Design Statement

Proposal: Alterations to planning consent Reference 2015/0034/P relating to single storey roof extension, 1x3 bed self-contained flat

Site Address:
5-6 Underhill Street, London, NW1 3ND

Date:
2 June 2017

Contact details: **Applicant/ owner of application site:**
AS&K Commercial Property Ltd. 9 West Heath Road London NW3 7UX

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Layout and structural height of roof extension:

Layout:
The amended proposal is to reduce the external patio area by 1.5m (extending the reception room and dining room by the equivalent amount).

Reduction of roof terrace:
On further reflection by the client, this area will be reduced so as to increase the internal amenity of the apartment as the external space will be rarely used. We concur that the additional internal floor area is of much greater value.

Large windows in the living area and floor to ceiling windows in the bedrooms will connect the internal spaces more than adequately with the outside.

Placement of windows:
The position and size of the windows has been revised to suit the revised layout. Windows have been added on the South West and South East facades. These will be a minimum of 1.7m above ground to prevent overlooking issues.

Height of roof extension:
The proposed height of the roof extension is 645mm (the pre-application was 745mm) higher than originally shown.

The reasons are:
The structure of the existing building is not able to take the load of an additional floor unless a structural steel frame and deck is installed on top of the existing roof (SEE Parapet Detail drawing 226-400-A). The consented scheme assumed that the finished floor level of the apartment equals the finished level of the existing roof which is not achievable, nor does it conform to building regulations in terms of drainage or heights of the f.f.l from the external f.g.l. etc.

The internal room height of the new proposal is 2.415m - 185mm lower than originally consented (2.6m) – in order to compensate for the higher position of the new f.f.l.

The proposed flat roof will be highly insulated and requires a thickness of 442mm, including falls of 2% to rainwater outlets, in comparison to 300mm as shown on the consented drawings.

Overshadowing:
We have indicated on the Sections and Elevations Drawing 226-300-A the 25 degree Rule of Thumb for the BRE's Daylight and Sunlight Calculations. It can be seen from the consented scheme that the neighbouring building is already overshadowed: This minor increase will have little to a minor effect on the neighbouring building. It is therefore hoped that this increase in Parapet height of 645mm is acceptable given the structural issues that have arisen since the original planning application.

We hope you agree that we have shown willing by decreasing the floor-to-ceiling height as well as using the thinnest steel beams given the Structural Engineer's advice:

"We have looked at the sizes for the steel beams. The most economic steelwork design will be achieved if we allow a structural zone depth of 450 mm. However, if necessary, we should be able to achieve a depth of 325 mm".

- Owen Brooker, Modulus

Summary:
The increase in height is necessary to construct the building on top of the existing roof in a structurally sound manner, and allow for adequate thermal insulation and comfort. The impact is nominal considering the overshadowing issue discussed above, as well as the fact that the majority of neighbouring buildings are higher anyway.

The new penthouse parapet wall will be extended vertically due to the structural reasons given, but the minor extra overshadowing occurs on the building to the South West's rooftop only. This building's North East façade is already in shadow with the consented scheme.

The visual impact of the increased volume and loss of external area is minimal considering the size of roof extension in relation to the size of the main building and neighbouring properties.

Method of construction:
The building shall be manufactured off-site by award winning eco-house pioneer Baufritz as a highly insulated timber frame construction to allow a fast construction process on site and achieve highest environmental standards. Baufritz is a European leader in building high quality ecological and healthy buildings. All materials used are natural, recyclable and biodegradable. Baufritz buildings are carbon positive, meaning they store more CO2 than used during the construction and running of the building.

For more information visit www.baufritz.co.uk

Submission documents:

Drawings by The House Designers:
226-101-A - PROPOSED FLOOR PLANS - SECOND TO ROOF
226-300-A - PROPOSED SECTIONS AND ELEVATION
226-301-A - EXISTING AND PROPOSED SW ELEVATION
ADDITIONALLY, PARAPET DETAIL DWG NO. 226-400-A