AAH planning consultants

DESIGN & ACCESS PLANNING SUPPORTING STATEMENT

SHAFTON ADVANCED LEARNING CENTRE, COLLIER ROAD,

SHAFTON

PROPOSED SITING OF ONE 32M HIGH WIND TURBINE

(REVISED SCHEME)

Our Ref: AAH/1001/11PLA

February 2010

PLANNING SUPPORTING STATEMENT

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APPENDICES:

APPENDIX A – APPEAL DECISION

1.0 Introduction

1.1 This Statement sets out our analysis of the relevant planning policy principles which need to be considered in support of this application for the erection of one 32m high wind turbine at Shafton Advanced Learning Centre (ALC). The application should be viewed in the context of the Outline Planning Permission (reference 2009/1260) and Reserved Matters Approval (reference 2009/1361) for the ALC which is currently under construction on site.

1.2 This application is a resubmission, following the withdrawal of an application (2010/1225) for the erection of one wind turbine at a hub height of 34m (43m to blade tip) and the withdrawal of a planning application (2010/0065) for 3 No. 15kW wind turbines in February 2010.

1.3 This application is submitted following the concerns raised during the processing of the earlier application and has sought to mitigate concerns through the careful repositioning of the turbine on site and the choice of turbine. The proposed turbine would measure 32m to the hub (45.5m to blade tip).

1.4 The development proposal involves the provision of one 225KW turbine and associated infrastructure comprising the following specifically:

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

1.5 Image 1 on the following page indicates this wind turbine in plan form.

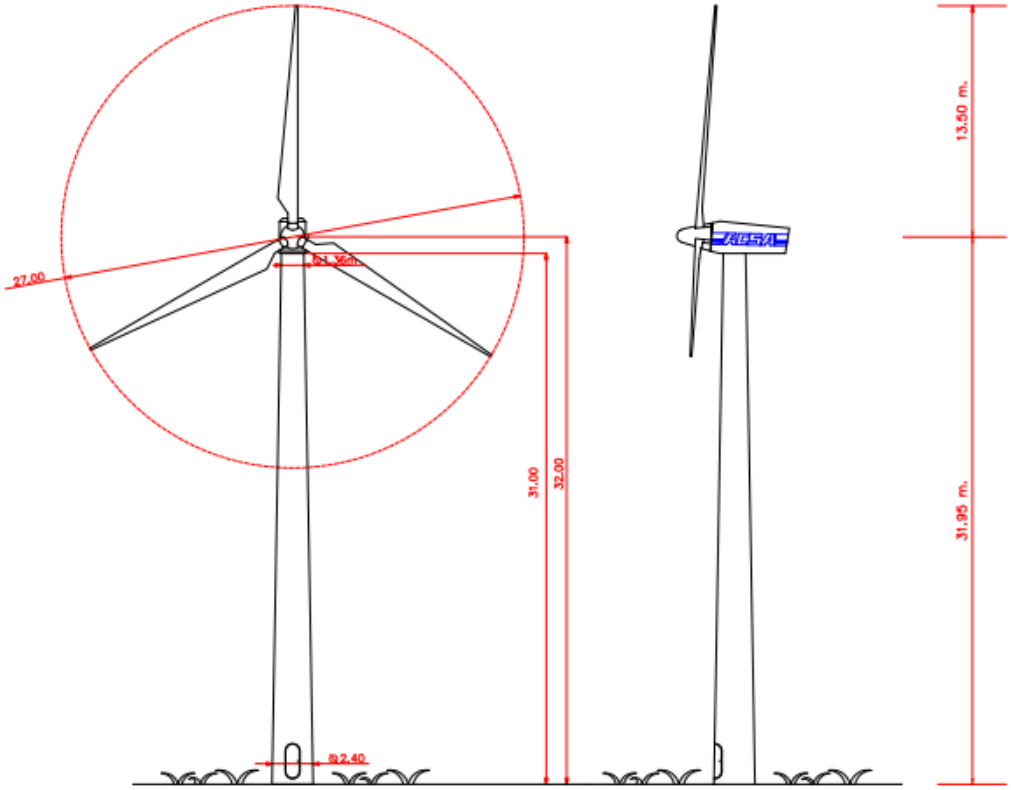


Image 1: Elevation Plan of the Turbine

1.6 The location of the proposed wind turbine has been determined following consideration of a number of factors including:

- Potential effects on the amenity of surrounding residential properties;
- Consideration of the requirements of statutory consultees, in particular Sport England and Natural England;
- Pre application discussions with the Local Planning Authority;

1.7 In line with the requirements of the 1999 EIA regulations, a screening letter on the need for an Environmental Impact Assessment (EIA) of the proposals, accompanies this application. It is considered that whilst the proposal is Schedule 2 development by virtue of the turbine's height, it is not EIA development. The site itself is not sensitive as defined by the regulations.

1.8 The proposed development would be located within land leased by the Shafton Advanced Learning Centre, where the principle of renewable energy provision is considered and has been previously determined to be acceptable. The main planning considerations are considered within this report in relation to local and national planning guidance alongside relevant planning case law.

2.0 Technical Details of the Proposed Turbine

2.1 The ACSA – A27 is a modern three bladed, high performance, reliable midsize 225kW wind turbine with each blade measuring 13.50m. Full specification details can be found within the table in Image 2 below:

Supplier / manufacturer:	**ACSA**
Output:	**225 KW**
Cut - in wind speed:	**3.5 m/sec.**
Cut - out wind speed:	**25 m/sec.**
Nominal wind speed:	**13,5 m / sec.**
Fast passive power regulation:	**Pitching (Blade angle adjustments)**

Image 2: Table outlining the technical specifications of the wind turbine

2.2 The wind turbine will be installed by appropriately trained and qualified engineers and electricians. Prior to installation a geological survey will be undertaken to determine the strength and composition of the sub soil in preparation for the foundation base of the wind turbine. The detailed design of the foundation depends on the sub soil composition. An anchor set in concrete and large anchor bolts secure the foundation structure to the base of the mast.

2.3 Installing in this manner ensures that minimal earthworks are required to install the turbine on site.



Image 3: Installation of the Turbine

2.4 The siting of the turbine would be approximately 150m from Engine Lane to the east of the turbine. Temporary access would be required to facilitate the installation, however once installed this may be grassed over and returned back to the existing ground conditions.

2.5 The proposed wind turbine mast will be treated in a white colour as this is generally perceived as being more aesthetically pleasing and non-obtrusive than green, brown and black against rural backgrounds (trees, hedges, fields, leaves etc) and also against the skyline of grey and blue in this country. This is the reason other masts which are widely distributed throughout the UK such as lampposts, pylons, signage posts, lightning conductors and other masts, utilise the same colours. The above colours are widely accepted by Planners across the UK and generally blend into a rural background with minimal visual impact.

3.0 The Site Details

3.1 The application site forms a new ALC which has been granted Outline and Reserved Matters Approval and is currently under construction. The site is to be constructed with the school buildings located towards the north of the site with playing fields and open space being situated in the southern portion of the site.

3.2 The proposed wind turbine is sought to be positioned at the southern end of the site, beyond the area identified for playing fields and open space and currently used as agricultural land.

3.3 The area encompassing the school site extends to 11.17ha, 2.5ha of which is for the buildings and access, and the remaining 8.67ha is for playing fields and open space. The school site extends at its eastern side from Engine Lane and Hazeldene Farm and from Collier Road to the north and fields to the south and west. Collier Road to the north represents the main access point to the ALC and is also the main A628 which links the site with the urban areas of Shafton to the north and Cudworth to the west.

3.4 The eastern boundary of the ALC site wraps around Hazeldene Farm which comprises a farmhouse and some outbuildings and is positioned approximately 250m to the north east of the wind turbine. This neighbouring property and Home Farm to the south east, represent the nearest neighbouring properties and are both located approximately 250m from the site of the proposed wind turbine. Both these properties are accessed off Engine Lane and do not have principle elevations facing the proposed wind turbine.

3.5 The ALC site slopes gently to the south parallel with Engine Lane and this has subsequent implications in the prominence of the proposed wind turbine as highlighted in the accompanying Landscape and Visual Impact Assessment. The approved ALC buildings are located on the higher ground level and face down towards the wind turbine. A line of pylons dissect the site running generally in a north-south line and any turbine would be seen against the context of these pylons.

3.6 Access to the site of the proposed turbine is likely to be straight from Engine Lane to the east of the proposed turbine and this will give the quickest and easiest access to the site. The actual siting of the turbine is approximately 100m from this road.

3.7 The application site is not located within a Conservation Area, however the site is within a Green Belt and subsequently the issues relating to the openness of the Green Belt require due consideration.

3.8 A copy of the plan, as set out in the accompanying planning documents illustrates the proposed siting.

4.0 Planning Policy

4.1 In order to understand the planning policy context associated with this forthcoming application for a wind turbine, it is necessary to consider the background context of energy use and how this has led to a fresh approach when dealing with renewable energy and particularly wind turbines.

4.2 In the UK around 90% of energy needs are met by oil, gas and coal. Fossil fuels are forecast to supply most energy needs by 2020. However, between 2004 and 2030 world demand for energy (on current trends) is forecast to increase by 53%. In addition, the concentration of global oil and gas reserves in relatively few locations brings issues of security of supply. Furthermore, as the UK's resources continue to decline, the UK will become more dependent on imports, hence the need for an increased use of renewable energy resources.

4.3 The UK's mix of generation capacity and reliance on coal and gas has meant that electricity generation in the UK has accounted for around one third of the UK's total carbon emissions. The UK needs to radically increase its use of renewable energy. Firstly, the impending threat of dangerous climate change means we urgently need to reduce our emissions of carbon dioxide and other greenhouse gases. A new focus on renewable energy will play a key role in this, as touched upon within this report, together with the carbon capture and storage and policies such as the EU Emissions Trading System and energy saving measures. At the same time, the growth in global demand for energy over the next few decades, and the depletion of our North Sea oil and gas resources, means that we need to re-think our approach to sourcing and using energy. Turning to renewables will help the UK recover some of its energy self-sufficiency, while assuring that more of our imported energy comes from reliable sources. Finally, as the entire world gears up for the transition to a new, low-carbon future, the UK needs a robust and thriving renewable energy sector to maximise the economic and employment opportunities this will inevitably bring. In this context, planning policy has been shaped recently to allow for an increase in the use of alternative power sources including, notably, wind farms and individual wind turbines as a mechanism to delivering this robust, thriving renewable sector.

4.4 The Government's policy on energy use is set out in the Energy White Paper (DTI, 2007). This sets the base from which all other planning policy principles on renewable energy have followed. This White Paper aims to:

- Cut the UK's carbon dioxide emissions
- Maintain the reliability of energy supplies
- Promote competitive markets
- Ensure that every home is adequately and affordably heated

4.5 In this context, renewable electricity generation can make a significant impact and the White Paper aims for 20% of electricity to be supplied by renewable generation by 2020. In terms of distribution, the White Paper envisages the possibility of a more decentralised low carbon energy system with more local energy supply and greater use of renewables, which it suggests could reduce losses arising from the transmission of centrally-generated electricity. This application would thus directly accord with the principles behind the White Paper and would enable a local energy supply which would be entirely decentralised.

4.6 The Energy Act 2008 contains provisions to implement legislative aspects of the 2007 White Paper. In particular, it includes the following provisions:

- A regulatory framework to enable private sector investment in carbon capture and storage (CCS)
- A strengthened UK Renewables Obligation to bring about greater and speedier deployment of renewable energy
- The introduction of feed-in tariffs to support low carbon electricity generation for projects up to 5 megawatts (enabling a guaranteed payment for generation)

4.7 This Energy Act set the framework through which the feed-in tariff has now been released and this application would realise one wind turbine which would be eligible for this tariff.

4.8 Planning applications must be determined in accordance with the Statutory Development Plan, unless material considerations indicate otherwise. If the Development Plan contains

material policies or proposals and there are no other material considerations, the application should be determined in accordance with the Development Plan. Where there are other material considerations, the Development Plan should be the starting point and other material considerations should be taken into account in reaching a decision. One such consideration is whether the planning policies are relevant and up to date. The Act provides that if there is a conflict between policies in adopted national planning guidance or policies in a Development Plan Document, the most recent policy will take precedence and weight attributed accordingly.

4.9 Barnsley Council has, at this stage, not produced a Local Development Framework and following the recent intention to remove the Regional Spatial Strategies, the most up to date local planning document is the Barnsley Unitary Development Plan and the saved policies within, which were saved in 2007. This plan is considered to be somewhat out of date for the ever changing climate change issue and there are a number of relevant national planning policy principles which are not fully reflected within this local planning document.

4.10 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 within the countryside and any specific landscape designation versus the weight associated with the environmental benefits of a wind turbine.

4.11 Planning Policy Statement 22: Planning for Renewable Energy (PPS22) was issued in 2004 along with its associated 'Companion Guide'. These two documents provide the national planning framework which sits against the context of the White Paper and Energy Act previously referenced, from which local planning authorities must decide on individual planning applications. The ministerial statement made by Yvette Cooper formalised government support for PPS22, it also encouraged local planning authorities to include in their local development frameworks policies requiring new developments to generate at least 10% of their own energy from on site renewable sources.

4.12 The Government believes that climate change is the greatest long-term challenge facing the world today. Addressing climate change is therefore the Government's principal concern for sustainable development. Policies and priorities for action, both in the UK and internationally, are set out in the Climate Change Programme and the report of the 2006 Energy Review. 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 18: Local planning authorities and developers should consider the opportunity of including renewable energy in all new developments. Small-scale renewable energy schemes utilising technologies such as solar panels, Biomass heating, small-scale wind turbines, photovoltaic cells and combined heat and power schemes can be incorporated both into new developments and some existing buildings. Local planning authorities should specifically encourage such schemes through positively expressed policies in local development documents.

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.

4.13 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, encouraging more sustainable use of land, and to diversify and promote growth in rural areas.

4.14 Within PPS7, Paragraph 16 (i) / (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.

4.15 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. Core Strategy Policies should be designed to promote and not restrict renewable and low carbon energy and supporting infrastructure. A proposal that will contribute to the delivery of the Key Planning Objectives set out in this PPS should expect expeditious and sympathetic handling of the planning application.

4.16 The application site is located within the council's Green Belt and consideration must be given to Planning Policy Guidance 2 (PPG2). 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.

4.17 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, PPG2 – 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'. Indeed, this issue was recently discussed in an appeal at land adjacent to Ramsgill, Otley

Road, Bingley (APP/W4705/A/09/2118825). This appeal (decision attached with this report in Appendix A) related to a 15m high wind turbine within the Harrogate Green Belt and the Planning Inspector in allowing the appeal accepted that Green Belt planning policy principles would dictate that the principle of a wind turbine was inappropriate and would, to an extent, result in some loss of openness. Nevertheless, in reaching the decision to allow the appeal the Inspector concluded:

4.18 *'I attach substantial weight to the harm to the Green Belt by reason of inappropriateness. As there would be a modest loss of openness within the Green Belt, I find only a limited degree of other harm. Set against this is the significant weight that I give to the wider environmental benefits associated with increased production of energy from renewable sources. When weight against one another, the other considerations do clearly outweigh the harm to the Green Belt by reason of inappropriateness and the other harm in relation to openness within the Green Belt. In my judgement very special circumstances do therefore exist and justify a grant of planning permission'.*

4.19 This appeal decision does set the issue of Green Belt principles versus renewable energy principles into context and the overriding conclusion is that the principle of renewable energy provision does represent special circumstances that justify planning consent. There is therefore considered to be no bar from a planning policy perspective to the consideration of this planning application in principle.

4.20 Consideration on the local level with regards to the Green Belt issue is given to Policy NE7 and links back with PPG2. As highlighted, the site is allocated under Policy NE7 as forming part of the Cudworth Green Belt. Policy NE7 defines the extent of the Green Belt around the settlement of Cudworth. Policy GS7 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 NE7, GS7 and GS9 all align with the provisions of PPG2 and the overwhelming guidance contained within case law is that wind turbines in principle are acceptable in Green Belts.

4.21 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.

4.22 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.

4.23 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.

4.24 The Council adopted the Education Sites DPD in January 2009. The DPD sets out the planned sites for secondary schools across the borough in accordance with the Government's Building Schools for the Future development programme. The DPD sets out the Council's intention to create nine advanced learning centres in the borough, to replace the thirteen existing secondary schools.

4.25 Policy EDS1 relates to the Council's intention to build three of the replacement schools on new sites. This includes reference to '11.17 hectares of land west of Engine Lane in Shafton'. Key issues associated with the development of the Shafton education site as identified by the Education Sites DPD, include reducing the effect of development upon the Green Belt and residential amenity. The DPD refers to the development of new education centres in the green belt. The provision of this new facility has been determined to be 'very special circumstances' which justify using Green Belt land to provide the education centres and to allow the Building Schools for the Future programme to go ahead.

4.26 The DPD identifies new sites for schools, including the site at Shafton. In accordance with the Outline and Reserved Matters Approval, the school buildings should be located towards the north of the site with playing fields and open space being situated in the southern portion of the site. The proposed wind turbine will sit at the southern end of the site, bordering the area identified for playing fields and open space, yet there are technical and practical reasons for this proposed siting.

4.27 The council have established, under the above mentioned policies, that proposals for wind turbines in Green Belts can, in principle, be acceptable having previously approved a similar application serving the Penistone ALC. Notwithstanding this, the assessment of this application must still be assessed on its own planning merits and how it relates to the relevant planning policies and the assessment of such effects are discussed in this report.

5.0 Planning History and Background to the Proposals

5.1 This application has been submitted following extensive discussions with a number of stakeholders and is intrinsically linked with the development of the Shafton ALC. In response to the continued economic decline of Barnsley Borough since the 1980's, an ambitious plan was drawn up for the regeneration of the Borough which is known as Remaking Barnsley.

5.2 The Education Vision associated with Remaking Barnsley acts to underpin the regeneration of the Borough. This has become known as Remaking Learning. Remaking Learning is a radical programme of transformation that will provide the highest quality learning opportunities for every child, young person and adult. A key tool in the delivery of this agenda is the Building Schools for the Future (BSF) programme, within which Barnsley is a "wave 3" Authority.

5.3 The Council's broad remit for delivering the BSF programme rests on improving the quality of teaching, support to teaching and the experience the school can offer. The design, environment, equipment and servicing of school buildings are central to these strategies and this has clear links with providing appropriate facilities that are fit for purpose. The current building stock has suffered through lack of investment and this has had a detrimental effect on attainment levels in Barnsley. There are serious suitability, condition and sufficiency issues to be addressed.

5.4 To address these issues and to help to achieve the educational vision highlighted above, the complete reorganisation of the secondary school stock is being pursued. This has resulted in the creation of a smaller number of new Advanced Learning Centres (ALCs) as the most appropriate solution. This is being delivered through the BSF programme. Upon completion, the BSF programme will deliver state of the art facilities providing access to high quality learning environments for all learners aged 11+ fit for the 21st Century.

5.5 Part of the new development programme is the delivery of cutting edge sustainability features and this includes the generation of a proportion of the energy consumed from renewable sources on site. This is intrinsically linked with the emerging Barnsley Core Strategy which sets a requirement for decentralised, renewable or low carbon energy sources to be installed at new major development sites, to reduce carbon dioxide emissions by at least 15% (draft policy CSP5).

5.6 On behalf of the Council, as a leading public sector body, the BSF team have adopted this requirement on each of the ALC sites. The turbine will also provide a new educational opportunity for children using the ALC, with the energy generation agenda presenting a number of opportunities for learning, which would otherwise not be present, including potential subject matter relevant to geography, physics, environmental and other technology considerations.

5.7 10% of the energy requirement at the ALC is already met through the provision of biomass heating / hot water as an integral part of the approved development. The Council, through the brief and specification prepared by the Education Department, requires a further 10% on site generation to be provided. This requires the presence of at least 1 turbine at each site, but allows the additional 10% to be provided across the Phase 2 sites as a whole. This allows for individual site circumstances to be taken into account.

5.8 The onsite renewable energy generation targets effectively amount to 20% of that required across the Phase 2 BSF portfolio. A strategic decision has been made to focus on biomass heating systems and wind power generation, as these technologies are the most proven and cost effective means of meeting the requirement.

5.9 Other technologies are either not feasible, not cost effective or a combination of both of these factors. Technologies such as micro-hydro and photovoltaics have been discounted on this basis, as they do not represent best value for public expenditure.

5.10 Currently 10% of onsite generation requirements for the majority of the ALC sites will be met by biomass heating plants. However, the additional contribution, over and above the contribution made by biomass has not been met. Therefore to meet the requirement specified by the Council, further sources of renewable energy are required.

5.11 Planning History covering the entire range of ALC's included a total of 5 wind turbines distributed across all of the Phase 2 schools. Three turbines have been approved, one each at Greenacre, Penistone and Springwell.

5.12 Following a review of the overall approach to delivery for the Phase 2 sites, a lower number of turbines are now proposed, generating equivalent levels of electricity from renewable

sources and to offset the shortfall of delivering lower output turbines at Greenacre and Springwell.

5.13 In this context, the overall approach to turbine distribution will be based upon selective use of more efficient turbines in the areas of greater operational efficiency. The objective is to meet the overall generation requirements set by both policy and the Education Departments Development Brief (amounting to 20% onsite generation overall), but to achieve this in a more efficient manner. A result of this approach will be fewer effects on the openness of the Green Belt, within which the turbine is to be located.

5.14 Penistone has been selected alongside Shafton to provide for two higher power generating wind turbines. Both Greenacre and Springwell were discounted as Shafton has the best wind profile and therefore is the most operationally efficient. This makes it therefore the most logical location for a wind turbine of higher power generating capacity alongside Penistone.

5.15 Both Springwell and Greenacre are constrained from accommodating a larger scale wind turbine by a combination of factors. These include:

Site size;

- The proximity of residential receptors;
- Site topography; and
- A less efficient wind profile resulting in a lower operational efficiency.

5.16 As this is the case, neither the Springwell site nor the Greenacre site were considered suitable or appropriate to accommodate a larger scale wind turbine operation. As this is the case, planning permission has been secured for small scale wind turbine development in these locations, leaving an interim deficit to be made up at Shafton and Penistone.

5.17 The assessment undertaken therefore shows that the Shafton site, by virtue of its exposure to wind resource, offers the greatest potential for renewable electricity generation from wind of these three sites. It is therefore the most logical and appropriate location for a larger scale installation (when compared to those turbines already approved at Springwell and Greenacre), to make the best use of the available wind resource to achieve a proportion of energy generation from onsite renewable sources. Attached as part of the application

submission are the calculations demonstrating the extent of savings and anticipated level of electricity generation onsite at Shafton.

5.18 Having determined that Shafton was ideally placed strategically to pursue a single wind turbine, an application was made and submitted in 2010 for the erection of one wind turbine at a hub height of 34m (43m to blade tip), however this application (2010/1225) was withdrawn to enable further thought into the positioning and turbine specification. This present application is a result of this review and the current proposals are considered to maximise the efficiency of the wind turbine through the specification choice but would be sited in a location where the impact on neighbours is fully respected.

5.19 As part of the ongoing BSF programme, extensive engagement has always been held with the school during the design process where the location of the initially proposed turbines, and the now revised location, has been discussed and agreed. This engagement remains ongoing.

5.20 Pre-application discussions were held with officers of Sport England, where the siting of the turbines was discussed. As a result of the discussions, the siting of turbines was considered and in principle agreement was reached, subject to the application of conditions to a planning permission.

5.21 It is clear therefore that this application has been submitted following extensive discussions with a number of stakeholders and having taken on board the views expressed during the previous planning application. This revised submission is a direct result of these discussions and subsequently is considered to be an appropriate form of development.

6.0 Consideration

6.1 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.

6.2 From an operational standpoint, the siting of a wind turbine requires maximum exposure to unobstructed wind flow conditions in order to achieve efficient operation. Proximity to ground based obstructions can detrimentally affect the performance of a turbine and it is therefore essential to ensure that a wind turbine is located a sufficient distance away from any such obstacles to provide the necessary clearance. After taking into consideration these factors, the siting point for the turbine has been chosen from both an operational/technical and a visual impact perspective, as discussed below.

Visual impact and Harm to the Green Belt

6.3 The proposed wind turbine would be positioned to the south of the school playing field and west of Engine Lane, as depicted in the accompanying plans. The turbine would measure approximately 32m high to the hub, with the blades extending another 13.5m beyond to reach a maximum height of approximately 45m. The previous application proposed to site the wind turbine approximately 100m to the north west of the site now proposed. This application would see a single structure which would be positioned in a comparable visual composition in relation to the previous submission with the context of the pylons, open fields and playing fields all remaining. The proposals would see a slight increase in height due to the change in turbine model from the previous application and thus this shift must be given due consideration.

6.4 As discussed, in this location and at this height the turbine would be visible from the surrounding public vantage points and would to an extent change the appreciation of this site within its surrounding context within the Green Belt. 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 and the benefits that this

application brings in assisting with the energy demands of the Shafton ALC. The accompanying photomontages and Landscape Visual Impact Assessment indicate the extent of prominence from nearby locations.

6.5 The issue of visual harm and the appropriateness of turbines within a Green Belt was recently discussed in an appeal at Land Adjacent to Ramsgill, Otley Road, Bingley (APP/W4705/A/09/2118825). This appeal (Appendix A) related to a 15m high wind turbine within open countryside and within the Harrogate Green Belt and the Planning Inspector in allowing the appeal accepted that countryside and particularly Green Belt planning policy principles would dictate that the principle of a wind turbine was inappropriate and would, to an extent, result in some loss of openness. The conclusion is covered in section 4.18 of this report.

6.6 This site is located within a Green Belt and this appeal decision does set the issue of Green Belt principles versus renewable energy principles into context and the overriding conclusion is that the principle of renewable energy provision does represent special circumstances that justify planning consent. Clearly the turbine itself would be an inappropriate form of development in the Green Belt, however, special circumstances would exist that justify the planning consent. This conclusion is further underlined by the extant planning consent which can now be implemented for the erection of two wind turbines serving the Penistone ALC and demonstrates that the Council's position with regards to the acceptance of wind turbines within the Green Belt aligns with the above mentioned case law. Notwithstanding the approval of an application at Penistone, this application is within the Cudworth Green Belt and an assessment of effects must be made in respect of any loss of openness in this Green Belt.

6.7 The proposed development of a single wind turbine within the grounds of the new school is a key component to the wider school redevelopment proposals, as this will secure a proportion of energy which is derived from onsite renewable sources in accordance with the national planning policy objectives, the statutory development plan and the Design and Development Brief for the BSF Programme. The full extent of this is outlined in chapter 5 of this report. The erection of this turbine will secure a source of renewable energy generation that will play its part in the wider objective of reducing greenhouse gas emissions, a principal

cause of global climate change. The need to secure and deliver sources of renewable energy generation in order to reduce CO^2 emissions is a key national planning policy objective.

6.8 The provision of the approved turbines, previously referred to at Penistone ALC met this overriding objective and consequently represented the very special circumstances that justified the proposals within the Green Belt. This planning application at Shafton seeks to maintain the Shafton ALC's objectives and commitment to reduce CO^2 and thus the very special circumstances previously accepted at Penistone would remain the same with this application at Shafton. The development will therefore meet wider planning policy objectives, most notably RSS Policy ENV5 and recent Coalition Government statements on renewable energy. It is therefore considered that the need for the development outweighs the harm to the Green Belt and that this constitutes very special circumstances.

6.9 Regard must still be given to the impact of the proposals on the open countryside and surrounding area. The application would result in a reasonably sized structure which would be visible in the open countryside and would therefore result in some loss of openness and some visual intrusion.

6.10 This application has sought to achieve the correct balance between efficiency and intrusion and an assessment of the site has been undertaken in order to establish the most effective siting point for this proposed turbine, taking into consideration both the technical and visual impact implications involved in this project.

6.11 The accompanying photomontage examples and LVIA effectively illustrate and assess the proposed turbine's impact, in terms of height and massing. The surrounding topography is undulating in nature and this topography when combined with the existing vegetation and built form does serve to effectively screen the proposed turbine from a number of locations including from along Pontefract Road and Barnsley Road, to the west and south west respectively.

6.12 The topography is such that some distant views can be achieved of the site from the north and to a lesser extent along Pontefract Road, however such views are distant, more constrained to glimpses seen with the context of buildings, vegetation and the pylons which

all aid in ensuring that the turbine is not overly dominant or intrusive into this vista. The extent of this is indicated within the photomontage and LVIA.

6.13 With these distant views the turbine would always be viewed in the wider context of the panoramic vista and the landscape to the rear, such that the turbine would not be significantly sky lined from these vantage points. Furthermore, from the north along Collier Road this turbine would not appear overly dominant but would be assimilated into the vista by the school buildings in the foreground, other buildings in the wider vicinity and hedgerows and trees. These would all serve to ensure that the physical intrusion from this single turbine would be limited.

6.14 The turbine would dominate the local landscape from nearby vantage points and ultimately this is unavoidable given the height of the turbine and the site's proximity to public highways. From Engine Lane the turbine would dominate the vista and the photomontage from Engine Lane demonstrates this impact. From Engine Lane the site appears relatively level and the site is bordered by a hedgerow which does allow views through to the application site. Any view through will be seen with the visual composition of the line of pylons which are not that dissimilar in height to the proposed turbine. Visual intrusion will always occur with a wind turbine; however the impact of this must be balanced against the overriding benefits and the steps taken to reduce the visual impact.

6.15 The proposed turbine would be treated in a white colour as this, and indeed grey or metallic colours, are more aesthetically pleasing and non-obtrusive than green, brown or black against rural backgrounds (trees, hedges, fields, leaves etc) and also against the skyline of grey and blue in this country. This is the reason other masts which are widely distributed throughout the UK including lampposts, pylons, signage posts, lightning conductors and other masts, utilise the same colours.

6.16 The proposed turbine is positioned divorced from the ALC buildings, approximately 50m to the south east of the southernmost playing field. However, this position was considered to be the optimal location from both a technical perspective but also importantly in relation to any impact on neighbours.

6.17 This turbine has therefore been sited in a position within as close proximity to the ALC and playing fields as possible and its relationship with the playing fields would be such that the

turbine is not viewed in isolation in the countryside. Observers would clearly understand the function as a renewable energy device, which is clearly serving the needs of the ALC. Given the turbine's location, height and coloured finish it is considered that the landscape and pattern of open fields around the turbine against the backdrop of the surrounding settlements and woodlands would all remain dominant in every public view of the turbine. This is further underlined by the nature of a wind turbine with a narrow mast and a greater inter-visibility with views through the turbine to the countryside to the rear possible, unlike a building. This is evident within the photomontage and it is considered that this would ensure that an acceptable level of impact on the character and openness of the countryside would be achieved in this part of the Green Belt.

6.18 Residents/visitors travelling in the area either by foot or car would experience different degrees of visibility of the proposed turbine, principally due to the location and speed of movement. People's perception of the effect of the development would also vary, whilst some including a substantial number of local people would find the impact of the turbine unacceptable, others would welcome the introduction of the structure and find that it added diversity to this area. Undoubtedly from close up the mast would dominate people's perception of this urban/rural fringe area. However, because the proposal would be a single structure surrounded by fields, its visibility and adverse impact would not be so great so as to fundamentally compromise either resident's or visitor's experience of this part of the Green Belt. The impact on neighbour amenity is specifically addressed separately in this report.

6.19 Given the above site context and Landscape and Visual Impact Assessment it is felt that this turbine in this location would have an acceptable level of impact on the character and openness of the countryside. When this is balanced against the positive benefits associated with the introduction of the renewable energy provision, it is considered that the application should be considered favourably.

6.20 Having regard to the siting of the turbine within the designated Green Belt, it must be recognised that the wind turbine would be inappropriate under Green Belt planning policy principles, nevertheless, it is considered that the wider environmental benefits associated with increased production of energy from the turbine serving the ALC outweighs the harm to the Green Belt by reason of inappropriateness and the other harm in relation to openness

within the Green Belt. It is therefore considered that very special circumstances do exist that justify a grant of planning permission for the provision of a turbine serving the site.

Neighbour Impact

6.21 In siting this revised application for the proposed turbine in the proposed location, we have sought to ensure that the positioning of the turbine is sufficiently secluded from adjoining neighbours to ensure local occupants are not in any way adversely affected by potential noise or shadow flicker associated with the operation of the wind turbine.

6.22 In this case, the chosen siting point of the turbine is approximately 250m from the two nearest residential properties, Hazeldene to the north east and Home Farm to the south east. There are a number of other properties to the west in Cudworth, however these are located over 700m from the application site and although some properties will have an outlook towards the wind turbine, it is the impact on Hazedene and Home Farm which are considered to need closer scrutiny.

6.23 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 140m of the turbine and there are no properties within this distance, with the nearest property being Hazeldene and Home Farm approximately 250m away. There is therefore no issue of residents being affected by shadow flicker at the site due to the location of the turbine and the distance from neighbouring properties.

6.24 The siting point of the wind turbine has been selected after considering technical feasibility, access, visual impact and noise pollution issues and has also taken into consideration the proximity to all residences in relation to noise levels generated by the wind turbine in operation.

6.25 The ACSA – A27, like most modern day wind turbines does not create the same levels of noise as the very early designs, there are less mechanical parts to cause mechanical "whirring" noise. Accompanying this application is a noise specification for this model as

measured at a distance of 63m, with data for a wind speed of 8m/s and a precision level of +- 3 dB, obtained data are as follows:

Hz	63	125	250	500	1000	2000	4000	8000	A-weighted
$L_{eq,\,ref}$ (dB)	56	58	57	54	50	46	39	31	**55**
$L_{w,\,ref}$ (dB)	98	100	99	95	92	88	81	73	**97**

$$L_{A,eq} = 55\ dB$$

6.26 Reference should be made to ETSY-R97, the Noise Assessment Rating for wind turbines. This guidance note, which is widely used by Planners in wind turbine noise assessments, 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.

6.27 The Noise Working Group recommends that day time lower fixed limits can be higher than this at 45dB(A). In the case of the siting point of the wind turbine, the nearest residential properties, Hazeldene and Home Farm, are both approximately 250m from the wind turbine and having regard to the data provided when measured at 65m, it is clear that at over three times the distance away, noise emissions do not present a concern in this case.

6.28 Home Farm is positioned set back from the public highway down an access track, with its frontage facing towards the public highway. It is a two storey dwelling and does have windows on its northern elevation which do have views over the fields to the north, and as such, views would be achievable of the wind turbine. However, as these are north facing windows and not the principle windows associated with this property, it is considered that any view of the turbine would have a reduced impact. Home Farm's western elevation facing into the rear garden is considered a principle elevation and any views towards the turbine would be angled and not direct. Furthermore, boundary treatment would all serve to ensure that the turbine would not be overly dominant or intrusive from this elevation particularly given the distances involved. Again regard should be given to the position of the pylons that dissect the site and would be more dominant and intrusive than the proposed turbine further away.

6.29 Hazeldene Farm is located to the north of the site of the proposed wind turbine and is positioned facing onto the public highway with east and westerly principle elevations. From both of these elevations the wind turbine would not be visible and as such the proposed wind turbine would not be overly dominant or prominent from this property. The proposed turbine would of course be visible from within the curtilage of Hazedene Farm, however this would be viewed at a distance of approximately 250m and with the context of the pylons within the same vista. As such, the turbine would not be intrusive to this farm and at the distances and angle involved, is unlikely to harm the living conditions enjoyed by the occupants of this property.

6.30 Any other property such as those to the west along Pontefract Road and Barnsley Road are considered sufficiently far away, taking into account the local topography which means they are positioned on a higher ground level with intervening vegetation. This would all serve to ensure that the proposed turbine is unlikely to harm the living conditions enjoyed by the occupants of any other properties.

6.31 The perception of any visual harm caused by the wind turbine is a sensitive and subjective matter, with many individuals in support of their installation yet many against the principle of turbines in the countryside in their particular local area. It is felt that this perception of harm is likely to change over time as people become familiar with their appearance and recognise the positive contribution they make in reducing greenhouse gas emissions. A change in culture is thus likely to occur. Nevertheless, any application must be determined on its own merits and in light of policy expectations and the perception of harm from the principle of turbines, should carry little weight when balanced against the positive benefits of these turbines. Having regard to the actual likely effects of the proposed turbine in this location it must be concluded that the effects on neighbour amenity are likely to be negligible.

Electromagnetic Interference

6.32 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. Consequently and notwithstanding the concerns raised during the previous application by neighbours, this wind turbine is unlikely to cause any electromagnetic interference in the area.

Proximity to Electrical Power Lines

6.33 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

6.34 The National Air Traffic Service (NATS) no longer respond to wind turbine developer enquiries and any issues pertaining to the wind turbine's installation at the site will need to be conducted by the Local Planning Authority. However, it is noted that no objections were raised during the previous application process and it is not envisaged that any concerns will be raised with this proposal.

6.35 Given the significant distance to any main or small air field and their associated flight paths and having regard to the size of the proposed wind turbine on this site, it is considered that the proposals would have no impact on flight paths or the operations of airports in the wider region.

Ground Conditions

6.36 Prior to installation a geological survey will be undertaken to determine the strength and composition of the sub soil in preparation for the foundation base of the wind turbine. The detailed design of the foundation depends on the sub soil composition. An anchor set in concrete and large anchor bolts secure the foundation structure to the base of the mast. There is no overriding reason why the ground conditions in this location in comparison with the approved location are likely to preclude the development and should the Local Planning

Authority wish to consider the foundation structure in greater detail it is recommended that this be included and required as a condition of any consent.

Ecological Issues

6.37 The application site is not located in any area designated as being of ecological importance. The particular site has little in the way of ecological habitats with the exception of hedgerows and isolated trees along the hedgerows.

6.38 The installation of the proposed wind turbine is unlikely to result in significant hedgerows being removed due to the form and nature of the installation process which will require an access from Engine Lane only, thus only a small portion of hedgerow would be removed. There is little evidence to suggest that a wind turbine in this particular area at the height proposed would cause any significant impact on local birdlife or indeed any other species.

6.39 The BREAMM assessment submitted with this application (which relates to the wider school development) considers the ecological value of the site. Whilst it is acknowledged that some bat activity was recorded on the site, it is not of significant intrinsic value in its own right. In addition, the report also concludes that the vegetation present on site is at a low risk of being capable of supporting bats

6.40 Natural England produced a document 'Our State of the Natural England' report in 2008 which summarises the potential impacts of both terrestrial and marine wind energy developments and their ancillary infrastructure, on the natural environment. These include but are not confined to, the potential impacts on bird and bat populations.

6.41 Bats and their roosts are legally protected by domestic and international legislation. The purpose of the legislation is to maintain and restore protected species to a situation where their populations are thriving, and there is sufficient habitat to ensure this will continue. Generic guidance on assessing the impact of wind turbines on bats has been developed at the European level under the Eurobats Agreement (Bonn Convention), to which the UK is a signatory. Natural England subsequently produced a Technical Information Note TIN051 in light of the Eurobats Agreement entitled Bats and Onshore Wind Turbines.

6.42 The Eurobats guidance proposes that the buffer surrounding woodland areas should be 200m, whereas the Natural England document suggests a buffer zone of 50m. One reason

for the difference is that the European guidelines are catering for a greater diversity of species, some of which are known to fly very long distances, often in the open, away from woodland. The use of linear features varies among species. Research found that serotines in Finland and Holland utilised linear features and open habitat. In Holland, pipistrelle and serotine were known to cross gaps of 110-150m in open and patchy landscapes, although pipistrelles did so infrequently. Traditional flight routes may explain why pipistrelles and other small bats will cross gaps up to 200m.

6.43 However, the evidence in Britain is that most bat activity is in close proximity to habitat features. Activity was shown to decline when measured at fixed intervals up to 50m away from treelines and at varying intervals up to 35m from treelines. This decline occurred both when bats were commuting and when foraging, although the decline is greater when animals were commuting.

6.44 To minimise risk to bat populations Natural England's advice is to maintain a 50m buffer around any feature (trees, hedges) into which no part of the turbine intrudes. This advice was recommended during the previous approved planning application and remains pertinent here with the revised proposals. Having regard to the findings of the BREEAM assessment and the distance from hedgerows and habitat features, it is considered that the proposed wind turbine would be sited in a position where the risks to bats are minimal.

6.45 To help minimise the potential conflict between birds and wind turbines, the RSPB and Natural England have jointly produced a GIS map and written guidance to aid the planning process for onshore wind energy development in England. The map is based on distributional data for twelve sensitive bird species, plus statutory SPAs (Special Protection Areas), and sites containing nationally important populations of breeding waders and seabirds, or wintering waders or wildfowl. Ten of the twelve species included on the map are listed on Annex I of the EU Birds Directive, with two additional species of conservation concern included, due to concern about potential impacts on their rapidly declining or highly localised populations. The application site is not located within an area designated as being of high or medium risk and there are no localised designations within the site or within 3km, indicating that the site is at low risk to bird populations notwithstanding the concerns raised by local residents during the previous application.

6.46 The RSPB recognises the essential role that renewable energy, including wind, plays in the attempt to tackle climate change, and supports appropriately located wind energy developments. Effects of wind farms on birds vary depending upon factors such as species, season, weather, habitat type and individual site characteristics such as topography (e.g. Langston and Pullan, 2003, Barrios and Rodríguez, 2004, Drewitt and Langston, 2006, 2008, de Lucas et al., 2008, Smallwood and Thelander, 2008). As wind energy is still a relatively new technology, information about these effects is sparse, with few relevant published peer-reviewed papers on the subject (Whitfield and Coupar, 2008), although the knowledge base is increasing.

6.47 Wind farms or individual turbines can affect birds in four main ways: collision, disturbance displacement, barrier effects (sometimes considered a type of disturbance displacement) and direct habitat loss.

6.48 Direct habitat loss is generally considered to be a relatively minor concern (Percival, 2000), although there will be exceptions, for example where overlap is with very rare species with small home ranges (Whitfield and Coupar, 2008). As the site has been designated a low risk area with no specific designation there would be no loss for very rare species. Furthermore given that this application relates purely to an individual turbine with no loss of trees and minimal hedgerow removed for access purposes the proposals would not result in any significant loss of habitat.

6.49 Collision risk and disturbance displacement are considered the two predominant effects. Wind farms in the UK have not been associated with high collision rates to date, because on the whole they have been constructed in areas with little bird activity (Percival, 2005, Madders and Whitfield, 2006), and generally, collision rates recorded at many wind farms in the UK and elsewhere have been low (e.g. Erickson et al., 2001, Percival, 2005, Drewitt and Langston, 2006, 2008). Clearly with an individual turbine the potential for collision with birdlife is that much reduced.

6.50 Different species groups vary in terms of susceptibility to collision, with raptors appearing to be particularly susceptible (e.g. NWCC, 2000, Langston and Pullan, 2003, Thelander et al., 2003, Smallwood and Thelander, 2004, Anderson et al., 2004, 2005). Whitfield (2007) suggests that much of this vulnerability appears to be due to reduced avoidance of wind turbines by raptors (e.g. Whitfield and Madders, 2006a, b). Some other groups also appear

quite susceptible, for example, together with raptors, gulls accounted for most of the fatalities in Hötker et al.'s (2006) review of wind farm impact studies, and an estimated 165 collisions of several species of tern per year occurred at a 25-turbine wind farm at Zeebrugge, Belgium (Everaert and Stienen, 2006). Moorehead and Epstein (1985) suggested that large wetland birds, such as geese, might be especially susceptible to collision. However, Hötker et al. (2006) found that records of collisions in geese were relatively rare, and generally there have been few recorded collisions of geese at wind farms.

6.51 It is generally considered 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 the ecological habitats within the area, which predominantly include hedgerows and maturing trees, it is considered that these types of birds would be the predominant birdlife in the area. The larger species groups referred to previously are not predominant within the immediate area and as such are unlikely to be affected. Furthermore, the site is not located on a known migration flight path which may otherwise prejudice other species. As this application relates to an isolated wind turbine rather than a wind farm, it is considered that the risk of bird collision would be minimal. Furthermore, regard should also be given to the close proximity of the pylons which would cause an obstacle for birds to avoid.

6.52 Disturbance can affect species in a number of ways; either by direct loss of e.g. nesting, foraging, roosting or moulting habitat, or by affecting productivity, and potentially survival. Meta-analysis of 19 datasets suggested reduced abundances of birds at wind farms, particularly of wildfowl and waders (Stewart et al., 2007), in accordance with results on disturbance displacement. However, such species are not predominant in the application site and as this application relates to an isolated turbine it is considered that disturbance is likely to be minimal and confined to the confines of the site locality rather than displacing any birds from the wider locality.

6.53 In respect of badgers, surveys have been undertaken and did not identify any setts within the site. Given the small area which would be affected by the works it is unlikely that badgers would be affected by the proposal. However, should a sett be discovered as part of the preconstruction check of the land, a license would need to be obtained from Natural England prior to commencement of works.

6.54 Both the RSPB and Natural England are generally supportive of wind turbines and the role they play in sustaining the country's energy demands. Naturally site specific conditions must still be given due consideration and in this location it is considered that the provision of one individual wind turbine can be sensitively sited so as to ensure that the proposals would not result in any adverse impact on ecological issues.

Archaeological Implications

6.55 The proposals will involve some ground excavations when the foundations are laid and the turbine installed, however, following a desktop appraisal there is little to suggest that the application site has any archaeological importance. Nevertheless, if any findings are discovered during ground work, appropriate steps as required will be taken to ensure that no damage occurs.

Heritage Assets

6.56 As with any application, consideration should be given to any impact on the character of heritage assets, be they listed buildings or conservation areas.

6.57 Importantly, wind turbines have a finite lifecycle and can be decommissioned and removed from site without any trace, and effects are consequently transient in nature and unlikely to result in a permanent feature on the landscape. The English Heritage document: 'Wind Energy and the Historic Environment' acknowledges that climate change is itself likely to be detrimental to the historic environment for reasons which include the effects of rising sea levels and increased 'storminess'. The document also points to the reversibility of wind energy developments which can further mitigate their impact. In this case, the expected 25 year life of the wind turbine would be short relative to the longevity of a historical building.

6.58 In this particular case, due to the rural context of the application site and the divorced nature from the built environment, Shafton, Cudworth and other urban areas, it is considered that there are no conservation areas or individual listed buildings that would be directly affected by the proposals. This is underlined further by the findings of the Landscape and Visual Impact Assessment.

Loss of Agricultural Land

6.59 The area of the application site is limited due to the diameter of the turbine and consequently 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.

Impact on Playing Pitch Users

6.60 The application site is located on farmland bordering the playing fields approved as part of the original Reserved Matters Approval reference (2009/1361) and therefore would not directly impact upon the playing fields.

6.61 As this is the case, it is considered that the revised application continues to comply with Exception Criteria E3 of Sport England's Playing Fields Planning Policy Statement, which specifies that planning permission for development which may affect the use of a planning field is acceptable where:

'The proposed development affects only land incapable of forming, or forming part of, a playing pitch, and does not result in the loss or inability to make use of any playing pitch (including the maintenance of adequate safety margins), a reduction in the size of the playing areas of any playing pitch or the loss of any other sporting/ancillary facilities on the site'.

6.62 It has to be acknowledged that there may be some potential for distraction to users by virtue of the location of pitches relative to the location of the turbine due to the potential for shadow flicker to occur, however as outlined previously, such occurrences would be rare and unlikely to significantly impact upon the enjoyment and users of the playing pitches to the north.

Installation of the turbine

6.63 The temporary works required to install the turbine are limited. A haul road of terram reinforcement membrane and crushed recycled material will need to be installed from Engine Lane to the east of the turbine. A small section of hedgerow would need to be removed to facilitate this.

6.64 It is the intention to leave the haul road in place to assist the access of the transit/Land Rover access in the future for inspections. The installation vehicles would include two cranes, one 120 tonne and one 50 tonne capacity, to access across the field using the haul road. The delivery of the turbine parts will require 3 visits of a 44 tonne low load lorry to deliver the mast, nacelle and blades. The crane will lift the mast and nacelle into position, secure bolts to the mast base, and attach the 3 no blades to the nacelle. In order to connect the cables from the nacelle to the inverter, and from the inverter to the farmer's field boundary, a cable would be laid in a trench 800mm deep, 400mm wide and backfilled with excavated material and patted flat. The land would be reinstated to its original condition upon laying the cable.

Economic and Social Benefits

6.65 At present, wind turbines in the United Kingdom prevent over 5.5 million tonnes of CO^2 emissions each year, with a standard 2 megawatt turbine producing the same amount of power as that used by over 1,120 homes each year. The Sustainable Development Commission have calculated that if wind energy made up 20% of total output in 2020, the CO^2 emissions savings of wind output could be around 28.4 million tonnes (7.8 million tonnes of carbon) of CO^2 per year.

6.66 Wind power currently makes a contribution of 8.8% of renewables in input terms (i.e. in volume of fuel inputs of renewables to heat, electricity and transport, after conversion to an oil equivalent basis), but accounts for 27% of electricity generated by renewables (2007 figures, BERR, 2008). The implementation of the 2020 Renewable Energy Strategy will require a marked increase in both on and offshore wind energy generation. This could be to the magnitude of an additional 10GW onshore and 25GW offshore, a five-fold and sixty fold increase from current operational generating capacity. This implies a requirement for the construction of around an additional 5,000 onshore and 7,000 offshore wind turbines. This wind turbine proposed will help to achieve these targets alongside the local and site specific targets previously referred to.

6.67 Although the PPS1 supplement advises that strategic targets should not be applied directly to individual planning applications, they must be a relevant planning consideration when considering the applications simply because it is only through an accumulation of individual planning applications that targets are met. Having regional targets entirely separate would

be irrational not only in terms of the Government's aim of securing substantially more renewable energy generation capacity but also of the whole basis of the plan-led system. The prominence given to them in national policy makes them an important consideration.

6.68 Onshore and offshore wind represent the cheapest, most technologically advanced and most rapidly growing forms of renewable energy, with wind growing by 25% between 2006 and 2007 in terms of input into electricity generation (BERR, 2008). This wind turbine will provide a greater proportion of electricity than the approved two wind turbines and the overall approach to delivering 10% onsite renewable energy generation over and above that provided via the biomass heating. This application is critical in achieving these goals at Shafton ALC to provide a proportion of the school's energy requirements.

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:

- The proposed wind turbine would be positioned to the south of the playing fields in a location where the visual intrusion would be minimised and the turbine seen against the context of hedgerows, maturing trees and the gently undulating topography surrounding the site.

- The proposed turbine would not be seen as an isolated feature within the countryside but would clearly relate to Shafton ALC due to its relationship with the school playing fields, despite its distance to the actual buildings and thus the function of the turbine would be readily appreciated.

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

- The scale and location of the wind turbine would be such that the impact on nearby residential properties would be negligible with any impact confined to a visual appreciation of its siting. This on its own would not constitute a material harm to living conditions due to the distance involved and the fact that the main aspect of the nearest properties do not face directly towards the site of the wind turbine, and therefore it is thus considered that the amenity of neighbouring properties would be maintained.

- There are no other material planning considerations that would outweigh the overriding benefits of this proposal in providing a renewable energy source and the long term environmental benefits this brings, taking into account the extant planning consent for two wind turbines which this would replace.

7.2 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 PPG2, PPS1, 7 and 22. It is thus felt that this application should be granted subject to reasonable and appropriate conditions.

APPENDIX A

Appeal Decision

Site visit made on 20 April 2010

by Andrew Dale BA (Hons) MA MRTPI

an Inspector appointed by the Secretary of State for Communities and Local Government

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Decision date: 11 May 2010

Appeal Reference: APP/W4705/A/09/2118825
Land adjacent to Ramsgill, Otley Road, High Eldwick, Bingley, West Yorkshire BD16 3BD

- The appeal is made under section 78 of the Town and Country Planning Act 1990 against a refusal to grant planning permission.
- The appeal is made by Mr Brendan Hudson against the decision of City of Bradford Metropolitan District Council.
- The application (reference 09/04148/FUL), dated 27 August 2009, was refused by notice dated 28 October 2009.
- The development proposed is the erection of one 6kW wind turbine on a 15 metre mast.

Decision

1. I allow the appeal, and grant planning permission for the erection of one 6kW wind turbine on a 15 metre mast on land adjacent to Ramsgill, Otley Road, High Eldwick, Bingley, West Yorkshire BD16 3BD in accordance with the terms of the application reference 09/04148/FUL, dated 27 August 2009, subject to the following conditions:

    1) The development hereby permitted shall begin not later than three years from the date of this decision.

    2) The development hereby permitted shall be carried out in accordance with the following approved plans: the site plan showing the siting of the wind turbine; and the plan entitled *6kW on 15m tower - planning drawing*.

    3) If the wind turbine hereby permitted ceases to operate for a continuous period of 6 months (unless such cessation is due to the wind turbine being under repair) then a scheme to decommission and remove the wind turbine and to restore the site shall be submitted to and approved in writing by the local planning authority within 3 months of the end of the cessation period. The scheme so approved shall be implemented within 6 months of the date of its approval by the local planning authority.

Main issues

2. I consider that the main issues in this case are:

    (a) firstly whether the proposal would constitute inappropriate development in the Green Belt;

    (b) secondly its impact on the openness of the Green Belt;

(c) thirdly the effect of the proposed development on the character and appearance of the Rombalds Ridge Landscape Character Area;

(d) fourthly the implications of the proposal for the safety of horses and their riders on the training gallops of Craiglands Farm Racing; and

(e) finally, if the development is inappropriate, whether the harm by reason of inappropriateness, and any other harm, is clearly outweighed by other considerations, so as to amount to the very special circumstances necessary to justify the development.

Reasons

Green Belt - appropriateness

3. Saved Policy GB1 of the City of Bradford Metropolitan District Council Replacement Unitary Development Plan (UDP) sets out a similar restrictive approach to development within the Green Belt as Planning Policy Guidance 2: Green Belts (PPG2). Paragraph 3.1 of PPG2 indicates that there is a general presumption against inappropriate development within the Green Belt.

4. Section 336 of the 1990 Act defines buildings. The definition includes any structure or erection such as man-made above ground structures like wind turbines and their supporting masts. These do not fall within the categories of buildings that are permissible in the Green Belt with reference to UDP Policy GB1 and PPG2. I therefore share the views of the Council and the appellant that the development proposed must be regarded as inappropriate development in the Green Belt.

Green Belt - openness

5. The appeal site lies towards the southern end of a field to the south of the dwelling known as Ramsgill. Paragraph 1.4 of PPG2 states that the fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open; the most important attribute of Green Belts is their openness. It is not defined in PPG2 but openness can be taken to mean the absence of visible development. This single wind turbine with its base, mast and rotating blades would result in some, albeit modest, loss of openness of the Green Belt.

Rombalds Ridge Landscape Character Area

6. Planning Policy Statement 22: Renewable Energy (PPS22) explains that local landscape designations should not be used in themselves to refuse planning permission for renewable energy developments. Planning applications for renewable energy developments in such areas should be assessed against criteria based policies set out in local development documents, including any criteria that are specific to the type of area concerned. To this end, I have had regard to saved Policies NE3 and NE3A of the UDP and to the Landscape Character Supplementary Planning Document (SPD), volume 4 of which relates to Rombalds Ridge.

7. The parties agree that volume 4 of the SPD places the appeal site within a "mixed upland pasture" landscape type. This landscape is noted, in the SPD,

to be prominent and open especially in views from Baildon Moor, from East Morton to Menston Road and from Shipley Glen Road. Having regard to the appellant's photomontages and my own site inspection, I consider the development would not be unduly conspicuous from any of these key long distance vantage points. The other primary distant views of the structure would be from the south; views from Bingley Road where it passes adjacent to the western end of Baildon Golf Course are typical of such views. From this vicinity, the wind turbine (approximately the height of a mature oak tree) would not be visually intrusive as it would stand on an opposing slope to observers, against a backdrop of rising ground containing a number of buildings and mature trees.

8. Closer range views would be possible from Otley Road to the west and from the public footpaths and the public bridleway referred to in the planning officer's report and the consultation response from the Council's landscape architect. However, given the limited size, height and scale and coloured finish of the proposed wind turbine, I consider that the landscape and the pattern of open fields would remain dominant in all of these views. Moreover, a variety of other factors would play a telling part in diluting the impact of the turbine depending on the observer's position on these public routes e.g. telegraph poles, pylons, dwellings and high hedges, backdrops of high moorland and two large trees that stand relatively close to the appeal site. It would not be viewed as an incongruous feature in the landscape and it would be sited sufficiently close to Ramsgill for observers to understand its function as a renewable energy device serving the needs of that domestic property.

9. In all, I consider that the development would not adversely affect the particular character or appearance of the Rombalds Ridge Landscape Character Area or have any other unacceptably harmful landscape effects. I am therefore satisfied that there would be no conflict with the objectives of UDP Policies NE3 and NE3A or with the aims of the SPD.

Safety of horses and their riders

10. Although this issue does not feature as a reason why planning permission was refused, it is nevertheless a material planning consideration and I have carefully studied the written representations made on behalf of the owners of Craiglands Farm Racing. The business employs 20 staff and is based on the training and racing of 65 thoroughbred racehorses. The training gallops occupy land to the east of the appeal site, the nearest section being about 30m away from the site of the proposed wind turbine.

11. The objectors explain that racehorses are highly strung and can be easily spooked. The stated concern is that the introduction of a new, alien and moving feature that could cast shadows so close to the gallops presents a health and safety hazard to both horse and rider.

12. However, no specific evidence of any actual serious incidents for horses or their riders near wind turbines has been produced. If there was a tangible and unacceptable risk of horses being frightened by turbines, with the likelihood of injury to them, their riders and third parties, it is likely that it would have been comprehensively addressed in national planning policy guidance. As it is

PPS22 is silent on the matter whilst its Companion Guide mentions a suggestion from the British Horse Society for a 200 metre separation distance around bridleways to avoid the possibility of wind turbines frightening horses. Whilst this distance could be deemed desirable, it is not a statutory requirement and it is important to note that it also applies to proposals for wind turbines exceeding 100m in height with far larger blades than those proposed here.

13. The roughly 30m separation distance that would be available in the case before me is equivalent to two times the height of the mast. This is a largely open landscape and the turbine would be visible for quite a distance from the adjacent gallop whether the horses were approaching from the north or the south. There is little likelihood that there would be a sudden appearance in the horses' sight lines of turning blades. Given the position of the turbine relative to the gallops and the limited size of the blades, I consider that serious problems with shadows sweeping across the gallops would be unlikely to arise. Even if shadows were cast from time to time, there is no convincing evidence that this would adversely affect the horses.

14. For these reasons, I do not believe that the appeal proposal would present an unacceptable risk to the safety of horses and their riders on the training gallops of Craiglands Farm Racing.

Other considerations

15. Turning now to other considerations, the primary matter brought to my attention by the appellant is the advice in PPS22, Planning Policy Statement 7: Sustainable Development in Rural Areas and Planning Policy Statement 1: Delivering Sustainable Development and its Supplement on Planning and Climate Change. In addition, I have been made aware of those policies of the Regional Spatial Strategy (ENV5 and YH2) which, taken together, encourage strategies to reduce greenhouse gas emissions and meet renewable energy targets.

16. PPS22 indicates that renewable energy development should be capable of being accommodated throughout England where the technology is viable and environmental, economic and social impacts can be addressed satisfactorily. In this case I consider that no adverse environmental, economic or social impacts would arise. The development would utilize the good resources for wind energy at the site and help to reduce the carbon footprint of the occupiers of Ramsgill. Small scale projects like this can provide a limited but valuable contribution to overall outputs of renewable energy and to meeting energy needs both locally and nationally. This wider environmental benefit of the proposal is a material consideration to which, in line with the advice in PPS22, I attach significant weight.

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

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

Conditions

18. The Council has not provided me with any suggested conditions. I have considered the possible conditions mentioned within the written representations from the appellant. In addition to the standard condition setting out a time limit within which the development is to be started, I agree that a condition is necessary to secure the removal of the wind turbine and the restoration of the site should the wind turbine cease to operate for a continuous period of 6 months. This is to prevent the countryside from being littered with redundant structures and to give effect to saved UDP Policy NR13 which covers wind farms and wind turbines. I add a condition requiring compliance with the approved plans, for the avoidance of doubt and in the interests of proper planning.

Conclusion

19. Taking into account all the matters raised in the written representations, I conclude that the appeal should be allowed.

Andrew Dale

INSPECTOR