SUSTAINABILITY & RENEWABLE ENERGY STATEMENT

PROPOSED NEW CARE HOME FOR OLDER PEOPLE

Old Row,
Whalley Road,
Barrow,
BB7 9AZ

LNT Care Developments
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LS25 2DY

February 2023

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1.0 INTRODUCTION

1.1 This Sustainability Statement is submitted on behalf of LNT Care Developments (the Applicant) in support of the planning application for a care home for older people at Old Row, Whalley Road, Barrow, BB7 9AZ. (the Site).

1.2 LNT Construction (the Agent) are the Applicant's sister company, and will deliver the proposals with them.

1.3 LNT have considerable experience in the development and operation of care homes for older people, and provide excellent, high-quality care homes. They have developed some 150 such care homes in a variety of locations across the country over the last decade.

1.4 The National Planning Policy Framework (NPPF) provides a definition of what 'sustainable development' is, and the objectives and policies to deliver it. This Statement considers and addresses key policies, guidance and objectives to deliver sustainable development (**Section 2**).

1.5 Most notably it reduces carbon dioxide (CO_2) emissions, maximise energy / resource efficiency, and minimises the impact on and maximises adaptability to climate change.

1.6 This Statement demonstrates that the proposal suitably achieves these objectives through relevant design, construction and operational aspects. This is with specific regard to:

- Site location, social and economic infrastructure/impacts (**Section 3**)
- Transport connectivity and movement (**Section 4**)
- Site layout, design, materials and landscaping (Section 5)
- Resource usage (Section 6)

1.7 Section 7 provides a summary of the Site's sustainable design, construction and operational benefits.

2.0 POLICY CONTEXT

2.1 The NPPF seeks to deliver 'sustainable development'. A high-level objective of this is *"meeting the needs of the present without compromising the ability of future generations to meet their own needs"* (Paragraph 7).

2.2 The planning system has three overarching objectives (economic, social and environmental) that, if pursued in *"mutually supportive ways"* will achieve sustainable development (Paragraph 8). Local plans and policies are required to embed these objectives, with regard to local circumstances (Paragraph 9).

2.3 This aspect of sustainable development is discussed further in the accompanying Planning Statement, which demonstrates how the development proposals comprise sustainable development in terms of the complete planning policy context.

2.4 The NPPF also requires development to manage patterns of growth, with regard to sustainable transport objectives. These policies are considered further in the accompanying Transport Statement and Travel Plan.

2.5 The NPPF states that *"good design is a key aspect of sustainable development"* (Paragraph 126), and Paragraph 130 places focus on ensuring development functions well and adds to an area's quality for its lifetime.

2.6 To address climate change issues, the NPPF seeks proposals to incorporate suitable adaption measures, plan for green infrastructure, and minimise greenhouse gas emissions (GHG) through building location, orientation and design. Proposals should reflect national technical standards (Paragraph 154).

2.7 Paragraph 157 of the NPPF also outlines the need for local authorities to consider the feasibility and viability of incorporating local renewable energy requirements, and the use of design measures (outlined above) to minimise energy consumption.

3.0 SITE LOCATION AND SOCIO-ECONOMIC INFRASTRUCTURE

3.1 At the heart of the NPPF is a 'presumption in favour of sustainable development'. The more efficient use of land through higher density, mixed use development and the use of suitably located land, has always been a key element to achieving sustainability objectives.

3.2 At local level, Ribble Valley Borough (the Council) have developed policies aimed at achieving sustainable development, where proposals are in line with Local and National Policy and improve the economic, social and environmental conditions in the area.

3.3 The majority of care homes built by LNT have been constructed in urban or suburban locations. Such locations, including the site, benefit from existing community facilities and services and the established populations.

3.4 Sustainably located developments also contribute towards the further development of sustainable communities. The development of the site provides a positive contribution to the area in all social, economic and environmental senses (as demonstrated within the accompanying Planning Statement).

3.5 The proposal is set within current agricultural land in the heart of Barrow, a Tier 1 village within Ribble Valley Borough. The site is within close proximity to existing residential, commercial, civic and community uses.

3.6 The site is suitable for a care home and will contribute to the local area socially by creating an important, inclusive and high-quality community/social care facility and economically, through increased spending and job creation.

3.7 The proposals will rely on local residents and employees and will therefore reduce the need for residents, visitors and staff to travel from outside the area.

3.8 The majority of the construction work is likely to be done by sub-contractors. Wherever possible and appropriate local firms and people will be given opportunities to tender and undertake works related to the development. This will further benefit the local economy, and environment by reducing GHG emissions associated with vehicle journeys.

3.9 Once complete and operational, the care home will require between 50-60 employees attending on a phased shift basis. Opportunities will consist of a wide range of full and part-time roles and flexible working hours, at various levels.

3.10 Work experience and long-term training opportunities/career progression are offered to all, from care assistant to care home manager. Other service sector jobs will also be available, such as kitchen and domestic staff. This approach will strengthen socio-economic opportunities/resilience in and around the site going forwards.

3.11 The proposal's design, and the approach taken by the Applicant through construction and operation, make best use of the site and its sustainable location. This will maximise the socio-economic benefits available, and be highly beneficial for local environmental sustainability.

4.0 TRANSPORT CONNECTIVITY AND MOVEMENT

4.1 The site is sustainably located within the Tier 1 village of Barrow, south of Clitheroe. The site is well serviced by regular bus services which connect the site with Burnley, Blackburn and Clitheroe with bus stops being located a mere 110m from the proposed care home entrance. The Lancashire region promotes the use of cycling as a sustainable mode with free cycle to work classes. These initiatives will aid in promoting the use of sustainable transport to and from the proposed development.

4.2 As the submitted Transport Statement and Travel Plan highlights, the proposal aims to reduce the proportion of journeys made by non-sustainable modes of transport, in line with national and local transport policy objectives.

4.3 The proposed care home can be accessed via a range of sustainable transport modes (by existing public transport, cycle and by foot). Parking spaces will be provided with electric vehicle charging points to ensure the property is responsive and resilient to changes in more sustainable vehicle technology.

4.4 The site location, and the proposal's overarching occupancy, employment and transport objectives, will reduce the average journey time to the site, which will reduce associated pollution and emissions.

4.5 As noted in the Travel Plan, the nominated Travel Plan Co-ordinator will be aiming to help achieve a meaningful shift away from the use of private cars by staff and visitors - to public transport and other sustainable modes of travel within the first two years of occupancy.

4.6 The proposals and associated transport objectives/arrangements will ensure that vehicle and pedestrian movements associated with the site are sustainable, in accordance with relevant national and local policies.

5.0 SITE LAYOUT, DESIGN, MATERIALS AND LANDSCAPING

5.1 The proposed building configuration provides substantial landscaped gardens (secure and open) around it. The elevations will benefit from views out over adjacent areas (the road network, the public realm and the high-quality landscaped gardens).

5.2 Secured by Design principles are incorporated into the proposed care home design. The site layout, building orientation and design are around a singular point of access to the site for both pedestrians and vehicles. The entrance to the building is situated centrally within its western elevation. The main office which is manned 24 hours a day is located within the reception, providing monitoring of the site and building entrances at all times.

5.3 Suitable boundary treatments, comprising primarily of 1.8m high metal railings will be used to provide secure private amenity space and defensible boundaries, whilst maintaining an open and inviting environment.

5.4 The building's orientation, form and façade design will ensure that a majority of rooms (communal and private) will benefit from direct sunlight and passive solar gain throughout the day. Windows are located at the ends of corridors, within stairwells and all outward facing lounges/dining/communal rooms are given generous glazing to provide plenty of natural light. This will reduce dependency on artificial light and maximise passive solar heat gain.

5.5 The 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. Sourcing these locally will, where possible, minimise the carbon footprint associated with the production and distribution of materials.

Landscaping and Biodiversity

5.6 Indicative landscape proposals are provided to show how the final scheme is intended to assimilate within its surroundings.

5.7 New planting will complement and enhance the site's setting and mitigate for necessary losses. This will maintain and enhance the site's biodiversity and green infrastructure functions; whilst integrating it with its built and natural context.

5.8 Proposed planting is indicated with additional hard and soft landscaping, to provide an attractive landscaped setting for the home and usable external amenity space for residents. Proposed planting will be designed to include native indigenous species and aims to provide all year-round colour and interest, whilst taking all opportunities to enhance local biodiversity.

5.9 Maintaining and enhancing the site's natural characteristics will also safeguard its ability to offer natural solar shading and cooling, and therefore assist resident's comfort and well- being, during warmer weather.

6.0 RESOURCE USAGE

6.1 In the building design, having regard for the operational requirements of the home, steps have been taken to reduce energy demand.

6.2 Low energy luminaires and occupancy sensors are to be used within the communal areas, corridors, bathrooms, toilets and en-suites to control and minimise the energy usage.

6.3 There will also be a control centre which will enable specific areas within the building to be isolated at night to minimise energy use. This involves shutting off lighting within communal and corridor areas, which will then operate on a Passive Infrared (PIR) system (only turning on when people approach these areas during the night).

6.4 The building has been designed to a high construction specification to ensure the building fabric is suitably resilient to adverse weather events. For example, good levels of insulation, airtight construction, and effective glazing, Windows will provide natural ventilation to reduce energy demand/heat loss and keep the building cooler during hotter months.

6.5 The Building Regulations submission will provide a Simplified Building Energy Model (SBEM) calculation relating to the energy efficiency of the building taking into account its heating, lighting and orientation.

6.6 The installation of heat recovery ventilation provides good energy efficiency and a healthy, comfortable indoor living environment. Wherever possible, natural ventilation methods will be used to maximise comfort and maintain connections with the outdoors. 'Comfort cooling' will also be installed, where necessary, operated through the intended ground source system.

Renewable Energy

6.7 LNT continues to review a range of renewable energy technologies, such as biomass, ground source and air source heat pumps, and solar photovoltaic (PV) panels. This is

because the technologies are continually improving and internal reviews of the viability and feasibility of available options is the most efficient and effective way to maintain the buildings resilience and adaptability.

6.8 At present, to contribute to the overall energy requirements of the care homes, the preferred technology LNT utilise is Ground Source Heat Pumps and Solar PV panels. These systems are installed in all new facilities, for lighting, electricity, heating and cooling purposes. This approach appropriately maximises the amount of energy generated by renewable/sustainable energy source(s), and will exceed current Building Regulation and Planning Policy requirements.

6.9 The installation of Ground Source Heat Pumps will involve the creation of a series 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 all 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. This makes Ground Source Heat Pumps the most energy efficient way of providing and maintaining constant optimum temperatures throughout the care home.

6.10 The bore holes for the Ground Source Heat Pump will be located underneath the proposed garden areas and/or beneath the proposed parking area. Further investigation is required, however, before the locations of the boreholes can be confirmed.

6.11 Solar PV panels are also an efficient and effective way of maximising energy generation and will ensure that all electric operational elements of the building are powered from on-site renewable sources. It is anticipated that almost all of the proposed care homes electrical energy requirements will be generated from this on-site renewable source. Given the advent of battery technology it is anticipated that almost all of the care homes electrical energy requirement will be generated by the array of integrated solar panels proposed.

Waste Management

6.12 Resource management in the construction process is an essential element in the efficiency of the design and build of a project. The limited creation of waste will ensure potential adverse impacts on the environment are minimised and are integral to the design strategy.

6.13 At the very basic level, LNT intend to maximise the opportunity to work with the site's existing characteristics and levels to minimise the creation of spoil waste to landfill. Where possible, alterations to site levels will be kept to a minimum and where remodelling is required, every effort to minimise waste generation will be made.

6.14 All of our operational 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;
- Site 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.

6.15 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. Contractors, the Design Team and Suppliers are all to be encouraged to look at ways to minimise waste.

6.16 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 and materials from demolition works.

6.17 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 and review.

6.18 This 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 CONCLUSIONS

7.1 This Sustainability Statement considers and demonstrates how the proposals for a care home for older people will deliver national and local sustainable development objectives, through the proposed design, construction and operations.

7.2 This Statement pays specific regard to:

- The site location, social and economic infrastructure/impacts.
- Transport connectivity and movement.
- Site layout, design, materials and landscaping.
- Resource usage.

7.3 The proposals will contribute to and enhance the site and surrounding area's sustainability, most notably the sustainability of the local community, environment and economy.

7.4 The site will be well-served by public transport and by foot and cycle. The proposals intend to make best use of this to minimise the use of private motor vehicles through the implementation of the submitted Travel Plan.

7.5 The proposed layout, design, materials and landscaping have been designed to be resilient, minimise energy demand and maximise the benefits of natural heating,

cooling and ventilation. Local materials will be sourced where possible and landscaping will be improved with new planting to enhance biodiversity in the immediate area.

7.6 Appropriate forms of renewable energy (including Ground Source Heat Pumps and Solar PV panels) will be used to continually manage the care homes operational viability and resource efficiency. Waste will also be regularly monitored and appropriately managed through construction and operation stages.

7.7 In light of this, the proposals achieve national policy sustainability objectives, set out in Paragraphs 7, 8, 9, 126, 130, 154 and 157 of the NPPF.