



IN ASSOCIATION WITH

PRIMENERGY

DESIGN AND ACCESS STATEMENT

LAND SOUTH WEST OF INGFIELD FARM, INGBIRCHWORTH, PENISTONE, SHEFFIELD

S36 7GG

**PROPOSED SITING OF 1 x 50M HIGH (HUB) WIND TURBINE PLUS ASSOCIATED
DEVELOPMENT**

CO-ORDINATES:

TURBINE 1: X422035, Y405235

Our Ref: AAH/2905/12PLA

DECEMBER 2012

DESIGN AND ACCESS STATEMENT

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1.0 Introduction

- 1.1 AAH Planning Consultants has been commissioned to prepare a planning application at land south west of Ingfield Farm, Ingbirchworth, Penistone, Sheffield. 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 1 no. 50m (hub) high wind turbine within land owned by and associated with Mr Robert Knowles. This land is linked with the operations of the adjacent Ingfield Farm. The turbine would have an overall height of approximately 76m to the tip.
- 1.2 The development proposal involves the provision of 1(no.) EWT 52-500kW turbine and associated infrastructure comprising the following specifically:
1. Base work to secure the turbine to the site
 2. Grid connection

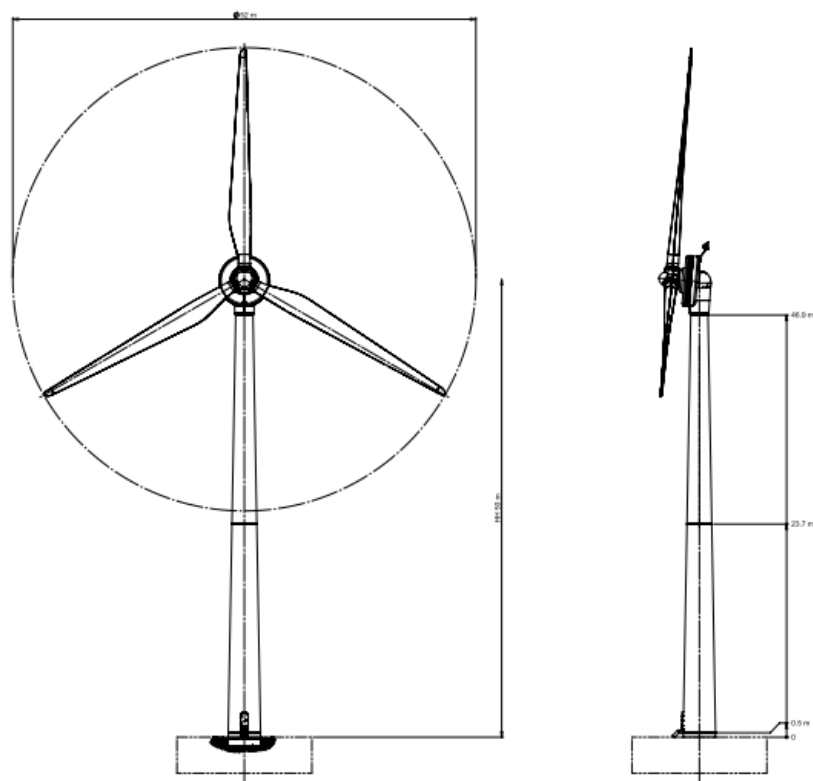


Image 1.1: Elevation Plan of proposed EWT 52-500kW (also attached separately)

- 1.3 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 and buildings can detrimentally affect the performance of wind turbines and it is therefore essential to ensure that a 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 located in the proposed location to ensure that the turbine's operation is not affected by turbulence caused by nearby trees and vegetation or, indeed, agricultural buildings in the local area. The proposed turbine has also been located away from neighbouring properties and settlements, and is sufficiently detached from any heritage assets and monuments within the locality to ensure no significant harm will result.
- 1.4 The 50m hub EWT 52 (500kW) is a modern direct drive wind turbine which was developed in response to market demand and designed according to EWT's proven 'Direct Drive' technology. The turbine is specifically designed for operating in low to moderate wind speed areas. With EWT turbines the rotor directly drives the synchronous generator, without the use of a gearbox. The generated energy is fed into the grid via a modern back-to-back full-power converter which controls the output, so grid requirements can be met. This converter also contains a number of programmable functions like the capability to limit output during night hours and a noise reduction measure. This medium scale wind turbine has a large blade diameter in order to operate in low wind speed areas and maximise efficiency in more windy climes. The three blade machine consists of a steel tubular tower and glass fibre blades, designed to absorb light and blend into a dull cloudy background.
- 1.5 The introduction of the proposed turbine at the application site would see a vital form of farm diversification, using land to harvest the wind in order to produce renewable energy. The applicant currently farms part of the surrounding field system and the energy produced would help cross subsidise the operations of the farm business. The turbine has a rated output of 500kW, and will allow the farm business to operate in a more environmentally and financially sustainable manner, with any excess electricity being sold back to the national grid. Both the generation and export of excess electricity would contribute to the country's renewable energy provision and contribute to the proportion of the UK's binding target of 15% renewable energy production target (by 2020).

- 1.6 The main planning considerations are examined in detail within this report in relation to the development plan and other material considerations.

2.0 The Site Details

- 2.1 The application site is located in open countryside, and within Green Belt land found to the west of Ingbirchworth. Ingbirchworth is located to the north west of Penistone (3.1 km), north of Millhouse Green (2.16km), south west of Upper Denby (1.5km), south east of Birdsedge (2.9km). The site is positioned to the south of High Lane, which runs from Ingbirchworth, to the east. The site is located on agricultural land to the south of Ingbirchworth Reservoir and north of Royd Moor Reservoir, as well as west of Scout Dike Reservoir, which are all reasonably prominent water bodies in the local area. The site is over 4km from the Peak District National Park, strongly suggesting that there is minimal potential to impact on its landscape and heritage objectives. The site's situation can be seen within the OS extract provided below:

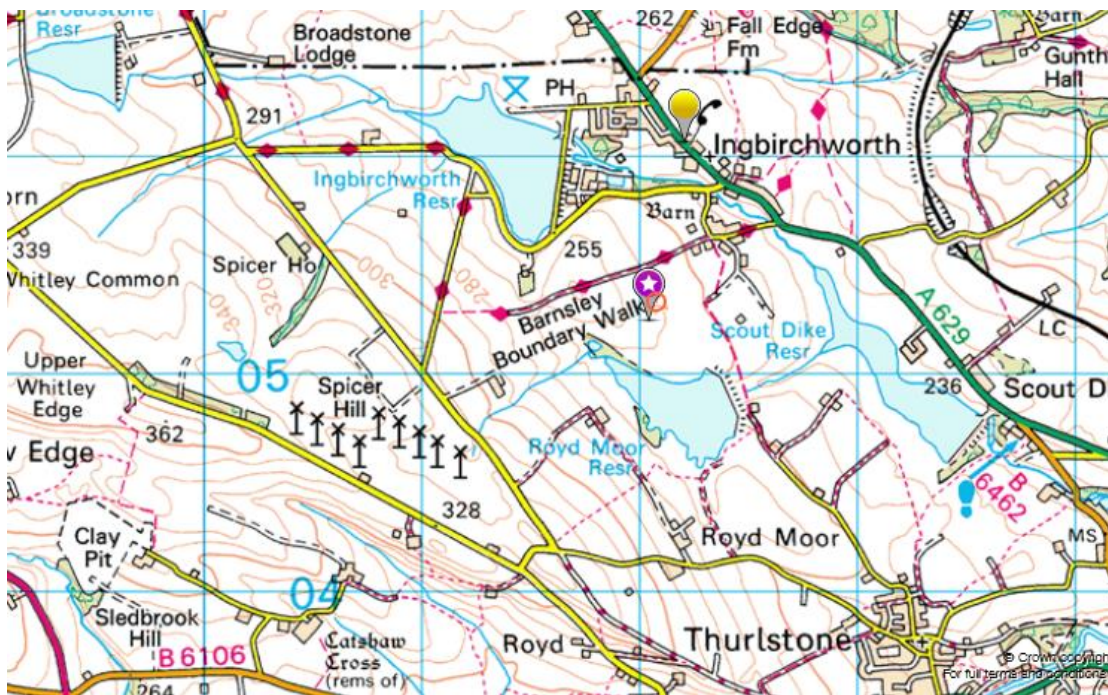


Image 2.1 - OS Extract

- 2.2 The site is located within the countryside for development control purposes, in an area of undulating farmland which is host to a series of low lying and reasonably substantial reservoirs. The site's situation is one associated with the local settlement of Ingbirchworth further east, however one also surrounded by occasional farmsteads and houses further west, as local topography affords views towards the open countryside and beyond. The site is located approximately 1.1km north east of the Royd Moor Wind Farm which dominates

local views in the area, due to its location on a fairly prominent vista and the number of turbines involved i.e. 13. The local landscape rises and falls quite substantially when travelling around the site and the wider area, offering sporadic views towards the site from different locations and screening it completely at other points, with the help of local tree screening and vegetation, which is present throughout the area.

- 2.3 The turbine site is bounded on all sides by agricultural fields, divided by their respective boundaries. The turbine will be located in a rectangular shaped field, which gently slopes towards the adjacent reservoir further south. The nearest point of access is from High Lane further north of the site, which is also a local public right of way, one of a few present in the area. High Lane runs further east towards Ingfield Farm and its adjacent buildings, turning into New Road Lane further north east.
- 2.4 The site lies outside of any local designated areas of landscape value and within the open countryside as defined on the Council's Proposals Map (see policy section below). Located to the south west of Barnsley's administrative boundaries, the site is however located within the Green Belt and the application is required to demonstrate compliance with this designation - in terms of representing a form of very special circumstances in accordance with national policy (see policy section below) to overcome the loss of openness on the Green Belt. The accompanying Landscape and Visual Impact Assessment (LVIA) goes into more detail as to the development's potential to impact on the surrounding landscape and in terms of the potential for cumulative landscape impact.
- 2.5 Whilst the site and surrounding land is predominantly agricultural in nature, residential properties also exist in the local area, the closest of which is a neighbouring residential property - Willow Farm - located around 450m north-east of the turbine site. Additional properties are also located further east and north of this property, including other residential properties situated adjacent the Ingfield Farm complex. A caravan site is located slightly closer to the turbine site, however is run by the applicant. As this is owned by the applicant, the potential for amenity impact on this recreational use should require limited consideration as ultimately it will be a financially interested use. Overall, nearly all of the above identified properties and the caravan park either have the benefit of substantial vegetation, neighbouring buildings or local topography either blocking direct views of the site or aspects (i.e. principal elevations) facing away from the site. Combined, these factors

should ensure that impacts on visual amenity are limited, however these are considered further within the visual amenity section (below) and within accompanying LVIA and photomontages. The siting of the turbine away from such properties will also help to minimise instances of shadow flicker and noise impact, with the full potential for these issues will be teased out within later sections of this report.

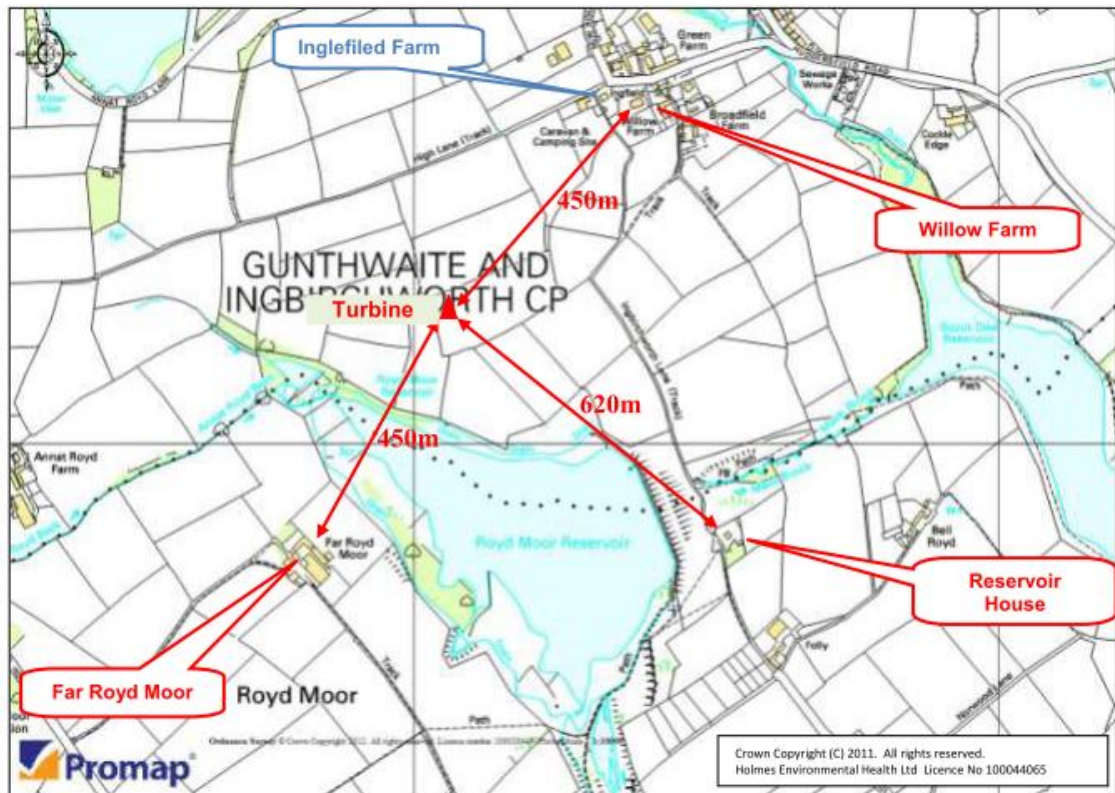


Image 2.2 - Location of nearest neighbours

- 2.6 The application site is not located within a Conservation Area, although some of the converted farm buildings adjacent to Ingfield farm (incl. Broadfield Farm, Green Farm and Willow Farm) are listed - hence the Conservation Area status of this area. The nearest listed building to the application site is the Grade II* listed Barn at Ingfield Farm, 499m north east of the site, adjacent Ingfield Farm. Royd Moor (Gr II) is located approximately 971m south and Annat Royd Farm (Gr II) is 770m to the south west. The potential for impact on these listed buildings is described in the accompanying heritage statement. The statement concludes that such designated heritage assets are sufficiently divorced from the turbine site and that the potential for impact on them as assets and on their setting will be limited.

2.7 Vehicular access is proposed directly from High Lane to the north east, which will provide suitable access for construction vehicles from the A629, further east. Construction vehicles will pass Ingfield Farm, and through the existing agricultural access used by the camp site. This route then follows through the south of the caravan park, and leads directly into the proposed site. This route is already used by agricultural vehicles to access the wider field system around the site. The proposed turbine site has a gently sloping topography, which descends further south towards Royd Moor reservoir, however it is achievable and should prove suitable and stable (with the addition of a gravel track) to provide access for associated construction vehicles needed to erect the turbine. Access is described in more detail in the relevant section below.

3.0 Planning Policy

3.1 The Government's National Planning Policy Framework (NPPF) was published on 27th March 2012 and is now a material consideration, which should be afforded significant weight in the determination of this planning application. The NPPF cannot make irrelevant any matter which is a material consideration in a particular case, but where it indicates 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 the overriding Green Belt designation versus the weight associated with the wider environmental benefits of a wind turbine.

3.2 At the heart of the National Planning Policy Framework is a **presumption in favour of sustainable development**, which should be seen as a golden thread running through both plan-making and decision-taking. The NPPF makes clear that, for 12 months from the day of publication, decision-takers may continue to give full weight to those relevant policies in the Development Plan that have been adopted since 2004, even if there is a limited degree of conflict with the NPPF. In other cases and following this 12-month period, due weight should be given to relevant policies in existing plans according to their degree of consistency with this framework (i.e. the closer the policies in the plan to the policies in the Framework, the greater the weight that may be given).

3.3 In terms of its detail, Paragraphs 97 and 98 of the NPPF relate to the provision of renewable energy developments and state the following:

97. 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:

- 1. have a positive strategy to promote energy from renewable and low carbon sources;*
- 2. design their policies to maximise renewable and low carbon energy development while ensuring that adverse impacts are addressed satisfactorily, including cumulative landscape and visual impacts;*

3. *consider identifying suitable areas for renewable and low carbon energy sources, and supporting infrastructure, where this would help secure the development of such sources;*
4. *support community-led initiatives for renewable and low carbon energy, including developments outside such areas being taken forward through neighbourhood planning; and*
5. *identify opportunities where development can draw its energy supply from decentralised, renewable or low carbon energy supply systems and for co-locating potential heat customers and suppliers.*

98. *When determining planning applications, local planning authorities should:*

1. *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*
2. *approve the application 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.*

3.4 Green Belts have been perhaps the most well known feature of the planning system since the 1950's, continuing to command widespread support by the council's that use them. 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 historic feature of the planning system, long standing policies and traditional considerations applied to development within the Green Belt are not necessarily up to date, with the ever changing issue of climate change, and weight should 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.

- 3.5 The principle of a wind turbine 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. The newly adopted NPPD reasserts this position, stipulating 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.' (pg 20 - NPPF)

- 3.6 Given the newly adopted national planning policy context and greater emphasis that is now placed within the planning system on renewable energy provision, as well as the principle of the 'presumption of sustainable development', it is considered that the environmental benefits of this medium scale renewable energy project would in fact represent 'very special circumstances'. Indeed, the NPPF goes on to state that:

"Such very special circumstances may include the wider environmental benefits associated with increased production of energy from renewable sources."

(pg 21 - NPPF)

- 3.7 Green Belt policy for Barnsley is considered under the auspices of saved UDP policy (GS6 Extent of Green Belt) and within Core Strategy Policy CSP34 - Protection of the Green Belt. This latter policy states that:

CSP 34 Protection of Green Belt

The general extent of the Green Belt is shown on the Core Strategy Key Diagram.

Its detailed boundaries will be shown on the Proposals Maps which will accompany the Development Sites and Places DPD.

In order to protect the countryside and open land around built up areas the extent of the Green Belt will be safeguarded and remain unchanged.

The Green Belt boundaries will be subject to localised review only which may result in changes necessary to deliver the borough's distribution of new employment sites as set out in CSP12.

- 3.8 Whilst the deployment of a wind turbine is not explicitly referred to within the above Green Belt policy, it is widely recognised that wind turbines represent an acceptable form of development within the Green Belt where it is evident that such development would preserve its openness, with this evidenced by a number of wind turbine installations within Green Belt land. The limited scale of the turbine proposed, its small surface area and the thin nature of the tower will also help to preserve the openness of the designation. Green Belt issues aside, other important policy considerations which also require consideration relate to those policies referring to development proposals for renewable energy or wind turbine installations. Such policies require the benefits of renewable energy proposals to be considered against any potential effects of a scheme, such as the impact on the character of the local landscape, ecological or archaeological interests, and visual and neighbour amenity. A breakdown of these relevant policies is given at 3.11.

Yorkshire and Humberside Regional Spatial Strategy

- 3.9 Although the Government is in the process of revoking the East of England Regional Plan, it still forms part of the development plan and therefore the relevant policies within the Regional Plan alongside the Core Strategy DPD and any 'saved' policies of the Unitary Development Plan are applicable to the planning application along with the newly adopted principles of the NPPF (as a newly adopted material consideration). In this light, its policy weighting is still material, despite the intention for its abolition within relevant parts of the Localism Act 2011.
- 3.10 The Regional Spatial Strategy set local targets for installed grid-connected renewable energy and the figures for Barnsley were 15 MW by 2010 and 34 MW by 2021. Some progress has been made towards meeting this target. Currently, there is an existing wind farm which has a capacity of 6.5 MW that has planning permission until 2018 and a further three extant wind farm permissions totalling a potential capacity of 20.1 MW.

Barnsley - LDF/ saved Local Plan considerations

- 3.11 Transitional arrangements are in place to give favour to saved aspects of local plans/ LDF documents adopted after 2004 for a period of one year from the NPPF's adoption (i.e. March 2013). This would include the adopted Barnsley Core Strategy (September 2011), although saved policies of the Unitary Development Plan (adopted 2000), while relevant, would need

to be judged in accordance with their consistency with the objectives of the NPPF. The following Core Strategy DPD policies are relevant for siting a turbine at the Ingfield Farm site.

Core Strategy DPD (September 2011)

CSP 6 Development that Produces Renewable Energy

We will allow development that produces renewable energy as long as there is no significantly harmful effect on:

- the character of the landscape and appearance of the area*
- living conditions*
- biodiversity, geodiversity and water quality*
- heritage assets, their settings and cultural features and areas*
- highway safety, and*
- infrastructure including radar*

Proposals must be accompanied by information that shows how the local environment will be protected, and that the site will be restored when production ends.

3.12 This is the principal policy relating to renewable energy developments in the Borough and provides relevant criteria with which to judge the wind turbine proposal against. These include the potential for impacts on landscape impact, amenity, biodiversity, heritage assets, highway safety and radar/ MOD impact. These individual considerations will all be teased out in the remaining sections of this report, with heritage and landscape impact also considered in separate reports.

3.13 Other relevant policy considerations are also provided below:

CSP 1 Climate Change

Development will be expected to:

- reduce and mitigate the impact of growth on the environment and carbon emissions*

- ensure existing and new communities are resilient to climate change harness the opportunities that growth, and its associated energy demands, brings to increase the efficient use of resources through sustainable construction techniques and the use of renewable energy

We will take action to adapt to climate change by:

-giving preference to development of previously developed land in sustainable locations

- locating and designing development to reduce the risk of flooding

- promoting the use of sustainable drainage systems

- promoting investment in Green Infrastructure to promote and encourage biodiversity gain.

- 3.14 Policy CS1 aims to ensure all development proposals help reduce and mitigate impact on carbon emissions, as well as promote the use of renewable energy -as well as other factors more associated with building development. By its nature the turbine will help both to reduce carbon emissions and represents a form of renewable energy production.

CSP 21 Rural Economy

We will encourage a viable rural economy by allowing development in rural areas if it:

-supports the sustainable diversification and development of the rural economy; or

- results in the growth of existing businesses; or

- is related to tourism or recreation; or

- improves the range and quality of local services in existing settlements

Development in rural areas will be expected to:

- be of a scale proportionate to the size and role of the settlement

- be directly related, where appropriate, to the needs of the settlement

- not have a harmful impact on the countryside, biodiversity, Green Belt, landscape or local character of the area

- consider the re-use of existing rural buildings in the first instance; and

- protect the best quality agricultural land.

- 3.15 Policy CSP 21 aims to ensure that development within rural areas is suitable to the aspirations of the rural economy, especially if linked to/ representing a form of sustainable diversification. Such development will have to be of a suitable scale, not have a harmful impact on the countryside, Green Belt, landscape or local character of the area and protect the best quality agricultural land. The scale of turbine proposed for the site should ensure that it has limited impacts on the local area, local and national designations and ensure continued use of the land for agricultural purposes.

CSP 29 Design

High quality development will be expected, that respects, takes advantage of and enhances the distinctive features of Barnsley, including:

- topography, Green Infrastructure assets, important habitats, woodlands and other natural features

- views and vistas to key buildings, landmarks, skylines and gateways

- heritage, townscape and landscape character including the scale, layout, building styles and materials of the built form particularly in and around:

- Barnsley Town Centre

- Penistone and the rural villages in the west of the borough

- within and adjacent to Conservation Areas

Development should:

- contribute to place making and be of a high quality, that contributes to a healthy, safe and sustainable environment

- help to transform the character of physical environments that have become run down and are lacking in distinctiveness

- *enable all people to gain access safely and conveniently, providing, in particular, for the needs of families and children, and of disabled people and older people*
- *contribute towards creating attractive, sustainable and successful neighbourhoods*
- *achieve a Building For Life assessment rating of 'good' or equivalent as a minimum, in developments of 10 or more dwellings*

3.16 CP29 demands that new development proposals are well designed and takes into account and enhances of the distinctive features of Barnsley. This includes its landscape character including Penistone and the rural villages in the west of the borough and within and adjacent to Conservation Areas. The nature of the turbine development is itself a streamlined and well designed structure, with its siting having taken into account the above factors which the remainder of this statement and other documents will identify.

CSP 30 The Historic Environment

We will positively encourage the management, conservation and enjoyment of Barnsley's historic environment and make the most of the heritage assets which define Barnsley's local distinctiveness.

Development which affects the historic environment and Barnsley's heritage assets and their settings will be expected to protect or improve:

- *the character and/or appearance of Conservation Areas*
- *the character and/or appearance of Scheduled Ancient Monuments*
- *the character and/or appearance of Listed Buildings (including any locally listed buildings or buildings of archaeological significance)*
- *archaeological remains of local or national importance*
- *the character and/or appearance of historic parks and gardens and other historic landscapes including key views from and within these landscapes*

- 3.17 As indicated by policy CSP6, the importance of demonstrating limited impact on both designated heritage assets and their setting is a key consideration for any wind turbine application. The proposal will have limited impact on such designations, as well as Scheduled Ancient Monuments and any archaeological remains. The potential for impact will be looked at in more detail within the accompanying Heritage Statement.

CSP 36 Biodiversity and Geodiversity

Development will be expected to conserve and enhance the biodiversity and geological features of the borough by:

- protecting and improving habitats, species, sites of ecological value and sites of geological value with particular regard to designated wildlife and geological sites of international, national and local significance, ancient woodland and species and habitats of principal importance identified in Section 74 of the Countryside and Rights of Way Act 2000 and in the Barnsley Biodiversity Action Plan

- maximising biodiversity and geodiversity opportunities in and around new developments conserving and enhancing the form, local character and distinctiveness of the river corridors of the Dearne and Dove as natural floodplains and important strategic wildlife corridors

Development which may harm a biodiversity or geological feature will not be permitted unless effective mitigation and/or compensatory measures can be ensured.

- 3.18 The proposed turbine has been sited to ensure minimal impact on ecological designations. The relevant section within this statement will demonstrate such limited potential for impact on local or national features.

CSP 37 Landscape Character

Development will be expected to retain and enhance the character and distinctiveness of the individual Landscape Character Area in which it is located (as set out in the Landscape Character Assessment of Barnsley Borough 2002).

- 3.19 By their nature, wind turbine developments are likely to introduce an element of visual and landscape impact to their landscapes. The accompanying landscape section of this report and separate Landscape and Visual Impact Assessment (LVIA) provide an objective

assessment of this impact based on interpretation of photomontages, as well as any potential for cumulative effect the turbine might introduce.

- 3.20 The Council's saved UDP Proposals Map has also been examined as part of this planning policy review in order to determine whether there are any other designations located within or close to the site which might be considered directly applicable to the assessment of this application. The following extract from the saved UPD Proposals Map, provided overleaf, shows the application site and surrounding area, together with any key planning designations. As expected a principal issue is the overriding Green Belt designation, as well as location of a Conservation Area to the east (around Ingfield Farm), however it is the purpose of this statement - and the accompanying heritage and LVIA statement - to justify how the siting of the turbine has overcome these policy hurdles.

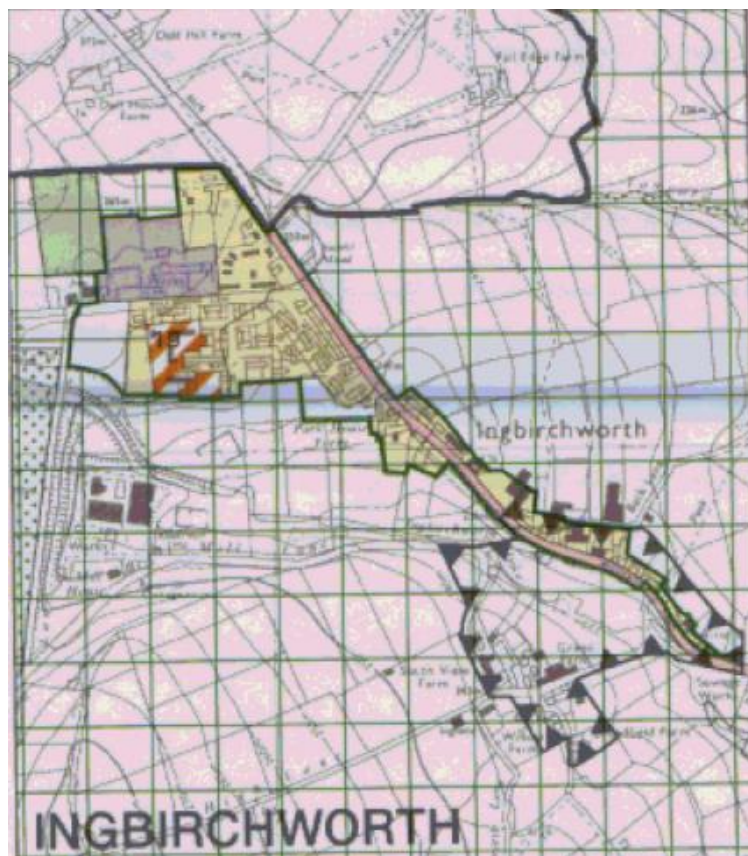


Image 3.1 - Proposals Map Extract - Unitary Development Plan (2000)

- 3.21 Despite their age and transitional caveats provided within the NPPF, those saved UPD policies relevant to the application also include:

- GS6 Extent of Green Belt
- BE4 Archaeological Sites
- M11 Agricultural Land
- H7 Access to undeveloped land

3.22 In this instance, the above policy framework - which comprises local, regional and national considerations - provides a suitable steer to assess the proposed turbine development. The proposal will now demonstrate how it has taken into account the above considerations, including landscape (see LVIA); residential amenity; ecology; heritage (see accompanying heritage statement) and other factors.

3.23 The proposal is for one medium scale 500kW turbine intended to cross-subsidise the operation of the applicant's farm holding, with any excess electricity generated being sold back to the grid. The scheme has been designed to adhere with the thrust of the above mentioned guidance, with each of the above factors being considered in detail within the following section of this report.

3.24 In summary, this policy review has shown there is very positive support in favour of the principle of renewable energy devices across the district, underlined by the newly adopted principles of the NPPF. The proposed turbine will therefore be assessed in relation to the above policies, along with all other material planning considerations that require due assessment.

4.0 Consideration

- 4.1 As previously identified, there is a presumption in favour of sustainable development 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 Green Belt, landscape, heritage assets, amenity, archaeological and nature conservation issues and any adverse impact upon the electromagnetic field. Each issue will be considered individually.

Landscape and Visual Impact Assessment

- 4.2 The proposed wind turbine would be positioned within established agricultural land to the west of Ingfield Farm, west of the nearest settlement of Ingbirchworth and south east of the conservation adjacent High Lane. The proposal would measure approximately 50m high to the hub, with the blades extending to reach a tip height of 74m. In this rural location and at this height the turbine would be visible from areas to the south and west, but less so to the north and east due to the natural elevation of the land and presence of natural screening. Direct views would be less prominent from Ingbirchworth, where the turbine would be screened by local topography and tree belts. Views from the adjacent conservation area to the north east would also be interrupted, as the lay of the land and man-made features would prohibit direct views of the whole turbine. While views of the turbine from south would be more open and prominent, especially to dwellings and footpaths in the local area, views from settlements further south, such as Thurlstone and parts of Penistone, would not be possible. While views towards the site are achievable from a couple of properties to the west, the ridge (Spicer Hill) which accommodates the prominent Royd Moor Wind Farm rises up and screens more long distance views from beyond this point, again ensuring visual impact is contained to the local scale. The siting of the turbine would, to an extent, change the appreciation of this site within its surrounding rural context; especially when compared to how the site is viewed at the moment. However, this does not necessarily equate to unacceptable harm and this change in vista must be balanced against policy expectations and guidance encouraging renewable energy. The process of assessing the impact of this application has been guided by the document 'Guidelines for Landscape and Visual Impact Assessment' (2002), see Appendix A, and attached with the application submission

documents is a Landscape and Visual Impact Assessment of the proposed wind turbine in this location based on these recognised guidelines, see Appendix B.

Landscape Character Assessment

4.3 The study area lies within Character Area known as ‘Yorkshire Southern Pennine Fringe’ as defined in the Countryside Commission’s Countryside Character, ‘The character of England’s natural and man-made landscape’, Volume 3: Yorkshire and The Humber (Ref. 11.3). The key characteristics of area 37 ‘Yorkshire Southern Pennine Fringe’ are as follows:

1. Eastern slopes of the Pennines, dropping from upland in the west down to the east, dissected by numerous steep-sided valleys;
2. Extensive urban influences from the matrix of large and small towns;
3. Close conjunction of large-scale industry, urban areas and transport routes with open countryside;
4. Predominance of local sandstone and ‘gritstone’ as a building material notably in large and dominant industrial buildings;
5. Urban development mainly confined by valleys creating dramatic interplay of views between settlements and the surrounding hillsides;
6. Predominantly pastoral farming with strong linear patterns of walled enclosures on plateaux;
7. Predominantly broadleaved woodlands on steep valley sides forming important backdrops to industrialised areas;
8. Impression of a well-wooded landscape even though tree cover is relatively sparse overall;
9. Dense network of roads, canals and railways.



Image 4.1 - NCA Map Extract - 37 - South Pennine Fringe

- 4.4 With the above character sensitivities, including descriptions such as an urban development mainly confined by valleys creating dramatic interplay of views between settlements and the surrounding hillsides, the proposed wind turbine's landscape impact must be carefully balanced against the renewable energy benefits derived from the proposals. The accompanying Landscape and Visual Impact Assessment (LVIA) included with the application submission evaluates this potential impact and incorporates photomontages to illustrate the wind turbine within the wider setting of the South Pennine Fringe NCA and more local character designations derived from the Barnsley Borough Landscape Assessment, as undertaken by ECUS and Land Use Consultants.
- 4.5 In summary, while there would be some changes in the landscape character of the area as a result of the proposed development, these would however be limited to a moderate effect significance, with the photomontages and associated assessment of effects demonstrating that the main visual impact is likely to be confined to particular viewpoints close to the site, where relatively open views are afforded of the turbine due to landscape topography, including from Annat Royd Lane to the west, Ingbirchworth reservoir to the north and some points along the A628 to the east. The LVIA also takes into account the adjacent Royd Moor Wind Farm and other proposed developments which haven't yet been erected in terms of gauging cumulative landscape effect. The LVIA demonstrates that the introduction of the turbine at the site would have a moderate impact significance to the majority of receptors (although overall there were 7 receptors in the moderate categories and 6 in the slight), mainly due to its scale and the exposure of the site from many of the views. Views from the

south and south east are however restrictive due to the lay of the land, and the ZTV shows that beyond the immediate site, the potential for long range views is reduced.

- 4.6 The key characteristics of the overall landscape would therefore remain intact, for example the landform, undulating character and wide ranging views to the west. Site specific features would also be protected and maintained in situ, although these are already limited, which will aid in assimilating the turbine into its surroundings. The effect significance of the scheme on the landscape character is concluded as being 'moderate', as the proposed scheme would cause a somewhat noticeable difference to the landscape, and would affect several receptors. The proposal would not however change the key characteristics of the South Pennine Moors overall, and such change associated with the introduction of this turbine must also be balanced against national policy requirements which aim to encourage renewable energy.

Cumulative Landscape Impact

- 4.7 Cumulative impact is a consideration in determining wind energy applications such as this, a search of nearby wind farms and turbines in the area has therefore been undertaken in order to assess whether the proposals would result in any such effects. Whilst there are no wind farms within the immediate vicinity or setting of the application site, there are a number of operational and consented commercial wind farm sites located within the wider landscape area. The following table therefore lists all operational or consented wind farm sites located within a 10km radius of the application site:

Wind Farm	Status	Distance	Direction
Royd Moor (13 x 54m)	Operational	1.1km	South West
Royd Moor/ Spicer Hill (3 x 95m)	Consented	1.0km	South West
Blackstone/ Crow Edge (3 x 101m)	Consented	2.3km	West
Hazlehead	Operational	4km	South West

4.8 The proximity of the proposed turbine site to the above wind farms, particularly the Royd Moor site - and comprising 13 no turbines reaching height of 35m to the hub and over 54m to tip), the photomontages and associated assessment of effects undertaken within the accompanying Landscape and Visual Impact Assessment demonstrate that while there would be some visual interaction between the two sites, due to the close proximity between the two, views towards both sites would only be possible from the east. The three additional turbines at Land at Spicer Hill (app 2009/ 0572) also need consideration. Views of these more substantial turbines and the turbine site would be more prominent, however again only from sites from the very east. With regards to the other consented wind farm at Blackstone Edge (2008/0171), this comprises 3 wind turbines up to 60m hub and 101m to tip. While the distance involved suggests that this wind farm should be sufficiently detached from the site, there would be some visual interaction with the proposed turbine at Ingfield Farm. Again, however views of the proposed turbine and this wind farm would be limited to westerly views, and local topography would help to screen the potential. These views have been considered by the LVIA and demonstrate that the application will not introduce a significant level of cumulative effect by proposing an additional turbine.

4.9 In addition to the above larger scale wind farms, a search of smaller scale wind turbine applications has revealed that there are other turbines in the local area that have received consent or which are up and running in the local area, some of which were visible upon the site visit. These include turbines from Barnsley and neighbouring (to the north) Kirklees planning authorities and are mapped on the following extract below:

- 1) 2011/1349 Land at PULE HILL FARM, Rag Lane, Thurgoland, Barnsley S35 7BA
Erection of 1 no 11KW wind turbine on a 18.4m mast. (Resubmission of app 2011/0470) FINAL DECISION 03-11-2011 Approve (7.8km to SW) - **Easting 428685, Northing 401820**
- 2) 2011/92186 Broadstone Lodge Farm, Broadstone Road, Cumberworth, Huddersfield, HD8 8YF. Erection of 1 no. 50kw wind turbine on a 24.6 metre tower. (Adjoining Authority Consultation) Approved (Kirklees) - (1.79km to north west of site) - **Easting 420358 Northing 406423**

- 3) 2011/0980 Hey Slack Farm. Hey Slack Lane, Cumberworth, Huddersfield, HD8 8YD
Erection of 5 Kw wind turbine on a 12m high mast.(Resubmission) FINAL DECISION
15-08-2011 Approve - **Easting 418358, Northing 406215**
- 4) 2011/0534 Drake Hill Farm, Hey Slack Lane, Cumberworth, Huddersfield, HD8 8YD
Erection of 1 no. 10K wind turbine on a 15m tower. (Adjoining Authority
Consultation) FINAL DECISION 10-05-2011 Approved (Kirklees) **Easting 436468,
Northing 398622**
- 5) 2011/0403 Penistone Advanced Learning Centre, Huddersfield Road, Penistone,
Sheffield, S36 7BX Installation of 32 m high wind turbine (to hub) with associated
infrastructure and access. (Revised Scheme) FINAL DECISION 11-04-2011 Approve
Easting 424207, Northing 404103
- 6) 2010/91199 Application approved Comment period has ended Address: Dearne
Head Farm, Haddingley Lane, Cumberworth, Huddersfield, HD8 8YD:Description-
Installation of 1x Evoco 10 KW wind turbine on a 15m tower Date 21-Apr-2010
(Kirklees) **Easting 418632, Northing 407690**
- 7) 2010/92169 Upper Woodroyd Barn, Hog Close Lane, Holmfirth, HD9 7TE -
Description Erection of one 10kw wind turbine on a 15m mast - Date 09-Dec-2010
(Kirklees) - Approved - **Easting 418066, Northing 405770**
- 8) 2011/92410 Application approved Quarry House Farm, Penistone Road, High Flatts,
Denby Dale, Huddersfield, HD8 8XY - Erection of 1 x 24.6M high (HUB) wind turbine -
08-Sep- 2011 (Kirklees) **Easting 421809, Northing 406916**
- 9) 2011/92279 Application approved - Delph House Farm, Penistone Road, High Flatts,
Huddersfield, HD8 8XY - Erection of wind turbine (Endurance 50Kw on a 25m tower)
(Kirklees) **Easting 421570, Northing 406578**

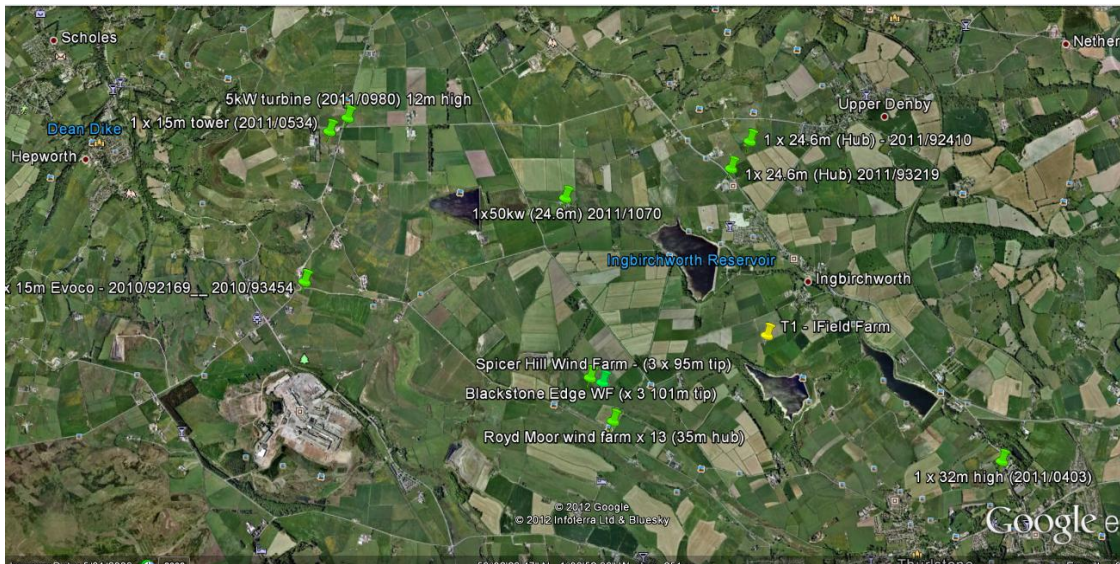


Image 4.2 - Location of other wind turbines (green) and the proposed site (yellow)

- 4.10 Based on the above, while there are a number of turbines in the local area, the majority of these are in small scale machines, between 15 - 26.4m (hub height). As the land topography also descends beyond Spicer Hill, there would be limited views to the turbines located west of Royd Moor Wind Farm. Other small scale turbines north east at High Flatts are also not visible from the site or from photomontage locations to the north. The largest and most visible turbine is a 50kw machine to the north west at Broadstone Lodge Farm, at 24.6m to hub. Views from the turbine site are not visible, however receptor locations to the west would suffer some cumulative effect as has been acknowledged within the accompanying photomontage, albeit successively (i.e. where the viewer has to turn their head).
- 4.11 Based on the above assessment, the proposed turbine at the application site 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 the medium scale turbines.
- 4.12 Cumulatively, while there would be some views of both the proposed turbine and the adjacent and more substantial Royd Moor Wind Farm and the proposed Blackstone/ Crow Edge Wind Farm, views of the three sites together in the same vista would usually only be possible from receptors to the east and south east of the site (i.e. along the A629 and within Ingirchworth; although views from the village of the three sites would be limited). Cumulatively, views of the both the proposed turbine and the other smaller wind turbines would also be limited, with views of both the proposed and the and the north west of the site (Broadstone Lodge Farm) only really visible from westerly receptors.

Neighbour Impact

Shadow Flicker

- 4.13 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. National Policy Statement guidance (see EN1 and EN3 and the saved technical guidance to PPS22) shows 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 520m of the turbine. The turbine would be sited over 448m to the south west of the nearest residential property, linked to Willow Farm. While this distance is not considered sufficient to prevent any adverse impact on this, or nearby residential dwellings, accompanying shadow flicker analysis has concluded that this phenomenon would only be likely to occur on a very small number of days per year and only during a nominal amount of hours over these days. There is therefore only very limited potential for shadow flicker impact envisaged on the residential amenity of the nearest neighbouring properties adjacent the proposed site. This level of impact is not considered substantial enough to significantly reduce the level of amenity enjoyed by these residents.

Noise

- 4.14 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.
- 4.15 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 project, meaning that it can be acceptable to have higher noise readings where the applicant's property is the primary affected residence.
- 4.16 In the case of the siting point of the wind turbine, the nearest residential property is situated approximately 450m East of the proposed turbine, known as Willow Farm. Other properties are also located within similar distances to the turbines sit, including Far Royd Moor (450m West) and Reservoir House (620m South East). While the caravan and camping site is

located closer to the turbine site, it is under the ownership of the applicant and so should be considered a financially interested use. A noise assessment has been commissioned to substantiate the potential for noise impacts at these properties. The results from this report state that at the distances involved between the turbine and the nearest properties, the proposed EWT 52-500kW turbine would be unlikely to introduce a level of noise impact that would be significant. In this case, therefore, it is considered that the proposed turbine would remain within the thresholds for noise in relation to neighbouring properties. In order to support these claims, additional information relating to potential noise impact is included within the accompanying documents. The report's findings are summarised below (attached separately):

As the noise level at all non-associated neighbouring properties is less than 35dB(A) at 10m/s wind speed at 10m height the simplified assessment as described in the ETSU Guidance applicable. It is therefore not necessary to assess the noise against background noise level as, according to the ETSU Guidance "...even in sheltered areas when wind speeds exceeds 10m/s on the wind farm site, some additional background noise will be generated which will increase background levels at the property"

Visual Impact from Neighbours

- 4.17 In terms of visual impact from neighbouring properties, the turbine will be fairly prominent in this location given the proposed scale and height required for technical viability, with deliberate screening of such a structure made difficult by virtue of its very form and nature. The change in visual amenity of residential properties within the surrounding area is a material planning consideration, with the assessment of the visual impact on neighbouring properties being based on a judgement as to whether the proposals would cause significant harm to neighbour amenity - to such an extent that would justify a reason for refusal. The potential for such impact would be balanced against the planning policy direction encouraging renewable energy devices such as this.
- 4.18 To aid the assessment of the visual impact from nearby residential properties to the north west and those located further south east and south, a series of photomontages have been prepared and included as part of the Landscape and Visual Impact Assessment, at Appendix B. This document provides a useful tool to understanding the scale of the turbines and thus

the associated visual impact, with the attached Zone of Theoretical Visibility Map (ZTV) also indicating those settlements within the surrounding area from which the turbine would be seen to some extent. The accompanying ZTV shows that due to the topography of the immediate site and surrounding area, the turbine's visibility could potentially extend to that of nearby Ingbirchworth to the east, as well as properties located to the south and west - as previously described. However, due to available screening which is provided adjacent the turbine site and due to the undulation of the land, the turbine would be much less visible from more distant settlements further south such as Thurlstone or further north, such as High Flats. The turbine would be somewhat visible to the north west, however tree screening provided to the north of the site should help limit substantial impacts. The lay of the land also limits westerly views beyond Spicer's Hill, whereby the 13 turbines are already located. The results of this assessment demonstrate that the turbine would appear most prominent from properties situated to the south of Royd Moor, the adjacent road network to the east (i.e. A629) and west and from views from more isolated to vantage points, such as local footpaths whereby fleeting and unobstructed views are possible. This acknowledged, the presence of intervening landscape features and vegetation, as well as settlement structures and existing man made features in the landscape all have the effect of softening the resultant magnitude of visual impact the turbine would introduce to the site. The turbine would not appear as an isolated vertical structure, as views towards the site would be taken in the context of the above features, including power lines, trees, etc and it's modest scale would help keep it from being overly intrusive or dominant within the skyline.

- 4.17 Whilst the introduction of the turbine would clearly result in a change to the visual amenity afforded to these neighbouring properties, with the occupants of the properties to the south and west (aligning Royd Moor reservoir) and some properties (located off the A629), for the reasons set out above and within the accompanying LVIA report, it is considered that the overall impact of the proposals would not be overly harmful or unacceptable. Views from the nearest settlement of Ingbirchworth would suffer only very limited impact, and no views would be obtainable from the Conservation Area either. Obtainable views within the area would rather be limited to footpaths located at reasonably long distances away, i.e. that which runs to the south of Royd Moor reservoir or from local road users, ensuring that the resultant impact is considerably reduced as a result.

Electromagnetic Interference

- 4.18 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. At 76m in height to blade tip, the wind turbine proposed at the application site is above this height, although larger scale commercial turbines are also proposed to the west, within the area. Consequently, the addition of this modest scale turbine would be unlikely to cause any electromagnetic interference in the area.

Proximity to Airports and Flight Paths

- 4.19 The nearest airfield to the site is Crosland Moor which is situated approximately 9 miles to the north west of the site. This represents the nearest airfield to the site, with a grass and asphalt runway and associated facilities. Emley Moor TV mast is situated close to the site already, suggesting the addition of the mast delivering limited potential to impact on the operation of this additional turbine. Another nearby airfield is Swinton, situated around 11 miles to the east, which operates on a similar level. The nearest commercial airports include Leeds Bradford (34km to the north) and Robin Hood Airport (45km east), substantial enough distances to ensure that the turbine's addition would be unlikely to interfere with the operation of Precision Approach Radar or Air Traffic Control systems. Whilst further consultation will form a key part of the planning application process, having regard to the size of the proposed wind turbine at the site, it is considered that the proposals would have no impact on flight paths or the operations of airports/ airfields in the wider region.

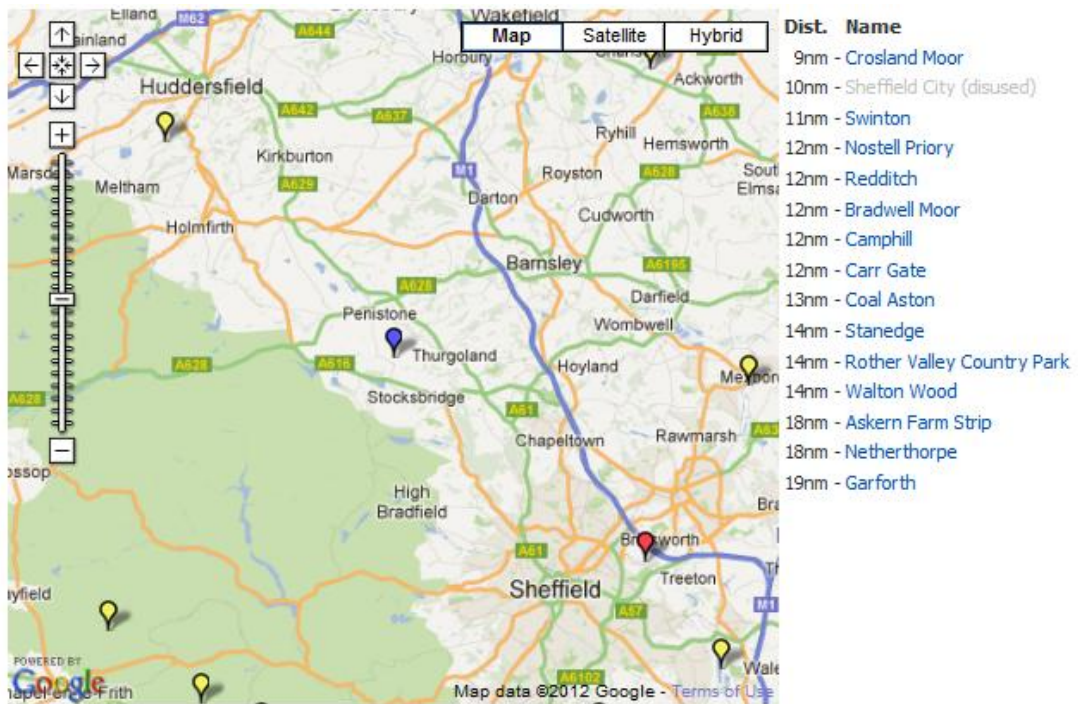


Image 4.3 - Nearby Airfields and Airports (taken from ukga.com)

- 4.20 As shown within the following NATS radar map, showing coverage within the area of the site at 80m, there does appear to be some dispersion of radar coverage in the area, though this is expected to be limited and coverage may well exist at the site.

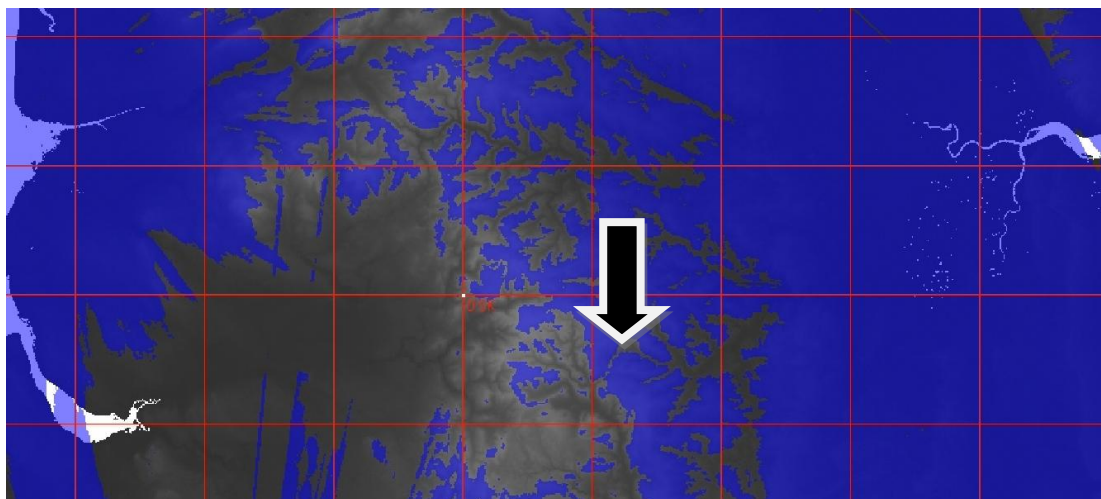


**Image 4.4 - NATS Radar Map Extract –coverage within the area of the site at 80m
(blue area suggests coverage)**

4.21 The relatively undulating topography of the surrounding landscape should provide some assistance in shielding the rotating blades from the indicative radar coverage suggested above. The relative height of the proposal should help to ensure its limited impact on flight paths or the operations of airports in the wider region, including highlighted above. This is, arguably, evidenced by the operation of the nearby wind farm at Royd Moor and the lack of objections for the Blackstone Edge site, which are proposed to be sited at a similar level to the proposed turbine and will protrude further into the sky due to their larger scale. Consultation with NATS will however take place through the application process, to which suitable responses regarding mitigation can be made - if required. While other small scale airports are also present in the local area, it is highly unlikely that the development would pose any significant issues to their day to day operation.

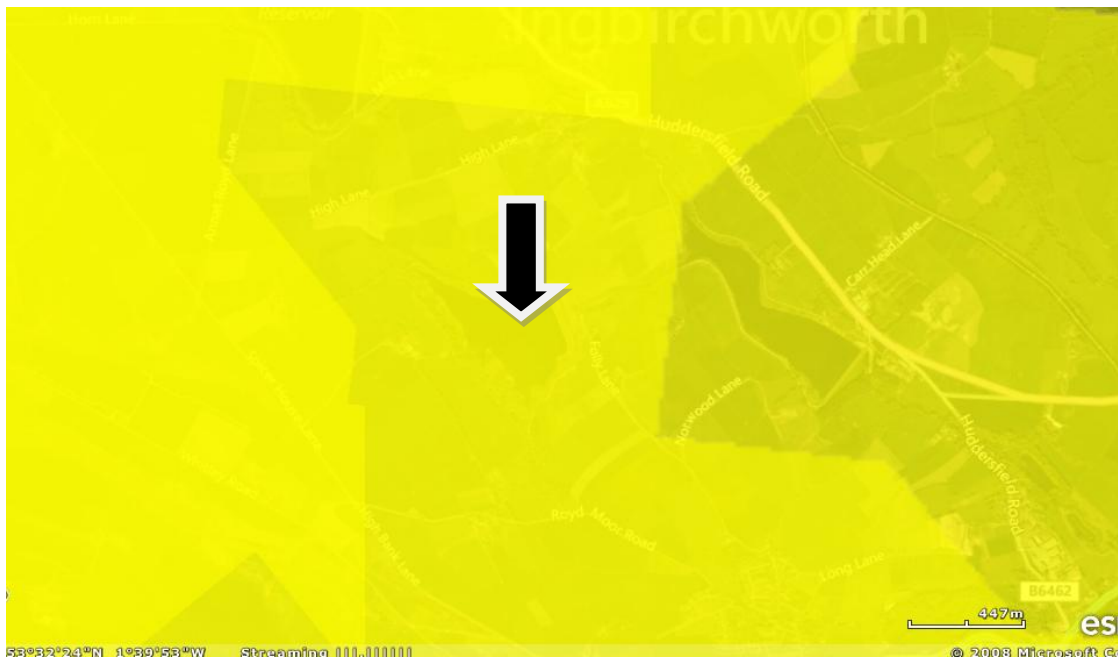


Image 4.5- MOD Onshore Radar Coverage Map at 80m - Extract (yellow = potential radar detection)

4.22 An examination of the MOD Onshore Radar Coverage at 80m Map suggests that the site does lie within an area where the extent of radar coverage may present potential issues. However, the presence of smaller and larger scale turbines within area would suggest that the turbine could be accommodated without adversely effecting military radar operations. Consultation with the MOD will be undertaken during the application process.

Ecological Issues

- 4.23 The installation of the proposed wind turbine has sought to respect the ecological values associated with the site. The site is located within an agricultural field system, around 510m from the proposed access. A visit to the site suggested that there is very limited vegetation which might provide localised habitats for smaller bird populations, however the turbine have been carefully sited away from field divisions to ensure even further limited potential impact. The proposed route of the underground cable connecting the turbine to the grid has also sought to avoid any substantial vegetation on the site, as indicated on the submitted plans.
- 4.24 An Extended Phase 1 Habitat and Protected Species Survey was undertaken by E3 Ecology in October 2012. The report and its findings are included with this application and should be read in addition to the desk based analysis given below.
- 4.25 A desk-based appraisal of nearby designated ecological sites has found the following located within 10km of the application site:

Local Nature Reserves

Site Code	Name	Area (Ha)
1008803	BRETTON COUNTRY PARK	39.37

Special Areas of Conservation

Site Code	Name	Area (Ha)
UK0030280	SOUTH PENNINE MOORS	65025.5

Special Protection Areas

Site Code	Name	Area (Ha)
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UK9007021	PEAK DISTRICT MOORS (SOUTH PENNINE MOORS PHASE 1)	45300.56
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Selected Sites of Special Scientific Interest

Site Code	Name	Area (Ha)
1002023	THE DARK PEAK	31823.79
1004074	PYE FLATTS MEADOWS	2.21
1003966	LITTLE DON STREAM SECTION	1.01
1084115	SPRING MEADOWS, ALDERMAN'S HEAD & COW CROFT MEADOWS	16.83

4.26 Despite the range of sites found within the 10km search area, none are within immediate proximity to the application site. This is illustrated within Image 4.6, which shows the application site and surrounding sites of ecological importance within 10km. The closest site is Pye Flatts Meadow SSSI (Site of Specific Scientific Interest). As a lowland grassland and due to the distances in-between this and the turbine site, it is unlikely that the operation of the turbine would impact on the objectives of the site's designation or interfere with any species which use the site.

4.27 In terms of internationally designated sites, the South Pennine Moors SAC (Special Area of Conservation) is located within the SAC aspect of the moors and includes a range of vegetation, with bogs and marshes (42.7%) and heath, scrub, maquis and garrigue constituting over 90% of its cover. The blanket bogs are cited as being botanically poor, however where the peats are drier heather, crowberry and bilberry become more prominent. The dry heaths's extensive area occupies the low slopes of the moors on mineral soils where the peat is thin. The moors support a rich invertebrate fauna, especially moths, and important bird assemblages, linked with species which occupy the Special Protection Area (SPA further west). The turbine site is considered to be suitably divorced from this

designation and is of a small enough scale to ensure that it will not present any additional impact to the objectives of this designation.

- 4.28 The Peak District Moors (South Pennine Moors Phase 1) is a Special Protection Area (SPA) (and SAC) and is linked to the aforementioned South Pennine Moors SAC. The nearest portion of the substantial designation is the 31823 Ha SSSI known as the Dark Peak, situated just under 4km to the south of west of the turbine site. The vast blanket mires of the Dark Peak plateaux support nationally important breeding populations of golden plover *Pluvialis apricaria* (1.7% of the British population) and dunlin *Calidris alpina* (0.9% of the British population) as well as very significant numbers of meadow pipit *Anthus pratensis*, the most common passerine throughout the area. Dunlin tend to concentrate into a few areas of blanket mire without significant amounts of heather, although they tend to be associated more strongly with the high altitude plateaux towards the centre of the moorland blocks and the density of breeding birds is high compared to other populations to the north. Meadow pipits and other small song birds form the staple prey of merlin. Among other species, the south Pennine population of breeding twite is probably of international significance. Not only is it the most southern population in Britain, but it is also isolated from birds occupying the mountains of Central Asia. Over a quarter of the south Pennine birds breed within the Dark Peak, (only a few breed further south on other Peak District moorlands), so this site is important to the maintenance of this population. Twite are found in locations throughout the Dark Peak, but are particularly concentrated in the north east where they favour a mixture of habitats including tall heather for nesting and roosting and rough grassland areas for feeding. Other species present within designation include Peregrine, woodland birds (redstart, green woodpecker) and waterside birds such as (dipper, grey wagtail). The site is located at a distance from the designation and that would suggest the potential for impact would be limited. However, as some of these species (especially migratory species) may use the site as a feeding area/ functionally connected area, such potential cannot be ruled out entirely. That said, at just over 4km, such a distance should ensure that there would be minimal direct interaction between the wind turbine and the above sites of ecological importance and their associated habitats, and therefore the likely impact on ecology will derive from the values associated with the site and its immediate surroundings. The location of other turbines within the local area also offers some support to our opinion that the site is far enough away to ensure minimal impact on the objectives of these international ecological designations.



Image 4.6 - Nearby Ecological Designations (Natural England)

- 4.29 The E3 report findings were positive and proposed that there would be minimal interaction between the turbine and on-site features. The laying of a temporary track and other infrastructure would also not interfere with the existing habitats and species which use the site. The proposed development site, inclusive of immediately adjacent habitat, is considered to be of low ornithological value for both its breeding and wintering population. As the construction footprint makes up a very small proportion of the broader area, which is dominated by similar habitats, it is likely that the land within and adjacent to the proposed development will constitute only a small proportion of the land utilised by these species.
- 4.30 In terms of the site's operation, collision risk and disturbance displacement are considered the two predominant effects of small and medium scale wind turbines such as is proposed. Clearly with a medium scale turbine, the potential for collision and disturbance with birdlife is reduced from that of a commercial wind farm. Different species groups vary in terms of susceptibility to collision, with 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 and in this respect the proposals are unlikely to have any impact in respect of collision with such birdlife. Given that the turbine has been sited within a relatively open field system, with very little if anything in the form of tree or hedgerows

within 75m of the site, it is thought that predominant birdlife associated with such habitats, such as more agile small birds, would not be based on the site. The E3 report states that wildfowl, waders and raptors are the key bird groups considered at particular risk of collision with operational turbines. Although migratory swans and geese are likely to move around the area in small numbers during winter, potentially passing over the site, such movements are generally at height, and much above the height of the turbine proposed in this case (76m to blade tip). A range of common raptors and owls, are likely to be present in the area. The site may also support scarcer raptors that may pass over the site infrequently. It is likely that all these species will have only low levels of activity over the site due to the limited availability of prey in an intensively managed site such as this.

- 4.31 Disturbance displacement is a common effect from wind turbines on wildfowl and wader species, however such species are not known to be predominant within the application site. Furthermore any displacement is likely to be confined to the area around the wind turbine rather than the wider area.
- 4.32 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. The site's 70m buffer from such features should ensure the proposals do not result in any significant impact on possible bat populations. Whilst the presence of a small tree to the north west of the site is located within such levels, such an isolated and small scale planting is unlikely to provide an adequate form of foraging or habitat for bats in light of their specific feeding/ living requirements. The e3 report states that in terms of on-site findings, the lack of potential bat roost sites within 50m of the proposed turbine (man-made structures) and the location within an intensively managed arable field (low quality habitat for foraging bats), leads to the conclusion that the risk of potential long term impacts on local bat populations of the operational turbines, through direct collision mortality and indirect effects such as barotrauma, is likely to be low.
- 4.33 Both the RSPB and Natural England are generally supportive of wind turbines and the role they play in sustaining the country's energy demands. Guidance now provided in the form of National Policy Statements on Energy (EN1 and EN3) and saved Technical Annex to PPS22

indicates that bird species and their habitats are rarely affected by wind turbine developments and the impact of appropriately designed and located wind turbines on local bird life should, in many cases, be minimal. Naturally site specific conditions must still be given due consideration and in this location it is considered that the provision of a wind turbine can be sensitively sited so as to ensure that it would not result in any adverse impact on ecological issues.

Archaeological Implications

- 4.34 The proposal will involve some ground excavations when the foundations are laid and the 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 proposed turbine has found only one result:

Title	Location	Description
MONUMENT NO. 51039	Barnsley	Barn 15th Century

- 4.35 The location of this site can be found at Image 10 below (purple square). The distance of this monument from the turbine will ensure it will be unlikely for the turbine's erection to impact on its current status; although this does not mean that yet undiscovered archaeological sites are not present closer to the site. The depth of the foundations would be unlikely to disturb the ground any further and so the potential of impacting on any potential archaeological finds would be minimised.

Heritage Assets

- 4.36 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 following extract from the English Heritage National Heritage List for England identifies the nearby listed buildings (blue triangles) and Scheduled Ancient Monuments (red hatching) within the area of the site.

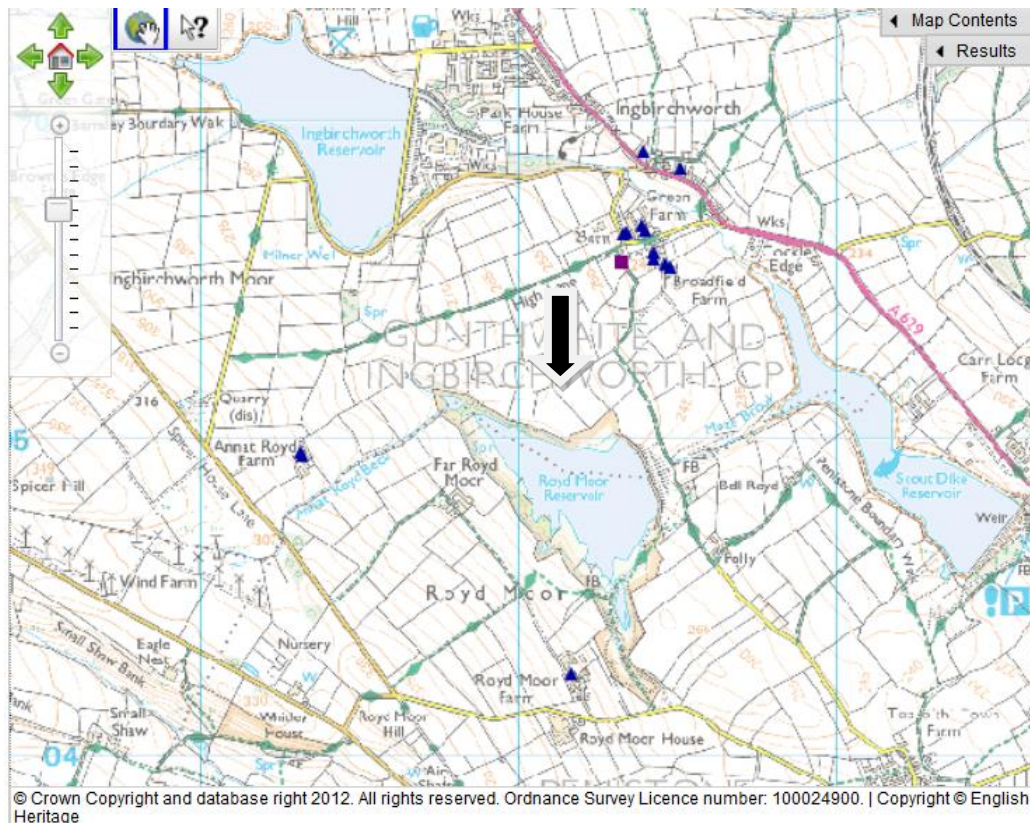


Image 4.7: Location of Heritage Assets in the wider area (Black arrow = turbine site)

Legend

- | | |
|--------------------------------|---|
| ▲ Listed Building (NHLE) | ■ Scheduled Monument (centre point) |
| ■ EH PastScape | ■ Registered Park/Garden (centre point) |
| ○ Local HER records | ■ Registered Battlefield (centre point) |
| ○ National Trust HBSMR | ■ Protected Wreck Site (centre point) |
| ■ Building Preservation Notice | ■ World Heritage Site |
| ■ Certificate of Immunity | |

4.37 National policy (re NPPF) dictates that such heritage assets are given special treatment in the design and assessment of proposals that may impact upon the architectural or historic qualities of the buildings or, indeed, their setting. The NPPF states that in terms of meeting sustainable development objectives, proposals must demonstrate that they do not introduce significant or demonstrable impact on the objectives of heritage assets. In line with this, the following heritage section assesses the potential impact on these local designated heritage assets, using photomontages - which are more fully assessed within the LVIA - to assess any potential impact. As can be seen above, there are no scheduled monuments within 2km of the turbine site. There are however 11 listed buildings, including a cluster of buildings to the

north east of the site around Green, Willow and Broadfield Farms (which together have Conservation Area status). The most significant of these heritage assets is the barn to the west of Ingfield Farm, which is Grade II* listed and which is situated around 492m of the site. Other listed buildings present in this area include:

- 1) Green farmhouse, Ingbirchworth, Gunthwaite and Ingbirchworth, Barnsley - Grii
- 2) Willow Farmhouse, Ingbirchworth, Gunthwaite and Ingbirchworth, Barnsley - Grii
- 3) Grange Farmhouse, Penistone road, Ingbirchworth, Gunthwaite and Ingbirchworth, Barnsley - Grii
- 4) Annat Royd Farmhouse, Spicer House Lane, Ingbirchworth, Gunthwaite and Ingbirchworth, Barnsley - Grii
- 5) L Shaped barn range attached to Annat Royd Farmhouse, Spicer House Lane, Ingbirchworth, Gunthwaite and Ingbirchworth, Barnsley - Grii
- 6) Barn approximately 5 metres south east of Green Farmhouse, Ingbirchworth, Gunthwaite and Ingbirchworth, Barnsley - Grii
- 7) Cottage (now store) immediately north east of number 24, Penistone Road, Ingbirchworth, Gunthwaite and Ingbirchworth, Barnsley - Grii
- 8) Barn immediately south east of Broadfield Farmhouse, Ingbirchworth, Gunthwaite and Ingbirchworth, Barnsley - Grii
- 9) Broadfield Farmhouse, Ingbirchworth, Gunthwaite and Ingbirchworth, Barnsley - Grii
- 10) barn adjoining and to south of willow farmhouse barn adjoining and to south of willow farmhouse, ingbirchworth, gunthwaite and ingbirchworth, barnsley ii
- 11) L Shaped range of barns immediately north of Royd Moor Farmhouse, Royd Moor Road, Penistone, Barnsley - Grii
- 12) Ings cottage, Ingbirchworth, Gunthwaite and Ingbirchworth, Barnsley - Grii

13) Barn at Ingfield Farm, immediately west of Ings Cottage - (Gr II*)

4.38 The principal listed buildings which will be considered from the above list are indicated below. These include: 4) Annat Royd Farmhouse and 5) L Shape barn range attached to Annat Royd Farmhouse (both Gr II); 11) L shaped barn/ stable immediately north of Royd Moor Farmhouse; 13) Barn west of Ingfield Farm (Gr II*) and the adjacent Conservation Area which contains a number of listed buildings located to the north east of the site (see red circle below). These represent the closest designated heritage assets and their potential for impact is considered more relevant in terms of the siting of a turbine at this location - see image 11 below for the location of the closest designated heritage assets.

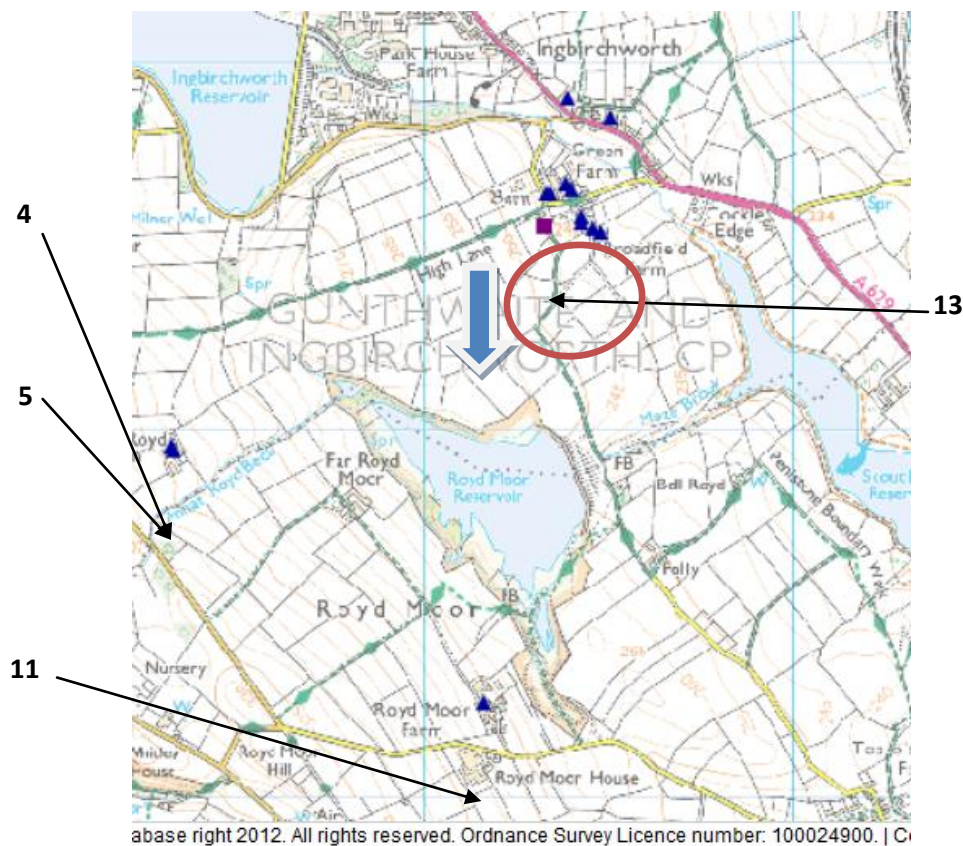


Image 4.8 - Location of Designated Nearest Heritage Assets (red circle = Conservation Area and blue arrow = turbine)

Heritage Analysis

1) Annat Royd Farmhouse and & ii) L-Shape barn attached to Annat Royd Farmhouse,
Spicer House Lane, Ingbirchworth, Penistone - both Grade II



Image 4.9 - View towards turbine site from west of Annat Royd Farmhouse and Barn

4.39 Annat Royd Farmhouse and the associated L-Shape barn are situated north west of Royd Moor Reservoir, around 780m west of the proposed turbine site. The farmhouse and barn are Grade II listed, and sit on reduced gradient, around 15m lower than Spicer Hill Road. Details of their specific features are as follows (as taken from the English Heritage web site):

1) Annat Royd Farm House, Spicer House Lane - Gr II - 17th century

4.40 17th century farmhouse, heavily altered in the early 19th century. The farmhouse is 2 storeys in height and possesses the following detail: a symmetrical 3-bay facade; Quoins; Central doorway in C20 lean-to porch (possessed Tudor-arched lintel). There is also a 3-light flat-faced mullion window to left and right of both floors. In addition, a chamfered light and one 2-light double-chamfered window (mullion removed) remain to the left.

ii) L-Shape Barn attached to Annat Royd Farmhouse

- 4.41 The barn is fixed to the south western elevation of the adjacent farmhouse and dates back to 1805. The main building has paired entrances to left and additional 2 entrances to the centre, although part blocked. A tall, elliptical headed cart entrance exists to the right, with a lintel. A keystone reads J A Anno Domini 1805. The wing which adjoins the farmhouse, has altered cart entrance to ground floor and stone steps leading to a blocked door way, to the right of which is a mullioned window. Other internal features include softwood king-post trusses with oak-tie beams. These range of idiosyncrasies have contributed to its listing.
- 4.42 Overall, while these heritage assets will be viewed in the context of the turbine site, further east, the distance involved (i.e. at over 700m) strongly suggests that the turbine is suitably divorced from having significant impact on the setting of these buildings. Substantial tree screening in the form of tree screening further east and the presence of the reservoir also help to provide a sense of distance between the sites. The listed buildings have also seen substantial utilitarian farming development within their setting which has already detracted from their setting and how they are read. The addition of an individual turbine should not introduce a level of impact above this, due to the scale and distances involved.

2) L-Shaped Barns Immediately north of Royd Moor Farmhouse



Image 4.10 - Turbine in the context of the Gr II L-Shaped stable and barn, Royd Moor Farmhouse located far right (outside of shot)

- 4.43 This L-shaped stable and barn date from 1785 and are located to the north of the associated Royd Moor Farmhouse, situated around 1km south of the turbine site. Specific listing details include the following specifically *(as taken from the English Heritage citation)*:

The stable and barn range originate from 1785, with the stable built slightly later. Roof is of stone slate and the building incorporate and L-shape plan. Regarding the barn, there is a tall segmental-headed cart entrance to the left, with a keystone dated 'J H 1785' and quoined surround. Two lower segmental-arched cart sheds exist to the right, with a common central jamb. Regarding the Stable, projecting on the left, there are 3 entrances with deep lintels and quoined surrounds (2 part-blocked) and two small later openings at high level. Square pitching holes exist to rear of the stable range. Rear of barn has opposing, tall cart entry and ventilation slits.

- 4.44 The I-shaped barn/ stable buildings are located within the middle of the farmstead, and are sufficiently screened from wide open views towards the site. While the turbine would be visible, it would be seen around 1km in the distance and would not significantly detract from the barn or its setting, because of Royd Moor reservoir and its associated (and significant) tree screening which align its banks. Such features help provide a sense of separation, ensuring the turbine is well outside of its setting, and help mitigate the potential impact on the listed building. Finally, the barn is also surrounded to the north by an agricultural shed and separate structure to the north east, as well as substantial curtilage screening which assists to further break up views towards the turbine from the asset.

3) Barn at Ingfield Farm, immediately west of Ings Cottage - (Gr II*) and associated Conservation Area



Image 4.11 - View from west of Conservation Area and Gr II* listed barn

- 4.45 The barn in question is located to the western edge of the Ingbirchworth Conservation Area. The barn - which has been converted for residential use - sits 500m from the proposed turbine site, with the following detail regarding its listing applicable (*as taken from the English Heritage data base*);

"C16 barn, made up of thinly-coursed dry rubble with a stone slate roof. Structure has five interns bays and associated quoins. There is a square-headed cart-entry within in 2nd bay, with a square pitch-hole to right, with a small outshut to rear of first bay. In terms of the interior, features include 4 cruck trusses with extended tie-beams; thick collars at apex and a diagonally-set ridge piece and reverse-curved braces from blades to purlins in line with trusses. Wall plates are also supported on the tie-beams."

- 4.46 The barn's location to the edge of the conservation area does not mean that it is afforded uninterrupted views to the turbine site. Main views from the property will look out to the west, with the turbine appearing above the adjacent farm building at a more acute angle from the principal elevation of the barn. While the turbine is visible from this location, the setting of the listed building is preserved and principal views of the building will rarely be viewed in the same context as the turbine, due to the distances involved. The barn is set

within its own distinct curtilage and views to the turbine will be well interspersed with manmade features such as utilitarian barns and more natural features such as substantial trees.

Ingbirchworth Conservation Area



Image 4.12 - Ingbirchworth Conservation Area

- 4.47 The Ingbirchworth Conservation Area is one of 18 located within the remit of Barnsley Metropolitan Borough Council and comprises a range of Grade II and one Grade II* (see above) farm buildings and barns associated with Willow, Broadfield, Green and Ingfield Farms. The main group of buildings the designation surrounds is not physically attached to the rest of the settlement (which is located 390m further east), rather situated independently to the south west of Ingbirchworth within the countryside and associated Green Belt.

4.48 A Conservation Area Appraisal has not yet been undertaken for Ingbirchworth, however the collection of farmsteads offer a unique layout and historical 17-18th century agricultural building vernacular character due to the range and concentration of such buildings within a small concentration, offering a somewhat distinctive location. The approach to the Conservation Area from the east unveils the collection of farmsteads situated around an informal cross-road, the adjacent buildings suggesting membership of a single farming entity, rather than separate autonomous agricultural operations. Some of the barns have been converted to residential use, their conversion usually retaining distinctive historical features including quoins, stone slate roofs and stone lintels. Their combined character offers a pleasant viewing experience to the observer. The Conservation Area is aligned with some trees to the south and north of its designation, with views from the west of the designation further west interrupted by the rising gradient of the land. The photograph below shows the potential for impact from the edge of the Conservation Area, adjacent the Grade II* listed barn.



Image 4.13 - View from west of Ingbirchworth Conservation Area and Gr II* listed barn

4.49 Overall, the potential for any detracting from the setting of the conservation area is minimised by the distance of the turbine and its sensitive siting behind farm buildings further

west. The turbine's scale has also helped to minimise impact on the designation and ensure it does not introduce a level of significant impact on its setting.

- 4.50 These findings conclude that the introduction of the turbine at the application site would have a negligible impact on either the assets or their setting. This is mainly due to the distances involved, the presence of tree screening, existing vegetation, man-made features and that any visual interaction between the application site and these designated heritage assets would be seen in the context of intervening topography and land features which would help to reinforce separation between sites. It is therefore considered that the proposed turbine would be sited well outside the associated setting of these heritage assets, with no resultant harm derived from the proposals as a result.

Loss of Agricultural Land

- 4.51 The area of the application site is limited due to the diameter of the proposed turbine and, consequently, the proposals would present no more than negligible impact on the agricultural uptake of the land which would continue while the turbine is in operation. The turbine base has a moderate surface area, the foundations of which would be located below the ground to a sufficient depth that normal agricultural operations would be achievable around the turbine. The net loss of agricultural land would therefore be very low.

Flood Risk

- 4.52 It is noted that the turbine will be sited within Flood Zone 1 and as such a Flood Risk Assessment (FRA) has not been undertaken.

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 will 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 comprise temporary works and no trees or dry stone walls would be removed with the ground being reinstated to its original condition following the laying of the cable. Access to the site for the installation of the turbine would be achieved from dedicated farm access used by Ingfield Farm (corner of

New Row Lane and High Lane). This access is also utilised by users of the caravan and camping site and would provide a route for construction vehicles through the main farm yard and south west towards the application site. Vehicles would originate from the main A629 south of Ingbirchworth (A629), taking a left turn onto High Lane and pass through farm buildings located to the east of the site and into the farm itself. This route is illustrated below:

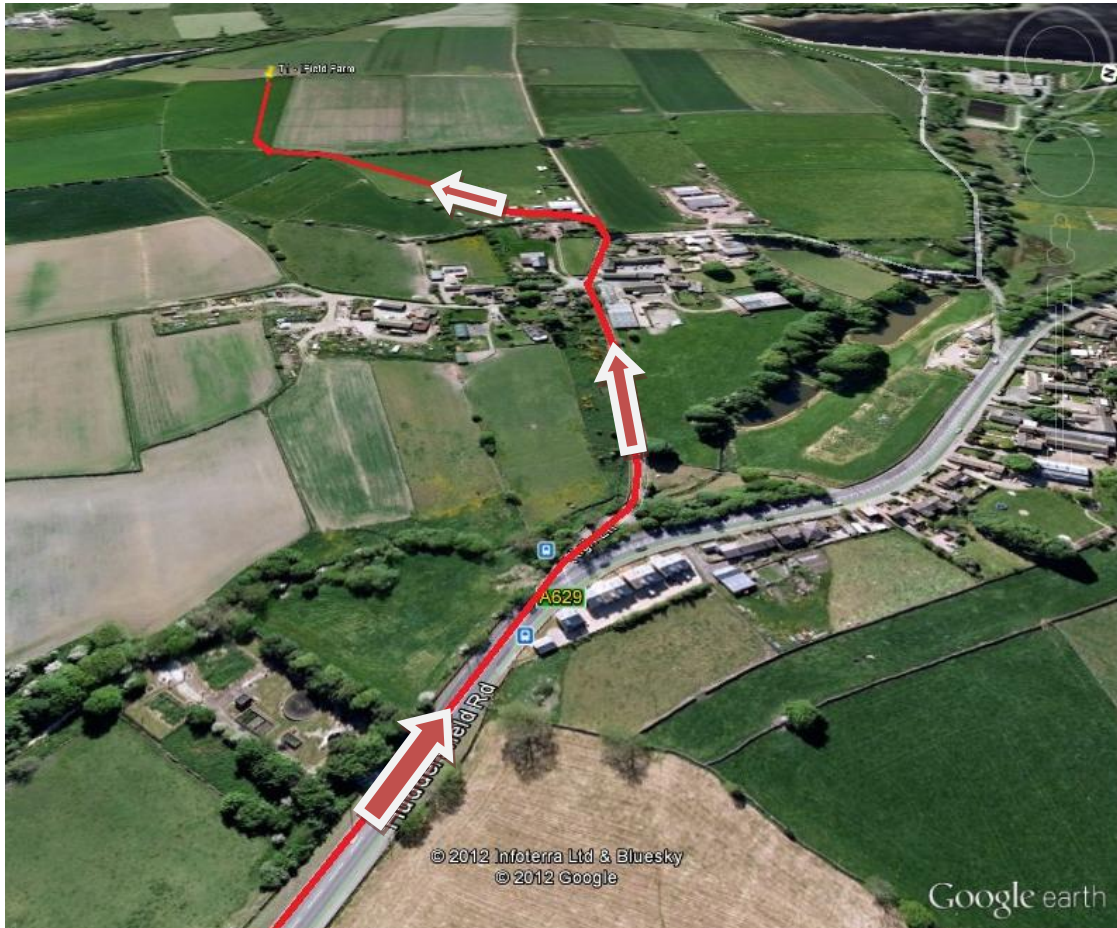


Image 4.14 - Proposed Access Route (from A629 from south west towards farm site)

- 4.54 The route provides excellent accessibility from the A629, towards the site and has no junctions or turning angles that might impeded on the ability of delivery/ installation vehicles to reach the site (e.g. HGVs, cranes). This route is currently used by large scale agricultural vehicles in connection with the existing operations at the farm and surrounding field systems, and it is considered that the same access arrangements would be suitable for use by the vehicles delivering and installing the turbine onto the site.

- 4.55 The proposed turbine would be delivered in parts and so would not necessitate overly large vehicles that require specific requirements for the installation. That said, delivery does require HGVs, mobile cranes, cement trucks, all of which should be able to access the current route without any amendments to junctions or verges on-route.

5.0 Community Consultation

- 5.1 In light of the turbine's scale, distances from the nearest settlement and the in absence of any identified amenity impacts at this stage, there has been no pre-application dialogue established with Gunthwaite and Ingbirchworth or the Parish Council.
- 5.2 The applicant would however be happy to attend a Parish Council meeting to inform the committee of the proposals once an application has been submitted.

6.0 Sustainability Statement

- 6.1 The Council's validation requirements include the need for details of how the proposed development would minimise resource and energy consumption compared to minimum required under current Building Regulations legislation. In addition, how a development's location and design has taken into account the longer term impacts of climate change and detail how the development would incorporate renewable sources sufficient to reduce the development's carbon dioxide emissions by 15% (et al).
- 6.2 This application for a medium scale wind turbine is not covered by existing Building Regulations legislation requirements for energy consumption requirements, principally as the proposed turbine is a structure and not a building. This said, the siting of a wind turbine will help contribute to the a reduction in carbon dioxide emissions; with the precise amount of CO₂ (in tonnes saved) dependant on the amount of kilowatt hours produced by the turbine. The conversion of wind - which is a free and abundant resource - into power will however more than ensure that the development minimises resource and energy consumption and even contributes to the creation of free energy. When compared against other forms of energy generation, especially those reliant on converting fossil fuels into power, the turbine's ability to contribute to reductions in CO₂ is also clearly evident.
- 6.3 The development's location and design have taken into consideration the longer terms impacts of climate change by being sited outside of a high risk flood zone and therefore preventing future incidences of flooding. The same location has ensured that any ancillary infrastructure is also outside of any higher risk flood zones. By incorporating key mechanical and electronic parts within the hub and nacelle, the turbine's design ensured that extreme incidences of climate change (including harsher forms of weather) would be unlikely to impact on its ability to produce clean renewable energy.
- 6.4 Overall, the proposals comply with the council's sustainability requirements, in both contributing to major CO₂ reductions above and beyond those specified by current Building Regulations legislation.

7.0 Conclusion

- 7.1 In assessing this application in relation to policy and environmental context, it is considered that the application should be granted for the following reasons:
- 7.2 The proposed wind turbine would be positioned to the south west of the farmstead known as Ingfield Farm, located within agricultural land west of Ingbirchworth and north of Royd Moor Reservoir in West Yorkshire. As the accompanying LVIA and accompanying photomontages suggest that the proposal would have a moderate effect significance on the wider area, with several receptors having open and clear views towards the turbine in the wider landscape. This said, key visual receptors (such as heritage assets) are located at such distances to ensure that any views of the turbine will not appear overbearing and reasonably modest when compared to those commercial turbines further north west. In this sense the policy accords with key aspects of policy CSP 37 Landscape Character, in preserving the character of the landscape and CSP 6 which aims to ensure that developments retain the character of the landscape and appearance of the area. Both the scale of the development and the location have ensured a reasonable separation from other similar and more substantial developments and retained the openness of the Green Belt, as required by proposals within this designation.
- 7.3 The visual impact of the proposal would, therefore, be confined to more local views, due to intervening vegetation, man-made structures (farm buildings) and the undulating topography of the area all have the affect of mitigating the visual impact of the turbine, resulting in a moderate change in view for a limited number of receptor views. While there are a number of wind turbines already in the local area, (including those which have received consent, but not yet implemented) the accompanying LVIA demonstrates that the introduction of this medium scale turbine would have a limited impact on the existing characteristics of the South Pennines Character Area (No. 37) and can be accommodated into the landscape in accordance with the above policies. While the introduction of the turbine may also introduce some material cumulative landscape effect on the wider area, especially in the context of the substantial Royd Moor Wind Farm to the south west, proposals for Royd Moor's decommissioning in 2018 should ensure that any slight increase in the level of cumulative effect would only be present in the medium term, even with the addition of the Spicer Hill and Crow Edge proposals.

- 7.4 The NPPF strongly implies that proposals for renewable energy development should be considered a form of very special circumstances to overcome the loss of openness of the Green Belts. This together with the nature of wind turbine - in terms of their small footprint and use of narrow towers - should ensure the openness of the surrounding Green Belt designation is preserved.
- 7.5 The scale and location of the wind turbine is such that the impact on nearby residential properties would be minimal with any impact confined to a visual appreciation of the siting. This on its own would not constitute a material harm to living conditions to local residents, with the nearest neighbour over suitable distances relating to noise and shadow flicker (apart from a potential 7 hours per annum of shadow flicker) and it is thus considered that the amenity of neighbouring properties would be maintained. None of the nearby properties have direct views from primary elevations, and although some dwellings further north would have some appreciation of the turbine, the potential for significant impact on outlook is minimal. The medium scale turbine would be sited in excess of 450m away from the nearest residential property to the north east, which neither has direct views of the site due to a substantial perimeter wall and right of way abutting is western boundary. The proposals therefore accord with the aims of policies *CSP 6 Development that Produces Renewable Energy* relating to preserving living conditions as it would not detrimentally impact on the amenity of local properties, in terms of noise, shadow flicker or visual impact.
- 7.6 While the turbine is located relatively near to the International Ecological Designations, (the closest of which are the South Pennine Moors SAC and associated SPA, specifically the nearest known as Dark Peak) the desk-top investigations and the presence of other turbines in the area strongly suggest that the proposal would be unlikely to introduce a significant level of additional impact on the overarching objectives of these designations - which are situated around 4km south west of the site. The nearest national designation (SSSi) is also located far enough away to suffer any ill effects due to the operation of the turbine. An Extended Phase 1 Habitat and Protected Species Survey was undertaken by E3 Ecology in October and states that due to the turbine's location within an intensively managed arable field (low quality habitat for foraging bats), the risk of potential long term impacts on local bat populations of the operational turbine, through direct collision mortality and indirect effects such as barotrauma, is likely to be low.

- 7.7 The siting of the turbine at substantial distances away from the designated heritage assets would mean that the proposals would not be likely to result in any harm to listed buildings or scheduled ancient monuments within the area in line with the requirements of the NPPF, saved local and adopted policies (i.e. Core Strategy DPD). The accompanying heritage section has demonstrated that adjacent designated heritage assets are sufficiently detached from the site to ensure that there would be no resultant visual interaction or significant impact to their setting. This includes the Gr II listed Farm house and attached barn at Annat Royd, the Gr II listed barn and stable at Royd Moor Farm and the Gr II* listed barn at Ingfield Farm and adjacent Ingbirchworth Conservation Area. The most sensitive of these are perhaps the latter more significantly designated asset and the Conservation Area which is a collection of various other Grade II listed farm buildings. While the turbine would be visible from the edge of the conservation area, the potential for impact is not viewed as significant due to the interplay of farm buildings, natural topography and the distances involved between the designation and the turbine site.
- 7.8 With the overarching emphasis on encouraging renewable energy developments, as set out within regional policies of the Yorkshire and Humber Plan, the proposals are considered to accord with the objectives of this policy which aim to encourage proposals that meet renewable energy targets and those required to reduce CO2 emissions. The proposals should therefore be considered favourably as a result.
- 7.9 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.
- 7.10 While no community consultation was undertaken with the local parish council, the applicant is happy to engage with the local community upon validation of the application.
- 7.11 The turbine also meets the sustainability criteria provided by the council in accordance with existing Building Regulations legislation. The turbine would also contribute to a net reduction of CO2 emissions and is sited in a location (and includes design principles) which ensure its compatibility with climate change events.
- 7.12 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 newly adopted provisions 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’(2002). 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:

1. 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;
2. 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;

3. 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:

4. High sensitivity e.g. residential properties, Public Rights of Way and passive recreational activities, scenic drive;
5. Medium sensitivity e.g. play areas, sporting and active recreational facilities, attractive rural lanes;
6. 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:

7. High magnitude e.g. major change in view character;
8. Medium magnitude e.g. moderate change in view character;
9. Low magnitude e.g. minor change in view character;
10. 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

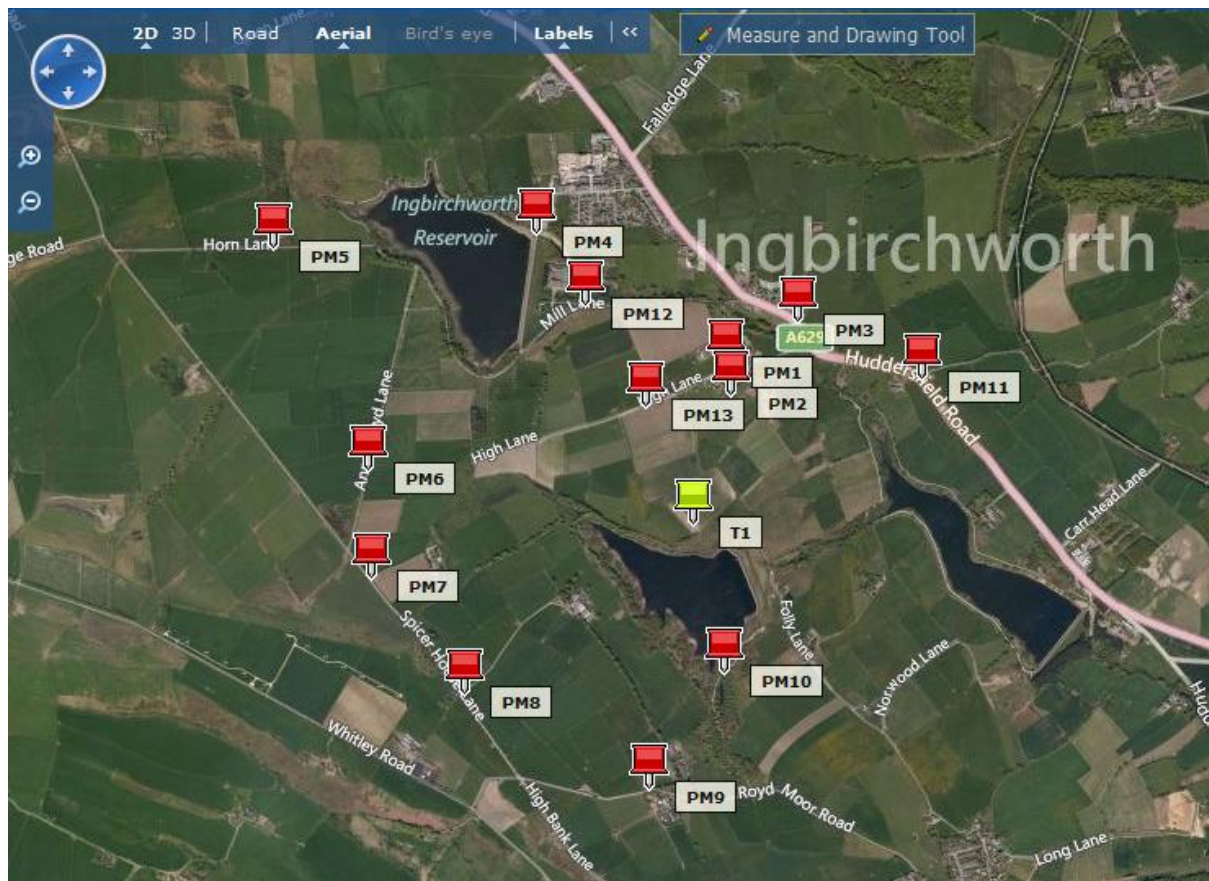
Impacts are described as being either beneficial or adverse.

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.

APPENDIX B - PHOTOMONAGE LOCATIONS



Grid Reference	X (Eastings)	Y (Northings)	Latitude	Longitude	Description (Click to Edit)	Post Code	Link	Email	Twitter	Center	Zoom Birds Eye	Zoom Aerial	Style	Show	Delete
SE 22214 05083	422214	405083	53.541925	-1.6662607	T1	i	link	email	twitter	center	zoom	zoom	style	show	delete
SE 22327 05642	422327	405642	53.546944	-1.6645158	PM1	i	link	email	twitter	center	zoom	zoom	style	show	delete
SE 22344 05531	422344	405531	53.545946	-1.6642672	PM2	i	link	email	twitter	center	zoom	zoom	style	show	delete
SE 22577 05790	422577	405790	53.548264	-1.6607323	PM3	i	link	email	twitter	center	zoom	zoom	style	show	delete
SE 21671 06084	421671	406084	53.550944	-1.6743854	PM4	i	link	email	twitter	center	zoom	zoom	style	show	delete
SE 20754 06034	420754	406034	53.550532	-1.6882290	PM5	i	link	email	twitter	center	zoom	zoom	style	show	delete
SE 21086 05269	421086	405269	53.543643	-1.6832695	PM6	i	link	email	twitter	center	zoom	zoom	style	show	delete
SE 21098 04890	421098	404890	53.540236	-1.6831138	PM7	i	link	email	twitter	center	zoom	zoom	style	show	delete
SE 21420 04493	421420	404493	53.536655	-1.6782821	PM8	i	link	email	twitter	center	zoom	zoom	style	show	delete
SE 22073 04160	422073	404160	53.533635	-1.6684531	PM9	i	link	email	twitter	center	zoom	zoom	style	show	delete
SE 22324 04568	422324	404568	53.537291	-1.6646374	PM10	i	link	email	twitter	center	zoom	zoom	style	show	delete
SE 23007 05593	423007	405593	53.546475	-1.6542572	PM11	i	link	email	twitter	center	zoom	zoom	style	show	delete
SE 21839 05842	421839	405842	53.548762	-1.6718666	PM12	i	link	email	twitter	center	zoom	zoom	style	show	delete
SE 22049 05490	422049	405490	53.545590	-1.6687220	PM13	i	link	email	twitter	center	zoom	zoom	style	show	delete