CANAWAY FLEMING ARCHITECTS

10b Wavel Mews

2016/5492/P

Sustainability and Climate Change

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Contents

1. Introduction

Canaway Fleming Architects have been commissioned by our client, the applicant, who is the owner of the site at 10b Wavel Mews to design a new modern family home on the site of the existing house. Our client's vision is to design and build a new family residence and a high quality modern piece of architecture making the best possible use of land. The house would naturally embody low energy technologies and promote low carbon standards in both the construction and daily use of the house - ***a sustainable development***.

The following document provides further detail on how the design and construction of the proposed new house would address issues relating to sustainability and energy use under Camden council's Policy CC1 – *Climate Change Mitigation,* with a particular focus on *Resource efficiency, demolition and retrofitting existing buildings.*

2. Existing Building

The existing building at 10b Wavel Mews is described and illustrated in the Design and Access Statement (reference P16-107-A-RP-01-004 Rev 01) accompanying the planning application reference 2016/5492/P. Reference should be made to that document for further detail on the context of the building and site. The site is located in the South Hampstead Conservation Area.

2.1. Accommodation

The house is a two-storey semi-detached dwelling. At the ground floor, there is a single garage internal to the footprint of the house. Accommodation consists of a separate kitchen with a living/ dining room to the rear and WC to the ground floor. At first floor are three bedrooms one double bedroom with an en-suite bathroom, two single bedrooms, and a family bathroom. The ceiling heights in the house are low generally.

2.2. Construction

The existing building was constructed in the 1970's. External walls are uninsulated solid brickwork construction; the ground floor is an uninsulated ground bearing solid concrete slab construction. The first floor is constructed of timber floor joists as is the flat roof with a bitumen felt finish. Windows are aluminium framed and single glazed

The garage the north of the house is traditionally built with a single skin of brickwork and a timber framed roof.

2.3. Energy and Utilities

The house is heated via a gas fired boiler and radiators which also provides hot water via a hot water storage tank. There are currently no renewable energy technologies used to provide power to the house or water efficient technologies such as rainwater harvesting.

The existing house would not comply with current building regulations under Approved Document Part L - Conservation of Fuel and Power, due to the period of construction.

3. Proposed Development

3.1. Accommodation

The applicant proposes to construct a new four-bedroom family home on the site of the existing building. The new house would be constructed over three levels, these being: a new basement, ground and first floor levels. The new house would provide for the following accommodation:

- **Basement Level** – gym, study, shower room, living room and sunken courtyard garden;
- **Ground Floor** – one garage and cycle storage, entrance hall, accessible WC, open plan family kitchen and dining room; and
- **First Floor** – master bedroom with en-suite bathroom and dressing room, three further double bedrooms and family bathroom.

3.2. Efficient Use of Land

The proposed new house would provide significantly more accommodation than currently exists in providing for a larger family home. Efficient use of land is central to sustainable development however, the development must also consider other issues, in this case heritage and physical contexts when reaching a balance to what an appropriate amount of development might be on the site.

It has been considered that significantly increasing the height of the existing building to provide new accommodation would not be appropriate in the context of the conservation area. Other methods for providing more accommodation have been considered to mitigate the increased height while making better use of the land, hence the proposals for a new basement.

In addition to the proposed new basement, the house has been designed to provide increased space above ground to the side and rear of the house and the front at the first floor. The mass, scale and form of the proposed new house is therefore very different from the existing; modern in design approach yet sensitive to the context of the conservation area in achieving the greatly improved accommodation, a high quality piece of architecture and better use of land.

3.3. Resource Efficient Construction

A new basement is being proposed to provide increased amenity and living space. The new basement requires structure to be put in place to ensure safe construction of the new building and protect the adjacent buildings and structure. Retention of the existing house would not be compatible with construction of the new basement. Removing the existing building means safer more efficient construction techniques can be adopted in the construction of the new house, reducing time on site and minimising temporary works and resources generally.

The Basement Impact Assessment, Construction Method Statement and Traffic Management Plan submitted with the planning application identify the proposed approach to the construction of the new house. The applicant is committed to procuring the construction of the new house in line with industry standard best practice guidance and statutory requirements to achieve:

- reduce waste from construction activities;
- reduce energy and water use during construction;
- efficient use of materials; and
- sourcing of materials with low embodied carbon content and where possible source materials locally.

Waste would be minimised during construction, this would include for the removal of the existing house and where possible the reuse of materials on site or facilitate the reuse of materials off-site with the aim to diverting 85% of waste from landfill as per the recommendations of the ICE Demolition Protocol.

Where possible waste would be sorted on site to identify materials suitable for reuse or if this is not possible would be directed to accredited waste salvage centres.

3.4. Low Energy and Water Demands in Use

It has been established that the existing house has little or no architectural merit that would justify retention of the building in whole or part. It has also been established that the design of the replacement building is required to be of high architectural quality to fully justify the removal of the existing house and provide a positive contribution to the conservation area. This approach extends to the method of construction of the new house and its sustainability credentials.

The proposed new house will be designed to meet the current provisions of the building regulations under the following approved documents:

- Part G - Sanitation, Hot Water Safety and Water Efficiency; and
- Part L - Conservation of Fuel and Power.

The proposed new house has been designed to maximise the use of natural daylight where possible with the provision of well-proportioned glazed openings and roof lights to reduce the reliance of artificial light during daylight hours.

Living spaces will be located at basement level providing for an increased level of insulation to the structure via semi exposed surfaces (as opposed to exposed walls above ground level).

Energy efficient appliances and low energy lighting would be utilised throughout the house where possible. Provision of renewable energies such as photovoltaics to the roof are to be considered as part of the energy strategy of the new house.

3.5. Removal of the Existing Building

Construction of the new house would necessitate the removal of the existing building. Camden planning policy CC1 – *Climate Change Mitigation* states the following:

- require all proposals that involve substantial demolition to demonstrate that it is not possible to retain and improve the existing building; and
- expect all developments to optimise resource efficiency.

Justification for the removal of the existing house in the conservation area on the principles of design, heritage, use and amenity has been provided in the design and access statement and discussed with the Local Authority during pre-application consultation and design development during the consultation period of this application.

In consideration of the foregoing we consider that the removal of the existing building would be fully justified under policy CC1.