



DESIGN AND ACCESS STATEMENT

PROPOSED WIND GENERATOR

**DOTTEREL FARM
WEAVERTHORPE
NORTH YORKSHIRE**

Pegasus Planning Group Ltd
Pegasus House
Querns Business Centre
Whitworth Road
Cirencester
Glos
GL7 1RT

Telephone: (01285) 641717 Facsimile: (01285) 642348

PPG Ref: PA/CIR.A.0176

Date: 2nd May 2013

COPYRIGHT

The contents of this document must not be copied or reproduced in whole or in part without the written consent of **Pegasus Planning Group Ltd**

CONTENTS:

	Page No:
1. INTRODUCTION	1
2. SITE DESCRIPTION & CONTEXT	2
3. DESIGN	3
4. ACCESS	6
5. SUMMARY	7

1. INTRODUCTION

1.1 This Design and Access Statement forms part of a package of documents accompanying a planning application for a single wind generator at Dotterel Farm, Weaverthorpe, North Yorkshire.

1.2 The purpose of this document is to demonstrate that the Applicant has fully considered the design and access issues as part of the comprehensive preparation of the scheme prior to submission of the planning application. This report therefore covers the following matters:

- Use
- Amount
- Location
- Scale
- Landscaping
- Appearance
- Access

2. SITE DESCRIPTION & CONTEXT

- 2.1 The application site covers an area of approximately 0.3 hectares within the agricultural setting of Dotterel Farm, approximately 1.9km north west of the village of Weaverthorpe in North Yorkshire.
- 2.2 The routes for HGV's travelling to/from the site have been discussed and agreed with officers from North Yorkshire County Council. The site would be accessed via the existing point of access to Dotterel Cottage Farm off Main Road to the west of Weaverthorpe. Access/egress to the site would be from the strategic highway network via the following routes:
- Route A (south) – from the A614 at Driffield, along the B1249, turning left at Foxholes crossroads and then past Butterwick and Weaverthorpe to the Dotterel Cottage Farm point of access; and
 - Route B (north) – from the A64 at Saxton, along the B1249, turning right at Foxholes crossroads and then past Butterwick and Weaverthorpe to the Dotterel Cottage Farm point of access.
- 2.3 A search of "sensitive areas" as described by the EIA Regulations indicates that the site and immediate area lies outside of any such "sensitive area". The nearest sensitive area is a Scheduled Monument (SM) located approximately 1.1km to the north west of the site.
- 2.4 The generally accepted wind speed for commercial wind turbine developments is that of above 5.6m/s. The wind speed data obtained from the Department of Energy and Climate Change (DECC) indicates that the annual average wind speed at Dotterel Farm is 6.5m/s at 45m Above Ground Level (AGL). As the Proposed Development is for a single wind generator with a hub height up to 55m and tip height up to 81m, it is considered that the application site is a commercially suitable location to sensitively exploit the natural wind resources of the area.

3. DESIGN

3.1 A considerable number of factors have contributed towards the design and layout of the site that is now put forward. These are now discussed against the various aspects of Design highlighted within CABE's guidance document regarding the production of Design & Access Statements.

Use

3.2 The site currently lies within open arable farmland within the wider countryside setting. The proposed wind turbine will not result in the loss of any significant part of the site as the space taken up by the wind generator covers just 0.3 hectares out of a total farm holding of approximately 100 ha.

3.3 The proposal is for the installation of a single wind generator with a maximum blade height of up to 81m. It is anticipated that the wind generator would be operational for a duration of 25 years.

3.4 The proposed location has been chosen due to its exposure to commercially viable wind speeds and limited environmental constraints. The location also provides an uninterrupted airflow by virtue of the site being some distance from structures which would detrimentally influence the generating capacity of the generator.

3.5 If the Council is to continue its excellent records of contributing towards the Regional and National targets for renewable energy provision, then such developments will continue to be required within the countryside where the capacity to support such schemes is greater than within an urban setting.

Amount and Fabrication

3.6 It is proposed to construct a single wind generator with a height to blade tip of up to 81m and a short new access track. The wind generator will be formed of 3 blades made from glass-fibre reinforced epoxy. The nacelle, housing the generator will be mounted at the top of a galvanised steel tower, which will be up to 55m high (referred to as the hub height).

3.7 The exterior finish of the nacelle is proposed to be matt light grey. The final finish can be the subject of an appropriate Condition of an approval if required by the Local Planning Authority.

- 3.8 The overall scale of the wind generator will be up to a maximum height of up to 81m, to the tip of the blade when vertical.
- 3.9 Land take for the wind generator will be small at only 0.3 hectares. This is formed by the concrete foundations and the access route across the field connecting from the existing access tracks and infrastructure requirements. At the end of the wind generator's lifespan of 25 years, the plant and machinery can be dismantled and removed and the site restored to its former use.

Location

- 3.10 In proposing the general location of the development, great consideration has been given to the relationship of the existing buildings and surrounding trees and hedgerows. This will help ensure that the development sits comfortably within, and is well contained by, its natural surroundings whilst not adversely detracting from the ability of the existing farm estate to operate or detrimentally effect surrounding environmental characteristics.
- 3.11 The specification for the location, positioning and height of the generator is based on the following considerations relating to achieving a sustainable economic output of the wind generator, while minimising any detriment to the landscape and wider visual amenity, and also adhering to the safe working practices as recommended by the manufacturer.
- There are no overhead electricity transmission lines, trees or other height obstructions in the vicinity which would affect the safety or operation of the wind generator.
 - The site is not located within any environmentally sensitive areas so as to reduce any potential impacts the proposed development may have on landscape and visual amenity and ecological areas.
 - No public access is required as part of this development.

Scale

- 3.12 The scale of development on site has been determined by the requirements to achieve a consistent and smooth laminar airflow in order to achieve a sustainable renewable energy generating potential of the wind generator. Achieving a 'clean' airflow maximises output, minimises fatigue and associated maintenance costs caused by turbulent airflow.

- 3.13 The location has evolved to achieve a satisfactory economic potential of the proposal as weighed against the environmental sensitivity of the site and the wider surroundings to inform a suitable scale of proposed development.

Landscape

- 3.14 The proposal has been subject to a detailed landscape and visual impact assessment. The following design principles have been considered as part of the development of the scheme:

- Development and application of the most suitable wind generator design for the site, to respond to the local landscape character and provide an acceptable design solution in terms of scale, layout and visual composition.
- Achieve a cost effective scheme that may be viewed and considered an acceptable component of the landscape.
- Minimise any adverse landscape and visual effects on views from key receptors such as important protected landscape, highways and public footpaths and settlements.

- 3.15 No formal landscaping scheme is proposed as part of this development.

Appearance

- 3.16 A detailed consideration of the appearance of the turbine in relation to the landscape and its visual impact is also included within the Landscape and Visual Impact Assessment which accompanies this application.

- 3.17 In summary, the accompanying landscape and visual report demonstrates that the proposed wind turbine can be successfully accommodated on this site and assimilated into the surrounding area without causing significant harm to the local character, visual amenity or landscape features of the area. The proposed development comprises a single wind generator and its effect upon the landscape character is judged to be slight/moderate.

- 3.18 It has therefore been demonstrated that the development proposals are acceptable in terms of impact upon landscape and visual amenity.

4. ACCESS

- 4.1 Vehicular access to the proposed wind generator site would be by the existing Dotterel Farm track through the farm complex from an unnamed lane to the south which runs between the B1249 at Foxholes and the B1253 at Duggleby. All likely access routes around the site are suitable for heavy goods vehicles and are frequently used by large agricultural machinery, as would be expected in a rural area.
- 4.2 Construction of the wind generator will require items of plant and machinery equipment coming to the site as well as aggregate (used from the site) and concrete and steel for the construction of the foundations (although the foundations will be minimal) and the partial new access track within the field. The construction period for the above components is anticipated to take approximately 2 to 3 months.
- 4.3 The wind generator components will be transported to site via abnormal load vehicles as well as standard 40 foot or 60 foot articulated lorries to deliver the additional associated plant and machinery.
- 4.4 The main transport impacts will result from the movement of the commercial HGV's, abnormal load vehicles and light vehicles to and from the proposed development site during the construction phase of the development. All construction vehicles will utilise the local highways.
- 4.5 It is anticipated that a total of 38 HGV and 8 Abnormal Load Vehicle movements will be required during the construction of the proposed development.
- 4.6 During the operational phase very few vehicle movements are expected to be generated by the development, only relating to maintenance activities, expected to be up to twice a year using a van or 4 x 4 light goods vehicle.
- 4.7 The development will not be open to the general public and will be maintained by a dedicated team of engineers. For this reason, it is not appropriate to apply the requirements of inclusive access to this proposed scheme.

5. SUMMARY

- 5.1 This Report has highlighted the design and access considerations relevant to the proposed development.
- 5.2 The final design solution set out in the current application has been adopted to balance the need to maximise renewable energy generation against potential environmental constraints of the site.
- 5.3 The design and access considerations as set out above are deemed to represent a suitable solution in the context of the application site.