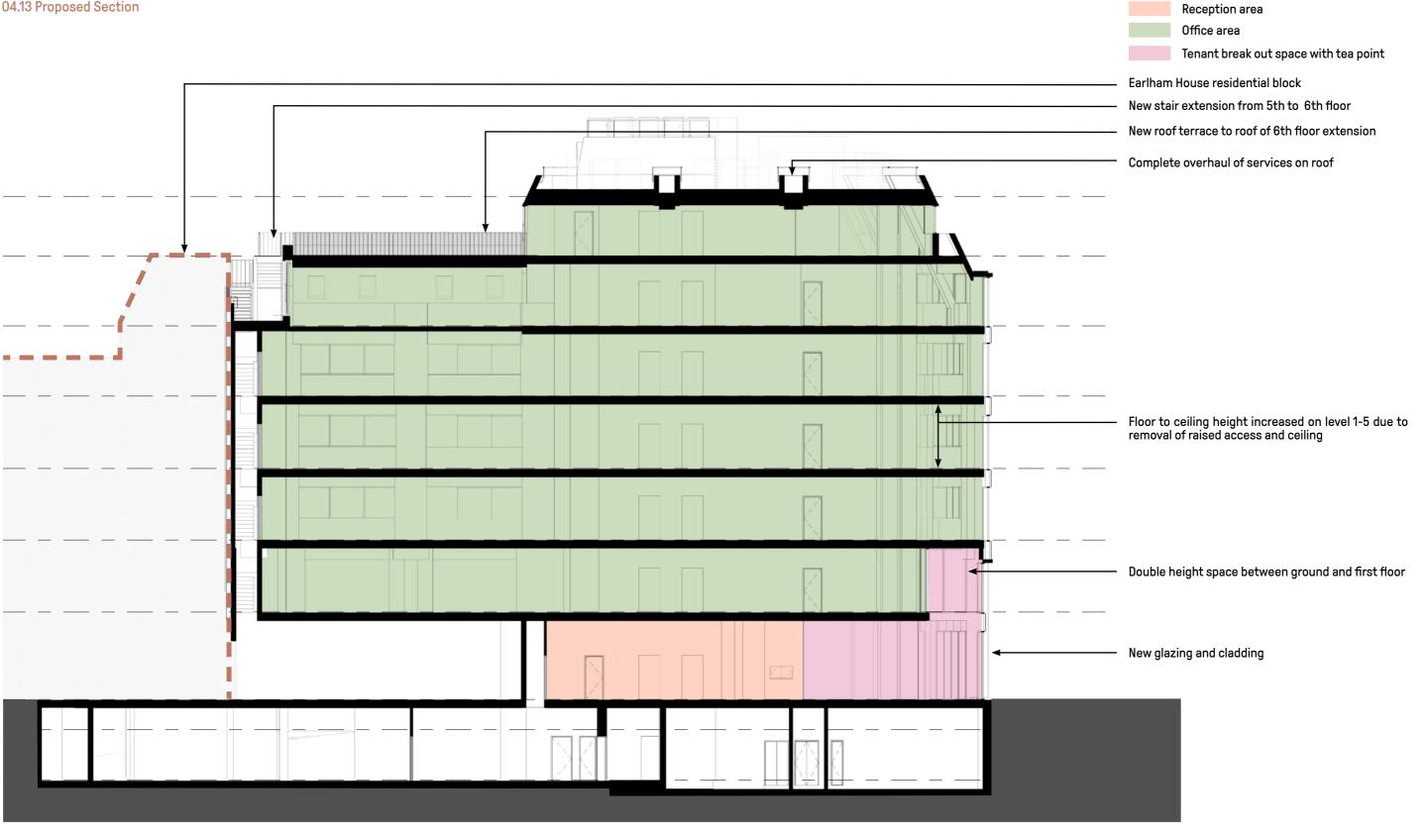
# Proposal O4.12 CGI





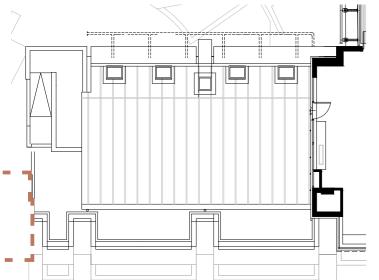


04.13 Proposed Section

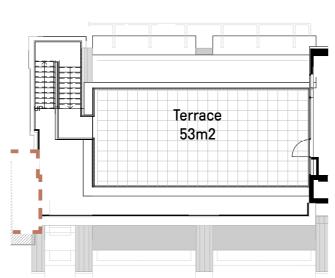




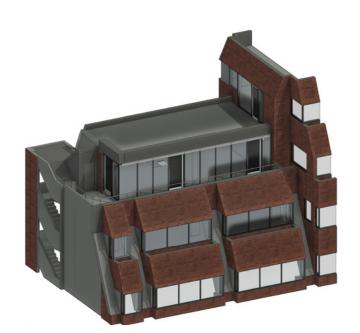
04.14 - 6th Floor Terrace



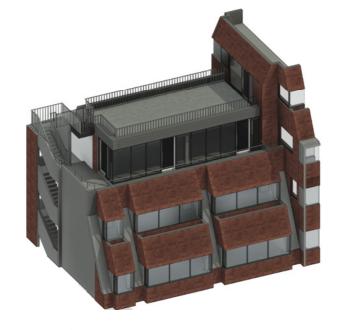




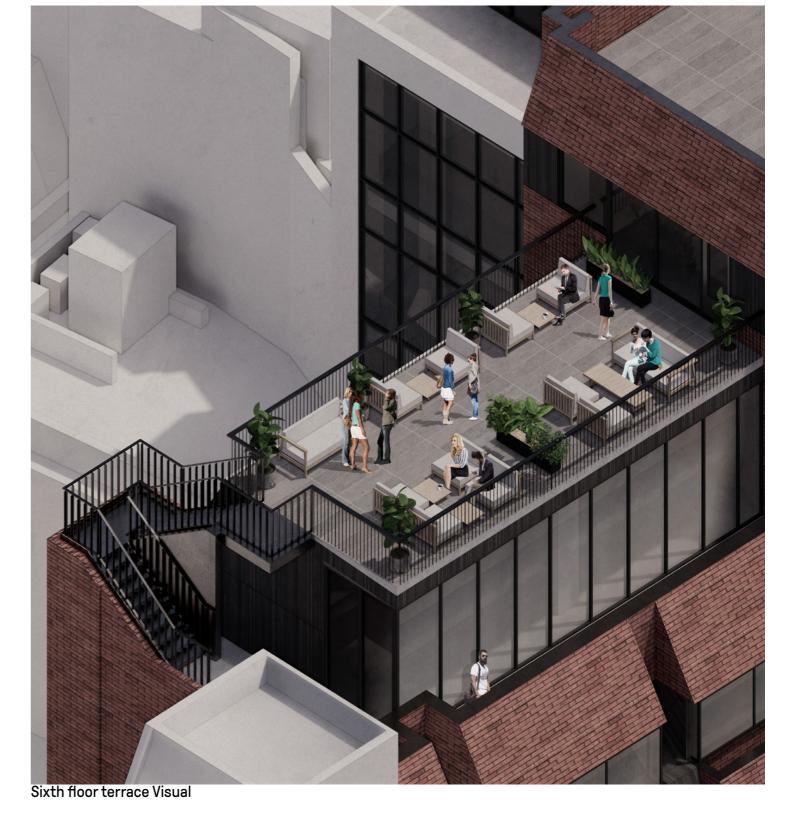
Proposed Sixth Floor Plan



Existing sixth floor



Proposed sixth floor terrace



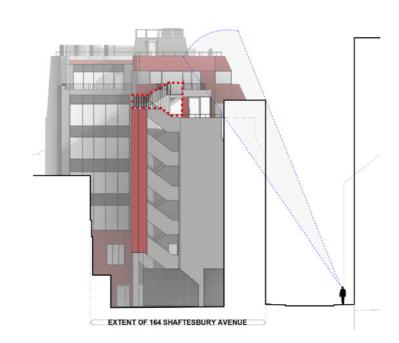


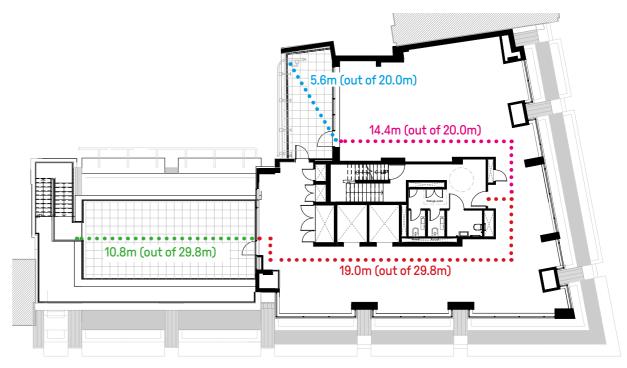
#### 04.15 - Secondary stair extension

The existing secondary staircase on the southern elevation of the building currently extends to Level 5.

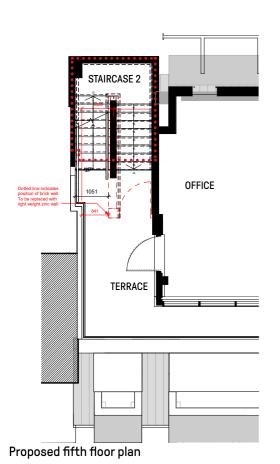
To provide two means of escape the existing second escape stair will be extended to allow access from the roof terrace. To minimize the visual impact of this extension a lightweight metal railing is proposed. Furthermore, the stair extension will not be visible from street level due to it being setback from the front of building.

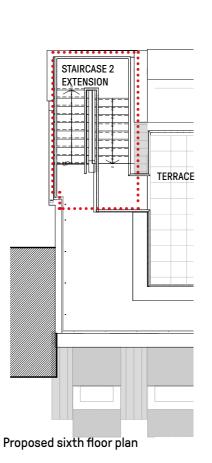
No roof structure is proposed to the staircase extension. Being a fire escape staircase and external, heat tracing will be integrated within the stair flight to ensure trip and slip hazards during adverse weather conditions (such as ice of the treads for example) are avoided.

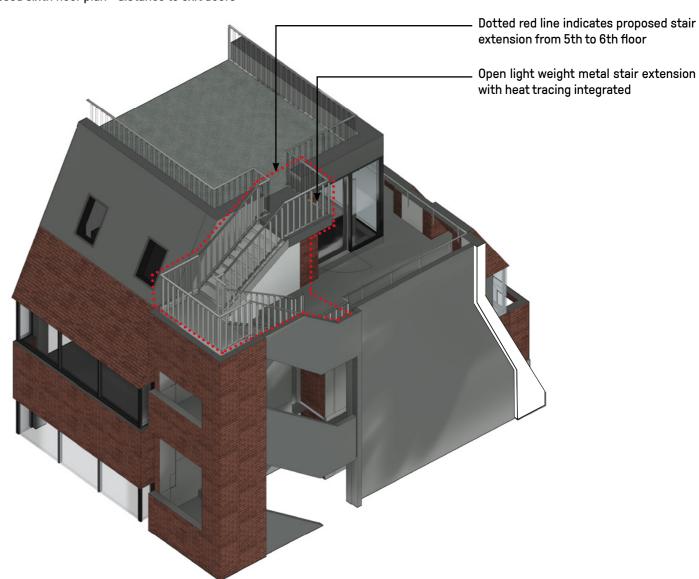




Proposed sixth floor plan - distance to exit doors







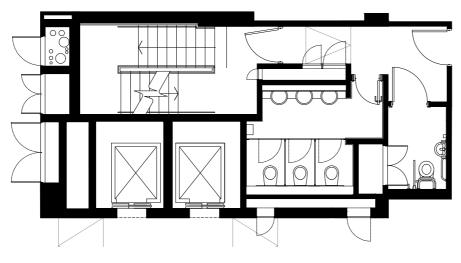


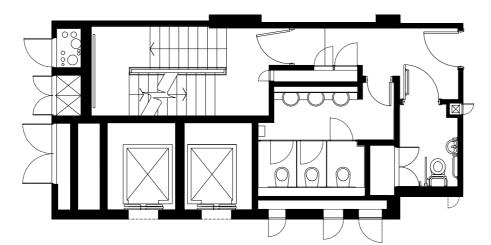
04.16 - Core re-design - Existing core

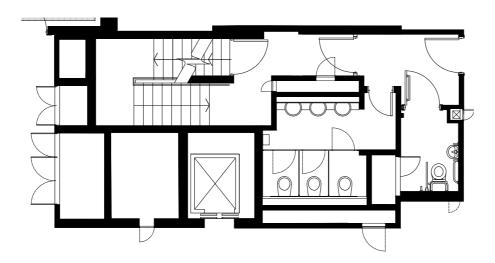
### Superloo Layout

### Number of existing W.C's per levels.

Currently the toilets are separate female and male on alternating levels. While this makes it efficient at each floor, it does not make it comfortable for its users. The washbasins are separate from the WC cubicles, resulting in a sequence of hallways and rooms within rooms.







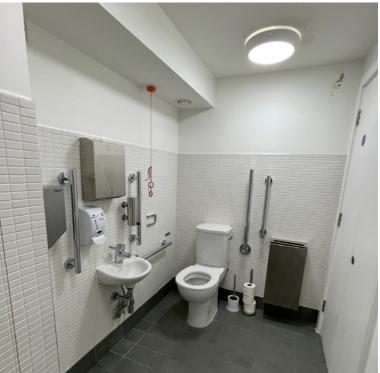
### WC layout - Typical level

Level 1 - 4: Disable W.C. = 4 no. W.C. with 3 no. units = 4 no.



### WC layout - Level 05

Level 5: Disable W.C. = 1 no. W.C. with 3 no. units = 1 no.



### WC layout - Level 06

Level 6: Disable W.C. = 1 no. W.C. with 3 no. units = 1 no.

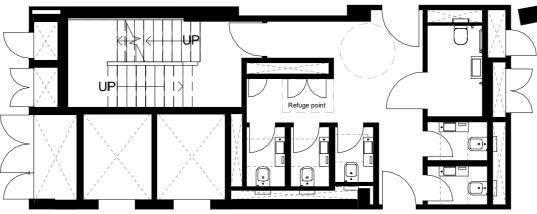


04.16 - Core re-design - Proposed core

### **Superioo EXECUTIVE**

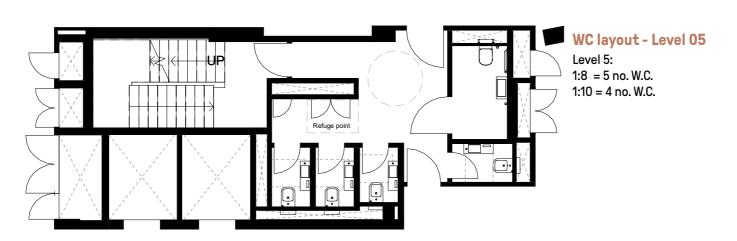
### Number of W.C's required based on occupancy density levels per sqm.

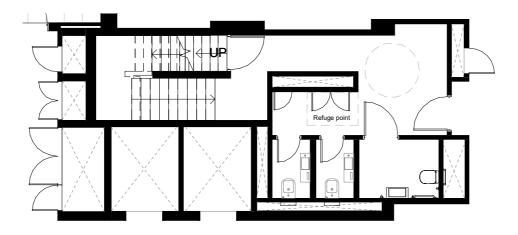
We propose to re-design the core in order to provide greater number of unisex wc and de-clutter the circulation spaces on office floor levels.



### WC layout - Typical level

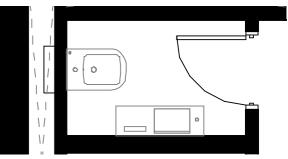
Level 1 - 4: 1:8 = 6 no. W.C. 1:10 = 5 no. W.C.



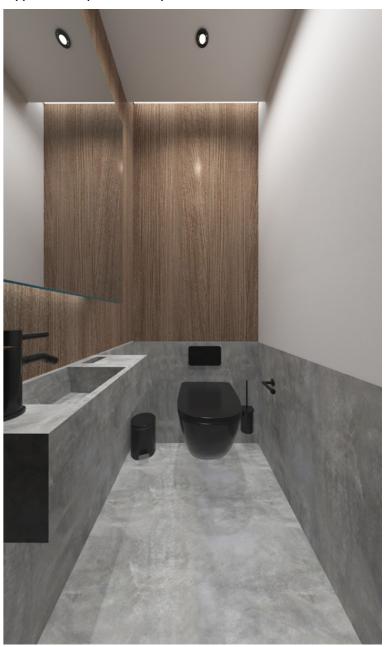


### WC layout - Level 06

Level 6: 1:8 = 4 no. W.C. 1:10 = 3 no. W.C.



Typical superloo layout

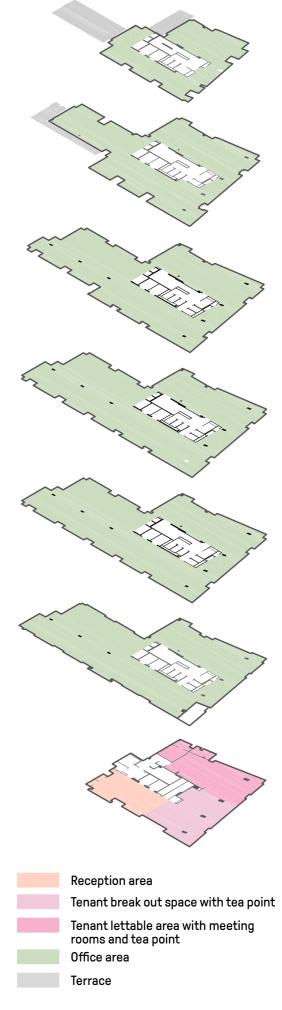


Typical superloo visual



04.17 - Area schedule

Floor Level	Existing Building GEA sqm	Proposed GEA sqm	Gain(+)/Los s(-) of GEA sam	Existing GIA sqm	Proposed GIA sqm	Gain(+)/Los s(-) of GIA sam	Existing NIA sqm	Proposed NIA sqm	Gain(+)/Loss(-) of NIA sqm	Existing External Space	d	Gain(+)/L oss(-) of External
Basement	880	880	0	800	800	0	Office 34	0	-34	0	0	0
Ground Floor	376	396	+20	354	382	+28		Tenanted Space 104	+104	0	0	0
Level 1	527	544	+17	481	486	+5	396	411	15		20	
Level 2	562	563	+1	511	511	0	440	436	-4			
Level 3	562	563	+1	511	511	0	436	434	-2			
Level 4	538	539	+1	489	485	-4	410	410	0			
Level 5	443	455	+12	405	421	16	340	345	5	18.8	24	+5.2
Level 6	270	270	+0	245	250	5	184	184	0	14	66	+52
Roof	35	35	+0	31	31	0						
Total	4193	4245	52	3827	3877	50	2240	2324	Gain 95	32.8	90	Gain 57.2





# 05 SUSTAINABILITY

### **Executive Summary**

This Sustainability Statement has been prepared by JLL's Net Zero Design team for Freshwater Group ('the Applicant'), to support a full planning application for the refurbishment of the existing building at 164 Shaftesbury Avenue, London, WC2H 8HL ('the Site'). 164 Shaftesbury Avenue is an existing building, which primarily accommodates office areas and comprises seven floors (including a basement).

The proposed scheme involves erection of two-storey infill extension at ground and first floor and single-storey extension at fifth floor on the corner of Shaftesbury Avenue and Mercer Street, external alterations including relocation of main entrance from Shaftesbury Avenue to Mercer Street, replacement gates on Mercer Street, replacement of three terraces fronting Mercer Street with one at fifth floor level, erection of new roof terrace at sixth floor level, and replacement glazing and cladding at ground to fifth floor levels, and overhaul of building services including a new lift overrun and replacement and installation of plant.

Sustainability is embedded in the design proposals for the refurbishment of 164 Shaftsbury Avenue since the early stages of the project and it will continue to drive the design and construction, to deliver a highly sustainable development.

This Sustainability Statement presents the key elements of the

sustainability strategy developed for the proposed refurbishment, in response to the national, regional and local planning policy requirements related to environmental sustainability.

The proposed Sustainability Strategy involves design and construction measures covering the following themes:

- Energy and CO2 emissions
- Water
- Sustainable materials
- Transport
- Circular economy and waste management
- Pollution
- Health and wellbeing,
- Ecology & biodiversity
- Adaptation to climate change
- Sustainable design and construction management

The proposed refurbishment is also assessment under the BREEAM Refurbishment and Fit-Out (R&FO) 2014 scheme, with the aim to achieve a BREEAM Excellent rating.

The project team reviewed the BREEAM requirements during a dedicated pre-assessment workshop and concluded that the proposed development is able to achieve a BREEAM Excellent rating, in line with the planning policy requirements of Camden's Local Plan. The BREEAM pre-assessment will be included in Appendix A and provided a detailed breakdown of the targeted credits and score.



### Sustainability

05.01 - Sustainability strategy

### **Summary of Targets and Objectives**

The key targets and objectives of the proposed sustainability strategy are summarised below:

#### BREEAM

164 Shaftesbury Avenue aims to achieve a BREEAM Excellent rating, being assessed under the BREEAM UK Non-Domestic Refurbishment and Fit-Out (RFO) 2014 scheme.



The proposed refurbishment will combine energy efficiency measures and low and zero carbon (LZC) technologies to:

- reduce CO2 emissions following the Camden Planning Guidance, following the energy hierarchy.
- provide an all-electric solution with no fossil fuels used onsite.
- incorporate renewable energy technologies.

#### Sustainable Materials

The proposed design will aim to:

- promote circular economy and resource efficiency.
- prioritise materials that have low embodied carbon, including those that can be reused or recycled.
- prioritise sustainably sourced materials.
- use legally harvested and traded timber and timber-based products.
- prioritise durable materials and healthy materials (e.g., low VOC emitting materials).

#### Water and Surface Water Run-off

The proposed refurbishment will aim to:

- reduce potable water consumption, through the specification of efficient water fittings and achieving the BREEAM Excellent standard for the 'Wat 01' water category.
- incorporate water meters and sub-meters to enable monitoring and efficient control of the building's water demand.
- incorporate water leak detection and flow control devices to reduce water consumption.
- explore the feasibility of incorporating a blue roof.

### Health and Well-being

The proposed design will be occupant-centric, and it will aim to:

- incorporate design measures to provide a secure, inclusive, and accessible space.
- maximise daylight levels in the main occupied spaces of the building.

- provide thermal comfort and avoid overheating risk in line with the cooling hierarchy.
- provide visual and acoustic comfort to the building occupants.
- incorporate materials that do not emit toxins to the internal or external environment.
- provide high air quality levels contribute to improved air quality for the surrounding area.

### **Transport**

The proposed scheme will aim to support sustainable means of transport by:

- providing secure and accessible cycle storage in line with the standards set by Camden Local Plan.
- being located in a central location and in close proximity to public transport.

### Pollution

The proposed refurbishment will incorporate measures to:

- minimise the generation of air pollution and prevent increased exposure to poor air quality.
- minimise air pollution during construction.
- design against noise to reduce the need for mitigation measures
- reduce night-time light pollution.

#### (F) Ecolog

The proposed design will aim to:

- Maintain and enhance the ecological value of the site as a result of the development, following the recommendations of the ecologist.
- Incorporate planting and soft landscaping elements.
- Provide bird boxes to enable nesting.

#### Adaptation to climate change

The Development will incorporate measures to adapt to climate change in line with Policy CC2, of Camden Local Plan:

- Green spaces: The proposed design will aim to incorporate greenery, to enhance the ecology of the site, where feasible, due to space limitations related with the refurbishment of the existing building.
- Surface water run-off: The proposed scheme does not increase the area of impermeable surfaces. The feasibility of incorporating a blue roof will be explored.
- Overheating risk and urban heat island effect: The design will aim to minimise the risk of overheating, following the cooling hierarchy. The scheme, which involves the refurbishment of an existing building does not contribute to additional hardstanding areas in the local building environment (the footprint of the existing built is unchanged).

### Sustainable Design and Construction Management

The proposed refurbishment will incorporate the following measures:

- Stakeholder Consultation: The relevant project key stakeholders have been involved in the design process, providing feedback on designing and delivering a sustainable, functional and accessible development.
- Sustainability Implementation Plan: JLL have been appointed as the sustainability advisors, to set performance targets for the proposed scheme, provide advice to the design team and monitor progress, during the design and construction phase of the project.
- Environmental Management System: The principal contractor will operate an environmental management system (EMS).

  They will also be required to implement best practice pollution prevention policies and procedures on-site.
- Building User Guide and occupants' training: A building user guide (BUG) will be prepared prior to handover for distribution to the technical and non-technical building users, including the occupiers and managers. A training schedule will be prepared for building occupiers and managers, timed appropriately around handover.

The relevant project members will ensure that materials are sourced in a responsible way and have low embodied impact over their lives. Moreover, good design and construction practices will be encouraged, including material reuse, reduction of the waste arising from refurbishment works and through efficient operation of the building.

The design will also ensure prevention and control of the pollution associated with the building's location and use by significantly reducing the current impacts of light-pollution, noise, and NOx emissions on the occupants.

The development will also encourage habitat protection and creation, improving and managing the site's long-term biodiversity.

The scheme will achieve a BREEAM 'Excellent' rating and has the potential to provide a benchmark for a sustainable refurbished development that can exceed current policy requirements and is scalable throughout the UK.



