5.0 building layouts

5.1 floor plans
5.2 accommodation schedule
5.3 co - living accommodation
5.4 pbsa

5.1 floor plans

5.1.1 lower ground floor (co living)

Utilisation of the site levels enables the introduction of a lower ground floor to co living 02. Units on the lower ground floor will have the use of private gardens as indicated in the diagram below.

5.1 floor plans

5.1.2 ground floor (co living)

The ground floor of the co-living provides shared amenity, resident cycle parking, plant and apartments. Due to the existing typography of the site the co-living ground floor is circa one storey lower than the student ground floor.

5.1 floor plans

5.1.3 level 01 (co living), level 00 (student)

The ground floor of the student buildings provide pedestrian level amenity space focused around the courtyard, cycle parking, plant, bin stores and apartments.

A public facing reception and lounge area provides street level activity.

5.1 floor plans

5.1.4 typical floor

Co-living units are 22.5 sqm in size with 5% accessible units.

Student units are all studios and vary in size from 17.5sqm to 28 sqm, with 5% accessible units.

5.2 accommodation schedule

student

total rooms: 399
total amenity space: 534sqm (1.3 sqm per room)
total bike spaces: 204
total gross internal area: 10916 sqm

co-living

total rooms: 414
total amenity space: 1409 sqm (3.4 sqm per room)
total bike spaces: 292
total gross internal area: 12381 sqm

student block 01

amenity 167 sqm
refuse store 26 sqm
total units 36
nia 675.5 sqm
gia 1194 sqm
bike spaces 0

level	studio 15.8	studio 17.5	studio 19	studio 19.5	studio 21	studio 22.5	studio 23.9	studio 25	ac studio 28	GIA sqm
0										301
1			9		2				1	301
2			9		2				1	301
3			11						1	291
4										
Total Units	0	29	0	0	4	0	0	0	3	

student block 02

amenity 0 sqm
refuse store 15 sqm
total units 112
nia 2131.5 sqm
gia 2963 sqm
bike spaces 140

level	studio 15.8	studio 17.5	studio 19	studio 19.5	studio 21	studio 22.5	studio 23.9	studio 25	ac studio 28	GIA sqm
0		7	5		4					595
1		8	11		4				1	595
2		8	11		4				1	595
3		8	11		4				1	595
4		12	11						1	583
Total Units	0	43	49	0	16	0	0	0	4	

student block 03

amenity sqm
refuse store 29 sqm
total units 141
nia 2626.5 sqm
gia 3462 sqm
bike spaces

level	studio 15.8	studio 17.5	studio 19	studio 19.5	studio 21	studio 22.5	studio 23.9	studio 25	ac studio 28	GIA sqm
0		11	9						1	577
1		12	11						1	577
2		12	11						1	577
3		12	11						1	577
4		12	11						1	577
5		12	11						1	577
Total Units	0	71	64	0	0	0	0	0	6	

student block 04

amenity 367 sqm
refuse store 36 sqm
total units 110
nia 2172 sqm
gia 3297 sqm
bike spaces 76

level	studio 15.8	studio 17.5	studio 19	studio 19.5	studio 21.5	studio 22.5	studio 23.9	studio 25	ac studio 26	GIA sqm
0		8	2							*729*
1		11	2		9	1			2	642
2		11	2		9	1			2	642
3		11	2		9	1			2	642
4		11	2		9	1			2	642
Total Units	0	52	10	0	36	4	0	0	8	

coliving block 01

amenity 723 sqm
refuse store 27 sqm
total units 200
nia 3999.6 sqm
gia 6306 sqm
bike spaces 310

level	studio 18.3	studio 20.7	studio 21.9	acc studio 27	amenity	GIA sqm
0	0	10		2	343	1051
1	20	10	4	2	76	1051
2	20	12	4	2	76	1051
3	20	12	4	2	76	1051
4	20	12	4	2	76	1051
5	20	12	4	2	76	1051
Total Units	100	68	20	12		

coliving block 02

amenity 496 sqm
refuse store 29 sqm
total units 107
nia 2054.1 sqm
gia 3240 sqm
bike spaces 0

level	studio 18.3	studio 20.7	studio 21.9	acc studio 27	amenity	GIA sqm
LG	9		2	1	38	352
0	14		3		344	878
1	21		4	1	38	670
2	21		4	1	38	670
3	21		4	1	38	670
Total Units	86	0	17	4		

coliving block 03

amenity 190 sqm
refuse store 30 sqm
total units 107
nia 1992.9 sqm
gia 2835 sqm
bike spaces 0

level	studio 18.3	studio 27	amenity	GIA sqm
0	19	1	38	567
1	21		38	567
2	21	1	38	567
3	21	1	38	567
4	21	1	38	567
Total Units	103	4		

5.3 co-living accommodation

5.3.1 typical rooms

The co-living rooms have been designed in collaboration with the client/ operator and the council to ensure a diverse and flexible means of accommodation to suit the demand of this type of accommodation.

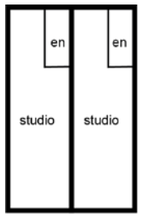
Room sizes meet or exceed the minimum size of 18 sqm within the GLA guidance on shared living.

The standard studio (Typical studio 01) is 18.25 sqm in size and are designed to locate the ensuite furthest away from the window, and locate the living area (kitchen, desk, soft chair) nearest the window. Larger studios (Typical studio 02) are located centrally with co-living block 1 and benefit from the views of the courtyards, and have small balconies where appropriate. Typical Student 03 are the largest of the studios and are located at the end of the blocks, and benefit from dual aspect.

There is provision of 5% accessible accommodation, these studios are located nearest the cores and shared spaces. Accessible rooms will contain an accessible ensuite, kitchen and wider clearances.

The co-living blocks have been designed in a modular fashion to allow for future adaptability where required by the market. Due to the lightweight (non structural) construction of the party walls between studios. Studios could be combined to create larger 1 or 2 bed apartments.

2 x 18.25sqm studios



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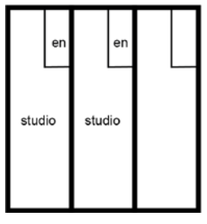
1 x 1B apartment (36.5 sqm)

3 x 18.25sqm studios



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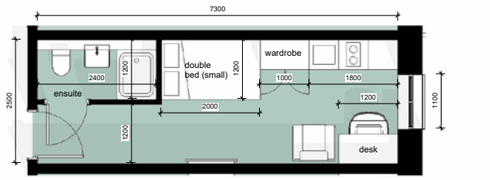
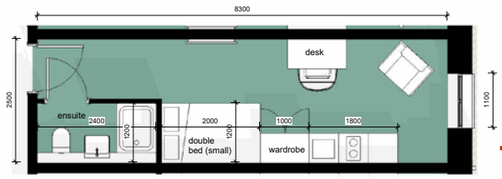
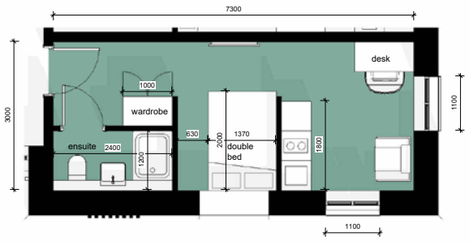
1 x 2B apartment (55 sqm)



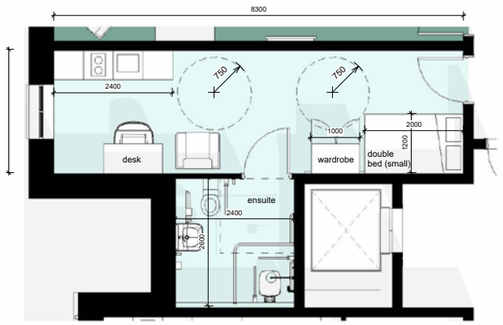
Co - Living Typical Studio 01
1 : 50
area: 18.25 sqm



Co - Living Typical Studio 02
1 : 50
area: 20.75 sqm



Co - Living Typical Studio 03
1 : 50
area: 21.75 sqm



Co - Living Typical Accessible Studio
1 : 50
area: 27.25 sqm

5.3 co-living accommodation

5.3.2 internal amenity

The co-living amenity strategy has been designed in collaboration with the council throughout the pre-application process. The amenity spaces are designed to align with the GLA guidance on purpose built shared living. The amenity spaces have been designed to promote shared living and a sense of community.

The amenity strategy provides 2 types of shared amenity spaces as follows:

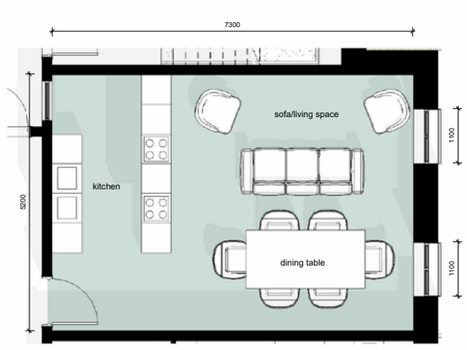
shared kitchen/living spaces

Kitchen / living spaces are to be located on every floor and are only accessible for those residents on that floor. These have been size to ensure their is a minimum of 0.5 sqm of kitchen space per resident and 1 cooking facility per 15 residents. The kitchen includes the following:

- hob, oven, sink and draining board per 15 residents
- fridge, freezer, dishwasher, microwave and food storage
- refuse space include recycling

The kitchen/living space also provides a dining room table over and above the required 2 dining spaces per cooking station, and a sofa, soft chairs and television.

The shared kitchen/living spaces are located centrally within the floor plan to encourage use by all residents, and ensure they are easily accessible from the accessible studios.



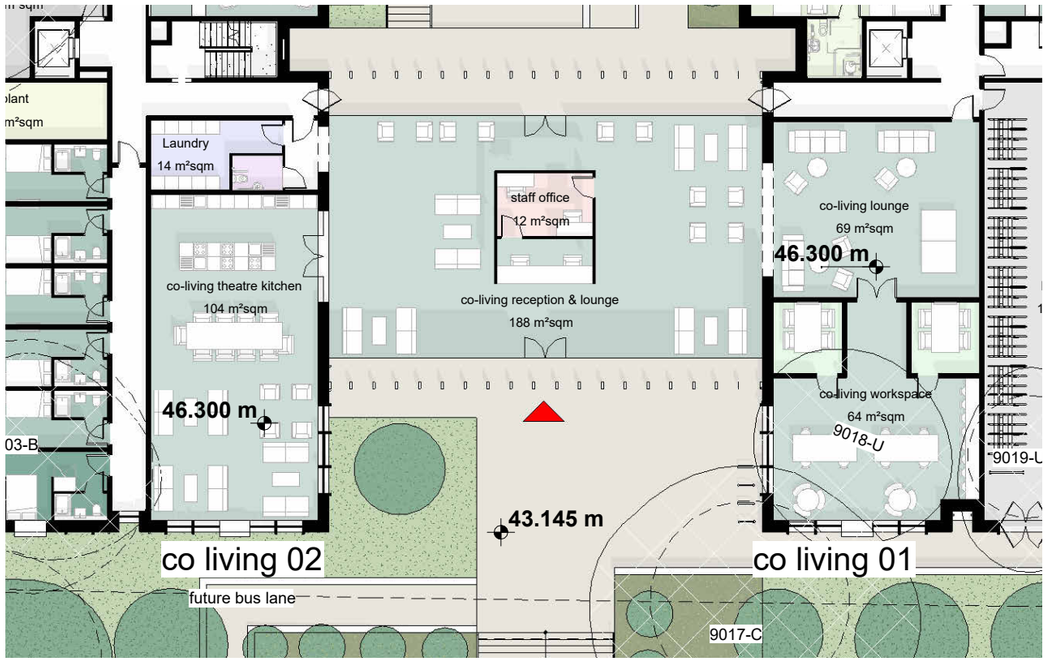
Co - Living Typical Kitchen
1 : 50

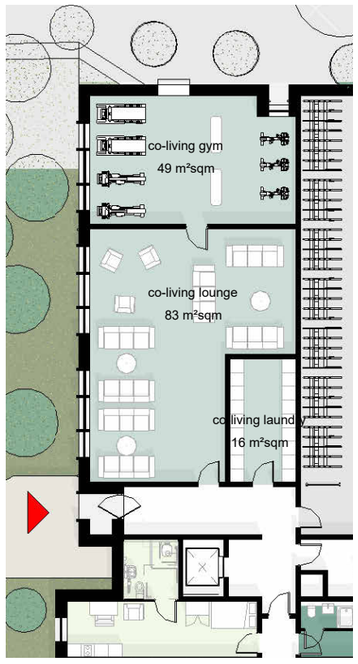
shared facilities

In addition to the shared kitchen/living spaces further shared facilities are located on the ground floor in two locations. These areas are accessible to all residents and are designed to encourage all residents to interact together.

The shared facilities include the following:

- Bookable theatre kitchen and communal dining area
- Lounge areas (various)
- Workspaces (including bookable meeting rooms)
- Gym
- Laundry





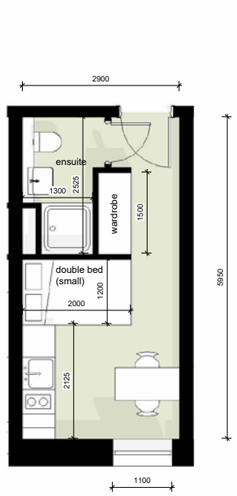
5.4 pbsa accommodation

5.4.1 typical rooms

The pbsa accommodation has been developed to provide a choice of range of high quality studios for any residents. The scheme is an all studio scheme, following market research, studio units are more desirable by students. Typical units are illustrated and described below.

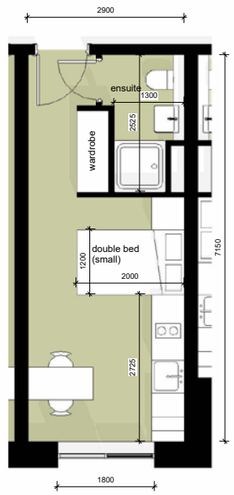
Studio units range between 17.5 sqm and 20 sqm. Each studio unit is designed to accommodation a small double bed, a kitchen, wardrobe, desk and storage. These arrangements provide students with all the necessary functions for efficient self contained living.

5% of the accommodation has been designed to meet wheelchair accessible standards as stated in Approved Document Part M. Accessible studios will contain an accessible ensuite, kitchen and wider clearances. Accessible studios are located as close to the cores as possible.

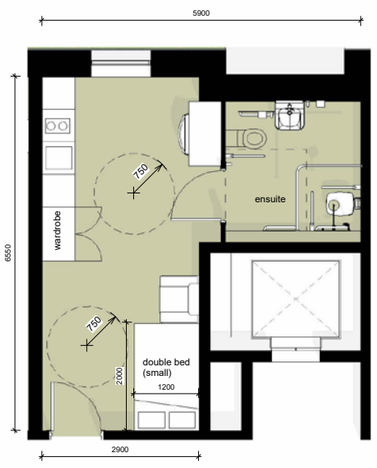


PBSA Typical Studio 01
1 : 50
area: 17.5 sqm

PBSA Typical Studio 02
1 : 50
area: 18.5 sqm



PBSA Typical Studio 03
1 : 50
area: 20 sqm



PBSA Accessible Studio
1 : 50
area: 26.8 sqm

5.4 pbsa accommodation

5.4.2 internal amenity

Internal amenity space is provided within student block 01 & student block 04. These spaces are accessible to all students within the development and provide high quality spaces for residents to relax, study and meet like minded residents.

The internal amenity spaces include the following:

- Group study rooms
- Bookable Individual study pods
- Cinema room
- Gym
- Lounge

570 sqm of pbsa internal amenity is provided over the development, this equates to 1.43 sqm per resident.

6.0 techincal

6.1 sustainability

Planning policy, modern building practices and the clients desire for a sustainable development will inform the sustainable and low carbon design.

The development strategy can be subdivided into three key categories.

1. sustainable construction

- Reuse of a vacant brownfield site.
- The proposals will be optimised to ensure the most efficient structure possible, reducing the amount of embodied carbon.
- Use of MMC and offsite construction methods to reduce wastage and provide a factory level provision
- Reuse and recycle during the demolition period
- Achieve BREEAM excellent
- Consideration to ensure the building is as flexible as possible to allow for adaptable and reuse.

2. operational energy

- Fabric first approach to the design of the building envelope to reduce energy needs of the development
- Onsite energy generation such as photo-voltaic panels and air source heat pumps
- Use of smart technology to reduce energy consumption
- Water efficient fittings and equipment and rainwater harvesting
- Promote recycling
- Car free development, promote sustainable methods of travel through the provision of well designed cycle storage

3. health and wellbeing

- Introduction of high quality external amenity space to encourage residents to use the outdoor spaces.
- Creation of a safe and inclusive environment
- Ensure good indoor air quality, ventilation and daylight
- Encourage a healthy and active lifestyle with onsite gyms
- enhance biodiversity and local ecology on site through the provision of a considered landscape design, retention of existing trees and living roofs.

6.2 accessible & inclusive design

Accessibility and inclusivity has been at the forefront throughout the designing of the development.

The site benefits from its close proximity to shops, leisure amenities, and public services, as well as excellent public transport connections. These factors support a largely car-free development and encourage the use of sustainable transport options. A limited amount of on-site car parking is included, comprising four accessible ‘blue badge’ spaces, which will be accessed via the proposed service route.

The development has been designed in line with the Building Regulations Approved Document M Volume 2 (2015 edition), as well as the BS8300:2018 guidance – Design of an accessible and inclusive built environment, Parts 1 and 2.

Entrance doors will be key card-operated and fully automatic, offering a clear opening width of more than 1 metre. Each entrance will be accessed via a level platform. Due to the pavement on Heavitree Road having a gradient of approximately 1:25, these platforms will be positioned above pavement level.

All external amenity areas have been designed to be accessible, ramps and slopes have been fully integrated within the landscape.

All internal doors along circulation routes will be wheelchair accessible, and lifts will provide access to all floors. Communal corridors are designed to be 1.5 metres wide.

Provision has been made for wheelchair-accessible accommodation, including 21 (5.2%) PBSA units and 20 Co-living units (4.8%) These rooms will be self-contained studios featuring accessible bathrooms, adequate clearance and turning spaces, and fittings installed at suitable heights for ease of use.

Cargo bike spaces have been included within the cycle stores, which allows for 3 wheel accessible bikes.

6.3 parking strategy

The proposed development is design to encourage cycling as a means of sustainable transport for residents. All bike stores are located at ground floor and close to each building entrance. All storage racks will be gas assisted 2 tier racks, with sheffield stands located externally for visitors. Infrastructure for charging electric bikes will be provided within each cycle store.

All stores will be appropriately sized and will be secure, with keycard access for residents and staff.

internal bike stores

co-living

Due to the lack of cycle storage guidance for the co-living, we have applied the exeter guidance to PBSA accommodation. Within the co-living 292 cycle spaces are provided for residents and site staff use. This includes the introduction of cargo bike spaces.

student

For the student accommodation local planning requirements are for one space per bedroom (for the first 10 rooms) and then one space per two rooms there after. The proposals achieve 204 bike spaces, with further staff and site wide visitor spaces provided. Cargo bike spaces are provided within the stores.

external bike stores

There are 70 cycle parking spaces located around the site, these are intended to be used by visitors or short term staff parking.

car parking

The site is a car free development, aligning with liveable Exeter, with 4 statutory accessible parking space provided.

co-living ground floor

pbsa ground floor

6.4 waste strategy

The proposed development will utilise a private refuse collection. Collections will be arranged to be twice weekly.

Each building has been designed to have a bin store which is accessed directly off the main core, and easily accessible for residents. On collection days building management will move the bins to the collection points as indentified on the plan.

Refuse stores will contain a number of 1100l bins which are split into recycling and general waste, bins will be colour coded and clearly marked to ensure waste is deposited in the correct location. Number of bins within each store is set out below.

Waste allowances has been calculated using a minimum of 32litres of general waste and 32l of recycling per bed.

PBSA block 1: 2 x 1100l general, 2 x 1100l recycling
PBSA block 2: 3 x 1100l general, 2 x 1100l recycling
PBSA block 3: 2 x 1100l general, 2 x 1100l recycling
PBSA block 4: 2 x 1100l general, 2 x 1100l recycling

co-living block 1: 6 x 1100l general, 5 x 1100l recycling
co-living block 2: 3 x 1100l general, 3 x 1100l recycling
co-living block 3: 3 x 1100l general, 3 x 1100l recycling

Waste reduction and recycling will be encouraged by management

6.5 fire strategy

As part of the submission a fire service strategy drawings have submitted to demonstrate the proposed fire strategy. The scheme has been designed in conjunction with Fire Prevent, and will comply with all relevant building regulations and british standards.

All building are 6 storeys or lower, and below 18m in height (top floor), therefore are not classed as buildings of high risk.

The scheme utilises BS9991 guidance, with all single direction travel distances to protected cores are no further than 15m.

All buildings are sprinklered as they are taller than 11m in height.

Dry riser locations, as indicated on the fire service drawings are all within 45m of fire tender parking areas on the service road. Heavitree Road or Gladstone Road would not be required for fire tender parking.

All protected cores have an escape stair and an evacuation left, and are designed in accordance with BS9991.

co-living ground floor

pbsa ground floor

6.6 daylight and shadowing

The massing of the development has been informed by a number of areas, one which being the desire to minimise the impact one the neighbouring buildings.

As demonstrated in the previous chapters of the design and access statement, the proposed design represents a significant reduction in height, footprint and massing when compared to the previously refused scheme. A daylight and sunlight analysis was submitted as part of the previous application and had been deemed suitable in terms of minimal impact to the surrounding area.

shadow path analysis

Desktop shadow path assessment has taken place throughout the design process in an iterative process to help generate the proposed massing. The images provided here reflect the final proposals. Trees have not been included on the shadow assessments as this is to review the building impact.

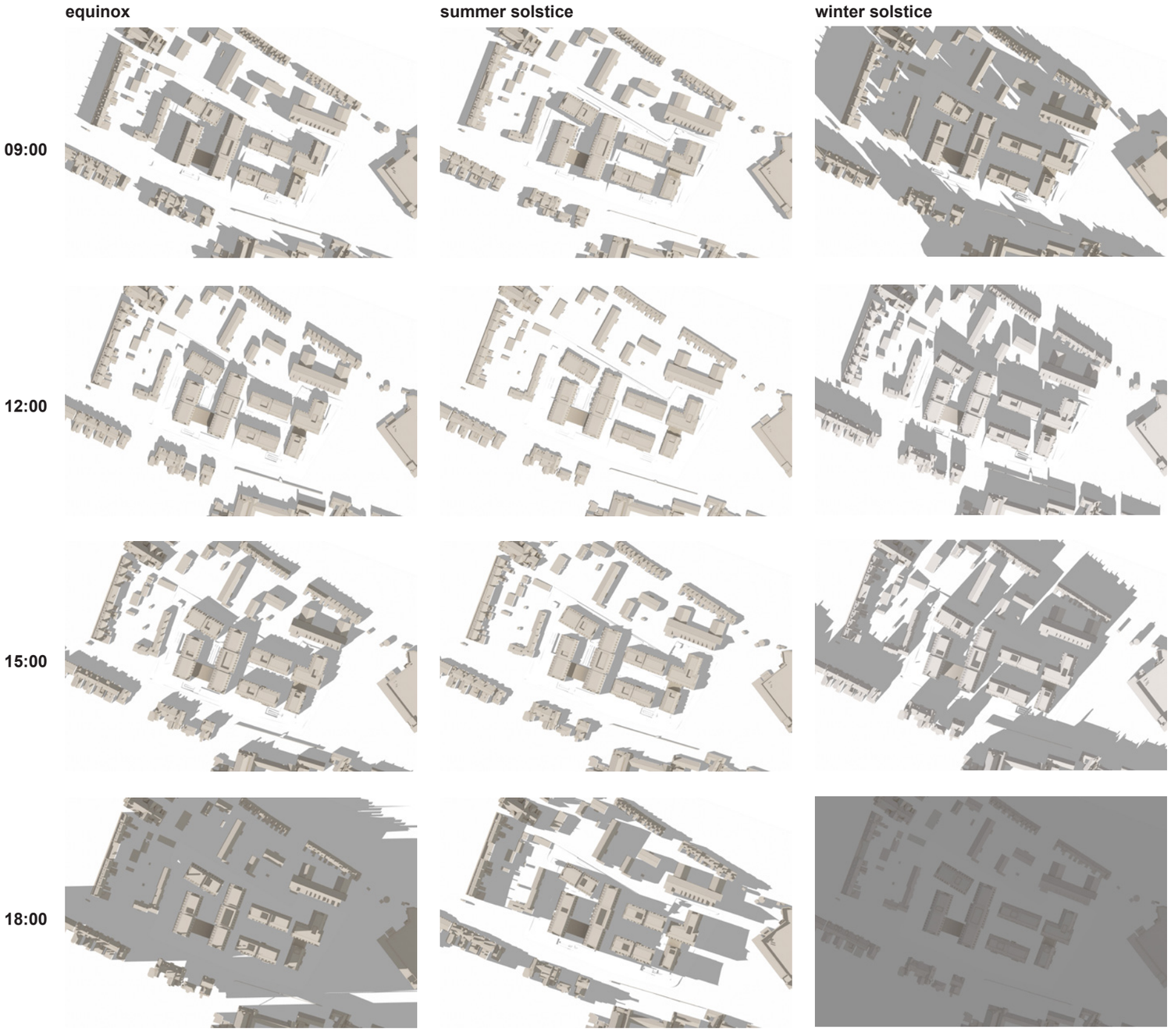
The analysis demonstrates that there is limited shadowing on the neighbouring buildings. When shadowing is present this is generally early morning and in the evenings in the winter months. The analysis also demonstrates that both courtyards in the scheme achieve good levels of sunlight throughout the day.

daylight and sunlight

Furthermore, the proposals seek to achieve the principles outlined in the BRE Site Layout and Planning for Daylight and Sunlight: A Guide to Good Practice (2011).

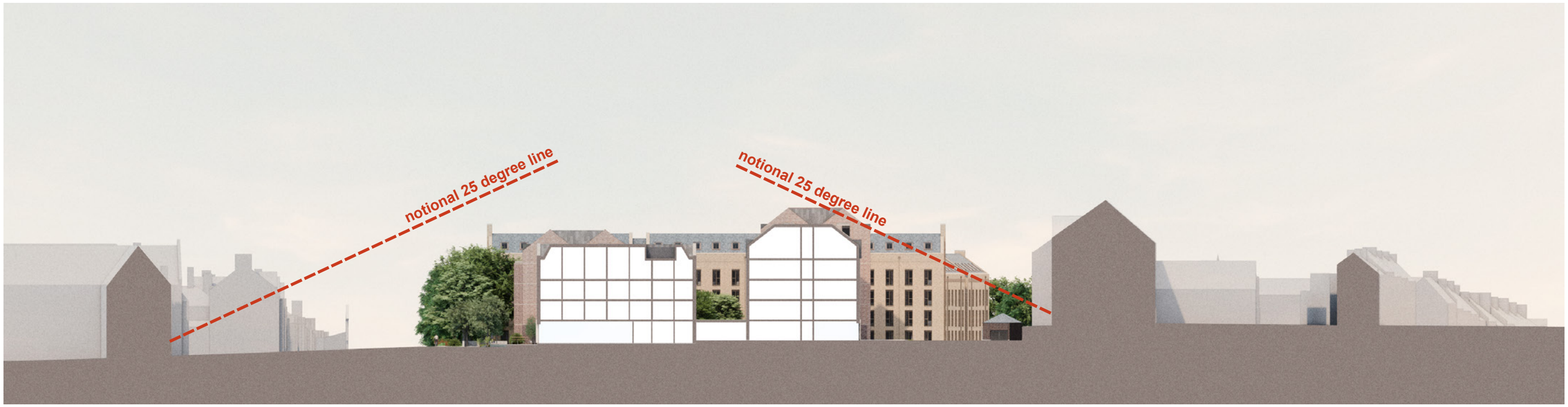
The ‘25 degree test’ requires a notional line to be drawn from the centre point of the lowest window of an existing building at an angle of 25 degrees. Guidance suggests that if the proposals fall underneath the line there is unlikely to be a detrimental effect to daylight on the existing property.

The sections on the next pages demonstrate for the most part the scheme achieves the requirements. Where this is not achieved there are only minor and are no worse than the previous scheme.



6.6 daylight and shadowing

Section A



Section B

6.7 adaptability

The proposals have been designed to allow for future adaptability, allowing for the building to evolve with changing needs over time whether in terms of use, technology or occupancy. The following methods will be utilised:

Minimising load bearing interior walls: Designing the structure to minimise load bearing internal walls allows for reconfiguration of the internal conditions of the building without intensive structural interventions. This would enable a diverse of potential future uses.

Introduction of suspended ceilings: Designing in suspended ceilings and easily accessible services routes would facilitate the integration of new technologies with minimum disruption to the building.

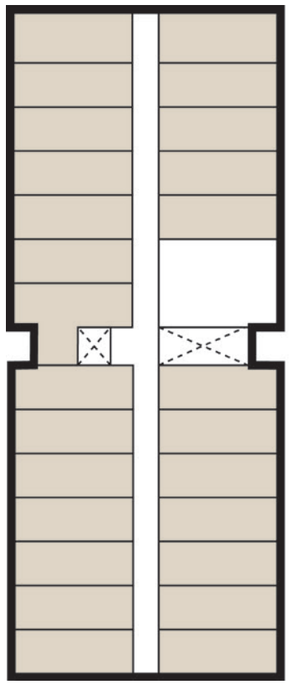
Generous floor to ceiling heights: Designing to allow for suitable floor to ceiling heights ensures that potential future uses can be accommodated within the building.

Structural Over design: Slightly over designing floor structure or foundation capacity allow the buildings to support potential future loads for example rooftop additions or heavier equipment.

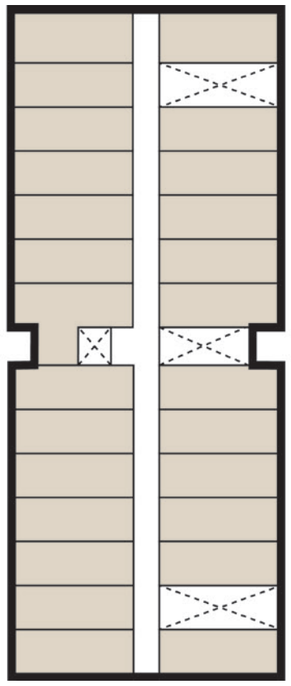
Future Proofing and Smart Infrastructure: installing future proofed technologies will prepare the building for future innovations in technology, building management or infrastructure requirements.

Life cycle and circular design: Designing and specifying materials that can be easily disassembled, reused or recycled ensures a reduction in potential wastage

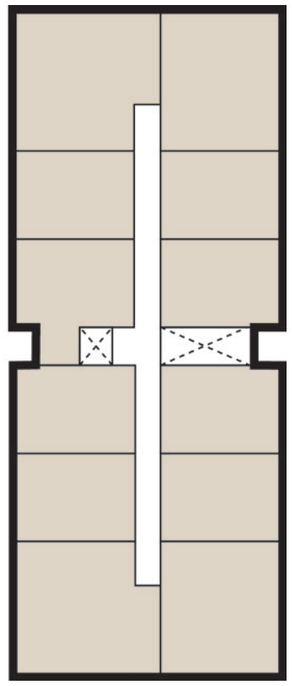
Design for additional cores: Design to allow for additional escape stairs or cores. Different uses may require alternative escape distances, therefore allowing for the potential introduction for new cores within the building would allow for a greater flexibility of future uses.



Typical co-living floor plate



Potential future hotel layout
additional cores introduced to comply with travel distance requirements



Potential future residential layout
lightweight partition reconfigured (without structural alterations) to allow for residential apartments

6.8 bus lane

Devon County Council and Exeter City Council have identified aspirations to improve bus priority measures along Heavitree Road as part of the Central Exeter bus route. The proposed development has been positioned to provide a safeguarded area for a potential future bus route while still allowing for the safe operation of the site for student and co-living accommodation. The applicant is not responsible for the delivery and implementation of the potential bus route, however, the proposed layout ensures it would not prejudice the delivery of this aspiration.

As part of the application the pedestrian crossing on Gladstone Road will be improved and upgraded.

A full highways report is provided as part of the application.

6.9 drawing list

Architectural drawings to accompany the application are as follows:

Site Plans

23042-BC-ZZ-XX-DR-A-03-001_P2 - Site Location Plan
23042-BC-ZZ-XX-DR-A-03-002_P2 - Existing Site Plan
23042-BC-ZZ-XX-DR-A-03-003_P2 - Demolition Plan
23042-BC-ZZ-XX-DR-A-03-100_P2 - Proposed Site Plan
23042-BC-ZZ-XX-DR-A-03-101_P2 - Site Plan - Co Living Lower Ground
23042-BC-ZZ-XX-DR-A-03-102_P2 - Site Plan - Coliving Level 00
23042-BC-ZZ-XX-DR-A-03-103_P2 - Site Plan - Student Level 00-Coliving Level 01
23042-BC-ZZ-XX-DR-A-03-104_P2 - Site Plan - Student Level 01-Coliving Level 02
23042-BC-ZZ-XX-DR-A-03-105_P2 - Site Plan - Student Level 02-Coliving Level 03
23042-BC-ZZ-XX-DR-A-03-106_P2 - Site Plan - Student Level 03-Coliving Level 04
23042-BC-ZZ-XX-DR-A-03-107_P2 - Site Plan - Student Level 04-Coliving Level 05
23042-BC-ZZ-XX-DR-A-03-108_P2 - Student Level 05

Technical Plans

23042-BC-ZZ-XX-DR-A-03-150_P1 - Fire Service Plan - Coliving Level 00
23042-BC-ZZ-XX-DR-A-03-151_P1 - Fire Service Plan - Student Level 00-Coliving Level 01
23042-BC-ZZ-XX-DR-A-03-152_P1 - Proposed Phase Plan

Typical Layouts

23042-BC-ZZ-XX-DR-A-03-180_P1 - Proposed Typical Layouts - Coliving
23042-BC-ZZ-XX-DR-A-03-181_P1 - Proposed Typical Layouts - PBSA

Elevations

23042-BC-ZZ-XX-DR-A-03-200_P2 - Proposed Site Elevations
23042-BC-ZZ-XX-DR-A-03-201_P2 - Proposed Site Elevations_2
23042-BC-ZZ-S1-DR-A-03-210_P2 - Proposed Elevations_Student 01
23042-BC-ZZ-S1-DR-A-03-211_P2 - Proposed Elevations_Student 01_2
23042-BC-ZZ-S2-DR-A-03-212_P2 - Proposed Elevations_Student 02
23042-BC-ZZ-S2-DR-A-03-213_P2 - Proposed Elevations_Student 02_2
23042-BC-ZZ-S3-DR-A-03-214_P2 - Proposed Elevations_Student 03
23042-BC-ZZ-S3-DR-A-03-215_P2 - Proposed Elevations_Student 03_2.pdf
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If a combined set is required, please request it from brown + company

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