

Design & Access Statement

52 Coldharbour Lane, Hayes, UB3 3EP, UK.

Change of use of first floor from tuition centre/offices to 2 x 2 bed and 3 x 1 bed self contained flats, including addition of a second floor, a first floor side extension, balconies to rear, new external stairs, refusal and recycle storage, bicycle parking and widening of crossovers.

April 2023

ARRIGONI
ARCHITECTS

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1. Introduction

1.1 Purpose of this document

This document has been prepared by Arrigoni Architects on behalf of the Applicant in support of a full planning application for the change of use of first floor from tuition centre/offices to 2 x2-bed and 3 x1-bed self contained flats, including:

- Addition of a second floor;
- First floor side extension;
- Balconies to rear;
- New external stairs;
- Refusal and recycle storage;
- Bicycle parking; and
- Widening of crossovers.

The application site is located ar 52 Coldharbour Lane, Hayes, UP3 3EP, UK.

The proposed development aims to deliver a building with a very high level of architectural ambition, providing 5 new flexible dwellings to accomodate the needs of a wide variety of residents.

Arrigoni Architects is keen to proactively work with the London Borough of Hillingdon to secure a high-quality design in harmony with the local character.



1.

1. Collage drawing showing the proposed west elevation.



1.

1.2 Arrigoni Architects

Arrigoni Architects is an East-London-based practice founded by Enrico Arrigoni. Since its foundation in 2015, Arrigoni Architects has been practising architecture that is grounded in history and dedicated to the conciliation between contemporary and historical architectural languages.

The practice's commitment to creating harmonious and long-lasting spaces is aligned with the concern for the environmental, socio and economic aspects of sustainability in architecture. This working ethos motivates the office to create designs that are cost-effective, accessible, energy-efficient and beautiful.

In 2021, Arrigoni Architects has been selected for the Architecture Foundation publication, 'New Architects 4', which features the work of 109 emerging and talented British practices working across architecture, urban design, public space and related areas. The selection was made by an expert jury comprising some of Britain's most prominent architecture critics.

1. New Architects 4 by the Architecture Foundation. Arrigoni Architects' contribution at pages 78-83.

2. Application site

2.1 Site description and existing use

The site comprises a two-storey detached property sitting at the south side of Coldharbour Lane in Hayes Town centre, a vibrating environment characterised by mixed use offices, restaurants, retail units, light engineering units and residential properties.

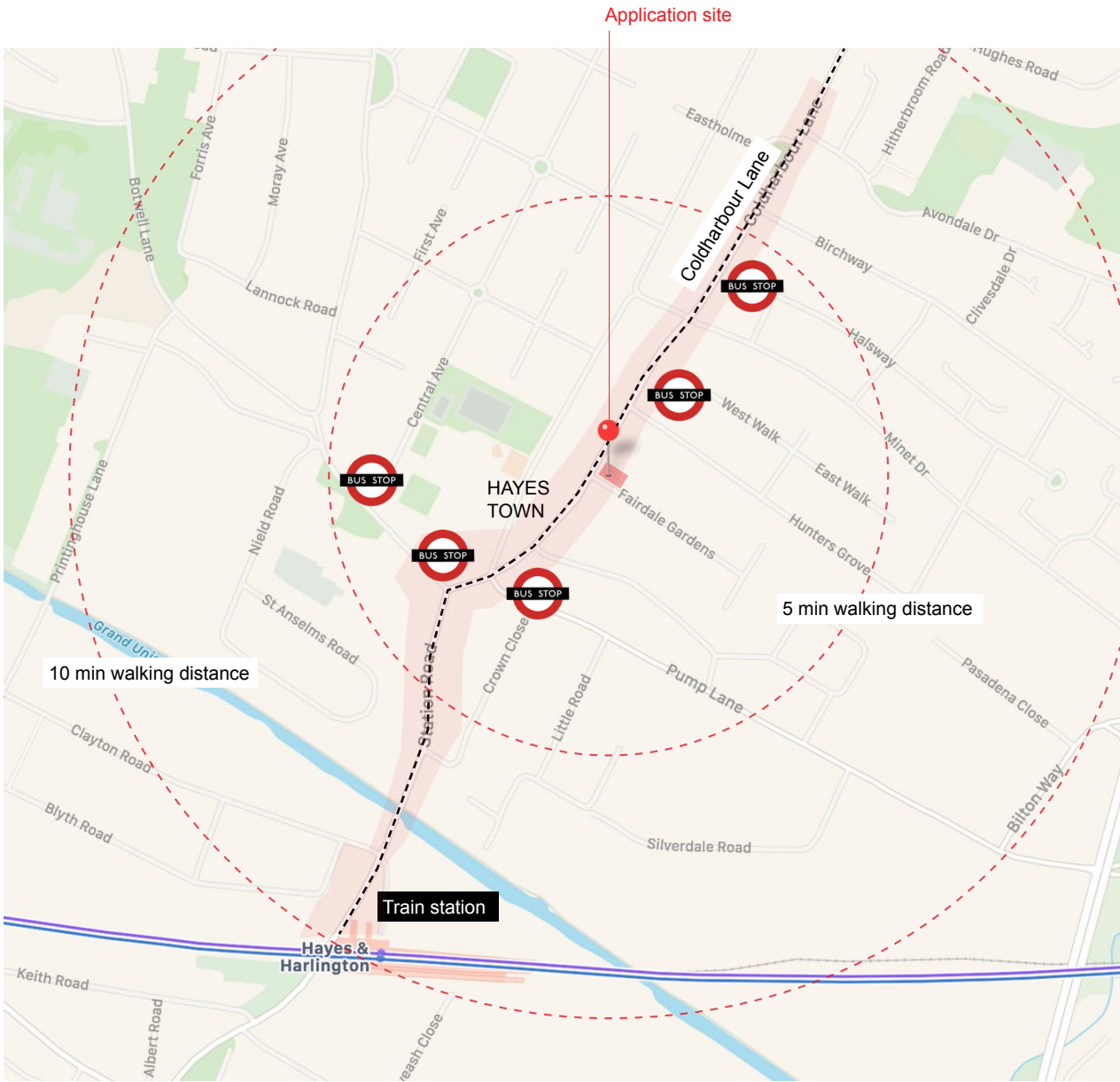
The property is owned by Mr T. Dar and untill 2021 was run as an educational establishment known as the Hayes Tuition Centre, an ofsted award-winning teaching centre for all age groups.

The accommodation has become tired and in need of updating and along with new teaching methods is no longer used as classrooms. It is acoustically wanting, poorly insulated and in dire need of refurbishment and updating.



1.

1. View of the application site from Coldharbour Lane.



1.

2.2 Transport links

Being situated in the heart of Hayes town centre, the site features easy access to numerous bus lines and train stations, including busses 90, 140, 969, E6 and Hayes & Harlington train station. Most services are within a five minutes walking distance from the site, including supermarkets, a local park, a fitness gymnasium, doctors and a dentist.

1. Map of the application site and surroundings. Base image source: Apple maps.



1.

2.3 Planning history

The following relevant planning applications have been submitted to the London Borough of Hillingdon for the site at 52 Coldharbour Lane, Hayes, UB3 3EP, UK:

- **52803/APP/2000/1566 - Granted 21/09/2000.**
Change of use of ground floor to tuition centre for children aged 6 -18 years.
- **19332/APP/2006/330 - Approved 31/03/2006**
Erection of a single storey rear extension and single storey detached outbuilding in rear garden (involving demolition of existing conservatory) (application for a certificate of lawfulness for a proposed use or developemnt).
- **52803/APP/2014/2234 - Refused 26/01/2015**
First floor rear extension, first floor side extension and change of use from office (Use Class B1a) to residential (Use Class C3) to create 3 x 2-bed self contained flats including installation of integral balcony to side, creation of entrance way to side and installation of timber cladding to side.
- **52803/APP/2019/654 - Refused 08/05/2019**
Change of use of first floor from tuition centre/offices to create 4 x 2 -bed and 1 x 1-bed self contained flats, including addition of a second floor, a first floor side extension, balconies to rear, and new external stairs.
- **52803/APP/2019/2634 - Approved 21/09/2021**
Change of use of first floor from tuition centre/offices to 2 x 2 bed and 3 x 1 bed self contained flats, including addition of a second floor, a first floor side extension, balconies to rear, new external stairs and widening of crossovers.
- **52803/APP/2022/2955 - Withdrawn 28/03/2023**
Variation of Conditions 2 (approved plans), 3 (material details), 6 (landscape scheme) and 7 (noise levels) of planning permission ref. 52803APP/2019/2634 dated 21/09/2021

For the past year, Arrigoni Architects has been working on the approved application (Ref.APP/2019/2634) to deliver an improved revision of the design. For this reason, we have been responsible for the S73 Minor Material Amendment Application (Ref.APP/2022/2955). Following advice from the London Borough of Hillingdon, the S73 application has been withdrawn in favour of this Full Planning Application.

1. View of the application site from the intersection between Fairdale Gardens and Coldharbour Lane.

PREVIOUSLY APPROVED DESIGN (Ref.APP/2019/2634)



1.

PROPOSED



1. West elevation. Comparison between the previously approved design and the current proposal. Out of scale drawing.

3. Proposed design

3.1 Design introduction

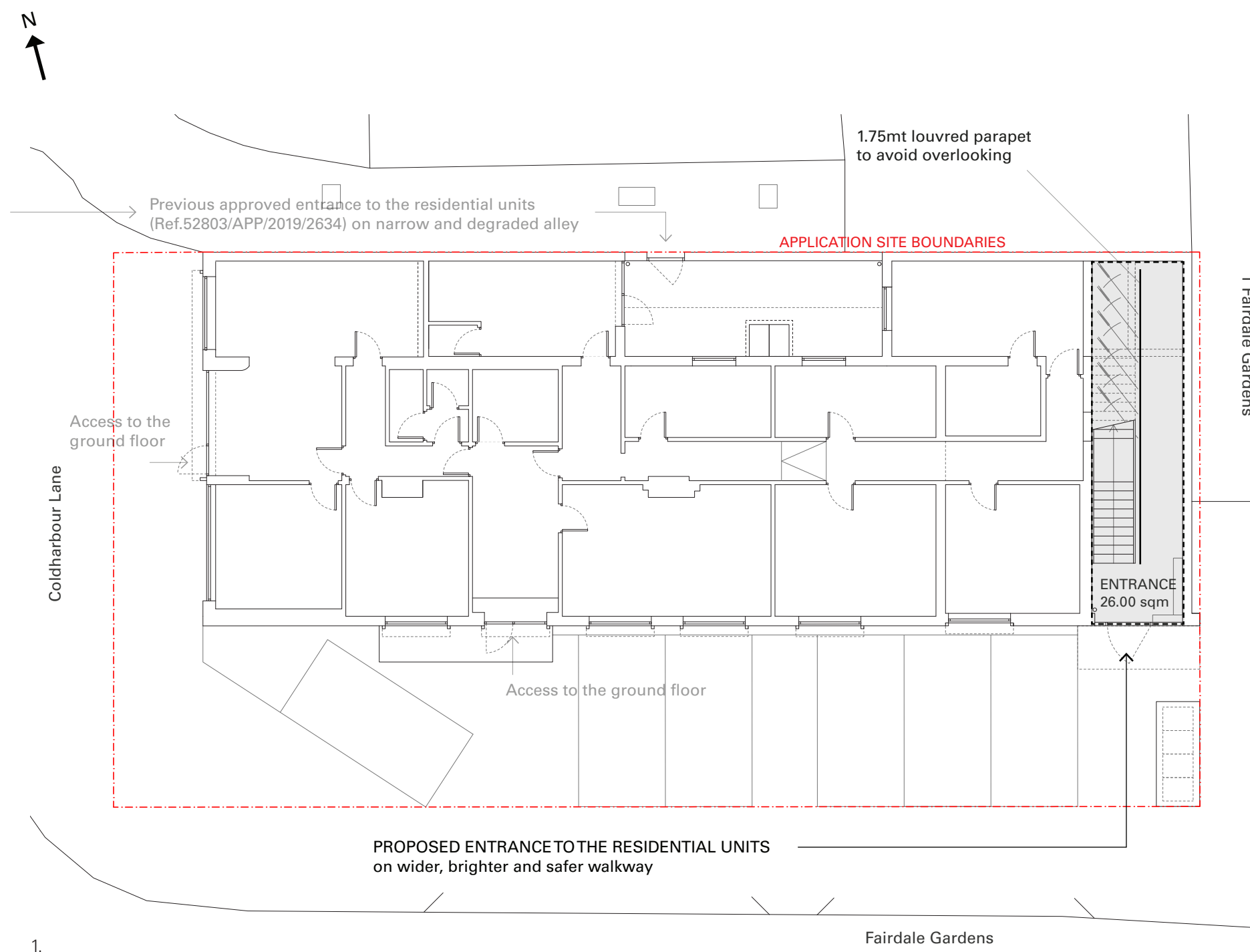
This proposal is based on the previously approved design Ref.APP/2019/2634 and aims to convert the existing first floor accommodation into three flats and add an additional floor on top of the current structure to create two further flats.

As in the previous approved design, the proposal includes a side extension on the first floor and the addition of a second floor, both featuring a flat roof. Nevertheless, the proposed design aims to significantly improve a number of relevant aspects, including the residential entrance located on a more favourable position and an high-quality and flexible flat layouts with appropriate private amenity space.

The proposed design also incorporates a series of key elements that were neglected from the previous approved design, including refusal and recycling storage, bike storage, car parking and planting strategy.

Following the recently withdrawn Minor Material Amendment Application (Ref.APP/2022/2955), the proposed design has been informed by a series of sensitive comments from the Planning Officers. For this reason, particular care has been given to managing heat risk (chapter 3.4), privacy and overlooking (chapter 3.5) and materials and external surfaces treatment (chapter 3.7).

All the key aspects of the proposed design will be carefully explained in the next chapters.



3.2 Access

The previous approved design (Ref.APP/2019/2634) included a dedicated access to the residential units from the alley to the north of the application site, alongside Coldharbour Lane. As shown on the left, the proposed access has been moved to the east, alongside Fairdale Gardens.

Following a survey of the area, the alley alongside Coldharbour Lane appeared to be a narrow walkway, mostly used to access the adjacent property and for refusal storage. The proposed entrance is located on a wider and brighter walkway, well exposed to the public realm as recommended by the approved document Q, Secured by Design (SBD) to improve the security of buildings. The proposed entrance is better suitable to access the site with sustainable and alternative means of transportation, bicycles, strollers, etc..

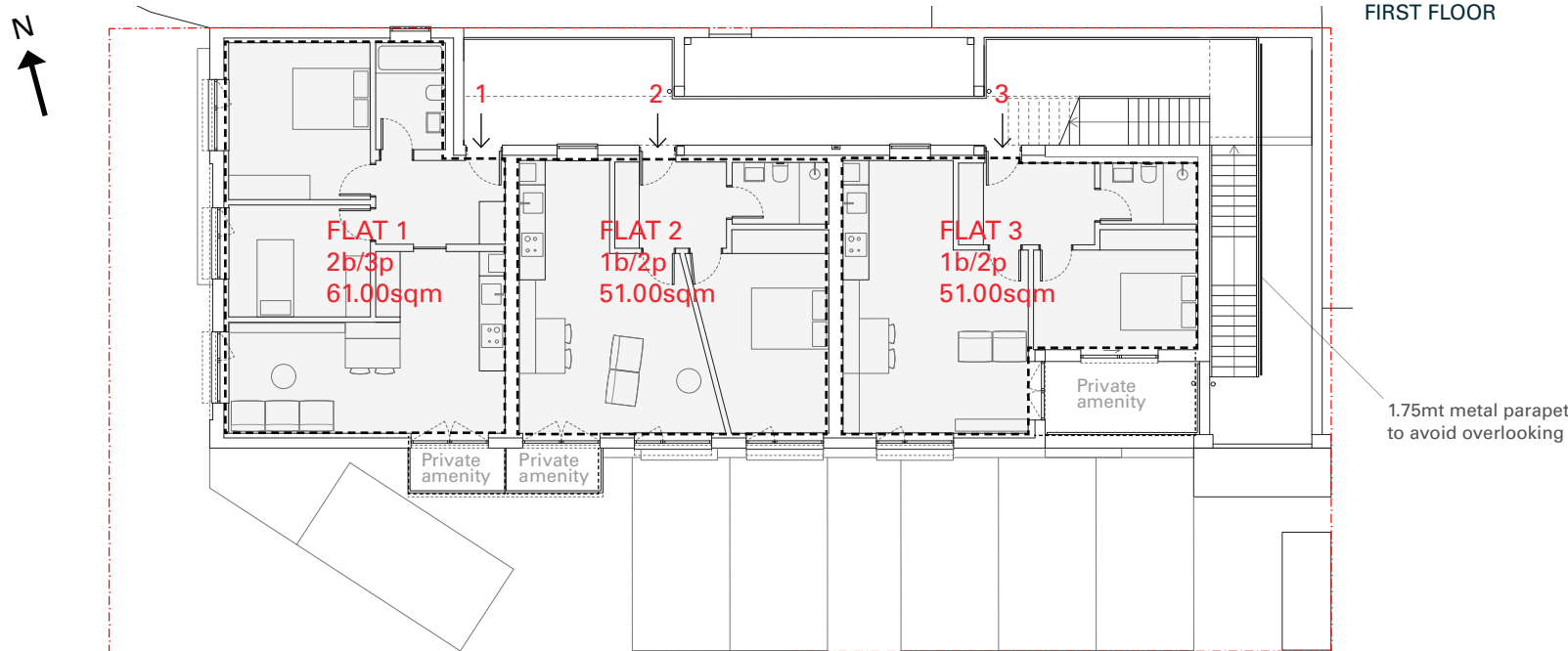
The external metal staircases has been designed to minimise its visual impact from the public realm. Informed by preliminary comments of the London Borough of Hillingdon, a metal louvred parapet height 1.75mt has been incorporated in the staircase design to avoid any potential overlooking towards the neighbouring properties alongside Fairdale Gardens. Please, refer to chapter 3.5 (Privacy and overlooking).

1. Proposed ground floor plan highlighting the new entrance of the residential units. Out of scale drawings.

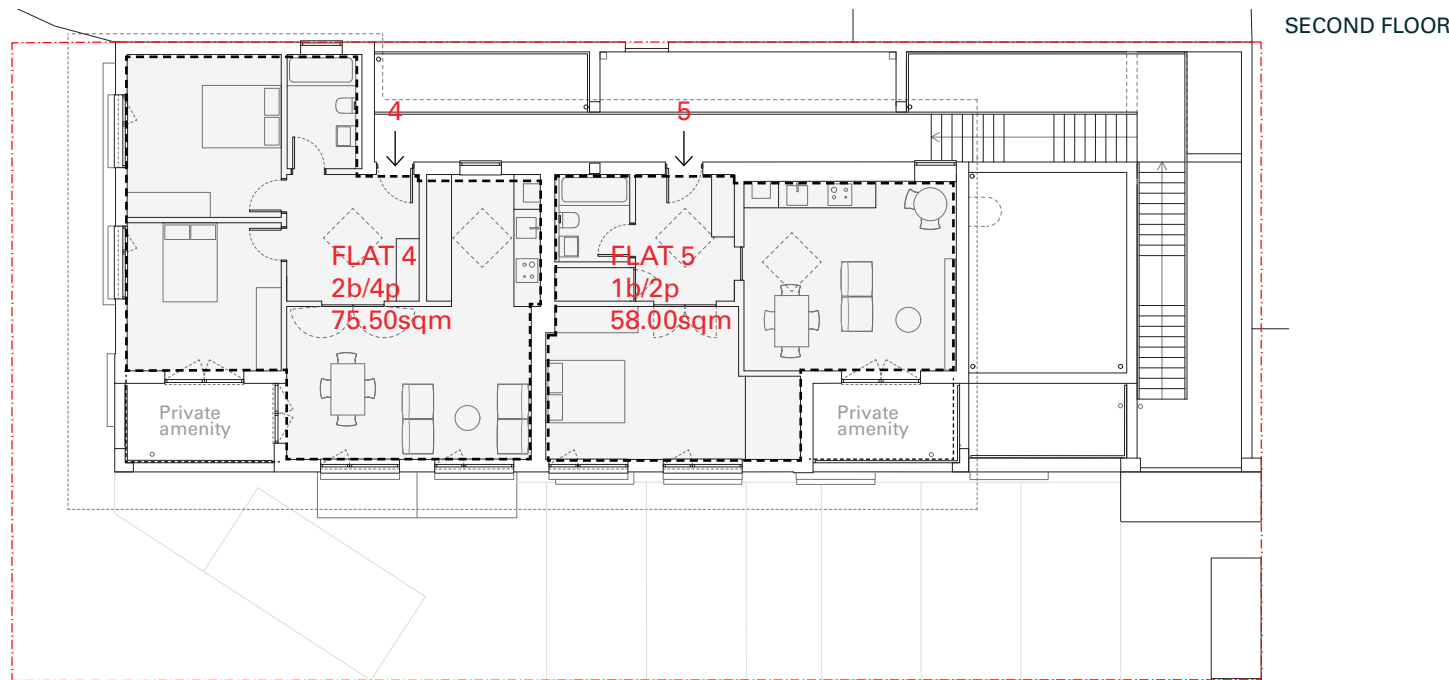
Type of dwelling		Minimum gross internal floor areas* and storage (square metres)			
Number of bedrooms (b)	Number of bed spaces (persons(p))	1 storey dwellings	2 storey dwellings	3 storey dwellings	Built-in storage
1b	1p	39 (37) *	N/A	N/A	1
	2p	50	58	N/A	1.5
2b	3p	61	70	N/A	2
	4p	70	79	N/A	2

FLATS 2, 3, 5
FLAT 1
FLAT 4

1.



FIRST FLOOR



SECOND FLOOR

2.

3.3 Quality of accommodation

The proposed design includes the enhancement of the interior layout of the five residential units previously approved (Ref.APP/2019/2634). The new layout complies with national and local guidelines as per Policy D6 Housing Quality and Standards of the London Plan 2021 and avoids inner rooms as per Building Control's advice.

The proposed units achieve and exceed the requirements of internal space to qualify as 1b2p (flats 2, 3, 5), 2b3p (flat 1) and 2b4p (flat 4). Complying with Table 3.1 of the London Plan 2021, the proposed design provides adequately-sized rooms with comfortable and functional layouts and an adequate provision of internal storage space.

According to building regulations, high-quality sound insulation and appropriate layers will be installed in between the flats to meet the highest level of comfort for the inhabitants.

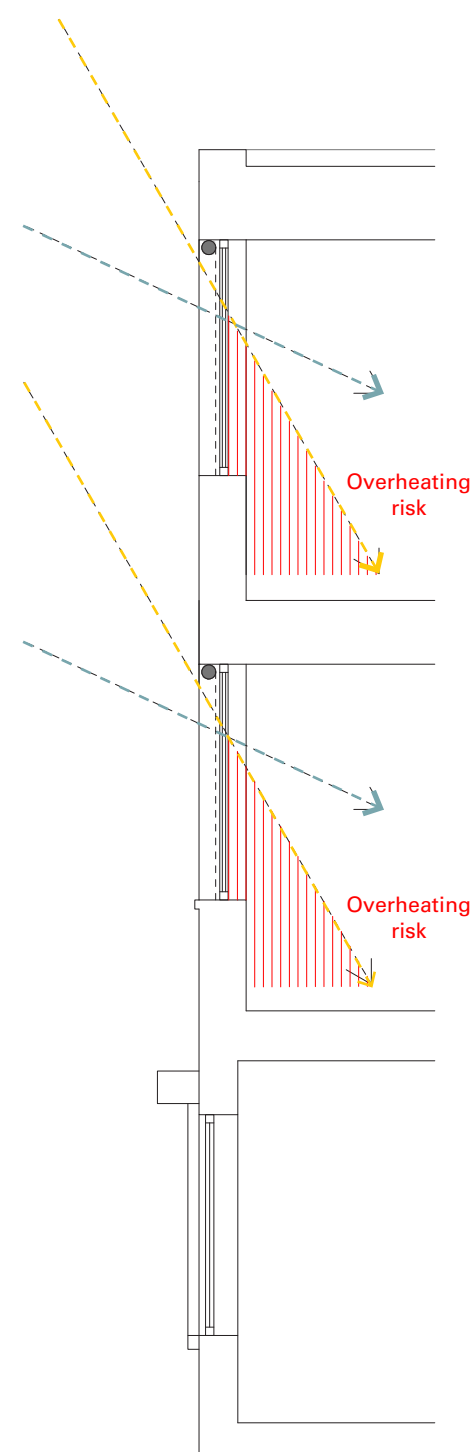
As shown on the left, the first and second floors will deliver no. 5 flats as follows:

Flat 1 -	2b/3p	61.00 sqm
Flat 2 -	1b/2p	51.00 sqm
Flat 3 -	1b/2p	51.00 sqm
Flat 4 -	2b/4p	75.50 sqm
Flat 5 -	1b/2p	58.00 sqm

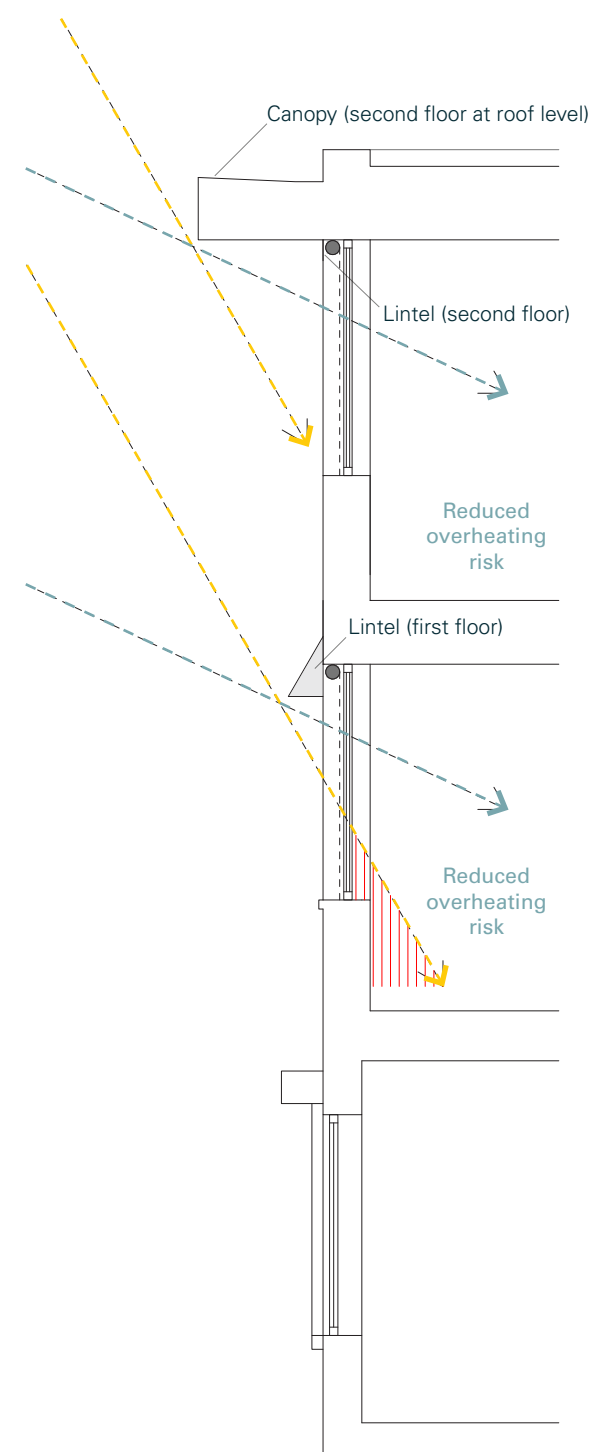
1. Table 3.1 Minimum internal space standards for new dwellings. Source: The London Plan, March 2021, p. 127. Please, find highlighted the proposed residential units' corresponding parameters.
2. Proposed first and second floor plans highlighting the new internal layout of the five residential units. Out of scale drawings.

SOUTH AND WEST EXPOSED FACADE

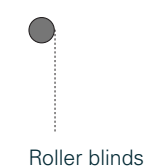
SHADING SYSTEM WITHOUT CANOPY



SHADING SYSTEM WITH CANOPY AND LINTELS - CURRENT DESIGN PROPOSAL



SYMBOLS KEY



Solar radiation reaching through the window



60° average sun angle during summer.²



25° average sun angle during winter.²

3.4 Managing heat risk

According to Policies D6 and SI 4 of London Plan 2021, the proposed design aims to reduce the potential for internal overheating and reliance on air conditioning systems. Overheating can occur during the hottest days of the year, when daytime temperatures reach well over 30°C and do not drop below 18°C at night. These circumstances can lead many people to feel too hot and can seriously harm certain health conditions and 'at risk' groups.

For this reason, the proposed design incorporates an anti overheating strategy relying on solar shading systems and other approved devices, including:

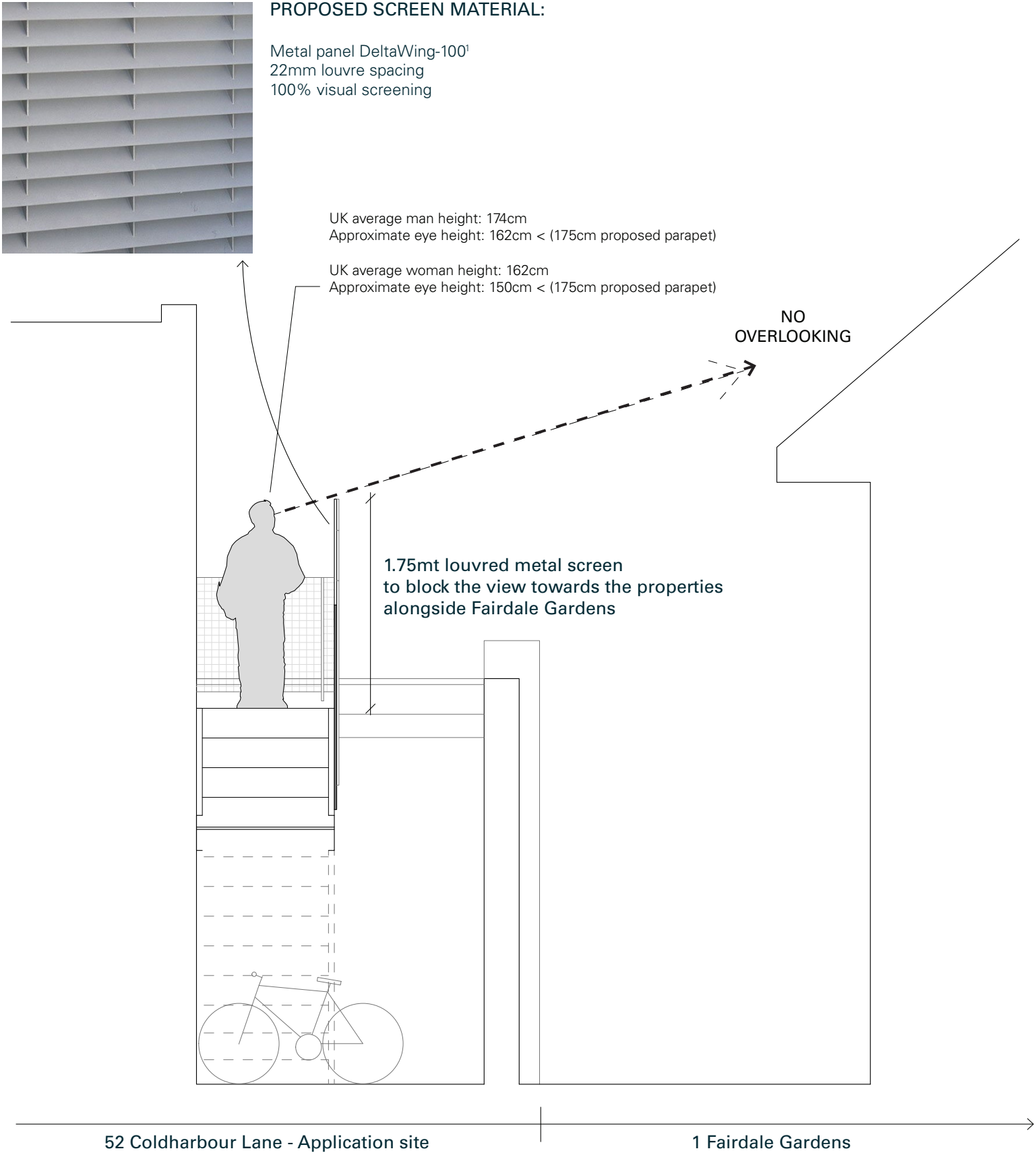
- South and west exposed roller blinds;
- South and west exposed canopy and lintels;
- High performance triple glazed windows; and
- Double exposition layout for all residential units.

As shown on the left, the proposed canopy and lintels contribute to considerably reduce the amount of summer sun rays reaching through the windows, while allowing the more gentle winter ones. Without these elements, the shading system would rely only on the use of the roller blinds, leading to a loss of view and/or natural light during the warmest days.

Combined together, canopy, lintels and roller blinds will contribute to block the harmful rays of the sun and keep the heat out while retaining the cool air inside guaranteeing a high level of comfort throughout all the whole year.

1. Section drawing of the typical south and west elevation. Comparison between the shading system strategy with and without the use of canopy.
2. Average solar elevation angle from www.sunearthtools.com. Winter time = December between 12 and 14. Summer time = June between 12 and 14.

EXTERNAL STAIRCASE TO ACCESS THE RESIDENTIAL UNITS, PROPOSED PRIVACY STRATEGY



3.5 Privacy and overlooking

The Planning Officer's comments in relation to the withdrawn S73 Application (Ref.APP/2022/2955) highlighted an issue related to the staircase location on the eastern side of the site: *"The new external stairwell will cause overlooking and privacy issues for the neighbouring property at Fairdale Gardens, harming their amenities"*.

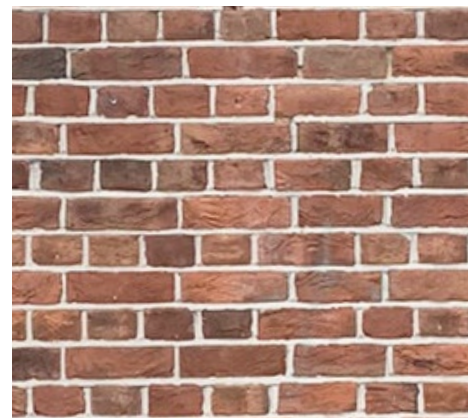
To address this concern, the proposed design incorporates a louvred metal screen of 1.75 mt of height, which is higher than the average man and woman height in the UK. To see over the parapet one would have to be almost two meters tall. As shown on the left, thanks to the proposed screen, there would be no overlooking towards the properties alongside Fairdale Gardens, fully preserving the neighbouring amenities.

3.6 Rights of light

Taking a rule of thumb line at 45 degrees, the proposed design does not encroach on any neighbours' right to light, featuring adequate distance from the site boundaries and the adjacent buildings.

1. Manufactured by an approved UK company such as Langandfulton.co.uk or similar.
2. Section drawing showing the staircase to access the residential unit, to the east of the application site, highlighting the strategy to avoid overlooking towards Fairdale Gardens.

Draft



MATERIAL:
Brick slips to match existing

LOCATION:
West facade, south facade, east facade, north facade.

FINISH:
Applied mortar slurry as below:



MATERIAL:
Brick slips & bricks
Applied mortar slurry/paint

LOCATION:
All facades.

NUMBER ON DRAWINGS:

02

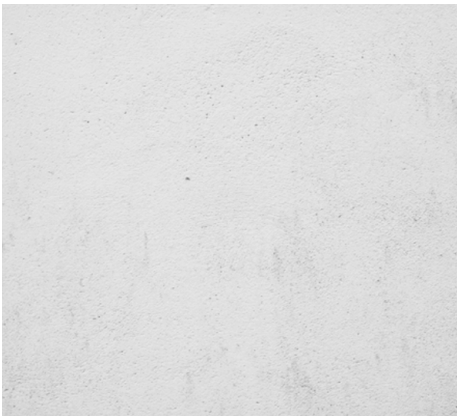


MATERIAL:
Bricks with lime wash/paint
dark tone

LOCATION:
All facades, up to approx. 1,6mt
from the ground floor level.

NUMBER ON DRAWINGS:

01

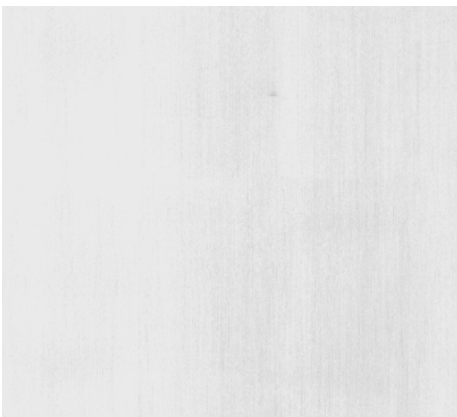


MATERIAL:
Render, neutral colour

LOCATION:
North, east, south facade.

NUMBER ON DRAWINGS:

13



MATERIAL:
Mill finish aluminium

LOCATION:
Canopy and balconies fascia,
exposed lintels, rainwater pipes,
claddings.

NUMBER ON DRAWINGS:

06 07 09 16

Please, also refer to the proposed drawings.

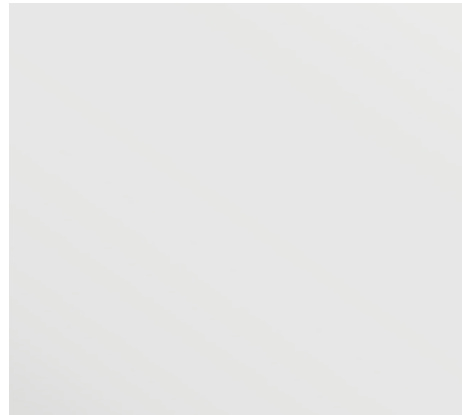
3.7 Materials and external surfaces

As shown on the left, the proposed design incorporates a simple palette of high-quality materials that complement the existing property and contribute to lowering the building's carbon footprint.

The existing predominant materials have been maintained as an integral part of the design. The proposal is mainly based on the use of brick slips to match the existing bricks. The final appearance of the building will be then refined with a thin layer of mortar slurry or lime wash paint to characterize and differentiate the ground floor from the upper levels.

On a few occasions, two types of metal cladding will be implemented on the southern and western facades. The claddings will be either colour coded to resemble the green shutters and details of the original building or mill finish to gracefully complement the main palette.

The render finish on the north elevation will be preserved and extended to the second floor.

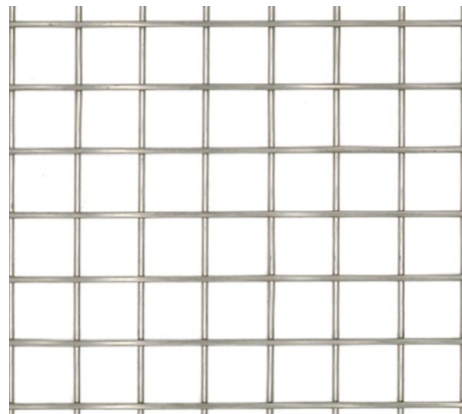


MATERIAL:
Light grey powder-coated steel

LOCATION:
External staircases and pathways.

NUMBER ON DRAWINGS:

10 15



MATERIAL:
Light grey powder-coated steel mesh

LOCATION:
Balconies, staircases and walkways parapets.

NUMBER ON DRAWINGS:

10

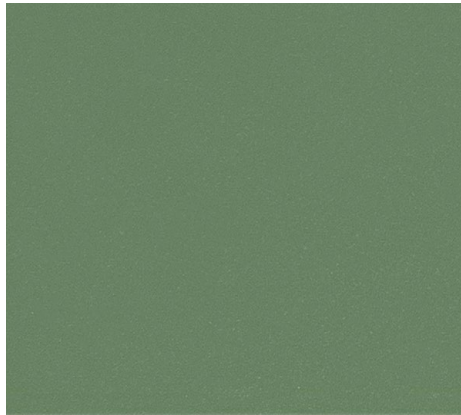


MATERIAL:
Galvanized steel

LOCATION:
East facade.

NUMBER ON DRAWINGS:

10



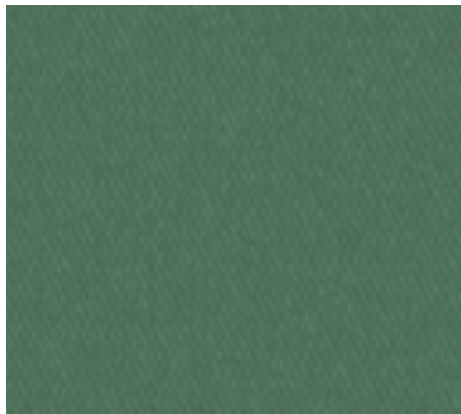
MATERIAL:
Green powder-coated steel to match the existing roller blinds

LOCATION:
All facades.

NUMBER ON DRAWINGS:

08 14

Roller blinds
Please, also refer to page 11.



MATERIAL:
Textile material for wind resistant external roller blinds, colour to match the existing roller blinds

BRAND:
Markilux Sunvas or similar.

LOCATION:
All west and south exposed windows.

Please, also refer to the Proposed drawings.

The external stairs and pathways, mesh parapets, handrails and the east exposed louvred parapet will be realized in light grey powder-coated steel, to minimize the impact on the public realm and guarantee a long-lasting resistance against weather conditions.

A green powder-coated steel canopy will be installed to shelter the entrance to the residential units alongside Fairdale Gardens.

As in the previous approved design, a galvanized steel CAT ladder will be located on the eastern side of the building to allow regular maintenance works on the roof and the PV system.

As shown in chapter 3.4, the proposed design includes roller blinds on the south and west exposed sides of the site. The roller blinds feature a green fabric in line with the adopted colour palette.

1.

1. Material palette, location and reference to the application's drawings.

Table 4 Indoor ambient noise levels for dwellings

Activity	Location	07:00 to 23:00	23:00 to 07:00
Resting	Living room	35 dB $L_{Aeq,16hour}$	—
Dining	Dining room/area	40 dB $L_{Aeq,16hour}$	—
Sleeping (daytime resting)	Bedroom	35 dB $L_{Aeq,16hour}$	30 dB $L_{Aeq,8hour}$

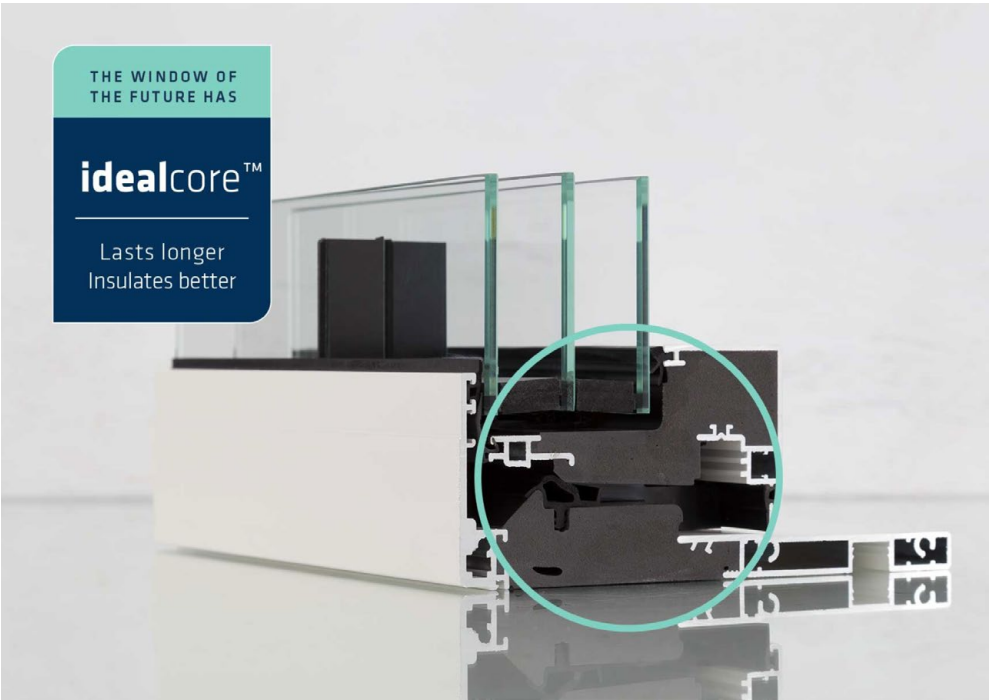
The proposed triple glazed window allows for a noise reduction of 37 dB. Following the noise reduction, all the indoor ambients will respect the value stated in table 4 of the BS8233:2014.

NOTE 1 Table 4 provides recommended levels for overall noise in the design of a building. These are the sum total of structure-borne and airborne noise sources. Groundborne noise is assessed separately and is not included as part of these targets, as human response to groundborne noise varies with many factors such as level, character, timing, occupant expectation and sensitivity.

1.

SELECTED WINDOW:
IDEAL COMBI FUTURA+I

Triple glazed
U value of 0.75 W/m2K
Trickle vent
Noise reduction of 37 dB



2.



Particular care has been reserved for the choice of the windows. The selected model is the Futura+I, triple glazed inward opening/fixed frame window manufactured by Ideal Combi. The proposed external finish is either anodised aluminium or a grey aluminium RAL, in harmony with the plethora of sustainable materials shown on the previous page.

The proposed window model ensures one of the lowest U-values currently on the market (0.75 W/m2K), allowing to decrease the energy consumption of the residential units.

As per Policy DMHB11 of the Hillingdon Local Plan, to ensure that the amenity of occupiers of the development site and surrounding premises is not adversely affected by external noise, the proposed window provides a noise reduction of up to 37 dB. The noise level of all the indoor rooms, including the habitable rooms, will comply with the noise standard specified in Table 4, BS8233:2014 for internal rooms and external amenity areas.

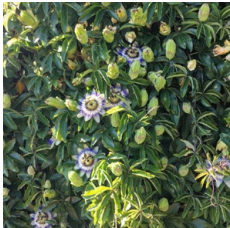
1. Table 4, Indoor ambient noise level for dwellings. Source: BS8233:2014.
2. Informations and pictures of the selected window type, Futura+I by Ideal Combi. Source: <https://idealcombi.com>

The soft lanscape will be based on a climbing specie common in the UK and selected following the advice of the Royal Horticultural Society. Some of the suitable species would be:

Jasminum officinale



Passiflora caerulea



Hedera hibernica



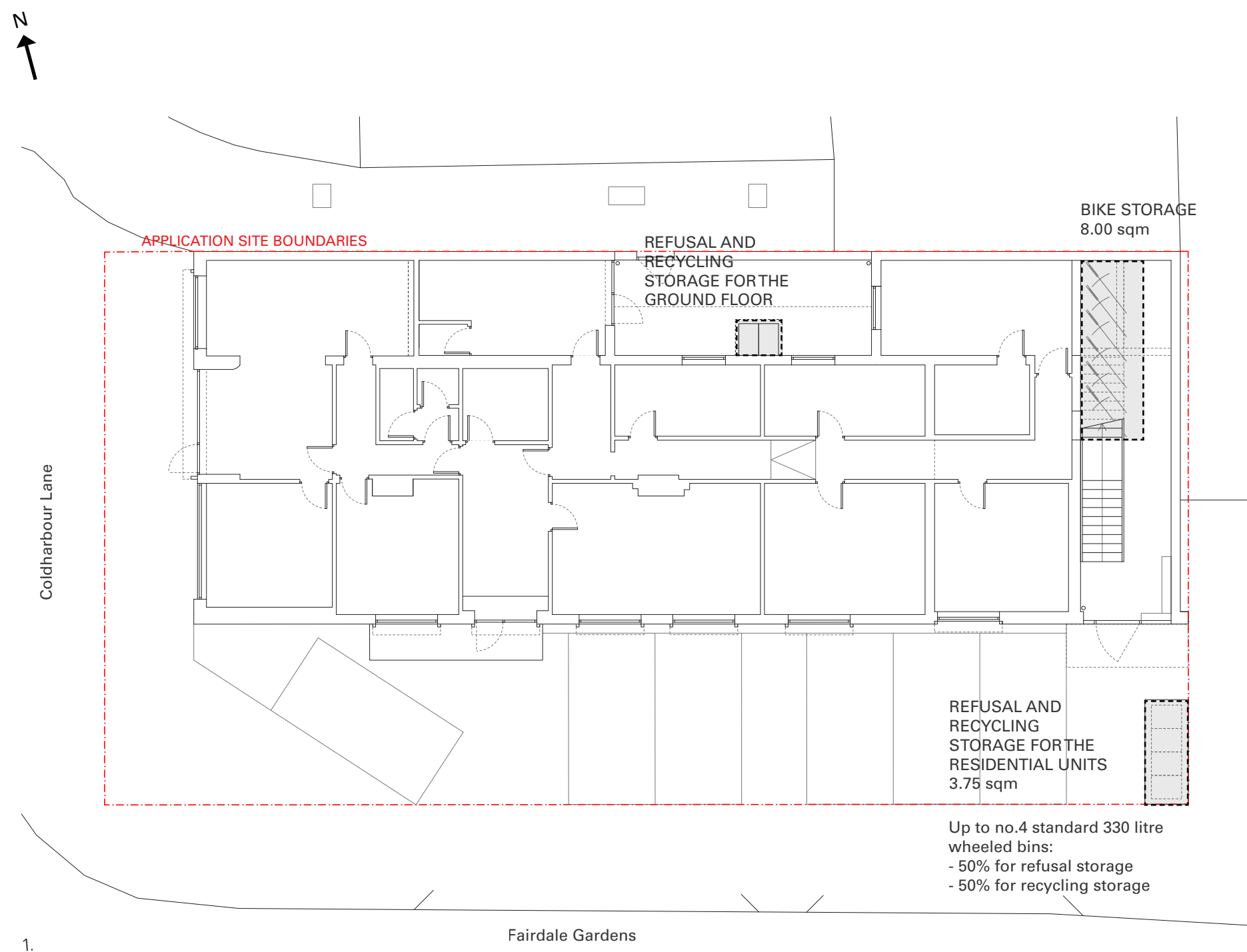
Wisteria



3.8 Planting strategy

The proposed design recognizes the opportunity to introduce planting on the south-west elevations. As shown on the left, the proposed soft landscaping will ensure that the development contributes to the biodiversity of the Borough, as per Policy G7 of the London Plan.

Thanks to the south-west exposition, the proposed climbing vegetation will benefit from good levels of direct sunlight throughout the day and will complement the appearance of the building on its most public front.



1. Proposed ground floor plan highlighting the refusal and recycling storages and the bicycle storage.
Out of scale drawing.

3.9 Refuse and recycling management

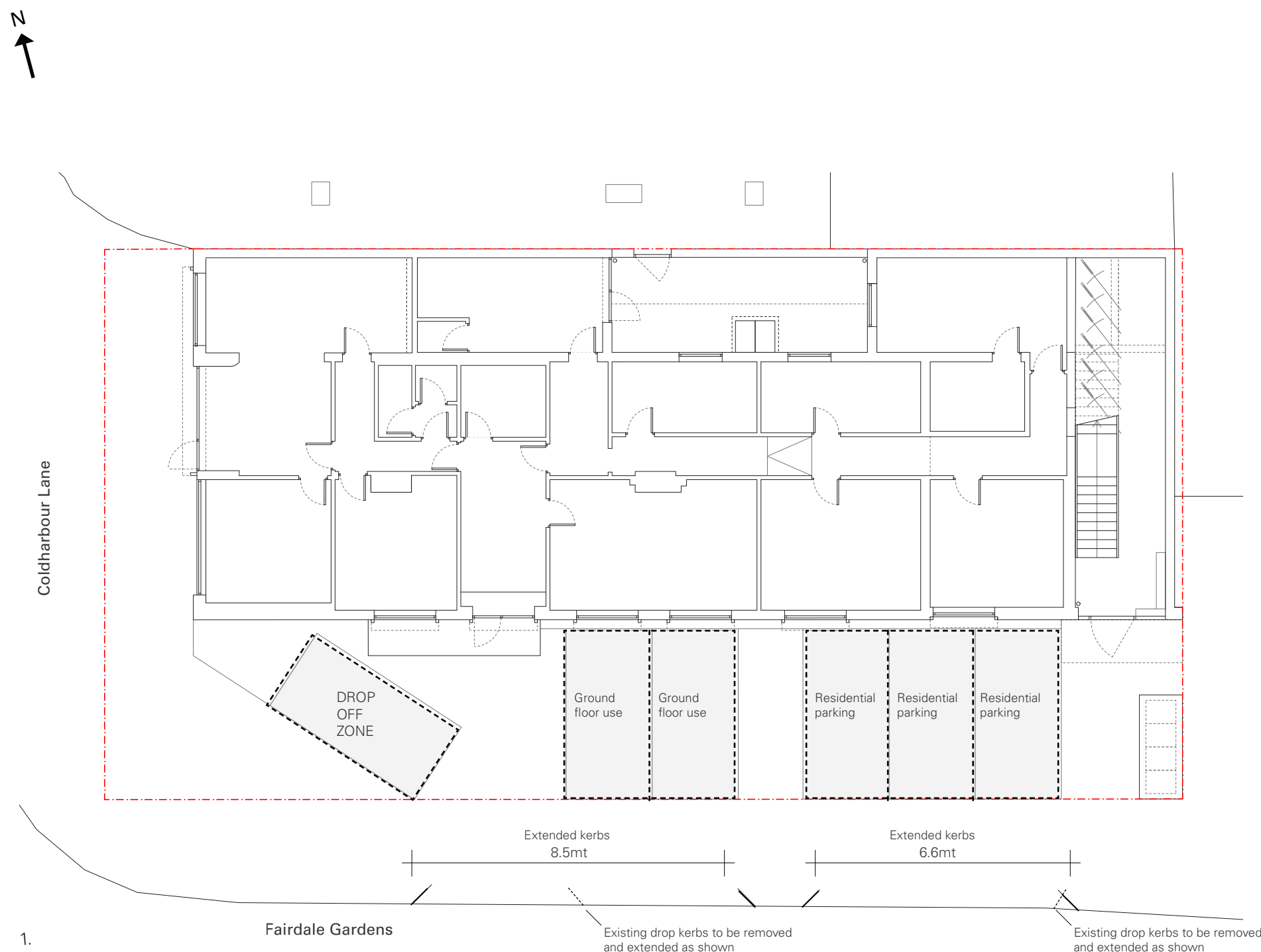
As per Policy EM11 of the Hillingdon Local Plan: Part 1, and Policy 5.42 of the Hillingdon Local Plan: Part 2, the proposed design makes sufficient provision for the storage and collection of general waste, recycling and organic waste.

As shown on the left, a dedicated facility has been located on the southeastern side of the application site for the use of the five residential units. The external bins will be raised from the ground level, screened and protected to avoid adverse visual impact and nuisance to both occupiers and neighbours. The ground floor has been provided with a dedicated facility in the internal courtyard to the north of the application site.

3.10 Bicycle parking

As per the new London Plan 2021 and complying with Table 1, Parking Standard of the Local Plan: Part 2, the proposed design is committed to encouraging and supporting sustainable transport.

As shown in the adjacent drawing, the cycle parking has been located in a safe, secure, accessible, and sheltered location near the entrance of the residential units. The parking will take the form of a stand similar to the Sheffield stand, allowing both the frame and wheels of the cycles to be secured without risk of damage.



1. Proposed ground floor plan highlighting the refusal and recycling storages and the bicycle storage.
Out of scale drawing.

3.11 Car parking

The PTAL rating for the proposed development using the Transport for London WebCAT service, indicates that the site has good access to public transport with a PTAL rating of 4.

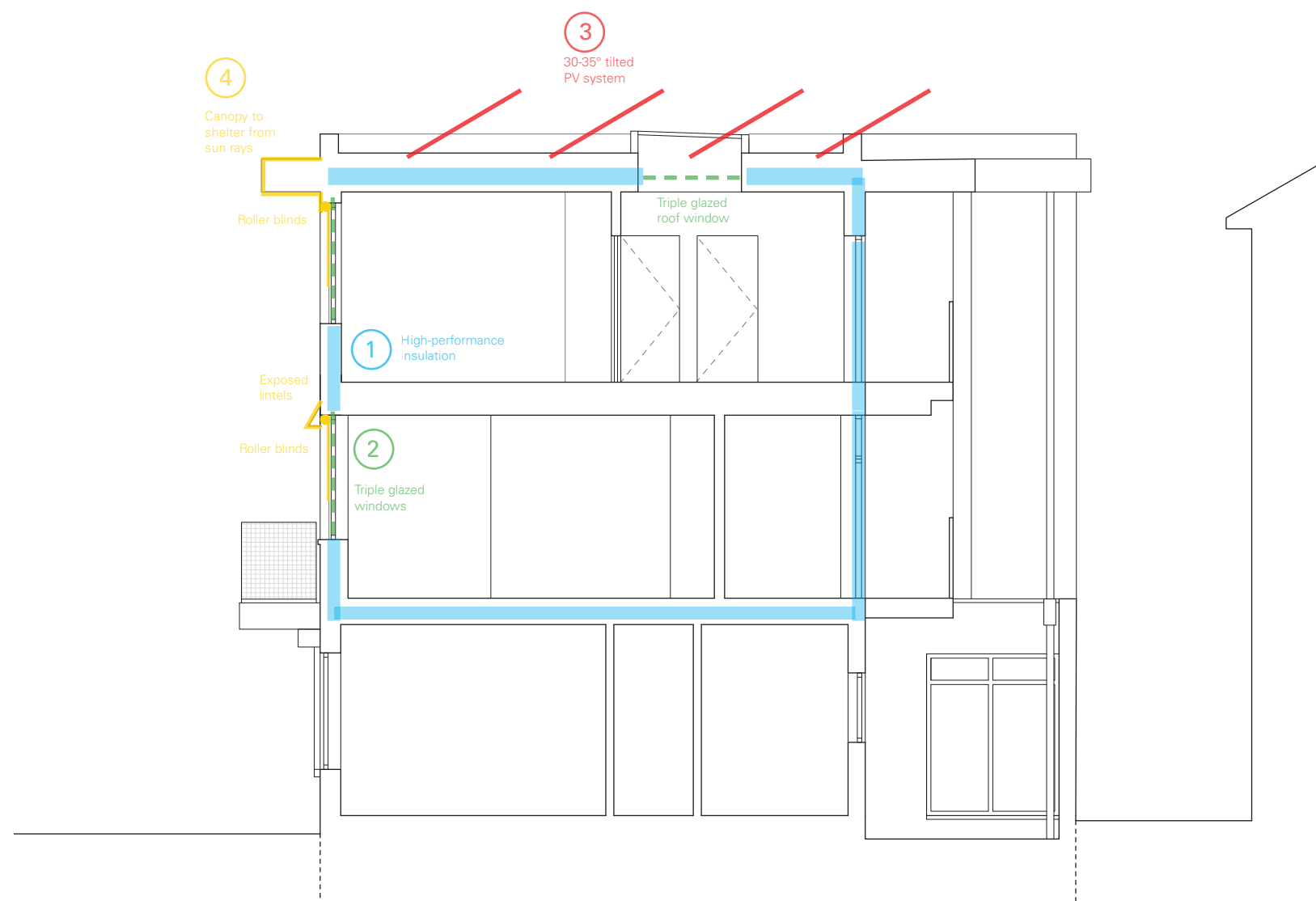
Complying with Policy T6.1 of the London Plan and Policies DMT2 and DMT6 of the Hillingdon Local Plan, this design proposal ensures to provide an appropriate level of car parking.

The proposed scheme includes no. 5 car parking spaces and no. 1 drop-off area to the south of the site, alongside Fairdale Gardens. The existing drop kerbs will be extended to Council standards as shown on the left.

Three out of five car parking shall be allocated and dedicated for the use of each of the proposed residential units and shall remain allocated and dedicated in such a manner for the life-time of the development.

According to the Section 106 Agreement dated 06/08/2021 and related to the previous approved application (ref.APP/2019/2634), no application for a Parking Permit will be made by the Applicant. For this reason, prospective owners and occupiers will be notified that they will not be entitled to apply for a Parking Permit.

Please, also refer to the parking allocation scheme shown in drawing no. 211 (Proposed Ground Floor).

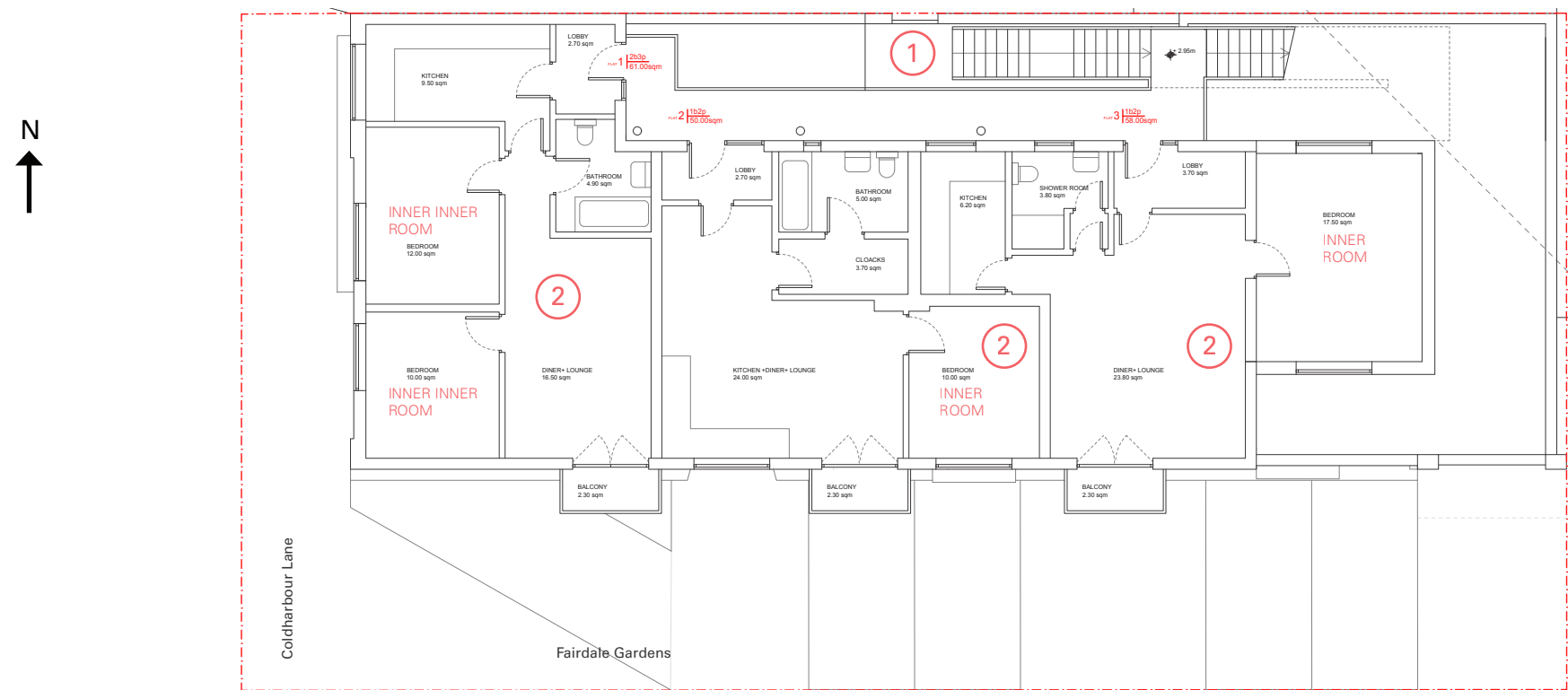


3.12 Sustainability

The proposed design ensures to make the most efficient use of resources and reduces its lifecycle impact on the environment. According to the London Plan and the Code for Sustainable Homes, a series of measures will be undertaken to contribute to climate change mitigation and adaptation, including:

- 1) High-performance insulation to comply with Building Regulations and reduce the need for heating;
- 2) High-quality triple glazed composite windows and roof windows;
- 3) Solar PV system for each residential unit;
- 4) Effective strategy to manage heat risk and reduce the need for cooling;
- 5) Recycling of construction materials;
- 6) Minimising CO2 emissions during construction and throughout the building life cycles; and
- 7) Planting strategy to incorporate landscape design and enhance biodiversity.

PREVIOUS APPROVED DESIGN
Ref.APP/2019/2634



4. Previous applications

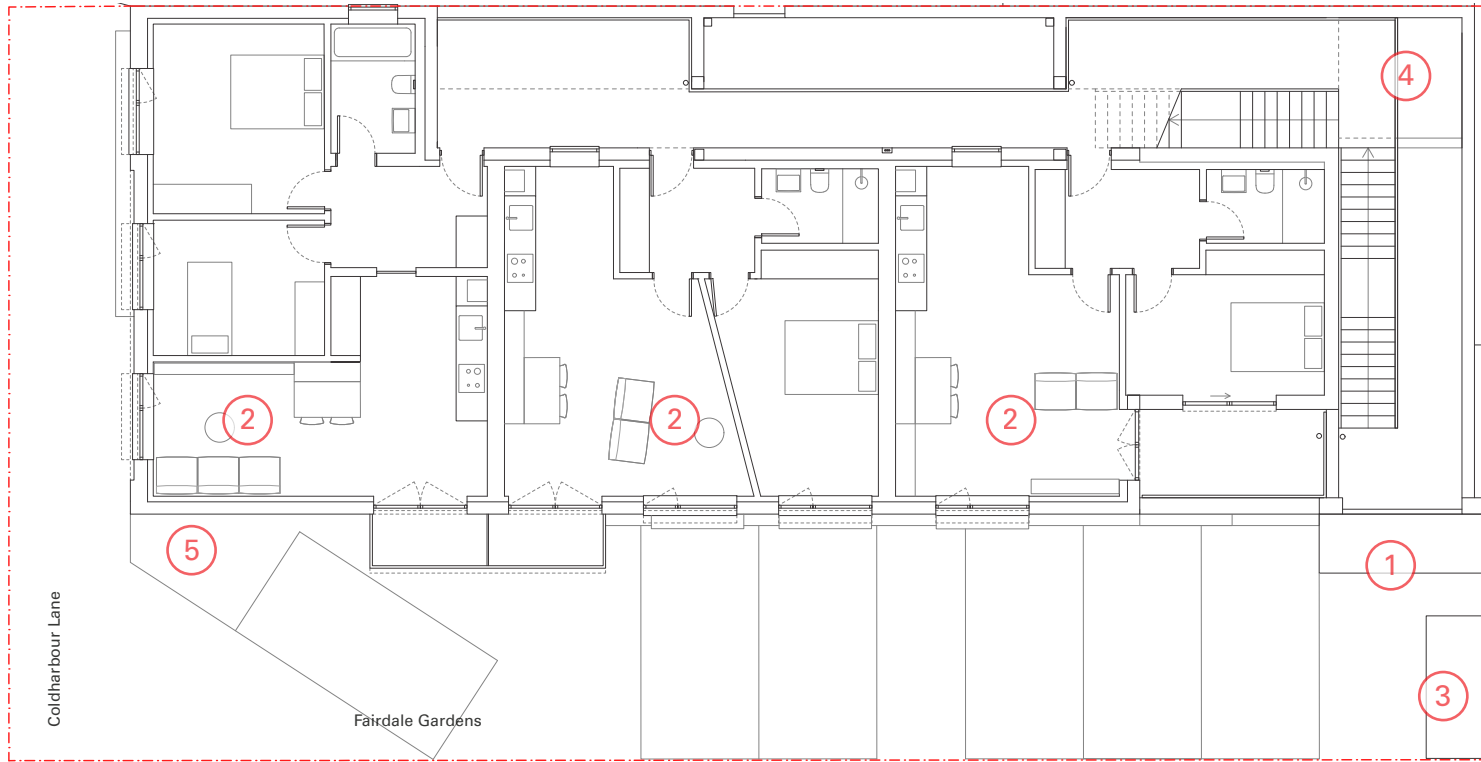
This proposal is based on the previously approved design (Ref.APP/2019/2634) and has been informed by the Council comments regarding the withdrawn Minor Material Amendment Application (Ref.APP/2022/2955).

4.1 Comparison with Previously Approved Design

As shown on the left, a series of relevant improvements has been made to deliver a high-quality architecture and comfortable accommodations to fit the needs of a wide variety of users. The differences with the previous approved design include:

- 1) Residential entrance moved alongside Fairdale gardens to ensure safety and guarantee an appropriate facility to the new inhabitants;
- 2) Improved flat layouts, compliant with current building regulations, avoiding the presence of inner rooms and ensuring safety, comfort and flexibility;
- 3) Appropriate location and design of a refusal and recycling storage, missing from the approved application.
- 4) Appropriate location and design of a bike storage, missing from the approved application.
- 5) Presence of a landscaping strategy, including a planting scheme, missing from the approved application.

CURRENT PROPOSED DESIGN

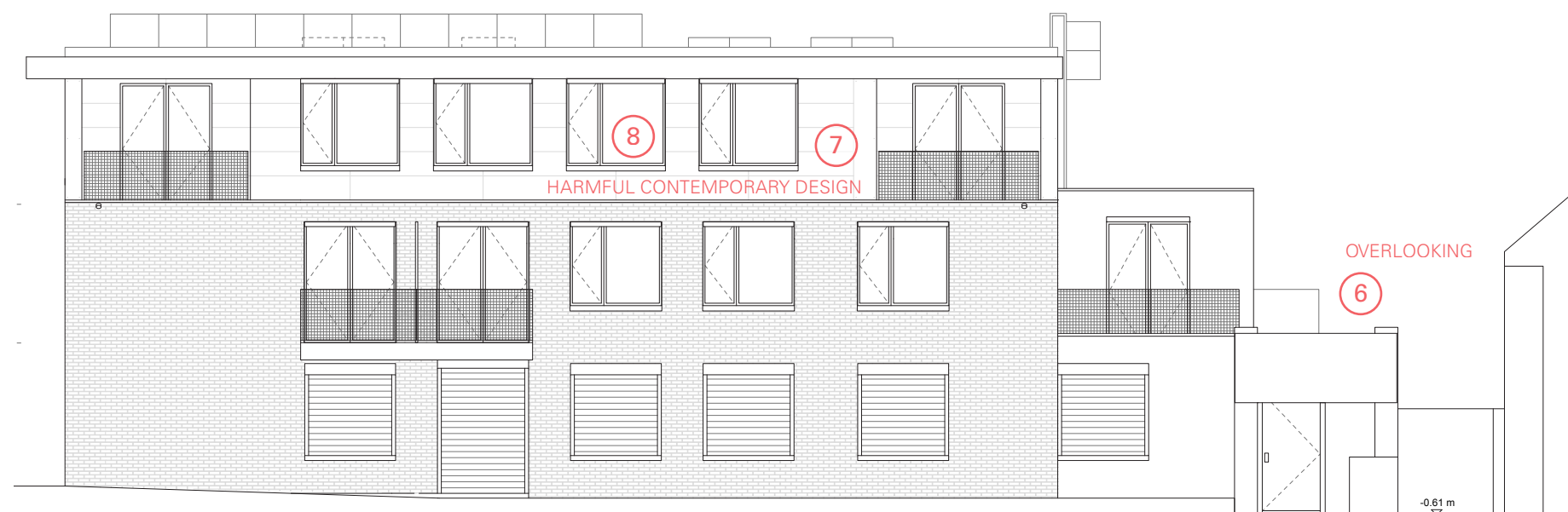


1.

1. First floor plan. Comparison between the previously approved design and the current proposal. Out of scale drawing.

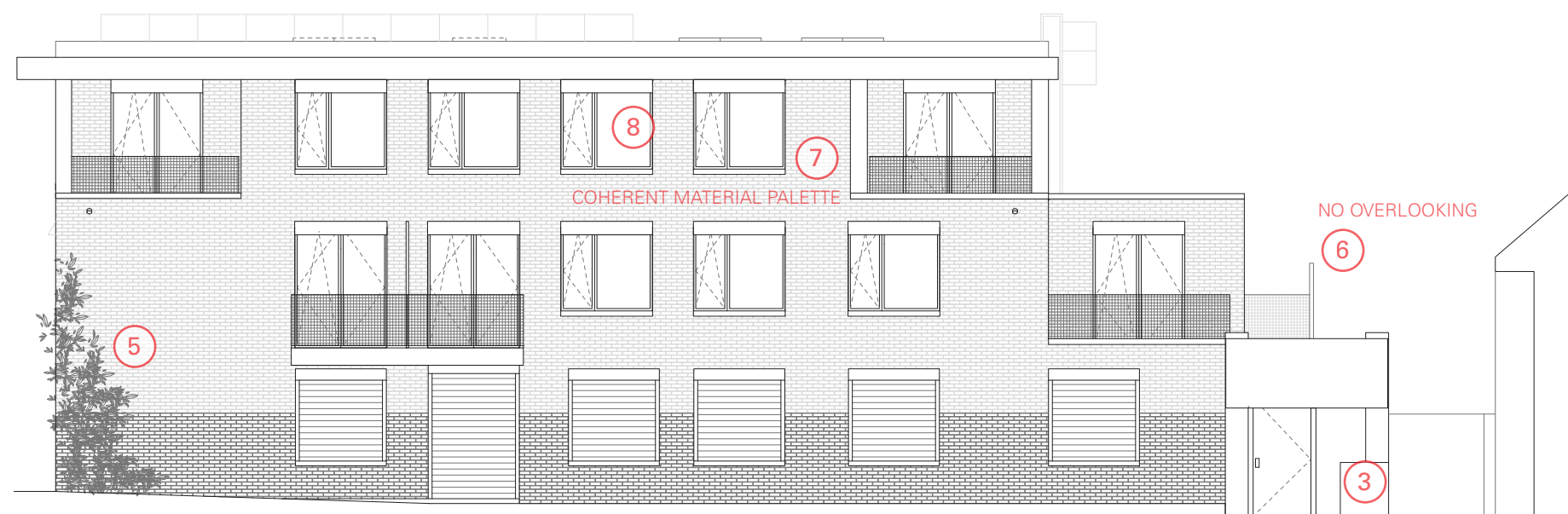
PREVIOUS WITHDRAWN DESIGN

Ref.APP/2022/2955

**4.2 Comparison with Withdrawn S73 Application**

As shown on the left, a series of design decisions have been informed by the sensitive comments from the Planning Officers as follows:

- 6) A 1.75mt height privacy screen has been located on the eastern side of the site to avoid potential overlooking towards Fairdale Gardens.
- 7) A coherent material palette based on bricks and brick slips, similar to the previous approved one and in harmony with the existing building and the surrounding context.
- 8) Windows dimensions resized to match the existing proportions.

CURRENT PROPOSED DESIGN

1.

1. South elevation. Comparison between the withdrawn S73 application design and the current proposal.
Out of scale drawing.

5. Planning policy context

The proposed design takes into account the relevant Policies contained in the following documents:

- The National Planning Policy Framework (NPPF).
- The New London Plan 2021.
- The London Borough of Hillingdon Local Plan: Part 1 and Part 2.
- The London Borough of Hillingdon SPD for Planning Obligations.
- The BS 8233:2014, Guidance on sound insulation and noise reduction for buildings.



1.

1. Collage drawing showing the proposed south elevation.