DESIGN AND ACCESS STATEMENT

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PROPOSED SITING OF 1 x 36.6M HIGH (HUB) WIND TURBINE WITH A TIP HEIGHT OF 46.3M

SEPT 2013

DESIGN AND ACCESS STATEMENT

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APPENDICES:

1.0 Introduction to the Proposal

1.1 This desktop assessment sets out our analysis of the relevant planning policy principles which need to be considered in support of this application for the erection of one 36.6m high (hub height) wind turbine at Fields Farm, Draycott Cross, Cheadle. The turbine would have an overall height of approximately 36.6m to the tip.

Use

1.2 The site itself consists of a relatively open, gently undulating arable field associated with Fields Farm. There is a quarry approximately 900m to the East and the surrounding countryside comprises a very variable pastoral landscape that includes industrialised landscapes of the Potteries, dissected plateaux flanking the Churnet valley and the dissected slopes leading up to the Peak District. The area lies in North Staffordshire and is bounded to the west by the Shropshire, Cheshire and Staffordshire Plain, to the south by Needwood and the South Derbyshire Claylands and to the north-west by the Peak District. 22% of the area is urban, 7% is woodland.

1.3 The proposed turbine would introduce a different use but would remain intrinsically linked with the agricultural use of the land in that it would harvest the natural resources of the land much in the way agricultural activities do. The effects of this are analysed within the consideration chapter of this report.

Amount

1.4 The development proposal involves the provision of one Endurance wind turbine and associated infrastructure comprising the following specifically:

- Base work to secure the turbine to the site
- Grid connection

The amount of work involved is subsequently limited. The effects of this are analysed within the consideration chapter of this report.

Scale

1.5 The scale of the development is derived from the turbine's height as the nature of this turbine has a very slim profile. The proposals seek the erection of one 36.6m high (hub height) wind turbine which would have an overall height of approximately 46.3m to the tip. This is illustrated in the following image.

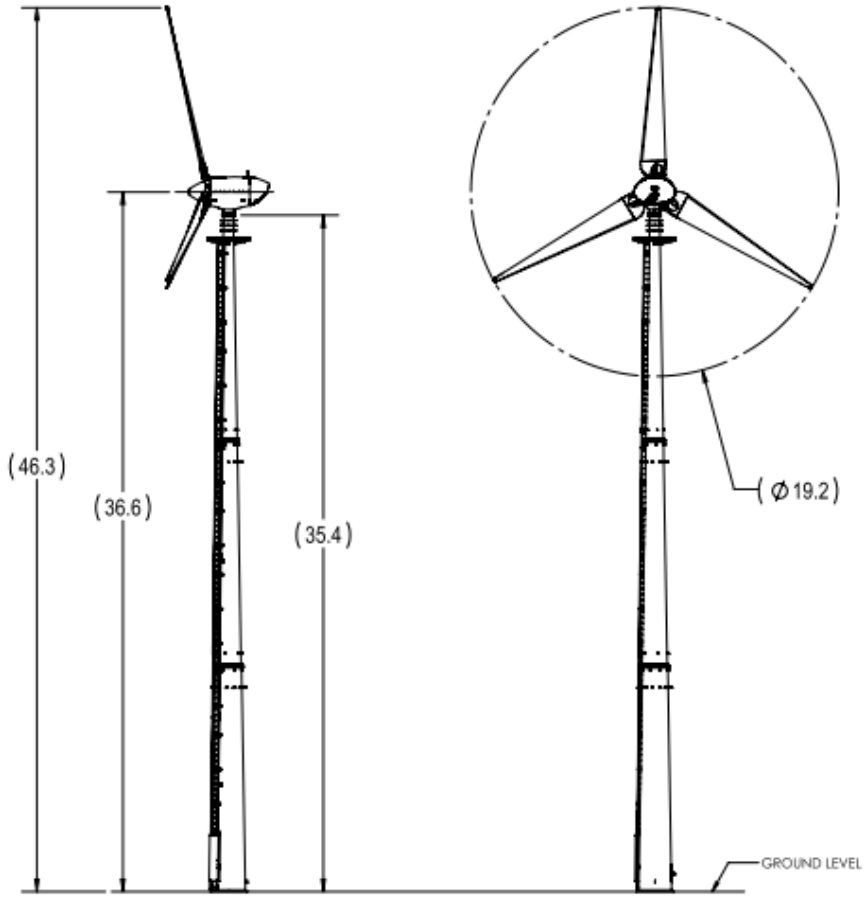

Image 1: Elevation Plan of the Turbine

1.6 The effects of this scale of turbine are analysed within the consideration chapter of this report.

Layout

1.7 From an operational standpoint, the siting of a wind turbine requires maximum exposure to unobstructed wind flow conditions in order to achieve efficient operation. Proximity to

ground based obstructions can detrimentally affect the performance of a turbine and it is therefore essential to ensure that a wind turbine is located a sufficient distance away from any such obstacles to provide the necessary clearance. After taking into consideration these factors, the siting point for the turbine has been chosen from both an operational/technical and a visual impact perspective and has been sited in the proposed location to ensure that the turbine's operation is not adversely affected by turbulence caused by the adjacent farm buildings and tree belts. The proposed layout of the turbine and associated works is indicated in the following site location plan.

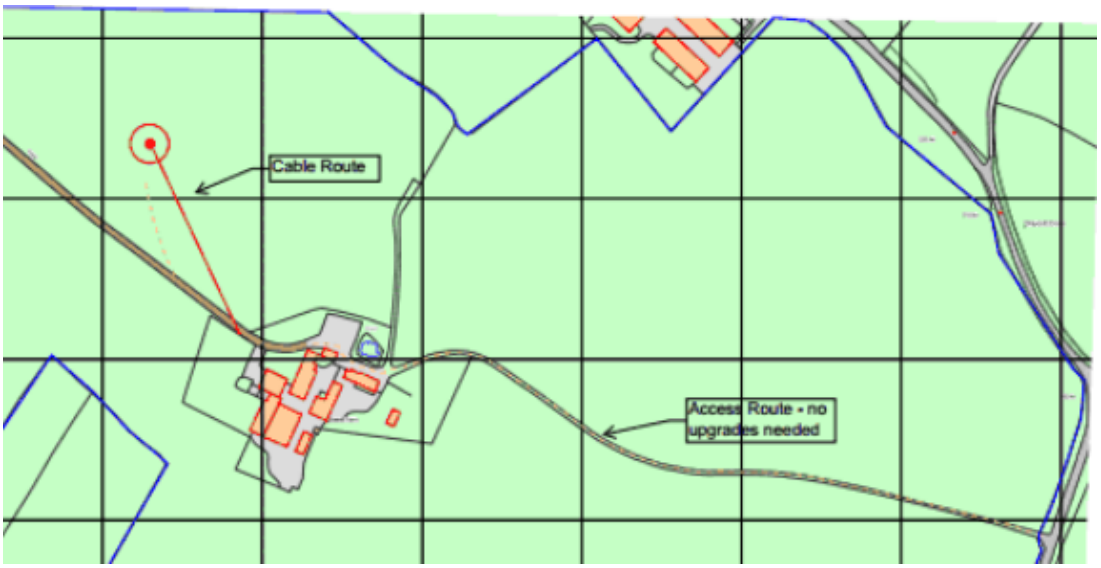

Image 2: Site Location Plan

1.8 The effects of this layout and positioning of the turbine are analysed within the consideration chapter of this report.

Landscaping

1.9 No landscaping is proposed as part of this planning application however all disruption to the landform such as through the cable run would be returned back to ensure that the existing landscaping is maintained. The effects of this are analysed within the consideration chapter of this report.

Appearance

1.10 The proposals seek a traditional three blade horizontal axis wind turbine. The appearance of wind turbines is standard. Endurance use industry standard neutral matte finish paints. These are designed to absorb light and blend into a dull grey cloudy background. As illustrated in the manufacturer's datasheet. The effects of the appearance of this turbine are analysed within the consideration chapter of this report particularly within the Landscape and Visual Impact section.

Access

1.11 Access to the site for the installation is likely to be easy as the site is currently served by an access track linking Fields Farm to Cheadle Road. The proposed turbine would be delivered in parts and so does not necessitate unduly large vehicles that require specific requirements for the installation. The effects of this are analysed within the consideration chapter of this report.

Climate Change Mitigation

1.12 Climate change has been recognised as one of the most serious issues facing the world today. In response, the UK has committed itself to legally binding targets relating to reducing CO2 emissions and increasing the amount of electricity produced from renewable energy resources such as the wind. Wind turbines are considered the most mature of renewable energy technologies and have been operating in the UK for over 20 years. The wind turbine will make a significant contribution towards renewable energy target and the reduction of greenhouse gas emission.

1.13 For the last 15 years rural landowners have been encouraged to consider diversification from their core business activities. The proposed development is a form of rural diversification. The energy produced shall be exported to the National Grid, helping to meet national, and indeed local targets for renewable energy generation. Rural landowners must look very closely at all of their resources and try to provide alternative sources of income which will help to sustain their varied business activities during difficult economic times.

1.14 The proposed wind turbine would satisfy the energy demands of the farm by providing a source of renewable energy that would also allow the farm business to operate in a more

environmentally and financially sustainable manner. The whole thrust of this application is therefore based on climate change mitigation.

1.15 The main planning considerations are considered within this report in relation to local and national planning guidance.

2.0 The Site Details and Background

2.1 The site lies less than 1km to the South of Boundary village and is approximately 1.5Km to the South West of Cheadle. Cheadle is a small market town situated approximately 18Km from the city of Stoke-on-Trent. The turbine would be positioned within the land owned by and associated with Fields Farm, to the North West of the dwelling. The farm house itself is grade II listed dating to the late 18th century with some 20th century additions. The proposed turbine is indicated in the map below showing the turbine in relation to its surroundings:

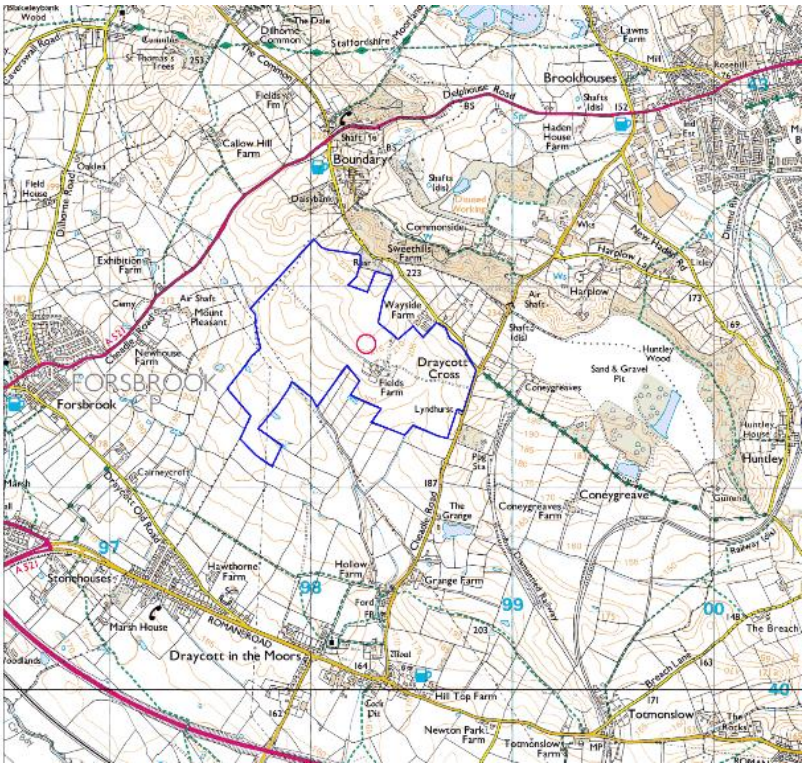

Image 3: Site Area Plan

2.2 There are various farmsteads and buildings in the locality, but the area's overall character is rural. The area around the turbine is relatively open and gently undulates

2.3 The nearest neighbouring property is the farm complex to the North East of the site which is located approximately 350m from the proposed siting of the wind turbine.

2.4 Access to the site is from the farm access which links to Cheadle Road to the South East of the proposed turbine. The actual siting of the turbine is approximately 50m from the farm track and 400m from Cheadle Road.

3.0 Planning Policy

3.1 The Government's National Planning Policy Framework (NPPF) was adopted on 27 March 2012 and represents the principal national guidance document and a material consideration which must be taken into account, where relevant, in determining planning applications. This framework replaces all previous national policy statements, which were superseded on its adoption. Statements contained within cannot make irrelevant any matter which is a material consideration in a particular case, but where such statements indicate the weight that should be given to relevant considerations, decision makers must have proper regard to them. One particular consideration which will be teased out in this report is the weight which should be given to the appropriateness of development both within the countryside and any specific landscape designation versus the weight associated with the wider environmental benefits of a wind turbine.

3.2 At the heart of the NPPF is a presumption in favour of sustainable development, which should be seen as a golden thread running through both plan-making and decision-taking. Sustainable Development encompasses concepts of sustainable economic, social and environmental development which run concurrent with the spatial approach to planning. Key to this application, the following excerpts are applicable to a proposed wind turbine for this site:

Renewable Energy

3.3 To help increase the use and supply of renewable and low carbon energy, local planning authorities should recognise the responsibility on all communities to contribute to energy generation from renewable or low carbon sources. They should:

- Have a positive strategy to promote energy from renewable and low carbon sources;

3.4 When determining planning applications, local planning authorities should:

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

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

Heritage Assets

3.5 When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation. The more important the asset, the greater the weight should be. Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. As heritage assets are irreplaceable, any harm or loss should require clear and convincing justification. Substantial harm to or loss of a Grade II Listed Building, park or garden should be exceptional. Substantial harm to or loss of designated heritage assets of the highest significance, notably scheduled monuments, protected wreck sites, battlefields, Grade I and II* Listed Buildings, Grade I and II* registered parks and gardens, and World Heritage Sites, should be wholly exceptional.

Planning Practice Guidance for renewable Energy and Low Carbon Energy

3.6 At the end of July 2013 the Companion Guide to PPS22 was replaced by the above document. The document states that increasing the amount of energy from renewable and low carbon technologies will help to make sure the UK has a secure energy supply, reduce greenhouse gas emissions to slow down climate change and stimulate investment in new jobs and businesses. Planning has an important role in the delivery of new renewable and low carbon energy infrastructure in locations where the local environmental impact is acceptable.

Energy Policy

3.7 It is also important to stress that there are also other material policy considerations relevant to this application found in various national energy policy documents. These indicate a strong positive policy favouring wind power and other forms of renewable energy in the UK. This is largely motivated by the government's international agreements on the reduction in the emissions of greenhouse gases, and the national and local targets that have been identified for achievement by 2010 and 2020. The Energy White Paper (2007) confirms the

requirement for 10% of UK electricity to come from renewable energy by 2010 with an aspiration to double this by 2020.

3.8 In 2009 the British Wind Energy Association (BEWA) compiled a detailed review of the state of progress towards the 2010 renewable energy targets adopted by the English regions and the aggregate 'English' target. It found that with the exception of London all the English regions are very unlikely to meet their onshore wind targets by 2010. In fact at the time the report was completed in April 2009 only half (50.5%) of the aggregate onshore target had been met. This failure to meet the 2010 target puts extreme pressure on all parties concerned including electricity generating companies, landowners and developers, Central Government and Local Planning Authorities to deliver more renewable capacity more effectively and more efficiently.

3.9 Wind energy has the potential to be delivered in a shorter timescale than other forms of clean or renewable energy such as biomass, hydroelectric and combined heat and power. Traditionally, these have much longer lead in time and as such are unlikely to have a significant impact on reducing emissions in the short term. Therefore, it is of paramount importance that every opportunity is taken to accelerate the development of wind energy projects over the next few years to maximise benefits and help ease the pressure on the delivery of the 2020 targets. Delivery of these targets will lead to wider economic and environmental benefits, reduced greenhouse gas emissions, provision of a secure and diverse energy supply for businesses and residents and reduced instances of fuel poverty.

3.10 On 1st April 2010 the government introduced new Feed in Tariffs (FITS) to encourage more individuals and small businesses to invest in small to medium scale renewable technologies such as wind turbines and solar electricity. The aim is to accelerate the delivery of energy from renewable sources and speed up the delivery of national and regional targets (although the latter have now been abolished as a result of the revocation of the Yorkshire and Humber RSS earlier in the year).

3.11 In March 2012 Ofgem released the Renewables Obligation (RO) Annual Report for 2010/11, which is the main support mechanism for encouraging the growth of renewable energy in the UK. This includes onshore wind. Ofgem's report shows that the RO added just £15.15 to the annual energy bill of the United Kingdom's 26.3 million households – with just £4.68 of that supporting onshore wind. By comparison, the rising cost of imported gas added around

£120 to energy bills last year. Increase in the cost of gas added more than 10% to energy bills, while support for onshore wind added less than 0.05%.

3.12 Britain risks running out of energy generating capacity in the winter of 2015-16, according to the energy regulator Ofgem. Its report predicts that the amount of spare capacity could fall from 14% now to only 4% in three years. Ofgem said this would leave Britain relying more on imported gas, which would make price, rises more likely. The regulator said more investment was needed in building fresh generating capacity. This highlights the importance of security of electricity supply.

Green Belt

3.13 The site is located within the Green Belt. The NPPF states that the Government attaches great importance to Green Belts. The fundamental aim of Green Belt Policy is to prevent urban sprawl by keeping land permanently open. When located in the Green Belt, elements of many renewable energy projects will comprise inappropriate development. In such cases developers will need to demonstrate very special circumstances if projects are to proceed. Such very special circumstances may include the wider environmental benefits associated with increased production of energy from renewable sources.

Local Planning Policy

Staffordshire Moorlands Local Plan

3.14 The Staffordshire Moorlands Local Plan was adopted in September 1998 and is a key part of the development plan system. The current plan consists of a proposals map which identifies land allocations and area designations. The proposals map is accompanied by a written statement containing policies on a broad range of issues relevant to the development and use of land.

3.15 The site is allocated as a Special Landscape Area and within the Green Belt in the proposals map, as shown on the map below.

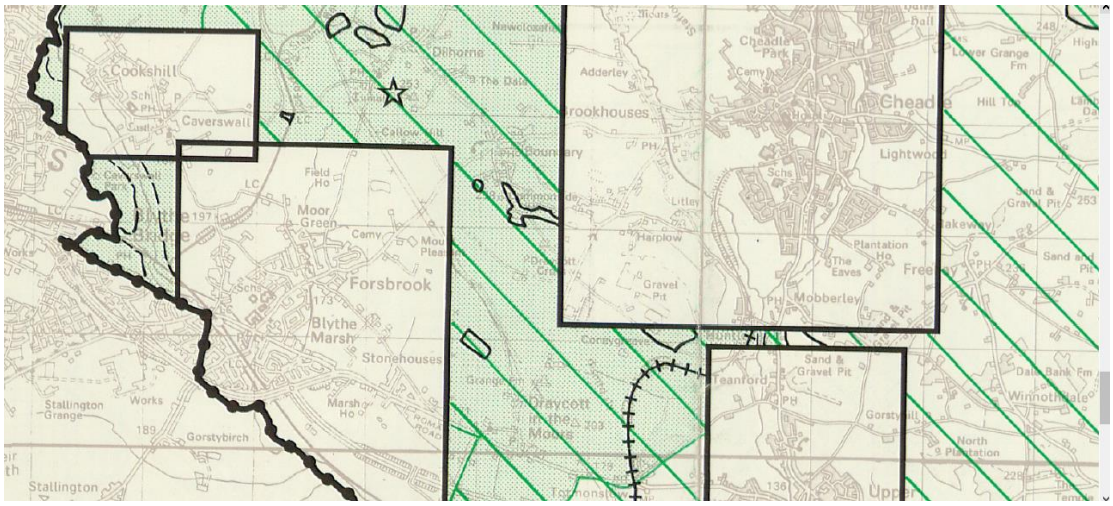

Image 4: Planning Policy Proposals Map

3.16 The Planning and Compulsory Purchase Act 2004 provided for the saving of policies in adopted Local Plans for a period of 3 years only from the commencement date of that Act. A Direction was received from the Secretary of State confirming which policies in the Staffordshire Moorlands Local Plan should be saved. All saved policies will remain in force until such time as they are replaced by new policies in the Local Development Framework.

Policy N2 Except in very special circumstances, there will be a presumption against inappropriate development in the green belt.

Policy N7 Development which would injure the visual amenity of the green belt by virtue of its siting, materials or design will not be permitted in locations which are within or visually conspicuous from the green belt.

Policy N8 In the special landscape area permission will not be given for development which would materially detract from the high quality of the landscape because of its siting, scale, design and materials, and associated traffic generation. In areas where the special landscape overlaps the green belt there will be a presumption against most development in accordance with policy N2.

Policy N9 Within the special landscape area the local planning authority will promote and require especially high standards of design for development.

Revised Submission Version Core Strategy (December 2011)

3.17 There is no 'saved' Policy in the Council's 1998 adopted Local Plan about renewable energy or climate change. However the Council's Revised Submission Core Strategy contains two Policies:-

Policy SD1 (Sustainable Use of Resources) – this covers orientation and layout expectations for new buildings / the requirements for "sustainability statements" with applications / expectations for housing development to meet "Building For Life" standards / requirements for recycling of building materials in new construction / water conservation expectations for new buildings.

Policy SD2 (Renewable and Low-Carbon Energy) – this covers the Council's assessment approach to proposals for larger, stand-alone renewables installations including wind turbines etc / insulation and micro-renewables expectations for both individual new buildings and on larger development sites / expectations regarding 'District-heating' measures / retrofitting of carbon-saving measures within existing buildings.

4.0 Consideration

4.1 As previously identified, there is a presumption in favour of renewable technologies and significant weight should be attributed to this issue in line with government policy. This issue should be balanced against other main considerations including the impact upon the character and appearance of the area, archaeological and nature conservation issues and any adverse impact upon the electromagnetic field. Each issue will be considered individually within this desktop assessment.

Landscape and Visual Impact Assessment

4.2 The proposed wind turbine would be positioned to the North of the farmstead and measure 36.6 m high to the hub, with the blades extending to reach a tip height of 46.3m. In this location and at this height the turbine would be visible and would to an extent change the appreciation of this site within its surrounding rural context. The process of assessing the impact of this application has been guided by the document 'Guidelines for Landscape and Visual Impact Assessment'(2013) utilising photomontages as guiding tools. This is commonly used for large scale schemes however the principles can be used on even the smallest scheme and the principles have therefore been adopted with this application to offer a robust assessment of the visual impact of the proposed turbines. Appendix A of this report outlines the approach taken here within this desktop assessment.

Landscape Character Assessment

4.3 The site is located within National Character Area 64 'Potteries and Churnet Valley'. This is a very variable pastoral landscape that includes industrialised landscapes of the Potteries, dissected plateaux flanking the Churnet valley and the dissected slopes leading up to the Peak District. The area lies in North Staffordshire and is bounded to the west by the Shropshire, Cheshire and Staffordshire Plain, to the south by Needwood and the South Derbyshire Claylands and to the north-west by the Peak District. 22% of the area is urban, 7% is woodland. The main area distinctions are:

1 East of Stoke-on-Trent – Very high densities of farmsteads relating to the earlier enclosure and settlement of the valleys and the later 18th/19th century enclosure of

the moorlands. There are lower densities of farmsteads in the mixed farming areas to the south.

2 The Stoke-on-Trent and Newcastle-under-Lyme conurbation – Farmsteads often developed in close relationship with its industries where surviving groups are very rare.

3 West of Newcastle-under-Lyme – Larger estate farms developed in the 19th century.

Landscape and Settlement

- High to very high levels of dispersed settlement, with 10% of farmsteads in villages and 7.4% in hamlets.
- Very high density of farmsteads in the landscape, lower to the Churnet Valley and west of the Potteries.
- Predominant pattern of very small farmsteads (48%) particularly around Biddulph Moor, with large-scale (21.1%) farmsteads concentrated to west, in Churnet Valley and in lowlands to south.

Farmstead and Building Types

- Linear and small loose courtyard plans, with working buildings to one or two sides of the yard, are widespread but predominant to the east.
- Dispersed plans, particularly dispersed clusters, are concentrated around the uplands to the east and relate to its long history of stock rearing.
- Regular L-plan arrangements are the predominant regular plan type in the character area, reflecting the housing of dairy cattle.
- Buildings for cattle predominate: from small cow houses attached to houses to larger two storey buildings.
- Threshing barns, where present, form part of combination ranges.
- Field barns.

Rarity and Significance

- Very high rates of survival, with 70% recorded from late 19th century maps (in Staffordshire) retaining more than half of their historic footprint – strong differences between higher loss (high proportion of the 15% across the area) and alteration around

Potteries and to west in contrast to very high survival in the moorlands and Churnet Valley.

• Recorded pre-1800 farmstead buildings comprise 10% of those recorded from late 19th century maps. Notable is a concentration of farmsteads retaining a 17th century building, usually the farmhouse, along the eastern side of the character area along the Churnet Valley. These may reflect the prosperity in this period of its farming community, as a result of its diverse semi-industrial economy as well as access to upland commons for rearing livestock.

Drivers for Change

• High level of loss of farmsteads in the area of the Potteries and on the western edge of the character area.

• High economic mass (proximity to the Stoke conurbation and other urban areas) has allowed conversion of three fifths of farmsteads to residential use though participation of residents in business activity is relatively low.

4.4 The application site is located within the Council's designated Special Landscape Area and within the Green Belt as shown in the proposals map extract in the policy section above.

4.5 As outlined above, the scale of the landscape is one of the primary characteristics likely to require consideration. For instance, is it small scale and intimate or large scale and expansive? In this particular case the turbine would relate sympathetically to the surrounding landscape and would be appropriate in scale and visual context with the surrounding tree belts and farm buildings. The setting of the turbines and the landscape impact will be explored further below in the Landscape Visual Impact section below.

4.6 Small-scale turbines are more commonly found in settled landscapes and as such they have potential to impact on the landscape character unless sympathetically sited. By positioning the turbine in relation to the farm, tree belts and large pylons the proposal has sought to compliment the landscape character ensuring the pattern of human activity is related to existing human activity rather than intruding into more open isolated parts of the landscape area.

4.7 Even small turbines have the potential to dominate small-scale topography and care has been taken not to introduce a scale of turbine, which would have an overbearing presence on complex or intricate landforms and, as such, would not dominate this skyline and relates well to these landscape features. Set in this context turbines reaching 36.6m to the hub are deemed to be commensurate in scale and would not have an over bearing presence on the landform.

4.8 The development here would result in the introduction of a vertical feature within the landscape which would have some micro visual and landscape impacts. However this is an agricultural scale turbine and at this scale it is unlikely to have such a significant presence within the landscape. The proposals would not remove any of the key characteristics of the sub area and the design has sought to respect key landscape characteristics in design and scale as set out above. The more localised visual effects are considered below, with the aid of photomontages assisting the assessment.

Landscape Visual Impact

4.9 An assessment of the visual impact of the proposed turbine has been made of utilising photomontages as guiding tools. These photomontages are attached as Appendix B. The following table demonstrates this assessment of these photomontages:

Table Detailing the landscape and visual impact					
Site/Feature	***Location and Distance from Turbine***	***View and Assessment***	***Receptor Sensitivity***	***Magnitude of Impact***	***Impact Assessment***
Photomontage 1 – 398054, 340198	1550m to the South.	Taken from the graveyard of St Margaret's Church. The belt of mature trees between the view point and the proposed turbine would severely limit views, even in autumn and winter months. As such, there would be a very limited impact on visual amenity.	Medium	Low	Slight Adverse
Photomontage 2 –	1426m to	Taken from the gateway at the end of the track which leads to the	Medium	Medium	Moderate

398118, 340317	the South	entrance to St Margaret's Church Hall car park. The turbine is in a slightly elevated position and is obviously visible across the field, however, it would not be viewed in isolation as there are large, metal pylons which are viewed in the same context. As such, the turbine would not be the only man made vertical structure on the horizon.			Adverse
Photomontage 3 – 398242, 340317	1422m to the South	Taken from the public footpath near Hollow Farm, uphill from the ford where the public footpath begins. There would be very limited views of the turbine from this vantage point due to the mature trees and building in the foreground. As such, the turbine would not be viewed in isolation and would not appear a visually intrusive or overly prominent feature in the landscape.	Medium	Medium	Moderate Adverse
Photomontage 4 – 398556, 340740	1052m to the South East	Taken from a gateway to a field on Cheadle Road, nearby the Grange. The turbine would be visible from this location but only over the mature trees and buildings in the foreground. Again, it would not be viewed in isolation or be an overly prominent feature on the landscape.	Low	Medium	Slight Adverse
Photomontage 5 – 398784, 341441	633m to the East.	Taken from the layby on the opposite side of the gateway to Fields Farm. The turbine would be visible from this viewpoint but would be viewed against the mature trees in the foreground and the large metal pylons in the back ground. There would be some effect on the landscape but not significantly adverse.	Low	Medium	Slight Adverse

Photomontage 6 – 397526, 342222	849m to the North West	Taken from a gap in the hedgerow on the A521, Northeast of Mount Pleasant Farm. The foreground rises and falls to the turbine position. There are a number of trees in the foreground and several large pylons in the background. As such, it would not be the only man made vertical feature in the landscape. Therefore, it would not have a significantly adverse effect on visual amenity.	Low	Low	Slight Adverse
Photomontage 7 – 397113, 340963	1356m to the South West.	Taken from a gap in the hedgerow on Draycott Old Road. There is a mature tree belt between the viewpoint and the turbine location which would result in only the hub and the blades being visible. As such, it would not have an unreasonable impact on the visual amenity of the landscape.	Medium	Low	Slight Adverse

4.10 Therefore having regard to the above assessment, whilst there is some harm within the slight and moderate adverse categories, this does not necessarily equate to unacceptable harm and this change in vista must be balanced against policy expectations and guidance encouraging renewable energy.

4.11 Due to the narrowness of the turbine and the relatively modest height in comparison with large scale commercial wind turbines, it is considered that main views would be contained to more local views from the immediate road network. There is unlikely to be any longer distant view of the turbine which would have a significant effect. This aids in ensuring that any harm is minimised and constrained to the local scale.

Green Belt

4.12 Green Belts have been perhaps the best known feature of the planning system since the 1950's and continue to command widespread support. The protection of the Green Belt is an overriding planning consideration and one, which in the case of most forms of development, strongly militates against the granting of planning permission. However, having been a

feature of the planning system since the 1950's the policies and traditional considerations applied to development within the Green Belt are not necessarily up to date with the ever changing climate change issue. As such, weight should now be given to the environmental benefits from proposals such as wind turbines against the background of Green Belt policies. Very special circumstances will be required to justify instances where this presumption against development should not apply.

4.13 The principle of wind turbines would not accord with the forms of development deemed acceptable in the Green Belt and its very nature is therefore deemed inappropriate in principle within the Green Belt under this policy context, as stated within the Planning Officers Report. The NPPF states that 'very special circumstances' will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm, is clearly outweighed by other considerations.

4.14 When located in the Green Belt, elements of many renewable energy projects will comprise inappropriate development. In such cases developers will need to demonstrate very special circumstances if projects are to proceed. The NPPF specifically states '**such very special circumstances may include the wider environmental benefits associated with increased production of energy from renewable sources**'. Given the national planning policy context and the greater emphasis that is now placed within the planning system on renewable energy provision, it is considered that the environmental benefits of small-scale renewable projects such as this would represent 'very special circumstances'.

4.15 Indeed, this issue was recently discussed in an appeal at land adjacent to Ramsgill, Otley Road, Bingley (APP/W4705/A/09/2118825). This appeal related to a 15m high wind turbine within the Harrogate Green Belt, and the Planning Inspector in allowing the appeal accepted that Green Belt planning policy principles would dictate that the principle of wind turbines was inappropriate and would, to an extent, result in some loss of openness. Nevertheless, in reaching the decision to allow the appeal the Inspector concluded:

4.16 *'I attach substantial weight to the harm to the Green Belt by reason of inappropriateness. As there would be a modest loss of openness within the Green Belt, I find only a limited degree of other harm. Set against this is the significant weight that I give to the wider environmental benefits associated with increased production of energy from renewable sources. When weight against one another, the other considerations do clearly outweigh the harm to the*

Green Belt by reason of inappropriateness and the other harm in relation to openness within the Green Belt. In my judgement very special circumstances do therefore exist and justify a grant of planning permission'.

4.17 This appeal decision does set the issue of Green Belt principles versus renewable energy principles into context and the overriding conclusion is that the principle of renewable energy provision can represent special circumstances that justify planning consent. This is underlined in the wording of the NPPF. It must be acknowledged that the proposed turbine would represent inappropriate development in the Green Belt. The balancing considerations that must be assessed are therefore the 'substantial weight to the harm to the Green Belt by reason of inappropriateness' versus:

1) The extent of visual and landscape harm and subsequent loss of openness.

2) The wider environmental benefits of the scheme through the increased production of energy from renewable sources.

4.18 Climate change has been recognised as one of the most serious issues facing the world today. In response, the UK has committed itself to legally binding targets relating to reducing CO2 emissions and increasing the amount of electricity produced from renewable energy resources such as the wind. Wind turbines are considered the most mature of renewable energy technologies and have been operating in the UK for over 20 years. The wind turbine will make a significant contribution towards renewable energy target and the reduction of greenhouse gas emission.

4.19 A further example which emphasises the above point is the appeal relating to 5 wind turbines, monitoring mast and associated infrastructure at Hook Moor, Near Micklefield (Ref:08/01118/FU) The application was refused by Leeds City Council but was heard at a public enquiry on 11th October 2011 and was allowed.

4.20 The site is located within the Green Belt the Inspector identified that one of the main issues in the determination of this case was whether the proposed wind farm would represent inappropriate development in the Green Belt and if it did, whether very special circumstances were demonstrated that would clearly outweigh any harm by reason of inappropriateness and any other harm, including its effect on the openness of the Green Belt and its visual amenities.

4.21 The Inspector summarised the matters which he considered weighed against the proposal (the harm) as follows:

i) The development constituted inappropriate development in the Green Belt. This attracted substantial weight in its own right;

ii) There would be some harm to the openness and purposes of the Green Belt, which was of moderate weight;

iii) There would be a degree of harm to the character and appearance of the landscape, but this was of moderate weight overall;

iv) There would be minor harm to the setting of Lotherton Hall gardens, but this could be mitigated and was of limited weight.

4.22 The matters which the Inspector considered weighed in favour of the proposal were summarised as:

i) The strong national support for renewable energy in order to tackle the effects of climate change was a significant factor in favour of the proposal, and carried substantial weight;

ii) The locally emerging targets for renewable energy, together with the anticipated provision of 20MW of wind generated energy, were considerations of significant weight;

iii) The provision of employment was a matter of some weight.

4.23 The Inspector commented that the competing matters in the balance are all of importance, but in this case it was concluded that, in his judgement, the case for renewable energy, and the support given to it at national, regional and local level, clearly outweighs the harm by inappropriateness and the other harm identified. The Inspector was therefore satisfied that the other considerations demonstrated amount to the very special circumstances necessary to justify development in this case. As a result there was deemed to be no conflict with the saved UDP Green Belt policies.

4.24 The Inspector identified the emergence of national and local policy and guidance, including the National Renewable Energy Action Plan, the Promotion and Use of Energy from Renewable Sources Regulations, The UK Renewable Energy Road Map, and the Natural Resources & Waste DPD, all of which add to the support for renewable energy which previously existed (and which continues to exist).

4.25 It should be noted that both the above appeals were allowed due to environmental benefits which outweigh the harm on the Green Belt with the decisions being made prior to the adoption of the NPPF, which places an even greater emphasis on renewable energy.

Cumulative Landscape Impact

4.26 The following image shows the commercial wind schemes in the broader area and it is clear that there is a significant distance to such schemes and that the proposals are unlikely therefore to have any real visual interaction which would result in any significant cumulative impact :

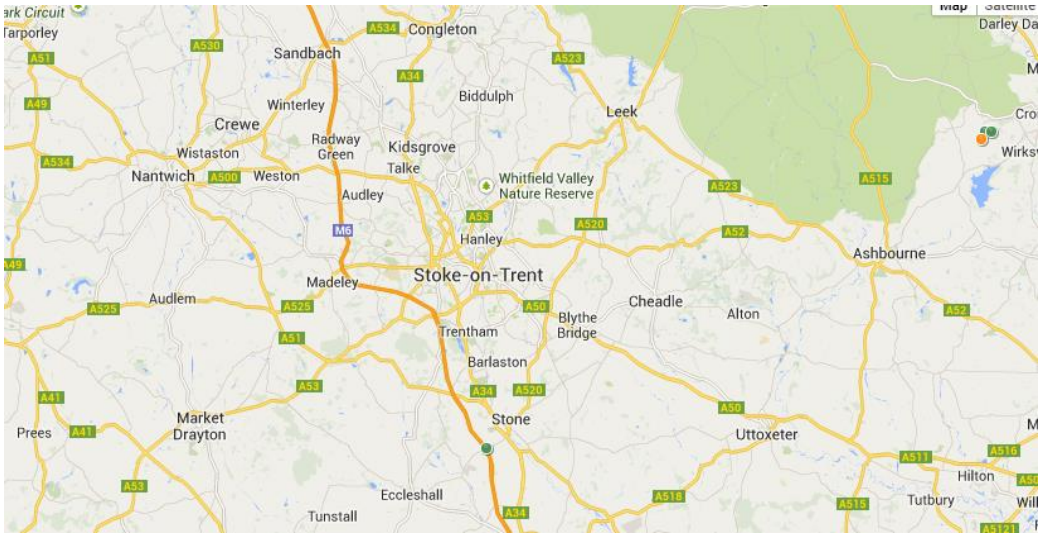

Image 5: Map showing other commercial scale turbines in the area

4.27 The photomontages included within Appendix B demonstrate that the proposed turbine would not be viewed in the same visual context as any other existing agricultural scale wind turbines and thus any cumulative visual and landscape effects are likely to be minimal.

4.28 Based on the above assessment the turbine would not significantly alter the character of the local landscape as previously defined, thus the general character of the landscape would be retained, albeit with the introduction of a visible turbine. When the visual impact is balanced against the positive benefits associated with the introduction of the renewable energy provision, it is considered that this application should be considered favourably and can be accommodated without compromising the overriding characteristics of this landscape and the associated planning policies.

Neighbour Impact

4.29 In April 2012, Renewable UK commissioned Ipsos MorI to undertake a survey of public awareness and attitudes towards wind energy in the UK. The survey found widespread support for wind energy with 66% of respondents in favour of wind power in the UK and only 8% opposing. The survey also found widespread acceptability of wind farms in the landscape with only 6% of respondents finding the look of wind farms 'completely unacceptable'.

4.30 These latest survey results echo findings in a 2009 report by the Department of Energy and Climate Change (DECC) entitled Renewable Energy Awareness and Attitudes Research which also reported on the awareness and attitudes of the general public to renewable energy. As well as finding strong support for the use of wind power, the study also found that just under two thirds of those surveyed said that they would be happy to live within 5km of a wind power development (62%).

4.31 In terms of visual impact from neighbouring properties in this case, the accompanying photomontages within Appendix B outlines how the proposed turbines would sit in the landscape. It is a well held planning principle that there is 'no right to a view' from individual residential properties over land in someone else's ownership. However, any development that dominates an outlook to an unreasonable degree in that it harms the amenity of residents could constitute an unacceptable impact.

4.32 This has been confirmed in a range of recent appeal decisions including, for example, APP/C3105/A/09/2116152 where the Inspector remarked 'no *protection exists for the benefit of a private view. Consequently, I do not regard as unacceptable the situation in which a turbine is prominent in the view from a domestic window*' (paragraph 55). This is a reference to the so-called lavender test (commonly referred to as such following an appeal

determined on behalf of the secretary of State by inspector David Lavender) in which the distinction between private views and residential amenity were drawn clearly. The test emphasized that outlook from a private property is a private matter, and that it becomes a matter of public interest only at the point where the introduction of a new feature in that view would result in a presence so overbearing, oppressive or overwhelming that it would result in unsatisfactory living conditions such that residential amenity is unacceptably affected.

Shadow Flicker

4.33 The chosen siting point of the turbine is over 350m from the nearest residential property, which is amply sufficient to prevent adverse impact on any residential dwelling. Shadow flicker is defined as obstructions to light incurred when the blades of the wind turbine cause light pollution when sited in close proximity to buildings, typically to the west or east of the turbine. Shadow flicker has only been known to occur within 10 rotor diameters of a turbine 130 degrees either side of north. In this case, shadow flicker could only theoretically occur within 192m of the turbine and there are no properties within this distance. There is therefore no issue of residents being affected by shadow flicker at the site due to the location of the turbine and the distance with neighbouring properties.

Noise

4.34 The ETSU-R97 is a guidance note widely used by planners in assessing wind turbines and indicates that a noise limit for night time operation of 43DB(A) is acceptable. This limit is derived from the 35DB(A) sleep disturbance criteria referred to in Planning Policy Guidance.

4.35 The Noise Working Group recommends that day time lower fixed limits can be higher than this at 45 DB(A). They also state that consideration should be given to increasing the permissible margin above background where the occupier of the site has some financial involvement in the wind turbine, meaning that it can be acceptable to have higher noise readings where the applicant's property is the primary affected residence.

4.36 Attached with the application documents is a noise survey undertaken in relation to the Endurance E-3120 Wind Turbine according to IEC 61400-11 at East Ash Farm, Bradworthy, Devon to measure the sound power level and tonal characteristics. The

apparent sound power level of the wind turbine was calculated over a range of wind speeds from 3-12m/s together with the one third octave band levels for wind speeds of 6-8 m/s. It was not possible to calculate the 1/3 octave sound power levels above 8m/s due to the contrition of background noise. The tonal output from the Endurance E-3120 turbine has been assessed using the methodology prescribed by IEC 61400-11 for wind speeds of 6-10 m/s and has been determined to be not tonal, except at a wind speed of 6m/s where tones were identified. In the case of the siting point of the wind turbine, the nearest residential property is well over 350m from the wind turbine and therefore noise emissions are unlikely to present a concern in this case.

Visual Impact from Neighbours

4.37 In terms of visual impact from neighbouring properties, the accompanying photomontages within Appendix B outlines how the proposed turbines would sit in the landscape. It is a well held planning principle that there is 'no right to a view' from individual residential properties over land in someone else's ownership. However, any development which dominates an outlook to an unreasonable degree in that it harms the amenity of residents could constitute an unacceptable impact. In this particular case the nearest neighbouring property is Wayside Farm 350m to the North East of the site.

4.38 In terms of visual impact from neighbouring properties, the turbine is unlikely to be overly dominant or prominent at this distance given the height of the turbine, orientation of the neighbouring properties, positioning within the farmstead and the location of tree belts. At the distances involved the turbine is unlikely to harm the living conditions enjoyed by the occupants of these properties.

Electromagnetic Interference

4.39 The wind turbine's switch gear has been fully tested to ensure compliance with the UK standards, thus ensuring that the main source of electromagnetic interference from other wind turbines is avoided. The digital TV network in the UK is not affected by electromagnetic interference which was previously associated with analogue TV services and transmission stations. The scattering and disruption of signal is a rare occurrence in any event, associated with very large utility scale wind turbines and there have been no recorded instances of electromagnetic interference occurring from wind turbines less than 45m high.

Subsequently, this wind turbine is unlikely to cause any electromagnetic interference in the area.

Proximity to Airports and Flight Paths

4.40 The nearest commercial airports are Manchester and East Midlands which are both located approximately 24nm from the site, whilst the nearest small independent airfield is Rocester which is still some 4.8nm from the proposed turbine. Whilst consultation will form a key part of the planning application, given the significant distance to any main or small air field and having regard to the size of the wind turbine on this site it is considered that the proposals would have no impact on flight paths or the operations of airports in the wider region.

Ecological Issues

4.41 An appraisal of nearby designated sites has found the following within 10km of the application site:

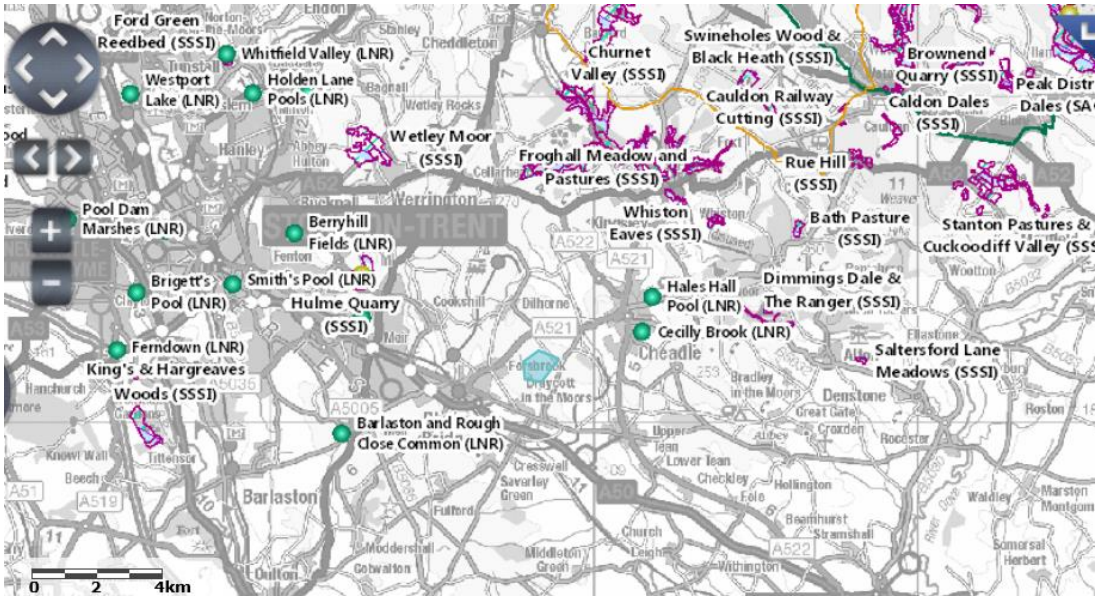

Image 6: Ecological Designations in the Area

4.42 As shown in the map above the turbine would not be located within a designated site or adjoining a designated site. The closest Local Nature Reserve (LNR) is Cecilly Brook which is

over 2Km to the North East from the proposed turbine and the closest Site of Special Scientific Interest (SSSI) is Hulme Quarry SSSI over 4Km to the North West.

4.43 As such, any ecological impact is likely be associated with the habitats found within or adjacent to the application site only rather than nearby designated assets as highlighted above. The installation of the proposed wind turbine would result in no significant trees being removed due to the form and nature of the installation process and as such there would be no direct habitat loss.

4.44 Collision risk and disturbance displacement are therefore considered the two predominant effects likely to occur. Clearly with an individual turbine the potential for collision and disturbance with birdlife is reduced from a commercial wind farm. Different species groups vary in terms of susceptibility to collision, with larger birds such as raptors being particularly susceptible. The RSPB generally consider that smaller more agile birds such as sparrows or finches are better equipped to avoid collision with wind turbines. Given the habitats around the site it is considered that the smaller more agile farmland bird species found within hedgerows would be the more predominant of birdlife.

4.45 Taking into account the habitats on site, given the relatively low height of the turbine in comparison with large scale wind turbines and as this application relates to an isolated turbine rather than a wind farm it is considered that the risk of bird collision would be minimal. Comparably disturbance is likely to be contained to the micro scale around the turbine itself rather than from the wider area.

4.46 Natural England has produced a Technical Information Note TIN051 in light of the Eurobats Agreement, entitled 'Bats and Onshore Wind Turbines'. This report summarises the potential impacts of wind energy developments on bats and TIN051 recommends that wind turbines are unlikely to affect bat populations where a 50m buffer is maintained from foraging habitat. In this location the most likely foraging area is the trees around the farmhouse and the tree belt and hedges to the North of the site. This wind turbine is positioned outside of the buffer zone required by Natural England and it is thus clear that the proposals would not result in any significant impact on possible bat populations.

4.47 Both the RSPB and Natural England are generally supportive of wind turbines and the role they play in sustaining the country's energy demands. Naturally site specific conditions

must still be given due consideration and in this location it is considered that the provision of one individual wind turbine can be sensitively sited so as to ensure that the proposals would not result in any adverse impact on ecological issues.

Archaeological Implications

4.48 The proposals will involve some ground excavations when the foundations are laid and turbine installed. A review of the information within the PastScape database has been undertaken which is taken directly from the NMR's national historic environment database containing nearly 400,000 records on the archaeology and buildings of England and its territorial waters. A search of sites within 500m of the turbine has return no results in terms of archaeological findings, as illustrated in the map below;

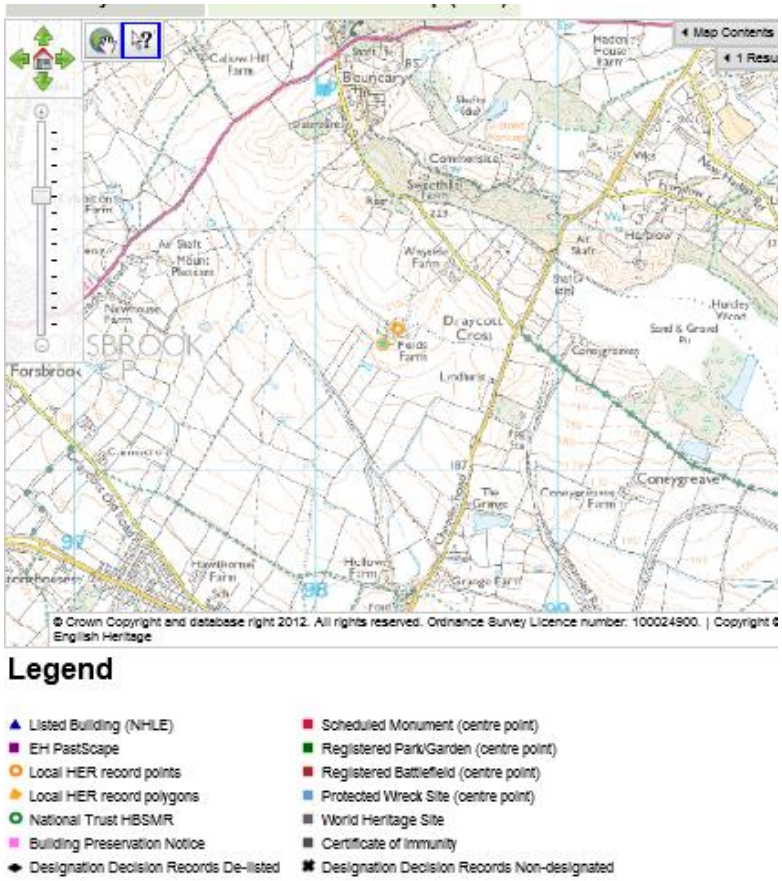

Image 7: Map showing nearby archaeological sites

4.49 Nevertheless, if any findings are discovered during ground work appropriate steps as required will be taken to ensure that no damage occurs.

Heritage Assets

4.50 As with any application, consideration should be given to any impact on the character of heritage assets, be they listed buildings or conservation areas. The nearby listed buildings (purple triangle) and Scheduled Ancient Monuments (red hatching) are identified in the following map:

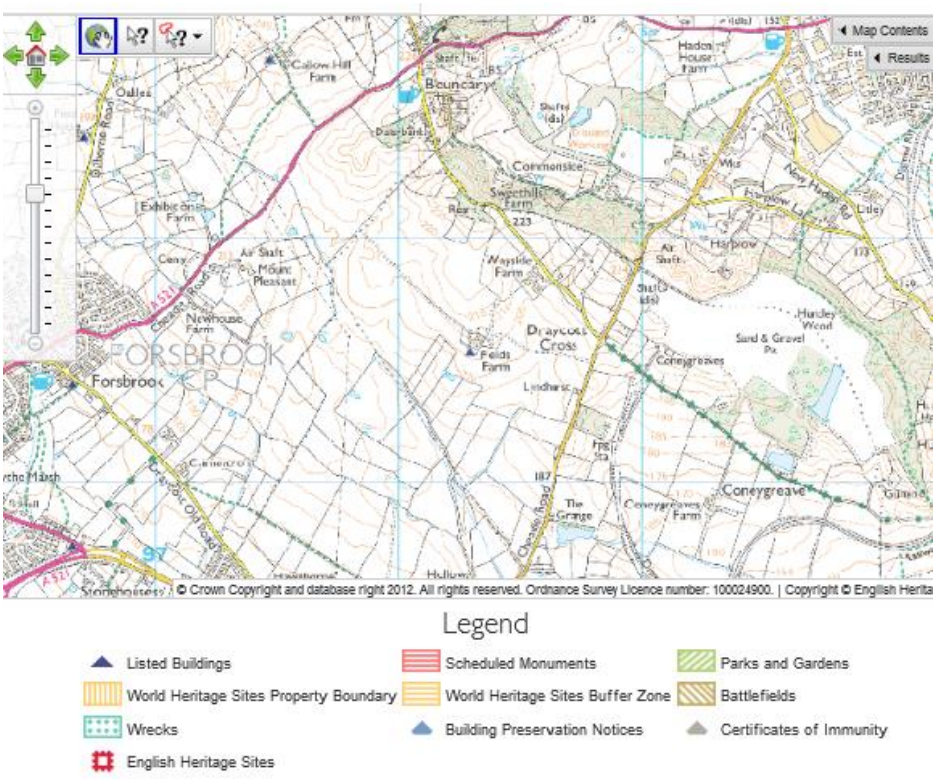

Image 8: Map showing nearby heritage assets

4.51 As shown on the map above, there are no scheduled monuments in the surrounding area and the only listed building is the farm house to which the turbine relates. Between the farm house and the turbine are a number of large, modern agricultural buildings and a small tree belt. The siting of the turbine would not be significantly detrimental to the special architectural character or setting of the farm house and, in any case, at the end of the life of the turbine it can easily be removed and the land restored.

Loss of Agricultural Land

4.52 The area of the application site is limited due to the diameter of the turbine and subsequently it would have a no more than negligible impact on the agricultural use of the land which would for the main part continue whilst the turbine is in operation.

Installation of the Turbine and Access Arrangements

4.53 The temporary works required to install the turbine are limited. If granted we would be happy to accept a condition that any works to the land be reinstated following the installation of the turbine. In order to install the cabling for the turbine to connect to the grid some ground disturbance will be needed, however this will be temporary works, no trees would be removed and again the ground will be reinstated to its original condition upon laying the cable.

4.54 The installation of the single Endurance E-3120 wind turbine will take no more than 2 months. The principle stages for the installation are as follows:

1. Construction of foundation and concrete curing period

2. Cable trenching and installation

3. Tower Assembly and erection

4. Installation of the blades onto the rotor

5. Installation of the nacelle on the tower section

4.55 A standard digger will be used to dig the foundations of the turbine. Cement for the foundations will be brought in using standard cement lorries. Transportation of the wind turbine to the site will usually be via two standard lorries – each capable of accommodating a standard 40ft shipping container. There will be no abnormally large loads and the volume of delivery and installation traffic will not be significantly greater than required for special transportation measures and in many respects comparable with the width and scale of agricultural vehicles that currently use the site. Two cranes are typically used to hoist the wind turbine into place. The application area that will be disturbed during construction of

the base and tower will be in the region of 6m by 6m (36 square metres in total) within the land edged red.

4.6 The location and site map submitted with the application indicates the access route for the delivery of the turbine, tower and foundations with a dotted orange line. Access from public highway to the site will be via the farm track. Then access to the turbine position itself will be across the field. It will not be necessary to create a hard-core track as access to the turbine will be over the undisturbed field surface using temporary reinforcing cover sheets. These are removed completely once installation is complete leaving no trace. It should be noted that there is no requirement for regular vehicle access to the turbine site other than for delivery and installation of the foundations and the wind turbine itself. The installation will not take place until site conditions make it easy to use this route without any need for a permanent track across the field. The proposed site will not therefore require any changes or improvements to the local highways for access or maintenance. This is one of the real benefits of a turbine of this scale where no extra traffic will be generated as a result of the project, other than for the initial delivery of the equipment and an annual routine maintenance visit.

5.0 Conclusion

5.1 In assessing this application in relation to policy and environmental context, it is considered that the application should be granted for the following reasons:

- The proposed wind turbine would be positioned to the North of the farmstead in a location where the visual intrusion would be minimised and the turbine seen against the context of maturing trees and farm buildings.

- The proposed turbine would not be seen as an isolated feature within the countryside but would clearly relate to the farmstead and the function would be readily appreciated.

- It is acknowledged that under strict Green Belt guidance, a wind turbine is considered inappropriate development in principle, however, in line with recent appeal decisions and case law there are exceptional circumstances in the form of providing renewable energy and assisting the UK's commitment to addressing climate change which outweigh Green Belt planning policy.

- The scale and location of the wind turbine would be such that the impact on nearby residential properties would be negligible with any impact confined to a visual appreciation of its siting. This in its own would not constitute a material harm to living conditions and it is thus considered that the amenity of neighbouring properties would be maintained.

- There are no other material planning considerations that would outweigh the overriding benefits of this proposal in providing a renewable energy source and the long term environmental benefits this brings.

5.2 Having regard to the above and all other matters, it is considered that the proposed development meets the expectations of policies of the Development Plan and other policy guidance including specifically the provisions of the NPPF. It is thus felt that this application should be granted subject to reasonable and appropriate conditions.

APPENDIX A METHODOLOGY USED FOR ASSESSING VISUAL LANDSCAPE IMPACT

The process of assessing the impact of this application from a visual amenity perspective has been guided by the document 'Guidelines for Landscape and Visual Impact Assessment'(2013). To accompany the description of baseline and assessment information, a series of classifications have been applied to the landscape character of the site and each visual receptor. These act as a summary and place a defined value on; the sensitivity of the character area/visual receptor, the magnitude of change and the subsequent significance of the effect of the development.

The sensitivity of existing Landscape Character/Visual Receptors is the degree to which landscape character or a visual receptor can accommodate change arising from a particular development, without a detrimental effect. It is dependent on its importance, quality, value and contribution and the degree to which it can be replaced or substituted. The sensitivity of landscape character/ a visual receptor is defined as being High/Medium/Low, where High is the most sensitive. For visual receptors and views the sensitivity will depend on the location and context of the viewpoint, the expectations and occupation or activity of the receptor and the importance of the view. The most important receptors are usually users of outdoor recreational facilities, where the interest may be focused on the landscape. Also, occupiers of residential properties where views may be affected by the turbine are considered important. Other receptors that have been included are people travelling through or past the affected landscape in cars, on trains or other transport routes. The magnitude of change to a landscape character area or visual receptor will be dependent upon the nature of the proposed development itself and its size, location, and individual forms and pattern in relation to the character of the proposed development site and the surrounding area. Magnitude of change is categorised using the terms Low, Moderate and High, which can be generally defined as:

- Low - a limited number of changes to any of the key elements/features/characteristics of the baseline landscape or views. This would equate to a discernable but non-material change to the landscape character or view;
- Moderate - a moderate number of changes to any of the key elements/features/characteristics of the baseline landscape or views. This would equate to a material change in the landscape character or view;

- High - a large number of changes to any of the key elements/features/characteristics of the baseline landscape or views. This would equate to a fundamental change in the landscape character or view.

For visual receptors the criteria adopted for classification of sensitivity and magnitude of impact are as follows:

Sensitivity:

- High sensitivity e.g. residential properties, Public Rights of Way and passive recreational activities, scenic drive;
- Medium sensitivity e.g. play areas, sporting and active recreational facilities, attractive rural lanes;
- Low sensitivity e.g. industry, general road users.

Views from faster roads (e.g. 'A' and 'B' class roads and motorways) are normally considered to be of low sensitivity to change due to the transitory nature of such views. Views from minor country lanes, which potentially have a higher recreational value, have been assessed as being of medium or high sensitivity.

Magnitude of Impact:

- High magnitude e.g. major change in view character;
- Medium magnitude e.g. moderate change in view character;
- Low magnitude e.g. minor change in view character;
- Negligible magnitude e.g. a development is visible but forms a barely perceptible component of the view

Due to access restrictions, the magnitude of effect on view character for all receptors, including residential property, is assessed on the basis of ground level views (e.g. from ground floor and garden level in the case of residential property).

An assessment of the significance of an impact can be derived from the combination of the 'sensitivity' of a landscape or visual receptor and the 'magnitude' of the impact. This has been interpreted as follows:

Sensitivity		**Magnitude**		**Significance**
High	+	High	=	Substantial
High	+	Medium	=	Moderate
High	+	Low	=	Slight
Medium	+	High	=	Moderate
Medium	+	Medium	=	Moderate
Medium	+	Low	=	Slight
Low	+	High	=	Moderate
Low	+	Medium	=	Slight
Low	+	Low	=	Slight

Impacts are described as being either beneficial or adverse.

Negligible impacts can be derived from high, medium or low sensitivity combined with negligible magnitude.

Landscape character is defined as a distinct and recognisable pattern of elements that occur consistently in a particular type of landscape. Patterns in the landscape, activity or tranquillity, heritage and cultural associations, vegetation, land use and connectivity combine together to create landscape character. It is important this is considered so a full understanding of the site and its surroundings can be achieved. England has been divided into areas with similar landscape character, which are called National Character Areas (NCAs) and the characteristics of the application site are considered within this application.

An assessment has been made of the visual impact from key settlements and public vantage points around the site. A table has been prepared which demonstrates the envisaged impact from key areas around the site of the proposed turbine.