

BARKWAY - ENERGY & SUSTAINABILITY STRATEGY

1.0 Energy Strategy

The proposed dwellings will be constructed following a fabric first approach to comply with the requirements of Part L1A Building Regulations, incorporating high standards of thermal insulation, airtightness, and thermal bridging together with efficient heating and lighting systems. No gas will be installed across the development. Electric Air Source Heat Pumps and underfloor heating will be installed in all private dwellings. Electric panel heaters and Hot Water Heat Pumps will be installed in affordable dwellings. SAP calculations using SAP10 software will be provided to the NHBC to demonstrate compliance with Part L1A Building Regulations prior to commencement of the development.

2.0 Materials and waste

The development will prioritise the use of materials and construction techniques that have smaller ecological and carbon footprints, help to sustain, or create good air quality, and improve resilience to a changing climate where appropriate. With regards to construction waste, prior to commencement of works on site, Redrow Homes will require the principal contractor, sub-contractors, design team and suppliers to minimise the amount of waste produced during construction and adopt principles to reduce waste.

Through future supply chain involvement, consideration will be given to the responsible sourcing of main construction materials. For example, suppliers will preferentially hold an Environmental Management System (EMS), and where possible accredited to ISO 14001. In addition, all timber in the scheme will be FSC and procured in accordance with the UK Government's 'Timber Procurement Policy'.

3.0 Water consumption

Proposed homes will employ highly efficient water fittings. All dwellings will not exceed the 110 litres/person/day water consumption target. Part G water calculations demonstrating that dwellings will not exceed the target will be provided to NHBC prior to commencement of the development.

4.0 Managing Air Quality

During construction, the principally risk to air quality will arise from plant vehicle emissions and the generation of dust. The impacts are predicted to have a short duration. The scheme will adopt mitigation measures following IAQM construction dust guidance to reduce the risks. The measures include ensuring management of the site including recording air quality complaints and incidents of dust causing emissions, continued monitoring of dust generation on site, use of construction equipment in conjunction with suitable dust suppression techniques and ensuring adequate water supply and cleaning equipment is made available.

5.0 Overheating

The development has followed the best practice 'Cooling Hierarchy' when considering overheating mitigation measures. Part O overheating calculations will be carried out and provided to the NHBC to demonstrate compliance with Part O Building Regulations prior to commencement of the development.

Matthew Moore

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