SOUTH CAMBRIDGESHIRE DISTRICT COUNCIL

REPORT TO:	Planning Committee	05 February 2014
AUTHOR/S:	Planning and New Communities Director	

Application Number:	S/0439/12/FL
Parish(es):	Litlington
Proposal:	Installation of five wind turbines of maximum height to tip of 100m, a single 60m lattice tower meteorological mast, on-site substation, access tracks, hardstanding areas, external transformers, temporary construction compound, and associated infrastructure
Site address:	Land at Highfield Farm, west of Royston Road
Applicant(s):	Mr Ralph Parker, Highfield Wind Energy Limited
Recommendation:	Refusal
Key material considerations:	Renewable energy generation, landscape and visual impact, cumulative impact, residential amenity, cultural heritage and archaeology, rights of way, noise, shadow flicker, aviation, ecology, ornithology, highway safety, and utilities and telecommunication.
Committee Site Visit:	04 February 2014
Departure Application:	No
Presenting Officer:	Paul Sexton
Application brought to Committee because:	Officers consider that he application is one which should be presented to Committee for decision
Date by which decision due:	02 July 2012

Site and Proposal

1. The application proposes the erection of 5 wind turbines on land at Highfield Farm, to the west of Royston Road, Litlington.

2. The detailed location of the turbines is set out below:

Turbine 1 E531309 N241142
Turbine 2 E531393 N240852
Turbine 3 E531828 N240955
Turbine 4…E531680 N241200
Turbine 5…E532173 N241081

3. Each turbine will have an overall tip height of 100m, although the application states that the exact make and model of the turbine will not be selected until the pre-construction phase of the project. The assessments accompanying the application are based upon the 2.5MW Nordex N80 turbine. Based on this the application states that the proposed output from the wind farm would provide approximately 27,400Mwh of electricity, sufficient for about 4,980 homes.

4. In addition to the five turbines a 60m high lattice tower meteorological mast is to be constructed 150m north east of Turbine 2, and will be in place for the life of the wind farm. Hardstanding areas will be required around the base of each turbine for construction purposes, but will be left in place for the lifetime of the project in case of repair. A small transformer may be required at the base of each turbine.

5. A single storey substation, approximately 4.6m by 5.6m in size, is proposed 450m to the south of turbine 3, to allow for connection to the local electricity generation network, which would be via an existing 33kv line

6. Although the proposal is to use and upgrade existing farm tracks within the site where possible, there would be approximately 1.6km of new tracks, which will have a crushed stone running surface, laid over a stone sub-surface, which itself lies on top of a geotextile membrane

7. t is proposed to upgrade an existing farm entrance off the Royston Road, to the east of the site, to facilitate that delivery of components to the site. The anticipated delivery route would be from Junction 10 of the M11 at Duxford, then west via the A505 to the turn off to Litlington, east of Royston.

8. The site is located on undulating farmland approximately 1.5km to the south of the centre of the village of Litlington. The site is approximately 1.7km north of the A505. To the west is a public footpath and permissive bridleway running north to south, with another permissive bridleway along the boundary to the north. The Icknield Way. A long distance footpath runs east to west to the south of Litlington, 800m north of the site. There is a bridleway running north to south through Morden Grange farm, 800m west of the site. A map showing the position of the site in relation to existing rights of way and permissive paths is attached as Appendix 1.

9. The closest buildings to the site are at Highfield Cottages, and Highfield Farm and Grade II listed barn to the south, within the ownership of the applicant. To the west are Brick Cottages, White Cottages and Morden Grange Farmhouse, along with former agricultural buildings, which are now partly in commercial use.

10. The proposed operational lifetime of the project is 25 years, following which the wind farm would be decommissioned, unless a fresh planning permission was granted for its retention.

11. The application is accompanied by an Environmental Statement (ES), Design and Access Statement, Planning Appraisal,

12. The Environmental Statement comprises:

Volume 1 – Non-Technical Summary
Volume 2 – Written Statement
Volume 2 – Appendices
Volume 3 – Figures
Volume 4 - Visualisations.

13. The Chapters in the ES comprise:

1. Introduction
2. Development Rationale
3. Site Selection
4. Existing Physical Conditions
5. Environmental Impact Assessment
6. The Development Proposal
7. Construction Operation and Decommissioning
8. Traffic and Transport
9. Landscape and Visual Impact Assessment
10. Cultural Heritage
11. Ornithology
12. Ecology
13. Noise
14. Archaeology
15. Utilities and Communication
16. Aviation
17. Socio-Economics
18. Avoidance and Mitigation Summary
19. Residual Impacts Summary
20. Concluding Statement

14. Since the submission of the application the additional information has been submitted by the applicant, which can be viewed on the website, including observations in respect of the NPPF, comments on responses to consultations, additional information/clarification on noise and shadow flicker, additional visualisations, supplementary cultural heritage report, revised ecology mitigation and draft planning conditions.

Planning History

15. There is no relevant planning history.

Planning Policies

National Planning Policy Framework (NPPF)

16. Paragraph 2 confirms that planning law requires applications for planning permission to be determined in accordance with the development plan, unless material considerations indicate otherwise.

17. Paragraph 3 confirms that National policy statements form part of the overall framework of national planning policy, and are material considerations in decisions on planning applications.

18. The NPPF confirms the presumption in favour of sustainable development (paragraph 14)

19. Paragraph 17 supports the transition to a low carbon future and encourages the use of renewable resources, such as the development of renewable energy. It also states that planning should contribute to conserving and enhancing the natural environment, and conserve heritage assets in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life for this and future generations

20. Paragraph 75 states that planning policies should protect and enhance public rights of way and that opportunities should be sought to improve and add to existing networks.

21. Paragraphs 97 and 98 refer to renewable energy. They state that Local Planning Authorities should have a positive strategy to promote energy from renewable and low carbon sources. Applicants for renewable energy should not be required to demonstrate the overall need for renewable or low carbon energy and also recognise that even small-scale projects provide a valuable contribution to cutting greenhouse gas emission. An application should be approved if its impacts are (or can be made) acceptable

22. Paragraph 109 states that the planning system should contribute to and enhance the natural and local environment by protecting and enhancing valued landscapes.

23. Paragraph 118 states that when determining planning applications, local planning authorities should aim to conserve and enhance biodiversity. If significant harm cannot be avoided, adequately mitigated, or as a last resort compensated for, planning permission should be refused.
Paragraph 128 states that in determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting.

24. Paragraph 133 states that where a proposed development will lead to substantial harm to or total loss of significance of a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits that outweigh that harm or loss.

25. Paragraph 134 states that where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal.

26. Paragraph 135 states that the effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that affect directly or indirectly non designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.

The Planning System: General Principles 2005

27. This document remains extant and seeks to establish the principles within plan-making and decision taking.

National Policy Statement EN-1: Overarching Energy (2011)

28. This document is intended to provide policy for developments considered by the Infrastructure Planning Commission; which in the case of wind turbine development would be schemes capable of generating 50MW or more. The statement describes the challenge of cutting greenhouse gases by at least 80% by 2050 (compared to 1990 levels); a legally binding target, as 'major, and that rapid change will be required in the UK. It also confirms that about a quarter of the UK's generating capacity is due to close by 2018; that the UK needs all types of energy referred to in the document in order to achieve energy security; there is an urgent need for new energy (certainly in the next 10-15 years)

National Planning Statement EN-3 – Renewable Energy (2011)

29. Section 2.7 discusses on-shore wind with reference to a number of considerations. It states that appropriate distances, having regard to noise and visual amenity, should be maintained between turbines and sensitive receptors; spacing should be provided between the turbines; grid connection can have an impact on commercial feasibility; the time-limited nature of wind farms is an important consideration; a tolerance for micro-siting of between 30 and 50 metres is typical; reducing the scale of the proposal may not be feasible; noise measurement should use ETSU-R-97.

Energy Roadmap – July 2011 (updated 2012)

30. The headline objective is to ensure that 15% of the UK energy demand is met by renewable sources by 2020. On-shore wind is identified as a key component in the renewables mix. The aspiration is for 30% of electricity to be generated from renewable sources by 2020. A central scenario of 40% by 2050 is also included.

31. *Department for Communities and Local Government - Planning practice guidance for renewable and low carbon energy – July 2013* provides advice on the planning issues associated with the development of renewable energy, and should be read alongside other planning practice guidance and the NPPF. 'Planning for Renewable Energy: A Companion Guide to PPS22' is cancelled by the guidance.

32. Paragraph 16 states that local planning authorities should not rule out otherwise acceptable renewable energy developments through inflexible rules on buffer zones or separation distances.

33. Paragraphs 29 – 45 give specific advice in respect of wind turbines.

Local Development Framework

34. DP/1 – Sustainable Development
DP/2 – Design of New Development
DP/3 – Development Criteria
DP/7 – Development Framework
NE/2 – Renewable Energy
NE/4 – Landscape Character Areas
NE/6 – Biodiversity

NE/11 – Flood Risk
NE/15 – Noise Pollution
NE/16 – Emissions
NE/17 – Protecting High Quality Agricultural Land
CH/1 – Historic Landscapes
CH/2 – Archaeological Sites
CH/4 – Development Within the Curtilage or Setting of a Listed Building
CH/5 – Conservation Areas

Supplementary Planning Documents

35. Biodiversity SPD
Landscapes and New Developments SPD
Listed Buildings SPD
Development Affecting Conservation Areas SPD

Draft Local Plan 2013

36. S/3 – Presumption in Favour of Sustainable Development
S/7 – Development Frameworks
CC/2 – Renewable and Low Carbon Energy Generation
CC/6 – Construction Methods
CC/7 – Water Quality
CC/8 – Sustainable Drainage Systems
HQ/1 – Design Principles
NH/2 – Protecting and Enhancing Landscape Character
NH/3 – Protecting Agricultural Land
NH/4 – Biodiversity
NH/14 – Heritage Assets
SC/11 – Noise Pollution

37. In February 2011 Council passed a resolution confirming that it supported seeking energy from renewable sources. "However, applications for wind farms (2 turbines or more) cause deep concerns to our residents by nature of their scale, size and noise. This Council believes that a minimum distance of 2km between a dwelling and a turbine should be set to protect residents from disturbance and visual impact. If the applicant can prove that this is not the case a shorter distance would be considered. This will be addressed during the review of the Local Development Framework."

38. Policy CC/2 of the Draft Local Plan 2013 confirms this by proposing a minimum distance of 2km between a dwelling and a wind turbine (proposals for 2 or more turbines) is set to protect residents from disturbance and visual impact. If the applicant can prove that this is not the case, a shorter distance would be considered.

39. Objections to this part of Policy CC/2 have been received, and will need to be considered as part of the ongoing Local Plan review process.

Consultations

40. A number of the consultation responses are very detailed and have been attached as appendices, so that Members can read them in full. Where this has been done only brief summaries are given below.

41. **Litlington Parish Council** recommends refusal. A full copy of its response is attached as Appendix 2.

42. The reasons for refusal can be summarised as:

- The impact on health and well-being of residents
- The impact on the character of the landscape
- The impact on the visual amenity of residents
- The impact on cultural heritage
- Traffic and Transport

43. Other considerations such as the question of whether any harm was clearly outweighed by other considerations, so as to amount to the very special circumstances necessary to justify the development.

44. **Steeple Morden Parish Council** recommends refusal

45. The Parish Council fully supports the move towards renewable energy and its efficient production. However, the proposed wind farm and its location raise a number of significant concerns, both for the Parish of Steeple Morden and for the wider area. We would summarise as follows:

Landscape

46. We feel the proposal would be extremely detrimental to the character and setting of the site and the surrounding Parishes, and of the neighbouring Therfield Heath, a valued and very popular local amenity. The size of the proposal would be out of scale with its Cam Valley location and consequently unsympathetic to its intimate landscape character. In addition, it would have a detrimental impact on the character and setting of a number of listed buildings within this Parish.

Intrusion

47. There are five properties at Morden Grange Farm within 800m of the proposed site – not four, as stated in the Application – which would be adversely affected by the flicker from the turbine blades, as well as the constant noise from the site. In addition (and not mentioned at all in the Application despite being within a mile of the wind farm site), there are three dwellings at The Thrift and a further two dwellings at Gatley End, together with a proposed 70-room hotel on the site of the former Horse and Groom Public House. All of these would be overshadowed by the five turbines and, again, subject to constant noise from their operation.

48. For the sake of these residents, we feel that it should be incumbent on the Applicants to produce examples of existing installations that effectively and reliably mitigate the risk of blade flicker, together with an indication of noise levels likely to be experienced at these locations by day and night (including low frequency noise), once the actual model of the turbine had been decided on. Since these dwellings would also be the most likely to suffer from interference to their television signal, an acceptable method of avoiding this would also need to be agreed, before any decision on the application is reached.

Access

49. We have grave concerns about the access route to the site during the construction phase, and for its subsequent maintenance and possible decommissioning. In particular, a 30% uplift in the number of HGV's crossing the eastbound carriageway of the A505 during the construction phase seems fraught with danger, occurring at a

point where most traffic on this trunk road is travelling at or above the 70mph legal speed limit. Having visited the site, these HGV's would have to emerge into this same high-speed traffic stream from a standing start, as there is no entry slip at this junction for them to gain at least some speed.

50. Added to this are the 144 exceptional loads mentioned in the Application that would reach the site via the same route and would also have to cross the eastbound carriageway of the A505 – presumably only possible after a police escort has stopped all eastbound traffic for each of the 144 crossings.

51. We would welcome some comment from the Highways Agency on the likely disruption to local and trunk-road traffic, and also for the constabulary on the cost and operational requirements of providing the necessary escorts for the exceptional loads. In addition, we would seek reassurance from Network Rail on the safety implications of so many HGV's using the Litlington level crossing and also that the exceptional loads will be able to negotiate the crossing, without the entry and exit angles bringing some of the components into dangerously close proximity to the 25KV overhead wires.

Biodiversity

52. We note that the Environmental Impact figures in the Appendices refer to an earlier version of the Application for four turbines and different blade length from the five-turbine version now being considered. These tables should be updated to reflect the configuration under discussion, then re-examined.

Justification

53. When consulted on an earlier application for the anemometry mast on this site, we did suggest a condition requiring the data from this mast be placed in the public domain. Unfortunately that suggestion was not acted upon, nor was an undertaking, given at the public meeting in October 2011, that on-site date would be used in this application. Without access to this data, we are unable to state categorically whether the considerable local harm would be outweighed by any 'green' benefits arising from this site. However, extrapolating the likely output based on locally available wind-speed data and comparing that with the Applicants' own figures, we remain unconvinced of the site's ability to swing the balance even slightly in its favour, whereas the potential harm is all too evident.

54. Without prejudice to these objections, we would suggest the following conditions, should the committee see fit to approve this Application:

    1. Any increase in the overall height or blade length as a result of final turbine selection should require a fresh Planning Application to be made.

    2. The proposed £5,000 per turbine contribution to the local community should accrue from revenue, not profit, as stated in the Application."

55. **Bassingbourn Parish Council** recommends refusal

"The turbines would cause damage to the character of the landscape. They would harm cultural heritage. If approved a precedent would be set for future applications."

56. **Abington Pigotts Parish Meeting** recommends refusal

"To permit this in the least windy part of the country would inflict a negative financial return on those who subsidise these schemes, the electricity consumer."

57. **Guilden Morden Parish Council** recommends refusal

"The Parish Council is concerned about noise pollution and the overbearing nature of the proposed turbines."

Royston Town Council recommends refusal

58. "Members understand the need for sustainable energy but were divided on the need for this particular wind farm at this location as it will be close to people's homes and that it would be detrimental impact on our valued landscape. If this farm is allowed to diversify for economical reasons then the whole area could become covered with a swathe of wind farms.

59. Other concerns raised were the effectiveness of the turbines and the impact during construction. Members voted 4 against and 2 for, it was agreed to inform South Cambridgeshire District Council that the council objects to the development and that the Town Council wished this matter to be discussed further at their next Full Council scheduled to be held on 25 June 2012. This would allow all of Royston Councillors to discuss this application."

60. In response to the amended consultation in March 2013 it states that following a full discussion the Council agreed to object to this application for the installation of five turbines. They are in the wrong area and there are plenty of other locations not within a mile of residential properties. The prevailing wind is westerly which will have an effect on Royston. These turbines will also have an effect on Therfield and Ashwell residents. Members ther3efore agreed to object on environmental grounds of noise and appearance, a wrong location.'

61. In a further letter received in September 2013it reaffirms its strong objection stating that there are much more suitable and less populated places for a wind farm than on the doorstep of a town of over 17,000 residents. The location is only 1km from the A505 and Litlington, and a little over a mile from the west end of Royston. The turbines will be very visible on long stretches of the A505 and a distraction to drivers on what is already a dangerous road. The site is some 50-60 metres above sea level. The Heath opposite is 100-120 metres. The turbines will tower above the Heath, the town and surrounding area and be visible from miles around. The noise from them will certainly be heard by Litlington residents and probably also some Royston residents as the prevailing wind is from the west.

62. The Council also draws attention to the developer's consultants response to SCDC Health and Environmental Services, 4 October 2013 -22/2/13 item 41

63. "Health Effects of Wind Farms
There are no direct health effects of wind farms as the noise levels, especially at low frequency and infrasonic levels, are too low to cause any such effects. Indirect health effects such as annoyance leading to stress, or stress related sleep disturbances, may occur but this can be minimised through compliance with the current government planning guidance on noise from wind farms."

64. It does not say there will be no effects, only that they will be minimised.

65. The Town Council is also concerned that this is not the only controversial planning application very close to Royston not within the boundaries of NHDC and not under NHDC control. Is it a coincidence that the developers have chosen the perimeter of SCDC for this planning application and the other application for a solar farm. Do the developers think that SCDC will be less concerned than they might of this application was for a location within 1 mile of Trumpington or Cambridge? Royston Town Council asks that SCDC object to this application and give weight to the views of the local residents as they would if it was in their heartland.

66. **Kelshall Parish Council** recommends refusal

67. Not considered suitable for this environment.
Too close to too many communities.
Air space used by army and small airfields, plus Stansted and proposed flight path for the extra Luton runway.
Not convinced of 'proven wind farm function' and recommends wind advice.

68. In response to the amended consultation in March 2013 it comments that if it is correct that radar is affected by turbine activity, in which case, has regard been given to the proposed expansion of Stanstead Airport and the likely new runway effect from Luton Airport. We understand that the Luton flight path is scheduled to be above the Highfield Development. Because this is Essex and Bedfordshire Councils, have they been consulted?

69. **Therfield Parish Council** recommends refusal

70. "Therfield Parish Council is opposed to this application on the ground of the proximity of the site to the limestone scarp of Therfield Heath."

71. **North Hertfordshire District Council** states that the application was discussed by its Planning Committee on 18 April 2013 and comments:

72. It strongly recommends that the determining Authority consult the Parish Council's at Hinxworth, Ashwell, Kelshall (Parish Meeting), Therfield, Sandon, Barkway and Reed as well as Royston Town Council. Additionally it recommends that the Conservators of Therfield Heath are consulted.

73. It recommends that Hertfordshire County Council is consulted in respect of vehicle movements during construction on the A505, and the ongoing issue of driver distraction.

74. It recommends that the issue of noise in relation to the nearest noise sensitive properties, as well as shadow flicker, be fully investigated in order to safeguard reasonable living conditions.

75. **Central Bedfordshire Council** has no objection.

76. The **Councils former Team Leader Sustainable Communities (and Principal Lead for Environmental Sustainability and Climate Change)** commented in March 2013.

77. "The following response assumes that the applicant has satisfactorily resolved any outstanding local technical and environmental matters arising, such as those relating to potential impacts on aviation, microwave links, highways, network transmissions, biodiversity, landscape, conservation and public health.

78. From the perspective of sustainable development there are two key issues that should be taken into account when considering the determination of the current Highfield Farm application:

a) The need and relevance for large scale wind farm development as an effective and appropriate renewable energy technology in South Cambridgeshire

79. From this strategic perspective, the strength of argument (as reflected in national and local policy) is overwhelmingly in favour and constructed from the following elements:

80. The likely impacts associated with climate change will be increasingly and dangerously disruptive without the very rapid and comprehensive reductions in greenhouse gases laid by Government from the Climate Change Act of 2008 (impacts locally will likely include more frequent and more severe flooding, subsidence, water shortages and increased insurance associated with damage to buildings). The importance to South Cambridgeshire and the Cambridge sub-region as a whole, of which the district is an integral part, cannot be understated since much of the area lies close to sea level and already experiences some of the driest seasonal weather in the country.

81. South Cambridgeshire residents also have, on average, one of the highest annual per capita carbon footprint figures in the region - at approximately 10 tonnes of CO_2 (as calculated by DEFRA in its annual reporting).

82. It is therefore appropriate that the district takes all steps available to mitigate these impacts through maximising its contribution to carbon reduction as rapidly as possible. The Highfield Wind Farm would be a useful important part of this contribution.

83. South Cambridgeshire District Council is committed, as a signatory to the Nottingham Declaration, to taking steps to mitigate the effects of climate change. Alongside this broader strategic position, South Cambridgeshire as the local planning authority, is specifically disposed through its planning policies to encourage the installation of renewable energy technologies within the district.

84. On-shore wind is currently the most available and economically viable low carbon renewable energy technology in the UK and has a significant and very relevant role to play in decentralised energy provision. On-shore wind energy makes a very competitive contribution to the country's energy supply as a clean and reliable form of power produced in an environmentally friendly way as the turbines do not produce chemical or radioactive waste.

85. In response to the 2008 EU Renewable Energy Directive the UK Government has adopted a target of generating 15% of all energy from renewable sources by 2020. The current scenario for realising this target suggests that it will need to incorporate 35% of electricity generation from renewable sources. Onshore wind generation has been specifically identified as a means of realising these targets (off-shore wind generation requires a much greater investment. The conditions for securing such investments are presently far less favourable than they were).

86. Wind turbines provide load relief for conventional fossil fuel powered plants, enabling them to throttle back and save fuel. The need for a back-up conventional electricity supply to stand in when the wind is not blowing has created concern over potential carbon savings. However, National Grid has calculated that 33GW of wind would

require an additional 6.5GW of reserve back-up supply, roughly the same proportion as is currently built into the grid system. It should be remembered that every kWh generated by wind is one less from fossil fuels. The issue is not relative reliability but the number of kWh delivered to the grid.

b) The importance of securing local community support, acceptance or buy-in for the wind farm development

87. The second strategic sustainability issue relevant to this proposed development has gained significant recent profile when it comes to the consideration of commercial wind farm planning applications. This relates to the importance of effective public engagement as society makes the transition to low-carbon living in a low-carbon economy over the next 20 to 30 years.

88. Effective public engagement is a necessity and bedrock of this transition and all decentralisation measures (of which the Highfield Wind Farm must be considered one) will need to ensure that they propagate support. The essential facets of the take-up and shift to low carbon lifestyles over the coming two or three decades are not geographically remote, they are local, existing at community, neighbourhood and individual levels of engagement and agency. The decentralisation transition will come about as much through our individual actions to reduce carbon emissions in our day-to-day lives as it will from a change to a locally dispersed infrastructure of non-fossil fuel based energy generation, the former arising from behaviour change and domestic level changes towards more sustainable energy management, and the latter arising from the progressive inclusion of renewable energy installations, such as the Highfield Wind Farm proposal.

89. The ability and significance of these two elements supporting each other must not be missed or underestimated. If the two are effectively linked then the rate of change is far more likely to reach that required to meet the challenging targets that have been set for national and local carbon reduction between now and 2050.

90. Proposed developments, such as the Highfield Wind Farm, are well placed to do this by fostering community buy-in and ownership. Without this local relationship between such installations (especially the more visible ones such as large-scale wind) and the communities around them, and for whom they will become an element of day-to-day life, they will risk:

i) not making the most of the opportunities they bring to engage local populations actively in the benefits and positive options arising from the transition to low carbon living in a low carbon economy, and;

ii) alienating significant numbers of the local population from this transition process. Unless active and responsive consultation is carried out alongside potential options around local community buy-in, partial ownership or some other mechanism for sharing returns from the energy output, many local residents will come to see wind farms as externally imposed and purely commercial driven impositions upon their lives and local areas.

91. The current wind farm application appears to be running this ‘social’ risk as significant local opposition remains. Within the strategic sustainability framework, social viability is as important as its technical, environmental and financial counterparts.

92. As it currently stands, from a strategic sustainability perspective, the underdevelopment of a convincing responsive consultation process and tangible

financial stake for all residents (ideally one that is tied to the productivity of the wind farm) is the greatest weakness of the application. Opportunities around partial/limited local ownership (for example through share options) of one of the turbines is an option that could have been brought forward. Many people are anxious about climate change and energy security and would welcome the chance to have a direct stake in a new low carbon future.

Overall recommendation

93. Support the application from a strategic sustainability perspective

94. Request that the applicant look to address the concerns raised around community engagement – especially those relating to options for limited/partial community ownership or shareholding that would allow residents to secure a long term stake in the productivity of the wind farm.

95. The **Landscapes Officer** comments are attached as Appendix 3. He concludes:

96. "The proposed Highfield wind farm development will have significant negative Landscape and Visual effects over a wide area of South Cambridgeshire and neighbouring districts.

97. In the villages close to the site and their immediate surroundings, the development will dominate and alter the landscape character and the views experienced by people living in and travelling through the area. Harm to the existing landscape character and views will affect both the villages themselves, and their setting in the wider landscape.

98. The development will significantly reduce the present landscape character, views and amenity value of a valued and popular recreation area, and many associated public rights of way.

99. The development will also form a visual bridging point between the existing Wadlow and Langford developments. Effects will be particularly evident between Langford and the proposed Highfield development.

100. In my opinion the proposed development will cause unacceptable levels of harm to the local landscape character, to the villages, their setting, and the wider landscape, and to the amenity of local people and visitors. There will be few opportunities for mitigation to reduce the Landscape and Visual effects of the development."

101. The **Trees Officer** comments that this agricultural landscape has minimal significant trees and there is an existing infrastructure for access requiring what would appear to be minimal loss of any hedges/trees. No objections are raised, however the overall impact on the landscape from the scale of the turbines will be more of a consideration.

102. The **Conservation Officer** comments are set out in three consultation responses, dated 17 July 2012, 4 April 2013 and 8 September 2013, which are attached as Appendix 4.

103. The comments state that the site is significant, being highly visible open countryside on a ridge running east west above a chalkland valley, which contains numerous historic villages (most of which are Conservation Areas), Listed Buildings and Archaeological sites. The ridge itself is considered significant as the route of the Icknield Way (Ashwell Street), and locally it connects Litlington with Royston

104. Within South Cambridgeshire the proposal would affect the settings of the nearest Conservation Areas comprising the villages within the valley between the two east-west chalk ridges. The views across the valley are predominately tranquil, unspoilt and rural in character, and from north to south all the five closest Church spires and villages within these Conservation Areas are visible on a clear day, linking the highly designated Listed churches to the Conservation Areas they predominate, and demonstrating the visual, historic and communal links between these historic settlements. Likewise from the north, the villages are seen within a backdrop of the southern ridge and edge of Hertfordshire, to which they were also linked. Being the tallest structures within the settlements the Churches and their inter-visibility is important, and they and the villages would be dominated by the dominated by the proposed turbines.

105. The consultation responses set out the concerns regarding the harm to Litlington Conservation Area, and the listed buildings within it, and refer specifically to the impact on Bury Farm and Manor Farm, the impact from Viewpoint D, the impact on the southern part of the Conservation Area and views out of the village along the Royston Road. Viewpoint 3 shows that the nacelles at least would be visible above rooftops in this part of the village, and the character of the group of historic buildings in this area would be notably and detrimentally affected by the proposed turbines.

106. The grade II listed barn at Highfield Farm is the closest listed building, at 520 metres south of turbine 5. The unspoilt rural character, outlook and functioning of the listed barn would be notably and detrimentally affected by the proposed turbines.

107. There is specific concern regarding the impact on Steeple Morden Conservation Area.

108. There is also concern about the views of the turbines from the Wimpole Hall South Avenue, from which there would be a significant impact.

109. **English Heritage** comments that the proposed wind farm will be a dominant feature in a sensitive landscape that includes a number of heritage assets. Its full comments, which are contained in letters dated 21 August 2013, 22 October 2012, and 25 May 2012, are attached as Appendix 5.

110. It is particularly concerned about the series of ancient monuments on Therfield Heath, which lie immediately south of the proposed site. From the additional photomontages provided by the applicant, it is apparent that the wind farm would adversely impact on the setting of the prehistoric barrow cemetery on Therfield Heath, the constituent monuments of which were sited in commanding locations, overlooking this landscape. It addition, it would interrupt views of the Heath from Icknield Way and from the undesignated war memorial at the former World War II Steeple Morden air base. The siting of a wind farm in this landscape will result in harm to the significance of these assets.

111. English Heritage is of the view that this proposed wind farm will result in harm to the significance of a number of heritage assets on Therfield Heath and, in accordance

with paragraph 134 of the NPPF it will be necessary to weigh that harm against the public benefits of the proposal.

112. It states that in arriving at this recommendation it has reviewed the findings of recent appeal decisions to inform its balancing of the harm against the public benefit, and makes specific reference to the case of the Bicton wind enquiry

113. Given the quality of the assets affected by the proposal, and the level of harm that would result from this proposal, it doubts that there would be sufficient public benefit to outweigh the harm, and if the Local Planning Authority agrees with the assessment, then it would expect the application to be refused.

114. **Environmental Health Officer** - updated comments are attached as Appendix 6 and deal with the issues of noise, shadow flicker, amplitude modulation, construction noise and vibration, and wind farm operational noise. The conclusions are set out below:

115. "The purpose of an ES is to provide all the necessary information in a readily understandable format for public scrutiny to allow an informed decision to be made on whether planning permission should be granted.

116. The following environmental health issues need to be considered and addressed effectively in order to minimise potential adverse impacts on existing residents and which are paramount in facilitating sustainable development and safeguarding amenity and a healthy living environment:

a) Noise Impact – Construction Noise and Vibration, and Wind Farm Operational Noise
b) Shadow Flicker

117. We have therefore considered the effect of the proposed development on living conditions at residential dwellings in the surrounding area, including its impact on quality of life/amenity in terms of operational noise including Other or Excess Amplitude/Aerodynamic Modulation (O/EAM) and shadow flicker impacts.

118. As far as the living conditions of the wind farm neighbours are concerned, having reviewed the additional background noise monitoring undertaken and information provided we conclude that robust noise and shadow flicker impact assessments have been undertaken and reported within the ES. The assessments have been undertaken in accordance with current government/industry standards and best practice guidance.

119. In particular, the necessary noise assessment for the wind farm has been carried out in accordance with government / industry best practice including the requirements of ETSU-R-97, the "Prediction and assessment of wind turbine noise" IOA bulletin March/April 2009 and the May 2013 IOA Good Practice Guide.

120. It has been demonstrated following a robust analysis of the supporting baseline monitoring data and assessment approach that the proposed Wind Farm should not exceed the limits recommended by ETSU and therefore would result in no significant effects at the residential receptors identified in relation to noise.

121. The impact assessment predicts that collective operational turbine noise levels for all the closest residential receptor locations fall within the relevant levels of acceptability (meeting the ETSU guidance derived noise limits), at all wind speeds and directions.

122. On balance we have no objection principle as it is our view that the proposals should not give rise to significant adverse impacts on health and quality of life as a result of noise and shadow flicker subject to mitigation control/regulation by appropriately worded conditions that provide an adequate level of protection."

Suggested conditions include

123. The **Scientific Officer (Contaminated Land)** states that a condition relating to contaminated land investigation is not required.

124. The **Environmental Health Officer (Public Health Specialist)** states that under the Council's policy this application falls into the definition requiring a Health Impact Assessment (HIA), however he is happy that relevant issues have been considered as part of the Environmental Statement and a specific HIA is not needed in this case.

125. **Ecology Officer** - has no objection:

126. "The EIA has taken account of all areas of potential ecological concern requested by myself and others during the scoping process. The surveys have been undertaken over a period of several years with main effort focussed in 2008 and 2009, with a review in 2011.

127. The two main areas of potential concern, bird and bat, have been investigated with a thoroughness and the application of different approaches. The use of extensive vantage point surveys for bird surveys over many months gives me confidence that the conclusion 'no significant effects of the Highfield Wind Farm on valued ornithological receptors are expected' is correct in view of the data assessed. The bat survey work accords with the guidelines of the Bat Conservation Trust and if significant populations were present then their presence should have been detected. I accept that the development area is not particularly rich in bat numbers or species.

128. The applicant and landowner should be commended for the discovery of a breeding pair of stone curlews using the site. However, the project now proposes a number of measures, such as the control of cropping types and areas of bare ground, in order to specifically enhance areas of the farm for this regionally important species.

129. Through the provision of plots specifically for stone curlew the proposal has the opportunity to benefit other species including rare arable plants, brown hare and typical (but declining) farmland birds such as grey partridge and skylark.

130. Badgers are present in the general area but not likely to be adversely affected

131. No reptiles were recorded in the development area.

132. The scheme proposes post-project monitoring, with specific measures for stone curlew. The mitigation, enhancement and monitoring regimes can be secured through a suitably worded condition.

133. Para 317 of Appendix 11 shows the collision risk model spreadsheets. For each of the birds considered it states that 4 turbines are proposed, yet the scheme is for 5.

Can the applicant comment as to whether this area of evaluation needs to be re-considered, or do the result soft this specific model remain unaffected?

134. Windfarms generate electricity that then needs to be distributed across the wider countryside. The surrounding land has a number of County Wildlife Sites and Protected Road Verges. Can it be conformed that none of these important botanical sites will be damaged as a result of infrastructure work associated with the wind farm proposal?

135. **Cambridge Airport** - currently objects due to the potential impact on airfield operations, however it is in discussions with the applicant to see if agreement can be reached on mitigation measures.

136. In a recent email the Airport has indicated that following discussions with the applicants agent it expects to be able to withdraw its objection by suggesting two conditions, the wording of which will have been agreed between it and the applicant. The conditions would deal with the preparation of an appropriate mitigation strategy for its radar, and its timely implementation funded by the applicants. It states that this would be a similar position to that reached in respect of earlier wind farm applications at Boxworth and Balsham.

137. **Cambridgeshire Archaeology** - has no objection as no archaeology of national importance was revealed in the field evaluation undertaken for the Environmental Statement. Of the 5 turbine locations only one produced evidence of archaeology that will be directly affected by construction impacts. For this reason it recommends that the site should be subject to a programme of archaeological investigation to be secured by condition.

138. The **Rights of Way and Access Team, Cambridgeshire County Council** comments that there are a number of rights of way and permissive access in proximity of the development site. The British Horse Society guidance suggest that 200m exclusion zone around public bridleways to avoid wind turbines frightening horses, and fall over distance is considered to be an acceptable separation from a public right of way.

139. It welcomes the applicant's consideration of public rights of way and recreational routes adjacent to the site. The proximity of turbines 1 and 2 exceeds the fall over distance from Public Footpath No.44 Steeple Morden, however a permissive bridleway also follows the line of the Public Footpath so local horse riding groups may have some concerns regarding the close proximity of the turbines. Records show a permissive footpath north of turbines 1 and 4, which is approximately only 60m north of turbine 1 so the landowner may want to consider re-routing this path or re-positioning turbine 1 south of turbine 2.

140. In areas of poor public access it is generally asked that improved access is provided to help mitigate for the effect of the wind turbines on the enjoyment of public rights of way. In this case access is already reasonably good, but it states that it would be please to discuss any proposals which the developer may make, and in particular it would welcome a link to the currently dead-end Litlington Byway Open to all Traffic No.11 from Royston Road to the disused quarry.

141. In response to the amended consultation (March 2013) it is noted that the applicant has acknowledged the location of the permissive path and rights of way on the locality and welcomes that it has been considering options for making improvements to public access through newly dedicated public rights of way or permissive paths.

Environment Agency - has no objection in principle.

142. Where soakaways, or infiltration drainage, are proposed for the disposal of uncontaminated surface water, percolation tests should be undertaken, and soakaways designed and constructed in accordance with BRE Digest 365 (or CIRIA Report 156), and to the satisfaction of the Local Authority. The maximum acceptable depth for soakaways is 2m below existing ground level. Soakaways must not be located in contaminated areas. If, after tests, it is found that soakaways do not work satisfactorily, alternative proposals must be submitted.

143. Only clean, uncontaminated surface water should be discharged to any soakaway, watercourse or surface water sewer.

144. Any culverting or works affecting the flow of an Ordinary Watercourse requires the prior written Consent of the Lead Local Flood Authority (LLFA), Cambridgeshire County Council in this instance. The LLFA seeks to avoid culverting, and its Consent for such works will not normally be granted except as a means of access.

145. The granting of planning approval must not be taken to imply that consent has been given in respect of the above.

146. The **Defence Infrastructure Organisation** objects.

147. The turbines will be 24.4km from, in line of sight to, and will cause unacceptable interference to the ATC radar at Cambridge Airfield. It states that wind turbines have been shown to have detrimental effects on the performance of MOD ATC and Range Control radars. These effects include the desensitisation of radar in the vicinity of the turbines, and the creation of 'false' aircraft returns which air traffic controllers must treat as real. The desensitisation of radar could result in aircraft not being detected by the radar and therefore not presented to air traffic controllers. Controllers use the radar to separate and sequence both military and civilian aircraft, and in busy uncontrolled airspace radar is the only sure way to do this safely. Maintaining situational awareness of all aircraft movements within the airspace is crucial to achieving a safe and efficient air traffic service, and the integrity of the radar is central to this purpose. The creation of 'false' aircraft displayed on radar leads to increased workload for both controllers and aircrews, and may have a significant operational impact. Furthermore, real aircraft returns can be obscured by the turbine's radar returns, making the tracking of conflicting unknown aircraft) the controllers' own traffic) much more difficult.

148. If the developer is able to overcome the issues stated above, the MOD will request that all turbines be fitted with 25 candela omni-directional red lighting or infrared lighting with an optimised flash pattern of 60 flashes per minute of 200ms to 500ms duration at the highest practical point.

149. In response to the updated consultations (March 2013) it noted the discussions that have been taking place between Cambridge Airport and the developer but no final agreement had been reached at that point.

150. **NATS Safeguarding** states that the proposed development has been examined from a technical safeguarding aspect and does not conflict with its safeguarding criteria and accordingly it has no objection to the proposal.

151. **Imperial War Museum Duxford** has no comments. It states that it has seen nothing of significance in the proposal that would prevent it from carrying out its current business.

152. The **Civil Aviation Authority** has raised no objection, but states that should consent be granted the Defence Geographic Centre should be contacted to inform the dates, location and heights of the turbines in order to ensure the accuracy of aviation charts and publications in the interest of aviation safety.

153. **Bassingbourn Barracks** has not commented on the application.

154. **Natural England** comments as follows:

Designated Sites

155. Provided the development is carried undertaken in strict accordance with the details of as submitted then it is satisfied that the proposal is unlikely to have an effect on any statutorily designated sites.

156. The development is located close to several Local Wildlife Sites, and SCDC should ensure that it has sufficient information to fully understand the impact of the proposal on such sites before it determines the application.

Wider Ecology

157. Based on the information provided the potential impacts of the scheme appear to be limited to birds and bats, and as such it has restricted its comments on wider ecology accordingly:

Ornithology

158. Detailed consideration of the ornithological impacts of the proposed scheme are provided in Chapter 11 of the ES and supporting appendices, and whilst the survey information collected in support of the application is now several years old, Natural England is satisfied that sufficient survey effort has been undertaken to inform the assessment of impacts.

159. Chapter 11 identifies that a range of sensitive species were observed across the site between 2007 and 2009, including the breeding activity of two Annex 1 bird species (stone curlew and hobby).

160. Collision risk modelling and consideration of displacement effects are presented for each of the identified species, and Natural England is satisfied that, with the exception of stone curlew, there are unlikely to be any significant impacts on these species as a result of the proposals.

161. With regard to the stone curlews, the ES and supporting appendices consider several methodologies for determining collision risk, and whilst potential risks of collision are assessed as being unlikely, the ES acknowledges uncertainty regarding this assessment, and that any unpredicted collision impact on the stone curlew would have a negative impact.

162. To mitigate potential collision risks and displacement effects on future breeding success, a detailed Ecological Enhancement Plan is provided in Appendix 11.3. This includes measures to deter future nesting attempts in the vicinity of the turbines (Sugar beet exclusion zone, turbine base design), and the provision of dedicated nesting plots and foraging areas elsewhere on site. Section 7 of the plan

recommends ensuring its implementation over the lifespan of the turbine scheme through the use of a suitably worded planning condition.

163. Whilst Natural England is broadly satisfied with the proposed plan (which it suggests relates primarily to mitigation, and not just enhancement), it highlights that the plan will have implications for the existing Higher Level Stewardship (HLS) scheme on the site. Section 3 of the plan clearly identifies that three new stone curlew plots will be provided, and suggest that new areas of grazed pasture are also part of the proposals. Elsewhere the ES suggest that the grazed land is either being proposed (ES para 12.117) or will be preserved (ES para 11.156). The relationship between the proposed mitigation/enhancements is only vaguely described (ES para 11.156) and t is aware that the grazed pasture identified on Figure 11.2 (Stone Curlew Enhancement) is already covered by options within the HLS agreement. Natural England clarifies that Environmental Stewardship funding cannot be used to fund anything that a developer is required to do as a condition of a planning permission, and should permission be granted the existing HLS agreement will need to be reviewed and amended accordingly (potentially involving the reclamation of any HLS payments already made). Alternatively, the applicant could look to re-locate the grazed pasture within the current application to other areas within the farm holding not covered by HLS options, and Natural England would be happy to discuss this issue further as required.

164. The ES and Enhancement Plan also identifies the need to undertake post-construction monitoring for stone curlew, which Natural England fully supports, However, it is noted that the proposed programme relies in part on the involvement of the RSPB. Whilst Natural England would look to the RSPB to provide any comments on their willingness to participate in future stone curlew monitoring of the site, as a general principle it is highlighted that the developer should be responsible for undertaking all monitoring directly associated with the development proposals.

165. Finally the ES proposes that pre-construction checks (para 11.160) and post-construction monitoring will be undertaken for red and amber listed breeding birds. Again Natural England supports these measures but recommends that this is expanded to incorporate hobby, given the previous history of this Annex 1 species nesting on site.

Bats

166. Chapter 12 of the ES identifies that a suite of manual and static bat surveys were undertaken at the site during 2009. Whilst the level of survey effort for manual transects appears reasonable and well spread across the active season, the level of effort employed through static detectors is minimal (compared with the Bat Conservation Trusts, Bat Survey: Good Practice Guidelines 2nd Ed (2012)), and provides no information regarding activity in open habitats where the turbines are located. However, based on the information that has been collected across the more suitable habitats on site, Natural England concurs that the general level of bat activity appears to be low (with only individual records of high risk species such as noctule and possibly nathusius pipistrelle). Given the low levels of activity and the identified buffers to any suitable habitats such as the shelterbelts on site will be at least 80m from turbine tip (ES para 12.97), Natural England is satisfied that the risks to bats have been minimised and that significant impacts are unlikely to occur.

Landscape

167. The proposed development is not located within, or within the setting of, any nationally designated landscape, and Natural England would therefore look to the Council's Landscapes Officer to provide any detailed comments on the visual impacts

and effects on local landscape character resulting from the proposals. All proposals however should complement and where possible enhance local distinctiveness and be guided by the Council's landscape character assessment where available, and the policies protecting landscape in the local plan or development framework.

168. Natural England notes that significant effects on both landscape character (LCA2, LCA 227 and LCA 228) and visual amenity (such as users of the Icknield Way and Hertfordshire Chain Walk and visitors to Therfield Heath SSSI/Local Nature Reserve) are predicted as a result of the introduction of tall structures with moving rotors which are not a component of the current local landscape (typically characterised by continuous, uninterrupted views of predominantly open arable downland). Such impacts will therefore need to be given due consideration as part of the decision making process.

169. The **RSPB** comments that it has been involved in pre-application discussions with the consultants in regard to bird surveys carried out for the proposed wind farm and bird species on the site.

The RSPB's position on wind technologies

170. The RSPB is supportive of renewable energy projects providing that adverse impacts upon wildlife are avoided by appropriate siting and design. The RSPB views climate change as the greatest long-tern threat to biodiversity and renewable energy offers a way of mitigating the impact and reducing overreliance on fossil fuels.

171. The available evidence suggests that wind farms can pose three main problems for birds; disturbance, habitat loss or damage, and collision. Birds may be scared away by construction noise, vehicle movements, or the presence of operating turbines. The wind farm itself may physically destroy bird's feeding, breeding or roosting sites. In addition, birds may fly into the turbine tower or blades and be killed or injured; storms or conditions of poor visibility will increase the likelihood of this occurring. The siting of turbines may also be an issue for bats, not only because of the risk or direct collision if turbines are placed on migration or commuting routes, but also because of the displacement of foraging habitat.

RSPB position

172. The RSPB has no objection to the proposed wind farm providing that the proposed mitigation measures are detailed in Section 11.143 of the ES are imposed through suitable conditions.

Designated sites

173. The RSPB accepts the conclusion in the ES that the proposed development is unlikely to have any significant effect on any sites designated for birds.

Environmental Statement

174. The RSPB has reviewed Chapter 11 of the ES (Ornithology) and is satisfied that the bird vantage point surveys and breeding bird surveys provide a satisfactory baseline from which an assessment of the impact of the wind farm on bird species can be made.

175. The RSPB accepts that collision risk estimates have been provided for all the target species, with the exception of the stone curlew. These estimates suggest the wind farm is unlikely to have a significant effect (i.e. 1% mortality) on the population of these species. It will be important that these predictions are verified by post-construction monitoring.

176. **Network Rail** has no objection in principle. It states that its only concern would be the route that construction traffic will take to/from the development site during the construction phase in relation to railway bridges or level crossings along the route. The preferred route passed over the Litlington Level Crossing just to the south of the site. It notes from the submitted information that consideration has been given to this crossing and an assessment made has been made. However, it requests that the applicant contacts the Asset Protection Team to discuss the preferred route to ensure that all aspects of the crossing have been taken into account given that overhead lines are present in the area. It also requests that be informed of abnormal loads with a minimum of 6 weeks notice, and there may be a requirement for bridge/level crossing protection measures to be put in place at the applicant's expense.

177. The **Local Highway Authority (Cambridgeshire County Council)** has no objection subject to a condition requiring the submission of a method statement which should include proposed access routes for the individual elements of the turbines; traffic management for their delivery, any modifications required to the adopted public highway to enable the turbines to be delivered to the site, and the serving arrangements for the turbines once installed.

178. However, it points out that Hertfordshire County Council is Highway Authority for the A505.

179. **Hertfordshire County Council** comments as Highway Authority for the A505 will be included in an update report.

180. The **Ramblers Association** points out that the proposal affects Public Footpath 44, Steeple Morden, and also Ashwell Street, part of which is Public Byway No.8 Litlington. It is noted that all the proposed turbines would be located far enough away from any public right of way, so as not to result in any danger to path users, and accordingly it is not considered appropriate to make a formal objection to the application.

181. However it was noted that operation of the turbines would be likely to result in some disturbance to path users, both by noise and, more significantly, their impact on the landscape. The area chosen is currently a peaceful tract of open countryside, away from major roads, and pleasantly undulating so that it provides attractive and exceptionally wide views. In particular the view southwards from Ashwell Street, which is a popular path and forms part of the Icknield Way Trail, would be seriously affected by the presence of the turbines.

182. It states that it is aware that Cambridgeshire County Council has suggested that planning consent for the turbines might usefully be made conditional on the provision of some additional public access to the surrounding countryside, by way of compensation for the disturbance caused, and it would support this proposal. It is noted that there is currently a permissive riders' route between Steeple Morden Footpath 44 and the disused Litlington Clunch Pit, linking with the dead-end Litlington Byway 11. Conversion of the route into a public right of way would seem a worthy objective in this context, though it may be necessary to re-route a portion of the path, or to re-position Turbine No.1, which would be too close to it for safety.

CPRE Cambridgeshire and Peterborough objects:

183. "Severe detrimental impact upon the landscape and historic context of the Parishes, conservation areas and listed buildings over a considerable visual zone, particularly

the cherished view of Therfield Heath. This development will implant alien industrial structures of significant magnitude on a predominantly rural scene. The fragile and intimate landscape character of the Chalk Lands will suffer substantial degradation from these structures. Little or no mitigation measures are possible.

184. The severe detrimental visual impact upon the visual amenity provided by Therfield Heath with its views across the Cam Valley. This is an historic vista enjoyed by many receptors and is of considerable local importance. It is also an SSSI.

185. We are concerned at the robustness of the indicative energy output figures provided by the applicant. Estimates presented to us suggest that these have been overstated when local statistics for wind are used rather than Eastern Region averages.

CPRE Hertfordshire objects:

186. "There would be a severe detrimental visual impact on the landscape and historic context of Therfield Heath and the extensive and important views from the chalk ridge between Baldock and Royston in the abutting district of North Hertfordshire. This development would result in the construction of industrial structures up to 100 metres in overall height in an almost entirely small scale rural scene. In our opinion the important landscape character of the Chalk Lands would suffer substantial degradation from the installation of these structures, for which no substantive mitigation measures are proposed or indeed possible

187. There would be severe detrimental visual impact upon the visual amenity of the Therfield Heath SSSI, with its views across the Cam Valley. This is an historic vista enjoyed by many receptors and is of considerable local importance.

Insufficient information has been provided by the applicant to override planning policies for the protection of the countryside from unsuitable development. In particular, the energy output figures provided by the applicant indicate that these are likely to have been overstated by use of Eastern Region averages rather than the local wind statistics.

188. In conclusion we consider that the proposal therefore conflicts with Policy NE3 of the South Cambridgeshire LDF on Renewable Energy, by failing to meet the requirements of the following policies in the LDF in respect of the development:

DP/1 (p) Conserve and wherever possible enhance local landscape character
189. DP/2 (f) Be compatible with its location and appropriate in terms of scale, mass, form, siting, design, proportion, materials, texture and colour in relation to the surrounding area
190. DP/3 (2) Planning permission will not be granted where the proposed development would have an unacceptable adverse impact: M. On the countryside and rural character.

191. The **Conservators of the Therfield Heath and Greens** object. Therfield Heath overlooks the proposed windfarm site. The provided visualisation shows clearly how intrusive the site will be from the Heath. Therfield Heath provides a unique open space for the people of South Cambridgeshire and North Herts. The proposed screening will be totally inadequate when viewed from the high ground of the chalk escarpments. The application makes no mention of the community gain.

192. **Cambridgeshire Local Access Forum (LAF)** states that it is aware that Cambridgeshire County Council has suggested that planning consent for the turbines

might usefully be made conditional on the provision of some additional public access to the surrounding countryside, by way of compensation for the disturbance caused, and the LAF support this proposal.

193. The **Shelford and District Bridleways Group** objects on the grounds that the proposal is contrary to the health and safety advice issued by the British Horse Society in relation to wind farms, which recommends that there should be a 200m clearance from bridleways to avoid turbines spooking horses.

194. Whilst an objection is not raised in principle either the turbines should be moved so that they are more than 200m from the permissive bridleway, or an alternative bridleway route is offered which complies with the advice.

195. **British Horse Society** – no comments received.

196. **OFCOM** – no comments received.

Representations

197. 306 letters of objection have been received, from 191 households. The households can be broken down geographically into: Litlington – 114; Steeple Morden – 39; Royston – 11; Bassingbourn – 10, Kelshall – 5; Therfield, Abington Pigotts and Barrington – 2 each; and Guilden Morden, Reed, Melbourn, Ashwell, Baldock and Heydon – 1 each.

198. The areas of objection are set out below:

- Breach of SCDC 1.5km policy
- Site not windy enough – turbines will only work intermittently Wind speed based on average wind speed for EA and not data collected by the on-site mast – credible information? Lack of wind data
- Type of turbine Nordik 80 – not suited to conditions – wind shadow of Therfield Heath/Chalk ridge
- Will not produce output stated
- Too small to be accepted for renewable energy reasons – solely a commercial venture with total disregard to the feelings of the local community.
- Amount of power generated not significant enough to warrant disruption to landscape
- Adverse impacts outweigh benefits
- Turbines take more energy to generate than they generate
- Economies of electricity generation from on-shore wind turbines of questionable efficiency – sustained by financial subsidy, which cannot be justified given harm
- Not sustainable
- Cambridgeshire has exceeded the target it was set for RE generation – should be located in other areas.
- Impacts will significantly and demonstrably outweigh benefits
- Too close to the village and neighbouring houses.
- Oppressive/overbearing. Overshadow entire village
- The whole of Litlington is within 2km of turbines – unacceptable.
- Only 500m from nearest houses.
- The two western turbines are very close to the four cottages and farmhouse at Morden Grange Farm, and only 170m from the farm boundary
- 1 and 2 Brick Cottages are only 560m from turbine 2 and 740m from turbine 1. 3 and 4 White Cottages are about 620m from turbine 2 and 700m from turbine 1.

Whilst it is difficult to assess impact turbine 2 should be removed from proposed location.

- Height at 100m unacceptable and would be visible from a wide area and for many miles. By comparison the Johnson Matthey chimney at Royston is only 40m tall
- Impact of views from properties in Litlington and Morden Grange area. 600m from Morden Grange Cottages
- Industrial scale development
- Area of Best Landscape in 2003 Structure Plan – Landscape Character Area
- Rural landscape – contrary to Policies DP/1, DP/2 and DP/3 – residential amenity, traffic, village character, countryside/landscape character, environmental disturbance, ecology, wildlife, cultural heritage
- Visualisations only serve to increase concerns – artificially soften impact – grey colour against grey skies blend in - trees in full leaf
- Impact of noise – prevailing wind to village – swish and low rumble
- Current piece and calm – quiet background levels. Noise levels with application appear to indicate a significantly raised level (expected noise at 35Dba – which is current occasional peak
- Lack of sleep and impact on sleep patterns due to noise leading to ill-health
- Information given in paragraphs B210 and B215 of the ES Non-Technical Summary in respect of noise are misleading – information misleading
- Assurance is sought if noise levels exceed those predicted that turbines will not be operated or effective adaptions will be made to reduce noise to acceptable levels.
- Shadow flicker - effect on health and well-being
- Effect from Amplitude Modulation
- ETSU-R-97 – now over 10 years old
- Force families from houses as has happened in other parts of the country
- Impact on Roman Road – evidence of villa in garden of Manor Farm – change to cultural heritage – conservation areas – Litlington Church
- Important Countryside Frontage – flint wall of Manor Farm
- Affect 30 Listed Buildings
- Impact on views from Therfield Heath – an SSSI
- 26 Scheduled Ancient Monuments within 5km – setting of Therfield Heath – barrows/tumuli which were carefully located as territorial markers – Pen Hill Therfield Heath
- Impact on views from Steeple Morden War Memorial
- The ES at para 10.95 – states that the effects upon eleven assets are predicted to be significant
- Moving blades not characteristic of landscape
- Impact on surrounding footpaths/bridleway. Dog walkers and cyclists as well as pedestrians and horse riders use network of paths – popular routes of Icknield Way and to Clunch Pits
- Contrary to Horse Society recommendations - Frighten horses
- One turbine is too close to the Royston Road causing distraction to drivers
- Driving on Royston Road – shadow flicker, sun, leading to migraines
- Distraction to drivers on A505 – 70mph limit with a dangerous turn into Litlington
- Ecology – Flora and fauna – force abandonment of badger setts- habitats – wildlife. Birds – stone curlew (Schedule 1 of W and Cons Act 1981 – proposal to 'move' is not convincing. Grey Partridge, Corn Bunting – red listed. Barn owl – recorded in area but not seen in EA. Dotterel – red listed. Red kite. Impact on migratory birds
- Impact on bats - Barbestelle bat
- Impact on Whitehill Wood – planted as wood and given to community
- Tons of concrete detrimental to local eco-system

- No indication of any benefits to villages which would suffer relentless noise
- Area of UK where MOD flying – Helicopter route between AAC stations of Middle Wallop and Wattisham. Flying from Bassingbourn. Need to re-direct helicopters as a result of development?
- High level of light aircraft in area – no lighting proposed – impact on Duxford – Flight path to Luton
- Impact on Debden radar
- Loss of TV reception
- Construction noise and traffic
- Impact on level crossing on Litlington Road – power lines – will be access route for site
- In reality will not be commissioned after 25 years
- Flooding risk – large areas of concrete
- Effect of concreted area on usability of water – Thrift Cottages extract from borehole
- Safety – fire, shredding pieces
- Capacity of substation questioned
- No account taken of localism
- Distraction from local sports pitches – risk of injury
- Impact on tourism in the area – proven to reduce
- Other areas to west more suitable
- Will lead to further turbines in the future
- Should be offshore
- Loss of value to properties

199. An objection received from the **Stop Litlington Wind Farm Action Group (SLWFAG)** is attached at Appendix 7. The document was updated in March 2013, with the updated sections underlined. The summary and conclusions of the submission are set out below:

"Policy

200. The application would have wide-ranging and significant adverse impacts and is in conflict with:

201. National Policy (NPPF), by failing to meet the basic presumption in favour of sustainable development.

202. Regional Policy (East of England Plan), by failing to protect and enhance the diversity and local distinctiveness of the countryside character (ENV2), failing to protect diversity (ENV3) and failing to protect the historic environment (ENV6)

203. Local Policy (Local Development Framework), by being incompatible with the landscape scale, from, siting and proportion, by opposing the wishes of the local population (localism) and by failing to protect residents from disturbance and visual impact with the policy of South Cambs District Council.

204. The relationship between the National, Regional and Local Policies was recently considered in the High Court:

205. '…as a matter of law it is not correct to assert that the national policy promoting the use of renewable resources in PPG1 paragraph 22 negates the local landscape policies or must be given "primacy" over them'.

206. The developer variously suggests that selected planning policies are ‘not relevant to the determination of this planning application’, and in other places the same polices are ‘still material to the determination of planning applications’. This demonstrates that the Developer’s appraisal of planning polices relevant to this application cannot be relied upon.

Site Selection

207. The site is of a constrained size and shape and is in a low wind speed area that would impose disproportionately large adverse impacts for a proportionately small amount of electricity.

208. Alternative sites, which might offer a more equitable balance of harms and benefits, are not presented as required by planning regulations.

Landscape Character

209. The application acknowledges that the proposal would have significant adverse impacts on the character of the landscape, in conflict with the Local Development Framework.

210. We note that the developer acknowledges that mitigations ‘..would not materially change the extent and intensity of the significant effects predicted in this assessment.’

Visual Amenity

211. The application acknowledges that the proposal would have significant adverse impacts on the visual amenity of people who live, work, study, visit or travel through the surrounding area.

212. The turbines would be completely out of scale with and alien to all other natural or man-made vertical features present.

213. Therfield Heath, which overlooks the site, forms part of a nationally designated landscape of the Chilterns to which regional policy requires the highest level of protection be afforded. The application acknowledges that visitors to Therfield Heath would experience significant effects on their visual amenity as a result of the proposed turbines.

214. The proposal is unnecessarily and inappropriately close to residential dwellings and, in the absence of a visual amenity assessment for all dwellings within 1km of the proposed site, the precautionary principle should be applied and the application should be refused.

Cultural Heritage

215. The application acknowledges that the effects upon cultural heritage assets would be significant, which conflicts with regional and local policy.

Noise

216. Prevailing legislation offers no guarantee that a noise nuisance will not occur and rigorous noise assessment should be undertaken before determination.

217. Aspects of the noise assessment are flawed; do not meet the requirements of the prevailing legislation and thus the conclusions drawn in the ES about the potential for noise nuisance cannot be relied upon.

218. Excessive amplitude modulation is likely, due to the insufficient separation of the turbines within the turbine array. Dwellings lie well within the normal separation distance and are likely to suffer unacceptable noise impacts.

219. The scheme should be required to meet the acceptance criteria at the EIA state prior to determination rather than through planning conditions.

Construction Traffic

220. The traffic movements predicted have been considerably under-estimated and hence the conclusions drawn about the significance of the potential impacts cannot be relied upon.

221. The application fails to address the implications for road safety during the 25-year operational period, in particular the increased risk of distraction for drivers crossing 2 lanes of a dual carriageway with oncoming traffic travelling at the national speed limit.

Ornithology/Ecology

222. The potential risk of significant adverse impacts on the richness and diversity of species within a comparatively small area conflicts with national policy. This states that planning permission will not be granted for a development that would have an unacceptable impact on biodiversity.

Benefits

223. The applicant does not offer any credible data to support the claim for the amount of electricity the site might produce.

224. The type of turbine proposed is unsuited to wind speeds at this site and has been included solely to inflate the 'headline' amount of electricity that the site might produce

225. SLWFAG has identified and used three local, independent, verifiable sources of mean wind speed date to prepare a rigorous 'real-world' forecast of the amount of energy that the site could produce which suggest that the amount of electricity that could be produced is likely to be around one third of the amount claimed by the applicant.

226. We note the continuing absence of actual wind speed data to support the claims of the developer for the amount of electricity that the site could produce. The developer now suggests that estimates are merely, 'indicative of the scale of development only.' The estimates offered by the developer simply cannot be relied upon and should be discounted.

Conclusion

227. This application would impose wide-ranging and substantial harms on the quality of life, health and well-being of the local community. These would substantially outweigh the very limited benefits the application offers and thus the application should be refused.

228. The main body of this document sets out in detail why SLWFAG oppose this application in common with Parish Councils and Members of Parliament for the surrounding area.'

Andrew Lansley MP opposes the application:

229. "I have had a large volume of letters from my constituents who reside in the immediate area, and I share the views of my constituents with respect to the list of concerns the residents have raised with me:

230. *Damage to the character of the local landscape:* The area surrounding Litlington, and indeed South Cambridgeshire generally, is characterised by lovely flat hills, gentle hills and charming villages. Residents more often than not move to villages such as Litlington precisely for their quiet, calm atmosphere.

231. *The detrimental visual impact of the development:* The erection of 100 metre turbines in Litlington will be visible from the Mordens, Heydon, and other surrounding villages and would, I fear, be a sad blight on the beautiful landscape there.

232. *The harmful impact on residents:* Given the proximity to many of the houses (which appear to be as close as 700 metres in some instances), there is little doubt in my mind that there will be an impact on nearby residents, both in terms of noise and flicker from the rotating blades.

233. Although I am of course aware that it is not a binding decision, I do hope that the 2011 South Cambridgeshire decision to support a minimum distance of 2 kilometres and private residents and new turbines will also be applied in this instance."

Oliver Heald MP is not in favour of the proposal.

234. "I do think this will damage the view of the Cambridge plain from Therfield Heath and be a general intrusion into the visual amenity. In the past, Planning Inspectors have expressed the importance of maintaining the view from Therfield Heath across the Cambridge plain and indeed Royston Town Football Club was not allowed to relocate to the site next to the Little Chef on Baldock Road for this reason. The windfarm in question would be just as invasive."

235.

7 letters have been received supporting the application on the following grounds:

- Ample regional and national policy to support such a development
- Overriding national requirement to develop low carbon energy projects – this will reduce CO_2 emissions
- The electricity generation figures produced are accurate
- Wind farm projects are much needed with modern power stations desperately needed but problematic to build quickly enough to plug the energy gap
- Objections driven by selfish desire to preserve views of the countryside and house prices, neither of which are preserved in right by planning law
- Visual impact will not be negative. The area is not an AONB.
- Will be attractive compared to telecommunications masts in the area
- Noise will not be an issue given the A505 and railway line noise
- Site selection criteria met
- Turbines further from Heath than Johnson Matthey chimney
- Status of Therfield Heath as an SSSI has nothing to do with visual amenity

- The number of people with significant views is overestimated
- Cultural heritage not adversely affected
- Construction traffic not a substantive issue
- Wind farms have very low rate of bird kill except for the few on migration routes

Planning Comments

General

236. The approved development plan for the purposes of this application is the adopted Local Development Framework and where this is consistent with advice in the NPFF, it remains the starting point for consideration of planning applications. Although there are reference to specific policies in the Draft Local Plan this document does not carry significant weight at this point in time, particularly in cases such as Policy CC/2 where objection have been received.

237. The main thrust of Central Government policy is to help counter the serious effects of climate change and important role that renewable energy projects play in reducing CO_2 emissions, and increasing the amount of energy provided from renewable sources.

Energy generation of the scheme

238. Concern has been raised about whether the amount of electricity generated will be as predicted in the application submission, and that the type of turbine illustrated is not suitable for the particular local conditions.

239. The applicant has confirmed that the electricity production is based on a capacity factor of 25% and that the Nordex N80 has been used as the candidate turbine, but states that the wind turbine market is fast moving and that there presently a number of models available within the 100m tip height envelope. The requirement for this flexibility is recognised by National Policy Statement for Renewable Energy Infrastructure (EN-3).

240. The Planning practice guidance for renewable and low carbon energy – July 2013 at paragraph 38 states that as with any form of energy production this can vary for a number of reasons, but that this can be useful information in considering energy contribution to be made by a proposal, particularly when a decision is finely balanced.

241. For the reasons set out below officers are of the view that the decision is not finely balanced in this case.

Landscape Impact

242. Volume 4 of the ES contains 15 visualisation viewpoints and 7 cumulative visualisations. Since the submission of the application an additional 9 locations have been provided.

243. A summary of the ES assessment of the predicted effects from the 15 viewpoints is set out on pages 205 – 208 of Volume 2 – Written Statement with a number being predicted as major or major/moderate+, particularly those closer to the site.

244. The comments of the Landscapes Officer at Appendix 2 sets out the Methodology used by officers for the assessment of the impact of the proposed development on the landscape.

245. The proposed development lies in the Chalkland Landscape Area, as defined by the Cambridgeshire Landscape guidelines, and in the 'East Anglian Chalk' landscape area, as defined by Natural England's national character areas.

246. This is a large scale landscape, with an ordered pattern of large or very large fields, fields and woodland separated by low mechanically trimmed hedges or open ditches, and featuring relatively few hedgerow trees. The landscape pattern becomes more detailed at the edge of settlements and in the steam valleys.

247. The area is generally sparsely settled, with settlements small and relatively compact. Long views are possible from chalk ridges to the north and south of the site.

248. Some infrastructure is present close to the development site, notably the A505, the main railway line and industrial development at the edge of Royston. Much of the area remains tranquil however, with opportunities to get away from transport corridors and built up areas on the numerous lanes and public rights of way, particularly in the immediate vicinity of the site to the west and the Icknield way to the north.

249. Viewpoints 1 (junction of local byway and Royston Road near Limlow Hill), Viewpoint 3 (Church Street, Litlington), and the additional viewpoint 5 (Bridleway near Morden Grange Farm) in particular, show the turbines as dominating the approach to the village, the village centre itself (here officers consider that far more of the turbines would be visible than suggested in Viewpoint 3, and the tranquil landscape west of the village. The turbines would be set between 600m and 1500m from these viewpoints.

250. Here the landscape is considered by officers to have a medium level of sensitivity to change- a tranquil rolling landscape with a small scale and detailed landscape pattern around the village itself, and officers consider that the magnitude of the effects of the development would be major. The scale and movement of the turbines, would completely dominate and alter the present landscape character.

251. In officers view this would result in a Very Substantial or Substantial level of harm to Litlington and its surrounding landscape, with little no opportunity for mitigation of the effects.

252. Turbine 5 will have a significant impact when approaching Litlington on the Royston Road, being site only 110m west of the road.

253. Further from the village the landscape effects will be substantial or very substantial. Viewpoints 4 (Scenic viewpoint on Therfield Heath, and extra information Viewpoint B July 2012(Therfield Heath near Pen Hills) show the possible landscape effects of the proposed turbines from the elevated positions on Therfield Heath.

254. Here the wide open landscape is relatively free of infrastructure and clutter, and what there is (the railway and the A505) take the form of low, horizontal forms in the landscape mid-ground, and below the horizon. Again the landscape here is sensitive to change, and almost entirely rural in character, from the heath dropping away in the foreground to the open patch or agricultural land, small woodlands and shelter belts to the more distant chalk ridge between Haslingfield and Croydon.

255. The turbines would be set in a larger landscape, but due their scale, movement and industrial nature, projecting significantly above the horizon, would form a substantial and dominant landscape feature. Again there would be no mitigation measures possible to reduce the landscape effects.

Visual effects/amenity

256. The level of sensitivity to receptors of visual effects are graded high, medium and low. Receptors of high sensitivity include people using the public right of way network, local residents with clear or close views of the development, and people involved in outdoor recreation.

257. Views from the centre, south and west edges of villages will vary in their magnitude, but some will cause very substantial or substantial harm to views.

258. From the elevated position of Therfield Heath (with extensive public access), and from viewpoints on long distance footpaths of Icknield Way and Harcamlow Way, south of Litlington, the proposed turbines will dominate the view. They will cause particular harm at these points as the heath, and the surrounding footpaths and bridleways are a popular recreation area, which people visit, at least in part, for the specific views available from the heath and local rights of way.

259. Views to the south from the Icknield Way and surrounding footpaths of the rising land at Therfield Heath are currently unspoilt and the proposed turbines will significantly detract from these views. `

260. The proposed development would alter the views over a wide area, which visitors would experience over extended periods of time – with the development being either constantly in view, or experienced as a series of viewpoints. Visual effects would be very substantial or substantial, with little scope to reduce the harm by mitigation

Cumulative effect on landscape and visual amenity

261. This matter is addressed in Chapter 9 of the ES and five viewpoints demonstrating potential cumulative impact are included in Volume 4 – Visualisations. Additional viewpoints have been submitted during the course of the application

262. The visual and landscape effects of a wind farm development can combine with existing and proposed wind farm developments to produce a cumulative effect.

263. Cumulative impacts can be defined as the additional changes caused by the proposed development in conjunction with other similar developments, or as the combined effect of a number of developments. Assessment of Cumulative effects should take account of existing wind farms, and those which are consented or at application stage.

264. Cumulative effects will include both Landscape and Visual effects, and can be experienced in several ways – as effects on the physical landscape fabric, or as effects on the landscape character - either as combined visibility where two or more developments exist in the same view, or where the developments are experienced as a as a sequence of landscape and visual effects.

265. At the proposed Highfield development both combined and sequential effects can be seen.

266. At Therfield Heath the existing wind farm at Langford, east of Biggleswade can be seen clearly on the horizon. These turbines would appear as a backdrop to the proposed development, marking space and foreshortening the views between the two, with the Highfield development dominating.

267. The Wadlow wind farm development is also visible from Therfield Heath. The view from the public car park, for example, would encompass the Wadlow development (distant) Highfield (close) and Langford (Middle distance). The entire horizon would be affected to a greater or lesser extent by wind farm development.

268. These developments would also be experience sequentially. For example on a journey from east to west along the A505 there would be varying degrees of Landscape and Visual effects, from Very Substantial to minor, associated with wind farm developments for much of the journey.

269. Significant Cumulative Landscape and Visual effects will also be evident west of Highfield. In the Guilden Morden area, to the north and south of the village, both the Langford and Highfield developments will both be clearly visible from many viewpoints, with one or the other effecting the landscape and viewpoints to varying degrees producing effects from Very Substantial to Minor as the traveller moves between the two developments.

270. The conclusions of the Landscapes Officer are set out under Consultations above. Officers are of the view that the proposal will have a significant negative visual effects over a wide area of South Cambridgeshire.

Residential amenity

271. Although the broad visual impact of the development on the surrounding locality is considered above the matter of the impact of the wind farm on the outlook of nearby residential properties needs to be considered. Although private views are not normally considered to be a material planning consideration, appeals into wind farm proposals have taken the view that when turbines are present in such numbers, size and proximity that they represent an unpleasantly overwhelming and unavoidable presence in the main views from a house or garden, there is every likelihood that the property would become widely regarded as unattractive and thus unsatisfactory place in which to live. In such cases it has been considered that it is not in the public interest to create such living conditions where they did not previously exist.

272. This matter is dealt with in paragraph 9.261 of the ES Volume 2.

273. In this case the closest residential properties are those at Highfield Farm, Highfield House and Cottages. These properties are linked to the development by ownership and therefore less sensitive receptors than those other local residents who would have the development imposed upon them.

274. Limlow Cottage is a single storey property on the east side of Royston Road. The closest turbine would be turbine 4, at approximately 520m from the front of the dwelling. The property looks directly across the Royston Road from its front ground floor windows and the turbines will be visible in an arc of about 70 degrees, although to the left of the direct view from the windows. The garden of the property to the rear faces east, although all turbines would be viewed when looking back across Royston Road to the south west. Officers are of the view that as the turbines are offset from the straight ahead view from the front of the property the change in outlook, whilst significant, would not be overpowering or unpleasantly overwhelming.

275. Nos 3 and 4 White Cottages (part of the complex of buildings at Morden Grange Farm) are located 650m south west of turbine 2. The cottage facing the development has no windows in its side elevation and the ground and first floor windows of both cottages face north south, such that any view of the turbines will be very oblique and could not be considered to be overpowering or unpleasantly overwhelming. Views from the garden should be considered in the same way, as views to the north, west and much of the view south will be unchanged.

276. 1 and 2 Brick Cottages (part of the complex of buildings at Morden Grange Farm) are located approximately 580m west of turbine 2. All turbines will able to be viewed from the rear windows of gardens of these properties in an arc of about 90 degrees to the north east, although views to the south will be unchanged. There are a small number of windows at the rear of these cottages but the existence of outbuildings and tall screening at the bottom of the relatively short gardens, mean that full unobstructed views across the development site more difficult to obtain. Although the assessment of the impact on these properties is more balanced officers are of the view that again the development could not be considered overpowering or unpleasantly overwhelming.

277. Morden Grange Farm is 700m west of turbine 2 and the side elevation will look directly towards that turbine. Again views to the south, south east and west will be unaffected. There is significant landscaping in the garden of the property which will to some extent screen direct views of the turbines and again officers are of the view that the development could not be considered overpowering or unpleasantly overwhelming from that property.

278. There are a number of properties at the southern edge of Litlington and in the village itself which would have views out of the village to the south of the turbines, although the undulating landscape and landscaping will affect the amount of each turbine viewed in each case. The distances to the closest of these properties range from 900m to 1km from turbines 1 and 4. Although the turbines may be more evident in views south and south west, officers are of the view that the development could not be considered overpowering or unpleasantly overwhelming from these properties.

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Cultural Heritage and Archaeology

279. This matter is dealt with in Chapter 14 of the ES and a supplementary cultural heritage report received in July 2013, which deals comprehensively with the impact of the development of heritage assets in the five conservation areas identified by the Councils Conservation Officer as being affected by the proposal. It considers that the impact on Therfield barrows will be low major adverse effect; the impact on Litlington Conservation Area moderate; Steeple Morden Conservation Area minor; Guilden Morden Conservation Area negligible; Abington Pigotts negligible; Bassingbourn Conservation Area negligible; a moderate effect is identified on the listed barn at Highfield Barn; an minor effect on Gatley Farmhouse, Wimpole Hall and the Steeple Morden War Memorial.

280. In respect of archaeological interests within the site itself the Cambridgeshire Archaeology is satisfied that its interests can be dealt with by a negatively worded condition.

281. English Heritage has expressed concerns at the impact of the proposed turbines on the setting of the Therfield barrow cemetery, the importance of which is highlighted in its comments Appendix 5. The further assessment carried out on behalf of the

applicant, whilst recognising the importance of the heritage asset, does not attach the same degree of harm.

282. Given the location of the majority of the barrows, to the east of the major viewing point on the Heath, officers are of the view that the importance of the setting of this asset has been accurately assessed by English Heritage, and that there will be a very significant degree of harm, which will need to be balanced against the public benefits of the proposal.

283. The Conservation Officer is concerned at general views across the site both from the north and south and the impact that this will have on the setting and historical visual linkages of Churches in a number of villages, which tend to be the highest buildings, and therefore more prominent in distant views.

284. There are particular concerns about the impact of views into and out of the Conservation Areas of Litlington and Steeple Morden, along with the impact of important listed buildings.

285. These views are set out in the advice submitted at Appendix 4, and are not rehearsed again here. In a number of areas the degree of harm to heritage assets is rated higher than in the applicants submission, and there is particular concern about the setting of listed buildings on edge of the village where views of the heritage assets will be severely affected.

286. In those area s where the harm is identified as less than substantial the harm has to be balanced against any public benefits of the proposal.

287. The Conservation Manager is concerned about views from the southern end of the South Avenue of Wimpole Hall and Members will have an opportunity to view from this point. Although the wind farm will be approximately 7.5m away it will still adversely impact on the setting of the heritage asset to a significant degree.

Rights of Way

288. The effect on the enjoyment of the public rights of way in the area has been considered under visual amenity above, and is considered to be of great concern

289. The Rights of Way Officer, Cambridgeshire County Council has confirmed that the separation distances to existing public footpaths is acceptable.

290. Concern has been expressed about proximity of the proposed turbines 1 and 2 to the permissive bridleways to the north and west of the site. The British Horse Society recommends a minimum separation distance of 200m from a bridleway to a turbine to prevent horses from spooking, however this is not a statutory requirement and turbine 2 has a clearance of 180m. Turbine 1 however is within 100m of the permissive bridleway to the north. As this is a permissive rather than statutory route realignment within other land owned by the applicant could be secured by condition. The applicant has indicated his willingness to improve rights of way as part of the proposal

Noise

291. The Environmental Health Officer has carefully analysed the proposal against the original information, and the additional information supplied. The application has been considered in the light of the advice in ETSU-R-97, and whilst there has been concern expressed locally about the use of this document it remains the standard

against which wind farm proposals should be assessed. This position is supported in the Planning Practice and Guidance for Renewable and Low Carbon Energy published in July 2013

292. The Environmental Health Officer has concluded that the noise impacts from the proposal are acceptable subject to the imposition of appropriate conditions. These would include:

- Construction Environmental Management Plan covering hours of work/construction, noise predictions etc, in accordance with BS 5228:2009.
- Operational noise – maximum permitted noise levels at specified properties having regard to ES and ETSU limit guidance/IOA Good Practice Guidance May 2013
- Provision of noise and met data as requested
- Compliance checking if complaints received etc
- Other or Excess Amplitude Modulation noise occurrence greater than that envisaged or inherent in ETSU should complaints arise
- Post commissioning noise compliance checking for a period of time.

293. The applicants agent has supplied a draft set of conditions which the Environmental Health Officer is currently considering.

Shadow flicker

294. Under certain combinations of geographical position, time of day and year, the sun may pass behind the rotor of a wind turbine and cast a long shadow. When the sun is in a certain position on the sky at a specific time of day and alignment with an intervening turbine and the window of a neighbouring dwelling, as the blades rotate shadows can pass a narrow window. A person in that room may perceive that the shadow, effectively a drop in the light levels which comes and goes with each pass of the blade

295. Shadow flicker normally only occurs within 10 rotor diameters of the turbines at 130 degrees either side of north relative to the turbines, however these conditions should not be viewed as an absolute and at distances beyond 10 rotor diameters there is a low risk that shadow flicker may occur.

296. Modern turbines can be controlled so as to avoid shadow flicker when it has the potential to occur. Individual turbines can be controlled to avoid shadow flicker at a specific property or group of properties on sunny days, for specific times of the day, and on specific days of the year

297. The potential for shadow flicker is considered in Chapter 9 of the ES Volume 2. Seven dwellings have been identified as having the potential to experience shadow flicker effects and it is concluded that there are five potential receptor properties within the study area that could be exposed to shadow flicker, although for very short periods. Apart from Highfield House the worst affected property is Morden Grange Farm House, which could experience 80 shadow days per annum for a maximum of up to 51 minutes on each day – a total of 36.1 shadow hours per annum.

298. The Environmental Health Officer has addressed this issue in Section 4.0 of his comments in Appendix xx, and agrees with the assessment above. He agrees that a shadow flicker related mitigation condition is necessary and reasonable in the interests of the amenities of nearby residents subject to agreement on the final wording.

Aviation

299. This matter is considered in Chapter 16 of the ES, which concludes that following the proposed mitigation measures, no significant impacts on either civil or military airfields are anticipated.

300. Wind turbines can have an adverse effect on air traffic movement and safety as they may represent a risk of collision with low flying aircraft, and they may interfere with the proper operation of radar by limiting the capacity to handle air traffic, and aircraft instrument landing systems.

301. The Defence Infrastructure Organisation and Cambridge Airport currently object to the application on the grounds of potential interference with radar at Cambridge Airport. The applicant has been working with the Airport to address these concerns by appropriate mitigation measures, which it is suggested could be secured by two conditions. At the time of writing the report however officers have not received confirmation of an agreement, and therefore the objection constitutes a reason of refusal at the present time. A further update will be given at the meeting

302. No objection in respect of aviation has been raised by the National Air Traffic Control (NATS) or Duxford Airfield. Bassingbourn Barracks has been consulted but has not commented on the application.

Ecology

303. This matter is considered in Chapter 12 of the ES. In the conclusions it refers to the extensive surveys that undertaken at the site, and that a number of non-avian protected species were confirmed to be present within a 500m buffer area, most notably four species of bat and a modest population of badgers. Potentially significant pre-mitigation impacts were not identified as credible concerns for any protected species. The ES states that given the mitigation measures proposed, the construction and operation of the proposed development is deemed unlikely to result in negative ecological impacts beyond a minor magnitude for some species at the Parish/Local geographical scale. The enhancement measures described in Chapter 11 'Ornithology' are predicted to make significant contributions to UK BAP priority species targets.

304. The Planning Practice and Guidance for Renewable and Low Carbon Energy states at paragraph 33, that evidence suggests that there is a risk of collision between moving turbine blades and birds and/or bats. Other risks include disturbance and displacement of birds and bats and the drop in air pressure close to the blades which can cause barotrauma (lung expansion) in bats, which can be fatal. Whilst these are stated to be generally a relatively low risk, in some situations, such as in close proximity to important habitats used by birds or bats, the risk is greater and the impacts should therefore be assessed.

305. The local concerns in respect of the impact on ecology are noted, however Members will see from the consultation responses that Natural England, the Council's Ecology Officer and the RSPB have not objected to the application, and are satisfied with the investigations undertaken. The mitigation measures will need to be secured by condition.

Ornithology

306. This matter is considered in Chapter 11 of the ES, which states a number of avian species where found to be present at the site including: Stone Curlew, Hobby, Nightjar, Montagu's Harrier, Merlin, Whimbrel, Honey Buzzard, Bar-tailed Godwit, Peregrine, Marsh Harrier, Red Kite, and Golden Plover. A number of other bird species listed as birds of conservation concern were also recorded.

307. The ES states that significant effects were identified for collision risk to Stone Curlew. Whilst collision remains unlikely, if it were to occur, it would result in a major negative effect on the Regional population of stone curlew. Mitigation has been proposed (originally on three nesting plots to the south of the site) to reduce this potential impact still further, and potentially result in significant progress towards BAP species targets.

308. Members will see from the consultation responses that Natural England, the Council's Ecology Officer and the RSPB have not objected, subject to the mitigation measures proposed.

309. In September 2013, a letter was received from the applicants agent, stating that two further surveys targeted at Stone Curlews were undertaken in spring/summer 2013. The ES reported a breeding pair of Stone Curlews present in 2008, while in 2009 a single bird was observed, with no breeding suspected. A further survey was conducted in June 2009 but no birds were observed on that occasion. The 2013 survey again found no evidence of stone curlew on the site.

310. As a result, and with the agreement of the RSPB a slightly revised scheme of mitigation is proposed, which reduces the proposed nesting plots from three to two.

Highway safety implications

311. This matter is considered in Chapter 8 of the ES, which concludes that given predicted peak HGV movements are anticipated to exceed more than 30% of existing HGV movements along Royston Road from the junction of the A505, limited local disruption may occur to local traffic during the five non-consecutive days of turbine foundation concrete pouring. It is also anticipated that some brief disruption may occur during the delivery of the major turbine components.

312. Concern has been raised that the proposed turbines will represent a distraction and hazard to drivers, particularly when crossing the A505. The turbines will be a minimum of 1.2km to the north of the A505, and will be visible to drivers travelling along the A505 from both the Royston and Baldock directions. Officers are of the view that whilst when turning north from the A505 drivers will be looking towards the turbines, and particularly No5, they will be a feature in the landscape which has been visible for some time before the turn, and will not therefore represent a distraction so as to cause a hazard.

313. The applicants agent has pointed out that in previous Government Guidance, now replaced by the Planning Practice and Guidance for Renewable and Low Carbon Energy, it was stated that wind turbines should not be treated any differently from other distractions a driver must face, and should not be considered particularly hazardous.

314. Cambridgeshire County Council, as Highway Authority for the Royston Road, from where access onto the site will be gained has not objected on highway safety grounds. There should be a condition requiring a method statement for the site,

which would include routing and securing any modifications required to the public highway for safe delivery.

315. The comments of Hertfordshire County Council, as Highway Authority for the A505, will be included in an update report.

Impact on railway line

316. Traffic accessing the site from the A505 will need to cross the railway line at the Litlington crossing, where there are overhead lines. A detailed topographical survey was undertaken at the level crossing for the ES.

317. Network Rail has not objected to the application and has had further correspondence with the applicant's agent regarding the safeguarding measures which will need to be put in place during the period of construction.

Utilities and Telecommunications

318. Although OFCOM has not made comments in respect of this application it did input into the preparation of the ES and this issue is considered in Chapter 15 of Volume 2 of the ES, and modifications were made prior to submission.

319. Wind farms can potentially affect electromagnetic transmissions (e.g. radios, television and phone signals) and a clearance of 100m either side of a line of site link from the swept area of turbine blades is normally required. The application complies in this respect, however it would be appropriate to include a condition in any consent to ensure that any issues subsequently experienced can be dealt with.

Conclusions

320. Members will have the opportunity to visit the site and view from a selection of the important viewpoints highlighted above. The presumption remains in favour of sustainable development unless material considerations indicate otherwise. Although the amount of energy that the proposed development might generate is contested locally, Members must recognise that the proposed development will contribute to renewable energy levels.

321. This then has to be balanced against any harm and a view taken as to whether the public benefits of the proposal outweigh that harm. In this case officers have identified substantial levels of harm in terms of landscape and visual impact on the surrounding area, cultural heritage and impact on aviation (although it is recognised that Cambridge Airport may withdraw its objection).

322. In this case officers are of the view that the degree of harm outweighs the public benefits and the application should be refused.

Recommendation

323. That the application is refused for the reasons set out below.

Reasons for refusal

1) The proposed development will cause unacceptable levels of harm to the local landscape character, to the local villages and their setting - particularly Litlington and Steeple Morden.

The development would appear completely at odds with the character, scale and pattern of the landscape, and would dominate views both locally and in the wider landscape over large areas.

The development will also cause substantial harm to local amenity and the recreational experiences of residents and visitors. The open nature of the wider landscape and the numerous elevated views available mean that the development would be visible for extended periods of time to users of the landscape, particularly from Therfield Heath and the Hamcarlow way.

The development would also combine with views to the Wadlow wind farm development and with the much closer recent wind farm at Langford. These cumulative effects will also
cause substantial levels of harm to the landscape and village settings, particularly north and west of Litlington.

There will be few opportunities for mitigation to reduce the Landscape and Visual effects of the development, and so the levels of harm to landscape and amenity will remain unacceptably high.

2) The proposal will result in significant harm to a number of important heritage assets in the area including the ancient barrows on Therfield Heath, views into and out of Litlington and Steeple Morden Conservation Areas, the setting of a number of listed buildings in Litlington, including the Church, the setting of the South Avenue of Wimpole Hall, and views to and from the chalk ridges to the north and south of Litlington. The Local Planning Authority is of the view that the public benefits of the proposal do not outweigh the identified harm to heritage assets.

3) The proposed turbines would have an adverse impact on the operation of the radar at Cambridge Airport to the detriment of air safety.

Background Papers
Where the Local Authorities (Executive Arrangements) (Meetings and Access to Information) (England) Regulations 2012 require documents to be open to inspection by members of the public, they must be available for inspection: -
(a) at all reasonable hours at the offices of South Cambridgeshire District Council;
(b) on the Council's website; and
(c) in the case of documents to be available for inspection pursuant to regulation 15, on payment of a reasonable fee required by the Council by the person seeking to inspect the documents at the offices of South Cambridgeshire District Council.

The following list contains links to the documents on the Council's website and/or an indication as to where hard copies can be inspected.

- South Cambridgeshire Local Development Framework Development Control Policies DPD 2007
- South Cambridgeshire Local Plan Proposed Submission July 2013
- South Cambridgeshire Supplementary Planning Documents
- National Planning Policy Framework 2012
- Planning File References: S/0439/12/FL.

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