#### **BOROUGH OF KETTERING**

Committee	Full Planning Committee - 27/03/2012	Item No: 5.2			
Report	Michael Boniface	Application No:			
Originator	Development Officer	KET/2011/0082			
Wards	Queen Eleanor and Buccleuch				
Affected					
Location	Arable field at Cranford, Cranford				
Proposal	Full Application: Installation of 1 single wind turbine with a maximum height to tip of 66m, new access track, crane hardstanding, transformer cubicle and substation				
Applicant	Cranford Managment Ltd				

# 1. PURPOSE OF REPORT

- To describe the above proposals
- To identify and report on the issues arising from it
- To state a recommendation on the application

# 2. **RECOMMENDATION**

THE DEVELOPMENT CONTROL MANAGER RECOMMENDS that this application be APPROVED subject to the following Condition(s):-

- 1. The development hereby permitted shall be begun before the expiration of 3 years from the date of this planning permission.
- REASON: To comply with Section 91 of the Town and Country Planning Act 1990 (as amended) and to prevent an accumulation of unimplemented planning permissions.
- 2. The Local Planning Authority shall be notified in writing of the date when electricity from the development is first supplied to the grid and, other than any temporary construction compound(s), the development hereby permitted shall be removed from the site following the expiry of 25 years from that date: the turbine shall be decommissioned and the turbine and all related above-ground structures shall be removed from the site. Following the removal of the turbine and structures, the land shall be re-instated in accordance with a Decommissioning Method Statement that shall first be submitted for the approval of the Local Planning Authority at least 18 months before the date of the decommissioning of the turbine. That method statement shall include details of the manner, management and timing of the re-instatement works to be undertaken and shall be accompanied by a Traffic Management Plan for the removal of the turbine components. The removal works and the reinstatement of the site shall not be carried out other than in accordance with the approved scheme. REASON: In recognition of the expected life of the proposal and to prevent an unacceptable impact on the landscape and the surrounding environment in accordance with PPS5, PPG13, policy 25 and 26 of the East Midlands Regional Plan and policy 13 of the North Northamptonshire Core Spatial Strategy.

3. Notwithstanding the submitted information and before the erection of the wind turbine, details of its exact siting, design, specification and colour shall be submitted to and approved in writing by the Local Planning Authority. Only the approved wind turbine shall be installed upon the development site and the turbine shall not bear any logos or other forms of advertisement.

REASON: To ensure the proposal does not have a detrimental impact on quality of life or the natural environment in accordance with PPS1, PPS22, PPG24 and policy 13 of the North Northamptonshire Core Spatial Strategy.

- 4. The planning permission extends to the provision of 1 turbine only. The blade tip height of the turbine shall not exceed 66 metres in height above ground level and the hub height shall not exceed 49.04 metres in height above ground level.
- REASON: In the interests of protecting the natural environment and to minimise visual impact in accordance with PPS1, PPS22, policies 26 and 27 of the East Midlands Regional Plan and policy 13 of the North Northamptonshire Core Spatial Strategy.
- 5. Any lighting associated with the construction and operation of the wind farm shall only be installed and used in accordance with a scheme that has first been submitted to and approved in writing by the Local Planning Authority before the commencement of development.

REASON: In the interests of protecting the natural environment and to minimise visual impact in accordance with PPS1, PPS22, policies 26 and 27 of the East Midlands Regional Plan and policy 13 of the North Northamptonshire Core Spatial Strategy.

6. All cabling shall be laid underground in accordance with a scheme to be submitted to and approved in writing by the Local Planning Authority prior to installation.

REASON: In the interests of protecting the natural environment and to minimise visual impact in accordance with PPS1, PPS22, policies 26 and 27 of the East Midlands Regional Plan and policy 13 of the North Northamptonshire Core Spatial Strategy.

7. No development shall commence on site until details of the types and colours of all external facing and roofing materials to be used, together with samples, for the transformer box and substation have been submitted to and approved in writing by the Local Planning Authority. The development shall not be carried out other than in accordance with the approved details.

REASON: In the interests of the visual amenities of the area in accordance with policy 13 of the North Northamptonshire Core Spatial Strategy.

- 8. No development shall take place until details of the proposed surface material to be used in construction of the proposed access track have been submitted to and approved in writing by the Local Planning Authority. The development shall not be carried out other than in accordance with the approved details.
- REASON: In the interests if highway safety and the visual amenity of the area in accordance with policy 13 of the North Northamptonshire Core Spatial Strategy.
- 9. The Local Planning Authority shall be notified in writing if the wind turbine fails to produce electricity for supply to the electricity grid for a continuous period of 12 months. The wind turbine and its associated ancillary equipment shall be removed

from the site within a period of 6 months from the end of that 12 month period, in accordance with a scheme that has first been submitted to and approved in writing by the Local Planning Authority. That scheme shall include the details of the manner, management and timing of the works to be undertaken and shall also include a traffic management plan for the removal of the turbine components. The site shall be restored in accordance with a detailed scheme that has first been submitted to and approved in writing by the Local Planning Authority within 2 months of removing the turbine.

REASON: In recognition of the expected life of the proposal and to prevent an unacceptable impact on the landscaoe and the surrounding environment in accordance with PPS5, PPG13, policy 25 and 26 of the East Midlands Regional Plan and policy 13 of the North Northamptonshire Core Spatial Strategy.

10. No development shall take place until a baseline television reception study in the area (5km radius from the turbine) has been submitted to and approved in writing by the Local Planning Authority. The study shall include a mitigation scheme setting out details of works necessary to mitigate any adverse effects to domestic television signals in the area caused by the development and shall include provision for investigating and dealing with any claim by any person for domestic loss or interference at their household within 12 months of the final commissioning of the wind turbine. The development shall not be operated other than in accordance with the approved study and mitigation scheme.

REASON: In the interests of protecting local amenity and to alleviate any adverse electromagnetic interference in accordance with Policy 13 of the North Northamptonshire Core Strategy.

11. Prior to the commencement of development, a scheme for aviation lighting for the turbine shall be submitted to and approved in writing by the Local Planning Authority. The turbine shall not be brought into use unless or until the approved lighting scheme has been implemented in full.

REASON: In the interests of air safety in accordance with PPG13. The MOD have advised that the turbine should be fitted with 25 candela omni-directional red lighting or infrared lighting with an optimised flash pattern of 60 flashes per minute of 200ms - 500ms duration at the highest practicable point.

12. No development shall take place until details of the siting, design, materials and finish for all enclosures and boundary treatments to be erected have been submitted to and approved in writing by the Local Planning Authority. The development shall not be carried out other than in accordance with the approved details.

REASON: To protect the visual amenity of the area in accordance with policy 13 of the North Northamptonshire Core Spatial Strategy.

13. No development shall be undertaken other than in accordance with the recommendations, mitigation and enhancements measures set out within the submitted Ecology Report (September 2010). Prior to the commencement of development a detailed tree and hedgerow enhancement scheme shall be submitted to and approved in writing by the Local Planning Authority. The scheme shall include details of the proposed species, planting sizes, spacing and numbers of trees and shrubs to be planted. The approved scheme shall be carried out in the first planting

and seeding seasons following first operation of the turbine. Any trees or plants which, within a period of 5 years from the date of planting, die, are removed or become seriously damaged or diseased shall be replaced in the next planting season with others of similar size and species.

REASON: In the interests of wildlife and habitat in accordance with PPS9 and policies 5 and 13 of the North Northamptonshire Core Spatial Strategy.

14. No development shall commence unless and until a specification/specific details of the wind turbine to be installed and its exact position within the site have been submitted to and approved in writing by the Local Planning Authority. Where the turbine is not a 330kW Enercon E33 wind turbine a full update of the Environmental Noise Impact Assessment shall be submitted to and approved in writing by the Local Planning Authority. The development shall not be carried out other than in accordance with the approved details. Notwithstanding the provisions of Article 3 of the Town and Country Planning (General permitted Development) Order 1995 (or as amended) no further wind turbines other than those specified shall be installed on the site, under or in accordance with Part 8 of the Schedule to that Order, without a separate planning permission from the Local Planning Authority.

REASON: In the interests of protecting residential amenity in accordance with Policy 13 of the North Northamptonshire Core Spatial Strategy.

15. The noise emitted from the wind turbine as measured in accordance with the guidelines stated within ETSU-R-97, at any dwelling in existence (at the time of this permission) not associated with the scheme, shall not exceed 35 dBLA90, 10 minutes at wind speeds within the site not exceeding 10 metres per second. The measurements and or calculations shall be made in accordance with the methodology detailed in ETSU-R-97 The assessment and rating of noise from wind farms, in particular the noise emission values for the wind turbine shall include the addition for any tonal penalty as recommended in the same document.

REASON: In the interests of protecting residential amenity in accordance with Policy 13 of the North Northamptonshire Core Spatial Strategy.

16. The noise emitted from the wind turbine as measured in accordance with the guidelines stated within ETSU-R-97, at any dwelling in existence (at the time of this permission) associated with the scheme, shall not exceed 45 dBLA90, 10 minutes at wind speeds within the site not exceeding 10 metres per second. The measurements and or calculations shall be made in accordance with the methodology detailed in ETSU-R-97 The assessment and rating of noise from wind farms, in particular the noise emission values for the wind turbine shall include the addition for any tonal penalty as recommended in the same document.

REASON: In the interests of protecting residential amenity in accordance with Policy 13 of the North Northamptonshire Core Spatial Strategy.

#### Notes (if any):-

This planning permission is subject to "pre-commencement" conditions which
require details/drawings to be submitted to and approved in writing by the Local
Planning Authority before ANY development may lawfully commence. Any
development commenced in breach of these "pre-commencement" conditions
will be unauthorised, a breach of planning control, and liable to immediate

Enforcement and Stop Notice action.

# <u>Justification for Granting Planning Permission</u>

The proposal is in accordance with national and local policies as set out in Planning Policy Statements/Guidance Notes 1, 5, 7, 9, 23, 24 and 25, Policies 24, 26, 27, 28, 29, 30, 31, 35 and 40 of The East Midlands Regional Plan, Policies 5, 13 and 14 of the North Northamptonshire Core Spatial Strategy and Policy 7 of the Local Plan for Kettering Borough. Whilst a number of material planning considerations have been raised, in reaching the decision to approve the proposal, these have been carefully weighed against all relevant policy considerations.

## **Officers Report**

## 3.0 Information

# **Relevant Planning History**

KET/2010/0373 – Screening request for a single wind turbine – NOT EIA DEVELOPMENT 21/06/2010

## **Site Description**

Officer's site inspection was carried out on 17/03/2011 and 22/06/2011.

The application site is located 3.7km to the east of Kettering. The turbine would be located 1.6km to the north of Cranford St Andrew, 1.5km to the south east of Grafton Underwood, 1.7km to the north west of Twywell and 1.9km to the north of Cranford St John.

The site comprises approximately 0.1Ha of agricultural land in open countryside and is surrounded by further arable fields which are bounded by native hedgerows. A narrow road runs south west to north east along the east boundary of the site and a small isolated farm complex stands adjacent to this highway. Well established woodland (Cranford Wood) stands to the north as well as to the south (Sandy Spinney); both areas are designated as Local Wildlife Sites. A Site of Special Scientific Interest (SSSI) also exists approximately 1.6km to the south east (Twywell Gullet). Land levels generally slope upwards to the north.

The site does not fall within any nationally designated areas however many of the surrounding settlements (including the closest settlements of Cranford, Grafton Underwood and Twywell) are subject to Conservation Area designation and contain listed buildings.

#### **Proposed Development**

Wind turbine (maximum height of 66m to blade tip), transformer box, crane hard standing, access track and substation.

## **Any Constraints Affecting The Site**

- Local Wildlife Sites to north and south.
- SSSI to south east.

## 4.0 Consultation and Customer Impact

#### **Barton Seagrave Parish Council**

No objection.

## **Broughton Parish Council**

No objection.

## **Cranford Parish Council**

No objection. Comments as follows:

Precedent could be set.

 Unhappy about being surrounded by wind turbines and other development.

# **Lowick and Slipton Parish Council**

Objection for the following reasons:

- Local objection supported by the Localism Bill.
- Landscape and visual amenity.
- Cumulative impacts.
- Horses and riders involved with the charity EquATA (Equine Assisted Therapy Association) may be adversely impacted.
- Ecological impacts and lack of survey works/evidence to establish impacts, particularly in relation to bats and birds.
- Development may set a precedent for further turbines.
- Energy generation predictions are overestimated.
- East Northamptonshire is one of the lowest wind areas in the UK.

## **Sudborough Parish Council**

Objection for the following reasons:

- Cumulative impact with other wind farms nearby.
- Development may set a precedent for further wind turbines.
- Proximity to bridleway and potential impact on horses through vibration and shadow flicker.
- Hazard to users of the adjacent right of way due to the possible shedding of ice from the blades.
- The ecological assessment is inadequate.
- Visual impact on the historic landscape.

## **Twywell Parish Council**

Objection for the following reasons:

- Strength of local objection.
- Lack of appropriate bat surveying and impact assessment.
- Impacts on Red Kites in the vicinity.
- No suitable bird survey has been carried out.
- Risk of accidents should be considered.
- Horses and riders involved with the charity EquATA (Equine Assisted Therapy Association) may be adversely impacted.
- Breach of human rights.
- Landscape and visual impact.
- Cumulative impacts.
- Impact on listed buildings and conservation areas.
- Small amount of energy generation by turbine.
- The Granary, Kirtley Barn and Glebe Farm are very close.
- Little economic benefit locally.
- Adverse impact on tourism.
- A microlight airstrip is located within 1km to the north west of Twywell.
- Screening Opinion is wrong ES should be required.
- Loss of agricultural land.
- Further information fails to address concerns regarding wildlife, visual

impact heritage impact and cumulative impact.

# **Corby Borough Council**

No objection.

## **East Northamptonshire Council**

Objection for the following reasons:

- Cumulative impact on the landscape.
- Precedent for further development.
- Impact on historic and environmental assets.
- Impact on tourism.
- Impact on bridleways and public rights of way.
- Shadow flicker.
- Impact on horses ridden by autistic children.
- Impact on bats and red kites surveys/reports are inadequate.
- Not economically viable.
- Amount of energy produced would not off set environmental damage.
- Loss of enjoyment for people using bridleways.
- Risk of accidents has not been considered the Equine Assisted Therapy Association uses the bridleways and adjacent routes.
- Insufficient consultation has been carried out.

## **Borough Council of Wellingborough**

No objection subject to sufficient consultation being carried out.

# **Highway Authority**

No objection. The proposed delivery route passes through both Kettering and East Northamptonshire districts. Duck End falls within Kettering Borough and is a single track rural road mainly used for agriculture. A condition should require a road condition survey to be carried out prior to the development and any subsequent damage should be repaired at the developers cost. The turbine should be located a minimum distance of the tip height + 10% from the highway boundary. The proposals suggest a distance of 73m and this is acceptable.

#### **Environmental Health**

No objection. The submitted noise assessment demonstrates that the development of a single wind turbine in this location, based on a candidate turbine of an Enercon E33, can be implemented without adverse impact on amenity, and within the parameters of ETSU-R-97. Conditions should secure a revised noise assessment in the event that a different turbine is installed and set appropriate noise levels at nearby dwellings.

#### **Highway Agency**

No objection.

## **Environment Agency**

No objection.

## **Natural England**

Objection due to insufficient information having been provided to establish ecological impacts. Technical Information Note 059 suggests that the risk of bat concentrations at the site should be established along with the likely use of the site. The Phase 1 habitat Survey is insufficient and the 1km data search area is too small. The radius should be increased to 2km and Northants Bat Group should be consulted. Site surveys including a nocturnal transect survey must be carried out to establish the presence of bats and any necessary mitigation. The application should not be determined favourably in the absence of additional information which establishes potential impacts.

Having received further information, it is considered that the application now accords with Technical Information Note 059 and Natural England has no outstanding points of concern.

#### The Wildlife Trust

Objection for the following reasons:

- The ecological assessment does not contain details of any actual survey works or data, particularly in relation to bats and birds.
- Northants Bat Group has raised a number of concerns regarding the methodology adopted in relation to bat impact assessment.
- Insufficient information has been provided to allow an accurate assessment of impacts on ecological interests.

## **Northants Bat Group**

Objection for the following reasons:

- An inadequate local data search has been used.
- The 1km radius study area is too small.
- The applicant has not requested local bat data from the Bat Group.
- The report suggests that no bat records are available this is not true.
- The Bat Group holds bat records within a 2.5km radius.
- No detail of the bat surveyors experience is provided.
- Findings of the report are incorrect, inaccurate and misleading.
- Natural England's guidance note (TIN051) has not been followed.
- No bat surveys have been carried out.
- Roosting bats nearby are at risk of strike from the turbine blades.
- No transect surveys have been carried out.
- Arable fields do not necessarily represent low potential for bat activity.
- Commuting routes have not been identified through surveys.
- The comparatively low height of the blades could present greater dangers to bats which fly at low levels.
- Without the necessary information it is impossible to determine the best position for the turbine or appropriate mitigation.
- Post construction monitoring should be carried out.
- Even a 2km data search is insufficient.
- Almost all the bat species found in Northants have been killed by wind turbines.
- Risks cannot be identified without field surveys.
- Barbastelle bats (especially protected and rare species) may be close to the site.

Following the submission of additional information further comments have been received as follows:

- Noted that the search radius has been increased to 2km in line with Natural England guidance however a larger radius would still be more appropriate.
- Incorrect to state that the bat species identified are at low risk of collision.
- Survey works should be undertaken.
- Possibility of barbastelle bats in the vicinity of the site.
- The applicant's methodology is incorrect in stating that now survey is needed if the turbine is 50m from a hedgerow.

## **North Northants Badger Group**

No comment.

#### **NATS**

No safeguarding objection.

## **Ministry of Defence**

No objection. The turbine should be fitted with 25 candela omni-directional red lighting or infrared lighting with an optimised flash pattern of 60 flashes per minute of 200ms - 500ms duration at the highest practicable point. The MOD should be informed of the date construction starts and ends, the maximum height of construction equipment and the latitude and longitude of each turbine.

#### **OFCOM**

No objection.

## **English Heritage**

Objection for the following reasons:

- Insufficient information has been provided to establish potential impacts on heritage assets.
- No consideration is given to potential impacts on the setting of nearby conservation areas or listed buildings.
- Neither Drayton House and Park or Boughton House and Park were visited as part of the assessment.
- A public footpath also runs through Drayton Park.
- The ZTV should have informed a consideration of the impact on designated heritage assets.
- The Archaeological Desk Based Assessment states that there is no historic connection between the site and Drayton House and Garden and that the two are not inter-visible. The ZTV suggests that the turbine may well be visible however. This has not been tested.
- The turbine may well be visible on views with the important listed buildings and potential adverse impacts on significance must be carefully considered.
- Cumulative impacts with other turbines should also be considered.

Following the submission of additional information, further comments have been received as follows:

 The Cranford Wind Turbine Landscape, Visual and Cultural Heritage document and supplementary wireframes provide an analysis of potential impacts on Heritage Assets including the grade I listed Drayton House. The impacts identified would not amount to substantial harm in PPS5 terms. The application should be considered in line with national and local guidance and specialist conservation advice.

# **Archaeological Advisor (NCC)**

The requested archaeological evaluation confirms that no remains of archaeological interest were found and there will therefore be no further requirement for archaeological work.

## Campaign to Protect Rural England (CPRE)

Objection for the following reasons:

- Lubricants used in the turbine can be hazardous.
- Magnetic interference could affect local television reception.
- Possible accidents from ice-throw, driver distraction from shadow, glinting or simple movement and distress to horses.
- Cumulative impact with other turbines, both inter-visibility and sequential.
- Ecological impact.
- Visual impact.
- Impact on heritage assets.
- Visual Impact Assessment does not accord with recent guidelines.
- Cumulative impact with other turbines has not been considered.
- Horse riders using the adjacent road would be affected as the turbine would not be 200m from the road as recommended by PPS22.
- Wind conditions are likely to result in low energy generation.
- Northamptonshire is oversupplied with wind energy developments and is exceeding its regional target – there is no need for the development.

#### **Neighbours**

81 letters of objection for the following reasons:

- Failure to mention impact on Twywell Conservation Area in application documentation and environmental impact survey
- Inefficiency of inland wind turbines, offshore is more promising
- Cumulative impact of turbines in area, both existing sites and various proposed sites including Cranford.
- Poor energy generation associated with Burton Wold and concern that proposed site will produce similarly low levels of energy
- Threat posed to wildlife, specifically Red Kites and bats (various other animals mentioned i.e. badgers, deer etc)
- Allowing one turbine will lead to more being built on the site
- Visual and aesthetic impact to surrounding villages and area
- Health issues anxiety, depression, sleep deprivation, increase in migraines for sufferers and how it will affect the health of animals
- Environmental issues i.e. concrete left in ground after life of turbine
- Economic cost of turbine to taxpayers

- East Northants an area of low level wind
- Building in area of natural beauty unreasonable
- Flawed and misleading environmental study i.e. Bat study did not use wide enough area
- Conservation status of Twywell includes views
- Impact on small businesses due to loss of tourists who come to see and experience area of natural beauty
- People have not been informed properly of the changes to the application, therefore do not have sufficient time to make considerations
- Planning application number change
- Noise nuisance
- Flicker
- TV signal interference
- Ground vibration
- Area already subject to extensive development proposals and only north of Cranford will retain countryside feel
- How the turbine is connected to grid is fundamental but apparently 'outside the scope of the application'
- Road near proposed site unsuitable and dangerous for use by heavy construction vehicles i.e. narrow
- Rights that are protected by the European Court of Human Rights against health degeneration affected by turbine
- Distress to horses and people that use bridleways surrounding turbine (is turbine correct distance from bridleways so that EquATA (a Horse riding charity that helps autistic and other children) is still able to operate on local bridleways)
- Against public interest
- Effect on Flora
- Target for wind power energy has been reached in East Midlands
- Not part of wider government strategy in drive for more local governance if ignored i.e. Localism Bill
- · Distraction to drivers
- Greenfield site
- Waste of taxpayer money when inefficient and individual owner benefits monetarily
- Studies done hastily to get approval for application by September when government subsidies reduce
- Interfere with air defence radar
- Often have low flying military planes in area
- Site is grade 1 agricultural land
- Better to situate many on one site Burton Wold rather than have random sites of individual turbines

## 46 letters of support for the following reasons:

- No visual impact on Grafton
- Need for green power supply
- Property prices won't be affected as pylons more intrusive and that does not appear to have affected property prices in Grafton

Additional employment

# 5.0 Planning Policy

# **National Planning Policy**

Tackling climate change is a key Government priority for the planning system and has set the target to generate 20% of the UK's electricity from renewable energy resources by 2020. PPS1: 'Delivering Sustainable Development' (2005), its 'Planning and Climate Change' Supplement (2007), and PPS22: 'Renewable Energy' (2004), all strongly promote this type of development.

## PPS 1: 'Delivering Sustainable Development'

The objective of this national guidance is to ensure that the planning system delivers the concept of sustainable development and places considerable emphasis on tackling climate change and promoting renewable energy. Sustainable development is defined as 'the idea of ensuring a better quality of life for everyone, now and for future generations. Paragraph 13, 20-22 set out the key principles to plan making and decisions on planning applications, and requires local planning authorities to ensure that development plans contribute to global sustainability by addressing the causes of climate change through policies which promote and encourage, rather than restrict the use of renewable resources by the development of renewable energy. Paragraph 20 states that development plans should take account of environmental issues such as 'the protection of the wider countryside and the impact of development on landscape quality; the conservation and enhancement of wildlife species and habitats and the promotion of biodiversity; the need to improve the built and natural environment in and around urban areas and rural settlements, including the provision of good quality open space; the conservation of soil quality; and the preservation and enhancement of built and archaeological heritage'. Furthermore, paragraphs 30- 32 place significant emphasis on the achievement of designated energy targets.

## PPS1 Supplement: 'Planning and Climate Change'

The document further emphasises the importance that the government places on tackling climate change, and makes reference to the national legislative requirement to reduce carbon emissions by 60 per cent from their levels in 2003 by 2050. With regards to renewable energy generation paragraph 20 states that planning authorities should:-

- Not require applicants to demonstrate either the overall need for renewable energy or its distribution, nor question the energy justification for why a proposal for such development must be sited in a particular location.
- Ensure any local approach to protecting landscape and townscape is consistent with PPS22 and does not preclude the supply of any type of renewable energy other than in the most exceptional circumstances.

#### PPS 22: 'Renewable Energy'

PPS 22 states that positive planning which facilitates renewable energy developments can contribute to the Government's sustainable development strategy, and is the principle source of Government Planning policy on renewable energy. It is one of the main drivers in ensuring that the Governments renewable energy targets are delivered through the planning system. It is also a very important material consideration in the determination of any application for renewable energy development. In particular Paragraph 1(ii) states that the wider environmental and economic benefits of all proposals for renewable energy projects, whatever their scale are material considerations that should be given significant weight in determining whether proposals should be granted planning permission. Section (vi) of the same paragraph goes on to state that small scale projects can provide limited but valuable contribution to overall outputs of renewable energy and planning authorities should not reject planning applications simply because the level of output is small.

However, it does recognise and offer specific guidance relating to locational considerations:-

- Paragraph 11 acknowledges that planning permission should not be granted for renewable energy projects which fall within nationally recognised designations (such as SSSIs, Conservation Areas, or Listed Buildings) unless it can be shown that the objectives of the designation will not be compromised and the benefits of the project do not outweigh these effects.
- Paragraph 14 states that 'buffer zones which prevent the development of renewable energy projects' should not be employed, however the potential impacts of the proposal upon such designations are material considerations.
- Paragraph 15 goes on to identify that local landscape and nature conservation designations should not be used to refuse planning permission for renewable energy developments.
- With regards to the visual effects of wind turbines, PPS22 advises that local planning 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, and that these impacts are temporary if conditions are attached to planning permissions which require the future decommissioning of turbines'.

## PPS22 Companion Guide: 'Planning for Renewable Energy' (2004)

This companion guide advises that 'if the governments targets are to be met, policy support for renewable energy schemes will need to be backed up by development control decisions. It states that LPAs should recognise that the landscape and visual effects will only be one consideration to be taken into account in assessing planning application and that these must be considered alongside the wider environmental, economic and social benefits that arise from renewable energy projects (Paragraph 5.4).

Paragraph 5.10 advises that in determining planning applications, local planning authorities must come to an objective view on:

- the extent to which the project is in conformity with the development plan;
- the extent to which the reasons for any area based designations maybe compromised;
- the extent of any positive or negative impacts, and the means by which they may be mitigated if negative; and
- the contribution towards meeting the regional target, but recognising that a small contribution cannot be in itself a reason for refusal.

# PPS5: 'Planning for the Historic Environment'

This sets out the Government policies for the identification and protection of historic buildings, conservation areas, and other elements of the historic environment known as Heritage Assets. It outlines that "there should be a presumption in favour of the conservation of designated heritage assets and the more significant the designated heritage asset, the greater the presumption in favour of its conservation should be". It does however recognise the overarching objective to combat climate change, stating "Where conflict between climate change objectives and the conservation of heritage assets is unavoidable, the public benefit of mitigating the effects of climate change should be weighed against any harm to the significance of heritage assets in accordance with the development management principles in this PPS and national planning policy on climate change".

This guidance also relates to archaeological remains, suggesting that they should be preserved or recorded. Conditions can often be used to secure an appropriate public record of any remains.

#### PPS7: 'Sustainable Development in Rural Areas'

This sets out the Governments planning policies for rural areas and emphasises that in determining planning applications LPAs should take account of the need to protect natural resources; conserve specific features and sites of landscape, wildlife and historic or architectural value, in accordance with statutory designations (paragraph 16) and provide for the sensitive exploitation of renewable energy resources in accordance with policies set out in PPS22.

#### PPS9: 'Biodiversity and Geological Conservation'

This document sets out the Governments planning policies on the protection of biodiversity and geological conservation through the planning system. In relation to planning applications, paragraph 27 advises that planning authorities 'should not refuse permission if development can be subject to conditions that will prevent damaging impact on wildlife habitats or important physical features, or if other material factors are sufficient to override nature conservation considerations'.

## PPS23: 'Planning and Pollution Control'

This sets out the Government policies for the protection of impacts on health from development in terms of the quality of land, air or water. It reiterates the Governments commitment to the concept of sustainable development and states that 'the planning system plays a key role in determining the location of development which may give rise to pollution either directly or indirectly, and in ensuring that other uses and developments are not, as far as possible, affected

by major existing and potential sources of pollution.

# PPG24: 'Planning and Noise'

PPG24 provides guidance for local authorities on the use of their planning powers to reduce the adverse impact of noise. Although it makes no specific reference to noise from wind turbines, it does in general terms seek to minimise the adverse effect of noise and advises on the consideration to be taken into account for both noise sensitive development and for activities which will generate noise.

#### PPS25: 'Development and Flood Risk'

This sets out the Governments policies on development and flood risk. Its aims are to ensure that flood risk is taken into account at all stages in the planning process to avoid inappropriate development in areas at risk of flooding, and to direct development away from areas of highest risk.

## **Development Plan Policies**

Section 38 (6) of the Planning and Compulsory Purchase Act 2004 requires local planning authorities to determine planning applications in accordance with the statutory Development Plan, unless material considerations indicate otherwise.

## **Regional Planning Policy**

# East Midlands Regional Plan (EMRP) (March 2009)

## Policy 40: 'Regional Priorities for Low Carbon Energy Generation'

Policy 40 sets out the regional priorities for low carbon energy generation and states that local planning authorities should develop policies and proposals to achieve the targets for renewable energy provision for our region as set out in Appendix 5 of the EMRP. The targets for on shore wind energy provision are shown in the table below.

	Current	Current	Target	Target	Target	Target
	Capacity	Capacity	for	for	for	for
	(2006)	(2006)	2010	2010	2020	2020
	GWh/y	MWe	GWh/y	MWe	GWh/y	MWe
On shore wind	142	54	319	122	460	175

This policy also sets out the criteria for onshore wind energy for which LPAs should give particular consideration which are landscape and visual impact; the effect on the natural and cultural environment; the effect on the built environment; the number and size of turbines proposed; the cumulative impact of wind generation projects, including 'intervisibility'; the contribution of wind generation projects to the regional renewables target; and the contribution of wind generation projects to national and international environmental objectives

on climate change.

## Policy 24: 'Regional Priorities for Rural Diversification'

This policy encourages rural diversification, where the development is consistent with a sustainable pattern of development and environmentally sound management of the countryside. PPS22 recognises that 'renewable energy projects have the potential to play an increasingly important role in the diversification of rural economies'.

# Policy 26: 'Protecting and Enhancing the Region's Natural and Cultural Heritage'

This policy states that the regions natural and cultural heritage should be protected, enhanced and managed appropriately setting out various principles, including that damage to natural and historic assets should be avoided, unavoidable damage should be compensated for, minimised and clearly justified by the need for the development in that location which outweighs the damage, and the best and most versatile agricultural land should not be lost.

## Policy 27: 'Regional Priorities for the Historic Environment'

This policy states that Local Authorities should understand, conserve and enhance the historic environment and that in the growth areas development should promote sensitive change of the historic environment. To achieve this Local Authorities should identify and assess the significance of historic assets and their settings, use characterisation to understand the past's contribution to the landscape in areas of change.

## Policy 28: 'Regional Priorities for Environmental and Green Infrastructure'

This policy seeks the delivery, protection and enhancement of Environmental Infrastructure (EI), and requires LPAs to assess the capacity of existing EI to accommodate change and to protect sensitive areas.

## Policy 29: 'Regional Priorities for Enhancing the Region's Biodiversity'

This policy seeks the 'development and implementation of mechanisms to ensure that development results in no net loss of BAP habitats and species, particularly for restricted habitats with specific environmental requirements, and that net gain is achieved' as well as 'creating, protecting and enhancing features of the landscape which act as corridors and 'stepping stones' essential for the migration and dispersal of wildlife.

## Policy 30: 'Regional Priorities for Managing and Increasing Woodland Cover'

This policy seeks to replace, manage and increase woodland cover as part of new development focussing on identified priority areas, one of which is the Rockingham Forest.

# Policy 31: 'Priorities for the Management and Enhancement of the Region's Landscape'

This policy states that natural and heritage landscapes should be protected and enhanced. Local Development Frameworks should identify landscape and biodiversity protection and enhancement objectives through the integration of landscape character assessments with historical and ecological assessment.

## Policy 35: 'A Regional Approach to Managing Flood Risk'

This policy requires sustainable drainage in all new developments where practical. Development which will alone, or cumulatively have an adverse risk of flooding, or creating flooding, capacity of the flood plain, impede the flow of flood water or impede the infiltration of rain water to ground water storage should not be permitted unless the risk can be mitigated in an acceptable manner.

# Milton Keynes and South Midlands Sub Regional Development Strategy (March 2005)

## MKSM Strategic Policy 3: 'Sustainable Communities'

This policy states that Sustainable Communities will be achieved within the Sub-Region by the implementation of development in accordance with a number of principles including protecting, enhancing and increasing the Subregions stock of strategic environmental and cultural assets and taking advantage of opportunities to develop renewable energy.

## **Local Planning Policy**

# **North Northamptonshire Core Spatial Strategy (June 2008)**

#### Policy 5: 'Green Infrastructure'

Sub regional green infrastructure corridors will connect locations of natural and historic heritage and be safeguarded by not permitting development that compromises their integrity, use developer contributions to facilitate improvements and invest in enhancement and restoration where opportunities exist.

## Policy 13: 'General Sustainable Development Principles'

Development should meet today's needs without compromising the ability of future generations to enjoy the same quality of life. Development should respect the character of the area and not have an adverse impact on residential amenity (in the immediate or wider vicinity); the highway network and highway safety. Is should also seek to conserve and enhance the natural and historic environment, protect and improve water quality; not degrade soil quality; and finally not increase and where possible reduce flood risk.

## Policy 14: 'Energy Efficiency and Sustainable Construction'

Development should meet the highest viable standards of resource and energy efficiency and seek a reduction in carbon emissions. Although this policy does not explicitly relate to wind energy, paragraph 4.14 does state that in what will remain a generally rural area, there are some opportunities for wind energy developments and inline with the latest national guidance and planning advice, it is anticipated that new wind energy development proposals will, in principle, be considered favourably in North Northamptonshire.

#### Saved Policies from the Local Plan for Kettering Borough

# Policy 7: 'Protection of the Open Countryside' '

States that planning permission for development within the open countryside will not be granted except where otherwise provide for in this plan. The purpose of this policy is to protect the open countryside from unjustified development. However, it is considered that in terms of wind farms this policy has been largely superseded by more recent parts of the development plan which finds that in principle wind farm developments are appropriate within the open countryside. Where there is a conflict in the development plan the provisions contained within the Planning and Compulsory Purchase Act 2004 states that, the conflict must be resolved in favour of the most recently adopted policy.

An appraisal of this applications compliance with the above planning policies will be made in the following sections.

# Legislation

The Planning (Listed Buildings and Conservation Areas) Act 1990

- Section 66(1) of the Act states that in consideration of whether to grant planning permission the Local Planning Authority shall have special regard to the desirability of preserving the listed building or its setting or any feature of special architectural or historic interest which it possesses
- Section 72(1) of the Act states that in consideration of whether to grant planning permission the Local Planning Authority shall pay special attention to the desirability of preserving or enhancing the character and appearance of a conservation area.

## 6.0 Financial/Resource Implications

None

# 7.0 Planning Considerations

The key issues for consideration in this application are:-

- 1. Principle of development
- 2. Landscape and Visual Impact
- 3. Historic Environment
- 4. Highway Implications
- 5. Public Rights of Way
- 6. Noise
- 7. Shadow Flicker
- 8. Wildlife and Ecology
- 9. Geology and Soils, Hazardous Substances and Flood Risk
- 10. Agriculture and Soils
- 11. Telecommunications and TV Reception Interference
- 12. Tourism
- 13. Aviation

## 1. Principle of development

The policy section of this report clearly explains that there is strong policy support for the proposal at the national, regional and local level. This reflects the priorities of the Government to provide renewable sources of energy. Specifically, it is a government target and aspiration to generate 20% of the UK's electricity supply from renewable energy resources by 2020.

Policy 40 of the East Midlands Regional Plan (EMRP) (March 2009) requires the provision of 175MW installed capacity by 2020; however, paragraph 3.3.85 of EMRP and paragraph 3 of PPS22 make it clear that these regional targets are to be treated as a minimum. Any provision in excess of these targets will further assist in reducing reliance upon fossil fuels, reducing carbon emissions and combating climate change.

The East Midlands Annual Monitoring Report 2009-2010 (published February 2011) indicates that the current installed capacity for onshore wind energy generation within the East Midlands is 110MW (excluding 190MW of offshore capacity which does not contribute to regional targets) which equates to 63% of the 2020 target. This application will generate an installed capacity of 330kW which is equivalent to 0.19% of the 2020 target. Although this contribution is relatively small, it is nonetheless a contribution towards the Governments renewable energy targets which are an important material consideration. In fact, the applicant expects that the energy generated by the turbine would be roughly equivalent to the annual domestic consumption of all households in Cranford. Section 1(vi) of PPS22 states that small scale projects can provide a limited but valuable contribution to overall outputs of renewable energy and planning authorities should not reject planning applications simply because the level of output is small.

PPS1 (2004) outlines the need for the planning system to deliver sustainable development and to tackle climate change, and the PPS1 supplement 'Planning and Climate Change' (2007) states that positive planning for renewable energy development is important for the delivery of the Government's renewable energy targets. Furthermore PPS22 states that meeting the national renewable energy targets is a material consideration in the determination of applications for renewable energy development.

PPS22 acknowledges that there may be situations where proposals are not acceptable, however it also states that LPAs should recognise that the landscape and visual effects of wind turbines in a landscape will depend on their size, number and type of landscape involved. Furthermore the impacts upon an area are temporary if conditions are attached requiring the future decommissioning of the turbines. PPS7 advises that in rural areas the sensitive exploitation of renewable energy resources in accordance with PPS22 may be acceptable. Although the application site lies in a rural area it does not fall within any areas that are nationally designated for their importance, nor does the proposal have a significant impact on such areas close to the site as later discussed, for example the Conservation Areas in surrounding villages.

Section 38 (6) of the Planning and Compulsory Purchase Act 2004 requires

local planning authorities to determine planning applications in accordance with the statutory Development Plan unless material considerations indicate otherwise. It is clear that the proposed development is in accordance with the development plan and national policy and that it is acceptable in principle. The remainder of the report addresses the other material considerations that have been taken into account by the Local Planning Authority.

# 2. Landscape and Visual Impact

The need for renewable energy is clearly enshrined within all levels of planning policy; however, if the governments' targets are to be met, the policy support for renewable energy schemes needs to be backed up by development control decisions. A clear indication of this is that although PPS22 (2004) acknowledges that 'of all renewable technologies, wind turbines are likely to have the greatest visual and landscape effect', paragraph 5.4 of the PPS22 Companion Guide (2004) states that local planning authorities should recognise that the landscape and visual effects will only be one consideration to be taken into account in assessing planning applications and that these must be considered alongside the wider environmental, economic and social benefits that arise from renewable energy projects. It further contends that an assessment must be made on a case by case basis and for it to be appreciated that the effects will vary according to the size and number of turbines, the host landscape, and that these impacts maybe temporary depending on the consented life span of the project.

The government adopts a hierarchical approach to landscape protection and locational considerations, with the highest protection being afforded to national designations such as AONBs and National Parks, however, even in this instance planning permission may still be granted if the overriding public benefit outweighs any loss of landscape or visual integrity. In terms of local landscape and nature conservation designations paragraph 15 of PPS22 clearly states that local designations should *not* be used to refuse planning permission for renewable energy developments. As such landscape and visual impacts must not be considered in isolation but instead assessed within the context of impact significance and the wider implications and public benefit of the project.

The application is supported by a report entitled 'Landscape and Visual Amenity' which contains an assessment of the potential landscape and visual impacts. The study area is defined by a 10km radius from the development site and the submitted Landscape and Visual Impact Assessment provides a Zone of Theoretical Visibility (ZTV) diagram for this area along with a detailed analysis of potential impacts. This radius is below that recommended by the 'Visual Representation of Wind farms' Good Practice Guidance produced by Scottish Natural Heritage (2007), which suggests that a 20km radius should be used for turbines between 51m-71m in height. The applicant has clarified that this document is guidance only and that it has been produced in line with the specific meteorological and topographic conditions typical of Scotland where atmospheric conditions commonly allow clear views over long distances and where elevated terrain provides open views. It is asserted that no significant adverse visual impacts are identified within the 10km radius and that it is therefore unlikely that such impacts will result outside of this radius. Although a

useful tool in the consideration of proposals for wind turbines, it should be noted that the above guidance document largely relates to proposals for wind farms (multiple turbines) and in situations where an Environmental Statement is required (under EIA Regulations). This application is for a single turbine only and does not constitute EIA development. The 10km radius used should therefore be considered reasonable and proportionate in relation to the specific impacts likely to result from this proposal.

- 1) **The landscape planning designations:** The site does not lie within any national, regional or local area designated for its landscape value.
- 2) The existing landscape character: Within the 10km study area there are 2 national landscape character assessment areas identified. The site is located towards the southern boundary of the Rockingham Forest Character Area 92. This is typified by an undulating landform, with foreground views occupied by arable fields and low hedges. A more detailed character assessment has been carried out for the local area and is set out in the Northamptonshire Environmental Character Assessment. Three local landscape designations fall within the study area however the turbine itself would fall within area LCA3, the Rockingham Forest character area. The local landscape demonstrates some of the key characteristics of this designation such as the undulating landform and extensive woodland cover combined with arable fields.

In terms of designated conservation areas the closest are Cranford (1.6km), Grafton Underwood (1.5km) and Twywell (1.7km). Drayton House and Park (Grade I) and Boughton House and its registered park and gardens (Grade I) also stand within the study area.

3) A description of the site and surrounding area: The site is currently arable farmland with gappy to well defined hedgerows intersecting the site and surrounding area with notable pockets of mature woodland which are remnants of the sites location within Rockingham Forest, the former Royal hunting grounds.

The site is set on a ridge which forms part of a series of undulating ridges and systems within the landscape, and offers medium to long distance views of a rural landscape which includes local settlements and isolated farm buildings. There are a number of residential settlements within a 5km radius of the site and a narrow country road runs north to south along the east boundary.

4) Visual Resource: In order to establish the visual baseline for the site the applicants have produced a Zone of Theoretical Visibility (ZTV) for both the tips and hub of the proposed turbine, which helps to establish the potential visibility of the scheme. This presents the 'worse case scenario' as it is a bare ground analysis which excludes the potential screening effects of vegetation and built structures. The visual baseline also includes the identification of sensitive receptors including settlements, roads and railways, public rights of way, visitor attractions and representative viewpoints for photomontages. A number of settlements were identified within the study area spanning across the Borough of Kettering and the District of East Northamptonshire. Several public rights of

way and highways were identified along with 3 visitor attractions, Twywell Hills and Dales Country Park, Boughton House and Garden and Drayton House and Park.

The ZTV diagrams identify that potential views would be concentrated within a 5km radius of the site. To further assess the visual effect, 6 viewpoints were initially considered within the assessment area from key locations. Viewpoints are represented through computer generated wire lines which can then be used to generate photomontages. The selected points ranged in distance from the site from positions where views are likely to be most significant including the nearby settlements of Cranford, Woodford and Grafton Underwood. They included a number of visual receptors including residential, roads and visitor attractions within the area. Further viewpoints were also requested during the course of the planning application to ensure a comprehensive assessment of the potential impacts and these included locations at Slipton, Barton Seagrave, Lowick and the A14 (Thrapston).

**Summary of Effects: Landscape:** The site is not subject to any national or local landscape designations and as such there will be no effect upon any areas designated for their landscape value. During the construction phase there will be a direct impact upon the physical landscape due to the installation of ground works and indirect impacts through the visual evidence and interpretation of turbine installation and the movement of high cranes within the Rockingham Forest character area in which the site is located. It is considered that further indirect impacts will be experienced within the adjoining national landscape areas however due to the locational circumstances the effects will be reduced through the interpretation of the development within the wider rural and urban landscape and towards the outer boundaries of the study area the effect will be negligible to no effect.

During the anticipated 25 year operational lifespan of the project the potential effect upon the landscape character of the area is considered to be as follows. Owing to the nature of the development the wind turbine would have a direct impact upon the physical landscape within Rockingham Forest Character Area due to the loss of arable farmland and the loss of some hedgerow (approx. 12m) to accommodate the new access tracks. However, the site will continue to be farmed and there are plans for the replacement and restoration of local hedgerows as set out in the submitted ecology report resulting in a net increase in habitat corridors. As such the effect upon the physical landscape will be mitigated to an appropriate degree, furthermore it is recommended that a condition be placed upon the consent to ensure the land is returned to its previous state following decommissioning. It is considered that there will be no significant residual direct effects of the project upon the characteristic physical features of the landscape.

Due to the nature of the development it is considered that the landscape character of the site and immediate locality would be changed for the lifetime of the project, with full height views of the turbines evident in some locations. Despite this it is considered that the proposal would not undermine the wider rural landscape character and should be viewed in the context of nearby farm

buildings and as being a diversification within a rural land use as recognised by PPS7. As such it is not considered that the proposal would undermine the integrity of any key landscape characteristics and would be a progression within a historically dynamic and changeable landscape.

The loss of ground vegetation and hedgerow will be minimal, no important, mature, diverse or distinctive landscape components will be lost and, taking into account the proposed landscape and ecological improvements that will occur as a result of the reinstatement of surrounding hedgerows it is considered that there will be a slight beneficial effect on landscape fabric.

**Summary of Effects: Visual:** All wind turbines will result in some significant effect on views and visual amenity as a result of their size and prominence and it is considered that the most sensitive visual receptors will be residential properties located in and around Cranford, Twywell, Slipton and Grafton Underwood, along with users of public rights of way within close proximity to the site (closest approx. 550m away). As a result of the nature of development the ground level construction and high level works would be prominent in some views. However, as demonstrated by the submitted Zone of Theoretical Visibility (ZTV) it is considered that views of the ground level works will be very localised in nature and high level activity will also be reduced/filtered through the existing foreground vegetation, the orientation of some residential properties and topographical variations.

During the operational lifetime of the scheme the main visual effects will be on a number of residential properties located in and around the surrounding villages and the isolated dwellings located near the site. The closest residential property, Glebe Farm, is 850m away from the site with the Cranfords, Grafton Underwood and Twywell all located within 1.5km. The turbines would in some cases be viewed in their entirety and as such would be visually prominent, however, in many cases due to the existing mature vegetation and land levels the turbine will not be readily viewed at once as demonstrated by the photomontages from viewpoints 1, 2 and 3 and various viewpoints from surrounding settlements and key locations. In addition other elements within the landscape enhance the perception of separation from the turbines, such as the intervening infrastructure network, tree cover and orientation of the properties. It is however noted that significant and clear views will be possible from the 3 nearest residential properties, Glebe Farm, The Granary and Kirtley Barn and this is unavoidable given their proximity and elevated position compared with the site.

It is considered that the selected viewpoints are representative of the anticipated views of the development and these, coupled with the submitted Landscape and Visual Impact Assessment demonstrate that significant visual impacts would be confined to a 1.5km radius from the turbine. Although partial views of the turbine would be possible from further distances these would be intermittent and screened to a large extent by landscape features and built structures.

## **Cumulative Impact**

An assessment of potential cumulative impacts was submitted to the Council on the 6<sup>th</sup> September 2011 and highlighted the existence of the Burton Wold wind farm (and permitted and proposed extensions) within 5km. The viewpoints and analysis demonstrate that the development could potentially be visible together from some viewpoints including 7 (Slipton), 8 (Sudborough Road), 12 (Denford Road) and 13 (East of Raunds). While this is so, the turbine would be seen only as a negligible change in the landscape which is already to a large extent defined by the existence of turbines at Burton Wold. It is considered that due to the intervening vegetation, other vertical man made elements within the landscape and the distances involved that there is negligible cumulative visual or landscape impact resulting from this development in this context. The submitted information also recognises a proposal for 5 turbines at Barnwell Manor (5km north east of the Cranford turbine) and a single turbine between Pytchley and Broughton but again, no significant impacts are identified.

#### Conclusion

Overall it is considered that although there would be some significant landscape and visual impacts from the scheme the site is not located within an area designated for its landscape value and the impacts are not so unacceptable in policy terms to warrant refusal of the application. The methodology used to assess impacts is considered to be sound. It is accepted that the turbines will appear prominent in several views and from residential properties. However given the clear sense of separation between receptors and turbines, it is not considered that these will be overbearing or dominant.

## 3. Historic Environment

In assessing visual impact it is necessary to refer to sections 16(2) and 66(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990 which require Local Planning Authorities to have special regard to the desirability of preserving a building or its setting or any feature of special architectural or historic interest which it possesses when considering whether to grant planning permission for development which affects a listed building or its setting. Section 72(1) of the Act states that with respect to any buildings or other land in a conservation area, special attention shall be paid to the desirability of preserving or enhancing the character and appearance of that area.

The application site itself contains no designated heritage assets, but there are a number of heritage assets within the surrounding villages and in their immediate surroundings. Cranford, Grafton Underwood and Twywell each have Conservation Areas covering large parts of the village and a number of listed buildings are also located in surrounding settlements. Of note, Drayton House and Park (Grade I) and Boughton House and its registered park and gardens (Grade I) stand within 5km of the site.

The proposed wind farm will be visible within the historic environment in the surrounding area; however, any impact needs to be assessed in terms of whether there will be any physical damage to these assets (i.e. damage to archaeological remains) or harm to the setting of the assets which would affect their significance.

The application was originally accompanied by an Archaeological Desk Based Assessment which considered the potential for underground remains and impacts on the historic landscape. The site is located within a field which has retained its shape and function since at least 1748. The document concludes that limited potential exists for archaeological remains although it is noted that extensive possible prehistoric settlement activity has been identified in the area surrounding the site. A field assessment has therefore been carried out as a precautionary approach but the results confirm that no archaeological features or deposits were encountered. The principal impact to be considered therefore is any visual impacts caused by the turbines.

Whilst the turbine will be visible on views from some of the surrounding villages, the wireframe diagrams and photomontages discussed above provide for viewpoints from the nearest villages and it has been concluded that the visual impacts would not be significant or detrimental. On this basis, while partial views of the turbine may be possible from within nearby conservation areas or from a listed building, this would not result in substantial harm to their character and setting.

Viewpoint analysis has also taken place from Drayton House and Park (Grade I) and Boughton House and its registered park and gardens (Grade I). The information provided again demonstrates that any views would be extremely limited and certainly not amount to substantial harm as expressed in policy HE9 of PPS5.

The submitted Landscape, Visual and Cultural Heritage assessment provides a thorough analysis of potential impacts on heritage assets. Whilst some views of the turbine would be possible from the vicinity of heritage assets, a view does not necessarily amount to significant detriment. The turbine would be seen as a distant feature within the landscape and well removed from the historic setting of these heritage assets. Views are limited given the topography of the land, intervening buildings along with trees and landscaping.

#### 4. Highways Implications

The proposed development will involve transportation of the turbine components by road along with construction traffic for the proposed base and crane for erection of the turbine. The construction period is envisaged to last for approximately 4 months and vehicular movements would be spread throughout this period. The most intense period for vehicular movements would be during month 2 when the concrete base is cast. This would require 9 HGV deliveries in a day and therefore 18 movements would result. All deliveries would be below the 18.65m/44T threshold which requires police notification and no abnormal loads would therefore need to access the highway network.

The turbine is to be located 73m from the public highway which provides for the height of the turbine plus 10% in accordance with accepted practice and this prevents safety concerns in the event that the turbine was to fall.

No alterations are required to the public highway in order to accommodate the traffic associated with the development although the existing field access to the

site will need to be improved. This will involve removal of a short stretch of hedgerow (approx. 12m) and the creation of a 4.5m wide hard/compacted surface leading to the proposed crane pad. This would facilitate turns by large vehicles from the North only and would not allow traffic to turn towards Cranford itself.

The Highway Authority has raised no objection to the proposal in principle and is satisfied that highway network is capable of accommodating the proposed development. It has however been suggested that a road condition survey be carried out prior to the development and any subsequent damage should be repaired at the developers cost. Given the size of the vehicles involved (which are not abnormal) and the relatively low traffic movements associated with this scheme for a single turbine it is not considered reasonable or necessary to impose such a requirement. The existing highway network is capable of accommodating the traffic and it would not be possible to demonstrate that damage to the highway was attributable to this development.

# 5. Public Rights of Way

The closest public footpath stands approximately 550m to the south east of the site and runs between Cranford and Slipton. Further footpaths are located approximately 850m to the West (Cranford to Grafton Underwood) and approximately 835m to the North (Grafton Underwood to Lowick).

The main issues that have been raised by objectors are proximity, loss of tranquillity, visual amenity impact and horses being frightened by the turbines. Concern has also been expressed by objectors about the proximity of local roads and a SUSTRANS (sustainable transport) route that are used by horse riders, walkers and cyclists. Duck End adjoins the East boundary of the site and is a quiet country road

providing access to the village of Cranford from the North along with local farm buildings.

Planning for Renewable Energy A Companion Guide to PPS22 states there is no statutory separation distance between a wind turbine and a public right of way, however, fall over distance is considered acceptable. Fall over distance is defined as tip height plus 10%. The proposed turbine is 66m tall, thus a 73 metre separation distance is required and this is indeed proposed. The closest public right of way to the south east of the site is in excess of 500 metres away and the turbines therefore present no danger to users of the footpath.

The British Horse Society in their advisory statement on wind farms state that wind farms can frighten horses by blade shadow, the blades starting to turn and noise. To prevent these problems The Companion Guide to PPS22 states that a 200 metre exclusion zone around a bridle way is suggested by The British Horse Society, however, the Companion Guide stresses that this separation distance is not a statutory requirement and is subject to negotiation. No bridleways stand within a 200m radius of the proposed turbine in any case. Any horses using the public highway would be closer to the turbine however horses would also be subjected to moving vehicles in much closer proximity and the

introduction of a single wind turbine is therefore unlikely to result in a significant loss of amenity to horse riders.

#### 6. Noise

PPS22 endorses the use of 'The Assessment and Rating of Noise from Wind Farms' report by ETSU for the DTI, commonly referred to as ETSU-R-97, when assessing the potential noise impacts of wind turbines. Where noise levels are expected to be low at the nearest noise sensitive property, in this case Glebe Farm a simplified noise limit can be applied. The submitted Noise Assessment demonstrates that the proposed development would meet the noise levels recommended in ETSU-R-97 in all conditions and no adverse impact would therefore result to residential amenity. Conditions should be used to restrict noise levels at residential properties in accordance with ETSU-R-97 and ensure that a revised assessment is provided for any alternative turbine.

Third party representations have expressed concerns about the effect vibration and low frequency noise produced by the turbines would have upon their health. A companion guide to PPS22 addresses this issue. It states that there is no evidence to prove that low frequency noise generated by wind turbines is harmful to health, and it refers to a detailed study by ETSU for the DTI (ETSU W/13/00392/REP), which found that vibration levels and low frequency noise generated by wind turbines would not have an adverse impact upon human health.

## 7. Shadow Flicker

Shadow flicker is the casting of a shadow over neighbouring properties caused by the rotating blades of the turbine. The movement causes the shadow to flick on and off, and the effect of this occurs inside buildings where the flicker appears through a narrow window opening. PPS22 explains that for UK latitudes properties can be affected by shadow flicker 130 degrees either side of north and within 10 rotor diameters of the turbine, in this case 334m. No properties stand within 334m of the turbine and no shadow flicker will therefore occur.

# 8. Wildlife and Ecology

The application is accompanied by an Ecology Report which comprises a Phase 1 habitat survey and assesses the potential impacts upon Ornithology, Bats, Great Crested Newts, Water Voles, Badgers, Dormice and Reptiles. The assessment involves a site visit by a qualified ecologist, a description of the site, its context and the flora and fauna present. It then identifies any protected species present as well as proposing any required mitigation. The report also contains a data records search and consultation with bodies such as Natural England and the RSPB. The data records search initially looked at a 1km radius from the turbine however a supplementary report was received during the course of the application which increases the data search area to 2km at the request of Natural England.

Having considered the data collected and the site circumstances the report concludes that there is very low potential for impact on Great Crested Newts, Water Voles, Dormice and Reptiles. Potential does however exist for impacting Ornithology, Bats and Badgers and further detailed impact assessment of these species is therefore undertaken. The report goes on to make a series of recommendations and conclusions which seek to minimise potential impacts and mitigate their effects.

It is suggested that targeted bird nest/bat roost assessments are carried out in the event that hedgerows are to be breached and/or trees felled or limbed up. This would apply in relation to the 12m stretch of hedgerow to be removed in order to accommodate the proposed vehicular access improvements. Any works to hedgerows and/or trees should, if possible, be timed outside of 1<sup>st</sup> March to 1<sup>st</sup> August to avoid disturbing or destroying any active birds' nests.

In order to mitigate for the loss of the 12m stretch of hedgerow and to provide some ecological enhancement a hedgerow creation scheme should be implemented and nest boxes installed. It is proposed that defunct hedgerows between 50m and 500m from the turbine are gapped-up. This would include restocking of the gaps in the hedgerows with native species. Two barn owl nest boxes are also to be installed on two mature broadleaf trees (at least 8m tall) between 300m and 500m from the turbine.

Subject to the development being carried out in accordance with the recommendations, mitigation and enhancement measures set out in the Ecology report the development would result in little adverse ecological impact and the proposed enhancement measures would improve local habitats. Conditions should be used to require accordance with the submitted proposals.

## 9. Geology and Soils, Hazardous Substances and Flood Risk

The submitted documents confirm that all soils excavated during construction and decommissioning will be stored in accordance with Good practice Guidelines and that waste arising will be used wherever possible in the reinstatement of the site. Any excess materials will be disposed of off-site in accordance with Environment Agency requirements. All vehicles will use the proposed site tracks and hard standings to avoid potential degradation of top soils through compaction.

Any substances classed by regulation as hazardous (such as fuels, coolants, oils and lubricants) used during the construction, operation and decommissioning of the turbine will be disposed of in accordance with the relevant governing regulations at the time. The application details state that all site work would comply with the Construction (Design and Management) Regulations 2007 approved code of practice and the British Wind Energy Association 2005 Guidelines for Health and Safety in the Wind Energy Industry.

The site is in Flood Zone 1 which is considered to have a less than 1 in 1000 (0.1%) annual probability of flooding in any year. The impermeable area associated with the application will be very small comprising the turbine foundation, substation foundation and the external transformer. The development therefore presents very low risk of flooding and a detailed Flood Risk Assessment is not required under PPS25.

#### 10. Agriculture and Soils

The land is classified on the national agricultural land classification as grade 3, where grade 1 is best and grade 5 is worst. The location of the proposed turbines and alignment of the proposed access tracks is such that potential loss of productive land is minimised, not just through direct loss but also through indirect severance of land. Only a very small amount of productive agricultural land is to be lost as a result of this scheme for a single turbine and this would not be contrary to the aims and objectives of PPS7. The benefits in providing a renewable source of energy and combating climate change far outweighs this adverse impact.

## 11. Telecommunications and TV Reception Interference

A wind turbine can interfere with electromagnetic transmissions, such as microwave links, TV or radio transmissions by either; scattering the transmissions with the electromagnetic signals from the wind turbine; or by blocking line of sight transmissions.

The siting of the proposed wind turbine was designed following consultation with telecommunication links operators. BT requested a buffer of 100m from there nearest link and this has been accommodated. No objections have been received in relation to interference with telecommunication links, and therefore it is considered that the proposed development would not have an adverse impact upon telecommunications.

Since the digital switch over in this region, signals are far less susceptible to interference and the likelihood of detriment to TV signals is therefore low. Ofcom has raised no objection regarding interference with electromagnetic transmissions. However, the applicant has confirmed that in order to ensure domestic television transmissions are not adversely affected by the proposal pre-construction and post-construction surveys would be carried out. These surveys would determine the impact of the proposed development and identify any necessary mitigation measures required, for example, the repositioning of aerials, installation of satellite or cable connections to television services at a dwelling. Bearing in mind the applicant is committed to ensuring that television reception is not affected by the proposal it is considered that the proposal would not have an adverse impact upon television reception. A condition has been suggested to ensure that any necessary mitigation is provided by the applicant.

#### 12. Tourism

Concern has been expressed by some objectors' that the proposed wind farm would have an adverse impact on tourism in the area and threaten the livelihood of existing businesses such as local guest houses. A full assessment of the impact on landscape and nearby heritage assets has been discussed at sections 2 and 3 of this report establishing that the impacts are acceptable. It is considered unlikely that visitor numbers to nearby attractions will be materially affected by the presence of a single wind turbine in the distant countryside.

#### 13. Aviation

Wind turbines can have an impact on aviation operators, either as a result of

being a physical hazard during the landing or take off of aircraft, by interrupting an aerodrome's 'protected airspace', or as a result of being visible on a radar used for the guidance of aircraft when in flight. Consultation has been undertaken with the Civil Aviation Authority (CAA), National Air Traffic Services (NATS), Ministry of Defence (MOD) and Sywell Aerodrome. No objections have been raised although the MOD have requested that the turbine be fitted with 25 candela omni-directional red lighting or infrared lighting with an optimised flash pattern of 60 flashes per minute of 200ms - 500ms duration at the highest practicable point. The application details suggest the use of the infrared lighting which is invisible to the naked eye and appropriate details should be secured by condition. PPS22 makes it clear that it is the responsibility of the developer to consider potential impacts on radar and aviation and that Local Planning Authorities should not adopt policies in these regards. The application details demonstrate appropriate consultation and proposed mitigation and it is therefore considered that these matters are sufficiently addressed.

## **Conclusion**

The proposed development accords with both national and local planning policy and there are no material planning matters that indicate against the scheme; as such, planning permission should be granted.

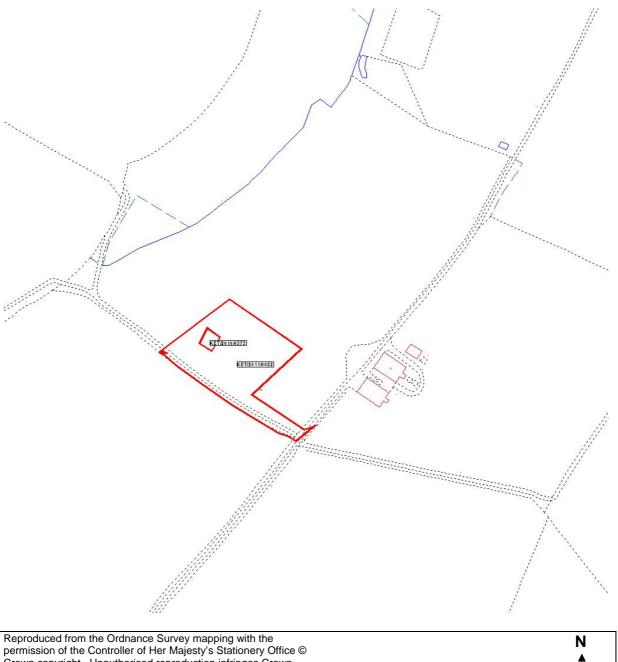
Background Papers Previous Reports/Minutes

Title of Document: Ref: Date: Date:

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# **SITE LOCATION PLAN**

Arable field at Cranford, Cranford Application No.: KET/2011/0082



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