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KL2950/SA/EW

SUSTAINABILITY DESIGN AND CONSTRUCTION STATEMENT

Replacement Garden / Woodland store – Halsteads, Thornton in Lonsdale

INTRODUCTION

Sustainability should be considered to ensure that all developments take reasonable opportunities to reduce energy use, water use and carbon emissions and to minimise waste, ensure future resilience to a changing climate and wherever possible to generate power through solar or other means, in accordance with Building Regulations.

This Sustainable Design and Construction Statement demonstrates that the design solution has considered and incorporates sustainable principles covered by the Craven District Council's planning documents referring to energy and water efficiency, adaptation to climate change, sustainable construction processes, materials, recycling, and ecology.

TRANSPORT

- The site lies within a rural area and depends on vehicular access.
- The existing property has numerous bike storage areas
- The existing property includes EC charging points
- A new charging point will be incorporated into the garden store for charging of ride on electric mowers etc

ENERGY AND CARBON REDUCTION

Energy and CO2 emissions will be reduced through the construction and operation of the garden store building and its services. The emission rate will be lower than the maximum emission rate permitted by Building Regulations. This will be achieved by the following: -

- The energy efficiently of the building fabric will be improved by limiting heat loss across the building envelope and ensuring a high standard of workmanship and attention to detail.
- The construction of walls and floors will provide high thermal capacity to avoid overheating and will retain heat. High levels of insulation will be installed in the floor, walls and roof which will exceed the minimum required by building regulations. Glazing will also exceed the building regulation requirements.
- Fixed internal lighting will be energy efficient fittings
- Fixed external lighting will be energy efficient fittings

MATERIALS

Where possible materials will be used with a lower environmental impact over their lifecycle. This will be achieved through the following:

- The specification of materials and systems will be mindful of using local companies and suppliers where appropriate to reduce carbon transport footprints.
- All timber will be sourced from sustainable locations.

WATER EFFICIENCY

- Water use will be minimised by installing water efficient equipment as required and increasing awareness of water consumption.

CLIMATE CHANGE ADAPTATION

- The extension has been designed to minimize solar gain and to ensure natural ventilation is available to all spaces.

BIODIVERSITY AND GEODIVERSITY

- The existing property benefits from large gardens and protected woodlands which will be maintained and protected.
- The proposed garden store does not build over any ecological features.
- The proposal aims to relocate an existing garden store building, away from the woodland area - allowing ample levels of sunlight to reach the vegetation and actively encourage biodiversity in the area.
- Bat and swift boxes are already positioned within the existing property this garden store serves.

POLLUTION

- External lights will be fitted with low energy bulbs and will be operated on a PIR system, activated as required.
- Careful choice of materials will limit pollutants arising from the installation of insulation.

RECYCLING AND WASTER FACILITIES CONSTRUCTION WASTE

- The existing property benefits from a site for its non-recyclable bins as provided by the local council.
- There is ample space for the storage of recycling boxes as provided by the local council
- There is ample garden space to encourage the composting of household waste.
- Where possible, site ground works waste will be used for the re-leveling of the proposed site levels. Other waste will be recycled and disposed of responsibly.
- The construction waste will be kept to a minimum. Removed sheet materials including the existing stores wall and roof covering will be salvaged and recycled, providing a sustainable material use and a limited waste.

FLOOD RISK

- The site is in flood zone 1 as identified on the Environment Agency Maps, no further details are required in respect to flooding.

Yours sincerely,
The Wright Design Partnership Ltd

Erica Wright
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