



DESIGN, ACCESS & PLANNING STATEMENT

REPOWERING OF EXISTING WIND TURBINE (REPLACEMENT)

Client

Stephen B Wells Ltd

Ian Pick Associates Ltd
Station Farm Offices
Wansford Road
Nafferton
East Yorkshire
YO25 8NJ
Tel: 01377 253363
Email: mail@ianpick.co.uk
Web: www.ianpickassociates.co.uk

Grange Farm
Burton Fleming
Driffield
YO25 3HP

1. INTRODUCTION

This report has been commissioned by Stephen B Wells Ltd of Grange Farm, Burton Fleming, Driffield, YO25 3HP.

Section 42 of the Planning and Compulsory Purchase Act 2004 requires a Design and Access Statement to be submitted with the majority of planning applications. The purpose of this report is to satisfy the requirements of Section 42 of the aforementioned Act.

This report has been prepared to illustrate the process that has led to the development proposal and to explain and justify the proposal in a structured way.

This report has been prepared by Ian Pick. Ian Pick is a specialist agricultural and rural planning consultant. He holds a Bachelor of Science with Honours Degree in Rural Enterprise and Land Management and is a Professional Member of Royal Institution of Chartered Surveyors, being qualified in the Rural Practice Division of the Institution.

Ian Pick has 24 years experience in rural planning whilst employed by MAFF, ADAS, Acorus and most recently Ian Pick Associates Limited.

2. BACKGROUND INFORMATION

The applicants currently operate an agricultural business based at Burton Fleming Grange, Burton Fleming. The business is predominantly arable, farming 322 hectares. The business includes 304 hectares of arable with wheat, barley, oilseed rape and potatoes. The business also operates a free-Range egg laying unit, along with smaller scale cattle operations.

OFGEM and the UK Government are actively encouraging the development of renewable energy schemes, with plans to boost UK energy independence and tacking the cost of rising energy prices. Under the proposed plans up to 95% of the UKs energy could come from low-carbon sources by 2030.

There is clearly an identified need to reduce carbon emissions, and ensure the security of energy supply, with renewable energy sources playing a key role. The applicant is therefore seeking to repower his existing turbine in order to maximise energy generation and efficiency, whilst minimising the environmental and visual impact.

In December 2021 it is understood OFGEM announced they are actively supporting and encouraging wind turbine operators to replace existing turbines with larger turbines and can do so without losing the Feed-in-Tariff. It is understood the government also released an energy support scheme which includes onshore wind development for the first time since 2015.

Wind Turbine output increases with average wind speed and rotor size known as swept area. Wind speed tends to increase with height in most locations, a phenomenon known as wind shear. This variation in velocity with altitude is most dramatic near the surface.

Further, the energy in wind is proportional to the cube of the wind speed. Consequently, a small change in wind speed produces a much larger change in wind energy. For example, increasing the height of a turbine tower from 30m to 40m will increase the average annual wind speed by 1 metre per second and this in turn increases the annual power generated by 41%.

The swept area relates to the wind energy captured, the proposed turbine will generate over twice as much renewable energy, and this is all captured at low wind speeds. This in

turn will help the farm and lower its electricity consumption from the national grid, thus reducing both its energy bills and its carbon footprint.

3. THE PROPOSED DEVELOPMENT

This proposed relates to the 'repowering' of an existing turbine. It is generally accepted in planning that the umbrella term 'repowering' extends to the replacement, replanting and extension of life of an existing turbine site.

For the purposes of repowering by way of replacement, this pertains solely to the replacement of the old turbine(s) by more powerful and efficient models that use the latest technology. On average, repowering more than doubles the generation capacity (in MW) of a wind farm and triples the electricity output because the new turbines produce more power per unit of capacity, as discussed above.

This scheme seeks to replace the applicant's existing turbine with a newer unit. The selected turbine is a Vestas V47. A specification sheet for the proposed wind turbine is attached to this application. The existing turbine is a Vestas V29.

4. SUPPORTING INFORMATION

This application is accompanied by the following surveys and assessments:

- Landscape and visual impact assessment
- Heritage statement
- Ecology survey
- Noise assessment
- Transport statement
- Flood risk assessment

5. AMOUNT / SCALE

The scale of the turbine includes a 39.7m tower height to hub, with a 47m diameter blade, giving a height to the tip of 63.2m (see Elevation Drawing attached). The existing turbine to be removed measures 30.4m to hub, with a total height to tip of 44.9m. The replacement turbine will therefore be 18.3m taller than the existing.

6. USE

The turbine will be used to generate renewable electricity, as per the existing turbine.

7. LAYOUT

The scheme represents one of replacement. The replacement turbine will be located 5m northeast of the existing. The site layout includes the existing farm access (as per the red line application boundary), an existing crane concrete crane platform, and an additional concrete foundation as per the elevation drawing.

The overall site layout can be seen in greater detail on the attached site plan (drawing No. IP/SW/02).

8. LANDSCAPE

The turbine will be sited adjacent to the existing which is to be removed. The existing turbine has an overall height of 44.9m, whilst the proposed has an overall height of 63.2m, an increase of 18.3m.

Whilst it is acknowledged there is an increase in the overall height of the replacement turbine over that of the existing, it is generally considered that the nature and character of the surrounding landscape will not change. The proposal will be seen within the context of the existing built agricultural development on the farm.

A detailed Landscape and Visual Impact Assessment can be seen attached.

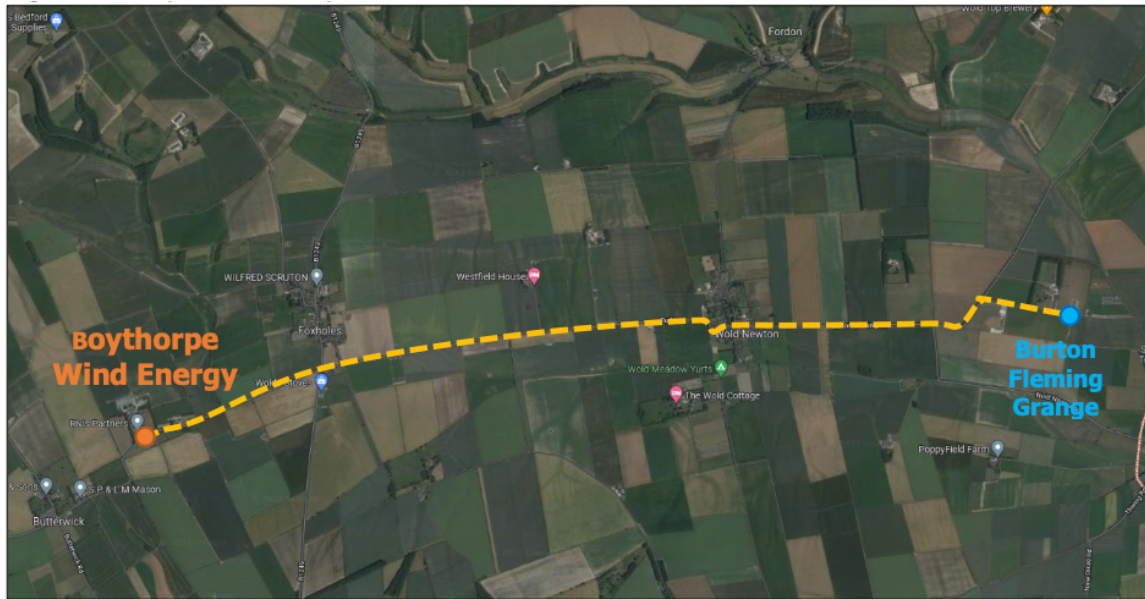
9. APPEARANCE

The turbine is of a typical design, made up of a steel construction.

10. ACCESS

Access to the site will be gained via the existing farm access to Mill Road. Following the construction phase, the proposal has no requirement for regular vehicle movements and will have a negligible impact on the local highway network.

A Transport Statement can be seen attached which outlines the transport details in extensive detail. The replacement turbine is being sourced from Boythorpe Wind Energy at Boythorpe Farm, Butterwick, YO17 8HF. An indicative plan outlining the transport route of the turbine from Boythorpe Farm to Burton Fleming Grange can be seen below.



11. NATIONAL PLANNING POLICY

Paragraph 84 of the NPPF 2021 relates to supporting a prosperous rural economy and provides strong support for the development and diversification of agricultural businesses.

Chapter 14 of the NPPF relates to meeting the challenge of climate change, flooding and coastal change. Paragraph 155 states that plans should help increase the supply of renewable and low carbon energy. Local Authorities should “provide a positive strategy for energy from these sources, that maximises the potential for suitable development, while ensuring that adverse impacts are addressed satisfactorily (including cumulative landscape and visual impacts).

Paragraph 158 of the NPPF states:

“158. When determining planning applications for renewable and low carbon development, local planning authorities should:

a) not require applicants to demonstrate the overall need for renewable or low carbon energy, and recognise that even small-scale projects provide a valuable contribution to cutting greenhouse gas emissions; and

b) approve the application if its impacts are (or can be made) acceptable (54). Once suitable areas for renewable and low carbon energy have been identified in plans, local planning authorities should expect subsequent applications for commercial scale projects outside these areas to demonstrate that the proposed location meets the criteria used in identifying suitable areas”

Footnote 54 within the NPPF states that “Except for applications for the repowering of existing wind turbines, a proposed wind energy development involving one or more turbines should not be considered acceptable unless it is in an area identified as suitable for wind energy development in the development plan; and, following consultation, it can be demonstrated that the planning impacts identified by the affected local community have been fully addressed and the proposal has their backing”.

In accordance with footnote 54 (NPPF), the proposed development represents the repowering of an existing turbine. There proposed development is therefore not in conflict with footnote 54 of the NPPF.