

The Proposal: Campus Aerial View



The Proposal: Campus Plan

Why are we building?

Keele is growing and we need more bedrooms to be able to offer first years, finalists and post-graduates affordable accommodation on campus.

Following feedback from students the university has identified the need for a good mix of affordable accommodation available to students, not just expensive en-suites, but shared accommodation in a mix of accommodation types.

A study has been carried out by the university to determine the best sites available for development, where existing land is already available or existing halls have been mothballed due to their inferior standards for today's market.

Although this scheme is predominantly for the construction of new accommodation on campus, the fact that the developments are on campus has not been ignored. It is intended that through the design of the buildings and associated landscaping that places will be created for all students, not just those who live on campus.

Parking is a major issue which requires addressing.

What are we building?

Demolition of circa 700 existing bedrooms.

Construction of circa 1500 new bedrooms.

Building a blocks containing cluster flats, terraces of 3-4 storey town-houses and studios across two sites – Horwood and Lindsay – with campus car parking also being developed at Barnes and Horwood.

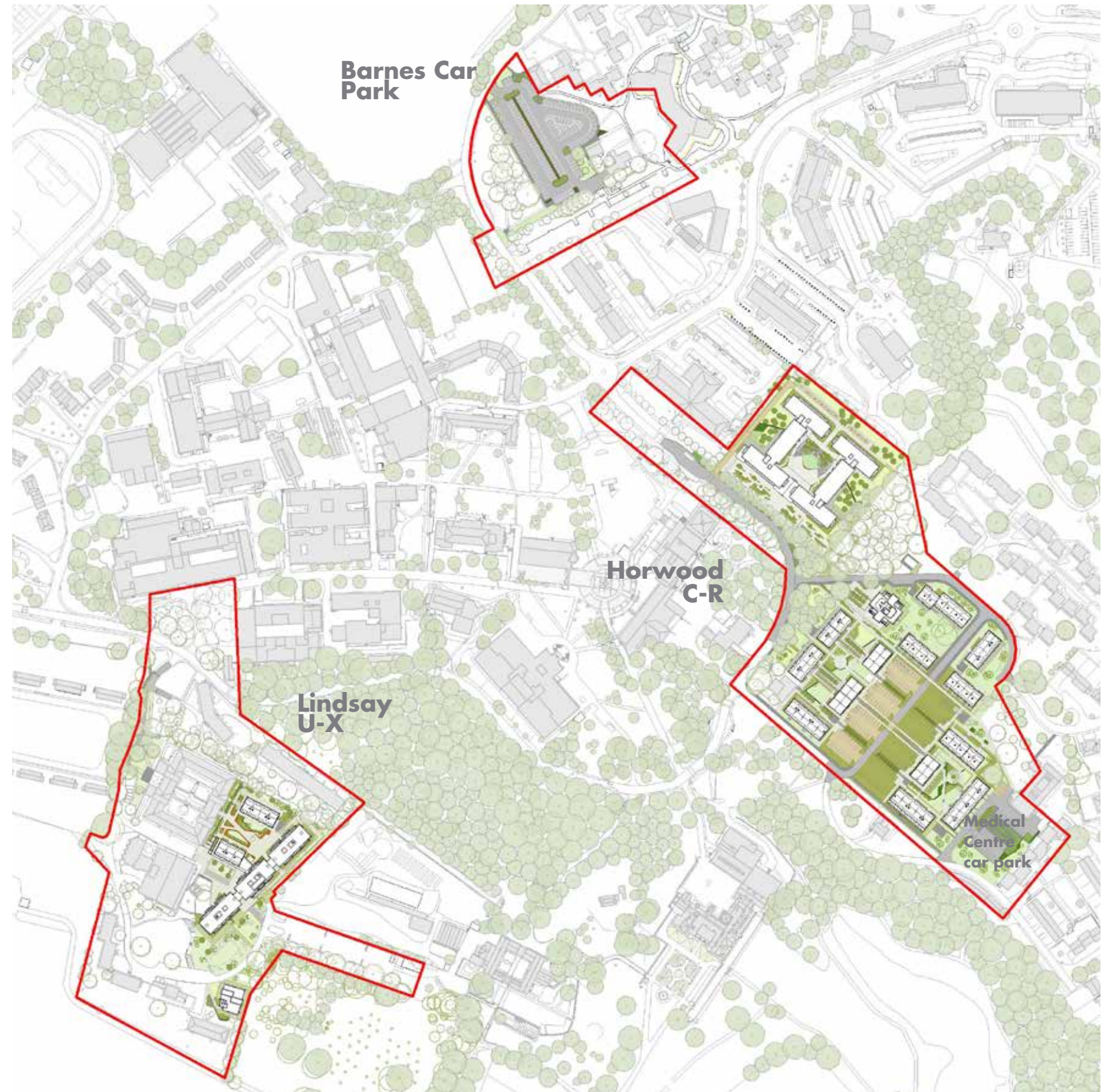
The existing tower at Horwood will be replaced.

The new blocks will be laid out to create communities within the existing halls. The different buildings being developed will allow students to live somewhere they feel most at home, eg. close to the centre of campus at Horwood A&B or in a quieter setting like Lindsay.

Responding to the specific context and unique character of each of the existing halls.

Enhanced landscape and public realm will create a clear distinction between the academic core and the residential neighbourhoods.

The masterplan that has been developed by BDP has been integrated into the proposals with key routes dovetailing into the masterplan and providing future links between the two academic cores.



Design Session 5

1. TOWN HOUSE FACADES | Elevating the 4 Storey Blocks



TOWN HOUSE FACADE | Current Preferred Solution In Context



3. TOWN HOUSE FACADE | 3 Storey Block - Elevation Study



PROPOSED ACCOMMODATION DESIGN DUAL OCCUPANCY ROOM OPTIONS



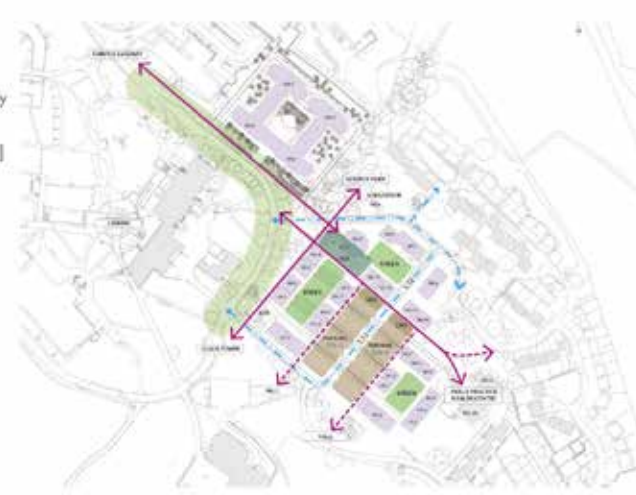
- 2.
- 1-3. Detailed study into townhouse façades, roof pitches and window treatment. Precedents presented to illustrate suggested materiality and proportions. The same language is to be used across each townhouse type with variations to distinguish between 3 and 4 –storeys in the gables and window surrounds.
4. Layouts of shared rooms developed.

Design Session 6

1. Horwood Tower and townhouse blocks set out following confirmation of further building removal.
2. Townhouse elevation presented, demonstrated in a 5 townhouse block.
3. The Barnes car park layout had been developed to accommodate c. 155 spaces.
4. The artist's sketch of the Horwood A&B's internal courtyard was presented and discussed. Opportunities for breaking out of the hub and using the space as an amphitheatre were well received.


1. HORWOOD TOWN HOUSES | New Layout

- Blocks set out on the site as per alternative layout sketch approved at the last meeting
- Locations and ground floor slab heights fully coordinated with the Landscape architects.
- Revised movement strategy illustrated [right]
- Revised landscape modelling is underway for this part of the site.
- MEP/Structures coordination is ongoing
- Townhouse types further developed. [elevation slides follow]



STRIDE TREGLOWN


2. HORWOOD TOWN HOUSES | Elevations - 4 Storey 'Shared'



STRIDE TREGLOWN

3. CAMPUS PARKING | New Layout

- Parking court re-drawn, now creating 140 spaces in lieu of 90 in previous layout
- Med. Centre parking laid out for accurate measure - creating 33 spaces
- Barnes site without the Eco-house creates circa 155 spaces
- 328 [maybe 340 total]



STRIDE TREGLOWN

4. SKETCH VISUALS | Horwood A&B Courtyard View



STRIDE TREGLOWN

Design Session 7



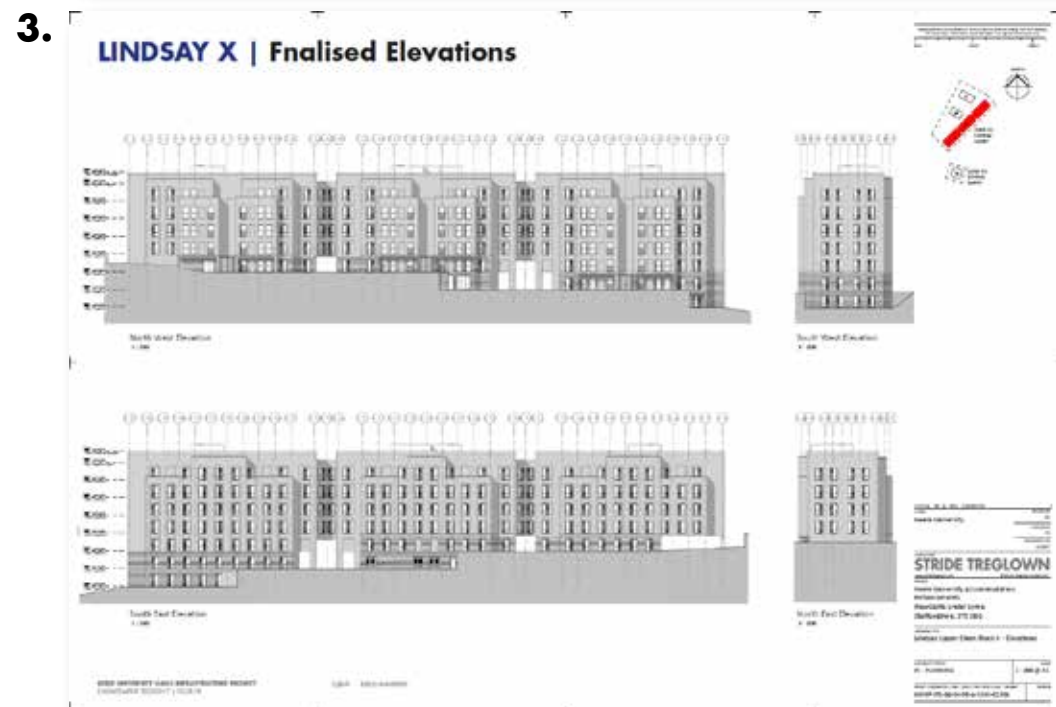
2. Prior to the planning submission, the final proposal was walked through with the university.

1. The lower ground floor of the tower will accommodate a social hub/laundry space.

2. The en-suite townhouses have a staggered footplate to allow an efficient stair core. The 3D section demonstrates how this works.

3. The finalised elevations for each block have settled on a palette of materials and introduce brickwork detailing to alleviate the mass.

4. An accessible studio was introduced to Lindsay Block X, following feedback from mobility impaired students during the consultation event.



4.

Model Walkround

The client team have been able to take a walk through the emerging 3D model, giving them a real feel for the buildings in context.

This has made a positive contribution to the briefing process, enabling clearer explanation of the emerging proposal and for the client team to respond to. They have been able to discuss, practical issues such as; access, movement, servicing, maintenance as well as design issues such as massing and elevation treatment options, all in a live 3-dimensional environment.

Being able to visualise the proposals at such an early stage in their design as enabled the client to provide clear feedback on all of these issues which has enabled the process to be much less protracted than is sometimes the case.

At all stages we have produced illustrative material based on the emerging model which has also enabled the University hierarchy and interested consultees, such as the Parish Council and the local authority Strategic Planning Control Group, to understand the proposals and to provide clear, supportive feedback.

There are snapshots of the current model used for illustrative purposes within this document. It must be noted that these are sketches and do not represent photo-realistic interpretations of the proposed design. The building modelling is correct in each of these images and matches the plans sections and elevations submitted. However the landscape design elements of these images must be read in conjunction with the submitted landscape drawings, as the 3d ground-scape modelling within the images is still a little simplistic. The submitted landscape drawings are the definitive plans.

1.



2.



3.



4.



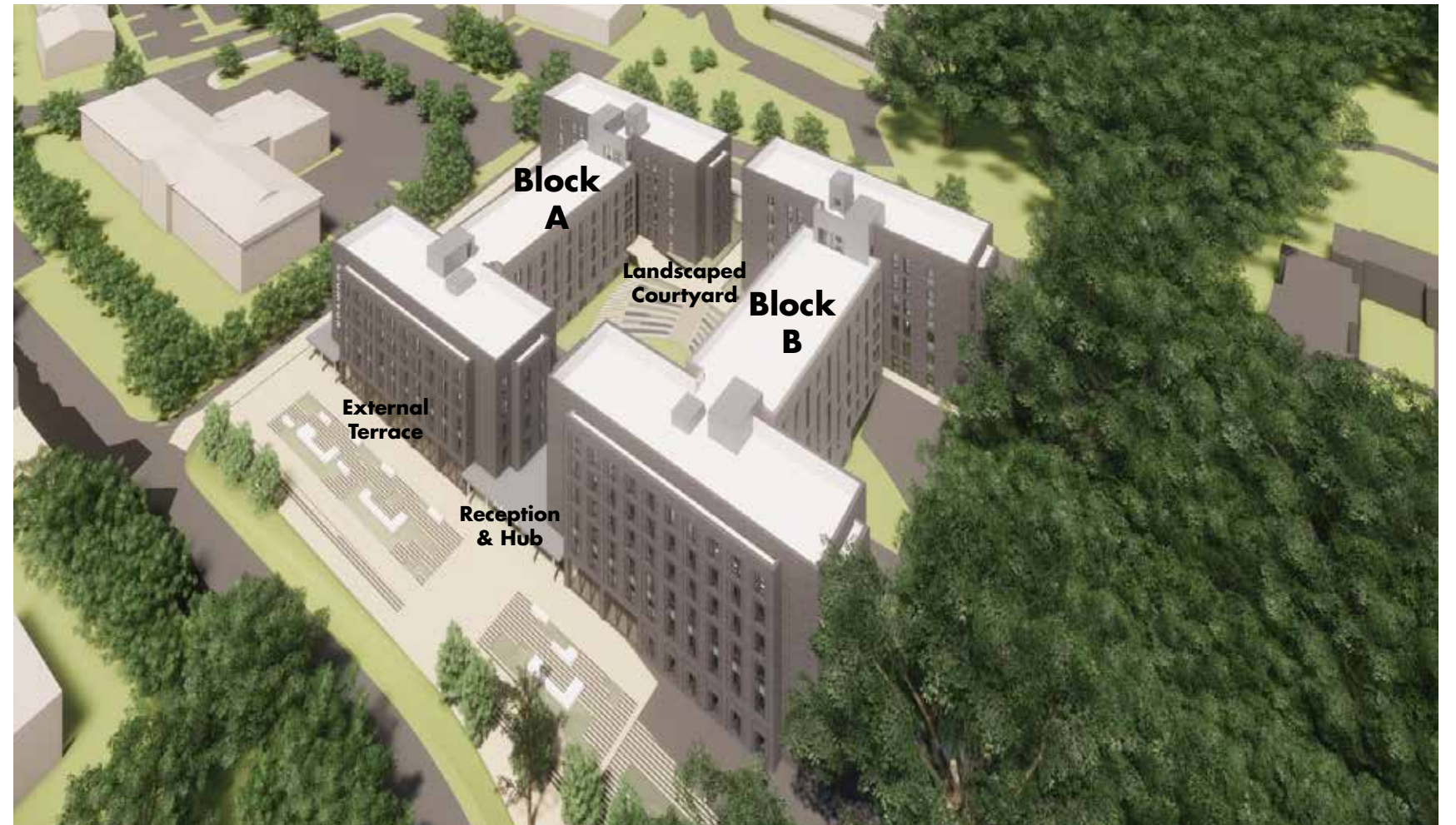
Horwood A&B : 3D Aerial View

Mass

- The massing to A&B is asymmetrical, and largely follows the topography of the site. Block A is lower than Block B and the front of each block is lower than the rear. The existing trees to the North of the site mean that the blocks are nestled within the woodland at the top of the slope.
- The separate cluster volumes are differentiated by their changing parapet heights and brick colours.
- The massing of the South blocks is also expressed by the stepping of the facades, giving the South elevation a presence.
- The two blocks line through with each other, giving a continuous horizontal feel and connection. This is further enhanced by the framing of the Main Entrance and link through to the Courtyard; expressing the structural brick piers from the accommodation above within the space - to form areas within the Hub. The use of ceiling bulkheads also helps to express the building form above and connects the two blocks.

Hub

- The Hub at Level 00 (shell space only being provided as part of the scheme) is designed to link strongly with the Student Union and Union Square in the heart of the campus.
- The Hub breaks out both at the front of Horwood A&B (South Elevation) to a pedestrian landscaped area and to the rear into the communal courtyard.



Horwood A&B: Elevations

Elevations

- Stepping the vertical planes of the elevations helps reduce impact of mass and gives the elevations an ordered, layered feel.
- The majority of the the Hub at Level 00 to the South elevation is fully glazed curtain walling, providing an open and welcoming feel to the Hub and giving passers by a view into Hub activity.
- The curtain walling also gives the Halls a horizontal crisp base and visually connects both blocks.
- Subtle differences in detailing give definition to the front and back of the blocks, with a variation in ground floor treatment at Hub level.
- The crisp window surrounds sit back from the face of the brickwork, sharing a common language through the blocks and approach to detailing.
- The symmetry & proportion of the fenestration to the South elevation above the Hub level and to the accommodation is set out to a regular grid, reflecting its use. The grid also defines the structure through the wider vertical brick piers that drop down between the bands of curtain walling, giving the façade a grander feel and grounding the block plinth.
- The fenestration style reflects the architecture of the Chapel.
- By playing with the proportions on the South elevation, the apparent heights of the vertical strip style windows become visually smaller in height as you go up the floors – similar to the classic proportions of Georgian architecture.

- The fenestration of the courtyard organises the same window type, as with the South elevation. However, it plays with different window heights in the same way the fenestration style of the Chapel does. Using the same vertical style strip windows of irregular length, but instead of organising vertically and maintaining horizontal clear lines as the front South and rear North elevations, they are set a repetitive rhythmic pattern. This creates a vertical feel rhythm, which is intermittently broken up with horizontal lines.
- Simple grouping of windows to rear elevation, creates an almost simplified classical proportion.
- The open plan nature of the Living / Kitchen areas is reflected in the treatment of the fenestration.

South West Corner:

- This corner was identified during the Urban Vision review as a strong and strategic corner in the Wayfinding around the campus.
- As such, the design of this corner has been carefully considered.
- The corner has full height glazing, responding to the Hub glazing, which is framed by a canopy style projecting roof, aligning with the Main Entrance - giving it a visual connection and hierarchical relationship.



Horwood A&B Front Elevation & SW corner



Horwood A&B Side/NW Elevation



Horwood A&B Courtyard Elevation

Horwood A&B : 3D Model Views/Sketches



Horwood Block A - SW hub corner



Horwood A&B front elevation aerial view towards Horwood Tower and Townhouses



Courtyard within Horwood A&B



Horwood A&B aerial view

Horwood Tower & Townhouses, C-R : 3D Model Views



Horwood Tower and Townhouses aerial view



Horwood Tower behind Block P and Block L



Horwood Tower and Townhouses from lower level of central car park



Horwood Tower looking up courtyard 1, blocks E-H

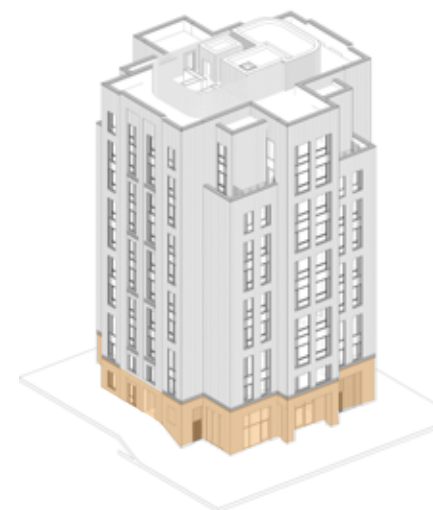
Horwood Tower (C) : Aerial View



penthouse 2-bed flats and studios to top two floors



8 bed shared facility clusters



ground floor level laundry and social space

Tower Design

- Tower will be a key focal point in campus for wayfinding.
- Axis formed from the main pedestrian route and road from academic core
- The Tower sits at end of existing boulevard that runs in front of Horwood A&B and landscaping to Horwood Townhouses create a strong visual link from the south.

Lindsay : 3D Aerial View



Lindsay U-X : 3D Views



Lindsay X with Townhouse Block W to right



Lindsay Square and hub undercroft below Townhouse W with underpass below Block X



Lindsay from lower site - Block W / Block X / Block U



Lindsay X from Lindsay Lower site.

5.3 Development Setting In The Landscape

Horwood A&B

The concept design acknowledges the landscape characteristics of the different campus zones and responds positively to the building design, development pattern and immediate settings. Each building cluster has its own richly landscaped courtyard with a variety of themed gardens and settings designed to be appealing throughout the academic year.

The exterior spaces are linked to the accommodation blocks and designed to be fully accessible, aiming to promote ownership and a clear sense of identity. The landscape design encourages active lifestyles with jogging loops, fitness trails and integrated circuits. There is also a network of smaller, intimate gathering spaces designed for social interaction and informal use. These include recreation areas, study terraces, BBQ areas, outdoor dining terraces and smaller seating spaces.

The planting design includes over 350 trees ranging from semi-mature specimens to feathered trees. The larger scale species will include high canopy parkland trees to complement the diverse range of tree species at Keele. These will be sited along principal routes and vistas. Medium sized street trees and garden varieties will be introduced in restricted communal spaces along with fruit trees and species with special properties and biological interest. Some will promote the concept of 'edible' landscape while others will be selected for their educational or ecological value.

Wildlife areas will incorporate appropriate native species aiming to protect existing habitats and encourage new ones to be established. Within these areas lighting will be kept to a minimum and no lighting will be installed adjacent to retained woodland or replacement tree planting. Roosting and nesting boxes will be provided among existing trees. New planting will include a range of native, fruit, berry and nectar bearing plants. Where appropriate new hedgerows will be planted to reinforce wildlife links to existing woodland belts and grassland areas will incorporate a diversity of grass and herb species.

The site profile, shape and size give plenty of freedom to develop a layout that is exciting, dynamic and achieves the development and design brief requirements. The site benefits from a strong landform, mature tree groups and woodland. It is also close to the central hub area and connects areas that are further afield including the Science Hub. There are three new components to Horwood

- The existing Tower, (Horwood O), is to be demolished and replaced by a new, 10 storey tower, Horwood C which has a slightly larger footprint sitting on a level, hard landscape plinth. The tower has been designed to be viewed from along its main axis, but to sit below the tree line;
- Townhouse terraces (Blocks D – R) are clustered in three sets across the contours of the parkland around circulation routes and a new central staff and accessible parking court (circa 150no bays) which is arranged along terraces that can be used as a marketplace (craft fairs, street food stalls, international themed events and farmer markets); and finally

Horwood A&B:

The two new blocks form a strong elevation along the new public realm linking the academic core to Horwood Halls. In the centre of the development is an intimate courtyard space that can be transformed into an outdoor performance space.

The development has been planned to nestle into the hillside with the building slabs set to integrate a complex set of parameters including accessibility, the existing woodland trees, highway edge and to minimise the need for external retaining structures that would sterilise the natural flow of hillside.

There are three main components of the design – the soft perimeter to the scheme that aims to integrate with the mature trees and pick up key pedestrian routes; the wide new civic frontage aligned with the axis to the new tower and enhancing the public realm and connections to the academic core and student union; and the central courtyard which can be transformed into an impressive outdoor performance space with full accessibility to the top and lower tiers.



Development Setting - Horwood A&B

Horwood C-R

Tower:

The base of the Tower is an important meeting point that picks up key north/south and east/west connections across the campus. Level differences are carefully negotiated to maximise tree retention, cycle paths and safeguard direct accessible routes across the space. At the edge of the routes hard and soft landscape spaces provide seating and smaller meeting areas for students to mingle and enjoy the views across the parkland and into the adjacent landscaped courtyards.

Townhouses:

The sheltered residential courtyards of Horwood are transformed into flowing grassland and meadow gardens that tell a story of the proximity to the countryside and the designed historic landscapes and gardens of Keele Hall. Our inspiration for the design has come from the campus setting and wider Staffordshire landscape, a textural and sensory space with particular attention to nuances of local character.

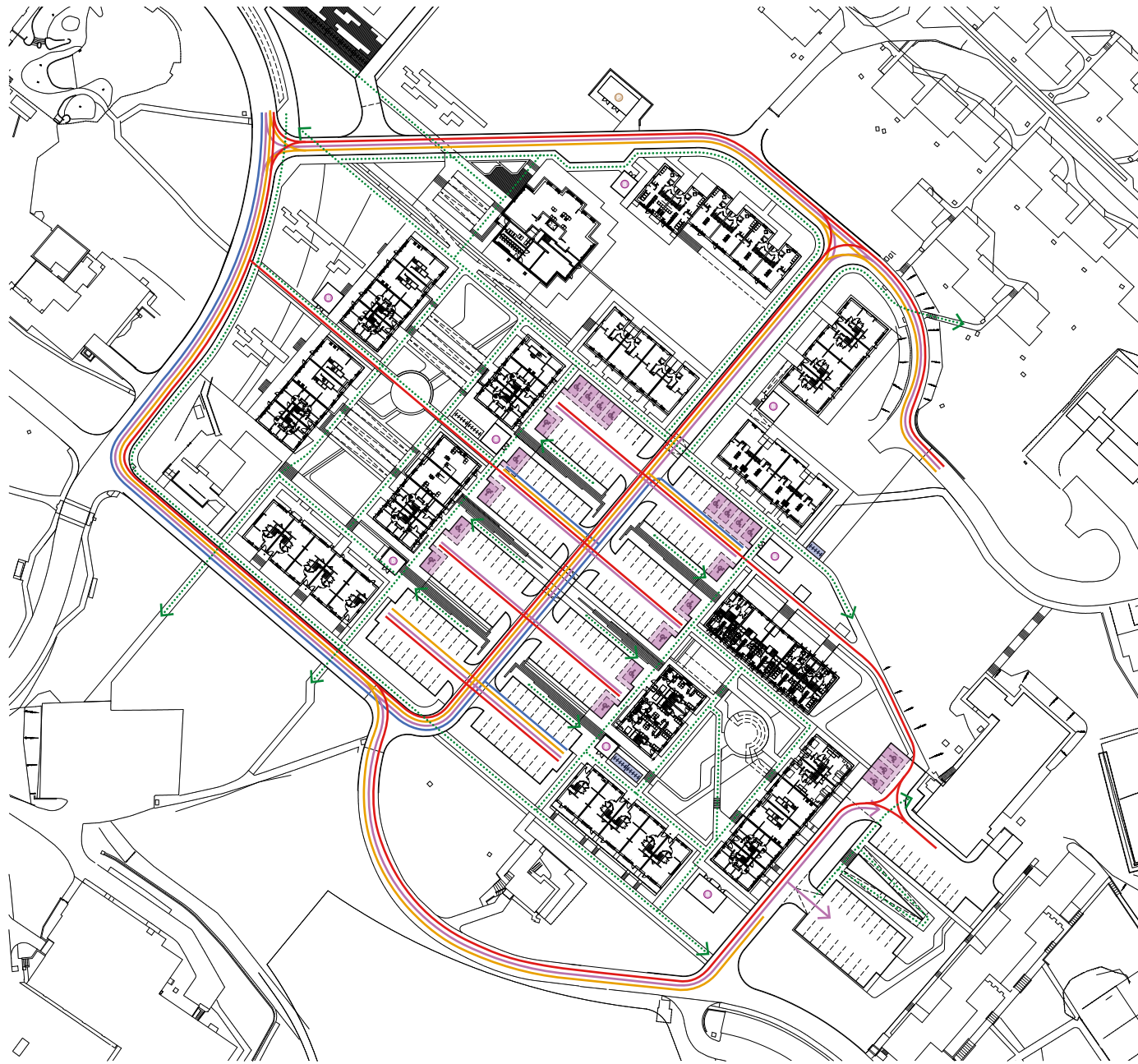
The planting design consists primarily of different types of grass and provides colour all year round, changing from blue and green in the summer to golden tones in the winter – a space of nuances that reflect the colours and tones of built and natural materials.

The play of colours within the enclosed courtyard gardens and the wavy shapes provide a distinct, varying and stimulating pattern all year around, particularly in views from rooms looking down upon the spaces.

In the northern most courtyards a mature group of Sycamore trees have been retained as a central feature. Split level building terraces have been designed to traverse the topography and integrate accessible routes where possible.



Development Setting - Horwood Tower and Townhouses



Horwood Tower & Townhouses: Access and Circulation

- | | |
|-------------------------|---------------------------|
| Accessible Parking Bays | Cycle Access |
| Cycle Parking / Storage | Primary Pedestrian Access |
| Car Access | Bin Store |
| Service Vehicle Access | Plant / Substation |
| Fire Tender Access | |



Barnes Car Park: Access and Circulation

- | |
|----------------------------|
| Electric Car Charging Bays |
| Car Access |
| Service Vehicle Access |
| Primary Pedestrian Access |
| Service Point |

Accessible Accommodation

Proposed Locations

Locations for 20 wheelchair accessible rooms have been identified within the proposal and are costed. These are, generally, created in the space of two standard shared facility bedrooms.

Each accessible room will include space for a large, accessible en-suite bathroom.

A number of rooms will be fully kitted out at hand over with a portion available for short notice adaptation. The numbers of each will be firmed up in the next stages.

Accessible rooms are located to be suitable for vehicular drop off, close to block entrance doors. However, they will not only be located at ground floor and will be spread among the general accommodation to avoid creating ghettos. The locations identified are as follows:

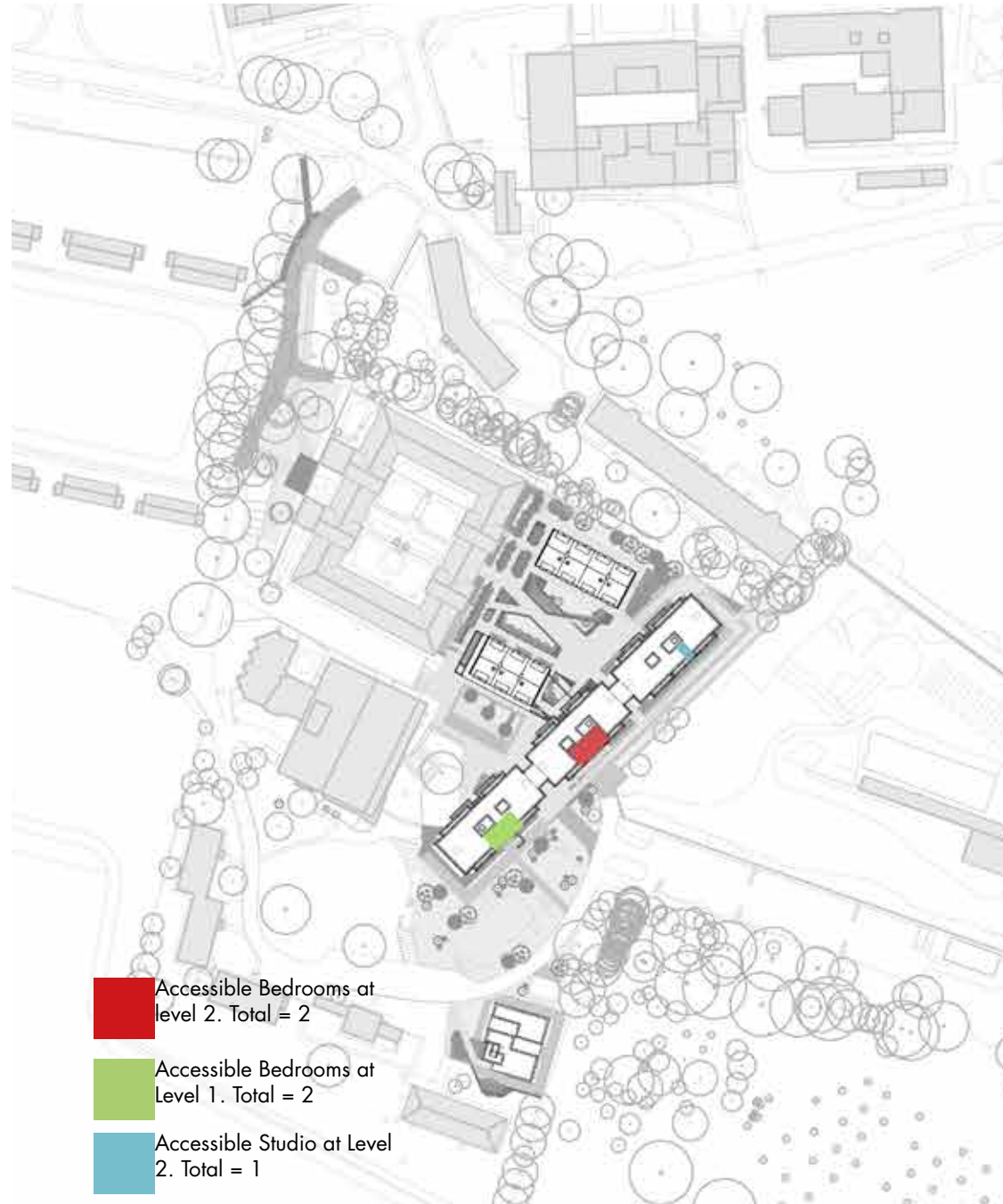
Horwood A & B - 10 accessible bedrooms, 2 per floor in a stack, each part of an 8 bed shared facility. The upper floor bedrooms will be 'adaptable' type and let as large en-suite beds if not adapted.

Lindsay Hall - 5 accessible bedrooms, 3 at block entrance level, 2 at an upper floor. One of the lower floor bedrooms is large enough to cope with any level of physical impairment and can be connected to an adjoining bedroom.

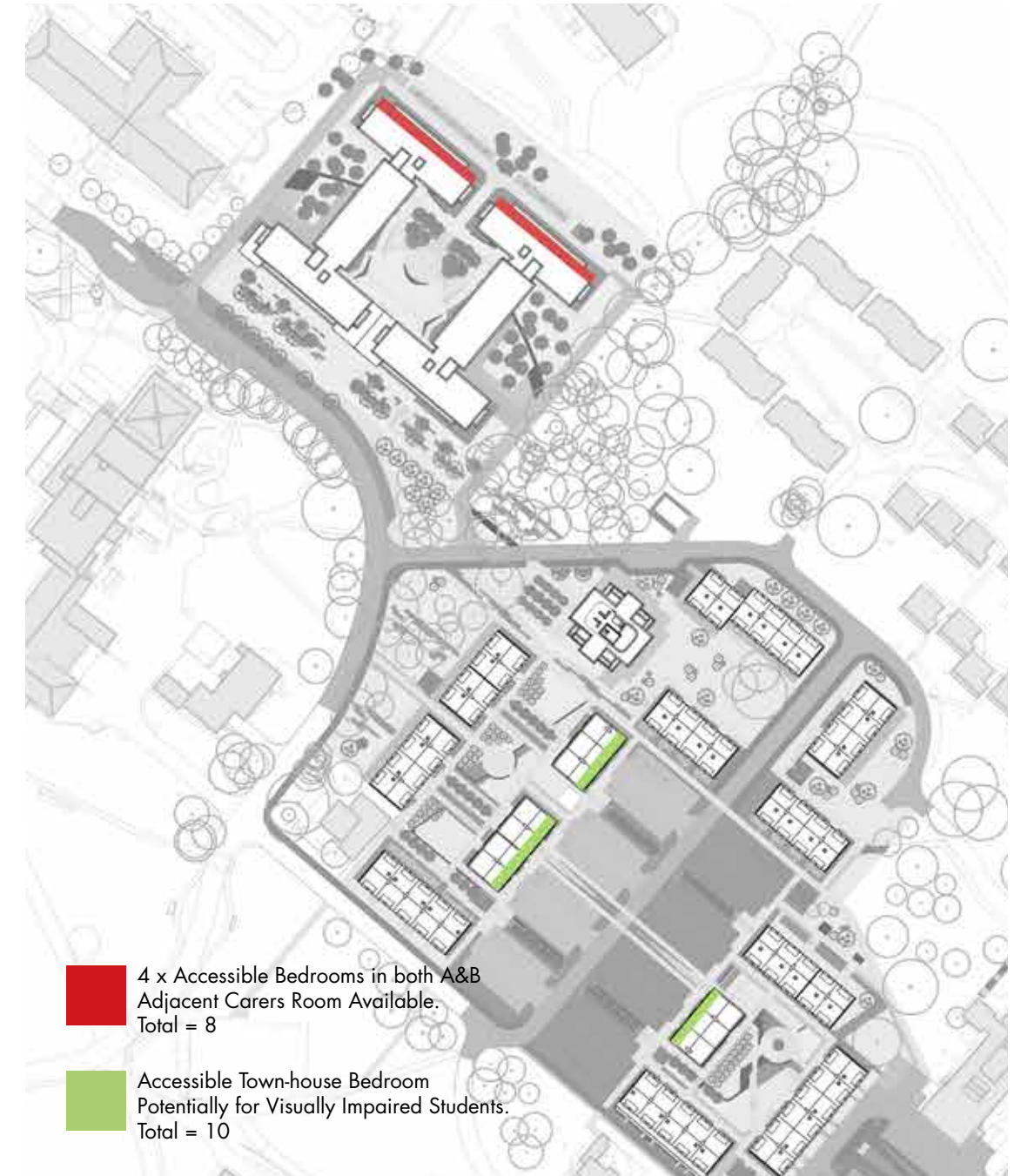
Horwood C - 1 potential accessible bedrooms is included in the tower as part of a 2 bed penthouse flat.

Horwood Townhouses - 4 accessible bedrooms, 2 per floor in a stack. The upper floor bedrooms are likely to be 'adaptable' type and let as large en-suite beds if not

Those clusters with an accessible bedroom will be capable of creating a split level kitchen space, suitable for the needs of a wheelchair users

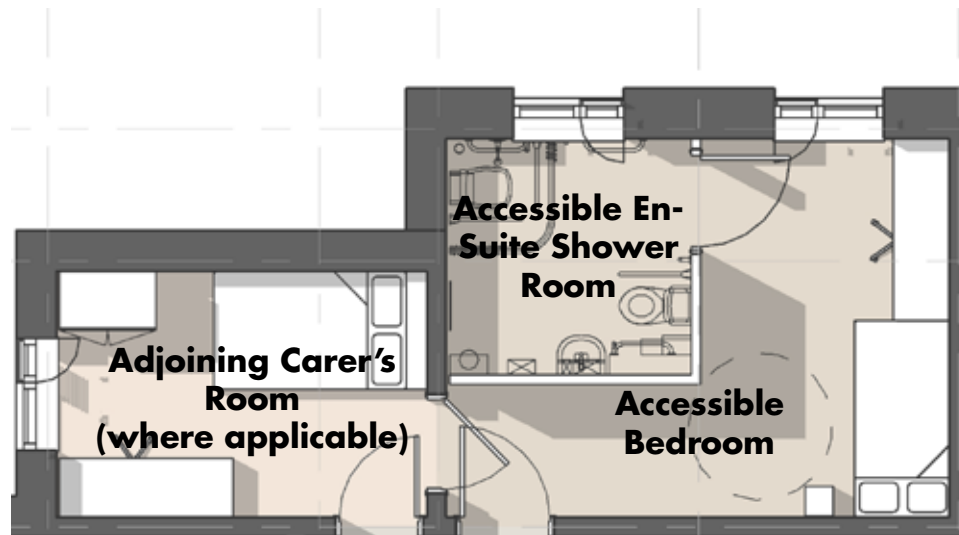


Lindsay Accessible Accommodation



Horwood Accessible Accommodation

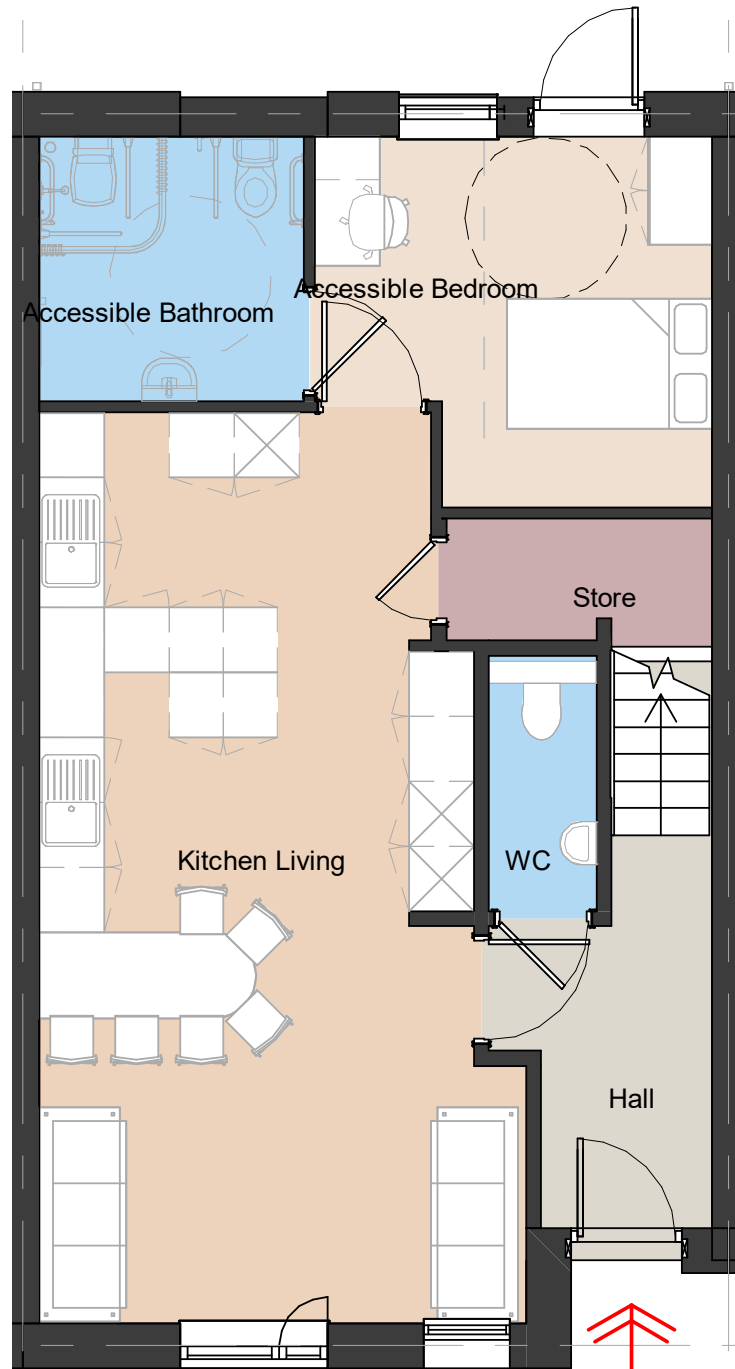
Accessible Bedrooms in Clusters with Carer Rooms



Typical Accessible Bedroom within shared clusters at Horwood A&B and Lindsay X

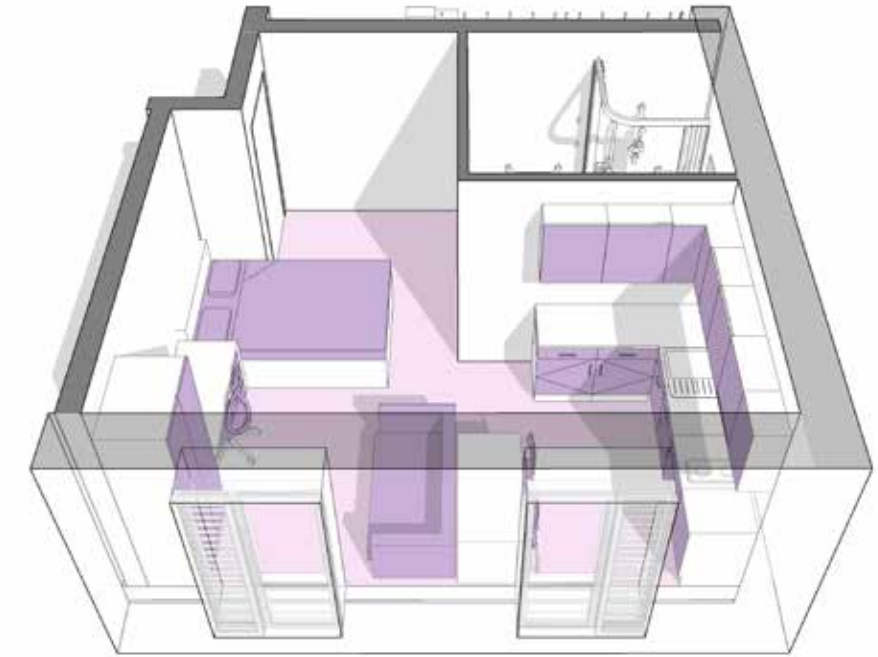
Horwood A&B - Accessible Bedrooms at L01 and adjacent carer's room

Accessible Accommodation Townhouse Accessible Bedrooms



Horwood Townhouses G, H & P
Accessible bedroom at ground floor level

Accessible Studio, Lindsay



Lindsay Block X : Level 02 Accessible Studio



Lindsay Block X : Level 02 Accessible Studio Plan