

6.0 Description of the Submitted Design

6.5 - Environmental Constraints

Daylight / Sunlight

The site is located in a very dense and developed urban environment. As such the impact on the daylight of neighbouring properties has been investigated in a separate report prepared by Delva Patman.

This diagram shows the general principles that were employed in the design to mitigate the impact on neighbouring daylight as well as the daylight to the proposed development itself.

The blue lines indicate neighbouring residential elevations. The pattern of the proposed blocks on the site is staggered such that over-shadowing to the neighbours is minimised.



Fig - 6.5.2 - Sun Path Showing Shadows at Noon (Typical)

Noise and Air Quality

St Pancras Way is a busy road and there are other potential noise constraints in the area from plant, trains and aircraft. A noise survey was commissioned and prepared by RBA and is submitted along with this applications.

This diagram shows the main source of noise and the general principles employed to mitigate the effect on the occupiers.

The podium raises the accommodation to a minimum of 7m above the traffic and therefore some mitigation of noise and separation from traffic fumes is achieved.

Block A is directly on the road. Natural ventilation will be provided via ducting running through the centre of the building with an intake from the rear so that windows can be closed at noisy times and the rooms will still be adequately ventilated. Blocks B and C are set back from the street edge, further reducing the impact of noise from the road. Block D is oriented such that no bedrooms face the road directly. The attenuated natural ventilation will also be implemented based upon the recommendations by WSP in their Air Quality Assessment,



Fig - 6.5.3 - Traffic Noise



Fig - 6.5.1 - Detail View of The Travis Perkins Fence Near the Unit e Entrance

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6.6 - Travis Perkins Layout

The improvement to the layout and operations of Travis Perkins has been a consistently important part of the design process from the start.

On this page, we show the existing and proposed layouts of the facility and how the re-design will improve operations.

The current buildings on the site were not purpose built but have been converted, with all the compromises that inevitably result from that. The main difficulty however, is one of loading and deliveries. Essential to the smooth operation of the business is getting the stock in, and the sales out. The current situation required articulated lorries to arrive early in the morning before business hours, and to stop on St Pancras Way and reverse into the site for offloading. Only when they have left the premises, can the customers enter to load up. Inevitably, in London traffic, the deliveries are sometimes late and it can arise that vans are parked up on St Pancras Way waiting for the delivery lorries to arrive or offload. This causes congestion and noise at the busiest time of the day for what is a one way street into Central London.

Therefore the revised layout is designed to set up a one way flow through the site. The delivery lorries can enter and leave the site in forward gear. The loading area within the site can be used while the customers arrive. Also, in the revised layout if a customer has forgotten an item after paying, they can exit and immediately re-enter the site for further purchases. Whereas at the moment they would have to drive a large circuit around the neighbourhood to arrive back at the entrance (See Fig 4.1.1/2 p26).

The plans shown on this page indicate the areas given over to storage, retail/admin and parking, loading and delivery.

It's clear how the improved flow of vehicles through the site gives a more efficient use of the land and improved storage and sales areas.

In summary, the revised layout of Travis Perkins, is more efficient for their operations, and the development proposals as a whole are an essential driving force behind this regeneration of the business.



Fig - 6.6.2 - Travis Perkins Existing Layout

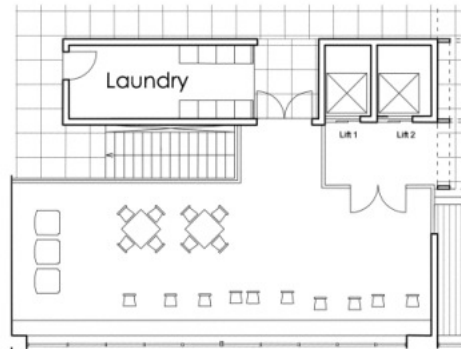


Fig - 6.6.3 - Travis Perkins Proposed Layout

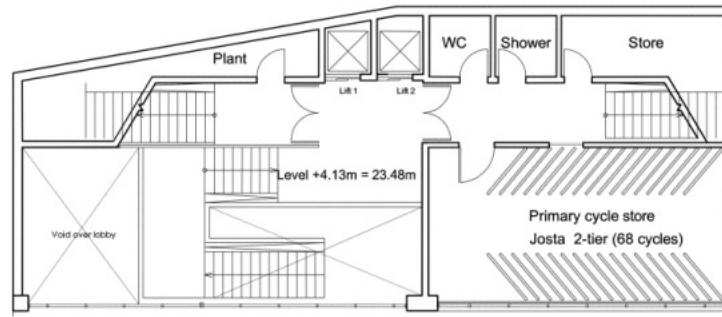


Fig - 6.6.1 - Detail View of The Unite Entrance

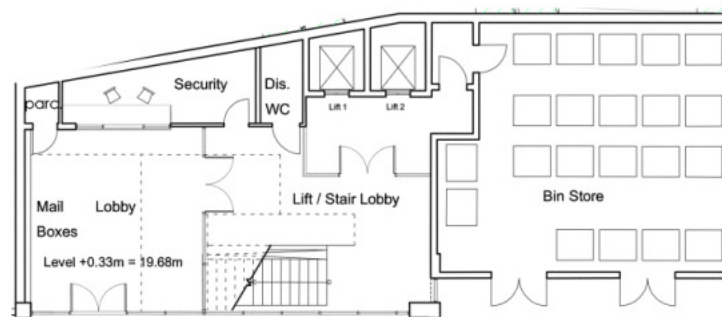
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Podium Level



Mezzanine Level



Ground Level

Fig - 6.7.2 - Entrance to the Unite Scheme

6.7 - Description of the Student Accommodation

Unite offer a high quality student living experience and their rooms are manufactured off site as modules which are lifted in to place on site. This process is highly sustainable in that quality and efficiency can be maintained in factory conditions, and on site operations can be kept down to a very minimum. This allows for a faster build time and reduces noise and site disturbance to the local area. The plans of the rooms and the shared living spaces have therefore been worked out over many years to be efficient, practical and comfortable.

The experience of living and visiting the Unite development starts by entering the vertical circulation area from ground level to podium. It has been a consistent theme of the design that this should be a spatial experience that takes the visitor up to a distinct raised platform.

The accommodation gathered around the entrance area includes:

- **Ground Floor**
Reception Desk and Office
Bin Store
Post area
- **Mezzanine Level**
Primary Bike Store for 68 cycles
Staff showers and WCs
- **Podium Level**
Informal Meeting Area
Main Common Room
Laundry

On the podium level, there is a large landscaped plaza which is discussed in more detail elsewhere in this report.

The common room is designed to be in two parts. The main space will have games facilities, a TV and will become a general socialising space. There is also, close by and visually linked, a separate space that looks out over the street. This space is a meeting area and will be more of a place to work and interact. By splitting the space into two there can be different events going on at one time. It's possible to allow one of these common rooms to be used by local interest groups to make presentations to students if required.

Further shared accommodation on the podium includes:

- A second laundry
- Secondary Cycle Storage
- Administration Office.

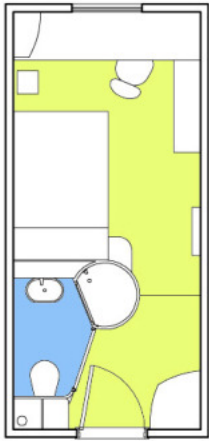


Fig - 6.7.3 - Typical Room

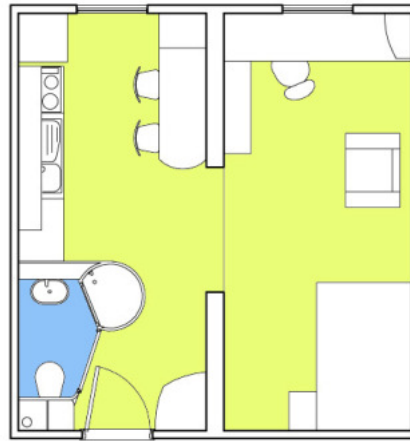


Fig - 6.7.4 - Typical Studio

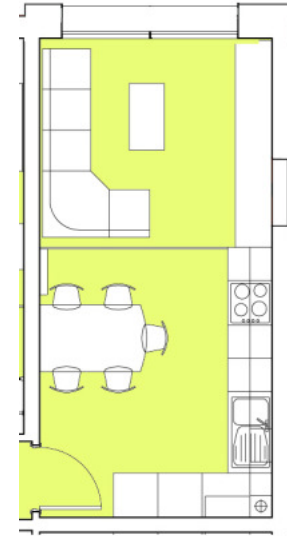


Fig - 6.7.5 - Typical Shared Kitchen

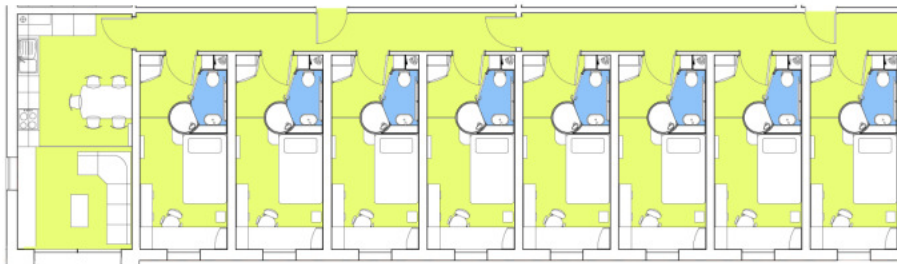


Fig - 6.7.6 - Typical Cluster Flat

6.0 Description of the Submitted Design

6.7 - Description of the Student Accommodation (Continued)

6.7.1 - General Description

The proposals would provide a total of 564 bedrooms spread across 120 units.

A range of different types of flat are provided in the scheme from studios for individual occupants to cluster flats for 8 students sharing.

The intention in providing such a range is to cater for students at different stages of their study and to allow enough flexibility for them to remain in student accommodation for the duration of their courses if they so wish.

The bedrooms are arranged as follows:

- 41 studio rooms
- 1 cluster flat with 2 bedrooms
- 13 cluster flats with 5 bedrooms
- 19 cluster flats with 6 bedrooms
- 26 cluster flats with 7 bedrooms
- 20 cluster flats with 8 bedrooms

Of these there are the following fully fitted accessible rooms:

- 6 rooms in 5 bed cluster flats.
- 5 in 8 bed cluster flats.
- 15 accessible studios.

Of the above, 6 rooms will be fully fitted out to DDA standards at construction stage, with a further 22 capable of being fully adapted. All cluster rooms are ensuite and have shared kitchen facilities, where as the studios are fully self contained.

All cluster rooms are single aspect and arranged along internal corridors. The Kitchens are all dual aspect and are generously proportioned to provide shared cooking facilities as well as a living room space.

6.7.2 - Student Housing Management Plan

A student housing management plan is being submitted along with this application. This plan outlines Unite's policy in regard to managing its facilities and ensuring that the occupants are considerate to each other and their neighbours.

It lays down the following mission statement and explains how that will be achieved:

The Student accommodation will be managed by UNITE, to create a safe, clean well run environment for its occupants, which respects their need for privacy and study.

The Residence and its occupants (the students) acknowledge and respect the rights of adjoining residents and businesses to a quiet life and will work to ensure that these rights are not compromised by their actions.

Unite, with their long experience of managing thousands of bed spaces across the country have developed and refined their management plan based on experience and are now well known for running well managed facilities that are considered to be good neighbours.

6.7.3 - Waste Management Plan

A dedicated refuse store will be provided on the ground floor next to the main entrance on St Pancras Way. This store can be accessed internally via a lobby and the waste will be collected from the road side.

Each cluster flat and studio will be provided with domestic waste collection facilities in the kitchens. The students will be responsible for depositing this in the refuse store.

Waste from the common areas will be collected by the staff and also deposited in the refuse store.

A dedicated space will also be provided in each flat for recyclable waste and the bin store will have space for recycling bins.

The total size of the refuse store will be 72 sqm

6.7.4 - Transport Management

A separate report is being provided as part of this application, prepared by WSP Transport Consultants.

In summary though the following will apply:

- A revised parking layout to the street will be provided so that there is no loss of on-street parking space.
- As part of this reorganisation, a dedicated loading point will be provided close to the student accommodation entrance.
- There will be no dedicated parking spaces apart from a single disabled parking space provided on the South part of the site.
- Moving in day will be managed with timed deliveries and will be explained in the Student Housing Management Plan
- Fire engines will serve the building from the road side and access will be provided to the podium deck via the main entrance and the escape stairs on Block D.



Fig - 6.8. 1 - Detail View of the Planted Frame to Block D

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6.8 - Landscaping and Biodiversity

Landscaping

The podium deck is a crucial part of the design as it will be place for the students to gather and meet, and will become a well used amenity space.

The landscaped areas are split into three distinct zones.

- Plaza

The largest open part of the podium will be this hard and soft landscaped plaza where students will be able to gather and socialise. It's located close to the common room areas as well as the entrance zone. The plaza will have planting boxes along its Eastern perimeter which, together with screens and balustrades will keep students away from the edge of the podium, whilst showing some greenery to the public realm.

Seating will be set out around planning boxes, and further planters will be set in front of the podium level room windows to give some defensible space for those occupants.

The hard landscaping will use pavements and decking to define areas of circulation.

The Plaza will also have a more intimate place next to the laundry where on a nice day, students could sit and read whilst waiting for the washing cycle.

- Retreat Garden

The protruding Block D separates an area of amenity space from the plaza. We are suggesting a less formal design for this zone which will give a more intimate feel. The intention is that this area will become a quieter area for study and relaxation.

- Less Accessible Zones

The landscaping to the rear of the building will follow a similar theme to that of the front but given the narrower spaces, these areas will be more of a visual amenity space for the rooms that look out in that direction, rather than a space to gather.

This is also true of the ground level to the South of the site. This will be the disabled parking space and service area for the plant room. It will be landscaped with climbing plants and planted paving to give some visual amenity to the neighbouring St Mungo's building.

Biodiversity

As the current site has little or no bio diversity, it being all hard standing and metal roofs, the proposals will certainly improve on this.

All flat roof spaces will be used to create green roofs, and together with the landscaped areas will be planted with a mix of species to be decided later on in consultation with a specialist consultant. The prominent frame structure to Block D is also proposed to be a vertical garden of climbing plants.

An Ecology report prepared by AECOM, is being submitted as part of this application.

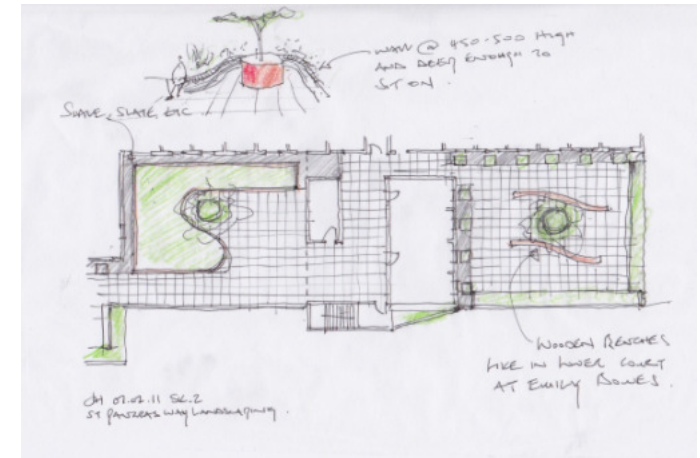


Fig - 6.8.2 - Landscaping Sketch

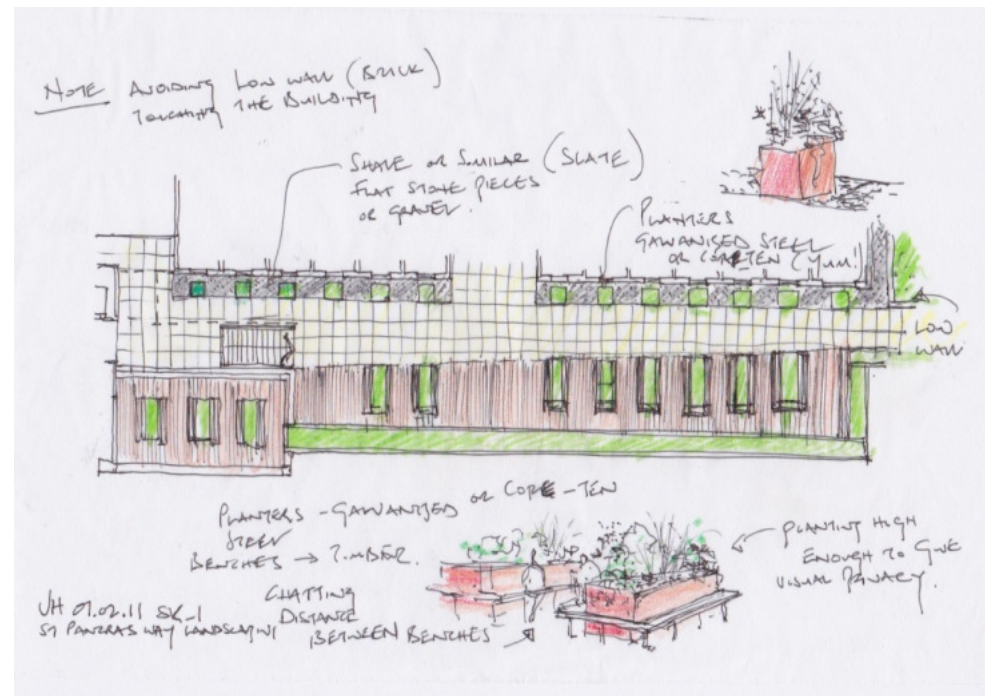


Fig - 6.8.3 - Landscaping Sketch



Fig - 6.8. 1 - Detail View of the Gable of Block A

6.0 Description of the Submitted Design

6.9 - Ecological Design

The ecological impact of the development has been at the forefront of our minds from the very beginning.

Unite have had many years experience in off site modular construction and have their own factory which manufacture the student rooms and kitchens to a high quality and specification. This process ensures that waste is kept to a minimum and that on site construction time is massively reduced over traditional build methods.

Fundamentally therefore the construction process of the student blocks will be as environmentally friendly as possible.

Along with this application will be submitted two reports on this aspect of the design.

Energy and Sustainability Report prepared by Applied Energy

This will outline the energy saving measures employed on the site to mitigate its impact on the environment for the life cycle of the building. The main measure being suggested is a highly efficient Combined Heat and Power plant, shared between the two uses on the site.

BREEAM Land Use and Ecology Reports prepared by Aecom

These reports show the Industrial and Multi-residential BREEAM assessments for the site.

The reports outline the measures to be taken in order to achieve the objective set out in initial planning advice which were to achieve a BREEAM rating of very good with an attempt to reach a rating of Excellent. The reports show that the Industrial element achieves Very Good, and the Student Residential achieves Excellent, so the proposals are well within the criteria laid out.