PLANNING SUPPORT STATEMENT

Dated 31st December 2012

Applicant:	Robert Barraclough
Proposed Development:	Installation of 1 No medium scale 50kW Endurance wind turbine on a 24m monopole mast
Site Address:	Land at Westfield Farm, Royd Moor Road, Thurlstone, S36 7RD

1 Introduction

1.1 Renewable energy development projects should be capable of being accommodated throughout England in locations where the technology is viable and environmental, economic and social impacts can be addressed satisfactorily.

1.2 The NPPF published on Tuesday 27th March 2012 contains new policy guidance which is an important and material planning consideration that should be given significant weight when taking decisions. It replaces all previous Planning Policy Guidance notes and Planning Policy Statements and requires Local Planning Authorities to produce up to date development plans incorporating the new guidance.

1.3 The NPFF introduces a presumption in favour of sustainable development, indicating that such development should proceed without delay. The proposed wind turbine on land at Westfield Farm is by definition sustainable development that will benefit the national and local economy and enhance the natural environment.

1.4 The transition to a low carbon future is a core principle of the NPPF and it positively encourages the use and development of renewable energy. It sees this as central to the economic, social and environmental dimensions of sustainable development.

1.5 NPPF also states that “when determining planning applications local planning authorities should recognise that even small-scale development provide a valuable contribution to cutting greenhouse gas emissions; and approve the application if impacts are (or can be made) acceptable.”

1.6 In making decisions Local Planning Authorities are required, where the development plan is out of date to grant planning permission unless any adverse impacts of doing so would significantly and demonstrably outweigh benefits, when assessed against the policies in the Framework taken as a whole.

1.7 In this particular case all environmental issues have been satisfactorily addressed and it is clear that on balance the economic and environmental benefits (in particular the production of renewable energy, the reduction of greenhouse gases and the support and diversification of an agricultural business) are afforded significant weight in accordance with the NPPF and these weigh heavily in favour of our proposal and as such planning permission should be granted.

1.8 The proposal on land at Westfield Farm will be sited in a location with a good wind resource (6m/s) where energy output and performance and the income generated will meet the environmental and economic needs of applicant.

1.9 The design, scale and appearance of the development has been considered and both technical and environmental factors have been examined to determine, on balance, the most appropriate site and type of wind development that optimises energy production and satisfactorily addresses environmental, economic and social impacts. Although there will be some harm to the open character of the Green Belt this harm is clearly outweighed by benefits. The design and selection process and our assessment of impacts are outlined in our accompanying Design & Access Statement and Environmental Statement.

1.10 The proposed turbine:

- Is an elegant and slender vertical structure that has a specific but limited presence. It will be seen as a new as a new marginal feature in the Green Belt and will not block the expansive view; it
- will be sited in a landscape that has no national designation that affords it any special protection but sited in an area regarded as being of moderate sensitivity to small scale wind development;
- aggregate visual impact will be moderate and views limited to near distance; it
- will not impact on local wildlife or protected species; it
- has been sited an adequate distance from neighbouring properties so as not to cause noise disturbance or shadow flicker, it
- will not affect the recreational use of local footpaths and
- will not affect the historic setting of listed buildings or other heritage assets.

1.11 The main issues are:

(a) whether the proposal constitutes inappropriate development in the Green Belt and its potential effect on the openness of the Green Belt;
(b) whether the proposal will cause harm to the character and appearance of the area and effect visual amenity
(c) whether any harm by reason of inappropriateness and any other harm is clearly outweighed by other considerations, so as to amount to very special circumstances to justify the development.

2 Inappropriate Development

2.1 It is accepted that the development of a wind turbine in Green Belt is deemed to be inappropriate development. The NPPF states that "inappropriate development is, by definition, harmful to the Green Belt and should not be approved except in very special circumstances. When considering any planning applications, local planning authorities should ensure that substantial weight is given to any harm to Green Belt. Very special circumstances will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm are clearly outweighed by other considerations."

2.2 The proposed development comprises a single medium size 50kw wind turbine on a 25m mast, relatively modest in scale compared to utility turbines. The visual envelope is restricted by local topography that limits visibility to predominantly near distance views. The turbine will be sited close to the farm complex and will be seen in context with these buildings and other scattered developments in the surrounding landscape.

2.3 Although there will be some effect on openness this harm is not seen to be significant and such harm will be outweighed by environmental and economic benefits which clearly demonstrate special circumstances. These benefits make significant contributions to the core principles of the NPPF – in particular the drive towards sustainable development, the transition to a low carbon future, meeting the challenge of climate change, supporting a prosperous rural economy, promoting health communities and helping to conserve and maintain the natural environment. When taking decisions local planning authorities must weigh development proposals against their contribution to the National Planning Policy Framework as a whole and make decisions accordingly.

3 Landscape & Visual Impact

3.1 Thoughtful design and careful site selection has resulted in a development proposal that on balance, optimises energy production and minimises overall environmental impact. However, the construction of a new vertical structure in the Green Belt will be visible from various vantage points (particularly at near distance), but given its relatively modest scale and slender form it will not block the expansive view. It will be sited in an open field close to Royd Moor Road and will be seen at near distance from this highway as well as from residential properties at Windsor Avenue and indirectly from properties at Westfield Avenue. However, the proposed turbine will have a relatively small visual envelope

restricted by the terrain and other landscape features. It will not be visual from the village of Thurlstone (other than those areas at very near distance mentioned above) and its visual impact at middle and far distance will be slight because of its modest scale and this impact will diminish rapidly with distance in locations where the turbine can be seen. In addition, the turbine sits in a low lying position and will rarely be seen breaking the skyline. It has been sited as close as possible to the host farm buildings and this projects both a physical and economic link with the farm. When viewed at greater distances it will be seen in context with other scattered developments/ urban features and the presence of trees and woodland along with the undulating landform will help assimilate the turbine into the landscape and mitigate impact upon its character and appearance.

3.2 At near distance it is accepted that the proposed turbine will occupy an open position where there is little natural screening and enclosure when viewed from Royd Moor Road. However, this is a limited to specific view close to the turbine and without this level of openness the turbine would not be able to harness the benefit of a steady and uninterrupted wind speed and this would significantly affect performance and output. The properties at the west side of Windsor Avenue occupy an elevated position and look directly towards the proposed turbine. However, their view is partly screened by trees and an outbuilding and in many cases the views out are limited to first floor level. At Westfield Avenue properties do not have a direct line of sight and the turbine will only be seen above the roof ridge of existing farm buildings – and those recently consented. The proposal will not involve the removal of existing landscape features.

3.3 Although there are one or two existing wind turbines close to the proposed site these will not be seen in combination with the proposed turbine and any cumulative effects are assessed as being very slight.

3.4 The overall aggregated Landscape and Visual impact is **moderate**

4 Ecology

4.1 An Ecological report has been carried out for the proposed development. The turbine has been sited more than 50m plus blade radius from trees, hedges and cesspits to prevent harm to feeding bats. The report recommends that best practice be followed with regard to potential ground-nesting birds during the breeding season – restricting construction activities to September-February or allowing construction following a pre-construction survey by a qualified ecologist to ensure the site is free of ground nesting birds before works commence. This can be facilitated by a standard condition.

5 Residential Amenity

5.1 The proposed turbine development has been sited 235m from the nearest residential dwelling not owned by the applicant. This exceeds the normal recommended stand-off distance for noise (144m) for this particular turbine. PPS22 Annex also recommends a stand-off distance of ten times blade diameter to prevent against the potential effects of shadow

flicker. In the case of this proposal it would mean a stand-off distance of 192m from each machine. This has been comfortably exceeded.

5 Benefits

5.1 Local Planning Authorities should consider the wider environmental an economic benefits of renewable energy projects, whatever their scale and these are material considerations that should be given significant weight in determining whether proposals should be granted planning permission.

5.2 Wider environmental and economic benefits (which include the increased production of energy from renewable sources) can also be used to demonstrate very special circumstances to clearly outweigh any harm by reason of inappropriate development which may impact on the openness of the Green Belt or have an adverse effect on a nationally designated areas such as a National Park, Area of Outstanding Beauty, Sites of Special Scientific Interest, National Nature Reserves, Heritage Coasts, Scheduled Monuments, Listed Buildings, Registered Historic Battlefields and Registered Parks and Gardens.

5.3 The wind turbine proposed on land at Westfield Farm will generate significant economic and environmental benefits and these weigh heavily in favour of our proposal.

5.4 Summary of Benefits

The proposed development will: -

- generate an estimated **170,000kW annually** - enough electricity to power the equivalent **of 52 average homes**;
- provide a secure electricity supply for the farm/ business and reduce overall energy costs;
- help reduce carbon emissions saving **89 tonnes** of carbon every and help the farm to become carbon neutral;
- help meet the Government's Renewable Energy Target for 2021;
- support the rural economy
- create the equivalent of **5.5 new jobs**(where 1 job is equivalent to 50 person weeks) over its lifetime through its manufacture, construction and maintenance;
- Help protect **1 full time job;**
- generate new income to invest in buildings and infrastructure and to invest in new farming activities; thereby protecting and creating local jobs;
- generate income to enable the landowner to continue to maintain and manage the rural landscape, thus helping to protect the character and appearance of the area and encourage biodiversity

5.5 **It is clear that on balance, the benefits of this development demonstrate special circumstances that clearly and significantly outweigh the harm to the openness and character of the Green Belt. It constitutes sustainable development and contributes to several of the core principles of the NPPF and therefore should be given favourable consideration.**

APPENDIX A
ECONOMIC AND ENVIRONMENTAL BENEFITS

Renewable Energy

A1 Wind energy is an abundant natural resource. It is non-polluting, clean and sustainable. The UK has one of Europe's windiest climates and therefore wind energy is an important element in achieving the Government's international commitment to reduce greenhouse gas emissions. The UK has a commitment underpinned by the Climate Change Act 2008 to reduce carbon dioxide levels by 42% less than 1990 levels by 2020 and by 80% by 2050.

A2 The UK Government also made a commitment under The Energy White Paper (2007) that 10% of UK electricity should come from renewable energy by 2010 and 20% by 2020.

A3 The increased development of renewable energy resources is vital to facilitating the delivery of the Government's commitments on both climate change and renewable energy and the NPPF advocates positive planning to facilitate renewable energy development that can contribute to the key principles of the Government's sustainable development strategy:

- Social progress which recognises the needs of everyone - by contributing to the nation's energy needs, ensuring all homes are adequately and affordably heated; and providing new sources of energy in remote areas;

- Effective protection of the environment – by reductions in emissions of greenhouse gases and thereby reducing the potential for the environment to be affected by climate change;

- Prudent use of natural resources – by reducing the nation's reliance on ever diminishing supplies of fossil fuels; and,

A4 The proposed turbine at Westfield Farm will deliver significant benefits towards all three elements of the sustainable development strategy and as such adds significant weight to our planning application. It will contribute towards the reduction of greenhouse gases by saving approximately **89 tonnes of carbon dioxide per year** (at least 1784 tonnes over twenty years) and generate an average of **170,000 kWh of electricity per annum** from renewable sources reducing our reliance on fossil fuels. This is equivalent to the electricity usage of **52 average homes.** Approximately 95% of energy generated will be fed back to the national grid. It will contribute to the Government's renewable energy targets and help meet the regional and local targets identified under Policy ENV5 and in table 10.2 of the Yorkshire and Humber Plan.

A5 In April 2011 the Renewable Energy Foundation published a report entitled Renewable Output in 2010. The report uses data provided by the Department of Energy and Climate

Change and data made available as part of Ofgem's reporting of subsidy claims under the Renewable Obligation. It concludes that the UK failed to reach its 10% renewable electricity target for 2010 producing only 6.5% of electricity from renewable sources – a shortfall of more than one third of the target figure which puts extreme pressure on the delivery of targets for 2021.

A6 It is clear that fundamental change is required to bring about greater public awareness of the benefits of wind energy, political support locally for wind energy schemes and greater support and understanding from local planning authorities particularly for small/medium scale wind developments located in areas which have low-medium sensitivity to wind developments, where the wind resource is good and where on balance potential environmental impacts can be satisfactorily addressed.

Environmental Management

A7 Farmers and landowners have shaped the landscape for thousands of years and rural landowners provide an important stewardship role helping to protect and manage the environment. This may be at risk if farms and rural enterprises are not allowed to adapt and diversify and this includes investment in new technology, new plant and processes and new business opportunities. Investment in cheaper, cleaner energy is an important part of this process. The development of a wind turbine at Westfield Farm will generate new income that will facilitate continuing improvements and on-going maintenance of the farm estate and be used to improve and maintain traditional farm buildings, repair dry stone walls and generally enhance the appearance of the farm.

A8 If farms and rural enterprises are not able to diversify and allowed to fail then their management role will cease and the character and appearance of the countryside as we know it will change irrevocably forever. Viable farms are essential if the rural landscape is to continue to be managed; thereby protecting its distinctive character, and maintaining its condition and environmental quality.

Supporting Business and Economic Growth

A9 The new NPPF reforms the planning system to promote sustainable economic growth and jobs. It introduces a strong presumption in favour of sustainable development and requires local planning authorities to plan positively for new development and to deal promptly and favourably with planning applications that comply with up to date national planning policy. When determining applications local planning authorities are obliged to have regard to all relevant considerations to support economic recovery including energy, environmental, transport and heritage consents. They should support enterprise and give appropriate weight to economic, environmental and social benefits of proposals; including long term or indirect benefits such as increased consumer choice, more viable communities and more robust economies (which may, where relevant, include matters such as job creation and business productivity. The NPPF is highly relevant to renewable energy developments.

A10 In addition Objective 6c (ii) in the Regional Economic Strategy for Yorkshire and the Humber aims to secure a strong and diverse rural economy by "promoting sustainable economic development in remote rural areas and drive change to support farming and land based industries."

A11 The proposed development, although modest in scale, will stimulate economic growth and create jobs. A wind turbine is an essential part of the applicant's business plan to improve the Westfield Farm estate and to develop the applicant's farming business.

A12 Land at Westfield Farm (450 acres) is owned and ran by Mr R Barraclough for beef cattle, sheep, pigs and poultry. It has a turnover of £1/4 million and is an important player in rural economy of Thurlstone/Penistone. The business employs **4 full and part time staff** and supports other small businesses and sub-contractors in the local supply chain. The proposed turbine will help the farm secure a much needed future power supply and significantly reduce its carbon footprint. Income generated through feed in tariffs will be invested in developing and expanding the farm business – purchasing new equipment, purchasing new livestock and improving/constructing new livestock buildings – which is essential to the future prosperity of the farm, enabling it to succeed in the long term.

A13 Westfield Farm is a large livestock farm that uses a considerable amount of electricity. The supply of clean and affordable electricity is very important. It will enable the Farm to reduce energy costs, keep its margins low and allow it to supply produce at prices that are attractive to wholesale buyers and ultimately consumers.

A14 Wholesale buyers and supermarkets have become increasingly environmentally aware. Compliance with their environmental buying policies is now essential if farms are to retain and win supply contracts. They have strict environmental controls and producers need to work with them to reduce their carbon footprints, improve energy efficiency through new techniques and practices, invest in new equipment and by introducing renewable energy generation. Farms that are unable or unwilling to adapt to these changes will find themselves frozen out of the market place. It is therefore imperative that Westfield Farm is allowed to modernise its business, assisted to achieve carbon neutrality, to produce a healthy and sustainable product that is now demanded by UK consumers. The new turbine will enable the farm to drastically reduce its carbon footprint, enabling it to meet the very highest environmental standards now imposed by wholesale buyers and consumers -helping it to not only retain contracts but to expand the business and potentially create new jobs.

A15 The applicant intends to use the new income to construct a new barn to replace older buildings that are now unfit for purpose (this is subject of a current planning application). He also plans to introduce new electric heating to all his other livestock buildings/ barns replacing existing diesel generators for clean renewable power. This will reduce fossil fuel consumption significantly and mean there will be no need for regular deliveries of diesel. In addition the applicant also intends to convert the farmhouse over to electric heating.

Job Creation

A16 The design, construction and project management of the proposed wind development will create an equivalent of **4 full time** jobs (measured as 1 job equal to 50 person weeks and calculated using Yorkshire Forward's/ European Commission job creation methodology). It will also help test the development of new technologies assisting the future process of research and development in the growth industry of wind turbine manufacture. A further **1.5 full time jobs** will be created over the expected 20 year lifetime of the turbine through regular maintenance and servicing contracts.

APPENDIX B
METHOD OF CALCULATION

Wind Speed
This is estimated at **6 m/s** using the national wind map (NOABL wind speed database) produced by the Department of Trade and Industry which provides a record of estimated average wind speeds across the UK. This does not provide an accurate, site specific wind speed but a general guide to the likely annual average wind speed for that area (i.e. based on a figure for each per square kilometre). Local topographical conditions and obstructions may increase or decrease actual wind speed.

Energy Generation
This is calculated from the manufacturer's power curve using the estimated average wind speed above. A copy of the power curve is in the manufacturers brochure enclosed with this application. At **6 m/s** the turbine will produce an estimated annual average output of **170,000 KWh** per annum.

Equivalent Consumption
The turbine will generate sufficient energy to power the equivalent of **52 average homes**. This is calculated using Ofgem's Typical Domestic Energy Consumption Figures for 2011. The typical electricity consumption for an average home is **3,300 kWh per year**. This is based on median values rather than the mean. The equivalent consumption figure was calculated by dividing the estimated annual energy generation by the electricity consumption for the average home. This provides an estimate for the number of homes the proposed turbine could potentially provide electricity for. This is a representative figure.

Carbon Savings
Carbon savings represent the amount of CO2 saved by generating renewable energy (where emissions are assumed to be zero) as an alternative to Grid electricity. A conversion factor is used. This is multiplied against the amount of renewable electricity generated per year to give an estimate for annual carbon savings. A conversion factor of 0.5246 has been used. This is means that 1 kwh of Grid electricity is equivalent to 0.5246 kg of CO2. This figure has been taken from the Carbon Trust's "Energy and Carbon Conversions 2011 Update" and the source of the figures comes from DECC published August 2011.
The calculation is therefore (170,000 kWh x 0.5246)/ 1000 = **89 tonnes of CO2 pear year**

Jobs Protected
Where provided, these figures are provided by the applicant and represent the number of people employed either by the farm or his whole farming business/ enterprise.

Business Turnover
Where provided, this is an estimate provided by the applicant or his/her business.

Jobs Created

This represents an estimate of the value of the proposed development to the local, national and international economy. The assembly, construction and maintenance of the turbine will solely benefit the UK. The majority of the main components of the turbine are manufactured outside the UK.

In calculating job creation methodologies used by the European Commission and the former Regional Development Agencies have been adopted and adapted to provide an estimate of jobs created. 1 full time job equivalent is equal to 50 person weeks (i.e. equivalent to one person in one full time job for one year).

Jobs are calculated by using multipliers which are weighted for different stages of the development process.

For manufacture, construction and maintenance it is estimated that **5.5 jobs** will be created. This is calculated as follows: -

Manufacture and Construction

For Manufacturing a factoring value of £80,000 per average job has been used. (This takes account of materials, labour, overheads and profit and assumes £80,000 of sales is required to create one average job across all disciplines).

For Construction a factoring value of £60,000 per average

The estimated total cost to manufacture and supply the turbine is assumed to be £180,000

The estimated total cost to construction and install the machine (including infrastructure works) is assumed to be £120,000

The calculation is therefore (£180,000/£80,000) + (£120,000/£60,000) = **4.25(rounded down to 4 jobs) per turbine**

Maintenance

For maintenance a factoring value of £60,000 per average job has been used.

The cost of basic maintenance of the machine is estimated to be £5000. This does not include any replacement of major parts.

The average life of a machine for the purposes of this exercise is assumed to be 20 years.

The calculation is therefore (5 x 20)/60,000 = **1.66 (rounded down to 1.5 jobs) per turbine**

The job creation figures do not include any in-direct jobs that may be created through the significant income generated by the turbine that will either be re-invested into the applicants business, home or the general economy.

Income Generation

For confidentiality reasons no figure or method of calculation has been included for this.