# 05 The Proposed Development

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## Introduction

**5.1** This chapter describes the Proposed Development including the design, application site layout and access, as informed by the Design and Access Statement (Ref 5-1).

**5.2** The alternatives considered and a description of how the design of the Proposed Development has evolved is provided in ***Chapter 4: Alternatives and Design Evolution***. Details of the proposed construction programme are provided in ***Chapter 6: Construction***.

## Overview

**5.3** The Proposed Development comprises one building of eight storeys which will be built directly above the Crossrail Fisher Street head house constructed as part of the Crossrail works. It will comprise 22 residential units (5 x 1-bed; 14 x 2-bed; 2 x 3-bed and 1 x 4-bed) which include the following:

- Two wheelchair accessible apartments;
- Two duplex apartments with private terrace gardens;
- One roof-top duplex penthouse with a private terrace;
- An entrance lobby area;
- A bin store;
- A covered bicycle storage unit at ground floor level with a new garden terrace on the level above, adjacent to the rear of 8-10 Southampton Row; and
- An electricity sub-station with access via Catton Street.

**5.4** The height of the top storey will be 157.5m above the Crossrail datum level. The ground level is 125.27m above the Crossrail datum level. A single staircase and two lifts will provide access to the upper floors.

**5.5** The Proposed Development will sit immediately above the intervention shaft serving the Crossrail tunnels and its head house, with the ground floor entrance separate from the head house entrance. The building will be bordered by the Grade II listed building 8-10 Southampton Row to the west and the UK Power Networks (UKPN) electricity substation to the east.

**5.6** The main entrance to the Proposed Development for residents and a separate entrance to a bicycle storage area will be from Fisher Street. Access to the internal waste bin store will be from Catton Street.

**5.7** Independent accesses are provided to both the Crossrail head house and the electricity substation with access via Catton Street.

**5.8** The Gross External Area (GEA) of the Proposed Development is 2839.2 square metres ($m^2$). The area schedule which shows the breakdown by level is given in Table 5-1.

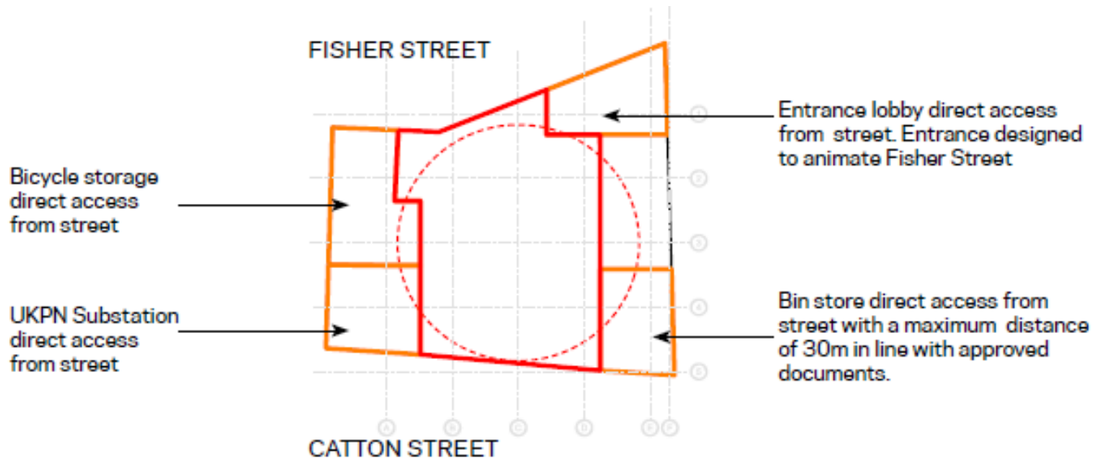
**Table 5-1 Summary Area Schedule of the Proposed Development**

| Level | Gross External Area (GEA) $m^2$ | Gross Internal Area (GIA ) $m^2$ |
|---|---|---|
| 0 (head house excluded) | 252.7 | - |
| 1 | 427.2 | 265.2 |
| 2 | 406.8 | 290.1 |
| 3 | 374 | 273 |
| 4 | 359.2 | 261 |
| 5 | 341.1 | 248.4 |
| 6 | 300.9 | 212.2 |
| 7 | 270.4 | 204.1 |
| 8 | 106.9 | 60.2 |
| **Total** | **2839.2** | **1814.2** |

**5.9** The Proposed Development has been designed to be 'car free' and therefore does not have any parking provision. However, a bicycle storage unit is provided at ground floor level, with a garden terrace on the level above. The bicycle storage unit is located between the main building and the rear of 8-10 Southampton Row and will be designed to accommodate 48 bicycles.

**5.10** A plan section of the Proposed Development showing the main access points is provided in Figure 5-1.

**Figure 5-1 Plan view of the Proposed Development showing Access Points**




**5.11** Figure 5-2 shows a section through the Proposed Development, highlighting the relationship to the Crossrail intervention shaft, head house and adjacent Grade II listed 8-10 Southampton Row.

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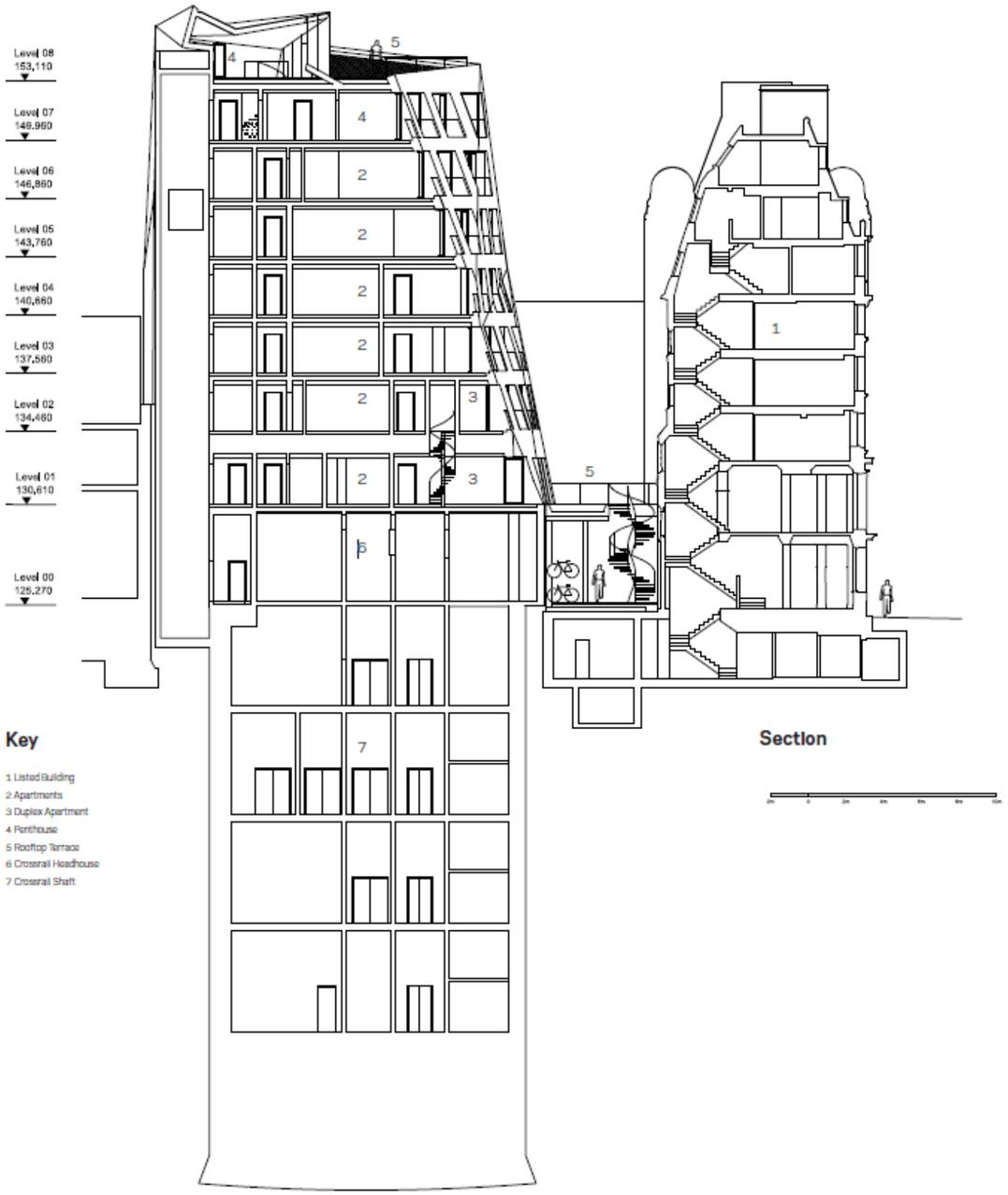
**Figure 5-2 East-West Section through the Proposed Development (Not to Scale)**




## Existing Application Site Environment

**5.12** The existing application site is currently under development for the Crossrail Fisher Street intervention shaft and head house. Prior to construction of the Proposed Development (anticipated for the purposes of this EIA to be 2015), the application site will be occupied by the completed head house and intervention shaft. Visual screening will be erected which has the same cladding as the head house to prevent the general public from accessing the areas either side of the head house.

**5.13** The surrounding buildings on Drake Street, Proctor Street and Southampton Row generally comprise medium rise office and commercial development, along with some residential units. These buildings are of a similar scale to the Proposed Development, most rising to between six and nine storeys.

**5.14** The application site is well served by public transport services and has a Public Transport Accessibility Level (PTAL) rating of 6b, and therefore has 'excellent' public transport accessibility. The application site is well served by London Underground Limited (LUL) public transport services as the application site is situated approximately 100m (2 minutes' walk) to the north of Holborn Station which provides Central Line and Piccadilly Line services.

**5.15** The application site is also served by LUL services from Tottenham Court Road Station, which is within approximately 10 minutes' walk from the application site and provides Northern Line services.

**5.16** Frequent bus service run along Procter Street, High Holborn and Southampton Row. There are 23 bus routes within the vicinity of the application site, all of which are within ten minutes' walk from the application site. In addition, Barclays Cycle Hire points are also available within walking distance of the application site.

**5.17** The application site is situated in a location where walking provides a convenient transfer mode if the main mode of travel is either by London Underground or bus.

**5.18** Further details on the transport context are provided in the Transport Statement which accompanies this planning application.

## Proposed Development Layout and Arrangement

### *Basement*

**5.19** The Proposed Development will be built directly above the Fisher Street head house and intervention shaft. As such, there will be no scope to incorporate basement levels.

### *Ground Level (Head House)*

**5.20** The Fisher Street head house will form the ground floor of the Proposed Development. The ground floor will include the entrance lobby to the residential apartments (off Fisher Street), access to the bicycle storage area as well as access to the waste bin storage area (off Catton Street) and independent accesses to the Crossrail head house and the electricity substation.

**5.21** Figure 5-3 shows the ground floor plan including the Crossrail head house and building access points.

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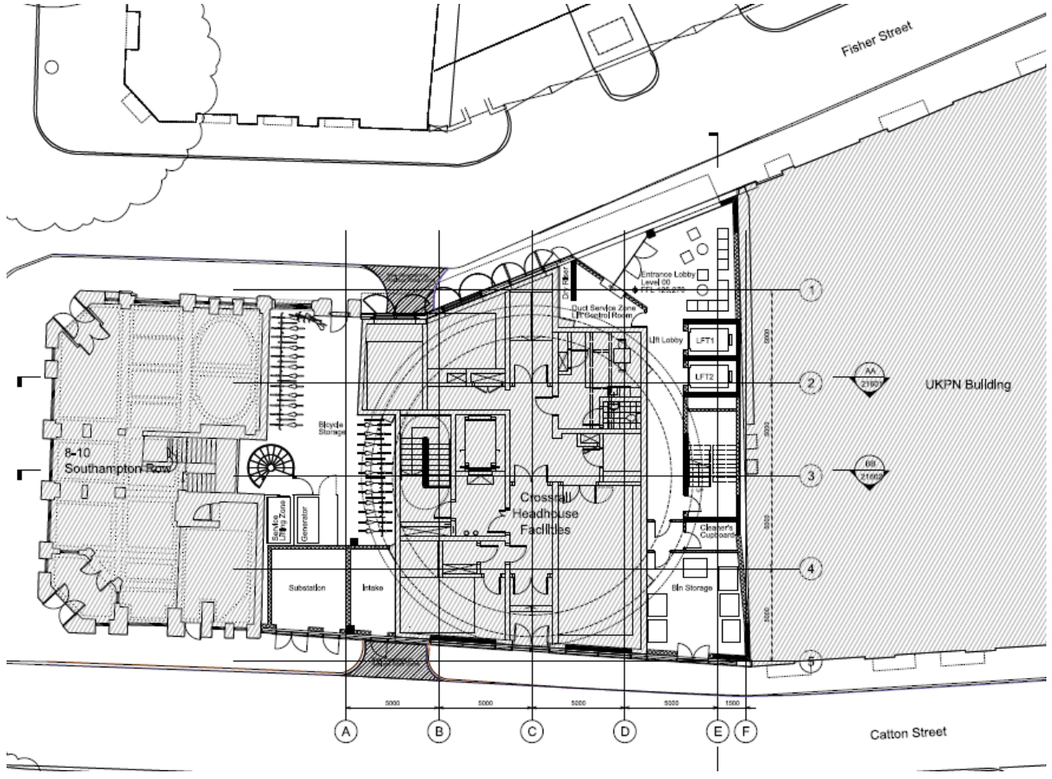
**Figure 5-3 Ground Floor Plan (Head House – excluded from Proposed Development)**




### *Levels 1 – 8*

**5.22** The Proposed Development comprises residential accommodation, providing 22 individual residential units. These 22 units comprise of one, two, three and four bedroom apartments with balconies or balconets, including two duplex apartments at first floor level and one duplex penthouse at rooftop.

**5.23** The upper levels contain a majority of two bedroom units and on the top levels is a penthouse apartment which is split over levels seven and eight. A breakdown of accommodation units by level is provided in Table 5.2.

**Table 5-2 Breakdown of accommodation units by level**

| Level | One Bedroom | Two Bedroom | Three Bedroom | Four Bedroom | Total Units |
|---|---|---|---|---|---|
| 0 | - | - | - | - | - |
| 1 | 1 | 1 | 2* | | 4 |
| 2 | | 2 | | | 2 |
| 3 | 2 | 2 | | | 4 |
| 4 | 2 | 2 | | | 4 |
| 5 | | 3 | | | 3 |
| 6 | | 3 | | | 3 |
| 7 | | 1 | | 1** | 2 |
| 8 | | | | | 0 |
| **TOTAL** | **5** | **14** | **2** | **1** | **22** |

** Two Duplex apartments over Levels 1 and 2*

*** One Penthouse apartment over levels 7 and 8*

### *Roof*

**5.24** The roof is accessible from one roof top penthouse (split over two floors) with a private terrace. The roof top terrace will introduce landscaping works which are described fully later in this chapter.

## Access

**5.25** The main entrance to the Proposed Development is restricted in size due to the electricity substation building to the east of the application site and 8-10 Southampton Row to the west. As such, only one entrance for residents can be accommodated from Fisher Street. It is envisaged that this entrance will form a feature of the building and provide potential for animation of the streetscape, improving the pedestrian environment between Southampton Row and Red Lion Square.

**5.26** Direct access to the bicycle storage area will be provided from Fisher Street. Access to the waste bin store is provided from Catton Street.

### *Parking*

**5.27** No residents parking will be provided as part of the Proposed Development.

### *Cyclists*

**5.28** The bicycle store will be accessible from Fisher Street and will provide secure storage for 48 bicycles..

### *Disabled Facilities*

**5.29** Two one bed apartments on the third level have been designed to accommodate wheelchair users.

## Façade Treatment

**5.30** The façade of the proposed building will be covered in copper alloy shingles which will be gold to bronze in colour. The ground floor façade will accommodate louvered panels for ventilation of both the Crossrail head house and the Proposed Development, which will be of powder coated galvanised steel and coloured to a dark grey colour. Remaining panels will be cladded in Portland limestone to suit the neighbouring listed building.

**5.31** The main entrance security door will be a single swing glazed double slim-frame door. Infill panels will be of laminated glass and incorporate emergency pass doors to both sides. The doors to the waste bin store and electricity substation access will be constructed of steel with ventilation louvres.

**5.32** Balconies will include stainless steel railings with glazed infill panels, fixed to horizontal steel supports on the walls of the building.

**5.33** The remainder of the building will comprise of windows set at differing angles. Windows will be triple glazed with anodised aluminium frames.

## Landscape and Public Realm Works

**5.34** The Proposed Development does not provide any hard landscaping in the public domain due to the application site constraints. Therefore, the only opportunities for landscaping will be at the first floor and roof levels as part of the private terrace. At the time of writing, the landscape proposals are indicative and will be finalised at a later stage in consultation with the LBC.

### *First Floor Terrace*

**5.35** The first floor terrace will be an outdoor space for use by residents of the two duplex apartments which are on the first floor and west side of the Proposed Development. The terrace will be sited between the existing building at 8-10 Southampton Row and the Proposed Development.

**5.36** Areas of hard paving and / or timber decking will be used for walkways, with the integration of planter features which will contain low maintenance perennial plants which are able to survive in limited levels of daylight.

### *Roof Top Terrace*

**5.37** There is an opportunity at roof level to introduce some soft landscaping which will be able to encourage some biodiversity. The Proposed Development will include, on the roof top terrace which is accessible to the penthouse apartment residents, native planting of the local flora and fauna or a specific ecosystem. Drainage systems could be used to retain water, thus enabling the plants to survive during periods of drought.

**5.38** Due to the functional requirements of the Proposed Development, raised planters approximately 900mm in height will be used for the planting. This will also allow for the integration of the vents for service pipes as part of the design of the terrace.

### *Public Realm*

**5.39** The Proposed Development will aim to improve the public realm via the improvement of the connection from Procter Street and Red Lion Square to Southampton Row and Sicilian Avenue (as illustrated in Figure 4-6). The general appearance and design of the building is intended to improve the local streetscape and increase the attractiveness of Fisher Street as a connecting pedestrian route.

## Surface Water Drainage

**5.40** Rainwater from the roof will be captured in gutters which will be internally positioned at the roof finish level. These will drain surface water via down pipes to the levels below in the common risers. The water will then be discharged into rainwater harvesting tanks located in the bin store at ground floor level. The tanks will be positioned at high level. Rain water on the main facades of the proposed building will be guided via channels designed into the cladding to allow rain water to be diverted away from the balcony openings. The water running on to the first floor terrace will be stored in reservoir boards to hydrate planting options. (Ref 5-2).

## Sustainability and Energy Use

**5.41** A Sustainability Statement and Energy Statement have been submitted as part of the planning application (Ref. 5-3 and Ref. 5-4 respectively).

**5.42** The proposed development is predicted to achieve a Code for Sustainable Homes Level 4, achieving a pre-assessment rating of 71.29% (Ref 5-3). The application of the Code for Sustainable Homes assessment tool, throughout the design process, will inform the proposed development so that sustainable solutions can be implemented. Materials will be chosen with reference to the Green Guide to specification and a construction management plan will be implemented which will have a strategy for dealing with waste material using the WRAP Quick Wins assessment (Ref 5-1).

**5.43** The analysis within the Energy Statement identified Ground Source Heat Pumps (GSHP) as the preferred Low and Zero Carbon (LZC) technology option recommended for the Proposed Development. This is because it is technically feasible, it meets the key Code for Sustainable Homes requirements and reduces $CO_2$ emissions to a greater extent than Air Source Heat Pumps (ASHP).

**5.44** However, the inclusion of GSHP within the Proposed Development only results in just over a 15% reduction in $CO_2$ emissions for the development from the inclusion of LZC technologies. This falls short of the 20% $CO_2$ reduction target set out by LBC. GSHP is a low emission heat technology and this is only able to address the smallest portion of the overall emissions. In addition GSHP's are not able to serve the unregulated energy consumption. As a result, low emission heat technologies such as heat pumps are unlikely to be able to meet the 20% LZC reduction required by LBC.

**5.45** The Energy Statement concludes that the 20% LBC target cannot feasibly be achieved, but that Code for Sustainable Homes Level 4 will be achieved giving the best possible outcome from the Proposed Development given the site constraints. It recommends that the GSHP solution (in conjunction with gas boilers) is adopted for the Proposed Development.

## Waste

**5.46** A dedicated secure bin store area is provided in the ground level of the Proposed Development, which is of sufficient size to house five 1280 litre Eurobins. The kitchen area or each apartment will be provided with internal storage space for mixed recyclables (30 litre bin) and organic kitchen waste (7 litre kitchen caddy) which meets the criteria for the LBC recyclable household waste collection scheme.

**5.47** A description of the waste requirements, estimated quantities, storage and collection associated with the proposed development is given in ***Chapter 9: Waste and Recycling*** of this ES.

## References


Ref. 5-1 HOK (2012); Fisher Street OSD Design and Access Statement

Ref. 5-2 Jacobs (2012); Fisher Street Oversite Development Stage C Report

Ref. 5-3 Jacobs (2012); Fisher Street Oversite Development Sustainability Statement

Ref. 5-4 Jacobs (2012); Fisher Street Oversite Development Energy Statement & Low and Zero Carbon Technology Study