

4.16 SECURED BY DESIGN + CRIME PREVENTION

Two consultations with the Metropolitan Police Service took place on 3rd January 2024 and 12th January 2024. The design was modified in line with advice as follows:

1. Double doors leading to cycle storage and rear access to the commercial unit were changed for single doors to enhance the security of the external perimeter of the building.
2. Revision of PAS24 doors and windows (incl. ground floor and podium level) and fob access.
3. Introduction of additional layer of security with CCTV on external perimeter of the building and internal cameras on both cores.

All windows and doors will comply with **Approved Document Q Secured by Design**.



FIGURE 118. Existing Passive Surveillance Condition on Percival Court



FIGURE 119. Proposed Passive Surveillance Condition on Percival Court

KEY:

-  Existing Window View
-  Proposed Window View
-  Existing Door Entry
-  Proposed Door Entry



FIGURE 116. Day-time view of Percival Court



FIGURE 117. Night-time view of Percival Court

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FIGURE 120. Ground Floor Plan - Access and Circulation Diagram



FIGURE 121. Ground Floor Plan - Door and Window Diagram

KEY

-  Resident - Access from High Road
 -  Visitor - Access from High Road/Percival Court
 -  Resident - Access from Percival Court
 -  Free Access Lift
 -  Destination Controlled Lift
 -  LPS 1175 SR2 Door
 -  LPS 1175 SR2 + Visitor A/V Call Point + Fob
 -  Pas 24 Door
 -  Pas 24 Door with Fob
 -  Pas 24 Door + Visitor A/V Call Point + Fob
 -  Pas 24 Window

-  Surveillance Camera View
-  Surveillance Camera

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FIGURE 122. First Floor Plan - Access and Circulation Diagram



FIGURE 123. First Floor Plan - Door and Window Diagram

KEY

- ➡ Resident - Access from High Road
- ➡ Visitor - Access from High Road/Percival Court
- ➡ Resident - Access from Percival Court
- Free Access Lift
- Destination Controlled Lift
- LPS 1175 SR2 Door
- LPS 1175 SR2 + Visitor A/V Call Point + Fob
- Pas 24 Door
- Pas 24 Door with Fob
- Pas 24 Door + Visitor A/V Call Point + Fob
- Pas 24 Window

- ➡ Surveillance Camera View
- 📹 Surveillance Camera

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FIGURE 124. Second Floor Plan - Access and Circulation Diagram



FIGURE 125. Second Floor Plan - Door and Window Diagram

KEY

- ➡ Resident - Access from High Road
- ➡ Visitor - Access from High Road/Percival Court
- ➡ Resident - Access from Percival Court
- Free Access Lift
- Destination Controlled Lift
- LPS 1175 SR2 Door
- LPS 1175 SR2 + Visitor A/V Call Point + Fob
- Pas 24 Door
- Pas 24 Door with Fob
- Pas 24 Door + Visitor A/V Call Point + Fob
- Pas 24 Window

- ➡ Surveillance Camera View
- 📹 Surveillance Camera

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FIGURE 126. Third Floor Plan - Access and Circulation Diagram



FIGURE 127. Third Floor Plan - Door and Window Diagram

KEY

- ➡ Resident - Access from High Road
- ➡ Visitor - Access from High Road/Percival Court
- ➡ Resident - Access from Percival Court
- Free Access Lift
- Destination Controlled Lift
- LPS 1175 SR2 Door
- LPS 1175 SR2 + Visitor A/V Call Point + Fob
- Pas 24 Door
- Pas 24 Door with Fob
- Pas 24 Door + Visitor A/V Call Point + Fob
- Pas 24 Window

- Surveillance Camera View
- 📹 Surveillance Camera

4.17 TRANSPORT STATEMENT SUMMARY

A Transport Statement has been developed by Arup to demonstrate the unique access, parking and service requirements for the development to support the Planning Application.

The site is well located for trips to be undertaken by sustainable modes being located within the District Centre and the range of amenities available and also for access by public transport. The site has a 'very good' PTAL rating of 5.

Cycle parking spaces will be provided with 21 Long-Stay Spaces and 7 Short-Stay Spaces - for both PBSA and Commercial Unit - and these will comply with London Cycling Design Standards.

There will be 1no. accessible parking space in Percival Court within the owned land and cars and vans accessing the site will do so in the same manner as existing vehicles accessing Percival Court.

Servicing of the development will be quite light and the site benefits from a loading bay located nearby on the High Road permitting daytime loading up to 40minutes. Smaller vehicles can also access the courtyard if required.

4.18 VENTILATION EXTRACTION SUMMARY

STUDENT ROOMS

Given the sites proximity to a major road air quality around the lower levels of the building is not expected to always be adequate for a fully naturally ventilated approach. As a result, it is recommended that openable windows are not used for ventilation or passive cooling. Whilst the windows proposed will still be openable at the occupants' discretion, to meet the ventilation requirements a mechanical ventilation solution has to be employed. This will additionally benefit the acoustic performance within each student bedroom.

To achieve this MVHR units will be installed within each block, ducted down to and along each corridor to serve all rooms. These heat recovery units will be sized to provide the Part L required ventilation rates to each bedroom and extract the same from the connected bathroom.

COMMON AREAS AND CORRIDORS

Generally, all common areas, stair cores, corridors, etc. will be naturally ventilated via the façade or passive transfer from adjacent spaces. If any specific areas are unable to be adequately ventilated or are likely to overheat these spaces will be served with local mechanical ventilation.

Where mechanical ventilation is provided this will be in the form of local heat recovery units as with the student room floors.

Latent heat will be recovered from the air removed from the extract air and used to temper the supply air.

PLANT AREAS AND BACK OF HOUSE GROUND FLOOR AREA

The plant room will be provided with a mechanical supply and extract system comprising duty/standby fire rated extract fans and a supplementary make-up supply fan.

Under normal conditions the duty supply and extract fans will operate to provide 3 air changes per hour within these spaces. Under 'fire mode' the duty/standby extract fans will operate at full speed to provide enhanced fire extraction requirements.

4.19 SUSTAINABILITY SUMMARY

The proposed development has been designed to achieve the highest of environmental performance standards following the Energy Hierarchy as set down by the London Plan and the London Borough of Haringey's relevant Policy documents.

Both the PBSA and the Commercial unit will be assessed against the BREEAM environmental standard. A pre-assessment has demonstrated that the development achieves BREEAM Very Good in accordance with Strategic Policy SP4.

A 'Lean, Clean, Green' approach to assessing energy and thermal comfort needs and appropriate solutions have been adopted following the guidance of The London Plan and the latest GLA guidance.

Based upon the BREEAM pre-assessment and the credit summary, the PBSA fully fitted scheme achieves a score of 57.1% and the Commercial Unit as a shell only a score of 59.46%. Both equates to "Very Good".

Following assessment of suitable renewable technologies, it has been concluded that the most appropriate solution would be the provision of a PV array at roof level and air source heating and heating/cooling for the student accommodation spaces. These on-site measures would, alongside carbon offset payments, satisfy both the London Plan and Haringey Strategic Policies and result in the development being zero carbon.

In addition, the development will be designed to facilitate a future District Energy Network (DEN) connection to achieve further improvements in energy performance.

Criteria	Multi-residential accommodation	Retail unit
Project scope	Fully Fitted	Shell Only
Building type (main description)	Residential institution – long term stay	Retail
Sub-group	Residential college or school (halls of residence)	Shop or shopping centre
Assessment stage	Design stage	Design stage
Building floor area (GIA)	1311.5m2	172.6m2
Building floor area (NIFA)	1311.5m2	172.6m2
Is the building designed to be untreated?	No	No
Building services - heating system type	Air System	None
Building services - cooling system type	Comfort Cooling	None
Does the building have external areas within the boundary of the assessed development?	Yes	Yes
Are commercial or industrial-sized refrigeration and storage systems specified?	No	No
Are building user lifts present?	Yes	No
Are building user escalators or moving walks present?	No	No
Are there any water demands present other than those assessed in Wat 01?	Yes	Yes
Are there statutory requirements, or other issues outside of the control of the project, which impact the ability to provide outdoor space	No	No
Are there any systems specified that contribute to the unregulated energy load?	Yes	N/A
Are the Post-occupancy evaluation credits targeted in Ene 01 issue?	No	No
Are laboratories present?	No	No
Are there fume cupboard(s) and/or other containment devices present?	No	No

FIGURE 128. BREEAM Pre-Assessment Scope Assumptions

4.20 FIRE STRATEGY SUMMARY

The fire statement report produced by OFR outlines the key principles of the fire strategy proposals to inform the design team during the planning application stage.

The principles given within the fire statement report seek the objective of demonstrating compliance with the London Plan 2021; that is, the statutory Spatial Development Strategy for Greater London prepared by the Mayor of London in accordance with the Greater London Authority Act 1999 (as amended) and associated regulations. It is to demonstrate compliance specifically with policies D5 and D12 of this document, and its aims are to support the planning application stage of the scheme; as such, the report has been developed to a commensurate level of detail.

The fire statement report is intended to be used for initial engagement with the local planning authority, i.e., London Borough of Haringey.

BASIS OF DESIGN

The fire statement has been developed to show how the relevant fire safety aspects in the design aim to address the requirements of Part B of the Building Regulations (as amended, 2022) that governs fire safety of building design. These requirements are segregated into distinct aspects of building design as follows:

- B1 – Means of warning and escape.
- B2 – Internal fire spread (linings).
- B3 – Internal fire spread (structure).
- B4 – External fire spread; and
- B5 – Access and facilities for the fire and rescue service.

The fire strategy is based upon the guidance given in BS 9991:2015 [5] for the residential areas, and BS 9999:2017 [6] for the independent commercial unit, and ancillary areas, as well as the standards referenced therein. Moreover, ADB has been considered and followed where applicable, which provides guidance above the standards of BS 9991:2015.

It should be noted that a draft BS 9991:2021 was released for comment in August 2021 and is currently under review by the BSI committee. This design follows the guidance of the current 2015 issue, however it includes enhancements such as evacuation lifts and enhanced ventilation provisions in preparation for the potential changes in the updated standard alongside other appropriate guidance as considered best practise.

As of 21 December 2018, the amendment to the Building Regulations 2010 and the associated changes to the Approved Document B (Fire Safety) and Regulation 7 (Workmanship and Materials) have come into effect.

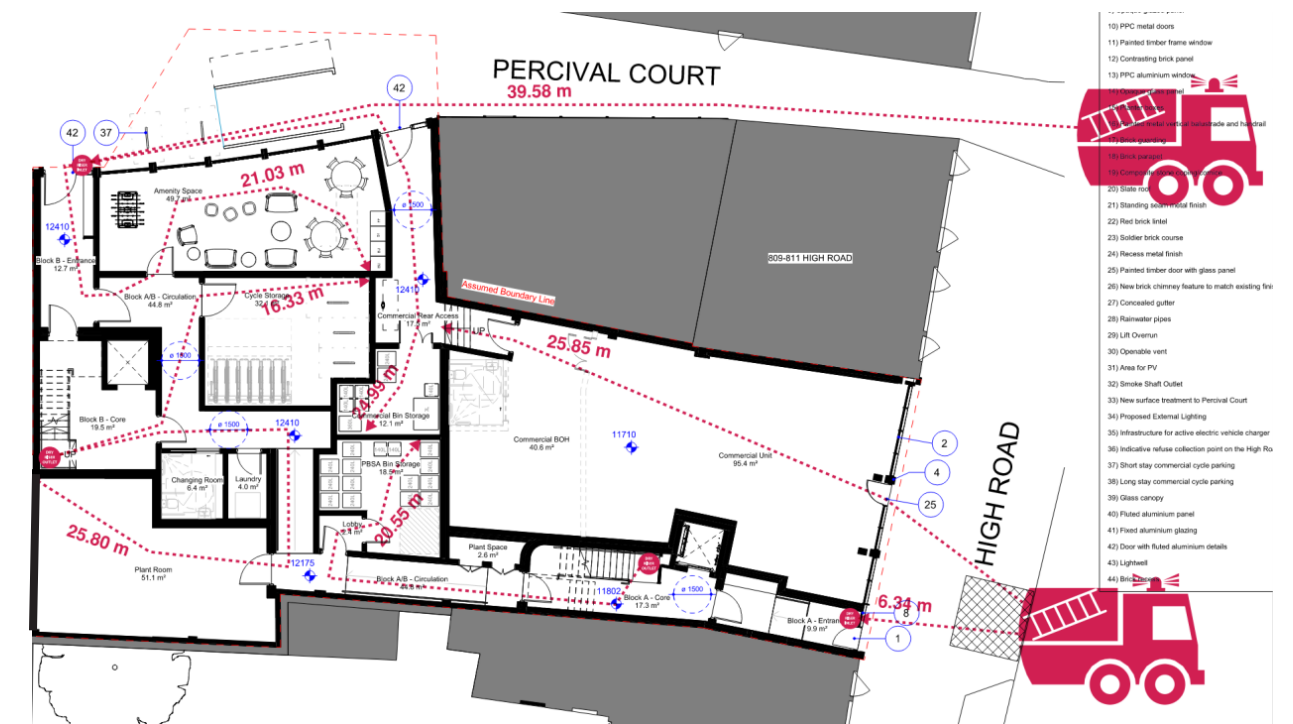


Figure 2: Fire Fighting Provisions on the Ground Floor

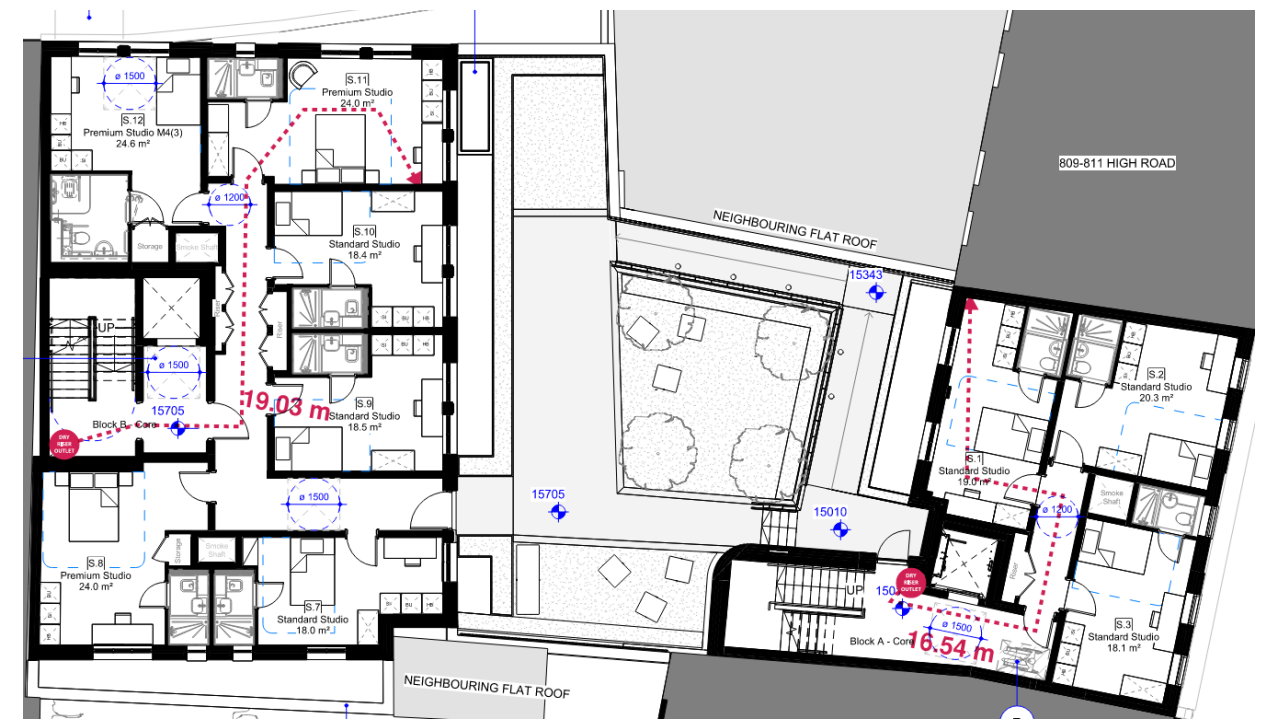


Figure 3: Fire Fighting Provisions on a Typical Floor

4.20 FIRE STRATEGY SUMMARY (CONTINUED)

Regulation 7 of the regulations has been amended to require that materials which are part of or within an external wall, balcony or similar must be non-combustible or of limited combustibility (this means European Class A2-s1, d0 or Class A1 when classified in accordance with BS EN 13501-1:2018).

The 807 High Road building is not a ‘relevant building’ as defined in Regulation 7(4) of The Building Regulations 2010 (as amended, 2022). However, OFR recommends that Regulation (7) is still respected to follow industry best practise.

It has been agreed upon by the design team that the external walls will be non-combustible, and any further external wall details are to be progressed throughout the remaining design stages while adhering to the recommendations within BS 9991:2015 and the requirements of Regulation 7, noting the relevant exemptions under Regulation 7(3).

SUMMARY OF PROPOSED FIRE STRATEGY

The below provides a tabulated summary of the fire strategy proposed for the development.

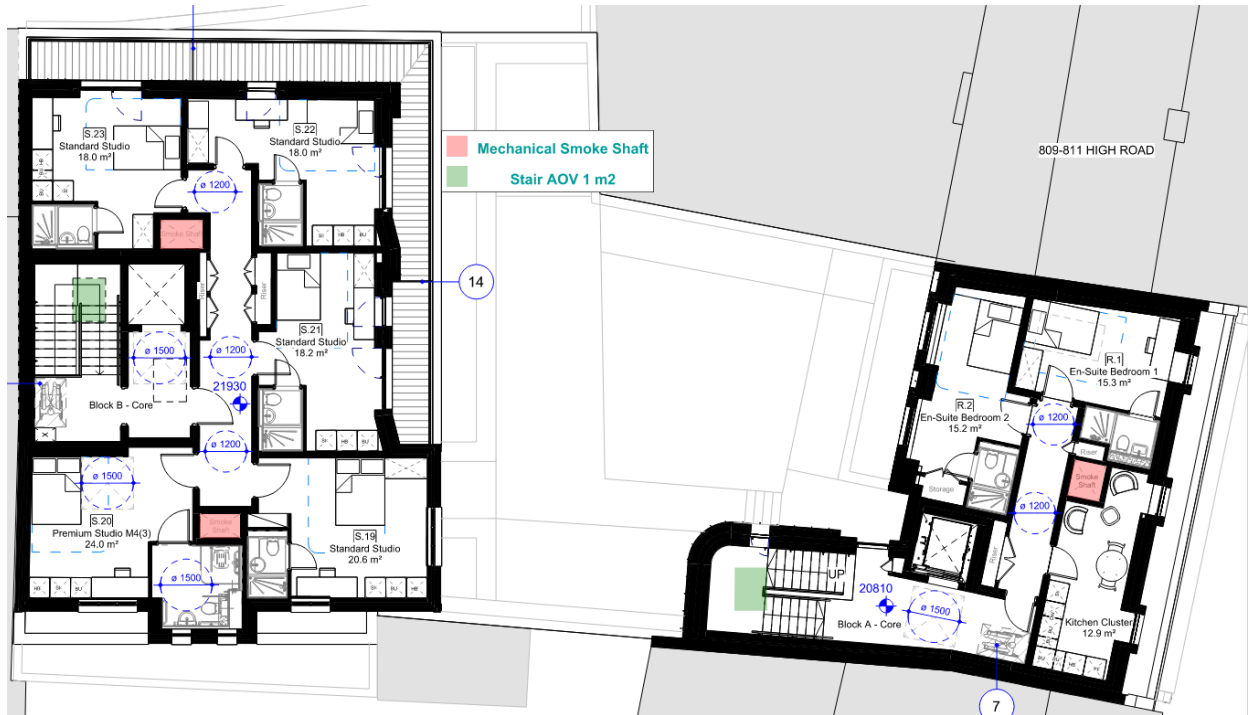


Figure 1: Smoke Ventilation Provisions on Typical Floor

Fire Safety Design Element	HR development		
Demise type	Residential.	Amenity and Ancillary.	Commercial.
Top-storey height	9.51 m.		
Evacuation Regime	‘Stay put’, whereby the occupants of the remaining apartments may evacuate if they choose to do so.	‘Simultaneous evacuation’, whereby all occupants evacuate immediately upon receiving an evacuation signal or instruction in the event of a fire.	‘Simultaneous evacuation’, independent of other areas.
Automatic Fire Detection and Alarm	Common corridors and cores – Category L5. Studio flats – Grade D1, Category LD1 Standard.	Category L2.	
Firefighting Provisions	2 cores, each fitted with an escape stair, a dry riser outlet, and smoke ventilation. Core A has an evacuation lift within the stair enclosure, and a ventilated common corridor. Core B has an evacuation lift within the stair enclosure, and a ventilated common corridor. Dry riser inlets are located next to the core entrances on the north and east elevations.	Dry riser outlets are provided at ground level within the stair cores, with access to all amenity and ancillary spaces. Some amenity/ancillary spaces can be accessed directly from the outside via the fire tender.	Firefighting done directly from the outside via the fire tender.
Evacuation Lifts	Provided to both cores. These should be designed for daily use. Core A’s evacuation lift is inside the stair core, meaning MIPs have a ventilated refuge point. Core B’s evacuation lift is inside the stair core, meaning MIPs have a ventilated refuge point. CFD analysis to be undertaken at next stage to support these arrangements.	Only ground floor – N/A.	
Smoke Venting	Common corridors - Block A: mechanical extract smoke shaft with a minimum free area of 1 m ² (this is over and above guidance recommendations); Block B: mechanical system, two shafts with a minimum free area of 1 m ² (this is over and above guidance recommendations). Cores - Automatic Opening Vent (AOV) with a minimum free area of 1 m ² at the top of the staircase that can be remotely operated. Final escape routes - protected from any accommodation by permanently or mechanically ventilated lobbies with a shaft with a minimum of 0.4 m ² .	Bin storage - approached via a protected lobby, with 0.2 m ² of permanent ventilation or a suitable mechanical alternative, which in turn is connected to a ventilated circulation lobby. All other ancillary accommodation should be separated from the protected cores / final escape routes by a protected lobby with no less than 0.4 m ² of permanent ventilation, or a suitable mechanical alternative.	None specified.
Structural Fire Resistance	60 minutes.		
Compartmentation	Construction common to the adjacent buildings.	60 minutes.	
	Protected shafts.		
	Walls separating different occupancies.		
	Compartment floors.		
	Construction separating student accommodation.		
	Bin stores.		
	Cycle stores.	30 minutes (upgraded to 60 if it contains high voltage equipment).	
	Plant rooms.	30 minutes.	
	Protected lobbies.	120 minutes.	
	Rooms containing life safety equipment.		
Protected route to sprinkler pump room.			
External Wall Requirements	All materials of the external walls, or a specified attachment, of the building are to be of European Class A2-s1, d0 or Class A1, and are to follow the requirements of Regulation (7)		
Fire Suppression	Category 3 sprinkler system, in accordance with BS 9251:2021.		

4.21 DAYLIGHT SUNLIGHT ASSESSMENT SUMMARY

Daylight and sunlight within the development have been assessed using the methodology in the Building Research Establishment guidelines (BRE 2022). As the massing has not changed materially from the consented scheme (HGY/2021/0441), the impacts on surrounding properties do not require reassessment.

DAYLIGHT

The following alternative median illuminance targets have been applied:

- 100 lux for bedrooms
- 150 lux for studios and a shared living/kitchen/dining space (3rd floor, Block A)
- 150 lux for communal indoor amenity space (ground floor, Block B)

The proposed building performs very well for daylight. All but one room meet the alternative targets and even in that room the study desk will be well lit (>200 lux).

SUNLIGHT

The building also performs well for sunlight. The number of single-aspect north-facing student rooms has been minimised to just three (one per floor) and a roof light brings sunlight into the communal indoor amenity space. The communal outdoor amenity area will also be well sunlit.

KEY

Median Illuminance (lux)

- ≥200
- ≥150
- ≥100
- ≥50
- <50



FIGURE 129. Ground Floor Plan



FIGURE 130. First Floor Plan



FIGURE 131. Second Floor Plan

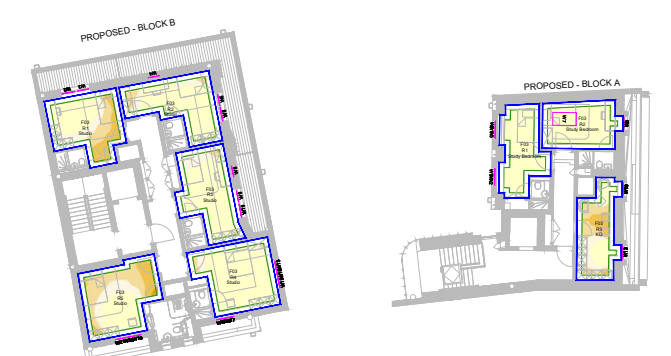


FIGURE 132. Third Floor Plan

4.22 NOISE IMPACT ASSESSMENT SUMMARY

A Noise Impact Assessment has been developed to assess the suitability of the property for use as student accommodation under the directions of planning policy document PPC24.

These measures include the noise level limitation of the plant noise and noise reduction for building structure and glazing.

The report highlight relatively high levels of noise affecting the frontage of Block A, overlooking High Road, and the southern facade of Block B, overlooking the pub beer garden. Therefore, the requirement for high-performance acoustic glazing to meet the criteria.

External plant is mainly roof-mounted and should be sufficiently remote from residential façades so as to be low impact. Internal plant on the ground floor is limited to small plant (e.g., pumps) and is unlikely to be audible in the closest studios above.

It is further considered that all noise-related issues could be successfully conditioned. The assessment suggests that the local council should be able to grant planning permission for the development under the current planning directives.

Affected façades (all levels)	Daytime dBL _{Aeq} (Criterion ≤35)	Night time dBL _{Aeq} / dB L _{Amax} (Criteria ≤30 / ≤45)		Indicative glazing performance (ventilation)** Studios / bedrooms
BLOCK A				
East façade	31	26	43	R _W +C _{tr} 40 (MV)
West façade	31	26	37	R _W +C _{tr} 25 (MV)
BLOCK B				
South façade (including returns*)	28	14	44	R _W +C _{tr} 40 (MV)
East façade (minus returns*)	28-32	18-22	38-43	R _W +C _{tr} 34 (MV)
North façade	32	27	38	R _W +C _{tr} 25 (MV)

FIGURE 134. Predicted internal noise levels and indicative glazing and ventilation recommendations

KEY

Glazing Specification

Rw+Ctr 40

Rw+Ctr 34

Rw+Ctr 25

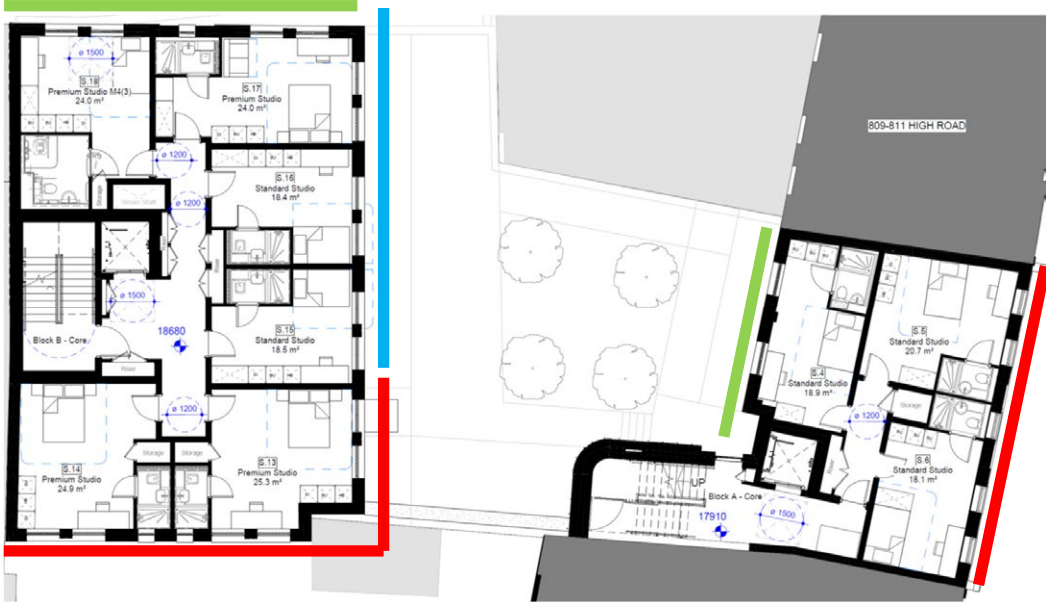


FIGURE 133. Facade identification and extent of proposed ventilation - All floors

807 HIGH ROAD

SECTION 5.0: CONCLUSION

The proposed development will provide a high quality, attractive and sustainable building, supplying student accommodation and high street commercial space. It will deliver positive improvements to the quality of the built environment in accordance with national, regional and local planning policy.

Guided by the HRW Masterplan, the development team has sought to ensure that proposed scheme is successful today within the existing context and can also be integrated easily into future neighbouring developments and contribute significantly for the wider benefit of the community.

The public benefits of the proposal include:

- Improvements to the street scene and public realm to the High Road and broader Conservation Area;
- Enhancement of the appearance, character and setting of the adjacent locally listed and nearby listed buildings;
- 25 units within the PBSA;
- Car free residential development;
- Achieving a minimum of BREEAM 'Very Good' for the commercial space and the residential development;
- Cycle parking in full accordance with London Plan;
- Approx. 182 sqm (GIA) of non-residential floor space (Class E) use;
- Safeguarding connection to the future Decentralised Energy Network (DEN).



