







# **Screening Opinion Request**

**Huddale Farm** 

03/12/2014

This page has been left blank intentionally



**Prepared for:** 

**Farm Energy Partnership** 

Prepared by:

Susan Bell BSc (Hons), MSc, AIEMA

# **Neo Environmental Ltd**

Tel: 0141 773 6262

www.neo-environmental.co.uk

1 Lonmay Road,

Glasgow

G33 4EL

	NAME	DATE
Edited by:	Dawn Thompson	03/12/2014
Checked by:	Michael McGhee	03/12/2014

**APPROVED BY:** 

**Paul Neary** 







# Contents

1	INTRODUCTION	5
2	DEVELOPMENT DESCRIPTION	5
3	RELEVANT PLANNING POLICY	7
4	LANDSCAPE and VISUAL IMPACT ASSESSMENT	9
5	ECOLOGY	10
6	CULTURAL HERITAGE AND ARCHAEOLOGY	16
7	NOISE & SHADOW FLICKER	20
8	FLOOD RISK	20
9	CONCLUSION	20
10	APPENDIX	21
Fi	gures	
Tab	le 5-1: Environmental Designations within 10km	11
Tab	le 6-1: SAMs Within 3km of the Proposed Wind Turbine	16
Tab	le 6-2: Listed Buildings within the Study Area	. 18
Figi	ure 2-1: Huddale Farm Site Lavout (F410424 N348619)	6



# 1 INTRODUCTION

- 1.1 Neo Environmental requests a Screening Opinion from Staffordshire Moorlands District Council to determine whether an Environmental Impact Assessment (EIA) is required to be submitted for a proposed single wind turbine development at Huddale Farm, Leek Road, Waterhouses, ST10 3LQ.
- 1.2 It is proposed that the development will consist of the installation of a single 500kW wind turbine and the associated infrastructure.
- 1.3 In compliance with the Town and Country Planning (Environmental Impact Assessment) Regulations 2011, this Screening Opinion Request includes: land identification, a description of the nature and the purpose of the proposed development and any associated environmental effects.
- 1.4 As outlined in this Screening Opinion, it is unlikely that the proposed development at Huddale Farm will result in significant environmental impacts at any stage of the development. **Therefore, an EIA should not be required**. Nevertheless, comprehensive supporting documentation will be submitted in support of the planning application to Staffordshire Moorlands District Council.

# 2 DEVELOPMENT DESCRIPTION

#### **DEVELOPMENT PROPOSAL**

2.1 The proposed development at Huddale Farm will include the installation of a single 500kW wind turbine and the associated infrastructure, including: an access track, area of crane hardstanding, meter house and underground cabling. The specifications of the proposed wind turbine are as follows:

• Number of Turbines: 1

• Number of blades: 3

• Height to Hub: 50m

• Rotor Diameter: 54m

Blade Tip Height: 77m

Output: 500kW

• Colour: White



#### SITE SELECTION

- 2.2 After an initial assessment, an indicative wind turbine location has been selected for the purposes of this Screening Opinion Request (see Fig. 2-1). The proposed turbine location at Huddale Farm is situated on agricultural land, at an elevation of approximately 309m AOD (E410424 N348619). At present the proposed site is utilised for agricultural purposes with the development field bound by hedgerows.
- 2.3 Settlements and residential properties are distributed within the locality; Staton Dale Farm lies approximately 560m to the south, Huddale Farm lies 770m to the northwest and Caltonmoor House and Meadowside lies approximately 1km to the east. Settlements within close proximity include: Calton; 1.4km north and Waterhouses 3.1km northwest.
- 2.4 The proposed development lies in close proximity to the local road network which will be utilised for the delivery of the wind turbine components. The A523 lies directly to the north of the proposed site.
- 2.5 The turbine will be micro-sited prior to submitting the formal planning application to limit and where possible, mitigate any potentially adverse environmental impacts.

FIGURE 2-1: HUDDALE FARM SITE LAYOUT (E410424 N348619)





# 3 RELEVANT PLANNING POLICY

#### **EIA REGULATIONS**

3.1 The proposed development does not fall within Schedule I of the 2011 EIA regulations where an Environmental Statement (ES) is always required. The need for an EIA for development listed in Schedule 2 of the EIA Regulations is dependent on whether the development is "likely to have significant effects on the environment by virtue of factors such as its nature, size or location" (Schedule 2 Development). As the hub height of the proposed wind turbine exceeds 15m, this development falls into class 3(i) of schedule 2 regulations. It is anticipated that due to the anticipated lack of significant environmental impacts, that an EIA will not be required.

#### **LOCAL PLANNING POLICY**

#### THE CORE STRATEGY POLICIES

3.2 There is no policy within the council's Local Plan about renewable energy or climate change. However the Council's Revised Submission Core Strategy<sup>1</sup>, within the Staffordshire Moorlands Local Development Framework, contains one relevant policy to this proposed wind development.

#### SD2 – Renewable and Low-Carbon Energy

- 3.3 The Staffordshire Moorland District will "strive to meet part of its future energy demand through renewable or low-carbon energy sources (which could be through a variety of technologies, for example wind power, solar energy, biomass etc.), in line with current evidence which identifies the feasibility of these forms of energy across the District. This will be achieved by:-
  - 1. Supporting small- and large- scale stand-alone renewable or low-carbon energy schemes, subject to the following considerations:
    - the degree to which the scale and nature of a proposal impacts on the landscape, particularly having regard to the landscape Character Assessment and impact on the

<sup>&</sup>lt;sup>1</sup> Core Strategy Policies SD1 and SD2 (2011). Available at: http://www.staffsmoorlands.gov.uk/sm/council-services/climate-change-and-renewable-energy/councils-policy-on-climate-change-and



- Peak District National Park (taking into account both individual and cumulative effects of similar proposals);
- the degree to which the developer has demonstrated any environmental/economic/social benefits of a scheme as well as how any environmental or social impacts have been minimised (e.g. visual, noise or smell);
- the impact on designated sites of European, national and local biodiversity and geological importance in accordance with policy NE1;
- the impact on the amenity of residents and other interests of acknowledged importance, including the historic environment;
- the degree to which individual proposals reflect current local evidence regarding the feasibility of different types of renewable or low-carbon energy at different locations across the District.
- in the case of proposals on greenfield sites, the Council will expect that submissions first demonstrate that there were no alternative brownfield sites, which were reasonably feasible and viable, and acceptable in other respects.
- 2. Requiring that all new development is constructed to the highest viably possible energy efficiency/renewable energy levels of the Code for Sustainable Homes and the BREEAM office scale (and as a minimum satisfy the levels required by law at the date of approval).
- 3. Requiring that all submissions for substantial residential, non-residential and mixed use developments (greater than 10 residential units or 1000m² floor space) consider:-
  - whether the scheme could contribute to any existing district heating infrastructure in that
    area, as a supplier of heat, or where there is no existing infrastructure the submission
    should explore the potential for the establishment of new infrastructure for this purpose;
    and
  - whether the scheme could benefit as a significant heat receptor (for example high density residential schemes). In these circumstances the submission should explore whether there is existing connecting infrastructure. Where there is no existing infrastructure the submission should explore the potential for the establishment of new infrastructure for this purpose.
  - In the case of mixed use schemes, the submission should explore how different uses can be optimally laid out to benefit from co-location as heat suppliers/receptors; including how new connecting infrastructure would assist the transference of low carbon heating.



- 4. The Council will promote the introduction of similar energy/carbon-saving and water efficiency measures within existing buildings (subject to other planning considerations) for example during conversions requiring planning permission; or retrofitting schemes. In the case of extensions requiring planning permission, such measures (either within the extension or original building) will be supported.
- 5. The Council will promote the integration of 'decentralised' renewable energy/low-carbon energy infrastructure within new development (or as retrofitted within existing development) and will encourage developers to explore how individual schemes can maximise microgeneration opportunities. Where major-scale development is proposed, for example across large-scale site allocations for housing, commercial or mixed uses, there will be an expectation that developers take a view regarding how sustainability standards can be further exceeded across the whole site. For example through the use of communal micro-renewable facilities or district heating schemes"

### 4 LANDSCAPE and VISUAL IMPACT ASSESSMENT

4.1 A Landscape and Visual Impact Assessment (LVIA) will accompany the planning application to Staffordshire Moorlands District Council. This will ascertain the potential beneficial and adverse impacts of the proposed development on the existing landscape and visual environments. Important factors that will be considered include the landscape characteristics and the sensitivity and visual amenity of the area. Landscape impact may be defined as changes in the physical landscape, which may give rise to changes in its character and how it is experienced. Visual impact comprises the change in the composition of available views from dwellings and public areas resulting from the proposal.

#### **METHODOLOGY**

- 4.2 The methodology will involve carrying out baseline studies of the existing landscape resources and visual amenity following the "Guidelines for Landscape and Visual Impact Assessment," (Landscape Institute and Institute of Environmental Management and Assessment, 2013). A desktop study will be commissioned to collect data on the existing landscape including landscape character, sensitivity and landscape designations.
- 4.3 The desktop study will also determine the likely Zone of Theoretical Visibility (ZTV), which is anticipated to incorporate a 25km study zone. This identifies the potential extent of the visual envelope and will ascertain representative viewpoints for the planning stage. These viewpoints will be used to identify and assess the sensitivity of potential visual receptors including residents, transport routes, tourist attractions and any likely impacts.



#### POTENTIAL VISUAL IMPACTS

- 4.4 Landscape designations have been identified within 10km of the proposed wind turbine location, as shown in Appendix E. Within 10km there is the Peak District National Park, one Registered Park and Garden and two Country Parks.
- 4.5 The closest designation is the Peak District National Park which lies approximately 160m to the northeast of the proposed development site. The LVIA will assess the potential visual impact of the proposed development, both individually and cumulatively upon each of the identified designations and receptors within the study area; particularly from within the National Park and views towards it. A number of photomontage images will be produced to support the application.

# 5 ECOLOGY

5.1 The proposed development site is currently utilised for agricultural purposes, with fields bound by post and wire fencing and drystone walls. The site itself is not believed to be of significant nature conservation importance. However, an ecological appraisal will be undertaken to support the planning application.

#### **METHODOLOGY**

- 5.2 The ecological appraisal will comprise a desk based assessment of available species records which will be obtained from the local biological data centre and an assessment of designated environmental sites within close proximity. Designated sites to be assessed will include, but are not limited to: Special Protection Areas (SPAs), Special Areas of Conservation (SACs), Ramsar Sites, Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNRs) and Local Nature Reserves (LNRs).
- 5.3 In addition, a phase 1 habitat survey will be undertaken to identify the potential of the site to accommodate rare or protected species within 250m of the wind turbine and 100m of the proposed access track
- 5.4 Natural England and Joint Nature Conservation Committee (JNCC) guidance will be consulted to identify these sites and to quantify the magnitude of potential impacts. Through the design process, adverse effects will be minimized to ensure a positive outcome for biodiversity.



#### **POTENTIAL IMPACTS**

- 5.5 The proposed development site at Huddale Farm is situated outwith any designated environmental sites; therefore it is unlikely that the proposed development will have a significant adverse impact upon local flora and fauna. This will be thoroughly assessed as part of the ecological appraisal, which will accompany the next stage of the planning process.
- 5.6 Within 10km of the proposed wind turbine location there is one SAC, one NNR, seventeen SSSIs, two LNRs and one RSPB Reserve. The closest designation lies 1.1km from the proposed wind turbine location, at Caldon Dales SSSI. It is anticipated that this SSSI will remain unaffected by the proposed development due to the reason for designation.
- 5.7 Each of the designations within 10km are outlined in Table 5.1 below.

TABLE 5-1: ENVIRONMENTAL DESIGNATIONS WITHIN 10KM

No.	SITE NAME	COMMENTS	DISTANCE (KM)
SAC			
1	Peak District Dales	This SAC covers a number of areas within 10km of the proposed wind turbine. This site has been designated for the presence of Annex I listed habitats, including: semi-natural dry grasslands and scrubland facies on calcareous substrates and tilio-acerion forests of slopes, screes and ravines. The site has also been designated due to the presence of Annex II listed white-clawed (or Atlantic stream) crayfish.	1.9
SSSI			
1	Caldon Dales	Caldon Dales is a steep-sided dry valley on the southern edge of the Carboniferous Limestone dome of south Derbyshire and north Staffordshire. It is the only such feature within the county of Staffordshire outside the National Park. Its importance lies in the local combination of unimproved, traditionally managed calcareous and neutral grassland, a phenomenon now rare in Staffordshire and the Midlands generally. Furthermore, the site contains one of the largest surviving examples of the meadow oat-grass Avenula pratensis—sheep's-fescue Festuca ovina grassland	1.1



		community in Staffordshire and many of the higher plants that occur are infrequent or rare in the county.	
2	Stanton Pastures and Cuckoocliff Valley	Stanton Pastures and Cuckoocliff Valley is an extensive area of unimproved grassland, heathland and deciduous woodland situated between the Weaver Hills and the Dove Valley in north east Staffordshire. Lying astride the junction between Carboniferous limestones and acid Triassic sandstones, the site is notable for its size, diversity of habitats, range of grassland communities and floristic richness.	1.5
3	Hamps and Mainfold Valleys	Throughout the site, extensive areas of woodland, scrub and grassland combine to form areas of exceptional interest.	1.8
4	Brownend Quarry	The quarry faces and rock outcrops within this site provide important exposures of a sequence of limestones formed about 335 million years ago during the Carboniferous Period of geological time.	2.0
5	Rue Hill	The Lower Carboniferous limestones of the Derbyshire Peak District reach their southwestern extremity at Caldon in north Staffordshire. Rue Hill SSSI consists of several small parcels of calcicolous grassland* developed on the sites of old limestone workings. Such grassland is geographically very restricted in Staffordshire, furthermore, both here and nationally, it is now much reduced in extent through changes in land use and farming practices. The site is primarily of interest for its characteristic and diverse flora, including a number of nationally uncommon plants and many others rare in the county.	2.1
6	Caldon Low	This outstanding site shows a Carboniferous Limestone section of considerable palaeogeographic and stratigraphic significance.	2.8
7	Cauldon Railway Cutting	The rock exposures within this site provide an important cross-section through shales and limestones of the Namurian Series originally formed during the Carboniferous Period about 325 million years ago.	3.0
8	Bath Pasture	Bath Pasture is situated on sloping ground west of the village of Cotton in north Staffordshire. The site is a large,	4.8



		floristically-rich unimproved acid grassland, with both dry and wet communities well represented. Such vegetation is now uncommon in lowland Staffordshire and lowland England generally, having declined greatly due to the agricultural changes of recent decades. This primary, acid grassland, interest is complemented by a number of other semi-natural habitats including wet neutral grassland, swamp, scrub and woodland. Bath Pasture supports over 100 species of higher plants, including several which are uncommon or rare in Staffordshire.	
9	Dove Valley & Biggin Dale	Dove Valley & Biggin Dale is one of the richest sites in the Peak District for lichens, in particular for saxicolous (rockloving) species, such as <i>Clathroporina calcarea</i> , which occurs on vertical limestone crags.	4.9
10	Swineholes Wood and Black Heath	The Millstone Grit ridge of Ipstones Edge is a prominent topographical feature in north Staffordshire, rising to 380 metres and forming the extreme south-western tip of the Pennines. The upland acidic dwarf shrub heath that formerly clothed much of the ridge has been largely converted to pasture. Swineholes Wood and Black Heath are the largest heathland remnants. They represent outlying examples of the submontane gritstone moors of the Peak District.	5.0
11	Churnet Valley	The Churnet Valley SSSI, lying to the north of Cheadle, includes the steep-sided main valley of the River Churnet and a number of tributary valleys. These valleys retain the largest remaining concentration of semi-natural ancient woodland in Staffordshire, intermixed with scrub, unimproved neutral and acid grassland and large areas of mire, marsh and carr. The area supports an outstanding assemblage of woodland birds.	6.3
12	Whiston Eaves	The semi-natural grassland at Whiston Eaves is situated to the south of the village of Whiston in north Staffordshire. The site encompasses a series of speciesrich meadows, all of which have been traditionally managed as either hay-meadow or grazing pasture. As elsewhere in lowland England, such areas are now rare in Staffordshire, having largely been lost as a result of	7.0



		changes in agricultural practices. Although consisting predominantly of semi-natural grassland, the site does include areas of rush pasture, scrub and running water.	
13	Saltersford Lane Meadows	Saltersford Lane Meadows is situated to the east of the village of Alton in north Staffordshire. The site encompasses two species rich meadows, both examples of a traditionally managed hay-meadow. Such hay-meadows are now uncommon in Staffordshire, having declined due to changes in agricultural practice.	7.1
14	Dimmings Dale and the Ranger	Dimmings Dale is a predominately wooded valley located about two miles east of Cheadle. The stream, a tributary of the River Churnet, has cut trough the underlying Bunter Sandstone exposing several outcrops of the harder Keuper rocks. It carries exceptionally clean water which hosts a rich invertebrate fauna. Remnants of ancient semi-natural oak woodland along the valley have important populations of dead-wood invertebrates and, together with the outcrops, also support a rich community of mosses and liverworts.	7.2
15	Froghall Meadow and Pastures	Froghall Meadow and Pastures is located in the steep-sided Churnet Valley to the south east of Froghall. It consists of a series of unimproved, species-rich fields, showing a range of grassland types which are locally flushed, and areas of scrub.	8.0
16	Ecton Copper Mines	Ecton Copper Mines is designated due to its geological importance. He site consists of an array of veins developed predominantly within the Ecton Limestones of Lower Carboniferous age.	
17	Combes Valley	This site supports a range of birdlife including flycatchers, redstarts and wood warblers. In the winter, redwings, fieldfares and winter finches regularly visit.	9.9
NNR			
1	Dovedale	Derbyshire Dales NNR lies within the Peak District National Park. The reserve consists of five separate limestone valleys Lathkill, Cressbrook, Monk's, Long and Hay. These five dales represent some of the best examples of wildlife and geology in the White Peak.	4.4



LNR				
1	Hoften's Croft Meadows  Hoften's Croft Site of 1.4 hectares of open meadows of agricultur unimproved grassland managed for wildlife.		3.5	
2	Hales Hall Pool	The 1.76 hectare manmade lake has existed in its current form since 1822. A double line of yew trees links it with Hales Hall built in 1712. There is diverse emergent vegetation around the edge of the pool including Marsh marigold and Flag Iris. Greater Tussock Sedge and Bulbous Rush both uncommon in Staffordshire are present. Look out for waterfowl such as herons, tufted duck, coot, moorhen and great crested grebes.	9.4	
RSPB	RSPB Reserves			
1	Coombes and Churinet Valleys	Species present within the reserve include: dipper, great spotted, woodpecker, pied fly catcher, redstart and woodcock.	9.4	

#### **MITIGATION MEASURES**

- 5.8 Species of bats present in the UK are highly active in close proximity to habitat features. Following best practice guidelines outlined by Natural England in Technical Information Note (TIN051)<sup>2</sup>, the turbine blade swept area will be sited at least 50m away from any potential habitat features, including: trees, walls, hedges, buildings and water bodies. Following this best practice will minimize any potential impact on surrounding bat populations.
- 5.9 As this medium scale wind turbine lies a considerable distance from any designated environmental sites, it is considered highly unlikely that there will be any negative consequences for local or regional ecology.
- 5.10 Biological records will be purchased from the local data centre to identify species which have been recorded within close proximity to the proposed development. This will inform whether any further assessment is required.
- 5.11 Through careful siting and positioning of the proposed wind turbine, it is perceived that any remaining potential for ecological impacts will be insignificant.



<sup>&</sup>lt;sup>2</sup> Natural England (2014) Bats and onshore wind turbines (Interim guidance) (TIN051). Available at: http://publications.naturalengland.org.uk/publication/35010

# 6 CULTURAL HERITAGE AND ARCHAEOLOGY

#### **METHODOLOGY**

- 6.1 An assessment of the potential impacts of the proposed development on the areas cultural heritage will be analysed through a study of the Historic Environment Records (HERs) for the area. This will include an analysis of:
  - World Heritage Sites (WHS)
  - Scheduled Ancient Monuments (SAMs)
  - NMR's (National Monuments Records) and SMRs (Sites & Monuments Records)
  - Listed Buildings (Grade I and II\*)
  - Gardens and designed landscapes
  - Cartographic Sources
  - Development Plans
  - Local Resource Research (libraries, etc.)
- 6.2 A field inspection may be undertaken where known recorded sites exist within close proximity to the development. This will be used to assess the area for any above the surface remains, or associated and unrecorded archaeological features.

## **DESIGNATED SITES**

- 6.3 Within 3km of the proposed wind turbine location at Huddale Farm there are: thirty-two Scheduled Ancient Monuments (SAMs), one Grade II\* and thirty-four Grade II Listed Buildings. Within 2km of the proposed development there are eleven Grade II listed buildings.
- 6.4 Each of the identified SAMs within the study area of the proposed development have been outlined within Table 6.1 below.

TABLE 6-1: SAMS WITHIN 3KM OF THE PROPOSED WIND TURBINE

No.	Mon No.	Name	DISTANCE (KM)	In ZTV
1	13579	Bowl barrow 220m north of dale abbey farm	0.6	Yes



2	13580	Bowl barrow 190m north of dale abbey farm	0.7	Yes
3	13578	Bowl barrow 510m north of latham hall	1.1	Yes
4	13577	Dun low bowl barrow	1.5	Yes
5	13600	Bowl barrow on milk hill	1.6	Yes
6	13583	Bowl barrow 140m north of thorswood plantation	1.6	Yes
7	13549	Bowl barrow 160m north of lower green house	1.6	Yes
8	13582	Bowl barrow 50m north-west of thorswood plantation	1.6	Yes
9	13581	Bowl barrow west of thorswood plantation	1.7	Yes
10	13552	Bowl barrow 50m west of summit of musden low	1.8	Yes
11	13551	Bowl barrow 160m south of summit of musden low	1.8	Yes
12	13553	Bowl barrow 230m west of summit of musden low	1.8	Yes
13	13550	Bowl barrow on summit of musden low	1.9	Yes
14	13591	Bowl barrow 330m east of weaver farm	2.1	Yes
15	13554	Bowl barrow on hazelton hill	2.2	Yes
16	22407	Cart low bowl barrow	2.3	Yes
17	13588	Bowl barrow on weaver hills 680m south of walk farm	2.4	Yes
18	13576	Top low bowl barrow	2.4	Yes
19	13587	Bowl barrow on weaver hills 730m south of walk farm	2.4	Yes
20	13589	Bowl barrow on weaver hills 550m south of walk farm	2.5	Yes
21	13564	Bowl barrow 300m north of slade house	2.6	Yes
	1	ı	1	1



22	13584	Bowl barrow on weaver hills 600m south of weaver farm	2.6	Yes
23	13585	Bowl barrow on weaver hills 550m south of weaver farm	2.6	Yes
24	22443	Bowl barrow on the walk	2.6	Yes
25	13586	Bowl barrow on weaver hills 570m south of weaver farm	2.6	Yes
26	13590	Bowl barrow 230m north of north wood	2.7	No
27	13592	Over low bowl barrow	2.7	No
28	13563	Bowl barrow 440m south east of throwley cottage	2.8	Yes
29	22408	Stonesteads bowl barrow	2.8	Yes
30	13562	Lamber low bowl barrow	2.8	Yes
31	13575	Bowl barrow 380m south-west of blore church	2.9	No
32	21605	Anglo-scandinavian cross, 240m south west of ilam hall	3	No

6.5 Each of the Grade II\* listed buildings within 3km and Grade II listed buildings within 2km are outlined in Table 6-2 below.

TABLE 6-2: LISTED BUILDINGS WITHIN THE STUDY AREA

No.	UID	Name	DISTANCE (KM)	In ZTV	
Grade	II* within 3km	1			
1	275198	Lee house Farmhouse and attached garden wall and troughs	2.8	Yes	
Grade II within 2km					
1	407202	Milepost at NGR SK 1131 4833	0.8	Yes	



2	275167	Milepost at NGR SK 1141 4872	0.8	Yes
3	275165	Caltonmoor House	0.9	Yes
4	275153	Milepost at NGR SK 10004950	1.0	Yes
5	407239	Milepost at NGR SK 1010 4762	1.2	Yes
6	275164	Ivy cottage	1.5	Yes
7	275163	Sundial approximately 10 yards south of church of St Mary	1.5	Yes
8	275162	Church of St Mary	1.5	Yes
9	275161	Bank House	1.6	No
10	275177	Fieldhead	1.6	Yes
11	275183	Stony Rock	1.7	Yes

6.6 It is anticipated that due to large number of heritage assets and lack of screening throughout the landscape, potential views of the proposed development will be likely. However, the extent of the visual impact will be assessed through a heritage assessment and where necessary the production of photomontage images.

#### **MITIGATION MEASURES**

- 6.7 It is predicted that for this site the main potential impact upon the areas cultural heritage will be of an indirect, visual nature; nevertheless, it is anticipated that the impact of this medium sized turbine will be reduced through screening by existing vegetation and built structures. Where appropriate these impacts can be specifically identified for sensitive heritage assets through the provision of wireframe diagrams or photomontages during any further planning stages.
- 6.8 If deemed necessary a walk over survey of the site will be undertaken by a qualified archaeologist as part of the project.



# 7 NOISE & SHADOW FLICKER

- 7.1 It is anticipated that due to the distance between the turbine location and the nearest sensitive receptor that there will be sufficient separation to nullify any noise or shadow flicker effects. The closest noise sensitive receptor is Staton Dale Farm which lies approximately 560m to the south of the proposed wind turbine location.
- 7.2 With regards to shadow flicker, there are no residential dwellings located within 10 rotor diameters (540m) of the proposed wind turbine location, therefore shadow flicker is not anticipated to be a constraint. A shadow flicker and noise assessment will be undertaken and submitted in support of the planning application.

# 8 FLOOD RISK

8.1 According to the Environment Agency (EA) indicative flood risk map, the proposed wind turbine location does not lie within an area at risk of flooding.

# 9 CONCLUSION

- 9.1 It is anticipated from the initial assessments of the site that any environmental impacts upon the local area from the proposed development will be relatively insignificant. There does not appear to be any significant ecology, cultural heritage, landscape, noise or shadow flicker impacts evident, although these will be fully assessed as part of the environmental report which will accompany the next stage of the proposed development.
- 9.2 It is expected that there is sufficient information contained within this report to allow Staffordshire Moorlands District Council to provide a Screening Direction. In order for the Council, statutory consultees and other interested bodies to properly assess the proposed development, sufficient information will be required at the planning application stage. Therefore, the following documents will be prepared to accompany the planning application:
  - Planning Statement
  - Design and Access Statement
  - Supporting Statement which will include the following assessments:



- Landscape and Visual Impact;
- Ecology including Phase I Habitat Survey and desk based assessment);
- Cultural Heritage;
- Traffic and Transport;
- Noise; and
- Shadow Flicker.
- 9.3 Confirmation from Staffordshire Moorlands District Council would be appreciated as to whether these, or any other documents will be required to support the planning application. As part of the screening process we would also like to seek some pre-application advice in relation to the project for the next planning stage. As such we would welcome your early comments on the proposal for a single wind turbine at Huddale Farm.

# 10 APPENDIX

- Appendix A 1:5000 Site Layout
- Appendix B Heritage Assets Map
- Appendix C Environmental Designations Map
- Appendix D ZTV
- Appendix E Landscape Designations Map

