



Langdale House Exterior Walkways

Feasibility Report

Flats 1-25, Langdale House, 4-12 Dorrington Street, EC1N 7TB

For **Origin Housing**
Prepared by **BPG Architects + Surveyors**

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Introduction

Brief

BPG were appointed by Origin Housing in October 2019 to undertake a feasibility study to look at solutions to overcome issues with drainage and standing water to existing external walkways at Langdale House, Dorrington Street, London, EC1N. The existing site is bordered by Dorrington Street and Leather Lane and comprises of three storeys of residential flats over a mixture of commercial units on the ground floor in an 'L-shaped' block which follows the line of the two bordering roads.

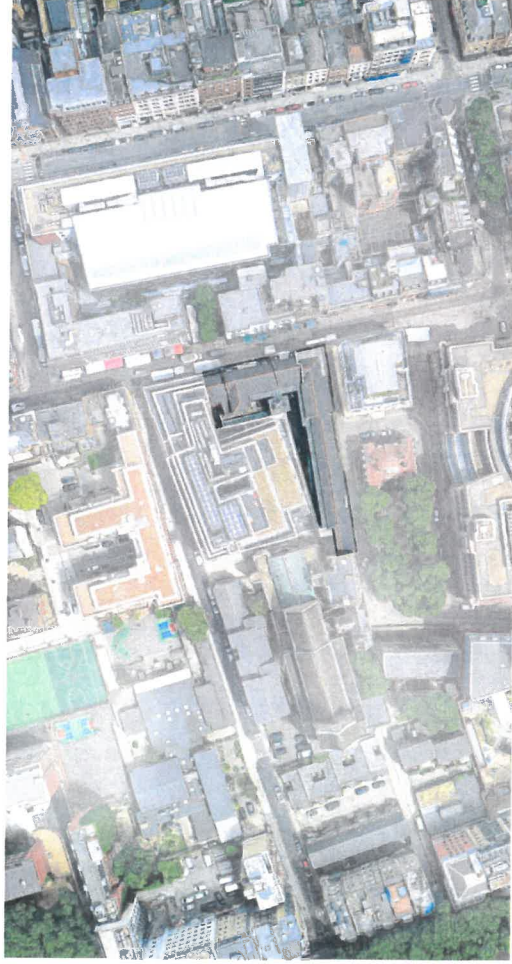


Image credit - Google maps

Both the outward and inward facing elevations comprise of brick façade, timber casement windows. The inward facing elevation also has open external metal deck walkways complete with vertical bar railings providing access to the flats. The existing walkways are prone to problems with standing water, owing to poor drainage.



1.a - Existing outward facing elevation



1.b - Existing outward facing elevation



1.c - Existing inward facing elevation

Drainage Issues

The current problems with drainage to the walkways primarily arises from the lack of sufficient fall to the existing walkway deck, leading to standing water in times of rainfall.

To overcome this a number of solutions were considered including:

1. Installation of the new coverings to existing deck to provide sufficient fall to allow the walkways to drain.
2. Replacement of walkways.
3. Enclosing the walkway to stop excess water accumulating on the deck.

On further investigation Option 1 was considered to be unfeasible for the following reasons:

- There are ramps within the existing walkway deck, which would mean that it would not be possible to create the required falls within these areas to enable the deck to drain effectively.
- Existing threshold levels to flat entrances are too low to accommodate any additional coverings, without changing the level of the existing deck and/or resolving further weathering and waterproofing issues at these junctions. (Photograph 2.a)

Option 2, replacing the entire walkway, would have significant disruption to the access to flats and therefore was deemed to be both an expensive and impractical option.

Therefore Option 3, enclosing the existing walkways to stop the excess accumulation of water on the existing walkways, was deemed to be the most feasible solution to the current problems. The options for achieving this are explored further on the following pages.



1.d - Existing inward facing elevation



1.e - Existing second floor walkway



1.f - Existing inward facing elevation



1.g - Existing walkway



2.a - Typical threshold

U-Glazing Precedents

Examples of completed projects elsewhere, where U-glazing has been used:

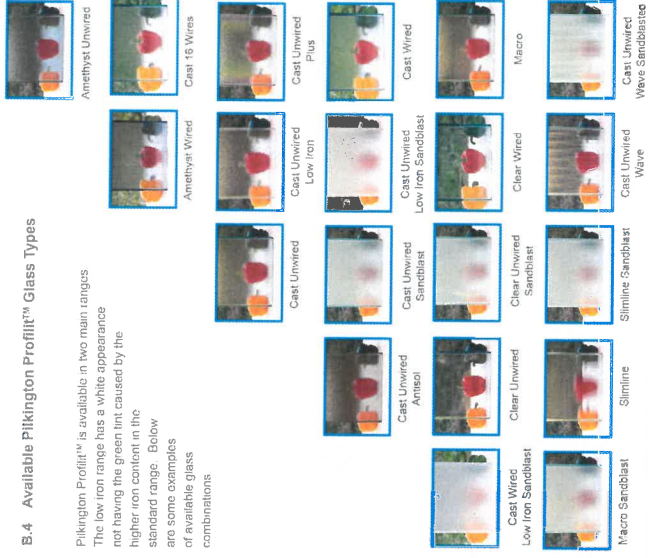


Benefits of the System

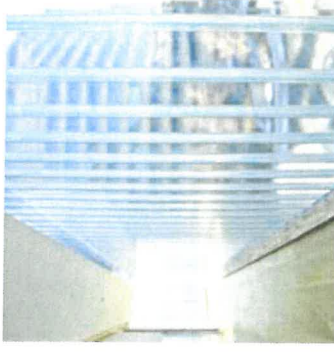
The proposed system comprises of u-shaped glazing modules which are fitted top and bottom in a vertical configuration within an aluminium framework. The system offers a choice of glazing options.

B.4 Available Pilkington Profilit™ Glass Types

Pilkington Profilit™ is available in two main ranges. The low iron range has a white appearance not having the green tint caused by the higher iron content in the standard range. Below are some examples of available glass combinations



3.b - Interior Togglass example



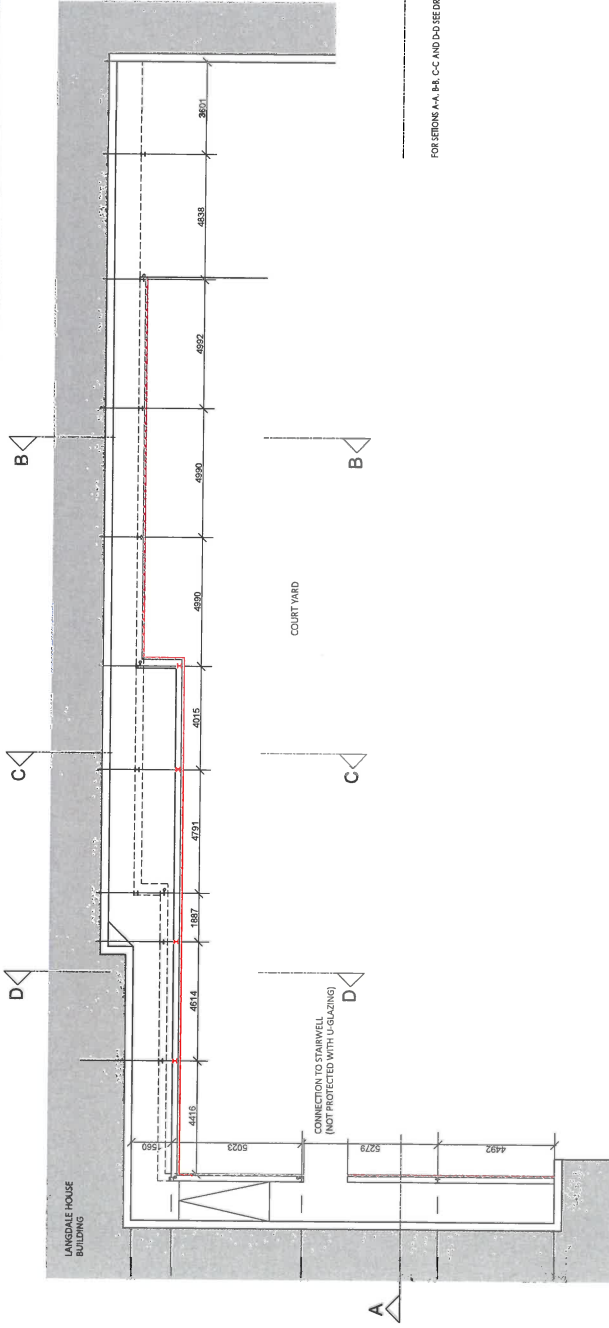
3.c - Interior Togglass example

The use of semi-transparent or transparent glazing to enclose the walkways will ensure that access to light is not restricted to the existing flats. Furthermore the use of this particular system comprising of modular vertical glazing panes with ventilation gaps, will maintain continuity of ventilation within the newly enclosed walkways.

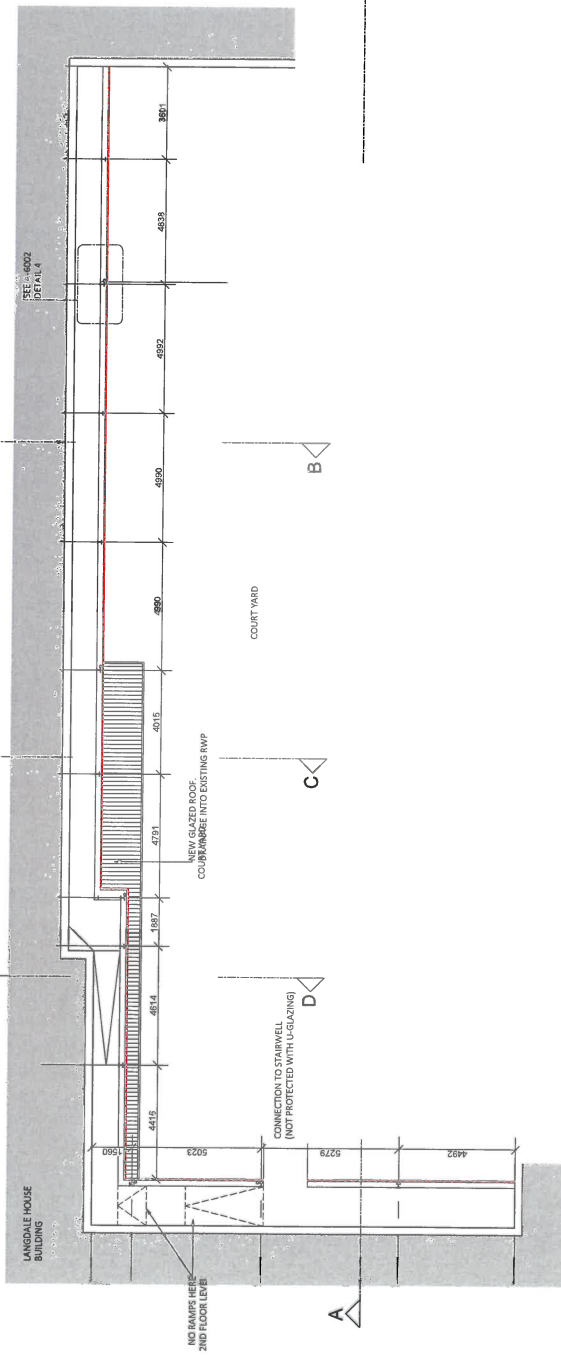
The proposed system can also be fixed to the external face of the existing walkway and therefore this will enable the installation of the system whilst the flats are occupied. As access can be maintained this means there will be minimal disruption to residents whilst the works are carried out.

3.a - Togglass glazing options

Proposals - Plans

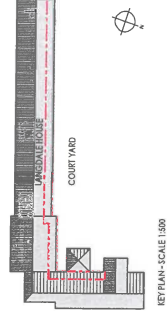


FIRST FLOOR PLAN SCALE 1:100 @ A1

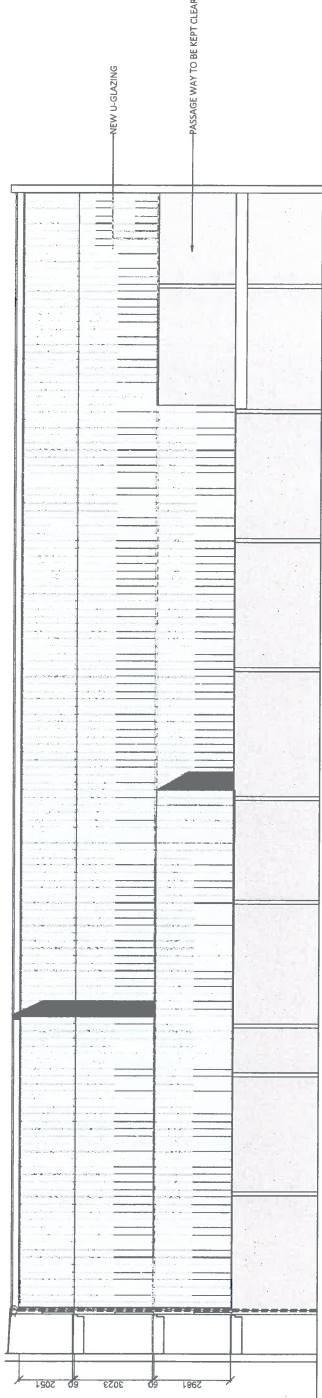


SECOND AND THIRD FLOOR PLAN SCALE 1:100 @ A1

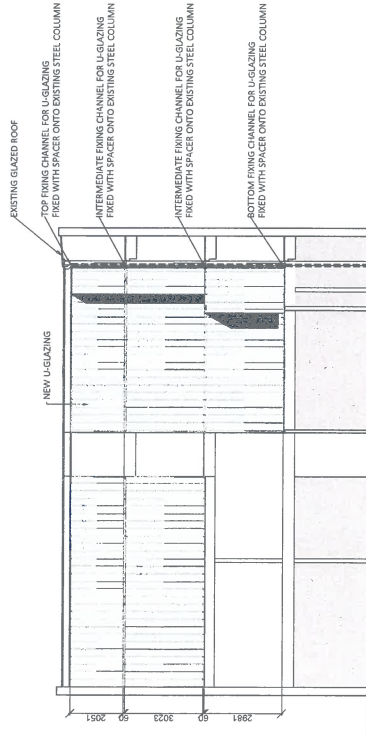
FOR SECTIONS A-A, B-B, C-C AND D-D SEE DRAWING P-4001



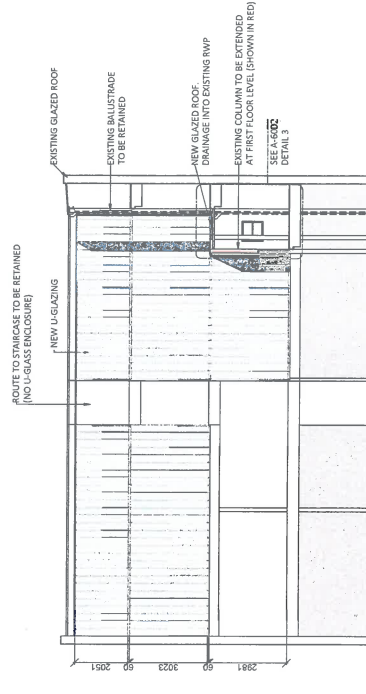
Proposals - Elevations



SECTION AA SCALE 1:100 @ A1

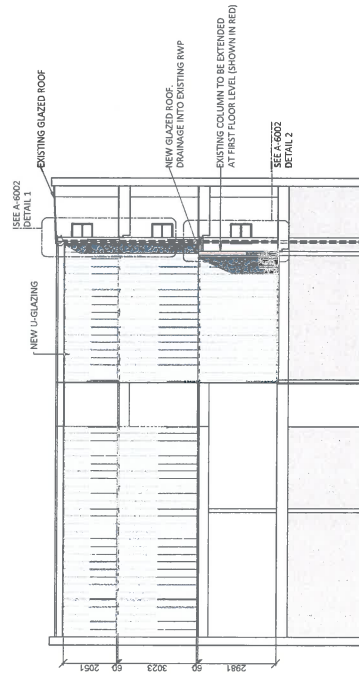


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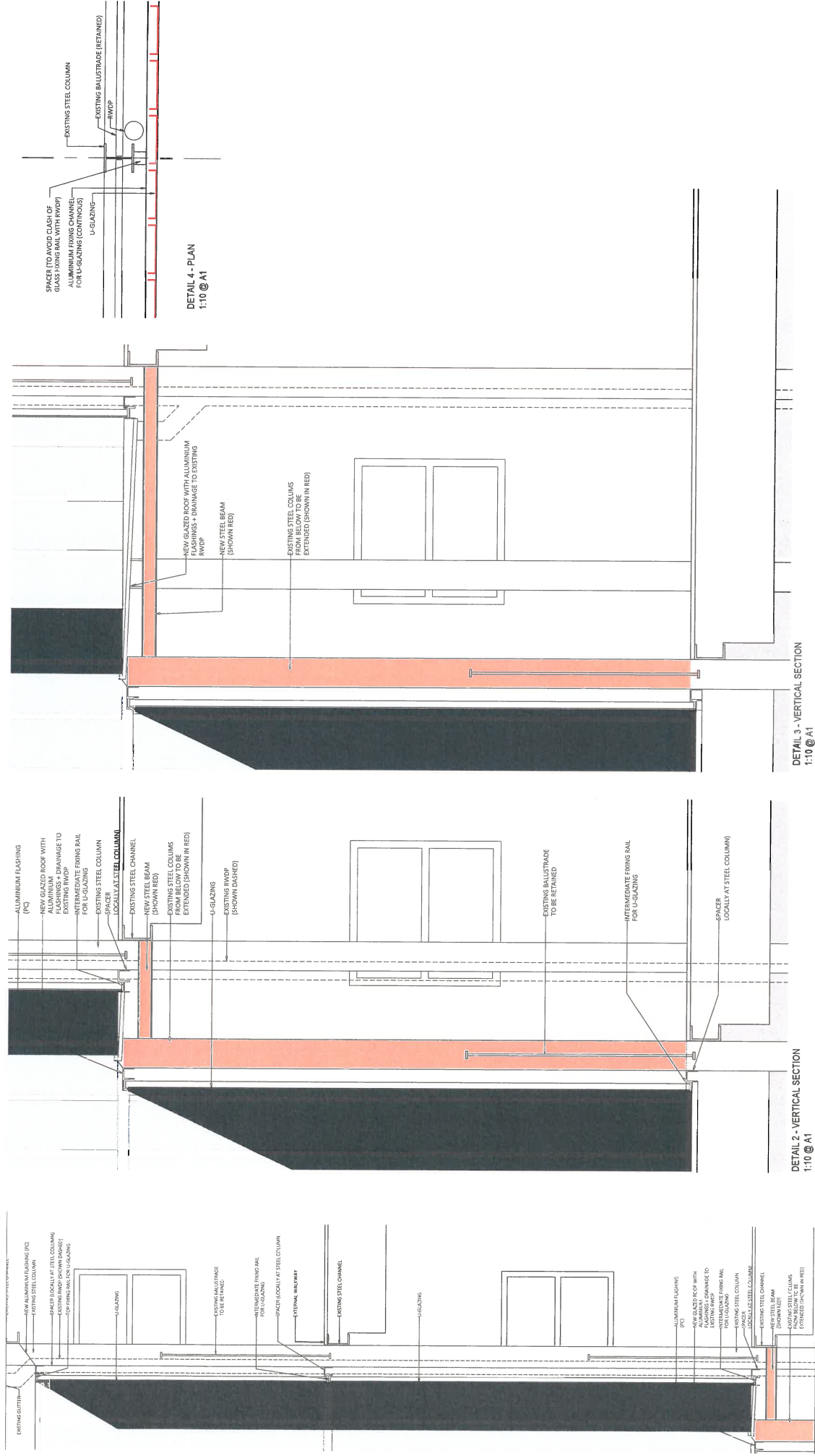
SECTION C-C SCALE 1:100 @ A1

SECTION B-B SCALE 1:100 @ A1



SECTION D-D SCALE 1:100 @ A1

Proposals - Details



Future Maintenance

With any property maintenance is an important consideration. Manufacturer recommendations for this system are annual cleaning and maintenance, which is typical for cyclical maintenance for any similar glazing system.

The composition of the system in small vertical panes, also means that if breakage of a pane were to occur, this could be easily replaced without need to replace large panes of glazing.

This system also comes with a 25 year guarantee.

