



Energy & Sustainability Statement

Site Address:

Land North of Calvin Court, Kingsley, Staffordshire. ST10 2DY

Applicant:

Hammonds Construction Ltd

Proposal:

Erection of 10no. bungalows: 5no. for the over 55s and 5no. standard market.

Planning Statement:

Date Issued: 30th August 2024

Job Reference: 6060

1. Introduction:

1.1 The applicant submits a full planning application for the erection of 10 bungalows.

1.2 This document should be read in conjunction with all other planning reports and drawings.

2. Existing Site

2.1 The site lies north of Holt Lane, Kingsley. Vehicular access to the site is via the existing vehicle access and egress point which serves Calvin Court.

2.2 The South and West boundaries of the site both consist of residential dwellings, beyond the North and East boundaries are open fields. The densely developed neighboring residential dwellings are made up of 2 stories semi and detached dwellings to the West, with single storey bungalows to the South.

2.3 The site is relatively level, with graded vehicle access from Calvin Court. The Eastern boundary is graded, such that the site cannot be seen from the wider public open space.

3. Sustainability Statement

- 3.1 The proposed development aims to achieve a good standard of scheme design, sustainability and environmental energy performance. This will be achieved by the following methods:

Site layout and design accommodation layout:

The overall scheme has been created in a holistic manor to fit within its site context, its relationship to the existing buildings, topography and landscape character, flora and fauna. The scheme design meets all planning requirements in terms of highways access and car parking provision. The internal planning layout of the house types meet the requirements of accessibility to building regulations standards and inclusive design.

Materials, responsible sourcing and environmental impact:

The materials composition is balanced between the traditional and the contemporary and have low environmental impact. The traditional cottage aesthetic that the properties portray is in keeping with its context, when combined with modern materials and construction techniques greatly improve their performance. They will not cause harm to the environment, are of high quality, long life, low embodied energy and are generally non-toxic in manufacture, construction and use. The materials can be sourced locally, assembled and maintained in such a way that they can be disassembled safely, re-used and recycled in the future.

The landscape treatment of the site is based on the use of a variety of textured hard paving and road surfacing which are self-draining to private courtyard standards. A detailed design and planting scheme has been submitted to support the application.

Construction method and site management of waste:

The proposed development will attempt to meet climate change objectives and surpass the requirements of the existing buildings regulation requirements. We will consider in the detail design evolution of our proposals, modern forms of construction for the primary above ground structural elements, comprising walls, floors and roofs. We will from the initial design stage of the project set parameters and objectives for waste minimisation during the construction phase of the project.

Energy Performance, renewables and efficiency:

We will consider Staffordshire Moorlands District Council policies and guidance documents later in this report.

We must also consider the current building regulations document L1 Volume 1 2021 with 2023 amendments will apply to our scheme development proposals, with our aim to improve on those standards by at least 10% subject to formal review at construction design stage. This will be achieved by the incorporation of high levels of quality thermal insulation, Modern Methods of Construction and renewable energy technologies (where appropriate). A potentially suitable

source of energy for heating could be piped hot water driven by an air source heat pumps. Additional energy efficiency measures to reduce consumption could include mechanical heat recovery ventilation systems, low energy led lighting with motion sensors and triple glazed windows and doors.

Household Waste Management and Recycling:

In keeping with local authority waste management plans, we intend to limit the proportion of householder waste that goes to landfill. We will provide space within the scheme development plan for suitable receptacles that will assist each householder to segregate and store waste for re-cycling. These will be mobile containers in order that they can be moved towards the carriage way for refuse collection.

Drainage Strategy:

Rainwater collection and reuse from the roofs of the proposed dwellings is viable. Rainwater runoff from hard paved areas will discharge naturally through permeable surface texture materials and or discharge into an attenuation tank before entering into the surface water drain located on site.

Foul water drainage will be directed to the mains sewer which is located on site.

Transport:

The site is considered to be sustainable for small scale development. Access to a local rural bus route with links to Kingsley, Kingsley Holt, Ipstones, Cheadle, Leek and Hanley can be achieved directly outside of the site which will reduce reliance on the private car.

Ecology:

The one site ecology if further considered in the PEA and BNG assessments. Please refer to those documents.

4. Key considerations

4.1 We assume that the application will be considered against SMDC declaration of a climate change emergency and the pledge to make the district Net Zero. (made 2019).

4.2 Its is acknowledge that the SMDC current local plan makes reference to planning consent providing a key role in mitigating the causes and effects of climate change through the location and nature of development. We consider that this site is in a well-connected location and well served by public transport routes and amenities within walking distance.

4.3 The SMDC Design guide Supplementary document indicates that principles such as “design first to reduce demand for energy and increase energy efficiency” and choosing materials with “Low embodied energy” should be considered wherever possible by developers. Under the latest version of the building regulations, it is commonplace for new developments to need at least one form of renewable energy source, and that all buildings should be well

insulated and airtight. Materials with low embodied energy will be used wherever possible but must be considered that due to the location and the local vernacular it can be challenging to obtain facing materials that match that criteria.

4.4 At the planning design stage we consider that the proposed buildings will be built to the proposed design standards:

- **Ground floor U Values – 0.12 W/m²K**
- **External walls U Values – 0.19 W/m²K**
- **Roof U Values – 0.14 W/m²K**
- **Windows U Values – 1.0 W/m²K**
- **Air permeability of 4 m³/m²/hr**
- **MVHR ventilation systems to be installed**
- **Air Source heat pumps to be used for space heating**
- **Energy efficient Gas boilers for hot domestic water.**
- **All lighting to be LED**
- **Solar PV will be considered, however on initial review the orientation of the properties does not suit the guidance.**

4.5 Embodied carbon will be fully considered at the construction phase. Subject to planning approval.

5. Conclusion

5.1 We believe that this scheme represents a realistic and conscious effort to develop a small sustainable and energy efficient housing scheme. The Design, construction cost and development value parameters are important to take into consideration, but it is very difficult at planning application stage to make general conclusions and policy decisions on all the energy and sustainability issues relevant to this proposed housing development. The energy and sustainability points outlined above, set out the applicant's strategic intention to achieve the highest levels of thermal efficiency in the proposed development and to create a high-quality designed scheme and to build an environmentally sustainable residential development within.