Application Number: F/YR12/0221/F Minor Parish/Ward: March/March West Date Received: 16 March 2012 Expiry Date: 11 May 2012 Applicant: Ms. J. Ross, Infinergy Ltd Agent: Infinergy Ltd Proposal: Erection of a 75 metre (max) high (hub height) wind turbine. Location: Land West of Lower Botany Bay Farm

Site Area/Density: 1 ha

Reason before Committee: This application is before the Planning Committee as the recommendation is contrary to the views of March Town Council and due to Member call in by Councillor Owen as there are too many on shore wind turbines, particularly in this area and the turbine is too large and inappropriate for the site at Lower Botany Bay.

1. EXECUTIVE SUMMARY/RECOMMENDATION

In planning policy terms the proposal is considered to accord with national, regional and local planning policy in contributing to the need for renewable energy without adversely affecting air turbulence considerations, biodiversity, design, access and noise. However, the proposed turbine is located in an area where the cumulative landscape and visual impacts are considered to be determining issues. In this context, the proposal is considered to have an adverse cumulative visual impact in the area. These visual impacts have been evaluated against the requirements to contribute to regional and national targets for renewable energy generation and the benefits of reducing carbon consumption but is, on balance, sufficient reason to resist this proposal.

2. HISTORY

Of relevance to this proposal is:

2.1	F/YR12/0207/F	Erection of a 36.4m high (hub height) wind turbine) – Floods Ferry Farm	Refused 24 August 2012
	F/YR11/0794/F	Erection of 1 x 36.4 metre high (hub height) wind turbine – Staffurths Bridge Farm	Granted 19 December 2011
	F/YR/09/0272/F	Erection of 9 x 67 metre high (hub height) wind turbines and met mast – land north of Floods Ferry Farm	Refused on 04/01/2010
	F/YR/09/0392/F	Erection of 3 no wind turbines (max height	Allowed on appeal

	100 m to blade tip) Land North Of Burnthouse Farm	
F/YR09/0562/F	Erection of 5 wind turbines (110m to blade tip) Boardinghouse Farm, Knights End Road, March	Allowed on appeal 06 July 2011
F/YR07/0585/SCO	Wind Farm Screening Opinion	Further details required
F/YR/06/0594/F	Erection of 2 no wind turbines (max height 100 m to blade tip) Ransonmoor Farm	Granted – 23 February 2007
F/YR/03/0990	Erection of 3 no wind turbines (max height 100 m to blade tip) Ransonmoor Farm	Granted – 25 April 2005

3. PLANNING POLICIES

3.1 National Planning Policy Framework:

Paragraph 2: Planning law requires that application for planning permission must be determined in accordance with the development plan.

Paragraph 14: Presumption in favour of sustainable development. Paragraph 93: Meeting the challenge of climate change, flooding and coastal change.

Paragraph 109: Conserving and enhancing the natural environment. Paragraph 98: Need for renewable energy and acceptable impacts.

3.2 Draft Fenland Core Strategy July 2012:

CS12: Responding to climate change and managing the risk of flooding in Fenland.

CS14: Delivering and Protecting High Quality Environments across the District.

3.3 Fenland District Wide Local Plan:

EMP1: Proposals will normally be favoured for new, or the extension or expansion of existing, firms ... outside DABs the expansion of existing firms will only be permitted where certain criteria are satisfied.
E1: To resist development likely to detract from the Fenland landscape. New development should meet certain criteria.
E8: Proposals for new development should: allow for protection of site features, be of a design compatible with their surroundings, have regard to amenities of adjoining properties and provide adequate access.

E20: To resist any development which by its nature gives rise to unacceptable levels of noise, nuisance and other environmental pollution.

E3: To retain existing trees and hedgerows. To impose, where appropriate, conditions on planning applications requiring landscaping and tree planting schemes. To request the submission of a landscaping scheme with planning applications on visually important sites.

3.4 East of England Plan:

ENG2: The development of new facilities for renewable power generation should be supported with the aim that by 2010 10% of the region's energy, and by 2020 - 17%, should come from renewable sources (excluding energy from offshore wind).

ENV2: Planning Authorities should protect and enhance the diversity and local

distinctiveness of countryside character by developing area-wide strategies and

landscape character assessments to ensure development respects/enhances local landscape character.

The ENV3: Ensure that new development minimises damage to biodiversity.

Policy ENV4: Ensures that the landscape, historic and wildlife value of farmland is increased whilst responding to issues such as climate change.

ENG1: Carbon dioxide emissions and energy performance. SS1: Achieving sustainable development.

3.5 The Fenland Wind Turbine Development Policy Guidance June 2009 (WTDPG)

Details contained under assessment section.

4. CONSULTATIONS

4.1 March Town Council:

4.2 Local Highway Authority (CCC): Recommend refusal. Inappropriate development for this area and too large.

- Prior to the commencement of construction, the access route (within Cambridgeshire) of the abnormal loads shall be submitted to the FDC in order that any highway or highway related modifications required to facilitate the abnormal loads may be identified and agreed with the LHA.
- Similarly a traffic management plan shall be submitted to and agreed in writing by FDC.
 Such agreement to provide for the cost of sign and pole relocations and / or repair/replacement due to any damage caused to highway infrastructure by construction traffic, to be met by the developer.
- Prior to commencement of construction a condition survey of Knights End Road shall be carried out by the applicant with a highways maintenance engineer present. Immediately following completion of the development, a further survey to establish any damage or deterioration to the carriageway and/or verges that has occurred as a direct result of traffic associated with the development shall be carried out and a timetable for appropriate implementation of remedial work shall be submitted in writing

and agreed with the LPA in consultation with the LHA.

Prior to the commencement of development, • adequate temporary facilities (details of which shall have previously been submitted to and agreed in writing with the LPA) shall be provided clear of the public highway for the parking, turning, loading and unloading of all vehicles visiting the site during the period of construction.

The proposed turbine is located approximately 6.5km from the Nene Washes SSSI/SPA/SAC/Ramsar, a site of European and international importance for wintering and breeding bird populations in lowland England. Whilst this proposal may be unlikely to have a direct impact on the Nene Washes designated site, the arable land in the vicinity of the proposal is considered to be a high sensitivity area for wind turbine development in relation to possible impacts on bird species associated with the site. Two of the SPA qualifying species are whooper swan and Bewick's swan, migratory species that are present between October and March/April. Information in the assessment judges the collision risk associated with this proposal to be low. We therefore advise that the following mitigation be requested through suitably worded planning conditions attached to any permission granted:

A programme of post-construction monitoring to be agreed, based on TIN069: Assessing the Effects of Onshore Wind Farms on Birds guidance, to confirm the results of the assessment and identify the need for any further mitigation. This will also help better inform the potential effects of future schemes:

Habitat management measures to be agreed which will discourage species at risk from using the area in the vicinity of the proposed turbine. The proposal is unlikely to have an adverse effect on other protected species, including bats.

No response

Turbine height should have no detrimental effect on emergency services air operations unit. Crime impact assessment is low but advice given about possible cable theft.

No adverse comments - advice offered

No objection

- 4.4 Middle Level
- Commissioners 4.5 Cambridgeshire Architectural Liaison Officer
- CAA 4.6
- 4.7 Peterborough Business Airfield

4.3 Natural England An assessment has now been carried out indicating that any impact from the turbine on users of the air sports centre with regards to air turbulence will be non-existent or negligible at distances 1000m downwind of the turbine (the airports centre is approximately 1570m NE of the proposed turbine).

Sport England does not have any published guidance or any professional expertise to challenge the findings of the assessment, therefore we must accept that our original requirement, that such an assessment is undertaken, has been carried out and that therefore we would not now be in a position to maintain an objection to this application.

However, I would raise two additional questions/points which emerged from a reading of the submitted assessment:

- Whilst the air sports centre will be 1570m from the turbine and therefore any impact has been shown to be negligible, would any users of the air sports centre be airborne at distances considerably closer to the turbine (i.e. within 500m) where the impact may be significant (as accepted in the summary of the main results of the assessment)?
- It should be noted that the assessment only relates to the impact of the single 75m wind turbine which is the subject of this planning application. Any subsequent planning application for additional turbine(s) will need to undertake a similar impact assessment with regard to potential cumulative health and safety impacts on the airports centre.
- 4.9 *Joint Radio Company* Do not foresee any potential problems.
- 4.10 **Environment Agency** We have reviewed the submitted Flood Risk Assessment (FRA) and consider this to be acceptable for the scale and nature of the proposed development.
- 4.11 **RSPB** The RSPB is supportive of renewable energy projects providing that adverse impacts upon wildlife are avoided by appropriate siting and design. The proposed development site lies within c.6km

of the Nene Washes Site of Special Scientific Interest (SSSI), Special Protection Area (SPA) and Ramsar site and within 13km of the Ouse Washes SSSI, SPA and Ramsar site. We are able to confirm the following points, which we hope can be of use to the Council in forming their recommendations with regard to the proposal:

- We agree that the modelling conducted using the data from surveys carried out for the Flood's Ferry proposal provides suitable evidence that collision risk to sensitive species for a single turbine of this specification in the present location is low and that this would provide suitable information to inform any assessment of potential contributions of this site to cumulative/in-combination collision risks to the relevant species in respect of future wind turbine applications;

- We appreciate the prohibitive constraints to micro-siting of the turbine;

- We welcome the proposal to prevent ruderal growth around the base of the turbine but suggest that this needs to at least encompass the area relevant to the blade diameter and a suitable buffer to this to ensure it is effective.

We also request that consideration be given to attaching a condition to any permission granted to secure post construction monitoring of the operational turbine, in order to provide data to verify the prediction of the current ecological assessment that the turbine will pose no, or minimal, collision risk to sensitive species such as migratory swans and golden plover. This would also aid in providing reasonable certainty (e.g. by means of quantitative information on potential numbers of annual collisions) for assessment of potential in-combination

impacts within any EIA (and for any necessary HRA) for further wind farm proposals that present collision risk to the same sensitive species within the Fens. We recommend that post construction monitoring is conducted by an independent and suitably qualified professional, follows the available guidance 5, and that a suitable methodology is agreed with the Council in consultation with Natural England and the RSPB before monitoring commences.

If it is not possible to avoid the bird breeding season in order to ensure legislative compliance, it is recommended that the construction area is checked by an ecologist (who is independent of the contractor) for nesting birds ahead of any work commencing. If nesting birds are present, work must not commence until the nests are inactive. We recommend that this measure is secured through provision of suitably worded planning condition.

The RSPB also propose that the geotextile or road base material should be placed around the base of the turbine (including a suitable buffer beyond the swept area of the turbine.

- 4.12 *NERL Safeguarding Office*4.13 *Anglian Water*No objections No objection to this proposal from a groundwater perspective.
- 4.14 Local residents/interested parties

Petition from 153 objectors in total predominantly concerned about dangerous turbulence wake from the turbine which can seriously affect light aviation activities and harm wild life, local economy and tourism.

In addition, 65 objections (53 of which in the main relate to a potential threat to the adjoining air sports centre) were received covering the following issues:

Devaluation of property,

Horses on nearby bridle paths being sensitive to wind turbine movement and sound,

Visual impact on Fenland landscape,

Proposal could endanger swans,

Adversely affect air sports centre due to turbulence from the turbine on a variety of light aircraft flying in the vicinity of the turbulence wake,

Could endanger swans in the surrounding area,

Another monstrosity to be built on our beautiful fens... which has now been marred by these structures,

Turbine will dominate our beautiful view of the fens,

Health and safety risk to the public,

Noise element is intolerable,

Existing turbines together with the proposal are a hazard to light aircraft,

Interfere with commerce and tourism in the local area.

9 letters of support covering the following:

The area has the capacity to accommodate larger turbines, wind turbines have a vital role in reducing our impacts on the climate, will help renewable energy targets, the site chosen for the wind turbine is ideal.

4.15 MOD (Defence Infrastructure Organisation) Safeguarding Officer No objections

Recommend that the following conditions should be added to a planning permission should it be granted.

Noise levels

The noise emission (LA90, 10 minute) from effects of the wind turbine, as measured in free field conditions at any dwelling, shall not exceed during night hours 2300 – 0700, 43dB(A). At all other times the noise emission (LA90, 10 minute) from the effects of the wind turbine, as measured in free field conditions at any dwelling, shall not exceed the greater of 35 db(A) or 5dB(A) above the background noise (LA90, 10 minute) as measured in accordance with ETSU-R-97. Informative:

Period of hours have been used are as defined in ETSU-R-97 (The Assessment and Rating of Noise from Wind Farms).

Quiet day-time periods are defined as:

All evenings from 6pm to 11pm, Plus Saturday afternoons from 1pm to 6pm, Plus all day Sunday, 7am to 6pm.

Night-time is defined as 11pm to 7am Remedial Action

In the event that noise exceeds the limits specified in the planning permission remedial action must be undertaken to reduce the noise levels. This would include, checking the source noise level of individual turbines (if this has not already occurred as part of any warranty agreement with the turbine supplier or by compliance testing). Mitigation applied may involve slowing of turbine rotational speed, thus reducing noise, or even shut-down of individual turbines, under critical wind conditions. Operator monitoring

At the reasonable request of, and following a complaint to, Fenland District Council the operator of the development shall, measure and assess the level of noise emissions from the wind turbine generators, following the procedures described in "The Assessment and Rating of Noise from Wind Farms, ETSU-R-97" published by ETSU for the Department of Trade and Industry.

Cumulative impact

Monitoring undertaken to identify compliance of planning conditions or justify complaints must consider the cumulative impact of other wind farms. The existence of other wind farm noise should not be considered as part of the prevailing background noise.

5. SITE DESCRIPTION

5.1 This application for a 500kw wind turbine is sited on land approximately 4km west of March The site comprises an area of mainly open and flat agricultural land with small to medium sized holdings and intersected by drainage channels which make up the Middle Level drainage system. The River Nene lies approximately 360 metres west of the application site.

The nearest residential properties are situated at a distance of approximately 750 metres from the proposed turbine. They are Botany Bay Farm, Lower Botany Bay Farm, Ransonmoor Farm and Heron Cottage. A recently approved turbine has been erected at Staffurths Bridge Farm approximately 1.2 km to the south west of the proposed turbine. There are a number of footpaths, trails and ways in the vicinity but none falls within 200 metres of the turbine.

6. PLANNING ASSESSMENT

6.1 Nature of Application

The application seeks full planning permission for the erection of a 3 bladed wind turbine assembly with an overall height of 102 metres to the top blade tip. The 500 kW turbine has a hub height of 75 metres. The proposal is not centred on a particular turbine choice as models and turbine design is constantly changing but the turbine would meet the specifications provided. Access will be via an existing on site track which runs directly from Knights End Road. A full Environmental Impact Assessment was not required for this application but in addition to the plans and supporting information, the application has been accompanied by a number of documents including proposed visualisations, a design and access statement, a report on turbulence impacts and a Technical Report.

The application is considered to raise the following key issues;

- Site History
- Principle and policy implications
- Landscape and Visual Impact Assessment
- Air turbulence Considerations
- Biodiversity
- Design
- Access

It is considered that, by assessing the above issues, it should be determined whether any adverse effects might outweigh the positive benefits of a renewable energy project.

Site History

There is no immediate site history but turbines have been granted in the following locations; Staffurth's Bridge (operational at 1.3km), Boardinghouse Farm (approved at 1.8km), Ransonmoor (operational at 2.2km), Greenvale AP (approved at 2.9km), Burnt House Farm (approved at 3.4km) and Fields End Water (operational at 3.9km).

Principle and Policy Implications

The proposal has been considered in line with National Guidance, in the form of the new National Planning Policy Framework (NPPF) and Development Plan Policy in the form of the Fenland District-Wide Local Plan, 1993, the East of England Plan and also the new Fenland Communities Development Plan Draft Core Strategy; these are listed in the relevant section of this report.

The Government has set a target of generating 20% of the UK's electricity by 2020 and also aims for the UK to be on a path to cut its carbon dioxide emissions by 60% by 2050, as well as maintaining reliable and competitive energy supplies. The development of renewable energy is considered to form a key part of meeting this target which has led to the view that renewable energy schemes should be supported where they do not result in other adverse impact upon the area that outweigh the renewable energy benefits. This application is for the erection of a wind turbine and associated infrastructure. Wind turbines are a sustainable and efficient source of renewable energy and therefore comply, in principle, with the provisions of the NPPF and emerging Core Strategy.

The Fenland Wind Turbine Development Policy Guidance June 2009 (WTDPG)

This document provides detailed local guidance particularly targeted at wind turbine development. It is recognised that there is a need to ensure that future development is in balance with the local landscape and the population that lives within it. As a result the Wind Turbine Development Policy Guidance (WTDPG) was produced by landscape consultants for FDC in April 2008. The WTDPG has been adopted as supplementary planning guidance by the Council. The WTDPG sets down a number of landscape character types and then sets out criteria for evaluating the sensitivity of each type.

Section 6 sets out the criteria for assessing planning applications based on:

- Landscape character
- Landscape capacity
- Visual impacts
- Cumulative landscape impacts
- Cumulative visual impacts
- Biodiversity considerations
- Heritage considerations
- Recreation and transport routes
- Mitigation
- Guidance on Form and Siting

Where wind turbine development is considered appropriate in the light of the above criteria, guidance is then given in terms of how the form and siting of turbine(s) should relate to the characteristics of the landscape type in which it is to be situated. Under the above guidance the proposed site is situated within the following designations:

- 1 "The Fens" landscape character area which has a medium high landscape capacity for groups of 17+,
- 2 A high landscape capacity for single turbines
- 3 A high landscape capacity for small turbine groups (2-5),
- 4 A high landscape capacity for small/medium turbine groups (6-10),
- 5 A medium-high landscape capacity for medium turbine groups (12-16),
- 6 A medium-high landscape capacity for large turbine groups (17+),
- 7 Within the 5km conspicuous zones for existing turbines,

- 8 On the boundary of the 2km 'prominent zone' and 5km conspicuous zone for existing turbines (sequential visual impact),
- 9 Within the 2km 'prominent' zone for proposed turbines.

In terms of landscape capacity within the Drained Fenland character type the WTDPG advises that the "cumulative impact of wind turbine development needs to be carefully considered".

In terms of visual impact the WTDPG advises that:

• Proposals within 400m of a settlement are highly unlikely to be considered acceptable in visual amenity terms.

• There should be no shadow flicker for any residential properties or on A or B roads.

• Proposals within 2km of a settlement should be carefully considered as turbines are likely to be highly prominent features

• Turbines should be set back a minimum distance of 200m from public footpath. The WTDPG advises that for National Trails this should be 3 times the distance

of the overall height of the turbine.

• Residential properties and users of recreational routes/facilities are likely to be considered more sensitive as receptors.

In terms of cumulative landscape impact the WTDPG advises that that there is a danger that excessive development of wind turbines in any landscape would at some point result in such material change as to unbalance and overpower the existing key characteristics of the landscape. To prevent this it advises that within the Drained Fenland character type not more than 25% of the area should be within 2km of a turbine development (prominent zone) and not more than 75% within 5km (conspicuous zone).

• Proposals for new wind turbine development, detached from existing turbines sites by more than 500m but within 4km of existing turbine developments are unlikely to be acceptable in visual terms. In some circumstances a distance greater than 500m is required.

• Proposals for new development within 10km of existing turbine developments need to be carefully considered.

• Settlements of more than 10 dwellings should not have wind turbines in more than 90° of their field of view from public or residential viewpoints within or around the settlements from a distance of 10km from the settlement.

• No more than 25% of the length of A and B roads and railways should be within 2km of wind turbines (prominent zone) and no more than 75% of its length being within 5km of turbines (conspicuous zone)

• Turbines within 4km of each other are likely to demonstrate a significant cumulative impact from a number of locations and are less likely to be considered acceptable in visual/landscape terms, unless they form a relatively modest extension to an existing turbine development.

Landscape and Visual Impact Assessment

The site is not located within any national or locally designated landscape areas but it is important to consider the impact of the turbine on the overall appearance of the Fenland landscape. Landscape and cumulative visual impact must, therefore, also be considered in relation to existing and proposed turbines in the area. As this topic is a specialist field in its own right, the Landscape Partnership, authors of The Fenland Wind Turbine Development Policy Guidance (June 2009), were asked to make an assessment of landscape and visual impact. The subsequent report assessed the Landscape and Visual impacts of the application - with particular reference to likely cumulative effects - and examined the contents of the Landscape and Visual Impact Assessment (LVIA) prepared by LUC (on behalf of the applicant) and submitted with the application.

The assessment noted that the WTDPG seeks to set an appropriate framework to assess emerging proposals and applications but specifically as stated in para 6.2:-

'Non-compliance with an individual criterion should not necessarily preclude turbine development. All the environmental factors should be carefully evaluated and then balanced by the planning authority against the requirements to contribute to regional and national targets for renewable energy generation and the benefits of reducing carbon consumption. The guidelines should also always be considered in conjunction with a detailed study of the site and its surroundings, particularly in terms of existing trees, hedges, buildings and structures that may provide visual mitigation of a wind turbine development'

The Lower Botany Bay Farm LVIA considers seven operational, approved or submitted wind turbine developments, all within 5km of the proposed Lower Botany Bay Farm Wind Turbine. However, this initially excluded the Boardinghouse Farm turbines that were allowed on appeal in July 2011. This omission was updated in a supplementary report from LUC as the scheme is an extension to the existing Ransonmoor turbines and when built will consist of five 110m high turbines (to blade tip) - the closest of which will be 1.8km from the proposed Lower Botany Bay Farm Wind Turbine. This will be the largest and tallest group of turbines near the site. In addition, both the Staffurth's Bridge turbine and the two Fields End Water turbines are now operational. The 5km distance also omits a number of medium to large turbine schemes which would have a bearing on the cumulative impacts e.g. at Coldham and Glassmoor. The FDC 'Wind Turbine Development Policy Guidance' also suggests that proposals for new wind turbine development within 10km of existing turbine developments will need to be carefully considered but for the purposes of this application a 5 km distance has been accepted. The consultants came to the following conclusions:-

Cumulative Landscape Effects

Whilst proximity to existing turbine locations can be seen as an effective way to reduce cumulative landscape effects, this is only one aspect of the WTDPG in relation to cumulative landscape impacts. The LVIA does not consider at all the proportion of the Landscape Character Area that would be affected by the additional turbine, in relation to the 'Prominent' and 'Conspicuous' zones as set out in the WTDPG Table 10. The 'Conspicuous' zone would cover an additional area of the 'Drained Fenland' equal to 28ha (less than 0.1%) to that covered by the 'Conspicuous' zone of any existing or consented turbine groups. This would barely increase the percentage cover within the 'Conspicuous' zone from the existing baseline and would still therefore be within the 75% threshold, excluding any of the other proposed turbine developments that are currently in planning.

Cumulative Visual Effects

The LVIA does not distinguish between those cumulative impacts that will occur as a result of the proposed Lower Botany Bay turbine with existing/consented turbines and those that will occur as a result of the proposed Lower Botany Bay turbine with other proposed but not consented turbines. In general, it is agreed that there will only be minor additional changes to views from the majority of the routes discussed in the LVIA. However, given the proximity of the proposed turbine to the Hereward Way and the River Nene Old Course and the number of existing and consented schemes already encountered along its route, the impact of the proposal on these recreational routes is considered to be of a medium magnitude of cumulative impact overall and locally major cumulative effects for selected lengths including locations near the proposed scheme within c. 2km. It is considered that there would be some moderate and major significance cumulative visual impacts from viewpoint 01, 04 and 05.

The 'Wind Turbine Development Policy Guidance' report considers that small groups of turbines can work well as focal points and landmarks. However, the relationship with other groups in the locality needs careful consideration to avoid undesirable conflict by effectively spreading the cumulative visual impact over an extensive area.

The proposed turbine at Lower Botany Bay is over 500m but less than 4km from the following existing or consented sites; Staffurth's Bridge (operational at 1.3km), Boardinghouse Farm (approved at 1.8km), Ransonmoor (operational at 2.2km), Greenvale AP (approved at 2.9km), Burnt House Farm (approved at 3.4km) and Fields End Water (operational at 3.9km). The proposed turbine could not be considered to be an extension of any of these other schemes. This means that the 'Prominent' zones of the turbine groups would overlap, contrary to the criteria in the 'Wind Turbine Development Policy Guidance'.

The applicant considers that the impact of the proposed turbine would have only a minor cumulative impact in visual terms. However, the consultants consider that the Lower Botany Bay scheme would add to the impression of a localised windfarm landscape, extending these types of effects further north. This effect would effectively breach the guideline threshold. The scheme would also almost join with the 2km prominent zones related to the turbines schemes to the north and north east of March.

The criteria for cumulative visual impact recommends that settlements of more than 10 dwellings should not have wind turbines in more than 90° of their field of view from public or residential viewpoints within or around the settlement for a distance of 5km from the viewpoint. It does not appear likely that this threshold would be breached for the settlements in the vicinity of the Lower Botany Bay turbine from locations where they can be readily seen.

The WTDPG indicates that individual dwellings should not have wind turbines in more than 180° of their field of view for a distance of 10km from the property. Whilst this threshold would be breached for properties such as Boardinghouse Farm and Lower Botany Bay Farm, the existing turbines to the north and north east of March are at a sufficient distance to not cause a significant cumulative issue.

The WTDPG states that proposals for new wind turbine development should be considered in relation to the sequential visibility of turbine development when experienced from A and B classification roads and railway lines. The criteria recommend that the route of the surrounding roads/railway line should in most cases not exceed 25% of its length (measured across or within Fenland) being within 2km of wind turbine development (the 'Prominent' zone) or 75% of its length being within 5km of wind turbine development (the 'Conspicuous' zone). In relation to the Lower Botany Bay turbine, there would be no additional impacts on any of the routes listed within the WTPDG from the 'Prominent' zone of turbine. Again, there would be no additional impacts on any of the routes listed within the WTPDG from the proposed wind turbine.

The consultants report concludes as follows:

1) In general terms the proposed turbine is largely in character with the local

landscape. The turbines would be located within the 'Drained Fenland' Landscape Character Type, which has high capacity to accommodate small groups of turbines. However, in specific terms the Lower Botany Bay turbine would further add to the growing feeling of being within a windfarm landscape in the area of Fenland within the vicinity of the site.

- 2) In cumulative landscape character terms, the addition of the Lower Botany Bay turbine would not cause the capacity threshold of the Drained Fenland to be exceeded and would therefore be considered acceptable. However, the capacity threshold may be breached if other proposed schemes in the planning system are approved.
- 3) The visual impacts of the proposed turbine would create some localised significant effects. This is particularly the case for recreational users on the Hereward Way and River Nene Old Course.
- 4) There would be cumulative visual impacts alongside other existing and consented schemes for receptors in the local landscape which would breach the Wind Turbine Development Policy Guidance in respect of this application. The LVIA omits consideration of the largest nearby consented scheme at Boardinghouse Farm. This effectively underplays the cumulative visual impacts.

In summary, there are particular concerns over the cumulative visual impacts with other existing and consented schemes.

Response to Consultants report from Applicant

The applicant/agent was advised of the consultants findings and responded as follows:

Cumulative Landscape Effects

All wind energy developments within 5km of the proposed Lower Botany Bay Farm Wind Turbine are within in The Fens LCA. The Lower Botany Bay Farm Wind Turbine will add another single turbine (102m to tip) to a landscape already containing (or consented to contain) a number of wind energy developments consisting of single turbines (single approved Greenvale AP turbine 100m to tip and single operational Staffurth's Bridge turbine 46m to tip) and small groups of turbines (5 operational turbines at Ransonmoor Farm up to 110m to tip, 5 approved turbines at Boardinghouse Farm adjacent to the Ransonmoor scheme 110m to tip, 3 approved turbines at Burnthouse Farm 100m to tip, and 2 operational turbines at Fields End Water 25m to tip). In addition, there are another 2 turbines proposed at March Landfill Site (125m to tip) which also fall within the same Fens LCA. The Lower Botany Bay Farm Wind Turbine will (application pending consideration) therefore be of compatible size and scale to existing and proposed turbines and will result in a minor additional change, in conjunction with other developments, to landscape character (low magnitude of change). The key characteristics of the landscape will be retained - the large scale, flat and open landscape with extensive views and large skies; the largely unsettled, arable landscape with isolated villages and scattered individual properties.

Since the landscape sensitivity of the Fens to wind energy development is considered to be low (see para. 4.10 of the Landscape and Visual Impact Report, February 2012) and the magnitude of cumulative change is predicted to be low, the cumulative effect on landscape character will be minor and not significant.

These developments form a cluster of wind energy developments in The Fens LCA. This is in line with the Council's approach to multiple developments which is to locate new turbines close to existing turbine locations where the character has

already been impacted upon (para. 3.8 Fenland District Council – Wind Turbine Development Policy Guidance).

Cumulative Visual Effects

Sequential visual impacts can be investigated through considering the potential impact of the Lower Botany Bay Farm Wind Turbine, in the context of other existing and proposed wind energy developments, on key routes through the area. Since the Lower Botany Bay Farm Wind Turbine is located close to existing development it will not have a much greater impact on routes than existing and proposed wind energy developments. For example, although it will be visible from parts of the A141 (particularly the open section between Wimblington and March), the turbine will be about the same distance away as the existing Ransonmoor turbines and will not be as prominent as the approved Boardinghouse Farm turbines or the proposed March Landfill turbines (application pending consideration) which would be closer to the road and influence visibility to a greater extent. The Lower Botany Bay Farm Wind Turbine will also be visible from the mainline railway where it will be about the same distance away as the proposed Burnthouse Farm turbines but not as close as the March Landfill turbines. The greatest impact will be on the Hereward Way and Footpath 15 along the old course of the River Nene where the Lower Botany Bay Farm Wind Turbine will be closer to the route than any other existing or proposed scheme, although this impact is as a result of the Lower Botany Bay Farm Wind Turbine alone rather than a cumulative impact. Overall, it is considered that the addition of the Lower Botany Bay Farm Wind Turbine will result in a minor additional change, in conjunction with other existing and proposed wind energy developments, to views from routes through the landscape, and the experience of people using these routes.

The applicants response concludes as follows:

- 1) The cumulative assessment concludes that the addition of one turbine at Lower Botany Bay Farm will not result in a significant cumulative impact on the landscape.
- 2) Although Fenland District Council's 'Wind Turbine Development Policy Guidance' states that proposals for new wind turbine development, detached from existing turbines sites by more than 500m but within 4km of existing turbine developments, are unlikely to be acceptable in visual terms because of their overlapping 'Prominent' zones of visibility, the same guidance also sets out the Council's approach to multiple developments, which is to locate new turbines close to existing turbine locations where the character has already been impacted upon (para. 3.8). The Lower Botany Bay Farm Wind Turbine is in line with this approach.
- Journey experience when travelling along key routes through the landscape will not be changed significantly by the addition of the Lower Botany Bay Farm Wind Turbine.
- 4) The 'Prominent' zone of the Lower Botany Bay proposals will cover an additional area of the 'Drained Fenland' equal to 509ha (1%) to that covered by the 'Prominent' zone of any existing or consented turbine groups. This will increase the percentage cover within the 'Prominent' zone from 23% to 24% (which is within the 25% threshold).
- 5) Since the Lower Botany Bay Farm Wind Turbine is a single turbine scheme it will not result in the field of view occupied by turbines significantly increasing as seen from local settlements, nor the field of view occupied by

turbines significantly increasing as seen from individual dwellings.

6) In conclusion, the revised cumulative assessment does not identify any significant cumulative effects on landscape or views and the proposal is within the capacity thresholds set out in Fenland District Council's 'Wind Turbine Development Policy Guidance' (WTDPG) and a single turbine can be accommodated in this landscape.

This response did not alter the consultants concerns relating to the cumulative visual impacts of the proposal alongside other existing and consented schemes for receptors in the local landscape. Therefore, this is still considered to breach the Wind Turbine Development Policy Guidance.

Air turbulence Considerations

An objection to the proposed wind turbine has been made by the adjoining Fenland Wind and Air Sports Centre. The objection is based on concerns that turbulence created from the wind turbine would adversely affect air operations at the Fenland Wind and Air Sports Centre and that the majority of air causing this effect comes from the direction of the turbine. A technical report on air turbulence was produced by the applicant leading to the conclusion that predicted turbulence levels from the 500kW single turbine proposed at the Botany Bay site show that at a distance of 500m there is an insignificant change to turbulence levels compared to ambient turbulence. At a distance of 1000m from the turbine effects are negligible, whereas the Fenland Wind and Air Sports Centre is 1570m away from the proposed turbine location. The wind turbine is also not located in an area where the predominant wind direction would blow towards the Fenland Wind and Air Sports Centre. The applicant has also confirmed that impacts from the existing Ransonmoor and consented Boardinghouse windfarm, although negligible, are indeed higher than predictions for the proposed Lower Botany Bay Wind Turbine.

The Air Sports Centre has responded by suggesting that should the Turbine to be granted permission and erected in its current proposed location this will cause a major hazard and a fixed obstruction to the present open countryside to the West -South-West direction of the Sports Centre as this is the predominant wind direction for the majority of operations. They have carried out testing in a variety of wind speeds, on the forward speeds and climb rates on a complete range of Powered Paragliders during Takeoff and Climbout, Approaches and Landings. They have concluded that in 1 minute from leaving the Airfield a pilot will travel forwards approximately 1/2 a mile (805m) forwards and climb to an altitude of approximately 230ft. This puts the pilot inside the CAA Calculated Wake Turbulence of the proposed Wind Turbine and at the point of highest vulnerability, i.e. climb out from departure to a safe and level cruise height (Minimum 500ft). The Wind Turbine at Botany Bay will inevitably cause a physical obstruction even when not in motion and a smaller amount of turbulence will still be produced from down wind of the Turbine structure due to its height and shape and the aerofoil shape of the Blades, Tower and Pod.

In response, the applicant is of the opinion that the turbine, if granted, should be treated like any other aviation hazard from a collision perspective and they question the basis on which assumptions are made to conclude that the proposal would be unacceptable in the locality. They acknowledge that the turbine will add an additional obstacle to the landscape, and may alter potential flight paths (climbing aircraft may turn outside the 500 metre radius from the turbine) but they do not believe that this will preclude paramotor activities at the Airsports Centre.

Technical submissions have been made by both sides disputing the facts and methodology used in the assessment of whether or not the turbine will adversely affect the operations of the Airsports Centre. The Airsports Centre has been granted permission for a period of 3 years in order to consider whether or not it is acceptable in the longer term. Planning case law suggests that it is difficult to come to a definitive position statement in cases where varying technical evidence has been submitted (AP/H0520/A/11/2158702). In this case, the turbine is at a distance of 1570m away from the proposed turbine location and it has not been established that it will adversely affect the Airsports Centre in which case it would be inappropriate to refuse planning permission for this reason.

Biodiversity

Natural England note that the proposed turbine is located approximately 6.5km from the Nene Washes SSSI/SPA/SAC/Ramsar, a site of European and international importance for wintering and breeding bird populations in lowland England and that 2 of the SPA qualifying species are whooper swan and Bewick's swan - migratory species that are present between October and March/April. Collision risk is considered to be low but suitably worded planning conditions are suggested covering the following topics – should planning permission be granted.

1) A programme of post-construction monitoring based on *TIN069 (Assessing the Effects of Onshore Wind Farms on Birds*) in order to confirm the results of the assessment and identify the need for any further mitigation.

2) Habitat management measures to be agreed which will discourage species at risk from using the area in the vicinity of the proposed turbine.

RSPB advise that:

-collision risk in the proposed location is low

-proposals to prevent ruderal growth around the base of the turbine should encompass the area relevant to the blade diameter and a suitable buffer to this to ensure it is effective.

-consideration be given to attaching a condition to any permission granted to secure post construction monitoring of the operational turbine, in order to provide data to verify the prediction of the current ecological assessment that the turbine will pose no, or minimal, collision risk to sensitive species such as migratory swans and golden plover

-post construction monitoring is conducted by an independent and suitably qualified professional, follows the available guidance 5, and that a suitable methodology is agreed with the Council in consultation with Natural England and the RSPB before monitoring commences.

-If it is not possible to avoid the bird breeding season in order to ensure legislative compliance, it is recommended that the construction area is checked by an ecologist (who is independent of the contractor) for nesting birds ahead of any work commencing. If nesting birds are present, work must not commence until the nests are inactive.

- geotextile or road base material should be placed around the base of the turbine (including a suitable buffer beyond the swept area of the turbine.

These recommendations can be made conditional upon any planning consent granted.

Design

Shadow flicker created by the turning of the turbine blades at certain times of day should also be considered. In terms of this proposal the impact is considered to be minimal as the nearest property is approximately 200m from the turbine but a precautionary condition relating to shadow flicker could be imposed. Noise impact from the turbine has been assessed is also a consideration which can be controlled by an appropriate planning condition should consent be granted. The turbine design is similar to others in the area but should permission be forthcoming it should be on the basis of the design submitted as any alteration to that design may require a further submission.

Access

Access into the site will be via the existing farm track. CCC Highways have suggested suitable conditions should planning permission be granted.

Contributors

Concern about turbulence wake has been assessed above. Devaluation of property is not a planning issue. The British Horse Society has produced advice dated April 2010 on the separation distances of wind turbines from roads and public rights of way. A 200 metre minimum separation distance is recommended which is achieved in this case. Visual impact and biodiversity issues have been assessed above as has health and safety risk to the public, noise and climate change.

CONCLUSION

7.1 In planning policy terms the proposal is considered to accord with national, regional and local planning policy in contributing to the need for renewable energy without adversely affecting air turbulence considerations, biodiversity, design, access and noise. However, the proposed turbine is located in an area where the cumulative landscape and visual impacts are considered to be determining issues. In this context, the proposal is considered to have an adverse cumulative visual impact in the area. This has been evaluated against the requirements to contribute to regional and national targets for renewable energy generation and the benefits of reducing carbon consumption but is, on balance, sufficient reason to resist this proposal.

8. **RECOMMENDATION**

Refuse Planning Permission for the following reasons.

The proposal is contrary to:-

- 1 The Fenland Wind Turbine Development Policy Guidance June 2009 as it is considered to have an adverse cumulative visual impact in the area,
- 2 Paragraph 109 of the National Planning Policy Framework 2012 in that it does not conserve and enhance the surrounding natural environment,
- 3 Policy CS14 of the Draft Fenland Core Strategy July 2012 which seeks to deliver and protect high quality environments across the District,
- 4 Policies E1 and E8 of the Fenland District Wide Local Plan which seek to resist development likely to detract from the Fenland landscape, be of a design compatible with their surroundings and have regard to amenities of adjoining properties, and
- 5 Policies ENV2, 3 and 4 of the East of England Plan which seek to protect and enhance the diversity and local distinctiveness of countryside character, ensure development respects/enhances local landscape character and minimise damage to biodiversity.







Typical Elevation on a 500kW Wind Turbine





NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE

2. ALL LEVELS ARE IN METRES UNLESS STATED OTHERWISE.

