Wind Turbine Development at Darton Advanced Learning Centre, Barnsley: Design and Access Statement

Introduction

1.1 This Design and Access Statement has been prepared by Turley Associates on behalf of Barnsley Partnership for Learning in support of a full planning application for a wind turbine development at Darton Advanced Learning Centre (ALC).

1.2 The requirement for a Design and Access Statement has arisen in response to the need to promote better quality and more sustainable design in development, an objective embedded through PPS1: Creating Sustainable Communities (2005).

1.3 The purpose of this statement is to consider the relevant design policy guidance and identify the design principles band concepts that have been applied to particular aspects of the proposal – these being the amount, layout, scale, appearance and landscaping of the development and access arrangements.

2. Policy Framework

2.1 The following documents set out the policy framework for consideration of the proposed development.

PPS1: Creating Sustainable Communities (2005)

2.2 PPS1 sets out the Government's commitment to sustainable development. Local Planning Authorities are encouraged to:

- Give priority to re-using previously developed land;
- Create sustainable patterns of development;
- Create usable, durable and adaptable places;
- Make more efficient use of land; and,
- Promote good design in development.

2.3 The principle policies set out by PPS1 (paragraph 13) include the promotion of high quality development though inclusive design and the efficient use of resources. These include a commitment towards addressing the causes and impacts of climate change, through reduced energy consumption and the promotion of renewable energy sources.

2.4 PPS1 states that '*good design should contribute positively to making places better for people'* (paragraph 34). As such, design should be appropriate in its context and should allow a place to function well, through carefully planned high quality developments which support the efficient use of resources.

2.5 Good design should:

- Be integrated into the existing urban form and the natural and built environments;
- Be an integral part of the processes for ensuring successful, safe and inclusive villages, towns and cities;
- Create an environment where everyone can access and benefit from the full range of opportunities available to members of society; and
- Consider the direct and indirect impacts on the natural environment.

2.6 Design policies should avoid unnecessary detail and should concentrate on guiding the overall scale, density, massing, height, landscape, layout and access of new development in relation to neighbouring buildings and the local area.

PPS22: Renewable Energy (2004)

2.7 PPS22 sets out the Government's planning policy on renewable energy. The key objectives are the promotion and development of renewable energy and improvements to energy efficiency in order to mitigate climate change.

2.8 Paragraphs 19 and 20 relate to the impacts of renewable energy development on the landscape and visual amenity, and ambient noise levels. Appropriate siting, layout, design and landscaping schemes are emphasised as a means of minimising the impacts of the proposed renewable energy development.

Barnsley Unitary Development Plan (Adopted 2000)

2.9 The Barnsley Metropolitan Borough Council Unitary Development Plan (UDP) (2000) constitutes the Council's statutory development plan whilst the Local Development Framework (LDF) is under preparation.

2.10 Saved Policy BE6 sets out design standards for all development; proposals will be assessed in accordance with the following criteria:

- The quality of layout and the suitability of the scale of the development;
- The use, quality, design and landscape treatment of open land within the site and the area around buildings;
- The standard of detailed design and facing materials of proposed buildings;
- The suitability of the whole development for its proposed context and its relationship with adjoining land uses.

2.11 Policy ES12 sets out the Council's requirements for proposals that seek to develop wind energy generation. These proposals will be assessed with regard to the impact upon visual amenity and residential amenity, in terms of noise, outlook and shadow flicker, as well as electro-magnetic effects and suitable design which makes provisions for connection to the electricity transmission and supply system.

Barnsley Local Development Framework

2.12 In accordance with the requirements of the Planning and Compulsory Purchase Act (2004), the Council is currently preparing its Local Development Framework (LDF). The Core Strategy Revised Preferred Options was published in June 2009. This was updated by the Core Strategy Publication Version, which was published in March 2010 and is out for consultation until 9 April 2010.

2.13 Strategic Objective 6 of the Publication Version requires that all new development is suitably designed and built to the highest standards, by embracing the principles of sustainable design and requiring developments to achieve nationally recognised design standards.

2.14 Strategic Objective 8 seeks to minimise energy consumption and to support renewable energy facilities in order to increase the amount of renewable energy produced in the Borough.

2.15 Draft Policy CSP1 supports Strategic Objectives 6 and 8 by requiring that development reduces and mitigates the impact of growth on the environment and ensures that existing and new communities are resilient to climate change, through the efficient use of resources and renewable energy.

2.16 Draft Policy CSP6 specifies that proposals for renewable energy will only be permitted where there is no significantly harmful effect upon the character of the landscape and appearance of the area, residential amenity, biodiversity, any historical and cultural features, highway safety and infrastructure.

2.17 Draft Policy CSP29 seeks to secure high quality design in all new developments. The policy requires that all development must adhere to design principles which include:

- Contribution to place making and high quality design;
- Regeneration;
- Improved access and safety for all;
- Meet the CABE Building or Life Silver Standard.

3. Evaluation of the Proposal

Use

3.1 The proposal is for one wind turbine with a maximum hub height of up to 34 metres.

3.2 The proposed development will make a positive contribution to the surrounding locale by promoting the provision of energy from wind power, as a renewable resource.

3.3 Wind energy has been selected before other forms of renewable energy sources as a mature renewable energy technology, which will take greatest advantage of local climatic conditions.

Amount

3.4 One turbine is proposed at Darton ALC. It is considered that a single turbine is sufficient at this location, with a view to making the most efficient use of the available wind resource for renewable energy generation, across all of the Phase One BSF schemes.

Layout

3.5 The proposed location of the turbine has been selected following consideration as to where the wind resource will be greatest and most reliable.

3.6 The proposed location of the turbine, to the north-east of the school playing fields, will also ensure that there is minimal impact upon the residential amenity of the surrounding properties.

3.7 The proposed turbine is also a suitable distance from surrounding vegetation, in order to protect local biodiversity.

3.8 The siting of the turbine will also allow for minimal impact upon the visual quality of the surrounding landscape, as illustrated by the accompanying Visual Impact Assessment.

Scale

3.9 The proposed development is for one wind turbine with a hub height of 34 metres and rotor diameter of 18 metres.

3.10 The size and scale of the turbine proposed will maximise the potential for this site in terms of renewable energy generation, whilst ensuring that there is no detrimental impact to adjacent uses.

Landscaping

3.11 The turbine is to be accommodated within the landscaping details already approved under the wider ALC construction programme.

Appearance

3.12 By necessity, the turbine has a functional appearance that reflects its role as an energy generator. The turbine comprises a steel tower upon which is mounted a generation hub and two bladed turbine assembly.

3.13 Alternative turbines were considered as part of the evaluation; however, these were discounted on the grounds of operational efficiency.

Access

3.14 Construction of the turbine will take place as part of the overall school construction programme, which will ensure minimal impact upon the usage of the adjacent pitches.

3.15 The turbine will require occasional access for maintenance purposes in accordance with a specified schedule, which will instruct the maintenance and operation of the turbine and safeguard the usage of the adjacent playing field.

3.16 The maintenance of the turbine is expected to be on a periodic basis

3.17 In respect of the timescales for the maintenance of the turbine it is not proposed that a dedicated hard standing area is provided by which to access the turbine; it is therefore possible that playing pitches may not be available for use whilst annual maintenance is carried out. This will however, be formalised via the management plan.

3.18 Given the nature of the proposal, access for those with disabilities is not a consideration in this case.