

# Proposed Wind Turbine at Higher Biscovillack Farm, Greensplat Road, Trenance Downs, St Austell, Cornwall

Landscape and Visual Impact Assessment (LVIA)

Prepared by Amalgam Landscape Limited On behalf of CleanEarth

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Trenance Downs, St Austell, Cornwall

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#### 1. Introduction

#### **Purpose of this Report**

- 1.1 Amalgam Landscape, a Registered Practice of the Landscape Institute, has produced this Landscape and Visual Impact Assessment (LVIA) on behalf of CleanEarth for a proposed single wind turbine development (the proposed development) at Higher Biscovillack Farm, Greensplat Road, Trenance Downs, St Austell, Cornwall.
- 1.2 The LVIA has been prepared in accordance with pre-application guidance from Cornwall Council (CC) and is produced as supplementary information to inform the planning application.
- 1.3 The purpose of the LVIA is to identify and outline the existing landscape character and visual amenity receptors within the study area, including their sensitivity to change and to assess the potential magnitude of impact and level of effect, including the significance of effect, on these receptors as a result of the proposed development. Mitigation measures are proposed, including during the initial design phase, to reduce the impacts and effects of the proposed development. Impacts and effects are assessed at significant stages in the life of the proposed development, including construction, operation, and decommissioning.
- 1.4 The LVIA also considers the cumulative effects of the proposed development when perceived with other wind energy schemes that are consented and 'pending planning' within the study area. Operational wind energy schemes are also considered as part of the baseline assessment.
- 1.5 Therefore, the LVIA will assist decision-makers, members of the public and other interested parties by providing a clear and common understanding of the predicted landscape and visual impacts and effects of the proposed development in an impartial and professional way.

#### **The Proposed Development**

- 1.6 The location of the proposed development is illustrated in **Figure 1**.
- 1.7 The proposed development will consist of:
  - A single three-bladed wind turbine with 76.5m tower and 58.5m blades. The proposed wind turbine will have a maximum overall tip height of 135m;
  - The proposed wind turbine will be a semi-matt mid grey colour (RAL:7035) in order to blend in with the colour of the sky which represents the background to the proposed wind turbine in most views;
  - Crane hard-standing areas for erecting cranes at the proposed wind turbine location;
  - · Temporary construction compound; and

<sup>&</sup>lt;sup>1</sup> 'Pending planning' – wind energy schemes that have been submitted for a planning application decision. This does not include wind energy schemes in screening or scoping or those that have been refused planning permission.

- Existing entrance and track off Greensplat Road will be used for access during
  construction, operation and decommissioning although there will be a short stretch of
  new compacted gravel access track connecting the existing entrance and track to the
  base of the proposed wind turbine.
- 1.8 The proposed development will involve the following distinct phases:
  - Construction phase approximately 6-9 months, with the cranes present for a maximum of 6 days (subject to weather conditions);
  - Operation phase 35 years; and
  - Decommissioning phase approximately 4-6 weeks, with the cranes present for a maximum of 6 days (subject to weather conditions).

# Scope of the LVIA

- 1.9 The scope of the LVIA has been prepared in accordance with pre-application guidance from CC. The LVIA:
  - Identifies the methodology, including defining the extent of the study area and the
    detailed technical approach. The 'main' study area is a 10km radius measured from
    the location of the proposed development. An additional 'broad' study area of 20km
    radius measured from the location of the proposed development is used to assess the
    wider extent of potential visibility, including to inform the cumulative assessment;
  - Describes the existing site and its surroundings, including a determination of its sensitivity and value;
  - Identifies operational, consented and pending planning wind energy schemes within a
     20km radius study area measured from the location of the proposed development.
     Operational wind energy schemes also form part of the existing conditions assessment;
  - Describes the wider context of the site, including landscape relevant designations, landscape character and visual amenity receptors and their views within the 10km radius study area. Annotated panoramic viewpoints, from agreed publicly accessible locations are used to help describe and illustrate the existing context;
  - Proposes mitigation measures which aim to avoid, reduce or compensate for any
    effects. Mitigation through siting and design during the earliest stages were critical in
    reducing the potential landscape and visual effects of the proposed development.
    Additional landscape and ecology mitigation measures were also proposed;
  - Describes the magnitude of impact and the level and significance of effect on the
    existing landscape character and visual amenity receptors and their views as a result
    of the proposed development. Computer-generated zones of theoretical visibility
    (ZTVs), calculated to the hub height and blade tip height, help to identify the locations
    in the relevant study areas where the proposed wind turbine <u>could</u> be visible, based on
    landform only. Photographs, wireframe views and photomontages are also used to
    illustrate the potential impacts and effects of the proposed development from agreed
    publicly accessible locations;
  - Assesses the additional cumulative effects of the proposed development in combination with other consented and pending planning wind energy schemes.
     Wireframe views and photomontages are also used to illustrate the potential impacts and effects of the proposed development in combination with consented and pending

planning wind energy schemes. The influence of the proposed development in combination with operational wind energy schemes are also considered as part of the baseline assessment; and

 Provide conclusions on the overall landscape and visual effects of the proposed development.

# 2. Methodology

- 2.1 The LVIA is carried out by experienced chartered landscape architects. They apply professional judgements in a structured and consistent way, following the guidelines produced by the relevant professional bodies concerned with landscape and visual impact assessment and the assessment of wind energy scheme related developments.
- 2.2 These guidelines are identified in **Appendix A**.
- 2.3 In line with the *Guidelines for Landscape and Visual Impact Assessment*<sup>2</sup> (*GLVIA*), the primary guidance in respect of LVIA, the methodology used for this assessment has three iterative key stages, as follows:
  - <u>Existing conditions</u> (or baseline assessment) this includes the gathering and description of information to inform the assessment, including information on other operational wind energy schemes, within the study area;
  - <u>Design</u> this includes input into the design at key stages including defining the location of development, identification of opportunities and constraints, review of and recommendations to layout, discussion and recommendation of landscape mitigation measures; and
  - <u>Assessment of Impacts and Effects</u> this includes an assessment of the potential landscape and visual effects of the proposed development and any cumulative effects.

#### The Study Areas

- 2.4 The 'main' study area is a 10km radius measured from the location of the proposed development.
- 2.5 Cumulative information, including details of operational, consented and pending planning wind energy schemes, above 15m in height to blade tip, has been collected within a 20km radius study area.
- Zones of Theoretical Visibility (ZTVs), calculated to the hub height and blade tip heights, which assess the <u>potential</u> visibility of the proposed development, have also been completed for 10km and 20km radius study areas.

<sup>&</sup>lt;sup>2</sup> The Landscape Institute and the Institute of Environmental Management and Assessment, Guidelines for Landscape and Visual Impact Assessment (GLVIA), Third Edition, 2013

#### **Existing Conditions Assessment Methodology**

- 2.7 The description of the existing conditions establishes the baseline situation against which the impacts and effects of the proposed development are assessed.
- 2.8 The description of the existing conditions includes:
  - **Site description** which is the description of the site, the boundaries and the immediate surrounds, including a determination of its sensitivity and value;
  - Cumulative information which includes information on operational wind energy schemes. Consented and pending planning wind energy schemes do not form part of the existing conditions assessment;
  - Landscape character which is the description of the physical characteristics of the
    landscape and their sensitivity. The landscape is divided into discrete areas of similar
    characteristics called 'landscape character areas.' Reference is made to previously
    published landscape character assessments at a national and local scale. Landscape
    relevant designations, which include areas recognised for their landscape value, at a
    national, regional and local scale, are also identified to help determine sensitivity; and
  - Visual amenity receptors which is the identification of people and groups of people
    and a description of their views. Views from settlements (towns, villages and hamlets),
    individual and small clusters of residential properties and farms, places of interest
    including country parks, national trails, recreational routes, national cycle routes, local
    public rights of way, bridleways and cycleways, open access areas, major and minor
    roads and railway lines are assessed. The sensitivity of the visual amenity receptors is
    also described.
- 2.9 Information is collected through a combination of desk studies, site surveys and consultation.

Desk Study

- 2.10 An initial desk study was undertaken to review existing map and written data, relevant to the study area. Details of sources of information are found in **Appendix A**.
- 2.11 A summary of the desk study is outlined below:
  - Review of relevant development plans for policies and designations to gain an
    understanding of the 'importance,' 'value' and 'sensitivity' of designated features
    attributed to the landscape and visual resource by the national and local government;
  - Review of previously published landscape character assessments at a national and local scale to gain an understanding of the overall character, quality and sensitivity of the existing landscape within the study area, including the sensitivity of the site to renewable energy development;
  - Review of maps and internet data to gain an understanding of the landform and landscape pattern as well as for information on the location of public rights of way, open access areas and visitor attractions; and
  - Searches of CC planning information as well as national databases and websites to find information on operational, consented and pending planning wind energy schemes. The information is constantly changing and was last updated at the beginning of September 2025.

#### Site Survey

- 2.12 An initial site survey, including a photographic survey, was undertaken in January 2025, and following pre-application advice from CC an additional site survey, including a photographic survey, was undertaken in October 2025 by an experienced and chartered landscape architect.
- 2.13 In addition, selected viewpoint photography from a site survey undertaken in April 2022, by an experienced and chartered landscape architect, was also used to inform the LVIA.
- 2.14 The survey within the study area was undertaken from selected publicly accessible areas, such as public highways and public rights of way. Views from private properties, such as houses and settlements, were estimated from the closest publicly accessible location and checked using aerial photography.
- 2.15 The site survey helped to gain an understanding of the site and its context as well as the wider landscape character and visual amenity receptors and their views within the study area. The site survey also helped to determine the potential impacts and effects as a result of the proposed development as well as developing the design and mitigation measures. This supplemented the available information collected during the desk study.

#### Consultation

- 2.16 As part of the pre-application consultation, 5 publicly accessible viewpoints<sup>3</sup>, interpreted as photomontages were issued to CC. These comprise **Viewpoints 1-5 (Figures 13-17)** of the LVIA.
- 2.17 In addition, 2 other potential annotated panoramic publicly accessible viewpoints were also issued to CC, as part of the pre-application consultation. From these 2 potential viewpoints, based on the potential visibility of the proposed development as well as the sensitivity of the landscape and/or visual amenity receptor, only 1 of the viewpoints was selected to be interpreted as a photomontage and to support the LVIA. This included **Viewpoint 10 (Figure 22)**.
- 2.18 Pre-application advice was received from CC on 10<sup>th</sup> September 2025, including detailed advice from the CC Landscape Officer, which states that any future application should include a LVIA, including an assessment of cumulative landscape and visual effects. The LVIA should cover all phases of the proposed development. It was advised that the LVIA should follow best practice guidance, including GLVIA<sup>4</sup> and consider interrelationships with other related disciplines, including ecology and heritage.
- 2.19 Of relevance to the LVIA, the pre-application advice states:

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<sup>&</sup>lt;sup>3</sup> A viewpoint from Hensbarrow Downs open access area, adjacent to trig point, was issued to CC as part of the pre-application consultation. However, due to slight changes in the proposed wind turbine location during the assessment and design process, the proposed wind turbine would now not be perceived from this nearby elevated and open location as it would be hidden behind the intervening tips. This viewpoint was therefore not used to inform the LVIA.

<sup>&</sup>lt;sup>4</sup> The Landscape Institute and the Institute of Environmental Management and Assessment Guidelines for Landscape and Visual Impact Assessment (GLVIA), Third Edition, 2013

- The proposed development is situated within the St Austell or Hensbarrow China Clay Area Cornwall Character Area (CCA27), as described in the CC LCA<sup>5</sup> and within Landscape Character Type H, Hills and Carns (LCT H);
- The proposed development is situated within the St Austell or Hensbarrow China Clay Renewable Landscape Unit (RLU13), as described in the CC RELS Assessment<sup>6</sup>.

The proposed development, at 135m in height to blade tip, would be in Band D - 100m-150m in height to blade tip wind energy developments. Within RLU13, the landscape has been identified as moderate-high sensitivity to wind energy developments within Band D. RLU13 notes that given the highly industrial character and large-scale of this landscape, there is an opportunity to accommodate turbines up to Band C, and potentially into the lower end of Band D. However, RLU13 should remain a landscape with occasional wind energy development to preserve the landmark features within it (and its distinctive skyline profile visible in long views) and to limit cumulative landscape effects. The wider area is however considered suitable for wind energy development and is able to absorb changes to the landscape to a degree;

- There are three public rights of way in close proximity to the site and views from these public rights of way should be included in the LVIA including:
  - From Greensplat Road, heading east towards Ruddlemoor (424/4/1). A viewpoint from the public right of way is illustrated in **Viewpoint 9 (Figures 21A-21C)**;
  - Running north to south to the west of the site (419/27/1). A viewpoint from the public right of way is illustrated in **Viewpoint 7 (Figures 19A-19C)**; and
  - Running east to west and end at Higher Biscovillack Farm (424/5/1). A viewpoint from the public right of way is illustrated in **Viewpoint 8 (Figures 20A-20C).**

An analysis of all public rights of way, within 1km radius of the proposed development, including showing the location of the close proximity viewpoints, has also been included within the LVIA and is illustrated on **Figure 8**;

- The introduction of a wind turbine would have landscape and visual impacts and some
  mitigation would be required, so it is expected that landscape works, including tree
  planting would be proposed. The proposed landscape works could help to screen
  landscape and visual impacts and these should be discussed within the LVIA. Further
  information on landscape (and ecology) mitigation measures are found in Section 4 of
  this LVIA
- 2.20 Detailed advice from the CC Landscape Officer was also received and is outlined in more detail below:
  - A detailed LVIA within 10km radius of the proposed development should assess the
    impact of the proposed development on landscape character and visual amenity.
    Within 20km radius of the proposed development, only 'notable' features need to be
    assessed as part of the LVIA. A wider study area may be required in relation to the
    cumulative assessment;
  - The inclusion of viewpoints from the scattered farms and dwelling within approximately 1km of the site would be welcomed. Often these can be represented by views from adjacent or nearby roads or public rights of way, which frequently interconnect with

<sup>&</sup>lt;sup>5</sup> Cornwall Council, Landscape Character Assessment, 2022 (on-line via interactive map www.cornwall.gov.uk)

<sup>&</sup>lt;sup>6</sup> Cornwall Council, Review of the Cornish Renewable Energy Landscape Sensitivity (RELS) Assessment, Final Report, December 2020

houses and farms. Views from the public rights of way within 1km radius of the site are illustrated in **Viewpoints 6-9 (Figures 18-21).** Views from nearby minor roads, are illustrated in **Viewpoint 4 (Figure 16)** and **Viewpoint 11 (Figure 23)**;

- A viewpoint from Greensplat Road towards the site entrance, showing any access
  proposals such as widening, installation of fencing and gates, should be considered. A
  viewpoint from Greensplat Road, adjacent to the access has been included and is
  illustrated in Viewpoint 11 (Figures 23A-23C);
- The viewpoints should cover a representative sample and include views from the immediate area and the wider landscape setting, including from diverse receptors.

The potential viewpoints used to inform the LVIA were:

- From the most 'exposed' viewpoints (based on the ZTVs);
- Broadly surrounding the proposed development, from all directions of view;
- From a variety of sensitivity of receptors, focussing on the most 'sensitive'; and
- From a variety of distances away from the proposed development.
- The visual representation of the proposed development should comply with the relevant Landscape Institute guidance. Detail on the compliance of the visual information to inform the LVIA, including ZTVs and photomontages, is found in Appendix B.

Landscape Character and Visual Amenity Receptor Sensitivity Methodology

2.21 Landscape character and visual amenity receptors are assessed according to their sensitivity by balancing value and susceptibility to change.

Value

- 2.22 The value of the landscape is established as part of the existing conditions assessment. A review of existing landscape relevant designations, including planning policies and cultural values, are the starting point in determining landscape value. A review of the relevant landscape character assessment<sup>7</sup> also helps to determine value.
- 2.23 The value of visual amenity receptors and their view is determined by:
  - Recognition of the value attached to particular views, for example in relation to heritage assets or through designations; and
  - Indicators of value attached to views by visitors, for example by appearing in guidebooks or on tourist maps, provision of facilities for their enjoyment, such as parking spaces, sign boards and interpretive material and reference in art and literature.

Susceptibility to Change

2.24 Determination of the landscape susceptibility to change is based on the ability of the landscape to accommodate the proposed development without undue consequences for the maintenance of the existing conditions and/or the achievement of landscape planning policies and strategies.

<sup>&</sup>lt;sup>7</sup> Cornwall Council, Landscape Character Assessment, 2022 (on-line via interactive map <a href="https://www.cornwall.gov.uk">www.cornwall.gov.uk</a>)

- 2.25 The susceptibility to change of visual amenity receptors is determined through the user and the location, including:
  - The occupation or activity of people experiencing the view; and
  - The extent of which their attention or interest may be focussed on the views and the visual amenity they experience at particular locations.

# Sensitivity

- 2.26 The landscape character areas are assessed for their sensitivity based on a review and analysis of the elements, designations and previously published descriptions. The sensitivity of the visual amenity receptors is dependent on the location, context and importance of the viewer.
- 2.27 The sensitivity of both landscape character and visual amenity receptors are evaluated according to a five-point scale. The criteria used to assess the sensitivity of landscape character and visual amenity receptors are outlined in **Table 1**.

Table 1 Broad criteria for assessing the sensitivity of landscape and visual receptors

| Consitivity | Landagana abayaatay dagayintis               | Vigual amonity resenter description           |
|-------------|--|---|
| Sensitivity | Landscape character description              | Visual amenity receptor description           |
| High        | Distinctive landscape elements and/or        | Residents of residential properties and       |
|             | character.                                   | settlements.                                  |
|             | Includes areas with a very strong positive   | Users of public rights of way/open access     |
|             | character with valued features that          | land in designated areas of landscape         |
|             | combine to give an experience of unity,      | value (within National Landscapes).           |
|             | richness and harmony.                        | Users of national trails/recreational routes  |
|             | Landscapes in excellent/very good            | and national cycle routes.                    |
|             | condition that are considered to be of       | Visitors to valued viewpoints (for example    |
|             | particular importance to conserve. No        | promoted or well-known viewpoints, key        |
|             | detractors present.                          | designed views or panoramic viewpoints        |
|             | Likely to be nationally designated, such as  | marked on maps).                              |
|             | National Landscapes and <u>could</u> include | Viewers with interest and/or prolonged        |
|             | very highly valued landscapes of strong      | viewing opportunities and/or who have a       |
|             | scenic quality and rarity on a               | particular interest in their visual           |
|             | national/international scale (National       | environment and/or open to many viewers,      |
|             | Landscapes).                                 | for example visitors to landmark              |
|             | A landscape or elements with a very          | landscapes.                                   |
|             | low/very limited tolerance to change of the  |   |
|             | type of development proposed.                |   |
| Medium-high | Highly valued landscape elements and/or      | Users of public rights of way/open access     |
|             | character.                                   | areas, including those which could be         |
|             | These are landscapes in very good            | locally recognised (within Areas of Great     |
|             | condition that are considered to be of       | Landscape Value) or in locations where the    |
|             | importance to conserve. No or few            | users are likely to pause to appreciate the   |
|             | detractors present.                          | view, such as at benches, key views           |
|             | Likely to be locally designated, such as     | to/from local landmarks.                      |
|             | Areas of Great Landscape Value and could     | Users of outdoor recreational facilities with |
|             | include valued landscapes of scenic quality  | high interest in the surrounding              |
|             | and rarity on a regional or local scale.     | environment including visitors to attractions |
|             | A landscape or elements with a low/limited   | or heritage assets.                           |
|             | tolerance to change of the type of           |   |
|             | development proposed.                        |   |

| Sensitivity | Landscape character description              | Visual amenity receptor description              |
|-------------|--|--|
| Medium      |  |  |
| Medium      | Moderately valued or 'everyday' landscape    | Travellers along identified scenic road          |
|             | elements and/or landscape character.         | routes.  |
|             | These are landscapes in good condition       | Visitors to cemeteries.                          |
|             | which <u>could</u> be appreciated by the     | Visitors staying at a caravan/camping site.      |
|             | community but has little or no wider         | Viewers with moderate interest in their          |
|             | recognition.                                 | visual environment, for example, users of        |
|             | Some detractors could be present.            | local parks, open space and public realm.        |
|             | A landscape or elements with a partial       |  |
|             | tolerance to change of the type of           |  |
|             | development proposed.                        |  |
| Medium-low  | Reasonably valued landscape elements         | Travellers along most minor roads with           |
|             | and/or landscape character.                  | limited opportunity to enjoy the view due to     |
|             | Could include features/areas that exhibit    | speed of travel, including users of 'B' roads    |
|             | positive character but which may have        | or unclassified roads.                           |
|             | evidence of alteration, degradation and      | Outdoor sporting facilities and users of         |
|             | erosion of features resulting in areas of    | recreational facilities with low interest in the |
|             | more mixed character.                        | surrounding environment.                         |
|             | Some detractors likely to be present.        | _  |
|             | A landscape or elements with a tolerance     |  |
|             | to change of the type of development         |  |
|             | proposed.                                    |  |
| Low         | Weak landscape structure, partly degraded    | Static office workers and workers in             |
|             | with frequent detractors.                    | industrial facilities/indoor non-static          |
|             | Highly likely to be a non-designated         | environments where their attention is            |
|             | landscape in poor condition which could      | focussed on their work or activity and/or        |
|             | include elements and/or areas that are       | where there are infrequent views.                |
|             | generally negative in character with few, if | Travellers with limited opportunity to enjoy     |
|             | any, valued features.                        | the view due to speed of travel (for             |
|             | A landscape or elements with a high          | example on trunk/A roads or rail routes).        |
|             | tolerance to change of the type of           | in the state of the reaction.                    |
|             | development proposed.                        |  |

# **Design Methodology**

- 2.28 A role was played by the chartered landscape architect in developing the design during the assessment process, including determining the landscape mitigation measures, such as proposed planting.
- 2.29 The landscape mitigation measures were also agreed through discussions with the ecologist and informed by the Ecological Impact Assessment<sup>8</sup> and Biodiversity Net Gain Assessment (BNG)<sup>9</sup>.

<sup>&</sup>lt;sup>8</sup> Western Ecology, Ecological Impact Assessment, Land at Higher Biscovillack, St Austell, Cornwall, November 2025

<sup>&</sup>lt;sup>9</sup> Western Ecology, Biodiversity Net Gain Strategy, Land at Higher Biscovillack, St Austell, Cornwall, November 2025

#### Assessment of Impacts and Effects Methodology

- 2.30 The existing conditions descriptions and the determination of sensitivity help to assess the magnitude of impact and level of effect, including the significance of effect, on the landscape character and visual amenity receptors as a result of the proposed development.
- 2.31 The determination of impacts and effects are assessed at different stages during the life of the proposed development including:
  - · During construction;
  - · During operation; and
  - During de-commissioning, including any residual effects.
- 2.32 However, it should be noted that the effects will be reversible, albeit long-term given the 35 year life of the proposed development.
- 2.33 The additional cumulative effects of the proposed development, when perceived with other wind energy schemes in the study area, are also assessed.

#### Magnitude of Impact Methodology

- 2.34 An 'impact' is defined as a change likely to occur as a result of the construction, operation and decommissioning of the proposed development.
- 2.35 The scale or magnitude of impact is determined through the assessment of the duration and extent of the changes to the landscape and visual resource as a result of the proposed development.
- 2.36 The duration of impact determines the time period over which the changes as a result of the proposed development occurs. Most impacts as a result of the proposed development would be long-term, given that the operational period will be 35 years. However relatively short-term impacts may be identified for example, during construction or decommissioning.
- 2.37 The extent of the impact indicates the geographic area over which the changes as a result of the proposed development occur. The extent of the impacts could be limited; localised; intermediate or wide.
- 2.38 The magnitude of impact on both landscape character and visual amenity receptors are evaluated according to a seven-point scale. The broad criteria for assessing the magnitude of impacts are outlined in **Table 2**.

Table 2 Broad criteria for assessing the magnitude of impact on landscape character and visual amenity receptors

| Magnitude of impact | Landscape character description   | Visual amenity receptor description  |
|---------------------|---|--|
| High                | High levels of change to landscape elements/ landscape character.   | Receptors would experience an immediately apparent change to their views, arising from   |
|                     | The proposed development will be very prominent in the landscape and will be perceived as a determining factor of the | major alteration to the key characteristics of<br>the existing view or the introduction of<br>elements that will be totally uncharacteristic |

| Magnitude of impact | Landscape character description              | Visual amenity receptor description              |
|---------------------|--|--|
|                     | landscape character.                         | of the view.                                     |
|                     | The proposed development will lead to a      | The proposed development will dominate the       |
|                     | major alteration to the landscape character. | field of view and be impossible not to notice.   |
|                     | The proposed development, when               | The proposed development, when perceived         |
|                     | perceived with other wind energy schemes,    | with other wind energy schemes, would be         |
|                     | will be immediately apparent and contribute  | immediately apparent and contribute to a         |
|                     | to a 'landscape with wind farms.'            | view dominated by wind farms.                    |
| Medium-high         | Prominent level of change to landscape       | Receptors would experience an apparent           |
|                     | elements/landscape character.                | change to their views.                           |
|                     | The proposed development will be obvious     | The proposed development would be                |
|                     | in the landscape and will generally be       | prominent in views or would be perceived as      |
|                     | perceived as a determining factor in local   | the determining factor within the field of view  |
|                     | landscape character.                         | and be difficult not to notice.                  |
|                     | The proposed development, when               | The proposed development, when perceived         |
|                     | perceived with other wind energy schemes,    | with other wind energy schemes, would be         |
|                     | would be obvious and contribute to a         | obvious and contribute to a view influenced      |
|                     | 'landscape with wind farms.'                 | by wind farms.                                   |
| Medium              | Partial levels of change to landscape        | Receptors would experience a readily             |
|                     | elements/landscape character.                | apparent change to their view, arising from      |
|                     | The proposed development will be             | partial alteration to the key characteristics of |
|                     | noticeable but not necessarily a             | the existing view or the introduction of         |
|                     | determining factor of the landscape          | elements that may be prominent but will not      |
|                     | character.                                   | dominate the field of view.                      |
|                     | The proposed development would lead to a     | The proposed development, when perceived         |
|                     | change to the landscape character.           | with other wind energy schemes, would be         |
|                     | The proposed development, when               | apparent and contribute to a view influenced     |
|                     | perceived with other wind energy schemes,    | by wind farms.                                   |
|                     | would be apparent and contribute to a        |  |
|                     | 'landscape with wind farms.'                 |  |
| Medium-low          | Minor levels of change to landscape          | Receptors would experience an apparent but       |
|                     | elements/landscape character.                | minor change in their view, arising from an      |
|                     | The proposed development will be             | alteration to the view.                          |
|                     | perceived but will not be a determining      | The proposed development will be present in      |
|                     | factor of the landscape character.           | views but will form only a minor element.        |
|                     | The proposed development, when               | The proposed development, when perceived         |
|                     | perceived with other wind energy schemes,    | with other wind energy schemes, would be         |
|                     | would be noticeable and may contribute to    | noticeable and may contribute to a view          |
|                     | a 'landscape with wind farms.'               | influenced by wind farms.                        |
| Low                 | Low levels of change to landscape            | Receptors would experience a low level of        |
|                     | elements/landscape character.                | change to views. The proposed development        |
|                     | The proposed development will be present     | will be present in the wider landscape but will  |
|                     | and will be perceived as a background        | be perceived as a background component of        |
|                     | feature of the wider landscape character.    | views and easily go unnoticed.                   |
|                     | The proposed development would lead to a     | The proposed development would lead to a         |
|                     | minor change to the landscape character.     | minor change to the view.                        |
|                     | The proposed development, when               | The proposed development, when perceived         |
|                     | perceived with other wind energy schemes,    | with other wind energy schemes, will not be      |
|                     | will not be immediately noticeable, although | immediately noticeable, although it may          |
|                     | it may contribute to a 'landscape with wind  | contribute to a view with wind farms.            |
|                     | farms.'                                      |  |

| Magnitude of impact | Landscape character description  | Visual amenity receptor description   |
|---------------------|--|---|
| Negligible          | Very minor levels of change to landscape elements/landscape character.  The proposed development will be largely unnoticed in the landscape. It will be difficult to perceive changes to landscape elements/landscape character.  The proposed development, when perceived with other wind energy schemes, will be largely unnoticed in the landscape. | Receptors would experience a very low level of change to views.  The proposed development will be barely perceived in the wider landscape and easily go unnoticed.  It would result in a difficult to perceive change in view.  The proposed development, when perceived with other wind energy schemes, will be largely unnoticed in the view. |
| No change           | Indiscernible level of change. Equivalent to no change.  | Indiscernible level of change. Equivalent to no change.   |

#### Level of Effect Methodology

- 2.39 An 'effect' is defined as the degree of change likely to occur as a result of the construction, operation and decommissioning of the proposed development.
- 2.40 The level of the effects on landscape character and visual amenity receptors is determined by balancing the sensitivity of the receptor and the magnitude of impact as a result of the construction, operation and decommissioning of the proposed development.
- The correlation between the sensitivity of the landscape character and visual amenity receptor, and the magnitude of impact to determine the level of effect is summarised in **Table 3**. The matrix is however not a prescriptive tool and the analysis of the level of effects requires the exercise of professional judgement. As stated in paragraph 2.23 of GLVIA "professional judgement is a very important part of LVIA. While there is some scope for quantitive measurement of some relatively objective matters... much of the assessment must rely on qualitative judgements..." It is essential that professional judgements are described in a transparent and clear manner.

Table 3 Overall determination of the level of effect on landscape character and visual amenity receptors

|           |             | Sensitivity of receptor |             |               |               |               |
|-----------|-------------|-------------------------|-------------|---------------|---------------|---------------|
|           |             | High                    | Medium-high | Medium        | Medium-low    | Low           |
|           | High        | Major                   | Major or    | Major-        | Moderate or   | Moderate-     |
|           |             |                         | Major-      | moderate or   | Moderate-     | minor or      |
|           |             |                         | moderate    | Moderate      | minor         | Minor         |
|           | Medium-high | Major or                | Major-      | Moderate      | Moderate-     | Minor or      |
| 3C        |             | Major-                  | moderate or |               | minor or      | Minor-        |
| impact    |             | moderate                | Moderate    |               | Minor         | negligible    |
| of ir     | Medium      | Major-                  | Moderate    | Moderate      | Minor or      | Minor-        |
|           |             | moderate or             |             |               | Minor-        | negligible or |
| Ĕ         |             | Moderate                |             |               | negligible    | Negligible    |
| Magnitude | Medium-low  | Moderate or             | Moderate-   | Moderate-     | Minor-        | Negligible    |
| Ĕ         |             | Moderate-               | minor       | minor or      | negligible or |               |
|           |             | minor                   |             | Minor         | Negligible    |               |
|           | Low         | Moderate-               | Minor or    | Minor-        | Negligible    | Negligible    |
|           |             | minor or                | Minor-      | negligible or |               |               |
|           |             | Minor                   | negligible  | Negligible    |               |               |

Sensitivity of receptor High Medium-high Medium **Medium-low** Low Negligible Minor or Minor-Negligible Negligible Negligible Minornegligible or negligible Negligible Neutral Neutral No change Neutral Neutral Neutral

- 2.42 The broad definitions of the level of effects, to determine the significance of effect, include:
  - Neutral no change;
  - Negligible barely perceptible and not likely to be critical in the decision making process;
  - Minor-negligible perceptible and not likely to be critical in the decision making process
  - Minor perceptible and not likely to be critical in the decision making process;
  - Moderate-minor perceptible and not likely to be critical in the decision making process
  - Moderate perceptible and not likely to be key decision making factors;
  - Major-moderate considered to be important and are likely to be material in the decision making process; and
  - Major represent key factors in the decision making process and are likely to suffer the most damaging impact and loss of resource integrity.
- 2.43 'Major-moderate' and 'Major' impacts are determined as 'significant' with reference to the EIA Regulations.
- 2.44 It is important to note that effects can be adverse (negative) or beneficial (positive) or no change (neutral). The broad criteria for assessing the beneficial, adverse and neutral effects are outlined in **Table 4**.

Table 4 Broad criteria for assessing the beneficial, adverse and neutral effects on landscape character and visual amenity receptors

| Level of effect | Landscape character description               | Visual amenity receptor description           |
|-----------------|---|---|
| Beneficial      | Improvement to landscape elements and/or      | Introducing elements that improve the view.   |
|                 | features.                                     | This could also include removal of existing   |
|                 | Improvement to the value of landscape         | detractors to the view.                       |
|                 | character and resource.                       |   |
|                 | This could also include removal of existing   |   |
|                 | detractors of the landscape character.        |   |
| Adverse         | Removal of landscape elements and/or          | Introducing elements that degrade the view.   |
|                 | features.                                     |   |
|                 | Degradation of landscape character and        |   |
|                 | resource.                                     |   |
| Neutral         | Changes to landscape character or             | Changes to views that would be neither        |
|                 | landscape elements that would be neither      | positive nor negative.                        |
|                 | positive nor negative.                        | Could include the addition of elements within |
|                 | Could include the addition of elements        | the view that already exists (for example     |
|                 | within the landscape that already exists (for | housing) which would not involve the          |

| Level of effect | Landscape character description  | Visual amenity receptor description                   |
|-----------------|--|---|
|                 | example housing) which would not involve<br>the degradation or removal of valued<br>aspects of the landscape resource. | degradation of removal of valued aspects of the view. |

#### **Cumulative Assessment Methodology**

- 2.45 Cumulative assessment is concerned with the 'additional' effects of the proposed development when perceived with other operational, consented or pending planning wind energy schemes. Operational wind energy schemes also form part of the existing conditions assessment.
- 2.46 Within the cumulative assessment, the proposed development is considered 'in addition' to:
  - Existing wind energy schemes in the study area. This is also considered as part of the baseline assessment:
  - Consented wind energy developments in the study area, where they are highly likely to exist; and
  - 'Pending planning' wind energy developments in the study area, where there is only the potential that they will exist.
- 2.47 Those wind energy schemes currently undergoing screening or scoping are not considered as part of the cumulative assessment.
- 2.48 The cumulative assessment considers the additional impacts and effects on landscape character, landscape relevant designations and visual amenity receptors and their views.
- 2.49 In relation to visual amenity receptors, there are two types of impact. These include:
  - Combined impacts which occur when the receptor is able to perceive two or more wind energy developments from one viewpoint, in combination or in succession; and
  - Sequential impacts which occur when the receptor has to move to another viewpoint to see different wind energy developments, travelling along regularly used routes such as roads or popular or recognised public rights of way.

# 3. Existing Conditions

- 3.1 The description of existing conditions establishes the landscape character and visual amenity context within the study area and forms the basis of the LVIA.
- 3.2 The existing conditions include descriptions of the site and its immediate surrounds, landscape relevant designations, landscape character and visual amenity receptors and their views within the study area as well as information on operational wind energy schemes.

#### The Site and Surrounds

- 3.3 The site is situated within a regular gently sloping field, currently used for pasture. The regular field is bordered by a diverse mix of hedgerow and hedge banks.
- The site is accessed via an existing gateway off the adjacent Greensplat Road. Greensplat Road runs along the eastern boundary of the field and is lined by a hedgebank, intermittently topped with shrubs.
- 3.5 The site is surrounded by a landscape heavily influenced by the immediate china clay works and is punctuated by tips, workings and pits as well as scattered operational wind energy schemes. Immediately to the east, to the east of Greensplat Road, is a well-vegetated tip, topped with the single Band C<sup>10</sup>, between 61-99m in height to blade tip, operational wind turbine at Greensplat. To the north, to the north of the permissive quarry road and to the west are more tips and quarry workings. There are also single Band C operational wind energy schemes at Higher Goonamarth Farm to the north-west and Blackpool Quarry to the south-west.
- 3.6 Annotated aerial photographs of the site and its immediate surrounds, showing its location, are illustrated in **Figure 2**.
- 3.7 The site is of **medium** sensitivity, defined in Table 1 of this LVIA as:

"Moderately valued or 'everyday' landscape elements and/or landscape character. These are landscapes in good condition which <u>could</u> be appreciated by the community but has little or no wider recognition. Some detractors could be present. A landscape or elements with a partial tolerance to change of the type of development proposed."

#### Value of the Site

- 3.8 The site is not within any areas designated nationally, regionally or locally for their landscape value and/or scenic quality.
- 3.9 With reference to Table 1 in TGN 02/21<sup>11</sup>, which defines a 'valued landscape,' a range of factors and indicators may be considered when determining the value of landscapes (outside designated landscapes). These are identified in **Table 5.**

# Table 5 Broad criteria for assessing landscape value of the site and immediate surrounds

| Factor                           | Definition and summary assessment of site and immediate surrounds        |
|----------------------------------|--|
| Landscape with clear evidence of | The Ecology Impact Assessment <sup>12</sup> has identified that the site |
| ecological, geological,          | comprises a field currently in pastoral use. The field is bordered       |

<sup>&</sup>lt;sup>10</sup> The height brackets of the wind energy schemes have been taken from Table 3.2, Wind Development Sizes, Cornwall Council, Review of the Cornish Renewable Energy Landscape Sensitivity (RELS) Assessment, Final Report, December 2020. Of relevance, these include:

Band A – between 18-25m in height to blade tip;

Band B – between 26-60m in height to blade tip;

Band C - between 61-99m in height to blade tip; and

Band D - between 100-150m in height to blade tip.

<sup>&</sup>lt;sup>11</sup> Landscape Institute, Technical Guidance Note 02/21 Assessing Landscape Value Outside National Designations

| Factor  | Definition and summary assessment of site and immediate surrounds   |
|---|---|
| geomorphological or physiographic interest which contribute positively to the landscape                                       | by a diverse mixture of bramble and gorse, native hedgerow topped Cornish banks and Cornish banks with no hedgerow.  There are no particularly distinctive geological, geomorphological or physiographic features in and around the site that will be significantly affected.   |
| Landscape with clear evidence of archaeological, historical or cultural interest which contribute positively to the landscape | With reference to the Heritage Impact Assessment (HIA) <sup>13</sup> , the archaeological potential of the site is low. The elevated and remote location of the proposed wind turbine and the effective screening provided by china clay tips, would suggest the impact on local designated heritage assets will be minimal.  There are relatively few designated heritage assets surrounding the site, with only one Listed Building within 1km, although there are Listed Buildings, Scheduled Monuments, Conservation Areas, Registered Parks and Gardens and World Heritage Site within 10km.  The scale and artificiality of this landscape serve to diminish the apparent scale of the proposed wind turbine, and the bench tips provide extensive screening. As a result, the number of designated heritage assets where an appreciable adverse effect could be experienced will be few and, overall, the effect on the historic environment is adjudged to be negligible adverse. Due to the number of operational, consented and pending planning wind energy schemes in the local area, there will be a slight cumulative effect. |
| Landscape which is in a good physical state both with regard to individual elements and overall landscape structure           | The site is situated within a regular gently sloping field, currently used for pasture. The regular field is bordered by a diverse mix of hedgerow and hedgebanks.  |
| Landscape which is connected with notable people, events and the arts   | There are no notable associations to the landscape of the site.   |
| Landscape that has a strong sense of identity   | The landscape of the site and its surrounds appears to be typical of the St Austell or Hensbarrow China Clay Area (CCA27), which extends in a broad band from east to west across the centre of the study area, extending to the north-western fringes of the study area.   |
| Landscape offering recreational opportunities where experience of landscape is important                                      | The site is not publicly accessible although Greensplat Road runs along the eastern boundary of the regular field in which the site is situated.  Greensplat Road is largely lined and enclosed by hedgebanks and hedgerows.  |
| Landscape that appeals to the senses, primarily the visual sense  | The site is set within an agricultural landscape on the fringes of a dramatic and varied landscape of china clay waste tips and areas of rough vegetation, characterised by open-pit mining.  |
| Landscape with a strong perceptual  | The site is within an agricultural managed landscape - there is   |

<sup>&</sup>lt;sup>12</sup> Western Ecology, Ecological Impact Assessment, Land at Higher Biscovillack, St Austell, Cornwall, November 2025

<sup>&</sup>lt;sup>13</sup> SouthWest Archaeology, Heritage Impact Assessment, November 2025

| Factor  | Definition and summary assessment of site and immediate surrounds   |
|---|---|
| value notably wildness, tranquillity and/or dark skies  | no sense of wildness or tranquillity.  As defined by GLVIA and TIN 01/2017 <sup>14</sup> , tranquillity is "a state of calm and quietude associated with peace, considered to be a significant asset of the landscape."  Separated from other receptors including major roads and settlements, there may be the potential for dark skies on the site although within the description of the St Austell or Hensbarrow China Clay Area (CCA27), it is described as "heavily disrupted and active landscape with relatively low levels of tranquillity." |
| Landscape which performs a clearly identifiable and valuable function, particularly in the healthy functioning of the landscape | The site is within an agricultural landscape heavily influenced by the nearby industrial landscape.   |

3.10 In summary, overall, although the site has some valued elements, it is not a valued landscape, as defined by the list of factors and indicators to be considered when determining the value of landscapes.

# **Cumulative Wind Energy Schemes**

- 3.11 Operational, consented and pending planning wind energy schemes, greater than 15m to blade tip, are identified within the 20km radius study area. The presence of operational wind energy schemes is also included within the descriptions of existing conditions.
- 3.12 The operational, consented and pending planning wind energy schemes are listed, with their location illustrated, on **Figure 3**. This cumulative information is constantly changing and was last updated at the beginning of September 2025.
- 3.13 Scattered within the surrounding industrial landscape in close proximity to the site (within 5km radius) are single, operational Band C<sup>15</sup> between 61-99m in height to blade tip wind turbines including Higher Goonamarth Farm to the north-west, Blackpool Quarry to the south-west, Greensplat to the east, Gunheath Quarry to the north-east and Gaverigan Farm to the north-west. There are also smaller single, operational Band B between 26-60m in height to blade tip wind turbines (within 5km radius) at Henavisten Farm to the west, Mount Stamper Farm to the east, Ninnis Farm to the south-west, Bodinnick Farm and Land south-east of Resugga Farm to the south-west respectively.
- 3.14 Scattered within the surrounding industrial landscape in close proximity to the site (within 5km radius) are consented single Band D between 100-150m in height to blade tip wind turbines at East Karslake to the north-west, Longstones to the north-west, Higher Goonamarth 2 to the north-west, Wheal Martyn to the north and Burngullow to the west.

<sup>&</sup>lt;sup>14</sup> The Landscape Institute, Technical Information Note 01/17, Tranquillity – An Overview

<sup>&</sup>lt;sup>15</sup> The height brackets of the wind energy schemes have been taken from Table 3.2, Wind Development Sizes, Cornwall Council, Review of the Cornish Renewable Energy Landscape Sensitivity (RELS) Assessment, Final Report, December 2020. Of relevance, these include:

Band A – between 18-25m in height to blade tip;

Band B – between 26-60m in height to blade tip;

Band C – between 61-99m in height to blade tip; and

Band D – between 100-150m in height to blade tip.

There is also a pending planning, two Band D – between 100-150m in height to blade tip - wind turbines to the north-west at Dubbers.

#### 3.15 In summary:

- There are 104 operational wind energy schemes within the 20km radius study area.
   These vary from single wind energy schemes to large clusters, although the majority of operational wind energy schemes are single wind turbines. The operational wind energy schemes vary in size from Band A up to Band D;
- The operational wind energy schemes in the study area appear to be well-scattered throughout the study area, including within the industrial china clay landscape, although largely avoiding the sensitive coastal fringes, the National Landscape and the dense settlements;
- There are 5 single consented wind energy schemes within the 20km radius study area.
   The consented wind energy schemes are all focused within 2km radius of the site and are all Band D; and
- There are 2 pending planning wind energy schemes within the 20km radius study area. One, the Band D, 135m high two wind turbine development at Dubbers, is within 5km radius of the site.

#### **Landscape Character**

#### Landscape Relevant Designations

- 3.16 The site is <u>not</u> recognised for its importance or value through any landscape relevant designations.
- 3.17 There are however landscape relevant designations within the study area. These are shown in **Figure 4** and described in more detail below<sup>16</sup>:
  - The high sensitivity Cornwall National Landscape occurs approximately 4.2km to the south of the site at its closest point, extending to the southern fringes of the 10km radius study area.

As illustrated in **Figures 9 and 10**, the Cornwall National Landscape extends over the wider 20km radius study area and extends to the north, north-east, east, south and south-west, largely focussed along the coastline but also extending across the distinctive upland landscape of Bodmin Moor to the north-east.

The Cornwall National Landscape is made up of twelve separate geographical areas and contains some of Britain's finest coastal scenery.

As identified in the Cornwall National Landscape Management Plan<sup>17</sup>, the National Landscape in the study area is within Area 9: South Coast Central.

<sup>&</sup>lt;sup>16</sup> The LVIA considers historic landscape designations in terms of their role in defining landscape character only, such as Conservation Areas and Registered Parks and Gardens. More detail on heritage designations can be found in the Heritage Impact Assessment by SouthWest Archaeology (November 2025) which accompanies the planning application.

<sup>&</sup>lt;sup>17</sup> Cornwall Council, The Cornwall National Landscape Management Plan, 2022-2027, Adopted May 2022

The key landscape characteristics of Area 9: South Coast Central is described as broad and deep coastal and tidal river landscape, bisected by sinuous creeks. The ridges between the creeks are rounded and covered with a medium-scale field pattern, bisected with diverse Cornish hedges, with a mix of pasture and arable use and are often scattered with farms. Woodland, often sessile oaks, cloak the slopes and enclose the creeks. Viewpoint 1 (Figures 13A-13D) illustrates the view from an open and elevated location along a public right of way within the National Landscape.

Area 9: South Coast Central is also described within the Cornwall Landscape Sensitivity Assessment (LSA)<sup>18</sup> as:

- A coastline of sweeping and extensive bays with majestic high cliffs rising above rocky shores, sandy beaches and small coves;
- Distinctive rocky promontories;
- Subtly rolling inland plateau;
- Far-reaching panoramic views from the rugged cliff tops;
- Medieval fields small in scale with irregular boundaries bounded by bare low stone walls near the exposed coasts to being broad and well-vegetated in the sheltered valleys;
- Outlines of early strip field systems are preserved in the current field patterns;
- Woodlands on steep valley sides, alongside streams and in valley bottoms in combination with other valuable wetland habitats such as fens and rush pasture;
- Coastal rough ground including scrub and bracken on wild cliff tops;
- A tranquil landscape relatively free of man-made land marks or structures;
- Rich in discernible pre-historic features from the largest Bronze Age burial mound in Cornwall at Carne Beacon to the County's largest prehistoric enclosure at the Iron Age cliff castles at Dodman;
- Estates and ornamental parklands notably at Caerhays and Heligan taking advantage of the sheltered valleys;
- Attractive coastal villages sheltered in the coves at stream mouths or around picturesque small harbours as at Mevagissey and Gorran Haven;
- Sparse settlement an even distribution of hamlets and farmsteads linked by narrow winding lanes with high hedges and blind corners; and
- Traditional black and white painted metal finger signs.

In addition, the LSA states that within Area 9: South Coast Central of the National Landscape "qualities that may particularly be affected by wind energy development are the majestic scale of the cliffs, far reaching panoramic views from the rugged cliff tops, the wild character of the cliff tops, and the prominence and skyline of pre-historic features from the largest Bronze Age burial mound in Cornwall at Carne Beacon to the County's largest prehistoric enclosure at the Iron Age cliff castles at Dodman, and the narrow winding lanes with high hedges and blind corners."

The Cornwall National Landscape is also protected by CC in Policy 23<sup>19</sup> which states that "great weight will be given to conserving the landscape and scenic beauty within or affecting the setting of the [National Landscape]. Proposals must conserve and

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<sup>&</sup>lt;sup>18</sup> Cornwall Renewable Energy Advice, Annex 1: An assessment of the landscape sensitivity to on-shore wind energy and large-scale photovoltaic development in Cornwall, Cornwall Council, March 2016 <sup>19</sup> Cornwall Council, Cornwall Local Plan, Strategic Policies 2010 – 2030, Adopted November 2016

enhance the landscape character and natural beauty of the [National Landscape] and provide only for an identified local need and be appropriately located to address the [National Landscape's] sensitivity and capacity. Proposals should be informed by and assist the delivery of the objectives of the Cornwall and Tamar Valley [National Landscape] Management Plans including the interests of those who live and / or work in them..."

 The high sensitivity Cornwall and West Devon Mining Landscape World Heritage Site (WHS) occurs approximately 4km to the east of the site at its closest point, extending further to the east and north-east.

The Cornwall and West Devon Mining WHS is recognised for the substantial remains as a result of the rapid growth of pioneering copper and tin mining in the 18<sup>th</sup> and 19<sup>th</sup> centuries, leaving behind a legacy of deep underground mines, engine houses, foundries, new towns, smallholdings, ports and harbours and their ancillary structures. The remains are a testimony to the contribution Cornwall and West Devon made to the Industrial Revolution in the rest of Britain.

The Cornwall and West Devon Mining WHS is also protected by CC in Policy 24 which states "development within the Cornwall and West Devon Mining Landscape World Heritage Site (WHS) and its setting should accord with the WHS Management Plan. Proposals that would result in harm to the authenticity and integrity of the Outstanding Universal Value, should be wholly exceptional. If the impact of the proposal is neutral, either on the significance or setting, then opportunities to enhance or better reveal their significance should be taken."

- There are three medium-high sensitivity Areas of Great Landscape Value (AGLV) in the study area including:
  - Upper Fal Valley, approximately 4.6km to the south-west of the site at its closest point, extending to the south-western fringes of the study area. This is a highly tranquil and naturalistic landscape focused on a series of well-wooded valleys which carve through agricultural land defined by an intact pattern of medieval enclosure with Cornish hedgerows. There is a strong sense of time-depth owing to the prehistoric remains, historic settlements and designed estate parklands. The inaccessibility of the landscape has resulted in the area retaining a strong rural character which creates a feeling of remoteness with a distinct sense of place;
  - Helman Tor and Luxulyan Valley, approximately 5.3km to the east of the site at its closest point, extending to the north-eastern fringes of the study area. The AGLV is an intact and high quality landscape of varied natural, historic and cultural interest. The two distinct contrasting landscape types consisting of moorland and high hills at Redmoor, and deep incised wooded valleys at Luxulyan Valley create a stunning area that can easily be recognised. Views across this unique landscape can typically be seen from rocky outcrops at higher elevations, such as at Helman Tor. Viewpoint 10 (Figures 22A-22D), illustrates the expansive views from Helman Tor. The landscape is rather peaceful, with western parts of the AGLV being particularly quiet, dark night skies can be seen throughout, combining to create both a scenic and peaceful area. The AGLV is also especially valued due to its substantial areas of open access land and public access, including the Saint's Way recreational route; and
  - Camel and Allen Valleys, approximately 9.2km to the north of the site at its closest point, extending to the northern fringes of the study area. The AGLV is cherished for its distinct incised wooded valleys, exposed ridgelines, and intact medieval landscape. It is a valued destination for recreation, with a network of public rights of way including the popular multi-use Camel Trail. There are many historic features within the landscape including the Registered Park and Garden at Pencarrow, clusters of

prehistoric settlements and hillforts and historic church towns. The steep wooded valley slopes within the AGLV dominate the landscape, the combination of the tree coverage and high-hedged lanes create a feeling of 'secretness' and enclosure when within the valleys. In contrast, the exposed ridge between the River Camel and the River Allen consists of farmland with mostly intact medieval field patterns and boundaries marked by Cornish hedges.

AGLVs are areas of high landscape quality with strong and distinctive characteristics which make them particularly sensitive to development.

There are also proposed extensions and changes to the boundaries for the AGLV - identified as candidate AGLVs $^{20}$  including to the Upper Fal Valley to the south-west and Helman Tor and Luxulyan Valley to the east. These are currently considered for adoption.

CC in Policy 23 recognises the importance of AGLVs and states that development within AGLVs "should maintain the character and distinctive landscape qualities of such areas."

- There are two **high** sensitivity Registered Parks and Gardens in the study area, including:
  - Tregrehan, Grade II\*, approximately 5km to the east of the site at its closest point. This is a mid-19<sup>th</sup> century garden and pleasure grounds, together with significant plant collections, set in parkland; and
  - Heligan, Grade II, approximately 6.7km to the south of the site at its closest point. This is a late 18<sup>th</sup> century and early 19<sup>th</sup> century park and gardens, with an extensive plant collection.

Registered Parks and Gardens are protected by CC in Policy 24 which states that "development proposals will be expected to... conserve and, where appropriate, enhance the design, character, appearance and historic significance of historic parks and gardens."

- Some of the towns and villages in the study area have been recognised as **high** sensitivity Conservation Areas. These include:
  - St Austell, approximately 1.9km to the south-east;
  - Charlestown, approximately 4km to the south-east;
  - Pentewan, approximately 6.9km to the south-east;
  - Grampound, approximately 8.6km to the south-west;
  - Tywardreath, approximately 8.2km to the east; and
  - Mevagissey, approximately 9.3km to the south.

Conservation Areas are protected by CC in Policy 24 which states that "development proposals will be expected to… maintain the special character and appearance of Conservation Areas…"

 There is minimal high sensitivity Ancient Woodland in the study area, the closest, Park Matthews Wood, approximately 4.5km to the south-east, within the Cornwall National Landscape.

Ancient Woodlands are protected by CC in Policy 23 which states that "development must avoid the loss or deterioration of Ancient Woodland..."

<sup>&</sup>lt;sup>20</sup> Cornwall Council, Cornwall Area of Great Landscape Value (AGLV) Review, 2023 (on-line via interactive map <a href="https://www.cornwall.gov.uk">www.cornwall.gov.uk</a>)

#### Landscape Character

#### National Landscape Character

- 3.18 The Natural England<sup>21</sup> national landscape character information is referred to for a strategic understanding of landscape character within the study area. This outlines the wider setting for the site and provides a context for the description of the local landscape character.
- 3.19 Within the study area, there are two national landscape character areas. Their location is illustrated in **Figure 5**.
- 3.20 The site, broadly stretching in a band from the east to the west of the study area, including to the north-eastern fringes of the study area is the *Hensbarrow national landscape character area* (154).
- 3.21 The Hensbarrow national landscape character area (154) is described as an interesting and varied landscape, named after Hensbarrow Downs, the granite hills which are the focus of the china clay industry. The world-famous Eden Project is located in an old china clay pit and to the north, Goss Moor forms an open and wild landscape that is touched by human infrastructure such as roads, electricity pylons and historical tin extraction. The eastern side is an area of contrast between the wild and open granite tors, the biodiverse heath and willow carr and an idyllic pattern of fields bounded by Cornish hedges and woodlands. Settlements are fairly small, and the local vernacular is of granite or cob and granite buildings, roofed with slate and sometimes with hanging slate. The locally produced concrete blocks are also a distinctive feature.
- 3.22 The key characteristics of the *Hensbarrow national landscape character area (154)* include:
  - China clay spoil tips dominate this landscape with both conical and terraced heaps.

    They are often vegetated but the tops of conical heaps can remain bare of vegetation;
  - Buildings associated with the china clay industry including chimneys, drying kilns and mica dams;
  - Active china clay works are obvious as distinctive white terraces in the landscape;
  - A dispersed settlement pattern of hamlets and farmsteads with many villages being associated with the china clay industry. The local vernacular is granite and slate buildings which form the centre of the towns. Much later development represents a shift in the vernacular towards locally produced concrete blocks and sheet metal associated with industrial sites;
  - Mineral extraction industry, such as tin mining and china clay extraction, is prominent in the landscape. The china clay deposits are thought to be the largest in the world;
  - There are many abandoned mine buildings as well as larger structures such as the viaduct at Luxulyan. Many of these are of historical significance and add character to the area;
  - Pylons and wind turbines are a notable feature of the western landscape and new solar farms near Luxulyan stand out from the green fields that surround them;
  - Sheltered, wooded valleys with willow scrub and fast-flowing streams cut north to south through the area heading to the sea;

<sup>&</sup>lt;sup>21</sup> National Character Area profiles (<u>www.nationalcharacterareas.co.uk</u>)

- Key habitats associated with the area include lowland heathland, purple moor grass and rush pasture and fens, all of these being of European importance;
- The mosaic of habitats is home to many rare and iconic species, for example the spider Araneus triangulus, marsh fritillary, gold-ringed dragonfly, early purple orchids growing on roadside Cornish hedges, and birds such as buzzard and yellowhammer;
- The eastern area is dominated by irregular small fields, fringed with Cornish hedges and supporting small farmsteads and hamlets; and
- The granite geology of the area is showcased by striking tors such as Helman Tor,
   Roche Rock and huge granite boulders known as moorstone.
- 3.23 To the north, east, south and west, extending to the fringes of the study area, is the *Cornish Killas national landscape character area (152)*.
- 3.24 The Cornish Killas national landscape character area (152) forms the main body of the Cornish landmass around the granite outcrops of Bodmin Moor, Hensbarrow, Carnmenellis, West Penwith and The Lizard. The northern half of the area, with its open character and general lack of tree cover, affords long views across Cornwall to neighbouring areas and out to sea. The gently rolling scenery, sheltered coves, headlands, and estuaries of the south coast contrast with the exposed high cliffs and more rugged nature of the north coast. The rocky coastline is characterised by coves and headlands and possesses an impressive number of important geological exposures.
- 3.25 The key characteristics of the *Cornish Killas national landscape character area (152)* include:
  - A coastline of rugged, sheer cliffs, sandy beaches with rolling surf and dramatic sand dune systems on the north coast;
  - Intimate coves and deep, steep-sided rias (drowned valleys) with broadleaved woodland down to the tidal edge;
  - Rocky coastline characterised by coves and headlands, with an impressive number of important geological exposures;
  - Numerous fishing villages and small ports, many now developed into bustling summer tourist destinations, with small coves, quays and fish cellars slipways predominating;
  - An undulating shillet (shale) plateau, with open vistas and a characteristic network of stone-faced earthen banks (Cornish hedgebanks), many enclosing fields in use since medieval times. From higher ground there are long views across a rather uniform landscape of mixed farming, with small villages and market towns;
  - Renewable energy structures, such as wind and solar farms, which are a recent addition to the landscape;
  - Broadleaved wooded valleys, dominated by internationally important western oak woodland habitat, which dissect the plateau and lead to the south coast;
  - Many outstanding historic parks associated with the sheltered flooded river valleys
    along the south coast and benefiting from the mild climate. These have developed on
    both mining profits and more traditional historic estates;
  - Important industrial archaeological sites, including hard rock mining with its distinctive engine houses and quarrying sites, some of which form part of the Cornwall and West Devon Mining Landscape WHS;
  - A dispersed settlement pattern of hamlets, farmsteads, historic mining villages and small fishing villages, often formed of simple, austere buildings, with nonconformist

- chapels and wayside crosses, and located where steeply incised valleys meet the coast;
- Coastal defences and 16<sup>th</sup> century Henrician forts along the south coast, with clustering around Falmouth and the Fal, St Austell Bay and Whitsand Bay towards Plymouth;
- A number of market towns located between the higher moorland and the coast.
   Coastal towns were established on a strong maritime industry; and
- Lowland heath, wet woodland, wetland, scrub and unimproved grassland complexes, which are common and are sometimes associated with areas of past industrial activity.

#### Local Landscape Character

- 3.26 CC<sup>22</sup> has identified nine character areas within the study area. These are geographically discrete areas with their own sense of place and a distinct localised pattern of elements in the landscape that are unique to a specific area of Cornwall.
- 3.27 The landscape character areas are described in more detail below and their location illustrated in **Figure 6**.
- 3.28 The site is within the *St Austell or Hensbarrow China Clay Area (CCA27)*, which extends in a broad band from east to west across the centre of the study area, extending to the north-western fringes of the study area. **Viewpoints 2-9 and 11 (Figures 14-21 and 23)**, illustrates the landscape of the *St Austell or Hensbarrow China Clay Area (CCA27)*.
- 3.29 The St Austell or Hensbarrow China Clay Area (CCA27) is a dramatic and varied landscape of china clay waste tips and areas of rough vegetation, characterised by openpit mining. The mix of active and disused sites creates a dramatic 'lunar' landscape of huge, light coloured waste tips and settling ponds within a relic pastoral farming landscape. It is a rugged area of great variation and drama. Dominant visual elements include the large white spoil heaps, either conical or flat-topped in form, aqua-blue pools, areas of rough ground and natural and naturally regenerated scrub and heath, as well as large quarry pits. The scale of these features contrasts dramatically with the small-scale medieval field patterns surrounding settlements. The fluctuating and changing condition and relationship of elements in this landscape and the natural regeneration of heathland, new woodland planting and rough ground provide a vivid and dynamic visual landscape character quite unlike surrounding CCAs.
- 3.30 The *St Austell or Hensbarrow China Clay Area (CCA27)* is not recognised for its value through any landscape relevant designations.
- 3.31 The *St Austell or Hensbarrow China Clay Area (CCA27)* is however influenced by the presence of existing, largely single, wind turbines, including single, Band C<sup>23</sup> between 61-99m in height to blade tip operational wind turbines such as Higher Goonamarth

Band A – between 18-25m in height to blade tip;

Band B – between 26-60m in height to blade tip;

Band C - between 61-99m in height to blade tip; and

Band D – between 100-150m in height to blade tip.

<sup>&</sup>lt;sup>22</sup> Cornwall Council, *Landscape Character Assessment*, 2022 (on-line via interactive map www.cornwall.gov.uk)

<sup>&</sup>lt;sup>23</sup> The height brackets of the wind energy schemes have been taken from Table 3.2, Wind Development Sizes, Cornwall Council, Review of the Cornish Renewable Energy Landscape Sensitivity (RELS) Assessment, Final Report, December 2020. Of relevance, these include:

Farm, Blackpool Quarry, Greensplat, Gunheath Quarry and Aggregate Industries as well as smaller single Band B – between 26-60m in height to blade tip – operational wind turbines at Henavisten Farm, and Land at Menna Farm and Band A turbines – between 18-25m at Mount Stamper Farm.

- 3.32 The key views and perceptual qualities of the *St Austell or Hensbarrow China Clay Area* (CCA27) includes:
  - The large conical and flat-topped spoil heaps form a distinctive and visually prominent skyline, visible in distant views from the surrounding area;
  - Panoramic views are possible from elevated areas including Carloggas Downs and Hensbarrow, offering extensive and scenic views over St Austell Bay and Luxulyan Valley (CCA30) and the Mid Cornwall Moors (CCA26);
  - Natural landforms such as Hensbarrow Beacon and granite outcrops at St Dennis and Roche are distinctive, and discernible in distant views, although in places these are dwarfed by the large spoil heap landforms and built features such as pylons and operational wind turbines;
  - The landscape character is strongly influenced by the dominant scale of the china clay workings, with the mix of active and disused sites creating a dramatic 'lunar' landscape of large, pale-coloured spoil tips and bright turquoise settling ponds. The landscape has a dynamic character as a result of ongoing extraction operations;
  - Relics of historic mining activity and industry are scattered across the area, including clay dry stacks and the Gover Viaduct on the north edge of St Austell; and
  - Areas of light pollution exist around Melbur Refinery, Goverseth and Bugle, with light
    pollution from the neighbouring St Austell also impacting the dark night skies of the
    CCA. This is a heavily disrupted and active landscape with relatively low levels of
    tranquillity.
- 3.33 The most valued landscape attributes and key sensitivities of the *St Austell or Hensbarrow China Clay Area (CCA27)*, which would therefore be most sensitive to change are summarised as:
  - Distinctive large-scale spoil heaps and turquoise-coloured settling ponds, lakes and mica dams:
  - Small areas of pastoral farmland and rough grazing enclosed by stone-faced Cornish hedges;
  - Distinctive small-scale mining settlements with a strong character and sense of place, including the small-scale field pattern of miners' smallholdings around St Dennis;
  - Fragmented areas of lowland heathland, scrub and broadleaved woodland with areas of natural regeneration and restored heathland, woodland and rough ground;
  - Visible time-depth of structures and patterns within the landscape Bronze Age barrows, medieval field pattern, 19<sup>th</sup> century mining relics, and modern china clay workings;
  - Use of locally-occurring stone in buildings, including china stone and granite;
  - Long views from elevated areas towards St Austell Bay and Gribben Head on the coast; and
  - Contrast between large-scale spoil heaps and small-scale medieval field patterns.

- 3.34 The St Austell or Hensbarrow China Clay Area (CCA27) has been subject to great change and is poorly managed, with fragmented ecological corridors and intensive land use. However, this is a vibrant and dynamic industrial landscape of deep pits and steeply angled tips overlying an older farming and mining landscape, the remnants of which can be found amongst the present day workings. There is also scattered, generally single and operational wind energy schemes present, nestled within the diverse predominantly industrial landscape. Although a distinctive landscape, it has a weak landscape structure, partly degraded with frequent detractors with very good to substantial ability to accommodate change. This is a large scale industrial landscape with significant human influence, the presence of the prominent and distinctive skyline of huge pale spoil heaps and the presence of historic skyline features increase levels of sensitivity to wind energy development. As a result, it is of **medium-low** sensitivity, defined in Table 1 of this LVIA as "reasonably valued landscape elements and/or landscape character. Could include features/areas that exhibit positive character but which may have evidence of alteration. degradation and erosion of features resulting in areas of more mixed character. Some detractors likely to be present."
- 3.35 To the north-west, north and north-east of the site, extending in a broad band from east to west, including to the north-eastern fringes of the study area, is the *Mid Cornwall Moors* (*CCA26*) and is partly within the Helman Tor and Luxulyan Valley AGLV on the north-eastern fringes of the study area. **Viewpoint 10** (**Figures 22A-22D**), illustrates the landscape of the *Mid Cornwall Moors* (*CCA26*) from Helman Tor, within the Helman Tor and Luxulyan Valley AGLV.
- 3.36 The Mid Cornwall Moors (CCA26) is an open plateau comprising the remnants of the poorly drained wildland/moorland of Goss Moor at its heart and Red Moor, Bokiddick Downs and Breney Common to the east. These combine with areas of rough grazing and pastoral farmland on the surrounding slopes. Pastoral farmland is largely of medieval origin comprising small-scale fields bound by stone-faced Cornish hedges, with distinctive strip fields around Tregoss. The flora and fauna associated with the wetlands and heathlands within this area are of local, national and international importance. There is a strong visual relationship with surrounding, more elevated character areas including the distinct altered skylines of the St Austell and Hensbarrow China Clay area (CCA27), to the south, south-west and south-east. Tree cover is sparse on higher ground, but the sheltered slopes and lower land are well-wooded. The area is affected by industrial and residential development and infrastructure. There are also generally single or small clusters of wind energy schemes present, including the Band C – between 61-99m in height to blade tip - operational wind turbines at Trebilcock Farm, Lestoon Farm and Gaverigan Farm as well as a small cluster of Band D turbines – between 100-150m in height to blade tip – at South of A30.
- 3.37 The character of the *Mid Cornwall Moors (CCA26)* is largely intact and well-managed but diluted by pylons, the dominance of transport corridors and large-scale industry. As a result, it has a **medium** sensitivity, defined in Table 1 of this LVIA as "moderately valued or 'everyday' landscape elements and/or landscape character. These are landscapes in good condition which <u>could</u> be appreciated by the community but has little or no wider recognition. Some detractors could be present." The small area within the AGLV is of **medium-high** sensitivity.
- 3.38 Further to the north of the site, extending to the fringes of the study area is the *Camel and Allen Valleys (CCA29)*, which is also partly within the locally recognised Camel and Allen AGLV, towards the northern fringes of the study area.

- The Camel and Allen Valleys (CCA29) cut through the surrounding undulating plateau. The valleys are intimate and wooded, especially the Camel, with coniferous and mixed woodland including oak and ash woodlands. The Allen Valley has broadleaved woodland including significant areas of Ancient Woodland. The plateau tops are open and are dominated by estate farms with a mix of improved pasture and arable land within a mostly intact medieval field pattern of prominent Cornish hedges with few trees. The sloping lands to the south of the Camel, where there is a considerably greater proportion of more recently enclosed land, have a stronger field pattern with many hedgerow trees. Settlement is clustered in small villages on higher ground with distinctive churches.
- 3.40 There are operational smaller Band B between 26-60m in height to blade tip single turbines within the *Camel and Allen Valleys (CCA29)*, but excluded from the AGLV, including Rosewarrick.
- 3.41 The Camel and Allen Valleys (CCA29) has a **medium** sensitivity, but increasing to **medium-high** within the AGLV. **Medium-high** sensitivity is defined in Table 1 of this LVIA as "highly valued landscape elements and/or character. These are landscapes in very good condition that are considered to be of importance to conserve. No or few detractors present. Likely to be locally designated, such as Areas of Great Landscape Value and could include valued landscapes of scenic quality and rarity on a regional or local scale."
- 3.42 To the east of the site, extending to the north-eastern, eastern and south-eastern fringes of the study area is the *St Austell Bay and Luxulyan Valley (CCA30*).
- 3.43 The St Austell Bay and Luxulyan Valley (CCA30) is defined by the low rocky cliffs of the coastline forming the northern and eastern side of St Austell Bay and are punctured by the wide alluvial estuary at Par Beach, where extensive sands have built up in the mouth of the Par river. The wide, flat-bottomed valley of the River Par and its deep tributary valleys extend inland and have either been settled and heavily industrialised, or have developed wet woodlands. Another area of alluvial plain stretches inland at Par Moor, running up behind the cliffs of Carlyon Bay. At Par, an industrial docks complex was developed around the deep-water channel. The higher ground in this area is heavily built up with the urban centre of St Austell and sprawling residential areas of Carlyon Bay, St Blazey and Par, while the coastal zone with long sandy beaches at the base of the cliffs is popular for recreation. The eastern parts of the coastline are marked by rocky cliffs with occasional sheltered coves. Inland is a landscape of woodland pastoral farmland, changing to wetland between the settlements of Par and Tywardreath. The landscape is scattered with evidence of both past and present industry, including extensive relics of the mining industry and a former gunpowder factory in the well-wooded Luxulyan Valley. There is a single Band B – between 26-60m in height to blade tip – present at Tortoiseshell Barn and a single Band A – between 18-25m – at West Lampetho.
- 3.44 The St Austell Bay and Luxulyan Valley (CCA30) partly contains the Helman Tor and Luxulyan Valley AGLV, a World Heritage Site, Tregrehan Registered Park and Garden and Conservation Areas at St Austell, Charlestown and Tywardreath, as well as the coastal fringes of the National Landscape and the expansive and diverse settlement of St Austell.
- 3.45 The character of the *St Austell Bay and Luxulyan Valley (CCA30)* has been significantly altered over time and its current condition is mixed. The western area is highly developed with urban and suburban development, holiday facilities and recreational/amenity areas making a major impact as opposed to the eastern side of the bay where development has not been allowed to despoil the natural beauty. As a result, it has a varied **medium**

sensitivity within the development dominated areas, **medium-high** sensitivity within the AGLV and **high** sensitivity within the nationally designated landscapes.

- To the south of the site, extending to the southern fringes of the study area is the *Gerrans, Veryan and Mevagissey Bays (CCA22)*, which also includes the National Landscape and the Upper Fal Valley AGLV, as well as Pentewan and Mevagissey Conservation Areas and Heligan Registered Park and Garden. **Viewpoint 1 (Figures 13A-13D)** illustrates the landscape of the *Gerrans, Veryan and Mevagissey Bays (CCA22)*.
- 3.47 The *Gerrans, Veryan and Mevagissey Bays (CCA22)* is comprised of three large and sweeping coastal bays, rocky shores, sandy beaches and small coves. The coastal strip is dominated by scrub and bracken. Punctuating the bays are the distinctive promontory headlands of Nare Head, Dodman Point and Black Head. The plateau behind the coast is a medieval landscape of irregular mixed farmland, intersected by stream valleys that are often wooded. Most fields are bounded slate Cornish hedges. Parkland gives the area a domesticated feel. Settlement is sparsely distributed across the area and often of medieval origin with coastal villages tucked into the sheltered mouths of steep-sided stream valleys. The area has been heavily influenced by tourism.
- 3.48 Within the *Gerrans, Veryan and Mevagissey Bays (CCA22)*, there is a scattering of operational single and small-clusters of wind turbines (outside the National Landscape) varying from Band B to Band D, including the two-turbine 110m (Band D) wind energy development at Garlenick Estate. Also present are the single Band B turbines between 26-60m at Ninnis Farm, Field at Grampound Hill, the single Band A turbines between 18-25m at Levalsa Meor Farm and Pencoise Farm and the single Band C turbine between 61-99m at Pittsdown Farm.
- 3.49 The agricultural pattern of mixed farming of the Gerrans, Veryan and Mevagissey Bays (CCA22) is largely intact and in reasonable condition, although is being affected by the intensification of agriculture in some places. This is manifested in large sprawling agricultural buildings and over-intensive hedge maintenance leading to degradation of the Cornish hedges and the use of post and wire fencing, often associated with horsiculture or arable conversion. In places, the estate style of management and planting has resulted in the replacement of traditional field boundaries with fencing. The coastal strip is in poor condition due to a lack of grazing to manage the coastal heath or coastal field pattern. There has been local change from farmland or parkland to amenity uses such as caravan sites, with consequent loss of character. Woodlands in this area are largely unmanaged due to their situation in the steep sided stream valleys and grazing of these woodlands may be a problem. Conversely, woodlands in the parklands tend to be very highly managed. The main transport corridors interrupt tranquillity considerably in this character area, particularly in the summer months when traffic is heavy and the smaller lanes of the Roseland groan under the pressure. Where roads have been improved, Cornish hedges have often been rebuilt with non-vernacular stone slate and there has been gradual urbanisation of the area resulting from transport associated infrastructure such as metal bus stops, a proliferation of signage, particularly around villages, hard kerbing of verges and road paint. The traditional fingerposts are almost all in degraded to poor condition with peeling paint and rust. Some non-vernacular rural housing development away from village cores, along linear transport routes, has resulted in increased urbanisation, erosion of rural character and the loss of tranquillity. The character of some villages, particularly those on the coast has been weakened by tourist development, which although usually small in scale, is having an incremental impact. This character area has a strong visual relationship with its neighbours. The views of the spread of St Austell and china clay area, which do not share common characteristics, erode the tranquillity of this area. As a result,

it has a **medium** sensitivity, increasing to **medium-high** sensitivity within the AGLV and **high** sensitivity within the National Landscape. **High** sensitivity is defined in Table 1 of this LVIA as "distinctive landscape elements and/or character. Includes areas with a very strong positive character with valued features that combine to give an experience of unity, richness and harmony. Landscapes in excellent/very good condition that are considered to be of particular importance to conserve. No detractors present. Likely to be nationally designated, such as National Landscapes and <u>could</u> include very highly valued landscapes of strong scenic quality and rarity on a national/international scale (National Landscapes)."

- 3.50 To the south-west of the site, extending to the south-western fringes of the study area is the *Fal Valley (CCA21)*, which is also largely within the Upper Fal Valley AGLV and includes the Grampound Conservation Area.
- 3.51 The Fal Valley (CCA21) is focused on the deeply incised route of the Fal Valley and its tributaries which cut through an undulating plateau landscape. The area has a working agricultural character with medieval field patterns supporting mixed agriculture and bound by Cornish hedges. There is only one single Band B (between 26-60m) operational wind turbine present at Bartiliver Farm. Woodland is expansive in the valleys and includes large swathes of Ancient Woodland. The historic significance of this landscape is echoed in the remains of settlements of prehistoric and Iron Age origin. There are extensive parkland estates that give localised areas an ornamental and managed character, contrasting with the wild-feeling open estuary. The area is sparsely populated, with the main settlements being medieval in origin and partially included within Conservation Areas. The landscape is notably tranquil and peaceful, especially in the south, with scenic views channelled along the broad valley floors and across the valleys from the upper valley slopes. As a result, it has a **medium-high** sensitivity.
- 3.52 To the south-west of the site, on the south-western fringes of the study area, is the *Truro and Tresillian Valleys (CCA20)*.
- 3.53 The Truro and Tresillian Valleys (CCA20) is a landscape of contrasts centred on Cornwall's only city, Truro, which is situated within a bowl landform. The city is surrounded by a landscape of rural land and scenic valleys and the area maintains a strong association with the estuarine ria. Away from Truro, there is a strong working agricultural character, with the rolling fields to the north-east of Truro feeling particularly remote. The majority of field patterns are medieval in origin, marked by Cornish hedges with some grown-out hedges providing important links between valley woodlands (including some plantations). The estuarine ria supports many important habitats and is partially SAC designated. Many of the settlements within this landscape are of medieval origin often located at the head of the historically navigable section of the rivers. Truro is situated at the lowest crossing point for land transport. The cultural significance of this landscape is reflected in the presence of settlements with Conservation Areas, Registered Parks and Gardens and the character area is partially included within the Cornwall and West Devon Mining Landscape WHS. This is a scenic landscape with long-distance views possible across the valleys from more elevated areas and across the broad, open ria to other character areas. Away from Truro much of the landscape is notably tranquil. As a result, it has a medium-high sensitivity.
- To the south-west and west of the site, extending to the western fringes of the study area is the *Upper Fal Valleys (CCA19*).
- 3.55 The *Upper Fal Valleys (CCA19)* is an area of gently undulating plateau farmland dissected by small stream valleys which make up the tributaries which drain south before

converging at the Fal estuary. The landscape has an intact agricultural character, with mixed farmland within medieval fields divided by Cornish hedges. Archaeological features including prehistoric remains are occasional features within the farmed landscape. The landscape is sparsely settled, with scattered farms, hamlets and the small settlements served by a network of rural lanes and major routes including the A30, A39 and A3058. Tracts of woodland are located along streams and are often locally designated for their wildlife value. There are also some significant areas of plantation woodland. Tourism is less of an influence on the landscape compared with some areas of Cornwall. A strong rural character with high levels of tranquillity can be experienced although this is impacted in places by renewable energy schemes, major roads and overhead lines/pylons. There are scattered single and small-clusters of Band B wind turbines (between 26-60m) at Bodinnick Farm, Land south-east of Resugga Farm, Penhale Farm, Carnwinnick Farm, Cregan Gate and Woodland Valley Farm. As a result, it has a **medium** sensitivity.

- 3.56 To the north-west of the site, extending to the fringes of the study area is the *St Newlyn East to St Columb Major (CCA25)*.
- 3.57 The St Newlyn East to St Columb Major (CCA25) comprises the gently undulating agricultural landscape extending east to west with extensive views out to sea from the higher ground. The area is incised by shallow valleys on the margins. Field patterns are predominantly medieval but with strongly rectilinear post-medieval enclosure of former rough ground in some areas, particularly to the south. Land use is a mix of pasture and arable. Cornish hedgerows are prevalent but mature trees are fewer on higher ground due to exposure and close flailing of hedges. There is some woodland, mostly wet woodland, in the valleys with small areas of wetlands with fens. Settlement is generally small nucleated villages associated with the communications network and dispersed farm settlements. Tourism development, including caravan sites, is prevalent within the northern part of the CCA nearest the coast. As a result, it has a **medium** sensitivity.

#### CC RELS Assessment

- 3.58 Within the RELS Assessment, the *St Austell or Hensbarrow China Clay Area (RLU13)* has been identified as having a '**moderate-high**' overall landscape sensitivity for Band D wind energy development (between 100m-150m in height to blade tip).
- 3.59 The proposed development, at 135m in height to blade tip, is a Band D wind energy development.
- 3.60 'Moderate-high' sensitivity is defined as "key characteristics and qualities of the landscape are vulnerable to change from wind... energy development. There may be some limited opportunity to accommodate wind turbines... without significantly changing landscape character. Great care would be needed in siting and design."
- 3.61 The overall landscape sensitivity to wind energy development within the *St Austell or Hensbarrow China Clay Area (RLU13)* has been defined as:
  - "Although the large-scale industrial landscape with substantial human influence and existing Band C turbines [61-99m in height to blade tip] could indicate a lower sensitivity to development, the prominent and distinctive skyline (a cultural heritage feature in its own right) heightens levels of sensitivity to wind energy development. The visually prominent natural granite outcrops of Roche and St Dennis would be highly sensitive to wind energy development. Areas with regular field patterns on higher ground would be less sensitive."

- The operational wind energy developments within the *St Austell or Hensbarrow China Clay Area (RLU13)*, comprise of single, largely Band C (between 61-99m in height to blade tip) wind turbines, including Higher Goonamarth Farm, Blackpool Quarry, Greensplat, Gunheath Quarry and Aggregate Industries as well as smaller single Band B turbines (between 26-60m in height to blade tip) at Henavisten Farm and Land at Menna Farm and a Band A single turbine (between 18-25m in height to blade tip) at Mount Stamper Farm.
- In addition, "given the highly industrial character and large-scale of this landscape, there is an opportunity to accommodate turbines up to Band C, and potentially into the lower end of Band D. However, the RLU should remain a landscape with occasional wind energy developments to preserve the landmark features within it (and its distinctive skyline profile visible in long views), and to limit cumulative landscape effects. Careful consideration could be made to replace single Band C turbines with larger models, potentially up to the lower end of Band D, and similarly in terms of replacing Band B turbines with Band C models. In some cases (where technically feasible and in line with the landscape guidance) there may also be opportunities to add two more turbines to single Band B or C schemes to create small wind farm developments."
- 3.64 The relevant strategic guidance for wind energy development within the *St Austell or Hensbarrow China Clay Area (RLU13)* include:
  - Ensure that any new Band C or D turbines are sited well away from any Band A or B turbines, so that the different size classes are not seen together;
  - Ensure that any new developments are similar in terms of siting, layout and relationship to key landscape characteristics, so as to present a simple image that relates clearly to landscape character;
  - Avoid close juxtaposition of different turbine designs and heights within the same banding, aiming instead for a consistent design and height in any given area;
  - Locate turbines within the mining landscapes in the centre of the RLU (away from the
    outward presenting edge of the china clay area) and in the areas of more regular field
    patterns which tend to occur on higher ground away from the river valleys and older
    settlements;
  - Site turbines away from the natural granite outcrops of Roche and St Dennis and the outer boundary tips and landforms of the area so that these are retained as distinctive features on the skyline;
  - Avoid locating the largest scale wind energy development in areas of very small, ancient fields (especially in the east at Stenalees and Penwithick, in the north around St Dennis, and in the south at Goverseth and Carpalla);
  - Ensure wind energy development does not dominate, or prevent the understanding and appreciation of, historic landmarks on the skyline, including St Stephen's Beacon, St Dennis church and the 15<sup>th</sup> century chapel on the top of Roche Rock;
  - Consider how turbines fit with existing skyline features when siting and designing wind development – turbines may be better sited on the top of flat tips than close to distinctive conical forms, and away from the outward presenting edge of the china clay area; and
  - Ensure wind energy development does not dominate the huge pale spoil heaps, extensive turquoise lagoons and settling tanks, Trenance viaduct on the north edge of St Austell, Gover Viaduct, the Norman towers of both St Dennis and Roche, Roche Rock and Hensbarrow Beacon as distinctive features of the landscape.

#### Visual Amenity Receptors and their Views

3.65 An overview of the visual amenity receptors and their views within the study area is described below. The location of principal visual amenity receptors is illustrated in Figure 7 and viewpoint locations shown on Figures 11 and 12.

Settlements - Towns, Villages and Hamlets

- There are a number of **high** sensitivity towns, villages and hamlets scattered throughout the study area, generally situated along the major road corridors or associated with the quarry workings, including the large coastal town of St Austell approximately 1.4km to the south of the site at its closest point, extending to the boundary with St Austell Bay to the south-east. Largely sloping down towards the coastal fringes and enclosed by surrounding development, it is only from the fringes of St Austell, that more expansive views inland are possible, as illustrated in **Viewpoint 2 (Figures 14A-14D)**. Views over the adjacent undulating farmland, mineral workings and scattered wind energy schemes are possible from the fringes of the settlement.
- 3.67 Situated on the A3058, the linear settlement of Trewoon is approximately 1.4km to the south of the site at its closest point. Separated from the site by sloping rising landform, views northwards, including towards the scattered operational wind energy schemes focused within the industrial landscape are often restricted.

### Scattered Residential Properties

- 3.68 Individual **high** sensitivity residential properties and farms are scattered within the undulating landscape of the study area, often stretched out along the network of minor roads, or focussed along junctions, becoming sparser within the industrial landscape, including in close proximity to the site.
- 3.69 Most of these houses and farms have restricted views into the surrounding landscape from a combination of vegetation enclosing many properties, screening provided by adjacent development, subtle variations in landform and by the numerous lines of mature vegetation, including hedgerows, linear tree belts, mature trees, small copses and woodlands, in the wider landscape.
- 3.70 There are however a number of residential properties within close proximity to the site, including:
  - Greystones and South Cottage, situated immediately to the west of Greensplat Road, to the north of the site. Wider views, including towards the site are limited by the mature garden vegetation enclosing the houses as well as subtle variations in the intervening sloping landform;
  - Lower Biscovillack Farm, situated to the south-west of the site and accessed via a long farm track off Greensplat Road to the south. The house is situated to the south of a large complex of farm buildings which help to limit wider views up the vegetated lower slopes towards the adjacent upper slopes and the site;
  - Collection of detached diverse single and two storey houses including permanent
    caravans/lodges accessed off Greensplat Road. To the west of Greensplat Road, to
    the south and south-east of the site, include the recently constructed Hill House,
    largely separated from the site by intervening tips and the single storey caravan/lodge
    at Biscovellett Quarry, with more open views up the slopes towards the site possible.
    To the east of Greensplat Road, to the south-east of the site, are a collection of

- properties which appear to be well-enclosed by mature vegetation including Chaunvista, El Paso and the collection of properties at Bay View Farm;
- To the south-east with wider views, including towards the site, largely limited by the
  intervening well-vegetated tip as well as mature vegetation surrounding the properties
  themselves are Sunny Corner, Brecombe Farm, Brecombe Barn and Furze Croft;
- To the east and south-east, the scattered houses, often associated with farms, including Lansalson Farm, Boskell Farm, Palace Close Farm and Holmeleigh are situated on the dip slopes with wider views, including towards the site, often restricted by subtle variations in the surrounding landform, the intervening well-vegetated tips and enclosure around the properties themselves, including surrounding farm buildings and mature vegetation;
- To the south-east, to the east of Greensplat Road, the detached property at Springfield Cottage appears to be very well enclosed by mature vegetation and to the south of farm buildings which help to limit wider views up the vegetated slopes towards the site; and
- To the south-west, a number of scattered properties, including Valley View Cottage,
  Treglyn, Carne Stents and Secret Cottage are situated on the lower slopes of a valley
  and wider views are restricted by the surrounding well-vegetated and wooded steep
  valley sides.
- 3.71 Further detail on the close proximity residential properties, within 1km radius of the site, can be found in the separate Residential Visual Amenity Assessment (RVAA) that accompanies the planning application.

National Trails

- 3.72 The **high** sensitivity South West Coast Path National Trail crosses the study area from the east to the south, approximately 4.9km to the south-east of the site at its closest point.
- 3.73 Following the dramatic coast, as well as skirting the settlement fringes of St Austell, views are focussed across the coast and coastal fringes, with views inland largely restricted by the intervening undulating and well-vegetated agricultural landscape.

Recreational Routes

- 3.74 The **high** sensitivity Saints Way recreational route crosses the study area from the northeast to the east, approximately 6km to the east of the site at its closest point.
- 3.75 Crossing the undulating and well-vegetated landscape, variable views are possible, including of the scattered generally single and small clusters of wind energy schemes in the surrounding landscape.

National Cycle Routes

- 3.76 Numerous high sensitivity National Cycle Routes (NCRs) cross the study area, generally passing from the north-west, to the north-east, east, south-east and south, with many of the routes connecting at St Austell to the south-east.
- 3.77 The closest, NCR2, the Clay Trail, passes approximately 1.1km to the east of the site at its closest point, connecting with the Wheal Martyn Museum and Country Park.

3.78 Largely following minor roads as well as purpose-built routes along former railway lines associated with the mining landscape, views from the NCRs are largely restricted by the immediate enclosure by vegetation, including Cornish hedges as well as the wider screening by development and undulating landform including the numerous and dramatic tips surrounding the site and within the wider landscape. Glimpsed views however into the surrounding varied landscape, including of the scattered single and small clusters of wind energy schemes are possible from gaps in the enclosure, or from selected elevated locations, such as bridges.

Places of Interest (including Country Parks)

- 3.79 The **high** sensitivity and renowned Eden Project occurs approximately 4.8km to the east of the site at its closest point, the Lost Gardens of Heligan, approximately 7.7km to the south.
- 3.80 The **high** sensitivity Wheal Martyn Museum and Country Park occurs approximately 1.1km to the north-east. Focussed around a museum and visitor centre, there are also walks surrounding the centre, generally through woodlands scattered with remnants of the mining industry. As illustrated in **Viewpoint 3 (Figures 15A-15D)**, there are also 'look-out' points, focusing on a working quarry, where views into the wider mining landscape, scattered with operational wind energy schemes, are also possible.
- The **high** sensitivity Black Head National Trust owned land, also occurs on the coastal fringes, approximately 7.5km to the south-east.
  - Local Public Rights of Way, Bridleways and Cycleways
- There are **medium-high** and **high** (within the National Landscape) sensitivity scattered public rights of way, bridleways and cycleways present within the study area.
- 3.83 An analysis of the closest **medium-high** sensitivity public rights of way within 1km radius of the site, including the location of the viewpoints focussed on the close proximity public rights of way, is illustrated in **Figure 8**.
- 3.84 The closest **medium-high** sensitivity public rights of way to the site include:
  - Public right of way (424/4/1) connects Greensplat Road to the south-east of the site, broadly heading eastwards towards Ruddlemoor. Wider views, including towards the site, are largely enclosed by the intervening well-vegetated tip. Even as the public right of way follows a sunken track heading towards Boskell Farm and Riding Stables, it is only from gaps in this enclosure such as gateways that views across the intervening fields, towards the nearby well-vegetated tip is possible, including towards the operational wind turbine at Greensplat, as illustrated in Viewpoint 9 (Figures 21A-21C);
  - Public right of way (424/5/1) connects Greensplat Road to the north of the site and follows the sloping fields down towards the uninhabited Higher Biscovillack Farm. As illustrated in Viewpoint 8 (Figures 20A-20C), views are possible across the sloping rising fields, including towards the operational wind turbine at Greensplat;
  - Public right of way (419/40/1) connects with the permissive quarry road to the north-west of the site before heading broadly to the south and south-west. Passing through a variable sloping agricultural landscape, wider views towards the site are occasionally open, as illustrated in Viewpoint 6 (Figures 18A-18C), where views are possible across the lower well-vegetated valley towards the adjacent slopes, including towards

- the operational wind turbine at Greensplat. However, mature vegetation intermittently lining the public right of way as well as woodland helps to limit wider views;
- Public right of way (419/29/1) occurs to the north-west of the site and connects with public rights of way (419/40/1 and 419/27/1) to the north-west. The public right of way follows the lower valley floor and is enclosed by mature vegetation as well as sloping landform with very restricted wider views, including towards the site; and
- Public right of way (419/27/1) runs from north to south, broadly to the west of the site. To the north-west, the public right of way is enclosed by a dramatically sloping and well-vegetated tip, which restricts wider views. As the public right of way heads south, it passes through a sloping agricultural landscape, including through Penisker Farm to the west. As illustrated in Viewpoint 7 (Figures 19A-19C), views are possible across the lower well-vegetated valley towards the adjacent slopes, including towards the operational wind turbine at Greensplat. However, mature vegetation intermittently lining the public right of way as well as subtle variations in the sloping landform helps to limit wider views.
- 3.85 Further afield, wider views are possible from the network of public rights of way across the diverse farming and industrial influenced landscape, although often limited by subtle variations in landform and mature vegetation in the immediate and wider landscape.

  Scattered operational wind energy schemes are also often perceived.
- 3.86 Even from a public right of way on the fringes of the National Landscape to the southeast, as illustrated in **Viewpoint 1** (**Figures 13A-13D**), it is only from selected open and elevated locations that expansive and distant views are possible, including of the scattered operational wind energy schemes.

### Open Access Areas

- 3.87 There are scattered **medium-high** sensitivity open access areas within the study area.
- 3.88 Largely focussed on open and elevated locations within the wider undulating and varied landscape, selected wider views are possible across the rolling landform including towards the distinctive tips and quarries, punctuated by scattered single and small clusters of operational wind energy schemes.
- 3.89 As illustrated in **Viewpoint 5 (Figures 17A-17D)**, expansive views are possible from the fringes of the informal open access area to the north-east at Caerloggas Downs towards the site. Views are possible across the landscape of rough grassland and restored heathland towards large tips and quarry workings and scattered wind energy schemes, with settlement focussed on the lower slopes.
- 3.90 From the open access areas further afield including from Hensbarrow Downs and Roche Rock to the north and Goss Moor to the north-west, views are possible across the intervening landscape, towards the distant tips, which form the horizon and restrict wider views, including towards the site.
- 3.91 However, from the more distant and elevated open access areas, towards the fringes of the study area, including from Helman Tor to the north-east, as illustrated in **Viewpoint 10** (**Figures 22A-22D**), wider views are possible. From this elevated and open location, expansive views are possible across the lower varied undulating farmland and wooded landscape, including towards the distant tips on the horizon, punctuated by scattered operational wind energy schemes. Although distantly perceived, wind energy schemes, however, do not dominate or largely influence the expansive view.

#### Major Roads

- 3.92 Numerous **low** sensitivity major roads pass through the study area, the closest, the A3058, crossing the study area from the west to the east, passing through St Austell to the south-east, approximately 1.6km to the south of the site at its closest point.
- 3.93 Largely enclosed by development and mature vegetation, it is only from a few selected open locations including as the A3058 emerges from the enclosure of St Austell to the south and south-east, as illustrated in **Viewpoint 2 (Figures 14A-14D)**, that more expansive views across the wider industrial and farming landscape, scattered with operational wind energy schemes, are possible.
- 3.94 The A391 also crosses the study area from the north-east, where it connects with the A30 at a junction, to the south-east passing through St Austell, approximately 2.3km to the east of the site at its closest point. Largely enclosed by development and mature vegetation, it is only from a few selected open locations, that more expansive views across the wider industrial and farming landscape, scattered with operational wind energy schemes, are possible.
- 3.95 Further afield, including the A30 which crosses the study area from the north-east to the north-west, the major roads are largely enclosed by rolling landform, adjacent development and surrounding mature vegetation. Although views of the scattered operational wind energy schemes are possible from the network of major roads, they do not dominate.

#### Minor Roads

- 3.96 Numerous **medium-low** sensitivity minor roads cross the study area and are largely enclosed by mature linear tree belts, hedgerows and hedgebanks. It is only from selected high points, or gaps in the enclosure, that views into the surrounding farmland and industrial influenced landscape, including scattered operational wind energy schemes, are possible.
- 3.97 The closest minor road, Greensplat Road, occurs immediately to the east of the site and passes from roughly north to south, including connecting with the permissive quarry road to the north. As illustrated in **Viewpoint 11 (Figures 23A-23C)**, Greensplat Road is largely lined by linear vegetation, including hedgebanks, which helps to restrict views into the surrounding agricultural landscape.
- 3.98 The permissive quarry road occurs to the north of the site and heads roughly to the west and north, passing through the heavily industrial influenced landscape, including adjacent to operational wind energy schemes. As illustrated in **Viewpoint 4 (Figures 16A-16D)**, views are possible from an open location along the permissive quarry road, across the undulating landscape, including towards operational wind energy schemes.
- 3.99 Variations in the dramatically sloping landform associated with the industrial landscape helps to limit views towards the site from the surrounding network of minor roads, although views towards the scattered operational single wind turbines are often possible.
- 3.100 Further afield, along the network of minor roads that cross the study area, it is only from selected open and/or elevated locations, that more expansive views over the surrounding undulating agricultural and wooded landscape, punctuated with scattered wind energy schemes, including the dramatic distant tips, are possible. Selected views over the

surrounding landscape are possible and although distantly perceived, wind energy schemes, do not dominate or largely influence the expansive view.

## Railway Lines

3.101 A number of **low** sensitivity railway lines cross the study area, connecting and passing through St Austell to the south-east, with views generally restricted by a combination of adjacent development, variations in landform and mature vegetation.

# 4. Design and Mitigation Measures

4.1 Mitigation measures to help minimise the potential impacts and effects have been incorporated into the distinct phases of the proposed development, including during the design process (designed in mitigation) and 'additional' landscape measures, focussed on improving the entrance to the site off Greensplat Road and enhancing biodiversity, and during construction, operation and decommissioning.

## **Designed in Mitigation**

- 4.2 A balance between technical and environmental constraints, effectiveness and landscape and visual impacts were the key factors in determining the selection and siting of the proposed wind turbine for the site.
- 4.3 In addition, the landscape guidance for the *St Austell or Hensbarrow China Clay Area* (*CCA27*), in which the proposed development will be situated, has been referenced to aid in the overall design. The relevant guidance to protect, conserve and manage landscape character for the *St Austell or Hensbarrow China Clay Area* (*CCA27*) includes:
  - Identify and conserve important historic and ecological features while achieving balance with the needs of current industry;
  - Conserve the small-scale mining settlements around St Dennis, including the remaining medieval strip-field patterns;
  - Ensure the distinctive conical and flat-topped spoil heaps, turquoise-coloured settling
    pools, and other industrial landscape features remain prominent as distinctive features
    of the landscape;
  - Conserve and protect important historic features including the Bronze Age barrows, medieval field patterns, and extensive mining relics, providing interpretation features where appropriate;
  - Protecting historic features which act as local landmarks (such as Roche Rock) and their settings from adverse development;
  - Maintain and restore Cornish hedges, stone walls, hedgerows and other boundary features, while respecting the pattern of ancient field systems and reflecting local variations in style, using locally sourced granite where possible;
  - Promote the use of local stone (including in new developments);
  - Retain the open views out of the landscape as well as views of prominent features associated with the mining industry;

- Seek opportunities to create green infrastructure links to contribute to nature recovery networks and provide sustainable opportunities for travel, access and recreation;
- Create opportunities to integrate former workings within the wider landscape by linking new landscape proposals with existing hedgerow patterns, woodland and copse planting using appropriate native species;
- Continue habitat restoration projects, ensuring newly created habitats use native species, are appropriately located, and are connected to nearby habitats through ecological corridors including hedges;
- The drive for new tree planting (e.g. Forest of Cornwall, England Tree Action Plan) provides opportunities to strengthen and connect woodland habitats, but must respect landscape character and be sensitive to the local ecological conditions; and
- Ensure plans for new renewable energy developments consider landscape and visual
  effects (including cumulative effects), especially on south-facing slopes and areas of
  high ground which are favourable for solar and wind development. Site in appropriate
  locations and mitigate impacts through careful design.

Mitigation through the selection of the proposed wind turbine

- 4.4 The size and model of the proposed wind turbine was selected to provide a substantial amount of electricity generation.
- 4.5 The proposed wind turbine will also be the same size as the nearby consented single turbines at Burngullow, East Karslake, Longstones, Higher Goonamarth 2 and Wheal Martyn.

Mitigation through siting of the proposed wind turbine

- The proposed wind turbine will be sited within a regular sloping field, within a wider industrial working landscape already influenced by other operational, consented and potentially pending planning wind turbine developments. The proposed wind turbine will appear as an additional vertical moving element within a landscape already influenced by similar sized wind energy schemes.
- 4.7 The proposed wind turbine will be positioned away from high sensitivity receptors, such as residential properties and settlements.
- The siting of the proposed wind turbine has also been designed to have minimal effects on any landscape elements. Existing tracks and access points will be used, although there will be loss of grassland for the new access tracks and the proposed wind turbine foundation. There will be a loss of hedgebanks at the existing access and along Greensplat Road for safety reasons and to allow for visibility during construction. As a result, during construction, there will be limited removal of vegetation, with associated low impacts and minor adverse effects on landscape elements and landscape pattern. The effects will be not significant. However, as illustrated in Viewpoint 11 (Figures 23A-23C), the hedgebanks will be replaced following completion of construction activities and planted with a diverse native mix of trees and shrubs/hedgerow planting, which will provide benefits over time to landscape elements, landscape pattern as well as for biodiversity. Over time, these improvements to landscape elements and landscape pattern, focussed at the entrance and along Greensplat Road will provide low impacts and minor beneficial effects. The effects will be not significant.

## 'Additional' Landscape Mitigation Measures

- 4.9 To reinforce the vegetation pattern surrounding the proposed development, as well as provide nature conservation and biodiversity enhancements, additional landscape mitigation measures have been proposed.
- 4.10 The additional landscape mitigation measures have been informed through liaison and agreement with the ecologist and with reference to the Ecological Impact Assessment<sup>24</sup>, BNG Assessment<sup>25</sup> and the Green Infrastructure Statement<sup>26</sup> that accompanies this planning application.
- 4.11 The 'additional' landscape (and ecology) mitigation measures include:
  - New neutral habitat grassland habitat in suitable locations, including within existing modified grassland;
  - · New native mixed scrub planting; and
  - New native mixed tree and shrub/hedgerow planting on top of Cornish hedgebanks at the entrance and along Greensplat Road.

#### Construction

- 4.12 Mitigation measures, relevant to the LVIA during the construction period, include:
  - Vegetation loss, including hedgerows, tree and shrub removal will be kept to a
    minimum and any vegetation lost during construction at the access and along
    Greensplat Road will be replaced following completion of construction activities. The
    Cornish hedgebank at the entrance and along Greensplat Road will be reinstated
    following completion of construction activities. Hedgebank recreation should follow an
    accepted methodology such as the best practice method produced by the Guild of
    Cornish Hedgers<sup>27</sup>; and
  - All temporarily disturbed and excavated areas will be reinstated following the completion of construction activities.

#### Operation

4.13 Given the scale of the proposed wind turbine, there are few realistic mitigation measures that could be introduced, which would help limit the visibility of the proposed development within the wider landscape during the operational period. A new tall structure with moving vertical elements will be introduced which, due to its size and scale, will be perceived over a relatively wide area, largely in combination with nearby operational, consented and pending planning wind energy schemes.

<sup>&</sup>lt;sup>24</sup> Western Ecology, Ecological Impact Assessment, Land at Higher Biscovillack, St Austell, Cornwall, November 2025

<sup>&</sup>lt;sup>25</sup> Western Ecology, Biodiversity Net Gain Strategy, Land at Higher Biscovillack, St Austell, Cornwall, November 2025

<sup>&</sup>lt;sup>26</sup> CleanEarth, Green Infrastructure Statement

<sup>&</sup>lt;sup>27</sup> The Guild of Cornish Hedgers, Code of Good Practice, Building and Repairing Cornish Hedges, 2001 (available at <a href="www.cornishhedgers.org.uk">www.cornishhedgers.org.uk</a>)

4.14 However, it should be acknowledged that the operational effects of the proposed development will be temporary, given the 35 year operation period.

## **Decommissioning**

- 4.15 The proposed development will be operational for 35 years, at the end of which it will be dismantled and removed and the site reinstated to previous conditions.
- 4.16 Mitigation measures, relevant to the LVIA during the decommissioning period will be similar to the construction period and will include:
  - Vegetation loss, including hedgerows, tree and shrub removal will be kept to a minimum; and
  - The decommissioning compound and all disturbed and excavated areas will be
    reinstated following the completion of decommissioning activities. The concrete
    foundations will be broken up and removed from the site and underground cabling will
    be removed or left in-situ, covered to make up levels and spread with recovered
    subsoil and topsoil, appropriate to re-establish previous conditions.
- 4.17 Following completion of decommissioning activities, the site will revert to its previous agricultural use.

# 5. Construction and Decommissioning Impacts and Effects

- 5.1 Construction activities that have the potential to affect the landscape character and views from visual amenity receptors include:
  - Deliveries to site and vehicle movements on and off-site;
  - Construction of short stretches of new access roads, connecting the existing tracks to the base of the proposed wind turbine, including improvements to existing access off Greensplat Road;
  - Presence of crane (maximum of 6 days in good weather conditions) to erect the proposed wind turbine;
  - Erection of proposed wind turbine tower, installation of turbine nacelle and blades; and
  - Reinstatement works to areas disturbed by construction activities.
- 5.2 Decommissioning activities that have the potential to affect the landscape character and views from visual amenity receptors include:
  - Presence of crane (maximum of 6 days in good weather conditions) to dismantle and remove the proposed wind turbine; and
  - Dismantling and removal of proposed wind turbine and associated infrastructure.
- 5.3 From the description of the construction and decommissioning activities, as outlined above, any effects on landscape character and visual amenity receptors and their views during the construction and decommissioning phases will be temporary in duration.
- 5.4 During construction, there will be a permanent loss of grassland for the new access tracks and the proposed wind turbine foundation. There will be a temporary loss of hedgebanks

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at the existing access and along Greensplat Road for safety reasons and to allow for visibility during construction. As a result, during construction, there will be limited removal of vegetation, with associated **low impacts** and **minor adverse** effects on landscape elements. The effects will be **not significant**. However, as illustrated in **Viewpoint 11** (**Figures 23A-23C**), the hedgebanks will be replaced following completion of construction activities and planted with a diverse native mix of trees and shrubs/hedgerows, which will provide benefits, over time, to landscape elements, landscape pattern as well as for biodiversity. Over time, these improvements to landscape elements and landscape pattern, focussed at the entrance and along Greensplat Road will provide **low impacts** and **minor beneficial** effects. The effects will be **not significant**.

- Other short-term impacts and effects will be associated with crane movements, only present on site for a likely period of 6 days.
- Therefore, the short-term, reversible and temporary nature of the construction and decommissioning activities on both landscape character and visual amenity receptors and their views will ensure that the impacts will be **low** and the effects will be **minor adverse**. The effects will be **not significant**.

# 6. Operational Impacts and Effects

#### Overview

- Zones of Theoretical Visibility (ZTVs) have been generated calculated to a hub heights of 76.5m and blade tips of 135m covering the 20km radius study area (**Figures 9 and 10**) and the 10km radius study area (**Figures 11 and 12**).
- The ZTVs are calculated using specialist software. Further details on the production of the ZTVs are found in **Appendix B**.
- 6.3 The ZTVs illustrate the areas of potential visibility of the proposed wind turbine, based on landform data only across the study area. The ZTVs do not take into account the screening effects from local features such as subtle variations in landform, vegetation cover or development. Therefore, the ZTVs represent the 'worst-case' scenario based on the maximum potential hub height and blade tip of the proposed wind turbine but are a starting point for assessing the operational impacts and effects of the proposed development on landscape character and visual amenity receptors and their views.
- 6.4 Within the 20km radius study area, as illustrated in **Figures 9 and 10**, the wider extent of potential visibility is broadly spread throughout the study area, with largely only selected high points with the potential to perceive the proposed development and barely any potential indirect influence on the Cornwall National Landscape.
- 6.5 Within the 20km radius study area, there is a noticeable difference and extensive reduction in potential visibility of the proposed wind turbine when comparing hub height and blade tip extents, with no potential visibility (for hub height) to the north, north-west and west.
- Within the 10km study area, as illustrated in **Figures 11 and 12**, the extent of potential visibility is broadly limited to the north-east, east, south and south-west, although the

- location of the proposed development in combination with the surrounding undulating landform, dominated by adjacent tips, ensures that the potential visibility of the proposed wind turbine will be limited to the north, north-west and west.
- 6.7 As illustrated on the ZTVs, the main potential extent of visibility of the proposed wind turbine is within close proximity (within 2km radius), although this very quickly dissipates with distance, with wider visibility (beyond 5km) focussed on selected high points and ridges to the north-west, west, south and south-west only.
- There will also be limited potential visibility from the fringes of St Austell to the south and south-east. The large expanses of urban areas, including intervening buildings and mature vegetation that predominates, will help to restrict the potential visibility of the proposed development although these factors are not reflected in the ZTV analysis.
- There will also be a substantial difference between the potential visibility between hub height and blade tip, as illustrated in the ZTVs. The difference between the predicted extent of visibility between the maximum blade tip and hub height ZTVs is particularly noticeable to the north, north-west and west as well as throughout the study area, where the potential extent of visibility is substantially reduced between the blade tip and hub height.

#### Viewpoint Analysis

- 6.10 Eleven viewpoints, their location illustrated in **Figures 11 and 12**, have been selected to help inform the LVIA and help determine and describe the magnitude of impact and level of effect, including the significance of effect, of the proposed development.
- 6.11 The viewpoints represent the most 'exposed' publicly accessible views of the proposed development, from the most 'sensitive' receptors, broadly surrounding the proposed wind turbine from all directions of view.
- 6.12 To illustrate the predicted views of the proposed wind turbine, photographic views, wireframes and photomontages have been produced for <u>all</u> of the viewpoints. The other wind energy schemes within the study area are also shown on all wireframe views.
- 6.13 Details of the preparation of the viewpoint graphics are included in **Appendix B**.

## **Operational Impacts and Effects on Landscape Character**

#### Landscape Elements

- 6.14 The proposed wind turbine will have minimal effects on any landscape elements.
- 6.15 There will be loss of pasture grassland for the new access tracks and the proposed wind turbine foundations, with associated **low impacts** and **minor adverse** effects on landscape elements. The effects will be **not significant**.
- There will be a temporary loss during construction of the intermittently vegetation topped hedgebanks at the entrance to the proposed development, including along Greensplat Road for safety reasons and to allow for visibility during construction. However, as illustrated in **Viewpoint 11 (Figures 23A-23C)**, the hedgebanks will be replaced following completion of construction activities and planted with a diverse native mix of trees and

- shrubs/hedgerow planting, which will provide benefits, over time, to landscape elements and landscape pattern.
- 6.17 In addition, the proposed enhancements to grassland and new native mixed planting will provide benefits to biodiversity.
- 6.18 Over time, these improvements to landscape elements and landscape pattern, including focussed at the entrance and along Greensplat Road will provide **low impacts** and **minor beneficial** effects. The effects will be **not significant**.

## Landscape Relevant Designations

- 6.19 The proposed development will <u>not</u> directly affect any landscape relevant designations.
- 6.20 However, with reference to the ZTVs (**Figures 9-12**), there will be the potential for indirect impacts and effects on the setting of selected landscape relevant designations as a result of the operation of the proposed development, as follows:
  - The high sensitivity Cornwall National Landscape occurs approximately 4.2km to the south of the proposed development at its closest point, extending to the southern fringes of the 10km radius study area. The Cornwall National Landscape also extends over the wider 20km radius study area including to the north, north-east, east, south and south-west, largely focussed along the coastline but also extending across the distinctive upland landscape of Bodmin Moor to the north-east.

Intermittently within the ZTVs, the proposed development has the potential to indirectly influence the setting of the "landscape character and natural beauty of the AONB."

As illustrated in **Viewpoint 1** (**Figures 13A-13D**), from an open and elevated public right of way on the fringes of the National Landscape to the south-east, the proposed development has the potential to be perceived on the distant slopes. Set amidst and in the same context as other operational single wind energy schemes.

The proposed development will be selectively viewed, from open and elevated locations, within the National Landscape, as an additional vertical moving element within the inland industrial influenced landscape. The proposed development will be perceived within a landscape already influenced by other nearby operational wind energy schemes. The proposed development will add another vertical moving element to the landscape, when perceived from selected open and elevated locations on the fringes of the National Landscape.

The proposed development, although selectively perceived within the National Landscape will not however, as outlined within the LSA, affect the key landscape characteristics of Area 9: South Coast Central or the perception of "the majestic scale of the cliffs, far reaching panoramic views from the rugged cliff tops, the wild character of the cliff tops, and the prominence and skyline of pre-historic features from the largest Bronze Age burial mound in Cornwall at Carne Beacon to the County's largest prehistoric enclosure at the Iron Age cliff castles at Dodman, and the narrow winding lanes with high hedges and blind corners."

At worst, the introduction of an additional moving and vertical element on the setting of the **high** sensitivity National Landscape, the magnitude of impact will be **negligible**, the level of effect will be **minor-negligible**. The effects will be **not significant**.

However, for the vast majority of the National Landscape, including the wider National Landscape within the 20km radius study area, the proposed development will be difficult to perceive and will not influence the key landscape characteristics of the nationally recognised landscape. For the majority of the National Landscape, the

magnitude of impact will be **no change**, the level of effect will be **neutral**. The effects will be **not significant**.

- The high sensitivity Cornwall and West Devon Mining Landscape World Heritage Site (WHS) occurs approximately 4km to the east of the proposed development at its closest point, extending further to the east and north-east.
  - Excluded from the ZTVs, there will be no potential influence on its setting as a result of the proposed development. With reference to CC Policy 24, the proposed development will not "result in harm to the authenticity and integrity of the Outstanding Universal Value" of the WHS. The magnitude of impact will be **no change**, the level of effect will be **neutral**. The effects will be **not significant**.
- The medium-high sensitivity Camel and Allen Valleys AGLV, approximately 9.2km to the north of the proposed development at its closest point, extending to the northern fringes of the study area, is excluded from the ZTVs and will experience no indirect influence on its setting as a result of the proposed development. The magnitude of impact will be no change, the level of effect will be neutral. The effects will be not significant.

The **medium-high** sensitivity Upper Fal Valley AGLV, approximately 4.6km to the south-west of the proposed development at its closest point, extending to the south-western fringes of the study area and the Helman Tor and Luxulyan Valley AGLV, approximately 5.3km to the east of the proposed development at its closest point, extending to the north-eastern fringes of the study area (including the candidate AGLVs) are intermittently within the ZTVs and will have the potential for their setting to be indirectly influenced by the proposed development.

Within the Upper Fal Valley AGLV and the Helman Tor and Luxulyan Valley AGLV, the potential influence of the proposed development on their setting will be largely restricted to selected high points and ridges within the predominantly undulating and well-vegetated landscapes of the AGLVs. Such limited influence of the proposed development will easily become 'lost' with distance and due to the screening by the undulating landform including tips and numerous woodlands and thick hedgerows that are characteristic of the intervening landscape.

As illustrated in **Viewpoint 10 (Figures 22A-22D)**, within the Helman Tor and Luxulyan Valley AGLV, even from a high point adjacent to Helman Tor, the potential visibility of the proposed development will be extremely restricted. The proposed development, perceived barely above the distant horizon, will be difficult to 'pick out' within a landscape already indirectly influenced by scattered operational wind energy schemes.

In reality a combination of distance and screening by intervening landform, development and mature vegetation will ensure that any indirect influence on the setting of the AGLVs within the study area, as a result of the proposed development, will be very difficult to ascertain.

In summary, the proposed development although with the potential to be perceived (often, at worst, just blade tips only) from selected distant and high points within the AGLVs will not affect, with reference to CC Policy 23, "the character and distinctive landscape qualities of such areas." A combination of distance and intervening undulating and well-vegetated landform will ensure that even if distantly perceived, the proposed development will not influence or affect the special qualities and value of these locally recognised landscapes.

At worst, the magnitude of impact on these **medium-high** sensitivity landscapes will be **negligible**, the level of effect will be **negligible**. The effects will be **not significant**.

Although in reality for the vast majority of the AGLVs, the proposed development will have no discernible influence on their setting and the magnitude of impact will be **no change**, the level of effect will be **neutral**. The effects will be **not significant**.

Only the fringes of the high sensitivity Trewithen Registered Park and Garden, approximately 5km to the east of the proposed development at its closest point and Heligan Registered Park and Garden, approximately 6.7km to the south of the proposed development at its closest point, are within the ZTVs. However, a combination of distance and mature vegetation within and on the boundaries of the parks and gardens and within the wider undulating landscape will ensure there will be no indirect influence on their setting as a result of the proposed development.

With reference to CC Policy 24, the proposed development will not adversely affect "the design, character, appearance and historic significance of historic parks and gardens."

The magnitude of impact will be **no change**, the level of effect will be **neutral**. The effects will be **not significant**.

 The high sensitivity Conservation Areas at Pentewan, approximately 6.9km to the south-east, Grampound, approximately 8.6km to the south-west, Tywardreath, approximately 8.2km to the east and Mevagissey, approximately 9.3km to the south are excluded from the ZTVs with no potential indirect influence on their setting as a result of the proposed development.

Even from the closest Conservation Area at, St Austell, approximately 1.9km to the south-east and Charlestown, approximately 4km to the south-east, which are intermittently within the ZTVs, the density and screening provided by the surrounding development will ensure there will be no indirect influence on their setting as a result of the proposed development.

With reference to CC Policy 24, the proposed development will therefore not affect "the special character and appearance of Conservation Areas..."

The magnitude of impact will be **no change**, the level of effect will be **neutral**. The effects will be **not significant**.

 No high sensitivity Ancient Woodlands will be directly affected by the proposed development. The closest, Park Matthews Wood, approximately 4.5km to the southeast, within the Cornwall National Landscape.

With reference to CC Policy 23, the proposed development will not involve "the loss or deterioration of Ancient Woodland." The magnitude of impact will be **no change**, the level of effect will be **neutral**. The effects will be **not significant**.

#### Landscape Character Areas

- 6.21 With reference to the ZTVs (**Figures 11-12**) and the viewpoints (**Figures 13-23**), the main impacts and effects as a result of the operation of the proposed development will be on the landscape character areas in close proximity.
- 6.22 The proposed development is within the **medium-low** sensitivity *St Austell or Hensbarrow China Clay Area (CCA27)* which extends in a broad band from east to west across the centre of the study area, extending to the north-western fringes of the study area.
- 6.23 The site is within the *St Austell or Hensbarrow China Clay Area (CCA27)*, which extends in a broad band from east to west across the centre of the study area, extending to the north-western fringes of the study area.

- 6.24 Already influenced by scattered single Band B (between 26-60m in height to blade tip) and single Band C (between 61-99m in height to blade tip) operational wind energy schemes, the proposed development will introduce an additional moving vertical element to the agricultural fringes of this varied, dramatic landscape of china clay waste tips and areas of rough vegetation, characterised by open-pit mining.
- As illustrated in Viewpoint 4 (Figures 16A-16C), Viewpoints 6 to 8 (Figures 18A-18C to 20A-20C) and Viewpoint 11 (Figures 23A-23C), within close proximity, the proposed development will be perceived as a prominent single moving vertical element, separated but often in combination with other nearby single operational wind energy schemes, within the agricultural fringes of this wider industrial influenced landscape.
- Variable screening, even in close proximity, provided by intervening development, vegetation and variations in the industrial landform, as illustrated in **Viewpoint 9 (Figures 21A-21C)**, will however help to reduce the influence of the proposed development, although still at least partially perceived.
- As illustrated in **Viewpoints 2 and 3 (Figures 14A-14D and 15A-15D)**, the proposed development will be perceived within a wider industrial landscape where it will add an additional vertical moving element to a landscape already scattered with other operational wind turbines. The proposed development will be perceived as an additional vertical element within a landscape, separated but in combination with and influenced by other operational wind energy schemes.
- 6.28 With distance, these subtle variations in the characteristic undulating landform, including screening provided by intervening tips and spoil heaps, will help to restrict the influence of the proposed development within the *St Austell or Hensbarrow China Clay Area (CCA27)*, as illustrated on the ZTVs. Even if distantly perceived, the proposed development will be barely viewed as an additional vertical element within a working industrial landscape, already influenced by scattered wind energy schemes, its addition difficult to ascertain within the wider landscape of the *St Austell or Hensbarrow China Clay Area (CCA27*).
- In summary, the operation of the proposed development will introduce a new vertical moving element in the agricultural fringes of the vibrant and dynamic industrial landscape of the St Austell or Hensbarrow China Clay Area (CCA27). The proposed development will be perceived particularly within close proximity as a prominent vertical element, but set within an industrial changing landscape, reasonably tolerant of change, the proposed development will not feel 'out of place.'
- 6.30 At worst, the magnitude of impact on this **medium-low** sensitivity landscape will be **medium-high**, the level of effect will be **moderate-minor adverse**, although these effects will dramatically reduce with distance, as well as the screening provided by the surrounding dramatic industrial landscape. The effects will be **not significant**.
- 6.31 In addition, within the RELS Assessment, the *St Austell or Hensbarrow China Clay Area* (RLU13) has been identified as having a 'moderate-high' overall landscape sensitivity for Band D wind energy development (between 100-150m in height to blade tip).
- 6.32 Although the RELS Assessment recognises that the *St Austell or Hensbarrow China Clay Area (RLU13)* is vulnerable to change from wind energy development, it does acknowledge that there may be some limited opportunities to accommodate Band D wind turbines without significantly changing the landscape character when great care is taken in siting and design.

- 6.33 The RELS Assessment also states that the "visually prominent natural granite outcrops of Roche and St Dennis would be highly sensitive to wind energy development." As illustrated on the ZTVs, Roche and St Dennis are excluded from the ZTVs and will experience no indirect influence on their setting as a result of the proposed development.
- 6.34 The proposed development also largely follows the relevant strategic guidance for wind energy development within the *St Austell or Hensbarrow China Clay Area (RLU13)* including:
  - Ensuring that any new Band C or D turbines are sited well away from any Band A or B turbines, so that the different size classes are not seen together;
  - Ensure that any new developments are similar in terms of siting, layout and relationship to key landscape characteristics, so as to present a simple image that relates clearly to landscape character;
  - Avoid close juxtaposition of different turbine designs and heights within the same banding, aiming instead for a consistent design and height in any given area;
  - Locate turbines within the mining landscapes in the centre of the RLU (away from the
    outward presenting edge of the clay area) and in the areas of more regular field
    patterns which tend to occur on higher ground away from the river valleys and older
    settlements;
  - Site turbines away from the natural granite outcrops of Roche and St Dennis and the outer boundary tips and landforms of the area so that these are retained as distinctive features on the skyline;
  - Avoid locating the largest scale wind energy development in areas of very small, ancient fields (especially in the east at Stenalees and Penwithick, in the north around St Dennis, and in the south at Goverseth and Carpalla);
  - Ensure wind energy development does not dominate, or prevent the understanding and appreciation of, historic landmarks on the skyline, including St Stephen's Beacon, St Dennis church and the 15<sup>th</sup> century chapel on the top of Roche Rock;
  - Consider how turbines fit with existing skyline features when siting and designing wind development – turbines may be better sited on the top of flat tips than close to distinctive conical forms, and away from the outward presenting edge of the clay area; and
  - Ensure wind energy development does not dominate the huge pale spoil heaps, extensive turquoise lagoons and settling tanks, Trenance viaduct on the north edge of St Austell, Gover Viaduct, the Norman towers of both St Dennis and Roche, Roche Rock and Hensbarrow Beacon as distinctive features of the landscape.
- 6.35 With reference to the ZTVs (**Figures 11-12**), the proposed development has the potential to indirectly influence the landscape character areas further afield.
- 6.36 To the north-west, north and north-east of the proposed development, extending in a broad band from east to west, including to the north-eastern fringes of the study area, is the **medium** sensitivity (**medium-high** within the AGLV) *Mid Cornwall Moors (CCA26)*.
- 6.37 Largely excluded from the ZTVs with only the north-eastern fringes close to the boundary of the study area with the potential to perceive the proposed development, as illustrated in **Viewpoint 10 (Figures 22A-22D)**, even from selected open locations within the open plateau landscape, comprising of moorland, rough grazing and pastoral farmland, largely only the blade tips of the proposed development will have the potential to be perceived. Influenced by scattered generally single and small-clusters of operational Band C and

Band D wind energy schemes, the addition of the proposed development, barely perceived above the distant tips will largely not influence the character of the largely intact and well-managed but diluted by pylons, the dominance of transport corridors and large-scale industry of the *Mid Cornwall Moors (CCA26)*. At worst, the magnitude of impact will be **negligible**, the level of effect will be **negligible adverse**. The effects will be **not significant**. Although, in reality, for the vast majority of the *Mid Cornwall Moors (CCA26)*, the influence of the proposed development will easily go unnoticed and the magnitude of impact will be **no change**, the level of effect will be **neutral**. The effects will be **not significant**.

- 6.38 Further to the north of the proposed development, extending to the fringes of the study area is the **medium-high** sensitivity *Camel and Allen Valleys (CCA29*), which is also partly within the locally recognised Camel and Allen AGLV, towards the northern fringes of the study area. Excluded from the hub height ZTV and with only a few scattered areas with the potential to perceive the blade tip only, the proposed development will easily go unnoticed and will not influence the key characteristics of the landscape. The magnitude of impact will be **no change**, the level of effect will be **neutral**. The effects will be **not significant**.
- 6.39 To the east of the proposed development, extending to the north-eastern, eastern and south-eastern fringes of the study area is the **medium-high** sensitivity, **high** sensitivity within the nationally recognised landscapes, *St Austell Bay and Luxulyan Valley (CCA30*).
- 6.40 Intermittently within the ZTVs, although largely excluded from the hub height ZTV, only the blade tips of the proposed development will have the potential to be intermittently perceived from within the *St Austell Bay and Luxulyan Valley (CCA30)*.
- The potential visibility of the proposed development will be extremely restricted and it will be difficult to 'pick out' within a landscape already indirectly influenced by scattered operational wind energy schemes. At worst, the magnitude of impact will be **negligible**, the level of effect will be **negligible adverse**. The effects will be **not significant**. However, barely viewed as an additional vertical element (and only just the blade tips) within a landscape and views already influenced by other scattered wind energy schemes, the addition of the proposed development will not significantly affect the key characteristics and features of the landscape character area. Although with the potential to be distantly and selectively perceived, for the vast majority of the *St Austell Bay and Luxulyan Valley (CCA30)*, the magnitude of impact will be **no change**, the level of effect will be **neutral**. The effects will be **not significant**.
- 6.42 To the south of the proposed development, extending to the southern fringes of the study area is the **medium** sensitivity, increasing to **medium-high** sensitivity within the AGLV and **high** sensitivity within the nationally recognised landscapes, *Gerrans, Veryan and Mevagissey Bays (CCA22)*.
- Intermittently within the ZTVs, the proposed development will have the potential to be distantly perceived from selected open and elevated locations within the inland plateau of irregular mixed farmland, scattered with operational single and small-clusters of wind turbines (outside the National Landscape) varying from Band B to Band D, away from the more enclosed sweeping coastal bays. As illustrated in **Viewpoint 1 (Figures 13A-13D)**, from selected elevated and open locations within the inland agricultural landscape, distant views towards the proposed development, set amidst an industrial landscape, scattered with other operational wind energy schemes will be possible.

- The proposed development will be selectively and distantly viewed from within the *Gerrans, Veryan and Mevagissey Bays (CCA22)* as an additional vertical element within the inland industrial influenced landscape, within a landscape already influenced by other scattered operational wind energy schemes. At worst, the magnitude of impact will be **negligible**, the level of effect will be **negligible adverse** to **minor-negligible** (within the **medium-high** and **high** sensitivity landscapes). The effects will be **not significant**. However, the addition of the proposed development will not significantly affect the key characteristics and features of the landscape.
- To the south-west of the proposed development, extending to the south-western fringes of the study area is the **medium-high** sensitivity *Truro and Tresillian Valleys (CCA20)*.

  Excluded from the ZTVs, there will be no potential indirect influence on the key characteristics of the landscape. The magnitude of impact will be **no change**, the level of effect will be **neutral**. The effects will be **not significant**.
- 6.46 To the south-west of the proposed development, extending to the south-western fringes of the study area is the **medium-high** sensitivity *Fal Valley (CCA21)*, which is also largely within the Upper Fal Valley AGLV and includes the Grampound Conservation Area.
- Intermittently within the ZTVs, the proposed development will have the potential to be distantly perceived from a few selected open locations within the undulating plateau landscape, separated by intimate and well-vegetated valleys. The proposed development will have the potential to be selectively and distantly perceived as an additional vertical element within the distant inland industrial influenced landscape. At worst, the magnitude of impact will be **negligible**, the level of effect will be **negligible adverse**. The effects will be **not significant**. However, the addition of the proposed development will not significantly affect the key characteristics and features of the landscape and will largely go unnoticed, through a combination of distance and screening by surrounding mature vegetation within the predominantly mixed agricultural and well-vegetated landscapes.
- To the south-west and west of the proposed development, extending to the western fringes of the study area is the **medium** sensitivity *Upper Fal Valleys (CCA19)*. Largely excluded from the ZTVs, it will only be from the southern and eastern fringes of this gentle undulating plateau farmland landscape, separated by intimate and well-vegetated small river valleys that will have the potential to perceive mainly the blade tips of the proposed development only. The proposed development will have the potential to be selectively perceived in close proximity (and largely only the blade tips) as an additional vertical element within the inland industrial influenced landscape. At worst, the magnitude of impact will be **negligible**, the level of effect will be **negligible adverse**. The effects will be **not significant**. However, the addition of the proposed development will not significantly affect the key characteristics and features of the landscape and will largely go unnoticed, through a combination of distance and screening by surrounding mature vegetation within the predominantly mixed agricultural and well-vegetated landscape.
- 6.49 To the north-west of the proposed development, extending to the fringes of the study area is the **medium** sensitivity *St Newlyn East to St Columb Major (CCA25)*. Excluded from the hub height ZTV and with only a few scattered areas with the potential to perceive the blade tip only, the proposed development will easily go unnoticed and will not influence the key characteristics of the landscape. The magnitude of impact will be **no change**, the level of effect will be **neutral**. The effects will be **not significant**.

### Operational Impacts and Effects on Visual Amenity Receptors and their Views

An Overview of Visual Amenity Receptors and their Visibility within the Study Area

- 6.50 The operation of the proposed development will introduce a new tall vertical moving built element which will have the potential to be perceived by surrounding visual amenity receptors.
- 6.51 With reference to the ZTVs (**Figures 11-12**) and the viewpoints (**Figures 13-23**), the proposed development will be perceived over a limited area, potentially only from a few visual amenity receptors in close proximity and from open and/or elevated areas further afield.
- 6.52 The sensitive design and siting of the proposed development within the agricultural fringes of an undulating industrial landscape also help to restrict the influence of the proposed development on surrounding visual amenity receptors and their views.

Settlements - Towns, Villages and Hamlets

- 6.53 The majority of **high** sensitivity towns, villages and hamlets in the study area including Indian Queens and Nanpean to the north-west, St Stephens and Foxhole/Goverseth to the west, Roche to the north, Stenalees and Bugle to the north-east and Grampound to the south-west are excluded from the ZTVs and will experience no potential views towards the proposed development. The magnitude of impact will be **no change**, the level of effect will be **neutral**. The effects will be **not significant**.
- 6.54 Only the closest settlements focussed to the south-east and south are within the ZTVs and will have the potential to perceive the proposed development, including the large coastal town of St Austell approximately 1.4km to the south of the proposed development at its closest point, extending to the boundary with St Austell Bay to the south-east. Largely sloping down towards the coastal fringes and enclosed by surrounding development, it will only be from the fringes of St Austell that more expansive views inland towards the proposed development will be possible, as illustrated in Viewpoint 2 (Figures 14A-14D). Views over the adjacent undulating farmland, mineral workings and scattered wind energy schemes including the proposed development will be possible from the fringes of the settlement only, although at least partially limited by the mature vegetation on the settlement fringes. Although selectively perceived, the proposed development will not seem out of place within this working, industrial and changing landscape, already influenced by scattered operational wind energy schemes. The magnitude of impact will be medium, the level of effect will be moderate adverse. The effects will be not significant.
- 6.55 Situated on the A3058, the linear settlement of Trewoon is approximately 1.4km to the south of the proposed development at its closest point. Separated from the proposed development by sloping rising landform, views northwards, including towards the scattered operational wind energy schemes focussed within the industrial landscape will often be restricted. Glimpses towards the proposed development will be selectively possible, although largely limited by surrounding development and intervening sloping landform and at worst, the magnitude of impact will be **medium-low**, the level of effect will be **moderate-minor adverse**. The effect will be **not significant**.

#### Scattered Residential Properties

- 6.56 Individual **high** sensitivity residential properties and farms are scattered within the undulating landscape of the study area, often stretched out along the network of minor roads, or focussed along junctions, becoming sparser within the industrial landscape, including in close proximity to the proposed development.
- 6.57 Most of these houses and farms have restricted views into the surrounding landscape from a combination of vegetation enclosing many properties, screening provided by adjacent development, subtle variations in landform and by the numerous lines of mature vegetation, including hedgerows, linear tree belts, mature trees, small copses and woodlands, in the wider landscape. For the majority of **high** sensitivity scattered residential properties in the study area, the proposed development will not influence their views and the magnitude of impact will be **no change**, the level of effect will be **neutral**. The effects will be **not significant**.
- 6.58 There are however a number of residential properties within close proximity to the proposed development, which due to their proximity, will have the potential to perceive the proposed development.
- 6.59 Further detail on the close proximity residential properties, within 1km radius of the proposed development, can be found in the separate Residential Visual Amenity Assessment (RVAA) that accompanies the planning application.

#### National Trails

- 6.60 The **high** sensitivity South West Coast Path National Trail crosses the study area from the east to the south, approximately 4.9km to the south-east of the proposed development at its closest point.
- 6.61 Largely excluded from the ZTVs and following the dramatic coast, as well as skirting the settlement fringes of St Austell, views are focussed across the coast and coastal fringes, with views inland, including towards the proposed development, largely restricted by the adjacent undulating and well-vegetated agricultural landscape and extensive development around St Austell. From the vast majority of the National Trail, the proposed development will not be perceived, and the magnitude of impact will be **no change**, the level of effect will be **neutral**. The effects will be **not significant**.

## Recreational Routes

- 6.62 The **high** sensitivity Saints Way recreational route crosses the study area from the northeast to the east, approximately 6km to the east of the proposed development at its closest point.
- Only barely and intermittently within the blade tip ZTV to the north-east on the fringes of the study area, variable views are possible, including of the scattered generally single and small clusters of wind energy schemes in the surrounding landscape. The proposed development will however be difficult to 'pick out' and be largely indiscernible and the magnitude of impact will be **no change**, the level of effect will be **neutral**. The effects will be **not significant**.

### National Cycle Routes

- Numerous **high** sensitivity National Cycle Routes (NCRs) cross the study area, generally passing from the north-west, to the north-east, east, south-east and south, with many of the routes connecting at St Austell to the south-east.
- The majority of NCRs, particularly to the north-west, north and north-east, are excluded from the ZTVs, including the closest, NCR2, the Clay Trail, which passes approximately 1.1km to the east of the proposed development at its closest point, connecting with the Wheal Martyn Museum and Country Park. For the majority of the NCRs in the study area, the magnitude of impact will be **no change**, the level of effect will be **neutral**. The effects will be **not significant**.
- Even when intermittently within the ZTVs including to the east, south-east and south, the NCRs, which largely follow minor roads as well as purpose-built routes along former railway lines associated with the mining landscape, views from the NCRs towards the proposed development will be largely restricted. The immediate enclosure by vegetation, including Cornish hedges as well as the wider screening by development and undulating landform including the numerous and dramatic tips surrounding the proposed development and within the wider landscape will restrict the majority of views. The proposed development will easily go unnoticed in the view. At worst, the magnitude of impact will be **negligible**, the level of effect will be **minor-negligible**. The effects will be **not significant**. The proposed development however will easily go unnoticed in the view, particularly when perceived as a minor additional vertical element within a view already influenced by other single and small clusters of similar sized operational wind energy schemes.

## Places of Interest (including Country Parks)

- The **high** sensitivity and renowned Eden Project, approximately 4.8km to the east of the proposed development at its closest point and the Lost Gardens of Heligan, approximately 7.7km to the south are largely excluded from the ZTVs, with only the blade tips to have the potential to be barely perceived from their fringes. In reality, a combination of distance, subtle variations in landform and screening by surrounding development and mature vegetation would ensure there would be no views of the proposed development from these places of interest and the magnitude of impact will be **no change**, the level of effect will be **neutral**. The effects will be **not significant**.
- Even from the **high** sensitivity Wheal Martyn Museum and Country Park which occurs approximately 1.1km to the north-east, focussed around a museum and visitor centre, which is very well enclosed by woodland and adjacent sloping landform, there would be no potential views towards the proposed development. However, as illustrated in **Viewpoint 3 (Figures 15A-15D)**, it would only be from the 'look-out' point, focusing on a working quarry, where views into the wider mining landscape, including the proposed development, adjacent to the operational Greensplat wind turbine will be possible. Although perceived, the proposed development will not seem out of place within this working, industrial and changing landscape, already influenced by scattered operational wind energy schemes. The magnitude of impact will be **medium-low**, the level of effect will be **moderate-minor adverse**. The effects will be **not significant**.
- The **high** sensitivity Black Head National Trust owned land, occurs on the coastal fringes, approximately 7.5km to the south-east and is excluded from the ZTVs. The magnitude of impact will be **no change**, the level of effect will be **neutral**. The effects will be **not significant**.

Local Public Rights of Way, Bridleways and Cycleways

- There are **medium-high** and **high** (within the National Landscape) sensitivity scattered public rights of way, bridleways and cycleways present within the study area.
- 6.71 The public rights of way within the study area are generally enclosed by thick hedgerows and mature tree and woodland vegetation which will restrict most views into the wider rolling agricultural landscape, including towards the proposed development, set against a backdrop of existing tips, spoil heaps and quarries and often perceived in combination with other wind energy schemes.
- 6.72 Even from a **high** sensitivity public right of way on the fringes of the National Landscape to the south-east, as illustrated in **Viewpoint 1** (**Figures 13A-13D**), it will only be from selected open and elevated locations that expansive and distant views, including towards the proposed development, will be possible. Set amidst scattered operational wind energy schemes, the proposed development will be viewed from the public right of way. At worst, the introduction of an additional moving and vertical element on the views from the **high** sensitivity public right of way, in the National Landscape, the magnitude of impact will be **negligible**, the level of effect will be **minor-negligible adverse**. The effects will be **not significant**.
- 6.73 It will generally only be from the **medium-high** sensitivity public rights of way in close proximity that will experience exposed views towards the proposed development.
- An analysis of the closest **medium-high** sensitivity public rights of way within 1km radius of the proposed development, including the location of the viewpoints focussed on the close proximity public rights of way, is illustrated in **Figure 8**.
- 6.75 The closest **medium-high** sensitivity public rights of way to the proposed development include:
  - Public right of way (424/4/1) which connects Greensplat Road to the south-east of the proposed development, broadly heading eastwards towards Ruddlemoor. Wider views, including towards the proposed development, will be largely enclosed by the intervening well-vegetated tip. Even as the public right of way follows a sunken track heading towards Boskell Farm and Riding Stables, it will only be from the few gaps in this enclosure such as gateways that views across the intervening fields, towards the nearby well-vegetated tip will be possible. As illustrated in Viewpoint 9 (Figures 21A-21C), only the blade tips of the proposed development will have the potential to be glimpsed above the intervening tip, adjacent to the operational single wind turbine at Greensplat from a gateway and gap in enclosure. At worst, the magnitude of impact will be low, the level of effects will be minor-negligible adverse. The effects will be not significant. However for the majority of the public right of way, the proposed development will not be perceived and influence the view;
  - Public right of way (424/5/1) connects with Greensplat Road to the north of the proposed development and follows the sloping fields down towards the uninhabited Higher Biscovillack Farm. As illustrated in Viewpoint 8 (Figures 20A-20C), views will be possible towards the proposed development across the sloping rising fields, including towards the operational wind turbine at Greensplat, from open sections along the public right of way before it drops down to the more well-vegetated valley slopes. In close proximity, the proposed development will be perceived as a prominent moving vertical element, perceived adjacent and in combination with another wind energy scheme. At worst, the magnitude of impact will be medium-high, the level of effect will

be **moderate adverse**. The effects will be **not significant**. Such effects will however quickly become restricted by mature vegetation and subtle variations in landform;

- Public right of way (419/40/1) connects with the permissive quarry road to the north-west of the proposed development before heading broadly to the south and south-west. Passing through a variable sloping agricultural landscape, wider views towards the proposed development will be occasionally open, as illustrated in Viewpoint 6 (Figures 18A-18C). Views will be possible towards the proposed development, across the lower well-vegetated valley towards the adjacent slopes, including towards the operational wind turbine at Greensplat. In close proximity, the proposed development will be perceived as a prominent moving vertical element, perceived adjacent and in combination with another wind energy scheme. At worst, the magnitude of impact will be medium-high, the level of effect will be moderate adverse. The effects will be not significant. Such effects will however quickly become restricted by subtle variations in landform and mature vegetation intermittently lining the public right of way as well as enclosure by extensive woodland which will help to limit views towards the proposed development;
- Public right of way (419/29/1) occurs to the north-west of the proposed development
  and connects with public rights of way (419/40/1 and 419/27/1) to the north-west. The
  public right of way follows the lower valley floor and is enclosed by mature vegetation
  as well as sloping landform with very restricted wider views, including towards the
  proposed development. The magnitude of impact will be no change, the level of effect
  will be neutral. The effects will be not significant; and
- Public right of way (419/27/1) runs from north to south, broadly to the west of the proposed development.

To the north-west, the public right of way is enclosed by a dramatically sloping and well-vegetated tip, which will restrict wider views, including towards the proposed development. The magnitude of impact will be **no change**, the level of effect will be **neutral**. The effects will be **not significant**.

As the public right of way heads south, it passes through a sloping agricultural landscape, including through Penisker Farm to the west and more open views, including towards the proposed development will be possible, although often limited by surrounding vegetation and scattered development.

As illustrated in **Viewpoint 7** (**Figures 19A-19C**), as the public right of way crosses an open sloping field, views towards the proposed development will be possible across the lower well-vegetated valley towards the adjacent slopes, including towards the operational wind turbine at Greensplat. At worst, the magnitude of impact will be **medium-high**, the level of effect will be **moderate adverse**. The effects will be **not significant**. Such effects will however quickly become restricted by subtle variations in landform and mature vegetation intermittently lining the public right of way as well as enclosure by extensive woodland further to the south which will help to limit views towards the proposed development.

# Open Access Areas

The scattered **medium-high** sensitivity open access areas within the study area are largely focussed on open and elevated locations within the wider undulating and varied landscape and are intermittently within the ZTVs. Selected wider views will be possible across the rolling landform including towards the distinctive tips and quarries, punctuated by scattered single and small clusters of operational wind energy schemes and the proposed development.

- 6.77 As illustrated in **Viewpoint 5 (Figures 17A-17D)**, expansive views are possible from the fringes of the informal open access area to the north-east at Caerloggas Downs towards the proposed development. Views will be possible towards the proposed development across the landscape of rough grassland and restored heathland towards large tips and quarry workings and scattered wind energy schemes, with settlement focussed on the lower slopes. Although perceived, the proposed development will not seem out of place within this working, industrial and changing landscape, already influenced by scattered operational wind energy schemes. The magnitude of impact will be **medium-low**, the level of effect will be **moderate-minor adverse**. The effects will be **not significant**.
- 6.78 The open access areas further afield including Hensbarrow Downs and Roche Rock to the north and Goss Moor to the north-west, are excluded from the ZTVs and will experience no potential views towards the proposed development.
- However, from the more distant and elevated open access areas, towards the fringes of the study area, including from Helman Tor to the north-east, as illustrated in Viewpoint 10 (Figures 22A-22D), wider views, including towards the proposed development will be possible. From this elevated and open location, expansive views will be possible across the lower varied undulating farmland and wooded landscape, including towards the distant tips on the horizon, punctuated by scattered operational wind energy schemes and the proposed development. Although barely and distantly perceived, the proposed development, even in combination with other operational wind energy schemes, will not dominate or largely influence the expansive view. At worst, the magnitude of impact will be negligible, the level of effect will be negligible adverse. The effects will be not significant. In reality, however, the proposed development will easily go unnoticed in the view.

## Major Roads

- 6.80 Numerous **low** sensitivity major roads pass through the study area, the closest, the A3058, crossing the study area from the west to the east, passing through St Austell to the south-east, approximately 1.6km to the south of the proposed development at its closest point.
- 6.81 Largely enclosed by development and mature vegetation, it will only be from a few selected open locations, as the A3058 emerges from the enclosure of St Austell to the south and south-east, as illustrated in **Viewpoint 2 (Figures 14A-14D)**, that more expansive views across the wider industrial and farming landscape towards the proposed development, scattered with operational wind energy schemes, will be possible. Although perceived, the proposed development will not seem out of place within this working, industrial and changing landscape, already influenced by scattered operational wind energy schemes. The magnitude of impact will be **medium**, the level of effect will be **minor-negligible adverse**. The effects will be **not significant**.
- The A391 crosses the study area from the north-east, where it connects with the A30 at a junction, to the south-east passing through St Austell, approximately 2.3km to the east of the proposed development at its closest point. The A390 also heads out of St Austell to the south-west. Largely enclosed by development and mature vegetation, it will only be from a few selected open locations focussed to the east and south, that more expansive views across the wider industrial and farming landscape, towards the proposed development, scattered with operational wind energy schemes, will be possible. At worst, only glimpses of the proposed development will be possible, with **negligible impacts** and **negligible effects**, although in reality the influence of the proposed development will be

difficult to perceive and will easily go unnoticed in the view. The effects will be **not significant**.

Further afield, including the A30 which crosses the study area from the north-east to the north-west, the majority of the major roads are largely enclosed by rolling landform, adjacent development and surrounding mature vegetation which will restrict views towards the proposed development and are excluded from the ZTVs. The magnitude of impact will be **no change**, the level of effect will be **neutral**. The effects will be **not significant**.

#### Minor Roads

- 6.84 Numerous **medium-low** sensitivity minor roads cross the study area and are largely enclosed by mature linear tree belts, hedgerows and hedgebanks, as well as development which will restrict the majority of wider views, including towards the proposed development.
- 6.85 It will only be from close proximity, from selected high points, or from gaps in the enclosure, that views into the surrounding farmland and industrial influenced landscape, including the proposed development and scattered operational wind energy schemes, will be possible.
- 6.86 The closest minor road, Greensplat Road, occurs immediately to the east of the proposed development and passes from roughly north to south, including connecting with the permissive guarry road to the north.
- Greensplat Road is largely lined by linear vegetation, including hedgebanks, which will help to restrict views into the surrounding agricultural landscape, including towards the proposed development. However, as illustrated in **Viewpoint 11 (Figures 23A-23C)**, from the entrance to the proposed development, from this close proximity, the proposed development will be perceived above the immediate enclosure and the magnitude of impact will be **high**, the level of effect will be **moderate adverse**. The effects will be **not significant**. Subtleties in surrounding landform and enclosure by immediate vegetation, as well as distance, will help to restrict this influence of the proposed development along the length of the minor road.
- The permissive quarry road occurs to the north of the proposed development and heads roughly to the west and north, passing through the heavily industrial influenced landscape, including adjacent to operational wind energy schemes. As illustrated in Viewpoint 4 (Figures 16A-16D), views will be possible from an open location along the permissive quarry road, across the undulating landscape, including towards the proposed development, adjacent to the operational wind energy schemes at Higher Goonamarth Farm and Greensplat. At worst, the magnitude of impact will be medium-high, the level of effect will be moderate-minor. The effects will be not significant. However, many of the views from the permissive quarry road will be limited by intervening vegetation and variations in landform, which will restrict the influence of the proposed development on the oblique views from the minor road.
- 6.89 Further afield, along the network of minor roads that cross the study area, it will only be from selected open and/or elevated locations, that more expansive views over the surrounding undulating agricultural and wooded landscape, punctuated with scattered wind energy schemes, including the dramatic distant tips and the proposed development, will be possible. Selected views over the surrounding landscape, including the proposed development, will be possible and although distantly perceived, wind energy schemes, will

not dominate or largely influence the expansive view. The magnitude of impact will be **low**, the level of effect will be **negligible adverse**. The effects will be **not significant**.

#### Railway Lines

- 6.90 A number of **low** sensitivity railway lines cross the study area, connecting and passing through St Austell to the south-east. Wider views, including towards the proposed development, will be generally restricted by a combination of adjacent development, undulating landform and mature vegetation. Even if obliquely glimpsed, the proposed development will be viewed as an additional vertical element, set within a landscape already influenced by scattered operational wind energy schemes, its addition will be difficult to ascertain.
- 6.91 For the vast majority of users of the railway lines in the study area, the magnitude of impact will be **no change**, the level of effect will be **neutral**. The effects will be **not significant**.

# 7. Cumulative Impacts and Effects

- 7.1 The proposed development is considered 'in addition' to:
  - Operational wind energy schemes in the study area, where the wind turbines already
    exist. Operational wind energy schemes are also discussed within the 'main' impacts
    section of the LVIA;
  - · Consented wind energy schemes where they are highly likely to exist; and
  - Pending planning wind energy schemes in the study area where there is only the potential that they will exist depending on the success of the planning application.
- 7.2 To aid in the cumulative assessment, additional photomontages have been created for the viewpoints (Viewpoints 1-5, Figures 13D-17D and Viewpoint 10, Figure 22D), showing the proposed development in combination with the nearby consented and pending planning wind energy schemes. The consented and pending planning wind energy schemes, as shown on the viewpoints, are all single turbines and the same size as the proposed development 135m to blade tip (Band D).
- 7.3 The location of the wind energy schemes within the 20km radius study area are illustrated in **Figure 3**.

## Landscape Character

- As illustrated in **Viewpoints 2-5 (Figures 14D-17D)**, within the *St Austell or Hensbarrow China Clay Area (CCA27 and RLU13)*, the proposed development has the potential to be perceived separated but in combination with the nearby operational and consented wind turbines. The proposed development will largely be perceived as a separate vertical moving element, in combination with other well-spaced single and similar sized turbines, within an expansive agricultural and industrial landscape.
- 7.5 With reference to the RELS Assessment, the proposed development, although viewed occasionally with the nearby consented wind energy schemes, will be perceived within "a landscape with occasional wind energy developments to preserve the landmark features within it (and its distinctive skyline profile visible in long views), and to limit cumulative landscape effects."

- 7.6 Further afield within the wider landscape of the study area, as illustrated in **Viewpoint 1** (**Figure 13D**), within the *Gerrans, Veryan and Mevagissey Bays (CCA22)* and **Viewpoint 10** (**Figure 22D**), within the *Mid Cornwall Moors (CCA26*), the proposed development will be distantly perceived as an additional vertical element, within an expansive industrial landscape, already influenced by wind energy schemes. The addition of the proposed wind turbine, in combination with the operational, consented and pending planning wind turbines, will not dramatically change the wider characteristics of the landscape character areas or create a landscape dominated by wind turbines.
- 7.7 The introduction of an additional moving vertical element, in combination with the operational, consented and pending planning wind turbines, however, will increase the perception of wind energy on the landscape, largely only in close proximity only.
- 7.8 In summary, even with the addition of the proposed development, in combination with the operational, consented and pending planning wind turbines, will not dominate the landscape or influence the setting of landscape relevant designations. The undulating, industrial influenced landscape appears to have the capacity to absorb the proposed wind turbine even in combination with other wind energy schemes without creating a 'wind farm' landscape.

Visual Amenity Receptors and their Views

#### Combined Views

- 7.9 As illustrated in **Viewpoints 2-5 and 10 (Figures 14D-17D and 22D)**, the proposed development has the potential to be perceived separated but in combination with the nearby operational and consented wind turbines. The proposed development will largely be perceived as a separate vertical moving element, within an expansive agricultural and industrial landscape.
- 7.10 Further afield, as illustrated in **Viewpoint 1 (Figure 13D)** and **Viewpoint 10 (Figures 22D)**, from selected distant, elevated and open locations, the proposed development will be distantly and barely viewed as an additional vertical element, within an expansive agricultural and industrial landscape, already influenced by wind energy schemes. The addition of the proposed wind turbine, in combination with the operational, consented and pending planning wind turbines, will not dramatically change the wider views or create views dominated by wind turbines.
- 7.11 The introduction of an additional moving vertical element, in combination with the operational, consented and pending planning wind turbines, however, will increase the perception of wind energy on views, largely in close proximity only.
- 7.12 The proposed wind turbine, in combination with the operational, consented and pending planning wind turbines, will add to the perception of wind energy schemes in the view.

  The addition of the proposed wind turbine, even when perceived in combination with the nearby consented wind turbines, will not dominate the view.

## Sequential Views

7.13 Passing in often close proximity to the operational, consented and pending planning wind energy schemes in the study area as well as the proposed development, sequential views of wind energy schemes will be possible from the transport corridors including the adjacent minor roads and public rights of way, in close proximity.

- 7.14 The screening surrounding many of the transport corridors, largely focussed along the well-vegetated valley floors or set within an undulating and developed landscape, however, will ensure that many views of wind energy schemes will be glimpsed and quickly vanish due to a combination of enclosure by mature vegetation and the undulating landform.
- 7.15 In sequential views from the transport corridors, the proposed development and the operational, consented and pending planning wind energy schemes will add vertical elements to the view.
- 7.16 The addition of this single moving element, even in combination with the nearby consented and pending planning wind turbines will not create 'wind farm' dominated journeys.

## 8. Conclusions

- 8.1 The landscape around the proposed development is dominated by the surrounding existing and remnants of the china clay works, interspersed with rolling well-vegetated farmland. Visual amenity receptors consist of scattered residential properties and farms and towns and villages connected by a network of transport corridors including major and minor roads and public rights of way. Selected views are only possible from limited scattered receptors, generally only where gaps in vegetation cover or when elevated open land allows occasional expansive views.
- 8.2 The site is not recognised for its value through any landscape relevant designations, although there are scattered landscape relevant designations within the study area. The nationally recognised Cornwall National Landscape occurs to the south, extending and focussed along the coastal fringes. There are three locally recognised Areas of Great Landscape Value to the south-west, east and north and the Cornwall and West Devon Mining Landscape World Heritage Site occurs to the east. There are two Registered Parks and Gardens present and some of the centres of the scattered towns and villages are recognised as Conservation Areas. There are also a few widely scattered Ancient Woodlands present.
- 8.3 Mitigation measures during the site selection and design stages have ensured that the proposed development will have limited direct effects on landscape elements, mainly the loss of grassland. The loss of the Cornish hedgebanks at the entrance and along Greensplat Road, will be replaced and enhanced following the completion of construction activities. Proposed additional ecological mitigation measures will more than compensate for this limited loss and help to improve the overall biodiversity and nature conservation of the site and immediate surroundings. The design and location of the proposed development within a wider agricultural and industrial landscape also minimises the wider impacts on landscape character, landscape relevant designations and nearby visual amenity receptors. However, the proposed development, due to its scale, will affect both landscape character and visual amenity receptors and their views during construction, operation, and decommissioning.
- 8.4 The containment and enclosure provided by the surrounding dramatic and occasionally well-vegetated landscape will also ensure that the proposed development will only have minimal effects on both landscape character and visual amenity receptors and their views during construction and decommissioning. Crane activity will be perceived and will draw attention to the proposed development within the landscape and be visible for selected

close proximity visual amenity receptors, but the presence will not be out of place within this changing industrial landscape. The cranes will also be present for a very short period of time and will be temporary.

- During the operation period, the proposed wind turbine, due to its scale, will be visible and potentially perceived over a relatively wide area. However, the majority of effects on landscape character and visual amenity receptors and their views will be minimal, largely because of the enclosure provided by the surrounding tips and spoil heaps as well as mature vegetation, undulating landform, and development in the wider landscape. Exposed views of the proposed wind turbine will generally be only from those receptors in close proximity or from selected, high, and open locations further afield. However, although potentially and selectively perceived, the proposed development will be viewed as an additional built moving element, separated but in combination with the adjacent operational, consented and pending planning wind energy schemes, within an expansive agricultural and industrial landscape already influenced by extensive development, including wind energy schemes.
- 8.6 Further afield, the proposed development will have the potential to be perceived, particularly from a few selected open and/or elevated locations. It will be viewed as an additional vertical element within a landscape and views already scattered with operational, consented and pending planning wind energy schemes. The proposed development will add a single vertical moving element. With distance, however, the proposed development will easily become 'lost' within the wider landscape, set within a landscape and views already influenced by scattered wind energy development.
- 8.7 With regard to the landscape character areas and the setting of landscape relevant designations, the proposed development will not dramatically change the characteristics of the wider landscape or affect the integrity of landscape relevant designations. The setting of the proposed wind turbine within an industrial landscape, which is reasonably tolerant to change, will ensure that there will be limited indirect effects on landscape character areas and the setting of landscape relevant designations. The proposed development will be selectively visible but will largely be perceived as an additional built element, separated but often in combination with other similar sized wind turbines, within a landscape already influenced by development. The proposed development will fit within the existing landscape pattern and will not be out of scale with the surrounding landscape.
- 8.8 Exposed views of the proposed development from visual amenity receptors will be limited and will be generally only from those very few receptors in close proximity, from selected high points or where there is limited vegetation cover or 'gaps' in the enclosing vegetation and development further afield. These receptors already experience views of the working, industrial landscape, including operational, consented and pending planning wind energy schemes. However, it is important to note that views of the proposed wind turbine will not be 'overbearing' or dominate the view, perceived separated but in combination with other operational, consented and pending planning wind energy schemes. Set within a working industrial landscape, relatively few visual amenity receptors will have close-range views of the proposed development and the majority of wider views will be obscured by localised screening from vegetation, variations in landform and adjacent development. The influence of the proposed development will also very rapidly decrease with distance where the majority of views will be obscured by localised screening from intervening development and mature vegetation.
- 8.9 In summary, the proposed development will:
  - · Add a single built vertical moving element to the landscape;

- Avoid and does not have a direct impact on any designated landscapes;
- Be set within a landscape heavily influenced by china clay works and tips, with reasonable ability to accommodate change without detriment to its landscape character;
- Is positioned within a landscape that has the capacity to accept wind energy development (as defined by CC);
- Be perceived in close proximity as a prominent vertical element, separate but in combination to similar scale operational, consented and pending planning wind turbines;
- Very quickly become 'lost' within the wider expansive undulating landscape; and
- Overall, have relatively limited effects on landscape relevant designations, landscape character and visual amenity receptors and their views.

# **Appendix A - References**

#### **LVIA References**

The Landscape Institute and the Institute of Environmental Management and Assessment, Guidelines for Landscape and Visual Impact Assessment (GLVIA), Third Edition, 2013

The Landscape Institute, Technical Guidance Note 06/19, Visual Representation of Development Proposals, 17<sup>th</sup> September 2019

The Landscape Institute, Technical Guidance Note 02/21 Assessing Landscape Value Outside National Designations

The Landscape Institute, Technical Information Note 01/17, Tranquillity – An Overview

### **General LVIA Designation References**

The government information website (www.magic.gov.uk)

#### **Local Plan References**

Cornwall Council interactive maps (www.cornwall.gov.uk)

Cornwall Council, Cornwall Local Plan, Strategic Policies 2010 – 2030, Adopted November 2016

Cornwall Council, The Cornwall National Landscape Management Plan, 2022-2027, Adopted May 2022

Cornwall Council, Cornwall Area of Great Landscape Value (AGLV) Review, 2023 (on-line via interactive map www.cornwall.gov.uk)

# **Landscape Character References**

National Character Area profiles (www.nationalcharacterareas.co.uk)

Cornwall Council, Landscape Character Assessment, 2022 (on-line via interactive map <a href="https://www.cornwall.gov.uk">www.cornwall.gov.uk</a>)

Cornwall Council, Review of the Cornish Renewable Energy Landscape Sensitivity (RELS) Assessment, Final Report, December 2020

Cornwall Renewable Energy Advice, Annex 1: An assessment of the landscape sensitivity to on-shore wind energy and large-scale photovoltaic development in Cornwall, Cornwall Council, March 2016

## **Visual Amenity References**

SUSTRANS website for important cyclepaths (www.sustrans.org.uk)

Open access website (www.openaccess.naturalengland.org.uk)

National Trust website (www.nationaltrust.org.uk)

# **Mitigation References**

The Guild of Cornish Hedgers, Code of Good Practice, Building and Repairing Cornish Hedges, 2001 (<a href="https://www.cornishhedgers.org.uk">www.cornishhedgers.org.uk</a>)

## **Cumulative LVIA References**

Renewable Energy Statistics Database for the United Kingdom (REStats) (www.gov.uk)

National infrastructure planning portal for large scale wind energy developments in England and Wales (<a href="https://www.infrastructure.planninginspectorate.gov.uk">www.infrastructure.planninginspectorate.gov.uk</a>)

Cornwall Council Onshore Wind Energy Maps (www.cornwall.gov.uk)

Cornwall Council planning portal (www.cornwall.gov.uk)

# Appendix B - Technical Information

#### Introduction

The interpretation of the magnitude of impact and the level of effect of the proposed development was determined with the assistance of specialist computer generated information.

The Landscape Institute 'Technical Guidance Note 06/19, Visual Representation of Development Proposals, 17th September 2019 was referenced for the creation and presentation of the landscape and visual technical graphic information, to accompany and inform the LVIA. It was also referenced for guidance on the use of the camera and photography.

## Zone of Theoretical Visibility (ZTV)

A computer-generated Zone of Theoretical Visibility (ZTV) was the first step in the assessment of effects.

The ZTV helps to inform judgements on the effects of the proposed development and provides information on:

- Where visibility is theoretically likely to occur;
- How much of the proposed wind turbine is likely to be visible (calculated to hub height and blade tip); and
- Extent and pattern of visibility.

The ZTV was calculated using QGIS software on a Digital Terrain Model (DTM) derived from Environment Agency Lidar Composite DTM 2m 2022.

ZTVs, to blade tip and hub height, covering the 20km radius study area was overlaid on an OS base map of 1:250,000 scale and plotted at A3 size at 1:150,000 scale for graphic interpretation.

In addition, ZTVs, to blade tip and hub height, covering the 10km radius study area was overlaid on an OS base map of 1:50,000 scale and plotted at A3 size at 1:75,000 scale for graphic interpretation.

A ZTV represents a theoretical area from which the proposed wind turbine or part of the proposed wind turbine may be seen. The ZTV, therefore, represents potential visibility.

The proposed development was plotted based on the hub height to 76.5m and 135m to blade tip above ordnance datum (AOD) assuming a viewer height above ground level of 2m. The ZTV was calculated considering earth curvature.

The ZTV was based on landform data only with any ridgelines, plateaux and valleys reflected in the extent of predicted visibility. The ZTV however does not take into account subtle variations in landform (which the DTM data does not always reflect), local conditions

such as built development or vegetation such as woodland, which can and does significantly reduce the area and extent of actual visibility.

The ZTV, therefore, represents a worst-case theoretical scenario with regard to the visibility of the proposed wind turbine. It does not convey the magnitude of impact or level or significance of effect. However, it forms an appropriate starting point for undertaking the LVIA.

The ZTV is also a useful basis for selecting potential viewpoints, wireframes, and photomontage locations.

## **Photographs**

Photographs included in the assessment were taken by an experienced chartered landscape architect when conducting the site survey.

The photographs were taken with a Nikon D610 camera with a Nikon AF-S Nikkor 50mm f/1.8g fixed lens.

The panoramic photographs were taken with the aid of a tripod with the head fixed on a vertical and horizontal axis also incorporating a spirit level to ensure 'level' photographs. The camera was positioned at 1.5m above ground level unless otherwise specified (such as a hedge, tree or other obstruction in the view).

The photographs were mainly taken in landscape format. Some of the close proximity views were taken in portrait format to ensure enough of the proposed wind turbine would be represented in the view.

GPS coordinates and height data (AOD), using a hand-held GPS device was taken at every photographic location and verified against UK Grid Reference Finder Web Page. A compass bearing was also taken to ensure the direction of view was correct. The horizontal field of view was also recorded.

A series of overlapping photographs were taken, with each photographic frame overlapping between 20-30% and stitched together using Adobe Photoshop software to provide panoramic views. These are 'cylindrical' projections. The photographs were then converted to 'planar' projection using a re-projection tool in Resoft Windfarm software.

## **Viewpoints**

A number of viewpoints from which the proposed development may be visible were selected.

Viewpoint photography was undertaken in fine weather with good visibility in January 2025, and following pre-application advice from CC an additional photographic survey, was undertaken in fine weather with good visibility in October 2025 by an experienced and chartered landscape architect.

In addition, selected viewpoint photography from site surveys undertaken in April 2022, by an experienced and chartered landscape architect, was also used.

The viewpoints, agreed through consultation with CC, meet the following criteria:

- A balance of publicly accessible viewpoints from the main directions of view;
- Within the ZTVs;
- Provide a representative selection of views and receptors towards the proposed development, focussing on the most sensitive; and
- For receptors most likely to experience the greatest change of view.

The viewpoints have been selected through analysis of existing conditions, site survey and consultation. The viewpoints have been specifically sought out to represent potentially the most 'exposed' views of the proposed development.

All panoramic photographic viewpoints were interpreted as Type 1 Visualisations.

Type 1 Visualisations are "reproduced at a size which aids clear understanding of the view and context, these simply show the extent of the site within the view, and annotate any key features within the view. Type 1 is the most basic form of visual representation with a focus on the baseline information<sup>28</sup>."

For the majority of Type 1 Visualisations:

- Final images are presented in drawing frames using Adobe In-Design and exported as a high resolution PDF file;
- All views are generated as panoramic images to capture the site and its context. They
  are presented as cylindrical panoramas of 90° Horizontal Field of View (HFoV) at A1
  width with an image size of 820mm x 130mm;
- The extent of the 53.5° planar panorama is shown; and
- The extent of the central 50mm frame used to construct panorama is shown.

For the Type 1 Visualisation focussed on the access only (Viewpoint 11):

- Final images are presented in drawing frames using Adobe In-Design and exported as a high resolution PDF file;
- All views are generated as panoramic images to capture the entrance to the site and its context. This is presented as a cylindrical panorama of 90° Horizontal Field of View (HFoV) at A1 width with an image size of 820mm x 260mm.

#### **Wireframes**

Wireframes are computer-generated line drawings, based on a DTM, which indicate an objective three-dimensional shape of the landform and proposed wind turbine.

The wireline drawings were produced using Resoft WindFarm (Version 4.2.5.1) computer software to generate a perspective view of the proposed wind turbine. The software used a 3D DTM model of the existing landscape within the study area derived from OS Terrain 50 grid data, OS Terrain 5 grid data and Environment Agency Lidar Composite DTM 2m 2017.

<sup>&</sup>lt;sup>28</sup> Page 16, paragraph 4.1.1: The Landscape Institute 'Technical Guidance Note 06/19, Visual Representation of Development Proposals, 17<sup>th</sup> September 2019

A 3D model of the proposed development was generated based on the wind turbine grid coordinates and specified turbine geometry, with the proposed wind turbine shown with one blade positioned upwards, orientated towards the viewer.

Using GPS grid coordinates and a specified direction and field of view, wireframe views of the proposed wind turbine within the existing landform were then generated within the Resoft WindFarm software by superimposing the models.

In addition, other operational, consented and pending planning wind energy schemes within the study area are shown on the wireframe views.

Wireframes are illustrated as Type 1 Visualisations and include:

- Panoramic wireframe images to illustrate the proposed development and its context, including other operational, consented and pending planning wind energy schemes in the view. They are presented as cylindrical panoramas of 90° Horizontal Field of View (HFoV) at A1 width with an image size of 820mm x 130mm; and
- Panoramic wireframe images to illustrate the proposed development and its context, including other operational, consented and pending planning wind energy schemes in the view. They are presented as planar panoramas of 53.5° Horizontal Field of View (HFoV) at A1 width with an image size of 820mm x 260mm.

## **Photomontages**

A photomontage is where a computer-rendered image of the proposed wind turbine is superimposed onto the existing photographic view.

The geometry of the overlain rendered image of the wind turbine matches as accurately as possible with the base photography.

The viewpoint location, height and direction of the view is identical, as is the horizontal field of view with the base photography.

Photomontages are a valuable tool for presenting an overall realistic impression of the proposed wind turbine in the landscape from selected agreed viewpoints.

The finished image is a representation of the likely appearance of the proposed wind turbine only.

The proposed wind turbine is orientated to appear consistent with any adjacent operational wind turbines (when perceived in the view) to give a more realistic interpretation of what the proposed development would look like when perceived in combination with adjacent operational wind turbines.

The photomontages show the proposed wind turbine only and did not show the ancillary development including access tracks, control building etc.

The proposed wind turbine is usually <u>centred</u> within the view, except when other features, such as cumulative wind energy schemes can be illustrated in the view.

Resoft WindFarm (Version 4.2.5.1) software was used to create the photomontages.

Panoramic images were imported into the software and geographic features matched with the corresponding coordinate of that feature on a base map. The two features were then aligned within the image. A wireline was also superimposed over the image to ensure the accuracy of the field of view and direction. Specific turbine models created from the manufacturer's designs were used to render the proposed wind turbine. Lighting conditions were created from the software lighting system to create realistic conditions based on the location and time/position of the sun. A perspective match was achieved between the computer-generated panorama and the photographs by iterative adjustments until all major features were aligned satisfactorily. Their interpretation of view assumes good visibility.

The photomontages were interpreted as Type 4 Visualisations. With reference to the Landscape Institute TGN 06/19, Type 4 Visualisations "require the use of equipment and processes which provide quantifiable verification data, such that they may be checked for accuracy…"

Type 4 Visualisations show the location, size and degree of visibility of the proposed development, including architectural form and use of materials.

The majority of Type 4 Photomontages were illustrated as:

- Planar panoramas of 53.5° Horizontal Field of View (HFoV) at A1 width with an image size of 820mm x 260mm; and
- Where relevant, other consented and pending planning wind energy schemes were shown on an additional photomontage, presented as 53.5° Horizontal Field of View (HFoV) at A1 width with an image size of 820mm x 260mm.

In addition, the Type 4 Visualisation focussed on the access only (**Viewpoint 11**) was illustrated as:

 Cylindrical panoramas of 90° Horizontal Field of View (HFoV) at A1 width with an image size of 820mm x 260mm.

## For all photomontages:

- There is an element of judgement. While the base data is factual (DTM/photograph)
  within established parameters, the finished image is a representation of the likely
  appearance of the proposed development;
- Each photograph incorporates the lighting and conditions as seen. The photomontage
  upon which it is based therefore only represents the appearance of the proposed wind
  turbine as it would have appeared at that time, on that day and at that time of year;
  and
- Final images are presented in drawing frames using Adobe In-Design and exported as a high resolution PDF file.

## Presentation

The majority of viewpoints (with the exception of Viewpoint 11) are presented as:

- 90° baseline panorama photographic view showing the extent of the 53.5° planar panorama and the extent of the central 50mm frame used to construct the panorama;
- 90° wireline view illustrating the proposed development and any other cumulative wind energy schemes in the view;

- 53.5° wireline view illustrating the proposed development and any other cumulative wind energy schemes in the view;
- 53.5° photomontage, illustrating the proposed development; and
- Where relevant, 53.5° photomontage, illustrating the proposed development in combination with other consented and pending planning wind energy schemes.

## Viewpoint 11 is presented as:

- Existing view. This is presented as a 90° angle of view;
- Proposed view (Year 1) to illustrate the 'worst-case' immediately following completion of the construction of the access to the proposed development. This is presented as a 90° angle of view; and
- Proposed view (Year 10) to illustrate the growth of any proposed landscape mitigation measures. This is presented as a 90° angle of view.

For all viewpoint representations, the following information is included:

- Figure number;
- Viewpoint number and description of viewpoint location;
- OS grid reference of viewpoint location;
- Viewpoint altitude;
- · Direction of view;
- Distance to site;
- Horizontal field of view;
- Paper size;
- Projection (cylindrical or planar);
- Image enlargement (100% or 150%);
- Viewing recommendations (view flat at comfortable arm's length);
- Weather and lighting conditions (for photographic images only);
- Camera and lens details including camera height (for photographic images only);
- Date/time of photograph (for photographic images only); and
- Distance to cumulative wind energy schemes (53.5° wireline view only).