

5.5.13. METAL AND TIMBER

1- Metal

All metal in the proposal will be a dark anodised metal.

2- Aluminium louvres to south facade

With the intention being to apply a dark colour to the primary elements of the facade, including window and curtain wall framing, metal panels, and flashing, ect. A second color will be applied to the aluminium horizontal shading of the south facade, creating a subtle yet effective contrast between the other metal in the scheme.

The Below image indicates some examples of metal colours which were presented to the planners on site.



Timber

To create a distinctive contrast between the stone and metal elements and to echo the warmth of the interiors, the ground floor's saw-tooth facade will incorporate a timber rainscreen system along with timber vertical shading fins where solid wall. The saw-tooth design inherently provides effective protection against water, enhancing the longevity of the timber elements.



Timber rainscreen and shading example

Facade Artwork

The proposal seeks to use the facade to display the buildings activities. One way to do this is through artwork.

A full bay adjacent to the entrance has been earmarked for an art piece reflecting the digital institute. Currently the design team are considering artists and mediums to highlight and celebrate the entrance to the institute while showcasing the work happening inside.



Indicative artwork - 'A Picture is Worth a Thousand Words'



Proposed South elevation rendering



Oxford Institute
of Digital Health



5.5.14. RETAINED GIBSON FACADE

Proposals for the refurbishment of the external walls of the Gibson Building seek to retain its character but repair and clean up years of modifications and clutter.

Redundant drainage pipes will be removed and brick work repaired. Windows will be replaced with matching gridded but high-performing new windows that are set back to align with a new insulation layer on the inside. The increased window reveals will articulate the facade better.

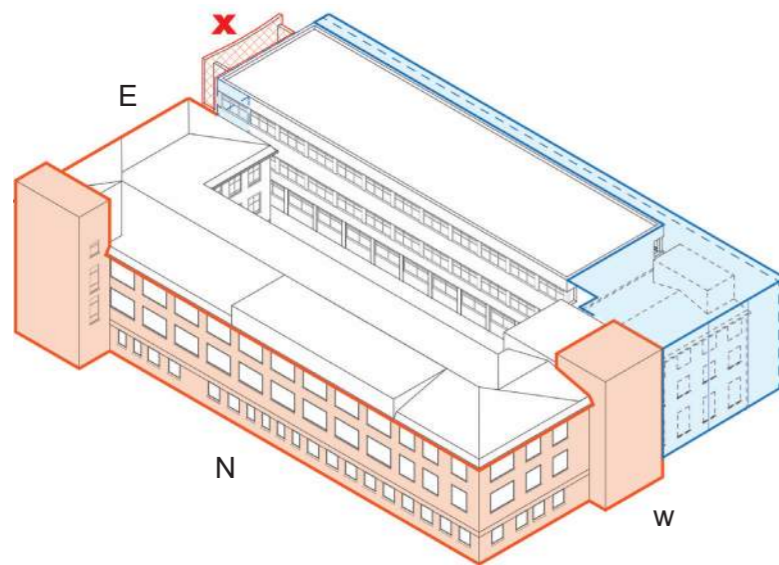
Note, detailed in place surveys of the existing façades will need to be completed in the next stages to help inform extent of removal & making-good.



North - Existing condition



East - Existing condition



Retained Facade (Insulated Internally)

Facade Strategy Axo - North West



West - Existing condition



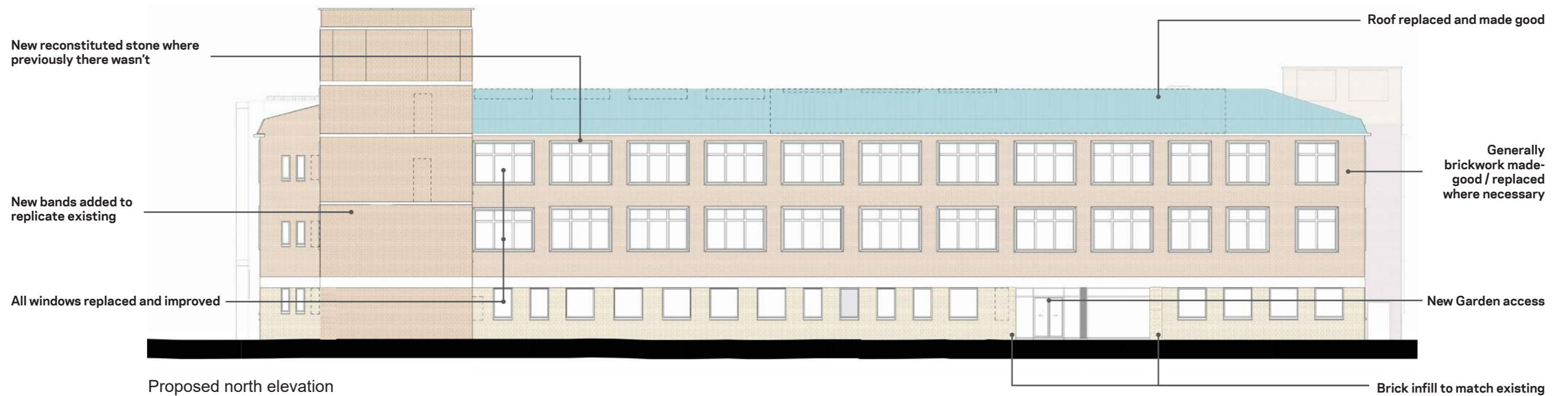
5.5.15. RETAINED GIBSON FACADE

The Following pages will illustrate the various interventions proposed to clean, repair and improve the over quality of the retained façades.

1 - North



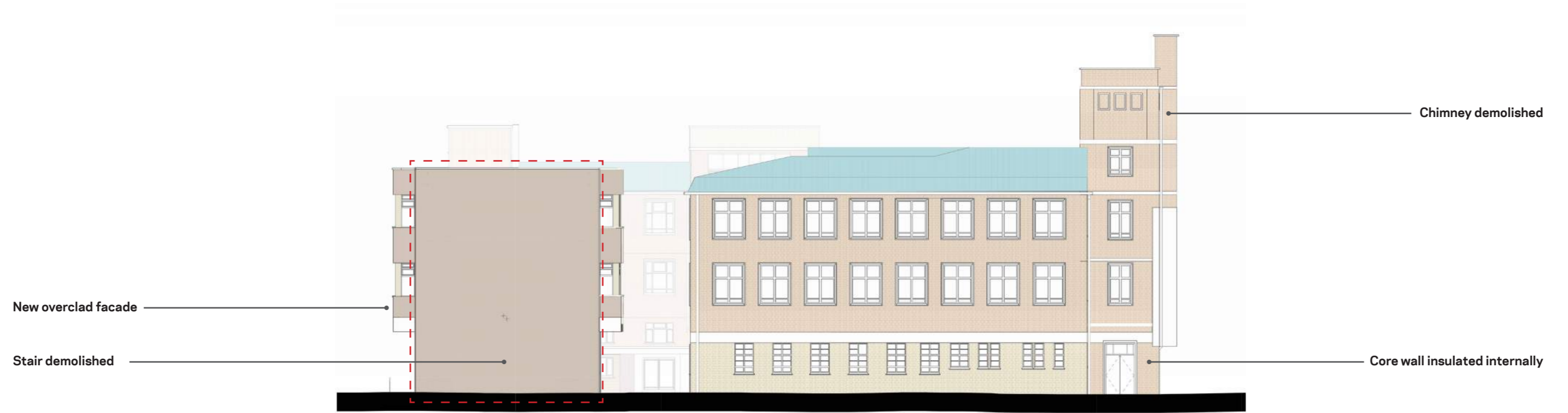
Existing north elevation



Proposed north elevation

5.5.15. RETAINED GIBSON FACADE (CONT).

2 - East



Existing east elevation



Proposed east elevation

5.5.15. RETAINED GIBSON FACADE (CONT).

3 - West



5.5.16. RETAINED FACADE DETAILS

To achieve the required thermal performance targets for the Gibson Building, the proposal involves lining the internal face with new insulation and plasterboard. This approach, however, introduces a thermal bridge at each slab, a aspect thoroughly examined by the facade and sustainability engineers.

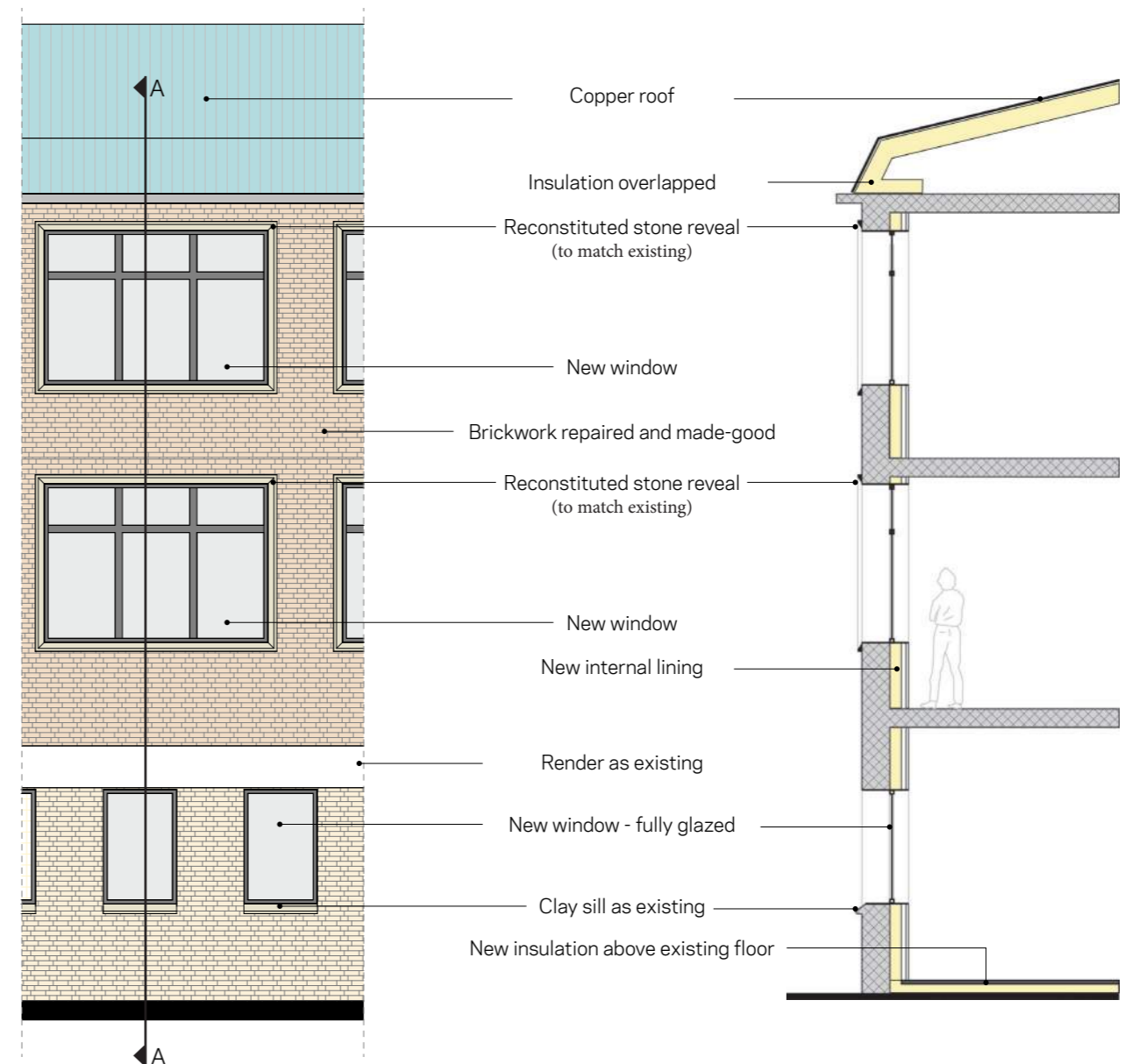
The proposal includes replacing all windows in the current facade with new triple-glazed units. For levels 1 and 2, efforts are made to replicate the existing window appearance. Various options to create slender new mullions and transoms, including continuous full frames or clip-on glazing bars, have been explored to maintain the desired aesthetic.

On the ground floor, a departure from the existing design is proposed, introducing a new triple-glazed unit without any horizontal or vertical elements, ultimately featuring a single pane of glazing.

Existing reconstituted stone window reveals will be extended inwards to resolve the increased reveal depth, and new reconstituted stone reveals added where the current facade is lacking them on the north facade. Localised bricked-up windows will be re-instated. The existing dormer facing the residential properties on the north side will be removed, with new dormers containing new mechanical plant to be placed on the courtyard side of the roof where they cannot be seen from surrounding properties.



North elevation



Detail Bay Elevation

Section AA



An alternative option of clip-on glazing bar for window mullion and transom.

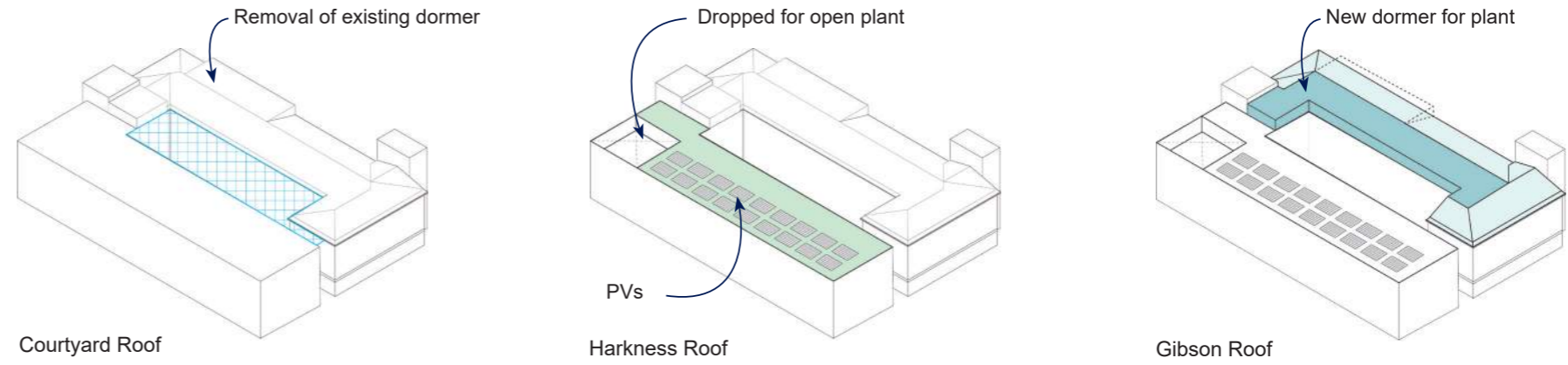
NOTE: This option requires to be confirmed regarding structural performance, and maintenance/replacement considerations of, the window units.

New Glazing bar options

5.6 ROOF DESIGN

5.6.1. OVERALL DESIGN

The existing Harkness Building roof will be rebuilt to host an array of photovoltaics above reconstituted stone pavers. The characteristic green patinated copper roof of the Gibson Building will be modified along the courtyard edge to house a new dormer to provide additional space for air handling plant that enables low energy heating and cooling of the building. This enables removal of the existing unsightly dormer on the north side facing the residential properties, resulting in a improved coherent roof form.



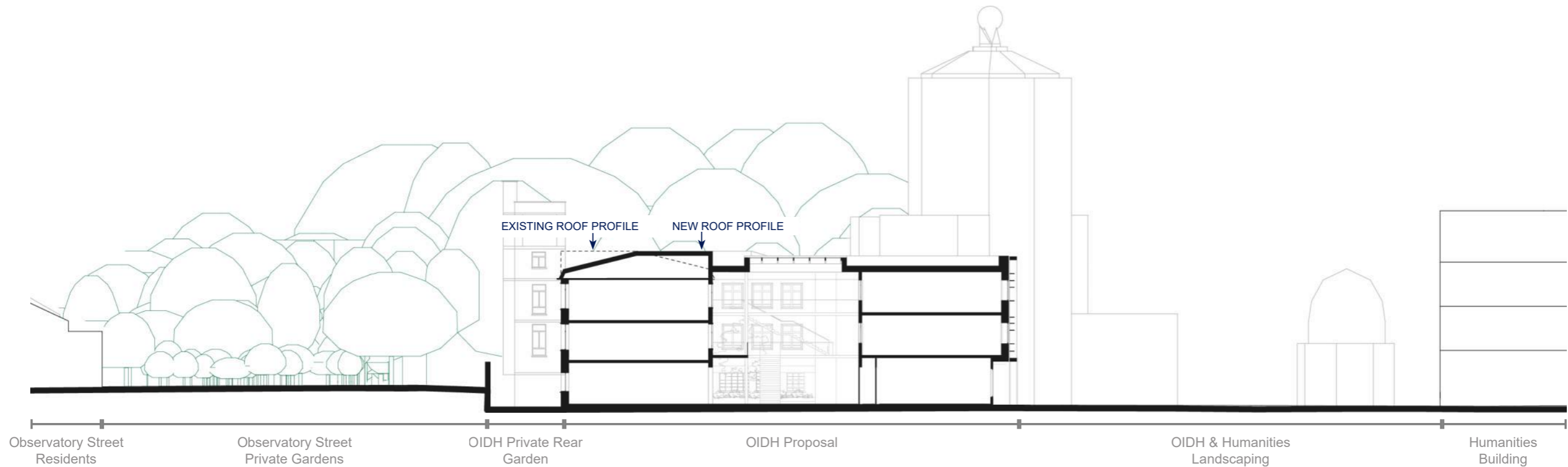
Aerial view of the proposed roof composition



View of proposed roof scape as seen from the top of the Observatory

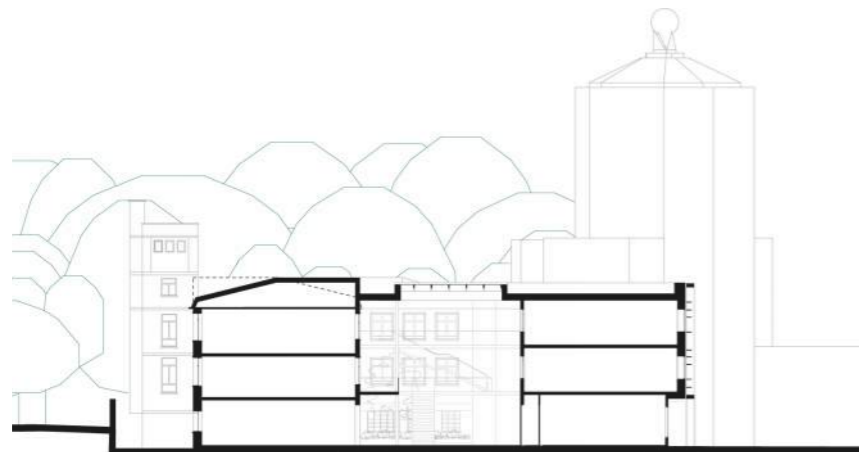


Aerial view of the proposed roof composition

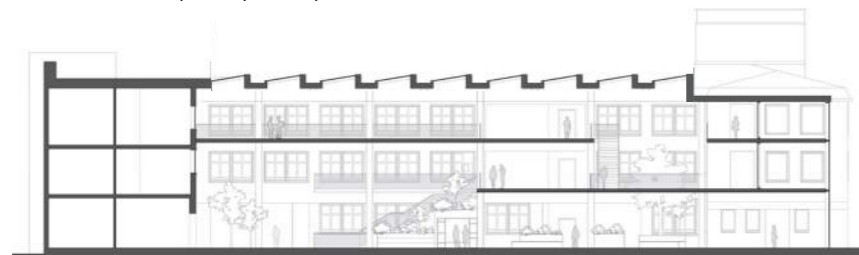


5.6.2. COURTYARD ROOF

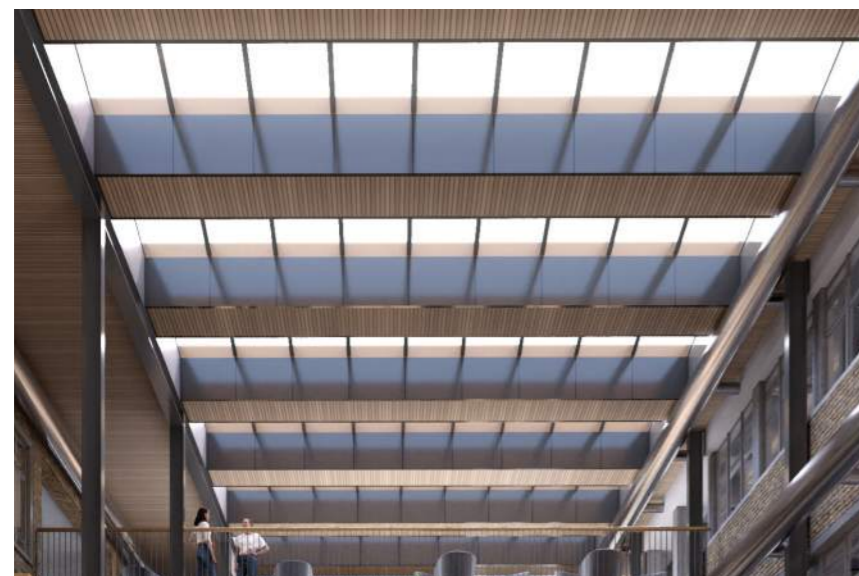
The roof design will cover the space between the buildings with a glazed roof to create an enclosed internal courtyard. To balance incoming daylight and excessive solar heat-gains, the courtyard roof limits glazing to approximately 50% of the area, broken down into a series of north/south running glazed strips offering ample view of the sky from inside.



Cross Section (north/south)



Long Section (east/west)

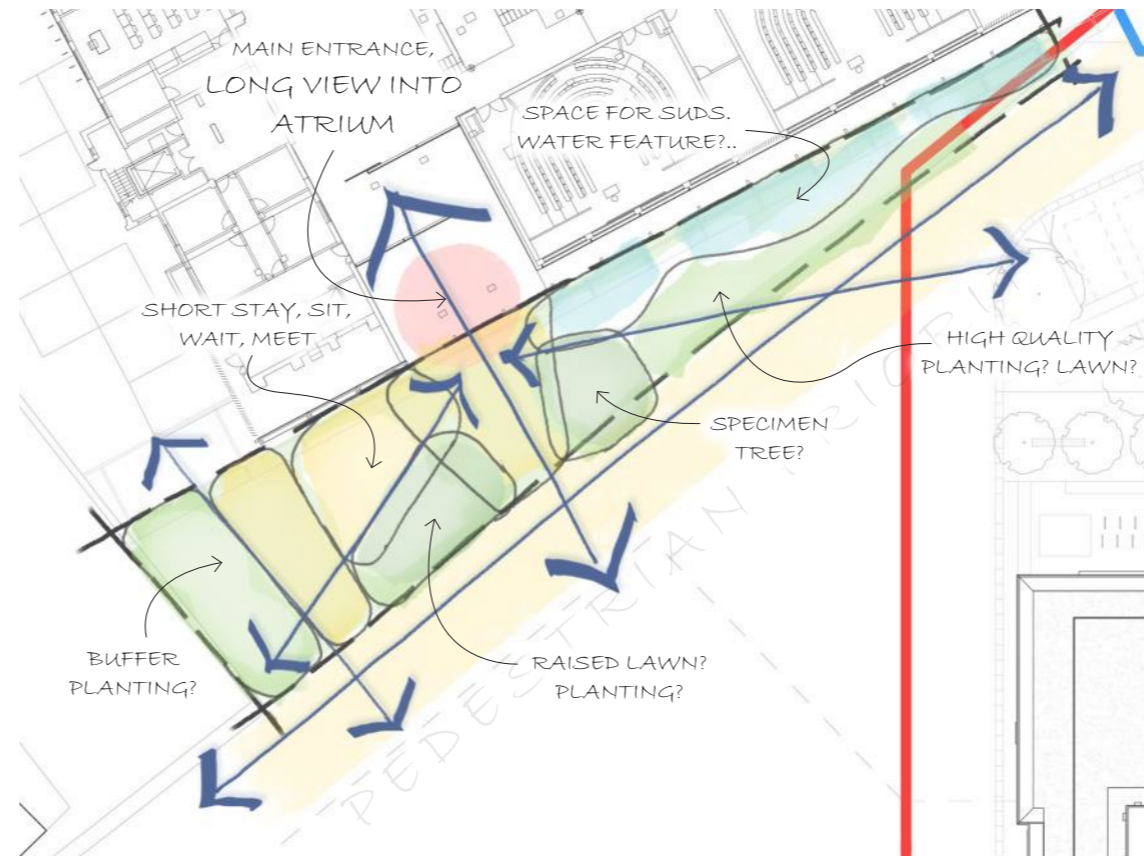


View of proposed courtyard roof from within the courtyard

5.7 LANDSCAPE DESIGN

5.7.1. MAIN ENTRANCE - DESIGN OBJECTIVES

- Establish a clearly defined entrance approach to the building main entrance.
- Create a coherent interface with the wider campus public realm - tying into both the existing access arrangements, while also considering opportunities for future connections with the New Humanities and Informatics buildings.
- Respect the sensitivity of views towards the Grade I listed Radcliffe Observatory by retaining key site lines along access roads and from entrance junctions.
- Prioritise the pedestrian experience. Minimise the role of the road by creating an entrance plaza which promotes the street space as a space for people first.
- Invest in quality. Use high quality materials and street furniture that are robust, reflect the campus character and encourage social interaction.
- Use landscape elements to promote sustainability. Use specimen trees and sustainable urban drainage as memorable place making assets.
- Ensure that the main entrance supports the logistical needs of the site, such as provisions for deliveries, emergency access and refuse collection.



(Above) stage 1 concept development plan

5.7.2. MAIN ENTRANCE - DESIGN SUMMARY

The main entrance (right) establishes a wide paved surface approach to the main entrance, flanked by an open lawn area and amenity planting borders with seating walls.

An area of lawn is proposed to the southern corner of the site which will host a large specimen parkland tree. This is set back from the street to retain uninterrupted site lines to the Observatory from the Walton Street approach.

A rain garden and amenity shrub and herbaceous border runs along the front elevation, punctuated with path routes and opportunities for communal seating.

Proposed materials in this location prioritise natural stone, in-keeping with the Observatory grounds character and New Humanities development.

Two accessible parking bays with EV charge capability are proposed adjacent to the existing New Radcliffe House parking area. These are to be accessed via Woodstock Road.



Proposed landscape plan



Supporting images

5.7.3. WEST ELEVATION - DESIGN OBJECTIVES

- Create a pedestrianised and publicly accessible cycle parking area with facilities for staff and student use.
- Provide a suitable interface with adjacent parking area.
- Retain access to existing substation/plant.
- Consider retention of any external doors from Gibson Building.
- Invest in quality. Use high quality materials and street furniture that are robust, reflect the campus character and encourage social interaction.
- Use landscape elements to promote sustainability. Use street trees and planting to structure space and raise environmental quality.

5.7.4. WEST ELEVATION - DESIGN SUMMARY

Parking facilities consist of unsheltered Sheffield cycle stands with access to the main entrance, as well as a two-tier storage unit to the site rear.

The existing site boundary has been enhanced with a widened soft landscape buffer, with space for street trees to soften the boundary between New Radcliffe House and the site.

A fenced zone is proposed to enclose a sub-station and generator compound. The exact size and footprint is to be confirmed at Stage 3. The option to include a bin store within this enclosure is also to be explored at Stage 3 following further stakeholder engagement.

To accommodate internal finished floor level changes, a ramp access is provided to address accessibility requirements.



(Above) stage 1 concept development plan



Proposed landscape plan



Supporting images

5.7.5. WALLED GARDEN - DESIGN OBJECTIVES

- Ensure the retention of the listed stone boundary wall and utilise this as a key defining feature of the space.
- Combine street furniture and planting to structure outdoor work stations, space for meetings, studying and socialising.
- Consider the impact of use of space on neighbouring private land.
- Invest in quality. Use high quality materials and street furniture that are robust, reflect the campus character and encourage social interaction.
- Ensure that suitable provisions are made so that outdoor amenity areas and workstations cater for the needs of all potential users, such as inclusion of seating with back/arm rests and space for wheelchairs.
- Review security implications so access to space is controlled and managed.
- Provide multiple escape routes from space to support emergency egress strategies.

5.7.6. WALLED GARDEN - DESIGN SUMMARY

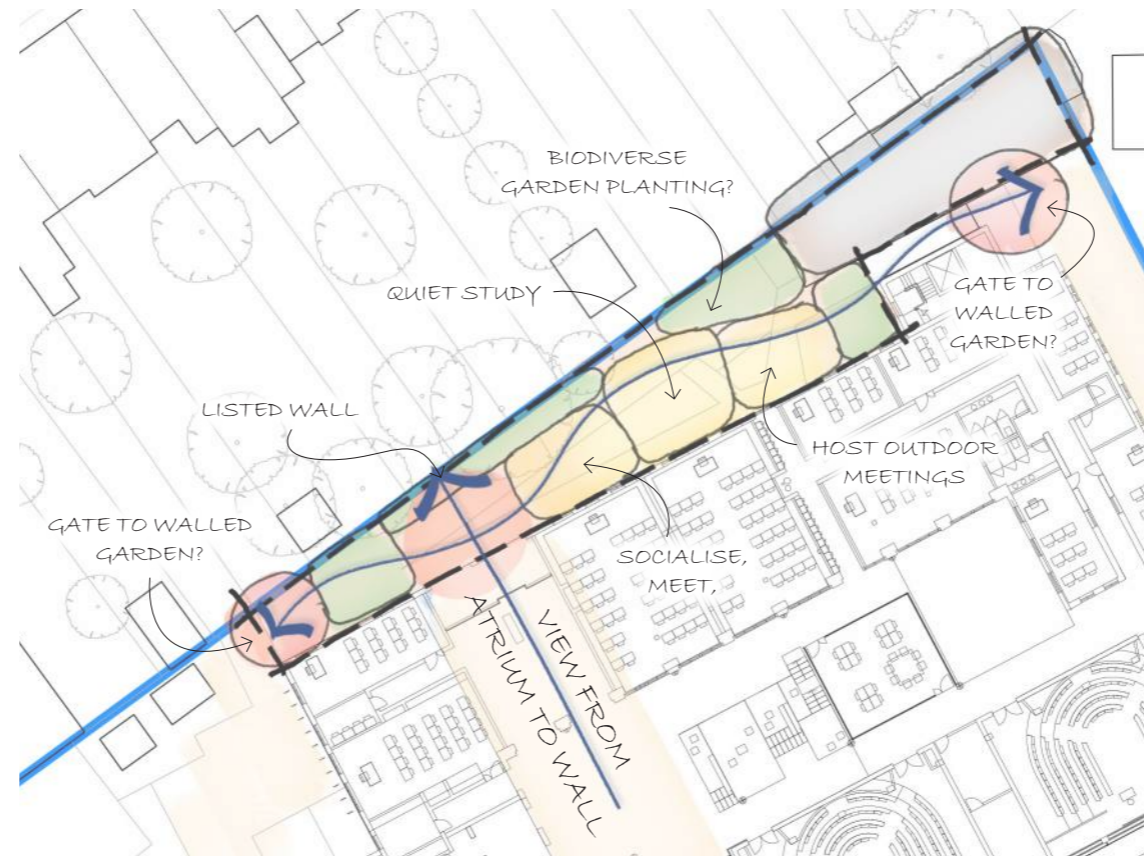
The walled garden design (right) has been developed to include cycle parking storage to allow staff parking to be secure and separate from the public areas of the site.

A range of seating areas have been provided within three contrasting partition areas: a casual social space for short term use by the atrium exit, an area for free standing tables and chairs, as well as a large communal meeting space with a long table.

The boundary wall is used as a decorative feature as an expression of local heritage and character.

Planting is proposed with a meandering 'toothed' layout, to allow seating to be organically arranged between planting as required and offer a range of enclosure.

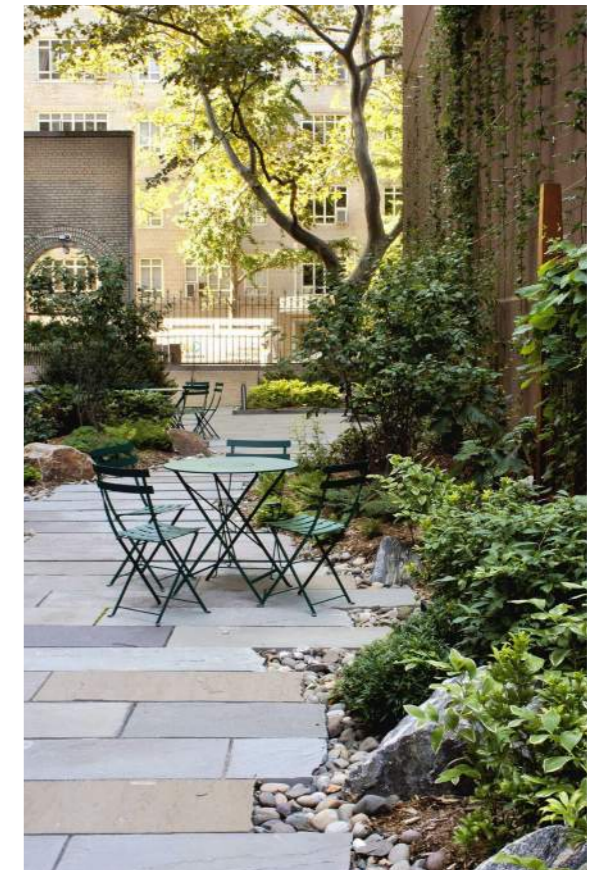
Due to space limitations, trees will be limited to small specimen trees and shrubs.



(Above) stage 1 concept development plan



Proposed landscape plan



Supporting images

5.7.7. ILLUSTRATIVE VISUALS



Indicative View looking towards main entrance approach.

5.7.7. ILLUSTRATIVE VISUALS (CONT).



Indicative View looking towards main entrance approach from Humanities department.

5.7.7. ILLUSTRATIVE VISUALS (CONT).



View of walled garden entrance.

5.7.7. ILLUSTRATIVE VISUALS (CONT).

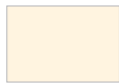
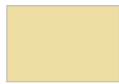






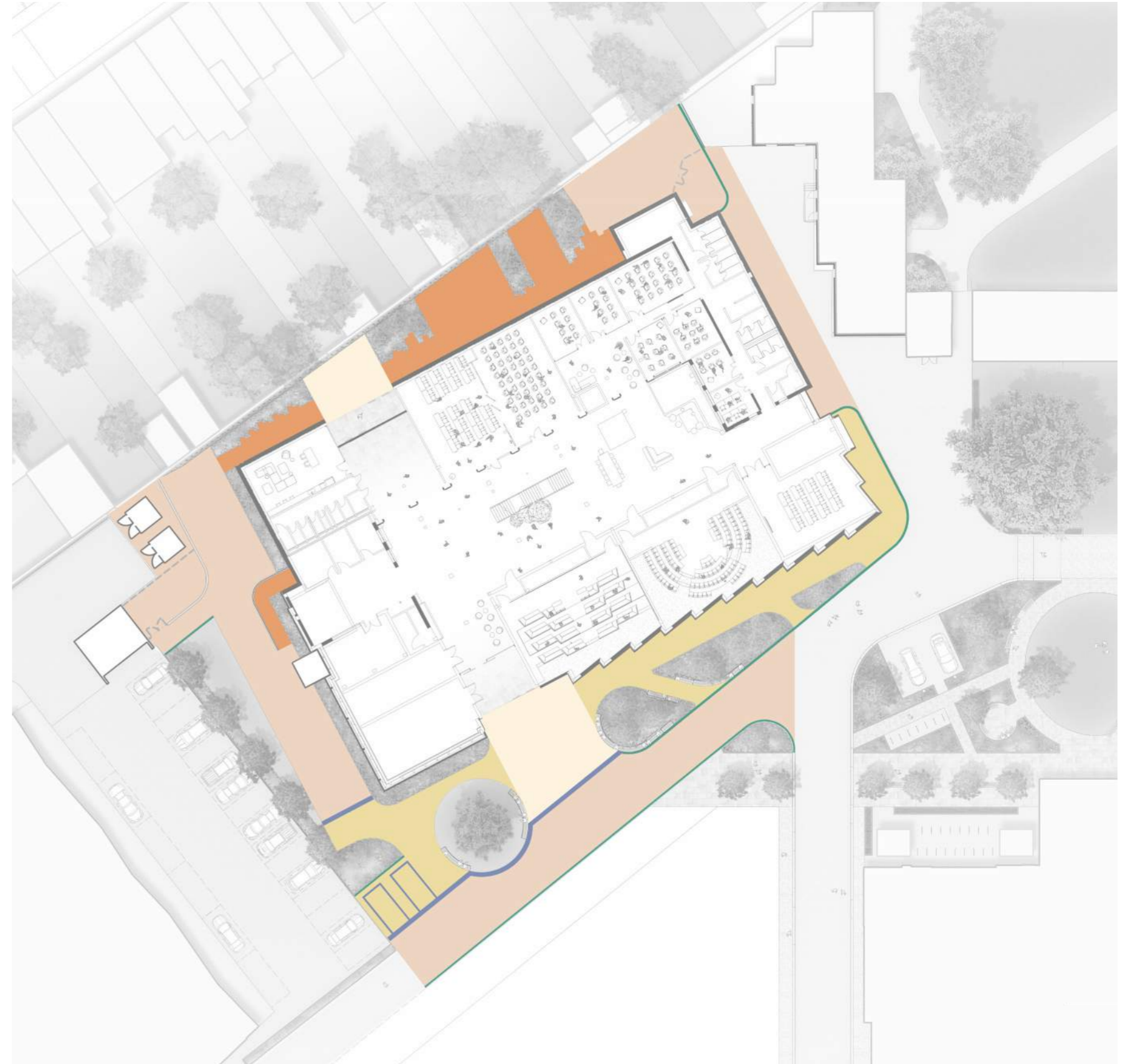
View of walled garden - communal meeting space.

5.7.8. MATERIALS STRATEGY OVERVIEW

The proposed materials are designed to meet the needs of the site's uses while also contributing to the look and feel of the environment. The selection and use of materials has been based on the following criteria:

- To be responsive to local character, with special emphasis placed on selecting materials which align with the proposed material palette of the adjacent New Humanities public realm and heritage setting of the Radcliffe Observatory.
- To minimise use of carbon in transport and manufacture.
- Coordination with drainage design, with consideration for how materials can reduce reliance on grey infrastructure and facilitate more sustainable approaches to water management where feasible.
- To balance cost effectiveness with quality.

-  Yorkstone paving flags, 600(L) x 400(W) mm, or similar.
-  Yorkstone paving flags, 300(L) x 100(W) mm, or similar.
-  Granite setts, cropped finish, 100(L) x 100(W) mm, or similar.
-  Concrete block paving, 300(L) x 200(W) mm with matching 50mm edging.
-  Granite kerbs and seating walls, flamed finish, or similar.
-  Buff bituminous macadam surface to pedestrian and vehicular areas.





Yorkstone paving flags, 600(L) x 400(W) mm, or similar.



Yorkstone paving flags, 300(L) x 100(W) mm, or similar.



Granite setts, cropped finish, 100(L) x 100(W) mm, or similar.



Concrete block paving, 300(L) x 200(W) mm with matching 50mm edging.



Granite kerbs and seating walls, flamed finish, or similar.



Buff bituminous macadam surface to pedestrian and vehicular areas.



Granite 250mm wide flush kerb edging to vehicular areas, or similar.



Granite rain garden kerb edging, or similar.



Metal edging and pebble margins to facade interfaces.



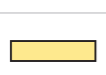





5.7.9. STREET FURNITURE STRATEGY OVERVIEW

Street furniture is proposed to create external spaces which are inviting and promote a lively, collaborative and active campus.

Street furniture will be robust and ergonomic for all users. Provisions for wheelchair access are to be included around communal chairs and tables. Seats with backs and arm rests are to be provided alongside standard benches.

As a setting for digital innovation, the use of smart street furniture is to be explored around the Institute of Digital Health. This includes opportunities for street furniture to be fitted with innovations such as phone and laptop charge points, WIFI, as well as motion sensors integrated into lighting.

Bins will be sited within convenient, visible locations and provided in line with the university's recycling policy.

-  Curved natural stone seating wall with slatted timber bench.
-  Straight natural stone seating wall with slatted timber seat with back and arm rests.
-  Straight natural stone seating wall with slatted timber bench.
-  Timber box benches (long, short and cube varieties).
-  Ground bedded communal long table with free standing chairs.
-  Litter and recycling bins.
-  Free standing communal table and chairs.
-  Cycle repair station.





Timber seating top for natural stone wall with back and arm rests.



Timber bench top for natural stone wall.



Curved bench top for natural stone wall.



Timber box bench.



Free standing communal table and chairs.



Sheffield cycle hoops.



Natural stone seating wall with timber bench top.



Communal long table with free standing chairs.




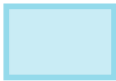

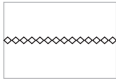


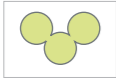





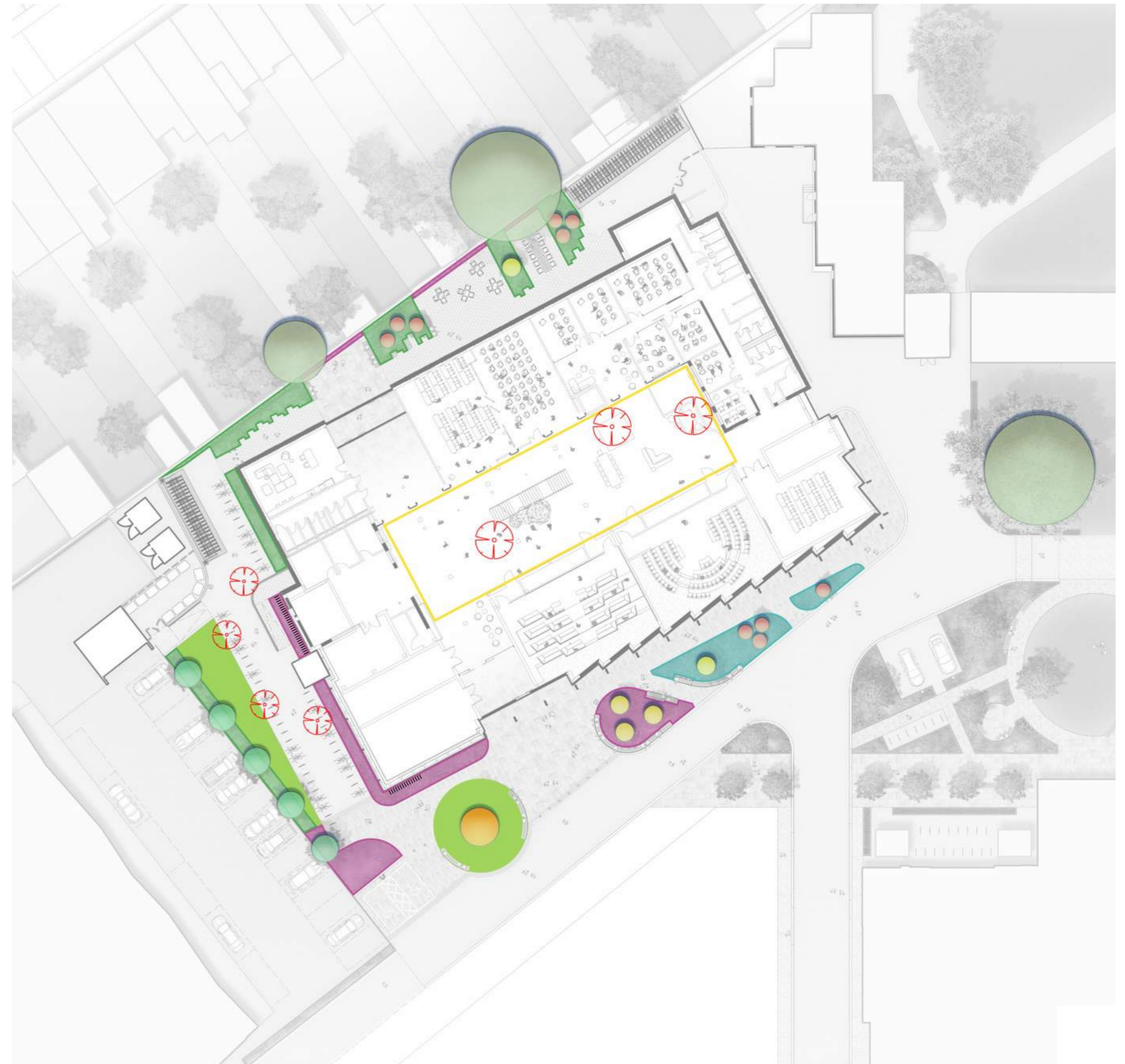
Litter and recycling bins.

5.7.10. PLANTING STRATEGY OVERVIEW

The planting proposals for this scheme will provide year round colour and interest. Where native planting cannot be used, species from the RHS plants for pollinators have been used to promote invertebrates. No less than 60% of the planting schedule will be evergreen to maintain year-round structure.

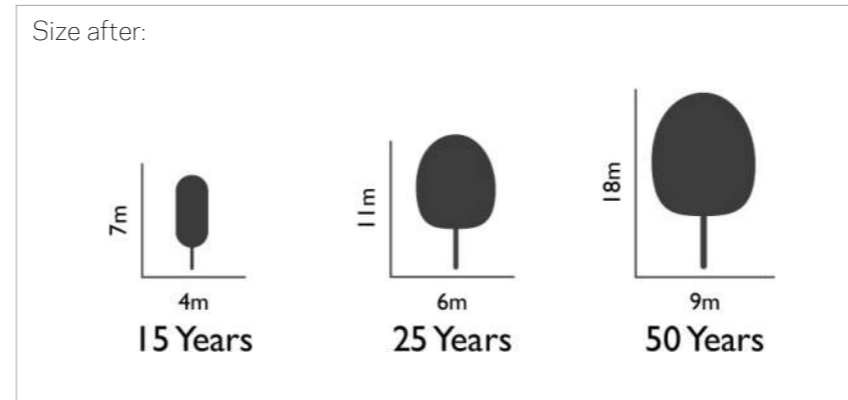
Hedgehog boxes, as well as log piles, pebbles, stones and boulders are to be integrated into planting areas where appropriate to provide habitat enhancement for invertebrates.

-  Amenity lawn.
-  Native shrubs and shade tolerant ground-cover.
-  Herbaceous shrubs and ornamental perennials.
-  Rain garden planting.
-  Interior planting.
-  Steel trellis for climbers.
-  Large single clear-stem parkland tree.
-  Avenue / single clear-stem street trees.
-  Multi-stem specimen trees.
-  Multi-stem and large shrubs.
-  Existing trees to be retained.
-  Existing trees to be removed.

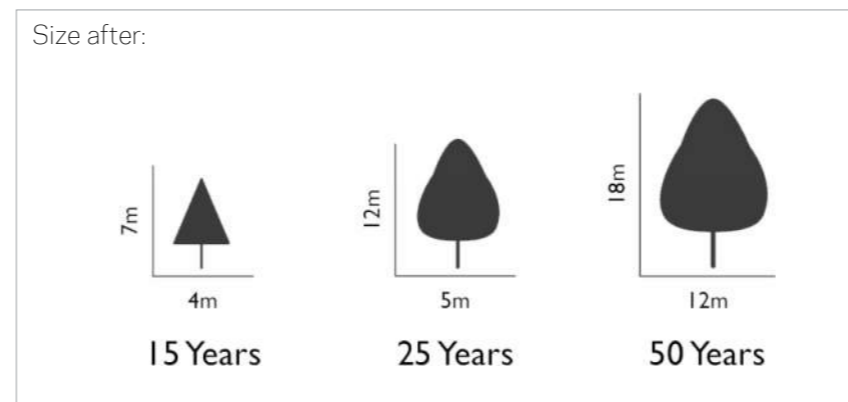


5.7.11. TREE PALETTE

Liriodendron tulipifera
Common name: Tulip Tree
Size: Large (11m high x 6m wide after 25 years).
Position: Large single clear-stem parkland tree.
Key characteristics: Distinctively shaped leaves with buttery yellow in autumn. Tulip shaped yellow-green flowers.



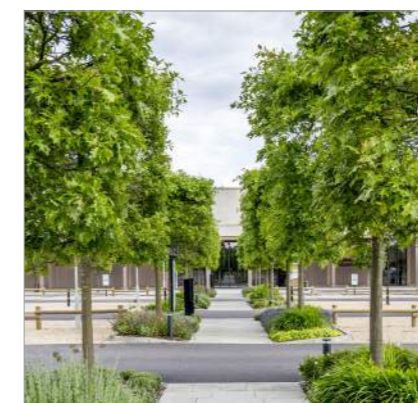
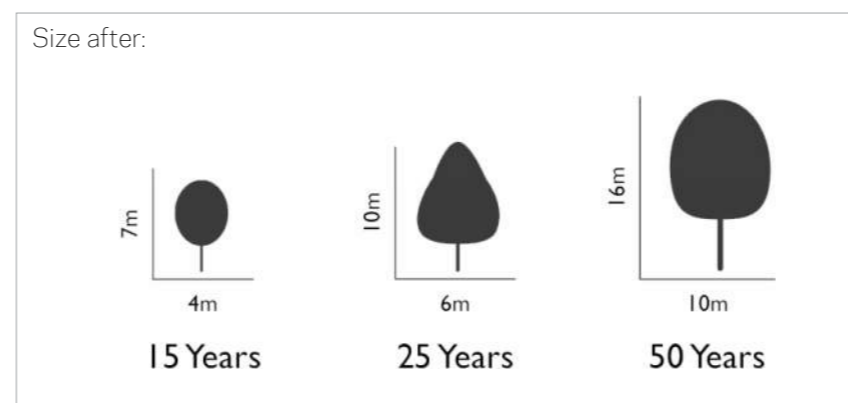
Liquidamber styraciflua
Common name: Sweetgum
Size: Large (12m high x 5m wide after 25 years).
Position: Alternative large single clear-stem parkland tree.
Key characteristics: Maple-like foliage which turns crimson reds and amber gold in autumn. Very attractive urban or parkland tree.



Pyrus calleryana 'Chanticleer'
Common name: Pear Tree
Size: Medium (8m high x 4m wide after 25 years).
Position: Avenue / single clear-stem street trees.
Key characteristics: Highly resilient street tree, suitable for poor soil conditions. Slim upright canopy with fiery autumn colour.



Carpinus betulus
Common name: Common Hornbeam
Size: Large (10m high x 6m wide after 25 years).
Position: Avenue / single clear-stem street trees.
Key characteristics: Vibrant lime green foliage with good autumn colour. Tolerates heavy pruning to form neat avenues in streets and car parks.

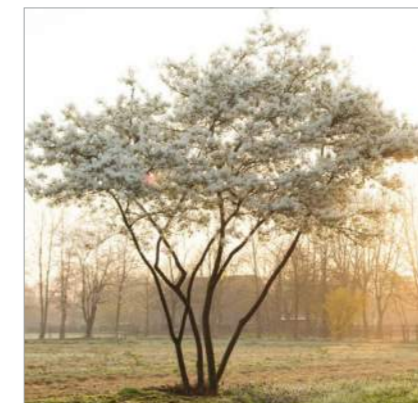
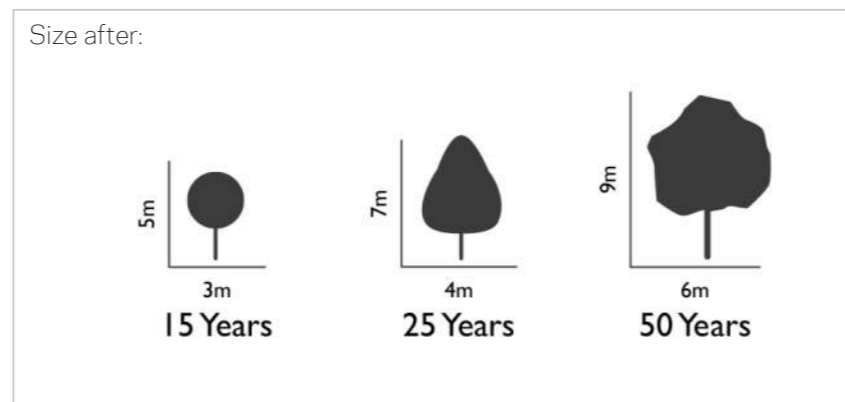


5.7.11. TREE PALETTE (CONT).

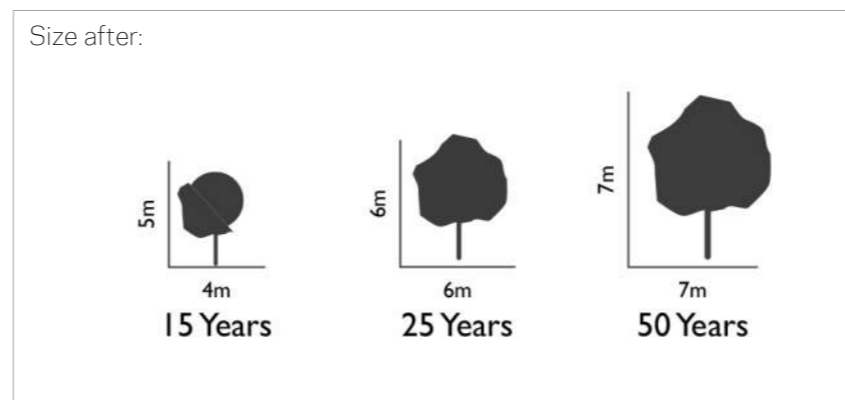
Acer griseum
Common name: Paperbark Maple
Size: Small (5m high x 3m wide after 25 years).
Position: Multi-stem specimen trees.
Key characteristics: Decorative peeling mahogany coloured bark with red foliage in autumn.



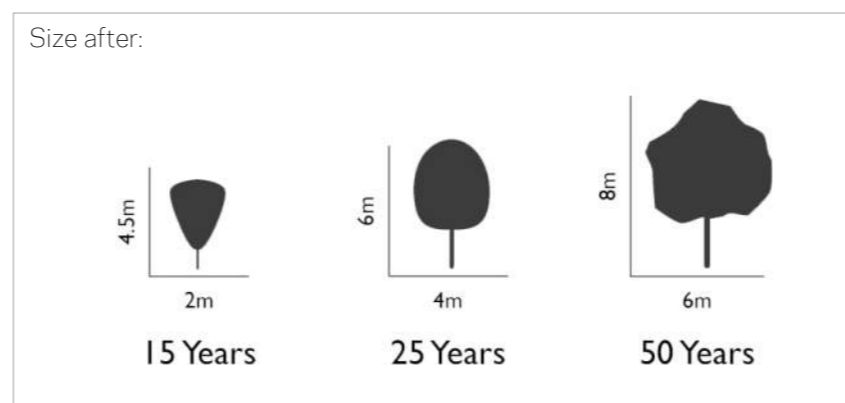
Amelanchier lamarckii
Common name: Snowy Mespilus
Size: Small (7m high x 4m wide after 25 years).
Position: Multi-stem specimen trees.
Key characteristics: White blossom in early spring and red autumn colour in autumn. High amenity value for birds and invertebrates.



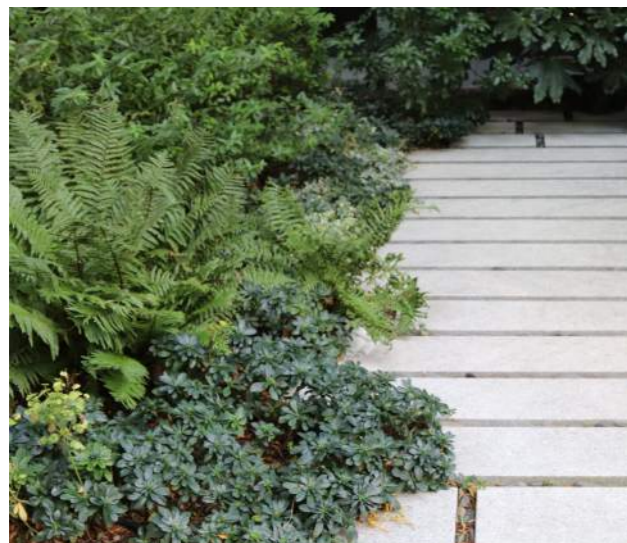
Corylus avellana
Common name: Hazel
Size: Small (6m high x 6m wide after 25 years).
Position: Multi-stem specimen trees.
Key characteristics: Large native shrub or small multi-stem tree. Rounded leaves which turn yellow in autumn. Edible nuts and yellow male catkins.



Prunus serrula
Common name: Tibetan Cherry
Size: Large (6m high x 4m wide after 25 years).
Position: Multi-stem specimen trees.
Key characteristics: Glossy red-brown coloured bark which peels with age. Narrow willow-like leaves and white flowers in April.



5.7.12. INDICATIVE PLANTING PALETTE



Native shrubs and shade tolerant ground-cover:

- Ajuga reptans
- Dianthus gratianopolitanus
- Geranium nodosum
- Geranium sanguineum
- Hedera helix
- Heuchera 'Plum pudding'
- Hosta June
- Pachysandra terminalis
- Polypodium vulgare
- Rosa Alba Meidiland
- Salvia 'Purpurescens'
- Sesleria autumnalis
- Vinca minor
- Viburnum opulus
- Viburnum rhytidophyllum
- Carpinus betulus (hedge)

Herbaceous shrubs and ornamental perennials:

- Carex oshimensis 'Evergold'
- Carex pendula
- Choisya 'Aztec Pearl'
- Choisya 'Sundance'
- Crocsmia 'Lucifer'
- Echinacea 'White Swan'
- Euonymous 'Emerald and Gold'
- Euonymous 'Emerald Gaiety'
- Hebe 'Mette'
- Hebe 'Mrs Winder'
- Lavandula 'Hidcote'
- Liriope muscari 'Big Blue'
- Lonicera nitida
- Rudbeckia 'Goldsturm'
- Rosmarinus officinalis
- Verbena bonariensis

Rain garden planting:

- Bergenia cordifolia 'Purpurea'
- Carex oshimensis 'Evergold'
- Carex pendula
- Cornus sanguinea
- Festuca glauca 'Elijah Blue'
- Helenium 'Moerheim Beauty'
- Iris foetidissima
- Iris pseudacorus
- Rudbeckia 'Goldsturm'
- Sesleria autumnalis
- Osmunda regalis
- Salvia 'Purpurescens'
- Salvia nemorosa
- Vinca Minor
- Verbena bonariensis
- Viburnum tinus 'Eve Price'

Climbing species:

- Clematis cirrhosa
- Hedera helix
- Lonicera periclymenum 'Graham Thomas'
- Parthenocissus tricuspidata
- Wisteria sinensis

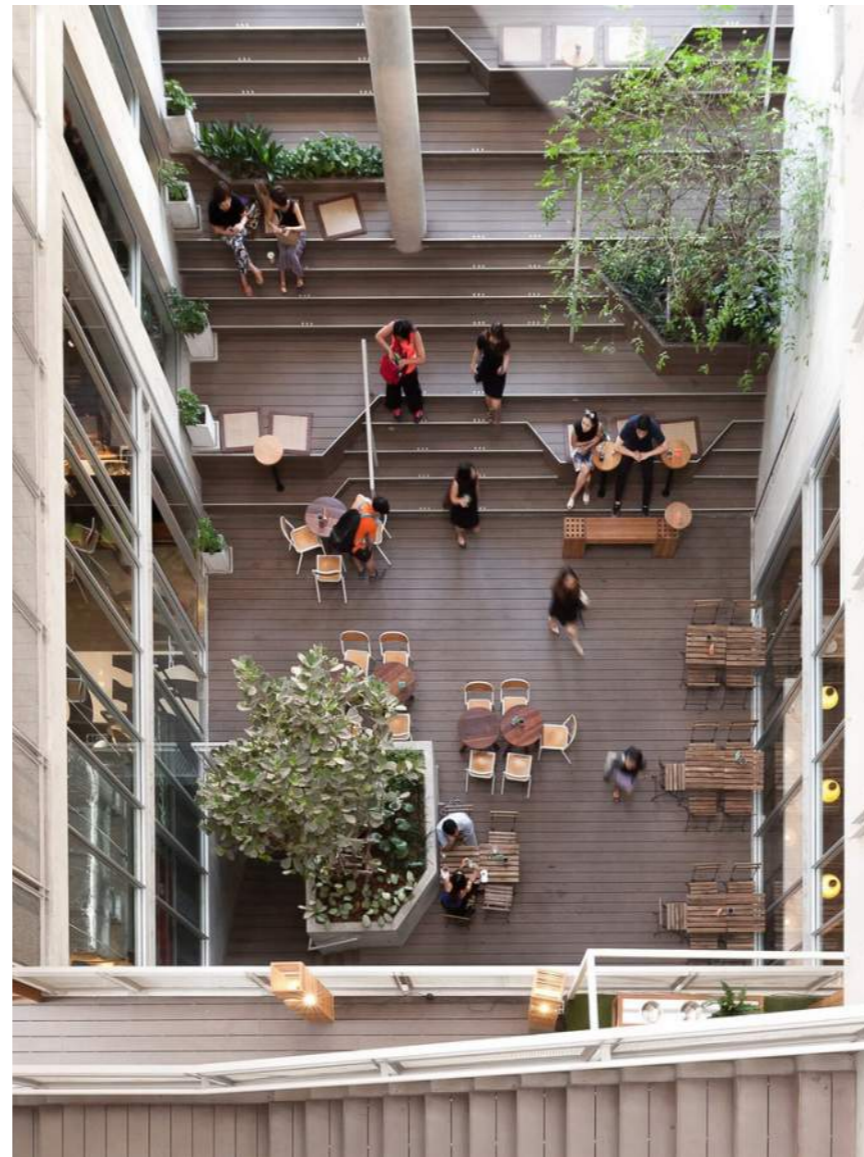
5.7.13. INTERIOR PLANTING

There is a wealth of research supporting the notion that exposure to planting and natural elements in the workplace are beneficial to well-being, reduced stress and concentration, as well as to provide internal spaces which are more dynamic and memorable. An internal planting strategy is proposed to provide these benefits. The strategy proposes three planting types which can be used interchangeably as suitable:

Large specimens to be used as focal features. These are to be reserved for spaces with plenty of room, such as at the main entrance or areas where height is unobstructed by floors above. When used in heavily trafficked areas these should provide maximum visual impact while also being carefully sited and scaled to avoid obstruction.

Planting in social and communal spaces: these are to take a variety of forms to suit the scale of the space and integrated into furniture where possible.

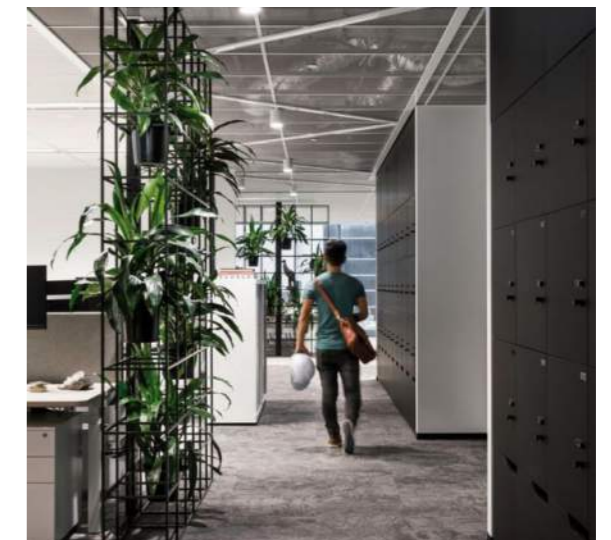
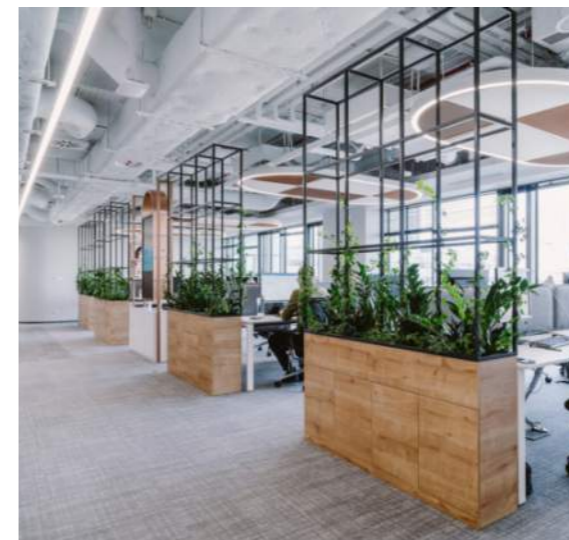
Planting to private areas and study spaces: these will provide functional roles to aid the creation of private or working spaces, such as to create partitions or add amenity to study areas.



Example of tree planting used to add interest to a central atrium.



Example of smaller modular planters integrated into seating.



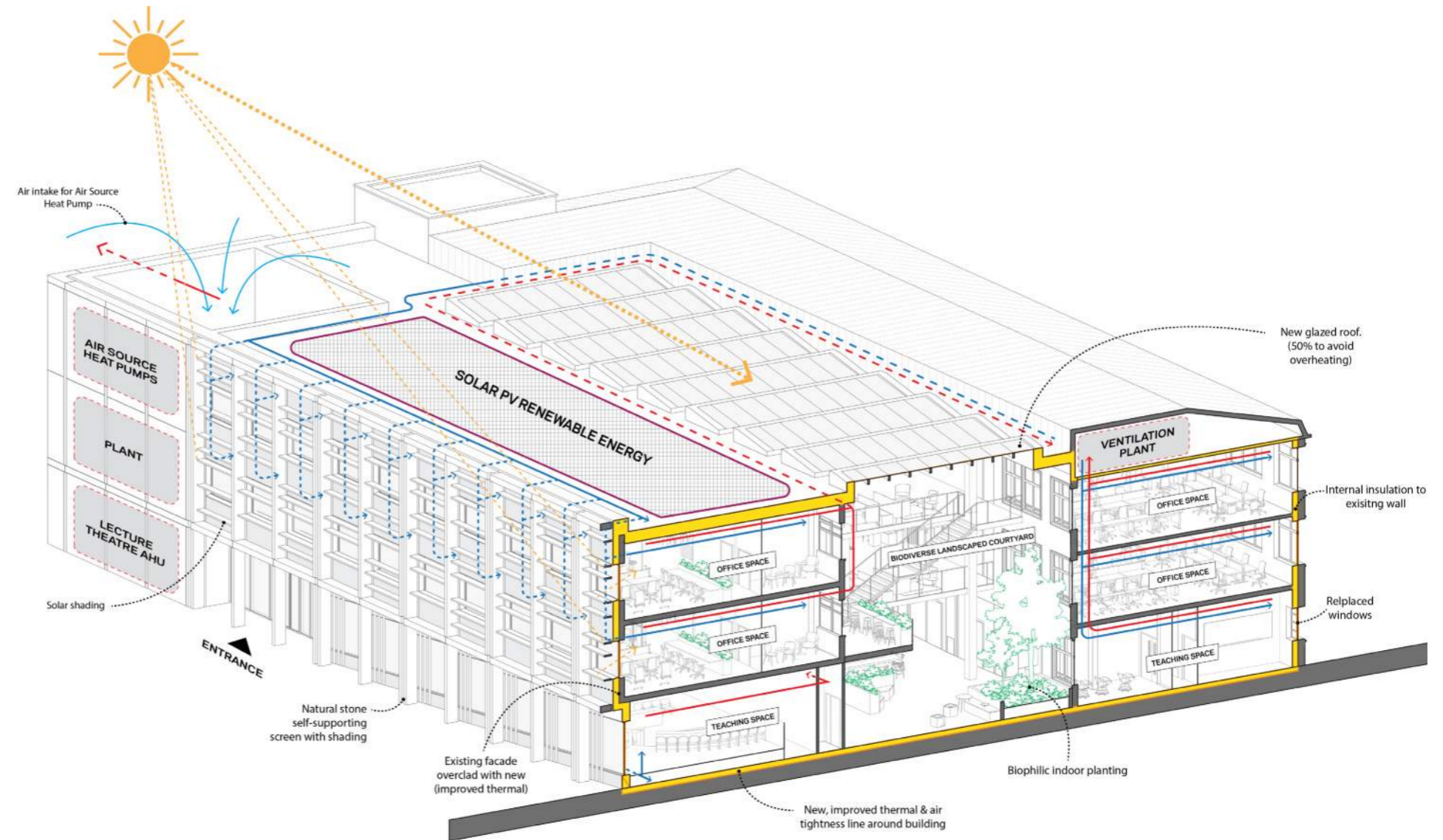
Examples of different types of planting used in private areas and study spaces to create partitions while adding amenity.

5.8 SUSTAINABILITY PRINCIPLES

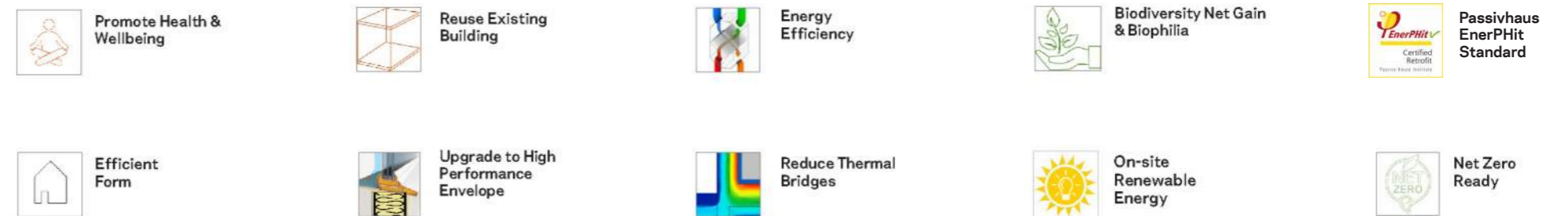
In line with the University of Oxford’s Sustainability Design Guide, the Institute of Digital Health will take a holistic approach to sustainability, ensuring that each aspect of the building responds not only to the local policy and context of the building, but with understanding of its regional, national, and global impact and responsibility to mitigate its contribution to the climate emergency and extinction crisis, whilst positively facilitating the health and wellbeing of users.

The design team have identified areas for improvement and proposed sustainability initiatives to create a wellness-centric environment with positive environmental outcomes. The following outlines the current sustainable design interventions:

- Designed to Passivhaus EnerPHit Standard (a certification scheme for highly energy efficient refurbishments).
- A new high performance, lightweight courtyard roof improves the building’s thermal efficiency, eliminating insulation and air-tightness requirements for inner courtyard walls.
- Introduction of new biophilic landscaping to the internal courtyard to form an inspiring, creative space that brings in natural daylight, views, and benefits of passive design to nurture good health and wellbeing.
- Careful reuse and refurbishment of the existing structure, lift/ stair cores and building facades, with insulation upgrades that improve envelope air tightness and thermal performance.
- High performance facade insulation to minimise thermal bridging.
- Reduced overall building energy demand and integration of energy generation through photovoltaics.
- Re-utilising waste heat through ASHP heat exchangers and using passive solar gain and shading features to control unwanted thermal gains.
- Low carbon in operational energy with all-electric, energy efficient systems.



Perspective section through the OIDH proposal illustrating sustainability interventions throughout



Project Sustainability Goals



6 ACCESS

- 6.1 Principle Aims
- 6.2 Accessibility Design Philosophy
- 6.3 Designing with Neurodiversity in Mind
- 6.4 Level Change Between the Two Buildings
- 6.5 Site Access Strategy
- 6.6 Cycle Parking Strategy
- 6.7 Security Strategy

6.1 PRINCIPLE AIMS

The Oxford Institute of Digital Health is designed as an inclusive and accessible environment to all, and independently used by visitors and staff. It aims to maximise the connections to the existing surroundings and improve accessibility and connectivity to the campus development.

Accessibility considers the requirements of all users: staff, visitors and the wider community beyond the site boundaries, including:

- People with mobility impairments
- People with visual impairments
- People with cognitive impairments
- Deaf people, and
- Older people.

THE STANDARDS, POLICY AND BEST PRACTICE

The access provisions are reviewed against the regulations and standards as identified below:

- The Building Regulations 2010, Approved Document M (Access to and use of buildings) Volume 2: Building other than dwellings
- The Building Regulations 2010, Approved Document K (Protection from falling, collision and impact)
- Building Regulations 2010, Approved Document B (Fire Safety) Volume 2: Building other than dwelling houses
- British Standard 8300 Design of Buildings and their Approaches to Meet the Needs of Disabled People - Code of Practice, BSi

EQUALITY ACT

There are nine different protected characteristics under the Act which have different levels of protection depending upon the context (such as employment, provision of goods and services, etc). This section will focus on the protected characteristic of disability. The types of discrimination that can arise in relation to disability are:

- Direct disability discrimination
- Indirect disability discrimination
- Treating disabled people unfavourably because of something arising in consequence of their disability with out justification; and
- A failure to make reasonable adjustments for disabled people ("the RA duty"). The RA duty works in different ways depending on who requests the reasonable adjustments to be made, for example an employee or a member of the public.

6.2 ACCESSIBILITY DESIGN PHILOSOPHY

The University of Oxford Accessibility Philosophy Document (Version 4 2024) has been a guiding document for developing the proposed Accessibility Strategy. This guidance document is of particular importance for the future building proposals. It outlines the expectations set on future buildings, which include the following;

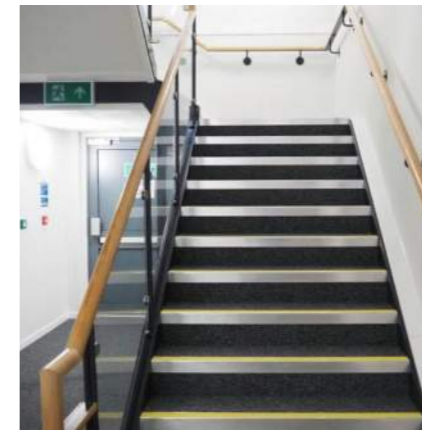
- Entering and exiting buildings: including steps, external ramps, entrance doors, access control systems and security.
- Circulation: vertical and horizontal, internal doors, corridors, internal stairs and signage.
- Facilities: lecture theatres, seminar/ meetings rooms, common rooms and break out spaces.
- Sanitary accommodation: accessible lavatories, changing places and showers.

The existing University buildings (Harkness and Gibson) lend themselves to reuse. The proposals seek to carefully and strategically enhance the existing floor plates, staircases and lifts, whilst being sensitive to the surrounding site. The future building proposals aim to achieve a fully compliant proposal. This said, there are challenges brought about when working with existing buildings and the associated constraints this brings.

Included here are a series of images taken from the Accessibility Design Philosophy Document are to illustrate initial design principles.

The following considerations for accessibility are key in achieving inclusive design:

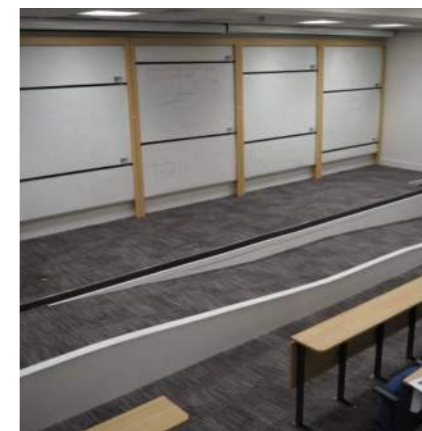
- Legal framework. Building Regulations Approved Document M and BS 8300
- Step-free access
- Appropriate circulation spaces
- Sanitary accommodation and facilities
- Emergency provisions
- Materials and visual contrast
- Natural and artificial lighting
- Acoustics and hearing aid provisions



Internal Stairs

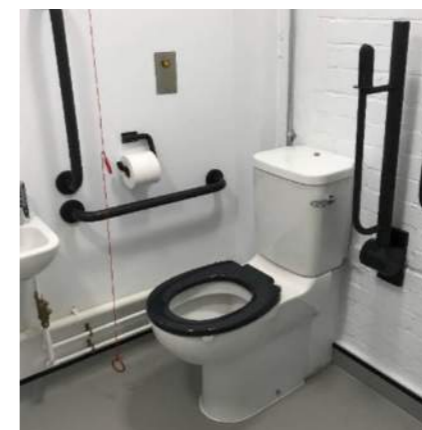
"All internal stairs must have tactile, high contrast nosings to enable people with visual impairments to use them safely."

"Handrails should be installed on both sides and continue around landings wherever possible."



Lecture Theatres

"Lecture theatres should be designed to give parity of access to all users, to include lecturers and audience members."



Toilets

"The University has a policy to include non-gendered toilet and shower facilities in addition to separate-sex toilets, wherever possible. These should take the form of self-contained non-gendered toilets/showers for individual use."



Emergency Refuges

"Some disabled people will be unable to leave a building without assistance. Therefore a sufficient number of emergency refuges must be provided on each floor of a building in order that users can await assistance within a fire protected area."

6.3 DESIGNING WITH NEURODIVERSITY IN MIND

With the aim of designing environments where all users can experience the building equally, defining Neurodiversity and understanding why taking it into account should be an integral part to the design is key.

“Neurodiversity is the term used to describe the variation in neurocognitive profiles across the whole population. The term recognizes the variety in the way we speak, think, move, act and communicate; that human brains are diverse and vary. Each one of us has a unique set of different connections with our billions of nerve cells. As a consequence, the way we interact with our environment can vary from person to person. It is dynamic and might change over time, for example, due to an incident such as brain injury, trauma, disease, stroke, an age related condition or a change in mental wellness. It is important that consideration behind becomes an active consideration behind design decisions.”

PAS 6463:2022

“Neurodiversity is a concept where neurological differences are seen as natural variations of the brain. These neurological differences are recognised and respected, celebrated and allow people to be themselves. These differences can include those diagnosed with Autism Spectrum Disorder, Dyspraxia, Dyslexia, Attention Deficit Hyperactivity Disorder, Dyscalculia, Tourette Syndrome and others.”

NHS Devon, ‘A guide for parents of children and young people with Autism’

It is important that the future building proposals for the

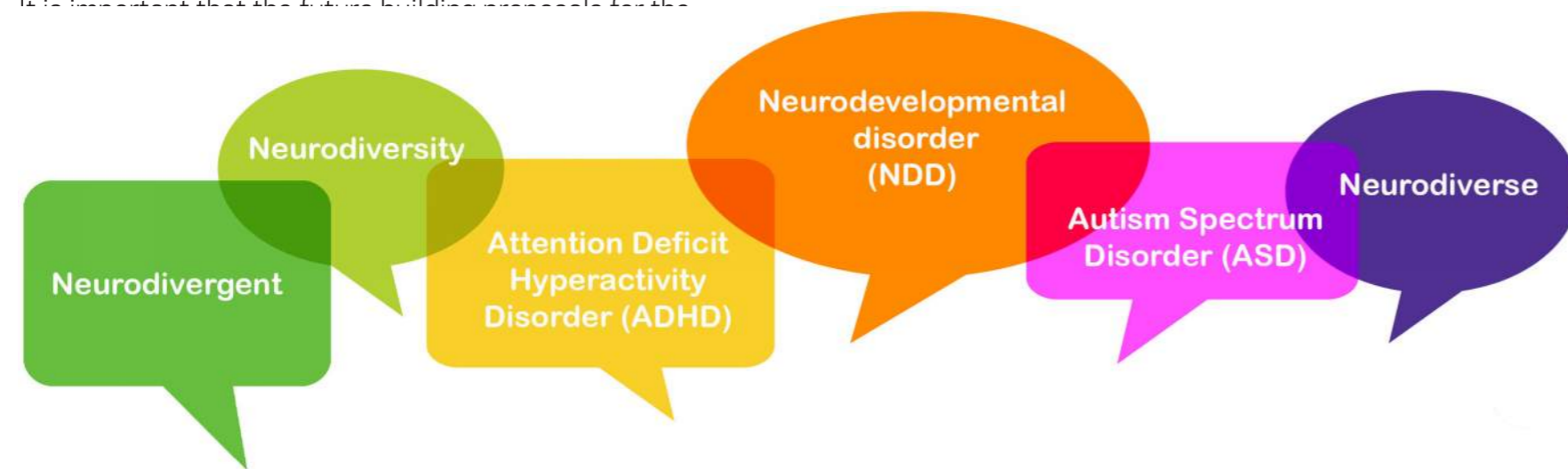


Image by NHS Cambridge

Institute of Digital Health fully consider the breadth of diversity within building users and their different needs. The PAS 6463:2022 guidance states that “Designing environments without due regard for Neurodiversity are likely to contribute to poor mental health and impaired wellbeing for people with sensory processing differences.” Some of the many design considerations include the following:

- lighting
- acoustics
- décor
- flooring
- layout
- wayfinding

The rich diversity of building users creates a opportunity and a requirement to address different needs. Protected characteristic groups are perhaps better understood within the industry in contrast to the needs of those with neurological differences. The future building proposals will need to consider user groups defined in the Equalities Act (age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex, and sexual orientation) in addition to designing an environment with Neurodiversity in mind. An example whereby Neurodiversity is taken into account is the lighting strategy. Daylighting has health benefits, therefore, natural daylight should be provided over artificial lighting where possible.

Steps outlined in PAS (Publicly Available Specification) 6463:

1. Conduct design review of updated proposals against the PAS and other ‘good practice’ documents depending upon sector and location.
2. Develop access section of the Design and Access Statement for planning and start to develop Access Strategy for Building Control approvals to this PAS.
3. Liaise as appropriate with Local Authority for access, conservation and planning.

PROPOSALS

The design team has focused on the need for the building to accommodate the rich diversity of future building users. The project team has sought to coordinate and refine building strategies in place, to best enhance the user experience.

The design process to date has followed the steps noted above. Principally, the proposals have been reviewed against good practice documents, such as British Standard guidance and specific to Oxford, the University Design Philosophy Documents. There has been a rigorous review process in place. The scheme has been reviewed with the local planning authority at three separate pre-application meetings. Public consultation has also been undertaken to hear the views of residents and to take the Department of Digital Health views into account.

The Local Government Association states that,

“National Autistic Society report at least 700,000 autistic adults in UK of which only 15% are in employment.”

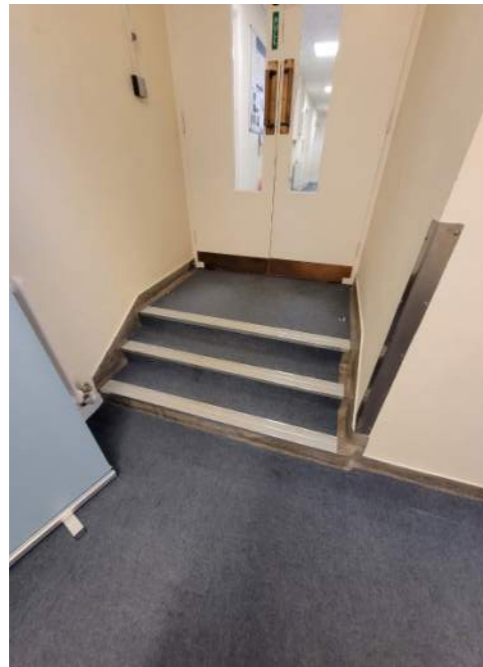
“According to the British Dyslexia Association, the number of individuals with dyslexia in the UK is around 10%, with 4% of population at the severe end of the dyslexia continuum.”

6.4 LEVEL CHANGE BETWEEN THE TWO BUILDINGS.

There is a change in level between the existing Gibson and Harkness buildings. The current surveys identify the change in levels between the two existing buildings to be:

- Harkness level 1 is 420mm higher than Gibson level 1
- Harkness level 2 is 660mm higher than Gibson level 2

Rather than developing a system of ramps within the new enclosed courtyard, it is preferable to address the change in level within the existing floor plates of the buildings themselves. The change in level between the two existing buildings is currently addressed in the south-west corner by a series of steps.



Existing Condition
Photo depicting the existing steps which connect the two buildings at level 2.

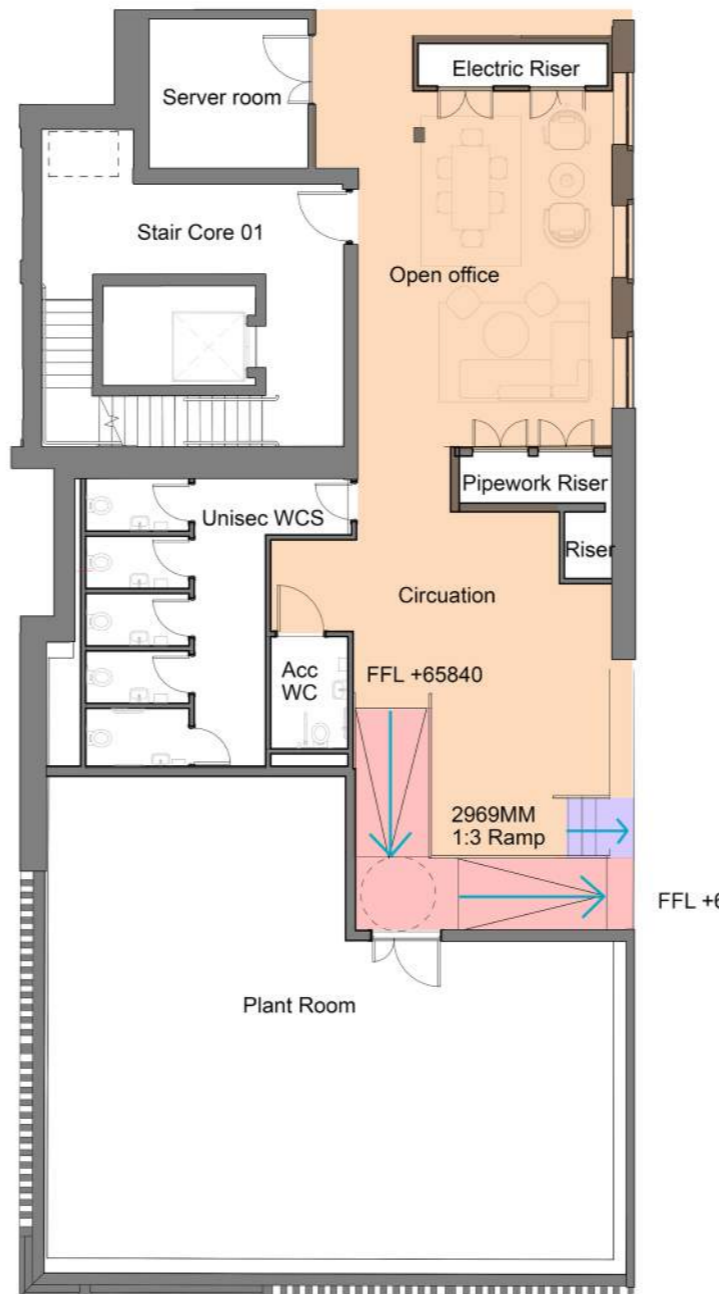
DESIGN OBJECTIVES

The design proposals provide ramped access to meet the following objectives.

- To provide a compliant ramped approach on each upper building level so that users who would struggle to navigate the existing steps, could transfer between each building level in an independent manner.
- To provide a natural and dignified route/ means to navigate this level change. The ramps should by no means be a 'lesser' or undignified journey.
- To remove the need for separation of building users on the basis on accessibility.

6.4.1 COURTYARD LEVEL CHANGE THRESHOLD

The change in level between the courtyard level (set to match the higher Harkness Building level) and the Gibson Building, is addressed in the same location on both levels 1 and 2. Setting this threshold in the same place on both levels helps ensure there is a consistent wayfinding strategy. Furthermore, the passenger lift has been positioned next to the steps, meaning that those who require the use of the lift do not need to travel to a different part of the building or seek an alternative route, to navigate the change in level.



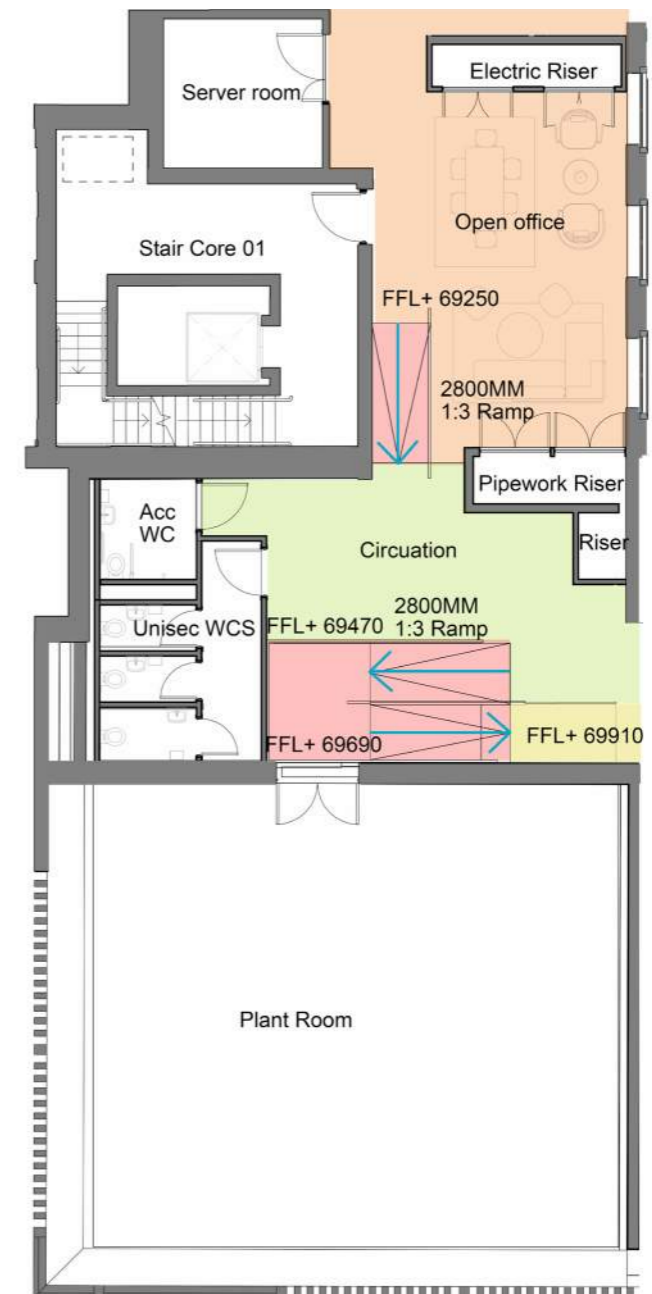
LEVEL 1

6.4.2 RAMPED ACCESS TO LEVELS 1 AND 2.

At level 1 the 420mm change in building height is addressed via the incorporation of two 1:13 ramps which each facilitate a level change of 210mm.

At level 2 the 660mm change in building level is addressed via the incorporation of three 1:13 ramps which each facilitate a level change of 220mm. Due to the constraints brought about by the limited space available, it has not been possible to also provide steps in this location.

All ramps will have handrails on both sides with a central landing providing a clear 1500mm turning circle.



LEVEL 2



The future building proposals will ensure there is space for two wheelchairs to pass each other and that the circulation route is free from obstruction.

1500mm wide open spaces are frequently provided to ensure wheelchair users can safely turn independently.

Sound-absorption materials such as the acoustic rafts will help maintain a conformable working environment. This aids people with sensory/ neurological processing difficulties.

Welfare blocks are located next to the building cores on each level

Red line indicates 420mm level change



Change in level (420mm) Steps will be required with handrail on each side.

Key

Vertical Circulation

- █ Existing Lift
- █ Proposed passenger lift
- █ Stair Core
- █ Stairs
- █ Ramp

Horizontal Circulation

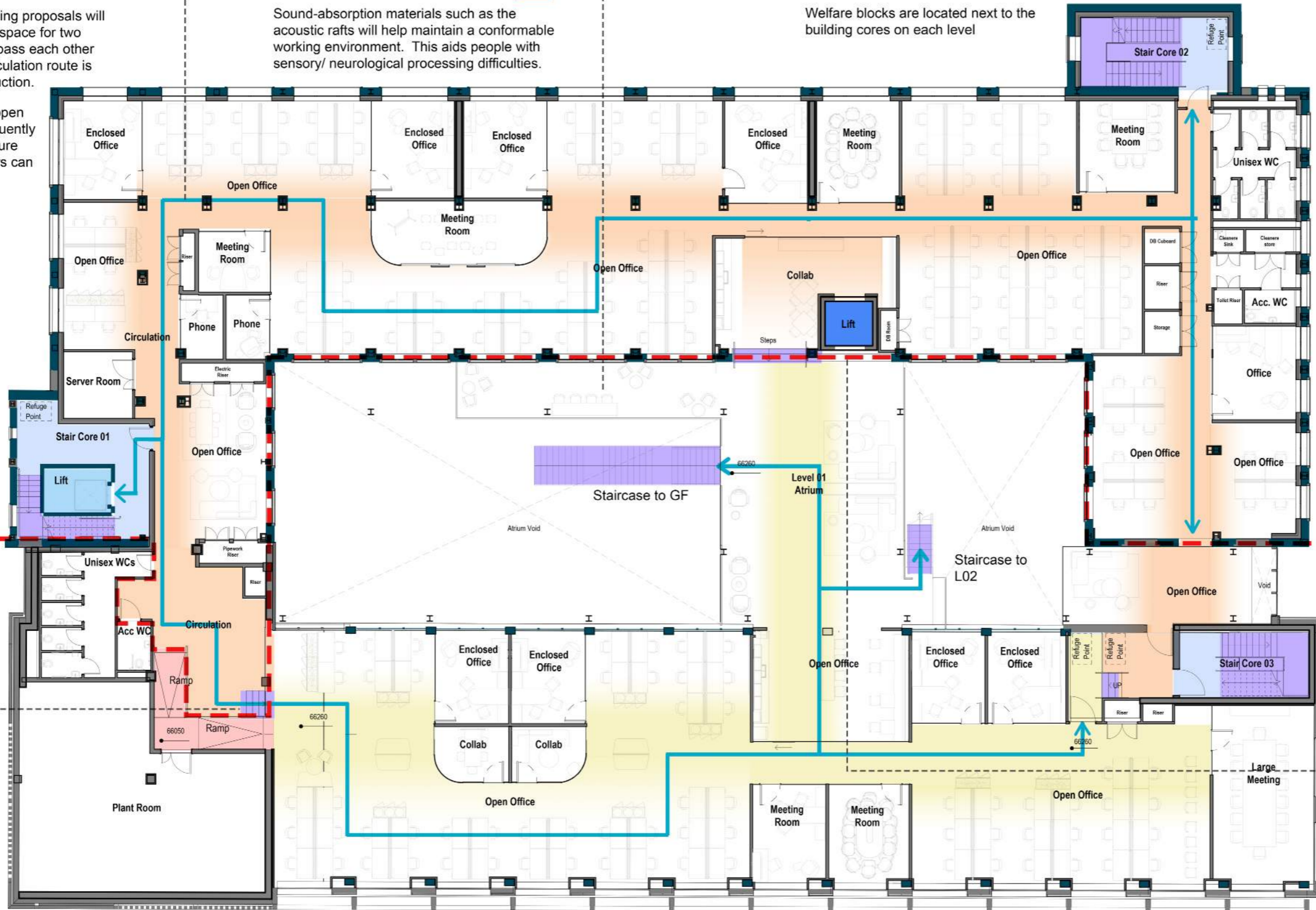
- █ Primary Circulation route (Gibson building)
- █ Primary Circulation route (Harkness building)
- █ Horizontal routes

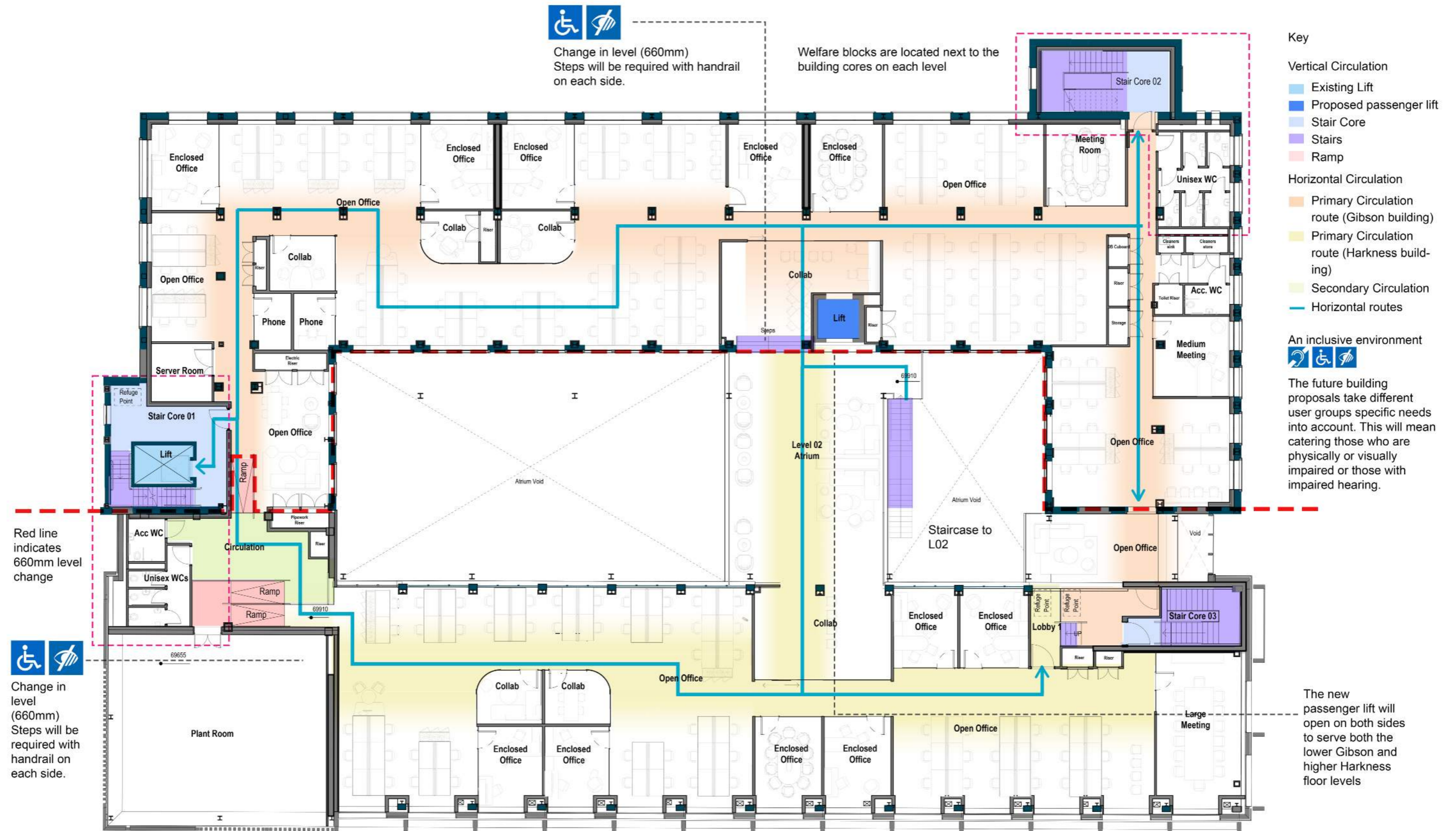
An inclusive environment



The future building proposals take different user groups specific needs into account. This will mean catering those who are physically or visually impaired or those with impaired hearing.

The new passenger lift will open on both sides to serve both the lower Gibson and higher Harkness floor levels

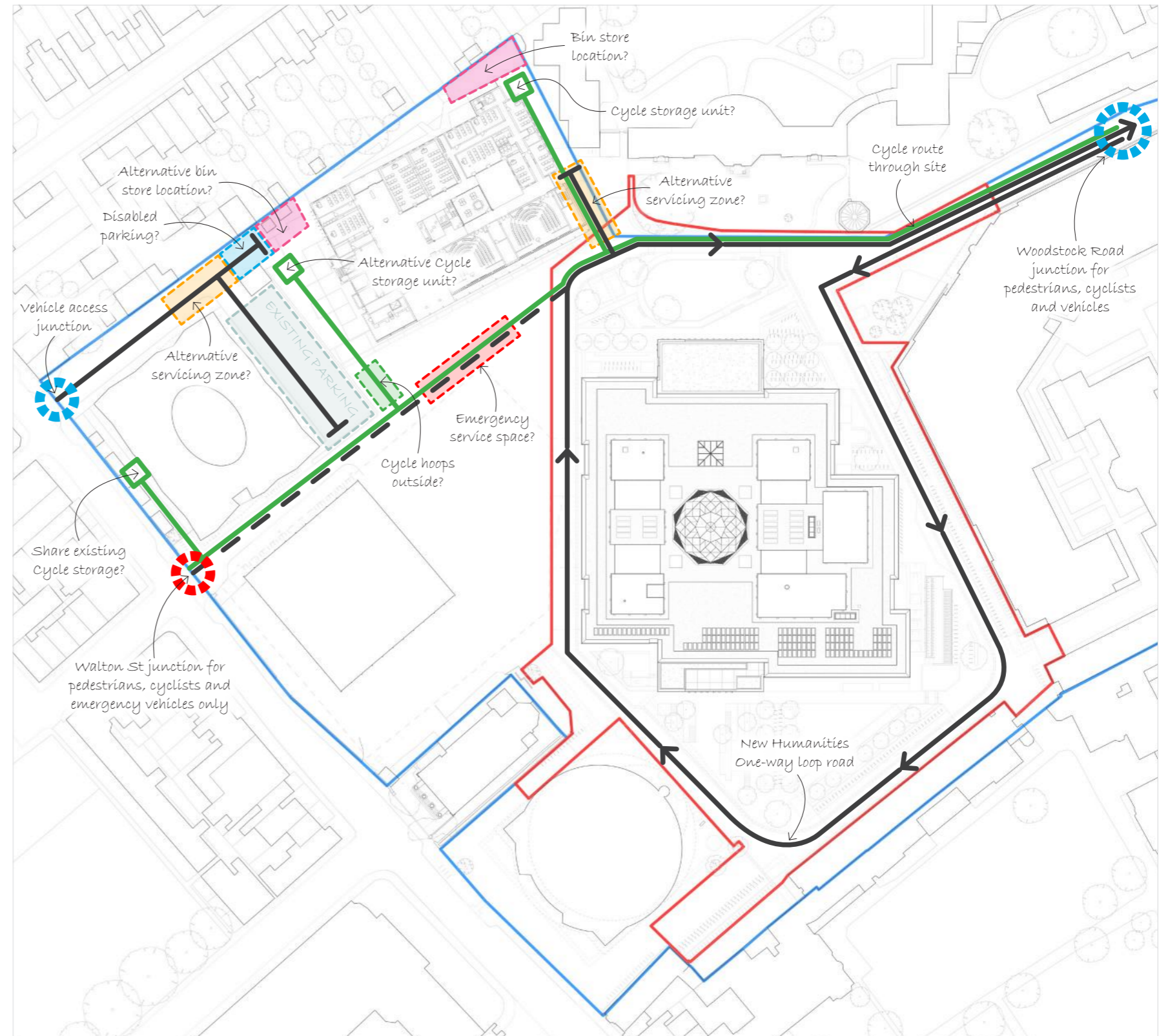




6.5 SITE ACCESS STRATEGY

The following strategy has been prepared through close engagement with the University, Local Planning Authority and Oxford Design Review Panel:

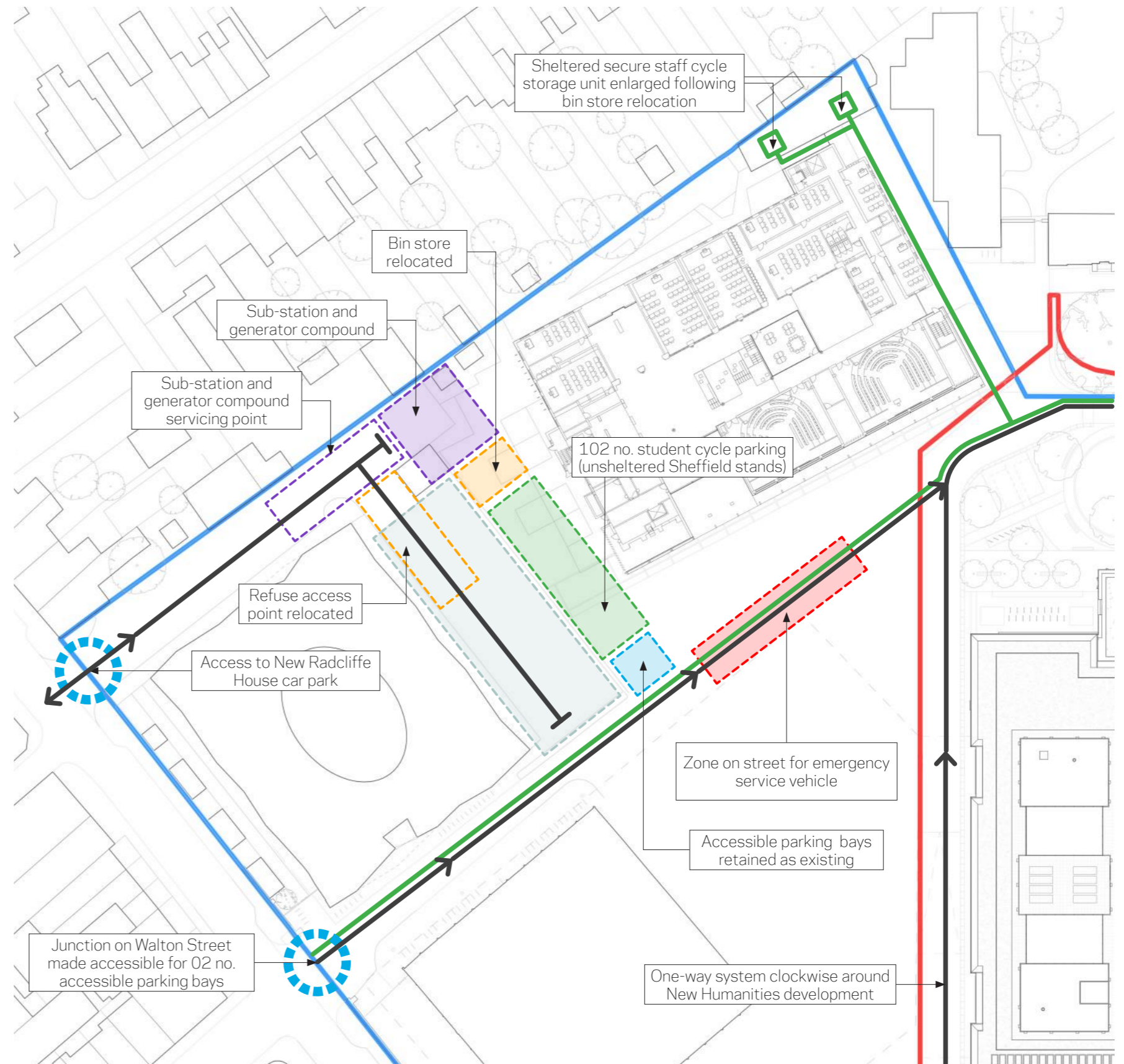
- No through-way for vehicles into campus via Walton Street junction. (With exceptions for emergency services and as required for operational maintenance). This junction is to remain a pedestrian and cyclist entrance to the campus.
- Clockwise one-way loop road for all vehicles from junction on Woodstock Road around New Humanities development, as per the arrangement agreed as part of the New Humanities planning application.
- Cycleway and pedestrian link between Walton Street and Woodstock Road to be retained and enhanced with a wider and re-surfaced street space, realigned to create a direct line from Walton Street towards the Radcliffe Observatory.
- Cycle parking is to consist of an open area to the western side of the development, with convenient access via the realigned pedestrian and cycle path, as well as additional storage units to the rear of the site and within the Walled Garden.
- Accessible parking for 2 no. bays is to be provided outside the main entrance. These are to share the pedestrian and cycle path and enter and exit the site via Woodstock Road, as per the current access arrangement for accessible parking.



6.5 SITE ACCESS STRATEGY (CONTINUED)

The plan (right) outlines in greater detail the strategy for site access, summarised below:

- Existing clockwise one-way loop road for all vehicles from junction on Woodstock Road around New Humanities development retained, with left turn to access site from loop road.
- Unsheltered Sheffield cycle stands installed outside main entrance for 102 no. students.
- Cycle parking for 144 no. staff allocated in Walled Garden and at site rear within two-tier storage units.
- Width of pedestrian and cycle path suitable of sustaining use by cars accessing accessible parking bays, as well as for use by emergency vehicles.
- Existing access arrangements to sub-station and generator compound via Walton Street retained as existing.
- Bin store and refuse collection route relocated - to be accessed via Walton Street.
- Relocation of bin store allows reuse of space for a larger capacity staff cycle parking storage shelter.



6.6 CYCLE PARKING STRATEGY

The strategy for cycle parking is based on the University requirements for staff and student parking and has been informed by Oxford City Council parking standards for cyclists.

The design proposes that student parking be located within a clear and legible location at the main entrance to the site. This takes the form of an open area of Sheffield stands, suitable for a variety of bike types, such as cargo and E-bikes. Cycle hoops are spaced at 1000mm centres.




Student parking is proposed as uncovered and in a well trafficked and overlooked public area to encourage natural surveillance. The space will require suitable lighting to ensure usage at all times of day.

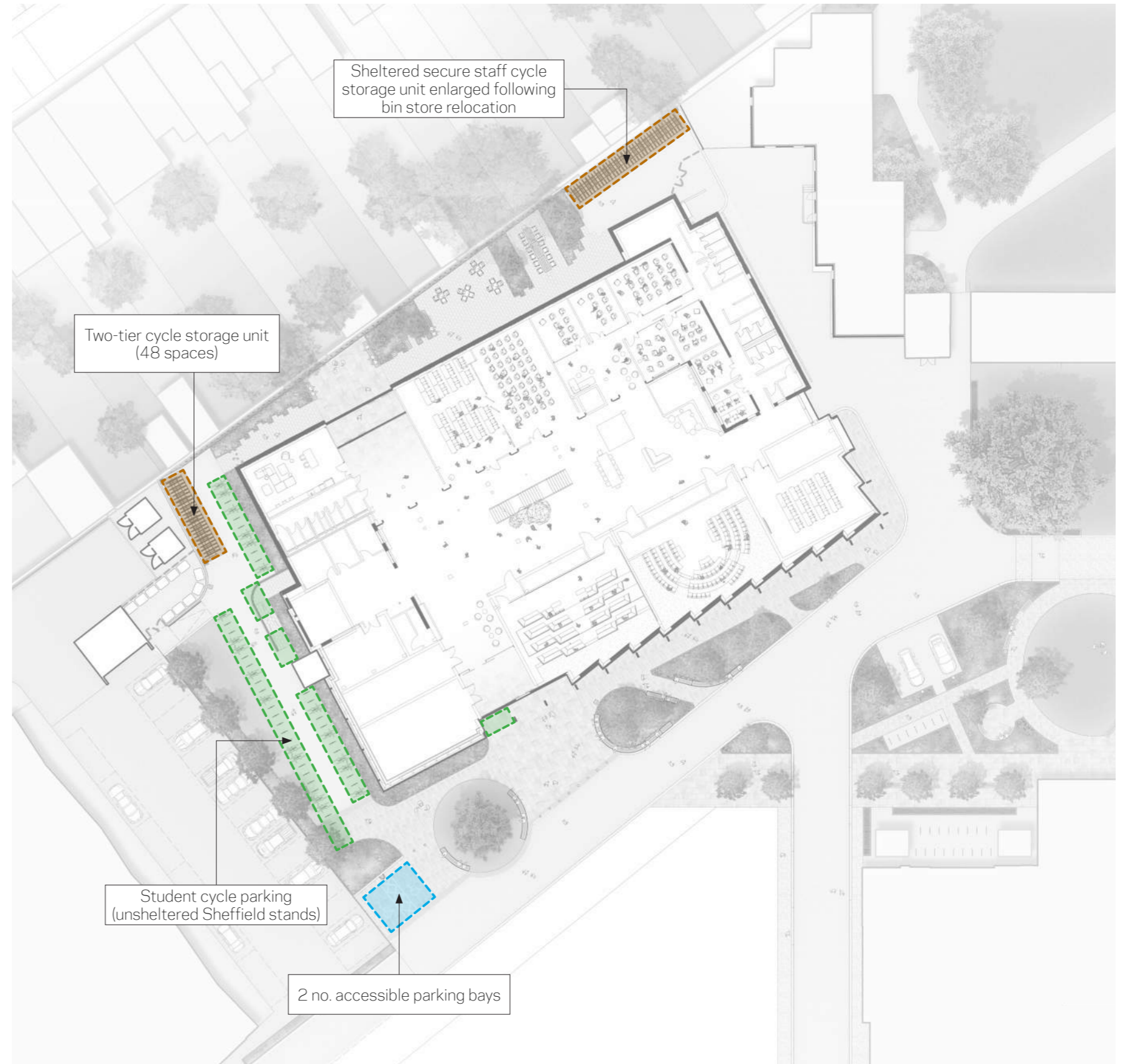
Staff are able to use the area allocated for students as well as covered storage units comprising two-tier cycle racks, provided at the site rear and in the Walled Garden. 50% of cycle parking within storage units are to be Sheffield stands to enable use for a variety of bike types.

The total allocation of cycle parking is as follows:

Students	102 spaces
Staff	144 spaces

2 no. accessible parking bays are provided at the site entrance. Access to these is as per the existing arrangement for accessible parking - with cars entering and exiting the site via Woodstock Road.

-  Unsheltered Sheffield cycle hoops for staff and student use.
-  Cycle storage shelters with Sheffield cycle hoops at grade and two-tier overhead storage units above.
-  2 no. accessible parking bays, accessed via New Humanities loop road via Woodstock Road. Fitted with shared electric vehicle charge outlet.



6.6 CYCLE PARKING STRATEGY (CONTINUED)



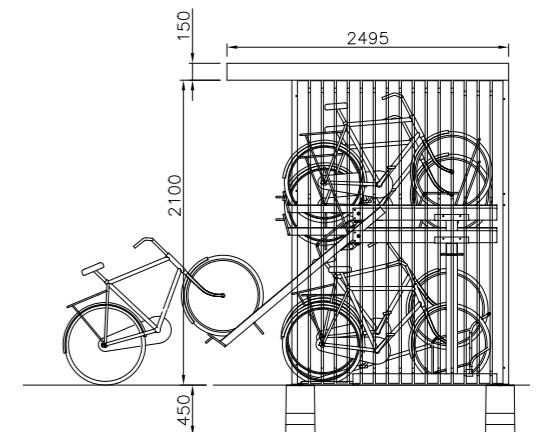
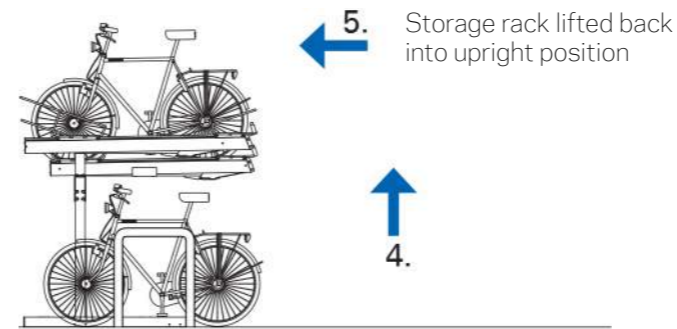
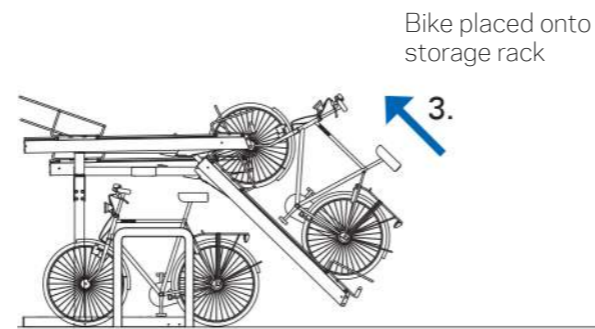
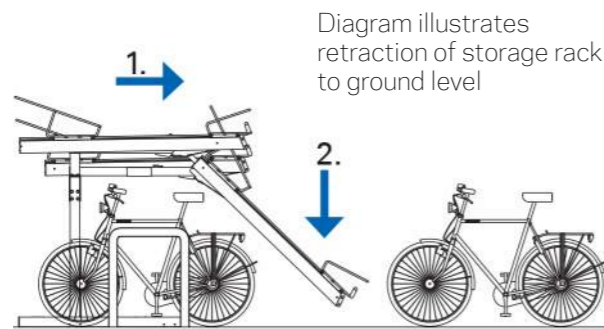
Sheffield cycle hoops.



Sheltered cycle storage unit with two-tier storage racks.














Example of two-tier storage racks.



Diagrams illustrating two-tier cycle storage units

6.7 SECURITY STRATEGY

The plan (right) illustrates security and access considerations for the submitted design. These have been developed through close consultation with the requirements of University stakeholders to ensure the proposals meet the end-user requirements.

-  Proposed private area (access for students and staff only).
-  2m high vertical bar fencing with matching gates. Fence to connect to existing boundary wall.
-  Proposed 2m high acoustic fence with matching gates.
-  Existing timber fencing to be retained.
-  Proposed 1.8m high brick wall to sub-station and bin store enclosure with timber double-leaf gates.
-  Ground rooted bollards to entrance (location and position to be confirmed following consultation with University Security stakeholders).
-  Retractable bollards to allow access for maintenance and emergency access.
-  Existing balustrade to health centre car park to be retained.
-  Proposed natural stone walls (0.45m high) with slatted timber seating tops
-  Gate location (access only to University maintenance staff) Can be used as an egress route.
-  Gate location (access to admitted staff/student personnel via mag-lock/code (TBC). Can be used as an egress route.

