

4.2 Design Influence

The front elevation was designed through analysis of the existing proportions of the domestic context on Silver St, informing repeated modules, recesses and dormers to create separation in response to existing chimneys.

1.



Domestic context

2.



Proportions

3.



Modules

4.



Variation, repetition

5.



Separation

6.



Refinement

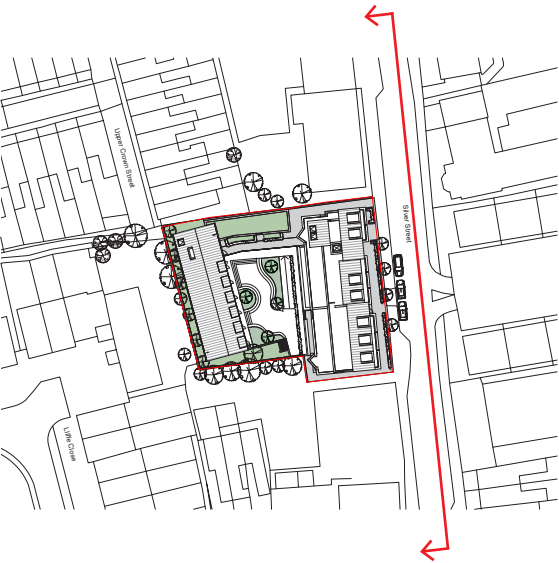
Site Analysis	Use & Amount	Layout & Landscape	Scale & Massing	Appearance	Shadow Analysis	Sustainability	Access	Working Drawings	Scheme Visuals
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4.3 Contextual Relationship - Elevation

The elevations opposite show the scale and massing of the proposed scheme

The proposed height is closely similar to that of the Platinum Apartments, however is set back from the street, relatively reducing degree of dominance and appearing shorter.

The Platinum apartments steps down to three storeys towards the South, the proposed scheme sits lower than the higher point of the Platinum apartments, and is of similar height to Hiett Close to the South



The strong parapet line of the roof provides a visual line to read from street level. The roof areas behind and set back and darker, appearing less prominent.



Platinum Apartments

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4.4 Contextual Relationship -
Aerial View

The surrounding context of the site houses many tall residential buildings, many of these being 3-4 stories or taller in height. These buildings are shown on the diagram to the right,



3 Storey Apartments - South along Silver St



79 Silver Street



3-4 Storey Apartments - North along Silver St



3 Storey Windsor Court - adjacent to the site

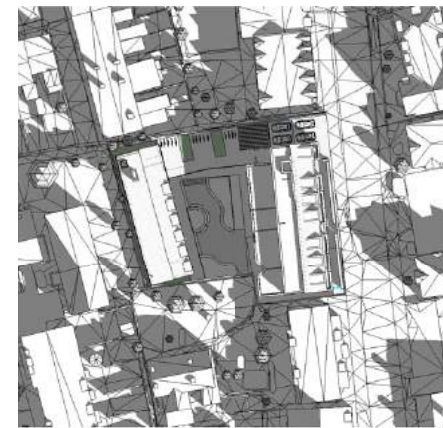
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4.5 Shadow Analysis

The diagrams to the right illustrate the sun path and its impact on proposed building.

The diagrams show that the rooms to the rear and the front of the courtyard receive early morning - midday illuminance. Similarly the rooms located to the front of the scheme receive a good level of sunlight from mid day though until the evening. The south facing courtyard receives sunlight throughout the day.

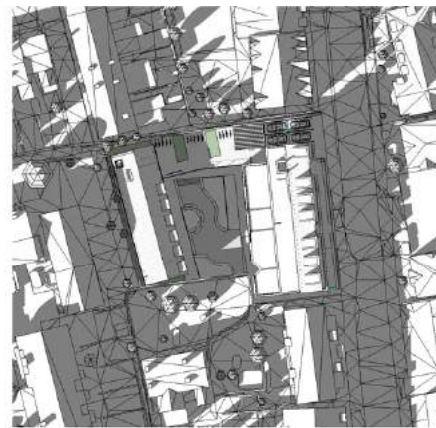
The diagrams also show that the proposed scheme will have minimal year round effect on the neighbouring properties.



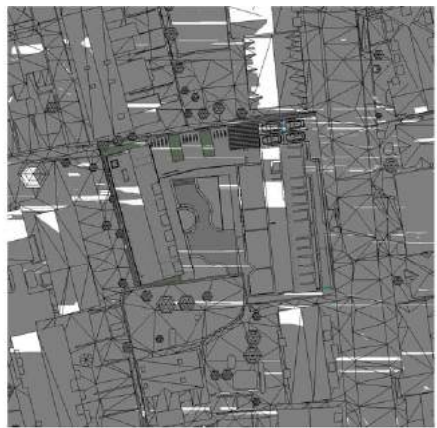
Spring & Autumn Equinox
20th March 9am



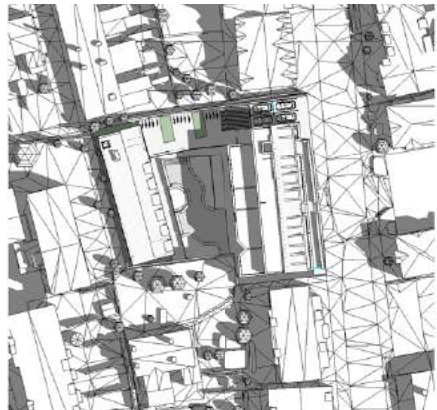
Spring & Autumn Equinox
20th March 12pm



Spring & Autumn Equinox
20th March 3pm



Spring & Autumn Equinox
20th March 6pm



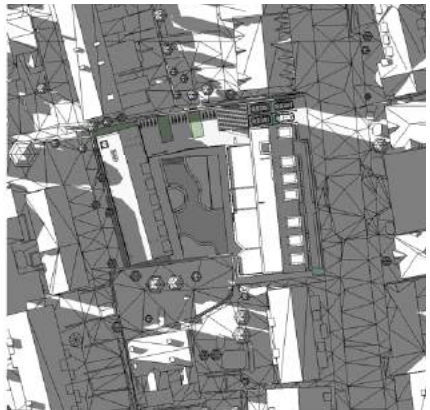
Summer Solstice
20th June 9am



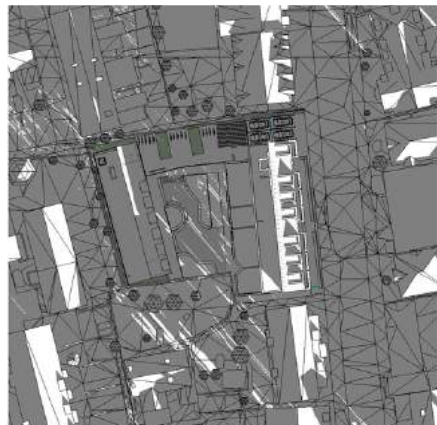
Summer Solstice
20th June 12pm



Summer Solstice
20th June 3pm



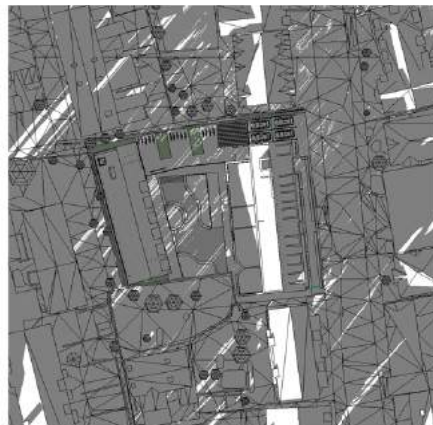
Summer Solstice
20th June 6pm



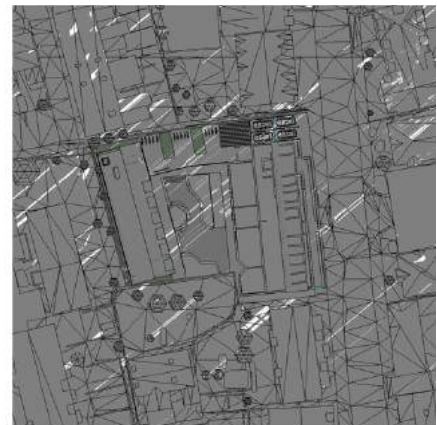
Winter Solstice
21st December 9am



Winter Solstice
21st December 12pm



Winter Solstice
21st December 3pm



Winter Solstice
21st December 6pm

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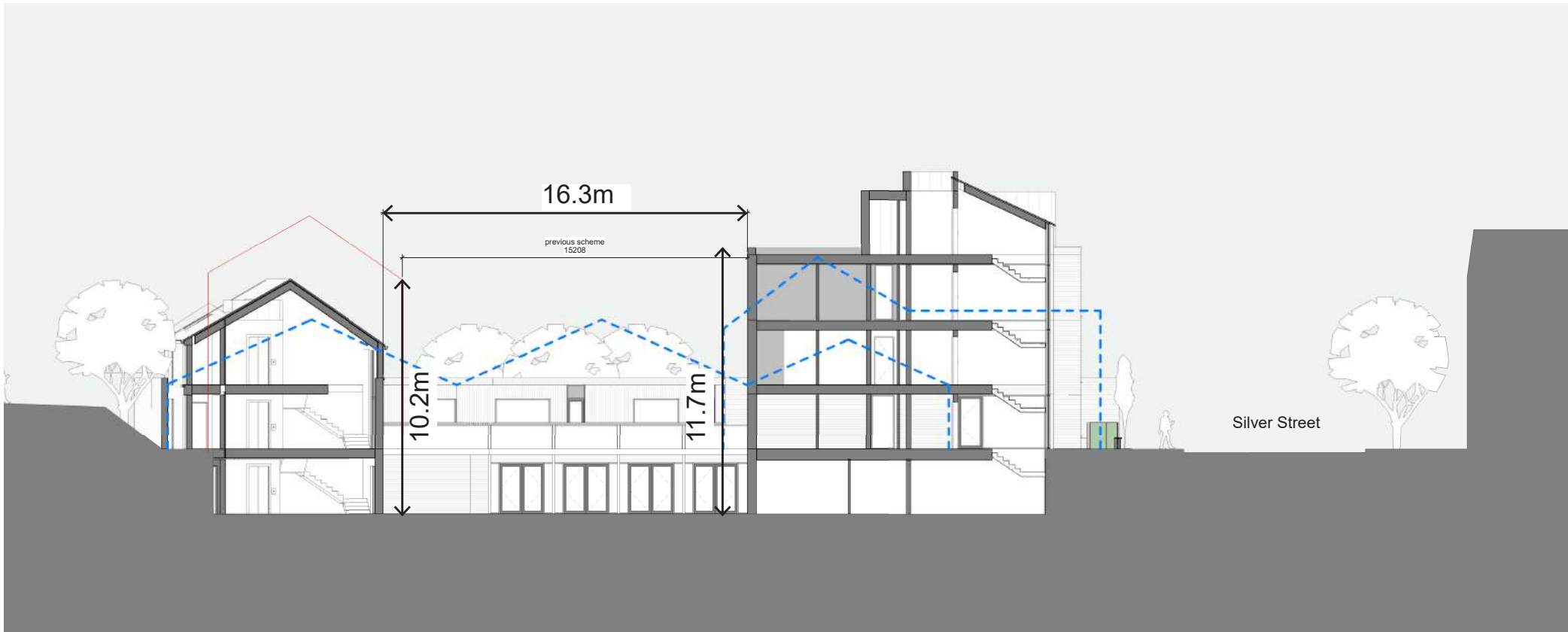
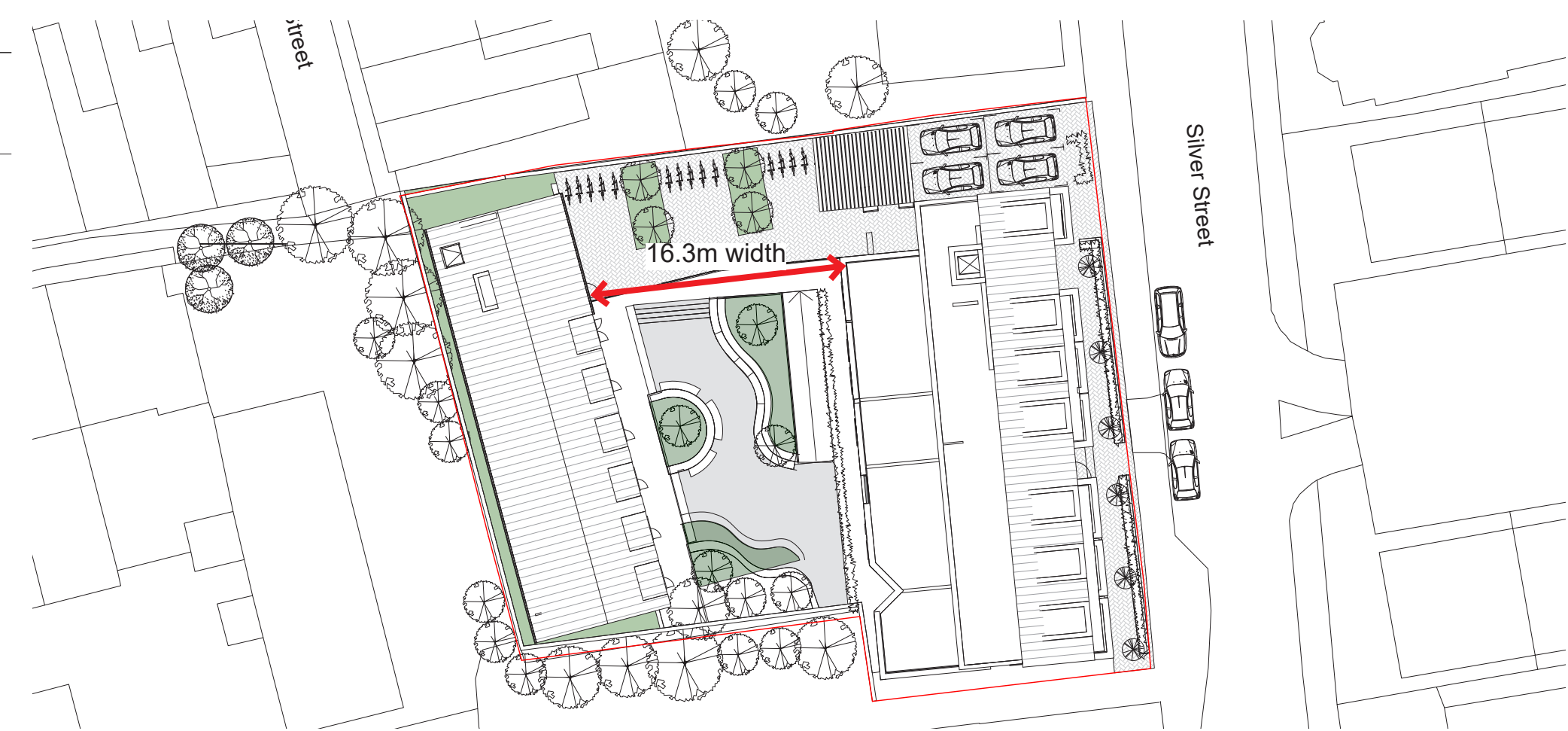
4.6 Courtyard analysis

The sunken courtyard in the centre of the scheme is generously proportioned, and will receive sunlight throughout the afternoon and evening, the courtyard is sunken, and users will not be seen from neighbouring properties, minimising disruption.

The proportions of the courtyard are below. The following pages compare this courtyard to similar, completed student accommodation schemes across the UK

Courtyard proportions:

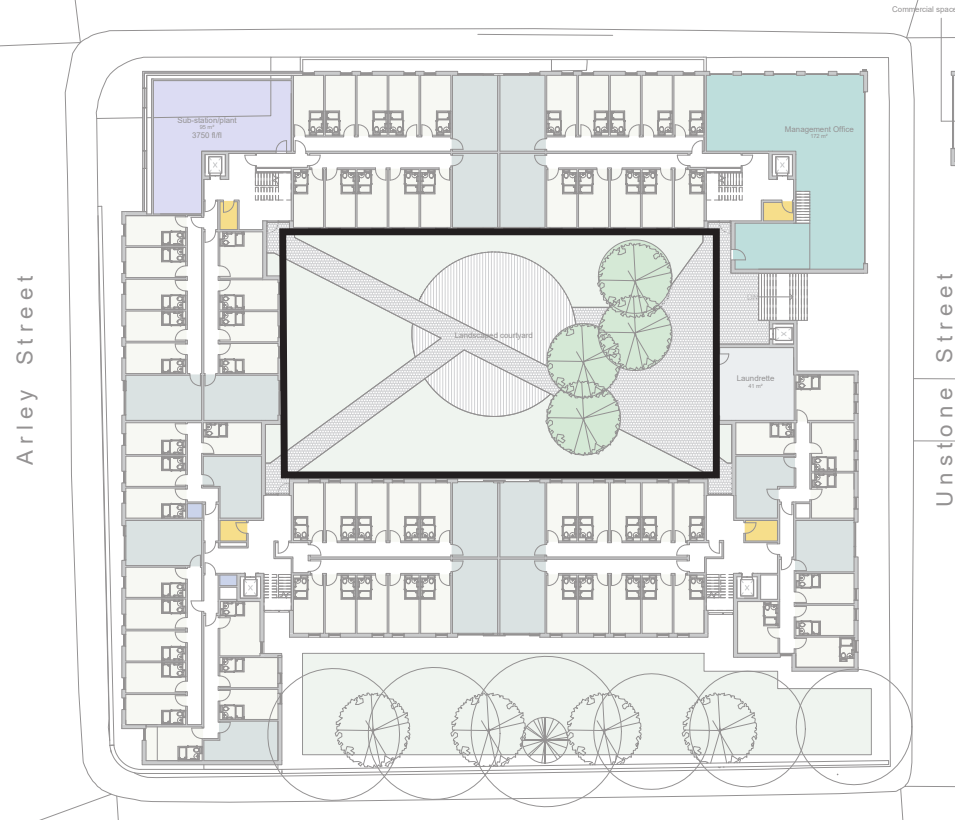
- Width: 16.3m (approx)
- Block B height: 10.2m
- Block A height: 11.7m



Scheme Visuals	Working Drawings	Access	Sustainability	Shadow Analysis	Appearance	Scale & Massing	Layout & Landscape	Use & Amount	Site Analysis
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Courtyard width: 20m
Building height: 6-7 storeys
Architects: O’Connell East Architects
Address: Denby st, Sheffield
Planning authority: Sheffield
Management: Host
Completion date: 06/18



Site Analysis	Scale and Use	Layout & Landscape	Scale & Massing	Appearance	Shadow Analysis	Sustainability	Access	Working Drawings	Scheme Visuals
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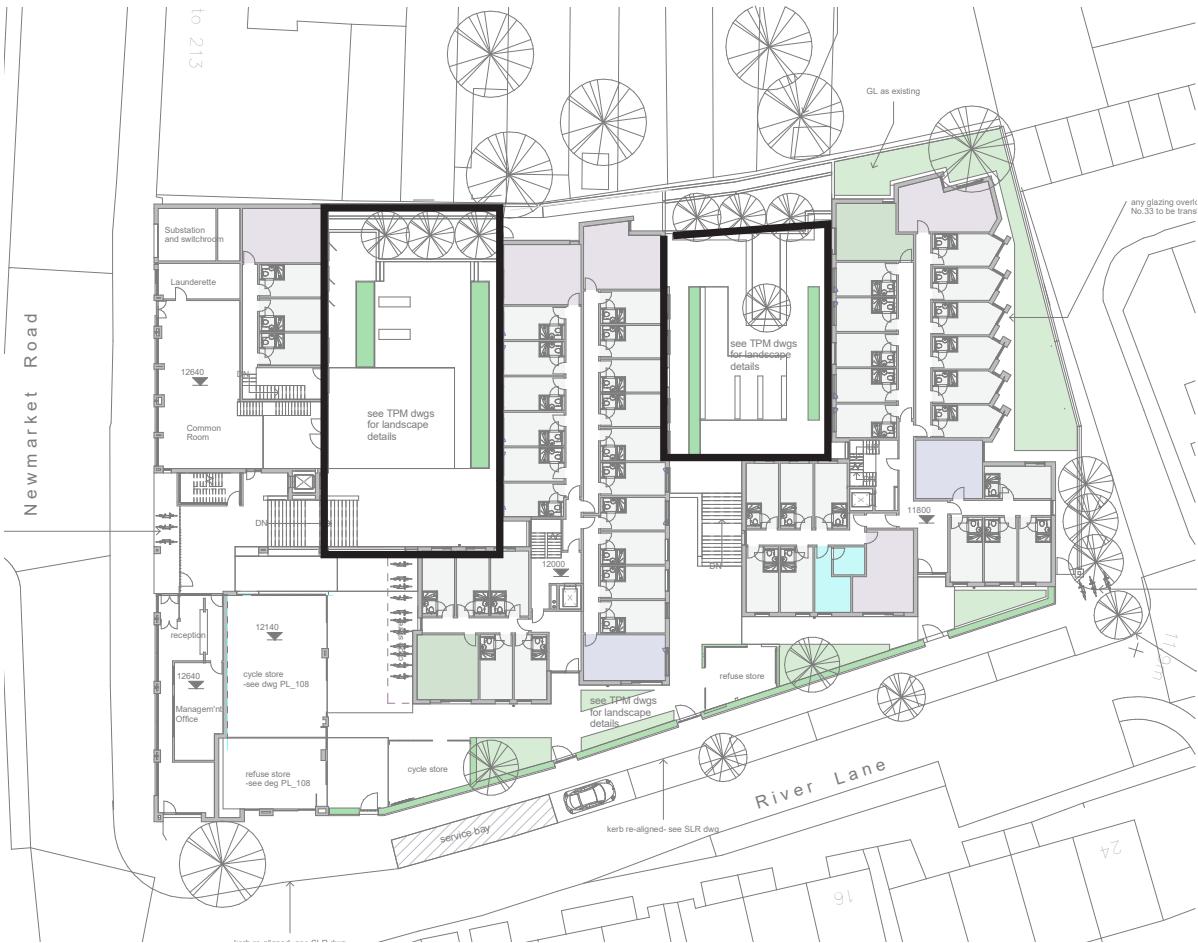
Courtyard width: 12m
Building height: 3-5 storeys
Architects: O'Connell East Architects
Address: London Road, Brighton
Planning authority: Brighton and Hove
Management: The Student Housing Company
Completion Date: 08/2014



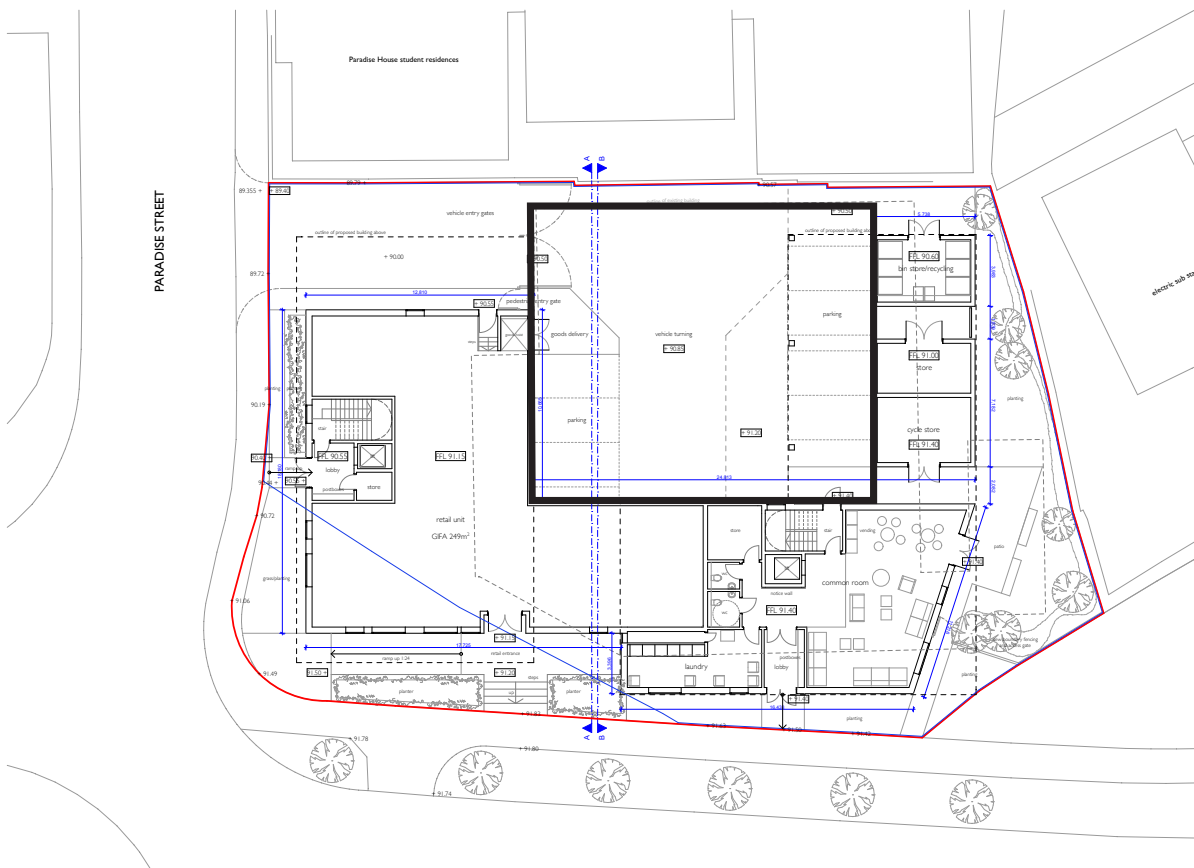
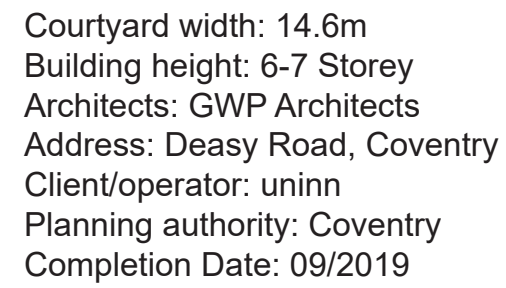
Site Analysis	Scale and Use	Layout & Landscape	Scale & Massing	Appearance	Shadow Analysis	Sustainability	Access	Working Drawings	Scheme Visuals
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Courtyard width: 13.5m
Building height: 4-5 storeys
Architects: O’Connell East Architects
Address: Newmarket Road, Cambridge
Planning authority: Cambridge
Management: The Student Housing Company
Completion Date: 06/2019



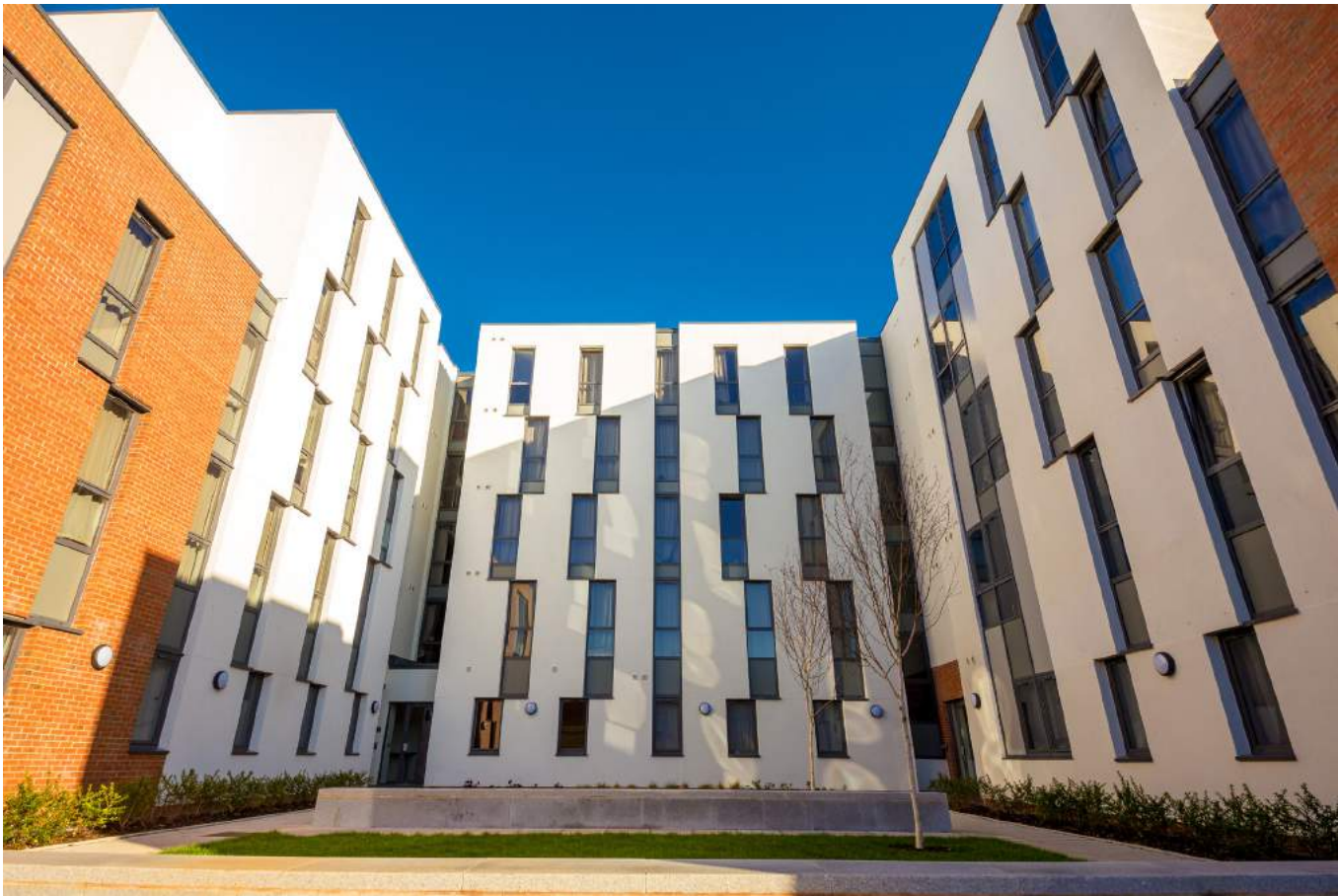
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Scheme Visuals	Working Drawings	Access	Sustainability	Shadow Analysis	Appearance	Scale & Massing	Layout & Landscape	Scale and Use	Site Analysis
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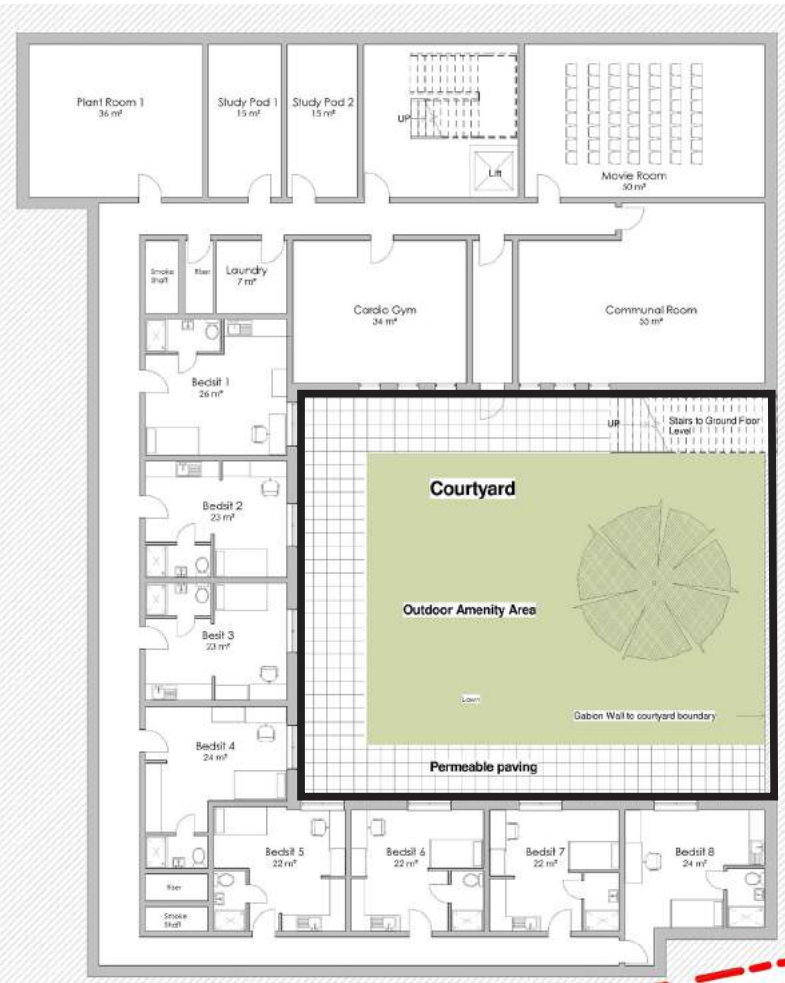
Courtyard width: 15m
Building height: 5 Storey
Architects: O’Connell East Architects
Address: Alma Street, Coventry
Client/operator: Host
Planning authority: Coventry
Completion Date: 09/2014



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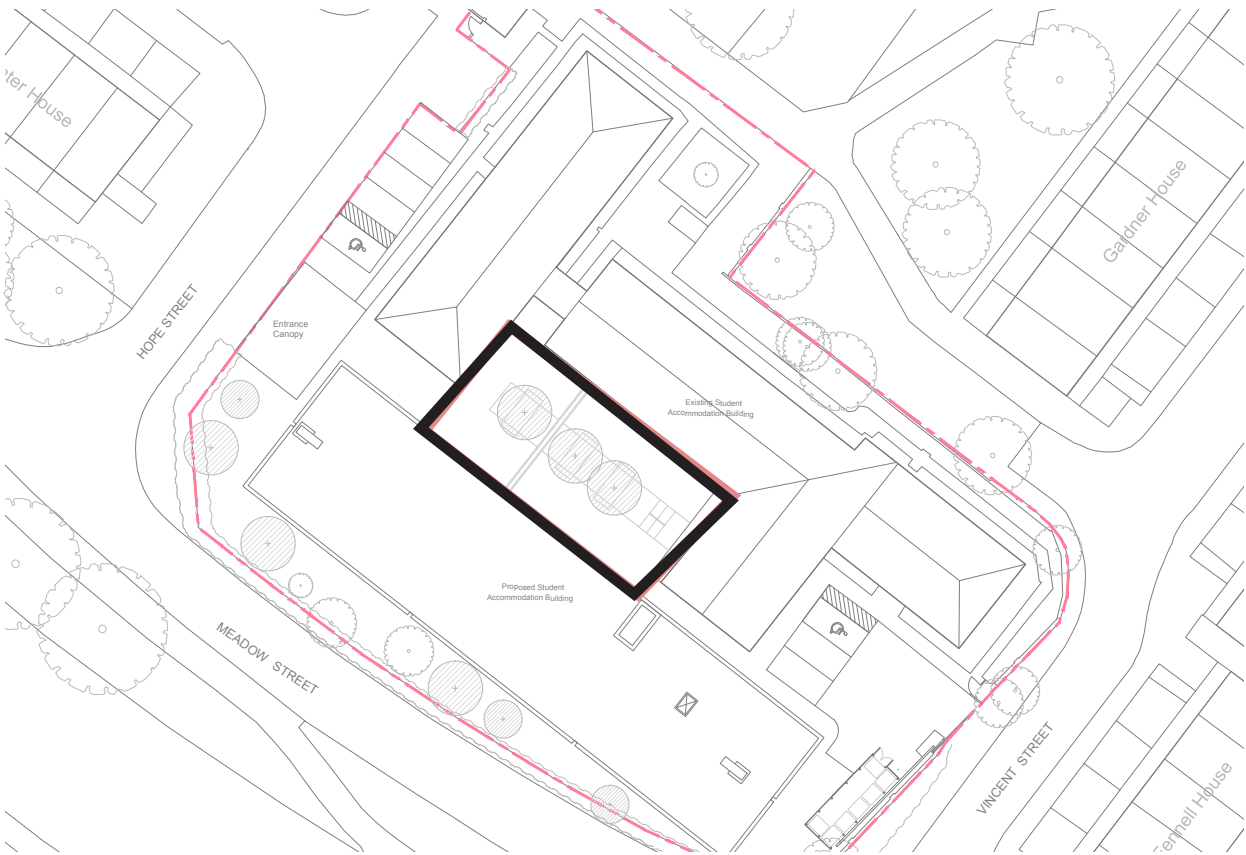
Courtyard width: 15m
Building height: 4 Storey
Architects: MAS Architecture
Address: Princess Rd East, Leicester
Client/operator: hello student
Planning authority: Leicester
Completion Date: 08/2019



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Courtyard width: 10m
Building height: 5 Storey
Architects: Unknown
Address: Meadow Street, Coventry
Client/operator: Axo student
Planning authority: Coventry
Completion Date: 08/2017



Site Analysis	Scale and Use	Layout & Landscape	Scale & Massing	Appearance	Shadow Analysis	Sustainability	Access	Working Drawings	Scheme Visuals
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4.7 Material Selection

A simple pallette of traditional materials with contemporary detailing is proposed for the development.

Traditional masonry construction will provide a robust and sustainable solution with good thermal, acoustic and fire performance as well as being a strong and durable finish requiring infrequent maintenance.

Facing brick:

A grey multi-brick with recessed windows.

Feature brick detailing:

Projecting 10mm alternate courses within recessed panels.

Window & Door frames:

PPC Aluminium dark grey/brown finish to provide contrast with the facing brick.

Roof Finishes:

Metal standing seam roof including cladding to dormer roofs.



3D View of the proposed Silver Street facade



Proposed projecting brick - alternate courses and window louvre vent detail (indicative image)



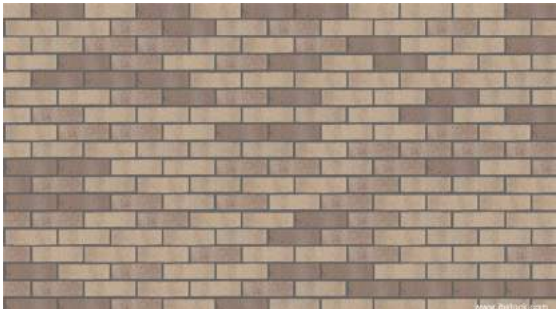
Zinc clad dormer and roof (indicative image)



Zinc clad dormer (vertical standing seam)



PPC Aluminium - Window & CW Frames, Copings



Grey Multi Facing Brick

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4.8 Proposed Use

The schedule to the right details the gross area of each floor plate.

The scheme includes a generous provision of high quality common space which has been designed to encourage social interaction between students; as places for students to meet and make friends.

It has been found on previous schemes that communal areas are important spaces within a student development and careful consideration of these spaces can improve the health and social wellbeing of residents. These spaces can also improve the desirability of the scheme with potential residents.

The scheme includes a common room and secure internal courtyard;

- Central Courtyard - 290m²

The Central courtyard provides a pleasant south facing landscaped space for students to interact, relax and socialise. As this courtyard is located a floor level below ground this greatly reduces any noise pollution as-well as visually screening all visibility through to neighbouring gardens. The common room also faces into the courtyard to provide a community feel within the space

Area Schedule (GIA)	
Level	Area

Level -1	682 m²
Level 0	551 m²
Level 1	580 m²
Level 2	373 m²
Level 3	226 m²
Total	2412 m²

Room Schedule		
Name	Count	Level

Studio	13	Level -1
Studio	19	Level 0
Studio	20	Level 1
Studio	13	Level 2
Studio	6	Level 3
Grand total:	71	71

Amenity Space			
Area	Name	Count	Level

37 m²	Cinema Room	1	Level -1
101 m²	Common Room	1	Level -1
36 m²	Fitness Room	1	Level -1
17 m²	Laundry	1	Level -1
57 m²	Plant	1	Level -1
18 m²	Store	1	Level -1

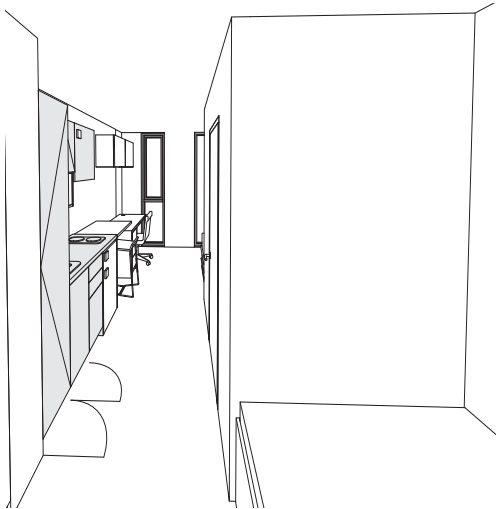


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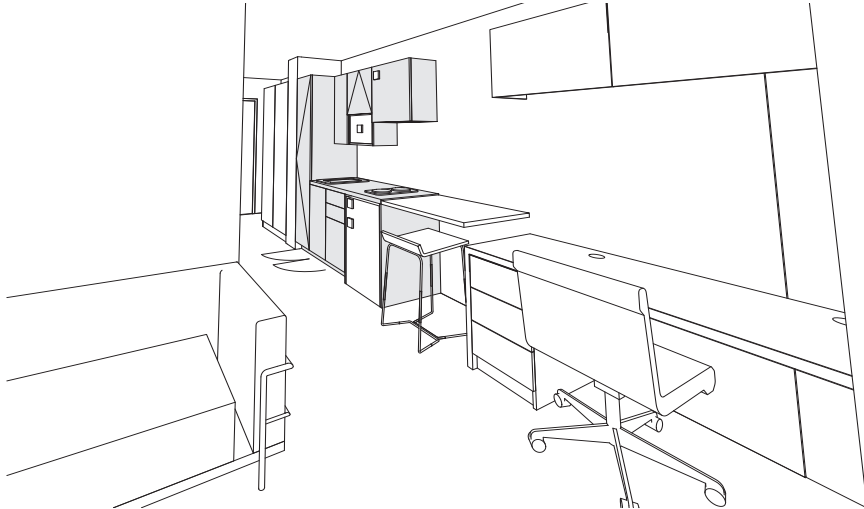
4.9 Room Type - Typical Studio

Studios are typically 22m2 (min.19m2) and are self-contained apartments providing sleeping, washing, lounge, cooking and dining facilities together with a generous study area. Indicative Studio Provision (all types):

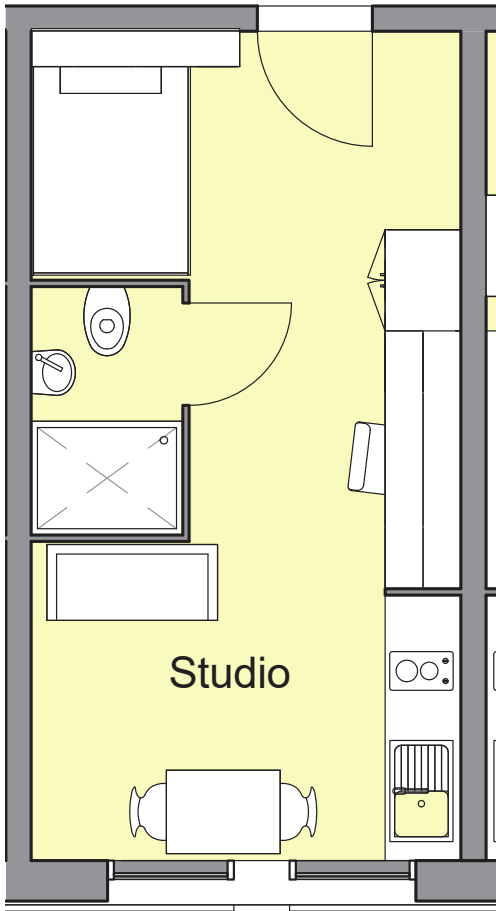
- Sleeping**
 - 1200mm Cabin Storage Bed
 - Bedside shelf
 - Headboard with shelving over
 - Wardrobe
- Washing**
 - Shower 1200x800mm
 - WHB
 - WC
 - Toiletries Shelf
- Cooking**
 - Domino Hob
 - Compact sink and drainer
 - Undercounter Fridge
 - Combination Microwave
 - Storage cupboards (base & wall units)
- Dining**
 - 2-Seater Sofa
- Lounge**
 - Small 2 Seater Sofa
- Study Area**
 - 1600mm Desk
 - Pedestal Drawer Unit
 - Notice Board
 - Shelving



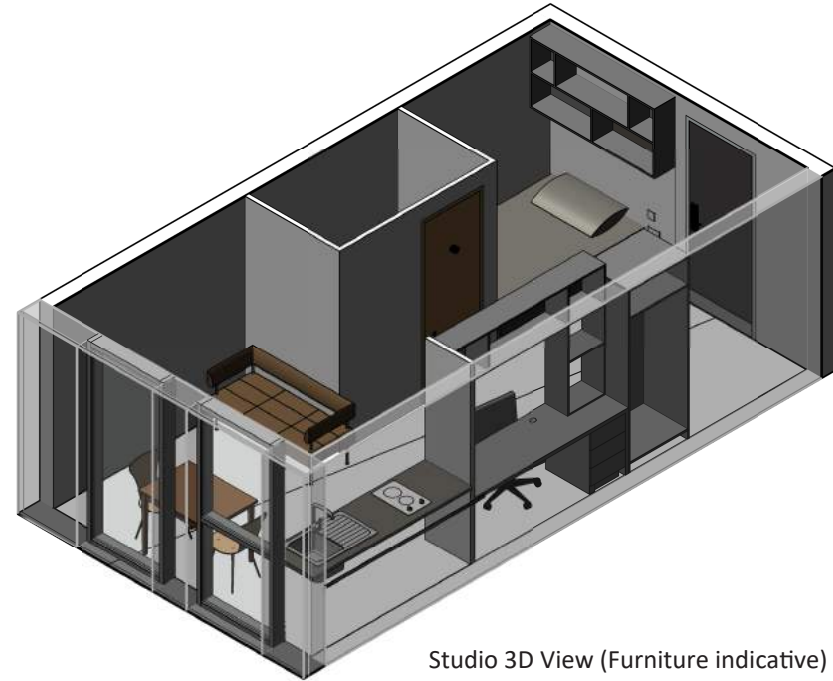
Typical Studio Layout Plan



Indicative Images - Studio



Studio Plan Layout (Furniture indicative)

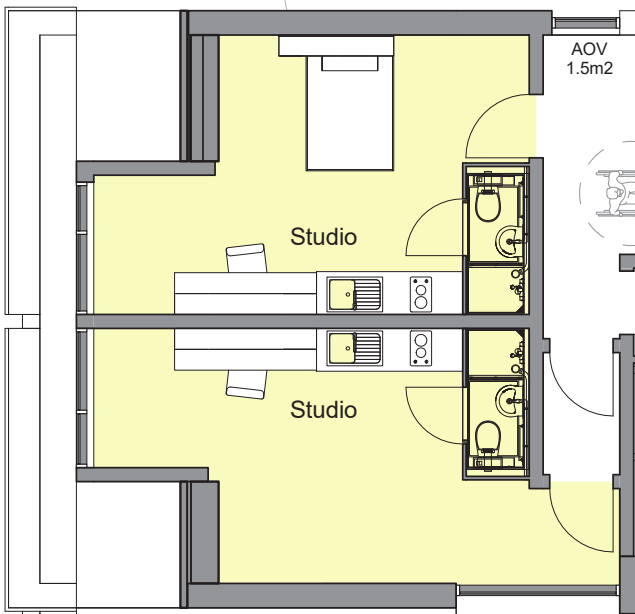
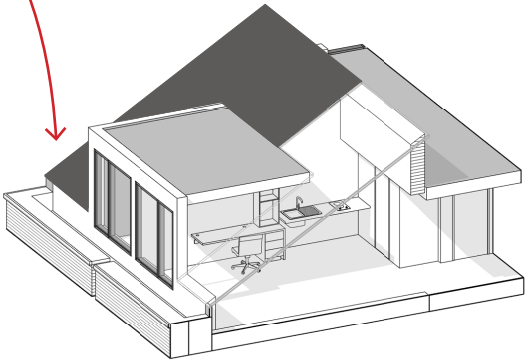


Studio 3D View (Furniture indicative)

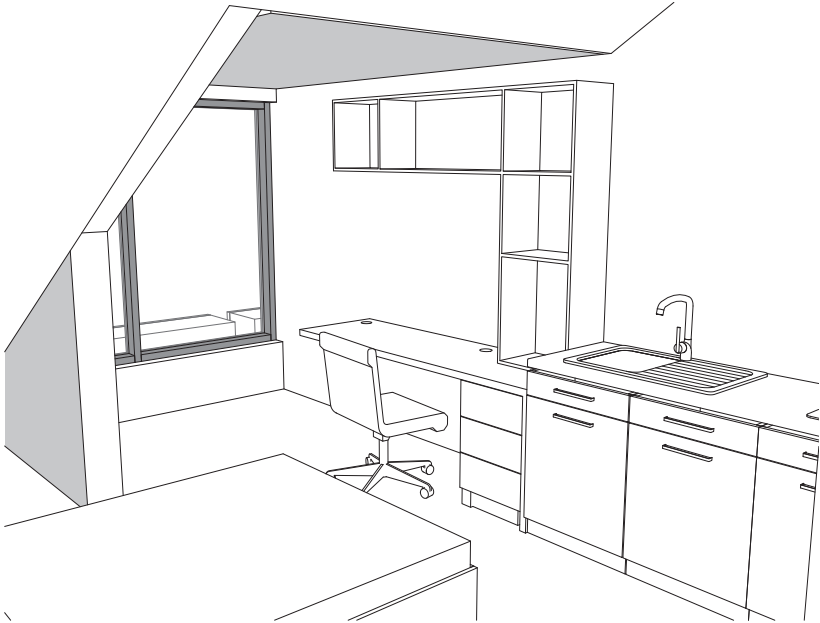
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4.10 Dormer Studio

Studios with Dormers are located to the front and rear of the proposed scheme and reduce the overall massing impact on the street and surrounding properties.



Typical Floor Plan of Studio with Dormer



Indicative interior view

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4.11 Accessible Studio

We have carried out a survey across 11 student accommodation schemes sites nationally to understand the uptake of accessible room provision, types of registered disabilities and requirements experienced by the Hall Managers who have monitored residents needs. Of the sites that were evaluated, the number of designated accessible rooms accounted for 1 - 4% of the total room provision.

Uptake of Accessible Provision:

- There has been limited uptake of fully accessible rooms across the 11 sites.
- The no. of wheelchair-bound visitors is very low or none recorded.
- Two of the sites have limited access for people who are wheelchair-bound but have experienced very low levels of demand.
- The majority of disabilities recorded relate to visual and hearing impairments.

In addition:

- Residents with a hearing impairment are typically provided with a 'hearing package' containing vibrating pillow and flashing alarm system.
- The majority of residents with a registered disability have not required adaptations within the accommodation.
- Other disabilities have required specific adaptation or facility such as orthopaedic mattress, applied tinted window films which have been accommodated.
- For the 11 halls reviewed, Hall Managers have also recorded any medical conditions which may not be considered to be a disability, but may require additional facilities within the accommodation such as medical fridges . These have been provided as required.
- There have been a small number of requests for the use of disabled parking spaces for visitors, such as parents, which have been accommodated.
- There has been no requirement to date for adaptation of staff facilities.
- Personal Emergency Evacuation Plans (PEEPs) for residents and visitors at all sites as required.

The Approved Inspector for the scheme have extensive experience within the student sector, and support new schemes providing a minimum of 1% total designated accessible rooms with access to shower facilities that meet the spatial requirements of AD.M. Of this 1% only 0.5% needs to be fully fitted on completion, but is to be designed to be readily converted to suit a resident's specific needs.

Part of the justification for this approach is based on the annual figures published by UCAS which have consistently shown over the last 5 years that the number of applicants and students accepted to University with mobility impairments is only 0.2%.

A total of 1 no. Accessible Rooms are proposed for this scheme with spatial configuration to meet AD.M. This provision will account for approximately 0.5% of the total rooms.



Accessible Studio (indicative layout)



Adjustable worktop to kitchens

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4.12 Accommodation Schedule

The schedules below indicate the number of rooms proposed and the gross internal area of each floor plate to achieve these occupancy numbers.

The proposed accommodation will provide a total of 79 en-suite studios. Studios range from 18 to 50 square Metres, providing a varied mix and choice of accommodation types, to suit resident’s budgets and living preferences.

Room Schedule		
Name	Count	Level

Studio	13	Level -1
Studio	19	Level 0
Studio	20	Level 1
Studio	13	Level 2
Studio	6	Level 3

Grand total: 71 71

Area Schedule (GIA)	
Level	Area

Level -1	682 m²
Level 0	551 m²
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Level 2	373 m²
Level 3	226 m²

Total 2412 m²



Indicative Images - Studio

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4.13 Unit Types and Sizes

Accommodation Types

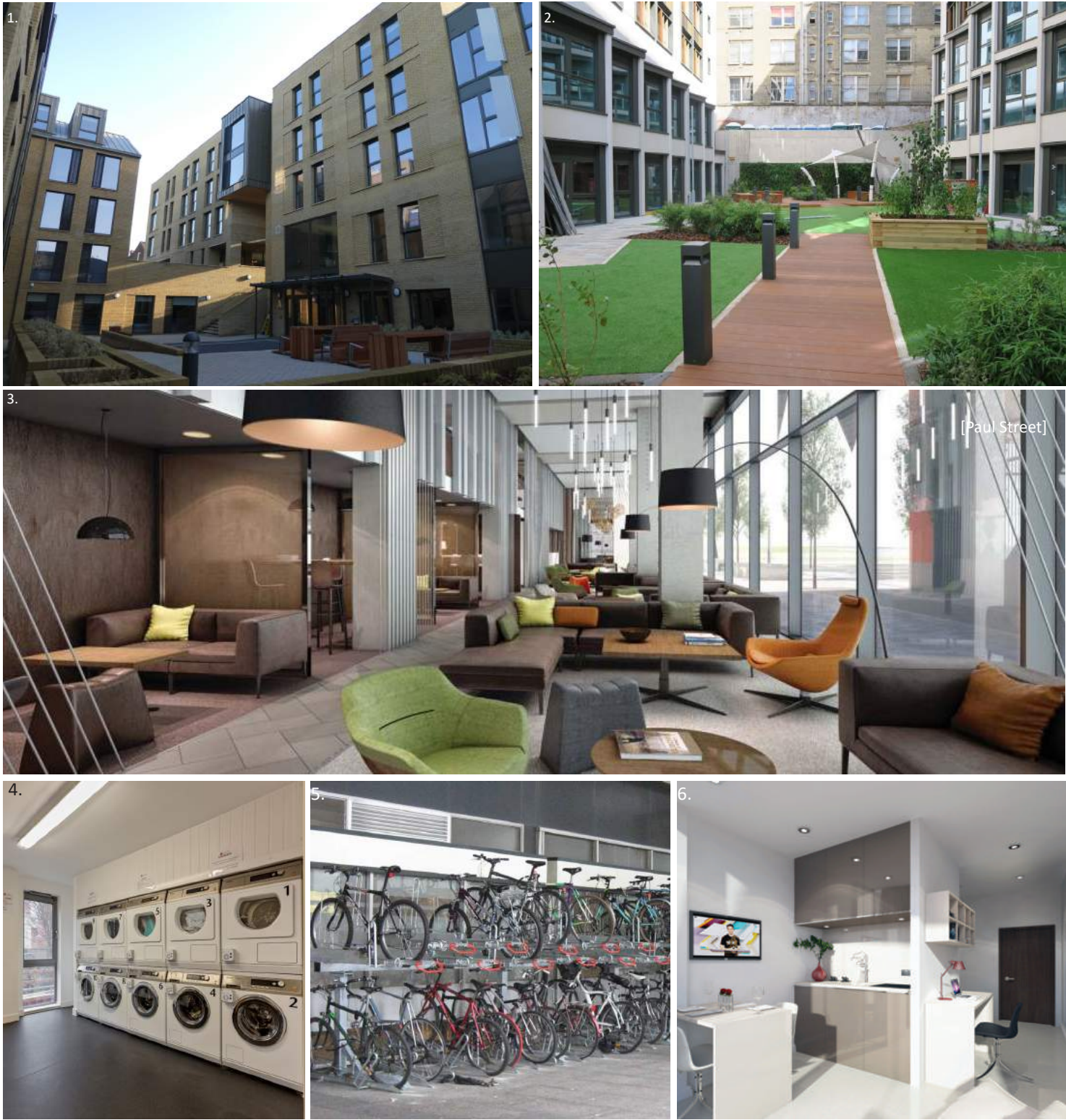
Typical Studio Rooms:
Accessible Studio Rooms: 25-27m²

Amenity Spaces

Common Room: 101m2
Plantroom: 57 sq m2
Cinema Room: 37m2
Fitness Suite: 36 m2
Cycle Storage: min 10 no. of cycle spaces

Unit Type Examples (Right)

- 1. Courtyard Area
- 2. Courtyard Area
- 3. Common Room
- 4. Laundry
- 5. Cycle Store
- 6. Studio



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4.14 Site Layout

The Proposal contains two main blocks, that are placed to the West and East side of the site, making space for a communal central courtyard, that is open to the South, allowing for plenty of sun.

Block A faces the street and therefore houses the majority of the amenity space such as the Laundry, Bike Store, Plant room, and storage space.

The Lower Ground floor houses a common room which leads directly to the courtyard and also provides a sheltered walkway connecting the two blocks.

A paved forecourt with tree planting is proposed at frontage.



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4.15 Sustainability

O’Connell East Architects and the design team have agreed with the client that a sustainable agenda should underpin all aspects of the design process. The proposed development will meet the minimum requirements of BREAM ‘Excellent’

A breeam statement has been prepared by an independent consultant and has been included within the application, however the basic design principles will be as follows:

- Large windows to allow good natural lighting.
- Internal solar shading of all windows to minimise over-heating.
- Substantial use of brick, a natural material, to reduce embodied energy.
- Use of high robust materials for longevity.

* Cross Laminated timber construction method

- Extensive use of deep wall and roof insulation zones to reduce thermal loss below statutory requirements.
- High performance double glazed windows and curtain wall glazing to reduce thermal loss below statutory requirements.
- Landscaped areas with natural materials and extensive planting.
- Natural ventilation and heat recovery ventilation for all flats to decrease energy use.

In addition the servicing energy strategy will include:

- Low energy electrical appliance and controls.
- Low flow appliances to conserve water.
- Centralized community type heating.

Social sustainability

- Design responsibly – by incorporating flexibility into schemes to accommodate future users. E.g. Demountable partitioning for future adaptability.
- Development benefits from a very sustainable location within walking and cycling distance of the city centre and University campuses and is served by the local bus network significantly reducing the reliance upon private cars for tenants.
- The scheme incorporates ‘Secure by Design’ recommendations.

Economic sustainability

- In terms of economic benefits the proposals will introduce new people into the area which will help contribute to the vitality and viability of local shops and services. The development will also help the local economy by creating jobs during construction and operational phases of the development
- Investigation and implementation of innovative construction methods which support environmental sustainability and offer immediate and longterm economic efficiencies.
- Design for minimum waste.

Environmental sustainability

- The proposal is sustainable in seeking to minimise energy consumption by providing high density flats designed to current energy efficient and conservation standards defined in Part L, F & G of the building regulations and by specifying recyclable materials with minimal wastage and employing local labour where possible.
- Encourage efficient use of space heating/lighting, equipment, water, electricity and utilise renewable energy forms where appropriate.
- Promote the use of environmentally friendly and sustainable materials.
- Work alongside other professionals who actively encourage the same values in their specialisations with regards to sustainability and the environment.

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4.16 Transport & Servicing Strategy

PEDESTRIANS

Residents and visitors arriving on foot will access the development through the reception which fronts Silver Street. Access control points will be provided to restrict unauthorised entry.

VEHICLES

The development will operate with ‘no-car’ leases precluding students from bringing a car to the site (or to central Reading). Adequate secure covered cycle parking will be provided and full information will be given to new students detailing walking and cycling routes and public transport services.

The management of the two student housing schemes at 79 and 40-68 Silver Street site will involve a single (full time) employee working across these two sites which are directly opposite each other. The employee will have some support (notably in respect of controlling any inappropriate student behaviour) from nominated student wardens (typically older/ postgraduate students) living within each site.

There are 4 off street parking spaces provided for maintenance. These are primarily provided to be used (under management supervision) for loading and unloading by students at the start and end of their academic year. They can also be used for maintenance and delivery vehicles during the rest of the year.

CYCLISTS

Residents arriving by bike will access the development via the main entrance and park bikes internally on Sheffield hoops

The cycle storage area will accommodate up to 20 bikes

REFUSE STORAGE

refuse is stored externally outside of block A, which can be pushed onto the street on collection days.

It is envisaged that the refuse vehicle will park on the highway, and management staff bring bins to the front of the development and return the empty ones to the store.

FIRE TENDER

Under fire condition, it is envisaged that the tender will park in the parking spaces or highway and connect to dry-riser breach inlet valves which serve the two lift / stair cores.

Details of the fire strategy for the development are to be agreed with Building Control.



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