PHOENIX

SOLAR PARK

WESSEX
SOLAR ENERGY

Land Quality Implications Assessment

December 2023

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Contents

1 Introduction

1 This Report has been prepared by Wessex Solar Energy (WSE) in support of a planning application for a Solar Park (which will generate up to 9.99 megawatts (MW) alternating current (AC)) to be located on land approximately 0.7 kilometres (km) south east of Cosheston, and approximately 2.5 km north east of Pembroke. The location of the proposed Solar Park site is shown in Figure 1.1.

2 The proposed site comprises 3 fields, covering a total area of approximately 13.84 hectares (ha), 7.34ha of which has been identified as being Best and Most Versatile (BMV) agricultural land (Environmental Statement Volume 2: Appendix A5.2)[1]. In the past few years, the land within the site boundary has been used for grazing cattle and sheep and for producing silage and arable crops. At the time of writing this report it is currently being grazed by sheep in its entirety.

[1] As defined within the National Planning Policy Framework and Planning Policy Wales Edition 10.

2 Purpose of the report

3 The purpose of the report is to consider whether the proposed Phoenix Solar Park will result in the unacceptable loss of Best and Most Versatile (BMV) agricultural land in planning terms. It explores the current methods of assessing land quality, the changes which may occur to land quality as a result of the construction, operational and decommissioning phases of the proposed solar park development and finally considers a do-nothing scenario where the ways in which the future land quality across the site may change should the proposed development not proceed.

3 Land Quality

3.1 Defining Land Quality

4 To enable detailed consideration of the potential impacts of solar development on land quality and the changes under a do-nothing scenario, it is necessary to understand the factors which contribute to land quality. Land quality in this context refers to the quality of agricultural land within the site boundary. In England and Wales guidance for assessing the quality of agricultural land is set out in the Ministry of Agriculture, Fisheries and Food (MAFF) revised guidelines and criteria for grading the quality of agricultural land (1988)[2].

5 These guidelines set out the Agricultural Land Classification (ALC) grading system. ALC grading was devised and introduced in the 1960s (MAFF, 1966) and has since been revised to comprise the following grades: Grade 1, Grade 2, Grade 3a, Grade 3b, Grade 4, Grade 5.

6 As stated within the guidance *'The classification is well established and understood in the planning system and provides an appropriate framework for determining the physical quality of the land at national, regional and local levels.'*

7 The Agricultural Land Classification system provides a framework for classifying land according to the extent to which its physical or chemical characteristics impose long-term limitations on agricultural use. These limitations can affect the range of crops which can be grown, the level of yield, the consistency of yield and the cost of obtaining it.

8 The guidance maintains that the principal physical factors influencing agricultural production are climate, site, and soil. These factors together with interactions between them form the basis for classifying land into one of the five grades now established.

9 Guidelines for the assessment of the physical factors such as climatic and site factors (including gradient, microrelief and flood risk) are set out within the MAFF, 1988 guidance document. However, they are not considered further within this report as they represent a consistent baseline regardless of the type of agricultural use - providing that the form of the land is not altered. Therefore, this report focusses on soil characteristics.

10 Soil characteristics play an important role in determining agricultural land quality. Of particular importance are texture, structure, depth, and stoniness. The guidance also acknowledges the site-specific importance of the chemical properties of soils in relation to the long-term potential of land.

11 Applying the criteria detailed within the guidance, an area of land can be assessed and awarded an ALC Grade. The quality of the land within each grade is summarised as follows;

- ***'Grade 1 - excellent quality agricultural land***
  Land with no or very minor limitations to agricultural use. A very wide range of agricultural and horticultural crops can be grown and commonly includes top fruit, soft fruit, salad crops and winter harvested vegetables. Yields are high and less variable than on land of lower quality.

[2] **MAFF (1988).** *Agricultural Land Classification of England and Wales. Revised guidelines and criteria for grading the quality of agricultural land*. MAFF Publications.

- ***Grade 2 - very good quality agricultural land***
  Land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural and horticultural crops can usually be grown but on some land in the grade there may be reduced flexibility due to difficulties with the production of the more demanding crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than Grade 1.
- ***Grade 3 - good to moderate quality agricultural land***
  Land with moderate limitations which affect the choice of crops, timing, and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.
    - ***Subgrade 3a - good quality agricultural land***
      Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.
    - ***Subgrade 3b - moderate quality agricultural land***
      Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.
- ***Grade 4 - poor quality agricultural land***
  Land with severe limitations which significantly restrict the range of crops and/or level of yields. It is mainly suited to grass with occasional arable crops (e.g. cereals and forage crops) the yields of which are variable. In moist climates, yields of grass may be moderate to high but there may be difficulties in utilisation. The grade also includes very droughty arable land.
- ***Grade 5 - very poor-quality agricultural land***
  Land with very severe limitations which restrict use to permanent pasture or rough grazing, except for occasional pioneer forage crops.'

3.2 Soil Characteristics and Limitations (as detailed within the MAFF 1988 Guidance)

12 Several important soil characteristics are considered within the guidance which can act as a limitation to the quality of the land being assessed. These are detailed below.

3.2.1 Soil Texture and Structure

13 *'Soil texture and structure have a major influence on water retention, water movement and aeration in soils and therefore on workability, trafficability, poaching risk and suitability as a medium for plant growth. Texture class is determined by the relative proportions of sand, silt and clay particles and the amount of organic matter in a soil horizon and may be assessed in the field by hand texturing or measured in a laboratory by particle-size analysis….. In most soils the primary particles are aggregated into structural units called peds. Soil structure is influenced considerably by soil texture and is described by reference to the size, shape and degree of development of the peds and the pores and fissures within and between them (Hodgson, 1976). A well-structured soil is characterised by clearly identifiable, stable peds with a high proportion of pores and fissures which allow easy movement of air, water and roots through the soil. Such soils are often found under permanent pasture where the soil has not been*

disturbed by cultivation and prolonged root action has assisted structural development'.

3.2.2 Soil Depth

14 *'Soil depth is an important factor in determining the available water capacity of a soil…. Shallowness affects cropping in other ways, notably by influencing the range and type of cultivations which can be carried out but also by restricting nutrient uptake, root growth and, in the case of fruit trees, root anchorage.'*

3.2.3 Stoniness

15 *'The main effects of stones are to act as an impediment to cultivation, harvesting and crop growth and to cause a reduction in the available water capacity of a soil.'*

3.2.4 Soil Chemistry

16 *'The chemical status of a soil does not affect ALC grading where nutrient levels can be maintained or corrected by normal applications of fertiliser or lime.'*

17 It is important to note as specified above that the ALC grading assumes a reliability on artificial maintenance of soil chemistry. Section 6 of this report considers the wider implications of such an approach upon long term land quality and the sustainable conservation of agricultural land as a finite resource for future generations; a policy requirement set out in PPW11.

4 Land Quality and Planning

18 In England and Wales, Future Wales 2040, and Planning Policy Wales Edition 11 (PPW11) include provision for the protection and conservation of 'best and most versatile agricultural land'.

4.1 Planning Policy

4.1.1 Future Wales 2040

19 Future Wales 2040 defines Agricultural Land of Grades 1, 2 and 3a as best and most versatile agricultural land (BMV).It states that ..*' Our productive land is a vital resource. Agriculture has shaped our landscapes and supported our rural and market towns for generations. We must continue to value and protect our agricultural land and ensure it can feed and support us.'*

4.1.2 Planning Policy Wales Edition 11 (PPW11)

20 Planning Policy Wales (PPW11) sets out the land use planning policies of the Welsh Government. It is supplemented by a series of Technical Advice Notes (TANs).

21 At paragraph 3.58 PPW11 specifies that:

"Agricultural land of grades 1, 2 and 3a of the Agricultural Land Classification system (ALC) is the best and most versatile, and should be conserved as a finite resource for the future."

22 It goes on to say that;

"When considering the search sequence and in development plan policies and development management decisions considerable weight should be given to protecting such land from development, because of its special importance. Land in grades 1, 2 and 3a should only be developed if there is an overriding need for the development, and either previously developed land or land in lower agricultural grades is unavailable, or available lower grade land has an environmental value recognised by a landscape, wildlife, historic or archaeological designation which outweighs the agricultural considerations. If land in grades 1, 2 or 3a does need to be developed, and there is a choice between sites of different grades, development should be directed to land of the lowest grade."

4.1.3 Technical Advice Note 6 (TAN 6)

23 TAN 6 is the advice note produced in relation to 'Planning for Sustainable Rural Communities' at Annex B Paragraph 2 it states:

'There may be proposals for development for non-agricultural purposes requiring significant amounts of the best and most versatile agricultural land. In such cases,

DRA has the statutory right to be consulted, so that planning authorities are made fully aware of the agricultural implications. Article 10(1), paragraph (w) of the Table to the Town and Country Planning (General Development Procedure) Order 1995 (GDPO) (S.I .No 1995/419), requires planning authorities to consult WAG before granting any planning permission which is not in accordance with the development plan, and would involve the loss of 20 hectares or more of grades 1, 2 or 3a agricultural land or a loss which is less than 20 hectares but is likely to lead to further losses amounting cumulatively to 20 hectares or more. If the planning authority is uncertain whether the land involved is grades 1, 2 or 3a they may seek advice from SEED on its classification.'

24 This consultation requirement is also contained within the Developments of National Significance (Procedure) (Wales) Order 2016, Schedule 5.

4.1.4 Summary

25 When ensuring compliance with the above policies, ALC surveys and grading are the accepted method of determining the land quality of a proposed development site. The results of a detailed ALC survey such as that provided in ES Vol 2 Appendix A5.1 can be used to identify the presence of best and most versatile (BMV) agricultural land within a development boundary and inform an assessment of the potential loss of any BMV agricultural land present.

26 This assessment is then considered as part of the decision-making process for any proposed development.

4.2 Definition and Assessment

27 As detailed above, BMV agricultural land is protected from loss by a range of policy documents and advice notes. No definition of 'loss' is provided within any of these documents. However, the Oxford dictionary defines 'loss' as follows:

'the state of no longer having something or as much of something; the process that leads to this'[3]

28 In the case of agricultural land this is understood to mean one of the following:

a) The land no longer being available for agricultural use – direct loss
b) Activity which reduces the quality of the land such that it would no longer be considered to be BMV land – indirect loss

29 There is no policy, guidance or legislation which limits the type of agricultural use of BMV agricultural land and as set out in the MAFF 1988 guidance, the difficulties with obtaining and standardising economic data as identified by Technical Report 11, means that there are no economic criteria for grading such land. As a result, an owner of BMV agricultural land can chose to use it for any agricultural purpose they wish without the need for any permissions or consents, for example arable, pasture or set aside, as long as there is no direct loss of the land. Furthermore, there is no mechanism

[3] https://www.oxfordlearnersdictionaries.com/definition/american_english/loss#:~:text=%5Bsingular%5D%20the%20disadvantage%20that%20is%20caused%20when%20someone,to%20accept%20this%20money%2C%20then%20that%27s%20his%20loss.

in place to prevent or monitor the indirect loss of BMV land via unsustainable or inappropriate agricultural activity. This is an important factor to bear in mind when applying limits on the use of BMV land through the planning system. For this reason, it is crucial within any decision making process that the purported 'loss' of such land should be given careful consideration and that evidence is presented to support any assertion that loss will or will not occur.

30 In addition, there is no definition of 'development' within Future Wales 2040 or PPW11 or accompanying guidance documents. It is assumed that this refers to the permanent conversion of BMV land into non-agricultural land resulting in loss as defined above.

31 This is an assumption which is supported by a number of relatively recent appeal decisions made in both England and Wales. A summary of these decisions can be found in Appendix A of this document.

32 In the context of the above, it should also be acknowledged that the temporary use of land does not necessarily constitute loss.

33 This general principle is broadly supported by the ALC guidance which sets out the following in relation to maintaining a consistent assessment approach:

> 3. *Where long-term limitations outside the control of the farmer or grower will be removed or reduced in the near future through the implementation of a major improvement scheme, such as new arterial drainage or sea defence improvements, the land is classified as if the improvements have already been carried out. Where no such scheme is proposed, or there is uncertainty about implementation, the limitations will be taken into account. Where limitations of uncertain but potentially long-term duration occur, such as subsoil compaction or gas-induced anaerobism, the grading will take account of the severity at the time of survey.*

34 While the above does not specifically relate to the development of agricultural land and does make reference to works in the 'near future', it makes the clear distinction that where reversible limitations are present and a timescale and method for their reversal is in place, then this should be taken into account when assessing land quality, resulting in the allocation of a higher land quality grading. Conversely, it could therefore be concluded that if activity or use which may temporarily reduce the quality of BMV land is easily reversible, then this should not be considered to result in the loss of BMV land. This approach should be applied to the consideration of the impacts of the proposed Phoenix Solar Park development on BMV land as set out in Section 5.

5 Potential Impacts

5.1 Direct Impacts

35 For the purposes of this assessment, and taking the above into account, direct impacts are defined as those which result in the physical permanent removal or addition of BMV agricultural land.

5.2 Indirect Impacts

36 Indirect impacts are defined as those which affect the overall long-term quality of land identified as BMV land. Adverse impacts are those which result in a decrease in quality such that the land may no longer be considered to be BMV land and is therefore lost. Beneficial Impacts would be those which result in an increase in the quality of BMV agricultural land or improve the sustainability of maintaining the existing land quality.

37 This report focuses on the potential indirect impacts which may affect any of the four soil characteristics identified within the ALC Guidance.

A. Soil Texture and Structure

Impacts on soil texture and structure may result from any activity which causes changes to the following:

- Physical composition e.g. silt, clay and sand proportions
- Aeration
- Porosity
- Water retention capacity
- Internal adhesion
- Organic matter content

B. Soil Depth

Impacts on soil depth may result from any activity which causes a change in soil depth.

C. Stoniness:

Impacts on stoniness may result from any activity which causes changes to the number and size of stones present within the soil.

D. Soil Chemistry:

Impacts on soil chemistry may result from any activity which causes changes to the chemical composition of the soil including nutrient presence and availability.

5.3 Solar Development

38 It is important to consider the direct and indirect impacts of the proposed Phoenix Solar Park on BMV agricultural land alongside the permanence and temporal scope of any impacts.

5.3.1 Direct Impacts

39 Solar energy developments are temporary in nature and are recognised as such within the planning system via the requirement for them to be decommissioned after a specified time period. This is ordinarily secured by condition as part of any decision notice and in the case of modern solar park proposals, is typically after a duration of 40 years of operation. There is therefore no direct impact on BMV agricultural land as defined in Section 5.1 above.

5.3.2 Indirect impacts

40 Although solar development does not result in the permanent loss of any BMV agricultural land, the potential impact of construction and decommissioning activities upon land quality must be considered, as this could result in indirect impacts of BMV agricultural land. For comparison purposes with a do-nothing scenario, potential operational impacts of the proposed solar park upon land quality are considered within Section 6.

5.3.2.1 Below ground components

41 The footprint of the proposed solar park development is extremely small relative to the size of the overall development site. The below ground-level structures form what is referred to as the 'footprint' of the proposed development. These structures require installation in a way which makes the land used temporarily unavailable for agricultural activity.

42 Table 1 provides a 'worst case' calculation of the footprint of the proposed Phoenix Solar Park development and includes all below ground components proposed.

Table 1: Development Footprint

Component	**Area (ha)**	**Area (acres)**
Construction		
Site compound	0.16	0.4
Operation		
Access Track – c.865m at 3m width	0.26	0.64
Inverter/transformer cabin foundations (11)	0.028	0.07
Control building foundations	0.002	0.005
Panel supports	0.0016	0.004
Fence posts	0.002	0.002
Main cable trenches partially backfilled with sand (c. 1km at 0.75m width and 1m depth)	0.075	0.37
Total	**0.528***	**1.304***

* This total area includes the footprint of items within areas of land classified as Grade 3b and so the overall land take of BMV agricultural land would be less.

43 The area occupied by the development footprint would be less than 0.53ha/1.3 acres and would be equivalent to only 3.83% of the total development site. The use of this land is considered to be temporary as it is easily reversible without any residual impacts upon land quality.

44 The limited amount of soil excavated to allow for the installation of the components listed in Table 1, for example up to 300mm of soil to facilitate access track creation, will be distributed across the ground surface in the immediate vicinity of the item being installed. This will result in little difference to the soil depth and will allow the in-situ retention of the soil for backfilling purposes upon decommissioning. Any bare soil would be re-seeded to ensure vegetation growth and prevent erosion.

45 The installation of these components is long-term, temporary, and reversible (see the Outline Decommissioning and Restoration Plan, DRN BL013). As set out in Section 5.3.2.3, a plan for the removal of these components is in place and the 40-year limitation on the planning approval would secure their removal after a known time period. As a result, the BMV land in these areas will not be permanently lost for use by future generations.

46 The installation of the electrical cabling connecting the panel rows will be minimal and will run at right angles to the rows. The cabling will be below ground in small trenches which will be backfilled with the soil which is temporarily excavated to facilitate their installation. For this reason, the cabling is not included within the footprint. No material other than soil will be used as backfill material and vegetation will grow over the cables and so the land will not be unavailable for agricultural activity. Potential installation impacts are considered within section 6.3.2.2 below.

5.3.2.2 Construction Activities

47 The potential impacts of construction and decommissioning activities across the wider site (land outside of the 'land take' areas) are considered below.

48 Details of construction activities and phasing for the proposed Phoenix Solar Park are provided within Environmental Statement Volume 1, Chapter 6, DRN BL001 and Environmental Statement Volume 2; Appendix A11.2. Activities which may specifically affect land quality are considered below.

A. Soil Texture and Structure

49 The following activities have the potential to affect the soil texture and structure across the wider site:

- Compaction of soil by vehicles transporting equipment and materials
- Mechanical disturbance of topsoil
- Removal of organic matter due to soil stripping

50 Vehicle movements around the site could cause compaction of the soils and disturbance of topsoil. This could result in reduced aeration, porosity, and water

retention capacity within the disturbed areas by reducing the presence of fissures and pores present. This could also disrupt the hydrological conductivity within the soil causing localised waterlogging.

51 As detailed within Chapter 6 of Environmental Statement Volume 1, DRN BL001, the creation of the site compound and access tracks are two of the first activities which would take place. This will prevent the unnecessary and uncontrolled movement of vehicles across large areas of unprotected soil by providing defined link roads for the transportation of electrical equipment and machinery. This will minimise the potential for compaction of soils and disturbance of topsoil to occur across the wider site.

52 The transportation of panel supports and the panels to their required locations on site will be undertaken by small, tracked vehicles, minimising damage to the surface by reducing compaction and disturbance/churning of the soil. The limited number of such movements will further reduce any potential impacts and subsequent longer-term impacts upon land quality are unlikely.

53 The installation of the panel supports will be completed by a piling machine. This machine will be tracked and will undertake limited movement across the site to reach each support location.

54 The vehicle movements will take place over a short time period and will be occasional across any one area. For this reason they will potentially have a lesser impact overall than that of large farm machinery used for sowing, ploughing, or spraying with fertiliser and pesticides, which have the potential to regularly disturb the top 300mm of soil across the entire site during typical repeated farming activity.

55 As outlined above, the installation of the electrical cabling connecting the panel rows will be below ground in small trenches which will be backfilled with the soil which is temporarily excavated to facilitate their installation. The excavation works required will be minimal at less than 600mm below ground level and in trenches less than 50 cm wide. Multiple cables will be located within each trench minimising potential disturbance. The soil structure and texture of the backfilled trenches and surrounding land will remain largely unchanged in a similar way to the impact of ploughing.

56 No soil stripping is proposed across the wider site. Upon completion of the construction works, any disturbed areas will be reseeded with a suitable grass mix as detailed within the Landscape and Ecological Management Plan (Environmental Statement Vol 2: Technical Appendix E9.4), preventing the longer term loss of vegetated topsoil.

B. Soil Depth

57 Soil depth across the wider site will not be affected by the proposed development for the following reasons:

- No soil will be removed from site as a result of the proposed construction activities.
- No soil stripping will take place across the wider site.
- The wider site will be seeded/reseeded to establish continual grass cover for grazing purposes which will reduce the potential for erosion.

C. Stoniness:

58 The soil on site will not be processed in any way and so the stoniness of the wider site will not be affected during the construction phase.

D. Soil Chemistry:

59 Soil Chemistry across the wider site will not be affected during construction. As detailed within the Landscape and Ecological Management Plan, weedkiller may be applied to discrete areas to allow new planting to become established. This will not be in sufficient volume to affect vegetation growth across the wider site or to affect the future growing potential of the soil within the site boundary.

5.3.2.3 Decommissioning Activities

Decommissioning activities are set out within the Outline Decommissioning and Restoration Plan, DRN BL013. Activities which may affect land quality are considered below.

A. Soil Texture and Structure

60 In the same way as during construction, the access tracks will remain in-situ until all other equipment has been removed from site. They will provide defined routes for the movement of any decommissioning vehicles and transportation of equipment to and from the site. The removal of the panels, panel supports, and fence posts will require minimal movement across the site. Any vehicle movements will be over a short time period and will be occasional across any one area, minimising potential compaction and disturbance impacts. The site will be left as grassland upon completion of the decommissioning works and any bare soil will be reseeded. This will result in predominantly continual vegetative cover reducing the potential for erosion to occur.

61 The cables will be removed from the sand-filled trenches and the trenches backfilled using soil previously excavated to allow the cable installation. It is anticipated that following 40 years, the small amount of sand within the trenches will have been distributed and incorporated into the structure of the soil immediately surrounding the trench by invertebrates and the movement of water through the soil. This will result in a potential negligible impact upon soil structure which may be beneficial or adverse depending on the soil structure along the very small defined route of the trenches..

B. Soil Depth

62 The removal of below ground components such as panel supports, foundations and fence posts will require some disturbance of the soil in the immediate vicinity of the items being removed. As detailed within the Outline Decommissioning and Restoration Plan, DRN BL013 any excavations created by the removal of the items will be backfilled using soil which was distributed in the immediate vicinity during construction.

63 No soil should need to be brought on to the site.

C. Stoniness

64 Since all components will be removed from the site in their entirety, including the aggregate access tracks, the stoniness of the soil across the site should not be affected by the proposed decommissioning activities.

D. Soil Chemistry

65 No proposed decommissioning activities should alter the soil chemistry across the site.

6 Do-nothing scenario

66 Although the proposed Phoenix Solar Park is a temporary development, due to the timescale and size of the proposed development, it is appropriate to consider a do-nothing scenario. This requires consideration of any changes which may occur to the land quality across the site over the next 40 years in the absence of the development.

6.1 Agricultural Activity

67 As detailed in Section 1, the fields within the site boundary have previously been rotationally used for grazing cattle and sheep and for the production of silage. At the time of writing this report the site is currently being grazed by sheep in its entirety.

68 Although many changes are taking place within the farming sector which may impact upon the use of the land, it is considered likely that it will continue to be used for arable and pastoral farming.

6.2 Impacts of Arable and Pastoral Farming on Land Quality

69 The impacts of modern farming techniques on the long term quality of agricultural land has been the focus of scientific studies and literature for many decades, increasing steadily since the turn of the century with the recognition of the potential importance of soils in relation to carbon sequestration and climate change[4].

70 The Intergovernmental Panel on Climate Change (IPCC) report 2002, provided considerable evidence to support what had been a long-held concern that modern farming practices could be damaging soils. The IPPC report focussed on the implications of soil degradation on the ability of soil to store carbon and highlighted the importance of soil health and quality in tackling climate change. Among other points of note, the report concludes that:

'Cropland soils can lose carbon as a consequence of soil disturbance (e.g., tillage). Tillage increases aeration and soil temperatures (Tisdall and Oades, 1982; Elliott, 1986), making soil aggregates more susceptible to breakdown and physically protected organic material more available for decomposition (Elliott, 1986; Beare et al., 1994). In addition, erosion can significantly affect soil carbon stocks through the removal or deposition of soil particles and associated organic matter……. Soil carbon content can be protected and even increased through alteration of tillage practices, crop rotations, residue management, reduction of soil erosion, improvement of irrigation and nutrient management, and other changes in forestland and cropland management (Kern and Johnson, 1993; Lee et al., 1993; Cole et al., 1996).'

71 Building upon the work completed by the IPCC, there are a considerable number of more recent studies which look at the importance of soil health directly related to how agricultural practices affect organic matter content, soil organism distribution and ultimately soil structure. They explore not only the importance of soils in combating climate change through carbon sequestration but also the quality of the soil as a growing medium.

[4] IPCC (2000) IPCC Special Report on Land Use, Land-Use Change and Forestry. A special report of the Intergovernmental Panel on Climate Change, eds R T Watson, I R Noble, B Bolin, N H Ravindranath, D J Verardo & D J Dokken D J). IPCC Secretariat, c/o World Meteorological Organisation, Geneva.

72 The sections below consider the potential impacts of ongoing agricultural use in the absence of the solar park on the soil characteristics considered as part of the ALC system and assesses how this may affect the BMV agricultural land.

73 A study published in 2015 (Graves et al., 2015) which developed and used an approach to assess the total economic cost of soil degradation in England and Wales concludes that;

'Quantifiable soil degradation costs ranged between £0.9 bn and £1.4 bn per year, with a central estimate of £1.2 bn, mainly linked to loss of organic content of soils (47% of total cost), compaction (39%) and erosion (12%)'.

6.2.1 Direct Impacts

74 It is not anticipated that future agricultural activity will result in any direct impacts upon BMV agricultural land. The assessment below is based upon the assumption that the site would remain in agricultural use during the next 40 years.

6.2.1.1 Soil Structure and Texture

75 The following modern farming practices can affect soil texture and structure:

- Compaction of soil by heavy machinery
- Regular and repeated mechanical disturbance of topsoil
- Removal of organic matter
- Increase in artificial fertilizers and pesticides - resultant decrease in soil organisms and microbes

6.2.1.1.1 Compaction and disturbance of topsoil

76 The regular and repeated use of heavy farm machinery to facilitate ploughing, seeding and the application of fertilisers and pesticides can all result in the compaction of soils over time. Soil compaction reduces the water and nutrient retention capacity of soil, as well as the air flow and the ease with which plants can establish a good root network and structure. Although ploughing can reduce the impacts of compaction in the top 300mm by repeated disturbance of the soil, over time a plough pan can develop which has wider implications on the overall long-term quality of the soil. A plough pan is a compacted layer of soil resulting from repeated ploughing. Plough pans reduce hydrological conductivity within the soil (Wang, Y, Zhang, B, 2017). Among other impacts, this can result in an increase in localised flooding and 'soil wetness' reducing land quality.

6.2.1.1.2 Removal of organic matter

77 The importance of organic matter content is recognised within the ALC guidance. Organic matter provides a number of benefits to soil:

- Increased nutrient content resulting in better crop yields
- Increased porosity
- Increased water storage capacity
- Cooling affect increasing germination of crop seeds
- Encourages soil organisms and microbes (see Section 6.2.2.3 below for further details)

78 Current agricultural practices can result in a significant reduction in the organic matter content of soil over time (Graves A R et al, 2015). This can happen through a variety of mechanisms. The first is the direct removal of organic matter through harvesting.

79 Crop rotation can reduce the cumulative impacts of organic matter removal over time but does not replace what is removed by farming practices during arable rotation periods.

80 A more difficult mechanism to control is the removal due to the use of mechanical tilling/ploughing. In 1999 (reference), a team of scientists from the United States Department of Agriculture (USDA), concluded that high power input was identified as generally increasing the rate of oxidation of organic matter, producing both carbon dioxide and nitrous oxide. The greatest effect, results from the use of pto-driven implements to "force" a tilth. (“pto” means power-take-off and applies to implements which use the power of the tractor engine in a direct drive to rotate or oscillate implements to “force” a tilth.) Conventional cultivation systems, involving implements such as the mouldboard plough, tined cultivators and power harrows, in several passes, will cause relatively rapid oxidation of organic matter and maybe 35% per annum of the Carbon in the organic matter will be lost on a declining basis (Butterworth, B., 2016).

81 Reduced organic matter content also causes a reduction in glomalin, an important component or the organic matter content of soils (see section 6.2.1.1.3).

6.2.1.1.3 Increase in artificial fertilizers and pesticides - Reduction in soil organisms and microbes

82 Farming practices can also have longer term effects on the health of soil. Farming activities which potentially reduce or limit the microbial content and invertebrate presence within a soil can result in detrimental changes to soil structure and texture:

83 Earthworms and other invertebrates perform a range of important functions within soils which improve the soil structure and texture. They aerate soil, creating pathways which facilitate the movement and storage of water, improving drainage and the water retention capacity of soil (Tree, I., 2018). Their burrows also allow the easier downward passage of roots.

84 Earthworms specifically facilitate the growth of bacteria and fungi which act as enablers of plant growth. They break down both soluble and insoluble organic matter which can then be taken up by plants. Soil microbes facilitate the uptake of a variety of nutrients including, nitrogen, carbon, sulphur, hydrogen and phosphorus (Zaller, J.G., 2014).

85 As detailed above, organic matter is an important component of productive soil and its presence is essential if a soil is to be assessed as having a good soil structure and texture. In breaking down organic matter and distributing it throughout the soil, earthworms therefore improve and maintain soil structure and texture.

86 Compaction of soil, regular and repeated mechanised disturbance of topsoil, and the application of fertilizers and pesticides can cause a decrease in the quantity of soil microbes and invertebrates within the soil (Tree, I., 2018, Zaller, J.G., 2014). For the reasons outlines above, over time this can result in the degradation of soil structure and texture and subsequently land quality.

87 In addition to the benefits gained from the presence of soil organisms and microbes considered above, the 1999 USDA study led by Sara Wright; a microbiologist researcher at the Soil Microbial Systems Laboratory, identified and named “Glomalin” as the protein (a glycoprotein produced by arbuscular mycorrhizal fungi) which

appeared to be the binding agent in the formation of soil aggregates. They determined that glomalin acts as a type of soil 'glue' linked with soil crumb structure, soil tilth, gas exchange, soil water movement and retention, crop stress and disease. The team also found that tillage activity tends to lower glomalin levels. It can be concluded that lower glomalin levels will result in a poorer soil structure and texture and that the reduction in glomalin over time would therefore result in a reduction in land quality.

6.2.1.2 Soil Depth

88 Although it is possible that crop harvesting techniques and machinery could cause a long term cumulative reduction in topsoil depth by direct removal of soil, there is insufficient evidence to suggest that it presents a particular risk to overall soil depth over time, other than via compaction as detailed above.

89 However, farming practices can result in increased erosion and permanent reduction in soil cover/depth. In the EU, average erosion rates for permanent arable crops is greater than 9 tonnes ha (add Leake, J., 2017).

90 As detailed in Section 6.2.1.2, a study completed by the USDA showed that farming techniques can also result in the cumulative reduction of glomalin and organic matter, resulting in a weaker soil structure making the soil more vulnerable to erosion. Other ground conditions resulting from arable farming practices including a lack of permanent root network within the soil and periods when the soil is unvegetated and uncovered also increase erosion resulting from water run-off and wind depending upon the time of year and site location (Bathurst, Bella., 2014).

6.2.1.3 Soil Chemistry

91 Harvesting crops, directly removes nutrients from the normal carbon and nitrogen cycles which function in the absence of farming. Crop rotation can reduce these impacts, but the majority of farm businesses rely on the use of artificial fertilisers to support their rotational crops and produce acceptable yields. This is unsustainable and as detailed below can result in a number of indirect impacts upon land quality. More importantly, the apparent productivity of the soil due to the application of artificial fertiliser can mask the continual decline of soil health and result in a delay in the implementation of management practices, such as grass-clover ley which might otherwise maintain land quality (Leake, J., 2017).

92 As detailed above, a reduction in the presence of organic matter and soil organisms and microbes could reduce the presence and availability of a variety of soil nutrients. It is acknowledged that the ALC guidance specifies that 'The chemical status of a soil does not affect ALC grading where nutrient levels can be maintained or corrected by normal applications of fertiliser or lime.'. However, this conveys a reliance upon artificial maintenance of soil chemistry which can have wider implications upon soil health over the longer term as outlined in Section 6.2.1.1.3 above. Therefore, it can be concluded that the long-term impact of current farming practices could be to reduce land quality via a change in the natural soil chemistry and a continued reliance on artificial land quality maintenance techniques.

6.3 Importance of Farm Management

93 It should be acknowledged that despite the potential negative impacts of farming practices on land quality as detailed above, the implementation of 'conservation agriculture' (JRC, 2009) and regenerative farming techniques (Tree, I. 2018) could minimise these impacts. In 2015, Natural Resources Wales produced a document

entitled; Getting the most from your soil - A practical guide to maximising cultivated land resources (NRW, 2015). This document was prepared to advise farmers on how to sustainably conserve soil as an important natural resource. It recognises the potential negative impacts of some existing and common farming activities on soil/land quality including those set out above.

94 However, other than subsidies; used to encourage certain practices, there is currently no way of ensuring that the management of agricultural land will take place in a way which will maintain soil quality and conserve BMV land. It should therefore be acknowledged that under the current farming regime, the BMV land within the proposed site boundary could experience a reduction in quality even under a regime of crop rotation. It is not possible to say at this time whether this would be sufficient to constitute 'loss' of BMV land by falling below the Garde 3a threshold, but taking into consideration the studies completed to date, it would be possible.

95 For the purposes of considering the potential impacts of the proposed Phoenix Solar Park development upon BMV land, it would therefore seem appropriate to conclude that under a do-nothing scenario, there could be a gradual decline in land quality across the proposed site over the next 40 years.

6.4 Solar Parks – Operation and Restoration

6.4.1 Operation

96 As detailed in Section 5.2.1, some of the solar park components will result in the temporary use of small areas of the site, (less than 0.53ha). During operation, the wider site will continue to be used for grazing. The site will be grazed by animals of short stature, likely sheep but some landowners take the opportunity to graze potentially higher value stock such as geese. Far from resulting in the 'loss' of BMV land, removing the land from arable farming will maximise the opportunity to conserve the BMV land within the site boundary by applying controlled minimal impact farming techniques. Based on the evidence presented within this report, the establishment of permanent grassland, if correctly managed could increase the soil and land quality over time. The conversion of the land to permanent grassland from rotational arable and pasture will serve to improve the growing medium, increasing the opportunity for organic matter to coat the mineral particles within the soil, stimulating water holding capacity, and allowing mycorrhizal fungi and bacteria to redevelop within the soil. The soils will be better able to store carbon in a way that contemporary, inorganically fertilised, and regularly cultivated soils are unable to do. Furthermore, as set out within the Landscape and Ecological Management Plan (Appendix A9.4), the use of fertilisers and pesticides will cease across the majority of the site, except for use in encouraging the initial growth of newly planted trees, hedgerows and meadow grassland areas.

97 These are all elements of soil and land quality recognised as sustainable and beneficial within the 2015 NRW document and other studies (JRC, 2019);

98 'Soils under grassland usually have good organic matter content, binding the soils and giving a stable structure that is less susceptible to damage.'[5]

[5] Getting the most from your soil - A practical guide to maximising cultivated land resources. Natural Resources Wales. July 2015

99 A study entitled Soil Policy Evidence Programme Assessment of Welsh Soil Issues in Context, produced by ADAS in 2019 determined that:

100 *'SOM [Soil organic matter] accumulation is favoured by management systems, which add high amounts of biomass to soil, improve soil structure, enhance species diversity and minimise soil disturbance. Such high carbon input (e.g. litter and roots), low disturbance systems are typified by the grassland soils….'*

101 Furthermore, it identifies the benefits of permanent grassland in reducing erosion. The report concludes that:

102 *'Land use change is an important factor in soil erosion risk and significant decreases in erosion risk have been noted when fields have changed from winter cereals to permanent grass. This is because grassland soils generally have year round crop cover and so soil is not exposed to the erosive forces of water or wind, although the erosion risk will be higher during the reseeding phase……Permanent soil cover will minimise erosion and hence grassland soils are often at low risk of water erosion'*

103 The findings of the 2019 ADAS report and the other studies cited within this report, support the conclusion that the conversion of the land within the site boundary from arable and pasture rotation to permanent arable as a result of the proposed Phoenix Solar Park has the potential to improve land quality from the current baseline.

6.4.2 Restoration

104 The potential methods and impacts of decommissioning upon the BMV land are considered in Section 5.3.2.3. All the components of the proposed Solar Park development will be removed from site in their entirety. As detailed within the Landscape and Ecological Management Plan (Appendix A9.4) during operation of the solar park site the wider site will be grazed and maintained as grassland and wildflower meadow. None of the works or uses prevent the ongoing/return of the BMV land for agricultural purposes. As detailed above due to the application of regenerative farming practices (inherent within the management of the site throughout the operation of the solar park) the land is likely to experience a period of rejuvenation and potentially be of better agricultural quality upon decommissioning than it is currently or would be under a do-nothing scenario.

7 Conclusions

105 In conclusion, land quality is determined by assessing a range of criteria. The most important factors which affect land quality include Climate, Site and Soil. These factors together with interactions between them form the basis for classifying land into one of the five grades now established. Land which has been assessed to be Grade 1, Grade 2 or Grade 3a land is accepted as being Best and Most Versatile (BMV) agricultural Land.

106 As Climate and Site are considered to be 'independent factors' remaining as a consistent baseline regardless of land use, this report focusses on soils.

107 As detailed within this report, the Phoenix Solar Park will not result in the permanent loss of any BMV agricultural lane. The proposed development will result in the temporary use of a limited area of BMV land (<0.53ha) but the land will not be damaged such that it cannot be returned to agricultural use in the future.

108 Furthermore, none of the components or works associated with the construction or decommissioning of the proposed Phoenix Solar Park would result in any direct or indirect impacts which would cause a reduction in the current land quality across the proposed site.

109 Under a do-nothing scenario, current research and studies indicate that it is possible that the land within the site boundary could experience a reduction in land quality over time due to ongoing agricultural techniques and management. It is also apparent that farming techniques potentially disrupt the natural processes which have resulted in the formation of the BMV land now present.

110 The report has identified that there is no mechanism to control the use of the site, providing the activities fall within 'agricultural use' and that placing restrictions on the use of BMV land through the planning system should take this into account. It should be noted that at the time of writing this report, the land within the proposed site boundary is currently grazed and will continue to be so during the operational phase of the proposed development.

111 A range of studies clearly demonstrate the benefits to land quality of permanent grass cover compared to arable and rotation farming (such as that which is implemented across the site currently), supporting the assertion that the operational phase of the proposed solar park could result in a long term improvement in land quality across the site.

112 It is acknowledged that current policies aim to conserve BMV land and that careful consideration must be given to the potential impacts of a proposed development in this regard.

113 It is demonstrated by the information contained within this report that the proposed development will not result in the permanent loss or degradation of any BMV land within the site boundary. The presence of BMV land should not in itself constitute grounds for refusal of the proposed development.

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FIGURE 1.1

SITE LOCATION PLAN

KEY

SITE BOUNDARY

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SCALE – 1:25,000

PLOT SCALE A3

PHOENIX SOLAR PARK

FIGURE 1.1

SITE LOCATION

Drawn:	CPA
Checked:	WSE
Approved:	APPROVED
REV A:	06/12/23

WESSEX SOLAR ENERGY

APPENDIX A

APPEAL REVIEW

STEPHENSON HALLIDAY

Planning, Landscape & Environment

Blackberry Lane Solar Farm
Planning Review
'Best and Most Versatile' Agricultural Land

Stephenson Halliday, on behalf of Wessex Solar Energy, has undertaken a review of relevant planning appeals and applications in support of Blackberry Lane Solar Park (Reference: DNS/3245065).

The key issue to be understood is how 'best and most versatile' (BMV) agricultural land should be considered in the context of solar development.

Land at Manor Farm, Llanvapley, Monmouthshire (Appeal Ref: APP/E6840/A/14/2212987)

Decision Date: 24th October 2014

(Planning Appeal)

The appeal was allowed and planning permission granted for a solar park, to include the installation of solar panels to generate up to 10 MW of electricity with transformer housings, security fencing and cameras, landscaping and other associated works, on land at Manor Farm, Llanvapley, Monmouthshire.

The original planning application proposed 45,000 solar panels in 7 fields covering an area of some 27 hectares. However, a revised scheme for 38,000 solar panels in 6 of the 7 fields (24 hectares) was subsequently submitted and refused by the Council. It is the revised scheme that was the subject of this appeal.

In discussing the issue of the quality of Agricultural Land the Inspector set out the following (emphasis added):

30. The Statement of Common Ground between the Appellant and the Council states that the Provisional Agricultural Land Classification Map (1977), published by MAFF, indicates the appeal site comprises a mix of Grade 3 and Grade 4 agricultural land (i.e. good/moderate and poor). However, a more detailed assessment was carried out for the Appellant in May 2014 which concluded that some 87% of the land is Grade 2 (very good) and the rest is Grade 3b (moderate). ... Nevertheless, there seems little doubt that the majority of the land falls within the definition of Best and Most Versatile (BMV) agricultural land.

33. Although some local residents are sceptical of the practicality, the Appellant and 2 landowners say the land would be used for seasonal sheep grazing underneath and amongst the rows of solar panels. Thus, ***some agricultural use would continue. It is also relevant that the development would be for a temporary 25 years period and, under the terms of any permission granted, would then be removed and the land would be reinstated for agricultural use. The development would temporarily change the use of the land rather than its quality and would not affect its long-term potential for resumed agricultural use. In fact, the Appellant even submits that the quality of the land would be improved by the end of the 25 years period. The development itself would be substantially reversible as the framework for the solar panels would be driven into the ground and would not involve any permanent foundations.***

35. The Council argues that it specifies 2 tests for the use of BMV land for development: whether or not there is an overriding need for the development; and whether or nor previously developed land or land of lower agricultural quality is available. However, whilst these matters are clearly relevant to consideration of this policy, I do not consider the policy to be so explicit as to require a full sequential test. It must also be remembered that it is a general policy applicable to all types and forms of development, many of which would involve permanent loss of the agricultural land. The 2011 Practice Guidance mentioned above makes it clear that the use of high quality agricultural land and the reversibility of the development are both relevant factors to be considered. With this in mind, it is more appropriate to consider the matters described in paragraph 4.10.1 in the round and in the context of the aim to conserve high quality agricultural land as a resource for the future.

36. In response to the Council's late reliance on the question of agricultural land quality, the Appellant has undertaken a Sequential Analysis Study (dated September 2014). This study considered possible alternative sites throughout the County and within 10 km around it, and lying within 2 km of the 33 kV or 66 kV electricity distribution network for a viable connection to the grid. Although one might argue about whether the correct criteria were used, those that were seem to be entirely reasonable, and the conclusion of the study was that only 1 other suitable site was identified. That was outside the County and still subject to uncertainty about detailed assessment of the land quality and the willingness of the landowner. Taken as a whole, the Study indicates the general dearth of lower grade land available in the area and suitable for the development of a solar farm.

37. Returning to PPW paragraph 4.10.1, I consider the general aim expressed in the first sentence would be met, i. ***e. the temporary nature and reversibility of the scheme would conserve the land quality resource for the future****. As to the more detailed criteria in the body of the paragraph, I consider the unavailability of alternative lower quality land to have been adequately addressed by the Appellant's recent study, and only the question of overriding need remains in doubt.* ***In view of the nature of the proposal and my conclusion that the general aim of the paragraph would be met, that requirement must be set much lower than for other developments more harmful***

to the land. *In so far as any conflict with that element is concerned, I consider it warrants little weight in the balance of arguments.*

Overall Conclusion
47. I have taken into account all matters raised, including concerns about the adequacy of local roads, long-term reinstatement of the land and lack of direct benefits to the local community, but nothing outweighs the considerations that have led me to my main conclusions: that the proposed development would not have an unacceptable adverse effect on the landscape character or visual amenity of the area and would not conflict with the various development plan policies in this respect; ***that the scheme would involve the use of high quality agricultural land, but that it would only be for a limited period of time and without long-term detriment to the land, such that any conflict with national policy would be of little weight;*** *and that the scheme would bring considerable benefit by the generation of renewable energy in support of national policy and some local benefits. On balance, I consider any (arguable) limited policy conflict in respect of agricultural land quality to be far outweighed by the benefits of the scheme and, on balance, I conclude it would meet the aims of development plan and national policy.*

Summary

It was accepted that the majority of the Appeal Site consisted of BMV, however the Inspector determined that it was important to understand that any solar development would be for a temporary period after which the site would be reinstated for agricultural use. It was also noted that the solar development would not involve any permanent foundations thus further strengthening the position of temporary development.

Additionally, a sequential assessment was undertaken to consider the alternative sites, within the County and within 10km of it. The Inspector accepted the findings of the study and accepted that there was a limited number sites comprising of lower grade agricultural land.

In terms of national policy; the Inspector concluded that the general aims of the policy were maintained insofar as the proposal would be temporary in nature, and reversible, which would conserve the land quality resource for the future.

Court Farm, Magor Road, Newport (Appeal Ref: APP/G6935/A/15/3034087)

Decision Date: 09th October 2015

(Planning Appeal)

The appeal site covers an area of around 14.3 hectares (35.3 acres) split into 4 fields to the north of the B4245 and to the east of Langstone. Around 70% of the site is classified as Grade 2 and 3a agricultural land with the remainder at 3b. Grades 1, 2 and 3a are classed as the 'best and most versatile'.

The main issue was the impact of the proposed development on the supply of the BMV agricultural land in the area (emphasis added).

6. Residents' concerns that the practicality and cost of cutting silage between and under the solar panels would make this unlikely are understandable. Further, the proposed development would preclude the land from being used to its full agricultural potential for twenty five years. Nevertheless, I am ***satisfied that the impact of the proposed development is reversible and that, consequently, there would not be a permanent loss of best and most versatile agricultural land and that it would be conserved as a finite resource for the future****. With regard to the question of overriding need, I agree with the approach taken by my colleague in the Llanvapley appeal. That being that the weight to be given to this test in this case is limited by the fact that the proposed development would not lead to a permanent loss of best and most versatile agricultural land.*

7. Turning to the availability of sites on brownfield or lesser quality agricultural land, ***it is not possible to site a solar farm anywhere****. Matters that need to be considered include amongst other things, levels of irradiance (usually south facing sites), a viable grid connection, adequate road access, agricultural land classification and landscape and other environmental impacts. The appellant has commissioned a sequential test which concludes, amongst other things, that no suitable brownfield land is available. This claim is not disputed by the Council and I have seen no evidence to demonstrate otherwise.*

8. The appellant's sequential test begins by assessing, amongst other things, suitable grid connection locations, grid capacity and a review of Western Power's network and heat maps across Wales. This identified limited capacity in North Wales and issues with grid connectivity in mid Wales and the Cardigan Bay coastline. A high level assessment was also undertaken to consider environmental, ecological and landscape constraints which led, amongst other things, to the exclusion of sites within National Parks. This 'Step 1' assessment concluded that there are potential development areas in Wrexham, Flintshire and Deeside in North Wales and to the east of Newport in South Wales.

9. Step 2 identified some opportunities for directly supplying industrial areas in North Wales but lower levels of irradiance generally and site specific constraints led to these sites being discounted.

The whole of the South Wales coastal area and M4 corridor is identified as enjoying acceptable levels of irradiance. An assessment of sub station capacity led to a conclusion that applications to connect to the grid around Newport were most likely to be successful. However, only the substation at Magor was identified as being able to accommodate the proposed solar farm.

10. Thus, Step 3 concentrated on sites in the vicinity of the Magor sub station. The Council criticise the assessment of alternative sites, arguing that the reasons for discounting them is not well explained. For example, it contends that proximity to ecological designations such as Sites of Special Scientific Interest would not necessarily preclude the development of a solar farm on the Gwent Levels. Whilst this may well be the case ***it is not unreasonable, in my view, for such sites to be discarded in favour of sites without such potential constraints. I have seen nothing in PPW to suggest that consideration of the availability of lower grade agricultural land requires a detailed analytical assessment of ecological or landscape impacts on every alternative site or solid proof that a solar farm would not be acceptable.*** *I am satisfied that the sequential test is robust and based on reasonable assumptions and I see no reason to dispute its findings...*

11. For the reasons given above, subject to conditions limiting the life of the proposed development to 25 years and the removal of the panels should they cease to be used for the generation of electricity, I find that the proposed development would not have an unacceptable impact on the supply of the best and most versatile agricultural land in the area...."

Summary

In accordance with the previously mentioned Llanvapley appeal, the Inspector was satisfied that the impact of the proposed development would be reversible and that, consequently, there would not be a permanent loss of best and most versatile agricultural land. It would therefore be conserved as a finite resource for the future.

The Inspector, in considering the sequential assessment, determined that it is not possible to site a solar farm anywhere and outlined a number of criteria to be taken into consideration including:

- levels of irradiance,
- a viable grid connection,
- adequate road access,
- agricultural land classification and landscape and
- other environmental impacts.

The Inspector noted that the Appellants sequential assessment had set out a detailed consideration of alternatives and no evidence had been provided which would demonstrate otherwise.

The Inspector also accepted that discarding sites, such as those close to SSSI designations, in favour of sites without such potential constraints is not unreasonable. Turning to national policy,

the Inspector noted that there is nothing in PPW to suggest that consideration of the availability of lower grade agricultural land requires a detailed analytical assessment of ecological or landscape impacts on every alternative site or solid proof that a solar farm would not be acceptable.

It was therefore concluded that the temporary nature of the site and removal of panels would not have an unacceptable impact of the supply of BMV.

Walpole St Andrew, Norfolk (Appeal Ref: APP/V2635/W/14/3001281)

Decision Date: 11th September 2015

(Planning Appeal)

The appeal was allowed and planning permission is granted for erection of a 30MW solar photovoltaic facility with associated landscaping and construction of temporary access on land at land at Rose and Crown Farm, Mill Road, Walpole St Andrew, Norfolk

The whole of the Appeal Site was categorised as falling within Agricultural Land Classification (ALC) level 2, which is defined as 'best and most versatile agricultural land' (BMV).

As outlined within Paragraph 21 of the Appeal Decision (emphasis added):

*"21. **There is no prohibition on the use of any particular grade of agricultural land or BMV land for solar panels.** The test, as set out in the Minister's Statement in March 2015, is to provide 'the most compelling evidence' that use of BMV land is necessary and that poorer quality land is not available in each case. At Rose and Crown Farm, the appellants have provided a sequential analysis which shows that there are severe grid restrictions in the wider area for a development of the size proposed..."*

Further discussion in relation to the sequential approach taken was set out which included much consideration of the availability of a viable grid connection and proximity to the scheme.

This is summarised as follows:

*"25. It is a noticeable feature of land in this part of East Anglia that there is almost no grade 4 land and very little grade 3 (no distinction is made between 3a and 3b, only 3a being BMV). **Given the practical need to limit the distance between generation capacity and the grid, the availability of poorer quality land suitable for PV, which the Government sees as an important part of the overall renewable energy mix, must be extremely constrained.***

*26. I give weight to the benefits of scale in this case, where a grid connection is assured and the generation capacity significant. Moreover, the Council has no objection on landscape, visual amenity, noise, heritage, highway safety, ecological or tourism grounds. **The land would continue to be used for grazing sheep, which would be ensured by a solar farm grazing methodology statement, which could be put in place by means of a condition. Sheep grazing is an accepted method of managing grass under solar panels and is already a feature of the landholder's operations, supporting a local butchering business in Upwell.** The Council does not question the value of sheepmeat to the economy or the assertion that much lamb is currently imported, nor the fact that the UK currently produces more wheat than it needs. **I conclude that this high quality land would not be lost to agriculture. Moreover, after 25 years, the land would be restored to arable use, most likely in a better condition than the intensive use it is currently put to.***

27. ... It was also apparent that the level of biodiversity in this intensive arable area is limited. ***The proposed scheme would bring about biodiversity improvements due to the margins around the panels being planted with a wildflower mix and the addition of screening hedgerows incorporating local species.***

28. Taking all these factors into account, I consider that ***there is a case for using this particular area of BMV land for solar energy development. A grid connection is available and the site is ready and available now."***

Summary

The Inspector acknowledges that there is limited land in the Council area that is not classified as BMV and as such gives weight to the benefits offered by the proposal, including grid connection and generation capacity.

The continued use of the site for grazing sheep was identified as being an accepted method of managing grass under solar panels. It was concluded that this BMV land would not be lost to agriculture and would be restored to better condition arable use once the solar farm is removed at the end of its lifespan.

It was also noted that the proposed solar farm would introduce biodiversity on a site that currently lacked biodiversity.

Hawkspur Green, Little Sampford Road, Essex (Appeal Ref: APP/C1570/W/15/3132904)

Decision Date: 14th April 2016

(Planning Appeal)

The appeal was allowed and planning permission is granted for installation of ground based racking systems, mounted solar panels, power inverter stations, transformer, station, substation, two batteries, fencing and associated access gates, CCTV security cameras on freestanding support poles and associated infrastructure on land to the west of Hill Hall, Hawkspur Green, Little Sampford Road, Essex.

The Appeal Site is predominantly within ALC level 3a which is considered to be BMV. The Inspector included commentary in relation to the NPPF (which at the time of determination was NPPF 2012, however much of what is discussed in the appeal decision remains extant within NPPF 2019):

"13. The delivery of renewable energy developments is discussed at paragraphs 97- 98 of the NPPF. Paragraph 97 states that in order to help increase the use and supply of renewable and low carbon energy, local planning authorities should have a positive strategy to promote both the use and supply of renewable energy. With regard to the development of agricultural land, paragraph 28 states that local plans should seek to promote a strong rural economy by supporting the growth and expansion of all types of businesses and enterprise in the rural area and promoting the development and diversification of agricultural and other land-based rural businesses. Paragraph 112 states that "Local planning authorities should take into account the economic and other benefits of best and most versatile agricultural land. Where significant development of agricultural land is demonstrated to be necessary, local planning authorities should seek to use areas of poorer quality land in preference to that of a higher quality".

...

25. The land falls mainly within Agricultural Land Classification (ALC) level 3a. This is within the category of 'best and most versatile (BMV) agricultural land' as defined in the NPPF at Annex 2 (comprising levels 1, 2 and 3a). ***There is no prohibition on the use of any particular grade of agricultural land or BMV land for solar panels****. The appellants carried out a search for more suitable land in the area, which shows that most land in this part of Essex is grade 2. The appeal site is amongst the poorer quality land available.*

...

27. ...The removal of arable production on some BMV land is a factor against the scheme, but ***there is very little poorer quality land and the loss is more than compensated for by the use of*** *the grass between the panels for the raising and fattening of sheep together with the*

production of electrical energy. The scheme would add a new income stream to the land holding, in line with the diversification objectives of policy E4. The return of the land to arable production after 30 years means that it would not be taken out of production in the long term.

Summary

The Appeal Site is identified as being BMV, however it is acknowledged that there is no prohibition on the use of any particular grade of land for solar panels.

The Inspector notes that there is little poorer quality of land as an alternative for solar development, as well as acknowledging the benefits that would be created by the use of land for grazing sheep and production of energy.

The temporary nature of the proposal was also acknowledged with the Inspector concluding that the agricultural land would not be taken out of production in the long term.

Cleve Hill Solar Park (Refence: EN010085)

Decision Date: 28th May 2020

(Nationally Significant Infrastructure Projects (NSIP))

The development proposed comprises the construction, operation, maintenance and decommissioning of a solar photovoltaic array with either an electrical storage facility or an extension to the solar photovoltaic array, together with connection infrastructure and other associated development. Both the solar photovoltaic array and the energy storage facility would have a capacity of greater than 50MW.

Following examination and detailed within the recommendations reached in the Report to the Secretary of State (dated 28th February 2020), Agricultural Land was carefully considered:

The principal issue that arose during the Examination in relation to land-use, agriculture and soils was the Agricultural Land Classification (ALC) assessment.

Paragraph 8.2.2 determines that:

"At 5.10.8, NPS EN-1 states that applicants should seek to minimise impacts on the best and most versatile agricultural land (defined as land in ALC Grades 1, 2 and 3a) and preferably use land in areas of poorer quality (ALC Grades 3b, 4 and 5) except where this would be inconsistent with other sustainability considerations. It goes on to suggest that schemes should not be sited in areas of the best and most versatile agricultural land without justification, but that little weight should be given to the loss of poorer quality agricultural land."

During the course of determination there was much discussion about the methodology used to calculate BMV on the Site with the Applicant maintaining that the Site fell within ALC Grade 3b. The ES estimated that the Proposed Development would affect approximately 370ha of arable land, comprising approximately 2ha of ALC Grade 2, 9ha of ALC Grade 3a, and 360ha of ALC Grade 3b. It concluded that this was not significant, given that more than 97% of the loss was of ALC Grade 3b, of low value.

A third party representative, Dr Erasin, argued that around 45.8% of land at Cleve Hill should be ALC Grade 2 or 3a. He reached a revised conclusion that approximately 41% of the land should have been ALC Grade 3a due to the presence of calcareous soils. He added this to the 1.9ha of ALC Grade 2 land and 8.8ha of ALC Grade 3a identified in the ES to deduce a total that he believed should be categorised as ALC Grades 2 and 3a of 164.7ha.

The ExA response stated:

8.2.26 We have considered each of the areas of on-going disagreement between the Applicant and Dr Erasin in relation to the ALC assessment report in detail. We believe that the fundamental matters with the potential to have a material effect on the outcome of the ALC assessment rest on

the interpretation of two main areas of the MAFF ALC guidelines: firstly, the climatic data used to determine soil wetness; and, secondly, the influence of CaCO3 in the soil on its wetness characteristics.

...

8.2.31. ... as per the test in NPS EN-1, we give very little weight to the loss of poorer quality agricultural land of ALC Grade 3b and find this to be neutral in the planning balance."

Summary

The key issue in this proposal was the classification of ALC. Whilst this was resolved, insofar as it was agreed that the majority of the site would be grade 3b and not BMV. It is interesting to note that discussions within the Report did not concentrate on the potential impact on BMV should that have been the agreed classification, and instead just discussed the methodologies used to derive a result.

Appendix 1; Land at Manor Farm, Llanvapley, Monmouthshire (Appeal Ref: APP/E6840/A/14/2212987)

The Planning Inspectorate
Yr Arolygiaeth Gynllunio

Penderfyniad ar yr Apêl

Ymchwiliad a agorwyd ar 13/08/14
Ymweliad â safle a wnaed ar 14/08/14

gan Clive Nield BSc(Hon), CEng, MICE, MCIWEM, C.WEM

Arolygydd a benodir gan Weinidogion Cymru

Dyddiad: 24 Hydref 2014

Appeal Decision

Inquiry opened on 13/08/14
Site visit made on 14/08/14

by Clive Nield BSc(Hon), CEng, MICE, MCIWEM, C.WEM

an Inspector appointed by the Welsh Ministers

Date: 24 October 2014

Appeal Ref: APP/E6840/A/14/2212987
Site address: Land at Manor Farm, Llanvapley, Monmouthshire, NP7 8SW

The Welsh Ministers have transferred the authority to decide this appeal to me as the appointed Inspector.

- The appeal is made under section 78 of the Town and Country Planning Act 1990 against a refusal to grant planning permission.
- The appeal is made by Cambourne Energy Investments (8) Ltd against the decision of Monmouthshire County Council.
- The application Ref DC/2013/00006, dated 4 January 2013, was refused by notice dated 13 September 2013.
- The development proposed is the construction of a solar park to include the installation of solar panels to generate up to 10 MW of electricity with transformer housings, security fencing and cameras, landscaping and other associated works.
- The inquiry sat for 5 days on 13 August, 29 & 30 September, and 2 & 7 October 2014.

Decision

1. The appeal is allowed and planning permission is granted for a solar park, to include the installation of solar panels to generate up to 10 MW of electricity with transformer housings, security fencing and cameras, landscaping and other associated works, on land at Manor Farm, Llanvapley, Monmouthshire, NP7 8SW, in accordance with the terms of the application, Ref DC/2013/00006, dated 4 January 2013, and the plans submitted with it, subject to the conditions in the attached Annex.

Procedural and Background Matters

2. The original planning application proposed 45,000 solar panels in 7 fields covering an area of some 27 hectares. However, a revised scheme for 38,000 solar panels in 6 of the 7 fields (24 hectares) was subsequently submitted and refused by the Council. It is the revised scheme that is the subject of this appeal, as indicated on drawing C.0444_04-F (i.e. revision F).

3. In comparison with the original proposal, the revised scheme involves the omission of solar panels and security fencing from the field in the south-eastern part of the site, replacement of the proposed security fencing over the remainder of the site with a 2.1 metres high "deer fence" with wooden posts, and enhanced tree planting and hedgerow reinforcement for visual screening.

4. The solar panels would be arranged in rows running east-west, with transformers in each field and a substation near the south eastern corner of the site to allow connection to a 66 kV overhead power line that crosses the site in that area. The panels would be supported on steel frames driven into the ground and would be angled at 20 degrees towards the south. The bottoms of the panels would be 800 mm and the tops 1400 mm above ground level. For security reasons the areas of panels would be surrounded by deer fencing with wooden posts some 2.1 metres high, and this would be supplemented with a CCTV and infrared security system mounted on poles within the site.

5. The fields in question already benefit from mature boundary hedges but these would be further reinforced to improve screening of the site, and temporary poplar plantations would be planted in the north-eastern corners of the 2 northern fields, where the ground level begins to fall away. Access into the site would be from Firs Road, which runs between the B4233 main road at Llanvapley to the south and the B4521 main road to the north.

Application for costs

6. At the Inquiry an application for costs was made by Cambourne Energy Investments (8) Ltd against Monmouthshire County Council. This application is the subject of a separate Decision.

Main Issues

7. The main issues in this case are: the effects of the proposed scheme on the character and appearance of the landscape, including the effects on the setting of White Castle, a Grade I listed building and scheduled ancient monument; the effects on the availability of high quality agricultural land; and the benefits of the scheme in the generation of renewable energy.

Reasons

Landscape Character and Appearance

8. The Council refused the proposed development solely because it considered it "would significantly harm the visual amenity of the area and the wider landscape qualities" due to its scale and location. It referred to 2 Unitary Development Plan policies in its refusal. However, the Monmouthshire Local Development Plan (2014) has been adopted since that date, and several LDP policies are particularly pertinent to this matter.

9. Policy SD1 permits renewable energy subject to several criteria being met, including "no unacceptable impacts upon the landscape, townscape and historic features and there is compliance with Policy LC5 with regard to protection and enhancement of landscape character". Policy LC5 permits development provided it would not have an unacceptable adverse effect on the special character or quality of Monmouthshire's landscape in terms of its visual, historic, geological, ecological and cultural aspects (i.e. the 5 character aspects defined in Landmap) by causing significant visual intrusion, significant adverse change in the character of the landscape, unsympathetic siting within the landscape, introduction of a use incompatible with its location, failing to harmonise with the landscape, or failing to incorporate important traditional landscape features or patterns. In addition, Policy S13 aims to safeguard the landscape, green infrastructure and natural environment by, amongst other things, maintaining the character and quality of the landscape and maintaining the integrity and connectivity of the green infrastructure network.

10. Other relevant policies include: Policy LC1, which provides a presumption against new built development in the open countryside unless justified by national or other development plan policies, including Policy RE3, which supports agricultural diversification; and Policy LC3 which aims to preserve the landscape setting of the Brecon Beacons National Park and avoid serious adverse effects on significant views into and out of the National Park.

11. It is generally agreed that these policies do not oppose the principle of renewable energy development in the open countryside and that the acceptability of such schemes should be assessed against the measure of avoiding significant or unacceptable harm to the character or visual quality of the landscape or to the setting of important features. In making this assessment I have taken into account the fact that the solar panels would be no more that 1.4 metres above ground level, the security fencing would be little more than 2 metres high, the present field patterns and boundary hedges would be maintained, and screening of the site would be further improved by reinforcing the hedges and allowing them to grow higher and by planting additional fast-growing trees for screening purposes in the north-east corner of the 2 northern-most fields.

12. This part of the County was not designated as a Special Landscape Area in the Unitary Development Plan but the newly adopted Local Development Plan uses the principles detailed in Policy LC5 to provide protection for the County's landscapes. It is acknowledged that the landscapes in most of the County are of an important high quality, and it is not disputed that the appeal site lies within a landscape of considerable importance. It is a sparsely developed, undulating rural landscape with scattered villages and farmsteads and a patchwork of generally medium-sized fields in pastoral or arable use. The scheme would have no direct affect outside the appeal site and, even within the site, it would have no permanent affect on the landscape, which would be reinstated at the end of the term of the development (25 years operation).

13. The dispute is essentially about the wider indirect effects on the landscape and visual amenity, and I deal with these separately. So far as landscape character is concerned the key Landmap Character Aspect Areas (AAs) are: the Northern Hills Visual and Sensory AA; the East Bergavenny Historic Landscape AA; and the Upper Gwent Cultural Landscape AA. However, the proposed development would only be seen from parts of these areas and, even when visible, only parts of the site would usually be seen due to the undulating topography, intervening wooded areas and the screening and limited physical attributes described above.

(a) Visual and Sensory Landscape Character

14. With regard to the Northern Hills Visual and Sensory AA, it is argued that the solar farm would be of a texture and colour type different from the present patchwork of agricultural fields, and to some extent that would be so. However, the existing field structures would be maintained with strong boundary hedging so that the solar farm would not appear as a single, continuous area, and I consider the panels would not be as intrusive as claimed. Nor do I consider the scheme would have any material effect on the tranquillity of the area.

15. Clearly, the scheme would have a major effect on the character of the site itself and on the setting and views from its immediate surroundings, including public footpaths through and alongside the site, but that detrimental effect would be partially mitigated by the boundary hedges which would significantly limit views from close to the site. Furthermore, I consider the effects on the character of the wider area would be, at most, moderate and generally low, and this conclusion is reinforced by the temporary nature of the development. Thus, even though the Northern Hills Visual and Sensory AA is of high scenic quality, I conclude that, apart from the site itself and its immediate surroundings where the development would have a major adverse effect, the wider impact on the landscape would generally be minor detrimental.

(b) Historic Landscape Character

16. The East Bergavenny Historic Landscape AA refers to the medieval Lordship of Bergavenny with its well preserved field and settlement patterns surviving in good condition and the presence of several scheduled ancient monuments and listed buildings. Although it is valued as an outstanding landscape aspect area, my conclusions on impact are similar to those above.

17. The landscape value is considered to be outstanding due to the integrity of the field and settlement pattern, the good survival and condition of historic buildings and historic landscape elements, and the presence of nationally rare and unique features, including scheduled ancient monuments and listed buildings. The scheme would retain the existing field pattern and field boundary hedges and have little effect on that factor.

18. There are no known heritage or archaeological assets within the appeal site. The nearest to the site is New House, a Grade II listed farmhouse and listed curtilage buildings 0.5 km to the south east of the appeal site. The most important element of their setting is their relationship with one another as a group of buildings comprising a post-medieval farmstead. Part of the proposed development would be visible from New House (the rest being effectively screened), but it would alter only a small area within the wider view and would have only a minor adverse impact on the wider setting of the listed buildings. The significance or understanding of the heritage assets would not be materially harmed.

19. The scheme would be visible from 2 important scheduled ancient monuments, White Castle some 1.8 km to the north east and Ysgyryd Fawr 3.2 km to the north west. White Castle gains its significance mainly from the evidential value of its historic fabric and its aesthetic value. The wider agricultural landscape contributes to its aesthetic appreciation but has already been subject to extensive change since the medieval period. The appeal scheme would be partially visible in long distance views from the twin-towered gatehouse and some lower parts of the Castle but would be relatively unobtrusive in the wider landscape. It would not detract from appreciation of the form and structure of the Castle, the key features in its significance, or significantly affect its setting or appreciation of its defensive siting on a slight rise. The scheme would not materially detract from the experience of visitors to the Castle.

20. Ysgyryd Fawr Defensive Enclosure, with the remains of St Michael's Chapel, derives its significance from its evidential value of the remains of a prehistoric settlement, though its hilltop setting and extensive views contribute towards its function as a defended enclosure. Much of the appeal scheme would be visible in distant views from Ysgyryd Fawr but would appear as an unobtrusive small part of the very extensive views. It would not detract from the setting of the historic asset or detract from the ability to understand and appreciate the historical importance of the asset.

21. The appeal scheme would have no, or very little, visibility from other heritage assets in the landscape character aspect area. My conclusion is that the proposal would not conflict with development plan or national policies to safeguard heritage assets and their settings, and the very limited harm caused to their significance would meet the statutory requirement to have special regard to the desirability of preserving listed buildings and their settings or any features of special architectural or historic interest (Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990).

(c) Cultural Landscape Character

22. Finally, the Upper Gwent Cultural Landscape AA is valued highly for its rich mix of evidence of long-term occupancy, including White Castle. I have assessed the impact on White Castle in more detail above. However, for the landscape aspect area as a whole my conclusions are similar to those above, i.e. even though the landscape is of high sensitivity, the generally low adverse impact would be of low significance for the character of the landscape.

(d) Landscape Visual Amenity

23. Turning now to consider effects on the visual amenity of the area, both the Appellant and the Council have submitted assessments from a range of viewpoints, some being specific key locations and others being representative of more general views. I have also visited many of these locations and made my own assessment of the likely visual effects of the proposed scheme.

24. Because of the topography and other intervening screening, most views of the site would only be of parts of it, for example parts of the 2 northern fields or parts of the 2 southern fields but rarely both. Where larger areas of the site would be seen the viewpoint is generally at a lower level so that the perspective would be compressed. 2 exceptions to these generalisations are the short distance view from a single upper floor window at Chapel Farm, next to the southern corner of the site, and long distance views from Ysgyryd Fawr, high ground some 3.2 km to the north west.

25. Ysgyryd Fawr lies within the Brecon Beacons National Park, and the Beacons Way Long Distance Path runs past its summit and along its crest. There are extensive views over the site from Ysgyryd Fawr but the site is only a small part of the extensive and panoramic views, and the proposed development would not have a significant effect on those views. As for Chapel Farm, the proposed development would be detrimental to the short-distance view over the site's southern fields from one upper floor window but the predominant views from the property would not be significantly affected.

26. Views from the road past the site would be substantially screened by the hedgerows, though glimpses of the solar panels and security fencing would be gained through occasional gaps and entrances. Views of parts of the site would be possible from a small number of residential properties and farms but these would generally be partially screened and at some distance. Long distance views would also be possible from lengths of the Three Castles and Offa's Dyke National Trails, from the higher parts of White Castle 1.8 km to the north east, and from several locations along the B4233 road to the south east and south west of the site. However, I do not consider the development would be a prominent feature in any of these views and would not affect them significantly.

(e) Overall Conclusion on Landscape and Visual Impact

27. The main parties have criticised the methodologies used by the others' expert witnesses in landscape and visual impact assessment, and to some extent this has depended on when the assessments were done and which edition of the standard guidance document was used. The main disagreement has been on the visual impact assessments. However, these are really only tools to aid the assessment, and I have had the benefit of an extensive site visit which included visiting all of the key viewpoints. Whilst I have found the main parties' assessments helpful, I have been able to draw my own informed conclusions.

28. My overall conclusion on this issue is that the proposed development would not have an unacceptable adverse effect on the character of the wider landscape area or the visual amenity of the area. By retaining the existing field boundary hedges it would meet the policy requirement to incorporate the traditional landscape patterns, and as a result of its screening by topographical features, hedges and trees it would be sympathetically sited within the landscape. I consider it would maintain the character and quality of the landscape and would be satisfactorily assimilated into it. It would also have no serious adverse effect on views into or out of the national park or on the settings of listed buildings or scheduled ancient monuments.

29. I conclude it would not conflict with the aims of the relevant LDP policies in these respects, particularly policies SD1, LC1, LC3, S10 and S13.

Quality of Agricultural Land

30. The Statement of Common Ground between the Appellant and the Council states that the Provisional Agricultural Land Classification Map (1977), published by MAFF, indicates the appeal site comprises a mix of Grade 3 and Grade 4 agricultural land (i.e. good/moderate and poor). However, a more detailed assessment was carried out for the Appellant in May 2014 which concluded that some 87% of the land is Grade 2 (very good) and the rest is Grade 3b (moderate). The 2 landowners concerned do not agree with this assessment and have submitted sworn affidavits describing the condition of the land, the uses to which it is generally put, and an opinion that it is generally Grade 3a or 3b agricultural land (i.e. good or moderate). Nevertheless, there seems little doubt that the majority of the land falls within the definition of Best and Most Versatile (BMV) agricultural land.

31. Several local residents have submitted that the use of such high quality agricultural land would be contrary to policy. Whilst it was not a matter that lead to the Council's refusal of the application, the May 2014 report has provided new information not available at the time of the Council's determination, and the Council has now also argued this ground against the proposal.

32. Technical Advice Note 6: Planning for Sustainable Rural Communities (TAN6) provides support for farm diversification but makes it clear every effort should be made to protect the best quality agricultural land. Paragraph 4.10.1 of Planning Policy Wales (PPW) says that BMV land should be conserved as a finite resource for the future and that such land should be protected from development unless there is an overriding need and lower quality land is not suitable or available. In addition, the Welsh Government's Practice Guidance on the Planning Implications of Renewable and Low Carbon Energy, February 2011, refers to the PPW policy and advises that the use of high quality agricultural land and the reversibility of a development are relevant factors.

33. Although some local residents are sceptical of the practicality, the Appellant and 2 landowners say the land would be used for seasonal sheep grazing underneath and amongst the rows of solar panels. Thus, some agricultural use would continue. It is also relevant that the development would be for a temporary 25 years period and, under the terms of any permission granted, would then be removed and the land would be reinstated for agricultural use. The development would temporarily change the use of the land rather than its quality and would not affect its long-term potential for resumed agricultural use. In fact, the Appellant even submits that the quality of the land would be improved by the end of the 25 years period. The development itself would be substantially reversible as the framework for the solar panels would be driven into the ground and would not involve any permanent foundations.

34. The Council maintains that the proposal should be subject to a sequential test (of suitable and available land) to meet the requirements of PPW paragraph 4.10.1 and has referred to recent changes in policy in England to support this. In England the National Planning Policy Guidance requires a sequential test to be carried out for any solar farm development to demonstrate that there is no alternative land of lesser quality available, and the Council has referred to a recent appeal decision near Ipswich to illustrate this. However, English planning policy has little relevance in Wales, where planning is a devolved matter. Even UK-wide energy policy has to be viewed in the context of Welsh planning policy, as confirmed by the Welsh Minister in his letter of July 2011 on renewable energy projects, where he said *"I would remind you that in relation to those consents which are devolved matters in Wales the Welsh Government policy provides the primary basis for consideration by local planning authorities …… in making decisions on individual planning applications"*. Thus the key to this matter lies primarily within PPW paragraph 4.10.1 itself.

35. The Council argues that it specifies 2 tests for the use of BMV land for development: whether or not there is an overriding need for the development; and whether or nor previously developed land or land of lower agricultural quality is available. However, whilst these matters are clearly relevant to consideration of this policy, I do not consider the policy to be so explicit as to require a full sequential test. It must also be remembered that it is a general policy applicable to all types and forms of development, many of which would involve permanent loss of the agricultural land. The 2011 Practice Guidance mentioned above makes it clear that the use of high quality agricultural land and the reversibility of the development are both relevant factors to be considered. With this in mind, it is more appropriate to consider the matters described in paragraph 4.10.1 in the round and in the context of the aim to conserve high quality agricultural land as a resource for the future.

36. In response to the Council's late reliance on the question of agricultural land quality, the Appellant has undertaken a Sequential Analysis Study (dated September 2014). This study considered possible alternative sites throughout the County and within 10 km around it, and lying within 2 km of the 33 kV or 66 kV electricity distribution network for a viable connection to the grid. Although one might argue about whether the correct criteria were used, those that were seem to be entirely reasonable, and the conclusion of the study was that only 1 other suitable site was identified. That was outside the County and still subject to uncertainty about detailed assessment of the land quality and the willingness of the landowner. Taken as a whole, the Study indicates the general dearth of lower grade land available in the area and suitable for the development of a solar farm.

37. Returning to PPW paragraph 4.10.1, I consider the general aim expressed in the first sentence would be met, i.e. the temporary nature and reversibility of the scheme would conserve the land quality resource for the future. As to the more detailed criteria in the body of the paragraph, I consider the unavailability of alternative lower quality land to have been adequately addressed by the Appellant's recent study, and only the question of overriding need remains in doubt. In view of the nature of the proposal and my conclusion that the general aim of the paragraph would be met, that requirement must be set much lower than for other developments more harmful to the land. In so far as any conflict with that element is concerned, I consider it warrants little weight in the balance of arguments.

Benefits of Scheme

38. Finally, I turn to the benefits of the proposed scheme. It is not disputed that the scheme would generate renewable energy that would contribute towards the national objective of promoting renewable energy supplies and combating climate change. An extensive list of policy documents and position reports has been referred to in this regard.

39. At the European level the EU Climate and Energy package was approved in 2009, and individual targets for each member state were set. The UK's legally binding obligation is for 15% of all energy to be generated from renewable sources by 2010. The UK Renewable Energy Strategy was published by DECC in 2009 with objectives to tackle climate change and promote security of supply, including the EU obligation. The Strategy indicates that renewables should provide more than 30% of our electricity consumption by 2020, and the National Renewable Energy Action Plan 2010 confirmed the Government's support for this target and outlined measures to achieve it.

40. In Wales support for renewable energy has been confirmed in One Wales: One Planet (2009), the Climate Change Strategy for Wales (2010), A Low Carbon Revolution – The Welsh Government Energy Policy Statement (2010), and Energy Wales: A Low Carbon Transition (2012). Capacity potential for each sustainable energy technology was established in the 2010 Energy Policy Statement, and these are still referred to in the latest edition of Planning Policy Wales. However, all of the various technologies are currently falling short of their projections towards achieving the 2020 targets in Wales, and solar generation (installed or being installed) amounts to only about 0.3 MW compared with its 2 MW 2020 target. Increased installation rates are needed if the 2020 renewable energy obligations are to be achieved in Wales.

41. Some third parties have drawn my attention towards UK-wide figures which indicate that the total large-scale solar PV capacity target for 2020 is already provided for by existing installations, installations currently under construction and those that have already received planning permission. Amongst several references, particular inferences are drawn from the Table: Large-scale solar PV deployment in the UK in paragraph 59 of the UK Solar PV Strategy Part 2, dated April 2014. It is argued that, as schemes in the pipeline would already be sufficient to meet the 2020 target for large-scale solar PV, there is no need for any more to be granted planning permission. However, that is clearly not the UK Government's expectation, as paragraph 60 goes on to say (in the context of its financial incentives budget) *"Given the finite nature of this budget it will be necessary for the Department to continue to monitor the overall pipeline of projects, including large-scale solar PV, against our ambitions for a diverse mix of renewable technologies and achieve value for money for customers"*. Clearly the UK Government still expects more schemes to be brought forward.

42. The same document also includes the warning that *"the public response to large-scale solar farms which have sometimes been sited insensitively has begun to erode the otherwise record levels of public acceptability the solar PV sector as a whole enjoys"*. The Council has asserted that this should be interpreted to mean that solar farms are "unpopular", which is clearly an interpretation step too far. The warning is that solar farms should not be insensitively sited, and I have reached clear conclusions on that above.

43. Third parties also draw attention to aspirations in the same strategy document to move more towards small and medium scale solar PV installations and argue that the appeal proposal is out of step with this strategy. However, whilst these are options to be considered by the UK Government and the strategy document is a material consideration, it carries little weight in comparison with Welsh planning policy. Planning Policy Wales has recently been revised and Edition 7 was issued in July 2014. It did not include any changes in response to the April 2014 solar PV strategy document. The Welsh Government's commitment to sustainability is unchanged.

44. Paragraph 12.8.8 of PPW says that the Welsh Government is committed to using the planning system to optimise renewable energy generation. Whether or not arbitrary targets are close to being met, the commitment to counter climate change remains, albeit subject to environmental safeguards. Welsh planning policy is the primary policy in this regard.

45. The benefits of the scheme are assessed against national and international obligations, the rate of progress towards them achieved so far, and the climate change and carbon reduction requirements. I conclude that the scheme would bring benefits of considerable weight in terms of renewable energy.

46. The scheme would also bring several other benefits. The reinforcement of the existing hedgerows and additional trees would provide long-term benefits to the character of the landscape in line with the guidelines detailed in LANDMAP. It would also enhance the ecological corridors along the hedgerows and improve biodiversity. As a farm diversification initiative it would also stabilise the viability of 2 marginal traditional farm holdings, whilst complementing their continued use of the land for an element of grazing. The ability of the farmers to undertake other improvements to the holdings as a result of the improved financial positions would also have local economic and social benefits. LDP Policy RE3 recognises the benefits of farm diversification, and the proposal would meet the aims of that policy.

Overall Conclusion

47. I have taken into account all matters raised, including concerns about the adequacy of local roads, long-term reinstatement of the land and lack of direct benefits to the local community, but nothing outweighs the considerations that have led me to my main conclusions: that the proposed development would not have an unacceptable adverse effect on the landscape character or visual amenity of the area and would not conflict with the various development plan policies in this respect; that the scheme would involve the use of high quality agricultural land, but that it would only be for a limited period of time and without long-term detriment to the land, such that any conflict with national policy would be of little weight; and that the scheme would bring considerable benefit by the generation of renewable energy in support of national policy and some local benefits. On balance, I consider any (arguable) limited policy conflict in respect of agricultural land quality to be far outweighed by the benefits of the scheme and, on balance, I conclude it would meet the aims of development plan and national policy.

48. For the reasons given above I conclude that the appeal should be allowed. I shall grant planning permission subject to several necessary conditions. A draft set of conditions was put forward in the Statement of Common Ground and, subject to a number of modifications, I consider those to be suitable.

49. Conditions for detailed approval of several matters are necessary in order to control their environmental impact, and detailed approvals of a Landscape and Ecological Management Plan and a Construction Method Statement are needed for the same reason. In the interests of safeguarding visual amenity conditions are also necessary to ensure the boundary hedges would be of a suitable height, the public right of way across the site would be adequately maintained and there would be no external lighting. In addition, conditions are needed to ensure transportation of equipment to the site is adequately control to minimise risks to highway safety and inconvenience to other road users. And finally, in view of the temporary nature of the proposal, conditions are necessary to ensure the plant is decommissioned and removed from the site in due course and that the land is reinstated.

Clive Nield

Inspector

APPEARANCES

FOR THE LOCAL PLANNING AUTHORITY:

Mr Emyr Jones of Counsel	Instructed by the Council's Solicitor.
He called:	
Mr Graham Carlisle, BA, MSc, MRTPI	Director, CDN Planning (Wales) Ltd.
Ms Fiona Cloke, BSc(Hon), MPhil, CMLI	Associate, TACP.

FOR THE APPELLANT:

Ms Morag Ellis QC	Instructed by Marrons Shakespeares LLP
She called:	
Dr Richard Massey, MA, PhD, MIfA	Senior Heritage Consultant, Cotswold Archaeology.
Mr Andrew Cook, BA(Hon), MLD, CMLI, MIEMA, CEnv	Director, Pegasus Group.
Mr Tony Kernon, BSc(Hon), MRICS, FBIAC	Director, Kernon Countryside Consultants Ltd.
Mr Paul Burrell, BSc(Hon), DipUP, MRTPI	Director, Pegasus Group.

INTERESTED PERSONS:

Mr Brian Spencer	Chairman of Llanarth Fawr Community Council.
Cllr Sara Jones	Ward Councillor.
Mrs Janet Andrews	Local resident.
Mr Ronald Barns	Neighbouring resident
Mr Peter Marchant	Local resident.
Mr Christopher Lewis	Local resident.
Mr Les Taylor	Local resident and member of CPRW.

DOCUMENTS SUBMITTED AT THE INQUIRY

1	Appellant's opening statement.
2	Council's opening statement.
3	Court of Appeal judgement: Barnwell Manor Wind Energy Limited v East Northants DC etc, [2014] EWCA Civ 137, submitted by Appellant.
4	Recent appeal decision, APP/Z6950/A/14/2213400, re solar farm at Treguff Farm, Cowbridge (submitted by Appellant).
5.1-5.2	Sworn affidavits by Mr Foord of Manor Farm and Mr Blackwell of The Willows, landowners of the site, submitted by Appellant.
6	Signed Statement of Common Ground between Appellant and Council.
7	Letter of Notification of Reconvened Public Inquiry and list of persons notified.
8	Extract from DECC publication, Energy Trends, September 2014, submitted by Appellant.
9	Extract from BRE National Solar Centre publication, Agricultural Good Practice Guidance for Solar Farms, July 2014, submitted by Appellant.
10	Council's Committee Report for PV Solar Park application at Rhewl Farm, Shirenewton, submitted by Council.
11	Email and photograph concerning nature of land at Buckwell Farm, site for another PV Solar Farm application, submitted by Council.
12	Email from Welsh Government Land Use Planning Unit re validity of Agricultural Land Classification report for Rhewl Farm planning application, submitted by Appellant.
13	Note from Mr Marchant commenting on Inquiry proceedings.
14	Cllr Jill Featherstone's statement on behalf of Llanarth Fawr Community Council, read in her absence by Cllr Brian Spencer (Chairman).
15.1-15.2	Mr & Mrs Andrews' statements, read by Mrs Andrews.
16	Mr Barns' statement.

17 Extract from adopted Local Development Plan, Policy S10, submitted by Mr Marchant.

18.1-18.8 Mr Taylor's statement and accompanying documents:

- Extract from DECC's UK Solar PV Strategy Part 2;
- Renewable Energy Foundation Information Note analysing DECC's database, May 2014;
- Extract from DECC's Consultation on changes to financial support for solar PV, dated May 2014;
- Extract from REEES Addendum report in connection with Monmouthshire LDP, dated February 2012;
- Extract from DECC publication, Energy Trends, September 2014;
- Papers for public consultation in connection with planning application for a Solar Park at Rhewl Farm;
- Mr Taylor's summary and conclusions re need for renewable energy developments.

19 Council's Closing Submissions.

20 Appellant's Closing Submissions.

21 Supplement to Appellant's Closing Submissions detailing responses to comments made in third party correspondence.

22 Appellant's Costs Application.

PLANS

The original application plans and additional plans (some amending the original plans) are detailed in Tables 3.1 and 3.2 of the Statement of Common Ground.

Annex of Conditions

1. The development hereby permitted shall begin no later than 5 years from the date of this decision.

2. The development hereby permitted shall be carried out in accordance with the following approved plans: C.0444_01-B, C.0444_04-F, C.0444_06-B, C.0444_07-B, C.0444_10-B, GCS0012B, Transformer details (unnumbered) and Danfoss Inverter Technical Sheets (unnumbered).

3. Notwithstanding the requirements of Condition 2 above, prior to the commencement of the development final details of the layout of the site shall be submitted to and approved in writing by the local planning authority. The development shall be carried out in accordance with the approved details.

4. Notwithstanding the requirements of Condition 2 above, prior to the commencement of the development final details of the substation structure and compound shall be submitted to and approved in writing by the local planning authority. The development shall be carried out in accordance with the approved details.

5. Prior to the construction phase of development a Landscape and Ecological Habitat Management Plan shall be submitted to and approved in writing by the local planning authority. The Plan shall be for the duration of the Solar PV scheme and shall include but not be limited to:

    - details of existing trees and hedgerows retained;
    - details of proposed tree and shrub planting, including their species, number, sizes and positions;
    - details of 2 poplar plantations in north east corner of the site, including their removal when the scheme is decommissioned;
    - details of hedgerow management, including consideration of the timing of works and the bird nesting season;
    - details of new planting for biodiversity, including hedgerows as indicated on the plans;
    - grassland management;
    - field buffers including use of wild bird mix seed around field margins;
    - details of fencing of newly planted hedgerow corridors to protect biodiversity interest from livestock;
    - details of management responsibilities and maintenance schedules.

    Any trees or hedgerow plants which within a period of 5 years from the completion of the development die, are removed, become seriously damaged or diseased, or become otherwise defective, shall be replaced within the current planting season or the first 2 months of the next planting season, unless the local planning authority gives written approval to any variation.

The development shall be carried out in accordance with the approved Landscape and Ecological Habitat Management Plan.

The Plan shall be monitored and a review shall be submitted in writing to the local planning authority before Year 11 of operation of the solar panel scheme; the Plan shall be reviewed thereafter in accordance with a timetable to be submitted to and approved in writing by the local planning authority.

6. Notwithstanding the requirements of Condition 5 above, all existing hedgerows shall be maintained at a minimum height of 3 metres.

7. Prior to the construction phase of development a Construction Method Statement shall be submitted to and approved in writing by the local planning authority. The Method Statement shall cover the following principles as outlined in the Ecological Appraisal (Phase 1 Habitat Survey and Assessment) for the Proposed Solar PV Site by Abbey Saunders Ecology, dated August 2012:

    - details of a scheme ecologist to monitor the project construction;
    - measures to protect retained features, including hedgerows and trees, through appropriate fencing to British Standard 5837;
    - measures to protect the pond;
    - details of storage of materials on the site;
    - details of precautions in respect of badgers, including but not limited to a pre-construction check, construction phase measures, badger gates and advice for site workers;
    - details of any temporary lighting during the construction phase.

    The development shall be carried out in accordance with the approved Construction Method Statement.

8. The development shall be carried out in accordance with the approved Transport Method Statement, and construction delivery times shall be managed strictly in accordance with the approved Transport Method Statement.

9. Other than that permitted during construction under Condition 7 above, no means of external illumination or lighting shall be installed on the site without the prior written approval of the local planning authority.

10. Prior to the commencement of development, a Public Right of Way Scheme shall be submitted to and approved in writing by the local planning authority. It shall cover the measures to be adopted to maintain Public Right of Way 359/242, which passes through the site, for the duration of this planning permission. The development shall be carried out in accordance with the approved Public Right of Way Scheme.

11. Any fence lines enclosing public rights of way shall be a minimum of 3 metres apart.

12. Prior to the commencement of development, a Decommissioning Plan shall be submitted to and approved in writing by the local planning authority. The Decommissioning Plan shall include details of the works necessary to revert the site to its original condition, including the method for the removal from the site of all the solar panels, sub-stations, transformers, structures, enclosures, equipment and all other apparatus above and below ground and details of how the site is to be restored to its original condition. The Decommissioning Plan shall also include a timeframe for such works.

13. Within one month of commissioning of the solar PV installation the local planning authority shall be notified of that commissioning date.

14. Following the cessation of use of the site as a solar farm, or 25 years after the commissioning date, whichever is the sooner, the solar panels and all associated plant and equipment shall be removed from the land and the site shall be returned to a state suitable for agricultural use in accordance with the approved Decommissioning Plan, unless written approval has been granted by the local planning authority to some alternative use.

Appendix 2: Court Farm, Magor Road, Newport (Appeal Ref: APP/G6935/A/15/3034087)

The Planning Inspectorate
Yr Arolygiaeth Gynllunio

Penderfyniad ar yr Apêl

Ymweliad â safle a wnaed ar 24/09/15

gan Mr A Thickett BA(Hons) BTP MRTPI DipRSA

Arolygydd a benodir gan Weinidogion Cymru

Dyddiad: 09 Hydref 2015

Appeal Decision

Site visit made on 24/09/15

by Mr A Thickett BA(Hons) BTP MRTPI DipRSA

an Inspector appointed by the Welsh Ministers

Date: 09 October 2015

Appeal Ref: APP/G6935/A/15/3034087
Site address: Court Farm, Magor Road, Newport, NP18 2EB

The Welsh Ministers have transferred the authority to decide this appeal to me as the appointed Inspector.

- The appeal is made under section 78 of the Town and Country Planning Act 1990 against a refusal to grant planning permission.
- The appeal is made by Court Farm Solar Ltd against the decision of Newport City Council.
- The application Ref 14/1275, dated 4 March 2015, was refused by notice dated 1 April 2015.
- The development proposed is solar photovoltaic panels (~10mwp) and associated works including, access tracks, security fencing and cameras affecting public rights of way 394/59 and 394/60, Llanmartin.

Decision

1. The appeal is allowed and planning permission is granted subject to the conditions set out in the Schedule at the end of this decision.

Main Issue

2. The main issue is the impact of the proposed development on the supply of the best and most versatile agricultural land in the area.

Reasons

3. The appeal site covers an area of around 14.3 hectares (35.3 acres) split into 4 fields to the north of the B4245 and to the east of Langstone. Around 70% of the site is classified as Grade 2 and 3a agricultural land with the remainder at 3b. Grades 1, 2 and 3a are classed as the best and most versatile.

4. Planning Policy Wales (PPW) states that the best and most versatile agricultural land should be conserved as a finite resource for the future. It goes on to say that such land should only be developed if there is an overriding need and either previously developed land or land in lower agricultural grades is unavailable or constrained by environmental, wildlife or other designations. Technical Advice Note 6 'Planning for Sustainable Rural Communities' (TAN 6) advises that *'once agricultural land is built on, even for 'soft' uses such as a golf course, its return to agriculture as best and most versatile agricultural land is seldom practicable'*.

5. In this case the proposed solar farm would have a life span of 25 years and the methods of construction and decommissioning can be controlled to ensure that there would be no loss of agricultural land quality once the development has been removed[1]. The land would not be lost to agriculture, the fields would be used for silage production and, according to the appellant's 'Agricultural Land Classification: Impact and Mitigation Assessment', sheep could be grazed between and beneath the rows of solar panels.

6. Residents' concerns that the practicality and cost of cutting silage between and under the solar panels would make this unlikely are understandable. Further, the proposed development would preclude the land from being used to its full agricultural potential for twenty five years. Nevertheless, I am satisfied that the impact of the proposed development is reversible and that, consequently, there would not be a permanent loss of best and most versatile agricultural land and that it would be conserved as a finite resource for the future. With regard to the question of overriding need, I agree with the approach taken by my colleague in the Llanvapley appeal[2]. That being that the weight to be given to this test in this case is limited by the fact that the proposed development would not lead to a permanent loss of best and most versatile agricultural land.

7. Turning to the availability of sites on brownfield or lesser quality agricultural land, it is not possible to site a solar farm anywhere. Matters that need to be considered include amongst other things, levels of irradiance (usually south facing sites), a viable grid connection, adequate road access, agricultural land classification and landscape and other environmental impacts. The appellant has commissioned a sequential test which concludes, amongst other things, that no suitable brownfield land is available. This claim is not disputed by the Council and I have seen no evidence to demonstrate otherwise.

8. The appellant's sequential test begins by assessing, amongst other things, suitable grid connection locations, grid capacity and a review of Western Power's network and heat maps across Wales. This identified limited capacity in North Wales and issues with grid connectivity in mid Wales and the Cardigan Bay coastline. A high level assessment was also undertaken to consider environmental, ecological and landscape constraints which led, amongst other things, to the exclusion of sites within National Parks. This 'Step 1' assessment concluded that there are potential development areas in Wrexham, Flintshire and Deeside in North Wales and to the east of Newport in South Wales.

9. Step 2 identified some opportunities for directly supplying industrial areas in North Wales but lower levels of irradiance generally and site specific constraints led to these sites being discounted. The whole of the South Wales coastal area and M4 corridor is identified as enjoying acceptable levels of irradiance. An assessment of sub station capacity led to a conclusion that applications to connect to the grid around Newport were most likely to be successful. However, only the substation at Magor was identified as being able to accommodate the proposed solar farm.

[1] Conditions are imposed relating to construction and restoration.

[2] APP/E6840/A/14/2212987

10. Thus, Step 3 concentrated on sites in the vicinity of the Magor sub station. The Council criticise the assessment of alternative sites, arguing that the reasons for discounting them is not well explained. For example, it contends that proximity to ecological designations such as Sites of Special Scientific Interest would not necessarily preclude the development of a solar farm on the Gwent Levels. Whilst this may well be the case it is not unreasonable, in my view, for such sites to be discarded in favour of sites without such potential constraints. I have seen nothing in PPW to suggest that consideration of the availability of lower grade agricultural land requires a detailed analytical assessment of ecological or landscape impacts on every alternative site or solid proof that a solar farm would not be acceptable. I am satisfied that the sequential test is robust and based on reasonable assumptions and I see no reason to dispute its findings. In that regard there are material differences to the two English cases cited by the Council where the Inspectors found the sequential tests to be wanting[3].

11. For the reasons given above, subject to conditions limiting the life of the proposed development to 25 years and the removal of the panels should they cease to be used for the generation of electricity, I find that the proposed development would not have an unacceptable impact on the supply of the best and most versatile agricultural land in the area. I conclude, therefore, that the proposal does not conflict with local and national policy as set out in Policy CE10 of the Newport Local Development Plan 2013 – 2028, adopted 2015 (LDP) and PPW.

Other matters

12. The 4 fields on which the solar farm would be installed are high on the south and west facing slopes of a hill which rises northwards from Magor Road. The area is characterised by fields of irregular shape and size mainly bounded by mature trees and hedges. The M4 motorway runs to the south of Magor Road and is a significant feature both in terms of sight and sound. The settlement of Langstone is also prominent particularly from the western part of the site. Long distance views from the northern part of the site include the Celtic Manor Hotel, wind turbines, large industrial buildings on the outskirts of Newport and the Severn Estuary. However, these long distance features do not detract from what is an attractive rural landscape.

13. The proposed solar farm would be split into 3 sections. The arrays would be about 1.3m in height at the western end (Section A). In the northern part (Section B) they would be about 1.6m high and in Section C (the south eastern part) would rise to 2m. The size and density of the hedges on the site boundaries would limit views of the panels even in winter. Also the height of the proposed arrays combined with the local topography would limit views from Langstone and from the properties on the lower part of Llanbedr. I walked around the footpaths which skirt the site and along Magor Road. From my observations, it is unlikely, in my view, that the panels would be visible from Magor Road.

[3] APP/D3505/A/13/2204846 & APP/U6925/A/13/2209535

14. I agree with Council officers that the appellant's Landscape and Visual Impact Assessment accurately analyses the landscape and visual effects of the proposed development. New hedging is proposed along the western and northern boundaries and this, combined with the existing hedges and trees, the size of the arrays and topography will ensure that the proposed development would not have an unacceptable impact on the character and appearance of the area. I conclude, therefore, that the proposal complies with Policies SP5, GP5 and GP6 of the LDP.

15. The nearest residential property would be around 230m away. I consider that the features described above together with distance between surrounding houses and settlements is such that the proposed development would not have an unacceptable impact on local residents. Walkers using the two footpaths which would skirt the solar farm would see the arrays at close quarters. However, for most of its length the green lane is a sunken lane and its base sits below the land on either side and it is also enclosed by mature hedging which limits views of the site. Walkers using the footpath which runs just inside the northern boundary currently enjoy long distance views towards the Severn Estuary and these views would be significantly curtailed if not lost altogether as a result of the proposed development. I accept that the proposed development would have a significant impact on the enjoyment of this part of the footpath. However, it would be limited to only a short section of any walk and I do not consider that this harm justifies withholding planning permission for the proposed development.

16. The appellant commissioned an ecological report which found no evidence of badger activity and no setts were found that could be affected by the proposed works. Information was submitted by a local resident following the receipt of the appeal and comments were sought from the appellant and the Council. The Council has reviewed the matter and concluded that *'with no evidence of outlier holes closer to or within the application site there is no reason to think the interests of badgers would be prejudiced by the development proposal which is in compliance with NLDP Policy GP5 (Natural Environment)'*. I have neither seen nor read anything to lead me to question this view.

Conditions

17. I have considered the conditions suggested by the Council in light of the advice in Circular 16/14. I shall, in order to ensure that the proposed development does not harm the character and appearance of the area, impose conditions relating to landscaping, the protection of trees, lighting and the use of the green lane. The erection of root barrier fencing will be sufficient to protect existing trees and the appointment of an arboriculturist is unnecessary. The appellant's ecological report finds little of merit on the site and although I acknowledge that the enhancements proposed in the Biodiversity and Habitat Management Plan would be of benefit, I do not consider them to be necessary.

18. I agree that it is necessary, in order to safeguard soil quality and prevent pollution and flooding, to control elements of the construction of the proposed solar farm and drainage. According to the Design and Access Statement the supports for the panels are not normally driven into the ground and, if they were, the site is far enough away from residential properties that a condition controlling noise, the hours of construction and dust management and suppression are not necessary. According to the appellant's Environmental Statement it will take around 3 months to construct the solar farm and, consequently, I see no need to require details of phasing.

19. Planning conditions should not be used to duplicate controls under other legislation. I see no planning need to impose conditions relating to the condition of the public highway, the sheeting of heavy goods vehicles or to prevent spillage or deposit of any materials on the highway or to require details of the vehicles to be used on the site during construction activities.

Conclusion

20. For the reasons given above and having regard to all matters raised, I conclude that the appeal should be allowed.

A Thickett

Inspector

Schedule: APP/G6935/A/15/3034087

The appeal is allowed and planning permission is granted for a solar photovoltaic panels (~10mwp) and associated works including, access tracks, security fencing and cameras affecting public rights of way 394/59 and 394/60, Llanmartin at Court Farm, Magor Road, Newport, NP18 2EB in accordance with the terms of the application, Ref 14/1275, dated 4 March 2015 subject to the following conditions:

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

2) The development hereby permitted shall be carried out in accordance with the following approved plans:
   Appendix 4, Substation
   Appendix 5, Camera Mounting System
   Appendix 6a, Typical Boundary Fence – Wooden Post, Stock Proof Fence
   Appendix 6b, Wattle Fence
   Appendix 7, Site Access Gate
   Appendix 8, Cable Trench Details
   Appendix 13, PV Framework Elevations
   Appendix 14, Typical Front and Piled Front Elevation
   Appendix 17, Site Layout Plan Figure 3 Revision D
   Appendix 23, Proposed Soft Landscaping to the Western Field
   Appendix 25(i), Appendix 25(ii) & (iii) Overview
   Appendix 25(ii), Typical Hedgerow Boundary and Solar Farm Elevational Section
   Appendix 25(iii), Typical Hedgerow Boundary and Solar Farm Elevational Section
   Appendix 27, Additional Drawing F
   Appendix 28, Tree Protection Measures
   Additional Drawing A, Solar Panel Row Orientation
   Additional Drawing C, Construction Phase – Temporary Access
   Additional Drawing D, Proposed Hedgerow to the northern boundary

3) The permission hereby granted shall expire 25 years from the date when electrical power is first exported ('first export date') from the solar farm to the electricity grid network, excluding electricity exported during initial testing and commissioning. Written confirmation of the first export date shall be provided to the local planning authority no later than one calendar month after the event.

4) Not later than 12 months before the expiry of the permission hereby granted, a decommissioning and site restoration scheme shall be submitted for the approval of the local planning authority. The approved scheme shall be implemented within 12 months of the expiry of the permission hereby granted.

5) Within 6 months of the solar farm hereby permitted ceasing to be used for the generation of electricity, it shall be permanently removed from the land and the site restored in accordance with a decommissioning and site restoration scheme which has been submitted to and approved in writing by the local planning authority.

6) No development shall take place nor shall there be any site clearance, tree felling or pruning or other works to facilitate the proposed development until root protection barrier fencing has been installed in accordance with details that have been submitted to and approved in writing by the local planning authority. No excavation for services, storage of materials or machinery, parking of vehicles, deposits or excavation of soil or rubble, lighting of fires or disposal of liquids shall take place within the areas enclosed by the root protection barrier

fencing. The fencing shall be retained for the duration of the construction of the development hereby permitted.

7) No development shall take place until a construction method statement has been submitted to and approved in writing by the local planning authority. The construction method statement shall include details of the following:
(a) the formation and position of the temporary construction compound;
(b) pollution control, including the protection of water courses and ground water; subsoil surface water drainage; bunding of fuel storage areas; sewage and foul water drainage and disposal; and emergency procedures and pollution response plans;
(c) storage of materials, soil, soil handling and disposal of surplus materials;
(d) the construction of the access into the site, the erection of any entrance gates and the creation and maintenance of associated visibility splays;
(e) access tracks and other areas of hardstanding, including areas of temporary road matting;
(f) the carrying out of foundation works, including the foundation of the solar arrays and any other structures to be installed on the site;
(g) method of working cable trenches, including soil storage and back-filling;
(h) restoration of the site following the completion of the installation of the solar arrays and associated plant and structures.
Development shall take place in accordance with the approved details.

8) No development shall take place until details of a scheme for the disposal of surface water following installation of the solar arrays has been submitted to and agreed in writing by the local planning authority. Development shall take place in accordance with the approved details.

9) No development shall take place until details of the construction of the tracks to be laid within the site have been submitted to and agreed in writing by the local planning authority. Development shall take place in accordance with the approved details.

10) No development shall take place until a traffic management plan has been submitted to and approved in writing by the local planning authority. The traffic management plan shall include details of:
(a) Signage;
(b) Details of temporary traffic management measures, such as traffic lights;
(c) All other measures to be taken to ensure the site can be accessed safely and with minimum disruption to the public highway and the green lane.

11) No development shall take place until details of the marshalling cabinets and the transformer have been submitted to and agreed in writing by the local planning authority. Development shall take place in accordance with the approved details.

12) No use shall be made of the green lane (Reference No. 100-12) to undertake either the construction or de-commissioning of the solar farm other than is necessary to pass between the B4245 Magor Road and the start of the temporary access track shown in 'Drawing 1054709-LUD-CF-004D - Additional Drawing C'.

13) The landscaping scheme shown on Appendix 23 (Proposed Soft Landscaping to the Western Field) and all other proposed new hedging shall be carried out in first planting season following the first export date and any trees or plants which within a period of 5 years from the first export date die, are removed or become seriously damaged or diseased shall be replaced in the next planting season with

others of similar size and species, unless the local planning authority gives written approval to any variation.

14) The wattle fencing shown on Drawings Appendix 6b (Wattle Fence) and Appendix 23 (Proposed Soft Landscaping to the Western Field) shall be erected within one month of the first export date. The fencing shall be retained for as long as the development hereby permitted remains in existence.

15) There shall be no illumination of the site outside the construction and decommissioning phases.

16) The access track in the vicinity of trees 65, 66 & 67 shall be provided in accordance with the details shown in Appendix 28 (Tree Protection Measures).

Appendix 3: Walpole St Andrew, Norfolk (Appeal Ref: APP/V2635/W/14/3001281)

The Planning Inspectorate

Appeal Decision

Hearing and site visit held on 14 July 2015

by Paul K Jackson B Arch (Hons) RIBA

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

Decision date: 11 September 2015

Appeal Ref: APP/V2635/W/14/3001281
Land at Rose and Crown Farm, Mill Road, Walpole St Andrew, Norfolk

- The appeal is made under section 78 of the Town and Country Planning Act 1990 against a refusal to grant planning permission.
- The appeal is made by Elgin Energy Esco Ltd against the decision of King's Lynn and West Norfolk Borough Council.
- The application Ref 14/00283/FM, dated 24 February 2014, was refused by notice dated 12 June 2014.
- The development proposed is erection of a 30MW solar photovoltaic facility with associated landscaping and construction of temporary access.

Decision

1. The appeal is allowed and planning permission is granted for erection of a 30MW solar photovoltaic facility with associated landscaping and construction of temporary access on land at land at Rose and Crown Farm, Mill Road, Walpole St Andrew, Norfolk in accordance with the terms of the application, Ref 14/00283/FM, dated 24 February 2014, subject to the conditions in the attached schedule.

Main Issues

2. The main issues are as follows:

- The effect on best and most versatile agricultural land (BMV); and
- Whether any harm caused is outweighed by the production of renewable energy.

Reasons

The site and surroundings

3. The appeal site consists of 66 hectares (ha) of flat arable land set at a level of approximately 2-3 metres below Mill Road, which is a former coastal dyke. It lies approximately halfway between the villages of West Walton to the south west and Walpole St Peter and Walpole St Andrew to the north east. Beyond the site boundary is further agricultural land and several hundred metres away are a small number of residential dwellings and farm buildings which address Mill Road to the north and west, Folgate Lane and Walpole Bank to the north and West Drove North to the east. The majority of dwellings benefit from thick and mature hedgerow screening. The land is currently used for arable crops including wheat, rapeseed and barley and is classified as having a grade 2 agricultural land quality. Ditches separate the fields. In the centre of the site

there are two sets of overhead power lines on pylons running across the site in a north-south direction. A subterranean high pressure gas pipe also runs in an east-west direction across the northern half of the site. Electricity infrastructure is a predominant feature of the surrounding landscape and includes a prominent large switching station to the north west.

4. The towers of the churches of St Mary in West Walton and St Peter in Walpole St Peter are visible in long distance views from within the site above trees but the site itself is not visible from within the churchyards.

5. The development would produce a maximum of 27 750 000 kilowatt hours, equivalent to the electricity supply for 7000 homes. Solar panels would be positioned in rows between 3 and 6m apart and up to 2.8m high, screened by new planting and existing hedges. At the Inquiry, the appellant confirmed that if fewer panels are necessary to achieve the desired output and approved grid supply, fewer would be installed at the southern end of the development. Deer fencing and CCTV would be installed on the boundaries where biodiversity enhancements and hedgerow improvements are proposed as screening.

Policy background

6. The development plan consists of saved policies of the King's Lynn and West Norfolk Borough Council Local Plan of 1998 (reviewed by the Secretary of State in 2007)(LP) and the King's Lynn and West Norfolk Borough Council Local Development Framework Core Strategy (CS) adopted in July 2011. There are no policies of the LP that are relevant to renewable energy. Policy CS06 states that within the countryside, the Council will seek to protect its character and resist the development of 'greenfield' sites unless the proposal is for essential agricultural or forestry needs. It goes on to state that 'farm diversification schemes' are supported subject to meeting the following criteria:

   - It meets sustainable development objectives and helps to sustain agricultural enterprise;
   - Is consistent in its scale within its rural location;
   - Is beneficial to local economic and social needs;
   - Does not adversely affect the building and the surrounding area or detract from residential amenity.

7. The supporting text to area-wide policies in section 7 says that to help meet Government targets, renewable energy will need to be considered. '*There are many different types of renewable energy choices, from solar energy, wind and biomass through to energy efficient installations such as combined heat and power and ground source heating. All of these technologies and methods of construction have a role to play in meeting Government targets and were seen as positive outcomes for the borough ….*' In a section titled 'Renewable Energy' policy CS08 says that the Council and its partners will support and encourage the generation of energy from renewable sources. These will be permitted unless there are unacceptable locational or other impacts that could not be outweighed by wider environmental, social, economic and other benefits.

8. The extant policies of the LP are being reviewed through the preparation of a 'Site Allocations and Development Management Policies' Document. A version of this document was reviewed by the Council in November 2014 and has been

subjected to examination in public. Emerging policy DM20 relates to renewable energy generation and states that proposals for renewable energy and associated infrastructure, including the landward infrastructure for offshore renewable schemes, will be assessed to determine whether or not the benefits they bring in terms of the energy generated are outweighed by the impacts. There were objections to emerging policy DM20 and as a result, currently, despite it having progressed through consultation and examination in public, it can only attract very limited weight.

9. National policy as a whole supports and encourages the development of renewable energy sources. As a result of EU Directive 2009/28/EC, the UK is committed to a legally binding target to achieve 15% of all energy generated from renewable resources, including electricity, heat and transport, by 2020. The 2006 Energy Review has an aspiration that 20% of electricity is to be from renewable resources by 2020. The overarching strategy to reduce carbon emissions to meet the requirements of the Directive and the Climate Change Act is contained in the UK Renewable Energy Strategy and the UK Low Carbon Transition Plan; the lead scenario is that 30% of electricity is to be derived from renewable resources by 2020, though this is not binding. The UK Renewable Energy Roadmap (the Roadmap) was first published in 2011 and an update published in December 2012 confirms PV as a key technology.

10. The Government's solar PV strategy was published in 2014. The aim is to create more financial certainty and investor confidence in order to realise the long term potential for solar PV in the UK at a large and small scale. There is no cap on capacity. New proposals are needed to meet the 2020 ambition and longer term decarbonisation. It is the Government's ambition to see "more ambitious deployment, perhaps approaching 20 GW early in the next decade". The past four years has seen a growth in the delivery of such facilities and their associated energy production capacity, but as at June 2013, the capacity of PV was 2.4 GW, forecast to reach 10 GW by 2020.

11. Paragraphs 64-66 identify that whilst large scale facilities provide an opportunity for greater energy production (as well as potential enhancement to biodiversity), it is also of importance that they are carefully planned and screened to ensure any amenity and visual impacts are minimised. The document records that members of the Solar Trade Association will comply with best practice guidance, the first aim of which is to focus on non-agricultural land or land which is of lower agricultural quality. Paragraph 67 says '*These best practice initiatives are important as they help address the perception that solar farms are diverting significant amounts of land from agricultural use and domestic food production. This, alongside the effects on the landscape and communities of the rapid growth in the deployment of large-scale solar PV installations, might erode public support for the sector overall*'.

12. The National Planning Policy Framework (NPPF) of 2012 says at paragraph 98 that applicants for energy development should not have to demonstrate the overall need for renewable or low carbon energy. Applications should be approved if their impacts are (or can be made) acceptable. Local authorities (or decision makers) should follow the approach set out in the National Policy Statement (NPS) for Renewable Energy Infrastructure (EN-3), read with the Overarching NPS for Energy (EN-1), both dated 2011. Paragraph 14 of the NPPF sys a presumption in favour of sustainable development lies at the heart

of the NPPF. Paragraph 17 specifically supports the transition to a low carbon future in a changing climate and encourages the use of renewable resources.

13. The advice needs to be read as a whole. Particularly relevant is paragraph 5.9.18 of EN-1 which advises that all proposed energy infrastructure is likely to have visual effects for many receptors around proposed areas and that a judgement has to be made on whether the visual effects on sensitive receptors, such as local residents and visitors to the area, outweigh the benefits of the project.

14. The delivery of renewable energy developments is discussed at paragraphs 97-98 of the NPPF. Paragraph 97 states that in order to help increase the use and supply of renewable and low carbon energy, local planning authorities should have a positive strategy to promote both the use and supply of renewable energy. With regard to the development of agricultural land, paragraph 28 states that local plans should seek to promote a strong rural economy by supporting the growth and expansion of all types of businesses and enterprise in the rural area and promoting the development and diversification of agricultural and other land-based rural businesses. Paragraph 112 states that "Local planning authorities should take into account the economic and other benefits of BMV agricultural land. Where significant development of agricultural land is demonstrated to be necessary, local planning authorities should seek to use areas of poorer quality land in preference to that of a higher quality".

15. In identifying the particular planning considerations that relate to large scale ground-mounted PV development, planning policy guidance (PPG) advises that the deployment of large-scale solar farms can have a negative impact on the rural environment, particularly in undulating landscapes. However, the visual impact of a well-planned and well-screened solar farm can be properly addressed within the landscape if planned sensitively. Particular factors a local planning authority will need to consider include (as relevant to this scheme):

    • Encouraging the effective use of land by focussing large scale solar farms on previously developed and non agricultural land, provided that it is not of high environmental value;

    • Where a proposal involves greenfield land, whether (i) the proposed use of any agricultural land has been shown to be necessary and poorer quality land has been used in preference to higher quality land; and (ii) the proposal allows for continued agricultural use where applicable and/or encourages biodiversity improvements around arrays. The guidance makes specific reference to a speech by the Minister for Energy and Climate Change, the Rt Hon Gregory Barker MP, to the solar PV industry on 25 April 2013, in which the Minister encourages development on brownfield land, low grade agricultural land and on buildings; and to a Written Statement to Parliament in March 2015. The guidance notes:

    • That solar farms are normally temporary structures and planning conditions can be used to ensure that the installations are removed when no longer in use and the land is restored to its previous use;

    • The proposal's visual impact, the effect on landscape of glint and glare and on neighbouring uses and aircraft safety;

    • The need for, and impact of, security measures such as lights and fencing;

- Great care should be taken to ensure heritage assets are conserved in a manner appropriate to their significance, including the impact of proposals on views important to their setting. As the significance of a heritage asset derives not only from its physical presence, but also from its setting, careful consideration should be given to the impact of large scale solar farms on such assets. Depending on their scale, design and prominence, a large scale solar farm within the setting of a heritage asset may cause substantial harm to the significance of the asset;

- The potential to mitigate landscape and visual impacts through, for example, screening with native hedges;

- The energy generating potential, which can vary for a number of reasons including latitude and aspect.

16. The guidance also advises that the approach to assessing the cumulative landscape and visual impact of large scale solar farms is likely to be the same as assessing the impact of wind turbines. However, in the case of ground-mounted solar panels it should be noted that with effective screening and appropriate land topography the area of a zone of visual influence could be zero.

17. The planning guidance also states in relation to all renewable energy development that: the need for renewable or low carbon energy does not automatically override environmental protections; cumulative impacts require particular attention, especially the increasing impact that wind turbines and large scale solar farms can have on landscape and local amenity as the number of turbines and solar arrays in an area increases; local topography is an important factor in assessing whether wind turbines and large scale solar farms could have a damaging effect on landscape and recognise that the impact can be as great in predominately flat landscapes as in hilly or mountainous areas; and great care should be taken to ensure heritage assets are conserved in a manner appropriate to their significance, including the impact of proposals on views important to their setting.

18. The Written Statement to Parliament in March 2015 sets out the Government's most recent aims on solar energy development amongst other streamlining objectives. The Secretary of State said amongst other things: '*We are encouraged by the impact the guidance is having but do appreciate the continuing concerns, not least those raised in this House, about the unjustified use of high quality agricultural land. In light of these concerns we want it to be clear that any proposal for a solar farm involving the best and most versatile agricultural land would need to be justified by the most compelling evidence. Of course, planning is a quasi-judicial process, and every application needs to be considered on its individual merits, with due process, in light of the relevant material considerations*.'

19. In accordance with the duty set out in section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 (LBCA), special regard needs to be paid to the desirability of preserving listed buildings or their settings or any features of special architectural or historic interest which they may possess.

The effect on best and most versatile agricultural land

20. The whole of the proposed solar development would be on land which falls within Agricultural Land Classification (ALC) level 2. This is well within the category of 'best and most versatile agricultural land' as defined in the NPPF at Annex 2 and is only one level below the highest category. There is no dispute that it is productive and profitable and provides a good yield of rape, barley and wheat on a rotating basis, varying with weather and market conditions. The yield is shown to be above average for the UK but marginally below that for East Anglia.

21. There is no prohibition on the use of any particular grade of agricultural land or BMV land for solar panels. The test, as set out in the Minister's Statement in March 2015, is to provide 'the most compelling evidence' that use of BMV land is necessary and that poorer quality land is not available in each case. At Rose and Crown Farm, the appellants have provided a sequential analysis which shows that there are severe grid restrictions in the wider area[1] for a development of the size proposed, which is the developer's preferred model. Any scheme that the appellant company promotes would require a 33kv distribution cable within a certain distance. At the Inquiry, it was explained that the network is working at maximum capacity in terms of new generation equipment; and grid availability for any particular size of renewable electricity scheme varies every day. Applicants are placed in an interactive queue, their progress depending on gradual upgrading of the network and whether previously approved schemes get planning permission. In considering the viability of any proposal, regard must be had to the distance to the grid connection point, as the cost of the connecting cable relative to the power generated is a significant constraint.

22. An Eastern Power Networks generation capacity map dated 19 March 2014 was supplied at the Inquiry which shows a very large part of northern East Anglia highly utilised. Updated maps are available online[2]. The latest published map dated 5 December 2014 shows the same restrained situation with some relaxation around Norwich. However, there is no information before me on what schemes are already approved, what quantity of new generation is already proposed or where any schemes are located. Without this information, it is difficult to assess whether the appeal proposal is sequentially preferable. The appellant identifies Grade 3a, 3b and 4 land and potentially developable sites, that is brownfield, non-agricultural land, and land with ALC grade 4 (grade 5 is not present). The fact that none of these can accommodate a 30MW proposal is hardly surprising, given the network constraint criteria imposed in the analysis. The potential for smaller schemes is unknown beyond the general capacity restraints. It remains unclear what potential there is for PV schemes which may only need grid capacity at the 11 kilovolt level or less.

23. In response to the suggestion that smaller potential sites should have been included, legal argument is put forward to the effect that any sequential test should compare like with like, similar to the test that might be used in connection with retail use or areas subject to flood risk. The situation is not the same; the market for energy is not the main concern. What is important is how national renewable energy targets are to be met whilst taking into account environmental restraints and land productivity. Whilst a sequential site

[1] Sequential test overview map Figure 1 dated 19/11/2014
[2] Doc 9. At http://www.ukpowernetworks.co.uk/internet/en/connections/documents/HQ-2000-4702-M.141205.pdf

analysis that took account of potential availability of all schemes of all sizes on preferable, lower quality land might be feasible for the local authority or a group of local authorities, no such work has been done; and it would not be able to take account of the grid connection limitations. On this point, there is not (as yet) any guidance on preferable locations for renewable energy schemes in any King's Lynn and West Norfolk document brought to my attention.

24. In any case, there are no recommendations as to how a sequential test should be carried out in these circumstances and policy does not require one as such, only most compelling evidence. Bearing this in mind, it is unhelpful that the Council was unable to provide any collated information on PV renewable energy capacity or progress with the supply of renewable energy as a whole in the Borough, only a list of approved PV applications and those currently in planning[3]. Some of these may not have been implemented for other reasons and some may not have obtained a grid connection. As a consequence, I am unable to assess the methods or the extent to which solar energy is being harnessed in King's Lynn and West Norfolk.

25. It is a noticeable feature of land in this part of East Anglia that there is almost no grade 4 land and very little grade 3 (no distinction is made between 3a and 3b, only 3a being BMV). Given the practical need to limit the distance between generation capacity and the grid, the availability of poorer quality land suitable for PV, which the Government sees as an important part of the overall renewable energy mix, must be extremely constrained.

26. I give weight to the benefits of scale in this case, where a grid connection is assured and the generation capacity significant. Moreover, the Council has no objection on landscape, visual amenity, noise, heritage, highway safety, ecological or tourism grounds. The land would continue to be used for grazing sheep, which would be ensured by a solar farm grazing methodology statement, which could be put in place by means of a condition. Sheep grazing is an accepted method of managing grass under solar panels and is already a feature of the landholder's operations, supporting a local butchering business in Upwell. The Council does not question the value of sheepmeat to the economy or the assertion that much lamb is currently imported, nor the fact that the UK currently produces more wheat than it needs[4]. I conclude that this high quality land would not be lost to agriculture. Moreover, after 25 years, the land would be restored to arable use, most likely in a better condition than the intensive use it is currently put to.

27. There are also particular chemical characteristics that pertain to the soil on the east side of the Mill Road Dyke, for many years known locally as 'The Salts' that mean high value crops such as potatoes or cauliflowers cannot be economically grown, unlike many other areas categorised at ALC grade 2. This was evident at the site visit. It was also apparent that the level of biodiversity in this intensive arable area is limited. The proposed scheme would bring about biodiversity improvements due to the margins around the panels being planted with a wildflower mix and the addition of screening hedgerows incorporating local species.

[3] Doc 5
[4] Having regard to cereal supply and demand balance sheets in the Agricultural and Land Use Statement dated December 2014, provided by the Agriculture and Horticulture Development Board

28. Taking all these factors into account, I consider that there is a case for using this particular area of BMV land for solar energy development. A grid connection is available and the site is ready and available now.

Other matters

29. The site is within sight of Grade I listed church towers at West Walton and Walpole St Peter, and limited views are available of Ingleborough Mill tower, listed at Grade II. These towers are well beyond a distance at which the site could be considered to make a significant contribution to their settings. Existing tall electricity infrastructure also substantially affects the quality of the surrounding landscape.

30. I have had regard to all the other matters raised, including written representations made by local occupiers and a petition submitted on the day of the Hearing. The concerns of local residents are understood, but the scheme would be screened by new and infill planting and would be very difficult to see from any local dwellings or from local roads. Its zone of visual influence would be very limited. It would be seen at close quarters through gaps in surrounding vegetation from some local rights of way, but would not prevent appreciation of the quality of the landscape as a whole, which is of significant scale.

Whether any harm caused is outweighed by the production of renewable energy

31. The production of at least 27.75 MW of renewable energy is a very significant factor in favour, along with the associated reduction in carbon dioxide emissions and the contribution that would be made to addressing climate change. The Council referred to a noticeable drop off in solar applications since 2013, the reason for which is unknown. This proposal will lead to a significant and useful increase in solar PV in King's Lynn and West Norfolk, substantially aiding the Council in its aim to support and encourage the generation of energy from renewable sources, which all communities have a responsibility to contribute to. The removal of arable production on BMV land is a factor against the scheme, but this is more than compensated for by the use of the grass between the panels for the raising and fattening of sheep together with the production of electrical energy. The scheme would add a new income stream to the land holding, in line with the diversification objectives of policy CS06. The return of the land to arable production after 25 years means that it is not taken out of production for cereals in the long term.

32. The lack of any appreciable harm in respect of any other planning issue contributes to my conclusion that overall, there is a most compelling argument in favour of granting planning permission. The proposal would conform to the aims of CS policies including CS08; national policy; and the advice in PPG.

Conditions

33. The proposed conditions have been considered in the light of the planning guidance and the model conditions in the Appendix to Circular 11/95 *The Use of Conditions in Planning Permissions*. Conditions are necessary to control the period of the permission and to ensure decommissioning takes place; and to ensure that in the event of the panels failing to supply electricity to the grid for more than 12 months, the development is removed. It is necessary that the development is carried out in accordance with the approved plan, for the

avoidance of doubt and in the interests of proper planning. In the interests of the character and appearance of the area, the external details of inverter housings, the transformer, fencing and any security measures need to be approved prior to commencement. There is a likelihood that interesting archaeological features associated with a pre-drainage village settlement are present and a condition is imposed requiring a scheme to ensure these are properly recorded if disturbance occurs.

34. A Landscape and Ecological Management Plan (LEMP) is necessary to address landscape and biodiversity protection and enhancement during the construction, operational and restoration periods. No permanent external lighting is a requirement to preserve the dark skies typical of this rural environment. Full details of the proposed landscaping and planting are necessary together with measures to protect existing vegetation and ensure that planting becomes properly established.

35. The use of the land for sheep rearing and fattening needs to be assured and a condition requires the approval of a Solar Farm Grazing Management Plan (SFGMP).

36. Construction traffic involved in the construction and dismantling of the scheme needs to be controlled to avoid unnecessary highway safety risk and to protect the character of the area. The temporary access is to be removed and the verges and fields restored to preserve the character of the countryside along Mill Road Dyke. In conjunction with this, the access to Rose & Crown Farm and nearby dwellings is to be upgraded where it has deteriorated over the years. The hours of working on site are controlled in the interests of local occupiers and conditions are imposed to control noise levels during construction and operation, due to the size of the scheme and the likelihood that when the sun is shining and invertors operating at maximum capacity, inverter cooling fans will be in operation.

37. A Construction Method Statement is necessary to ensure that the works are carried out without undue detriment to nearby occupiers and in the interests of highway safety and wildlife. The height of the panels is limited to avoid any undue prominence in this flat landscape. Finally, the development needs to be constructed 500mm above the ground level in accordance with the recommendations in the Flood Risk Assessment.

Conclusion

38. For all the above reasons, the appeal should be allowed.

Paul Jackson

INSPECTOR

Schedule of 21 conditions

1. The development hereby permitted shall be begun before the expiration of three years from the date of this permission.

2. The development hereby permitted shall be carried out in accordance with the following approved plans: WSP-0091-GA-600ST-217 Revision 08.

3. Notwithstanding the details submitted with this application, prior to the commencement of the development hereby approved, full details of the PV panels, mounting frames (and fixings), the external appearance of the inverter substations and primary substation, the boundary fencing and the locations and design of any CCTV cameras proposed shall be submitted to, and agreed in writing by, the Local Planning Authority. The development shall be constructed, operated and retained in accordance with the approved details.

4. The permission hereby granted is for the proposed development to be retained for a period of not more than 25 years from the date that electricity from the development is first supplied to the grid (the First Export Date), this date to be notified in writing to the Local Planning Authority. By the end of the 25 year period the solar panels must be decommissioned. No later than 6 months after decommissioning, all related structures shall be removed and the site restored in accordance with a restoration scheme which has been submitted to and approved in writing by the Local Planning Authority. The restoration scheme shall be submitted to the Local Planning Authority no less than 6 months prior to decommissioning and shall make provision for the dismantling and removal from the site of the solar PV panels, frames, foundations, inverter housings and all associated structures and fencing; and the repair of land drainage. The Local Planning Authority must be notified of the cessation of electricity generation in writing no later than five working days after the event.

5. If the development hereby permitted fails for a continuous period of 12 months to produce electricity for supply to the electricity grid network, then, unless otherwise agreed in writing with the Local Planning Authority, the solar panels and the ancillary equipment relating to it shall be decommissioned and removed from the site in accordance with a scheme to be submitted to the local planning authority no more than 3 months after the end of the 12 month period. The scheme shall make provision for the dismantling and removal from the site of the solar PV panels, frames, foundations, inverter housings and all associated structures and fencing; and the repair of land drainage. The land shall be reinstated in accordance with the scheme within a period of 6 months after the end of the 12 month period.

6. The scheme hereby permitted shall not commence until full landscaping details in accordance with the proposed mitigation illustrated on Plan no. SJA 199.11.B submitted as part of the Landscape and Visual Impact Assessment produced by Steve Jowers Associates (dated December 2013) including the positioning and height of straw bale screening, has been submitted to and approved in writing by the Local Planning Authority. The approved landscaping scheme shall be completed during the first planting season following the commencement of the development, or such longer period as may be agreed in writing by the Local Planning Authority. Any trees/shrubs/plants which, within a period of five years of being planted die, are removed or become seriously damaged or diseased shall be

replaced in the next planting season with others of similar size and species unless otherwise agreed in writing by the Local Planning Authority.

7. No trees, shrubs or hedges within the site which are shown as being retained in the Arboricultural Survey prepared by Greenwillows Associates Ltd (dated December 2013), shall be felled, uprooted, wilfully damaged or destroyed, cut back in any way or removed without the prior consent in writing of the Local Planning Authority.

8. The development hereby approved shall not commence until a Landscape and Ecological Management Plan (LEMP) which shall be in accordance with the recommendations in the 'Preliminary Ecological Appraisal' produced by Greenwillows Associates Ltd (dated September 2010) has been submitted to and approved in writing by the Local Planning Authority. The works shall be implemented in accordance with the agreed LEMP which shall include the grazing between the panels which is to be a grass mix suitable for grazing.

9. No development shall take place until a Written Scheme of Investigation and timetable for a programme and reporting of archaeological works has been submitted to and approved in writing by the Local Planning Authority. The scheme shall be implemented in accordance with the scheme and timetable.

10. Prior to the commencement of any works a Construction Traffic Management Plan (CTMP) shall be submitted to and approved in writing by the Local Planning Authority together with proposals to control and manage construction traffic using the 'Construction Traffic Access Route' set out in the Construction Traffic Management Statement by WSP dated 5 December 2013. For the duration of the construction period, all traffic associated with the construction of the development will comply with the CTMP and use only the 'Construction Traffic Access Route' and no other local roads unless otherwise approved in writing by the Local Planning Authority.

11. Prior to the commencement of any on-site works, the temporary construction access shall be laid out as shown within the submitted Construction Traffic Management Statement dated 5 December 2013 and constructed in accordance with Norfolk County Council access construction specifications for at least the first 15 metres as measured back from the near edge of the adjacent carriageway.

12. Prior to the commencement of the use of the solar facility hereby permitted, the existing vehicular accesses to Rose and Crown Farm off Mill Road shall be upgraded in accordance with the Norfolk County Council light industrial access construction specification for the first 10 metres (measured along their centre lines) as measured back from the near channel edge of the adjacent carriageway.

13. Within 6 months of the First Export Date, the temporary access road shall be removed, and the verge reinstated and any remedial works undertaken, in accordance with a detailed scheme and timetable to be agreed in writing by the Local Planning Authority.

14. For the duration of the construction and decommissioning periods, deliveries shall only be received at or despatched from the site between the hours of 0800 and 1900 hours Monday to Saturday and not at all on Sundays and Bank Holidays other than with the prior written approval of the Local Planning Authority.

15. The development hereby approved shall not commence until a Construction Method Statement (CMS) has been submitted to and approved in writing by the

Local Planning Authority. Thereafter the construction of the development shall be carried out in accordance with the approved CMS. The CMS shall include:

a) Details of any temporary site compound including temporary structures/buildings, fencing, parking and storage provision to be used in connection with the construction of the development;

b) Dust management and cleaning of vehicle wheels;

c) Pollution control measures in respect of:

- Water courses and ground water
- Bunding and storage areas
- Foul sewerage
- Construction noise mitigation measures

d) Temporary site illumination during the construction period;

e) Details of the proposed storage of materials;

f) Details of surface treatments and the construction of any hard surfaces and tracks;

g) Details of emergency procedures and pollution response plans;

h) A Site Construction Environmental Management Plan to include details of measures to be taken during the construction period to protect wildlife and habitats including nesting birds;

i) Details of how any construction compound and associated construction works will be reinstated to agricultural land, including a timetable for completion of the post construction restoration and reinstatement works.

Development shall be undertaken in accordance with the approved CMS.

16. No development shall take place until a Solar Farm Grazing Management Plan (SFGMP) has been submitted to and agreed in writing by the Local Planning Authority. The scheme shall describe the methods by which grazing will be maintained by sheep throughout the period during which the development is operational. If for any reason grazing by sheep fails to occur for a period of more than 12 months then, unless otherwise agreed in writing with the Local Planning Authority, the solar panels and the ancillary equipment relating to it shall be decommissioned and removed from the site in accordance with condition 5 above.

17. No external artificial lighting shall be installed or operated during the period of this planning permission.

18. The Rating Level LArTr (to include the 5 dB characteristic penalty) of the noise emanating from the approved scheme, shall not exceed the measured background noise level at any time at the curtilage of any noise sensitive premises lawfully existing at the time of consent. The rating level (LArTr) and the background noise level (LA90) shall be determined in accordance with the guidance and methodology set out in BS4142: 1997.

19. The noise emissions during construction of the development shall not exceed a $LAeq_{10\ min}$ noise level of 65 dB, 1 metre from the façade of any occupied residential dwelling, during the construction and decommissioning periods.

20. The height of any of the solar panels hereby permitted shall not exceed a height of 2.8 metres above existing ground level.

21. The development hereby permitted shall not be implemented otherwise than entirely in conformance with the recommendations contained in the JBA Consulting Flood Risk Assessment dated November 2013.

APPEARANCES

FOR THE APPELLANT:

Stephen Tromans	Queens Counsel, instructed by Philips Planning Services Ltd
Colm Murphy	Elgin Energy EsCo Ltd
Al Morrow BA(Hons) MRTPI	Philips Planning Services Ltd
Roland Bull BSc(Hons) MSc MRICS FAAV CEnv	Bidwells LLP
Ross Allan	Arcus Consulting
Mark Riddington	Landowner

FOR THE LOCAL PLANNING AUTHORITY:

Estelle Dehon	Of Counsel, instructed by East Law on behalf of King's Lynn and West Norfolk Borough Council
Hannah Wood-Handy BA(Hons) MA MRTPI	Principal Planner KLWNBC
Keith Wilkinson BA(Hons) MRTPI	Senior Planner KLWNBC
Noel Doran	East Law

DOCUMENTS

1 Updated Statement of Common Ground and list of suggested conditions

2 Petition of residents against the proposal

3 Written Statement to Parliament by the Rt Hon Eric Pickles MP, 25 March 2015

4 Bundle of documents relating to emerging policy DM20, supplied by the Council

5 Bundle of documents detailing planning applications for renewable energy development in KLWNDC, supplied by the Council

6 Note on sequential test, provided by the appellant

7 Folder of Inspector's decisions with highlighted points, submitted by the appellant

8 UKPN drawing HQ-2000-4702 Rev K showing Eastern Power Networks generation capacity at 19 March 2014

9 UKPN drawing HQ-2000-4702 Rev M showing Eastern Power Networks generation capacity at 5 December 2014, printed by the Inspector

Appendix 4: Hawkspur Green, Little Sampford Road, Essex (Appeal Ref: APP/C1570/W/15/3132904)

The Planning Inspectorate

Appeal Decision

Site visit made on 15 March 2016

by Paul K Jackson B Arch (Hons) RIBA

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

Decision date: 14 April 2016

Appeal Ref: APP/C1570/W/15/3132904
Land to the west of Hill Hall, Hawkspur Green, Little Sampford Road, Essex

- The appeal is made under section 78 of the Town and Country Planning Act 1990 against a refusal to grant planning permission.
- The appeal is made by Lightsource SPV 9 Ltd against the decision of Uttlesford District Council.
- The application Ref UTT/15/0676/FUL, dated 29 May 2015, was refused by notice dated 12 June 2015.
- The development proposed is installation of ground based racking systems, mounted solar panels, power inverter stations, transformer, station, substation, two batteries, fencing and associated access gates, CCTV security cameras on freestanding support poles and associated infrastructure.

Decision

1. The appeal is allowed and planning permission is granted for installation of ground based racking systems, mounted solar panels, power inverter stations, transformer, station, substation, two batteries, fencing and associated access gates, CCTV security cameras on freestanding support poles and associated infrastructure on land to the west of Hill Hall, Hawkspur Green, Little Sampford Road, Essex in accordance with the terms of the application, ref. UTT/15/0676/FUL, dated 29 May 2015 and the plans submitted with it, subject to the conditions in the attached schedule.

Main Issues

2. The Council has confirmed that subject to appropriate conditions, it does not defend the second reason for refusal concerning the risk of flooding. I concur that having regard to Essex County Council's response to the suggested sustainable drainage measures proposed, and the suggested conditions, the development would not unacceptably increase surface water flood risk. Taking account of all the representations, I consider that the main issues are as follows:

- The effect of the proposed development on the character and appearance of the area; and
- Whether any harm caused is outweighed by the production of renewable energy.

The site and surroundings

3. The site consists of a single field on relatively high ground in undulating countryside east of Thaxted, north of Little Bardfield and west of the hamlet of

Hawkspur Green. The wider area is generally used for arable farming, sometimes in very large fields, but is peppered with areas of woodland, some of which are conspicuous. One such area lies immediately to the north of the field in question. The eastern hedge is interspersed with trees and forms a significant visual screen from dwellings at Hill Hall and Salmons Farm about 0.2 kilometres (km) to the east. A public bridleway runs along the southern edge of the field with extensive views across Little Bardfield and countryside to the south.

4. The scheme includes solar panels 0.8 metres (m) above the ground with a height of about 2.343m, in rows at approximately 7.5m centre to centre. A group of buildings in the north eastern corner would accommodate substations, transformers, batteries and ancillary storage. The whole development would be contained within a deer fence with occasional poles allowing CCTV supervision. There would be no artificial lighting on any of the poles. New hedging to the north east and south is proposed as screening.

Policy background

5. The development plan for the area includes saved policies of the Uttlesford Local Plan adopted in January 2005 (LP). Policy S7 advises that the countryside will be protected for its own sake and planning permission will only be given for development that needs to take place there or is appropriate to a rural area. It says that development will only be permitted if its appearance protects or enhances the particular character of the part of the countryside within which it is set or there are special reasons why the development in the form proposed needs to be there. A general planning policy GEN3 concerns flooding; amongst other things, development must not increase the risk of flooding through surface water run-off. Sustainable drainage systems should be considered as an appropriate flood mitigation measure in the first place.

6. The National Planning Policy Framework (NPPF) of 2012 advises at paragraph 215 that saved policies of the LP can be afforded due weight according to their degree of consistency with policies of the NPPF. Policy S7 is of considerable age and is not in line with the thrust of rural policies of the NPPF, which requires as a core principle that '*planning should take account of the different roles and character of different areas, promoting the vitality of our main urban areas, protecting the Green Belts around them, recognising the intrinsic character and beauty of the countryside and supporting thriving rural communities within it*'. It also says that the planning system should protect and enhance valued landscapes, but does not use the phrase 'for its own sake' which derives from older guidance. Similarly, the NPPF advises that inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk, but where development is necessary, making it safe without increasing flood risk elsewhere; this involves applying a sequential test.

7. Policy E4 of the LP concerns farm diversification; it says that alternative uses for agricultural land will be permitted if all the following criteria are met: a) The development includes proposals for landscape and nature conservation enhancement; b) The development would not result in a significant increase in noise levels or other adverse impacts beyond the holding; c) The continued viability and function of the agricultural holding would not be harmed; d) The development would not place unacceptable pressures on the surrounding rural

road network (in terms of traffic levels, road safety countryside character and amenity.)

8. The Council published a supplementary planning document (SPD) in October 2007 *Energy Efficiency and Renewable Energy*. It advises that the Council is committed to tackling the causes and effects of climate change in Uttlesford including producing a climate change strategy and action plan to reduce carbon dioxide emissions from its own operations. It draws attention to LP policy ENV15 which says that small scale renewable energy development schemes to meet local needs will be permitted if they do not adversely affect the character of sensitive landscapes, nature conservation interests or residential and recreational amenity. Solar panels are recognised as a source of renewable energy.

9. National policy as a whole supports and encourages the development of renewable energy sources. As a result of EU Directive 2009/28/EC, the UK is committed to a legally binding target to achieve 15% of all energy generated from renewable resources, including electricity, heat and transport, by 2020. The 2006 Energy Review has an aspiration that 20% of electricity is to be from renewable resources by 2020. The overarching strategy to reduce carbon emissions to meet the requirements of the Directive and the Climate Change Act is contained in the UK Renewable Energy Strategy and the UK Low Carbon Transition Plan; the lead scenario is that 30% of electricity is to be derived from renewable resources by 2020, though this is not binding. The UK Renewable Energy Roadmap (the Roadmap) was first published in 2011 and an update published in November 2013 reasserts the importance of PV. It also states that support for solar PV should ensure proposals are appropriately sited, give proper weight to environmental considerations such as landscape and visual impact, heritage and local amenity, and provide opportunities for local communities to influence decisions that affect them as a key technology.

10. The Government's solar PV strategy was published in 2014. The aim is to create more financial certainty and investor confidence in order to realise the long term potential for solar PV in the UK at a large and small scale. There is no cap on capacity. New proposals are needed to meet the 2020 ambition and longer term decarbonisation. It is the Government's ambition to see "more ambitious deployment, perhaps approaching 20 GW early in the next decade". The past four years has seen a growth in the delivery of such facilities and their associated energy production capacity. Paragraphs 64-66 identify that whilst large scale facilities provide an opportunity for greater energy production (as well as potential enhancement to biodiversity), it is also of importance that they are carefully planned and screened to ensure any amenity and visual impacts are minimised. The document records that members of the Solar Trade Association will comply with best practice guidance, the first aim of which is to focus on non-agricultural land or land which is of lower agricultural quality. Paragraph 67 says '*These best practice initiatives are important as they help address the perception that solar farms are diverting significant amounts of land from agricultural use and domestic food production. This, alongside the effects on the landscape and communities of the rapid growth in the deployment of large-scale solar PV installations, might erode public support for the sector overall*'.

11. The National Planning Policy Framework (NPPF) of 2012 says at paragraph 98 that applicants for energy development should not have to demonstrate the

overall need for renewable or low carbon energy. Applications should be approved if their impacts are (or can be made) acceptable. Local authorities (or decision makers) should follow the approach set out in the National Policy Statement (NPS) for Renewable Energy Infrastructure (EN-3), read with the overarching NPS for Energy (EN-1), both dated 2011. Paragraph 14 of the NPPF says a presumption in favour of sustainable development lies at the heart of the NPPF. Paragraph 17 specifically supports the transition to a low carbon future in a changing climate and encourages the use of renewable resources.

12. Particularly relevant is paragraph 5.9.18 of EN-1 which advises that all proposed energy infrastructure is likely to have visual effects for many receptors around proposed areas and that a judgement has to be made on whether the visual effects on sensitive receptors, such as local residents and visitors to the area, outweigh the benefits of the project.

13. The delivery of renewable energy developments is discussed at paragraphs 97-98 of the NPPF. Paragraph 97 states that in order to help increase the use and supply of renewable and low carbon energy, local planning authorities should have a positive strategy to promote both the use and supply of renewable energy. With regard to the development of agricultural land, paragraph 28 states that local plans should seek to promote a strong rural economy by supporting the growth and expansion of all types of businesses and enterprise in the rural area and promoting the development and diversification of agricultural and other land-based rural businesses. Paragraph 112 states that "Local planning authorities should take into account the economic and other benefits of best and most versatile agricultural land. Where significant development of agricultural land is demonstrated to be necessary, local planning authorities should seek to use areas of poorer quality land in preference to that of a higher quality".

14. In identifying the particular planning considerations that relate to large scale ground-mounted PV development, planning practice guidance (PPG) advises that the deployment of large-scale solar farms can have a negative impact on the rural environment, particularly in undulating landscapes. However, the visual impact of a well-planned and well-screened solar farm can be properly addressed within the landscape if planned sensitively. Particular factors a local planning authority will need to consider include (as relevant to this scheme):

    • Encouraging the effective use of land by focussing large scale solar farms on previously developed and non agricultural land, provided that it is not of high environmental value;

    • Where a proposal involves greenfield land, whether (i) the proposed use of any agricultural land has been shown to be necessary and poorer quality land has been used in preference to higher quality land; and (ii) the proposal allows for continued agricultural use where applicable and/or encourages biodiversity improvements around arrays. The guidance makes specific reference to a speech by the Minister for Energy and Climate Change, the Rt Hon Gregory Barker MP, to the solar PV industry on 25 April 2013, in which the Minister encourages development on brownfield land, low grade agricultural land and on buildings; and to a Written Statement to Parliament in March 2015. The guidance notes amongst other things:

- That solar farms are normally temporary structures and planning conditions can be used to ensure that the installations are removed when no longer in use and the land is restored to its previous use;

- The proposal's visual impact, the effect on landscape of glint and glare and on neighbouring uses and aircraft safety;

- The need for, and impact of, security measures such as lights and fencing;

- The potential to mitigate landscape and visual impacts through, for example, screening with native hedges;

- The energy generating potential, which can vary for a number of reasons including latitude and aspect.

15. The guidance also advises that the approach to assessing the cumulative landscape and visual impact of large scale solar farms is likely to be the same as assessing the impact of wind turbines. However, in the case of ground-mounted solar panels it should be noted that with effective screening and appropriate land topography the area of a zone of visual influence could be zero.

16. The planning guidance also states in relation to all renewable energy development that: the need for renewable or low carbon energy does not automatically override environmental protections; cumulative impacts require particular attention, especially the increasing impact that wind turbines and large scale solar farms can have on landscape and local amenity as the number of turbines and solar arrays in an area increases; local topography is an important factor in assessing whether wind turbines and large scale solar farms could have a damaging effect on landscape and recognise that the impact can be as great in predominately flat landscapes as in hilly or mountainous areas; and great care should be taken to ensure heritage assets are conserved in a manner appropriate to their significance, including the impact of proposals on views important to their setting.

17. The Written Statement to Parliament in March 2015 sets out the Government's most recent aims on solar energy development amongst other streamlining objectives. The Secretary of State said amongst other things: '*We are encouraged by the impact the guidance is having but do appreciate the continuing concerns, not least those raised in this House, about the unjustified use of high quality agricultural land. In light of these concerns we want it to be clear that any proposal for a solar farm involving the best and most versatile agricultural land would need to be justified by the most compelling evidence. Of course, planning is a quasi-judicial process, and every application needs to be considered on its individual merits, with due process, in light of the relevant material considerations*.'

Reasons

Landscape character

18. The site lies within Landscape Character Type (LCT) *Thaxted Farmland Plateau (B8).* The relevant key characteristics of this LCT include a gently rolling plateau, almost flat in some areas, incised by the River Pant; broken hedgerows, an absence of hedgerows due to agricultural intensification; expansive views on open roads at higher elevations; settlements dispersed

across the landscape; and Stansted flight paths have severely altered tranquillity in this area. Sensitive key characteristics include the landscape pattern of small patches of ancient woodland scattered across the landscape; the open nature of the skyline of higher more exposed upper plateau levels is visually sensitive to new development; overall, the character area is considered to have a relatively high sensitivity to change.

19. The landscape is not designated in any way, but is highly valued by local residents. There are no heritage assets that would be affected by the proposal. The appellant's Landscape and Visual Impact Assessment (LVIA) considers that the overall sensitivity of the landscape to this type of development is medium[1], due to the containment provided by woodland and hedgerows and development nearby in the form of houses, farm buildings and electricity infrastructure; and Stansted noise from aircraft leaving and approaching the main runway, which lies about 13 km to the south west. The latter depends on wind direction; at the site visit, there was very little noise from aeroplanes which were approaching Stansted at some height. However I agree with the 'medium' categorisation for assessment purposes.

20. The scale of the proposed scheme is not very large, involving approximately 11.7 hectares (ha) in a single field. The solar panels would be effectively screened from view by woodland and hedgerows to the north and east and new hedge planting, restoring a lost hedge, would screen the development from the south in time. The general character area is very extensive and temporary use of this field for 30 years would not seriously compromise perception of the landscape quality as a whole. The buildings would be well screened and the access route would not be conspicuous. Moreover, restoration of hedgerows and the introduction of grass and some grazing, as proposed by the appellants, would improve ecological diversity in an area dominated by arable farming.

21. In terms of the significance of the effect on landscape character, whilst I have taken account of the Council's opinion, the impact would be no more than slight to moderate adverse, reducing substantially with distance. This harm needs to be carried forward into the overall balance.

Visual impact

22. Visual receptors include local residents, holidaymakers, people working in the area and recreational users such as cyclists, walkers and horse riders. The number of public rights of way nearby is relatively low and the site would only be visible from the adjacent bridleway designated as 32_22. From here it would be conspicuous and would represent a change of considerable magnitude. Having said that, it would be a relatively brief experience for users passing from Hawkspur Green to The Hydes and Little Bardfield due to existing screening and new hedging, which would reach maturity in 10-15 years. Moreover, the deer fence and panels would be set back from the bridleway by 25m. The main view from the bridleway is also to the south.

23. Due to the elevation of the site and the extent of screening, the visibility of the panels from surrounding countryside would be very limited. It is likely that some occupiers of dwellings in Little Bardfield would notice the panels in the first years of operation at a distance of about 1.3km, but the development would not occupy a large proportion of the horizon and would gradually reduce

[1] The assessment method follows advice in the Guidelines for Landscape and Visual Impact 3rd edition (GLVIA)

in significance as planting matures. There would be no significant visibility from any roads or other public rights of way. The proposed buildings would be screened from view by existing and proposed hedging and trees. The level of harm, whilst only locally moderate, has to be taken account of in considering the final balance.

Cumulative impact

24. There are 2 other schemes in the area, Hydes solar farm about 2.18 km to the south (10.8MW, commissioned) and Spriggs Farm 1.54 to the west south west off the B1051 (15MW, commissioned). However due to the nature of landscape and the degree of screening by woodland and hedges, which will mature, there would be very little intervisibility. Whilst it might be possible to experience these schemes together in various ways from time to time, for instance from horseback, they would not dominate the surroundings. The appeal proposal would be smaller than either and on raised ground. The cumulative impact on landscape character or visual amenity would not be a reason to refuse permission.

Other matters

25. The land falls mainly within Agricultural Land Classification (ALC) level 3a. This is within the category of 'best and most versatile (BMV) agricultural land' as defined in the NPPF at Annex 2 (comprising levels 1, 2 and 3a). There is no prohibition on the use of any particular grade of agricultural land or BMV land for solar panels. The appellants carried out a search for more suitable land in the area, which shows that most land in this part of Essex is grade 2. The appeal site is amongst the poorer quality land available.

26. Local residents draw attention to a number of concerns including the effect on the tranquillity of the area and the ability of the local network of country lanes to accommodate construction traffic. There is unlikely to be any noticeable noise impact from the scheme for passers-by on the bridleway. Construction activity will emit some noise but only for a limited period; and comparable with agricultural activity. Hawkspur Lane is the appellant's suggested route for construction traffic and this is a narrow lane. However the Highway Authority has no objections. The final route chosen is under the control of the Council and this matter does not weigh heavily against the scheme.

Conclusion

27. The production of 4.9 MW of renewable energy is a very significant factor in favour, along with the associated reduction in carbon dioxide emissions and the contribution that would be made to addressing climate change. The appellant indicates that the equivalent of about 1416 homes would be provided with electricity. The development would lead to a significant and useful increase in solar renewable energy in the Uttlesford area, substantially helping the Council in its aim to support and encourage the generation of energy from renewable sources, which all communities have a responsibility to contribute to. The removal of arable production on some BMV land is a factor against the scheme, but there is very little poorer quality land and the loss is more than compensated for by the use of the grass between the panels for the raising and fattening of sheep together with the production of electrical energy. The scheme would add a new income stream to the land holding, in line with the diversification objectives of policy E4. The return of the land to arable

production after 30 years means that it would not be taken out of production in the long term. Against that there would be a degree of harm to the landscape for longer than a generation.

28. The lack of any appreciable harm in respect of any other planning issue contributes to my conclusion that overall, there is a most compelling argument in favour of granting planning permission. The proposal would be in accordance with national policy in the NPPF and the advice in PPG. The appeal should be allowed.

Conditions

29. The proposed conditions have been considered in the light of the planning guidance and the model conditions in Appendix A to Circular 11/95 *The Use of Conditions in Planning Permissions,* which are still current. Conditions are necessary to control the period of the permission and to ensure decommissioning takes place; and to ensure that in the event of the panels failing to supply electricity to the grid for more than 6 months, the development is removed. It is necessary that the development is carried out in accordance with the approved plans, for the avoidance of doubt and in the interests of proper planning. In the interests of the character and appearance of the area, the external details of inverter housings, the transformer, battery container buildings, fencing and CCTV poles need to be approved prior to commencement. There is a likelihood that interesting archaeological features associated are present and a condition is imposed requiring a scheme to ensure these are properly recorded if disturbance occurs.

30. The perimeter planting and landscaping need to be implemented in accordance with the correct up to date planting plan which is Figure 24. Full details of the proposed landscaping and planting are necessary together with measures to protect existing vegetation and ensure that planting becomes properly established. No permanent external lighting is a requirement to preserve the dark skies typical of this rural environment. The use of the land for sheep rearing is an important benefit and needs to be assured by means of a Solar Farm Grazing Management Plan, which needs to include a minimum number of sheep during any period of 12 months. Biodiversity interests need to be protected by means of a Construction Environmental Management Plan (CEMP: Biodiversity). The installation of a sustainable drainage system needs to be assured.

31. A Traffic Management and Construction Management Plan (TMCMP) is necessary to ensure that the works are carried out without undue detriment to nearby occupiers and in the interests of highway safety and wildlife. This includes measures to control construction traffic involved in the construction and dismantling of the scheme to avoid unnecessary highway safety risk on narrow lanes, and to protect the character of the area.

Paul Jackson

INSPECTOR

Schedule of 13 conditions

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

2) The development hereby permitted shall be carried out in accordance with the following approved plans:

   Layout HHF_01_I

   Panels TYP_P_E_3L

   Toilet TC_01

   Transformer TD_01

   Storage SB_01

   Deer Fence

   Inverter ID_01

   DNO building DNO_01

   Client substation CSR_01

   Communications CB_01

   CCTV_01

   BATTERY SUB_01

   Planting plan Fig 24

3) Notwithstanding the details submitted with this application, prior to the commencement of the development hereby approved, full details of the PV panels, mounting frames (and fixings), the external appearance of the inverter substations, substation, battery building and storage buildings, the boundary fencing and the locations and design of any CCTV cameras proposed shall be submitted to, and agreed in writing by, the Local Planning Authority. The development shall be constructed, operated and retained in accordance with the approved details.

4) The perimeter landscaping measures and ecology bio-enhancement measures for the solar farm scheme hereby approved shall be implemented in accordance with the Biodiversity Management Plan dated June 2014 prepared by Wardell Armstrong including Figure 24 — Planting Plan (Option C) dated May 2015 where this planting plan supersedes those previously submitted by the applicant. The planting scheme shall be carried out no later than the first planting season following the commencement of development of the solar farm. Any trees/shrubs/plants which, within a period of five years of being planted die, are removed or become seriously damaged or diseased shall be replaced in the next planting season with others of similar size and species unless otherwise agreed in writing by the Local Planning Authority.

5) No development shall take place (including demolition, ground works, vegetation clearance) until a Construction Environmental Management Plan (CEMP: Biodiversity) has been submitted to and approved in writing by the Local Planning Authority. The CEMP: Biodiversity shall include the following:

a) A risk assessment of potentially damaging construction activities;

b) Identification of biodiversity protection zones;

c) Practical measures (both physical measures and sensitive working practices) to avoid or reduce impacts during construction (may be provided as a set of method statements);

d) The location and timing of sensitive works to avoid harm to biodiversity features;

e) The times during construction when specialist ecologists need to be present on site to oversee works;

f) Responsible persons and lines of communication; and the

g) Use of protective fences, exclusion barriers and warning signs.

The approved CEMP: Biodiversity shall be implemented and adhered to throughout the construction period of the development hereby approved.

6) No development or preliminary groundworks of any kind shall take place until the applicant has secured the implementation of a programme of archaeological trial trenching and excavation in accordance with a written scheme of investigation which has been submitted by the applicant to and approved by the Local Planning Authority.

7) No permanent lights of any kind shall be erected anywhere within the site without the prior written agreement of the local planning authority.

8) The permission hereby granted is for the proposed development to be retained for a period of not more than 30 years from the date that electricity from the development is first supplied to the grid (the First Export Date), this date to be notified in writing to the Local Planning Authority. By the end of the 30 year period the solar panels must be decommissioned. No later than 6 months after decommissioning, all related structures shall be removed and the site restored in accordance with a restoration scheme which has been submitted to and approved in writing by the Local Planning Authority. The restoration scheme shall be submitted to the Local Planning Authority no less than 6 months prior to decommissioning and shall make provision for the dismantling and removal from the site of the solar PV panels, frames, foundations, inverter housings and all associated buildings, structures and fencing. The Local Planning Authority must be notified of the cessation of electricity generation in writing no later than five working days after the event.

9) If the development hereby permitted fails for a continuous period of 6 months to produce electricity for supply to the electricity grid network, then, unless otherwise agreed in writing with the Local Planning Authority, the solar panels and the ancillary equipment relating to it shall be decommissioned and removed from the site in accordance with a scheme to be submitted to the Local Planning Authority no more than 3 months after the end of the 12 month period. The scheme shall make provision for the dismantling and removal from the site of the solar PV panels, frames, foundations, inverter housings and all associated structures and fencing; and the repair of land drainage. The land shall be reinstated in accordance with the scheme within a period of 6 months after the end of the 12 month period.

10) No development shall take place, including any ground works or demolition, until a Traffic Management and Construction Management Plan (TMCMP) has been submitted to and approved in writing by the Local Planning Authority. The approved TMCMP shall be adhered to throughout the construction/decommissioning periods for the solar farm and shall provide details of the provision of:

    i. The parking of vehicles of site operatives and visitors;

    ii. Loading and unloading of plant and materials;

    iii. Storage of plant and materials used in constructing the development;

    iv. Wheel and underbody washing facilities; and

    v. Lorry routing for deliveries to/from the site in a manner designed to avoid conflict on single carriageway roads.

11) Surface water drainage measures for the site as part of a sustainable urban drainage system (SUDS) for the solar park hereby approved shall be carried out in accordance with the revised Flood Risk Assessment as prepared by Wardell Armstrong dated August 2015.

12) No development shall take place until a Maintenance Plan detailing maintenance arrangements, including who is responsible for different elements of the surface water drainage system and the maintenance activities/frequencies to be carried out, including yearly logs of maintenance, throughout the life of the development has been submitted to the Local Planning Authority and approved in writing. The Maintenance Plan shall be implemented and retained.

13) No development shall take place until a Solar Farm Grazing Management Plan (SFGMP) has been submitted to and agreed in writing by the Local Planning Authority. The scheme shall describe the methods by which grazing will be maintained by a minimum number of sheep throughout the period during which the development is operational. If for any reason grazing by sheep fails to occur for a period of more than 12 months then, unless otherwise agreed in writing with the Local Planning Authority, the solar panels and the ancillary equipment relating to it shall be decommissioned and removed from the site in accordance with condition 8 above.

Appendix 5: Cleve Hill Solar Park (Refence: EN010085)