

Sustainability Statement

South Winds, Battledown Approach, Cheltenham, GL52 6RE

24th May 2023

Introduction

South Winds is in the Battledown area of Cheltenham, within Cheltenham Borough Council. The property is a detached house, originally constructed in the mid-1980s.

The original property is cavity wall construction.

There is limited opportunity to greatly impact the thermal efficiency of the existing building.

The following key measures have been considered:

Key Measures

Site and orientation

The proposed extension faces northeast and therefore will not incur a great deal of solar heat gain from the afternoon sun, thus ensuring there is no excessive overheating because of the new windows and doors to the new extension.

Building Fabric Design and Detailing

Insulation is the key part of sustainability. It serves to conserve energy by minimising the escape of heat from the building.

Due to the age of the building, heat loss is a principal issue in this dwelling. The new extension will comply fully with up-to-date building regulations which will ensure a very high standard of thermal insulation. The addition of the proposed extension will greatly improve the overall thermal efficiency of the property.

In addition to the structure, all new windows and doors will meet current u-value requirements along with draft proofing and airtightness.

The existing property is served by a modern boiler which is efficient and uses low carbon to heat the dwelling. With the added thermal efficiency of the extension, it is expected that less heat will need to be generated to provide the required warmth for the dwelling.

All sanitary ware and fittings will comply with current building regulations in terms of maximum flow rates, thus conserving water. All pipe work will be insulated to prevent heat loss and where possible pipe runs shortened to minimise pipe lengths and loss of heat.

There is the opportunity to install a rainwater butt at the rear of the new extension to provide water to irrigate the garden.

Transport and Travel

The property is situated on a main bus route into the centre of Cheltenham.

Ecology and Biodiversity

Although the extension will remove part of the existing soft landscaping, there will remain an ample area for lawn, plants and a wild bee friendly area.

Recycling

The household recycle all waste in accordance with Cheltenham Borough Council's recommendations.