SUSTAINABILITY AND ENERGY STATEMENT

PROPOSED CARE HOME FOR OLDER PEOPLE, THE OAKS, WEELEY HEATH, CO16 9EF



LNT Care Developments
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1.0 IN TRO DUC TION

- 1.1 This statement is submitted in support of the planning application made on behalf of LNT Care Developments, a company with considerable experience in the development and operation of care homes for older people. This strategy sets out the commitments of the developer in relation to sustainability and energy.
- 1.2 LNT Care Developments acknowledges the importance of the term sustainability within both the immediate and wider context. The main contribution towards sustainability is the extensive research that is undertaken into finding the most appropriate locations.
- 1.3 In accordance with National Planning Policy Framework (NPPF) and the policies with the Tendring District Councils Local Plan the proposed development seeks to mitigate its impact on climate change and reduce carbon dioxide (CO2) emissions.
- 1.4 The following sustainability statement will demonstrate that thought has been given to both the area chosen for development and the materials used in the construction process.
- 1.5 The report aims to cover the main a spects with regards to Sustainable Design and Construction in addition to wider issues in relation to sustainable development.

2.0 LO C A TIO N, TRA N SPO RT AND THE LOCAL ECONOMY

- 2.1 At the heart of the NPPF is a "presumption in favour of sustainable development". The more efficient use of land through optimum density, mixed use development and the use of suitably located previously developed land and buildings has always been a key element to achieving sustainability objectives.
- 2.2 At the loc all level the Council has also developed policies aimed at achieving sustainable development. As with many local authorities, all overriding policies have been strengthened to concentrate development on brownfield sites in accessible locations within the existing settlements. The strategic objectives of Tendring District aims to minimise the impacts of climate change, resource demand and the risk of flooding. Policy PPL10 sets out overarching sustainable objectives of the council, balancing the need to address climate change, improve the natural environment and meet local community needs.
- 2.3 All LNT Care Developments homes have been constructed in urban or suburban locations. An urban location has the benefit of not only being a more sustainable choice but it also allows for the construction of a well accessed community facility to the benefit of the residents, visitors and staff. The application site is located within a rural settlement although it has connectivity with the surrounding larger settlements with a direct link within two miles of Clacton-on-Sea, the largest coa stal town in Tendring.
- 2.4 The development of this site enables a positive contribution to the area by developing a site that will serve as a valuable asset for elderly people in the surrounding area and an employment-generating use.

- 2.5 The proposed development is a brownfield site on a continual linear form linking Weeley, Weeley Heath, Little Clacton through to Clac ton-on-Sea, where the character of the environment is predominantly residential however, there are community buildings in close proximity to the site. The proposed facility will enhance the site and wider area and add to local economic growth. It will provide a local social care service and employment opportunities and as such reduce the need to travel outside the area.
- 2.6 The proposed care home will provide employment opportunities within the area during the initial construction stages and within the operational functions and management of the proposed facility, on its comp letion.
- The majority of the construction work is done by sub-contractors to benefit the local economy. VMerever possible, local firms and people will be given opportunities to tender and undertake works related to the development.
- A home of the size proposed would provide 44 full time equivalent jobs. The home offers options for full and part time employment and flexible working hours, at various levels. Work experience and long-term training opportunities/career progression are offered to all, from care assistant to care home manager. Other service sector jobs would also be available within the home, such as kitchen and domestic staff.
- 2.9 The proposed site is ideally located to reduce the average journey time to work, thereby helping to reduce pollution and emissions, as the proposed home can be effectively reached by a range of sustainable transport modes (bus, cycle and walking).
- 2.10 As the submitted Transport Statement has demonstrated, the site for the proposed development aims to help reduce the proportion of journeys made by non-sustainable modes of transport, in line with national and local transport policy objectives.
- 2.11 The home aims to help achieve a shift of 15% away from the use of private cars by staff and visitors to public transport and other modes of travel to the site by the expiry of the first two years of occupancy.
- 2.12 The site is well served by adjacent footways and there is good opportunity for cycling to work. The site also has access to public transport.

3.0 SITE LAYOUT, DESIGN AND MATERIAL S

- 3.1 The proposed building configuration creates a secure parking area to the north of the site, with a drop off at the main entrance. The main external elevations benefit from views out on to Clacton Road with views over the garden areas to the south for a number of residents. Windowslocated at the ends of corridors and within stairwells would provide natural light into the circulation areas and reduce the level of artificial lighting required. Low energy luminaires and occupancy sensors are to be used throughout in the communal areas and corridors to control and minimise the energy used.
- 3.2 The use of large areas of glazing to the main lounges and dining elements of the building will maximise the opportunity for the absorption of natural daylight into the building.

- The majority of materials used within the development will be locally sourced, where possible. Particular attention will be paid to the main walling and roofing materials, which will make up the bulk of the construction.
- 3.4 These design considerations ensure that the development is energy efficient maximising the use of sun and shade to offset the demand for heating and cooling through the orientation of building, the internal layout, external landscaping, window design and intended material finishes.

4.0 ENERGY

- 4.1 General planning policies within the NPPF require development to:
 - i. Include measures to maximise energy conservation through the design of buildings, site layout and provision of landscaping; and
 - ii. Incorporate the best practical environmental option (BPEO) for energy supply.
- 4.2 In terms of building design, steps have been taken to reduce energy demand having regard for the operational requirements of the home.
- 4.3 Low energy luminaires and occupancy sensors are used throughout within the communal areas, corridors, bathrooms, toilets and ensuites to control and minimise the energy used. There will also be a control centre which will enable areas within the building to be isolated at night to further minimise energy use. This will shut off lighting within communal and corridor areas. However, these lights will still operate on a Passive Infra-Red (PIR) system, if people enter these areas during the night.
- The proposed building has been designed to a high level of construction. High levels of insulation will be provided to reduce the consumption of energy required for heating. The Building Regulations submission provides the Simplified Building Energy Model (SBEM) calculations relating to the energy efficiency of the building including the heating, lighting and orientation of the building.
- 4.5 High levels of insulation in the walls, roofs, floors, doors and windows will be included in the building to reduce winter heat loss, therefore, energy demand. Insulation also helps keep the building cool during the summer months, an increasingly important issue as climate changes.
- 4.6 Heat recovery systems are also installed within the roof space of the proposed home. Due to modern construction methods the buildings are all air tight, the installation of heat recovery ventilation combines energy efficiency with a healthy indoor living environment.

5.0 RENEWABLE ENERGY

5.1 As a company, we are continuing to review, a range of renewable energy technologies such as biomass, ground source, air source heat pumps, photovoltaic and solar power. It is acknowledged that technologies are continually improving and for this reason our company continues to review the viability of the various options available.

- 5.2 The technology to be utilised to contribute to the overall energy requirements of the proposed care home will be a combination of Photovoltaic panels on the roof and Ground Source Heat Pumps. These systems are installed in all new LNT facilities, in order to provide heating, hot water and electricity.
- 5.3 Solar Panel it is estimated that the photovoltaic (PV) panels will be placed on 10 of the building's roof planes, each individual panel measuring 2m x 2m. The solar panels would be inset within the roof plane of the proposed building and as such will not affect its general outward, public appearance.

The solar panels are linked to storage batteries with integrated technology, making full use of the solar energy produces throughout the day and utilising excess green energy from the grid at night, as necessary.

- 5.4 Ground Source The installation of Ground Source Heat Pumps (GSHP) will involve the creation of vertical bore holes within the site to extract heat from the ground. As the heat from the ground stays at a fairly constant temperature year-round, the system will be less likely to be affected by seasonal temperature changes, the amount of energy needed to heat the building is minimal, and constantly renewed naturally. Therefore, making the Ground Source Heat Pumps the most energy efficient way of providing and maintaining constant optimum temperatures throughout the care home.
- 5.5 The bore holes for the Ground Source Heat Pump will be located underneath the proposed garden areas and/or beneath the proposed parking area. However, further investigation is required, before the exact locations of the boreholes are confirmed.
- 5.6 The introduction and combination of the GSHP and PV Panels align with our aim of a carbon negative home and significantly reduce the utility bills for the end user.

6.0 SITE WASTE MANAGEMENT

- 6.1 Resource management in the construction process is an essential element in the efficiency of the design and build of a project. An integral element of the design strategy is to ensure that the creation of waste and potential adverse impact on the environment is kept to a minimum.
- 6.2 At the very basic level LNT Care Developments maximise the opportunity to work with the existing site characteristics and site levels to minimise the creation of waste for landfill. At a more general level, and subject to environmental ground conditions, crushed material from demolished buildings and car parking are re-used in the form of hard core. Alterations to site levels will be kept to a minimum and where remodelling is required efforts to minimise waste generation will be made.
- 6.3 All of our development schemes are accompanied by a Site Waste Management Plan (SWMP) which have a number of objectives, as follows:

All environmental safeguards are carried out correctly; Ste activities are well managed; Adverse impacts on the environment are minimised; The biodiversity of the site is conserved or enhanced; All relevant legislation is complied with; and The project is monitored for environmental impact.

- 6.4 From a very early stage in the project, the development team will review how waste generation can be minimised, thereby reducing the amount of waste to be removed from the site and project. Trade Contractors, the Design Team and Suppliers are all encouraged to look at ways to minimise waste.
- 6.5 Surplus or waste materials arise from either the materials imported to site or from those generated-on site. Imported materials are those, which are brought to the project for inclusion within the permanent works. Generated materials are those, which exist on the project such as topsoil, sub-soil, trees and materials from demolition works etc.
- 6.6 There are other considerations to waste management such as waste reduction; segregation of waste; disposal of waste; financial impacts of waste disposal; and recording, monitoring, education and review. A project's SWMP will outline the procedures that have been put in to place and demonstrate: how they benefit the environment; how we can measure the effects; and how these procedures and practices are sustainable.

7.0 BIO DIVERSITY

- 7.1 There are a number of trees within the site along all boundaries. The majority of these will be retained with any existing habitats around the site retained where possible as well as new habitats created through the intended land scaping.
- 7.2 Proposed planting is shown with additional hard and soft landscaping to provide an attractive landscaped setting for the home and usable amenity space for residents. The proposed planting scheme would be designed to include native indigenous species and aim to provide all year-round colour and interest and to enhance biodiversity.

8.0 COMMUNITY INVOLVEMENT

- 8.1 The proposed care home would provide a social care facility in this location. It would provide a much-needed service to support the local community, either directly in the case of future residents, or indirectly in the case of those with elderly dependant relatives. In so doing, it would assist in ensuring a balanced, sustainable and inclusive community within the local area.
- 8.2 Supporting neighbourhoods is a fundamental element of sustainability; therefore, communication with local residents is essential. The applicant will endeavour to respond appropriately and effectively to any comments raised by the local community. A representative will be available, at all reasonable times, to answer any questions that may arise during the application and consultation process and will endeavour to respond positively to any comments made.
- 8.3 Arrangements will be made to prevent or deal with any issues that might arise as a result of the proposed development and construction operations. Advance warning will be provided to all neighbouring residents/land users of the commencement of the construction works and emergency telephone and contact details will be distributed within the local area, prior to any commencement of works on site.

8.4 Notification of the application submission with copies of the submitted plans has been sent to adjoining neighbours and local ward councillors. Further consultations with the neighbouring residents can be arranged, should the need arise.