

ENERGY STATEMENT

10 GLENEAGLES CLOSE

SOUTH OXHEY, WD19 6LS

CONVERSION OF SINGLE DWELLING INTO 1 X 3 BED (6P) DWELLING AND 1 X 2 BED (3P) DWELLING, WITH ASSOCIATED AMENITY SPACE, CYCLE STORAGE AND BIN STORAGE INCLUDING ALTERATIONS AT 10 GLENEAGLES CLOSE , WD19 6LS

INTRODUCTION

This statement has been prepared on behalf of our client **Mr. & Mrs Gaurav Baral** for whom we submit a Energy statement in support of the planning application for conversion of single dwelling house into two self-contained units with separate amenity space at rear, including alterations at 10, Gleneagles Close, WD19 6LS

Site Description and Surroundings:

The site includes a semi-detached dwelling located on Gleneagles Close, South Oxhey. Gleneagles Close is a cul-de-sac comprised of semi-detached and terraced dwellings of similar design. The dwelling is set back from the highway by approximately 15m and has a dark tiled gabled roof form and a red facing brick exterior finish. The site is not in a conservation area and the building is not a listed building.

Proposal:

This proposal is for a part single storey rear and side extension and loft conversion including rear dormer and the conversion of the extended single dwelling into to two separate flats given pre-application advice Ref: 20/1548/PREAPP.

Ground Floor – 3 Bed 6 person flat of 97.5 sq. m,

First floor & loft floor – 2 Bed 3 person flat of 83.6 sq. m

Energy Conservation

The orientation of the development makes maximum use of natural resources such as daylight and sunlight. Natural daylight and ventilation have been considered important factors in the design in order to minimize the use of artificial lighting and mechanical ventilation within the flats. Windows will be specified with low E, high transmission glazing (transmission level of up to 70%), thereby maximizing the light levels whilst minimizing heat loss from window openings.

Energy Efficiency

Policy DM4 of the Development Management Policies LDD sets out that development must produce at least 5% less carbon dioxide emissions than Building Regulations Part L (2013) requirements having regard to feasibility and viability. This may be achieved through a combination of energy efficiency measures, incorporation of on-site low carbon and renewable technologies, connection to a local, decentralised, renewable or low carbon energy supply.

1. The development's predicted energy demand in kWh/year. This figure should be based on SAP or SBEM calculations and separated by fuel type (this is the DER or BER value)
2. The total carbon dioxide (CO₂) emissions resulting from the above energy demand (kgCO₂/year).
3. Proposals to reduce the energy demand. Specifications of any decentralised energy source and/or low or renewable energy systems proposed for the development shall be included.

4. The reduction in carbon dioxide emissions resulting from the above measures.

The building fabric will be upgraded and insulated where possible against heat loss to at least the current requirements of the Building Regulations. Specific measures would be delivered on the proposed development including: To minimize carbon dioxide emissions from use of heating, hot water systems and lighting and appliances. Improved thermal efficiency of the building envelope through enhanced 'U' Values. The boiler will be a Class 5 with maximum NOx rating of 40mg/kWh, and will incorporate heat recovery technology, such as 'Zenex Gas Saver'. This will preheat the incoming water to the boiler by making use of the waste exhaust heat and condensate in the flue, thereby increasing the boiler performance for producing hot water and reducing energy requirements of the system. Incorporation of 'A' or 'A+' rated appliances for energy and water consumption. Provision of energy efficient internal and external lighting with appropriate control to minimize electrical demand. Provision of internal retractable washing lines and drying space in each units. Provision to all flat owners' information about efficient use of energy installations within the units.

Ventilation & Lighting

Where mechanical ventilation is required under Building Regulations within Bathrooms and Kitchens, standard heat recovery ventilation systems will be specified whenever practicable. The system operates by extracting energy from the warm expelled air and uses this to preheat the incoming, cooler air. Localised lighting with user controls and low energy fittings will be specified. The use of low energy lighting will be maximized throughout the design. It will be positioned, controlled and focused such that its energy provides efficient, safe and secure access.

Water Conservation & Recycling

A water meter will be installed in each unit and a water leakage detection system installed together with water saving appliances will be specified. All flats will be specified with modern, efficient low water use appliances (Washing machines and dishwashers) and equipment to minimize water usage. Basins and Kitchen sinks will be fitted with flow restrictors or aerated taps as standard.

Sound Insulation

The flats will be the subject of rigorous sound insulation requirements to meet the current Building Regulations and will ensure that the noise nuisance between flats will be minimised.

- 1. All units will have 100% of their water supply through a water meter.**
- 2. All units will incorporate water saving and efficiency measures that Comply with Regulation 36(2) (b) of Part G 2 of the Building Regulations to ensure that a maximum of 105 litres of water is consumed per person per day.**
 - 1. All units have been designed to meet Part M42 of the building regulations.**
- 4. CO2 omissions from the building will be 10% less that the minimum standards provided within the building regulations.**