South Oxfordshire and Vale of White Horse Renewable Energy Study

Landscape Sensitivity Assessment

South Oxfordshire District Council and Vale of White Horse District Council

Final report

Prepared by LUC

September 2024

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Chapter 1
Introduction

Background to this study

1.1 In January 2023, South Oxfordshire and Vale of White Horse District Councils commissioned LUC to prepare a Landscape Sensitivity Assessment covering the two districts (together referred to herein as the 'study area').

1.2 This Landscape Sensitivity Assessment for wind energy and solar photovoltaic (PV) schemes provides judgements on the landscape sensitivity of different parts of South Oxfordshire and Vale of White Horse to these forms of development. The findings of this study will allow the Councils to identify broad areas for renewable energy development and establish a local policy framework for such development, in line with the National Planning Policy Framework (paragraph 160).

Policy context

European Landscape Convention

1.3 The European Landscape Convention (ELC) came into force in the UK in March 2007. It established the need to recognise landscape in law; and develop landscape policies dedicated to the protection, management, and planning of landscapes; and to establish procedures for the participation of the general public and other stakeholders in the creation and implementation of landscape policies. The ELC remains relevant despite the UK's departure from the EU.

1.4 The ELC definition of ‘landscape’ recognises that all landscapes matter, be they ordinary, degraded, or outstanding:

> “Landscape means an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors.”

1.5 Signing up to the ELC means that the UK is committed to protect, manage, and plan our landscapes for the future. The Convention also advocates work to raise landscape awareness, involvement and enjoyment amongst local and visiting communities. Landscape character is defined by the ELC as “a distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse”. Again, this reinforces the underlying message that ‘all landscapes matter’.

National Planning Policy Framework (NPPF)

1.6 The UK Government published the latest version of the National Planning Policy Framework (NPPF) in December 2023, which sets out the environmental, social and economic planning policies for England. Central to NPPF policies is a presumption in favour of sustainable development; that development should be planned for positively and individual proposals should be approved wherever possible.

1.7 One of the overarching objectives that underpins the NPPF is set out in Paragraph 8: “*an environmental objective – to contribute to protecting and enhancing our natural, built and historic environment*”.

1.8 Paragraph 180 states that “*planning policies and decisions should contribute to and enhance the natural and local environment by protecting and enhancing valued landscapes*” and “*recognising the intrinsic character and beauty of the countryside*”.

1.9 The NPPF also makes explicit reference to the need for defined strategic policies that make sufficient provision for climate change mitigation and adaptation, landscape and green infrastructure (paragraph 20).

1.10 Paragraph 160 states that "*to help increase the use and supply of renewable and low carbon energy and heat, plans should:*

1. *provide a positive strategy for energy from these sources, that maximises the potential for suitable development, while ensuring that adverse impacts are addressed satisfactorily (including cumulative landscape and visual impacts);*

2. *consider identifying suitable areas for renewable and low carbon energy sources, and supporting infrastructure, where this would help secure their development…"*

1.11 Footnote 58 clarifies that:

Except for applications for the repowering and life-extension of existing wind turbines, a planning application for wind energy development involving one or more turbines should not be considered acceptable unless it is in an area identified as suitable for wind energy development in the development plan or a supplementary planning document

National Planning Policy Guidance (NPPG)

1.12 Further guidance is provided in the Renewable and low carbon energy NPPG on how local planning authorities can identify suitable areas for renewable and low carbon energy. Paragraph 005 states that:

"…when considering impacts, assessments can use tools to identify where impacts are likely to be acceptable. For example, landscape character

areas could form the basis for considering which technologies at which scale may be appropriate in different types of location...”

1.13 This study uses the framework of Landscape Character Areas and Landscape Character Types for the landscape sensitivity assessment as set out in the 2024 Landscape Character Assessment for South Oxfordshire and Vale of White Horse.

Local Policy

North Wessex Downs National Landscape

1.14 The North Wessex Downs National Landscape is located in the southern part of Vale of White Horse and the south-western extent of the study area. Special qualities of the National Landscape include remote high chalk plains, plunging scarps and open downlands filled with flowers, scattered farmsteads and settlements in a landscape seemingly unchanged for centuries and a rich mix of ancient semi-natural woodlands, wood pasture with veteran trees, and plantations.

1.15 The existing Management Plan was published in 2019 and covers the period to 2024. Relevant objectives include:

- Policy LA06: Ensure that all development in or affecting the setting of the AONB conserves and enhances the character, qualities and heritage of the North Wessex Downs landscape.
- Policy NR13: Support reductions in emissions of greenhouse gases, such as carbon dioxide, nitrous oxide and methane, from all possible sources. Support mitigation measures including better on-farm management of fertiliser and animal waste, biomass heating from local fuel stocks and small-scale renewable energy generation appropriate within the protected landscape.

Chilterns National Landscape

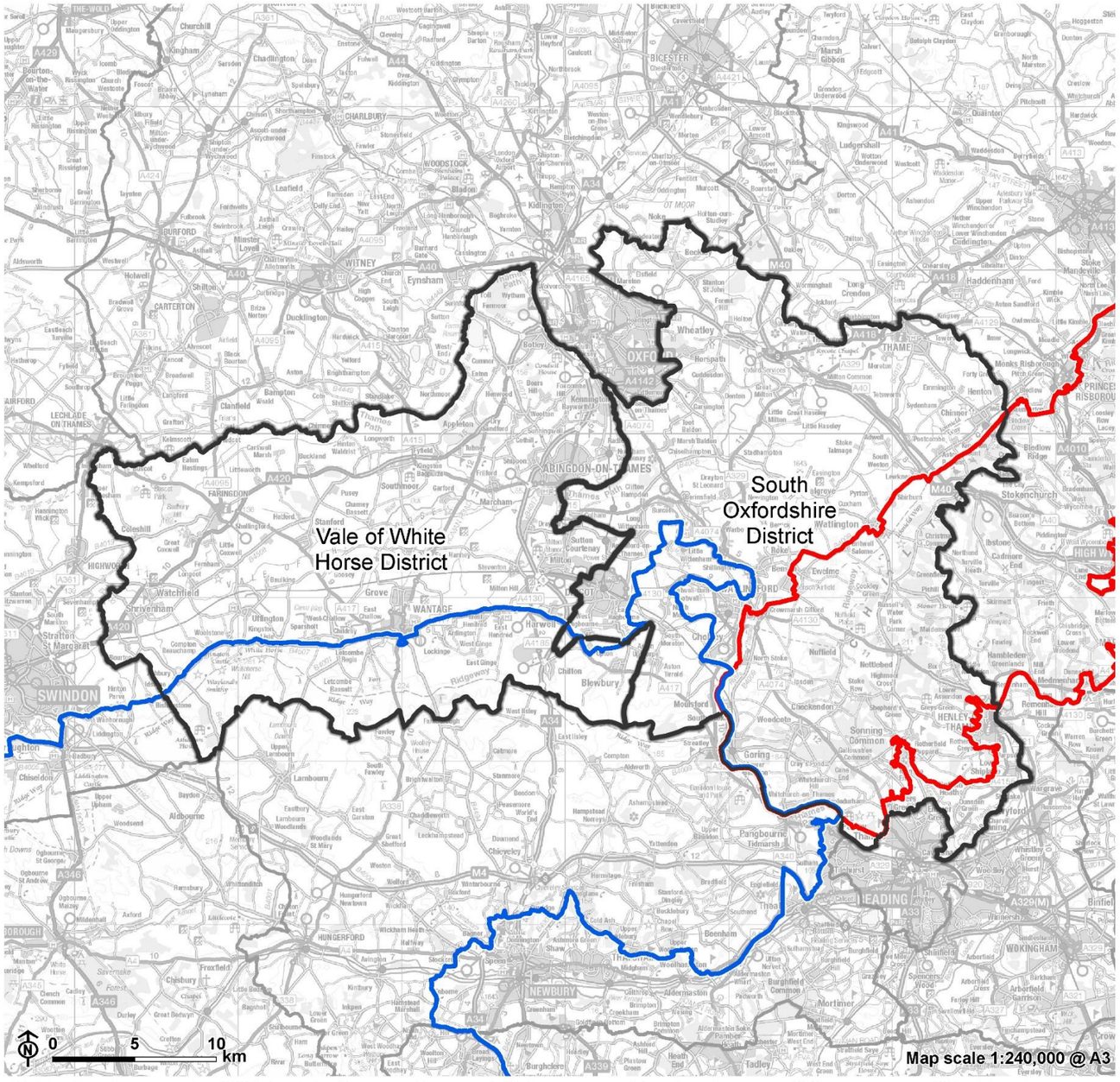
1.16 The Chilterns National Landscape extends into the southern part of South Oxfordshire (i.e. the south-eastern part of the study area). Special qualities of the National Landscape include a steep chalk escarpment, flower-rich downland, broadleaved woodlands (especially beech), commons, tranquil valleys, a network of ancient routes and a rich historic environment of hill forts and chalk figures.

1.17 The current AONB Management Plan covers the period between 2019 and 2024. Relevant objectives/policies include:

- Policy DP1: Ensure planning decisions take full account of the importance of conserving and enhancing the natural beauty of the AONB and the great weight given to its protection in the NPPF.
- The Chilterns Conservation board should be consulted on proposals for all renewable energy developments.

1.18 The Chilterns Conservation Board have also published a Position Statement on Renewable Energy (2014). The position statement sets out the Conservation Board consider wind turbines taller than 25 meters and solar PV arrays over 10 MW to '*not generally be appropriate within the Chilterns AONB or in locations beyond the AONB boundary where such development would affect its setting and character, as they would have significant potential to adversely affect the natural beauty of the AONB and to compromise the purpose of the AONB contrary to national planning policy.*'

Figure 1.1: Coverage of statutory landscape designations within and surrounding South Oxfordshire and Vale of White Horse



Chapter 2

Method

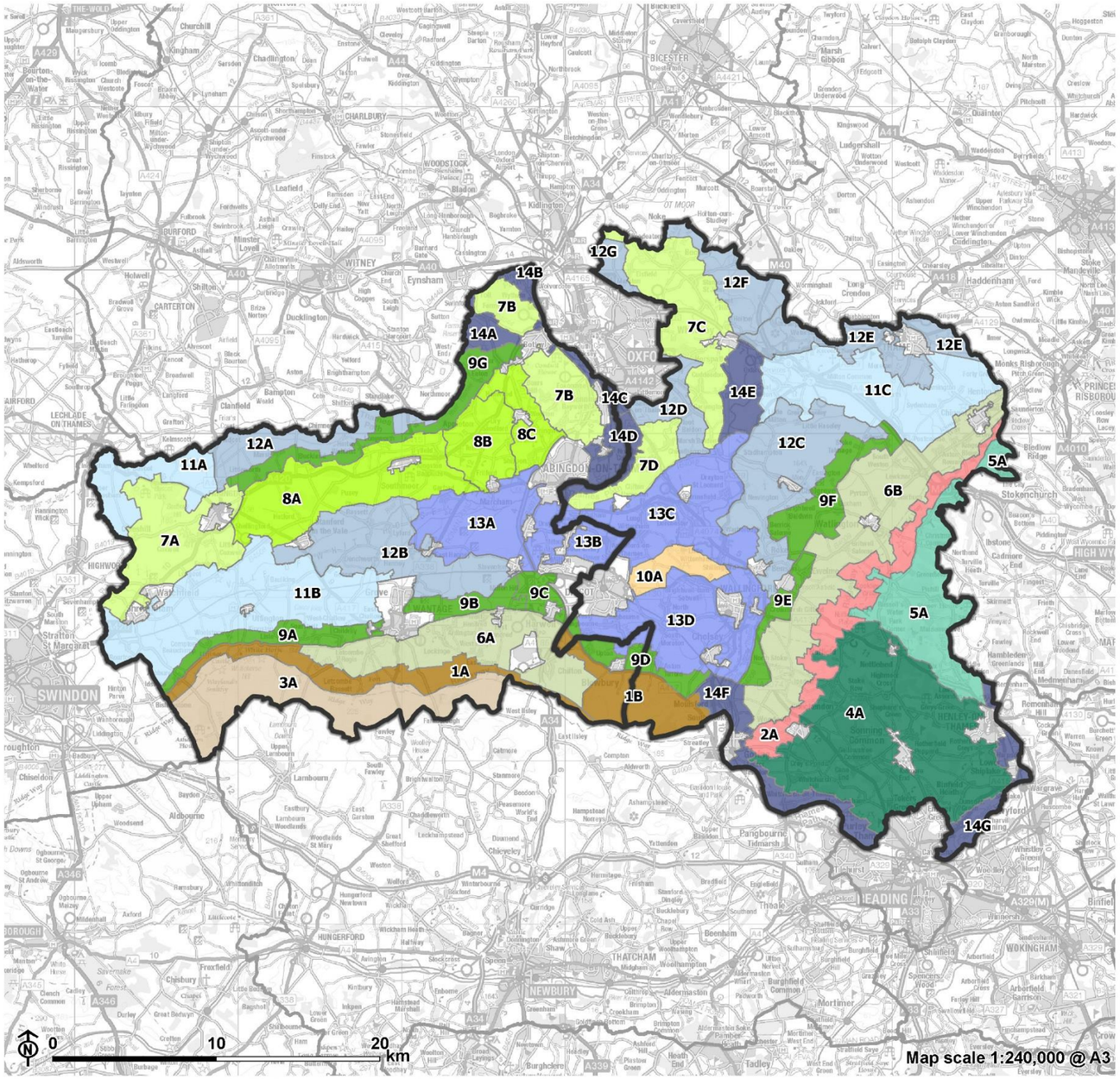
Scope of the assessments

2.1 The landscape sensitivity assessments focus on the landscape considerations associated with ground-mounted solar photovoltaic (PV) and wind energy developments at a strategic level.

Spatial framework for the assessment

2.2 The assessment uses the spatial framework of Landscape Character Types (LCTs) and component Landscape Character Areas (LCAs) identified by the 2024 Landscape Character Assessment for South Oxfordshire and Vale of White Horse. These are shown in Figure 2.1.

Figure 2.1: Landscape Character Types and Areas within South Oxfordshire and Vale of White Horse



South Oxfordshire and Vale of White Horse Strategic Renewable Energy Landscape Sensitivity Assessment
South Oxfordshire and Vale of White Horse Councils

LUC

Figure 2.1: Landscape Character Context in South Oxfordshire and Vale of White Horse Districts

- South Oxfordshire and Vale of White Horse
- Neighbouring Local Authority

Landscape Character Type

- 1: Open Chalk Escarpment and Upper Slopes
- 2: Wooded Chalk Escarpment
- 3: Open Chalk Dipslope
- 4: Wooded Chalk Plateau and Valleys
- 5: Wooded Chalk Ridges and Valleys
- 6: Chalk Escarpment Footslopes
- 7: Ridge Hilltops
- 8: Ridge Slope
- 9: Vale Edge Slopes
- 10: Lower Vale Hills
- 11: Upper Vale
- 12: Middle Vale
- 13: Lower Vale
- 14: River Valley

The labelled letters following the Landscape Character Type number denote different Landscape Character Areas within each Landscape Character Type

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Characteristics of solar PV and wind energy development types and their potential landscape impacts

Solar PV developments

2.3 Solar PV developments consist of racks of panels and associated structures such as inverters or transformer substations, fencing, and screening planting.

2.4 These developments can occupy substantial areas of ground which may be visible, particularly if located on slopes. Landscape effects may include the following:

- Solar PV developments may be particularly visible in open landscapes or on upper slopes of hillsides or where overlooked;
- On a sunny day they can appear blue, while on a cloudy day they can appear a dark grey, both of which contrast with surrounding green areas;
- The presence of solar PV panels and associated infrastructure may increase the perceived human influence on the landscape and erode intrinsically rural character;
- Solar PV development will change the land use and appearance of a field or fields, affecting land cover patterns;
- The regular edges of solar PV developments may be conspicuous in more irregular landscapes (particularly where field boundaries are irregular);
- The height of racks (up to 4 metres) may overtop typical hedgerow field boundaries;
- Racks may rotate to follow the sun, resulting in noise,

- Screen planting around solar PV developments may change the sense of enclosure of a landscape and restrict or alter important views;
- Construction of solar PV development may result in damage to landscape features such as hedgerow field boundaries and alter the landscape scale; and
- Structures may appear out of place in particularly wild or undeveloped landscape which are valued for their qualities of remoteness.

Wind energy developments

2.5 All turbines considered in this study are substantial vertical structures that may be highly visible within the landscape. Wind energy developments may affect the landscape in the following ways:

- Construction of turbines and related infrastructure may result in the direct loss of landscape features e.g. trees and hedgerows;
- The movement of the blades is a unique feature of wind energy development, setting them apart from other stationary tall structures in the landscape, and may affect characteristics of stillness and remoteness;
- The presence of turbines may increase the influence of built development on the landscape;
- Turbines may be perceived as out of scale in relation to human scale features in the landscape e.g. farmsteads, rural lanes, walls and hedgerows;
- Turbines on skylines may compete with existing skyline features (e.g. church towers) for prominence, where prominent undeveloped skylines or landmark features are characteristic of the landscape; and
- Access tracks or upgrades on access routes may be highly visible, particularly in open upland landscapes or undeveloped landscapes.

Type and scale of solar PV developments considered

2.6 The assessment considers the landscape sensitivity of the landscape within South Oxfordshire and Vale of White Horse to ground-mounted solar PV developments. Such developments consist of 'arrays' of solar PV panels, usually around three metres in height (although can be up to four metres) and mounted on aluminium/stainless steel frames, with associated infrastructure including inverters, on-site powerhouse, security fencing and CCTV. Solar PV developments in domestic gardens or roof mounted panels are outside the scope of this study.

2.7 The assessment judges the suitability of different scales of solar PV developments, based on bandings that reflect those that are most likely to be put forward by developers. The sizes used for the assessment are set out below, with the approximate MW equivalent):

- Very small solar PV installation: Up to 1 hectares (equivalent to <1 MW)
- Small solar PV installation: 1 to 5 hectares (equivalent to 1-4 MW)
- Medium solar PV installation: 5 to 20 hectares (equivalent to 5-15 MW)
- Large solar PV installation: 20 to 50 hectares (equivalent to 16-40 MW)
- Very large solar PV installation: 50 to 120 hectares (equivalent to 41-100 MW)

2.8 Proposed solar PV developments larger than 120 hectares have not been considered in this assessment. Landscape sensitivity to these very large schemes would be categorised as "high" sensitivity regardless of location, requiring developers to pay particular attention to this issue in their specific applications.

Type and scale of wind energy developments considered

2.9 For wind energy, the assessment considers five scenarios, as set out below:

- Very small turbines: <25 metres tip height
- Small wind turbines: 25-60m tip height
- Medium wind turbines: 60-100m tip height
- Large wind turbines: 100-150m tip height
- Very large wind turbines: 150-220m tip height

2.10 Typically, larger wind turbines will be developed in larger groups (wind farms) at larger scales. Groups of turbines will generally have a higher impact than singular turbines.

Cumulative effects

2.11 The LSA does not include assessment of the potential cumulative impacts of multiple developments as different combinations of development are not known at this stage.

2.12 As larger numbers of renewable energy developments are built, it is increasingly necessary to consider their cumulative effects. Cumulative effects of multiple schemes are a significant issue for planning authorities, particularly for free standing solar PV developments, which tend to cluster around grid connection points.

2.13 The most significant cumulative effects are those that result in changes in the character of a landscape to such an extent as to transform it into a different landscape type. It should be recognised that if numerous developments are

built, then at some point another development could tip the balance through its additional effects.

2.14 Key considerations are how different developments relate to each other, their frequency as one moves through the landscape, and their visual separation. These are most appropriately considered at the individual site level, including through the process of Cumulative LVIA. Additional information on the LVIA and Cumulative LVIA process are included in Appendix A.

Evaluating landscape sensitivity

2.15 This assessment draws on advice contained in Natural England's 'Approach to landscape sensitivity assessment' (2019) which supersedes 'Techniques and criteria for judging capacity and sensitivity' (Natural England, 2002). This describes the term 'landscape sensitivity', within the context of spatial planning and land management, as follows:

> "Landscape sensitivity may be regarded as a measure of the resilience, or robustness, of a landscape to withstand specified change arising from development types or land management practices, without undue negative effects on the landscape and visual baseline and their value."

2.16 It is a term applied to landscape character and the associated visual resource, combining judgements of their susceptibility to the specific development type/development scenario or other change being considered together with the value(s) related to that landscape and visual resource.

Assessment criteria

2.17 Landscape sensitivity assessment requires judgements on both landscape susceptibility (how vulnerable the landscape is to change from the type being assessed, in this case solar PV and wind energy developments) and landscape value (consensus about importance, which can be recognised through designation as well as through descriptions within the Landscape Character Assessment).

2.18 The selection of landscape sensitivity indicators ('criteria') for this study is informed by the attributes of landscape that could be affected by solar and wind energy development. These consider the 'landscape', 'visual' and 'perceptual' aspects of sensitivity. Their selection is also based on current best practice and experience of LUC in undertaking similar studies elsewhere in the UK.

2.19 The following five criteria headings are used for this study:

- Landform and scale (including sense of openness/enclosure);
- Landcover (including field and settlement patterns);
- Historic landscape character;
- Visual character (including skylines); and
- Perceptual and scenic qualities.

2.20 The following text provides guidance and examples of higher and lower sensitivity features/attributes for applying the criteria in the study area, for solar PV and wind energy, respectively. The assessments present a commentary against each criterion to inform the judgements on levels of sensitivity. It is important to note that the relative importance of each criterion varies between landscapes (due to differences in landscape character). The initial stage of the assessment involved a thorough desk-based study drawing on sources of spatial and descriptive information regarding the landscape (see Appendix B). This was supplemented by field survey work undertaken by a team of landscape professionals to verify the findings.

Solar PV assessment criteria

Landform and scale (including sense of openness/enclosure)

2.21 A flat or gently undulating lowland landscape or extensive plateau is likely to be less sensitive to solar PV development than a landscape with prominent landforms and visible slopes. This is because arrays of solar PV panels will be less easily perceived in a flat landscape than on a slope (including hills and knolls), especially higher slopes. However, flat or gently undulating landscapes which are overlooked from higher ground may have a higher sensitivity.

2.22 A landscape with a strong sense of enclosure (e.g. provided by land cover such as woodland, tree cover or high hedges) is likely to be able to provide screening for solar PV development and therefore be less sensitive than an open and unenclosed.

- Low: An extensive lowland flat landscape or plateau, often a larger scale landform. A very well enclosed landscape – e.g. with fields bounded by high hedges and dense tree/woodland cover.
- Low-Moderate: A simple gently rolling landscape, likely to be a medium-large scale landform. Some enclosure provided by hedges and tree/woodland cover.
- Moderate: An undulating landscape, perhaps also incised by valleys, likely to be a medium-scale landform, with hidden areas as well as some visible slopes. Some areas lacking screening by field boundaries or tree cover, whilst others might have a greater sense of enclosure owing to a denser occurrence of these features.
- Moderate-High: A landscape with distinct landform features, and/or irregular in topographic appearance (which may be large in scale), or a smaller scale landform. The landscape may contain prominent, visible

slopes with little sense of enclosure (low, few or no hedges or trees/areas of woodland).

- High: A landscape with a rugged landform or dramatic landform features (which may be large in scale), or a small scale or intimate landform. The landform may be very steep with exposed, visible slopes and no field boundaries or tree cover to provide screening.

Landcover (including field and settlement patterns)

2.23 Since solar PV panels introduce a new land cover (of built structures), landscapes containing existing hard surfacing or built elements (e.g. urban areas, brownfield sites or large-scale horticulture) are likely to be less sensitive to field-scale solar PV development than highly rural or naturalistic landscapes. Landscapes with small-scale, more irregular field patterns are likely to be more sensitive to the introduction of solar PV developments (particularly those which would cover multiple fields) than landscapes with large, regular scale field patterns because of the risk of diluting or masking the characteristic landscape patterns (noting that large-scale fields my have increased visual sensitivity on account of less screening). This would be particularly apparent if development takes place across a number of adjacent fields where the field pattern is small and intricate (bearing in mind that the height of panels could exceed that of a hedge or stone wall).

- Low: A landscape with large-scale, regular fields of mainly modern origin. An urban or ‘brownfield’ landscape.
- Low-Moderate: A landscape which is mainly defined by large, modern fields or those sub-divided for non-traditional uses, e.g. horse keeping. An area of large-scale horticulture or some urban or brownfield influences.
- Moderate: A landscape with a mixture of large-scale, modern fields and some smaller, more historic enclosure. A rural landscape, perhaps with some brownfield sites or urban influences.

- Moderate-High: A landscape dominated by ancient, small-scale field patterns with a few isolated areas of modern enclosure and/or with some areas of semi-natural land cover.
- High: A landscape characterised by small-scale, ancient field patterns and/or a landscape dominated by semi-natural land cover.

Historic landscape character

2.24 Landscapes which contain important archaeological or historic features or historic associations are likely to have a higher level of sensitivity to solar PV development. Historical features may be in the form of historic land cover types and field systems, areas of buried archaeology, historic landscapes such as Registered Parks and Gardens or buildings/structures designated for their historical significance.

2.25 Areas which make a significant contribution to the setting of a historical feature or landscape may also have higher sensitivity to solar PV development. Landscapes that are primarily of modern influence and origin will have a lower sensitivity to solar PV development.

- Low: A landscape with relatively few historic features important to the character of the area and little time depth (i.e. large intensively farmed fields).
- Low-Moderate: A landscape with a small number of historic features important to the character area and some time depth.
- Moderate: A landscape with some visible historic features of importance to character, and a variety of time depths.
- Moderate-High: A landscape with many historic features important to the area and a strong sense of time depth.
- High: A landscape with a high density of historic features important to the character of the area and great time depth

Visual character (including skylines)

2.26 The relative visibility of a landscape may influence its sensitivity to solar PV development. An elevated landscape such as a hill range or plateau, which is viewed from other landscapes, may be more sensitive than an enclosed landscape, since any solar panels will be more widely seen. Landscapes which have important visual relationships with other areas, for example where one area provides a backdrop to or is overlooked from a neighbouring area (which may be a designated landscape such as National Landscapes), are considered more sensitive than those with few visual relationships. The extent of inter-visibility may be modified by the importance of these views to appreciation of the landscape, and whether adjacent landscapes provide a setting for one another. Areas with frequent visual receptors (e.g. a strong network of rights of way/promoted viewpoints) will have higher levels of sensitivity.

2.27 Prominent and distinctive and/or undeveloped skylines, or skylines with important landmark features, are likely to be more sensitive to solar PV development because panels may detract from these skylines as features in the landscape, or draw attention away from existing landform or landmark features on skylines if not sited appropriately. Important landmark features on the skyline might include historic features or monuments as well as landforms. Where skylines are affected by development, e.g. through the presence of electricity pylons, the addition of solar panels may lead to visual confusion due to differences in scale. Therefore, developed skylines might not necessarily indicate lower sensitivity.

- Low: An enclosed, self-contained landscape, or one with weak connections to neighbouring areas. A landscape in which skylines are not prominent, and there are no important landmark features on the skyline.
- Low-Moderate: A landscape with limited connections to neighbouring areas, and/or where adjacent landscapes are not visually related. A landscape in which skylines are simple, flat or gently convex and/or there are very few landmark features – other skylines in adjacent LCTs may be more prominent.

- Moderate: A landscape which has some inter-visibility with neighbouring areas. A landscape with some prominent skylines, but these are not particularly distinctive – there may be some landmark features on the skyline.
- Moderate-High: A landscape which is intervisible with several areas, and/or where adjacent areas are strongly interrelated. A landscape with prominent skylines that may form an important backdrop to views from settlements or important viewpoints, and/or with important landmark features.
- High: A landscape which has important visual relationships with one or more neighbouring areas. It or the landscape(s) it is visible from is designated as a National Landscape. A landscape with prominent or distinctive undeveloped skylines, or with important landmark features on skylines.

Perceptual and scenic qualities

2.28 Landscapes that are relatively remote or tranquil tend to be more sensitive to solar PV development, since solar panels may be perceived as intrusive. Landscapes which are relatively free from overt human activity and disturbance, and which have a perceived naturalness or a strong feel of traditional rurality, will therefore be more sensitive. Qualities such as tranquillity can be found even in settled areas, where the influence of overtly modern development is reduced. Landscapes close to settlements can also be valued for their accessibility. Solar PV development will generally be less intrusive in landscapes which are strongly influenced by modern development, including settlement, industrial and commercial development and infrastructure.

2.29 Landscapes that have a high scenic quality (including those within the National Landscapes) will be more sensitive. Scenic qualities can include contrasts and combinations of landform and landcover. Scenic qualities are recorded in the Landscape Character Assessment, National Landscape Management Plans and noted from fieldwork.

- Low: A landscape without attractive character, with no pleasing combinations of features, visual contrasts and/or dramatic elements, such as industrial areas or derelict land.
- Low-Moderate: A landscape with much human activity and modern development, such as industrial areas. A landscape of limited attractive character, with few pleasing combinations of features, visual contrasts and/or dramatic elements.
- Moderate: A rural or semi-rural landscape with much human activity and dispersed modern development, such as settlement fringes. A landscape of intermittently attractive character, with occasional pleasing combinations of features, visual contrasts and/or dramatic elements. Some may be within a National Landscape.
- Moderate-High: A rural landscape with some modern development and human activity, such as intensive farmland. A landscape of attractive character, with some pleasing combinations of features, visual contrasts and/or dramatic elements. Most or all may be designated as a National Landscape.
- High: A more naturalistic landscape and/or one with little modern human influence and development. A landscape of consistently attractive character, with pleasing combinations of features, visual contrasts and/or dramatic elements. All or the vast majority is designated for its scenic qualities. A tranquil landscape with little or no overt sign of modern human activity and development.

Wind energy assessment criteria

Landform and scale (including sense of openness/enclosure)

2.30 A flat or gently sloping landform is likely to be less sensitive to wind energy development than a landscape with a dramatic rugged landform, distinct

landform features (including prominent hills and valleys) or pronounced undulations. Larger scale landforms are likely to be less sensitive than smaller scale landforms – because turbines may appear out of scale, detract from visually important landforms or appear visually confusing (due to turbines being at varying heights) in the latter types of landscapes. Landscapes with frequent human scale features, such as settlements, farmsteads, small farm woodlands, trees and hedges may be particularly sensitive to larger turbines. This is because large features such as wind turbines may dominate smaller scale features within the landscape.

- Low: An extensive lowland flat landscape or plateau with few/no human-scale features; often a larger scale landform.
- Low-Moderate: A simple gently rolling landscape with occasional human-scale features such as trees and domestic buildings; likely to be a medium-large scale landform.
- Moderate: An undulating landscape, perhaps also incised by valleys, likely to be a medium scale landform, with hidden areas as well as some visible slopes.
- Moderate-High: A landscape with distinct landform features, and/or irregular in topographic appearance (which may be large in scale), or a smaller scale landform. The landscape may contain prominent, visible slopes and frequent human-scale features.
- High: A landscape with a rugged landform or dramatic landform features (which may be large in scale), or a small scale or intimate landform often with a dense distribution of human-scale features, such as woodland. The landform may be very steep with exposed, visible slopes.

Landcover (including field and settlement patterns)

2.31 Simple, regular landscapes with extensive areas of consistent land cover are likely to be less sensitive to wind energy development than landscapes with more complex or irregular land cover patterns, smaller and/or irregular field

sizes. This is because landscapes with simple, regular land cover are less likely to be negatively affected by the footprint and access roads of wind turbine installations.

- Low: An open, continuous landscape with uniform land cover, or an urban or ‘brownfield’ landscape.
- Low-Moderate: A landscape of large open fields of modern enclosure, with little variety inland cover. A landscape which contains areas of brownfield sites or urban influences.
- Moderate: A landscape with medium sized fields (or a mix of modern and historic enclosure) and some variations in land cover. A rural landscape which may contain some brownfield sites or urban influences.
- Moderate-High: A landscape with irregular or small-scale fields and a variety in land cover. A rural landscape, perhaps with some areas of semi-natural land cover.
- High: A landscape with a strong variety in land cover, complex field patterns and/or semi-natural land cover. The field pattern may be characterised by small-scale, ancient fields.

Historic landscape character

2.32 Landscapes which contain important archaeological or historic features or historic associations are likely to have a higher level of sensitivity to wind energy development. Historical features may be in the form of historic land cover types and field systems, areas of buried archaeology, historic designed landscapes such as a Registered Park and Garden, or buildings/structures designated for their historical significance.

2.33 Areas which make a significant contribution to the setting of a historical feature or landscapes may also have higher sensitivity to wind energy development. Landscapes that are primarily of modern influence and origin will have a lower sensitivity to wind energy development.

- Low: A landscape with relatively few historic features important to the character of the area, and little time depth (i.e. large intensively farmed fields).
- Low-Moderate: A landscape with a small number of historic features important to the character area and some time-depth.
- Moderate: A landscape with some visible historic features of importance to character, and a variety of time depths.
- Moderate-High: A landscape with many historic features important to the area and a strong sense of time depth.
- High: A landscape with a high density of historic features (many designations) important to the character of the area and great time depth.

Visual character (including skylines)

2.34 The relative visibility of a landscape may influence its sensitivity to wind development. An elevated landscape such as a hill range or plateau, which is viewed from other landscapes, may be more sensitive than a landscape with limited visibility. Landscapes which have important visual relationships with other areas, for example where one area provides a backdrop to or is overlooked from a neighbouring area (which may be a designated landscape such as a National Landscape), are considered more sensitive than those with few visual relationships. The extent of inter-visibility may be modified by the importance of these views to appreciation of the landscape, and whether adjacent landscapes provide a setting for one another. Areas with frequent visual receptors (e.g. a strong network of rights of way/promoted viewpoints) will have higher levels of sensitivity.

2.35 Prominent and distinctive and/or undeveloped skylines, or skylines with important landmark features, are likely to be more sensitive to wind energy development because turbines may detract from these skylines as features in the landscape, or draw attention away from existing landform or landmark features on skylines. Important landmark features on the skyline might include historic features or monuments as well as landforms. Where skylines are

affected by development, e.g. through the presence of electricity pylons or existing turbines, the addition of turbines of a different scale may lead to visual confusion. Therefore, the presence of existing development cannot always assume a lower sensitivity to new development.

- Low: An enclosed, self-contained landscape, or one with weak connections to neighbouring areas. A landscape in which skylines are not prominent, and there are no important landmark features on the skyline.
- Low-Moderate: A landscape with limited connections to neighbouring areas, and/or where adjacent landscapes are not visually related. A landscape in which skylines are simple, flat or gently convex and/or there are very few landmark features on the skyline – other skylines in adjacent LCTs may be more prominent.
- Moderate: A landscape which has some intervisibility with neighbouring areas, and/or where relationships between adjacent landscapes are of more importance. A landscape with some prominent skylines, but these are not particularly distinctive – there may be some landmark features on the skyline.
- Moderate-High: A landscape which is intervisible with several areas, and/or where adjacent areas are strongly interrelated. A landscape with prominent skylines that may form an important backdrop to views from settlements or important viewpoints, and/or with important landmark features.
- High: A landscape which has important visual relationships with one or more neighbouring areas. It or the landscape(s) it is visible from is designated as a National Landscape. A landscape with prominent or distinctive undeveloped skylines, or with important landmark features on skylines.

Perceptual and scenic qualities

2.36 Landscapes that are relatively remote or tranquil tend to be more sensitive to wind energy, since turbines may be perceived as intrusive. Landscapes which are relatively free from overt human activity and disturbance, and which

have a perceived naturalness or a strong feel of traditional rurality, will therefore be more sensitive. Qualities such as tranquillity can be found even in settled areas, where the influence of overtly modern development is reduced. Landscapes close to settlements can also be valued for their accessibility. Wind energy development will generally be less intrusive in landscapes which are strongly influenced by modern development, including settlement, industrial and commercial development and infrastructure.

2.37 Landscapes that have a high scenic quality (including those within the National Landscapes) will be more sensitive to wind energy development. Scenic qualities can include contrasts and combinations of landform and landcover. Scenic qualities are recorded in the Landscape Character Assessment, National Landscape Management Plan and noted from fieldwork.

- Low: A landscape without attractive character, with no pleasing combinations of features, visual contrasts and/or dramatic elements, such as industrial areas or derelict land. A landscape with much human activity and modern development, such as industrial areas.
- Low-Moderate: A landscape of limited attractive character, with few pleasing combinations of features, visual contrasts and/or dramatic elements. A rural or semi-rural landscape with much human activity and dispersed modern development, such as settlement fringes.
- Moderate: A landscape of intermittently attractive character, with occasional pleasing combinations of features, visual contrasts and/or dramatic elements. Some may be within a National Landscape. A rural landscape with some modern development and human activity, such as intensive farmland.
- Moderate-High: A landscape of attractive character, with some pleasing combinations of features, visual contrasts and/or dramatic elements. Most or all may be designated as a National Landscape. A more naturalistic landscape and/or one with little modern human influence and development.
- High: A landscape of consistently attractive character, with pleasing combinations of features, visual contrasts and/or dramatic elements. All or

the vast majority is designated for its scenic qualities. A tranquil landscape with little or no overt sign of modern human activity and development.

Making overall judgements on landscape sensitivity

As with all assessments based upon data and information which is to a greater or lesser extent subjective, some caution is required in its interpretation. This is to avoid the suggestion that certain landscape features or qualities can automatically be associated with certain sensitivities – the reality is that an assessment of a landscape's sensitivity to development is the result of a complex interplay of often unequally weighted variables (or 'criteria').

2.38 There may be one criterion that has a strong influence on landscape sensitivity in a particular LCT (or LCA) which increases the overall landscape sensitivity score (an example for solar PV might be a landscape with a prominent/highly visible ridgeline, or significant coverage of semi-natural habitats). There may also be criteria that produce conflicting scores. For example, a small-scale landscape with historic field patterns may also afford greater screening of panels from topography and a dense network of hedgerows. A conflicting example for wind could be in the context of a settled landscape. While it would have a greater human influence (indicating a lower sensitivity to new development), it would also contain more human-scale features that could be affected by large-scale wind turbines (indicating a higher sensitivity). Conversely, a more remote landscape is likely to lack human-scale features but is likely to present a higher sensitivity from a perceptual point of view.

2.39 In these situations, a professional judgement is made on overall landscape sensitivity, taking all criteria into account in the context of their importance to the landscape character and quality of the individual LCT/LCA.

2.40 Landscape sensitivity is expressed on five-level scale from low sensitivity to high sensitivity. A landscape of higher sensitivity is likely to experience a greater impact on landscape character as a result of a given development type/scale, and a landscape of lower sensitivity is likely to experience a lesser impact on landscape character.

2.41 As this is a strategic study, a smaller-scale of development will generally result in a smaller impact on the landscape character and therefore a lower sensitivity. As the scale of development increases, so does the likely impact and landscape sensitivity.

Presentation of results

2.42 The full landscape sensitivity assessments for each of the LCTs are presented in separate assessment profiles. These are structured as follows:

- A map of the LCT, with component Character Areas and representative photographs;
- A summary description of the LCT against each of the assessment criteria;
- An overall discussion on the landscape sensitivity of the LCT to new solar PV and wind energy developments, referencing particular features, attributes or locations which may be more or less sensitive;
- Landscape sensitivity scores for new solar PV and wind energy development within each of the different development scenarios, for each LCA.

2.43 The next chapter sets out the overall results of the assessments.

Chapter 3

Landscape Sensitivity Assessment Results

3.1 The LCTs within South Oxfordshire and Vale of White Horse contain areas of higher and lower landscape sensitivity that vary from the overall scores. It is therefore very important to take note of the content of the individual assessment profiles, including any commentary which highlights areas which could be more sensitive to solar PV or wind energy developments.

3.2 Figures 3.1 to 3.5 present a spatial representation of the landscape sensitivity of South Oxfordshire and Vale of White Horse to new solar PV development (by the five different size bandings). These are followed by Figures 3.6 to 3.10, which show the overall sensitivity to the five different size scenarios for wind energy development.

These maps should always be referred to alongside the individual assessment profiles which set out the scores and reasonings behind them.

Generic guidance for accommodating solar and wind energy in South Oxfordshire and Vale of White Horse

3.3 The following section provides some generic guidance on siting renewable energy development in the study area focussing on minimising landscape and visual effects and making developments an accepted feature of the environment. While it is recognised that schemes need to be sited and designed to ensure operational efficiency, this is a matter for developers, and needs to be

balanced with adequate mitigation of adverse impacts. The siting and design of schemes is a key aspect of such mitigation.

3.4 In all cases the strategy for the relevant LCA within the South Oxfordshire and Vale of White Horse Landscape Character Assessment should be considered when choosing potential sites for development.

3.5 All renewable energy development should aim to be sensitively sited.

- Site renewable energy development away from dramatic rugged landforms or valued landform features. The most suitable sites are likely to be on large scale smooth, convex or flat landforms. For example, site solar PV development on lower slopes/undulating lowlands, rather than upper slopes where they are more visually prominent.
- Select sites in simple, regular landscapes with extensive areas of consistent ground cover over landscapes with more complex or irregular land cover patterns and landscapes with frequent human scale features (subject to satisfying other sensitivities).
- Seek to avoid areas with a concentration of semi-natural habitats.
- Seek to avoid siting renewable energy development where it could detract from undeveloped areas free from human influence and perceived ‘naturalness’.
- Consider locations in association with hard surfacing or built elements (e.g. larger business parks and reclaimed, industrial and man-made landscapes) where other landscape sensitivities are not compromised.
- Avoid siting renewable energy development on landscapes with intrinsic historic landscape character significance or potential for preserved archaeological evidence (e.g. fields with a medieval historic character).
- Protect the character of Conservation Areas (including views integral to their character), the setting to Listed Buildings (where the character of the landscape is an important part of a listed building’s setting), and Registered/ local historic parks and gardens and battlefields (including views to and from the heritage landscape, particularly designed views).

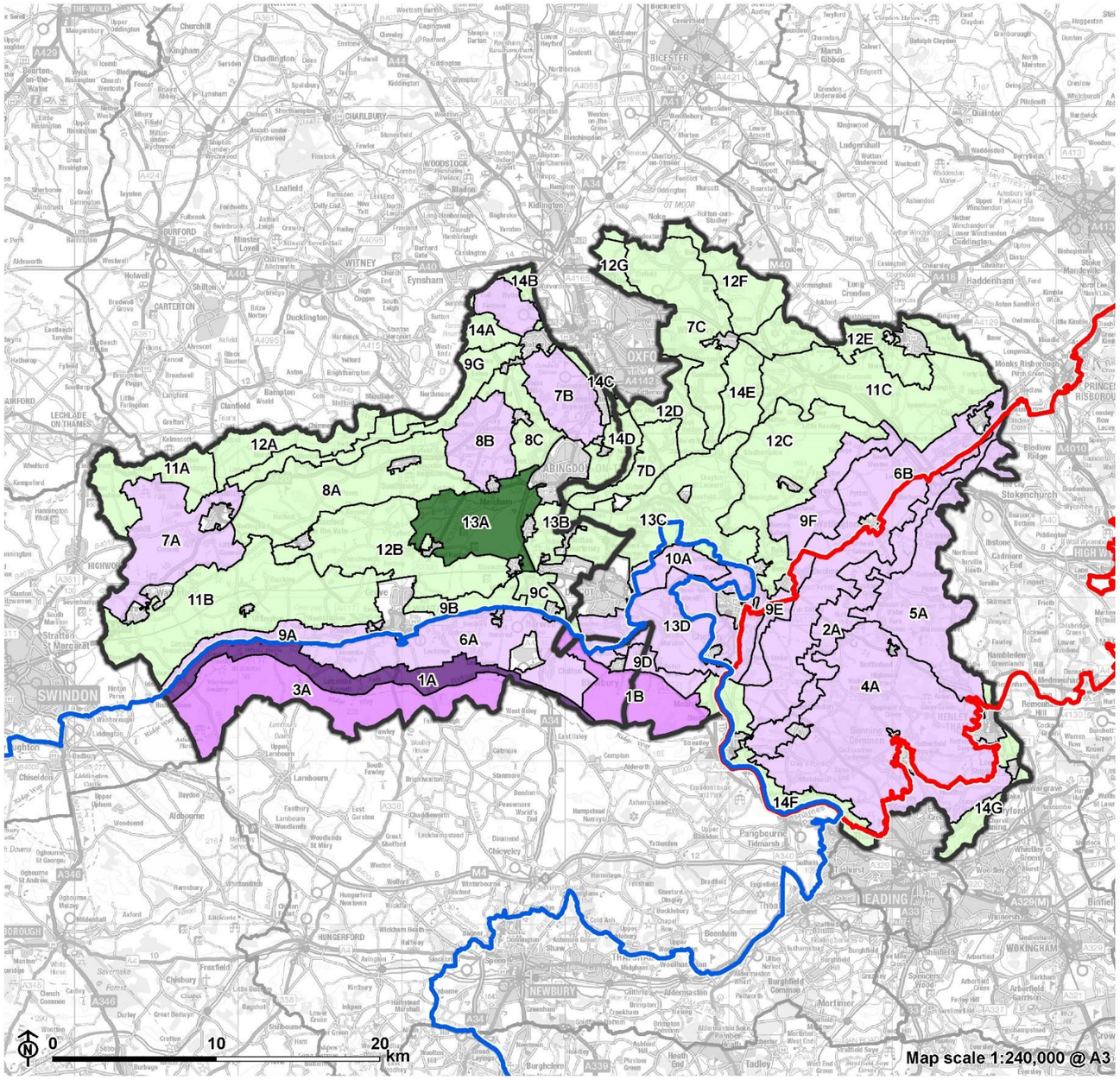
- Ensure siting of renewable energy development does not adversely affect the distinctive characteristics and special qualities of the Chilterns and North Wessex Downs, as set out in the Management Plans, or their settings.
- Ensure the siting of renewable energy development does not damage the special qualities of the landscape as recorded in the South Oxfordshire and Vale of White Horse Landscape Character Assessment descriptions and is designed with reference to landscape guidance.
- Significant effects on views from important viewpoints, popular tourist and scenic routes and settlements should be avoided where possible or minimised through careful siting.
- Avoid selecting sites for solar PV development which have Public Rights of Way running through them. Care should also be taken where Public Rights of Way are adjacent to sites.
- Avoid selecting sites on important undeveloped or distinctive skylines, or skylines with important cultural or historic landmark features.
- Consider the landscape effects of transmission infrastructure when siting development, aiming for sites that will minimise the need for above ground transmission infrastructure, particularly through National Landscapes. Undergrounding cables may mitigate effects in sensitive locations.
- Consider sites where areas of existing vegetation, such as woodland or high hedgerows could screen ground-level features of renewable energy developments (such as fencing, tracks and transformers) and solar PV panels rather than open and unenclosed landscapes. Since commercial scale wind turbines cannot be hidden, careful site selection as well as choice of turbine type and layout is the most effective way of minimising landscape and visual effects.
- Consider potential effects of transporting turbines and solar PV panels to site, and the possible limitations presented by winding narrow lanes bounded by hedgerows.
- Seek to keep developments within one LCT (particularly as perceived in sensitive views) so that the development does not span across marked changes in character on the ground, such as changes in topography. For

example, set turbines back from breaks of slope, avoiding the effect of turbines 'spilling' into adjacent valleys or lowlands, or keep solar PV panels set back from the edges of a plateau landscape to minimise effects on the surrounding area.

Landscape enhancement

- Continue the existing land use underneath the turbines or solar PV panels so that the landscape flows underneath and around these features, or link land use to adjoining land uses especially if this can create more robust semi natural habitats and reduce habitat fragmentation.
- Provide enhanced management of landscape features, habitats and historic assets as part of a renewable energy development, including contributing to wider landscape scale targets in the South Oxfordshire and Vale of White Horse Landscape Character Assessment or other relevant documents.
- Screening development of solar PV panels is important, however care needs to be taken with regards to the impact of screening on existing views and mitigation, which should fit in with the local landscape character. Native tree or shrub species should be used for any screening.
- Retained and new planted features such as vegetation around solar PV developments should be given sufficient space so that shade on the solar panels does not result in inappropriate maintenance of the vegetation.

Figure 3.1: Landscape sensitivity to very small scale (up to 1ha) solar energy development



South Oxfordshire and Vale of White Horse Strategic Renewable Energy Landscape Sensitivity Assessment
South Oxfordshire and Vale of White Horse Councils

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Figure 3.1: Landscape sensitivity to very small scale (up to 1 hectares) solar energy development

South Oxfordshire and Vale of White Horse
Neighbouring Local Authority
Landscape Character Area

National Landscape
Chilterns
North Wessex Downs

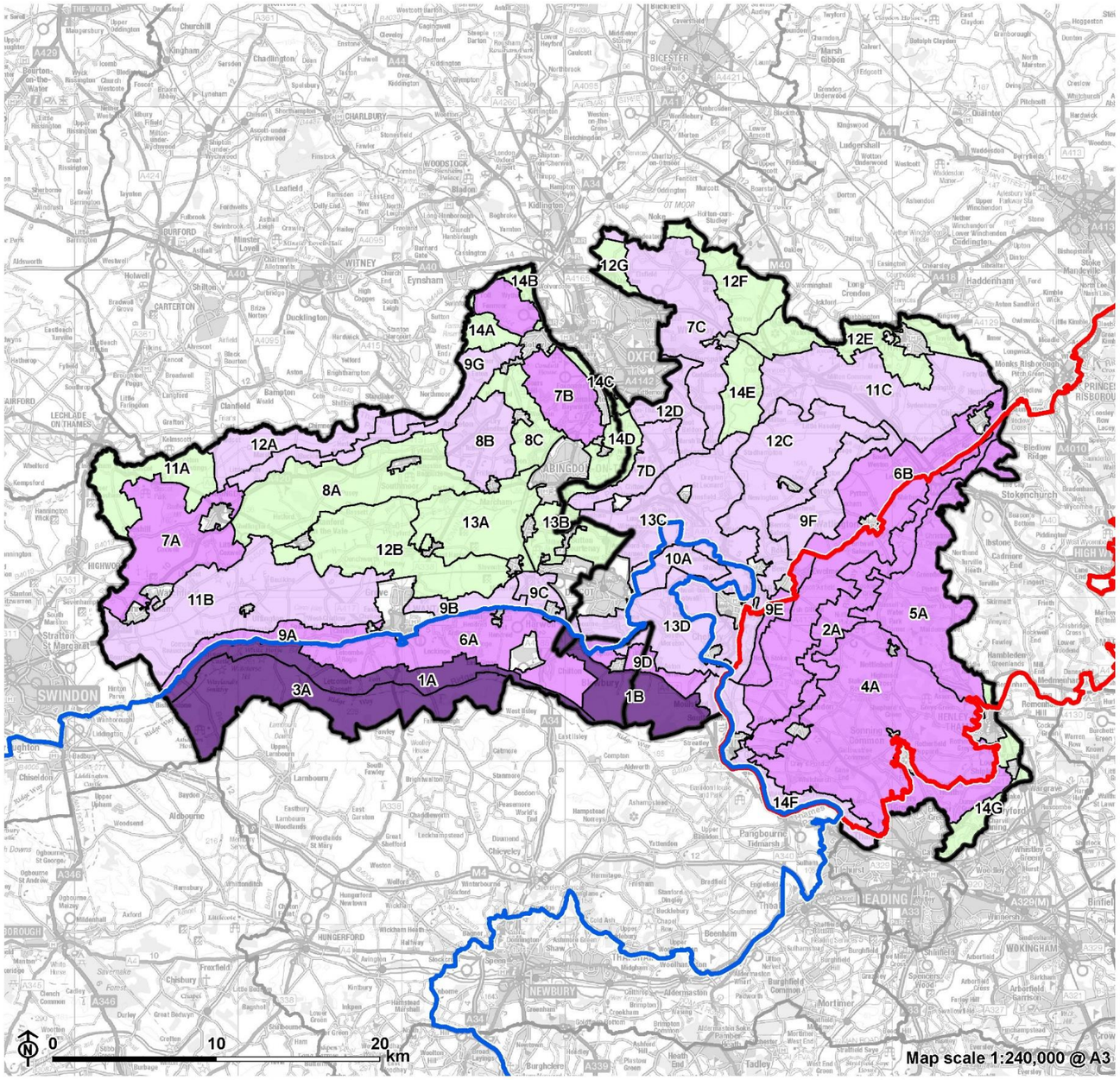
Landscape sensitivity to very small scale solar
High
Moderate high
Moderate
Low moderate
Low

Landscape Character Types
1. Open Chalk Escarpment and Upper Slopes
2. Wooded Chalk Escarpment
3. Open Chalk Dipslope
4. Wooded Chalk Plateau and Valleys
5. Wooded Chalk Ridges and Valleys
6. Chalk Escarpment Footslopes
7. Ridge Hilltops
8. Ridge Slope
9. Vale Edge Slopes
10. Lower Vale Hills
11. Upper Vale
12. Middle Vale
13. Lower Vale
14. River Valley

The labelled letters following the Landscape Character Type number denote different Landscape Character Areas within each Landscape Character Type

12315_Fig3_1_Landscape_Sensitivity_upto1h_Solar_r4_A3L 12/08/2024 EB:bournazel_j

Figure 3.2: Landscape sensitivity to small scale (1-5ha) solar energy development



South Oxfordshire and Vale of White Horse Strategic Renewable Energy Landscape Sensitivity Assessment
South Oxfordshire and Vale of White Horse Councils

Figure 3.2: Landscape sensitivity to small scale (1 - 5 hectares) solar energy development

- South Oxfordshire and Vale of White Horse
- Neighbouring Local Authority
- Landscape Character Area

National Landscape

- Chilterns
- North Wessex Downs

Landscape sensitivity to small scale solar

- High
- Moderate high
- Moderate
- Low moderate
- Low

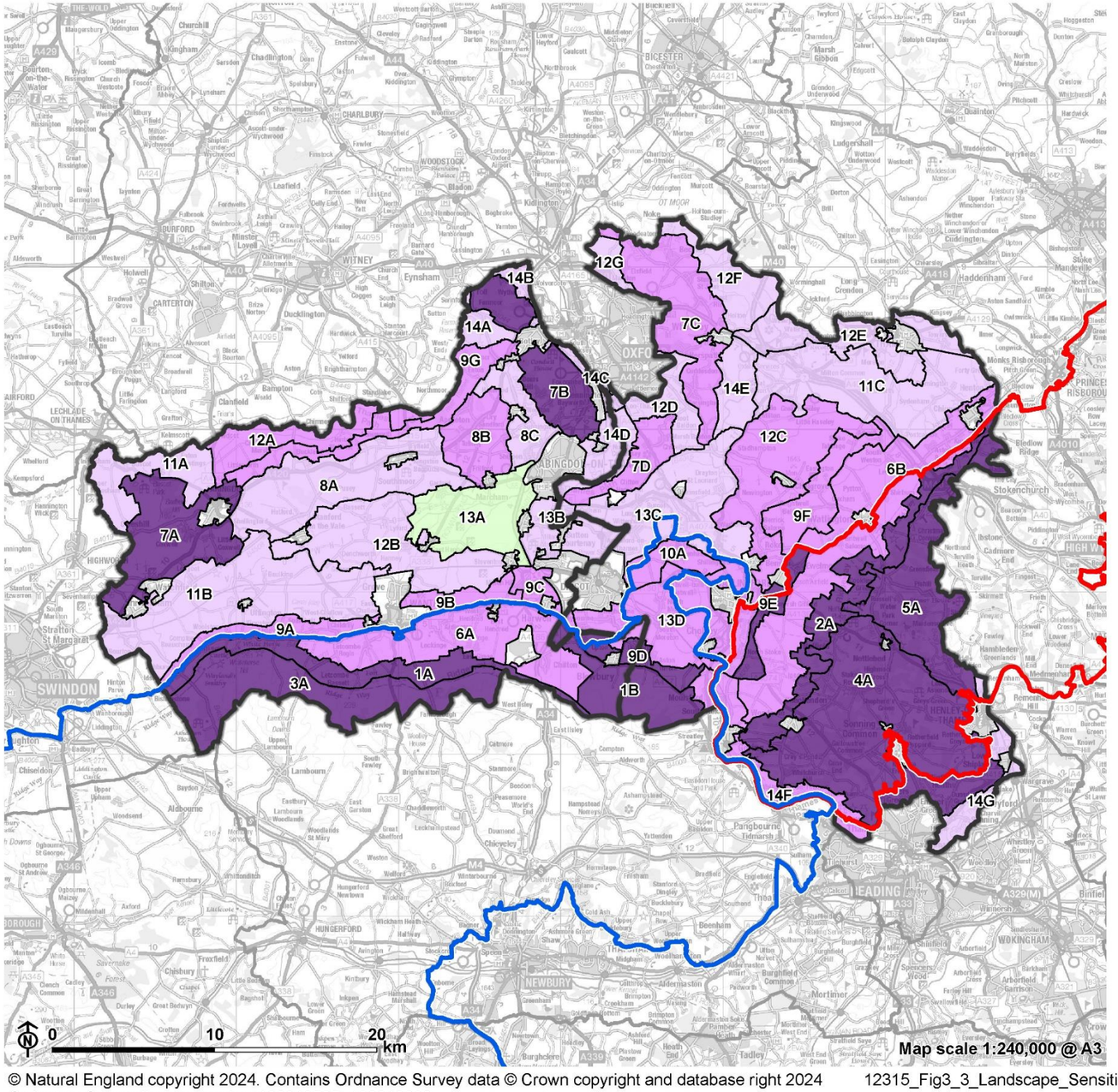
Landscape Character Types

1. Open Chalk Escarpment and Upper Slopes
2. Wooded Chalk Escarpment
3. Open Chalk Dipslope
4. Wooded Chalk Plateau and Valleys
5. Wooded Chalk Ridges and Valleys
6. Chalk Escarpment Footslopes
7. Ridge Hilltops
8. Ridge Slope
9. Vale Edge Slopes
10. Lower Vale Hills
11. Upper Vale
12. Middle Vale
13. Lower Vale
14. River Valley

The labelled letters following the Landscape Character Type number denote different Landscape Character Areas within each Landscape Character Type

12315_Fig3_2_Landscape_Sensitivity_1to5h_Solar_r4_A3L 12/08/2024 EB:bournazel_j

Figure 3.3: Landscape sensitivity to medium scale (5-20ha) solar energy development



South Oxfordshire and Vale of White Horse Strategic Renewable Energy Landscape Sensitivity Assessment
South Oxfordshire and Vale of White Horse Councils

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Figure 3.3: Landscape sensitivity to medium scale (5 - 20 hectares) solar energy development

- South Oxfordshire and Vale of White Horse
- Neighbouring Local Authority
- Landscape Character Area

National Landscape

- Chilterns
- North Wessex Downs

Landscape sensitivity to medium scale solar

- High
- Moderate high
- Moderate
- Low moderate
- Low

Landscape Character Types

1. Open Chalk Escarpment and Upper Slopes
2. Wooded Chalk Escarpment
3. Open Chalk Dipslope
4. Wooded Chalk Plateau and Valleys
5. Wooded Chalk Ridges and Valleys
6. Chalk Escarpment Footslopes
7. Ridge Hilltops
8. Ridge Slope
9. Vale Edge Slopes
10. Lower Vale Hills
11. Upper Vale
12. Middle Vale
13. Lower Vale
14. River Valley

The labelled letters following the Landscape Character Type number denote different Landscape Character Areas within each Landscape Character Type

12315_Fig3_3_Landscape_Sensitivity_5to20h_Solar_r4_A3L 12/08/2024 EB:bournazel_j

Figure 3.4: Landscape sensitivity to large scale (20-50ha) solar energy development

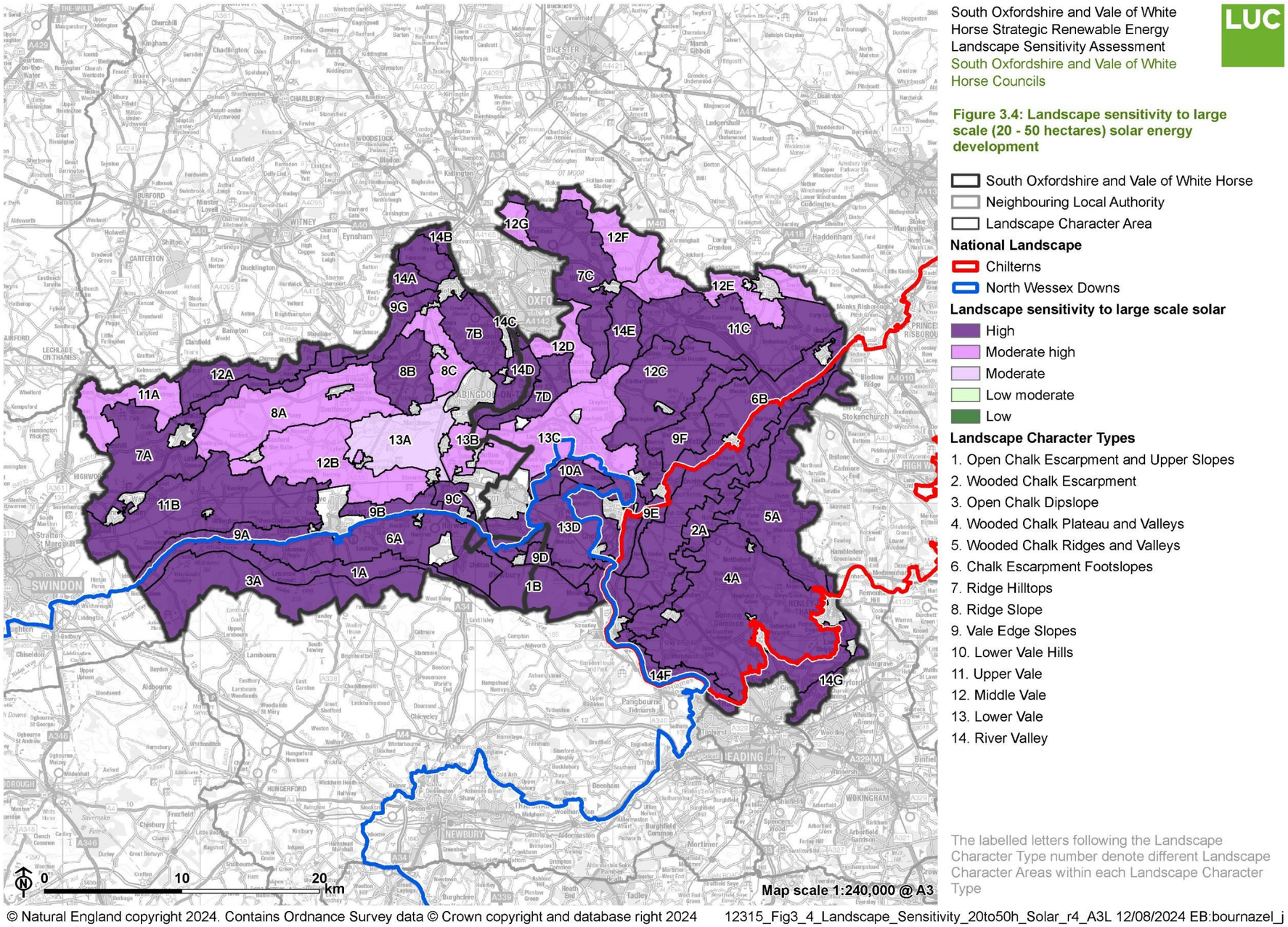

Figure 3.5: Landscape sensitivity to very large scale (50-120ha) solar energy development

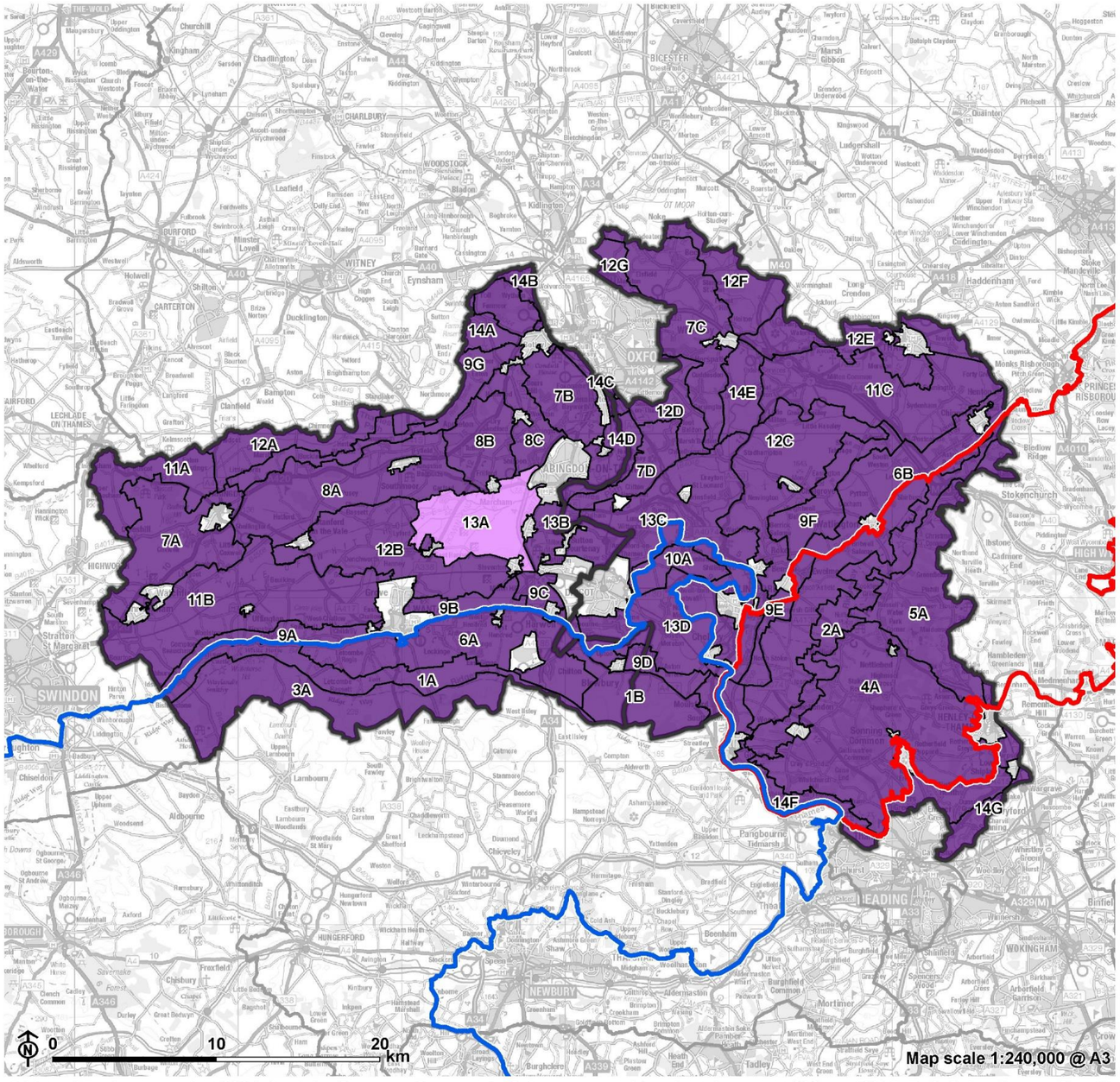

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Figure 3.5: Landscape sensitivity to very large scale (50 - 120 hectares) solar energy development

- South Oxfordshire and Vale of White Horse
- Neighbouring Local Authority
- Landscape Character Area

National Landscape

- Chilterns
- North Wessex Downs

Landscape sensitivity to very large scale solar

- High
- Moderate high
- Moderate
- Low moderate
- Low

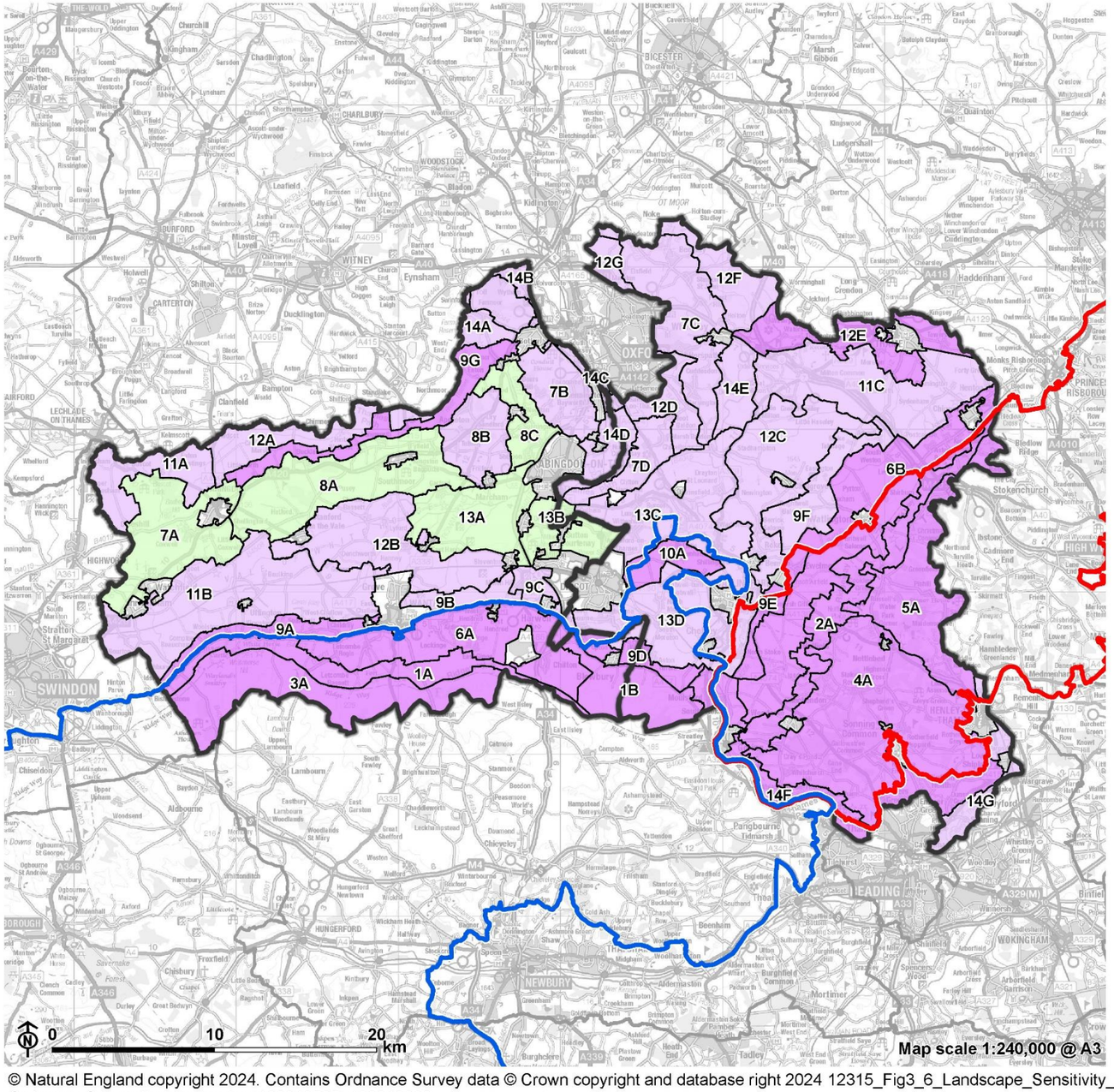
Landscape Character Types

1. Open Chalk Escarpment and Upper Slopes
2. Wooded Chalk Escarpment
3. Open Chalk Dipslope
4. Wooded Chalk Plateau and Valleys
5. Wooded Chalk Ridges and Valleys
6. Chalk Escarpment Footslopes
7. Ridge Hilltops
8. Ridge Slope
9. Vale Edge Slopes
10. Lower Vale Hills
11. Upper Vale
12. Middle Vale
13. Lower Vale
14. River Valley

The labelled letters following the Landscape Character Type number denote different Landscape Character Areas within each Landscape Character Type

12315_Fig3_5_Landscape_Sensitivity_50to120h_Solar_r4_A3L 12/08/2024 EB:bournazel_j

Figure 3.6: Landscape sensitivity to very small scale (<25 metres tip height) wind energy development



South Oxfordshire and Vale of White Horse Strategic Renewable Energy Landscape Sensitivity Assessment
South Oxfordshire and Vale of White Horse Councils

Figure 3.6: Landscape sensitivity to very small scale (<25 metres tip height) wind energy development

- South Oxfordshire and Vale of White Horse
- Neighbouring Local Authority
- Landscape Character Area

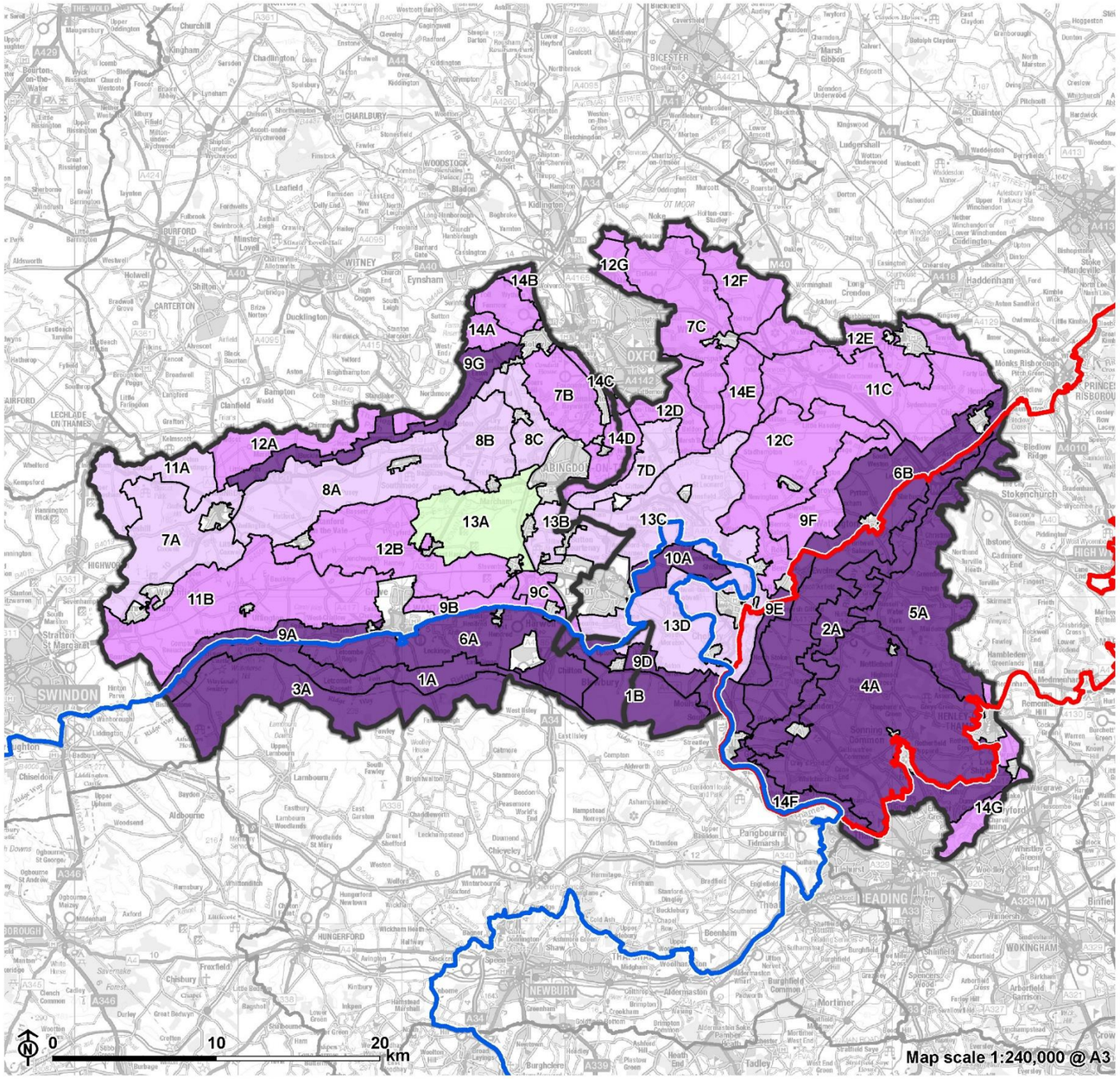
National Landscape
- Chilterns
- North Wessex Downs

Landscape sensitivity to very small scale wind
- High
- Moderate high
- Moderate
- Low moderate
- Low

Landscape Character Types
1. Open Chalk Escarpment and Upper Slopes
2. Wooded Chalk Escarpment
3. Open Chalk Dipslope
4. Wooded Chalk Plateau and Valleys
5. Wooded Chalk Ridges and Valleys
6. Chalk Escarpment Footslopes
7. Ridge Hilltops
8. Ridge Slope
9. Vale Edge Slopes
10. Lower Vale Hills
11. Upper Vale
12. Middle Vale
13. Lower Vale
14. River Valley

The labelled letters following the Landscape Character Type number denote different Landscape Character Areas within each Landscape Character Type

Figure 3.7: Landscape sensitivity to small scale (25-60 metres tip height) wind energy development



South Oxfordshire and Vale of White Horse Strategic Renewable Energy Landscape Sensitivity Assessment
South Oxfordshire and Vale of White Horse Councils

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Figure 3.7: Landscape sensitivity to small scale (25-60 metres tip height) wind energy development

South Oxfordshire and Vale of White Horse
Neighbouring Local Authority
Landscape Character Area

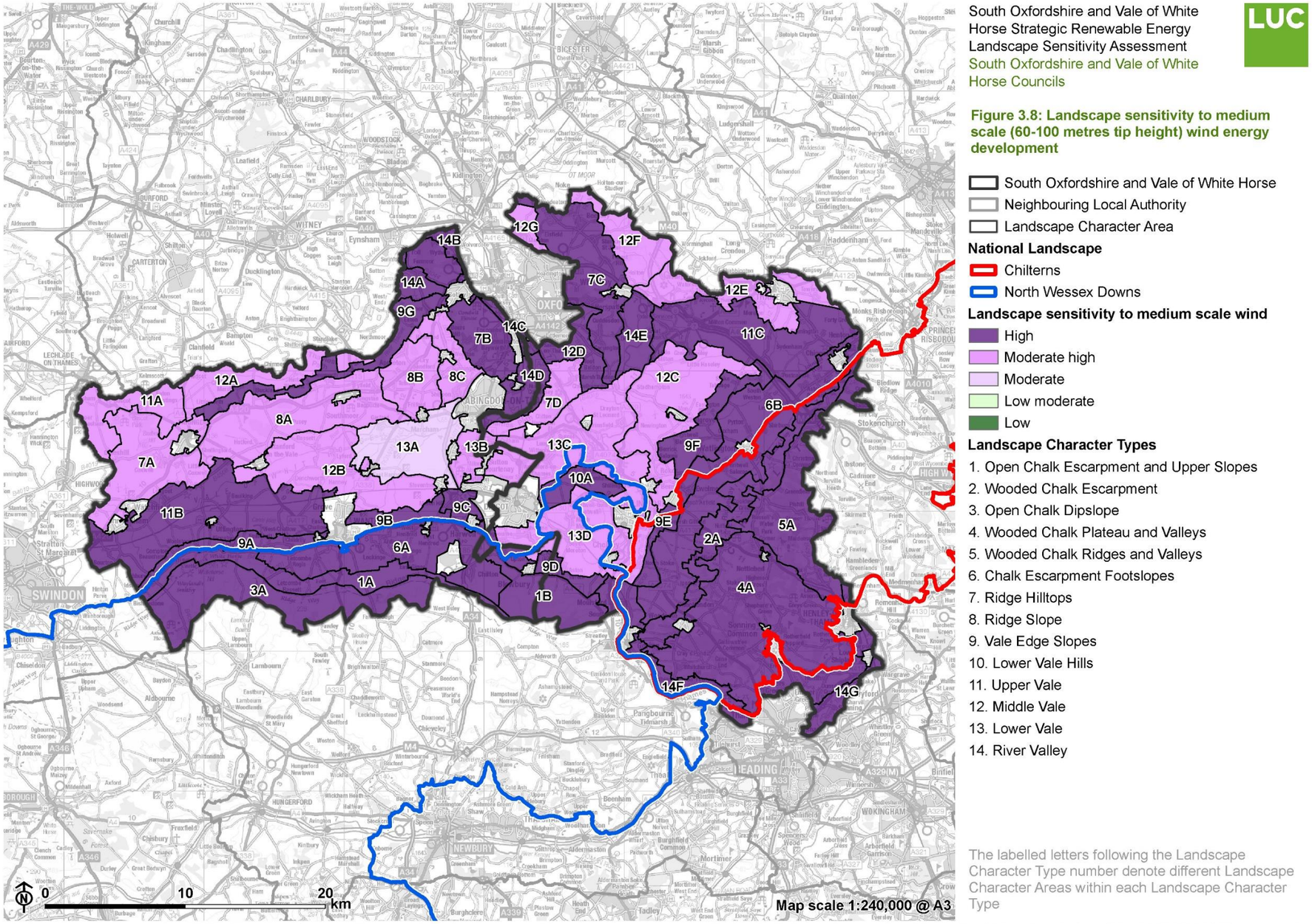
National Landscape
Chilterns
North Wessex Downs

Landscape sensitivity to small scale wind
High
Moderate high
Moderate
Low moderate
Low

Landscape Character Types
1. Open Chalk Escarpment and Upper Slopes
2. Wooded Chalk Escarpment
3. Open Chalk Dipslope
4. Wooded Chalk Plateau and Valleys
5. Wooded Chalk Ridges and Valleys
6. Chalk Escarpment Footslopes
7. Ridge Hilltops
8. Ridge Slope
9. Vale Edge Slopes
10. Lower Vale Hills
11. Upper Vale
12. Middle Vale
13. Lower Vale
14. River Valley

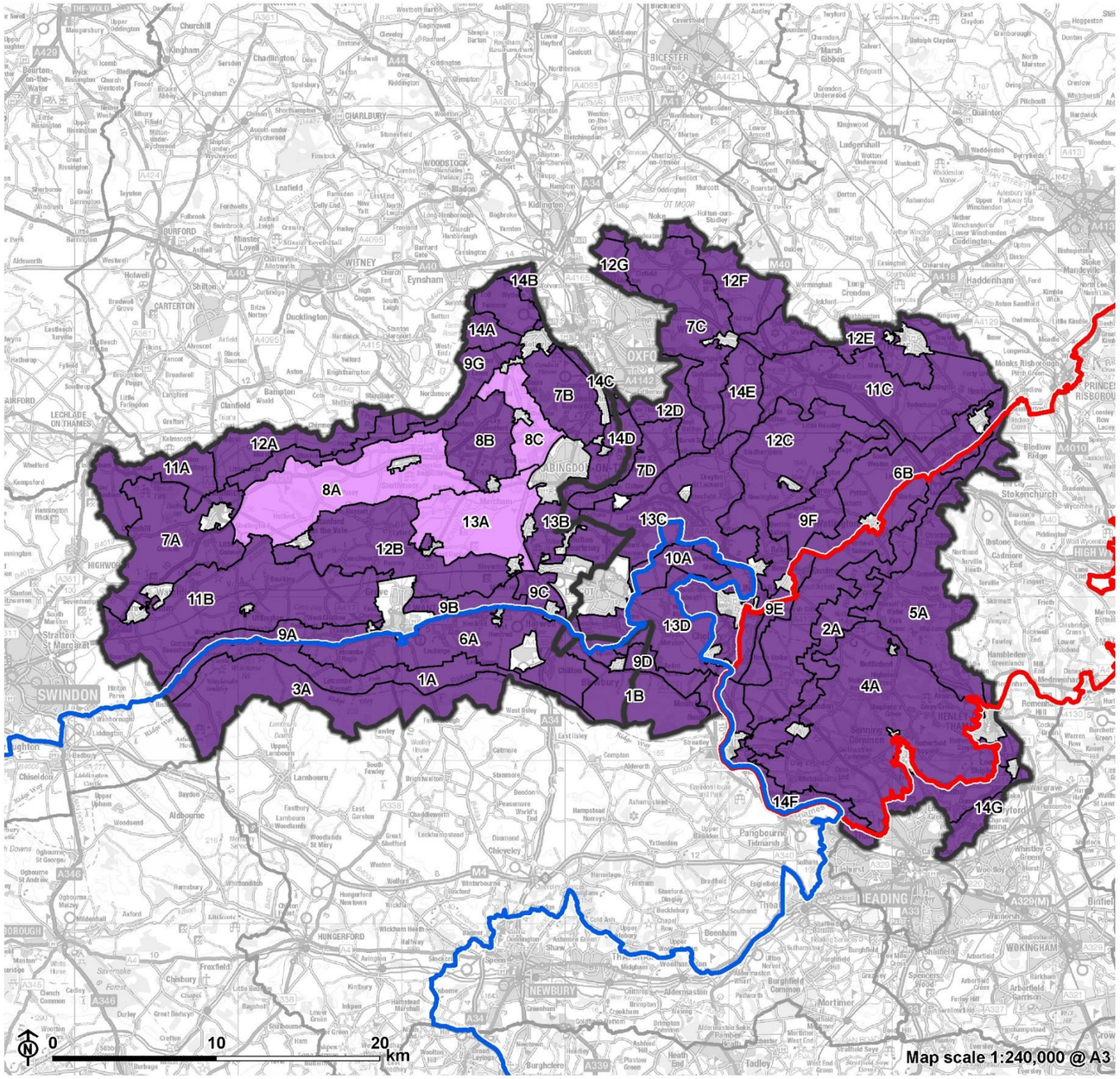
The labelled letters following the Landscape Character Type number denote different Landscape Character Areas within each Landscape Character Type

Figure 3.8: Landscape sensitivity to medium scale (60-100 metres tip height) wind energy development



12315_Fig3_8_Landscape_Sensitivity_60to100m_tip_wind_r4_A3L 12/08/2024 EB:bournazel_j

Figure 3.9: Landscape sensitivity to large scale (100 to 150 metres tip height) wind energy development



South Oxfordshire and Vale of White Horse Strategic Renewable Energy Landscape Sensitivity Assessment
South Oxfordshire and Vale of White Horse Councils

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Figure 3.9: Landscape sensitivity to large scale (100 - 150 metres tip height) wind energy development

South Oxfordshire and Vale of White Horse
Neighbouring Local Authority
Landscape Character Area

National Landscape
Chilterns
North Wessex Downs

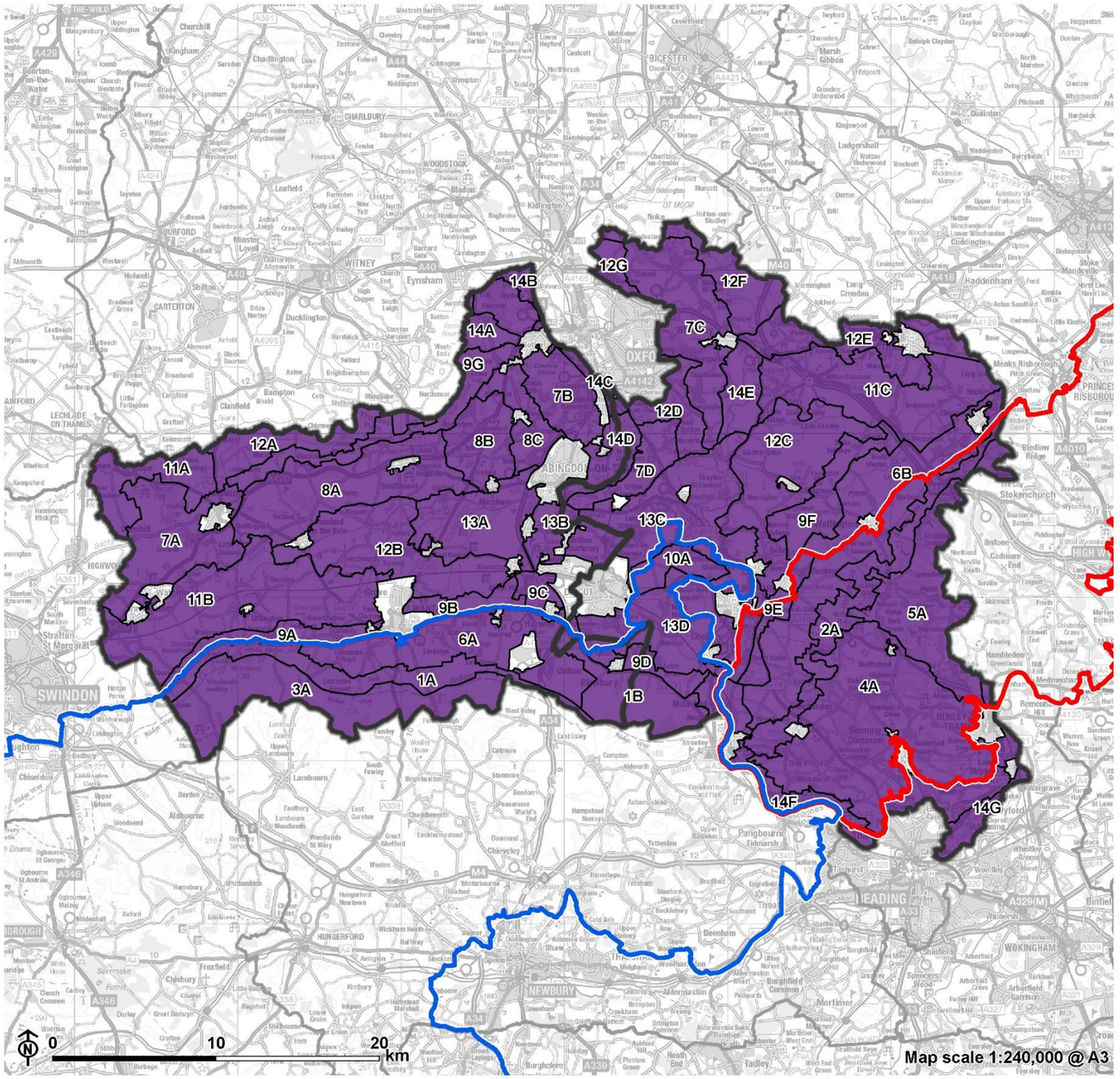
Landscape sensitivity to large scale wind
High
Moderate high
Moderate
Low moderate
Low

Landscape Character Types
1. Open Chalk Escarpment and Upper Slopes
2. Wooded Chalk Escarpment
3. Open Chalk Dipslope
4. Wooded Chalk Plateau and Valleys
5. Wooded Chalk Ridges and Valleys
6. Chalk Escarpment Footslopes
7. Ridge Hilltops
8. Ridge Slope
9. Vale Edge Slopes
10. Lower Vale Hills
11. Upper Vale
12. Middle Vale
13. Lower Vale
14. River Valley

The labelled letters following the Landscape Character Type number denote different Landscape Character Areas within each Landscape Character Type

12315_Fig3_9_Landscape_Sensitivity_100to150m_tip_wind_r4_A3L 12/08/2024 EB:bournazel_j

Figure 3.10: Landscape sensitivity to very large scale (150-220 metres tip height) wind energy development



South Oxfordshire and Vale of White Horse Strategic Renewable Energy Landscape Sensitivity Assessment
South Oxfordshire and Vale of White Horse Councils

Figure 3.10: Landscape sensitivity to very large-scale (150 - 220m tip height) wind energy development

South Oxfordshire and Vale of White Horse
Neighbouring Local Authority
Landscape Character Area

National Landscape
Chilterns
North Wessex Downs

Landscape sensitivity to very large scale wind
High
Moderate high
Moderate
Low moderate
Low

Landscape Character Types
1. Open Chalk Escarpment and Upper Slopes
2. Wooded Chalk Escarpment
3. Open Chalk Dipslope
4. Wooded Chalk Plateau and Valleys
5. Wooded Chalk Ridges and Valleys
6. Chalk Escarpment Footslopes
7. Ridge Hilltops
8. Ridge Slope
9. Vale Edge Slopes
10. Lower Vale Hills
11. Upper Vale
12. Middle Vale
13. Lower Vale
14. River Valley

The labelled letters following the Landscape Character Type number denote different Landscape Character Areas within each Landscape Character Type

12315_Fig3_10_Landscape_Sensitivity_150to220m_tip_wind_r4_A3L 12/08/2024 EB:bournazel_j

Appendix A

User Guide

A.1 The following list should assist in using available information to shape proposals for renewable energy development and assist in assessing and appraising planning applications.

1. What type of change is proposed?

2. To which Landscape Character Type (LCT) does the proposal relate (refer to Figure 2.1)? Is the site within a National Landscape or a Local Landscape Designation? If a proposal is close to the edge of two or more LCTs, all relevant profiles will need to be consulted.

3. To what degree does the site reflect the typical sensitivities identified in the sensitivity criteria for the LCT in question? Which of these sensitivities will be affected by the proposal and how?

4. Does the assessment text identify any areas of higher or lower sensitivity at Landscape Character Area (LCA) level that may be applicable to the proposal?

5. Are there any specific site opportunities for mitigation (including those identified in relevant LCA or LLD profiles)?

Guidance on undertaking Landscape and Visual Impact Assessment

Overall need/purpose

A.2 A landscape and visual impact assessment (LVIA) is a key part of assessing the effect of proposed wind energy or solar PV developments, including as part of the EIA process. An EIA may not be required for all developments however it is likely that a landscape and visual impact assessment or appraisal (LVIA) will be required to accompany the planning application. The level of detail required will be dependent upon the sensitivity of the site and the nature of the proposal and its potential effects. Pre-application discussions with South Oxfordshire and Vale of White Horse Councils are strongly recommended for all wind energy and solar PV applications. This will provide an opportunity to agree the scope, level of detail and presentation of the LVIA, and ensure that it is based on accurate and up-to-date information. The LVIA should address the key landscape issues raised by the proposals, providing information that is relevant, necessary and material to the decisions to be made. All renewable energy applications potentially affecting the North Wessex Downs or Chilterns National Landscapes will automatically require an LVIA.

A.3 General guidance on LVIA is provided in the Landscape Institute and Institute of Environmental Management and Assessment's 'Guidelines for Landscape and Visual Impact Assessment' (GLVIA3). However, the following guidance sets out the type of information that could be expected to be submitted as part of an LVIA for a solar PV or wind energy development in South Oxfordshire and Vale of White Horse. In addition, LVIAs for EIA developments should comply with the scoping opinion given by the planning authority where this has been sought.

A.4 The following section sets out the required components of an LVIA, in terms of information required to submit along with a planning application.

Project description

A.5 The planning application should include a description of the project at each phase in its life cycle in sufficient detail to allow the assessment of landscape and visual effects including:

- The location, layout, orientation and dimensions or extent of all plant and structures (including plans, elevations and sections);
- A description of the scale and duration of project activities during construction, operation, and decommissioning (including method of construction and traffic generation);
- Information on site access including routes for transport of renewables infrastructure, including any need for removal of landscape features;
- Location and size of temporary lay down areas, construction compounds, materials storage, temporary fencing, foundations and site cable runs;
- Excavation/levelling details and soil removal estimates (if applicable);
- Plans for site reinstatement;
- Details of any tracking or moving mechanisms;
- Location, specification and design of any structures, roads, hardstanding or storage buildings, temporary and permanent;
- Location and appearance of any signage, security features, lighting, fencing and onsite and offsite grid connection points (substation/switchgear cabinet);
- Plans for landscape mitigation measures and/or landscape enhancement; and
- Plans for decommissioning (removal of infrastructure and ancillary structures, proposals for restoration and future land management).

A.6 The LVIA should highlight those aspects of the development that are the key sources of landscape and visual change.

Baseline studies

A.7 The baseline studies should set out the existing conditions within the study area. The study area should be agreed with the planning authority. Information on land use, landscape features, landscape character and landscape designations should be provided, drawing on the Landscape Character Assessments and National Landscape (AONB) Management Plans (where relevant to the site in question). A field survey should be undertaken to supplement desk based information.

A.8 The landscape baseline should be evaluated in accordance with the 'Guidelines for Landscape and Visual Impact Assessment' (3rd Edition) – known as GLVIA3.

A.9 A zone of theoretical visibility (ZTV) should be prepared to indicate the area over which the renewable energy development may be seen. These should consider all components of the renewable energy development e.g. solar PV panels and associated infrastructure. ZTVs should be used, alongside fieldwork, to identify representative assessment viewpoints. These viewpoints should be discussed and agreed with the planning authority and other stakeholders. The number of viewpoints required will vary depending on the size of the development and sensitivity of the location. Priority should be given to views from distances of less than 3km and from sensitive locations (e.g. residential areas, areas popular with visitors or for outdoor recreation where views may be focussed on the landscape and recognised/iconic views). If the development is visible from a protected landscape there will be a requirement for at least one viewpoint from that landscape. The purpose for selection should be recorded within the LVIA.

Mitigation

A.10 As a consequence of the assessment process there are likely to be modifications to the scheme design to minimise landscape and visual effects,

particularly for larger schemes. In addition, there may be measures to prevent, reduce or offset significant adverse effects. These should be described in terms of relationship to/conservation of valued landscape features, relationship to landscape character (particularly topography, scale, landform and landscape pattern), and appearance from sensitive viewpoints and designated landscape. All mitigation measures should be described and an indication of how they will be implemented provided. Mitigation itself may have an impact on the landscape character, for example, hedgerow screening for a solar PV development could interrupt important long-distance views.

A.11 A description of the main reasons for site selection and any alternatives in site design or layout would also be helpful.

Enhancement

A.12 Enhancement aims to improve the character and quality of the landscape. It may take many forms, including improved land management or creation of new landscapes or features. Landscape enhancement, as part of a proposal, will be looked upon favourably.

Description of effects

A.13 This section should systematically identify and describe the likely effects of the proposal, identifying magnitude of change as a deviation from baseline conditions. Methods should be clearly set out. The assessment should cover effects at construction, operational and decommissioning phases and should consider direct, indirect, secondary, short, medium and long term effects. Effects on landscape features/fabric, landscape character, landscape values and visual amenity should be assessed.

- Effects on landscape features/fabric should consider loss of elements (e.g. hedges, trees).

- Effects on landscape character should describe the direct changes that will occur to the character of the landscape in which the proposal is located and the indirect changes to character of landscapes from where the development will be visible – this should include how the renewable energy development will affect perceptions of character and how widespread and prominent the changes will be.
- Effects on landscape values should describe any potential changes in special qualities of landscapes as recorded in Landscape Character Assessments. Particular weight should be given to conserving and enhancing the natural beauty and protecting the special qualities of protected landscapes, focussing on the reasons for designation referred to in their Management Plans.
- Effects on visual amenity should describe and illustrate the extent of visibility and record changes in views from the representative assessment viewpoints with reference to photographs and visualisations. The assessment needs to ensure that the representative viewpoints and visualisations are used to explain the impact of the scheme on visual receptors (e.g. on roads or public rights of way) across the whole route, rather than just spot points.
- Effects on settlements and individual properties should also be considered where relevant.

Assessment of significance

A.14 The significance of effects should be assessed by reference to GLVIA 3. The assessment should identify which effects are considered to be significant in the context of the EIA Regulations (for EIA development), as well as which are adverse or beneficial. Methods should be clearly set out and any assumptions clearly stated. The report should acknowledge that when assessments result in multiple negative effects, even when these are not classified as significant under EIA regulations, the cumulative effect of these can be significant.

Presentation of the LVIA

A.15 The document should be clear and logical in its layout and presentation. It should be a balanced document providing an unbiased account of the landscape and visual effects, with reasoned and justifiable arguments. A glossary of technical terms and reference list would also be helpful. For EIA development, a non-technical summary should be provided to enable a non-specialist to understand the landscape and visual effects of the proposal – this should include a summary description of the development, the aspects of landscape character and visual amenity likely to be significantly affected, and the mitigation measures to be implemented.

Maps and illustrations to accompany an LVIA

A.16 The number of maps and illustrations may vary according to the sensitivity of the site and type of proposal. Where possible, a suitable OS base should be used to indicate vegetation and public rights of way.

A.17 As a guide, the following illustrations will typically be required as part of an LVIA (see next section for maps and figures required as part of a cumulative assessment):

- A site layout plan showing position of infrastructure, access arrangements, location of any compounds, and all ancillary elements for the development in the context of the physical landscape fabric (this may already form part of the planning application in which case it can be cross-referenced);
- National character areas within the study area;
- Landscape Character Areas/Types (distance dependent upon scale of development);
- National landscape designations, open access land and public rights of way within the study area;

- Local landscape designations, rights of way and ancient woodland closer to the site (distance dependent upon scale of development);
- Mapping of historic parks and gardens, conservation areas, scheduled monuments, listed buildings and heritage trails may also be relevant to the LVIA (this information may also be recorded in the cultural heritage assessment);
- Zone of Theoretical Visibility within study area or an indication of extent of visibility (including the proportion of the site which will be theoretically visible if possible, and clearly indicating distance radii from the site);
- A map showing viewpoint locations, overlaid onto the Zone of Theoretical Visibility (may be combined with above maps if relevant);
- Zone of Theoretical Visibility overlaid onto character areas and designations (likely to be more than one map); and
- Photographs and photomontages/visualisations for viewpoints to illustrate the location and extent of development in the landscape, provided and reproduced at a minimum viewing distance of 30-50cm, and reflect best practice. Viewpoint locations and type of visualisation will need to be agreed with the LPA. Winter views are usually required as outlined in GLVIA3.

Cumulative Landscape and Visual Impact Assessment (CLVIA)

Overall need/purpose

A.18 Cumulative assessment as part of Environmental Impact Assessment (EIA) is required under the EU Directive on EIA (Directive 97/11/EC amending Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment), which was implemented from 1999. It refers to ‘an additional cumulative effect that is additional to the impact to be

expected from the developments taken individually' (The Council of the European Union, 1997).

A.19 The Landscape Institute defines cumulative landscape and visual effects as 'additional changes to landscape and visual amenity caused by the proposed development in conjunction with other developments (associated with or separate to it) or actions that have occurred in the past, present or are likely to occur in the foreseeable future'. Cumulative effects can trigger the EIA process. Even if EIA is not required, it is likely that a cumulative landscape and visual impact assessment or appraisal (CLVIA) will be required to accompany the planning application.

Differences between LVIA and CLVIA

A.20 Although both cumulative and non-cumulative landscape and visual impact assessment (CLVIA and LVIA respectively) consider the effects of a renewable energy development on views and on the landscape character of the surrounding area, there are differences in the baseline against which the assessments are carried out.

A.21 For LVIA, the baseline is the existing landscape, which includes any existing solar PV or wind energy developments. This is a known baseline that can be clearly defined. For CLVIA, the baseline is to some extent uncertain, and is partially speculative. This is because renewable energy developments considered as part of the baseline should include not only those existing in the landscape, but also those which are consented but not yet built. The baseline may therefore include (in addition to existing renewables developments):

- Renewables developments currently under construction
- Renewables developments which have been granted planning permission but are not yet constructed;

A.22 Schemes that are at the pre-planning or scoping stage are not generally considered in the assessment. They should only be included "if absolutely

necessary to make a realistic assessment of potential cumulative effects". In accordance with GLVIA 3 it may also be necessary to separately consider the total and additional cumulative effects of developments. The list of schemes to include and assessment scenarios should be agreed with the Council who will need to decide what is reasonable and proportionate to request for specific applications.

Information required to be submitted as part of a CLVIA

A.23 The level of detail required will be dependent upon the sensitivity of the site, the nature of the proposal and other existing and proposed schemes, and the potential for cumulative effects. A pre-planning application meeting with the relevant LPA may provide an opportunity to discuss scope. The following presents some guidance on undertaking CLVIA of wind energy/solar PV developments in South Oxfordshire and Vale of White Horse.

Study area and sites to be included

A.24 It is suggested that the CLVIA focuses on potentially significant cumulative effects and that a study area is selected to enable these significant effects to be reported. Study areas will depend on the size and location of other existing and proposed schemes within the landscape and will vary with type of landscape, but initial areas of search may be up to 10km from the proposal. Sequential impacts should also be considered, for example along a long-distance footpath. All existing and proposed renewables developments should be mapped within that area. The assessment may then focus in on 'hotspot' areas to identify likely significant effects – these 'sub-areas' might be less than 10km from the development. This will help keep the assessment proportional to the scale of the project and the nature of its likely effects.

Cumulative ZTV Analysis

A.25 Creating Zones of Theoretical Visibility (ZTVs) for each development, and overlaying these to create a CZTV, could help indicate areas where the proposed development is predicted to be visible (either on its own, or in conjunction with other renewables developments), and areas where other renewables developments will be visible but the proposed development will not. This can help focus the assessment.

A.26 Applicants should assess the cumulative landscape and visual effects of different scenarios, if applicable. This may include, for example, a scenario that considers the proposed development in the context of other existing, under construction and consented renewables developments (a fairly certain scenario) as well as a scenario that considers the proposed development in the context of other existing, under construction and consented developments.

Choice of viewpoints

A.27 A number of viewpoints should be selected to illustrate cumulative visual effects arising from the renewable energy development being assessed, in combination with other existing and proposed renewable energy developments. These selected viewpoints may be the same as, or a subset, of the main LVIA viewpoints, or they may be different. In any case they should be selected specifically to illustrate cumulative effects, including sequential views, representing the worst-case. These should be agreed with the relevant LPA prior to submission of a planning application and preferably at the scoping stage.

Baseline evaluation for the CLVIA

A.28 The sensitivity of the landscape and visual resource will be the same as that recorded in the LVIA. However, SNH guidance on CLVIA recommends that

key routes should also form part of the cumulative assessment. If routes are included in the assessment their sensitivity will also need evaluating. Key routes should be selected with reference to guidance published by Scottish Natural Heritage (SNH, 2012) and should include well used or important routes (e.g. National and Regional Trails and well used tourist routes) that may be affected by cumulative effects.

Preparing cumulative visualisations

A.29 Cumulative visualisation, to a level agreed with the LPA, and/or photomontages should be prepared from viewpoints to illustrate the nature and degree of cumulative change to the landscape and views. This is particularly important in cases where significant cumulative effects are predicted.

Describing and assessing effects

Magnitude of cumulative change to landscape

A.30 The magnitude of cumulative change to landscape character is the influence the additional renewables development will have on the character of the area which is informed by:

- The distance over which the development will have an influence on landscape character in combination with other renewables developments;
- The siting or location of the development being assessed in relation to other existing and proposed renewables developments (and their relationship to landscape character types);
- The design of the renewable energy development being assessed in relation to other existing and proposed renewable energy developments (including scale and layout of the development); and

- Whether key characteristics of the surrounding landscape are affected by the cumulative impact.

A.31 It will also be important to consider the combined effect of fencing, tracks, buildings and other ancillary features of the renewable energy developments on the landscape.

Magnitude of cumulative change to views

A.32 The magnitude of cumulative change to views should be described taking into account the following considerations:

- The arrangement of developments in the view, e.g. developments seen in one direction or part of the view, or seen in many directions;
- The visibility/prominence of the Proposed Development compared to the other existing and proposed schemes;
- The apparent distances, from the viewer, and between developments;
- The relationship between the various sizes and layouts of the developments;
- In the case of magnitude of change to routes (sequential effects), the relative duration of views of developments from routes;
- It will also be important to consider the combined effect of tracks on views; and
- The CLVIA may also consider cumulative effect on views from settlements through use of CZTVs and visits to the settlements.

Effect on designated landscapes

A.33 The CLVIA should set out the implications of cumulative effects on designated landscapes within the study area – for example North Wessex Downs and Chilterns National Landscapes (AONBs).

Significance

A.34 The assessment should identify which effects are considered to be significant in the context of the EIA Regulations (for EIA development), as well as which are adverse or beneficial.

Figures

A.35 The number of maps and illustrations may vary according to the sensitivity of the site, the nature of the proposal and other existing and proposed schemes, and the potential for cumulative effects. However, as a guide the following illustrations will typically be required as part of a CLVIA for EIA development:

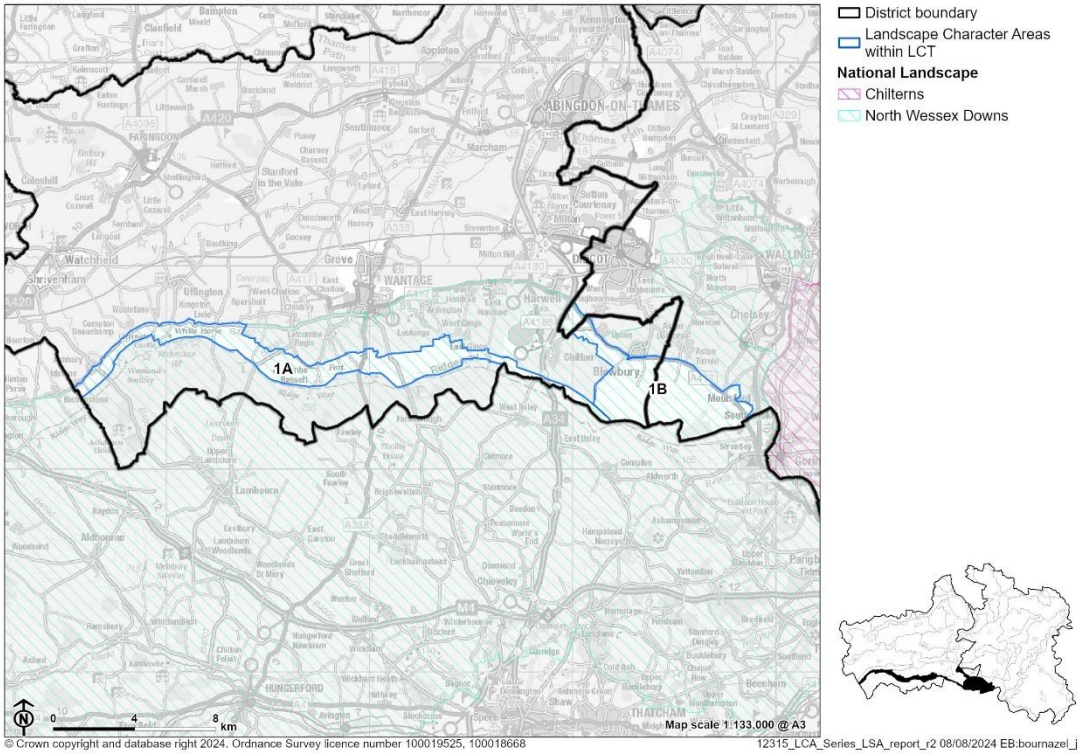
- Location map for all operational, consented and application sites within the study area, presented on a 1:50,000 or 1:25,000 OS base to indicate public rights of way, with concentric distance bands;
- CZTV for existing and proposed renewable energy developments in combination with the proposed development (CZTVs may be particularly useful for larger schemes – more than one CZTV may be useful to show different scenarios, as set out in the guidance above);
- CZTVs overlaid onto landscape character areas, landscape designations and cumulative assessment viewpoints as relevant; and
- Photographs or visualisations (comprising photomontages) of up to 360 degrees to show the proposed development in the context of other developments – annotated with site name, status (operational, permitted, application), and distance to each development, and clearly labelled to indicate how the images should be held and viewed.

Appendix B

Landscape Sensitivity Assessment Profiles

LCT 1: Chalk Escarpment

Figure 1: Contextual map of the LCT



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Component Landscape Character Areas:

- LCA 1A: Wessex Downs Open Chalk Escarpment and Upper Slopes
- LCA 1B: Aston Upthorpe Downs Open Chalk Escarpment and Upper Slopes

Figure 2: LCA 1B Large arable fields on Aston Upthorpe Downs

Figure 3: LCA 1A View east along open undulating grassland on Whitehorse Hill

Assessment of landscape sensitivity to renewable energy development

Landscape sensitivity assessment

Landform and scale (including sense of openness/ enclosure)

- Complex topography of open downland with rounded hills, steep slopes and dry valleys which dissect the chalk downs. Distinctive landform features include Dragon Hill near Woolstone (197 metres AOD) and the Devil's Punchbowl near Letcombe Bassett (225 metres AOD).
- A large-scale landscape which can feel remote in places, with a strong sense of openness owing to the limited tree cover and open, hedge-less field boundaries.
- There is a sense of openness and exposure as a result of the relatively sparse woodland cover, which is generally limited to valley sides and hill tops.
- Human scale features include occasional trees and tree groups, hedgerows, farmsteads, horse stabling and gallops.

Landcover (including field and settlement patterns)

- Landcover primarily consists of grazed pasture, rough grassland and scrub on the steeper slopes and large arable fields on the gentler slopes. Horse paddocks are common next to farmsteads and settlements.
- Small tree groups are frequent, and occasional linear lengths of woodland appear as 'hangers' along the slopes. Woodland cover is more extensive in LCA 1B, including at large tracts at Unhill Wood and Ham Wood, with scattered blocks across the Downs often associated with farmsteads.

- The LCT contains numerous nature conservation designations, including a Site of Special Scientific Interest (SSSI) and extensive areas of ancient woodland (as at Ham Wood and Unhill Woods). There are remnant areas of unimproved chalk grassland at Aston Upthorpe Downs and Moulsfor Downs SSSI, as well as internationally significant Special Areas of Conservation (SACs) at Hackpen Warren and Gramp's Hill.
- Priority Habitats include deciduous woodland and unimproved chalk grassland.
- Settlement within the LCT is limited to occasional farmsteads and isolated dwellings, except for Ashbury and the nucleated hamlet of Letcombe Bassett.
- Horse rides and gallops are a common feature on the elevated downland plateau, particularly in LCA 1B.
- Road access is limited to a few rural lanes that traverse the slopes, some enclosed by hedgebanks with mature trees. Other lanes cross the exposed landform and are more open with low roadside vegetation.

Historic landscape character

- A landscape of strong time-depth, including the prehistoric Uffington White Horse chalk figure on Whitehorse Hill (Scheduled Monument) is a prominent feature and well-known landmark on the scarp which provides a distinctive sense of place.
- Other prehistoric features include Iron Age hillforts, a Bronze Age cemetery on Churn Hill, and a Roman Temple on Lowbury Hill. Grim's Ditch is a distinctive linear earthwork running parallel to the Ridgeway, likely dating from the Iron Age. These are all Scheduled Monuments.
- Predominantly modern field patterns, with some remnant medieval, post medieval and pre-18th century field patterns on the plateau and some parts of the scarp slopes.
- The Ridgeway, an important prehistoric route, runs along the southern boundary of the LCT.

Visual character (including skylines)

- An open landscape with panoramic views from the top of the ridge over the Vale to the north and towards the Corallian Limestone Ridge. There are often panoramic views towards elevated downland beyond the district boundary to the south.
- The scarp itself forms a distinctive backdrop in views south from the lower-lying Vale, and forms an immediate setting to several small villages located below the foot of the scarp.
- Skylines are generally undeveloped, occasionally marked by trees and woodland blocks. The transition to the smooth rounded form of the Downlands to the south (in LCT 3) creates a broad horizon.
- Views are occasionally shortened by topography and tree cover.

Perceptual and scenic qualities

- The LCT is located entirely within the North Wessex Downs National Landscape, and displays several of the special qualities including remote chalk landform, arable habitats, chalk grasslands, prehistoric monuments, and extensive public rights of way.
- Public rights of way climb the slopes and connect to the prehistoric route of the Ridgeway National Trail which forms part of the southern boundary of the LCT. Small areas of the downs are open access land, including at White Horse Hill and south-west of Letcombe Bassett.
- A strongly rural and peaceful landscape with limited human influences. Major roads including the A417 and A34, as well as frequent aircraft passing overhead reduce the sense of tranquillity locally.
- The Tranquillity Assessment for South Oxfordshire and Vale of White Horse categorises 47% of the LCT in Zone 1 (‘areas of high tranquillity’) and 53% in Zone 2 (‘areas of some tranquillity’).

Table 1: Sensitivity scores for LCT 1 Chalk Escarpment

Criteria	Sensitivity Score: Solar	Sensitivity Score: Wind
Landform and scale (including sense of openness/enclosure)	High	High
Landcover (including field and settlement patterns)	Moderate	Moderate
Historic landscape character	Moderate-high	Moderate-high
Visual character (including skylines)	Moderate-high	Moderate-high
Perceptual and scenic qualities	High	High

Overall assessment of landscape sensitivity to solar PV developments

Summary of overall statement on landscape sensitivity of Chalk Escarpment LCT 1

A complex, rolling landform of valley and round or flat-topped hills with some exposed slopes, and a sense of openness due to the limited woodland cover. The limited enclosure and irregular, dramatic topography increase sensitivity to solar PV development as there are few existing features to screen any development. The landscape has a mixture of smaller-scale fields used for pasture, grassland, scrub and horse grazing, and larger arable fields on the more gentle slopes. The significant areas of unimproved chalk grassland are sensitive to solar development which would have adverse impacts on the rare habitat, often protected as SAC or SSSI. The limited settlement and built development within the landscape increases sensitivity as solar PV would introduce new built development into an otherwise rural landscape. Important

historic and prehistoric features including Iron Age hillforts and the Uffington White Horse are prominent features within the landscape, creating a strong sense of place and time depth and further increasing sensitivity. The elevated landscape allows for panoramic views to the north and south, while the scarp slope also provides a rural backdrop to historic settlements in adjacent lower-lying areas, increasing sensitivity. Skylines are generally undeveloped, and solar PV development may detract from the prominent topography which is visible over a large area.

The location of the LCT within the North Wessex Downs National Landscape increases landscape sensitivity to all scales of solar PV development. Representative examples of the special qualities within this landscape include the remote chalk landform, arable habitats, significant chalk grasslands, prehistoric monuments, and extensive public rights of way. Promoted routes that are popular for recreation including the Ridgeway National Trail are sensitive receptors to solar PV development due to the high number of people who use this route and the expansive views that can be experienced.

This LCT generally has ‘high’ landscape sensitivity to solar energy development greater than the ‘very small-scale’ development scenario. There may be some opportunities for ‘very small-scale’ solar PV developments to be integrated into hidden slopes and undulations on the rolling downland, avoiding steep and/or visually prominent slopes which are often highly visible from the surrounding landscape, including recreational users of The Ridgeway National Trail. Existing vegetation including hedgerows should be utilised to help screen new developments.

Sensitivity of Landscape Character Areas

LCA 1A: This landscape is highly sensitive to all scales of solar PV development due to the steeply sloping landform of the north-facing scarp slopes, the visual prominence of the landform with high intervisibility with surrounding lower-lying landscapes (including in views from historic settlements such as Kingston Lisle and Letcombe Regis), and the presence of extensive archaeological assets, particularly focused around Uffington, many of which are

nationally designated for their cultural importance. The LCA lies within the North Wessex Downs National Landscape, which also increases sensitivity.

Table 2: Landscape sensitivity to solar PV development in LCA 1A

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	High
Small solar (1-5 hectares)	High
Medium solar (5-20 hectares)	High
Large solar (20-50 hectares)	High
Very large solar (50-120 hectares)	High

LCA 1B: This landscape is highly sensitive to all scales of solar PV development greater than 1 hectare in size due to its location within the North Wessex Downs National Landscape, the sloping landform which is visually prominent in views from lower-lying areas (including in views from historic settlements such as Blewbury and Upton) and the presence of nationally-designated grassland habitats including at Aston Upthorpe Downs SSSI and Moulsford Downs SSSI. The sensitivity of some parts of the LCA to 'very-small scale' solar is reduced slightly by the presence of large areas of woodland which could be used to screen developments if appropriately designed and sited.

Table 3: Landscape sensitivity to solar PV development in LCA 1B

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	Moderate-high

Development scenario	Overall landscape sensitivity rating
Small solar (1-5 hectares)	High
Medium solar (5-20 hectares)	High
Large solar (20-50 hectares)	High
Very large solar (50-120 hectares)	High

Overall assessment of landscape sensitivity to wind energy developments

Summary of overall landscape sensitivity of Chalk Escarpment LCT 1

A complex and distinct landform of slopes, dry valleys, and hills creates a strongly undulating landscape, which increases sensitivity to wind energy development. The frequent human-scale features within the landscape, including small tree groups and woodland, hedgerows and farm buildings also increase sensitivity, particularly to turbines greater than 25 metres in height. Considerable areas of important chalk grassland habitat, and smaller-sized fields on steeper slopes have greater levels of sensitivity, although arable land use in larger-scale fields are slightly less sensitive. The variety of land cover across the landscape, with limited built development, also results in a higher sensitivity to wind energy development. A number of historic and prehistoric features, including the Uffington White Horse and Iron Age hillforts create a strong sense of time-depth, which increases sensitivity to wind energy development. The elevated nature of the landscape, which is visible from the surrounding lower-lying land is sensitive to change from wind energy development, as is the undeveloped skylines with prominent historic features. The landscape forms an important backdrop to views from villages below the foot of the scarp, and is highly visible from public rights of way including the Ridgeway National Trail. The rural and tranquil character of the LCT means

wind energy development may be perceived as intrusive in an area with little modern human influence.

The location of the LCT within the North Wessex Downs National Landscape increases landscape sensitivity to all scales of wind energy development. Representative features include special qualities such as the remote chalk landform, arable habitats, significant chalk grasslands, prehistoric monuments, and extensive public rights of way.

The presence of woodland blocks on the plateau may slightly lower the sensitivity to appropriately sited very-small scale wind energy development.

This LCT has ‘high’ landscape sensitivity to wind energy development greater than the ‘very small-scale’ development scenario.

Sensitivity of Landscape Character Areas

LCA 1A: This landscape would be highly sensitive to wind energy development due to the complex, steeply sloping landform that is visual prominent in view from surrounding lower-lying landscapes, the undeveloped skylines which contribute to the sense of openness on the escarpment, the setting the landscape provides to heritage features including Uffington White Horse as well as several other nationally designated prehistoric assets, the rural backdrop the landscape provides to settlements in adjacent lower-lying areas, as well as the rural setting and sense of tranquillity experienced from public rights of way and open access land, including The Ridgeway National Trail. The LCA has slightly lower (moderate-high) sensitivity to very small-scale turbines as they would be less out-of-scale in this landscape.

Table 4: Landscape sensitivity to wind energy development in LCA 1A

Development scenario	Overall landscape sensitivity rating
Very small-scale wind (<25 metres)	Moderate-high
Small-scale wind (25-60 metres)	High
Medium-scale wind (60-100 metres)	High
Large-scale wind (100-150 metres)	High
Very large-scale wind (150-220 metres)	High

LCA 1B: This landscape would be highly sensitive to wind energy development due to the visually prominent landform which form a rural backdrop in views from lower-lying settlements to the north, the undeveloped skylines which contribute to the sense of openness on the escarpment, and the presence of nationally-designated habitats including extensive ancient woodland at Unhill Wood and Ham Wood. The presence of woodland blocks on the plateau reduces landscape sensitivity to appropriately sited very-small scale wind energy development.

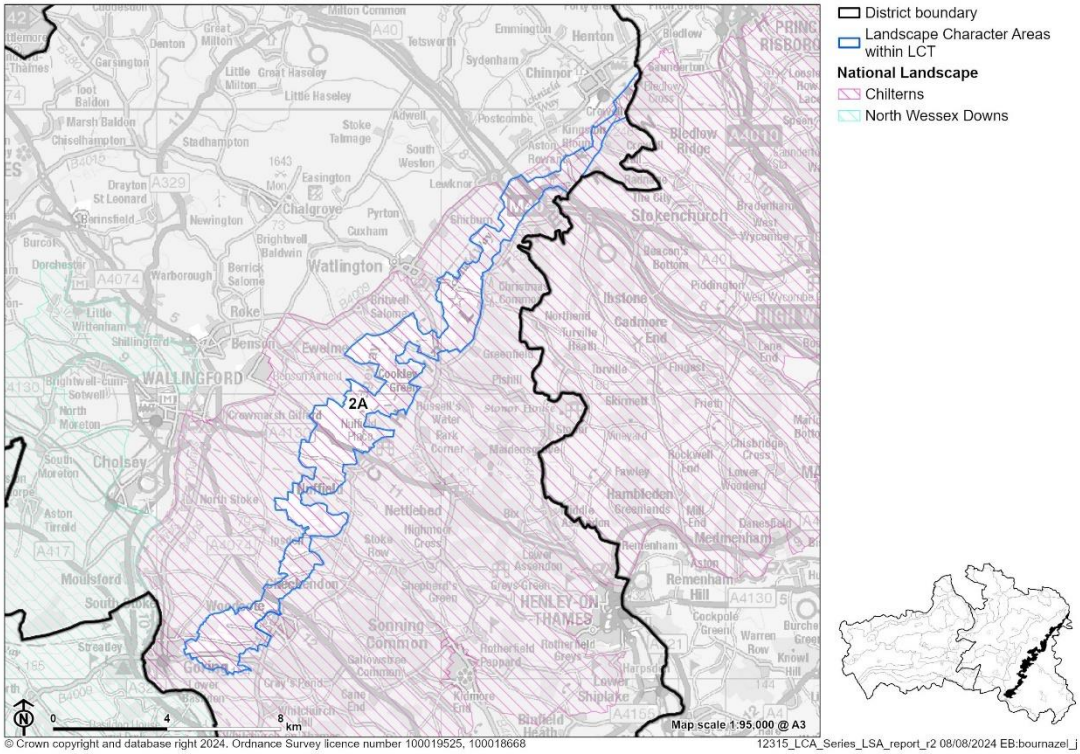
Table 5: Landscape sensitivity to wind energy development in LCA 1B

Development scenario	Overall landscape sensitivity rating
Very small-scale wind (<25 metres)	Moderate-high
Small-scale wind (25-60 metres)	High
Medium-scale wind (60-100 metres)	High
Large-scale wind (100-150 metres)	High

Development scenario	Overall landscape sensitivity rating
Very large-scale wind (150-220 metres)	High

LCT 2 Wooded Chalk Escarpment

Figure 4: Contextual map of the LCT



Component Landscape Character Areas:

- LCA 2A: Chiltern Wooded Chalk Escarpment

Figure 5: Long views from Watlington Hill across the vale

Figure 6: Enclosed character in Aston Rowant SAC woodland

Assessment of landscape sensitivity to renewable energy development

Landscape sensitivity assessment

Landform and scale (including sense of openness/enclosure)

- The Chilterns escarpment has a smooth and well-defined profile of a chalk landform. It is heavily incised by spurs and valleys, creating pronounced undulations. The steepness of the scarp varies, with gentle slopes in the south and more steep and dramatic slopes in the north.
- Heights range from 100 metres AOD to 250 metres AOD. The lowest areas are in the south, close to the River Thames. Notable hills include Chinnor Hill at 245 metres AOD and Watlington Hill at 230 metres AOD.
- The scale and sense of openness is varied. Pasture and arable fields with weak or absent hedgerow structure create an open, large-scale landscape, particularly on the top of the scarp. This contrasts with the sense of enclosure in wooded areas and along the sunken lanes with tall hedgerows which climb the scarp face or minor valleys.
- Human scale features include frequent blocks of woodland, country mansions at Watlington Park and Swyncombe House and occasional farmsteads.

Landcover (including field and settlement patterns)

- A landscape dominated by priority habitat beech-yew deciduous woodland, with extensive areas of ancient woodland. Species-rich chalk grassland, mixed chalk scrub and juniper are found in unwooded areas. Aston Rowant is internationally designated as a Special Area of Conservation (SAC), for its lowland juniper scrub on chalk and ash-beech-

yew woodlands. Many other sites are nationally designated as Sites of Special Scientific Interest (SSSI).

- Between the woodlands, fields are relatively open, with hedgerows along lanes and footpaths, but little internal division. The large-scale fields are generally in use for pasture, although arable cultivation dominates north-west of Nuffield.
- A very sparsely settled landscape, with occasional scattered farmsteads and estates.

Historic landscape character

- The field pattern between areas of woodland is of ancient unenclosed rough ground, planned 18th and 19th century enclosure, and some smaller areas of modern amalgamation.
- The historic strip parish pattern remains, where communities linked lower summer grazing pasture, fuel supply from woodlands and the spring-line streams water supply. The ancient Ridgeway crosses the LCT, which has provided access across the chalk landscape for thousands of years.
- Small estates and parklands, although not nationally designated, provide time-depth, such as at Watlington Park and Swyncombe House.
- Prehistoric monuments including bowl barrows on Chinnor Hill and Grim's Ditch are Scheduled Monuments, which contribute to time-depth in the landscape.
- Occasional isolated farms and associated barns are Grade II Listed Buildings, and form historic features.

Visual character (including skylines)

- The wooded raised escarpment landform is prominent in views from the surrounding lower-lying areas. The skyline is undeveloped and marked by the trees along the length of the escarpment.

- The height of the escarpment offers long-distance and panoramic views to the west and north across Oxfordshire.
- The whole LCT is part of the Chilterns National Landscape, and views within the LCT are therefore of nationally important landscapes.
- Strong structure of woodland and incised valley landform creates an intimate and enclosed character at times. Tree-lined sunken lanes are a common feature in the area and form wooded skylines in views to the LCT.

Perceptual and scenic qualities

- A generally rural and unspoilt landscape, with a strong structure of woodland and incised valley landform creating an intimate and enclosed character, contrasting with an elevated expansive character in the more open locations.
- The entirety of the LCT is part of the Chilterns National Landscape. Special qualities of the AONB represented in this landscape include the distinctive beech yew woodlands, rare chalk grassland, tranquillity and dark night skies, extensive recreational routes and a strong structure of hedgerows, parkland and farmland.
- The LCT features an extensive network of PRoW, including the ancient Icknield Way, Chiltern Way, The Ridgeway and Oxfordshire Way. Areas of Open Access Land are also found within the woodlands.
- Access is provided by a distinctive pattern of winding rural lanes climbing the scarp and minor valleys. The M40 motorway carves a route through the chalk scarp at the Stokenchurch Gap, and creates a localised detractor in the landscape.

Table 6: Sensitivity scores for LCT 2 Wooded Chalk Escarpment

Criteria	Sensitivity Score: Solar	Sensitivity Score: Wind
Landform and scale (including sense of openness/enclosure)	High	High
Landcover (including field and settlement patterns)	Moderate-high	Moderate-high
Historic landscape character	Moderate	Moderate-high
Visual character (including skylines)	High	High
Perceptual and scenic qualities	High	High

Overall assessment of landscape sensitivity to solar PV developments

Summary of overall landscape sensitivity of Wooded Chalk Escarpment LCT 2

The dramatic steep-sided chalk escarpment is a distinct landform feature, which has an irregular topographic appearance. Solar PV panels will be more easily perceived on the higher slopes. The open pasture and arable fields have little sense of enclosure and are likely to be more sensitive to solar PV as there are no current features to provide screening. However, significant areas of woodland and sunken lanes with tall hedgerows may be able to provide some screening, reducing sensitivity in locations with these features. The woodlands are ecologically important and often of ancient origin and are sensitive to the introduction of solar PV development. The larger-scale fields have less semi-natural land cover and have a slightly lower sensitivity. The historic strip parish pattern, small estates and parklands, and prehistoric monuments provide time depth, and have a higher sensitivity to solar PV development. The varied time-

depth of the field pattern, and limited historic buildings slightly reduce landscape sensitivity. The escarpment landform forms a prominent, undeveloped skyline which is widely visible, and also allows long panoramic views out, indicating high sensitivity. The landscape is visible in views from a variety of long-distance or promoted public rights of way that are popular for recreation including the Icknield Way, Chiltern Way, The Ridgeway and Oxfordshire Way, which are all sensitive receptors. The rural landscape, with a pleasing combination of woodland, incised valley landform, and elevated open areas, creates an attractive character with visual contrasts and dramatic elements. The M40 at Stokenchurch Gap is a local detractor within the landscape.

The location of the LCT within the Chilterns National Landscape increases landscape sensitivity to all scales of solar PV development. Representative features including beech yew woodlands, rare chalk grassland, tranquillity and dark night skies, extensive recreational routes and a strong structure of hedgerows, parkland and farmland may be adversely impacted by the installation of solar PV development.

This LCT has ‘high’ landscape sensitivity to solar energy development greater than the ‘small-scale’ development scenario. There may be opportunities to accommodate carefully sited ‘very small’ and ‘small’ scale solar PV development scenarios in areas where existing woodland and thick hedgerows could be used to screen solar PV installations and reduce their landscape and visual impact. Care would need to be taken to ensure that development does not detract from views both within and to the LCT from the wider landscape. Areas with important semi-natural habitats, archaeological features, and on the steep slopes and top of the escarpment should be avoided.

Sensitivity of Landscape Character Areas

- There is only one LCA in the Wooded Chalk Escarpment LCT, and therefore there is no variation in landscape sensitivity to solar PV development.

Table 7: Landscape sensitivity to solar PV development in LCA 2A

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	Moderate
Small solar (1-5 hectares)	Moderate-high
Medium solar (5-20 hectares)	High
Large solar (20-50 hectares)	High
Very large solar (50-120 hectares)	High

Overall assessment of landscape sensitivity to wind energy developments

Summary of overall landscape sensitivity of Wooded Chalk Escarpment LCT 2

This is a landscape of slopes and valleys which create a complex topography, indicating higher sensitivity to wind energy development. Frequent human-scale features within the landscape, such as trees, woodland, hedgerows and scattered farm buildings are also sensitive to larger turbines, as they may be dominated or overwhelmed by wind turbines greater than ‘very-small scale’. The rural landscape has varied land cover, with high concentrations of semi-natural land cover in the woodlands and grasslands, which increases sensitivity. The larger-scale fields have lower levels of sensitivity. The historic strip parish pattern, small estates and parklands, and prehistoric monuments create a landscape with many historic features and a strong sense of time-depth. These features and their setting increase sensitivity to wind energy development. The varied field pattern origin from ancient woodland to areas of modern field amalgamation slightly lowers sensitivity. Undeveloped skylines, which are either

open or marked by woodland are prominent, and visible from lower-lying landscapes due to the elevated landform are characteristic of the LCT and increase sensitivity. The pattern of woodlands, incised valley landforms and elevated open fields create an attractive character. Development is limited, with only the M40 at Stokenchurch Gap creating a localised detraction, slightly reducing sensitivity in this location.

The whole LCT lies within the Chilterns National Landscape, which increases sensitivity. Representative features including beech yew woodlands, rare chalk grassland, tranquillity and dark night skies, extensive recreational routes and a strong structure of hedgerows, parkland and farmland may be adversely impacted by wind energy development.

This LCT has ‘high’ landscape sensitivity to wind energy development greater than the ‘very small-scale’ development scenario (to which the LCT has moderate-high sensitivity). There may be potential for limited ‘very small-scale’ wind turbine development in locations where development would not be visually prominent within the wider landscape and would not detract from the setting of important archaeological features and the special qualities of the Chilterns National Landscape. The consideration of any cumulative landscape and visual impacts with other renewable energy development both within this LCT and adjacent landscapes is also important.

Sensitivity of Landscape Character Areas

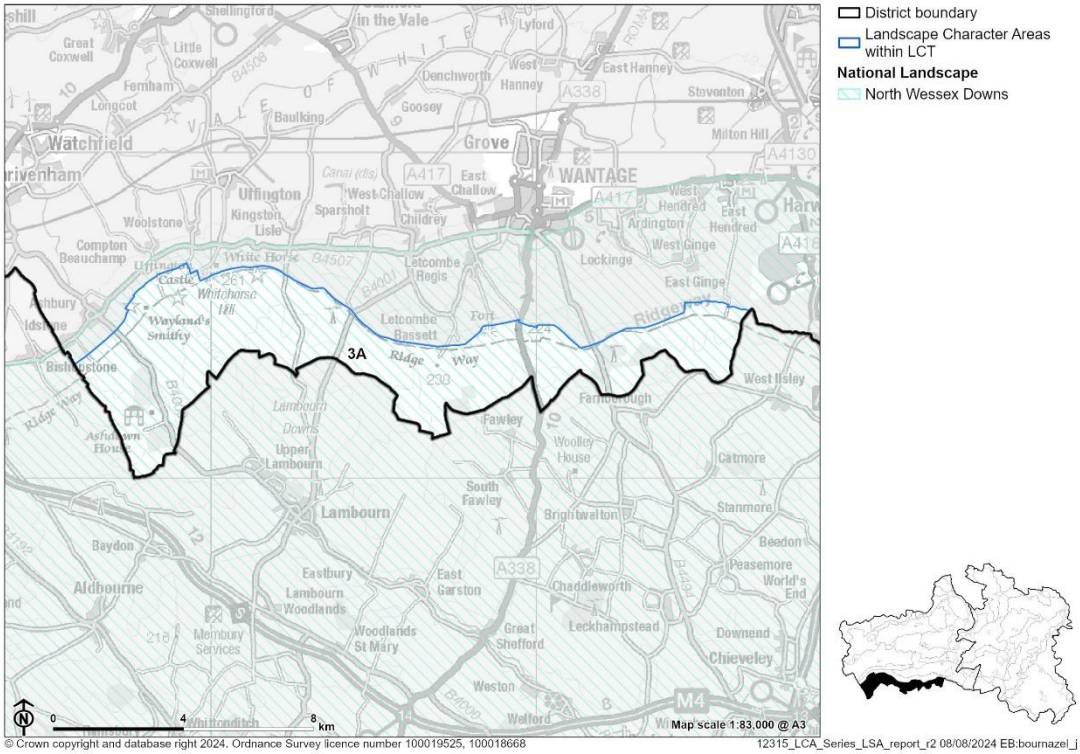
- There is only one LCA in the Wooded Chalk Escarpment LCT, and therefore there is no variation in landscape sensitivity to wind energy development.

Table 8: Landscape sensitivity to wind energy development in LCA 2A

Development scenario	Overall landscape sensitivity rating
Very small-scale wind (<25 metres)	Moderate-high
Small-scale wind (25-60 metres)	High
Medium-scale wind (60-100 metres)	High
Large-scale wind (100-150 metres)	High
Very large-scale wind (150-220 metres)	High

LCT 3 Open Chalk Dipslope

Figure 7: Contextual map of the LCT



Component Landscape Character Areas:

- LCA 3A: Wessex Downs Open Chalk Dipslope

Figure 8: Large-scale open fields on the plateau near Sparsholt Down.

Figure 9: Woodland at The Warren provides a backdrop to views across large-scale arable.

Assessment of landscape sensitivity to renewable energy development

Landscape sensitivity assessment

Landform and scale (including sense of openness/ enclosure)

- An elevated rolling plateau, with topography becoming more complex to the south. Ridges descend broadly south from the top of the steep scarp. High points include Cuckhamsley Hill at approximately 205 metres AOD, and Idstone Down at approximately 215 metres AOD.
- A large-scale, open landscape. The limited hedgerow structure with field boundaries predominantly delineated by post and wire fences contributes to the sense of openness.
- Woodlands and distinctive linear shelterbelts, notably in the west, provide a localised sense of enclosure.
- Human scale features include blocks and belts of woodland, occasional farmsteads, and historic buildings and structures associated with Ashdown House.

Landcover (including field and settlement patterns)

- Land use mainly consists of large-scale, rectilinear, open arable fields, with hedgerow boundaries often absent or gappy. There are occasional grassland fields, which are often small-scale.
- Semi-natural land cover is predominantly rough grassland, with areas of surviving chalk grassland and lowland calcareous grassland, including on Woolstone Down, Kingstone Down, Lang Down, and Knollend Down.

- Varied woodland cover including ancient woodland (as at Swinley Copse, Moss Hill and Nut Wood), more recent mixed plantations (often in geometric shapes), copses on hilltops, and occasional woodland ‘hangers’ along steep slopes.
- Part of Middle Wood contains the Ashdown Park Site of Special Scientific Interest (SSSI), designated for the lichen flora associated with a large number of naturally situated sarsen stones.
- A sparsely populated landscape, with settlement limited to isolated farmsteads. Road access is limited, with a small number of roads orientated broadly north-south including the A338 and B4001.
- Rides and gallops associated with horse racing are frequent features, along with fields subdivided into paddocks and associated stabling.

Historic landscape character

- Extensive evidence of prehistoric settlement and land use, including Iron Age Hillforts at St Alfred's Castle and Letcombe Castle (designated as Scheduled Monuments), Wayland’s Smithy Long Barrow, as well as several scattered burial mounds and further non-designated assets including Rams Hill Fort and Idlebush Barrow.
- Later settlement is indicated by the presence of surviving Romano-British field systems at Mere End Down.
- The Scutchamer Knob artificial mound located on Cuckhamsley Hill is a Scheduled Monument and forms a local landmark.
- The Ridgeway, an important prehistoric route, runs along the southern boundary of the LCT.
- Ashdown House (Grade I Listed), a distinctive manor house recorded as having post-medieval history is set within woodland at Ashdown Park (Grade II* Registered Park and Gardens (RPG)).

Visual character (including skylines)

- Extensive panoramic long-distance views are possible across the rolling plateau, including rural views from the Ridgeway north across the Vale landscapes towards the Corallian Limestone Ridge, and south across the North Wessex Downs (beyond the district boundary).
- Provides a rural backdrop above the ridge scarp in views from within the lower-lying vale landscapes to the north, as well as from the Corallian Limestone Ridge.
- Skylines are wide, open and are generally undeveloped. Blocks of linear woodland frame, or form a backdrop to views across the large-scale fields, in contrast to the more expansive views available from public rights of way across the downs.

Perceptual and scenic qualities

- The LCT is located entirely within the North Wessex Downs National Landscape, and displays several of the special qualities including remote chalk landform, ancient broadleaved woodlands, significant chalk grasslands, prehistoric monuments, country houses and landscape gardens, extensive public rights of way, dark night skies, and high levels of tranquillity.
- Features an extensive network of public rights of way, including parts of the Ridgeway National Trail and a significant number of bridleways which connect with the wider network of public rights of way across the downs.
- Ashdown House and woodland is a popular visitor attraction managed by the National Trust.
- An open and exposed landscape with a sense of remoteness and tranquillity. Dark night skies are experienced across much of the area.
- Generally a strongly rural character, with few urban influences. Human influences including the B4000 main road, gallops and horse training establishments locally reduce the sense of rural tranquillity.

Table 9: Sensitivity scores for LCT 3 Open Chalk Dipslope

Criteria	Sensitivity Score: Solar	Sensitivity Score: Wind
Landform and scale (including sense of openness/enclosure)	Moderate-high	Moderate
Landcover (including field and settlement patterns)	Moderate-high	Moderate
Historic landscape character	Moderate-high	Moderate-high
Visual character (including skylines)	High	High
Perceptual and scenic qualities	High	High

Overall assessment of landscape sensitivity to solar PV developments

Summary of landscape sensitivity of Open Chalk Dipslope LCT 3

A complex, elevated landform that is distinct and irregular in topographic appearance, which increases sensitivity to solar PV development. Open fields with often absent hedgerow boundaries result in little sense of enclosure, although woodlands are more common in the west. The limited screening by vegetation increases sensitivity. Large-scale arable fields are less sensitive to solar PV development in terms of land use than the areas of woodland cover and surviving chalk grassland, many of national significance, are of higher sensitivity. However, the lack of screening in large-scale arable fields increases visual sensitivity. This is a largely rural landscape, with few built elements, which increases sensitivity. Extensive evidence of historic land use are important to the character of the landscape, and create a strong sense of time-depth, increasing sensitivity. These include prehistoric monuments (many

designated as Scheduled Monuments), Romano-British field systems, and Ashdown Park Registered Park and Garden. The elevated landscape is prominent in views from lower-lying areas, and provides an important backdrop to the vale and wider North Wessex Downs. The landscape is highly visible from promoted routes including the Ridgeway National Trail, which are sensitive receptors to solar PV development. Skylines are wide, open and generally undeveloped, which increases sensitivity. The high levels of tranquillity and dark night skies create a rural landscape with limited modern development.

The location of the LCT within the nationally designated landscape of North Wessex Downs National Landscape increases landscape sensitivity to all scales of solar PV development. Representative features including ancient broadleaved woodlands, chalk grassland habitats, prehistoric monuments, country houses and parklands, extensive public rights of way, dark night skies, and high levels of tranquillity may be adversely impacted by the installation of solar PV development.

This LCT has ‘high’ landscape sensitivity to solar energy development greater than the ‘very small-scale’ development scenario. There may be limited opportunities to accommodate ‘very small’ scale solar PV development, using the existing woodlands and shelterbelts to provide screening. Solar PV development should be avoided on the north-facing slopes which are often highly visible from the surrounding landscape.

Sensitivity of Landscape Character Areas

- There is only one LCA in the Open Chalk Dipslope LCT, and therefore there is no variation in landscape sensitivity to solar PV development.

Table 10: Landscape sensitivity to solar PV development in LCA 3A

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	Moderate-high
Small solar (1-5 hectares)	High
Medium solar (5-20 hectares)	High
Large solar (20-50 hectares)	High
Very large solar (50-120 hectares)	High

Overall assessment of landscape sensitivity to wind energy developments

Summary of landscape sensitivity of Open Chalk Dipslope LCT 3

The distinctive slopes of this elevated landscape increase sensitivity to wind energy development, although there are fewer human-scale features than other landscapes in the districts, which slightly reduces sensitivity. Large-scale open arable fields are less sensitive than the occasional small-scale pasture fields in terms of land use, while the areas of nationally important semi-natural habitat including chalk grassland and woodland have a higher sensitivity. The lack of screening in large-scale arable fields increases their visual sensitivity. This is a rural landscape with few urban influences beyond the road network. Many historic features, including prehistoric Scheduled Monuments, and parkland at Ashdown Park are important to the character of the area, and create a strong sense of time-depth. This increases sensitivity to wind energy development. The elevated rolling plateau is visible from many surrounding landscapes, and provides a prominent undeveloped skyline to these areas. This increases

sensitivity to wind energy development. Visually prominent slopes that provide a backdrop in views from lower-lying areas and open undeveloped skylines also increase sensitivity to wind energy development. The landscape is highly visible from popular promoted routes including the Ridgeway National Trail, which are sensitive receptors. The landscape has a strong sense of rurality, high levels of tranquillity and good experience of dark night skies, increasing sensitivity to wind energy development.

The location of the LCT within the North Wessex Downs National Landscape increases landscape sensitivity to all scales of wind energy development. Representative features including ancient broadleaved woodlands, chalk grassland habitats, prehistoric monuments, country houses and parklands, extensive public rights of way, dark night skies, and high levels of tranquillity may be adversely impacted by the installation of wind energy development.

This LCT has 'high' landscape sensitivity to any wind energy development larger than the 'very small-scale' development scenario. The large-scale, simple landcover pattern, presence of existing infrastructure associated with horse training facilities, and scattered woodland belts on the plateau reduces sensitivity to very-small scale wind energy development.

Sensitivity of Landscape Character Areas

- There is only one LCA in this LCT, and therefore there is no variation in landscape sensitivity to wind energy development.

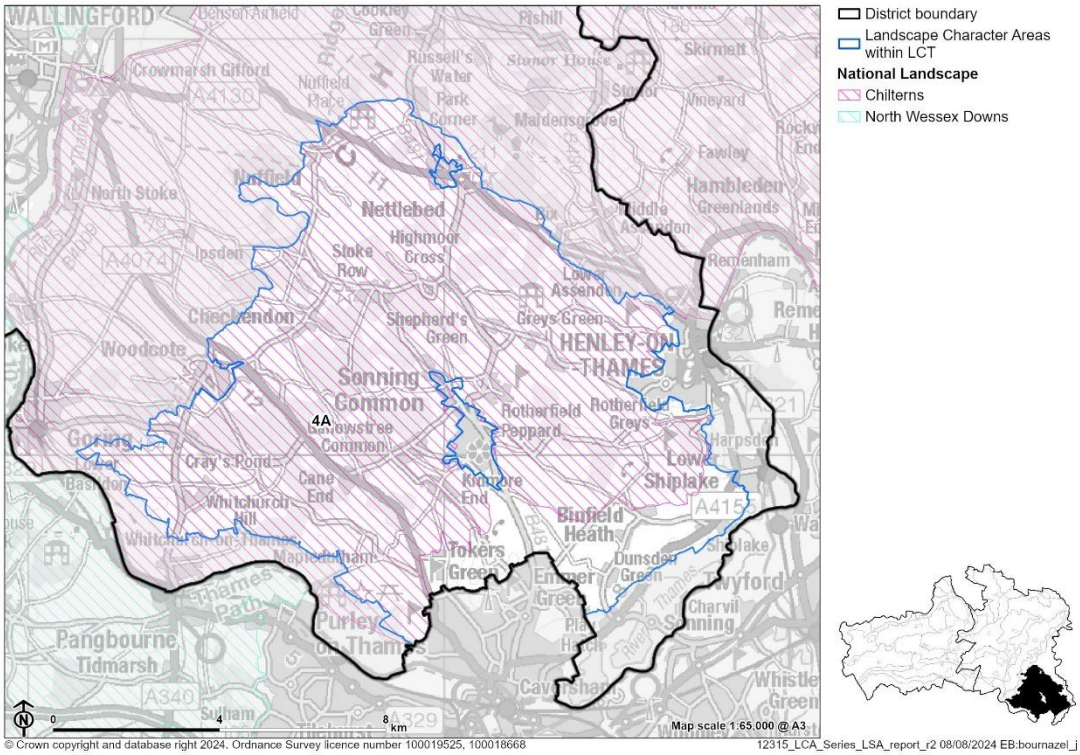
Table 11: Landscape sensitivity to wind energy development in LCA 3A

Development scenario	Overall landscape sensitivity rating
Very small-scale wind (<25 metres)	Moderate-high
Small-scale wind (25-60 metres)	High

Development scenario	Overall landscape sensitivity rating
Medium-scale wind (60-100 metres)	High
Large-scale wind (100-150 metres)	High
Very large-scale wind (150-220 metres)	High

LCT 4 Wooded Chalk Plateau and Valleys

Figure 10: Contextual map of the LCT



Component Landscape Character Areas:

- LCA 4A: Chiltern Wooded Chalk Plateau and Valleys

Figure 11: Pasture fields with woodlands in the background

Figure 12: Designed parkland landscape at Greys Court

Assessment of landscape sensitivity to renewable energy development

Landscape sensitivity assessment

Landform and scale (including sense of openness/ enclosure)

- The Chilterns plateau is incised by an irregular pattern of small-scale dry valleys, resulting in an undulating landscape.
- Heights range from 60 metres AOD in the valleys and adjacent to the River Thames, up to 212 metres AOD at Nuffield.
- Heavy woodland cover and species-rich hedgerows and trees containing fields create an enclosed character.
- Human scale features include frequent woodlands, a scattered settlement pattern of small hamlets and farms, commons, trees and hedgerows.

Landcover (including field and settlement patterns)

- A heavily wooded landscape, featuring extensive areas of ancient woodland. Many of the beech woodlands are nationally designated as Sites of Special Scientific Interest (SSSI). A number of commons are dominated by acid grassland, some recorded as priority habitat.
- A strong, irregular field pattern of arable and pasture fields. Several golf courses are found across the LCT.
- Settlement pattern of small villages, hamlets and farms scattered among the woods and commons. Larger, more modern settlements of Sonning Common, Henley-on-Thames and Woodcote lie on the edge of the area.

Historic landscape character

- The Historic Landscape Characterisation shows a varied historic field pattern, with areas of pre-18th century enclosure, post-medieval enclosure, 19th century reorganised enclosure and more recent amalgamation. Commons are found across the LCT, and are an important part of the landscape. Some, such as Kingwood Common were originally wasteland, while others have been reconverted to commons after previous land uses.
- The historic landscape character is also evident in the clear strip parish pattern, where communities linked lower summer grazing pasture, fuel supply from woodlands and the spring-line streams water supply.
- Occasional prehistoric archaeological monuments show the considerable time-depth across the landscape. These include Iron Age hill forts and a possible Roman enclosure, designated as Scheduled Monuments.
- A strong medieval settlement pattern provides time-depth. The settlements contain clusters of Listed Buildings and are often covered by Conservation Areas. Outside of settlements, frequent farmsteads contain Listed Buildings.
- Distinctive estates, including Nuffield Place, Crowsley Park, Checkendon Court, Friar Park and Greys Court. The latter two are both Grade II Registered Parks and Gardens. The manor houses are often still standing, with brick and flint common materials. Historic parkland features, such as formal avenues, free-standing trees in pasture and estate boundary treatments create a sense of place and time-depth.

Visual character (including skylines)

- Strong structure of woodland and incised valley landform creates an intimate and enclosed character, with very limited long-distance views. Tree-lined ridges are a common feature in the area and form wooded skylines.
- A largely undeveloped skyline, although electricity pylons north of Caversham are locally intrusive in views.

- The whole LCT is part of the Chilterns National Landscape, and so all internal views are of a nationally important landscape.

Perceptual and scenic qualities

- A generally rural and unspoilt landscape, with a strong structure of woodland and incised valley landform creating an intimate and enclosed character.
- The entirety of the LCT is part of the Chilterns National Landscape. Special qualities represented in this landscape include the distinctive beech yew woodlands, rare chalk grassland, tranquillity and dark night skies, extensive recreational routes and a strong structure of hedgerows, parkland and farmland.
- The LCT features an extensive network of public rights of way, including the Chiltern Way and the Ridgeway. Areas of Open Access Land are also found within the commons and woodlands, concentrated in the north.
- Distinctive pattern of narrow rural lanes, enclosed by tall hedgerows. Busy A roads cross the landscape, and are detracting modern additions. Localised areas of suburban land uses including golf clubs and educational facilities are found on the edges of Caversham and Henley-on-Thames.

Table 12: Sensitivity scores for LCT 4 Wooded Chalk Plateau and Valleys

Criteria	Sensitivity Score: Solar	Sensitivity Score: Wind
Landform and scale (including sense of openness/enclosure)	Moderate	Moderate-high
Landcover (including field and settlement patterns)	Moderate-high	Moderate-high
Historic landscape character	Moderate-high	Moderate-high

Criteria	Sensitivity Score: Solar	Sensitivity Score: Wind
Visual character (including skylines)	Moderate	Moderate-high
Perceptual and scenic qualities	Moderate-high	High

Overall assessment of landscape sensitivity to solar PV developments

Summary of overall landscape sensitivity of Wooded Chalk Plateau and Valleys LCT 4

The irregular pattern of small-scale dry valleys results in an undulating landscape, which increases sensitivity to solar PV development, although undulations in the land could also be used to screen views of small-scale development in some locations. Considerable woodland coverage and hedgerow boundaries provide enclosure and slightly reduce sensitivity as they could provide screening. The woodlands are often of ancient origin and many are nationally designated as SSSI, which increases sensitivity. The irregular field pattern and small-scale settlement pattern create a rural landscape. The golf courses have a slightly lower sensitivity to solar PV development. Several historic features are still visible within the landscape, including commons, the strip parish pattern, medieval settlement pattern and estates and parklands. These are important to the character of this landscape, and provide a strong sense of time-depth. The wooded skyline is visible from neighbouring areas, although there are limited views out due to the woodland cover. The skylines are largely undeveloped, with the exception of electricity pylons north of Caversham, which slightly reduce sensitivity to solar PV development. The generally rural character of the landscape, with good levels of tranquillity elevates sensitivity to solar PV development. Popular promoted routes including the Chiltern Way and the Ridgeway pass through this landscape, and are sensitive receptors. Localised areas of modern development are found on the

edges of Caversham and Henley-on-Thames, which slightly reduce the sensitivity.

The location of the majority of the LCT within the Chilterns National Landscape increases landscape sensitivity to all scales of solar PV development. Representative features including beech yew woodlands, tranquillity and dark night skies, extensive recreational routes and a strong structure of hedgerows, parkland and farmland may be adversely impacted by the installation of solar PV development.

This LCT has 'high' landscape sensitivity to solar energy development greater than the 'small-scale' development scenario. There may be opportunities to accommodate carefully sited 'very small' and 'small' scale solar PV development scenarios in areas where existing woodland and thick field hedgerows could be used to screen solar PV installations to reduce their landscape and visual impact.

Sensitivity of Landscape Character Areas

- There is only one LCA in this LCT. Although the south of the LCT is outside of the Chilterns National Landscape, there are no significant variations in landscape sensitivity to solar PV development within this LCT.

Table 13: Landscape sensitivity to solar PV development in LCA 4A

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	Moderate
Small solar (1-5 hectares)	Moderate-high
Medium solar (5-20 hectares)	High
Large solar (20-50 hectares)	High

Development scenario	Overall landscape sensitivity rating
Very large solar (50-120 hectares)	High

Overall assessment of landscape sensitivity to wind energy developments

Summary of overall landscape sensitivity of Wooded Chalk Plateau and Valleys LCT

The distinct plateau landform incised by valleys creates an irregular topographic appearance and strongly undulating landscape, which increases sensitivity to wind energy development. The woodlands and scattered settlement pattern create frequent human-scale features. Woodlands interspersed with commons and fields creates a variety in land cover, with areas of important woodlands and grasslands also increasing sensitivity. Golf courses and the suburban edges of adjacent larger settlements locally impact rurality and therefore slightly decrease sensitivity. Extensive ancient woodland, an irregular historic field pattern, strong medieval settlement pattern and designed parkland landscapes creates a landscape with a strong sense of time-depth, which increases sensitivity. The elevated landform has a largely undeveloped, wooded skyline, although there are limited outward views due to enclosure from the woodlands. An overhead pylon line north of Caversham is the only locally intrusive element in views. The visual contrasts between the open commons and fields and the extensive woodland provides an attractive character, with a good sense of tranquillity and experience of dark night skies. Modern influences are limited to some suburban influence on the edges of settlements adjacent to the LCT. The location of the majority of the LCT within the Chilterns National Landscape increases sensitivity to wind energy development. Representative features including beech yew woodlands, tranquillity and dark night skies, extensive recreational routes and a strong structure of hedgerows, parkland and farmland may be adversely impacted by wind energy development.

This LCT has 'high' landscape sensitivity to wind energy development greater than the 'very small-scale' development scenario.

Sensitivity of Landscape Character Areas

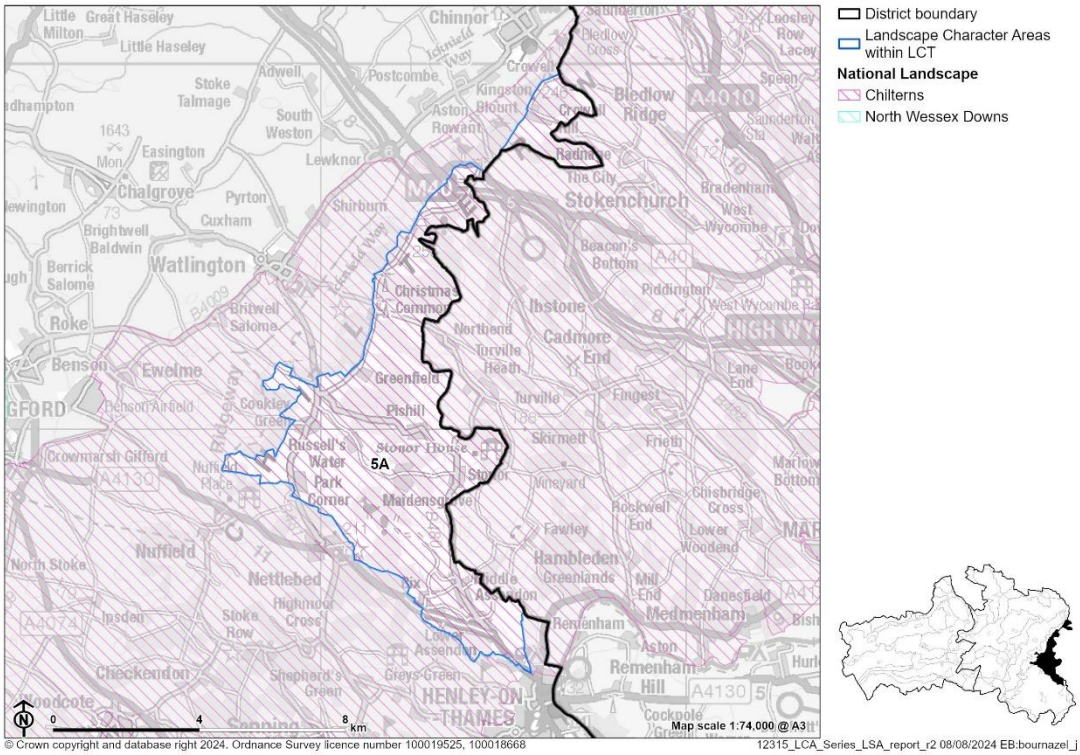
- There is only one LCA in this LCT. Although the south of the LCT is outside the Chilterns National Landscape, there are no significant variations in landscape sensitivity to wind energy development within this LCT.

Table 14: Landscape sensitivity to wind energy development in LCA 4A

Development scenario	Overall landscape sensitivity rating
Very small-scale wind (<25 metres)	Moderate-high
Small-scale wind (25-60 metres)	High
Medium-scale wind (60-100 metres)	High
Large-scale wind (100-150 metres)	High
Very large-scale wind (150-220 metres)	High

LCT 5 Wooded Chalk Ridges and Valleys

Figure 13: Contextual map of the LCT



Component Landscape Character Areas:

- LCA 5A: Chiltern Wooded Chalk Ridges and Valleys

Figure 14: Pasture valley with wooded backdrop, near Maidensgrove

Figure 15: Historic agricultural buildings in the sloping landscape

Assessment of landscape sensitivity to renewable energy development

Landscape sensitivity assessment

Landform and scale (including sense of openness/ enclosure)

- The Chilterns dipslope falls imperceptibly eastwards from the scarp giving the slope the character of a plateau. This is heavily dissected by steeply incised valleys, with only narrow ridges between, resulting in a strongly undulating landform. Valleys are predominantly dry with a limited number of watercourses.
- Heights range from 40 metres AOD to 250 metres AOD, with the lowest areas located to the far south around the River Thames; the highest areas include Bald Hill at 255 metres AOD and Britwell Hill at 230 metres AOD.
- The local topography is dominated by the Assendon and Stonor Valleys which merge to form the distinctive straight approach into Henley known as the 'Fair Mile'.
- The scale and sense of openness is varied and strongly influenced by the presence or absence of woodland and hedgerows. Some areas (e.g. to the north-east of Cookley Green and around Turville) have a relatively open character with large fields and low hedgerows enabling long views across the undulating landscape. These contrast with more enclosed areas created by the blocks of woodland (e.g. near Greenfield Wood and Kitesgrove Wood).
- Human scale features include frequent blocks of woodland, in-field and roadside trees, hedgerows and occasional hamlets, villages and farm buildings.

Landcover (including field and settlement patterns)

- Comparatively open fields contained within a strong structure of woods, species-rich hedgerows or trees to form a loose mosaic. Farming is mixed with dominance of arable cultivation with pasture more typical of lower slopes or valley bottoms.
- Supports a mosaic of farmland and woodland; steep valley sides typically support woodland, with distinctive valley top 'beech hangers' framing the valley and emphasising its depth.
- Contains a variety of Nature Conservation designations, including Sites of Special Scientific Interest (SSSIs) and extensive areas of ancient woodland; the internationally important Aston Rowant SAC and Chilterns Beechwoods SAC extend into this area, designated for its flower-rich chalk grassland, beech woodland and juniper scrub.
- Priority habitats include deciduous woodland, wood-pasture and parkland, traditional orchards, semi-improved grassland and lowland calcareous grassland.
- A sparse settlement pattern of small villages, hamlets and farms is connected by a distinctive pattern of winding rural roads.

Historic landscape character

- Stonor Park, a Grade II* Registered Park and Garden, is located to the east of LCA 5A. The well-managed parkland landscape has formal features such as avenues and free-standing mature trees in pasture, blocks of mature woodland and estate boundaries.
- The ruins of St James’s Church (Scheduled Monument and Grade II listed building) are located adjacent to the Chiltern Way.
- Many settlements date from the early Middle Ages, which saw enclosure and clearance and colonisation of previously unpopulated areas with new fields ‘assarted’ from extensive common woods; further enclosure through the Tudor and Jacobean periods was accompanied by the development of grand mansions and manor houses, such as Stonor Park.

- Conservation Areas are located at Stonor and the edges of Henley in the south of LCA 5A.

Visual character (including skylines)

- Strong structure of woodland and incised valley landform creates an intimate and enclosed character. Tree-lined ridges are a common feature in the area and form wooded, undeveloped skylines.
- Some views available from ridges into valleys but landform and strong structure of woods and hedgerows generally restrict longer-range views.

Perceptual and scenic qualities

- A generally rural and unspoilt landscape, with a strong structure of woodland and incised valley landform creating an intimate and enclosed character and restricting long-range views.
- Almost the entirety of the LCT is part of the Chilterns National Landscape. Special qualities represented in this landscape include the distinctive beech yew woodlands, rare chalk grassland, tranquillity and dark night skies, extensive recreational routes and a strong structure of hedgerows, parkland and farmland.
- The LCT features an extensive network of PRoW, including the Chiltern Way, Oxfordshire Way and Shakespeare's Way.
- Small areas of open common or heath occur within the area, at Russell's Water, Maidensgrove and at Bix.
- A distinctive pattern of winding rural lanes provides access to the landscape. A small section of the M40 motorway crosses through the area at the eastern side of the Stokenchurch Gap.

Table 15: Sensitivity scores for LCT 5 Wooded Chalk Ridges and Valleys

Criteria	Sensitivity Score: Solar	Sensitivity Score: Wind
Landform and scale (including sense of openness/enclosure)	Moderate-high	Moderate
Landcover (including field and settlement patterns)	Moderate-high	Moderate-high
Historic landscape character	Moderate	Moderate
Visual character (including skylines)	Moderate	Moderate-high
Perceptual and scenic qualities	Moderate-high	High

Overall assessment of landscape sensitivity to solar PV developments

Statement of overall landscape sensitivity of Wooded Chalk Ridges and Valleys LCT 5

The plateau-like landform with steeply incised valleys creates a strongly undulating and distinctive landform which increases landscape sensitivity to solar PV. The sense of openness varies across the area, with some areas of large-scale fields with low hedgerows, increasing sensitivity, contrasting with areas of enclosure within the blocks of woodland that have reduced sensitivity. Landcover is a mosaic of open fields and woodlands, with extensive areas of semi-natural land cover including ancient woodland, chalk grassland and scrub, which increases sensitivity. The pattern of small-scale settlements, farmland and woodland largely retains its Medieval origins. Historic features are limited to the parkland at Stonor Park and scattered Listed Buildings, creating a variety of time-depths. The strong woodland structure and incised valley landform creates

an intimate, enclosed landscape with limited intervisibility, reducing visual sensitivity. Skylines are wooded and undeveloped. This is a rural landscape with a strong sense of tranquillity and experience of dark night skies. The mosaic of woodland and farmland creates an attractive character and visual contrasts, increasing sensitivity. The landscape is visible from popular promoted routes including the Chiltern Way and Oxfordshire Way, which are sensitive receptors.

The location of the LCT within the Chilterns National Landscape increases landscape sensitivity to all scales of solar PV development. Representative features including beech yew woodlands, rare chalk grassland, tranquillity and dark night skies, extensive recreational routes and a strong structure of hedgerows, parkland and farmland may be adversely impacted by the installation of solar PV development.

This LCT has ‘high’ landscape sensitivity to solar energy development greater than the ‘small-scale’ development scenario. There may be opportunities to accommodate carefully sites ‘very small’ and ‘small’ scale solar PV development scenarios in areas where existing woodland and thick hedgerows could be used to screen solar PV installations to reduce their landscape and visual impact. All solar PV development should be avoided on the steep slopes which are often highly visible from the surrounding landscape.

Sensitivity of Landscape Character Areas

- There is only one LCA within this LCT, and there are no significant variations in landscape sensitivity to solar PV development.

Table 16: Landscape sensitivity to solar PV development in LCA 5A

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	Moderate

Development scenario	Overall landscape sensitivity rating
Small solar (1-5 hectares)	Moderate-high
Medium solar (5-20 hectares)	High
Large solar (20-50 hectares)	High
Very large solar (50-120 hectares)	High

Overall assessment of landscape sensitivity to wind energy developments

Summary of overall landscape sensitivity of Wooded Chalk Ridges and Valleys LCT 5

The steeply incised plateau-like landform creates a strongly undulating landscape, which increases sensitivity to wind energy development. The topographic variety within the landscape creates some hidden areas, as well as some visible slopes. Extensive areas of woodland, and occasional hamlets and villages form frequent human-scale features in the landscape, increasing sensitivity. The mosaic of farmland and woodland, which is of nature conservation importance, increases sensitivity to wind energy development. The only urban influence on the landscape is a small section of the M40, which is an aural and visual detractor. The landscape largely retains its landcover pattern of Medieval origin, increasing sensitivity. Historic villages, individual buildings and the parkland at Stonor Park provide a variety of time-depths. The structure of woodlands and incised valley landforms creates an intimate and enclosed character, which reduces sensitivity to ‘very-small scale’ turbines, which could be screened by these features. However, the wooded landform provides an important backdrop to views from settlements, increasing sensitivity in locations where this occurs. Skylines are visible from lower-lying landscapes due to the elevated landform characteristic of the LCT. The mosaic of woodland and farmland creates an attractive character of visual contrasts. This is a highly

tranquil landscape with limited signs of modern human activity, which increases sensitivity.

The location of the LCT within the Chilterns National Landscape increases sensitivity to all scales of wind energy development. Representative features including beech yew woodlands, rare chalk grassland, tranquillity and dark night skies, extensive recreational routes and a strong structure of hedgerows, parkland and farmland may be adversely impacted by wind energy development.

This LCT has 'high' landscape sensitivity to wind energy development greater than or equal to the 'small-scale' development scenario. The LCT has moderate-high sensitivity to 'very-small scale' wind development and there may be limited opportunities for developments of this scale associated with existing farms/settlement.

Sensitivity of Landscape Character Areas

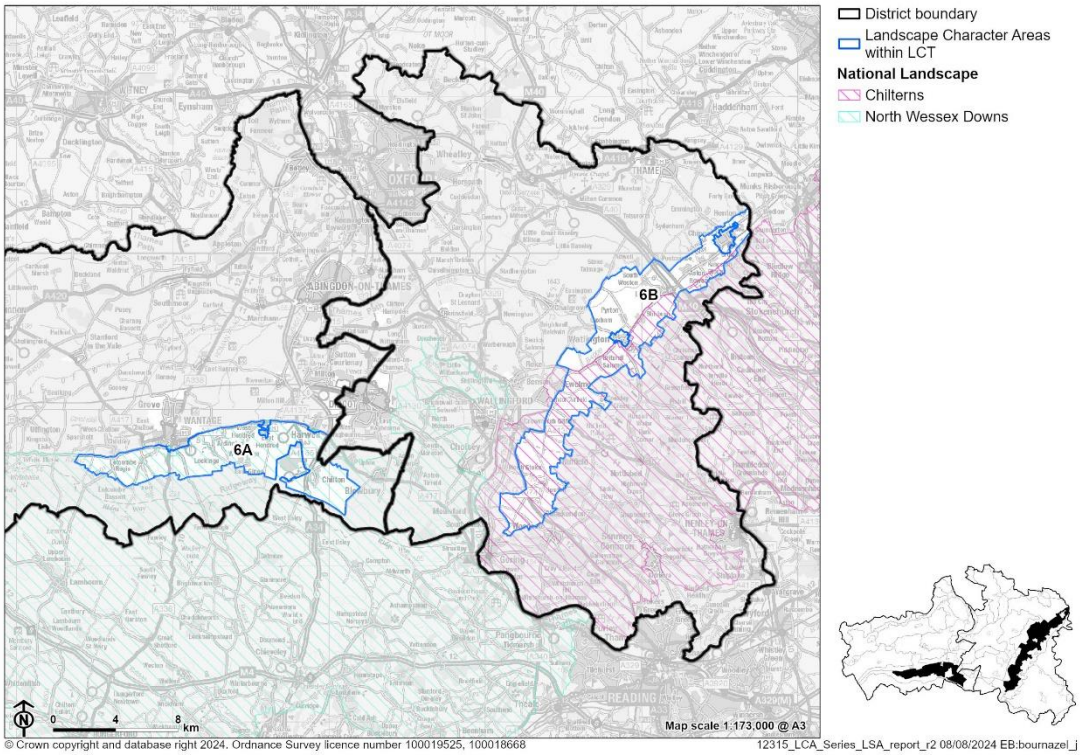
- There is only one LCA within this LCT, and therefore there are no significant variations in landscape sensitivity to wind energy development.

Table 17: Landscape sensitivity to wind energy development in LCA 5A

Development scenario	Overall landscape sensitivity rating
Very small-scale wind (<25 metres)	Moderate-high
Small-scale wind (25-60 metres)	High
Medium-scale wind (60-100 metres)	High
Large-scale wind (100-150 metres)	High
Very large-scale wind (150-220 metres)	High

LCT 6 Chalk Escarpment Footslopes

Figure 16: Contextual map of the LCT



Component Landscape Character Areas:

- LCA 6A: Wessex Downs Chalk Escarpment Footslopes
- LCA 6B: Chiltern Chalk Escarpment Footslopes

Figure 17: LCA 6A Open fields with occasional woodlands

Figure 18: LCA 6B Undulating fields with low hedgerows

Assessment of landscape sensitivity to renewable energy development

Landscape sensitivity assessment

Landform and scale (including sense of openness/ enclosure)

- A large-scale rolling shelf of land that falls from the foot of the scarp to the south and the east, and towards the lower-lying vale landscapes to the north and to the river valleys landscapes to the west and south. Small watercourses flow from chalk springs, creating a rolling topography.
- Heights range from around 160 metres AOD where it meets the scarp, to approximately 90 metres AOD where it meets the vale.
- Field boundaries are generally absent or defined by gappy hedgerows, creating an open character. Vegetation is concentrated along watercourses, and in small estates and parklands, (such as Arnhill Park, Ardington House and Shirburn Castle) providing some enclosure. LCA 6B has small linear belts, clumps and blocks of deciduous woodland, including some ancient woodland at Britwell Salome, Oakley Court and Woodhouse Farm.
- Human scale features include minor valley features, chalk spring-fed watercourses edged by riparian woodland and vegetation, tree planting associated with parklands, rural settlements, and farm buildings.

Landcover (including field and settlement patterns)

- Fields are often open, as a result of the amalgamation of older enclosures. Hedgerows are limited; with some reinforcement with post and wire. Where hedgerows survive they provide some enclosure. The landscape is generally used for intensive arable farming, with several areas of pig

farming. Smaller parcels of land are found on the edge of settlements and include orchards and paddocks.

- Small woodland blocks and linear belts are scattered across the landscape, and provide some localised enclosure. Woodland blocks are also found in the areas of parkland.
- Semi-natural land cover is limited to small woodland blocks, substantial tree belts and chalk spring-fed watercourses, which are edged by riparian woodland and vegetation. Lowland calcareous grassland is found on the edge of Watlington Hill.
- Historic settlements lie on the 'spring-line' where chalk springs flow towards the vale. Farmsteads are found across the area, and often contain listed buildings.
- Urban influences on the edge of the LCT include the southern edge of Wantage and Harwell Campus. A former chalk quarry at Chinnor is now being regenerated, with vegetation re-establishing.

Historic landscape character

- The small 'spring-line' villages date from the Medieval era with their cores often designated Conservation Areas and containing numerous Listed Buildings.
- Estates and parklands are a key feature of the landscape, with small manor houses and parklands on the edge of most of the small villages. Parkland features including tree roundels and parkland trees are common. The majority of the parklands are not nationally recognised, except for Shirburn Castle Registered Park and Garden (Grade II).
- A restored heritage railway runs east of Chinnor towards Princes Risborough. It follows part of the original route between Princes Risborough to Pyrton outside Watlington.
- Scheduled Monuments, providing time-depth to the landscape, are scattered across the LCT, including a Bronze Age Bowl Barrow at Churn Farm and Grim's Ditch.

- The historic field pattern has largely been removed by amalgamation of older enclosures. In LCA 6B evidence of strip parishes, long, linear land holdings leading up to the Chiltern Hills follow the line of earlier routeways.

Visual character (including skylines)

- The open, undulating topography results in panoramic, long-distance views. Views are available north across the lower-lying vale and south to the scarp which forms a strong backdrop. There are also open views across the footslopes themselves. The footslopes and scarp lie within the North Wessex Downs National Landscape (in LCA 6A) and Chilterns National Landscape (in LCA 6B).
- The open slopes provide a setting to towns and villages to the north, and visible from the scarp to the south. Pylon routes in the east of LCA 6A and north of Chinnor in LCA 6B and modern buildings at Harwell Campus reduce the tranquillity and form visual detractors.
- Tree cover and the undulating topography creates some small areas of enclosure.

Perceptual and scenic qualities

- A generally rural and unspoilt landscape, with a settlement relatively well assimilated into the landscape by tree cover. Signs of modern human activity include pylon routes, major roads, including the M40 and modern buildings at Harwell Campus. The modern settlement edges of Chinnor and Wantage are also a detractor.
- Almost the entirety of the LCT is nationally designated – the whole of LCA 6A as part of the North Wessex Downs National Landscape, and most of LCA 6B as part of the Chilterns National Landscape. Special qualities of the North Wessex Downs represented in this landscape include chalk streams, arable habitats, medieval settlements with historic buildings, country houses and landscape gardens and extensive public rights of way. Special qualities of the Chilterns represented in this landscape include the

panoramic views, ancient routeways, historic attractive villages and extensive public rights of way.

- The LCT features an extensive network of PRoW, including the Vale Way, Ridgeway, Oxfordshire Way and Chiltern Way and National Cycling Route 544.
- The north-south axis of roads connecting the scarp in the south to the vale in the north results in a distinctive grain to the landscape, with field boundaries and other features arranged parallel or perpendicular to this.

Table 18: Sensitivity scores for LCT 6 Chalk Escarpment Footslopes

Criteria	Sensitivity Score: Solar	Sensitivity Score: Wind
Landform and scale (including sense of openness/enclosure)	Moderate-high	Moderate
Landcover (including field and settlement patterns)	Moderate	Moderate
Historic landscape character	Moderate	Moderate
Visual character (including skylines)	Moderate-high	Moderate-high
Perceptual and scenic qualities	Moderate-high	Moderate-high

Overall assessment of landscape sensitivity to solar PV developments

Summary of overall landscape sensitivity of Chalk Escarpment Footslopes LCT 6

The landform shelf with distinctive rolling topography caused by small valleys has a largely open character as field boundaries are often absent, increasing sensitivity to solar PV development. Riparian vegetation and woodlands in small estates and parklands provide some areas of enclosure and reduce sensitivity as they would provide screening. A largely rural landscape with a mixture of large-scale arable fields, and some smaller orchards and paddocks on the edges of settlements. Limited semi-natural habitats and urban influences from adjacent settlements reduce sensitivity. Although the historic field pattern has largely been removed by modern amalgamation, the Medieval pattern of 'spring-line' villages, prehistoric Scheduled Monuments and small estates and parklands remain part of the character of the landscape. These provide a variety of time-depths, and increase sensitivity to solar PV development. The open and elevated character of the landscape provides prominent skylines and forms a strong backdrop to the surrounding vale landscapes and a distinctive setting to settlements, increasing sensitivity. Electricity pylon routes and major roads locally decrease tranquillity, which slightly reduces sensitivity. However, this is a rural and unspoilt landscape, with network of public rights of way including promoted routes the Vale Way, Ridgeway, Oxfordshire Way and Chiltern Way, which are all sensitive receptors.

The location of the LCT within the nationally designated landscapes of North Wessex Downs National Landscape and Chilterns National Landscape increases landscape sensitivity to all scales of solar PV development. Representative features of the North Wessex Downs including chalk streams, arable habitats, medieval settlements with historic buildings, country houses and landscape gardens may be adversely impacted by the installation of solar PV development. Representative features of the Chilterns including rare chalk

grassland, panoramic views, ancient routeways, and historic attractive villages may be adversely impacted by the installation of solar PV development.

This LCT has 'high' landscape sensitivity to solar energy development greater than the 'small-scale' development scenario. There may be some opportunities to accommodate carefully sited 'very small' to 'small' scale solar PV development in areas close to existing larger urban development, and where enclosure can be provided by hedgerows. Any solar PV development should be avoided on the steep slopes which are often highly visible from the surrounding landscape.

Sensitivity of Chalk Escarpment Footslopes Landscape Character Areas

LCA 6A: Features which increase sensitivity are the limited field boundary vegetation and very open character, resulting in limited opportunities to screen development with existing features. The landscape provides an important setting to historic villages and parklands such as East Hendred. Although vegetation along the small watercourses creates areas of enclosure, these are located on relatively steep topography. The location of the whole LCA within the North Wessex Downs National Landscape also increases sensitivity to all scales of solar PV development. Proximity to the urban edges of Wantage and Harwell Campus slightly reduces sensitivity.

Table 19: Landscape sensitivity to solar PV development in LCA 6A

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	Moderate
Small solar (1-5 hectares)	Moderate-high
Medium solar (5-20 hectares)	High

Development scenario	Overall landscape sensitivity rating
Large solar (20-50 hectares)	High
Very large solar (50-120 hectares)	High

LCA 6B: Features which increase sensitivity include semi-natural habitats, including ancient woodland and a SSSI at Knightsbridge Lane, which create variety in the landscape. Shirburn Castle is the only nationally designated Registered Park and Garden in the LCT. Combined with evidence of ancient strip parish field patterns, this increases the sense of time-depth and therefore sensitivity. The majority of this LCA lies within the Chilterns National Landscape, which increases sensitivity to all scales of solar PV development. Although the north-west of the LCA is not nationally designated, it has strong intervisibility with the National Landscape and provides a setting to it. Major roads including the M40 are local detractors from tranquillity, which slightly decreases sensitivity. The woodlands and robust hedgerow network, could allow for screening of 'very small' solar PV development.

Table 20: Landscape sensitivity to solar PV development in LCA 6B

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	Moderate
Small solar (1-5 hectares)	Moderate-high
Medium solar (5-20 hectares)	High
Large solar (20-50 hectares)	High
Very large solar (50-120 hectares)	High

Overall assessment of landscape sensitivity to wind energy developments

Summary of overall landscape sensitivity of Chalk Escarpment Footslopes LCT 6

A shelving landform, incised by small watercourses creating a rolling landscape, which increases sensitivity to wind energy development. The many human-scale features within the landscape including watercourses with riparian vegetation, parklands and rural settlements also increase sensitivity. The landscape has a mix of modern and historic enclosure patterns, and variety in landcover is provided by small woodland blocks in parklands and chalk spring-fed watercourses. The limited areas of semi-natural habitat and recent introduction of large-scale pig farming slightly decrease sensitivity. The landscape has a strong Medieval settlement pattern of ‘spring-line’ villages, and many small estates and parklands which are visible historic features of importance to the character, and create a variety of time-depths, increasing sensitivity. The open, undulating topography results in panoramic, long-distance views with high levels of intervisibility with surrounding landscapes, increasing sensitivity. Skylines are undeveloped, and provide a setting to towns and villages to the north. The rural landscape with limited modern human influence and an attractive combination of farmland, woodland blocks and parkland also increases sensitivity.

The landscape lies within the nationally designated landscapes of the North Wessex Downs National Landscape and Chilterns National Landscape, which increases sensitivity to all scales of wind energy development. Representative features of the North Wessex Downs including chalk streams, arable habitats, medieval settlements with historic buildings, country houses and landscape gardens and of the Chilterns including rare chalk grassland, panoramic views, ancient routeways, and historic attractive villages may be adversely impacted by wind energy development.

This LCT has 'high' landscape sensitivity to wind energy development greater than the 'very small-scale' development scenario.

Sensitivity of Chalk Escarpment Footslopes Landscape Character Areas

- **LCA 6A**: Features which increase sensitivity include the designation of the whole LCA as part of the North Wessex Downs National Landscape, as well as the open skylines, elevated topography, historic settlement pattern, varied landcover, and many human scale features. Features which slightly reduce sensitivity are proximity to the urban/commercial development on the edge of Wantage and at Harwell campus.

Table 21: Landscape sensitivity to wind energy development in LCA 6A

Development scenario	Overall landscape sensitivity rating
Very small-scale wind (<25 metres)	Moderate-high
Small-scale wind (25-60 metres)	High
Medium-scale wind (60-100 metres)	High
Large-scale wind (100-150 metres)	High
Very large-scale wind (150-220 metres)	High

LCA 6B: Features which increase sensitivity to wind energy development include the undulating landform, semi-natural habitats including ancient woodlands and calcareous grassland, historic settlement and field pattern and parklands including Shirburn Castle Registered Park and Garden, and expansive views. Much of the area is within the Chilterns National Landscape, which increases sensitivity to all scales of wind energy development. Although the north of the LCA is not nationally designated, it has strong intervisibility with

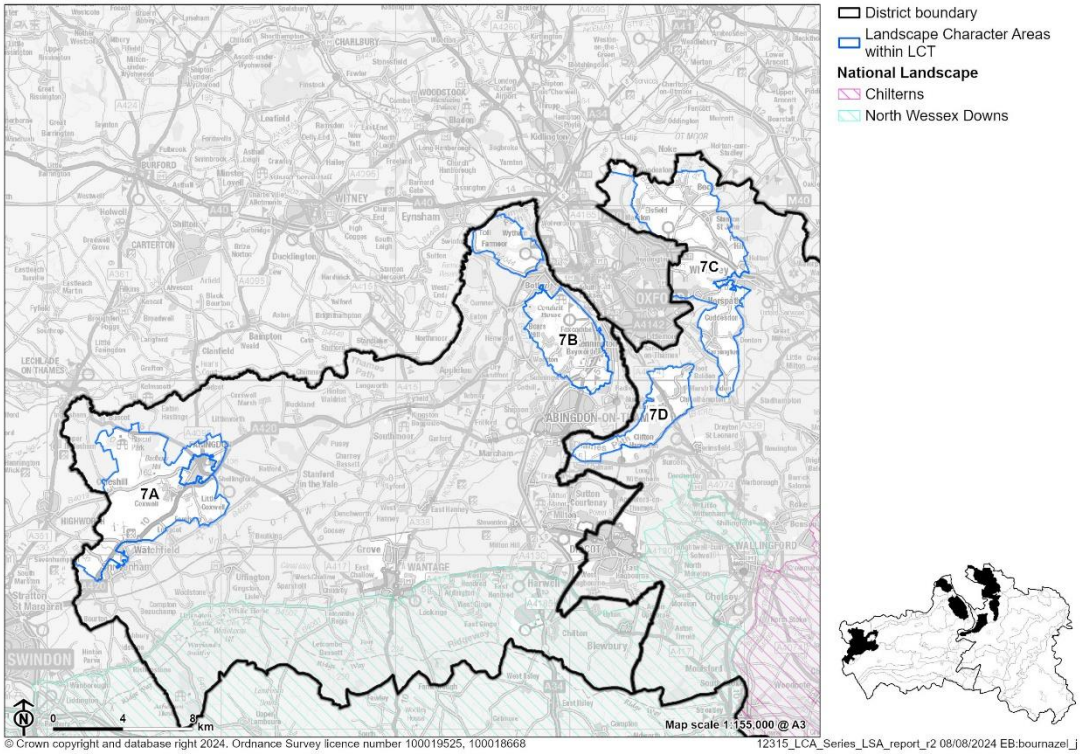
the National Landscape and provides a setting to it. The M40 is a local detractor which slightly reduces sensitivity.

Table 22: Landscape sensitivity to wind energy development in LCA 6B

Development scenario	Overall landscape sensitivity rating
Very small-scale wind (<25 metres)	Moderate-high
Small-scale wind (25-60 metres)	High
Medium-scale wind (60-100 metres)	High
Large-scale wind (100-150 metres)	High
Very large-scale wind (150-220 metres)	High

LCT 7 Ridge Hilltops

Figure 19: Contextual map of the LCT



Component Landscape Character Areas:

- LCA 7A: Faringdon Ridge Hilltops
- LCA 7B: Oxford West Ridge Hilltops
- LCA 7C: Oxford East Ridge Hilltops
- LCA 7D: Oxford South Ridge Hilltops

Figure 20: LCA 7A: Views to Westmill Wind Farm north of Watchfield

Figure 21: LCA 7B: Views across slopes to Oxford city

Assessment of landscape sensitivity to renewable energy development

Landscape sensitivity assessment

Landform and scale (including sense of openness/ enclosure)

- Gently undulating limestone and sandstone hills, ranging between approximately 60 metres AOD and 170 metres AOD. The hills surround the city of Oxford and the town of Faringdon in the west of the Vale of White Horse District.
- Slopes of varying steepness transition the landscape to neighbouring vales or river floodplains. Some steeper slopes are located around watercourses and localised high points, notably Shotover Hill (170 metres AOD), Bradbury Hill (160 metres AOD) and Thorn Hill (154 metres AOD).
- Several small spring-fed streams, such as Pennyhooks Brook, and Bayswater Brook incise the landscape as they flow to larger watercourses such as the River Cole and River Thame.
- Sense of enclosure is largely dependent on the dispersal of woodland across the landscape, some areas which contain significant blocks of woodland, including riparian and coniferous woodland (e.g. between Kennington and Wootton, along the River Cole, and near Wytham Great Wood), are more enclosed. Areas where woodland is sparse, such as east of Barton and near Garsington are more open.
- Field patterns and hedgerows also vary and affect enclosure – some areas of smaller-scale fields surrounded by species-rich hedgerows featuring mature trees such as oaks and sycamore provide a stronger sense of enclosure (such as around Boars Hill and east of Beckley) than larger arable areas lacking significant boundary vegetation (such as north of Watchfield and near Garsington).

- Human scale features include low-density settlements comprising scattered farmsteads and small villages such as Nuneham Courteney and Marsh Baldon.

Landcover (including field and settlement patterns)

- A mixture of large-scale and medium-scale arable and pastoral farmland generally defined by intact hawthorn hedges, with areas of estate land (such as Buscot Park, Coleshill Park and Nuneham Park), and smaller scale parcels of land associated with settlement (Foxcombe Hill and Boars Hill). Smaller areas of pasture often feature close to settlements.
- Settlement comprises several nucleated towns and villages and scattered farmsteads. Areas where open land is between settlement helps to ensure their individual characters. There are also a number of large country houses which are generally located on high points with views over the vale landscapes.
- Dispersed blocks of woodland feature throughout, some of which are very large and often associated with localised highpoints and steep slopes (such as Wytham Great Wood, Brasenose Wood, and Bagley Wood), including significant areas of ancient woodland.
- Significant biodiversity in the form of Sites of Special Scientific Interest (SSSIs) covering several areas of ancient woodland (such as Stanton Great Wood, Woodeaton Wood, Whyntham Wood), as well as former extraction sites (including Woodeaton Quarry and Littleworth Brick Pit). Priority habitats include deciduous woodland, lowland calcareous grassland, lowland dry acid grassland, lowland fens and lowland meadows.

Historic landscape character

- A combination of post-medieval and modern fieldscapes, with woodland dating from the last Ice Age, 17th century and modern plantations from the 1950s and 60s. The Wytham Estate has been owned, maintained and studied by the University of Oxford since 1942.

- Historically significant sites include two Iron Age hillforts at Badbury Camp and Little Coxwell Camp which are Scheduled Monuments, several cores of villages are covered by Conservation Areas (such as Faringdon, Woodeaton and Great Coxwell), and a number of Listed Buildings. The Grade II Listed Faringdon Folly Tower is a distinctive local landmark, on Faringdon Hill to the east of the town. Other historically significant sites include medieval moated sites (Holton House and Church Farm).
- Post-medieval estates feature throughout the rural landscape and include Nuneham Courtenay Grade I RPG which comprises an extensive area of 18th-century parkland designed by 'Capability' Brown for Lord Harcourt, Shotover House and parkland was designed by William Kent (Grade I RPG), and the Grade II* Registered Park and Garden (RPG) at Buscot House.
- Buildings in the villages often reflect the underlying geology, with many older houses constructed from the distinctive local Corallian Limestone. Red tiles or thatch are common as roofing materials.

Visual character (including skylines)

- Views are generally reduced by landform and tree cover resulting in a more enclosed and intimate landscape. Elsewhere low hedge heights, relatively limited woodland and/or raised vantage points allow long distance views, including from roads and public rights of way.
- Longer-range views comprise features from neighbouring settlements and landscapes such as the protected view to the spires and rooftops of Oxford ('dreaming spires of Oxford'), as well as the views to the North Wessex Downs National Landscape on the horizon. Dominant sky in long views of the open, exposed ridges and higher ground, associated with large-scale arable farming.
- There is often intervisibility with the neighbouring lower river valley landscapes (such as those associated with the River Ock and River Thames); the LCT often forms an undeveloped wooded backdrop and skyline in views from the neighbouring lower-lying vales. The wooded, steep ridges often a focal point in views including from Wytham, Botley,

Cumnor and Farmoor reservoir. Other notable viewpoints include Berkeley Road, Old Berkeley Golf Course, Boars Hill, Shotover Hill and Beckly Hill.

- Electricity pylons are a strong visual detractor in parts of the LCT such as south of LCA 7C and in views through to industrial areas such as on Abingdon's southern edge. Telecommunications masts at Beckley are also visible from a wide area.

Perceptual and scenic qualities

- The varied topography, mixed land use and strong woodland and tree cover create an attractive, diverse, patchwork landscape.
- A rural, relatively tranquil, farmland landscape, with an intact network of hedgerows and mature hedgerow trees, providing the rural setting to settlements. Wooded areas provide a stronger sense of enclosure, remoteness and tranquillity. Comparatively high levels of dark skies than elsewhere in the district.
- Areas close to towns and larger settlements (such as Oxford, Wheatley, Faringdon, and Shrivenham) are influenced by human activity, particularly where there are gaps in the vegetation that otherwise integrate the settlements into their surrounding rural setting.
- Good network of public rights of way including the Oxford Greenbelt Way, the D'Arcy Dalton Way and The Vale Way long distance paths; while access is more limited in some parts of the LCT. Paths through Shotover Hill and Wytham Woods (require a permit), Hinksey Heights golf course provide additional recreation.
- Major transport corridors, such as the A420, and A40 are generally well assimilated into the landscape by significant roadside vegetation, but noise and light pollution from traffic does in places reduce rural tranquillity. This also occurs with smaller B-roads (such as B4027 and B480).
- Larger-scale arable agriculture as well as proximity to industrial park and powerlines carried on large pylons in Oxford and Abingdon reduce tranquillity in the wider area.

- There is an existing renewable energy development at Westmill Wind Farm and Solar Park, north of Watchfield.

Table 23: Sensitivity scores for LCT 7 Ridge Hilltops

Criteria	Sensitivity Score: Solar	Sensitivity Score: Wind
Landform and scale (including sense of openness/enclosure)	Moderate	Moderate
Landcover (including field and settlement patterns)	Moderate	Moderate-high
Historic landscape character	Moderate	Moderate
Visual character (including skylines)	Moderate-high	Moderate-high
Perceptual and scenic qualities	Moderate-high	Moderate-high

Overall assessment of landscape sensitivity to solar PV developments

Summary of overall landscape sensitivity of Ridge Hilltops LCT 7

A gently undulating landform of prominent, visible hills which rise above the surrounding vales and floodplains, increasing sensitivity. Significant areas of woodland decrease sensitivity to solar PV development as they provide enclosure. Outside of the woodlands, this is an open landscape, which increases sensitivity. The field pattern is a mixture of large and medium scale arable fields, with smaller areas of pasture close to settlements. The woodlands create a rural character, along with significant areas of ecological grasslands, which increases sensitivity. There are limited urban influences, although a number of small villages lie within the LCT. The mix of historic and modern

fieldscapes, prehistoric hillforts, historic villages and estates and parklands creates a strong sense of time depth. These historic features are important to the landscape character of the LCT, and increase sensitivity to solar PV development. The landscape is visible from a number of popular promoted routes, including the Oxford Greenbelt Way and The Vale Way, which are sensitive receptors. The elevated landform creates an important backdrop to the surrounding vale and floodplain landscapes. Skylines are generally undeveloped, and often wooded. The LCT contains a number of notable viewpoints, which increases sensitivity. The varied topography and strong woodland cover create an attractive, diverse landscape, which increases sensitivity. Proximity to large urban areas including the edge of Oxford city and Abingdon slightly reduces sensitivity locally. A number of electricity pylons and large roads also detract slightly from the visual character and tranquillity of the LCT.

This LCT generally has ‘high’ landscape sensitivity to solar energy development greater than the ‘small-scale’ development scenario. There may be opportunities to accommodate carefully sited ‘very small’ and ‘small’ scale solar PV development scenarios in areas where existing woodland and thick hedgerows could be used to screen development to reduce their landscape and visual impact. Solar PV development should be avoided on the steep slopes which are often highly visible from the surrounding landscape.

Landscape sensitivity of Ridge Hilltops LCT

LCA 7A: The LCA’s role as part of the wider northern setting to the North Wessex Downs National Landscape, with a high level of intervisibility with the south, increases sensitivity to all scales of solar PV development. Other features which increase sensitivity include large areas of ancient woodland and the historic parkland at Buscot, an RPG. Features which decrease sensitivity to solar PV development include proximity to existing renewable energy development (although cumulative impacts should be carefully considered), which reduces the rural land cover, and the busy roads impacting on tranquillity. While strong woodland cover decreases sensitivity as it provides screening, the

woodland is often on sloping land which has high levels of intervisibility with the surrounding low-lying vales.

Table 24: Landscape sensitivity to solar PV development in LCA 7A

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	Moderate
Small solar (1-5 hectares)	Moderate-high
Medium solar (5-20 hectares)	High
Large solar (20-50 hectares)	High
Very large solar (50-120 hectares)	High

LCA 7B: Features which increase sensitivity to solar PV development include Wytham Woods SSSI, a large part of which is ancient woodland in the northern half of the LCA, the distinctive backdrop the LCA provides to Farmoor Reservoir and the Thames floodplain, as well as the distinctive backdrop to Oxford city. Features which locally decrease sensitivity to solar PV development include proximity to larger urban areas and busy roads, which reduce tranquillity.

Table 25: Landscape sensitivity to solar PV development in LCA 7B

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	Moderate
Small solar (1-5 hectares)	Moderate-high
Medium solar (5-20 hectares)	High
Large solar (20-50 hectares)	High

Development scenario	Overall landscape sensitivity rating
Very large solar (50-120 hectares)	High

LCA 7C: Features which increase sensitivity to solar PV development include the high concentration of SSSIs including Shotover Country Park, Brasenose Wood, Sidling's Copse and College Pond and Stanton Great Wood, greater areas without woodland which increases visibility, and the backdrop that the LCA provides to Oxford city and the Thames floodplain. Features which decrease landscape sensitivity include proximity to the urban edge of Oxford city which reduces the rural character and tranquillity.

Table 26: Landscape sensitivity to solar PV development in LCA 7C

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	Low-moderate
Small solar (1-5 hectares)	Moderate
Medium solar (5-20 hectares)	Moderate-high
Large solar (20-50 hectares)	High
Very large solar (50-120 hectares)	High

LCA 7D: Features which increase sensitivity to solar PV development include the historic character and time-depth associated with Nuneham Courtenay RPG. Features which decrease sensitivity to solar PV development include the gentler slopes and proximity to existing infrastructure such as the A4074, Culham Science Centre and industrial development on the edge of Abingdon, which locally reduce the rural character and tranquillity.

Table 27: Landscape sensitivity to solar PV development in LCA 7D

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	Low-moderate
Small solar (1-5 hectares)	Moderate
Medium solar (5-20 hectares)	Moderate-high
Large solar (20-50 hectares)	High
Very large solar (50-120 hectares)	High

Overall assessment of landscape sensitivity to wind energy developments

Summary of overall landscape sensitivity of Ridge Hilltops LCT 7

The gently undulating hills are prominent in the landscape and contain frequent human-scale features including woodlands, hedgerows, small villages and farm buildings, which increases sensitivity to wind energy development. Land cover is varied, with a mixture of large- and medium-scale fields in arable and pasture use, woodlands, and parklands. The woodlands are significant areas of semi-natural land cover, which increases sensitivity. Parklands and estates, historic villages and prehistoric monuments are visible historic features in the landscape which provide a variety of time-depths. The elevated landscape provides an important visual backdrop to the surrounding vale and floodplain landscapes, which increases sensitivity. Skylines are generally marked by woodland and are undeveloped. The LCT is visible from a number of popular recreational routes including the Thames National Path and Oxford Greenbelt Way, which are sensitive receptors. The LCT has a pleasing combination of woodland,

parklands and fields with a strong rural character, which increases sensitivity. Local detractors from the rural character and tranquillity include proximity to the residential and industrial edges of Abingdon and Oxford city, and the noise pollution from major transport routes.

This LCT has 'high' landscape sensitivity to wind energy development greater than the 'medium-scale' development scenario.

Sensitivity of Ridge Hilltops Landscape Character Areas

LCA 7A: The LCA forms part of the wider northern setting to the North Wessex Downs National Landscape, with a strong visual relationship between the National Landscape and the south of the LCA, which increases sensitivity. Proximity to existing renewable energy development at Westmill Farm reduces rural land cover, while busy roads impact on tranquillity. These slightly decrease sensitivity to wind energy development.

Table 28: Landscape sensitivity to wind energy development in LCA 7A

Development scenario	Overall landscape sensitivity rating
Very small-scale wind (<25 metres)	Low-Moderate
Small-scale wind (25-60 metres)	Moderate
Medium-scale wind (60-100 metres)	Moderate-high
Large-scale wind (100-150 metres)	High
Very large-scale wind (150-220 metres)	High

LCA 7B: Features which increase sensitivity to wind energy development include the extensive of coverage of semi-natural habitats including ancient

woodland at Wytham Woods SSSI, and the backdrop the LCA provides to the Thames floodplain and Oxford city. Proximity to the urban edges of Oxford and Abingdon, and to busy transport corridors locally decreases sensitivity.

Table 29: Landscape sensitivity to wind energy development in LCA 7B

Development scenario	Overall landscape sensitivity rating
Very small-scale wind (<25 metres)	Moderate
Small-scale wind (25-60 metres)	Moderate-high
Medium-scale wind (60-100 metres)	High
Large-scale wind (100-150 metres)	High
Very large-scale wind (150-220 metres)	High

LCA 7C: Features which increase sensitivity to wind energy development include the high concentration of semi-natural habitats including a number of SSSIs, the historic character including two RPGS, and the setting the LCA provides to Oxford city. Features which decrease sensitivity include proximity to the urban edge of Oxford city, which reduces the rural character and tranquillity.

Table 30: Landscape sensitivity to wind energy development in LCA 7C

Development scenario	Overall landscape sensitivity rating
Very small-scale wind (<25 metres)	Moderate
Small-scale wind (25-60 metres)	Moderate-high
Medium-scale wind (60-100 metres)	High

Development scenario	Overall landscape sensitivity rating
Large-scale wind (100-150 metres)	High
Very large-scale wind (150-220 metres)	High

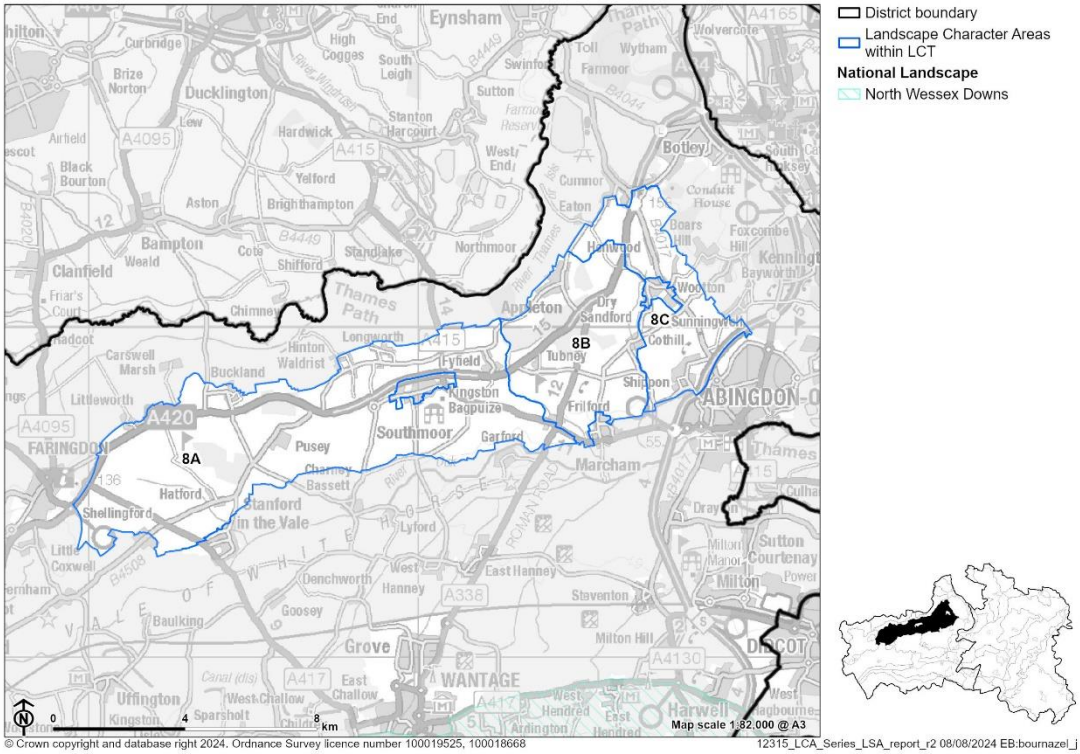
LCA 7D: Features which increase sensitivity to wind energy development include the important historic parkland at Nuneham Courtenay RPG, which contains ancient woodland, and the large number of semi-natural habitats. Features which locally decrease sensitivity to wind energy development include the proximity to the industrial edge of Abingdon, and more gentle slopes which are less prominent in the surrounding landscapes.

Table 31: Landscape sensitivity to wind energy development in LCA 7D

Development scenario	Overall landscape sensitivity rating
Very small-scale wind (<25 metres)	Moderate
Small-scale wind (25-60 metres)	Moderate
Medium-scale wind (60-100 metres)	Moderate-high
Large-scale wind (100-150 metres)	High
Very large-scale wind (150-220 metres)	High

LCT 8 Ridge Slopes

Figure 22: Contextual map of the LCT



Component Landscape Character Areas:

- LCA 8A: Faringdon to Frilford Ridge Slope.
- LCA 8B: Frilford to Sandford Ridge Slope.
- LCA 8C: Cumnor to Abingdon Ridge Slope.

Figure 23: LCA 8B: View across flat arable land towards woodland at Appleton Upper Common.

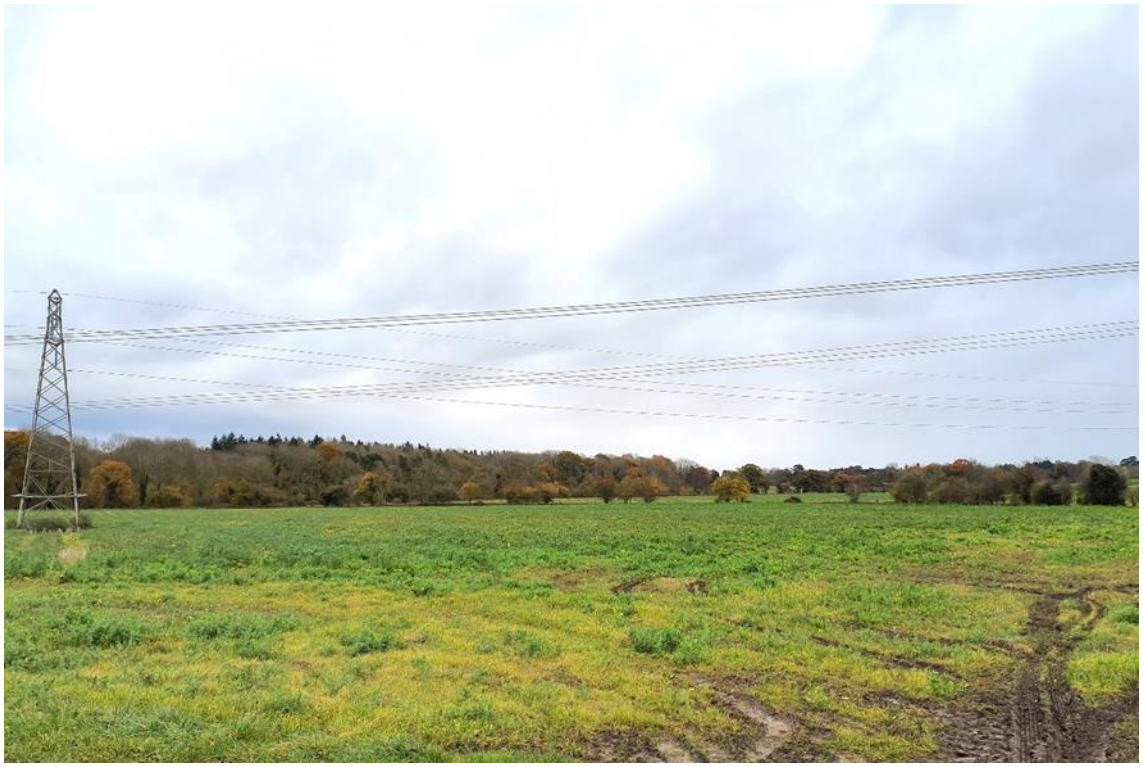


Figure 24: LCA 8C: Large-scale, open arable fields south of Cumnor, with wooded skyline.

Assessment of landscape sensitivity to renewable energy development

Landscape sensitivity assessment

Landform and scale (including sense of openness/ enclosure)

- A low ‘ridge’ landform which rises above the Thames and Ock Valleys, with steeper north-facing slopes (reaching 112 metres AOD in the west near Littleworth and 159 metres AOD in the east near Hurst Hill). Gentler south-facing slopes form a transition to the adjacent vale landscapes, lying at around 60 metres AOD.
- The rolling topography and tree cover, including large areas of woodland at Appleton Upper Common, Tubney Wood, and Buckland Warren provide a sense of enclosure. In contrast, land around Abingdon Airfield is open.
- Human scale features include hedgerows, mature trees and traditional farm buildings.

Landcover (including field and settlement patterns)

- Mixed field pattern of large-scale arable and pastoral farmland with small paddocks near settlements, and areas of estate land. Hedgerow boundaries are generally intact.
- Field patterns are predominantly of post medieval and modern origin, with some remnant areas of medieval field patterns. Field boundaries of hedgerows and mature hedgerow trees are largely intact and contribute to the sense of enclosure.
- The land is drained by minor watercourses which are often defined by riparian woodland, further contributing to the sense of enclosure.

- Supports a mosaic of farmland and woodland, with large areas of woodland (including ancient woodland) at Pusey Common Wood, Buckland Warren, Appleton Upper Common, and Tubney Wood.
- Contains numerous semi-natural habitats designated as Sites of Special Scientific Interest (SSSIs) including at Fernham Meadows, Barrow Farm Fen and Frilford Heath. Cothill Fen is internationally designated as a SAC, and is also a National Nature Reserve.
- There are several active and disused quarries across the landscape, most of which are designated as Local Geological Sites.
- Urban land uses in the west include lengths of runway, hard standings and hangers associated with Abingdon Airfield and fairways/putting greens at Frilford Heath Golf Course.
- Settlement comprises historic nucleated villages and hamlets, with scattered country houses and farmsteads elsewhere.

Historic landscape character

- Many of the villages comprise a cluster of listed buildings located around a historic core and have Conservation Areas, reflecting their historic significance.
- Areas of parkland associated with historic country houses at Pusey House, Buckland House (both Registered Parks and Gardens) and Kingston Bagpuize House locally influence the landscape character, with grassland, plantations, tree lines and groups, mature in-field trees, and lakes.
- Scheduled Monuments include Cherbury Camp Iron Age Hill Fort, a prehistoric settlement site north-east of Marcham, and a likely medieval enclosure in Ewedown Copse.
- Some medieval field patterns remain, notably around Hatford, Littleworth and Buckland, while the majority of the field pattern is of modern origin.

Visual character (including skylines)

- Woodland cover and hedgerows provide a sense of enclosure and limits the distance of views within the area. In some areas larger fields have boundaries which are low, gappy or absent (e.g. along Kingston Road), allowing open views across the landscape.
- Skylines are often wooded, however the presence of built features in some views (including pylons and settlement edges) exerts urban influence on the landscape.
- Infrastructure associated with Abingdon Arfield including runways, hard standings, hangers and associated buildings and security fencing exert an urban influence on the landscape.
- The south-facing slopes provide a backdrop to the vale to the south, and are part of the wider, albeit more distant, northern setting of the North Wessex Downs National Landscape.

Perceptual and scenic qualities

- A generally rural area with some sense of peace and tranquillity, particularly in more wooded areas.
- Human influences including pylons, settlement, and major roads locally limit the sense of tranquillity, notably in the east near larger settlements such as Abingdon on Thames.
- The LCT features a good network of PRoW, including the Oxford Greenbelt Way and Vale Way long distance footpaths.
- The rural landscape of pastoral fields interspersed with woodland and occasional parklands provides a rural setting to the historic villages and hamlets, and contributes to the sense of separation between settlements.

Table 32: Sensitivity scores for LCT 8 Ridge Slopes

Criteria	Sensitivity Score: Solar	Sensitivity Score: Wind
Landform and scale (including sense of openness/enclosure)	Moderate	Moderate
Landcover (including field and settlement patterns)	Moderate-high	Moderate-high
Historic landscape character	Moderate	Moderate
Visual character (including skylines)	Moderate	Moderate
Perceptual and scenic qualities	Moderate	Moderate

Overall assessment of landscape sensitivity to solar PV developments

Summary of overall landscape sensitivity of Ridge Slopes LCT 8

The undulating landform with a rolling topography, drained by minor watercourses, increases sensitivity to solar PV development. Large areas of woodland provide a greater sense of enclosure and offer potential for visual screening, which reduces sensitivity. The mosaic of farmland, woodland and high levels of heathland creates a rural landscape of ecological importance, which increases sensitivity. The mixed field pattern and non-rural land uses at Abingdon Airfield, active quarries and golf courses locally reduce landscape sensitivity. The landscape retains a historic settlement pattern, and a number of estates and parklands which are visible historic features of importance to the character and provide a variety of time-depths. Woodlands and hedgerows provide a sense of enclosure and limit views with other landscapes, reducing sensitivity to solar PV development. However, skylines are often wooded and generally undeveloped, and the south-facing slopes provide a backdrop to the

surrounding vale as well as a distant setting to the North Wessex Downs National Landscape. Popular public rights of way including the Oxford Greenbelt Way and Vale Way run through the landscape, and are sensitive receptors. A largely rural landscape with an attractive combination of farmland, woodland, heathland and small settlements, which increases sensitivity. Some human influences include active quarries, the urban settlement edge at Abingdon and busy roads which locally reduce tranquillity and the rural character, reducing sensitivity.

This LCT generally has 'high' landscape sensitivity to solar energy development greater than the 'medium-scale' development scenario. There may be opportunities to accommodate carefully sited solar PV development (up to 'medium' scale) where existing areas of woodland and intact hedgerows could be used to screen installations to reduce their landscape and visual impact.

Landscape sensitivity of Ridge Slope Landscape Character Areas

LCA 8A: Features which increase sensitivity to solar PV development include significant areas of ancient woodland at Pusey Common Wood and Buckland Warren, the variety of time-depths created by the historic settlement pattern of nucleated villages and hamlets and parkland character at Buckland House and Pusey, and the backdrop the landscape provides to the vale to the south. Features which decrease sensitivity to solar PV development include the active quarries and proximity to the urban edges of Faringdon and Stanford in the Vale, which reduce rural character and tranquillity, and busy roads which reduce tranquillity. The areas of woodland could be used to provide screening to solar PV developments, reducing sensitivity.

Table 33: Landscape sensitivity to solar PV development in LCA 8A

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	Low-moderate
Small solar (1-5 hectares)	Low-moderate
Medium solar (5-20 hectares)	Moderate
Large solar (20-50 hectares)	Moderate-high
Very large solar (50-120 hectares)	High

LCA 8B: Features which increase sensitivity to solar PV development include the prevalence of important semi-natural habitats including ancient woodland and heathlands, which are internationally and nationally designated. A number of nature reserves provide public access to the landscape and are sensitive receptors. Features which locally decrease sensitivity to solar PV development include the Frilford Heath golf course and intact hedgerows around the arable and pasture fields, which could be used to screen development.

Table 34: Landscape sensitivity to solar PV development in LCA 8B

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	Moderate
Small solar (1-5 hectares)	Moderate
Medium solar (5-20 hectares)	Moderate-high
Large solar (20-50 hectares)	High
Very large solar (50-120 hectares)	High

LCA 8C: Features which decrease sensitivity to solar PV development include Abingdon Airfield, which although more open, has a more urban character with considerable hardstanding. The LCA is also in close proximity to the urban edge of Abingdon, which reduces rural character and tranquillity.

Table 35: Landscape sensitivity to solar PV development in LCA 8C

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	Low-moderate
Small solar (1-5 hectares)	Low-moderate
Medium solar (5-20 hectares)	Moderate
Large solar (20-50 hectares)	Moderate-high
Very large solar (50-120 hectares)	High

Overall assessment of landscape sensitivity to wind energy developments

Summary of overall landscape sensitivity of Ridge Slopes LCT 8

A low ridge landform, with some visually prominent slopes, and human-scale features including hedgerows, mature trees and small settlements, which increase sensitivity to wind energy development. A varied land cover as a result of arable and pasture fields, woodlands, heathland and settlements, as well as considerable coverage by semi-natural habitats increases sensitivity. Areas of urban influence on the edge of Abingdon and at active quarry sites locally reduce the rural character and decrease sensitivity. Parklands and estates and historic villages provide visible historic features of importance to landscape

character and a variety of time-depths, which increases sensitivity. The LCT often has wooded skylines which are prominent in views from the surrounding vale and in longer views from the North Wessex Downs National Landscape, increasing sensitivity. However, woodlands and hedgerows limit intervisibility with neighbouring areas, which decreases sensitivity to smaller turbines. Popular recreational routes including the Oxford Greenbelt Way run through the landscape and are sensitive receptors. The woodland, parklands, heathland, and elevated landform form an attractive character with some combinations of visual contrasts, which increases sensitivity to wind energy development. A rural landscape with some human influences, which locally reduce rurality including active quarries and the adjacent settlement edges of Abingdon and Stanford in the Vale.

This LCT generally has ‘high’ landscape sensitivity to wind energy development greater than the ‘large-scale’ development scenario. Sensitivity of Ridge Slope Landscape Character Areas

LCA 8A: Features which increase sensitivity to wind energy development include significant areas of ancient woodland at Pusey Common Wood and Buckland Warren, which are important semi-natural habitats as well as human-scale features, a variety of time-depths from the historic settlement pattern and parkland character, and the wooded skylines which provides a setting to the surrounding vale landscapes as well as forming a long-distance setting to the North Wessex Downs National Landscape. The Carswell golf club and active quarry sites are modern influences on the land cover, which with the urban edges of Faringdon, Stanford in the Vale and Southmoor/Kingston Bagpuize decrease sensitivity to wind energy development.

Table 36: Landscape sensitivity to wind energy development in LCA 8A

Development scenario	Overall landscape sensitivity rating
Very small-scale wind (<25 metres)	Low-moderate
Small-scale wind (25-60 metres)	Moderate
Medium-scale wind (60-100 metres)	Moderate-high
Large-scale wind (100-150 metres)	Moderate-high
Very large-scale wind (150-220 metres)	High

LCA 8B: The extensive semi-natural habitats including ancient woodland at Appleton Upper Common and Tubney Wood, and heathland habitats including internationally important habitats at Cothill Fen increase sensitivity to wind energy development. Other features which increase sensitivity are the limited settlement pattern, and distant setting the landscape provides for the North Wessex Downs National Landscape. Features which locally decrease sensitivity include Frilford Heath golf course, the busy main roads, which reduce tranquillity, and views to Abingdon Airfield to the east.

Table 37: Landscape sensitivity to wind energy development in LCA 8B

Development scenario	Overall landscape sensitivity rating
Very small-scale wind (<25 metres)	Moderate
Small-scale wind (25-60 metres)	Moderate
Medium-scale wind (60-100 metres)	Moderate-high
Large-scale wind (100-150 metres)	High

Development scenario	Overall landscape sensitivity rating
Very large-scale wind (150-220 metres)	High

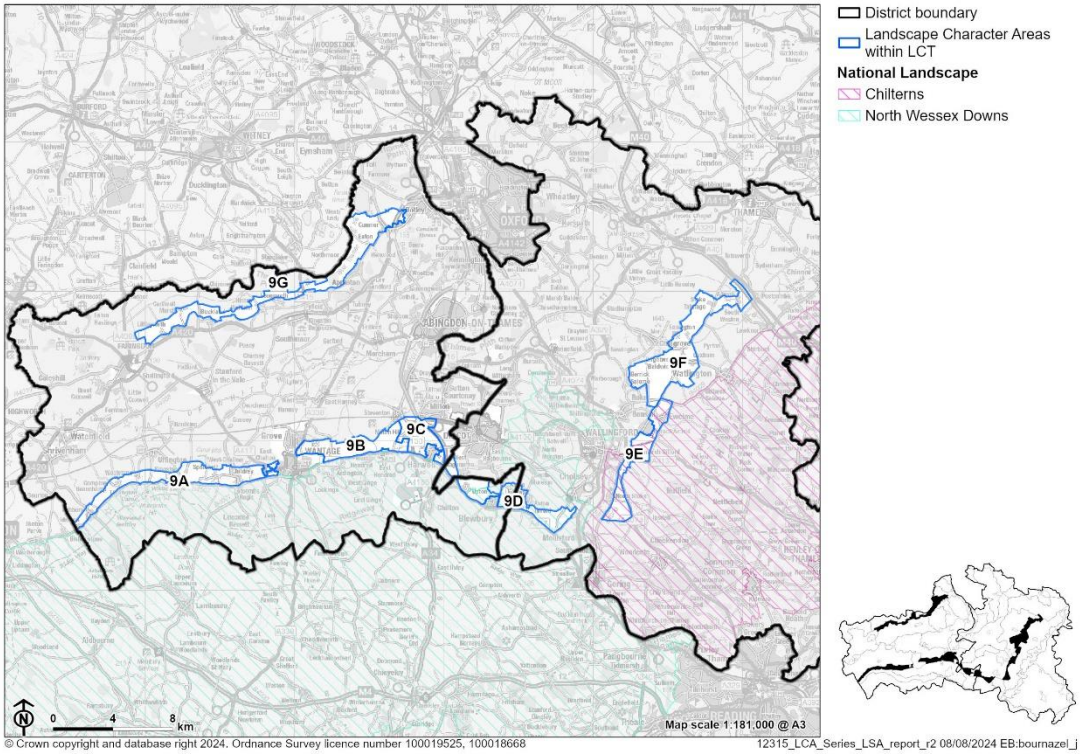
LCA 8C: Features which increase sensitivity to wind energy development include the frequent human-scale features including small blocks of woodland, settlement and hedgerows. Features which decrease sensitivity to wind energy development include the hard standing of Abingdon Airfield and proximity to the urban edge of Abingdon which reduce the rural character, and the busy roads which reduce tranquillity.

Table 38: Landscape sensitivity to wind energy development in LCA 8C

Development scenario	Overall landscape sensitivity rating
Very small-scale wind (<25 metres)	Low-moderate
Small-scale wind (25-60 metres)	Moderate
Medium-scale wind (60-100 metres)	Moderate-high
Large-scale wind (100-150 metres)	Moderate-high
Very large-scale wind (150-220 metres)	High

LCT 9 Vale Edge Slopes

Figure 25: Contextual map of the LCT



Component Landscape Character Areas:

- LCA 9A: Western Vale Edge Slopes
- LCA 9B: Wantage to Didcot Vale Edge Slopes
- LCA 9C: Milton Hill to Didcot Vale Edge Slopes
- LCA 9D: East of Didcot Vale Edge Slopes
- LCA 9E: Ewelme to South Stoke Vale Edge Slopes

- LCA 9F: Eastern Vale Edge Slopes
- LCA 9G: Northern Vale Edge Slopes

Figure 26: LCA 9F: Grazing cattle, backdropped by the Chiltern hills

Figure 27: LCA 9C: Large-scae arable farmland near West Hagbourne

Assessment of landscape sensitivity to renewable energy development

Landscape sensitivity assessment

Landform and scale (including sense of openness/ enclosure)

- Transitional, gently sloping or rolling land between the clay vales and higher chalk escarpment, ranging generally between 60 metres AOD and 100 metres AOD. Local hills feature throughout the LCT such as Lollington Hill (96 metres AOD), Blewburton Hill (110 metres AOD) and Adwell Cop (148 metres AOD).
- The LCT occurs along the foot of the North Wessex Downs and the Chilterns, typically approximating to areas where Upper Greensand forms the bedrock geology, and along the northern edge of the Corallian limestone ridge that runs between Faringdon and Oxford.
- Numerous spring-fed streams (such as East Hendred Brook and Mill Brook) vein the slopes on their way to larger watercourses such as the River Ock, River Thame, and River Thames.
- Woodland cover varies across the LCT, sometimes taking the form of small, dispersed blocks amongst large-scale arable farmland, amounting to fragmented tree cover, and in other places is widespread, knitting together with riparian vegetation, traditional orchards, parklands (Milton Hill House and Compton Beauchamp), and tall treebelts to form a well-wooded landscape with a greater sense of enclosure.
- There is a greater sense of enclosure in and around settlements where there are more small tree groups, hedgerow trees which line the smaller-scale, pastoral fields, and more riparian vegetation. Open farmland often provides the wider landscape setting to the settlements, forming gaps

between each. This is reducing in areas of recent development such as between East Challow and Wantage.

Landcover (including field and settlement patterns)

- Settlement pattern of small, often nucleated villages and hamlets regularly spaced throughout the LCT, frequently located near the source of spring-fed streams (such as the historic spring-line village at Ewelme); the majority of these have medieval cores, many are covered by Conservation Area designations and contain clusters of Listed Buildings, which abut directly onto the surrounding countryside. Settlements are often associated with parkland such as Compton Beauchamp, Hinton Manor, and Brightwell Baldwin. Scattered farmsteads also feature.
- Land use is generally medium-large scale, intensive, arable cultivation, bounded by a variably intact structure of hedges with hedgerow trees – some field boundaries are linear belts of planted woodland, or species-rich with mature hedgerow trees, others are gappy or have been replaced entirely by post and wire fencing. Smaller-scale fields often feature in proximity to smaller settlements and watercourses.
- Other land uses include smaller areas of permanent pasture or grassland found close to the small villages, orchards, sheep and cattle grazing, as well as significant commercial and residential development (e.g. Rowstock, Milton Hill and Milton Heights) within LCAs 9A, 9B and 9C which border Didcot and Wantage.
- Parkland and estates are frequent – such as Grade II Compton Beauchamp Registered Park and Garden (RPG), Milton Hill House, and Adwell – with characteristic tree avenues, estate fencing, grazing and mature individual trees standing in pasture.
- Priority habitats include deciduous woodland, lowland calcareous grassland and small areas of traditional orchard (such as at Quab Hill). Watercress beds at Ewelme are designated LWS and Appleton Lower Common is nationally designated as a Site of Special Scientific Interest (SSSI) for its broadleaved wet ash-wych elm woodland. These natural features provide ecological value and landscape diversity.

Historic landscape character

- A mixture of post-medieval, pre-18th century, and modern fieldscapes.
- The majority of the settlements have historic cores dating back to the medieval period and are covered by Conservation Area designations and contain clusters of Listed Buildings, such as at Ewelme, which has been occupied since at least the Bronze Age. Their open, rural setting and location on spring-fed streams also contributes to their historic character.
- Outside of the settlements there are Grade II listed buildings at Ardington Wick Farm and Lains Barn. While there are no Listed Buildings or Scheduled Monuments within LCA 9C, Conservation Areas cover large parts of Harwell, West Hagbourne, and Steventon, with which the LCA has a visual connection. Some former villages were deserted in medieval times, such as Clare where a single farm now occupies the site of 37 former households.
- Time depth is signalled by a variety of historic features including the site of a medieval manor house and Tudor royal manor in the south of Ewelme, a Roman Villa near East Challow, the ancient Grim's Ditch stretching east towards Nuffield (Scheduled Monuments) and a prehistoric hillfort at Blewburton Hill.
- Remnant traditional fruit orchards, such as on the edges of Aston Upthorpe and Aston Tirrold, provide a link to historic land uses, contribute to historic landscape character. Cress beds at Ewelme ceased commercial production in 1989 and are now managed as a heritage asset and nature reserve.
- Parkland estates within the LCT contain significant areas of grassland, plantations, tree lines, groups of trees and lakes. Compton Beauchamp (Grade II RPG) contains formal gardens and terraces and lawns enclosed by mature trees and shrubs, Hinton Manor was a royal residence in the 14th and 15th centuries, while Buckland has a mid-18th century country house, all are Grade II listed buildings within the RPGs.

Visual character (including skylines)

- The open landscape results in high intervisibility between the chalk escarpment in the south and the vales in the north. Gaps in tree cover allow panoramic views north across the slopes towards the lower-lying vale, and beyond that to wooded Corallian Limestone Ridge, particularly from more elevated positions. Enclosed locations, such as within the vicinity of villages or woodland, have more restricted views, as do views from lower elevations.
- Strong visual relationship with the Chilterns and North Wessex Downs National Landscapes to the south where the chalk escarpments of the Chilterns in the east and North Wessex Downs in the west form wooded skylines. The LCT often forms part of the National Landscapes or serves as their wider landscape and visual setting. Intervisibility is sometimes obscured by tree cover (often along roads) and the topography of the rising vale edge slope.
- The large, arable fields across the rolling slopes of the LCT often serve as an undeveloped backdrop in views from the lower-lying vale (or Thames valley) in the north and contribute to its rural context.
- Red Kites (Milvus milvus) are often seen in the skies.
- Tree cover around settlements has a screening function which limits the urbanising influence of villages and the surrounding larger towns (such as recent developments on the eastern edge of Wantage and East Hendred), which would otherwise be prominent in views both from the vale and the higher downs.
- Topographical highpoints (such as Blewburton Hill, Lollingdon Hill and Steventon Hill) provide visual landmarks, particularly where cloaked in woodland. The low rounded profile of Harrowdown Hill forms a locally distinctive landmark rising from the low-lying floodplain of the Thames.
- Larger transport corridors (such as the A417 and the M40) are generally well-integrated into the landscape through the mature vegetation which borders them, but can be visually and aurally detractive where not well-screened.

Perceptual and scenic qualities

- A clear sense of place is fostered in the transition between the escarpment landscapes and vale landscapes which provide part of the immediate and wider setting to the North Wessex Downs National Landscape, the Chilterns National Landscape and Corallian Ridge, as well as by open farmland forming gaps between villages and hamlets, helping to retain their individual identities and the regular spacing of settlements.
- Countryside patterned by a latticework of public rights of way providing good recreational access to the landscape, including the Ridgeway, the Thames National Path, and a section of the National Cycle Network 544 between Upton and Didcot; public rights of way connect the settlements and provide access between the chalk escarpment and vale.
- Road access is largely via small rural lanes and farm tracks. Larger roads often run along the top of the slopes, or cross the LCT, causing localised visual and aural intrusion where not effectively screened. Where trees including beech, sycamore, poplar and ash, line sections of the roads they are better integrated into the landscape.
- Other localised detractors include energy technology such as a solar farm at Crab Hill, and large electricity pylons running through the landscape, as well as views through to expanding residential development (such as at Wantage and Milton Heights), and noise from low flying aircraft at RAF Benson.
- Areas with a stronger parkland character, smaller scale fields, more riparian vegetation, and with larger and more frequent areas of woodland (some of ancient origin), are more tranquil than those more strongly associated with larger towns and their peripheral development which have more detracting features (such as at Wantage), and are characterised by larger-scale arable farmland.
- Existing renewable energy development within the LCT includes a solar PV development at Crab Hill.

Table 39: Sensitivity scores for LCT 9 Vale Edge Slopes

Criteria	Sensitivity Score: Solar	Sensitivity Score: Wind
Landform and scale (including sense of openness/enclosure)	Moderate	Moderate
Landcover (including field and settlement patterns)	Moderate	Moderate
Historic landscape character	Moderate	Moderate-high
Visual character (including skylines)	Moderate-high	Moderate-high
Perceptual and scenic qualities	Moderate-high	Moderate-high

Overall assessment of landscape sensitivity to solar PV developments

Summary of overall landscape sensitivity of Vale Edge Slopes LCT 9

A gently sloping landform, with local hills providing topographic variety. The field pattern is generally medium-scale, with open arable fields and hedgerows around smaller pasture fields. There is also greater enclosure around settlements, which locally reduces sensitivity to solar PV development. The mixture of large-scale arable fields and smaller-scale pasture fields provides variety within the landscape. The historic settlement pattern of ‘spring-line’ villages has largely been retained, increasing sensitivity. Proximity to the urban edges of larger settlements, including Wantage and Didcot, locally reduces sensitivity. The historic settlement pattern, small parklands and estates, and prehistoric earthworks provide a variety of time-depths and are important to the character of the landscape, increasing sensitivity. High levels of intervisibility between the LCT and adjacent landscapes, including the North Wessex Downs and Chilterns National Landscapes, increases sensitivity. The landscape forms

part of the setting to the National Landscapes, as well as to villages and towns. The LCT is visible in views from a variety of long-distance public rights of way including the Thames Path National Trail and the Ridgeway, which are all sensitive receptors. Skylines are generally undeveloped, with the local hills forming distinctive visual landmarks. This is a rural landscape with a pleasing combination of parkland, arable fields and areas of woodland, increasing sensitivity. Some modern development, particularly on the edges of Wantage and Didcot, locally reduces sensitivity.

This LCT generally has 'high' landscape sensitivity to solar energy development greater than the 'medium-scale' development scenario. There may be opportunities to accommodate carefully sited 'very small' and 'small' scale solar PV development in areas where existing hedgerows, hedgerow trees and woodland blocks could be used to screen development to reduce landscape and visual impact. Solar PV development should be avoided on the steep slopes and local hills, which are often highly visible from the lower lying vales.

Sensitivity of Vale Edge Slopes Landscape Character Areas

LCA 9A: Features which increase sensitivity to solar PV development include its visual relationship with the North Wessex Downs National Landscape and the frequency of smaller scale field patterns in proximity to the regularly distributed, historic settlements and small estates including Kingston Lisle and Woolstone. Features which slightly decrease sensitivity include the frequency of deciduous woodland, which provides some visual enclosure.

Table 40: Landscape sensitivity to solar PV development in LCA 9A

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	Moderate
Small solar (1-5 hectares)	Moderate-high

Development scenario	Overall landscape sensitivity rating
Medium solar (5-20 hectares)	Moderate-high
Large solar (20-50 hectares)	High
Very large solar (50-120 hectares)	High

LCA 9B: Features which increase sensitivity to solar PV development include the comparative lack of woodland cover, resulting in less opportunity for screening, close proximity to and intervisibility with the North Wessex Downs National Landscape and backdrop the LCA provides to the vale to the north. Features which reduce sensitivity include the existing solar farm development at Crab Hill and proximity to expanding residential and commercial development at Wantage, which reduce tranquillity and rural land cover.

Table 41: Landscape sensitivity to solar PV development in 9B

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	Low-moderate
Small solar (1-5 hectares)	Moderate
Medium solar (5-20 hectares)	Moderate-high
Large solar (20-50 hectares)	High
Very large solar (50-120 hectares)	High

LCA 9C: Features which increase sensitivity to solar PV development include proximity to and intervisibility with the North Wessex Downs National Landscape to the south, and the LCA's role as a backdrop to views from the lower-lying vales. Features which reduce sensitivity include its proximity to expanding residential and commercial development at Didcot and Milton Hill and Milton Heights, which reduce the rural land cover and tranquillity, and the intrusion of the busy A34 and A4130, which reduces the tranquillity.

Table 42: Landscape sensitivity to solar PV development in LCA 9C

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	Low-moderate
Small solar (1-5 hectares)	Moderate
Medium solar (5-20 hectares)	Moderate-high
Large solar (20-50 hectares)	High
Very large solar (50-120 hectares)	High

LCA 9D: The majority of the LCA is within the North Wessex Downs National Landscape and displays several of its special qualities including open arable landscape, medieval settlements, light road network, and good network of public rights of way. This increases the sensitivity of the LCA to all scales of solar PV development. Sensitivity is also increased by the openness of the landscape, due to less woodland and fewer field boundaries around the large-scale arable fields, resulting in fewer opportunities for screening.

Table 43: Landscape sensitivity to solar PV development in LCA 9D

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	Moderate
Small solar (1-5 hectares)	Moderate-high
Medium solar (5-20 hectares)	High
Large solar (20-50 hectares)	High
Very large solar (50-120 hectares)	High

LCA 9E: The majority of this LCA lies within the Chilterns National Landscape and has a strong visual relationship with the North Wessex Downs National Landscape, which increases sensitivity to all scales of solar PV development. Proximity to RAF Benson locally reduces tranquillity, as the barbed wire fences, lighting columns, institutional buildings and aircraft noise negatively impact on the rural character and tranquillity.

Table 44: Landscape sensitivity to solar PV development in LCA 9E

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	Moderate
Small solar (1-5 hectares)	Moderate-high
Medium solar (5-20 hectares)	High
Large solar (20-50 hectares)	High
Very large solar (50-120 hectares)	High

LCA 9F: Features which increase sensitivity to solar PV development include proximity to and intervisibility with the Chilterns National Landscape. Features which reduce sensitivity include proximity to RAF Benson and views to existing solar PV development (in LCA 12C), which reduce the rural land cover and tranquillity.

Table 45: Landscape sensitivity to solar PV development in LCA 9F

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	Moderate

Development scenario	Overall landscape sensitivity rating
Small solar (1-5 hectares)	Moderate
Medium solar (5-20 hectares)	Moderate-high
Large solar (20-50 hectares)	High
Very large solar (50-120 hectares)	High

LCA 9G: Features which increase sensitivity to solar PV development include the large parkland estates at Hinton Manor and Buckland House (RPGs), which provide a sense of time-depth and the invisibility with the low-lying River Thames floodplain. Features which reduce sensitivity include the strong pattern of woodland blocks and hedgerows, which would provide opportunities for screening.

Table 46: Landscape sensitivity to solar PV development in LCA 9G

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	Low-moderate
Small solar (1-5 hectares)	Moderate
Medium solar (5-20 hectares)	Moderate-high
Large solar (20-50 hectares)	High
Very large solar (50-120 hectares)	High

Overall assessment of landscape sensitivity to wind energy developments

Statement of overall landscape sensitivity of Vale Edge Slopes LCT 9

A gently sloping landform, with frequent human-scale features including small woodland blocks, spring-fed streams, villages and hedgerows, increasing sensitivity to wind energy development. The field pattern is a mix of modern and historic enclosure, with woodlands and parkland providing variations in land cover. This is a rural landscape with some localised urban influences on the edges of Wantage and Didcot. The medieval settlement pattern, parklands and prehistoric features are visible historic features of importance to character, and provide a variety of time-depths within the LCT. Skylines are generally undeveloped or marked by woodland, which increases sensitivity. The LCT provides a backdrop to lower-lying vale and floodplain landscapes and settlements, due to the elevated landform. It also has strong intervisibility with the North Wessex Downs and Chilterns National Landscapes, which increases sensitivity. A rural character with an attractive combination of features from the woodland blocks, historic villages and parklands, with limited modern influences. Local detractors to tranquillity and rural land cover include the commercial and residential edges of Wantage and Didcot, and large road corridors, which lowers sensitivity to wind energy development.

This LCT generally has ‘high’ landscape sensitivity to wind energy development greater than the ‘very small-scale’ development scenario.

Sensitivity of Vale Edge Slopes Landscape Character Areas

LCA 9A: Features which increase sensitivity to wind energy development include its frequent human-scale features such as woodland and the small-scale field pattern in proximity to the regularly spaced historic villages and

hamlets, its sloping landform, and its intervisibility to the low-lying vales to the north and the North Wessex Downs National Landscape to the south.

Table 47: Landscape sensitivity to wind energy development in LCA 9A

Development scenario	Overall landscape sensitivity rating
Very small-scale wind (<25 metres)	Moderate-high
Small-scale wind (25-60 metres)	High
Medium-scale wind (60-100 metres)	High
Large-scale wind (100-150 metres)	High
Very large-scale wind (150-220 metres)	High

LCA 9B: Features which increase sensitivity to wind energy development include the backdrop it provides to the surrounding vale landscape, and the LCA's role as part of the northern setting to the North Wessex Downs National Landscape. Features which reduce sensitivity to wind energy development include the larger-scale field pattern, limited human-scale features such as woodland, and proximity to existing renewable energy (solar PV) development at Crab Hill and in the neighbouring LCA (12B).

Table 48: Landscape sensitivity to wind energy development in LCA 9B

Development scenario	Overall landscape sensitivity rating
Very small-scale wind (<25 metres)	Moderate
Small-scale wind (25-60 metres)	Moderate-high

Development scenario	Overall landscape sensitivity rating
Medium-scale wind (60-100 metres)	High
Large-scale wind (100-150 metres)	High
Very large-scale wind (150-220 metres)	High

LCA 9C: Features which increase sensitivity to wind energy development include its role as part of the northern setting to the North Wessex Downs National Landscape, historic landscape character provided by parkland at Milton Hill, and distinctive backdrop to the wider rural context of the vale below. Features which decrease sensitivity include the considerable residential, commercial and infrastructural development across much of the LCA, reducing the rural character and land cover, and limited tranquillity due to proximity to busy roads.

Table 49: Landscape sensitivity to wind energy development in LCA 9C

Development scenario	Overall landscape sensitivity rating
Very small-scale wind (<25 metres)	Moderate
Small-scale wind (25-60 metres)	Moderate-high
Medium-scale wind (60-100 metres)	High
Large-scale wind (100-150 metres)	High
Very large-scale wind (150-220 metres)	High

LCA 9D: The majority of the LCA is within the North Wessex Downs National Landscape and displays several of its special qualities, including open arable landscape, medieval settlements, light road network, and good network of

public rights of way. This increases sensitivity to all scales of wind energy development. Features which increase sensitivity to wind energy development include the local highpoint and visual landmark of Blewburton Hill.

Table 50: Landscape sensitivity to wind energy development in LCA 9D

Development scenario	Overall landscape sensitivity rating
Very small-scale wind (<25 metres)	Moderate-high
Small-scale wind (25-60 metres)	High
Medium-scale wind (60-100 metres)	High
Large-scale wind (100-150 metres)	High
Very large-scale wind (150-220 metres)	High

LCA 9E: The majority of the LCA is within the Chilterns National Landscape and has a strong visual relationship with the North Wessex Downs National Landscape. This increases its sensitivity to all scales of wind energy development. Features which locally reduce sensitivity include the busy road network and RAF Benson, where barbed wire fences, lighting columns, institutional buildings and aircraft noise negatively impact on tranquillity and rural land cover.

Table 51: Landscape sensitivity to wind energy development in LCA 9E

Development scenario	Overall landscape sensitivity rating
Very small-scale wind (<25 metres)	Moderate-high
Small-scale wind (25-60 metres)	High

Development scenario	Overall landscape sensitivity rating
Medium-scale wind (60-100 metres)	High
Large-scale wind (100-150 metres)	High
Very large-scale wind (150-220 metres)	High

LCA 9F: Features which increase sensitivity to wind energy development include its intervisibility with the Chilterns National Landscape, and the backdrop it provides to the rural setting of settlements. The landscape also has a strong historic character due to a number of parklands and estates. Features which locally reduce sensitivity include the influence of the M40 in the east which reduces tranquillity.

Table 52: Landscape sensitivity to wind energy development in LCA 9F

Development scenario	Overall landscape sensitivity rating
Very small-scale wind (<25 metres)	Moderate
Small-scale wind (25-60 metres)	Moderate-high
Medium-scale wind (60-100 metres)	High
Large-scale wind (100-150 metres)	High
Very large-scale wind (150-220 metres)	High

LCA 9G: Features which increase sensitivity to wind energy development include frequent human-scale features including woodland blocks, historic parkland and villages, as well as intervisibility with the Thames valley and North Wessex Downs National Landscape. There are limited human influences on the landscape and good recreational access, provided in part by the Oxford

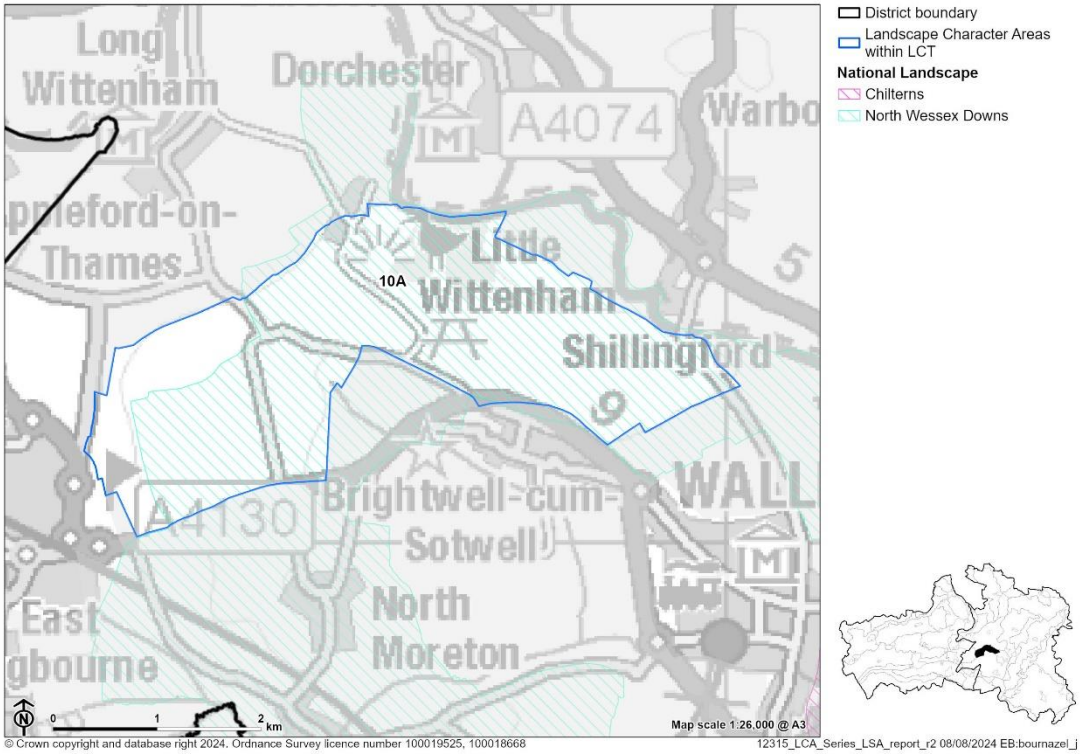
Greenbelt Way and the Thames Path National Trail. The tranquil, undeveloped character of the LCA, increases sensitivity.

Table 53: Landscape sensitivity to wind energy development in LCA 9G

Development scenario	Overall landscape sensitivity rating
Very small-scale wind (<25 metres)	Moderate-high
Small-scale wind (25-60 metres)	High
Medium-scale wind (60-100 metres)	High
Large-scale wind (100-150 metres)	High
Very large-scale wind (150-220 metres)	High

LCT 10 Lower Vale Hills

Figure 28: Contextual map of the LCT



Component Landscape Character Areas:

- LCA 10A: Sinodun Lower Vale Hills

Figure 29: Open pasture with views to Sinodun Hills

Figure 30: Long views north to the River Thames and its floodplain

Assessment of landscape sensitivity to renewable energy development

Landscape sensitivity assessment

Landform and scale (including sense of openness/ enclosure)

- An isolated chalk ridge at the Sinodun Hills, an outlier of the Wessex Downs chalk escarpment. Isolated outcrops of greensand and chalk form prominent rounded hills including Round Hill (121 metres AOD) Castle Hill (121 metres AOD), and Brightwell Barrow (113 metres AOD).
- The River Thames meets the northern boundary of Wessex Downs and Western Vale Fringes at Little Wittenham (in LCA 13C), from where the landform rises steeply to form Sinodun Hills.
- The scale and sense of openness are varied and strongly influenced by the presence or absence of woodland and the topography; the landscape is mostly open owing to the large-scale arable farmland and dispersed woodland, however, some areas have a stronger sense of enclosure where species-rich hedgerows are more intact and woodland belts feature more regularly. The localised hills contain views in some directions and allow long-range vantage points in others.
- Human scale features include dispersed woodland blocks, mature hedgerow trees, small linear settlement at Little Wittenham, occasional farmsteads and the Hadden Hill golf course.

Landcover (including field and settlement patterns)

- Predominantly agricultural land use in large-scale fields, comprising mainly arable land transected by species-rich hedgerows in parts, with some

small areas of pasture on the northern edges of the area and the hillsides of Whittenham Clumps.

- Sparsely settled, with the linear village of Little Wittenham (including a Conservation Area) in the north, and scattered farmsteads elsewhere, typically located along the lower slopes of the hills.
- Deciduous woodland occurs in scattered blocks and belts around farms, and in larger blocks at Little Wittenham Wood and Long Wittenham Wood. Two clumps of beech trees on Round Hill and Castle Hill (Wittenham Clumps) are distinctive features. Wittenham Clumps are internationally and nationally valued for their ancient woodland and grasslands, and are designated as a Special Area of Conservation (SAC) and Site of Special Scientific Interest (SSSI).
- Priority habitats include lowland calcareous grassland, semi-improved grassland, lowland meadows, deciduous woodland, and traditional orchards.
- The greens, fairways and buildings associated with Hadden Hill golf club in the west have a localised influence on the landscape character.

Historic landscape character

- Little Wittenham is covered by a Conservation Area designation and contains a number of Listed Buildings. Parts of the area are overlain by clay with flints, producing distinctively ‘grey’ and flinty soils; flint is conspicuous in the soils and buildings, forming part of the architectural vernacular.
- Evidence of a long history of settlement is indicated by the presence of prehistoric earthworks and hillforts including Castle Hill fort and Brightwell Barrow (Scheduled Monuments), as well as the Roman Road which connects Brightwell-cum-Sotwell to the Thames floodplain.
- Remnant areas of orchards to the north of Brightwell-cum-Sotwell also provide links to historic land uses and contribute to historic landscape character.

Visual character (including skylines)

- Wittenham Clumps is a key landscape feature in this area and in views from surrounding lower-lying landscapes, forming a prominent and distinctive feature on the skyline. Open Access Land at Wittenham Clumps allows for panoramic views across the surrounding vale landscapes.
- The open landscape results in extensive views from the hilltops and downs across the vale to the north, east and west. Hedgerows, trees and woodlands provide visual enclosure and restrict intervisibility in some places.

Perceptual and scenic qualities

- An overall rural character with few detractive features. However, features outside of the LCT, such as tall industrial features at Didcot (including Didcot B power station), recent and ongoing development on the eastern edge of Didcot (as part of the Didcot North East Strategic Allocation), and nearby transport corridors, including the A4130 and A4074 and railway line, are visual and/or aural detractors.
- Located almost entirely within the North Wessex Downs National Landscape, and displays several of the special qualities including ancient woodlands, chalk grasslands, arable habitats, prehistoric monuments and Roman relicts, sparse settlement pattern and extensive public rights of way.
- Areas of open grassland, meadows and orchards contrast with the intensively managed arable land, providing texture and scenic interest to the landscape.
- The Dark Skies / Light Impact Assessment for South Oxfordshire and Vale of White Horse indicates that this area has some of the darkest skies in the district.

Table 54: Sensitivity scores for LCT 10 Lower Vale Hills

Criteria	Sensitivity Score: Solar	Sensitivity Score: Wind
Landform and scale (including sense of openness/enclosure)	Moderate-high	Moderate-high
Landcover (including field and settlement patterns)	Moderate-high	Moderate-high
Historic landscape character	Moderate-high	Moderate-high
Visual character (including skylines)	High	High
Perceptual and scenic qualities	Moderate-high	Moderate-high

Overall assessment of landscape sensitivity to solar PV developments

Summary of overall landscape sensitivity of Lower Vale Hills LCT 10

The landform is an outlier of chalk and the Wittenham Clumps are highly distinctive landform features, which increases sensitivity to solar PV development. This is a highly rural landscape with areas of woodland and grassland semi-natural habitats, which increases sensitivity. The large-scale field pattern slightly reduces sensitivity. The prehistoric earthworks and hillforts are important to the area, and provide a strong sense of time-depth and increase sensitivity. The LCT has high intervisibility with the lower-lying vales, and with the wider North Wessex Downs National Landscape to the south, which increases sensitivity. This is a rural landscape with Haddon Hill golf club forming the only detracting modern feature. However, views to the industrial and residential edges of Didcot reduce the rural character, while close proximity to major transport corridors reduces tranquillity.

The location of the majority of the LCT within the North Wessex Downs National Landscape increases landscape sensitivity to all scales of solar PV development. Representative features including ancient woodlands, chalk grasslands, arable habitats, prehistoric monuments and Roman relicts, sparse settlement pattern and extensive public rights of way may be adversely impacted by the installation of solar PV development.

This LCT has 'high' landscape sensitivity to solar energy development greater than the 'medium-scale' development scenario. There may be opportunities to accommodate carefully sited 'very small' and 'small' scale solar PV development in the west where the LCT interfaces with the more developed, eastern side of Didcot, outside of the National Landscape. Existing woodland and thick hedgerows could provide screening, to reduce the landscape and visual impact of solar PV installations. Solar PV development should be avoided on the steep slopes which are highly visible from the surrounding landscape.

Sensitivity of Lower Vale Hills Landscape Character Areas

LCA 10A: As noted above, there may be slightly lower sensitivity to 'very small' and 'small' scale solar PV development in the west of the LCA, outside of the North Wessex Downs National Landscape.

Table 55: Landscape sensitivity to solar PV development in LCA 10A

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	Moderate
Small solar (1-5 hectares)	Moderate
Medium solar (5-20 hectares)	Moderate-high
Large solar (20-50 hectares)	High

Development scenario	Overall landscape sensitivity rating
Very large solar (50-120 hectares)	High

Overall assessment of landscape sensitivity to wind energy developments

Summary of overall landscape sensitivity of Lower Vale Hills LCT 10

The LCT is a distinct landform feature rising out of the surrounding low-lying vale, with the Wittenham Clumps prominent and visible slopes, which increases sensitivity to wind energy development. Frequent human-scale features of woodland, hedgerow trees, and small settlement at Little Wittenham also increase sensitivity. Although the landscape has a large-scale field pattern, which reduces sensitivity, large areas of semi-natural woodland and grassland habitats form variety in land cover and increase sensitivity. Prehistoric monuments are important to the character of the area and a strong sense of time-depth, increasing sensitivity. The elevated landform is highly visible from the surrounding landscapes, including the North Wessex Downs National Landscape to the south. The skylines are undeveloped, and Wittenham Clumps are important landmark features on the skyline. Open Access Land on Wittenham Clumps provides recreational access, and the LCT is visible from a number of surrounding public rights of, which are sensitive receptors. The landscape is highly rural, with limited human influence within the LCT. Views to the residential and commercial edge of Didcot reduces the rural character on the western edge, while proximity to major transport corridors reduces tranquillity. These locally reduce sensitivity to wind energy development.

The location of the majority of the LCT within the designated landscape of North Wessex Downs National Landscape increases sensitivity. Representative features including ancient woodlands, chalk grasslands, arable habitats, prehistoric monuments and Roman relicts, sparse settlement pattern and

extensive public rights of way may be adversely impacted by the installation of wind energy development.

This LCT has ‘high’ landscape sensitivity to wind energy development greater than the ‘very small-scale’ development scenario.

Sensitivity of Lower Vale Hills Landscape Character Areas

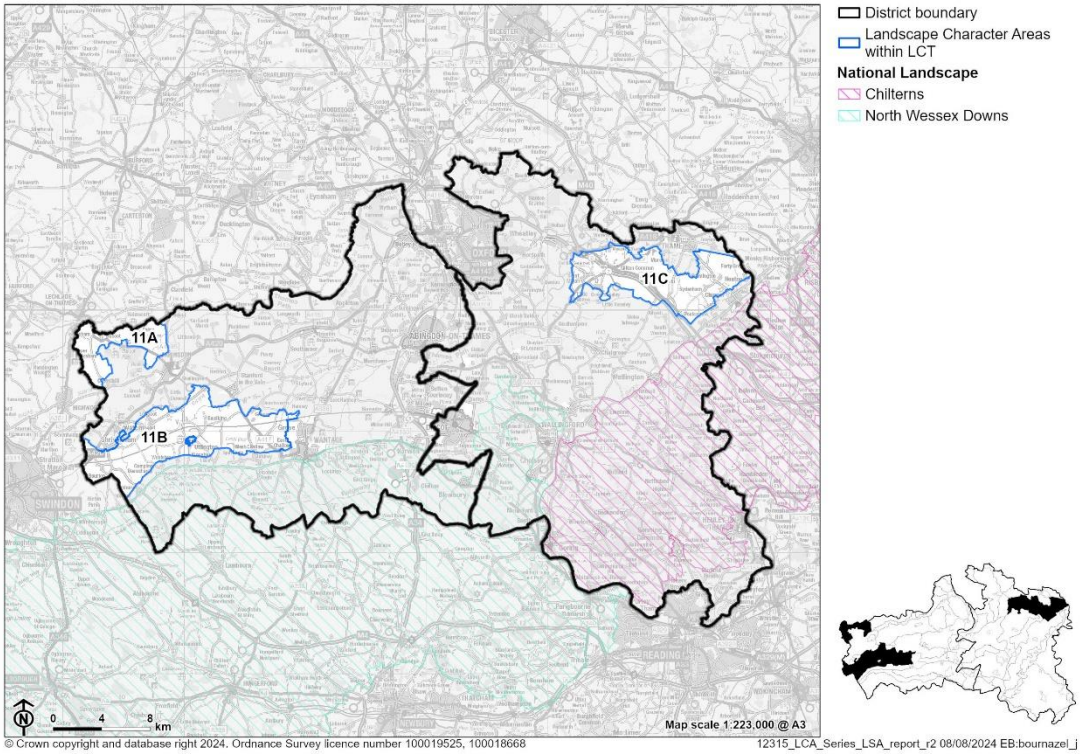
LCA 10A: There are no significant variations in landscape sensitivity to wind energy development within this LCT.

Table 56: Landscape sensitivity to wind energy development in LCA 10A

Development scenario	Overall landscape sensitivity rating
Very small-scale wind (<25 metres)	Moderate-high
Small-scale wind (25-60 metres)	High
Medium-scale wind (60-100 metres)	High
Large-scale wind (100-150 metres)	High
Very large-scale wind (150-220 metres)	High

LCT 11 Upper Vale

Figure 31: Contextual map of the LCT



Component Landscape Character Areas

- LCA 11A Thames Upper Vale
- LCA 11B Western Upper Vale
- LCA 11C Eastern Upper Vale

Figure 32: LCA 11B: Flat, large-scale arable fields with the North Wessex Downs on the horizon

Figure 33: LCA 11C: Hedgerows with occasional mature trees bound arable fields

Assessment of landscape sensitivity to renewable energy development

Landscape sensitivity assessment

Landform and scale (including sense of openness/ enclosure)

- A gently undulating landform that forms a transitional area between the low-lying valleys of the River Thames and River Cole, and the more elevated limestone ridge. In the east, undulating clay farmland lies to the west of the Chiltern Chalk Escarpment Footslopes. Small watercourses cross the landscape.
- Heights range from 80 metres AOD to 110 metres AOD, with localised areas of higher elevation, often associated with rising ground in adjacent LCAs.
- The sense of openness is varied and strongly influenced by the presence or absence of woodland and hedgerows. Some areas have a relatively open character with large fields and low, gappy or absent hedgerows, enabling long views across the undulating landscape. These contrast with more enclosed areas created by small woodland blocks including copses and tree belts.
- Human-scale features include blocks of woodland, in-field and roadside trees, hedgerows, and frequent hamlets and farm buildings.

Landcover (including field and settlement patterns)

- Predominately medium-scale arable fields, with some pasture on lower ground and along watercourses such as along the River Ock. Occasional smaller parcels of land include rough grass paddocks.

- A varying network of hedgerows enclose fields, with mature hedgerow trees in places, and gappy or removed hedgerows elsewhere.
- Woodland predominantly occurs in scattered small blocks/copses and linear belts, with extensive areas of ancient woodland.
- Many grassland habitats are nationally designated as Sites of Special Scientific Interest (SSSI) including wet meadows at Grafton Lock Meadows SSSI and neutral grassland and fen habitat at Fernham Meadows SSSI.
- Lightly settled, with an even spread of scattered settlements often focused on small greens of common land with larger settlement at Uffington. Views to the edges of Shrivenham and Wantage on the edge of the LCT impart a localised urban character.

Historic landscape character

- Small historic settlements centred on village greens provide historic character and time-depth. Conservation Areas are located at Buscot, Bourton, Baulking, Uffington, Great Milton, Great Haseley, and Sydenham.
- Many of the farmsteads and agricultural buildings are Listed Buildings, reflecting the long history of agricultural activity in the area. Fieldscapes are predominantly identified as post-medieval origin.
- Historic parkland at Ryecote comprises a historic house with mature woodland, specimen trees, and formal designed gardens, which provide historic character and time-depth.

Visual character (including skylines)

- Views are relatively open and wide-ranging due to the large-scale fields, low hedges, and gently undulating landform. The floodplains are generally more enclosed by mature riparian vegetation.
- Scattered woodland blocks and tree belts (including riparian trees) restrict views in places, particularly along watercourses.

- There are frequent views to rising ground to the north and south, including to the Corallian Limestone Ridge and the North Wessex Downs and Chilterns National Landscapes.
- Parts of the LCT contribute to the wider setting of the North Wessex Downs National Landscape and the Chilterns National Landscape with a strong visual relationship between the designated landscapes and the LCT.
- Overhead electrification infrastructure associated with the Great Western Mainline railway line is a prominent vertical feature across the landscape and contributes to the perception of human influence in the landscape.

Perceptual and scenic qualities

- A rural, agricultural landscape, with a sense of peace and tranquillity, particularly experienced on the river corridors and floodplains, and from public rights of way. Traffic on main roads including the M40 and A417 is locally disruptive.
- The landscape provides a rural setting to settlements within the area, including historic villages. It also provides a rural setting to larger settlements on the edge of the LCT including Shrivenham, Wantage and Chinnor.
- A network of public rights of way cross the landscape, including the D’Arcy Dalton Way, Oxfordshire Way, and Vale Way long distance footpaths. Small pockets of open access land (e.g. at Tetsworth Common) provide further recreational access.

Table 57: Sensitivity scores for LCT 11 Upper Vale

Criteria	Sensitivity Score: Solar	Sensitivity Score: Wind
Landform and scale (including sense of openness/enclosure)	Low-moderate	Moderate
Landcover (including field and settlement patterns)	Moderate	Moderate-
Historic landscape character	Low-moderate	Low-moderate
Visual character (including skylines)	Moderate	Moderate-high
Perceptual and scenic qualities	Moderate	Moderate

Overall assessment of landscape sensitivity to solar PV developments

Summary of overall landscape sensitivity of Upper Vales LCT 11

The gently undulating landform decreases sensitivity to solar PV development as there are opportunities to use undulations to visually screen development. Small areas of localised higher elevation increase sensitivity. The sense of openness varies across the LCT, with enclosure provided by hedgerows and small woodland blocks, contrasting with fields where hedgerows have been lost. Areas of enclosure generally have lower sensitivity, as more screening could be provided for solar PV installations. The LCT has a mixture of large-scale modern fields and smaller historic enclosures. Areas of semi-natural habitat including woodlands and grasslands, some designated as SSSI, increase sensitivity. The historic settlement pattern and listed buildings provide some visible historic features important to landscape character and some time-depth. Open and wide ranging views, with views to higher ground including the North Wessex Downs and Chilterns National Landscapes increases sensitivity. In

contrast, woodland blocks and riparian vegetation restrict views in places, reducing landscape sensitivity. Skylines are not particularly distinctive, although are generally undeveloped. The landscape is largely rural, which a sense of peace and tranquillity, which increases sensitivity. The combination of small watercourses, woodland blocks and small settlements forms a largely attractive character. Promoted public rights of way including the Oxfordshire Way and Vale Way are sensitive receptors which run through the LCT. Noise from main roads locally reduces tranquillity, while proximity to the urban edges of larger settlements locally reduces rural character.

This LCT generally has ‘high’ landscape sensitivity to solar energy development greater than the ‘medium-scale’ development scenario. There may be opportunities to accommodate carefully sited scale solar PV development scenarios (of up to ‘medium’ scale), using existing hedgerows, woodland blocks, tree belts, and riparian woodland to screen installations of medium scale and reduce their landscape and visual impact. Solar PV development should be avoided in areas with intervisibility with, or which form part of the setting to, the Chilterns National Landscape and the North Wessex Downs National Landscape.

Sensitivity of Upper Vale Landscape Character Areas

LCA 11A: Features which increase sensitivity to solar PV development include the open floodplain, which reduces the potential for screening, and the nationally designated grassland habitat at Grafton Lock SSSI. Features which decrease sensitivity to solar PV development include the flat, low lying landform and large-scale fields, except where it is overlooked from higher land, especially from Coleshill to the south of the LCA.

Table 58: Landscape sensitivity to solar PV developments in LCA 11A

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	Low-moderate
Small solar (1-5 hectares)	Low-moderate
Medium solar (5-20 hectares)	Moderate
Large solar (20-50 hectares)	Moderate-high
Very large solar (50-120 hectares)	High

LCA 11B: Features which increase sensitivity to solar PV development include the intervisibility with the North Wessex Downs National Landscape, and role the landscape plays as a rural setting to historic settlements. The presence of SSSI-designated grassland and fen habitat at Fernham Meadows also increases sensitivity. Features which decrease sensitivity are the busy roads and railways, which locally reduce tranquillity, and views to the urban edges of Wantage and Shrivenham, which locally reduce the rural character.

Table 59: Landscape sensitivity to solar PV developments in LCA 11B

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	Low-moderate
Small solar (1-5 hectares)	Moderate
Medium solar (5-20 hectares)	Moderate
Large solar (20-50 hectares)	High
Very large solar (50-120 hectares)	High

LCA 11C: Features which increase sensitivity to solar PV development include the intervisibility with the Chilterns National Landscape and small local hills including Prospect Hill and Horsenden Hill. Features which decrease sensitivity to solar PV development include the busy roads such as the M40, which locally reduce tranquillity, and Oxfordshire gold club which is locally reduces the rural character.

Table 60: Landscape sensitivity to solar PV developments in LCA 11C

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	Low-moderate
Small solar (1-5 hectares)	Moderate
Medium solar (5-20 hectares)	Moderate
Large solar (20-50 hectares)	High
Very large solar (50-120 hectares)	High

Overall assessment of landscape sensitivity to wind energy developments

Summary of overall landscape sensitivity of Upper Vale LCT 11

A gently undulating landscape incised by small watercourses, with frequent human-scale features including blocks of woodland, in-field and roadside trees, hedgerows, hamlets, and farm buildings, which increases sensitivity to wind energy development. The mix of modern and historic enclosures, and some variety in land cover from riparian vegetation lining watercourses, woodland blocks and small settlements increase sensitivity. Frequent areas of semi-

natural habitat also increase sensitivity. The urban influence from adjacent larger settlements locally decreases sensitivity. Historic villages and listed buildings provide historic features important to character, and some time-depth. The LCT has some intervisibility with the North Wessex Downs and Chilterns National Landscapes, which increases sensitivity to wind energy development. Skylines are not particularly distinctive, although generally undeveloped. A number of popular public rights of way cross the LCT, and are sensitive receptors. This is a rural, tranquil landscape with a pleasing combination of woodland, small watercourses and settlements, which increases sensitivity. Busy transport corridors locally reduce tranquillity, and proximity to larger urban areas locally reduces rurality. These both reduce sensitivity to wind energy development.

This LCT generally has 'high' landscape sensitivity to wind energy development greater than the 'small-scale' development scenario.

Sensitivity of Upper Vale Landscape Character Areas

LCA 11A: Features which increase sensitivity to wind energy development are the frequent human-scale features of woodland blocks, hedgerows and small settlements at Buscot and Eaton Hastings, areas of ancient woodland and important grassland at Grafton Lock SSSI. Features which decrease sensitivity to wind energy development include the gently undulating topography, medium to large-scale field pattern, and busy A417 which reduces tranquillity.

Table 61: Landscape sensitivity to wind energy development in LCA 11A

Development scenario	Overall landscape sensitivity rating
Very small-scale wind (<25 metres)	Moderate
Small-scale wind (25-60 metres)	Moderate

Development scenario	Overall landscape sensitivity rating
Medium-scale wind (60-100 metres)	Moderate-high
Large-scale wind (100-150 metres)	High
Very large-scale wind (150-220 metres)	High

LCA 11B: Features which increase sensitivity to wind energy development include intervisibility with the North Wessex Downs National Landscape, areas of ancient woodland and grassland and fen at Fernham Meadows SSSI, historic settlement pattern, and the frequent human-scale features. Features which locally decrease sensitivity to wind energy development are the urban edges of Shrivenham and Wantage, which reduce the rural character, and busy transport corridors, which reduce tranquillity.

Table 62: Landscape sensitivity to wind energy development in LCA 11B

Development scenario	Overall landscape sensitivity rating
Very small-scale wind (<25 metres)	Moderate
Small-scale wind (25-60 metres)	Moderate-high
Medium-scale wind (60-100 metres)	High
Large-scale wind (100-150 metres)	High
Very large-scale wind (150-220 metres)	High

LCA 11C: Features which increase sensitivity to wind energy development include intervisibility with the Chilterns National Landscape, frequent human-scale features including ancient woodland at Fernhill Wood and small historic villages. Features which decrease sensitivity to wind energy development

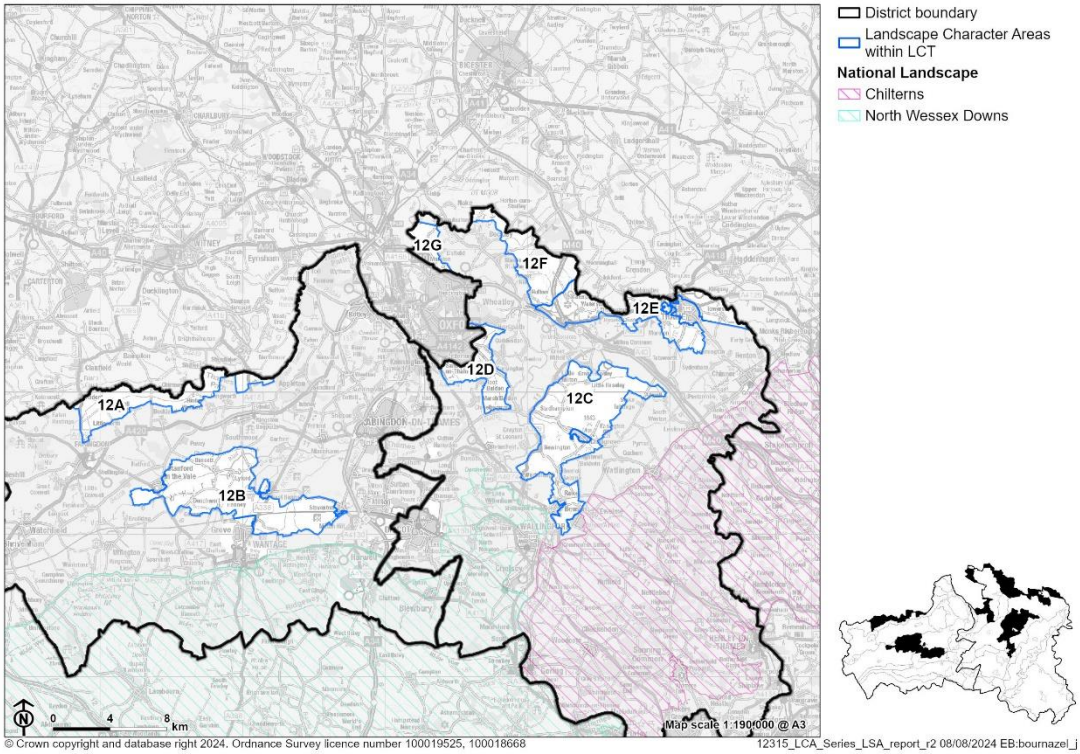
include the busy transport corridor of the M40 which locally reduces tranquillity, and Oxfordshire golf club which reduces the rural character.

Table 63: Landscape sensitivity to wind energy development in LCA 11C

Development scenario	Overall landscape sensitivity rating
Very small-scale wind (<25 metres)	Moderate
Small-scale wind (25-60 metres)	Moderate-high
Medium-scale wind (60-100 metres)	High
Large-scale wind (100-150 metres)	High
Very large-scale wind (150-220 metres)	High

LCT 12 Middle Vale

Figure 34: Contextual map of the LCT



Component Landscape Character Areas:

- LCA 12A: Thames Middle Vale
- LCA 12B: Western Middle Vale
- LCA 12C: Eastern Middle Vale
- LCA 12D: Oxford Middle Vale
- LCA 12E: Thame Middle Vale

- LCA 12F: Studley Middle Vale
- LCA 12G: Cherwell Middle Vale

Figure 35: LCA 12F Sheepgrazed pasture backgrounded by wooded hills

Figure 36: LCA 12D Powerlines and arable farmland transected by hedgerows

Assessment of landscape sensitivity to renewable energy development

Landscape sensitivity assessment

Landform and scale (including sense of openness/ enclosure)

- Flat or gently undulating, low-lying landscape, mostly within 60 metres AOD and 75 metres AOD, associated with the floodplains of the districts' major watercourses such as the rivers Thames, Ock, Thame and Cherwell; drained by numerous minor watercourses (including Stutfield Brook, Wadley Stream and Northfield Brook) which flow from the surrounding higher ground.
- Localised areas of higher ground include Barrow Bush Hill and parts of the LCT that rise to meet the footslopes of the North Wessex Downs, forming its northern landscape and visual context.
- Mainly occurring over clay, mudstone and sandstone geology, with some areas of better-draining gravel terraces, often contained by adjacent higher limestone ridges and slopes.
- A predominantly large-scale, open, arable landscape with variable sense of enclosure dependent on woodland cover and field scale – areas characterised by smaller-scale pasture fields are generally more enclosed owing to more intact boundary vegetation (including some woodland belts) including mature hedgerow trees; large-scale fields are more open, with low-clipped, often degraded hedges allowing high levels of intervisibility.
- Human scale features include low-density settlement comprising scattered farmsteads and small villages such Berrick Salmon and Charney Bassett.

Landcover (including field and settlement patterns)

- On the floodplain, land use is predominately pasture and waterside meadows, with smaller areas of arable, while on higher ground away from the river, arable cultivation is medium to large scale. There are occasional large mature trees within fields. Smaller-scale pasture fields are typically located around settlements.
- Field boundary vegetation varies, comprising degraded hedgerows with broken tree lines, as well as intact, low-clipped hedges along fields and roads. Some boundaries are delineated by open ditches and fences in places. Hedges that are more species rich with mature hedgerow trees feature predominantly along water courses and ditches. Hedgerow trees such as ash and oak make a positive contribution to enhancing distinctiveness in arable landscapes that have lost semi-natural vegetation to the enlarging of fields for agricultural production.
- Woodland cover is limited to dispersed small copses and broad tree belts between fields. Larger areas of ancient woodland are found in LCA 12F (Waterperry Wood, Holton Wood, and Stanton Great Wood), which are all also designated as Sites of Special Scientific Interest (SSSI). Some areas of more substantial woodland cover such as along the Great Western Main Line railway, and where vegetation flank canals and major watercourses (such as the rivers Ock, Thame and Thames). Elsewhere mixed broadleaf and coniferous plantations are often in angular blocks.
- Important wetland and grassland habitats feature adjacent to the river and across the low-lying floodplain (such as Cuttle Brook LNR and Otmoor Nature Reserve). There are also some occasional small traditional orchards, typically associated with farms.
- Settlement is infrequent across the LCT and typically comprises small, nucleated villages and hamlets. Some are covered by Conservation Area designations (such as Goosey, Berrick Salome, and Waterstock) and contain clusters of listed buildings. Scattered farmsteads feature throughout.

Historic landscape character

- Fieldscapes within the area are recorded as being a mixture of post-medieval, pre-18th century and modern origin. Small, remnant areas of orchards associated with settlements (such as at West Hanney and East Hanney) also provide links to historic land uses and contribute to historic landscape character.
- Causewayed enclosure and associated features immediately west of Rushey Weir are Scheduled Monuments, as is Wyke Monastic Grange in the south-west of the LCA. Several of the bridges, including at Radcot, Tadpole Bridge and Newbridge, are Grade II Listed Buildings.
- A number of the settlements are covered by Conservation Area designations (such as Berrick Salome, Waterstock, and Little Haseley) and contain clusters of Listed Buildings and Scheduled Monuments (such as a deserted medieval village site at Thomley and a moated Tudor brick house on the site of a medieval hunting lodge).
- Time-depth and historic character is also provided by areas of parkland character including Waterperry House and ornamental gardens, Ascott Park, and Thame Park (all Grade II registered).
- Royal Air Force airfields at Chalgrove and Benson Military link to historic land uses including the 17th century Civil War Registered Battlefield at Chalgrove.
- Buildings in the villages reflect the underlying geology, with many older houses constructed from local Corallian limestone. Red tiles or thatch are common as roofing materials.

Visual character (including skylines)

- Boundary and roadside vegetation, as well as dispersed woodland copses frequently shorten, fragment and partially screen views within the LCT. Between tree cover, and from more open areas dominated by large-scale arable land, there are views to high ground of the wooded Corallian Limestone Ridge emphasising the location of the LCT within a wider Vale.

- Sections of the LCT form a significant part of the wider setting to the north of the North Wessex Downs National Landscape (AONB), which is visible in the distance from vantage points within the Downs, including from The Ridgeway and Open Access Land surrounding the Uffington White Horse. The wooded ridge of the Chilterns National Landscape (AONB) is the backdrop for many views south.
- Riparian vegetation along the watercourses (both the larger rivers and their smaller tributaries) often frames or screens longer-range views; for example, the River Thames is visible from sections of the Thames Path along its banks, although layers of vegetation limit views across the pastoral farmland towards the river.
- Around watercourses smaller-scale landscapes with intimate, pastoral and tranquil character contrast with the larger-scale open arable farmland that dominates much of the area.
- Electricity pylons, solar farms and agricultural structures form visually detracting features, but the sparsely settled, rural area has a general sense of peace and tranquillity. The valley floor is well contained by the wooded slopes of the Corallian Limestone Ridge to the south. At a local scale vegetated screens (such as at Chalgrove Airfield) often effectively limit the urbanising influence of modern development.

Perceptual and scenic qualities

- An overall rural landscape with a relative absence of large settlement and modern infrastructure, resulting a strong sense of tranquillity over the majority of the LCT, which can be appreciated from the public rights of way across the countryside.
- Localised detracting features include electricity pylons, arterial transport corridors (including the M40 and A40) and large agricultural structures, which have a more significant effect in areas that are open, with high levels of intervisibility. Parts of the LCT are strongly influenced by proximity larger urban centres (such as Oxford and Thame) which introduce large business/light industrial land uses. Solar developments

and airfields are also locally detracting where not effectively integrated into their rural setting.

- On the floodplain, smaller-scale landscapes with an intimate and tranquil pastoral character contrast with the large scale open arable farmland that dominates much of the area.
- Vehicle access is predominantly farm tracks which provide links between the dispersed settlements, and is relatively limited in some parts of the LCT though major transport corridors feature throughout (such as the M40, A417 and A418), including a section of the Great Western Main Line railway, the old Wilts and Berks Canal.
- There is a well-connected network of public rights of way across most of the area (including the Vale Way, Shakespeare's Way, and other footpaths which connect to the Thames Path National Trail) though public rights of way are sparse in other parts of the LCT. The Thames is navigable, providing further recreational value.

Table 64: Sensitivity scores for LCT 12 Middle Vale

Criteria	Sensitivity Score: Solar	Sensitivity Score: Wind
Landform and scale (including sense of openness/enclosure)	Low-moderate	Low-moderate
Landcover (including field and settlement patterns)	Moderate	Moderate
Historic landscape character	Moderate	Moderate
Visual character (including skylines)	Low-moderate	Low-moderate
Perceptual and scenic qualities	Moderate	Moderate

Overall assessment of landscape sensitivity to solar PV developments

Summary of overall landscape sensitivity of Middle Vale LCT 12

A low-lying or gently undulating landform, with a generally large-scale field pattern. Flat lowland landscapes are likely to be less sensitive, as the solar PV arrays would be less easily perceived. The landscape is generally open, with localised hedgerows and riparian vegetation providing cover. The limited screening by vegetation, especially in large-scale arable fields increases visual sensitivity. Areas of large-scale arable farmland reduce sensitivity in terms of land use, while the smaller-scale pasture and waterside meadows and historic field patterns increase sensitivity. The landscape is generally rural, although existing solar development and proximity to modern development associated with adjacent settlements and major transport routes create a more modern land cover, reducing sensitivity in places. The varied historic field pattern, areas of parkland and the small historic settlements provide a variety of time-depths, which increase sensitivity.

The flat landform has some intervisibility with surrounding higher ground and forms part of the wider setting to the North Wessex Downs and Chilterns National Landscapes, which increases sensitivity. These landscapes are also visible in views from a variety of long-distance public rights of way including the Vale Way, Shakespeare's Way, and other footpaths which are all sensitive receptors. Skylines are generally undeveloped. The landscapes have areas influenced by proximity to modern settlement edges, which decrease sensitivity, and areas which are relatively free from overt human activity, which increase sensitivity.

This LCT generally has 'high' landscape sensitivity to solar energy development greater than the 'large-scale' development scenario. Existing woodland and thick hedgerows could be used to screen solar PV installations of medium-scale (or less) to reduce their landscape and visual impact. Care would be needed to ensure important intervisibility with the North Wessex Downs and Chilterns National Landscapes was not impeded.

Sensitivity of Middle Vale Landscape Character Areas

LCA 12A: Features which lower sensitivity to solar PV development include the flat topography, sparse settlement pattern and intact hedgerows with mature trees which provide visual containment. Features which locally increase sensitivity to solar PV development include the visual and experiential relationship with the River Thames which has a high recreational value as a navigable watercourse, parts of the LCA being overlooked by the Corallian Limestone Ridge which rises to the south, and the high levels of tranquillity in the LCA.

Table 65: Landscape sensitivity to solar PV development in LCA 12A

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	Low-moderate
Small solar (1-5 hectares)	Moderate
Medium solar (5-20 hectares)	Moderate-high
Large solar (20-50 hectares)	High
Very large solar (50-120 hectares)	High

LCA 12B: Features which lower sensitivity to solar PV development include the flat, low-lying landscape, limited settlement pattern, existing energy infrastructure such as solar development west of Steventon (though its visibility from within the vale is limited), overhead power lines and, where visible, railway electrification structures along the Great Western Main Line railway. Features which increase sensitivity include the lack of hedgerow structure to contain solar PV development, presence of historic settlements and the landscape's role as a rural setting to these, and the landscape's role within the wider landscape setting of the North Wessex Downs National Landscape.

Table 66: Landscape sensitivity to solar PV development in LCA 12B

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	Low-moderate
Small solar (1-5 hectares)	Low-moderate
Medium solar (5-20 hectares)	Moderate
Large solar (20-50 hectares)	Moderate-high

Development scenario	Overall landscape sensitivity rating
Very large solar (50-120 hectares)	High

LCA 12C: Features which increase sensitivity to solar PV development include important semi-natural habitats at Spartum Fen SSSI, historic features such as the Battle of Chalgrove Field, and local areas in the south which contribute to the landscape setting of the Chilterns National Landscape. Features that lower sensitivity to solar PV development include the presence of modern built development in the form of existing solar farms and airfields at Benson and Chalgrove.

Table 67: Landscape sensitivity to solar PV development in LCA 12C

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	Low-moderate
Small solar (1-5 hectares)	Moderate
Medium solar (5-20 hectares)	Moderate-high
Large solar (20-50 hectares)	Moderate-high
Very large solar (50-120 hectares)	High

LCA 12D: Features which increase sensitivity to solar PV development include the landscape's contribution to the rural setting of Oxford and its recreational value, including Shakespeare's Way long distance path. Features which decrease sensitivity to solar PV development include the existing electricity pylons which pass across much of the landscape, and the urbanising influence of Oxford which reduces tranquillity in parts of the LCA.

Table 68: Landscape sensitivity to solar PV development in LCA 12D

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	Low-moderate
Small solar (1-5 hectares)	Moderate
Medium solar (5-20 hectares)	Moderate
Large solar (20-50 hectares)	Moderate-high
Very large solar (50-120 hectares)	High

LCA 12E: Features which increase sensitivity to solar PV development include the low-lying and relatively flat landform, and limited tree and vegetation cover which create an open, exposed character of the LCA which has intervisibility with the Chilterns National Landscape to the south. Features which lower sensitivity to solar PV development include busy transport corridors which cross through the area, such as the M40 motorway in the west, and the A418 which runs along the length of the LCA towards Thame. These introduce visual and aural disruption to the landscape.

Table 69: Landscape sensitivity to solar PV development in LCA 12E

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	Low-moderate
Small solar (1-5 hectares)	Low-moderate
Medium solar (5-20 hectares)	Moderate
Large solar (20-50 hectares)	Moderate-high
Very large solar (50-120 hectares)	High

LCA 12F: Features which increase sensitivity to solar PV development include large blocks of woodland at Waterperry Wood, Holton Wood, and Stanton Great Wood, which are all designated as Sites of Special Scientific Interest (SSSI). Any development would need to avoid adverse effects on these important habitats. Hillsides and higher ground have longer views across the lower-lying vales (for example from Beckley towards Otmoor) and these areas also have higher sensitivity to solar PV development. Features which lower sensitivity to solar PV development include the presence of existing infrastructure such as the M40 as well as electricity pylons and telecommunications masts near Beckley form prominent vertical structures on the skyline. The LCA has a comparatively intimate, semi-enclosed character, with woodland and roadside vegetation limiting intervisibility and providing a sense of containment.

Table 70: Landscape sensitivity to solar PV development in LCA 12F

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	Low-moderate
Small solar (1-5 hectares)	Low-moderate
Medium solar (5-20 hectares)	Moderate
Large solar (20-50 hectares)	Moderate-high
Very large solar (50-120 hectares)	High

LCA 12G: Features which increase sensitivity to solar PV development include the relatively sparse woodland cover which occurs in small areas within field margins, along the river, and around farmsteads. The LCA provides an open rural setting to the north-east of Oxford which could be negatively impacted by the introduction of solar energy infrastructure. Features which reduce sensitivity include mature hedgerows which reduce views across the landscape, the local impact of the A40 which reduces tranquillity, and electricity pylons which impact the skyline.

Table 71: Landscape sensitivity to solar PV development in LCA 12G

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	Low-moderate
Small solar (1-5 hectares)	Low-moderate
Medium solar (5-20 hectares)	Moderate
Large solar (20-50 hectares)	Moderate-high
Very large solar (50-120 hectares)	High

Overall assessment of landscape sensitivity to wind energy developments

Summary of overall landscape sensitivity of Middle Vale LCT 12

A low-lying, flat or gently undulating landform, which reduces sensitivity to wind energy. The larger-scale arable fields also reduce sensitivity in terms of land use, although their lack of screening increases visual sensitivity. However, the frequent human-scale features within the landscape, including trees/woodland, hedgerows and scattered hamlets and farm buildings increase sensitivity. Field patterns are a mix of larger-scale modern and smaller-scale historic enclosure, with variation in land cover between arable fields and smaller pasture fields and water meadows. The landscape has a largely rural character, although locally impacted by proximity to urban settlement edges. Areas of parkland and historic villages provide visible historic features with importance to character, and increase sensitivity. The largely open, flat landscape and undeveloped skylines (intermittently marked by woodland) which have generally high levels of intervisibility with the surrounding landscapes, including intervisibility with the

North Wessex Downs and Chilterns National Landscapes, which increases sensitivity. The LCT is largely rural, which increases sensitivity. There is reduced tranquillity close to A-roads and adjacent urban settlements, which lowers sensitivity to wind energy development. This LCT generally has 'high' landscape sensitivity to wind energy development greater than the 'medium-scale' development scenario.

Sensitivity of Middle Vale Landscape Character Areas

LCA 12A: Features which increase sensitivity to wind energy development include the visual and experiential relationship with the River Thames which has a high recreational value as a navigable watercourse, while its banks provide important semi-natural habitat. The LCA is also overlooked by the Corallian Limestone Ridge which rises to the south and it has an undeveloped, tranquil character. Features which decrease sensitivity include the flat, low-lying landscape and limited human scale features due to the sparse settlement pattern.

Table 72: Landscape sensitivity to wind energy development in LCA 12A

Development scenario	Overall landscape sensitivity rating
Very small-scale wind (<25 metres)	Moderate
Small-scale wind (25-60 metres)	Moderate-high
Medium-scale wind (60-100 metres)	Moderate-high
Large-scale wind (100-150 metres)	High
Very large-scale wind (150-220 metres)	High

LCA 12B: Features which lower sensitivity to wind energy development include the presence of existing energy infrastructure such as solar development west

of Steventon (though its visibility from within the vale is limited) and, where visible, the overhead electrification infrastructure associated with the Great Western Main Line railway. Substantial belts of trees along the Great Western Main Line railway, vegetation along the Wilts and Berks Canal, and riparian vegetation along the River Ock help to limit the range of views in the landscape. The LCA's contribution to the landscape setting of the North Wessex Downs National Landscape increases its sensitivity to wind energy development.

Table 73: Landscape sensitivity to wind energy development in LCA 12B

Development scenario	Overall landscape sensitivity rating
Very small-scale wind (<25 metres)	Moderate
Small-scale wind (25-60 metres)	Moderate-high
Medium-scale wind (60-100 metres)	Moderate-high
Large-scale wind (100-150 metres)	High
Very large-scale wind (150-220 metres)	High

LCA 12C: Features which lower sensitivity to wind energy development include the presence of modern built development in the form of existing solar farms and airfields at Benson. Features which increase sensitivity to wind energy development include important semi-natural habitats, such as Spartum Fen SSSI, and historic features such as the Battle of Chalgrove Field. The south of the LCA contributes to the landscape setting of the Chilterns National Landscape and is therefore more sensitive to wind energy development.

Table 74: Landscape sensitivity to wind energy development in LCA 12C

Development scenario	Overall landscape sensitivity rating
Very small-scale wind (<25 metres)	Moderate
Small-scale wind (25-60 metres)	Moderate-high
Medium-scale wind (60-100 metres)	Moderate-high
Large-scale wind (100-150 metres)	High
Very large-scale wind (150-220 metres)	High

LCA 12D: Features which lower sensitivity to wind energy development include the flat, large-scale farmland, open character, proximity to industrial development on the southern edge of Oxford, and large power pylons which feature throughout the landscape, limiting the sense of tranquillity and remoteness. Features which increase sensitivity to wind energy development include the frequent human-scale features and promoted routes including Shakespeare's Way.

Table 75: Landscape sensitivity to wind energy development in LCA 12D

Development scenario	Overall landscape sensitivity rating
Very small-scale wind (<25 metres)	Moderate
Small-scale wind (25-60 metres)	Moderate-high
Medium-scale wind (60-100 metres)	Moderate-high
Large-scale wind (100-150 metres)	High

Development scenario	Overall landscape sensitivity rating
Very large-scale wind (150-220 metres)	High

LCA 12E: Features which increase sensitivity to wind energy development include the open, exposed character of the LCA with limited tree cover which is highly visible from the surrounding vales. Features which reduce sensitivity to wind energy development include the busy transport corridors which cross through the area including M40 motorway in the west, and the A418 which runs along the length of the LCA towards Thame. These introduce visual and aural disruption to the landscape, locally lowering its sensitivity.

Table 76: Landscape sensitivity to wind energy development in LCA 12E

Development scenario	Overall landscape sensitivity rating
Very small-scale wind (<25 metres)	Moderate-high
Small-scale wind (25-60 metres)	Moderate-high
Medium-scale wind (60-100 metres)	High
Large-scale wind (100-150 metres)	High
Very large-scale wind (150-220 metres)	High

LCA 12F: Features which increase sensitivity to wind energy development are the large blocks of woodland at Waterperry Wood, Holton Wood, and Stanton Great Wood, are all designated as Sites of Special Scientific Interest (SSSI), and longer views from hillsides and higher ground across lower-lying vales (for example from Beckley towards Otmoor). Features which lower sensitivity to wind energy development include the presence of existing infrastructure such as the M40 as well as electricity pylons and telecommunications masts near

Beckley which form prominent vertical structures on the skyline. The LCA has a comparatively intimate, semi-enclosed character, with woodland and roadside vegetation limiting intervisibility and providing a sense of containment.

Table 77: Landscape sensitivity to wind energy development in LCA 12F

Development scenario	Overall landscape sensitivity rating
Very small-scale wind (<25 metres)	Moderate
Small-scale wind (25-60 metres)	Moderate-high
Medium-scale wind (60-100 metres)	Moderate-high
Large-scale wind (100-150 metres)	High
Very large-scale wind (150-220 metres)	High

LCA 12G: Features which increase sensitivity to wind energy development includes the woodlands which occurs in small areas within field margins, along the river, and around farmsteads. The LCA provides an open rural setting to the north-east of Oxford which could be negatively impacted by the introduction of wind energy infrastructure. Features which lower sensitivity include the flat, low-lying landscape with limited intervisibility with surrounding landscapes.

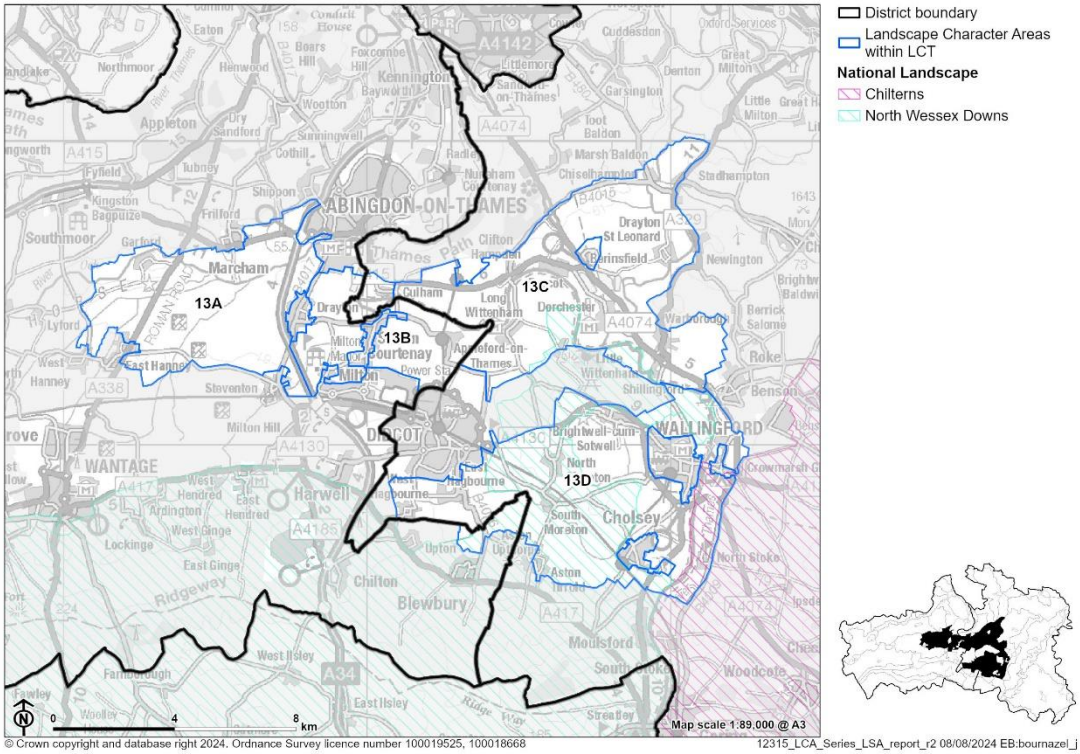
Table 78: Landscape sensitivity to wind energy development in LCA 12G

Development scenario	Overall landscape sensitivity rating
Very small-scale wind (<25 metres)	Moderate
Small-scale wind (25-60 metres)	Moderate-high

Development scenario	Overall landscape sensitivity rating
Medium-scale wind (60-100 metres)	Moderate-high
Large-scale wind (100-150 metres)	High
Very large-scale wind (150-220 metres)	High

LCT 13 Lower Vale

Figure 37: Contextual map of the LCT



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Component Landscape Character Areas:

- LCA 13A: Ock Lower Vale
- LCA 13B: Abingdon-Didcot Lower Vale
- LCA 13C: East Thames Lower Vale
- LCA 13D: South Thames Lower Vale

Figure 38: LCA 13A flat fields with solar farm in background

Figure 39: LCA 13D Open fields with electricity pylon and views to wider North Wessex Downs

Assessment of landscape sensitivity to renewable energy development

Landscape sensitivity assessment

Landform and scale (including sense of openness/ enclosure)

- A flat, low-lying floodplain landform with little topographic variation. The River Ock and its floodplain are found in LCA 13A, and the River Thames and its tributaries in LCAs 13B,13C and 13D. Cholsey Hill (within LCA 13D), at 74 metres AOD, is a distinctive rounded hill.
- Fields are generally large-scale and irregular in shape. Smaller-scale fields lie adjacent to the watercourses, as floodplain grazing. Field boundaries are often open, formed by drainage ditches and watercourses. Where hedgerows exist, they are often low in height.
- Small angular or linear woodland copses, riparian vegetation, small settlements and farm buildings provide human-scale features.

Landcover (including field and settlement patterns)

- Fields are often large-scale and in arable use, although smaller-scale fields adjacent to watercourses are in use for pasture.
- Existing solar farms are present in LCAs 13A and 13C.
- Semi-natural landcover is concentrated along the watercourses, with riparian vegetation, priority habitat floodplain grazing marsh, lowland meadows and lowland fens widespread.
- Tree cover is found in woodland belts along major transport corridors, and in small copses of scattered deciduous woodlands. Some woodlands are of ancient origin.

- Modern human activities including current and former gravel extraction influence the landscape. Former gravel pits are often now flooded, creating large lakes.
- Limited settlement within the floodplain, with villages set on slightly higher ground. Urban influence from adjacent urban areas including Abdingdon, Wallingford and Didcot. Busy A-roads and the Great Western Mainline railway run through the LCT, creating some urban influence.

Historic landscape character

- Villages are often covered by Conservation Areas, including Drayton and Dorchester, and contain clusters of Listed Buildings.
- Small manor houses and parklands are a feature of the landscape, including Grade II Sutton Courtney Manor Registered Park and Garden (LCA 13B).
- A number of former settlement sites are recorded, showing the long history of settlement on the floodplain. Many are now designated as Scheduled Monuments.
- The rivers and streams have been important navigation routes throughout history. A number of weirs and bridges cross the watercourses, many of which are Listed Buildings.
- Historic Landscape Characterisation shows that although some areas retain a Medieval field pattern, which enhances time-depth, the majority of field patterns are formed by 20th century field amalgamation.

Visual character (including skylines)

- The open, flat landform and limited field boundaries allow for long views to surrounding higher ground, including the North Wessex Downs National Landscape and Corallian Limestone Ridge to the north. There is intervisibility with the National Landscapes, which often form a backdrop to this LCT, e.g. at LCA 13A.

- In other areas with more settlement and woodland, particularly LCA 13B, views are obscured. The open skyline is not prominent, with electricity pylon routes the most prominent features on the skyline.

Perceptual and scenic qualities

- Some sense of tranquillity and remoteness in areas of limited settlement and public access, and along the river corridors. However, major transport corridors including A roads and railway and on-going gravel extraction are audible and visible detractors. The edges of adjacent settlements and employment areas, such as Abingdon, Didcot and Milton Park Estate as well as existing solar farms in LCAs 13A and 13C are modern elements in the landscape.
- Some areas of the LCT lie within the North Wessex Downs National Landscape and a small area within the Chilterns National Landscape. Special qualities of these National Landscapes represented in this landscape include chalk grasslands, arable habitats, Medieval and post-Medieval settlements with historic buildings, extensive public rights of way and panoramic views towards the chalk escarpment.
- The LCT features a good network of PRoW, including the Vale Way, Thames Path National Trail and Oxford Greenbelt Way.

Table 79: Sensitivity scores for LCT 13 Lower Vale

Criteria	Sensitivity Score: Solar	Sensitivity Score: Wind
Landform and scale (including sense of openness/enclosure)	Low-moderate	Low-moderate
Landcover (including field and settlement patterns)	Moderate	Moderate
Historic landscape character	Moderate	Moderate
Visual character (including skylines)	Low-moderate	Low-moderate
Perceptual and scenic qualities	Low-moderate	Low-moderate

Overall assessment of landscape sensitivity to solar PV developments

Summary of overall landscape sensitivity of Lower Vale LCT 13

This is a low-lying landscape, with generally modern fields which reduces sensitivity. However, the often open field boundaries increase sensitivity as there is less opportunity for screening. The mixture of arable and pasture fields, limited settlement and semi-natural landcover concentrated along the watercourses (including floodplain grazing marsh and lowland meadow) increases the sensitivity to solar PV development. However, the current and former gravel extraction, and proximity to adjacent urban areas reduces the rural character and decreases sensitivity. The rivers and floodplain have a long history of navigation and settlement, which combined with historic buildings and small parklands, create a strong sense of time-depth and increase sensitivity to solar PV development. The flat landform and open field boundaries allow for long views to surrounding higher ground, including to the North Wessex Downs National Landscape. The skylines are open but not prominent, with the skyline

of adjacent higher ground more prominent, which reduces sensitivity. The landscape has some rural character, although this is impacted by proximity to adjacent urban areas, electricity pylon routes, major transport corridors and on-going gravel extraction, which reduce sensitivity. A number of public rights of way run through this landscape, and are sensitive receptors.

This LCT generally has 'high' landscape sensitivity to solar energy development greater than the 'large-scale' development scenario. There may be opportunities to accommodate carefully sited 'very small', 'small' and 'medium' scale solar PV development scenarios in areas influenced by adjacent settlements, on-going gravel extraction works, or where light industrial land uses are already present, and where enclosure can be provided by existing hedgerows.

Landscape sensitivity of Lower Vale Landscape Character Areas

LCA 13A: Features which increase sensitivity to solar PV development include the open character of the landscape, with limited hedgerows or woodlands to screen any development. The centre of the LCA has a rural and remote character, and has intervisibility with the North Wessex Downs National Landscape to the south, which increases sensitivity. However, the landscape is low-lying, flat and is impacted by major transport corridors and proximity to the urban edges of adjacent settlements including Steventon and Drayton. The limited perceptual and scenic qualities reduce sensitivity to solar PV development.

Table 80: Landscape sensitivity to solar PV development in LCA 13A

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	Low

Development scenario	Overall landscape sensitivity rating
Small solar (1-5 hectares)	Low-moderate
Medium solar (5-20 hectares)	Low-moderate
Large solar (20-50 hectares)	Moderate
Very large solar (50-120 hectares)	Moderate-high

LCA 13B: Features which increase sensitivity to solar PV development include the time-depth at small parklands such as the Grade II Sutton Courtney Manor Registered Park and Garden, and strong recreational access including the Thames Path National Trail and Vale Way, where there are clear views into the landscape. Features which reduce landscape sensitivity are the vegetation and settlement which provides enclosure and could be used to screen solar PV development, as well as the impact of major transport corridors and on-going gravel extraction works.

Table 81: Landscape sensitivity to solar PV development in LCA 13B

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	Low-moderate
Small solar (1-5 hectares)	Low-moderate
Medium solar (5-20 hectares)	Moderate
Large solar (20-50 hectares)	Moderate-high
Very large solar (50-120 hectares)	High

LCA 13C: The south of the LCA lies within the North Wessex Downs National Landscape, which increases its sensitivity to all scales of solar PV development. Features which increase sensitivity include the strong historic character of the area, particularly around Dorchester and intervisibility with the North Wessex

Downs National Landscape. Features which decrease sensitivity include the blocks of woodland which provide enclosure and potential screening, existing solar farms, flooded lakes from former gravel extraction, and modern settlement edges.

Table 82: Landscape sensitivity to solar PV development in LCA 13C

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	Low-moderate
Small solar (1-5 hectares)	Moderate
Medium solar (5-20 hectares)	Moderate
Large solar (20-50 hectares)	Moderate-high
Very large solar (50-120 hectares)	High

LCA 13D: The majority of this LCA lies within the North Wessex Downs and Chilterns National Landscapes, which increases its sensitivity to all scales of solar PV development. Features which increase sensitivity include Cholsey Hill, a locally prominent hill, which is visible from across the low-lying landscape, sparse woodland character leading to an open, exposed character, and the historic settlement pattern which increases time-depth. Features which reduce sensitivity include the major transport corridors and electricity pylons which negatively impact on the rural and visual character.

Table 83: Landscape sensitivity to solar PV development in LCA 13D

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	Moderate

Development scenario	Overall landscape sensitivity rating
Small solar (1-5 hectares)	Moderate
Medium solar (5-20 hectares)	Moderate-high
Large solar (20-50 hectares)	High
Very large solar (50-120 hectares)	High

Overall assessment of landscape sensitivity to wind energy developments

Summary of overall landscape sensitivity of Lower Vale LCT 13

A simple, low-lying landform, which generally reduces sensitivity to wind energy. Some human-scale features such as riparian vegetation, small settlements and farm buildings slightly increase sensitivity. The varied sizes of fields, including large-scale arable and smaller-scale pasture, and some semi-natural habitats increase sensitivity. Current and former gravel extraction, major transport corridors and proximity to adjacent urban edges reduces sensitivity locally. Historic villages, small manor houses and parklands are visible historic features of importance to character, which increases sensitivity to wind energy development. The majority of the field patterns were formed by 20th century amalgamation, which reduces sensitivity. Simple, flat skylines with few landmark features and some disturbance from electricity pylon routes recues sensitivity. However, the landscape has intervisibility with the North Wessex Downs National Landscape, which forms a backdrop to many views from within the LCT. Areas of limited settlement and public access have a good sense of tranquillity and remoteness, which increases sensitivity to wind energy development. Public rights of way through the landscape are sensitive receptors, including the Thames Path National Trail. However, much of the area is disturbed by noise from major transport corridors and proximity to the urban

edges of adjacent settlements, which decreases sensitivity to wind energy development.

Sensitivity of Lower Vale Landscape Character Areas

LCA 13A: Features which increase sensitivity include the rural and remote character and intervisibility with the North Wessex Downs National Landscape, which increase sensitivity. However, this is a low-lying landscape which is impacted by major transport corridors and proximity to the urban edges of Steventon and Drayton. These reduce sensitivity to wind energy development.

Table 84: Landscape sensitivity to wind energy development in LCA 13A

Development scenario	Overall landscape sensitivity rating
Very small-scale wind (<25 metres)	Low-moderate
Small-scale wind (25-60 metres)	Low-moderate
Medium-scale wind (60-100 metres)	Moderate
Large-scale wind (100-150 metres)	Moderate-high
Very large-scale wind (150-220 metres)	High

LCA 13B: Features which increase sensitivity to wind energy development include the time-depth at the small estates and parklands, including Sutton Courtenay Registered Park and Garden, frequent human-scale features including settlements and woodlands, and some intervisibility with the Corallian Limestone Ridge higher ground to the north. Features which reduce sensitivity include proximity to the urban edges of Abingdon and Didcot, proximity to the industrial developments at Milton Park Estate and Didcot, major transport corridors and on-going gravel extraction works.

Table 85: Landscape sensitivity to wind energy development in LCA 13B

Development scenario	Overall landscape sensitivity rating
Very small-scale wind (<25 metres)	Low-moderate
Small-scale wind (25-60 metres)	Moderate
Medium-scale wind (60-100 metres)	Moderate-high
Large-scale wind (100-150 metres)	High
Very large-scale wind (150-220 metres)	High

LCA 13C: The south of the LCA lies within the North Wessex Downs National Landscape, which increases sensitivity to all scales of wind energy development. The representative features of the National Landscape include river valleys with grazed pastures, mixed field pattern and production and woodland. There is also strong intervisibility with other parts of the North Wessex Downs, especially the Wittenham Clumps to the south. Features which reduce sensitivity include former gravel extraction sites and modern settlement edges at Didcot and Benson.

Table 86: Landscape sensitivity to wind energy development in LCA 13C

Development scenario	Overall landscape sensitivity rating
Very small-scale wind (<25 metres)	Moderate
Small-scale wind (25-60 metres)	Moderate
Medium-scale wind (60-100 metres)	Moderate-high
Large-scale wind (100-150 metres)	High

Development scenario	Overall landscape sensitivity rating
Very large-scale wind (150-220 metres)	High

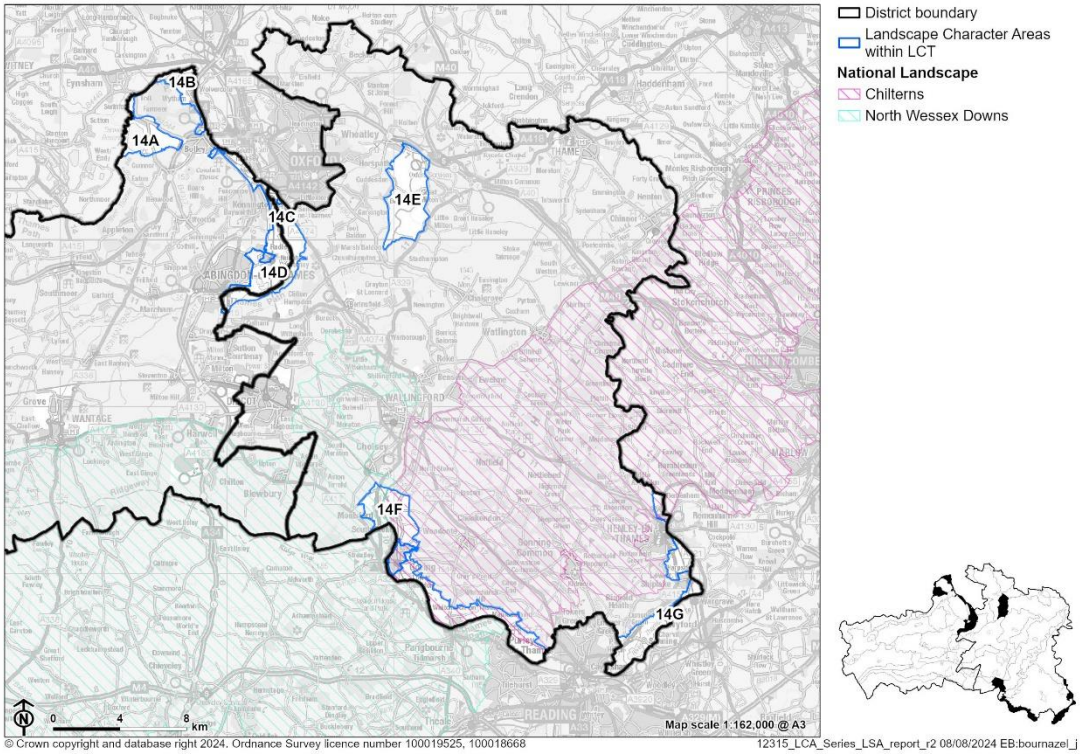
LCA 13D: The LCA is partially within the North Wessex Downs and Chilterns National Landscapes, which increases its sensitivity to all scales of wind energy development. Representative features of the National Landscapes include chalk grasslands, arable habitats, Medieval and post-medieval settlements with historic buildings, extensive public rights of way and panoramic views towards the chalk escarpment. Features which decrease sensitivity include the major transport corridors and electricity pylons which decrease rurality and impact on visual amenity.

Table 87: Landscape sensitivity to wind energy development in LCA 13D

Development scenario	Overall landscape sensitivity rating
Very small-scale wind (<25 metres)	Moderate
Small-scale wind (25-60 metres)	Moderate
Medium-scale wind (60-100 metres)	Moderate-high
Large-scale wind (100-150 metres)	High
Very large-scale wind (150-220 metres)	High

LCT 14 Lower Valley

Figure 40: Contextual map of the LCT



Component Landscape Character Areas:

- LCA 14A: Farmoor Reservoir Lower Valley
- LCA 14B: Eynsham to Oxford Thames River Valley
- LCA 14C: Botley to Kennington Thames River Valley
- LCA 14D: Abingdon to Kennington Thames Lower Valley
- LCA 14E: River Thame Lower Valley

- LCA 14F: Moulsford to Caversham Thames Lower Valley
- LCA 14G: Caversham to Henley Thames Lower Valley

Figure 41: LCA 14D riparian vegetation along the Thames with electricity pylon route

Figure 42: LCA 14F Dramatic views from Hartslock over the Thames valley

Assessment of landscape sensitivity to renewable energy development

Landscape sensitivity assessment

Landform and scale (including sense of openness/ enclosure)

- Generally flat and low-lying river valley landscapes, with gently rising valley sides. Between Goring and Caversham (LCA 14F) the valley sides are very steep, with a more complex topography.
- Heights range from 30-55 metres AOD in the flat floodplain to 80 metres AOD on the valley sides. The valley sides between Goring and Caversham rise to 135 metres AOD.
- The sense of openness is varied. Riparian vegetation provides framing for views along the river corridor. The rising valley sides, which have some small woodland blocks also provide enclosure from wider views. The floodplain area is often open.
- Pasture fields immediately adjacent to the river corridor are small to medium in scale, although areas have been subdivided for horse paddocks, bounded by fences. Large-scale arable fields bounded by drainage ditches or post and wire fences lie away from the river channel.
- Human scale features include the rivers themselves, riparian vegetation and small woodland blocks, and small villages and farm buildings.

Landcover (including field and settlement patterns)

- Supports a diverse array of wetland and woodland habitats, including considerable areas of priority habitats; floodplain grazing marsh, lowland meadow and small areas of deciduous woodland. Small areas of

woodland are recorded as ancient, while areas of wetland habitat are nationally designated as Sites of Special Scientific Interest (SSSIs).

- Farming is mixed, with pasture fields closest to the river channel and arable fields on the valley sides. Fields on the valley floor are often open, divided by drainage ditches, post and wire or post and rail fences. Fields on the valley sides are often bounded by species-rich hedgerows, some in poor condition. Some areas of pasture have been sub-divided for horse paddocks.
- The landscape has been heavily exploited for gravel extraction, and the former pits are now flooded to form large lakes. Although these are not natural features, recolonisation by semi-natural vegetation integrates them into the landscape. Farmoor Reservoir (LCA 14A) is a man-made reservoir, which creates a slightly urban character.
- Limited settlement pattern due to the floodplain, with small historic villages sited on the valley sides.

Historic landscape character

- Riversides have been a favoured area of settlement since prehistoric times, and many of the riverside towns and settlements have Roman or Saxon origins as strategic river crossings or staging posts. LCA 14D contains a number of Scheduled Monuments of former settlements. Historic buildings relating to the river include the Grade I listed stone bridge at Henley-on-Thames and varied styles of boat houses.
- The floodplain provides a setting for historic villages, which contain a number of listed buildings and are designated as Conservation Areas, such as Sonning Eye, Goring and Little Milton.
- Large manors and villas with associated parkland line the rivers. These include Registered Parks and Gardens at Nuneham Courtenay (Grade I in LCA 14D) and Fawley Court (Grade II* in LCA 14G). These parklands have characteristic features such as avenues and free-standing mature trees in pasture.

- Previous gravel extraction has removed much of the historic field systems in LCAs 14D and 14G.

Visual character (including skylines)

- Riparian vegetation and sloping valley sides often create an intimate and enclosed character. Woodland blocks on the valley sides provide some features on the skyline. Electricity pylon routes and occasional telecommunications towers are vertical features on the skyline.
- In more open and less vegetated areas (e.g. LCA 14A) views are more expansive and open.
- Adjacent landscapes provide much of the skyline, including the Chilterns National Landscape and Ridge Hilltops (LCT 7). Some views are available from ridges into valleys but the landform and strong structure of woods and hedgerows generally restrict longer-range views.

Perceptual and scenic qualities

- A generally rural and sometimes remote landscape, due to relative inaccessibility, creating an intimate character with restricted long-distance views.
- Past and active gravel workings, busy road and rail transport routes, and proximity to large urban and employment areas including Caversham, Reading and Oxford, and Wheatley services intrude on the rural landscape qualities.
- The open river corridors and enclosed floodplain create a pleasing visual contrast. Views to wooded valley sides, often outside of the LCT, are also distinctive.
- Recreational routes include the Thames Path National Trail, Chilterns Way and Oxfordshire Greenbelt Way, which provide access from nearby urban settlements. The River Thames offers water-based recreation.

Table 88: Sensitivity scores for LCT 14 Lower Valley

Criteria	Sensitivity Score: Solar	Sensitivity Score: Wind
Landform and scale (including sense of openness/enclosure)	Low-moderate	Moderate
Landcover (including field and settlement patterns)	Moderate-high	Moderate-high
Historic landscape character	Moderate	Moderate
Visual character (including skylines)	Moderate	Moderate
Perceptual and scenic qualities	Moderate	Moderate

Overall assessment of landscape sensitivity to solar PV developments

Summary of overall landscape sensitivity of River Valley LCT 14

A flat landscape, centred on the River Thames, River Thame, associated tributaries and their valleys. Flat lowland landscapes are generally less sensitive, as solar PV arrays would be less easily perceived. Riparian vegetation and existing small woodlands and hedgerows create an enclosed character, which could be used to provide screening. Areas of larger-scale arable fields are less sensitive in terms of land use than the small to medium pasture fields along the river corridor, as solar PV development could dilute or mask the field pattern. Extensive areas of wetland habitats are more sensitive. Numerous historic features including parklands and historic villages have a higher level of sensitivity, although these are not found across all of the River Valleys LCT. Although the landscape has limited long-distance views and does not have prominent skylines, it is often visible from higher areas of land including the Chilterns National Landscape, which increases sensitivity, as solar

PV development may be seen from the higher ground. The LCT is crossed by popular promoted routes including the Thames National Path, Chiltern Way and Oxfordshire Greenbelt Way, as well as water-based recreation on the River Thames, all of whom are sensitive receptors to solar PV development. The landscapes are often rural and remote, forming attractive valley landscapes with visual contrasts. There is some intrusion from human activities including road noise and quarrying, and being in close proximity to settlement fringes, which reduces sensitivity.

This LCT generally has 'high' landscape sensitivity to solar energy development greater than the 'medium-scale' development scenario. There may be opportunities to accommodate carefully sites 'very small', 'small' and 'medium' scale solar PV development scenarios in some areas of the River Valleys LCT. Areas of lower sensitivity include larger-scale arable fields, where hedgerows could be used to provide screening. Land in close proximity to the urban edges of settlements, or impacted by extraction works (where regeneration has not already occurred), may also be suitable for solar PV development scenarios.

Sensitivity of River Valley Landscape Character Areas

LCA 14A: Features which lower sensitivity to solar PV development include the Farmoor Reservoir, a large man-made structure which dominates this landscape. Although the landscape is flat, it is prominent in views from surrounding higher ground and from public rights of way, which increases sensitivity. The landscape also reads as part of a continuous landscape rising to the valley edge to the south, which increases sensitivity.

Table 89: Landscape sensitivity to solar PV development in LCA 14A

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	Low-moderate

Development scenario	Overall landscape sensitivity rating
Small solar (1-5 hectares)	Low-moderate
Medium solar (5-20 hectares)	Moderate
Large solar (20-50 hectares)	High
Very large solar (50-120 hectares)	High

LCA 14B: Features which reduce sensitivity to solar PV development include the reduced tranquillity and rurality due to noise from the A34 and proximity to Botley. However, features which increase sensitivity include the important wetland habitats, historic settlement at Wytham, and the prominence of the landscape in views from surrounding higher ground.

Table 90: Landscape sensitivity to solar PV development in LCA 14B

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	Low-moderate
Small solar (1-5 hectares)	Low-moderate
Medium solar (5-20 hectares)	Moderate
Large solar (20-50 hectares)	High
Very large solar (50-120 hectares)	High

LCA 14C: Features which increase sensitivity are the important wetland habitats designated as SSSI at Iffley Meadows, historic villages of South Hinksey and Sanford-on-Thames, and its visible from surrounding higher ground. Features which reduce sensitivity are the area's proximity to Botley, Oxford and Kennington, which limit the experience of tranquillity, and a number of electricity pylon routes on the skyline.

Table 91: Landscape sensitivity to solar PV development in LCA 14C

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	Low-moderate
Small solar (1-5 hectares)	Low-moderate
Medium solar (5-20 hectares)	Moderate
Large solar (20-50 hectares)	High
Very large solar (50-120 hectares)	High

LCA 14D: Features which reduce sensitivity are the on-going quarrying, which limits the experience of tranquillity and impacts land cover, and proximity to Abingdon-on-Thames which reduces tranquillity. Features which increase sensitivity include the historic interest at Nuneham Courtenay Registered Park and Garden, and the re-naturalising flooded former gravel pits at Radley Lakes.

Table 92: Landscape sensitivity to solar PV development in LCA 14D

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	Low-moderate
Small solar (1-5 hectares)	Low-moderate
Medium solar (5-20 hectares)	Moderate
Large solar (20-50 hectares)	High
Very large solar (50-120 hectares)	High

LCA 14E: Features which decrease sensitivity are generally located in the north where the rural characteristics are affected by proximity to the M40 and

Wheatley Services. Features which increase sensitivity further south are the more complex landform, open fields with limited enclosure, historic villages at Cuddesdon and Little Milton, and open views across the valley.

Table 93: Landscape sensitivity to solar PV development in LCA 14E

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	Low-moderate
Small solar (1-5 hectares)	Low-moderate
Medium solar (5-20 hectares)	Moderate
Large solar (20-50 hectares)	High
Very large solar (50-120 hectares)	High

LCA 14F: The sensitivity of the landscape is increased as the majority of this LCA lies within the North Wessex Downs and Chilterns National Landscapes. The special qualities present include chalk landform, yew woodlands and chalk grasslands, arable habitats with strong hedgerow network, historic attractive villages at Moulsford and Whitchurch on Thames, extensive public rights of way and medieval and post-medieval settlements with historic buildings, extensive public rights of way and panoramic views towards the chalk escarpment. The valley sides within are also very steep and contain internationally and nationally designated woodland habitats at Hartslock Wood SAC and SSSI.

Table 94: Landscape sensitivity to solar PV development in LCA 14F

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	Low-moderate

Development scenario	Overall landscape sensitivity rating
Small solar (1-5 hectares)	Moderate
Medium solar (5-20 hectares)	Moderate-high
Large solar (20-50 hectares)	High
Very large solar (50-120 hectares)	High

LCA 14G: Features which increase sensitivity are the inclusion of a small area in the north within the Chilterns National Landscape, with special qualities present including arable habitats with a strong hedgerow network. However, the rural characteristics are affected by proximity to Caversham, Reading and Henley, and tranquillity and land cover is impacted by on-going quarrying, which decreases sensitivity.

Table 95: Landscape sensitivity to solar PV development in LCA 14G

Development scenario	Overall landscape sensitivity rating
Very small solar (up to 1 hectare)	Low-moderate
Small solar (1-5 hectares)	Low-moderate
Medium solar (5-20 hectares)	Moderate
Large solar (20-50 hectares)	High
Very large solar (50-120 hectares)	High

Overall assessment of landscape sensitivity to wind energy developments

Summary of overall landscape sensitivity of River Valley LCT 14

A flat, low-lying landscape, with a mixture of large-scale arable fields on the valley slopes and small-scale valley bottom pasture fields. The frequent human-scale features within the landscape, including riparian vegetation, woodland blocks, hedgerows and small settlements, increase sensitivity to wind energy development. The mixed field size and variety in landcover including floodplain grazing marsh and lowland meadows, rivers and riparian vegetation are sensitive to wind energy development. The landscape provides a setting to heritage features including Registered Parks and Gardens, historic villages and listed buildings, and there is a variety of time depths, which also increases sensitivity. The low-lying landscape has limited prominent skylines, which some affected by electricity pylons. The landscape is visible from adjacent higher ground, including from the Chilterns National Landscape, which increases sensitivity. The landscape is often in proximity to large urban centres such as Oxford, Abingdon, Caversham and Reading, which all decrease sensitivity to wind energy development. However, away from the settlement edges, the landscape remains rural and relatively tranquil, which increases sensitivity.

This LCT generally has ‘high’ landscape sensitivity to wind energy development greater than the ‘small-scale’ development scenario.

Sensitivity ratings for River Valley Landscape Character Areas

LCA 14A: Features which decrease sensitivity are the flat topography, the large-scale man-made Farmoor Reservoir and limited time-depth. However, this

is a relatively rural area, with strong intervisibility with surrounding higher ground, and highly visible from promoted routes, which increases sensitivity.

Table 96: Landscape sensitivity to wind energy development in LCA 14A

Development scenario	Overall landscape sensitivity rating
Very-small scale wind (<25 metres)	Moderate
Small-scale wind (25-60 metres)	Moderate-high
Medium-scale wind (60-100 metres)	High
Large-scale wind (100-150 metres)	High
Very large-scale wind (150-220 metres)	High

LCA 14B: Features which decrease sensitivity include the proximity to the A34 and urban edge of Botley, as well as the low-lying landform. Features which increase sensitivity are the important wetland habitats, and visibility from the surrounding higher ground and national Thames Path trail.

Table 97: Landscape sensitivity to wind energy development in LCA 14B

Development scenario	Overall landscape sensitivity rating
Very-small scale wind (<25 metres)	Moderate
Small-scale wind (25-60 metres)	Moderate-high
Medium-scale wind (60-100 metres)	High
Large-scale wind (100-150 metres)	High

Development scenario	Overall landscape sensitivity rating
Very large-scale wind (150-220 metres)	High

LCA 14C: Features which decrease sensitivity are the impact on the skyline of electricity pylon routes, and the of proximity to transport corridors and the edges of Botley, Oxford and Kennington which impact on tranquillity. Features which increase sensitivity are the important wetland habitats designated as SSSI, woodland and historic villages at South Hinksey and Sandford on Thames, which form frequent human-scale features, as well as its visibility from the surrounding higher ground.

Table 98: Landscape sensitivity to wind energy development in LCA 14C

Development scenario	Overall landscape sensitivity rating
Very-small scale wind (<25 metres)	Moderate
Small-scale wind (25-60 metres)	Moderate-high
Medium-scale wind (60-100 metres)	High
Large-scale wind (100-150 metres)	High
Very large-scale wind (150-220 metres)	High

LCA 14D: Features which reduce landscape sensitivity are the impact of current gravel extraction on tranquillity and land cover, and proximity to Abingdon-on-Thames which reduces tranquillity. Features which increase sensitivity are the steep eastern valley sides, wildlife interest at Radley Lakes, and historic interest and time-depth at Nuneham Courtenay Registered Park and Garden.

Table 99: Landscape sensitivity to wind energy development in LCA 14D

Development scenario	Overall landscape sensitivity rating
Very-small scale wind (<25 metres)	Moderate
Small-scale wind (25-60 metres)	Moderate-high
Medium-scale wind (60-100 metres)	High
Large-scale wind (100-150 metres)	High
Very large-scale wind (150-220 metres)	High

LCA 14E: Features which reduce landscape sensitivity are proximity in the north to the M40 and Wheatley Services, which impact the tranquillity and rural character of the landscape. Features which increase sensitivity are the steep valley sides, and intervisibility with the surrounding higher ground.

Table 100: Landscape sensitivity to wind energy development in LCA 14E

Development scenario	Overall landscape sensitivity rating
Very-small scale wind (<25 metres)	Moderate
Small-scale wind (25-60 metres)	Moderate-high
Medium-scale wind (60-100 metres)	High
Large-scale wind (100-150 metres)	High
Very large-scale wind (150-220 metres)	High

LCA 14F: The majority of this LCA lies within the North Wessex Downs and Chilterns National Landscapes, which increases its sensitivity to all scales of wind energy development. The special qualities present include chalk landform, yew woodlands and chalk grasslands, arable habitats with strong hedgerow network, historic attractive villages at Moulsford and Whitchurch on Thames, extensive public rights of way and medieval and post-medieval settlements with historic buildings, extensive public rights of way and panoramic views towards the chalk escarpment.

Table 101: Landscape sensitivity to wind energy development in LCA 14F

Development scenario	Overall landscape sensitivity rating
Very-small scale wind (<25 metres)	Moderate-high
Small-scale wind (25-60 metres)	High
Medium-scale wind (60-100 metres)	High
Large-scale wind (100-150 metres)	High
Very large-scale wind (150-220 metres)	High

LCA 14G: Features which reduce sensitivity are proximity to industrial development on the edges of Caversham and Reading, which impacts on tranquillity, and the skyline, and former and current gravel extraction, which impacts on tranquillity and land cover. Features which increase sensitivity are its intervisibility with the Chilterns National Landscape, and the inclusion of a small area in the north-east within the National Landscape. The special qualities present include arable habitats with a strong hedgerow network.

Table 102: Landscape sensitivity to wind energy development in LCA 14G

Development scenario	Overall landscape sensitivity rating
Very-small scale wind (<25 metres)	Moderate
Small-scale wind (25-60 metres)	Moderate-high
Medium-scale wind (60-100 metres)	High
Large-scale wind (100-150 metres)	High
Very large-scale wind (150-220 metres)	High

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