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SUSTAINABILITY STATEMENT

PROUN

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Introduction

The proposal involves alterations to the ground floor units at Nos. 148 and 148A including the change of use at No. 148 to an office (Class E(g)) and 148A to estate agents (Class E(c)); part 1, part 2 storey rear extension including the creation of 1 x 2 bed maisonette and alterations to the existing 1 x 2 bed flat.

Sustainability has been a key consideration in the design process for redevelopment of this previously developed land.

The proposed development will be designed to meet Building Regulations requirements. The design includes the following sustainability measures. These elements will be dealt with in greater detail as the design is developed for construction in advance of an application for Building Regulations approval.

Categories for Assessment

Energy efficiency

Energy saving measures will be provided to achieve the equivalent of Code for Sustainable Homes level 4. Design principles have been adopted to reduce energy consumption and CO₂ emissions using passive design and energy efficiency measures. These include:

- Maximising natural light and ventilation.
- Achieve a Dwelling Emission Rate to meet the targets set out in the Building Regulations. SAP calculations will be provided by an accredited SAP assessor to demonstrate compliance.
- Design building fabric to exceed building regulations fabric standards and U values to reduce heat loss.
- Energy efficient lighting.
- Making provision for secure outdoor clothes drying with washing lines to private gardens, terraces and balconies.
- Using energy efficient white goods.
- Secure weatherproof cycle storage.
- Provision of space and services for home office opportunities.

Building fabric

New walls, floors and roofs will include thermal insulation to meet current U values.

Lighting

It is proposed that a minimum of 75% of internal light fittings are energy efficient type with efficiency greater than 40 lumens per circuit watt. All light fittings will be capable of receiving energy efficient lamps. All lighting in communal areas will be energy efficient and be controlled by movement detectors and timed shut off.

Energy efficient white goods

It is proposed that fridges and freezers are provided and have an A+ rating under the EU Energy Efficiency Labelling Scheme, and that information on the EU Energy Labelling Scheme is provided covering other appliances. If washing machines and dishwashers are provided these will have an A rating.

Cycle Storage

Secure covered cycle parking will be provided within communal and private storage areas.

Water efficiency

Water saving measures will be provided to achieve the equivalent of Code for Sustainable Homes level 4. These measures will include the specification of low volume dual flush toilets and low volume baths, along with low flow kitchen and bathroom fittings and appliances as follows.

- WC: 6 litres / 4 litres dual flush
- Taps: 3 litres per minute
- Shower: 6 litres per minute
- Bath: 140 litres maximum capacity to overflow
- Washing machines: 49 litres per cycle
- Dishwasher: 13 litres per cycle

Water butts will be provided to collect rainwater runoff from the roofs for garden irrigation.

Materials

Materials will be responsibly selected from sustainable or managed sources, including products with EMAS, EMS, FSC and PEFC certifications.

High efficiency hot water and heating systems will be specified, along with construction detailing to reduce air permeability and prevent thermal bridges.

Building materials will be sourced locally and recycled materials will be used wherever possible.

The design will aim to make efficient use of materials including standardisation and re-use of off cuts where practical. The design will also consider the future dismantling and re-use of materials.

Surface water run off

The design includes sustainable drainage systems to attenuate surface water discharge, including soft landscaping and permeable paving materials. Rainwater is also collected from roofs and stored in water butts for garden irrigation. Surface water run-off is into the existing system, and the design will ensure that no additional run-off will occur.

Flood risk

The site is located in an area of low annual probability of flooding.

Construction site waste management

The waste hierarchy of 'Reduce, re-use, recycle' will be adopted to minimise construction waste. There is limited demolition and excavation required, and the existing topography will be generally retained to minimise excavation spoil. A site waste management plan will be adopted which includes a commitment to minimise waste generated on site in accordance with WRAP / Envirowise guidance.

Waste: storage of non-recyclable waste and recyclable household waste

Each dwelling will include separate storage bins within the kitchen for recyclable waste in addition to the general refuse bin. Refuse bins are located at ground floor level within the enclosed communal store and meet local authority storage requirements. Separate bins are provided for general refuse and recyclables.

Composting facilities

Composting facilities are not considered appropriate for this development, but will be explored further as the design is developed for construction.

Pollution

Insulation materials will be selected to avoid the use of substances that have a global warming potential of 5 or more. Heating and hot water systems will have low NO_x emissions.

Health and well being

The design incorporates good levels of natural day lighting, sound insulation which meets or exceeds Building Regulations requirements, dual aspect with the opportunity for natural cross ventilation, good outlook, and private outdoor space to each dwelling to ensure that good quality accommodation is provided.

Sound Insulation

Airborne and impact sound insulation will be designed to exceed the performance standards set out in the Building Regulations, Approved Document E.

Accessibility

The development s designed to meet the requirements of accessible and adaptable dwellings in compliance with Approved Document M of the Building Regulations.

Construction site impacts

The contractor will be a member of the Considerate Constructors Scheme, and be required to comply with best practice site management principles. The contractor will adopt best practice policies in respect of air (dust) pollution arising from site activities, and in respect of water (ground and surface) pollution occurring on the site.

Security

The design will comply with the guidance of Secured by Design.

Ecology

The existing site is of low ecological value. The replacement landscaping will provide improved ecological value which will be integrated into the local area.

Management

Each dwelling will be provided with a simple Home User Guide which informs the occupier of environmental performance issues in a non-technical format.

Conclusion

The above points demonstrate that this proposed residential development will be designed to meet Building Regulations requirements and achieve a sustainable building.