Sustainable Design Statement

8 Belgrave Place, London, SW1X 8AJ

May 2022

Ref: 00185-A50-200

1. Introduction

This document has been prepared by Timothy Tasker Architects on behalf of Mr Peter Harrison to form part of the planning application for the alteration and the extension of the property. This report should be read in conjunction with the enclosed submission information.

This document supports the planning application for the following works:

- Excavation of a single storey basement incorporating rear light well
- Erection of dormer windows to side and rear elevation roofs
- Lowering of existing rear side windows to create Juliet balconies to match
- Lowering of existing lower ground floor window to accommodate relocated rear entrance door
- Replacement of existing windows with double glazed timber windows to match
- Re-decoration of all painted stucco render elements, iron work and railings and rainwater pipes
- Replacement of existing garage door with new painted timber doors with obscured glazed panels
- Installation of AC unit and acoustic enclosure to existing roof

We have taken the opportunity to improve the energy and water efficiency of the existing building to reduce emissions in order push for carbon neutrality by 2040. We have surmised our sustainable objectives in terms of energy in use and embodied energy as below:

2. Energy in use

Energy in use is has been reduced as follows:

- Installation of boiler with Flue Gas Heat Recovery System (FGHRS) such as an Ideal Logic Code Combi ESP1
- Installation of advanced heating controls (i.e. zoned for the UFH, and a "smart" thermostat)

- The existing roof, floor and wall insulation will be upgraded to significantly improve the U values throughout
- Existing single glazed windows replaced with double glazed units to further reduce heat loss.
- Complete replacement of existing lighting with low energy lighting will also be installed
- Natural ventilation is proposed via the installation of additional openable windows including an openable roof window which will pull air up through the house creating a stack effect. The addition of pitched roof dormer windows will provide cross ventilation, passively cooling the spaces
- New sanitaryware throughout to ensure no more than 105 litres a day water consumption
- Increase air tightness via installation of draught stripping and sealing up all existing penetrations
- All proposed pipework runs will be insulated to reduce energy loss
- Solar treatments to the South facing glazing and roof windows will help control heat gain

3. Embodied Energy

Embodied energy will be reduced as follows:

- Durable long lasting construction materials will be used and installed to highest standards. All proposed lead flashings will be from a minimum code 5 lead standard and installed as per the lead sheet association recommendations and guidance.
- Natural materials will be used externally wherever possible, natural slate tiles are proposed to the roof and natural stone will be used for the proposed copings and external lightwell finishes
- Timber will be used instead of steel/concrete wherever possible. Double glazed timber windows are proposed extensively
- Natural internal finishes and paints will be used wherever possible
- All building materials removed from the property and basement excavation will be re-used wherever possible such as hardcore and timber

The refurbishment and extension of the building will significantly reduce the energy in use and the embodied energy of the building thereby assisting in minimising the effects of climate change thus meeting the objectives of Westminster's recently adopted City Plan.

We believe this sustainable design statement demonstrates we have incorporated the relevant sustainable design principles into the design of the development in line with the City Plan 2019-2040 and the guidance outlined in the councils Environmental SPD.

Timothy Tasker Architects Ltd. Riverbank House, 1 Putney Bridge Approach, London SW6 3BQ

studio@ttarchitects.co.uk
+44 (0)203 620 2259