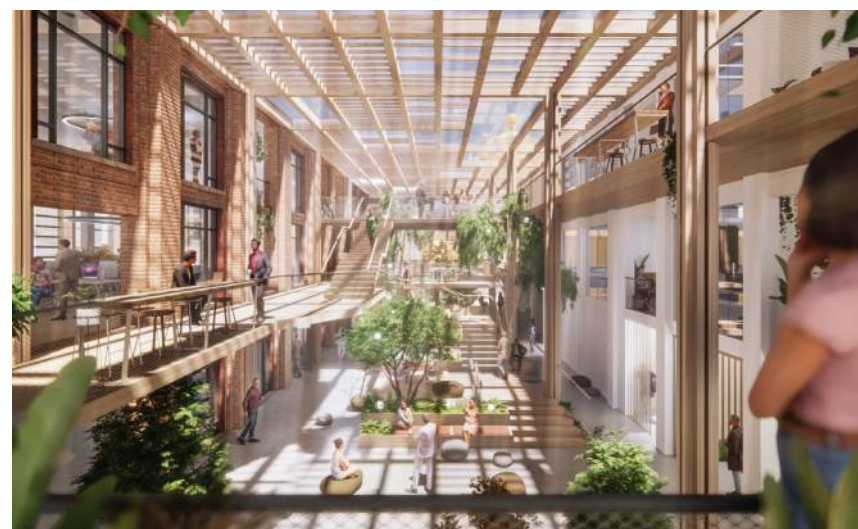
Visible but awkward security Barriers



Better integrated security barriers



Stage 2 courtyard development



Initial courtyard vision



Walkway at L2



No walkway at L2





## 5 DESIGN PROPOSALS

- 5.1 Use & Amount
- 5.2 Design Concept
- 5.3 Building Organisation
- 5.4 Urban Context & Scale
- 5.5 Appearance - Facade & Materiality
- 5.6 Roof Design
- 5.7 Landscape Design
- 5.8 Sustainability Principles



5.1 USE & AMOUNT

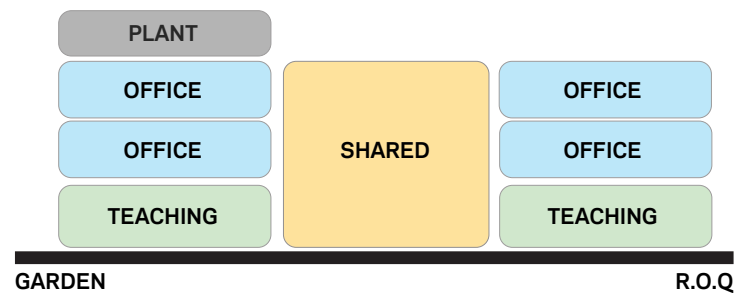
5.1.1. USE

The ground floor accommodates the proposed teaching spaces. The intention is to create a shared entrance and courtyard space for staff and students, with a series of seminar and teaching spaces accessible from this shared space.

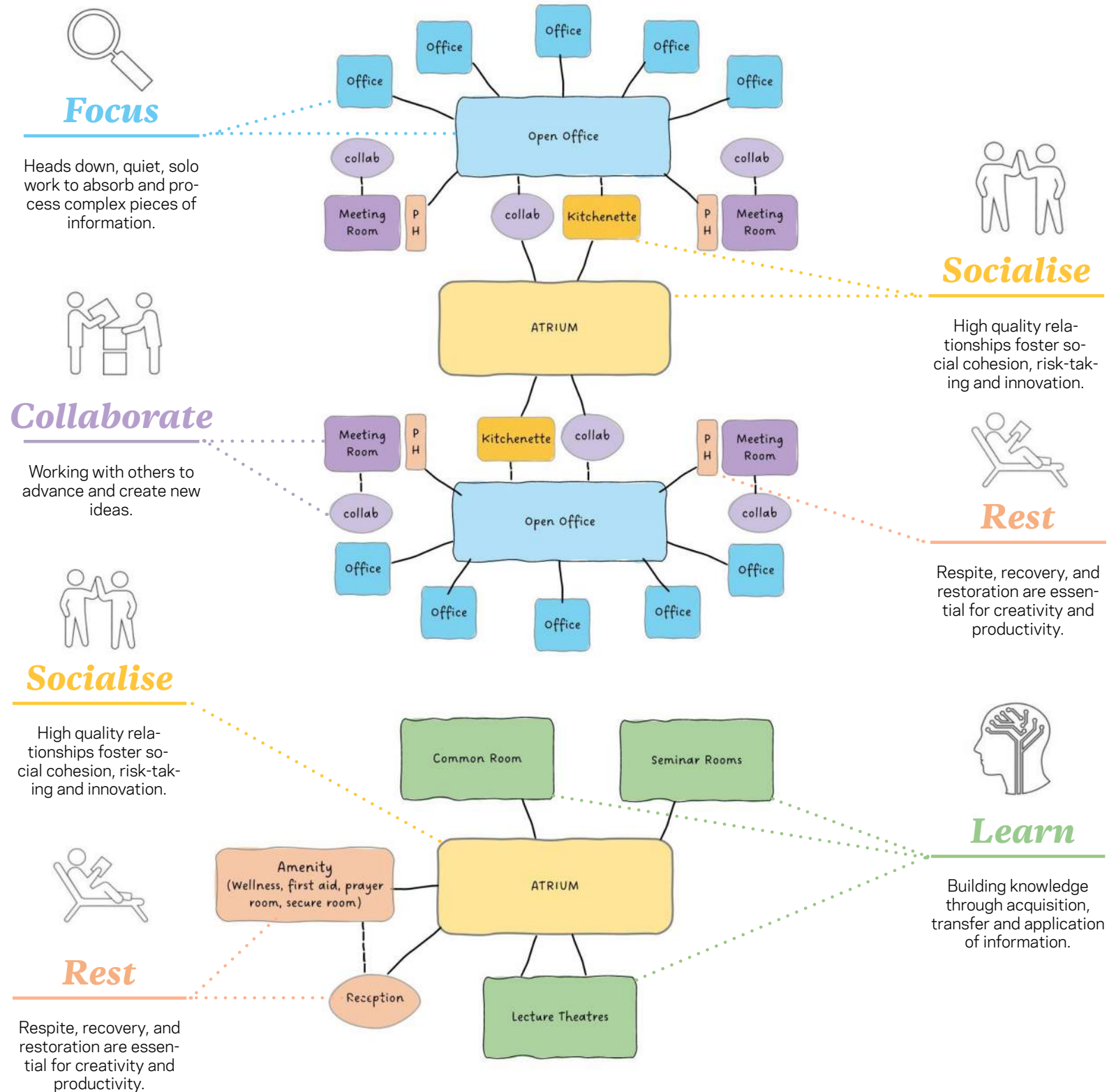
The design considerations for the new office layout involve several key elements. Firstly, the circulation from the atrium into the offices is carefully planned to ensure efficient movement throughout the space. Secondly, there is a deliberate hierarchy of spaces, transitioning from noisy zones near the atrium to quieter zones towards the offices. Additionally, meeting rooms and collaboration spaces are strategically grouped near key views, allowing for a pleasant and inspiring working environment. It is important to ensure that all office spaces have access to natural light and views, promoting a positive atmosphere. Collaboration spaces are intentionally spread out throughout the open office plan, fostering teamwork and creativity. Lastly, team zones are created by spacing out the offices across the floor, facilitating a sense of unity and collaboration within different groups.

During the briefing and visioning for the project, the requirement for different types of work spaces throughout the office and teaching spaces emerged from the user requirements.

Different work modes require different spaces and tools. A range of space types are needed to support the variety of work that people do. These types fall under one of the 5 categories listed below. The spatial diagrams in the following sections also utilise these categories and their associated colours for ease of reference.



Building Adjacency Diagram



Building Use Diagram



5.1.2. SCHEDULE OF ACCOMMODATION

The proposal works towards the approved brief established in the early design stages.

This brief aimed at restructuring the areas within the Schedule of Accommodation to align more effectively with the envisioned objectives for the upcoming building. In response to this, a significant increase in collaborative and meeting spaces was proposed for the future department. This strategic adjustment aimed to cater to diverse working styles, offering a blend of environments for building users. It also aimed to support the ongoing trend towards hybrid meetings and part-time remote work. The Schedule of Accommodation is outlined below with a further breakdown of spaces illustrated adjacent.

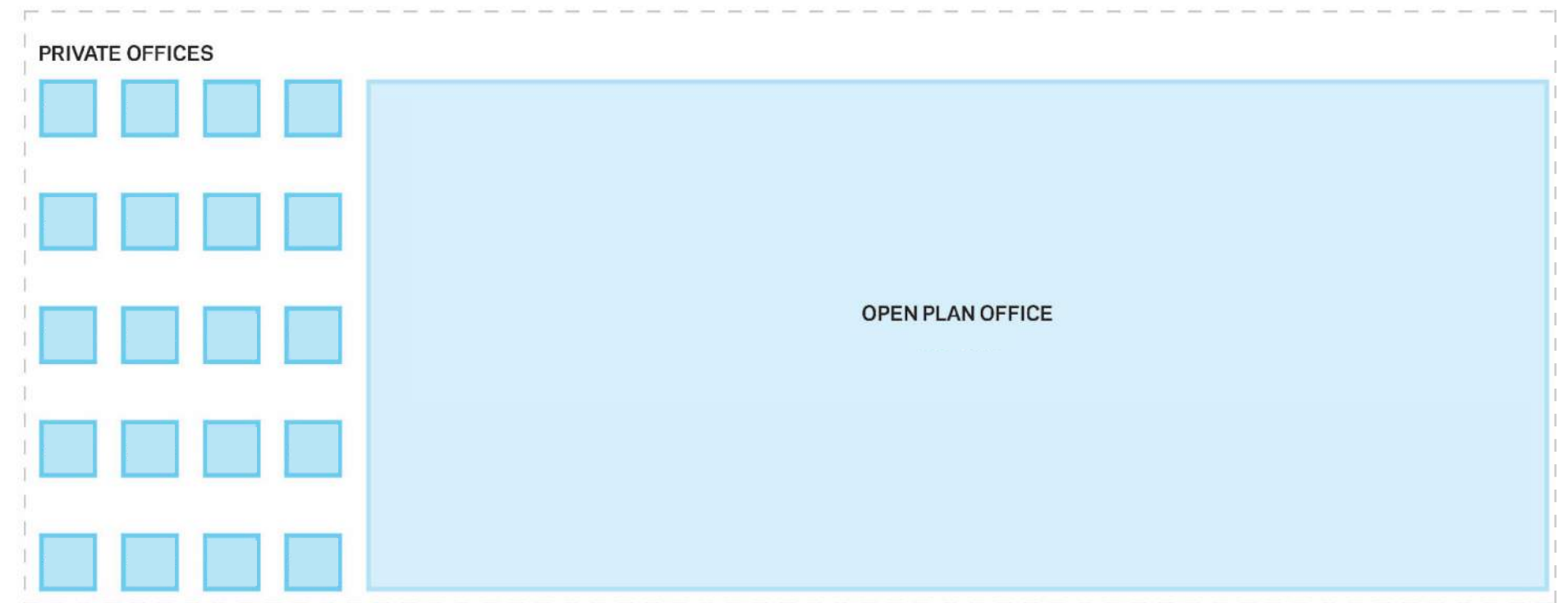
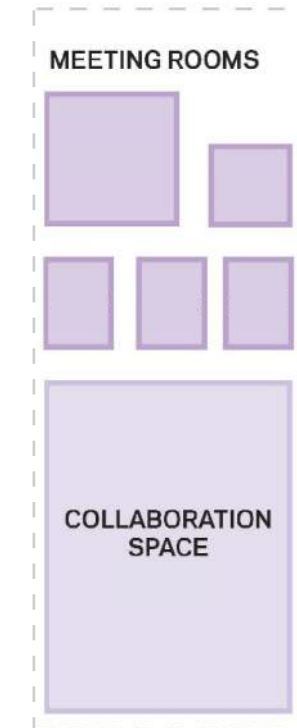
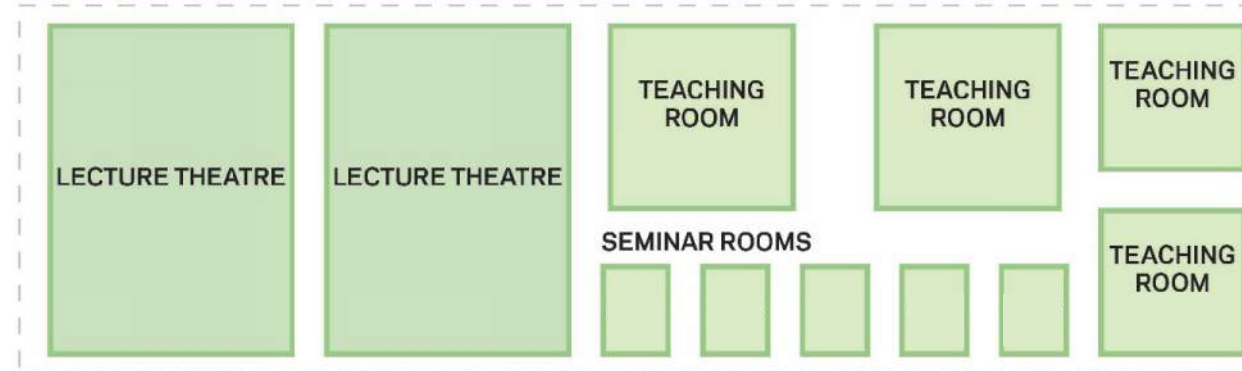
SCHEDULE OF AREAS - STAGE 3	
SPACE TYPE	PROPOSED AREAS
OPEN OFFICES	1780m <sup>2</sup> (328 seats, 63% FTE Rate*)
SINGLE OFFICES	325m <sup>2</sup> (20 offices)
MEETING ROOMS & COLLAB.	315m <sup>2</sup>
LECTURE THEATERS	310m <sup>2</sup>
TEACHING SPACES (INCL. COMMON ROOM)	550m <sup>2</sup>
SHARED SPACE INCLUDING COURTYARD	1300m <sup>2</sup>
WC & SHOWERS	235m <sup>2</sup>
<b>TOTAL NUA</b>	<b>4815m<sup>2</sup></b>
PLANT SPACE & RISERS	1468m <sup>2</sup>
<b>TOTAL GIA</b>	<b>6283m<sup>2</sup></b>

Building schedule of accommodation

SHARED SPACE - Students, Staff & Visitors



TEACHING SPACE - Students & Teaching Staff



OFFICE / RESEARCH SPACE - Researchers & Staff

Building schedule of accommodation



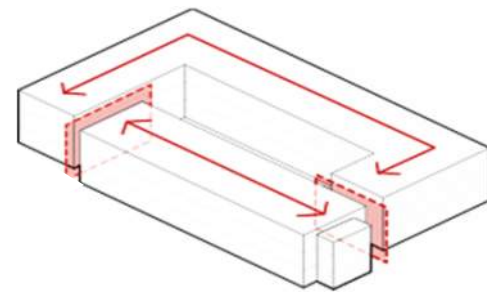
5.2 DESIGN CONCEPT

The proposed design aims to unify the two buildings by improving connections and addressing issues with the south-facing elevation (public space), particularly the fragmented southwest corner. The design involves over-cladding the existing Harkness building while maximising the re-use of the existing fabric.

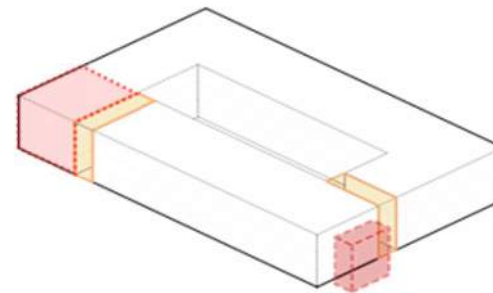
To create an inviting and permeable entrance, the ground floor allows views into teaching facilities, directing attention towards a prominent link connecting the public exterior, semi-public central courtyard, and the private walled garden at the rear.

A glazed roof over the courtyard serves as the central hub for the Institute, with interspersed levels for shared spaces and improved connectivity.

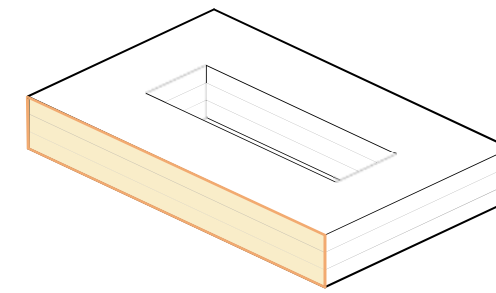
Highlighting an off-centre framed entrance orientated towards the approach from Walton Street (instead of the crowded central square / east corner) creates an additional landscaped focal point along the important thoroughfare through the ROQ, taking advantage of the building's footprint which angles away from the approach route.



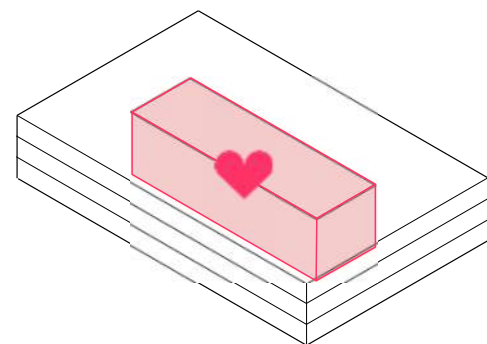
**Existing**  
Flows are separated across the two buildings



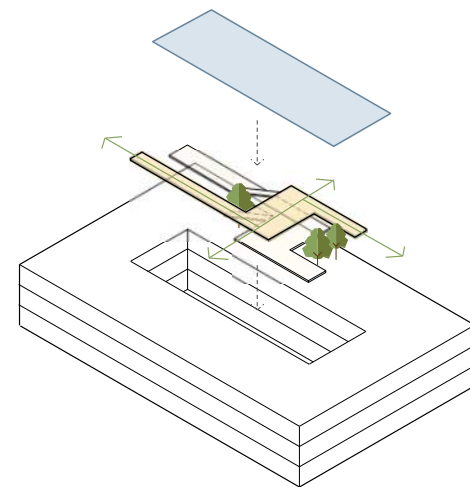
**Step 1**  
Connecting the two buildings, removal of unsightly staircase and rebuild SW corner



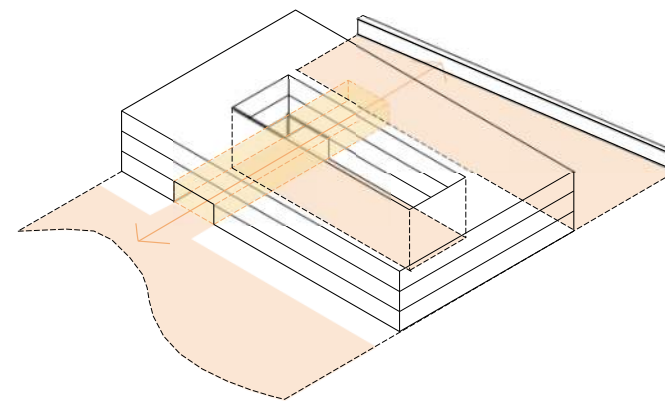
**Step 2**  
Unifying the two buildings and creating a single identity



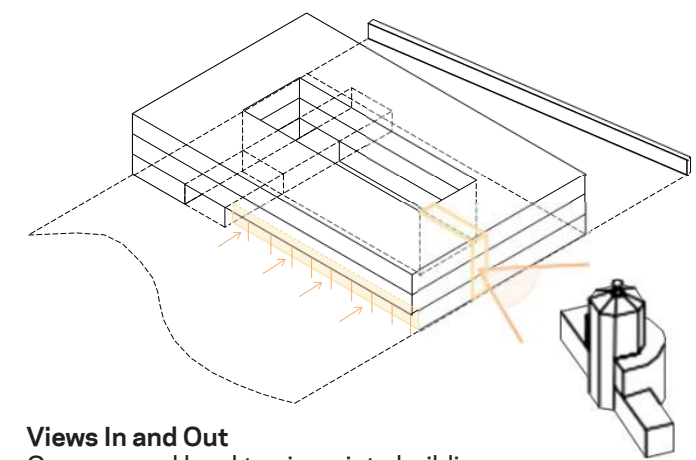
**Activated Heart**  
Make use of courtyard space



**Green Circulation Space**  
Add landscape and connections



**Connected Spaces**  
Support wayfinding, connecting arrival, courtyard and garden



**Views In and Out**  
Open ground level to views into building; make use of ROQ views

Overall building concept diagrams



### 5.3 BUILDING ORGANISATION

#### 5.3.1. GROUND FLOOR TEACHING

Teaching, student study and building amenity are centred around the ground floor to provide ease of access for large groups and an opportunity for the building to engage with the wider ROQ site. Both the Gibson and Harkness's ground floors have taller floor-to-soffit heights which allows for the inclusion of 2x 100 person lecture theatres and various sized seminar rooms to be located around the central, multifunctional courtyard space.

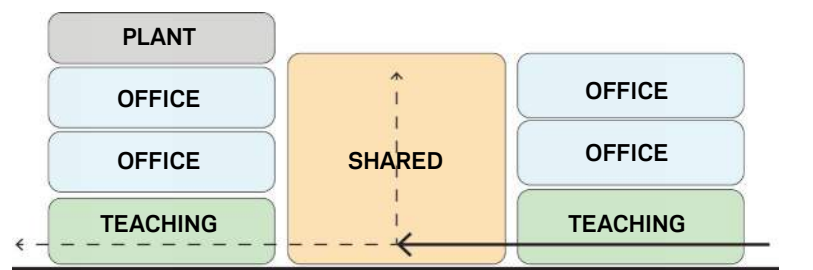
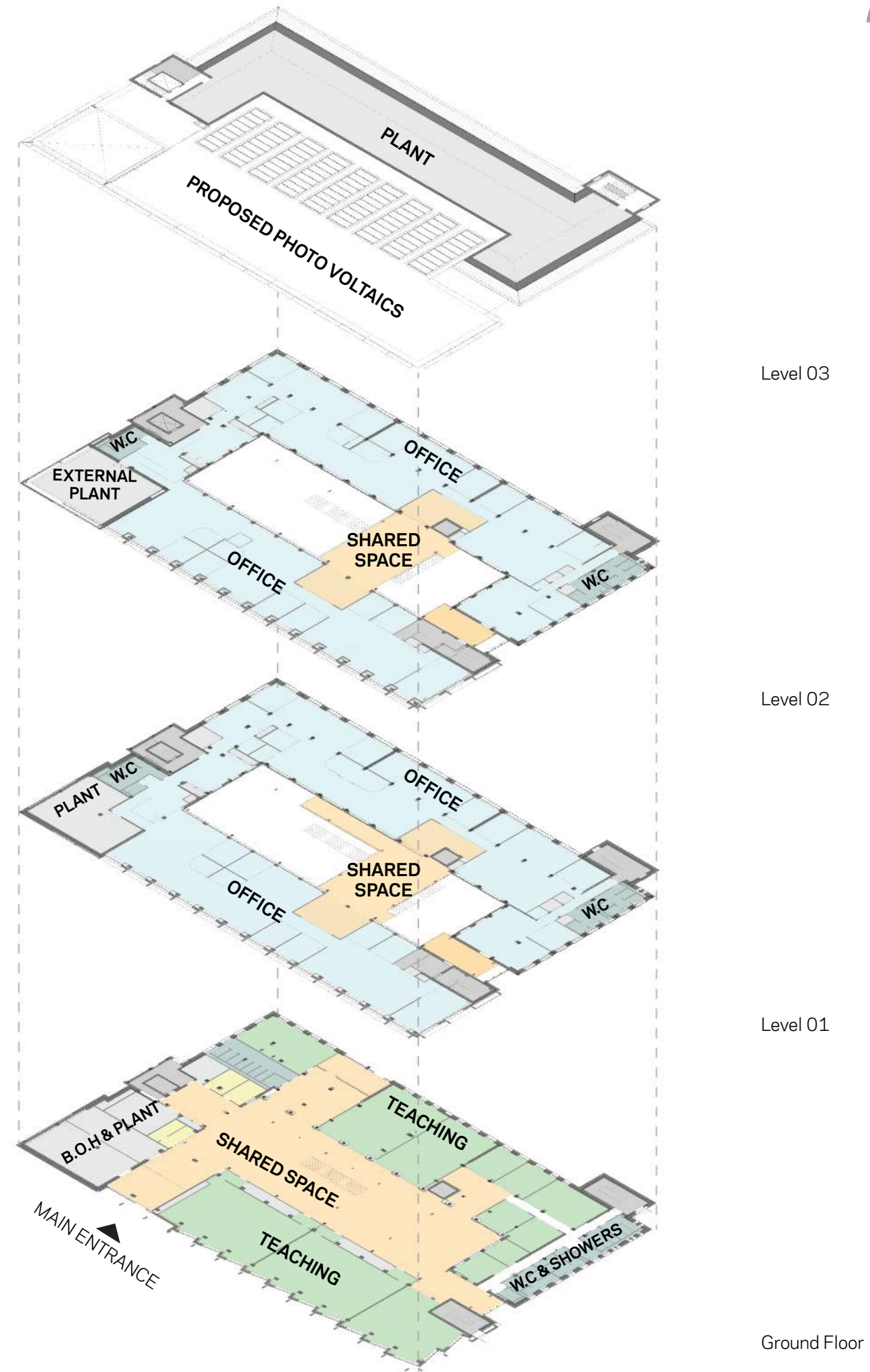
#### 5.3.2. LEVEL 01 & 02 OFFICE

Level 01 & 02 are primarily focused around office based working and research, with access being limited to the department and staff. Opening up the existing buildings provides a flexible floor plate suitable for a range of office environments which have been informed through user engagement and initial test-fits. The new office space will predominantly be open plan workspace with the provision of 20 private offices across the two floors. The department have expressed their interest in ensuring the private offices remain flexible and do not become a permanent base for a singular user.

#### 5.3.3. SHARED SPACE

Students, researchers, staff and visitors are greeted by a light filled, terraced, multifunctional courtyard space that connects all floors of the building while providing an exciting and lively circulation hub.

A variety of collaboration options will be provided though each level with a teaching focus on the ground floor while level 01 & 02 will focus on collaboration and interaction between researches and the varying sub-departments.



GARDEN

R.O.Q

Building Adjacency Diagram

Building Organisation AXO



5.3.4. BUILDING LAYOUTS - GROUND FLOOR

- Teaching Space
- Shared Sapce
- Amenity Space
- WC
- Plant / Riser
- Core





5.3.5. BUILDING LAYOUTS - LEVEL 01

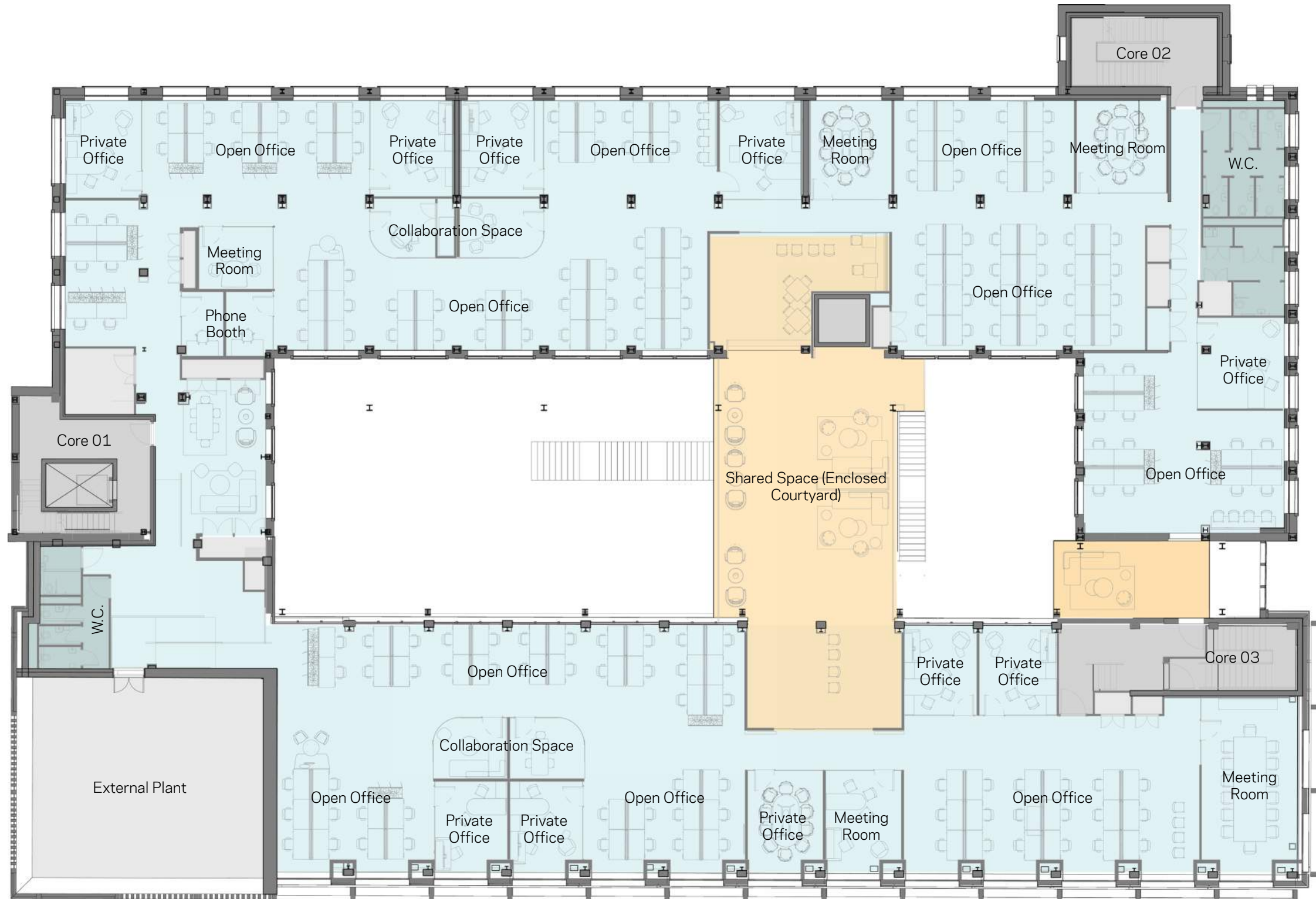
- Office Space
- Shared Sapce
- WC
- Plant / Riser
- Core





5.3.6. BUILDING LAYOUTS - LEVEL 02

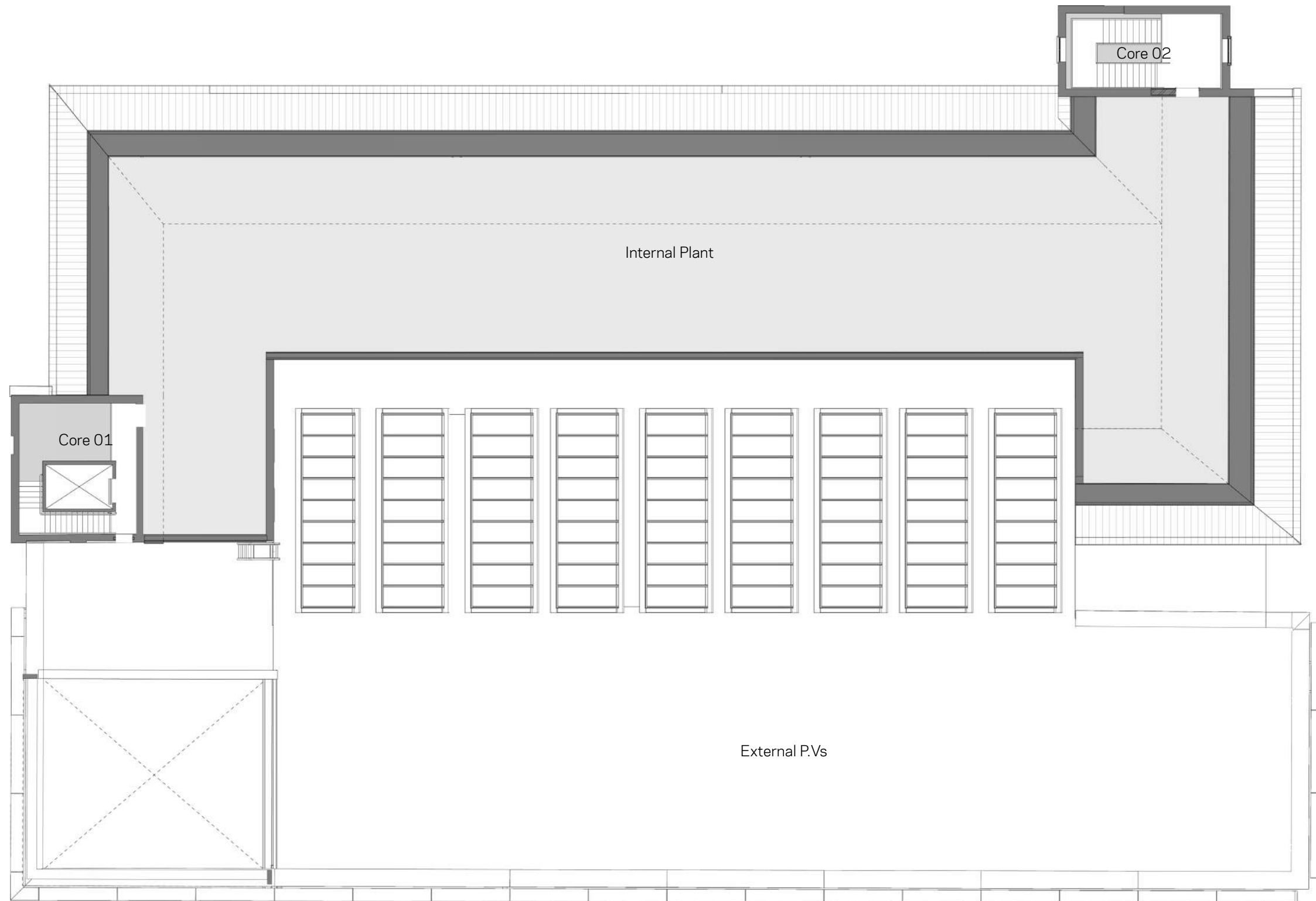
- Office Space
- Shared Sapce
- WC
- Plant / Riser
- Core





5.3.7. BUILDING LAYOUTS - LEVEL 03

- Plant / Riser
- Core





### 5.3.8. ENTRANCES & EXITS

The entrance and exit points to the building are as follows, and are shown on the adjacent plan:

1. The main entrance, located at the ground floor to the south of the site. This is the main point of entry for staff, students and visitors.
2. The rear garden access will be used by the department to access the rear private garden space.
3. Core 1 fire escape.
4. Core 2 fire escape.
5. Core 3 fire escape.

### 5.3.9. VERTICAL CIRCULATION - COURTYARD

The new enclosed courtyard will create a new centralised circulation route for the building, creating stronger connections between the Gibson and Harkness buildings by bridging the different levels between the two existing buildings. Proposals include a new primary stair and centralised lift.

#### Primary Stair

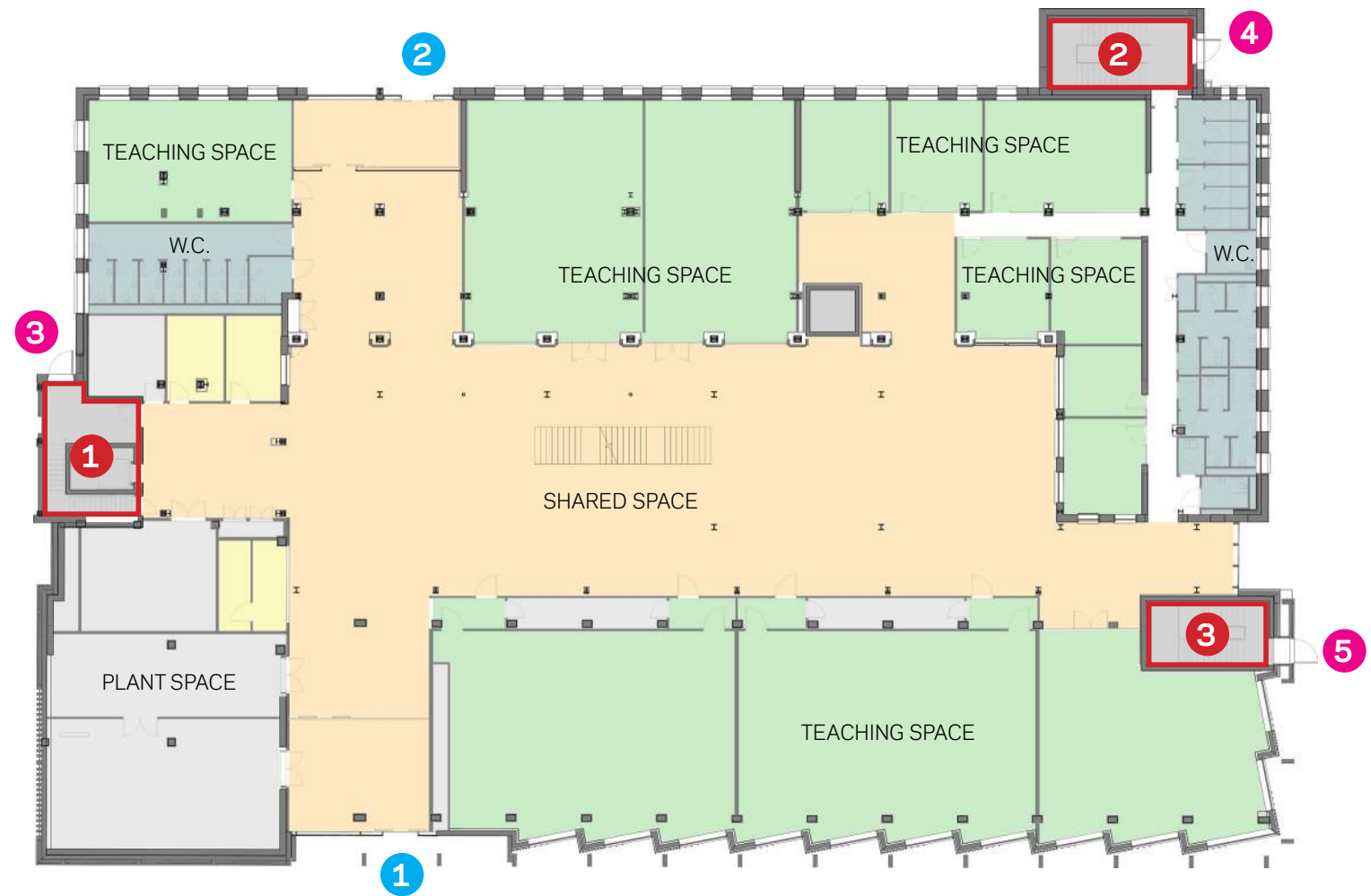
The courtyard serves as a connection point between the different levels of the building, enhancing legibility and way-finding for building users by creating one shared circulation route.

Careful consideration was given to the journey through the atrium, leading to adjustments to the original proposals. The level 2 stair originally required users to turn back on their intended path, limiting circulation flow. The stair has been relocated to the rear of the terrace, creating a clearer and more visible route through the space.

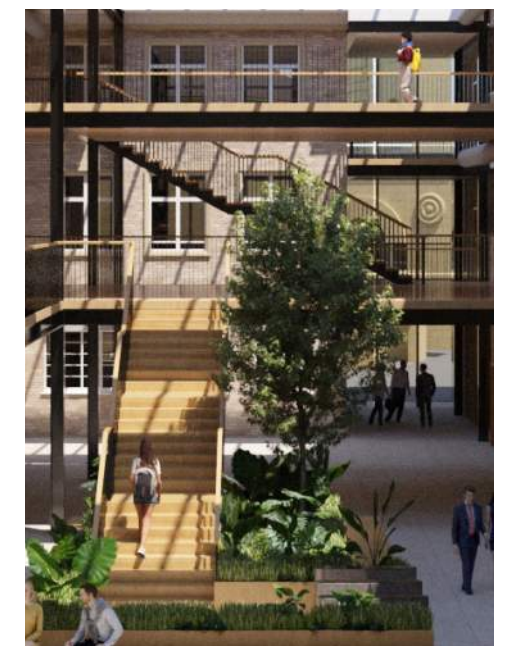
In earlier depictions, the ground floor stair was presented as terraced with platforms as users ascended. In order to create shared spaces that are accessible by all building users, and to keep student spaces located at ground floor, the stair has been redesigned to position the shared seating at ground floor level. This is intended as additional breakout space for the teaching area.

#### Lift

As there are differing levels between the Gibson and Harkness building, the atrium terraces will also be required to bridge the difference in floor levels. Although ramps have been considered, the length of ramps required would have significantly reduced the available space (continued overleaf).



Entrances (blue), cores (red) and final exits (pink)



Courtyard Staircase



In order to create equal access for all building users, and create the same journey through the building for all, a new through lift is required within the atrium. This will also serve as the primary lift circulation for the building, with the existing lifts and their suitability for retention / replacement to be further reviewed in Stage 3.

### 5.3.10. CORES

A thorough examination of the existing cores took place to assess the suitability of these two cores to act as fire protected cores and fire fighting stairs. Their constraints were reviewed during the design stages in conjunction with industry guidance such as, Fire Safety: Approved Document B, British Standard Codes of Practice such as BS 9999: 'Code of practice for fire safety in the design, management and use of buildings', in addition to the Oxford University Philosophy Documents.

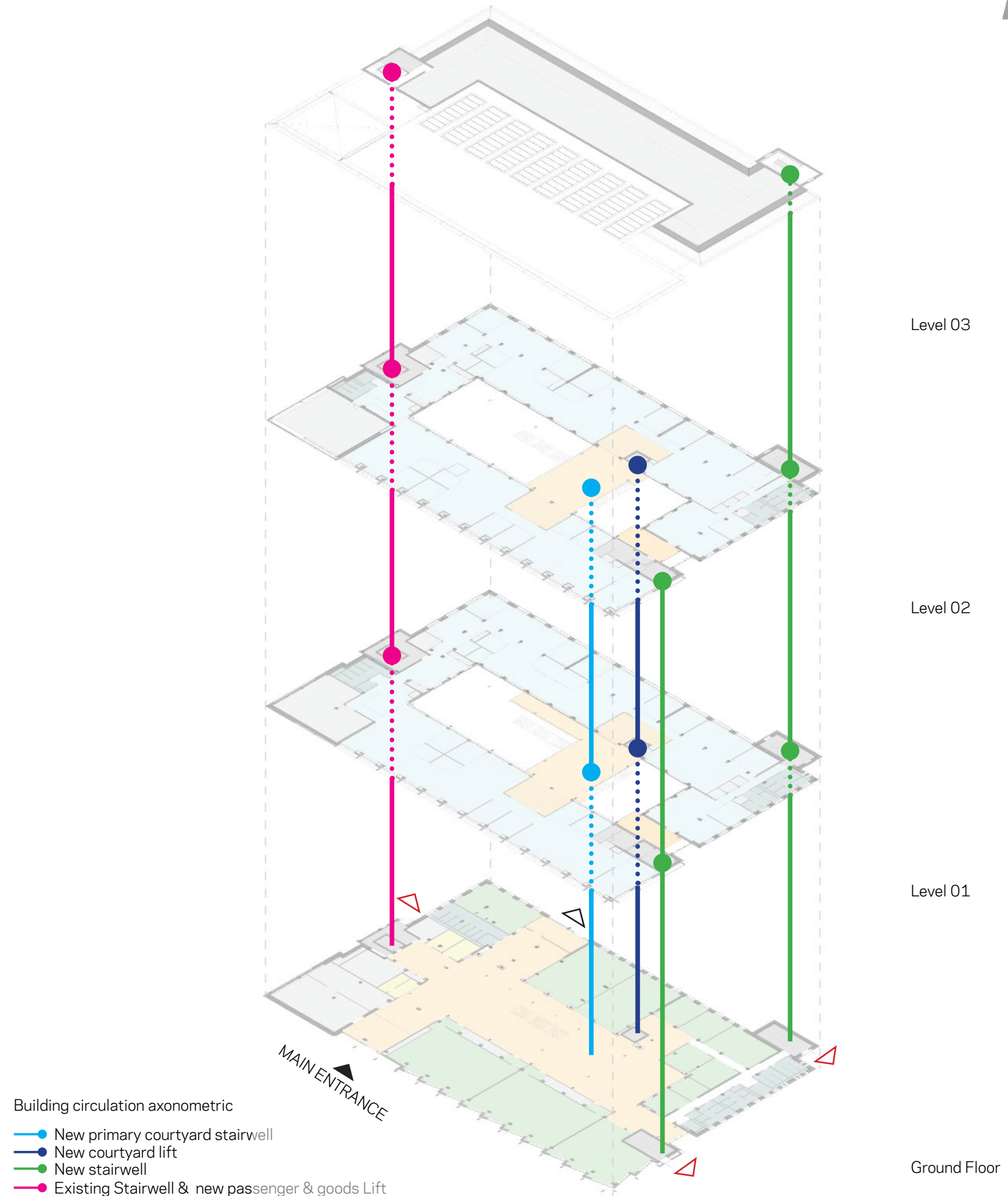
The evaluation determined that the west core (core 1) had sufficient clearance in the stairwell to retain the existing staircase and the existing lift shaft had enough room to accommodate a new lift, based on recommended sizes provided by the vertical transport (VT) specialist. It is important to highlight that the VT team will need access to the shaft for precise on-site measurements, which has not been possible due to the presence of asbestos. The new lift within core 1 will also serve as the buildings goods lift.

A similar assessment was conducted on the existing Gibson north core (core 2), revealing that the current stairwell was too narrow to comply with current regulations, significantly reducing the building's overall occupancy. Consequently, the existing lift shaft (currently a redundant goods lift) within the core has been removed to make way for the construction of a new compliant escape stair.

### 5.3.11. NEW SOUTH EAST PROTECTED STAIR

An existing stair core located in the Harkness building is to be demolished. In its place, a new stair core with a protected lobby is proposed. The new stair core will serve the south side of the building which is 420mm higher than the north side at level 01 and 660mm higher than the north side at level 02.

As with the existing cores, a refuge area is required on every level. This refuge area must have a call point and a two way communication system, allowing anyone who is positioned there with a means to raise awareness of their presence in this specific location. They need to be able to communicate with a qualified person, so that they can be assured assistance is on route.









## 5.4 URBAN CONTEXT & SCALE

### 5.4.1. SITE & PUBLIC REALM

The design of the public realm aims to create an attractive and contemporary design which responds to the setting of the Radcliffe Observatory Quarter.

The external landscape will include the following key areas, identified on the masterplan below:

1. Main entrance, hardscaped plaza.
2. Rain garden and amenity planting border to site frontage.
3. Student cycle parking area.
4. Communal seating areas within public realm.
5. Sub-station and generator compound.
6. Walled Garden, private space for staff and student use.
7. Staff cycle parking storage unit.
8. Proposed bin store.

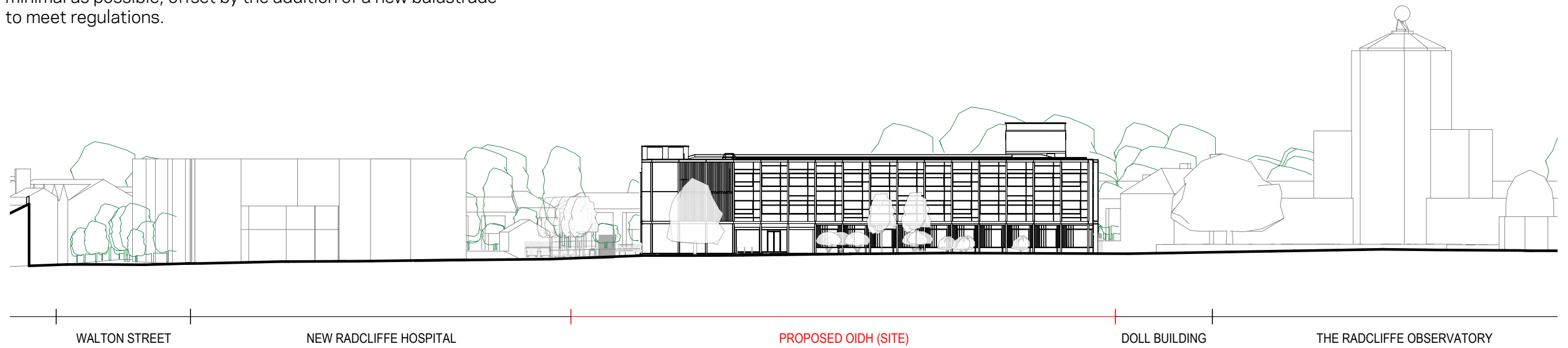


Ground floor plan within the proposed site context

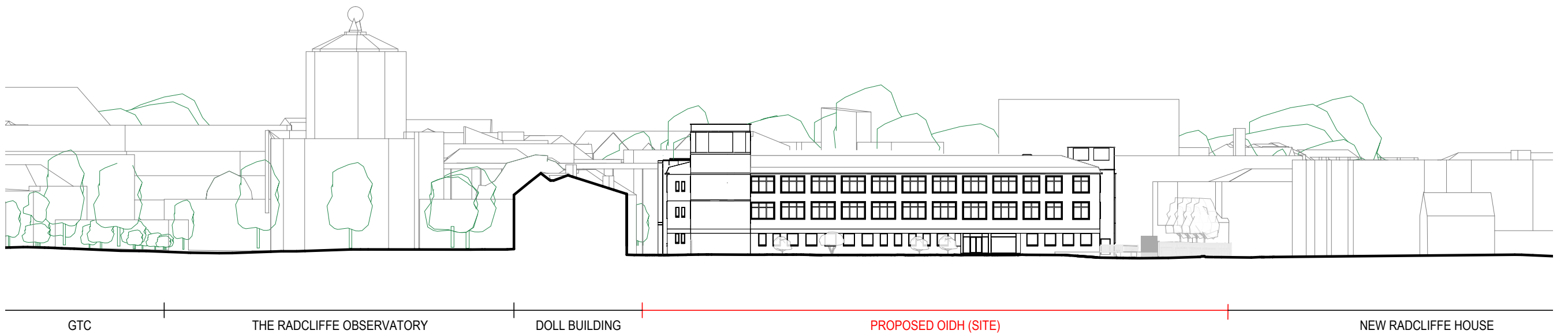


5.4.2. SCALE

The current proposal aims to minimise the impact of new development on the existing context, particularly focusing on reducing the height of the building to mitigate any potential harm to the Radcliffe Observatory. The design of the new Harkness roof build-up prioritises efficiency to limit the need for an extensive parapet. Considering the construction and thermal requirements, the new parapet has been kept as minimal as possible, offset by the addition of a new balustrade to meet regulations.



South Contextual Elevation



North Contextual Elevation



5.4.2. SCALE (CONT).



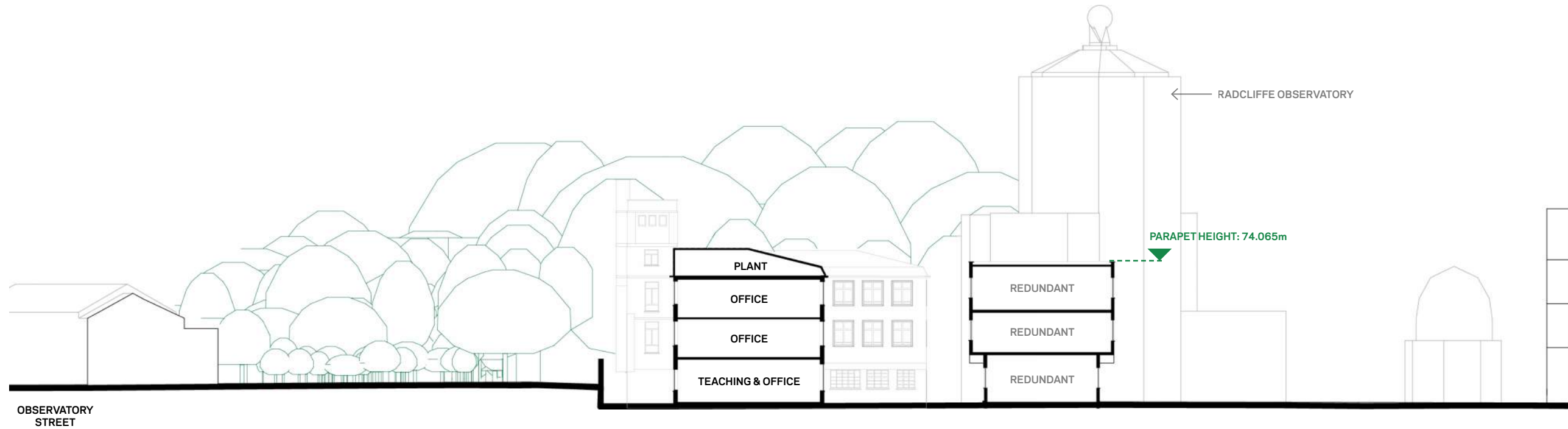
East Contextual Elevation



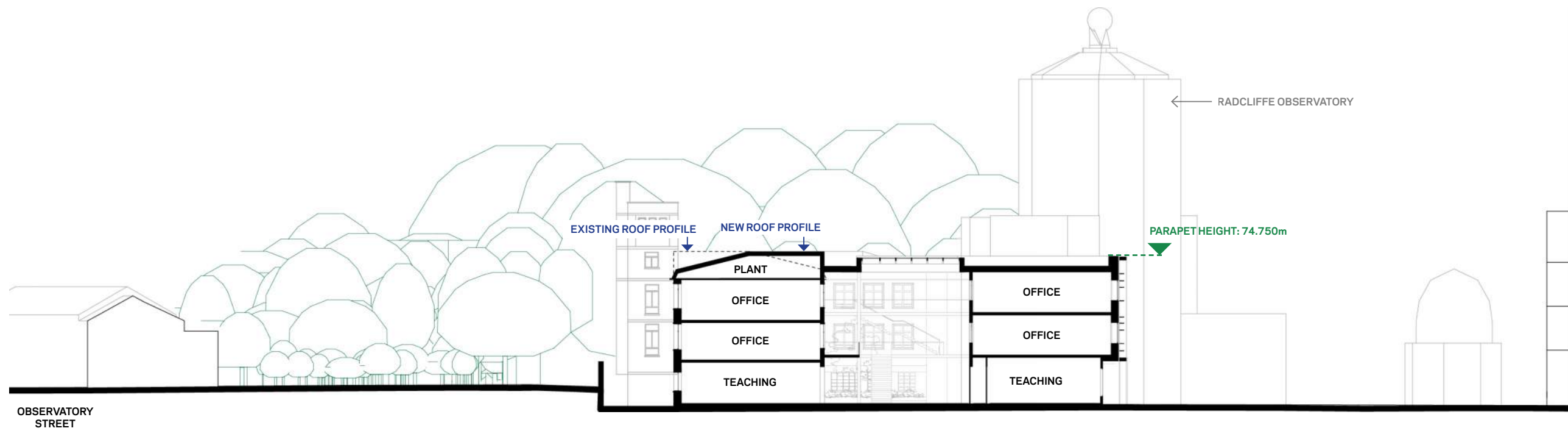
West Contextual Elevation



5.4.2. SCALE (CONT).



Existing section running north/south showing the refurbished buildings in relation to nearby residential properties on Observatory Street



Proposed section running north/south showing the refurbished buildings in relation to nearby residential properties on Observatory Street



## 5.5 APPEARANCE - FACADE DESIGN & MATERIALITY

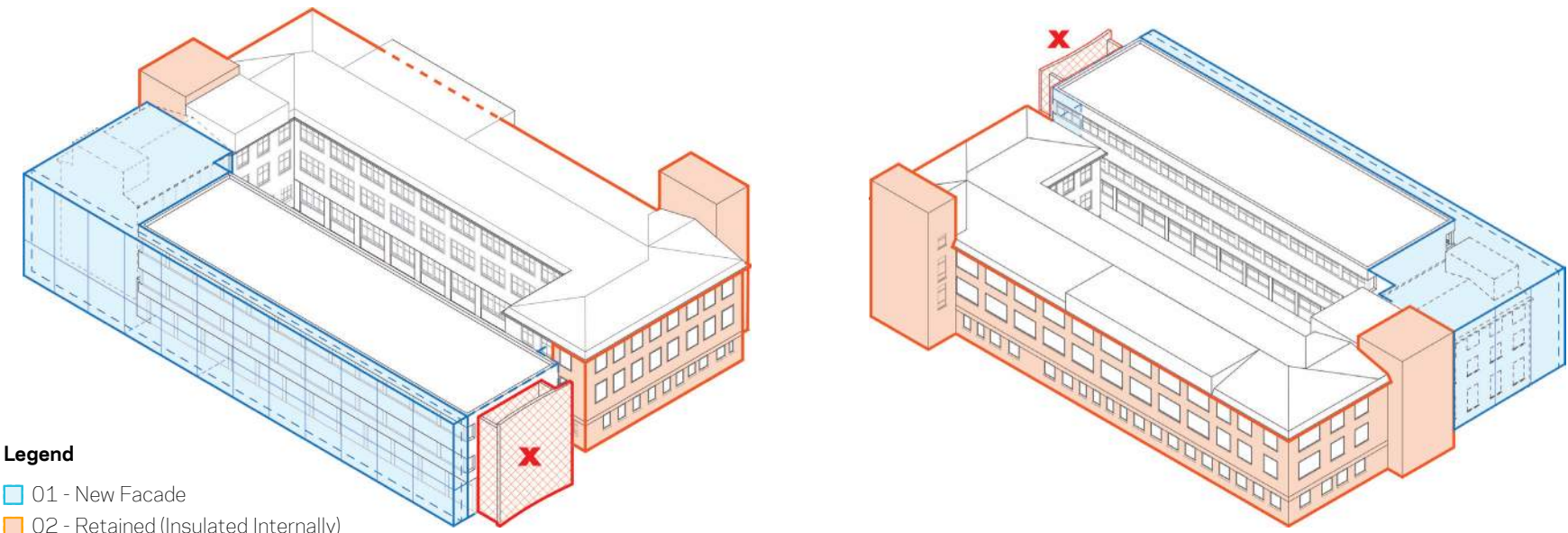
### 5.5.1. FACADE INTERVENTIONS OVERVIEW

#### 01 - New Facade

Given the historical importance of the site, the goal is to establish a new, unified facade that responds to the context of the wider ROQ. The south facade is key to these proposals as the most prominent elevation, and serves as the main entrance to OIDH. This facade will visually connect the two buildings by introducing a new elevation. This new facade will extend around the southeast and southwest corners. In the eastern section, the proposal includes the demolition of the current external stairwell and its replacement with an upgraded facade that complements the neighbouring Observatory. As for the southwest area, the plan involves filling the space between the buildings with usable area and improving the form factor therefore, necessitating a new facade.

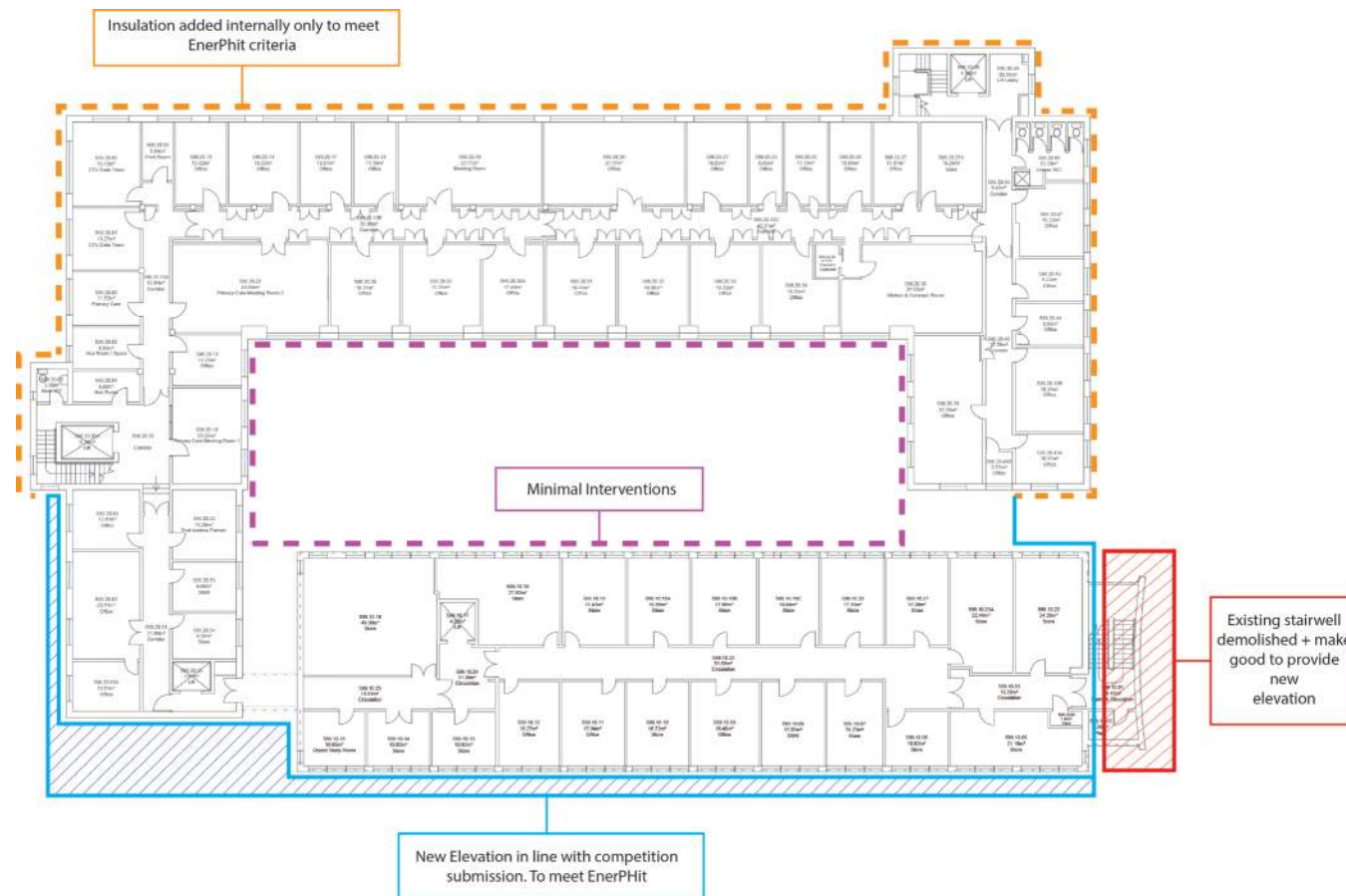
#### 02 - Retained Facade (Insulated Internally)

The intention is to preserve and repair / improve the existing façades of the Gibson building (west, north, and east) in terms of their appearance. This strategy intends to minimise the impact on the external appearance of the building and the residential neighbours, whilst also providing a cost conscious solution to improving the building fabric. Internal insulation will be required to improve the thermal performance of the existing facade and align with the project sustainability criteria, and the retention of the façades further reduces the embodied carbon footprint of the building proposals. The existing windows within this facade will need to be replaced to meet the required improved thermal performance.



Facade Strategy Axo - South East

Facade Strategy Axo - North West



Facade Strategy Plan



### 5.5.2. NEW FACADE

The strong horizontal articulation of the existing Harkness Building, its curved expressed stair-core close to the Observatory, and non-structural arched projections are out of character within the historic context of the Observatory, negatively impacting its setting.

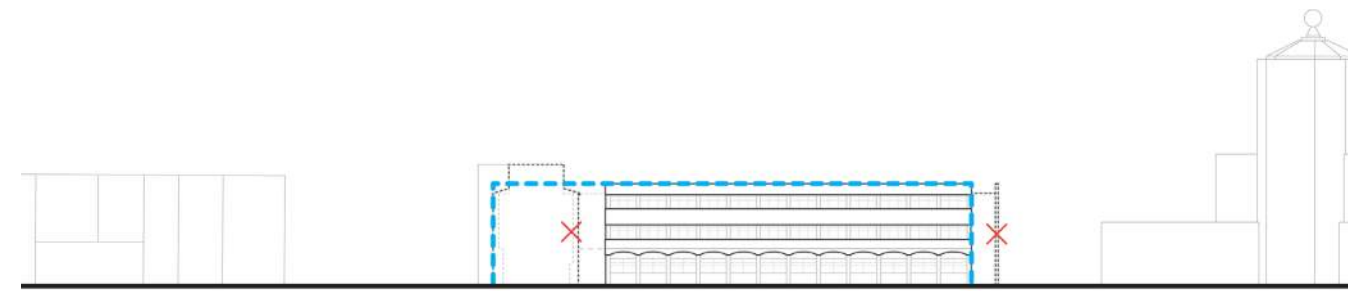
The proposed new south façade for OIDH seeks to complement the Radcliffe Observatory by:

- Celebrating instead of competing with the expressive Observatory,
- Creates a refined but understated appearance reflecting the transformational role digital technology can play in improving health.

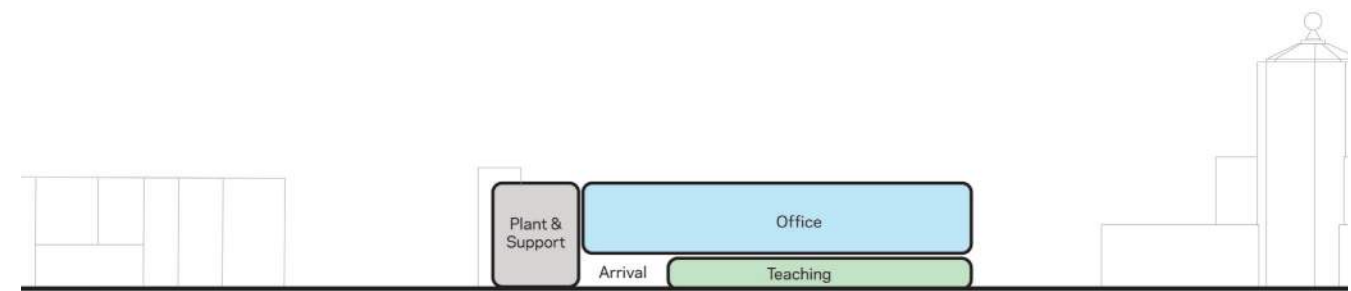
### 5.5.3. NEW FACADE - CHARACTER & IDENTITY

The design embodies the department’s vision for an appearance that conveys the innovative but understated character of their work, which seeks to improve healthcare and people’s lives in the background. Additionally, the design of the facade serves as a transition, a portal, bridging the historical context of its location with the forward-looking research and teaching activities housed within.

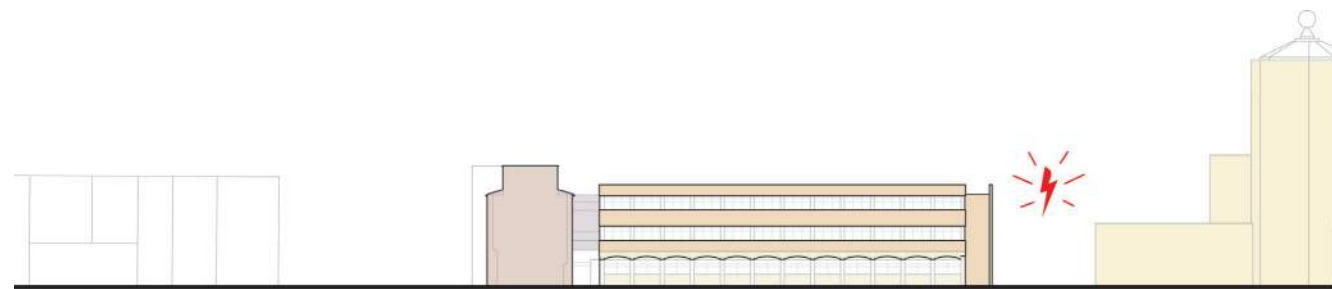
The overall concept for the new facade is outlined below:



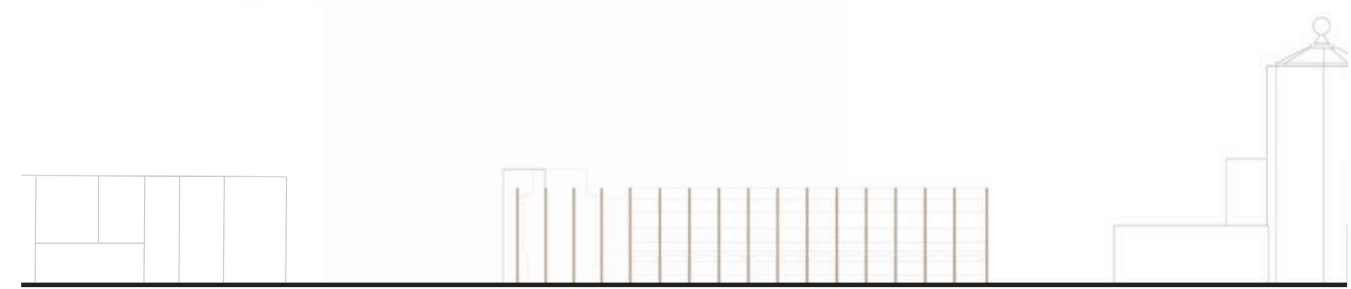
- Part-demolish, repair, and unify appearance to express single, elegant but understated identity
- Allows Observatory to stand out, matching Digital Health’s sophisticated but understated role



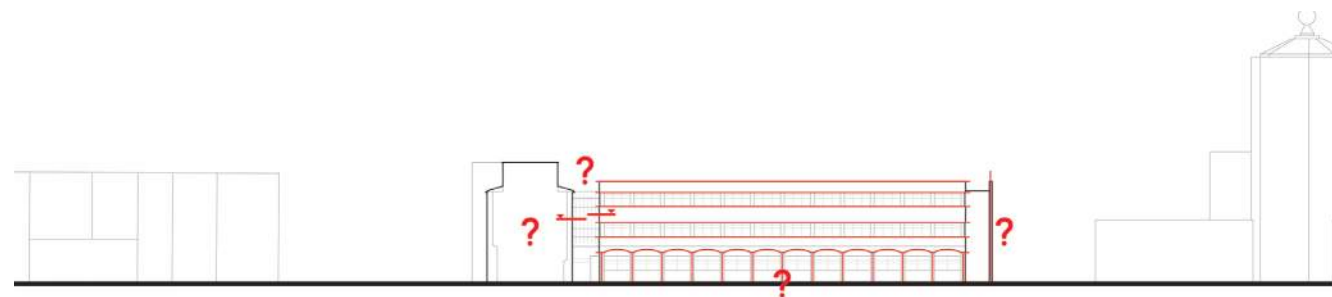
- Highlight entrance and acknowledge internal functions



- Current clash of architectural styles, materiality and tone



- Harkness Building structure serves as organising base module; maximise structure/fabric retention



- Inconsistent from language, scarred Gibson Building frontage, unresolved floor level difference



- Cladding variations differentiate functions, articulate/break-down volume, and highlight entrance
- Horizontal string course / cornice differentiating open ground and articulating roof edge
- Alternating horizontal louvres shade extensive glazing, unify & express digital forward-looking identity



5.5.4. SOUTH ELEVATION



Proposed south elevation



Existing south elevation



5.5.5. EAST AND WEST ELEVATIONS



Proposed east elevation



Proposed west elevation



Existing east elevation



Existing west elevation





Oxford Institute  
of Digital Health





Visualisation of approach from Walton Street (note: landscape indicative and not proposed)



Visualisation from entrance of new Humanities Building (note: landscape indicative and not proposed)



Visualisation looking towards proposed east elevation (note: landscape indicative and not proposed)



Visualisation looking towards entrance (note: landscape indicative and not proposed)

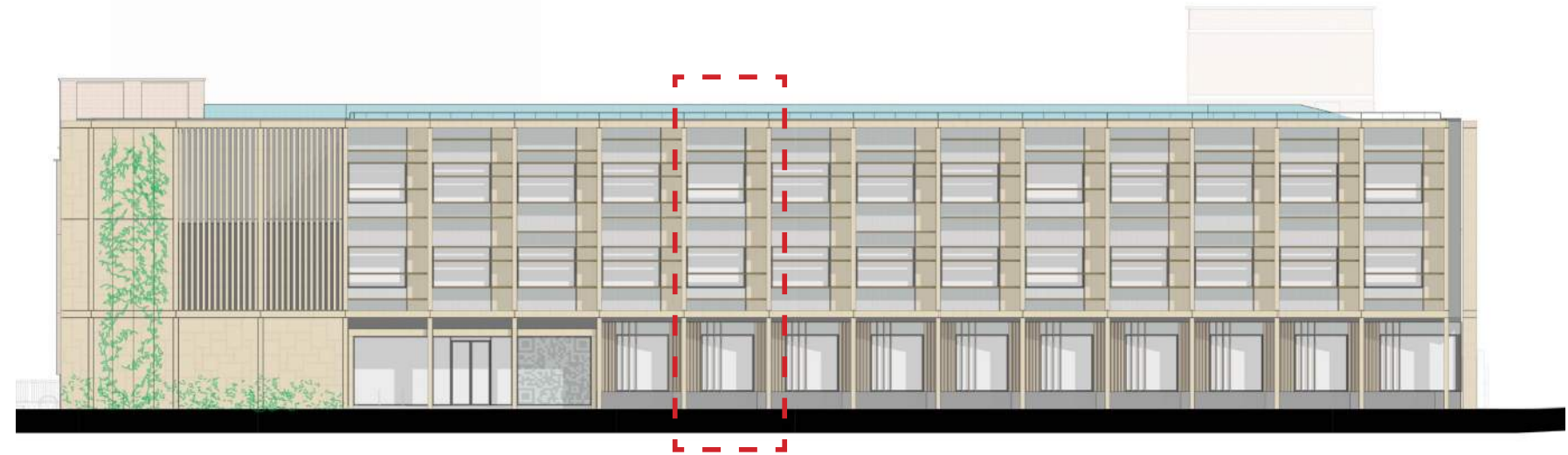


5.5.6. NEW FACADE DETAILS - TYPICAL BAY

Retaining the existing structure and its substantial horizontal brick bands/lintels as support, the unifying façade design to the Harkness Building aims to re-provide maximum glazing celebrating the unique views to the Quarter and Oxford skyline beyond.

Windows will be replaced with large triple glazed units. The solid brick faced wall areas will be over-clad with insulation protected by reflective glass cladding. To further reduce solar heat gain given the existing orientation, metal horizontal louvres are important to manage heat gain.

A limited amount of stone clad solid wall will be added alongside each existing column to improve the thermal performance and break the horizontal banded appearance.



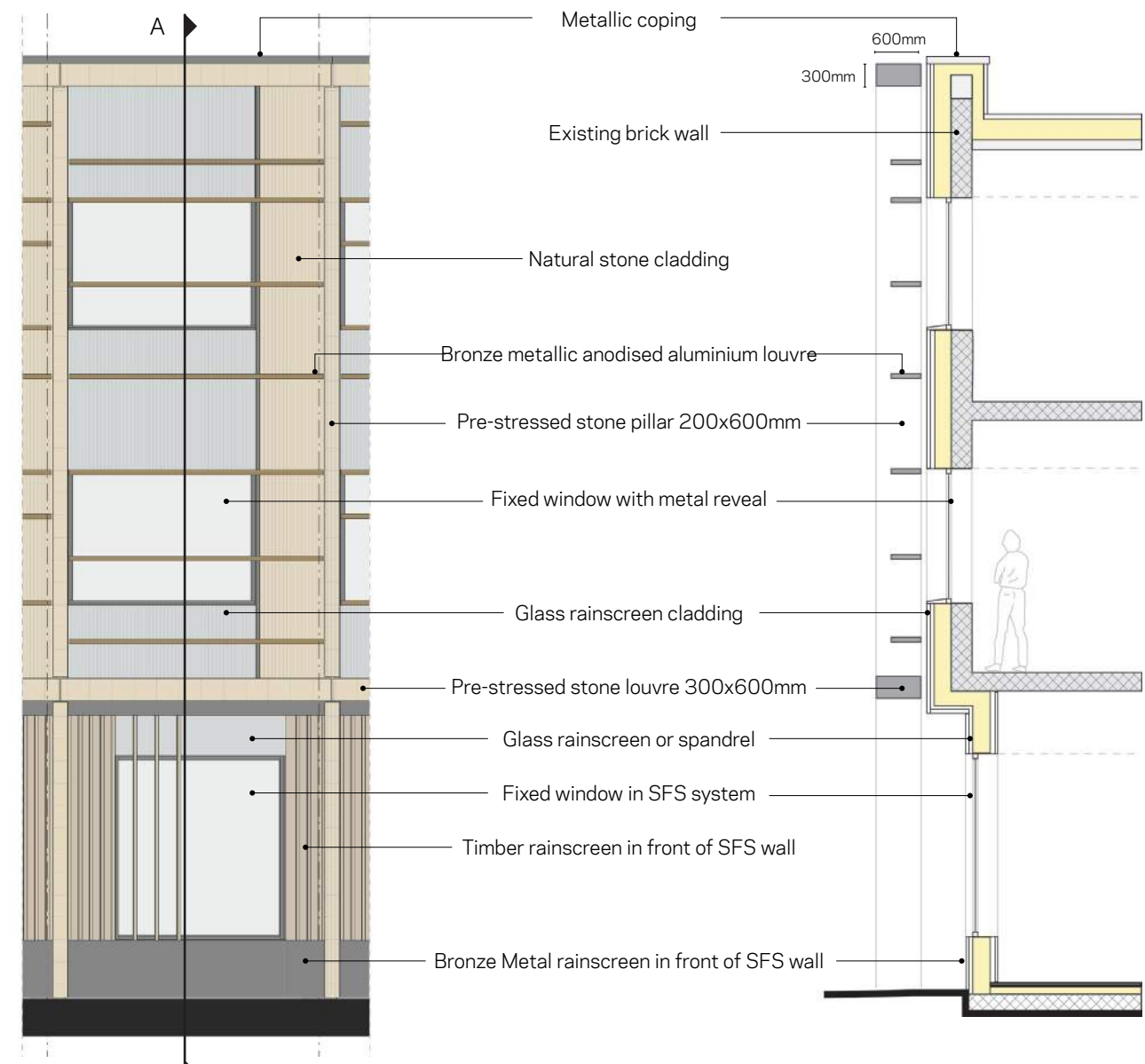
South elevation



South facade visualisations



Bay Render



Detail bay elevation

Section AA



### 5.5.7. NATURAL STONE FRAME CONSTRUCTION OPTIONS

Throughout the design process, the team proposed that the stone shading screen, positioned in front of the facade, is indeed a self-supporting, pre-tensioned natural stone structure. This implies that each vertical and horizontal element comprises a solid piece of quarried limestone. The team discovered that approximately 80% of quarried stone is typically discarded due to either aesthetic reasons or not meeting the required specifications. Actively targeting this discarded stone signifies a more conscious decision in the building's material sourcing.

In order to accommodate various construction methods and assess cost estimates, the team have explored an alternative construction option and evaluated the potential impacts on the original design intent. The outlined options below should be considered, noting that in the current plan, the self-supporting stone is included in the pricing.

#### 1 - Pre-tensioned Natural Stone

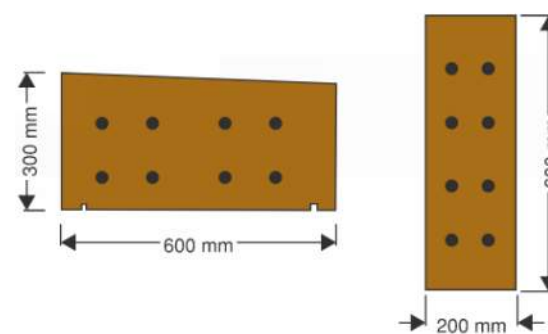
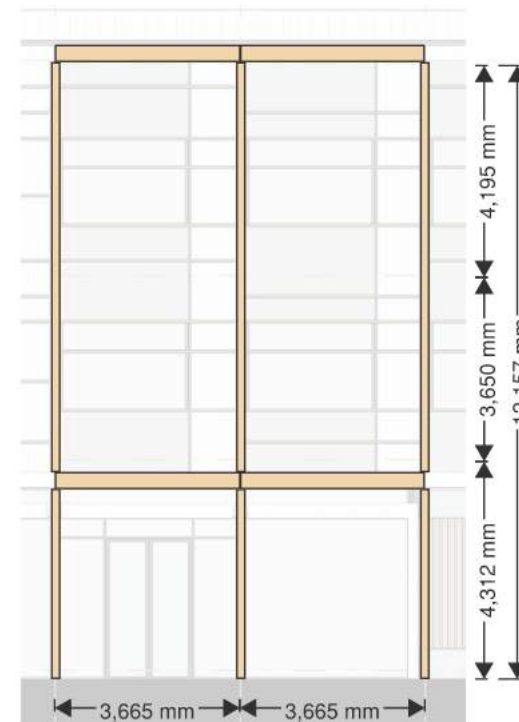
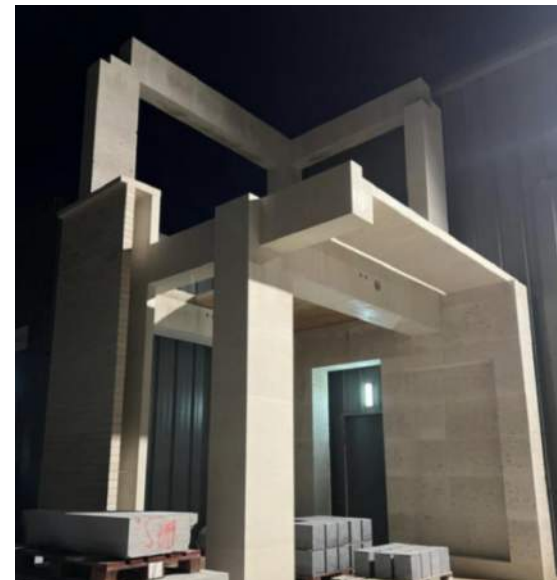
- Thinner joints, assumed no mortar (requires precision stone cutting)
- Limited supply chain
- Tension cables contribute to flexural strength of the stone, while compression is absorbed by the stone panels
- Can be prefabricated in large modules.

#### 2 - Stone-faced Precast or UHPC

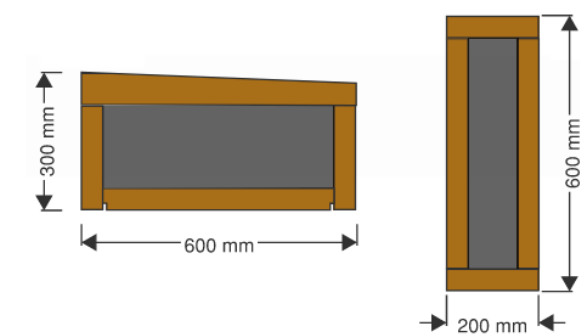
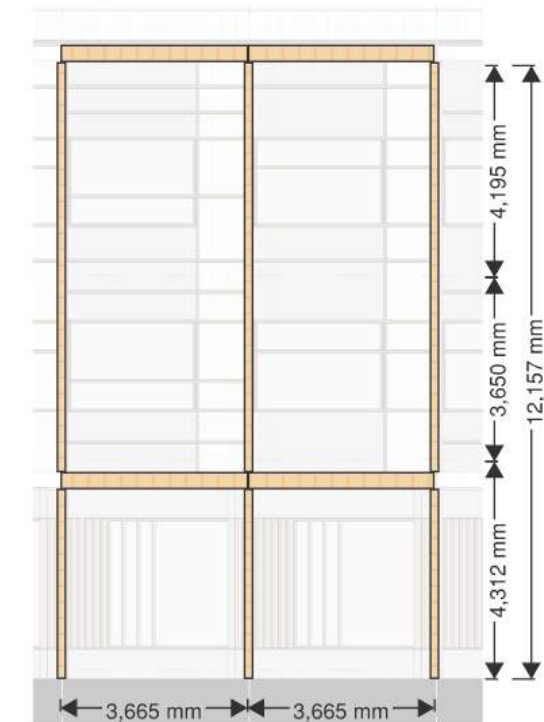
- Pre-fabricated option, with either:
  - Factory-cast traditional reinforced concrete (precast concrete) or
  - Ultra-high performance fibre reinforced concrete (UHPC)
- Intermediate stone joints can be pointed with mortar (say 6mm thick, TBC)
- Where required, panel to panel joints should be designed as movement joints (typically 20mm+, TBC)

	Pre-stressed stone	Stone-Faced Precast	Stone-Faced UHPC
Meets design intent			
Weight			
Procurement			
Sustainability			

1 - Pre - tensioned stone frame



2 - Stone-faced precast or UHPC





5.5.8. NATURAL STONE TYPES

The stone selection is contingent on the chosen system outlined in the preceding section.

For the pre-stressed stone system, the chosen stone must possess high compression strength to effectively support the required loads. Optimal choices for this application include Jura limestone from Germany or Valange from France, which remain viable even with alternative systems like precast or UHPC.

Considering Oxford's historical significance and the prevalent use of Clipsham stone in city projects, this is under consideration for the ashlar and stone panel systems. The team are also considering Hartham Park, also quarried in the UK. Regardless of the chosen stone, bed sizes will range from 300-600mm, requiring joints filled with limestone mortar to minimize visual impact.

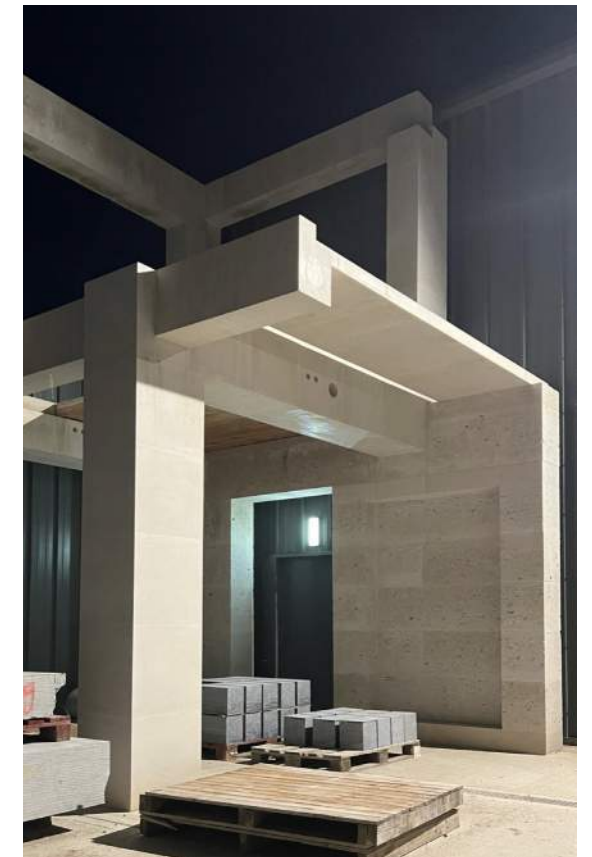
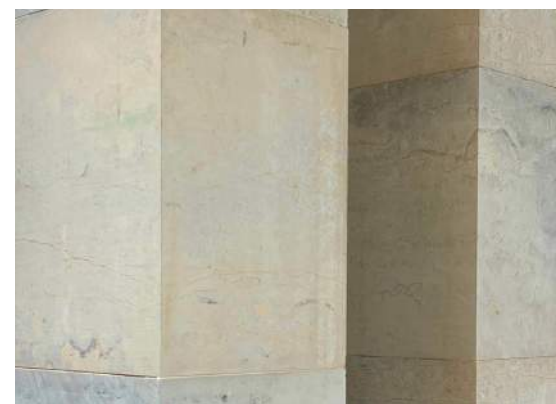
It's noteworthy that Clipsham, being more porous than the denser Jura stones, exhibits a more pronounced visual variation when wet.



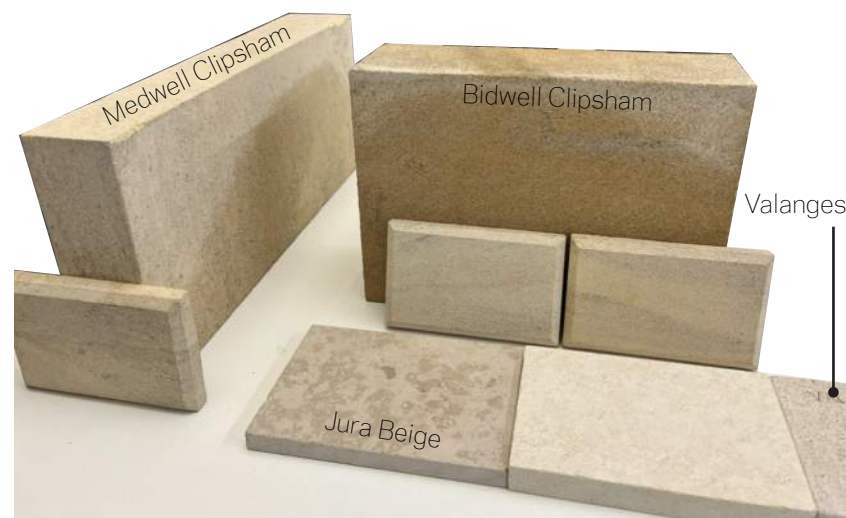
Valanges, France



Jura Beige - Germany



Clipsham - UK



Different stone types and their variations comparison



Hartham Park - UK

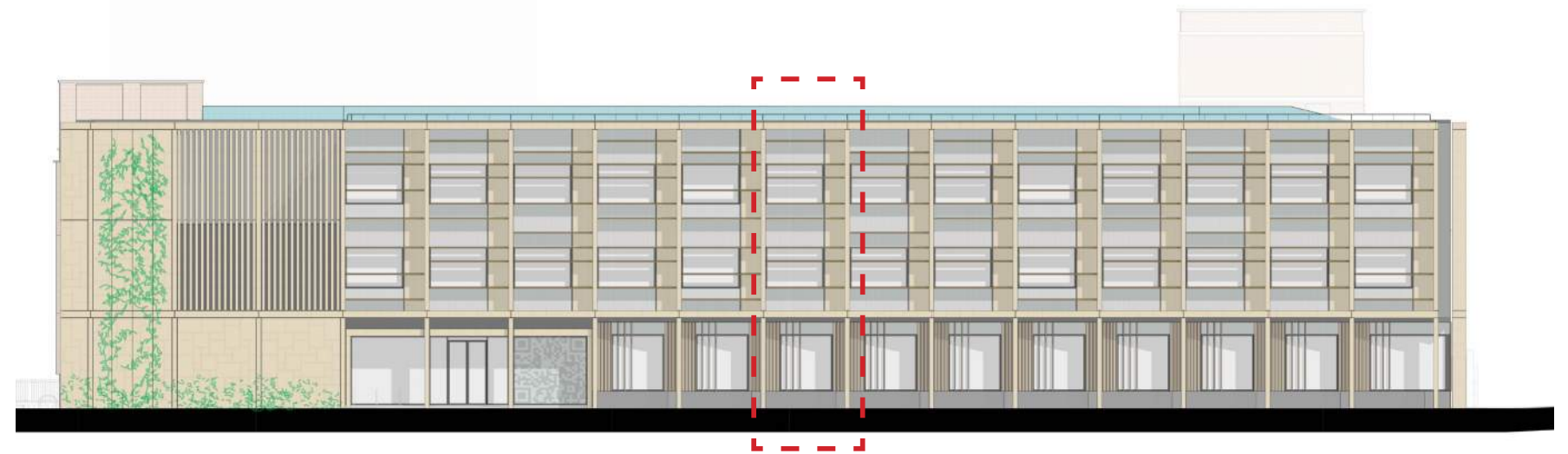




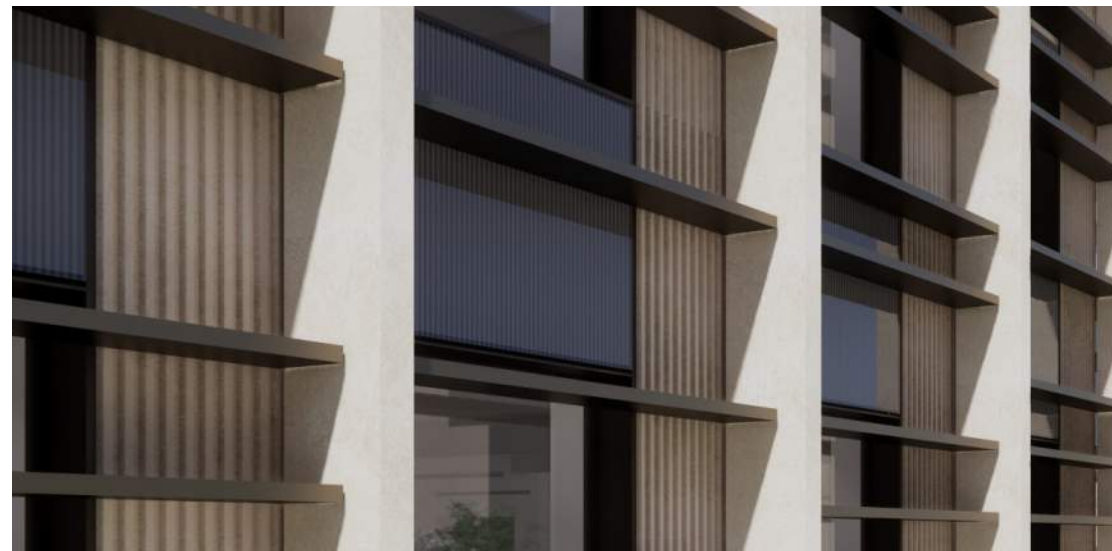
5.5.9. NATURAL STONE TEXTURED CLADDING

As part of the Harkness building's overcladding, the proposal involves incorporating a new textured stone panel for the solid portion, concealing the necessary new bay risers serving levels 1 and 2. This alteration also entails a reduction in the size of existing glazing to enhance the overall building performance.

The decision to opt for a textured panel was motivated by planning requirements, necessitating increased depth in the facade, and an opportunity to introduce additional vertical elements. Given the natural stone's bed sizes, it is anticipated that there will be varying joints along the panel length. The intention is to have 4-6mm limestone mortar joints, with slightly larger 10mm joints strategically placed at movement joints.



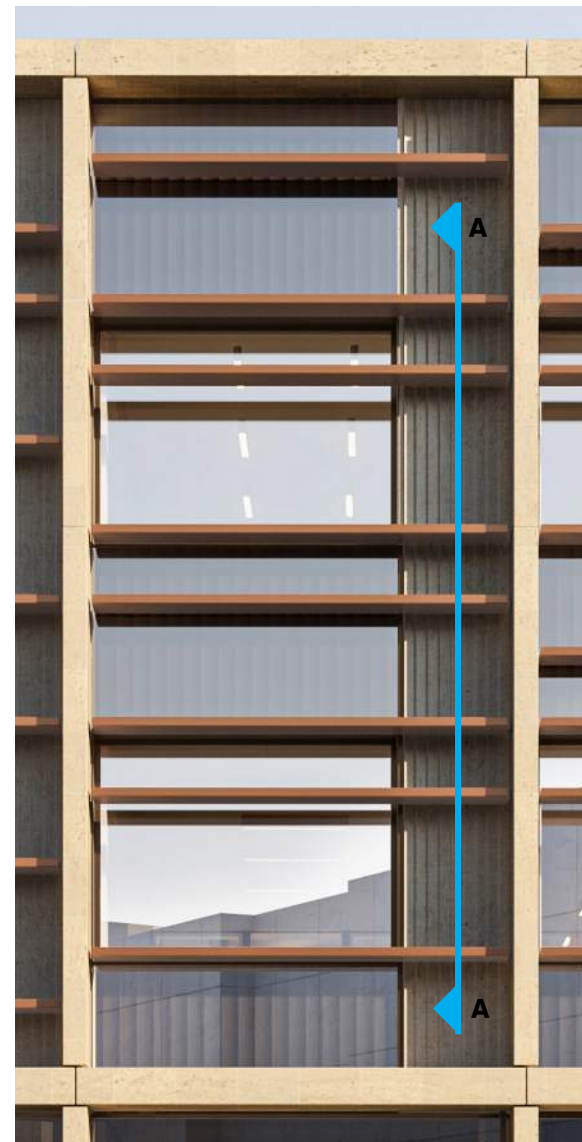
South elevation



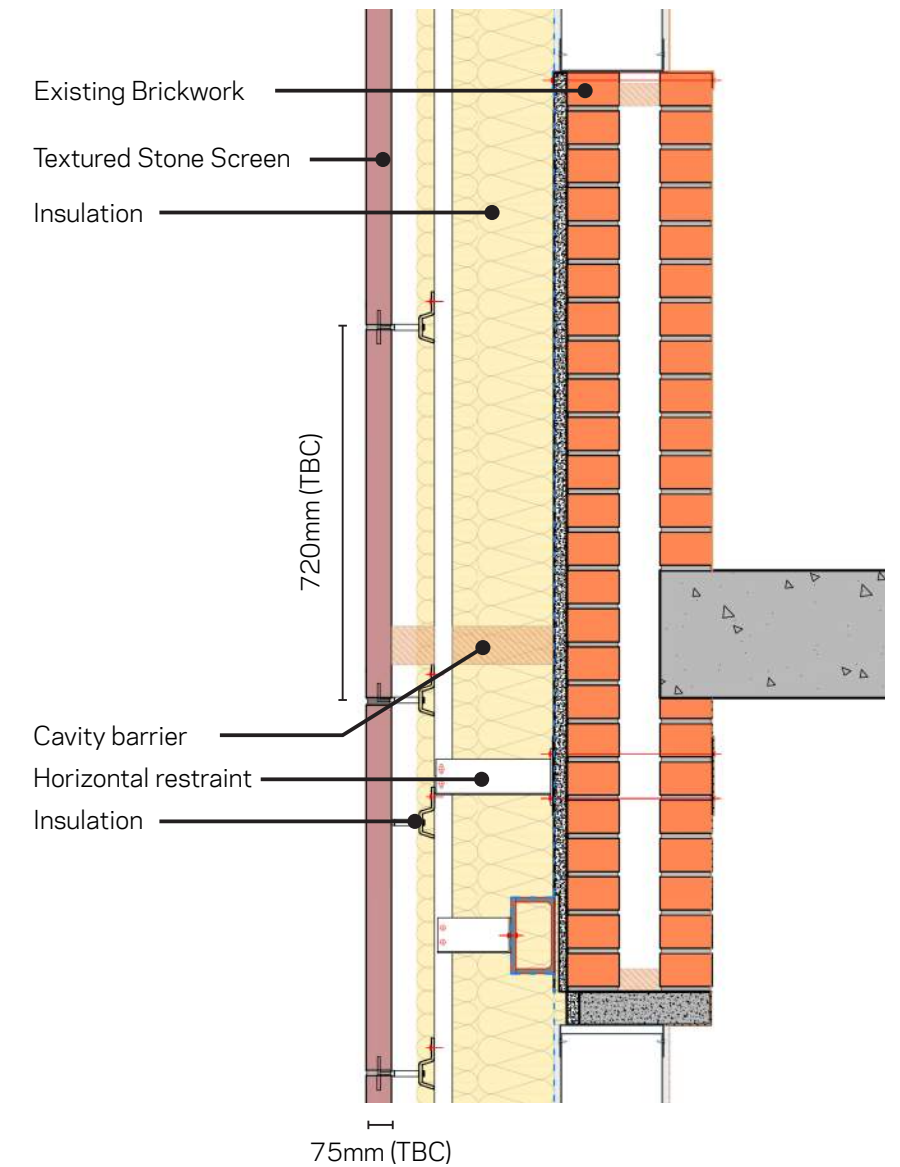
Perspective visualisation of texture stone panel



Example of textured limestone



Bay Render



Detail Section AA



5.5.10. SPLIT NATURAL STONE VERTICAL BAGUETTES

The deliberate solidity of the southwest corner of the building is designed to accommodate the new plant functions situated behind it. At Level 2, this corner extends externally to create space for recessing the new ASHP (Air Source Heat Pump) units beneath the roof level, ensuring minimal impact on the roofscape. Through the early, this corner remained solid, assuming that sufficient air could reach the ASHP with louvres only at Level 2 on the west facade. However, it was later determined that the south facade would also require open space to enable efficient functioning of the ASHP, allowing them to draw air from their sides.

To address this, the incorporation of new louvres was explored, and it is now part of the current proposal in the form of vertical natural stone baguettes. These elements, comprised of natural stone pieces approximately 300-600mm high with structural support, will exhibit a split effect with a rough finish on the outer face. This addition adds another layer of depth to the south facade, in response to planning feedback.



South elevation



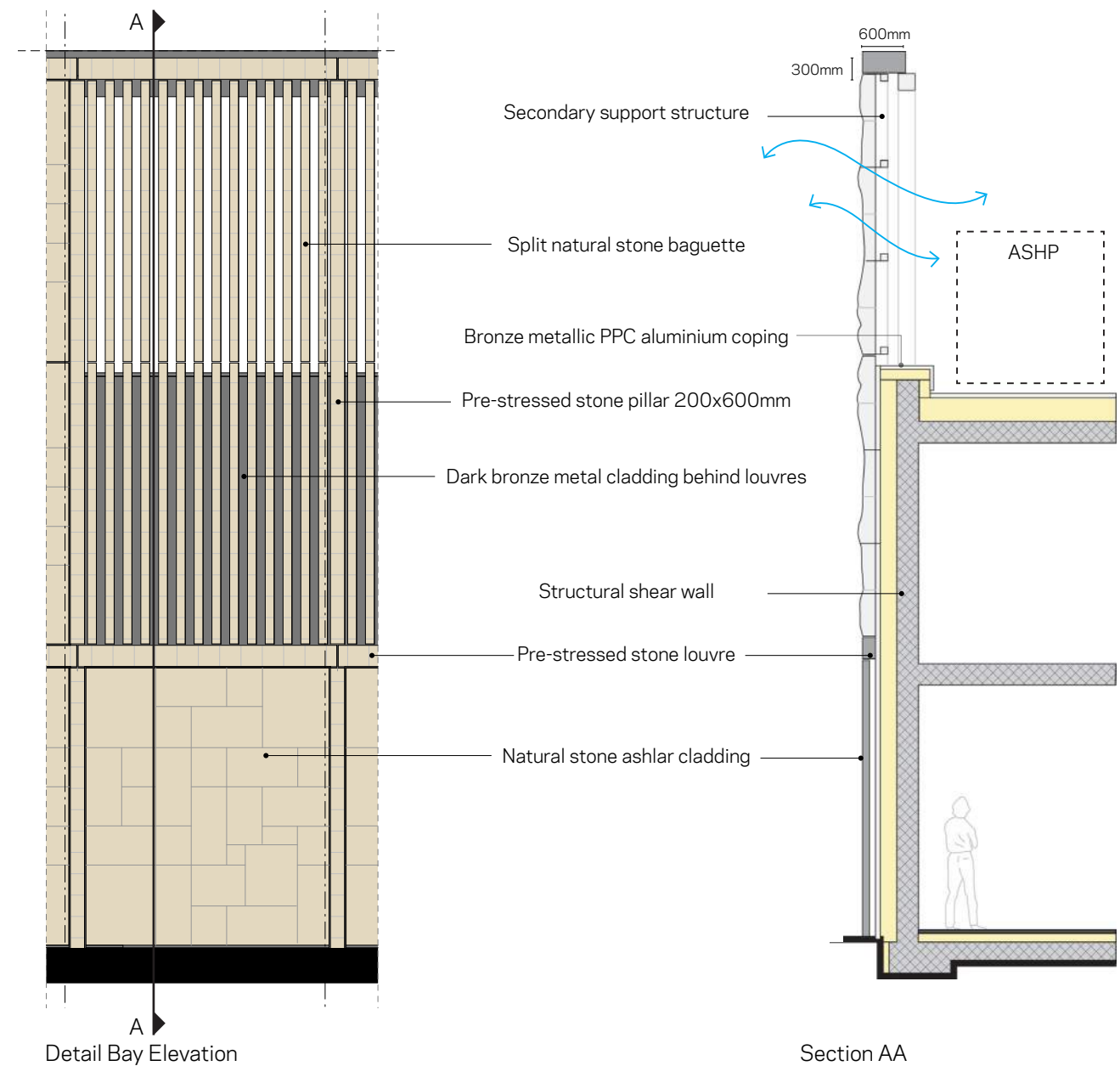
Example of split stone baguettes at Jesus College Cambridge



Example of vertical stone baguettes in front of louvres - Cheng Yu Tung Building Oxford



Bay Render



Detail Bay Elevation

Section AA



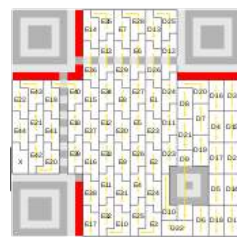
5.5.11. NATURAL STONE ASHLAR WALL

In areas with a solid, non-louvred facade in the southwest, a natural stone ashlar system is proposed. Diverging from the conventional ashlar joint pattern, a custom joint pattern resembling a QR code. This unique pattern serves as an additional means for the building to convey its identity on the external wall.

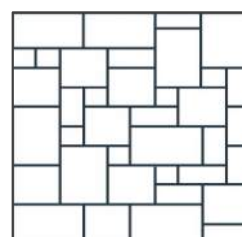
In instances where the solid wall spans the full height of the building, lightweight metal wires will be affixed to the facade. This installation facilitates the growth of plants along the entire solid facade, contributing to the visual breakdown of the overall scale and minimises growth into the open louvres.



1 - typical Qr code



2 - Qr code breakdown



3 - Joint pattern

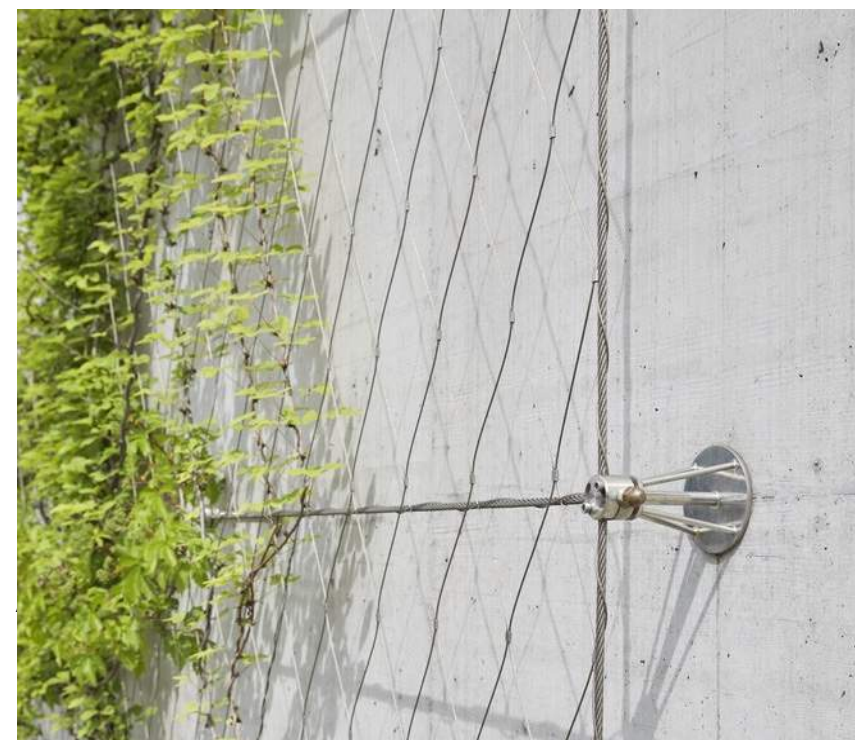
Stone layout and composition exploration - QR code analogy



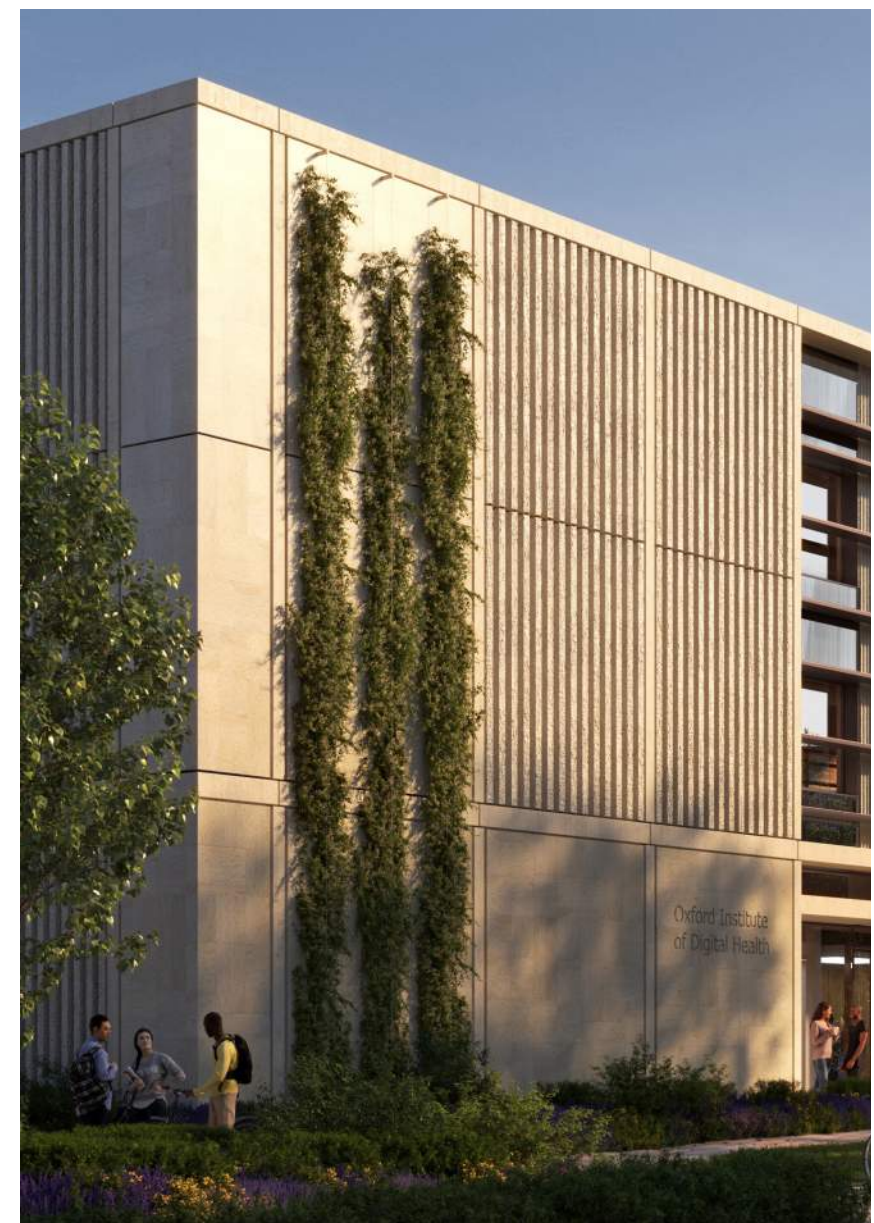
Example of ashlar stone cladding adjacent to the main entrance



South elevation



Examples of lightweight metal climbing plant support



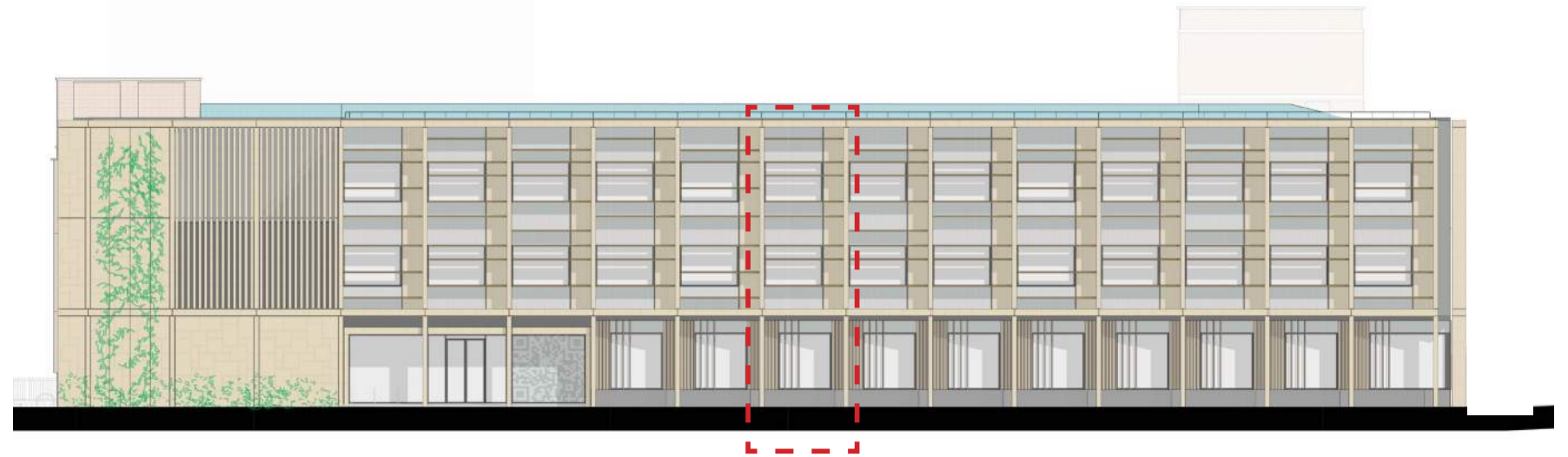
Climbing plants proposed to solid stone facade



5.5.12. WINDOWS & GLASS RAINSCREEN CLADDING

The proposed window frames feature a dark-coloured metal that complements the dark hue of the glazing, emphasising the contrast between the recessed windows and the reconstituted stone panels.

Additionally, the proposal includes glazed rainscreen cladding to overlay the newly insulated solid banding of the existing building. To enhance visual depth, reflect the historical context, and showcase pattern, glass with increased reflectivity is recommended. This choice aims to establish an identity that resonates with the surroundings. The incorporation of vertical fittings is a response to the textured stone panels, contributing to increased depth and heightened verticality in the overall design.



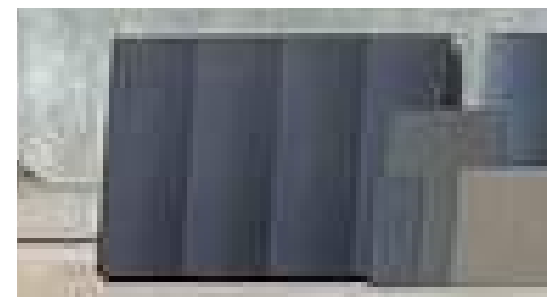
South elevation



East facade reflecting Radcliffe Observatory



Glass sample reflecting Observatory on site



Glass panel sample from different view points



Bay Render

