

ENVIRONMENTAL DESIGN STATEMENT

Proposed Development of a Mews of 6 Residential Dwellings

within the grounds known broadly as West Barn, Old Dairy Lane, Norton, Aldingbourne PO20 3AF

The design proposals for the West Barn Residential Mews will utilise either:

- the fabric first approach, maximising energy efficiency, with high U-values, low air permeability and mechanical ventilation with heat recovery (MVHR).
- or proposing at least 10% of the energy supply of the development shall be secured from decentralised and renewable or low carbon energy sources (as described in the glossary at Annex 2 of the NPPF)

The heat requirements for the dwellings will be kept to a minimum, and the low heating requirement will be met with a small, highly energy efficient gas fired boiler. Utilising a small gas boiler will result in lower carbon emissions and lower fuel bills than an electrically supplied heat pump system.

Dwellings will have an energy efficient underfloor heating system with zoned temperature control and weather compensation. Energy efficient lighting shall be installed throughout and photovoltaics will be installed to provide renewable electricity to each dwelling. The occupiers will benefit from the use of the renewable electricity to fuel the dwelling and potentially to receive an income from the Renewable Heat Incentive (RHI) scheme (scheme extended to 31 March 2022).

Energy display monitoring devices will be provided in all the dwellings showing energy consumption of both the gas and electricity, CO2 emissions along with details of the current tariff and cost of fuel consumed. This is important for reducing energy consumption as many occupiers do not understand the energy they use and therefore are unable to improve their habits to reduce energy consumption.

To minimise the embodied energy of the dwellings the materials selection has been considered to maximise the selection of materials with low embodied energy that score highly in the BRE Green Guide for Building Specification. The majority of the materials will achieve an A+ and A rating and the windows shall score an A-D rating.

Each dwelling will be provided with sufficient space, power sockets, telephone and broadband data-points to enable the occupier to work from home should they desire. This improves flexibility for residents providing the ability for people to work from home by providing the right environment and services and minimises the environmental impact of the travel associated with commuting.

Potable water consumption of dwellings will be reduced by specification of low water consuming fittings and water efficient appliances, such as 4/2L dual flush WCs and low flow taps and showers.

To encourage recycling a kitchen cupboard shall be fitted with separate bins for recycling and general waste and a compost bin shall be provided in each garden. Two waste bins per dwelling will be provided (1 x 240l refuse bin and 1 x 240l recycling bin).

The provision of gardens provides a private outdoor space for the residents. A healthy internal environment is created through the provision of large windows providing a wealth of natural light. Air quality is maintained with the filtration and provision of outdoor air, particularly during the winter months, through the MVHR system.

Provision will be made for facilities to enable the charging of electric vehicles (at a distribution of one point per allocated parking space).

The West Barn Residential Mews on Norton Lane has been designed holistically, incorporating sustainable design principles throughout to provide low energy dwellings that will provide a healthy environment for its occupants.

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