



**DESIGN AND ACCESS STATEMENT**

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**S36 8YR**

**PROPOSED SITING OF 1 x 24.6M HIGH (HUB) WIND TURBINE**

**Our Ref: P/1107**

**November 2011**

## DESIGN AND ACCESS STATEMENT

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## 1.0 Introduction to the Proposal

1.1 This desktop appraisal sets out our analysis of the relevant planning policy principles which need to be considered in support of this revised application for the erection of one 24.6m high (hub height), 34.2m high (tip height) wind turbine at High Wells Farm at Snowden Hill. The proposed wind turbine would be positioned to the south of the farm in a field and would provide electricity for the farm, this position has altered from the earlier application following negotiations with the Local Planning Authority. The revised location is on a lower level closer to the highway where the visual impact is reduced.

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

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

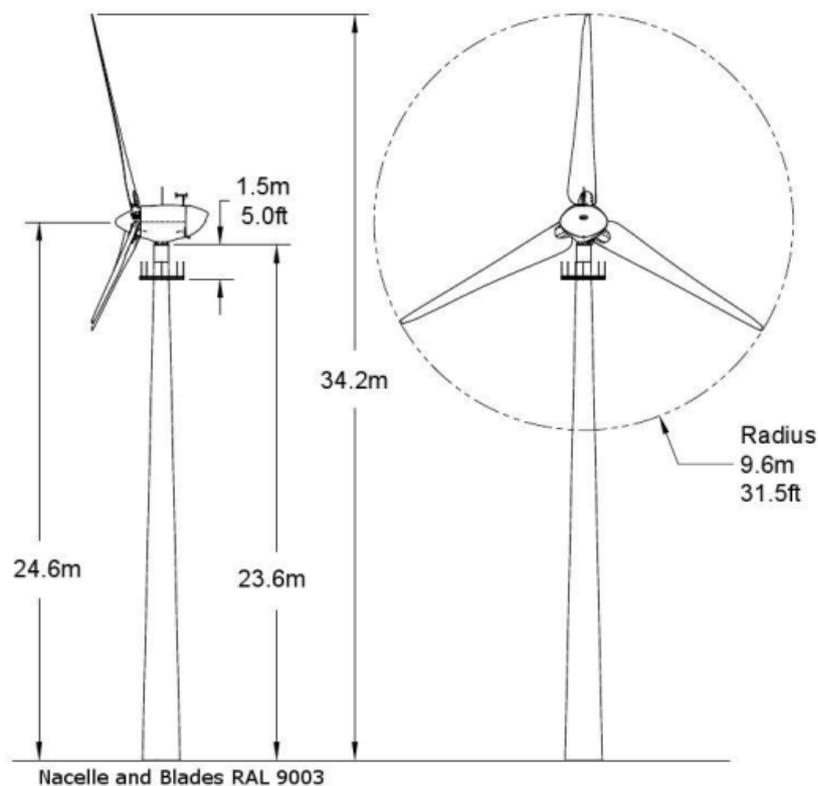
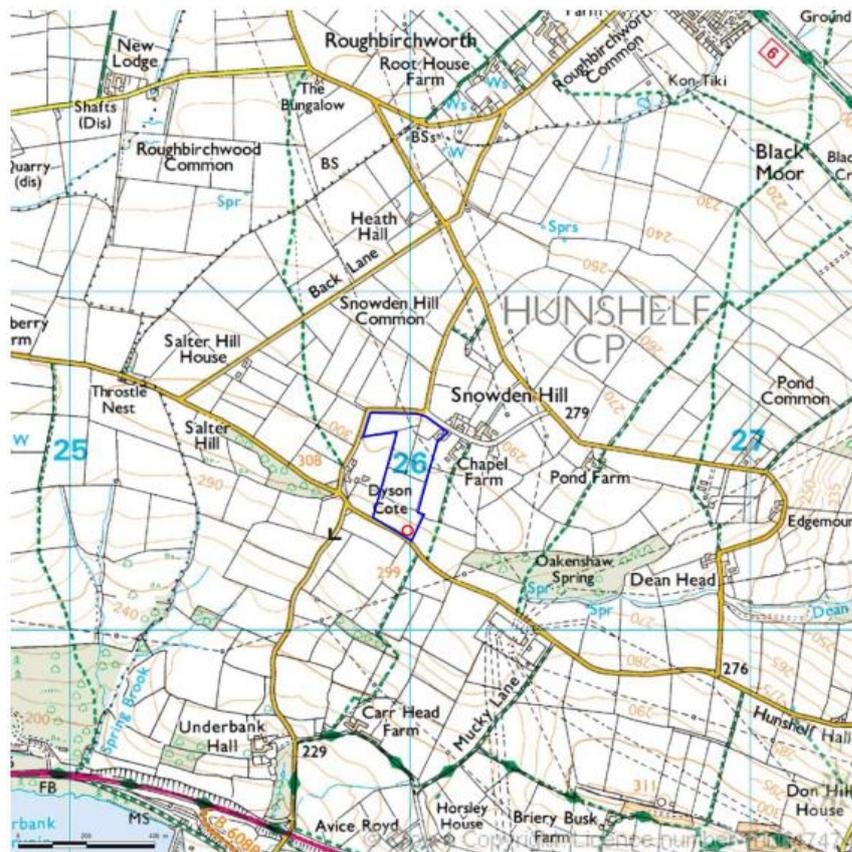


Image 1: Elevation Plan of the Turbine

- 1.3 Endurance use industry standard neutral matte finish paints. These are designed to absorb light and blend into a dull grey cloudy background. As illustrated in the manufacturer's datasheet.
- 1.4 From an operational standpoint, the siting of a wind turbine requires maximum exposure to unobstructed wind flow conditions in order to achieve efficient operation. Proximity to ground based obstructions can detrimentally affect the performance of a turbine and it is therefore essential to ensure that a wind turbine is located a sufficient distance away from any such obstacles to provide the necessary clearance. After taking into consideration these factors, the siting point and scale of the turbine has been chosen from both an operational/technical and a visual impact perspective and has been sited in the proposed location to ensure that the turbine's operation is not affected by turbulence caused by the dwelling and farm buildings to the north and west but is sufficiently close to ensure the turbine is not viewed in isolation.
- 1.5 The main planning considerations are considered within this report in relation to local and national planning guidance alongside relevant planning case law.

## 2.0 The Site Details and Background

- 2.1 The application site is associated with High Wells Farm which is a farm within a small hamlet at Snowden Hill. The proposed turbine is positioned to the south of this hamlet and to the east of Dyson Cote within a field associated with High Wells Farm. The proposed turbine is indicated in the map below showing the turbine in relation to its surroundings:



- 2.2 As the name suggests Snowden Hill is a hill with High Wells Farm located just below the brow of the hill and the proposed turbine positioned on the higher ground level. The land then drops steeply to the south and with a reduced gradient to the north.
- 2.3 The nearest main settlements are Penistone over 2km to the north west and Stocksbridge over 2km to the south east. The site sits close to the boundaries of Sheffield and Barnsley Council but falls within Barnsley's boundaries.
- 2.4 The site has good access arrangements which would allow for the installation of the turbine to be accommodated with ease. 'B' class roads pass close to the site to the south, west and

north and a public footpath passes in the adjacent fields to the east. The actual siting of the turbine is approximately 20m from the nearest road to the south.

- 2.5 The farm is a working milking parlour and as a result of this they are using approximately 35,000kWh. There are also plans to double the size of the parlour thus increasing their energy usage to 70,000kWh. In addition to this, the new proposed Endurance turbine is set to generate approximately 190,000kWh - assuming wind conditions on the site are suitable for average generation.
- 2.6 It is worth noting that the above figures equate to average production/ consumption over a year and do not present an accurate picture of day to day energy usage at the farm, especially at times of peak energy demand. The Endurance turbine has been sized accordingly to help satisfy these peak demands, to enable the client to become further self-sufficient and protect him from (almost inevitable) rising energy costs in the future.
- 2.7 In addition to justifying the new Endurance turbine to meet peak energy demands, it is also worth noting that as previously mentioned our client is looking to further increase his demand for renewable energy in the context of an additional milking parlour. Although this would not match the output generated from the proposed turbine, the client's current and future energy demands far exceed the amount that would be generated by a smaller turbine that on average for this wind speed would only generate approximately 25,000kWh.
- 2.8 In the context of the above, the Endurance will go a long way in delivering a more dependable supply and help satisfy the farm's peak energy needs. The Endurance's comparable performance is key to this; possessing (in practise) lower cut-in and higher cut-out speeds when compared with that of smaller wind turbines. This is because despite similar manufacturer's specifications relating to cut in/ cut-out thresholds, we have learned through experience that the Endurance's larger swept area and higher hub height aids its earlier cut in speed, compared to that off for example the Gaia's. To our current working knowledge, the Endurance is also able to carry on producing energy at higher wind speeds when compared to the performance of Gaia's.
- 2.9 Overall, we are confident that the Endurance turbine will help meet the peak energy needs of High Wells Farm (in light of the additional renewable capacity it should provide) and improve the security of renewable energy supply due to its comparatively better

performance. The Endurance will also help the client secure their commendable aspirations to create another milking parlour.

- 2.10 Overall, we feel the Endurance will reduce the client's current reliance on unsustainable energy prices, and also reducing their overall carbon footprint and help the local authority meet its renewable energy requirements

## 3.0 Planning Policy

3.1 The Government's statements of planning policy are material considerations which must be taken into account, where relevant, in determining planning applications. These statements cannot make irrelevant any matter which is a material consideration in a particular case, but where such statements indicate the weight that should be given to relevant considerations, decision makers must have proper regard to them. One particular consideration which will be teased out in this report is the weight which should be given to the appropriateness of development both within the countryside and any specific landscape designation versus the weight associated with the wider environmental benefits of a wind turbine.

3.2 Planning Policy Statement 22: Planning for Renewable Energy (PPS22) was issued in 2004 along with its associated 'Companion Guide'. PPS22 sets the objective based criteria that must be applied by local planning authorities in deciding individual planning applications to generate energy from wind. In particular, the following elements of PPS22 are seen as relevant to this case:

**Key Principle V1:** Small-scale projects can provide a limited but valuable contribution to overall output of renewable energy and to meet energy needs both locally and nationally. Planning Authorities should not therefore reject planning applications simply because the level of output is small.

**Paragraph 11:** "Small scale developments should be permitted within sensitive landscape areas such as National Parks, Areas of Outstanding Natural Beauty and Heritage Coasts, providing there is no significant environmental detriment to the area concerned".

**Paragraph 20:** Of all renewable technologies, wind turbines are likely to have the greatest visual and landscape effects. However, in assessing planning applications, local authorities should recognise that the impact of turbines on the landscape will vary according to the size and number of turbines and the type of landscape involved.

3.3 Planning Policy Statement 7: Sustainable Development in Rural Areas (PPS7) draws attention to the Government's objectives for the countryside and sets out the key principles of raising the quality of life in rural areas. Within PPS7 Paragraph 16 (iii) / (iv) states that amongst these principles are promoting good quality, sustainable development that support

development that provides for the sensitive exploitation of renewable energy sources in accordance with the policies set out in PPS22.

- 3.4 Planning Policy Statement 1: Delivering Sustainable Development, Planning and Climate Change (PPS1) - Supplement to PPS1, sets out how planning should contribute to reducing emissions and stabilising climate change and take into account the unavoidable consequences. It notes that tackling climate change is a key Government priority for the planning system.
- 3.5 Planning Policy Statement 5: Planning and the Historic Environment (PPS5) superseded Planning Policy Guidance 15 (PPG15). The overriding principles of PPS5 seek to preserve and conserve heritage assets such as Listed Buildings and they do encourage developments which enable such preservation. General planning standards should still be applied sensitively in the interests of harmonising the new development with its setting and this approach has been taken with the number of turbines, the location and height.
- 3.6 Green Belts have been perhaps the best known feature of the planning system since the 1950's and continue to command widespread support. The protection of the Green Belt is an overriding planning consideration and one, which, in the case of most forms of development, strongly militates against the granting of planning permission. However, having been a feature of the planning system since the 1950's the policies and traditional considerations applied to development within the Green Belt are not necessarily up to date with the ever changing climate change issue and weight should now be given to the environmental benefits from proposals such as wind turbines against the background of Green Belt policies. Very special circumstances will be required to justify instances where this presumption against development should not apply.
- 3.7 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. Notwithstanding this, PPG 2 – Green Belts does stipulate that *'Very special circumstances to justify inappropriate development will not exist unless the harm by reason of inappropriateness, and any other harm, is clearly outweighed by other considerations.'* Given the national planning policy context outlined previously and the greater emphasis that is now placed within the planning

system on renewable energy provision, it is considered that the environmental benefits of small scale renewable projects such as this would represent 'very special circumstances'.

- 3.8 Consideration on the local level with regards to the Green Belt issue is given to Policy GS7 of the Barnsley Unitary Development Plan which seeks to safeguard against inappropriate development in this locality and specifies that development will not be permitted within the Green Belt unless it maintains openness and does not conflict with the purposes of including land within the Green Belt. Policy GS9 requires that development within the Green Belt should not by reason of its siting, materials or design, result in significant harm to the visual amenity of the Green Belt. As highlighted the thrust of policies GS7 and GS9 all align with the provisions of PPG2 and the over whelming guidance contained within case law is that wind turbines in principle are acceptable in Green Belts.
- 3.9 The application site is also within the designated areas of Borough Landscape Value which are recognised as being of higher landscape quality than other countryside areas. The Areas of Borough Landscape Value are also in the Green Belt and development will therefore be limited to that which is appropriate in such areas in accordance with Policy GS8 previously referred to. Because of the special quality of these areas, any development which is acceptable should conserve the character of the area, and should, wherever possible, positively enhance the environment through its location, siting, scale, design, materials and landscaping.
- 3.10 Policy GS13 states that in areas designated as being of borough landscape value on the proposals map conservation and enhancement of the landscape will be extremely important considerations. Subject to policy GS8, development will only be allowed if:
- a) There is no loss of valuable landscape features
  - b) The nature, form and design of the development is sympathetic to the area
  - c) The overall character and appearance of the area is conserved and wherever possible enhanced.
- 3.11 Of particular importance to the assessment of this application is policy ES12 which sets out the Council's requirements for proposals that seek to develop wind energy generation. Such proposals will be assessed with regard to the following factors:

- Effect both individually and cumulatively upon landscape and the visual amenity of the area;
- The impact on residential amenity with reference to noise, visual outlook, shadow flicker and flashing from the turbine blades;
- Provision of satisfactory access to the highway network having regard to visual amenity, highway capacity and safety;
- Effect on wildlife, ecology and archaeology;
- Effect on agricultural land uses;
- Electro-magnetic effects;
- The provision for connection to the electricity transmission and supply system;
- The effect of shadow flicker or flashing from turbine blades.

3.12 Policy ES12A outlines the importance of using appropriate technology and design for all wind generator proposals. Policy ES1C states that the council will control development in the vicinity of existing wind generation installations so as to safeguard these from a reduction in local wind speeds.

3.13 Finally of more general relevance is policy BE6 which sets out design standards for all development. Proposals will be assessed in terms of:

- The quality of layout and the suitability of the scale of the development;
- The use, quality, design and landscape treatment of open land within the site and the area around buildings;
- The standard of detailed design and facing materials of proposed buildings;
- The suitability of the whole development for its proposed context and its relationship with adjoining land uses

## 4.0 Consideration

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

### Landscape and Visual Impact Assessment

4.2 The proposed wind turbine would be positioned to the south of the farmstead and would measure 24.6m m high to the hub, with the blades reaching a tip height of 34.2m. In this location on the hillside and at this height the turbine would be visible and would to an extent change the appreciation of this site within its surrounding context. 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 photomontages and the theory outlined in the document 'Guidelines for Landscape and Visual Impact Assessment'(2002) and Appendix A of this report outlines the approach taken here within this assessment.

### Landscape Character Assessment

4.3 The study area lies within Character Area 37 'Yorkshire Southern Pennine Fringe' as defined in The Countryside Commission's Countryside Character. The key characteristics of area 37 'Yorkshire Southern Pennine Fringe' are as follows:

- Eastern slopes of the Pennines, dropping from upland in the west down to the east, dissected by numerous steep-sided valleys;
- Extensive urban influences from the matrix of large and small towns;
- Close conjunction of large-scale industry, urban areas and transport routes with open countryside;

- Predominance of local sandstone and 'gritstone' as a building material notably in large and dominant industrial buildings;
- Urban development mainly confined by valleys creating dramatic interplay of views between settlements and the surrounding hillsides;
- Predominantly pastoral farming with strong linear patterns of walled enclosures on plateaux;
- Predominantly broadleaved woodlands on steep valley sides forming important backdrops to industrialised areas;
- Impression of a well-wooded landscape even though tree cover is relatively sparse overall;
- Dense network of roads, canals and railways.

4.4 The site is also located within the Green Belt where there is a presumption against inappropriate development and core aim of maintaining the openness of the area. The surrounding area is undulating in nature which places limits to far reaching views but the urban development of Penistone and Stocksbridge confined within the valleys do have an interaction with these surrounding hillsides including Snowden Hill. There would be some changes in the landscape character of the area, but these would be relatively minor and confined to the micro scale associated with the change in view of Snowden Hill. The key characteristics of the overall landscape would remain intact, for example the interplay between the human features associated with urban settlements, industry and the more natural features associated with the hillsides, woodland and openness. The significance of the effect of the scheme on the landscape character is concluded as being No Change, as the small negative change with the introduction of a single turbine would not in essence change the key characteristics of the landscape.

### **Landscape Visual Impact**

4.5 An assessment has been made of the visual impact from key public vantage points around the site taking into account the proximity to public highways, public right of ways, neighbouring properties etc. Attached as Appendix B is a map illustrating the locations of vantage points assessed. The following table demonstrates this impact from key areas:

| <b>Table Showing the landscape and visual impact on the openness of the Green Belt</b> |   |  |                                 |                            |                          |
|--|---|--|---------------------------------|----------------------------|--------------------------|
| <b>Site/Feature</b>  | <b>Location and Distance from Turbine</b> | <b>View and Assessment</b>   | <b>Receptor Sensitivity</b>     | <b>Magnitude of Impact</b> | <b>Impact Assessment</b> |
| Vantage Point 1 – Tofts Lane   | Approximately 20m to the south            | The turbine would be very prominent in close up views and seen to the north of the road beyond the stone wall as a skyline feature. Any view would be transient in nature as the users passes.   | Medium as attractive rural lane | High                       | Moderate Adverse         |
| Vantage Point 2 – Long Lane  | Approximately 1.3km to the north west     | The land gently rises towards the site from this view however the vista is dominated by a number of pylons lined in two rows. The proposed turbine would be set over the brow of the hill on the southern side and as such the entirety of the turbine mast would not be visible from this vista. Set in this context the turbine would be lost and would not dominate the vista.                        | Medium as attractive rural lane | Low                        | Slight Adverse           |
| Vantage Point 3 – Pond Common Lane   | Approximately 560m to the north east      | This view is on the lower level and the hamlet is evident on the horizon and the turbine would be viewed in the same vista however over the brow of the hill on the southern side and thus the entirety of the turbine mast would not be visible. The vista is littered with pylons and telegraph poles and the linking wires such that a single turbine could be accommodated without significant harm. | Medium as attractive rural lane | Medium                     | Moderate Adverse         |

|   |                                      |  |   |            |                  |
|---|--------------------------------------|--|---|------------|------------------|
| Vantage Point 4 – Manchester Road, Stocksbridge | Approximately 1.4km to the south     | Due to the mature tree belt that line Manchester Road there are no far reaching views towards the site and as such the turbine would be screened.  | High due to residential properties that share this view | Negligible | Negligible       |
| Vantage Point 5 – A616                          | Approximately 900m to the south      | Due to the topography of the land which rises towards the application site in stages, the site can not be seen from the A616 and as such the turbine would not be appreciated.   | Low Sensitivity due to general road user                | Negligible | Negligible       |
| Vantage Point 6 – Dyson Cote Lane               | Approximately 360m to the north west | The turbine would be viewed over the brow of the hill and so the entirety of the turbine mast would not be visible from this closer vantage point. It would also be viewed with Dyson Cote immediately to the right and so would not be seen as an isolated structure. Furthermore it would be seen with the backdrop of pylons of a far greater scale. The turbine at the height proposed and on the lower ground level over the brow of the hill would be subservient in scale with these taller more dominant structures. | Medium as attractive rural lane                         | Medium     | Moderate Adverse |

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

4.7 Due to the narrowness of the turbine and the relatively modest height in comparison with the larger pylons which would invariably share the vista, it is considered that the turbine could be accommodated within this landscape. The introduction of a single turbine would not see a significant loss of openness associated with the Green Belt and the benefits of the renewable energy generated would act as an exceptional circumstance outweighing any harm by inappropriateness. There is unlikely to be any longer distant view of the turbine

which would be of significance due to the topography and intervening trees and buildings. This aids in ensuring that any harm is minimised and constrained to the local scale.

### **Cumulative Landscape Impact**

- 4.8 Any cumulative impact is likely to be derived from the strong visual presence of pylons in the landscape rather than any other wind turbine or wind farm. However whilst this application would see the introduction of another vertical structure which would be invariably viewed against the same context as the pylons it is considered that the difference in scale is a significant determining factor in assessing cumulative harm. Particularly in this case where the turbine would always be viewed as a subservient structure and although more detached from the farmhouse in this application than the initial its functional use would still be understood as serving a local need rather than the pylons which offer more broader infrastructure benefits.
- 4.9 Based on the above assessment the turbine would not significantly alter the character of the local landscape as previously defined, thus the character of the landscape would be retained and the turbine would not result in a significant loss of openness. Visual impact has been mitigated through the careful siting in order to ensure the development adheres to PPS22
- 4.10 Whilst it is accepted that there is some, albeit limited harm in the moderate and slight adverse categories primarily from close up vantage points, the majority of public aspects would see a much reduced impact and when this is balanced against the positive benefits associated with the introduction of the renewable energy provision, it is considered that this application should be considered favourably and can be accommodated without compromising the overriding characteristics of this landscape and the associated planning policies.

### **Neighbour Impact**

#### **Shadow Flicker**

- 4.11 The chosen siting point of the turbine is approximately 210m from the nearest residential property Dyson Cote and Chapel Farm, which is amply sufficient to prevent adverse impact on any residential dwelling. Shadow flicker is defined as obstructions to light incurred when

the blades of the wind turbine cause light pollution when sited in close proximity to buildings, typically to the west or east of the turbine. PPS22 advises that 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 190m of the turbine and as such this turbine has been sited in order to respect the relationship with neighbours.

## **Noise**

- 4.12 Attached with the application documents is a noise survey undertaken in relation to the Endurance E-3120 Wind Turbine according to IEC 61400-11 at East Ash Farm, Bradworthy, Devon, to measure the sound power level and tonal characteristics. The apparent sound power level of the wind turbine was calculated over a range of wind speeds from 3-12m/s together with the one third octave band levels for wind speeds of 6-8 m/s. It was not possible to calculate the 1/3 octave sound power levels above 8m/s due to the contribution of background noise. The tonal output from the Endurance E-3120 turbine has been assessed using the methodology prescribed by IEC 61400-11 for wind speeds of 6-10 m/s and has been determined to be not tonal, except at a wind speed of 6m/s where tones were identified. In the case of the siting point of the wind turbine, the nearest residential property is approximately 210m from the wind turbine and therefore noise emissions are unlikely to present a concern in this case.

## **Visual Impact from Neighbours**

- 4.13 There are neighbours that are positioned within the area such as Dyson Cotes, Lower Dyson Cotes, Chapel Farm, Wendhome and Tenter House amongst others. All of these will have an appreciation of the turbine from their respective gardens though at a reasonable distance of over 210m. This revised application has also improved the visual relationship with the turbine due to the new position further south such that it is not within the direct line of sight of the closest neighbours. The orientation of many of these neighbouring properties such as Lower Dyson Cotes is such that it does not have a direct inter relationship with the siting point of the wind turbine. Indeed Lower Dyson Cotes is positioned with a north south orientation of its principle elevations. The farm buildings at Dyson Cotes are also positioned in between acting as a buffer. At the distances involved and the height it is considered that the turbine is unlikely to be overly intrusive in terms of neighbour amenity and simply being

visible in its self is unlikely to harm the living conditions enjoyed by the occupants of these properties.

### **Electromagnetic Interference**

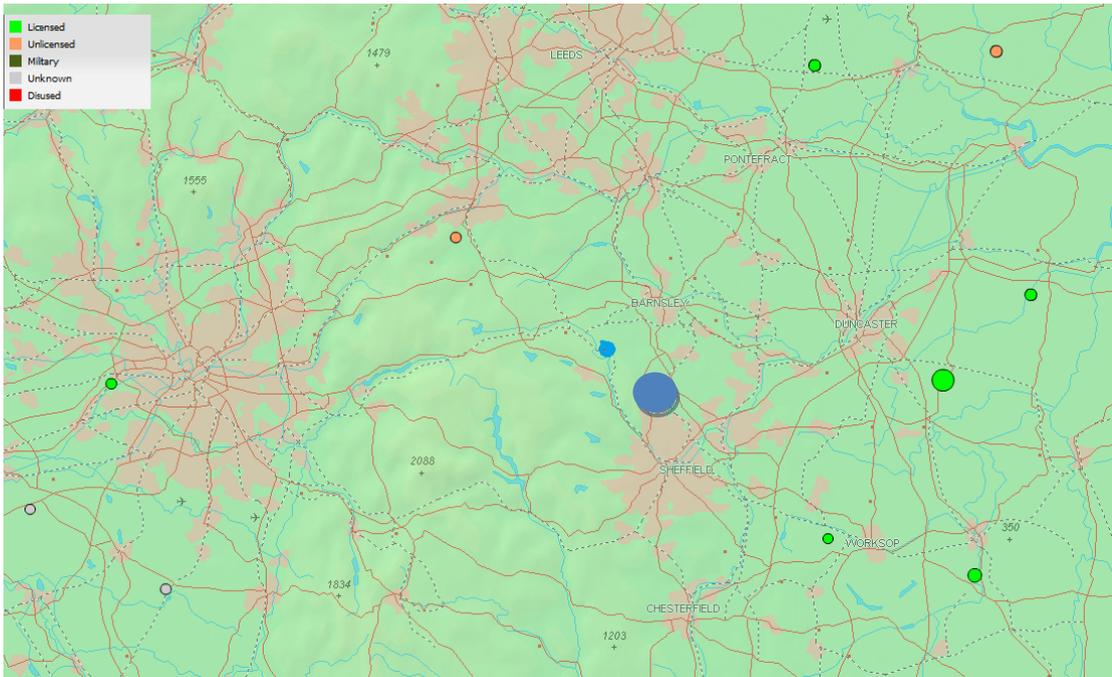
- 4.14 The wind turbine's switch gear has been fully tested to ensure compliance with the UK standards, thus ensuring that the main source of electromagnetic interference from other wind turbines is avoided. The digital TV network in the UK is not affected by electromagnetic interference which was previously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

### **Proximity to Electrical Power Lines**

- 4.15 The guidelines set out by NEDL (Distribution Network Operator) indicate that the installation of a wind turbine is acceptable at over 10m from any power line. As can be seen on site, this application would therefore fully comply with these expectations and the proposed wind turbine would have no impact on the distribution network.

### **Proximity to Airports and Flight Paths**

- 4.16 The nearest commercial airport is at Doncaster, which is a significant distance away and amply sufficient to ensure that the turbine would not impact upon that airport. The nearest airfield is an unlicensed airfield known as Crossland Moor and is indicated on the following plan. The application site is indicated by the blue circle.



4.17 As you can see in the above plan, the application site is located a significant distance to any licensed (green circle) or unlicensed (orange circle) airfield and there are no military (black circles) airfields within the vicinity. Given the significant distance to any main or small air field and having regard to the size of the wind turbine on this site and in relation to electricity pylons in the wider area which are higher, it is considered that the proposals would have no impact on flight paths or the operations of airports in the wider region. Indeed no objections were raised during the previous application submission on this matter further underlining this conclusion.

### Ecological Issues

4.19 The installation of the proposed wind turbine would result in no significant trees being removed due to the form and nature of the installation process. An appraisal of nearby designated sites has found the following within 10km of the application site:

#### Selected Local Nature Reserves

| Site Code | Name         | Area (Ha) |
|-----------|--------------|-----------|
| 1009581   | WHEATA WOODS | 65.27     |

|         |                          |       |
|---------|--------------------------|-------|
| 1009580 | WHARNCLIFFE HEATH        | 48.95 |
| 1009900 | WORSBOROUGH COUNTRY PARK | 62.82 |
| 1008867 | DEARNE VALLEY PARK       | 49.33 |
| 1009078 | POTTER HOLES PLANTATION  | 8.66  |
| 1008884 | ELSECAR RESERVOIR        | 13.64 |
| 1083118 | TOWN END COMMON          | 8.43  |

#### Selected Special Areas of Conservation

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

#### Selected Special Protection Areas

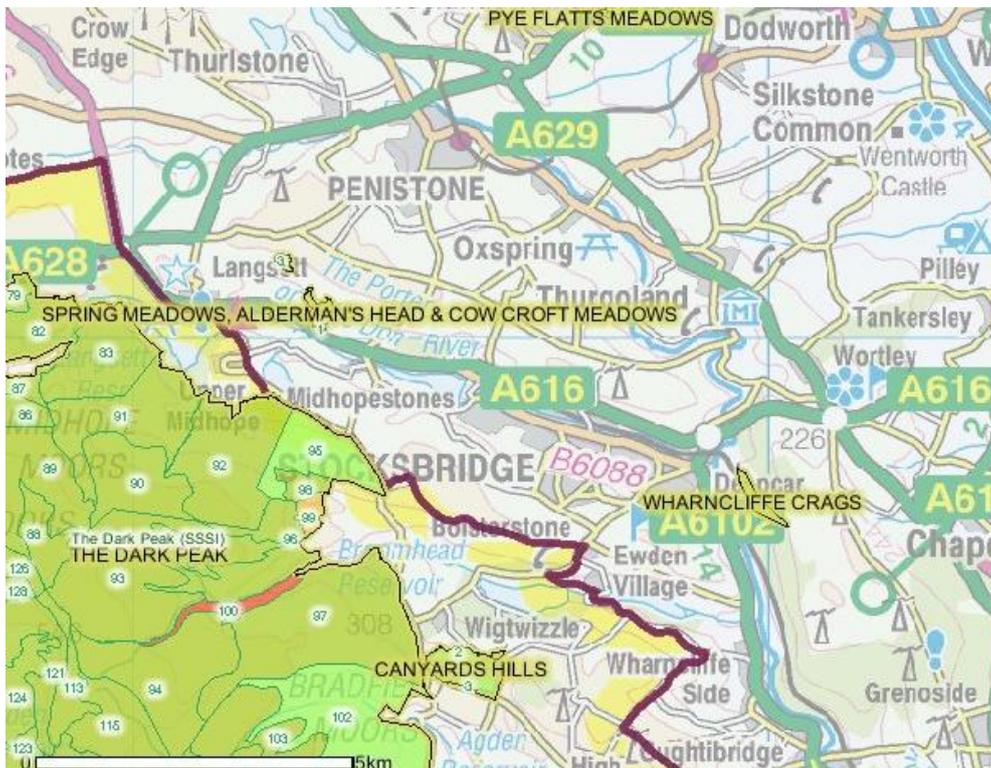
| Site Code | Name  |
|-----------|---|
| UK9007021 | PEAK DISTRICT MOORS (SOUTH PENNINE MOORS PHASE 1) |

#### Selected Sites of Special Scientific Interest

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

|         |                   |       |
|---------|-------------------|-------|
|         | CROFT MEADOWS     |       |
| 1002361 | CANYARDS HILLS    | 65.62 |
| 1004022 | WHARNCLIFFE CRAGS | 15.6  |

4.20 Although there are a number of ecological designated sites within the broader area, the application site is not located within a specifically designated site ensuring that no direct habitat loss would occur. The following map illustrates those closest.



4.21 Wind farms or individual turbines can affect birds in three main ways: collision, disturbance displacement and direct habitat loss. As can be seen there is a greater proliferation of designated sites to the south west associated with the Dark Peaks and whilst birdlife will travel there is unlikely to be any significant ecological linkages between these sites and the application site due to the proximity of urban settlements in between and the rows of pylons in close proximity to the application site. In this respect it is considered that the likely impact from collision, disturbance and displacement would be minimal and confined to the field locality rather than any wider significant impacts.

- 4.22 Natural England has produced a Technical Information Note TIN051 in light of the Eurobats Agreement, entitled 'Bats and Onshore Wind Turbines'. This report summarises the potential impacts of wind energy developments on bats and TIN051 recommends that wind turbines are unlikely to affect bat populations where a 50m buffer is maintained from foraging habitat. In this location the field boundaries are stone walls and as such there is little habitat for foraging bats. The most likely foraging area is the small woodland over 200m to the west of the turbine. This wind turbine is therefore positioned outside of the buffer zone required by Natural England and it is thus clear that the proposals would not result in any significant impact on possible bat populations.
- 4.23 Both the RSPB and Natural England are generally supportive of wind turbines and the role they play in sustaining the country's energy demands. 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 one individual wind turbine can be sensitively sited so as to ensure that the proposals would not result in any adverse impact on ecological issues.

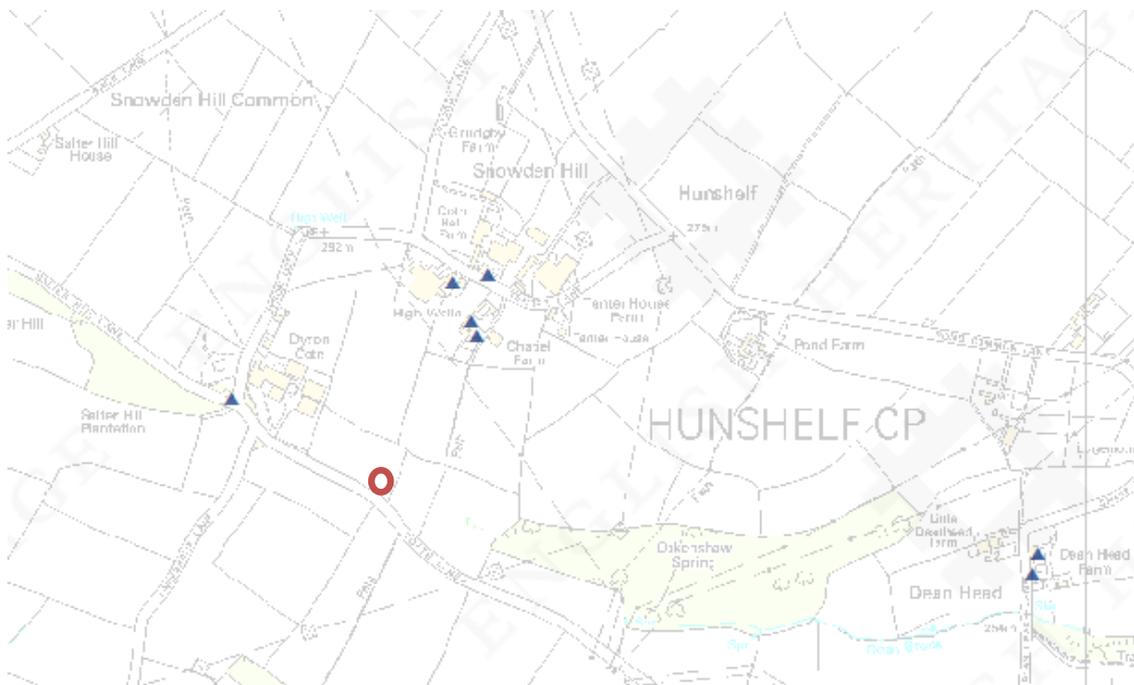
### **Archaeological Implications**

- 4.24 The South Yorkshire Sites and Monuments Record is a record of the known archaeology of the districts of Barnsley, Doncaster and Rotherham and of the City of Sheffield. A search of this record has found the following site within close proximity to the application site:
- Milestone at Dyson Cote Stoop, Langsett
- 4.25 The Milestone, known as collectively guide stoops, were ordered to be set on the highways across the moors by the West Riding Justices of the Peace in 1700. It was further ordered in 1733 that stoops should be erected at minor crossroads on the edge of the moors, pointing the way to hamlets and even to isolated farms. In 1738, distances were ordered to be shown. Most stoops have 4 sides; the Dyson Cote stoop, however, has 6. These are marked "Barnsley & Pontefract 1734/Doncaster/Wakefield & Leeds/Penistone, Hathersfield & Hallifax/Woodhead & Mottram/Underbank & Bradfield/ Sheffield & Rotherham. There is no reason though to suggest that this feature would mean that archaeological records may be

present within the application site. The proposals will involve some ground excavations when the foundations are laid and turbine installed, however if any findings are discovered during ground work appropriate steps as required will be taken to ensure that no damage occurs. However it is considered unlikely that this would be an over riding issue.

### Heritage Assets

4.26 As with any application, consideration should be given to any impact on the character of heritage assets, be they listed buildings or conservation areas. In this case as can be seen in the map below the properties around Snowden Hill contain a number of individual listed buildings.



4.27 The Milestone previously referred to in paragraph 4.25 is highlighted in the above map to the west of the turbine beyond the farm. The cottage at High Wells Farm approximately 10 metres to the west of a new farmhouse along Tenter Lane is a grade II listed building constructed in the late 18<sup>th</sup> Century though is noted within the listing as possibly being of earlier origin. The building is a two storey dwelling and has coursed square rubble external walls with a stone slate roof. The cottage has a close interaction with Tenter Lane but has little direct interplay with the turbine location which has been positioned over the brow of the hill on the southern slope providing a strong detachment. The cottage is also positioned

on an east west axis meaning that the turbine would not be visible from within the listed building.

- 4.28 Chapel Farmhouse including a chapel to the south and barns are also grade II listed and are located approximately 250m from the proposed turbine. The buildings are listed for their architectural vernacular and heritage associated with the small simple Church of England chapel. These buildings date back to the Late C18 or early C19 and are constructed with squared stone and stone slate roofs. The buildings are attached in an 'L' shape and orientated inwardly away from the turbine's proposed location. In this respect the turbine would be placed outside of the setting of these buildings and would not have a direct inter relationship with these features though would likely be visible from the curtilage. The extent of visibility is reduced though in this revised application due to its positioning over the brow of the hill on the southern slope. The farmhouse is also positioned on a rough east west axis meaning that the turbine would not be prominent from within the listed building.
- 4.29 Having regard to the above whilst heritage assets do exist in the vicinity the nature, location and orientation of these listed buildings is such that the proposed wind turbine would not impact directly or intrude significantly into their respective settings. In this respect it is considered that the impact on heritage assets would be acceptable.

### **Loss of Agricultural Land**

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

### **Installation of the Turbine and Access Arrangements**

- 4.31 The temporary works required to install the turbine are limited. If granted we would be happy to accept a condition that any works to the land be reinstated following the installation of the turbine. In order to install the cabling for the turbine to connect to the grid some ground disturbance will be needed, however this will be temporary works, no trees would be removed and again the ground will be reinstated to its original condition upon laying the cable. Access to the site can be readily achieved via the local road network and there is considered to be no constraints therefore to the installation of the turbine from a practical sense.

## 5.0 Conclusion

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

- The proposed wind turbine would be positioned to the south of the farmstead over the brow of the hill on the southern slope in a location where the visual intrusion would be minimised and the turbine seen against the context of the pylons which dominate the landscape. Set against these features the turbine would appear subservient and not intrusive into the countryside.
- The proposed turbine would not be seen as an isolated feature within the countryside and the location below the horizon would ensure that the entire turbine mast is not skylined.
- It is acknowledged that under strict Green Belt guidance, a wind turbine is considered inappropriate development in principle, however, in line with recent appeal decisions and case law there are exceptional circumstances in the form of providing renewable energy and assisting the UK's commitment to addressing climate change which outweigh Green Belt planning policy.
- The scale and location of the wind turbine would be such that the impact on nearby residential properties would be negligible with any impact confined to a visual appreciation of its siting. The revised application has sought to improve this relationship from the initial submission through its positioning further south on the lower ground level. It is thus considered that the amenity of neighbouring properties would be maintained.
- Whilst heritage assets do exist in the vicinity the nature, location and orientation of these listed buildings is such that the proposed wind turbine would not impact directly or intrude significantly into their respective settings. In this respect it is considered that the impact on heritage assets would be acceptable.
- There are no other material planning considerations that would outweigh the overriding benefits of this proposal in providing a renewable energy source and the long term environmental benefits this brings.

5.2 Having regard to the above and all other matters, it is considered that the proposed development meets the expectations of policies of the Development Plan and other policy guidance including specifically the provisions of PPS1, 5, 7 and 22. 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:

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

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

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

**Sensitivity:**

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

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

**Magnitude of Impact:**

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

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

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

| <b>Sensitivity</b> |   | <b>Magnitude</b> |   | <b>Significance</b> |
|--------------------|---|------------------|---|---------------------|
| 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: LOCATIONS OF VANTAGE POINTS ASSESSED

| Description      | Grid Reference | X      | Y      | Latitude  | Longitude  |
|------------------|----------------|--------|--------|-----------|------------|
| Turbine Location | SE 25989 00298 | 425989 | 400298 | 53.498744 | -1.6096924 |
| Vantage Point 1  | SE 25985 00244 | 425985 | 400244 | 53.498258 | -1.6097546 |
| Vantage Point 2  | SE 25824 01589 | 425824 | 401589 | 53.510357 | -1.612072  |
| Vantage Point 3  | SE 26473 00553 | 426473 | 400553 | 53.501015 | -1.6023731 |
| Vantage Point 4  | SK 25867 98891 | 425867 | 398891 | 53.486105 | -1.6116428 |
| Vantage Point 5  | SK 25905 99289 | 425905 | 399289 | 53.48968  | -1.611042  |
| Vantage Point 6  | SE 25903 00647 | 425903 | 400647 | 53.501883 | -1.6109562 |

