Environmental Statement (incl. Design & Access Statement)

For two wind turbines on land at Dubbers China-Clay Works, Nanpean, St. Stephen-in-Brannel, PL26 8XT.

November 2025

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Figures and Tables

1 Introduction

1.1 Application Details

1.1.1 This Environmental Statement (ES) including the Design and Access Statement (DAS) accompanies a planning application by Clean Earth (The Applicant) to Cornwall Council for full planning permission to develop two wind turbines, up to 135m tip height, on land at Dubbers China-Clay Works, Nanpean, St. Stephen-in-Brannel, PL26 8XT.

1.1.2 The Proposed Development will comprise of:

> *'Two wind turbines with maximum blade tip height of 135m, along with associated works, equipment and necessary infrastructure including access tracks, crane pads, cabling, electrical housing and a temporary construction compound'.*

1.1.3 Whilst establishing the proposal, The Applicant has sought to reduce environmental impacts by considering proximity and amenity to sensitive receptors (residential dwellings), noise, ecological constraints, landscape, and locally designated areas and features.

1.1.4 The Proposed Development would have an export capacity of 8.6MW and will provide a reliable source of clean energy which will be supplied to domestic and commercial consumers via the District Network Operator (DNO) grid network and have the capability of supplying local industry. The fundamental objective of this proposal is to generate renewable energy to supply the grid, helping to meet Government targets and reduce the UK's dependence on fossil fuels. It also helps to secure Cornwall's long term energy future and makes a significant contribution to Cornwall's Net Zero target[1].

1.1.5 Planning is sought for a temporary period of 35 years from the date of first exportation of electricity from the site to the grid network. Following the temporary 35-year period, the wind turbines and associated infrastructure will be removed from site, and the land returned to its original condition or a condition pre-agreed with the local planning authority (LPA).

1.1.6 This ES, and accompanying technical appendices, report the work undertaken in support of the Proposed Development. The contributors to each section are identified in Error! R eference source not found..

[1] https://www.cornwall.gov.uk/media/uxgjk4jn/climate-emergency-dpd.pdf (Accessed 8th November 2025)

***Table 1**: Contributors to the Environmental Statement*

Section and Topic	Contributor(s)
Chapter 1 – Introduction	CleanEarth
Chapter 2 – The Proposed Development	CleanEarth
Chapter 3 – Outlined Construction Process	CleanEarth
Chapter 4 – EIA Screening	Cornwall Council
Chapter 5 – Evaluation of the proposal	CleanEarth
Chapter 6 – Energy & Planning Policy	CleanEarth
Chapter 7 – Landscape & Visual Impact	Amalgam Landscape
Chapter 8 – Ecology	Western Ecology
Chapter 9 – Heritage Assessment	Southwest Archaeology
Chapter 10 – Noise	TNEI
Chapter 11 – Flood Risk and Hydrological Assessment	Engineering and Development Solutions (EDS)
Chapter 12 – EMI	MoD, JRC & Atkins
Chapter 13 – Shadow Flicker	CleanEarth
Chapter 14 – Transport	CleanEarth
Chapter 15 – Public Consultation	CleanEarth
Chapter 16 – Aviation	Straten Consulting
Chapter 17 – Contamination	Wheal Jane Consultancy
Chapter 18 - Socioeconomic	CleanEarth
Chapter 19 – Conclusion	CleanEarth

1.1.7 This ES has been submitted to Cornwall Council as the Local Planning Authority (LPA).

1.1.8 Comments on the application should be forwarded to Cornwall Council during its consideration and determination.

2 The Proposed Development

2.1 The Proposal

2.1.1 The Applicant proposes to install two wind turbines with a maximum blade tip height of up to 135m. The proposed turbines will feature a 3 bladed rotor design (for elevation drawings see **Appendix C**) with associated infrastructure including crane pads, temporary construction compound, cabling, electrical housing and a new access off the existing haul roads in the area.

2.1.2 The proposed wind turbines will generate an estimated annual output of over 25GWh of renewable energy. This level of generation is sufficient to supply electricity to over 5,500 Cornish homes each year, based on average household electricity consumption figures for 2023[2].

2.1.3 Ground and site investigations that occur after planning consent may require that a small variance be made to the final location of the proposed wind turbines and associated infrastructure, which is common for wind turbine proposals. Therefore, a 25m micro siting allowance is requested for the turbines and associated infrastructure – any amendments will be formally agreed with the LPA though suitable amendment.

2.1.4 The proposal also seeks to create new areas of grassland and scrub, resulting in a Biodiversity Net Gain (BNG) of 11.37% net gain in habitat areas. This will not only compensate for any habitat lost as a result of the Proposed Development but will also enhance the local surrounding area, whilst supporting local biodiversity.

2.2 Site Background

2.2.1 The proposed site is located on land at Dubbers China-Clay Works, Nanpean, St. Stephen-in-Brannel, PL26 8XT which is positioned to the north of Old Pound public road and northwest of Imerys Blackpool China Clay Works, centred on National Grid Reference SW 97502 56324 at an elevation of approximately 257m AOD (Above Ordnance Datum).

2.2.2 The site is located approximately 5.7km northwest of the town of St Austell. The proposed turbines are situated within a landscape that already exhibits strong industrial characteristics, with much of the immediate area dominated by the china clay industry.

[2] Subnational Electricity Consumption Data. Accessed via: https://www.data.gov.uk/dataset/480984d5-13d7-48b1-93c8-2a0871ef5543/sub-national-electricity-consumption-data (Accessed 12th September 2025)

2.2.3 The proposed turbine locations have been selected to appropriately add to the cumulative turbine developments within the proximate china clay area:

- Operational Higher Goonamarth Turbine - located approximately 1.7km southeast.
- Operational Blackpool Turbine - located approximately 1.7km southeast.
- Operational Greensplat Turbine - located approximately 2.9km southeast.
- Operational Gunheath Turbine - located approximately 3km east.
- Under Construction Longstones Turbine - situated approximately 1.2km southeast.
- Under Construction Wheal Martyn Turbine - situated approximately 2.3km east.
- Under Construction Burngullow turbine – situated approximately 2.3km south.
- Under Construction Goonamarth 2 Turbine – approximately 1.9km southeast.
- Under Construction East Karslake Turbine - approximately 1.3km southeast.
- In Planning Higher Biscovillack Turbine – approximately 2.8km southeast

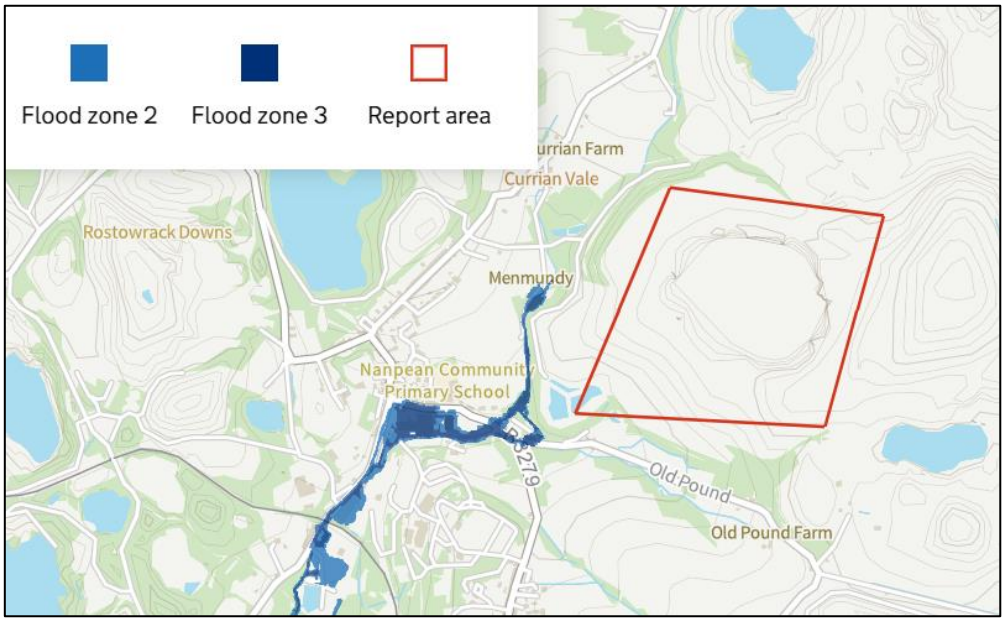
2.2.4 The prevailing character of the site is industrial, strongly influenced by the surrounding china clay workings and spoil tips. This landscape exhibits capacity to accommodate change without significant detriment to its existing character. The proposed turbines will be viewed against a backdrop of the extensive mining landscape that dominates the area. At closer range, the turbines will appear as prominent vertical elements, seen in context with other operational, consented, and proposed wind turbines of a similar scale.

2.2.5 The Proposed Development has been sited in the eastern fringes of St Stephen-in-Brannel, set apart from the more densely populated settlements of St Stephens, Nanpean, Whitemoor, Goonabarn, and Foxhole, with the closest residential property located 525m south of the closest turbine. The Applicant recognises the presence of nearby residential properties and has carefully considered these within the technical assessments that support this proposal.

2.2.6 It is concluded that the site is at low flood risk, as it lies within Flood Zone 1. A Flood Risk Assessment (FRA) has been undertaken to ensure that the Proposed Development does not increase flood risk elsewhere, achieved through the implementation of a suitable

Sustainable Drainage System (SuDS) design to manage surface water runoff from the site. A detailed FRA is provided in **Appendix H** and further discussed in **Chapter 11.**

***Figure 1**: Flood map for planning*



2.2.7 The site is not located within, or adjacent to, any nationally designated landscapes such as World Heritage Sites, National Parks, or Areas of Outstanding Natural Beauty (AONB), which attract the highest levels of protection in national policy.

2.2.8 The operational lifespan of the Proposed Development is 35 years, after which the turbines will be decommissioned. This site will then be reinstated to its former state or to a condition agreed with Cornwall Council. There may also be an option to extend planning permission for the turbines beyond this 35-year period; however, this will be subject to a further planning application which will be considered by Cornwall Council.

3 Outlined Construction Process

3.1.1 The development will be carried out over a period of 6-9 months. Details of the construction period may be subject to modifications at a later stage during the development; however, this phase will commonly involve the following stages:

- Ground investigation survey;
- Setting out and groundwork preparation;
- Laying steel reinforced concrete base to prepare for turbine foundations anchor;
- Foundation concrete pour and curing;
- Arrival of two telescopic cranes;
- Turbine component delivery on heavy goods vehicles, including tower foundations, eight tower sections, six blades, nacelle, hub, and generator;
- On-site assembly of the turbines into the foundations;
- Installation of earthing and electrical connection, and commissioning;
- Reinstatement of work;
- Demobilisation from the site.

3.1.2 It is expected that the construction phase will follow the order above, however, it may be subject to minor changes. Many of the tasks will be carried out simultaneously to reduce the time required on site. The erection of the proposed turbines will typically last about 5-7 days.

3.1.3 A crane hardstanding area of approximately 30m × 65m will be required for each turbine, for the tower, nacelle, hub, generator, and blade installations and a new access track is proposed off the existing haul roads to the turbine locations. The proposed development areas are illustrated in, PR4269-IFP-BP-T1, and PR4269-IFP-BP-T2 (Block Plans) PR4269-IFP-LP-T1 and PR4269-IFP-LP-T2 (Location Plans) **Appendix B**.

3.1.4 Abnormal Indivisible Loads (AIL) will arrive the A30 westbound, the route will take the first exit at Victoria Interchange and go straight over at the roundabout to join the A391. The route will continue on the road and cross straight over the first roundabout, and again, straight over for the second roundabout. On the third roundabout, the third exit is used to access Hensbarrow Hill Rd. It then bears right at the signposted junction for Brookland Sand & Aggregates. From here, loads will turn right using the existing entrance onto site. Loads will then continue along the existing haul roads to the development area.

3.1.5 Once planning permission has been granted and an access programme devised, Cornwall Council's Roads Department will be notified of the number, dates, and times of all proposed transport movements. Careful scheduling will ensure that deliveries avoid peak traffic periods during the morning and evening. Temporary traffic management measures will be implemented as required to facilitate the safe transport of components along existing highways.

3.1.6 Once installed, the wind turbines will be remotely monitored and will require only infrequent site visits for routine maintenance and inspection purposes — typically around ten visits per year. The largest vehicles expected to be used during the operational phase will be no larger than a 7.5-tonne van or standard 4x4 vehicle.

3.1.7 Outline Construction Process Summary:

- Construction is expected to take 6-9 months, with turbine erection taking 5-7days.
- Existing haul roads will be used to access the development area from the public road.
- Temporary infrastructure will be removed following the erection of the turbines.
- The project has a 35-year lifespan after which the wind turbines would be decommissioned, and the land returned to its current condition.

4 EIA Screening and Scoping

4.1.1 Wind turbines are industrial installations for the production of electricity and therefore fall under category 3a of schedule 2 of the Town and County Planning (Environmental Impact Assessment) Regulations 2017.

4.1.2 Schedule 2 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 requires developments that may have a significant impact on the environment to be screened by the Local Planning Authority prior to application, in order to assess the need for an Environmental Impact Assessment.

4.1.3 Prior to preparing the planning application, The Applicant engaged in a confidential pre-application process with the LPA to discuss the Proposed Development in principle, identify potential environmental sensitivities, and seek advice on the appropriate planning and regulatory requirements. Following this pre-application engagement, The Applicant elected to take a precautionary approach to environmental assessment and progress the proposal as EIA development. Accordingly, it was agreed with the LPA that a formal screening opinion for the proposed development would not be required.

4.1.4 The application has therefore been prepared as a full EIA development, incorporating comprehensive environmental assessments across all relevant topics to ensure that the potential impacts of the proposals are fully identified and addressed.

5 Evaluation of the Proposal

5.1 Reasoning for The Proposal

5.1.1 This proposal responds directly to Cornwall Council's declaration of a Climate Emergency on 22 January 2019, supported by 117 councillors[3]. Following this declaration, the Council prepared the Climate Action Plan (2019) and subsequently adopted the Climate Emergency Development Plan Document (CEDPD). Together, these documents reinforce Cornwall Council's commitment to a proactive and positive approach in determining renewable energy proposals.

5.1.2 During the Council meeting, members emphasised that *"more solar farms and wind turbines should be built in Cornwall to embed the culture of supporting climate change measures."* [4] This statement reflects the Council's commitment to achieving carbon neutrality by 2030 and highlights the strategic importance of renewable energy development within the county.

5.1.3 The environmental benefits and contribution towards carbon-reduction targets provided by this proposal are significant. These benefits should be assessed in the context of current planning policy, which consistent with the National Planning Policy Framework (NPPF, 2024) [5] should be interpreted with a presumption in favour of sustainable development, thereby supporting the delivery of renewable energy projects such as this.

5.2 Requirement for the Proposal

5.2.1 The urgent and pragmatic approach required to address the climate crisis cannot be aligned with slow or incremental progress. As highlighted to councillors, *"Cornwall is the sweet spot of the UK for renewable energy, having the best resource in Western Europe."* Decision-makers at all levels must therefore recognise the imperative to advance renewable energy development by interpreting existing policies positively and supporting proposals that contribute meaningfully to climate action objectives.

[3] Cornwall Council, Minutes of Meeting 22nd January 2019. Accessed via: https://democracy.cornwall.gov.uk/documents/g8343/Printed%20minutes%2022nd-Jan-2019%2010.30%20Cornwall%20Council.pdf?T=1 (Accessed 15th September 2025).
[4] Cornwall Council, Minutes of Meeting 22nd January 2019. Accessed via: https://democracy.cornwall.gov.uk/documents/g8343/Printed%20minutes%2022nd-Jan-2019%2010.30%20Cornwall%20Council.pdf?T=1 (Accessed 15th September 2025).
[5] National Planning Policy Framework. Accessed via: https://assets.publishing.service.gov.uk/media/67aafe8f3b41f783cca46251/NPPF_December_2024.pdf (Accessed 15th September 2025)

5.2.2 The proposal will support investment in the local economy and infrastructure through the delivery of a secured grid connection directly to the national electricity network with the capability of supplying local industry. This approach aligns with the guidance set out in Chapter 3, paragraphs 18–22 of the National Planning Policy Framework (NPPF), which encourages the development of infrastructure that contributes to a sustainable and resilient energy system. While grid capacity constraints in Cornwall often restrict the location and scale of renewable energy projects, this proposal benefits from a confirmed grid connection, enabling a substantial contribution to both local and national carbon-reduction targets.

5.2.3 Cornwall is making substantial progress in its green energy transition; however, is currently only around 40% of the way towards net zero target by 2030. Therefore, significant increases in renewable energy generation are still needed, including those that would be provided by the Proposed Development.[6]

5.2.4 The Proposed Development will have the capacity to power the equivalent of over 5,500 Cornish homes annually as per the latest annual average consumption figures for Cornwall 2023[7].

5.3 Suitability of The Proposed Location

5.3.1 The Proposed Development is located by the Cornwall Emergency Development Plan Document (CEDPD) Policy Map as within an area broadly suitable for wind energy.

5.3.2 The proposed development has been strategically sited at an elevation that optimises the available wind resource, in accordance with Policy 14 of the Cornwall Local Plan: Strategic Policies 2010–2030. This policy recognises the importance of increasing renewable energy generation by supporting developments that *"maximise the use of available resources by developing installations with the greatest energy output practicable."*[8] The proposal therefore fully aligns with the Council's objectives for sustainable energy generation and the efficient use of natural resources.

5.3.3 The proposed location and its surrounding area are considered highly suitable for wind turbine development in Cornwall. This is due to the site's elevated position, separation

[6] What is Cornwall doing? - Cornwall Council (Accessed: 11th November 2025)

[7] Subnational Electricity Consumption Data. Accessed via: https://www.data.gov.uk/dataset/480984d5-13d7-48b1-93c8-2a0871ef5543/sub-national-electricity-consumption-data (Accessed 15th September 2025)

[8] Cornwall Local Plan, Strategic Polices 2010-2030. Accessed via: https://www.cornwall.gov.uk/media/ozhj5k0z/adopted-local-plan-strategic-policies-2016.pdf (Accessed 11th November 2025).

from residential receptors, favourable wind speeds, and its remote, post-industrial landscape character, all of which collectively provide an optimal setting for renewable energy generation with minimal landscape and amenity impact. This is discussed further **in Chapter 7 – Landscape.**

6 Energy & Planning Policy Appraisal

6.1 Introduction

6.1.1 The planning policy context relating to this planning application for two wind turbines on land at Dubbers China-Clay Works are described below. Other specific legislation and policies pertinent to the environmental assessments required by Cornwall Council to accompany and inform this supporting statement (noise, landscape, and visual impact assessments etc.) are provided in the respective technical chapters of this document.

6.1.2 Since the adoption of the United Nations Framework Convention on Climate Change (1992), successive UK governments have pursued policies that encourage the development and deployment of renewable energy wherever it is economically viable and environmentally acceptable. These policies are underpinned by environmental imperatives, including concerns about carbon dioxide emissions and climate change, as well as the need to ensure a secure, diverse, and sustainable national energy supply.

6.1.3 The UK was the first country to introduce legally binding long-term carbon budgets into legislation, through the Climate Change Act 2008. Introduced in 2008, through this Act the UK Government committed to an 80% reduction of greenhouse gas emissions by 2050, compared to 1990 levels. In 2019, the UK strengthened this target by passing the Climate Change Act 2008 (2050 Target Amendment) Order 2019, which updated the UK's commitment to achieve 'net zero' or 100% reduction in emissions by 2050. Subsequently, six carbon budgets have been put into law to eliminate the UK's contribution to climate change by 2050 and to target net zero emissions. The seventh carbon budget is due to be published in June 2026 and aims to see onshore wind capacity double between 2023 to 2040.

6.1.4 The UK Government committed to reducing emissions under the Paris Agreement, adopted at the 2015 United Nations Climate Change Conference and ratified by the UK in November 2016. The Agreement establishes a long-term global goal of achieving net zero emissions by the end of the century, with progress reviewed every five years. This commitment provides a strong signal to investors, businesses, and policymakers regarding the transition to a low-carbon economy. To date, 196 countries have adopted the Agreement, underscoring the global momentum behind climate action.

6.1.5 The UK Government updated its British Energy Security Strategy in April 2022. Within the strategy, it's stated that the government will 'improve national network infrastructure and, in England, support a number of new projects with a strong local backing'.

6.1.6 In July 2024, the UK government published a planning statement lifting the de facto ban on onshore wind development, which had been in place since 2015. This placed onshore wind proposals on equal footing with other renewable energy technologies within the National Planning Policy (NPPF). Footnotes 57 and 58, which had previously imposed additional restrictions on onshore wind developments were removed. The removal of these footnotes aimed to simplify the approval process for onshore wind proposals. The statement also reaffirmed the Government's commitment to doubling onshore wind capacity by 2030, supporting wider objectives around energy security, affordability, and climate mitigation. In response, a new independent National Energy System Operator (NESO) was established in October 2024 to manage the transition to a more efficient and sustainable energy infrastructure.

6.1.7 In November 2024, the Prime Minister launched the Global Clean Power Alliance at the G20 summit in Rio de Janeiro in an effort to unite countries to speed up transitions to clean energy globally. The Government has firmly announced their commitment to be a leader in tackling climate change, emphasising the need for the scaling up of clean energy generation such as from wind development. In the following weeks, at the 29th United Nations Climate Change Conference (COP29), the Prime Minister announced the UK's new 2035 climate goal: to cut greenhouse gas emissions by at least 81% below 1990 levels. This milestone extends the UK's Net-Zero pathway, alongside rapid growth in renewable electricity generation, which has more than quadrupled since 2010.

6.1.8 This policy direction was subsequently reflected in the publication of a revised National Planning Policy Framework (NPPF) in December 2024, which introduced a more supportive approach to onshore wind development. The updated framework places greater emphasis on climate mitigation, energy security and the need to bring forward low-carbon infrastructure at pace. Alongside this, the Department for Energy Security and Net Zero (DESNZ) released the Clean Power 2030 Action Plan (CP30) in 2024 which sets out the UK Government's roadmap to ensure that by 2030 Great Britain generates enough clean electricity to meet total annual demand, providing guidance on renewable energy deployment, grid infrastructure, planning reforms, and supporting a nature-positive, low-

carbon transition. In July 2025 DESNZ introduced an Onshore Wind Task Force which sets out over 40 measures to help the UK meet the Clean Power 2030 targets.

6.1.9 The National Infrastructure and Service Transformation Authority (NISTA) was established in April 2025 and advises the UK Government on infrastructure, ensuring it aligns with Britain's climate goals. NISTA states that the UK electricity demand is expected to double by 2050, reinforcing the need to expand renewable energy generation.

6.1.10 Together, these recent policy developments provide a coherent and enabling framework for onshore wind, reaffirming its importance within the transition to a low-carbon energy system and strengthening the national policy support relevant to this proposal.

6.2 Decision Making

6.2.1 The starting point for the decision maker is Section 38(6) of the Planning and Compulsory Purchase Act 2004 which requires that applications are determined in accordance with the development plan unless material considerations indicate otherwise. This duty is also provided for in the National Planning Policy Framework (NPPF).

6.2.2 In practice this requires the decision maker to first determine whether the proposal accords with the relevant development plans. In this case of this planning proposal, this relates to Cornwall Local Plan Strategic Policies 2010-2030 (2016), the climate Emergency Development Planning Document (CEDPD) (2023) and St Stephen in Brannel Parish Neighbourhood Development Plan (2023-2030).

6.2.3 Although the NPPF does not form part of the development plan, it remains a material consideration under Section 38(6).

6.2.4 Cornwall Council have also produced several Supplementary Planning Documents (SPDS) and other guidance notes. Of particular relevance is the Cornwall Renewable Energy Planning Advice Supplementary Planning Document (SPD). Whilst the SPD does not carry full weight in the decision-making process, it provides a useful guide to the interpretation of policy.

6.2.5 In addition, the Government's Planning Practice Guidance (PPG) provides further advice on renewable energy development, including onshore wind, and is a relevant material consideration.

6.2.6 This planning policy appraisal sets out the current legislation and guidance that is relevant to the Proposed Development. The policy and guidance discussed in this summary include:

- National Planning Policy Framework (NPPF), December 2024;
- UK Government's Renewable and Low Carbon Energy Guidance, August 2023;
- Clean Power 2030 Action Plan (CP30), December 2024;
- Cornwall Local Plan Strategic Policies 2010-2030, November 2016;
- Cornwall Council Climate Change Action Plan (CCAP), July 2019;
- Cornwall Council Climate Emergency Development Plan Document (CEDPD), February 2023; and
- Cornwall Supplementary Planning Guidance.
- St Stephen in Brannel Parish Neighbourhood Development Plan 2023-2030.

6.3 The National Planning Policy Framework (NPPF), 2024

6.3.1 On the 12th of December 2024 an updated National Planning Policy Framework (NPPF) was issued. The NPPF sets out the Government's planning policies for England and how they are intended to be applied. The revised NPPF supersedes previous editions and provides a framework for the preparation of local development plans. Under planning law, applications must be determined in accordance with the development plan unless material considerations indicate otherwise. The update removes previous restrictions on onshore wind development and places greater emphasis on supporting renewable energy to meet national climate and energy objectives.

6.3.2 The NPPF reaffirms that the purpose of the planning system is to contribute to sustainable development. Paragraph 7 specifies that the objective of sustainable development can be summarised as meeting the needs of the present without compromising the ability of future generations to meet their own needs.

6.3.3 Paragraph 11 of the NPPF states that "at the heart of the Framework is a presumption in favour of sustainable development"[9].

"For decision-taking this means:

[9] National Planning Policy Framework, Accessed via: https://assets.publishing.service.gov.uk/media/67aafe8f3b41f783cca46251/NPPF_December_2024.pdf (Accessed: 20 August 2025).

- *Approving development proposals that accord with an up-to-date development plan without delay; or*
- *Where there are no relevant development plan policies, or the policies which are most important for determining the application are out-of-date, granting permission unless:*

a. The application of policies in this Framework that protects areas or assets of particular importance provides a clear reason for refusing the development proposed; or

b. Any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole, having particular regard to key policies for directing development to sustainable locations, making effective use of land, securing well-designed places and providing affordable homes, individually or in combination."

6.3.4 Paragraph 161 of the NPPF states that the planning system should support the transition to net zero by 2050 in a changing climate, taking full account of all climate impacts. In doing so, it should help to reduce greenhouse gas emissions and support renewable and low carbon energy and associated infrastructure.

6.3.5 Paragraph 162 of the NPPF requires that plans take a proactive approach to mitigating and adapting to climate change, considering the long-term implications for flood risk, coastal change, water supply, biodiversity and landscapes, and the risk of overheating and drought from rising temperatures.

6.3.6 Paragraph 164 of the NPPF states that new development should be planned for in ways that "avoid increased vulnerability to the range of impacts arising from climate change. When new development is brought forward in areas which are vulnerable, care should be taken to ensure that risks can be managed through suitable adaptation measures, including through incorporating green infrastructure and sustainable drainage systems."

6.3.7 Paragraph 165 of the NPPF requires that plans help to increase the use and supply of renewable and low carbon energy, through providing a positive strategy for energy from these sources; maximising the potential for suitable development, and their future re-powering and life extension, while ensuring that adverse impacts are addressed appropriately (including cumulative landscape and visual impacts). Furthermore, plans are encouraged to identify suitable areas for renewable and low carbon energy sources, and supporting infrastructure, where this will help to secure their development.

6.3.8 Paragraph 168 notes that when determining planning applications for renewable and low carbon developments LPAs should:

a) Not require applicants to demonstrate the overall need for renewable or low carbon energy and recognise that even small-scale projects provide a valuable contribution to cutting greenhouse gas emissions; and

b) Approve the application if its impacts are (or can be made) acceptable. Once suitable areas for renewable and low carbon energy have been identified in plans, local planning authorities should expect subsequent applications for commercial scale projects outside these areas to demonstrate that the proposed location meets the criteria used in identifying suitable areas; and

c) In the case of applications for the repowering and life-extension of existing renewable sites, give significant weight to the benefits of utilising an established site, and approve the proposal if its impacts are or can be made acceptable.

6.3.9 Paragraph 169 states that once suitable areas for renewable and low carbon energy have been identified in plans, local planning authorities should expect subsequent applications for commercial scale projects outside these areas to demonstrate that the proposed location meets the criteria used in identifying suitable areas.

6.4 UK Governments Renewable and Low Carbon Energy Guidance, 2023

6.4.1 The Ministry of Housing, Communities and Local Government issued the Renewable and Low Carbon Energy Guidance[10] in June 2015 and has since been updated in August 2023. This guidance provides advice on the planning considerations relating to wind turbines. Local Planning Authorities may wish to consider the following planning considerations when determining the outcome of a wind turbine application:

- Whether a proposal aligns with Local/Neighbourhood Plans and addresses the concerns of the local community;
- Noise impact (using ETSU-R-97);
- Air traffic and safety;
- Interference with Electromagnetic Transmissions;
- Ecology;
- Heritage;

[10] UK Government Renewable and Low Carbon Energy Guidance. Accessed via: https://www.gov.uk/guidance/renewable-and-low-carbon-energy#Do-local-people-have-the-final-say (Accessed: 21st August 2025)

- Shadow Flicker;
- Energy output of the turbine;
- Cumulative Landscape and Visual Impact; and,
- Decommissioning and reinstatement.

6.4.2 These planning considerations have been fully addressed throughout the investigative process for this proposal, which is supported by the detailed assessments further discussed in the respective technical chapters in this Environmental Statement.

6.5 Clean Power 2030 Action Plan (CP30), 2024

6.5.1 The Clean Power 2030 Action Plan (CP30) was published in 2024 and aims to expand renewable energy to meet 70% of Great Britain's electricity demand by 2030. The plan outlines the importance of onshore wind as a cost-effective, scalable technology for decarbonisation. The proposed turbines are expected to generate over 11.2GWh of energy each year, which will significantly contribute to the CP30's commitment to doubling the capacity of offshore wind from 15GW to 30GW by 2030. The CP30 also emphasises the importance of benefits for local communities. The Applicant will continue a percentage of the turbines income to a community benefit fund each year, distributed directly to the parishes for their allocation. The proposed turbines have been designed and sited to minimize visual, noise and ecological impacts. Detailed assessments have addressed these considerations in line with CP30s principles of environmental protection and social acceptability.

6.6 Cornwall Local Plan (CLP) Strategic Policies 2010-2030

6.6.1 The Cornwall Local Plan Strategic Policies document was adopted in November 2016 and provides a guide to the planning approach and policies adopted for Cornwall between 2010-2030. Details of the proposal and the alignment with the strategic policies are detailed below:

6.6.2 **Policy 1: Presumption in favour of sustainable development.** This emphasises the requirement for decision-makers to comply with the NPPF approach, and states that when making decisions the Local Planning Authority should "take a positive approach that reflects the presumption in favour of sustainable development". The local council should commit to "work with applicants and the local community wherever possible, and to

secure development that improves the economic, social and environmental conditions in the area" [11].

6.6.3 **Policy 2: Spatial Strategy.** This outlines the spatial strategy that encourages a sustainable approach to future development, which should accommodate the growth of economic, social, and environmental benefits for Cornwall. The policy emphasises that planning proposals should aim to increase community resilience to current and future issues, including climate change, by delivering a range of renewable energy and low carbon technologies. Furthermore, proposals will be welcomed by the council that improve conditions for investment in Cornwall, by supporting sectors including renewable energies.

6.6.4 **Policy 3: Role and function of places.** This sets a hierarchy in relation to the role and function of places and the associated considerations given to development. It is stated that "development will be supported where it is in accordance with the other policies of this plan and can demonstrate that it conserves and enhances the landscape character"[12]. Policy 3c is also appropriate as it states that:

'Proposal will be welcome that improve conditions for business and investment in Cornwall, in particular by:

c. Supporting the expansion of existing businesses and the indigenous businesses of agriculture, fishing and mining;'

6.6.5 **Policy 14: Renewable and Low Carbon Energy** specifically relates to renewable and low carbon energy and **Policy 15: Safeguarding renewable energy** relates to the safeguarding of renewable energy. Policies RE1 and RE2 in the Climate Emergency Development Plan Document (CEDPD) adopted in 2023 have replaced these policies.

6.6.6 The proposed site is located within the 'St Austell or Hensbarrow China Clay Area' which is identified in Cornwall's Climate Emergency Development Plan Document as an area suitable for wind energy development. The area is considered capable of accommodating Band D scale turbines (100–150m to tip), aligning with the scale of the proposed turbines. The Proposed Development is estimated to generate over 25 GWh annually, making a significant contribution to Cornwall Council's overarching aim of becoming a carbon neutral county by 2030, and is expected to save over 180,000 tonnes of carbon over its 35-year

[11] Cornwall Local Plan, Strategic Policies 2010-2030. Accessed via: https://www.cornwall.gov.uk/media/ozhj5k0z/adopted-local-plan-strategic-policies-2016.pdf (Accessed: 21st August 2025)
[12] Cornwall Local Plan, Strategic Policies 2010-2030. Accessed via: https://www.cornwall.gov.uk/media/ozhj5k0z/adopted-local-plan-strategic-policies-2016.pdf (Accessed: 21st August 2025)

operational lifetime. Furthermore, the Proposed Development is fully aligned with the aims set in Policy 2: Spatial Strategy, supporting investment in Cornwall, including in the renewable energy sector. On this basis, the proposal is considered acceptable and should be supported by the LPA.

6.6.7 **Policy 21: Best Use of Land and Existing Buildings.** This encourages a sustainable development and considerate approach to the use of land, with preference given to proposals that focus on previously developed land that is not of historic value. The proposed site is within the China Clay Mining area, characterised by spoil heaps and existing turbine development representing land which has already been greatly influenced by industrial development and providing an opportunity to support the energy intensive mining activity in the area.

6.6.8 **Policy 23: Natural Environment**. This relates to the natural environment and the need for proposals to sustain local distinctiveness and character by ensuring the development is an appropriate scale, whilst respecting the landscape area of both designated and undesignated sites.

6.6.9 The Proposed Development is appropriately sited and scaled in line with the Cornwall Council CEDPD and Renewable Energy Landscape Sensitivity (RELS) Assessment. The assessment evaluates the landscape area's sensitivity to turbine development and identifies the site as being within an area with potential to accommodate Band D developments (turbines up to 150m to tip), supporting the scale of the proposed turbines. Further details of this guidance are provided in Section 6.9, with a comprehensive assessment of landscape considerations presented in **Chapter 7.**

6.6.10 **Policy 24: Historic Environment.** This sets out a requirement to protect and conserve the historic environment, encouraging development proposals to consider and protect the character of the landscape, the appearance of conservation areas and sites of historic significance. The proposal is not situated within a heritage site; consideration of potential heritage impacts have been considered through a detailed heritage and investigation and summarised in **Chapter 9.**

6.6.11 **Policy 26: Flood Risk Management and Coastal Change**. This relates to the adopted local flood and coastal management strategies and the need for proposals to be suitably placed to minimise flood risk. The proposed site is not in an area of flood risk. The hydrological considerations addressed through this proposal are detailed in **Chapter 11**.

6.6.12 **Policy 27: Transport and accessibility.** This sets a standard for all development proposals to provide a safe and suitable access to the site, with an emphasis on minimising the adverse impact on the local road network. An access route assessment was completed for the Proposed Development to ensure the suitability of the route, prior to the preparation of the Construction Transport Management Plan document detailed in **Chapter 14.**

6.6.13 **Policy 28: Infrastructure.** This relates to the requirement of developer contributions, which should aim to enhance local infrastructure affected by the development. The Applicant will provide the parish with a community benefit, which it has done for previous applications, that will be consistent with the scale of the proposal and reflects Policy 28 requirements.

6.6.14 The policies outlined above, have been fully taken into account in the assessment of this proposal.

6.7 Cornwall Council Climate Change Action Plan (CCAP), 2019

6.7.1 The Climate Change Action Plan[13], published on the 15th of July 2019, was prepared in response to Cornwall Council's decision to declare a climate change emergency on 22nd January 2019. The report highlights the scale of the climate crisis and the actions required to transition into a carbon neutral county by 2030, which is guided by the UN's Sustainable Development Goals. Cornwall Council commit to:

- "Plan, invest and implement a transition to environmentally and socially sustainable jobs, sectors and economies, building on Cornwall's strengths and potential.
- Create opportunities to develop resource efficient and sustainable economic approaches, which help address inequality and poverty; and
- Design and deliver low carbon investment and infrastructure, and make all possible efforts to create decent, fair, and high value work, in a way which does not negatively affect the current workforce and overall economy".

6.7.2 The CCAP emphasises the necessity to revive the UK's onshore wind industry in order to maximise the benefits of Cornwall's natural resources and to transition into a carbon neutral county.

[13] Cornwall Council Climate Change Action Plan. Accessed via: https://www.cornwall.gov.uk/environment/climate-emergency/our-action-plan/ (Accessed: 21st August 2025)

6.8 Cornwall Council Climate Emergency Development Plan Document (CEDPD), 2023

6.8.1 The Climate Emergency Development Plan Document (DPD)[14], was adopted February 2023 which is one of a number of key actions identified in Cornwall's Climate Change Action Plan (CCAP). It forms part of the Cornwall Local Plan and provides further direction on planning for a sustainable future.

6.8.2 The CEDPD is aligned with the existing policies to support the Cornwall Local Plan, whilst providing new policies to encourage further progress towards meeting Cornwall's carbon neutral goal by 2030. Policies RE1 and RE2 directly relate to and support the implementation and necessity of renewable energy generation in Cornwall and have been included in the CEDPD to ensure a positive approach is applied to decision-making on suitable renewable development proposals.

6.8.3 The CEDPD aims to identify and provide information on the most suitable areas for wind development in Cornwall. This aspect is a positive step towards increasing renewable energy production in Cornwall and encourages a more positive decision-making approach to suitably placed proposals. The Proposed Development is located within an area identified in the CEDPD polices map as suitable for wind development.

6.8.4 **Policies RE1 – Renewable and Low Carbon Energy, and RE2 – Safeguarding strategic renewable energy sites**, of the CEDPD set out the principles with regards to renewable energy to ensure that this significant resource is maximised, whilst ensuring that any adverse impacts are addressed satisfactorily. They replace policies 14 and 15 of the Cornwall Local Plan: Strategic Policies.

Policy RE1 – Renewable and Low Carbon Energy sets out the following:

1. Proposals for renewable and low carbon energy-generating and distribution networks, will be supported in the context of sustainable development and climate change, where:

a) They contribute to meeting Cornwall's target of 100% renewable electricity supply by 2030.

[14] Cornwall Council Climate Emergency Development Plan Document: February 2023. Accessed via: https://www.cornwall.gov.uk/media/uxgjk4jn/climate-emergency-dpd.pdf (Accessed: 21st August 2025)

b) They balance the wider environmental, social, and economic benefits of renewable electricity, heat and/or fuel production and distribution;
c) It will not result in significant adverse impacts on the local environment that cannot be satisfactorily mitigated, including cumulative landscape and visual impacts, the special qualities of all nationally important landscapes, and the significance of heritage assets including their settings, including the outstanding universal value of Cornwall and West Devon Mining Landscape World Heritage Site and the character of wider historic townscapes, landscapes, and seascapes; and
d) In and within the setting of Areas of Outstanding Natural Beauty and undeveloped coast, developments will only be permitted in exceptional circumstances and should generally be very small scale giving due regard to the natural beauty of these areas; and
e) Where the current use of the land is agricultural, the use allows for the continuation of the site for some form of agricultural activity proportionate to the scale of the proposal and provides for 10% biodiversity net gain.
f) Commercial led energy schemes with a capacity over 5MW shall provide an option to communities to own at least 5% of the scheme subject to viability; and
g) There are appropriate plans and a mechanism in place for the removal of the technology on cessation of generation, and restoration of the site to its original use or an acceptable alternative use; and
h) Opportunities for co-location of energy producers with energy users, in particular heat will be supported.
2. Wind energy development proposals will be permitted where they:
a) Are located in a 'broad suitable area' identified on the Policies Map or in an area identified in a made Neighbourhood Plan or Neighbourhood Development Order or are for the repowering of an existing wind turbine/farm; and
b) Demonstrate that the planning impacts identified by the affected local community have been made acceptable by the proposal; and
c) Avoid or adequately mitigate shadow flicker, noise and adverse impact on air traffic operations, radar, and air navigational installations; and
d) Do not have an overshadowing or overbearing effect on nearby habitations;
e) Demonstrate that proposals would be outside of the 1km buffer zone for Special Areas of Conservation and Special Protection Area sites shown on the policies map and can be delivered without resulting in adverse effects on the integrity of European Sites and ensure that potential implications of wind farm development on the migratory flightpaths and core foraging zones and other functionally linked land for

SPA birds of the Marazion Marsh SPA, Tamar Estuaries Complex SPA and the Falmouth Bay to St Austell Bay SPA are fully considered.

6.8.5 Development scale and siting principles of policies RE1 and RE2 above have developed from Cornwall's Renewable Energy Planning Advice 2016 document below, this proposal aligns with RE1 and RE2 principles regarding both scale and siting.

6.8.6 Other relevant CEDPD policies to the proposal include Policy G1 – Green Infrastructure Design and Maintenance, Policy G2 – Biodiversity Net Gain, and Policy G3 – Canopy; all of which have been addressed through relevant statements and reports provided in **Appendix E.**

6.9 Cornwall Supplementary Planning Guidance

6.9.1 The Cornwall Renewable Energy Planning Advice Supplementary Planning Document (SPD) is an important renewable policy document for Cornwall which supports the policies high-lighted within the Cornwall Strategic Plan 2010-2030. The SPD, which provides guidance relating to the siting and scale of onshore wind, is a material consideration during the decision-making process for renewable energy proposals throughout Cornwall.

6.9.2 Whilst the SPD provides general advice on onshore wind developments, the Renewable Energy Landscape Sensitivity (RELS) Assessment provides guidance on strategic landscape guidance for wind development. Prepared to inform the development of the CEDPD, the assessment divides Cornwall into sub areas known as Renewable Landscape Units (RLUs) which presents the landscape's sensitivity to renewable energy infrastructure. A summary of the guidance relevant to the Proposed Development and how the proposal aligns with it is provided below.

Landscape Sensitivity Assessment and Guidance

6.9.3 The Proposed Development is situated within 'RLU 13 St Austell or Hensbarrow China Clay Area', which the CEDPD identifies as suitable for wind energy development. The landscape is considered to have moderate–high sensitivity to Band D wind energy development (turbines 100-150m in height), with potential capacity to accommodate turbines towards the lower end of this scale. This is demonstrated by recent approvals including Longstones (PA20/09318), East Karslake (PA24/05782), Wheal Martyn (PA21/07216), Higher Goonamarth 2 (PA24/08135) and Burngullow (PA23/09937) with consented tip heights of

up to 135m, matching the scale of the proposed turbines. The guidance recommends the RLU should consist of occasional wind energy developments.

6.9.4 The guidance recommends that wind turbines be located in 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. Turbines should also avoid natural granite outcrops such as St Dennis and Roche, and large-scale developments should not dominate small, ancient fields or the characteristic spoil heaps, lagoons, and settling tanks. The proposed site is centrally located within the RLU, aligning with these recommendations and Policy 23 of the Cornwall Local Plan and is sited within an industrialised landscape already accommodating wind development, as detailed in **Chapter 2**: The Proposed Development.

6.9.5 The RELS assessment further advises considering skyline relationships when siting turbines, with turbines may be better sited on top of flat tips instead of close to distinctive conical forms, and away from the outward presenting edge of the Clay Area. To ensure wind energy development does not dominate or prevent the understanding and appreciation of historic landmarks on the skyline, consideration should be given to St Stephens Beacon, St Dennis Church, and the 15th Century Chapel on top of Roche Rock. The proposed turbines have been sited in accordance with this skyline guidance and has been assessed for heritage impacts, as detailed in **Chapter 9**.

6.9.6 There are no areas within this CCA that are designated for scenic value. The RELs assessment highlights the landscape is characterised by industrial sites and the dominance of China Clay workings, making the proposed location suitable in accordance with Policy 21 of the Cornwall Local Plan. Furthermore, the proposal could provide renewable energy to support the energy intensive mining activities in the area.

6.9.7 The proposed site is not within any Areas of Outstanding Natural Beauty (AONB), Areas of Great Landscape Value (AGLV), Heritage Coasts (HC) or World Heritage Site (WHS).

6.10 St Stephen in Brannel Parish Neighbourhood Development Plan 2023-2030

6.10.1 The policies laid out in this Neighbourhood Development Plan[15] contribute towards securing net-zero carbon, alongside the NPPF, Cornwall Local Plan, and Climate Emergency DPD.

[15] St Stephen in Brannel Parish Neighbourhood Development Plan 2023-2030. Accessed via: https://ststepheninbrannel-pc.gov.uk/wp-content/uploads/2025/03/NDP-ST-STEPHEN-IN-BRANNEL.pdf (Accessed: 22nd August 2025)

6.10.2 **Policy NE6 Sustainable Energy Production** – Proposals for sustainable energy generation and distribution networks will be supported if they contribute to meeting Cornwall's target of 100% renewable electricity supply by 2030; and comply with Policy RE1 of the CEDPD.

6.10.3 In addition, Wind Energy Generation proposals will be supported if:

a. They are located in the Red Wind Energy Area of Search as shown on the Proposals Map 3 and comprise individual wind turbines and small clusters of up to and including Band C; OR

b. They are located in the Green Wind Energy Area of Search as shown on the Proposals Map 3 and comprise individual turbines and small to large clusters of up to and including Band D; and

c. They would not dominate, or prevent the understanding and appreciation of the distinctive historic landmarks, heritage assets, or the views of the china clay tips, lagoons and landforms associated with Hensbarrow mining area, or the rising ground above the settlements, which mark the Cornish Distinctiveness of the area. Outside the wind energy development Areas of Search, Development proposals involving one or more turbines will not be supported.

6.10.4 The site is within the identified 'green' area of NDP Map 3, 'Wind Energy Development Areas of Search' so is considered suitable for Band D height turbines, and for 'small to large clusters' of turbines, as per the made NDP policy NE6. This is further discussed in **Chapter 7** – Landscape.

6.10.5 Policy NE6 also discusses the importance of community involvement and benefit which is discussed in **APPENDIX O - Collaborative Benefits Report.**

6.11 Planning Policy Summary

6.11.1 At local, national, and international levels there are targets to tackle climate change and deliver environmental benefits. Renewable energy schemes, such as this one, are central to achieving these goals.

- Cornwall Council declared a Climate Emergency in 2019 and sought powers and resources from Westminster to help the County become Carbon Neutral by 2030.

- Whilst Cornwall Council acknowledge that the 2030 target will be difficult to achieve, their Action Plan to become Carbon Neutral within the next 5 years requires unlocking the County's wind potential.
- An increase in wind can provide greater security of the country's own energy supply. Since the war in Ukraine, the British Energy Security Strategy (2022) acknowledges that onshore wind is one of the cheapest forms of renewable power.
- In July 2024, the UK Government announced a decisive policy shift affirming its commitment to accelerating renewable energy. The statement committed to doubling onshore wind capacity by 2030, removing the longstanding de facto ban on onshore wind in England, and revising planning policy to place onshore wind on an equal footing with other energy developments. The National Infrastructure Commission has likewise recommended removing additional planning barriers, recognising the significant role onshore wind can play in boosting domestic energy production.
- The proposal is fully supported by the Cornwall Council's CEDPD Renewable and Low Carbon Energy policies (RE1 and RE2).

6.12 Renewable Energy in the Context of Application

6.12.1 The Applicant expects that the wind turbines will make the following contributions to national energy and environmental policies:

- The proposed wind turbines at Dubbers is estimated to save over 5,321 metric tonnes of carbon each year, compared to the equivalent fossil fuel production (depending on the UK energy mix at any one time).
- The turbines are estimated to generate over 25GWh of renewable energy a year, enough to power over 5,500 homes, based on the 2023 average consumption figures.
- The proposed Dubbers turbines will contribute to the legally binding government targets for renewable electricity generation and emission reductions.
- The proposal will contribute to Cornwall Council's aim of transitioning to a carbon neutral county by 2030 and re-enforcing the actions set to follow the Climate Crisis declaration on 22nd January 2019.

6.12.2 Energy Balance:

- An estimate of the energy payback for modern wind turbine development is 6-12 months[16] depending upon the site wind speed and turbine model. Please note that this is the prediction for a 'low wind' environment and therefore conservative. It would be reasonable to expect the energy payback to be far greater than this.
- Initial construction is estimated to take 6-9 months with each turbine erection taking place over a week (assuming good weather).
- The project has a 35-year lifespan after which the turbines and their associated infrastructure will be decommissioned, and the land reinstated to a condition agreed with the LPA.

[16] Life cycle costs and carbon emissions of wind power: executive summary, 2015. Accessed via: https://www.pure.ed.ac.uk/ws/portalfiles/portal/19730353/Executive_Summary_Life_Cycle_Costs_and_Carbon_Emissions_of_Wind_Power.pdf (Accessed 4h October 2023)

7 Landscape and Visual Impact

7.1 Introduction

7.1.1 This chapter outlines the results of a Landscape and Visual Impact Assessment (LVIA) completed by Amalgam Landscape on behalf of The Applicant. See **Appendix D** for the full report.

7.1.2 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.

7.1.3 The LVIA 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.

7.1.4 The main study area is a 10km radius measured from the location of the Proposed Development. An additional 'broad' study area of 20km radius is used to assess the wider extent of potential visibility, including to inform the cumulative assessment.

7.2 Methodology

7.2.1 The LVIA has been undertaken in compliance with the guidance produced by relevant professional bodies concerned with landscape and visual impact assessment and the assessment of wind energy scheme related developments. These guidelines are identified in **Appendix A** of the LVIA.

7.2.2 In line with the Guidelines for Landscape and Visual Impact Assessment (GLVIA), the primary guidance in respect of LVIA, the methodology used for this assessment has three iterative key stages, as follows: existing conditions (baseline assessment), design, and assessment of impacts and effects.

7.2.3 Zones of Theoretical Visibility (ZTVs), calculated to the hub height and blade tip heights, which assess the potential visibility of the proposed development, have also been completed for 10km and 20km radius study areas.

<u>Desktop Study</u>

7.2.4 An initial desktop study was undertaken to review existing maps and written data relevant to the study area – sources of information are found in **Appendix A** of the LVIA. This included a review of the relevant development policies and designations, previously published landscape character assessments, review of landform and landscape pattern, location of public rights of way, open access areas and visitor attractions, and local planning authority (LPA) information.

Site Survey

7.2.5 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. In addition, selected viewpoint photography from site surveys undertaken in May 2021 and April 2022, by an experienced and chartered landscape architect, was also used to inform the LVIA.

7.2.6 The survey was undertaken from publicly accessible areas; views from private properties were estimated from the closest publicly accessible locations and checked using aerial photography.

Consultation

7.2.7 As part of the pre-application consultation, 5 publicly accessible viewpoints, interpreted as photomontages were issued to LPA. These comprise **Viewpoints 1-5 (Figures 12-16)** of the LVIA.

7.2.8 In addition, 9 other potential annotated panoramic publicly accessible viewpoints were also issued to LPA, as part of the pre-application consultation. From these, based on the potential visibility as well as the sensitivity of the landscape and/or visual amenity receptor, 4 of the viewpoints were selected to be interpreted as photomontages and to support the LVIA. These include **Viewpoints 6, 14, 15 and 17 (Figures 17, 25, 26 and 28).**

7.2.9 Pre-application advice was received from LPA on 22nd July 2025, including detailed advice from the LPA Landscape Officer, which states that any future application should include a LVIA, including an assessment of cumulative landscape and visual effects. It was advised that the LVIA should follow best practice guidance, including GLVIA and consider interrelationships with other related disciplines, including ecology and heritage – relevant

advise from the pre-application is outlined in **paragraph 2.19** and advise from the LPA landscape officer is outlined in **paragraph 2.20** – the suggested viewpoints, descriptions and associated figures are also listed.

Landscape Character and Visual Amenity Receptor Sensitivity Methodology

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

Value

7.2.11 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 also helps to determine value.

7.2.12 The value of visual amenity receptors and their view is determined by the recognition of the value attached to particular views and indicators of value attached to view by visitors.

Susceptibility to Chage

7.2.13 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.

7.2.14 The value of visual amenity receptors and their view is determined through the user and location including, occupation or activity of people experiencing the view and the extent of which their attention may be focused on the views and visual amenity they experience at particular locations.

Sensitivity

7.2.15 The landscape character areas are assessed for their sensitivity based on a review of the elements, designations, and previously published descriptions. The sensitivity of both landscape character and visual amenity is dependent on the location context, and importance of the viewer. The sensitivity of both landscape character and visual amenity receptors are evaluated according to a five-point scale which ranges from Low to High as detailed in **Table 1 of Appendix D.**

Assessment of Impacts and Effects Methodology

7.2.16 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.

7.2.17 The determination of impacts and effects are assessed at different stages during the life of the Proposed Development, including: construction, operation, and decommissioning. However, it is noted that the effects will be reversible given the 35-year life.

Magnitude of Impact Methodology

7.2.18 The scale or magnitude of impact is determined through the assessment of the duration, extent of changes to the landscape and visual resource as a result of the Proposed Development.

7.2.19 The duration of impact determines the time period over which the changes as a result of the Proposed Development occurs. Most impacts 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.

7.2.20 The extent of the impact indicates the geographic area over which the changes occur and could be limited; localised; intermediate or wide.

7.2.21 The magnitude of impact on both landscape character and visual amenity receptors are evaluated according to a seven-point scale. The scale ranges from No change to High and is further detailed in **Table 2 of Appendix D.**

Level of Effect Methodology

7.2.22 The level of effect on the landscape character and visual amenity receptors are 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.

7.2.23 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 of Appendix D.** Further details on the criteria for assessing the level of effect on is located within **Table 4 of Appendix D.**

Cumulative Assessment Methodology

7.2.24 The cumulative assessment considers the additional effects when perceived with other operational, consented, or pending planning wind energy schemes. Operational wind energy schemes also form part of the existing conditions assessment.

7.2.25 There are two types of impact in relation to visual amenity receptors which includes:

- Combined impacts which occur when the receptor is able to perceive two or more 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 developments, travelling along regularly used routes such as major roads or popular recognised public rights of way.

7.3 Existing Conditions

The Site and Surrounds

7.3.1 The proposed site is situated on the upper slopes of a china clay tip and comprises of rough made ground, crossed by numerous working access tracks and at least partially regenerated with scrub/ grassland.

7.3.2 The site is within and 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.

7.3.3 The site is of medium-low sensitivity, defined 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.*"

Value of the Site

7.3.4 The site is not within any areas designated nationally, regionally or locally for their landscape value and/or scenic quality and 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 as identified in **Table 5 of Appendix D.**

Cumulative Wind Energy Schemes

7.3.5 Operational, consented and pending planning wind energy schemes, greater than 15m to blade tip, are identified within the 20km radius study area – illustrated in **Figure 3 of Appendix D**. The presence of operational wind energy schemes is also included within the descriptions of existing conditions. Cumulative schemes vary in size from Band A up to Band D – within a 5km radius there are 5 single consented Band D schemes and a single Band D turbine pending planning.

7.3.6 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.

Landscape Relevant Designations

7.3.7 The site is **not** recognised for its importance or value through any landscape relevant designations. However, there are landscape designations within the study area that have been identified; details of these and the National Character Types can be observed within **Figures 4 and 5 of Appendix D**.

National Landscape Character

7.3.8 Within the study area there are two national landscape character areas (NCAs), their location is illustrated in **Figure 5 of Appendix D**. Further details of Hensbarrow NCA (154) and The Cornish Killas NCA (152) are included in **Appendix D**.

Local Landscape Character

7.3.9 Nine landscape character areas (LCAs) have been identified within the study area, as listed below and illustrated within **Figure 6 of Appendix D**.

- St Austell or Hensbarrow China Clay Area (CCA27) – **Viewpoints 1-11 (Figures 12-22);**
- Mid Cornwall Moors (CCA26) - **Viewpoints 12 and 16 (Figures 23 and 27);**
- Camel and Allen Valleys (CCA29);
- St Austell Bay and Luxulyan Valley (CCA30) - **Viewpoint 17 (Figure 28)**;
- Gerrans, Veryan and Mevagissey Bays (CCA22) - **Viewpoints 13 and 15 (Figures 24 and 26);**
- Fal Valley (CCA21);
- Truro and Tresillian Valleys (CCA20);
- Upper Fal Valleys (CCA19);
- St Newlyn East to St Columb Major (CCA25) - **Viewpoint 14 (Figure 25);**

7.3.10 An outline of these LCAs and their landscape sensitivity can be found in **Appendix D**.

Cornwall Council RELS Assessment

7.3.11 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) – the Proposed Development falls into this category.

7.3.12 '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."

7.3.13 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."

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".

7.3.14 The relevant strategic guidance for wind energy development within the St Austell or Hensbarrow China Clay Area (RLU13) is listed in **paragraph 3.64 of Appendix D.**

Neighbourhood Development Plan (NDP)

7.3.15 The Proposed Development is within the 'green' area of the St Stephen in Brannel Parish Council NDP, as identified on Map 3 'Wind Energy Development Areas of Search.

7.3.16 The Proposed Development is therefore considered, within the NDP, as suitable in regard to wind energy schemes up to Band D – 100m-150m in height to blade tip and for 'small to large clusters' of wind turbines.

7.3.17 The NDP also states in Policy NE6 that any proposed wind energy development *"would not dominate, or prevent the understanding and appreciation of the distinctive historic landmarks, heritage assets, or the views of the china clay tips, lagoons and landforms associated with the Hensbarrow mining area, or the rising ground above the settlements, which mark the Cornish Distinctiveness of the area."*

Visual Amenity Receptors and their Views

7.3.18 An overview of the visual amenity and their views within the study area is summarised below, their locations are illustrated in **Figure 7** and viewpoint locations on **Figures 10 and 11 of Appendix D.**

Settlements- Tows, Villages and Hamlets

7.3.19 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 2.1km to the south-east of the proposed site. 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. Views over the adjacent undulating farmland, mineral workings and scattered wind energy schemes are possible from the fringes of the settlement.

7.3.20 Nanpean occurs approximately 1km to the west of the site at its closest point. Stretched out along a network of minor roads, broadly extending from north to south, views across the nearby sloping fields, including towards the rising tips, are possible from open fringes of the settlement. As illustrated in **Viewpoint 5 (Figures 16A-16D, Appendix D)**, from a public right of way and **Viewpoint 10 (Figures 21A-21D, Appendix D)** from a minor road, as they emerge from the enclosure of Nanpean, views are possible across the surrounding well-vegetated sloping fields, towards the rising tips. Selected close proximity views towards the site from the settlement fringes, although often limited by variations in the immediate sloping landform as well as screening by development and vegetation, are possible.

7.3.21 Views are also possible from the fringes of the nearby settlement of Foxhole/Goverseth to the south-west and Whitemoor to the north-west. Set on the lower slopes, amidst the undulating landscape and heavily influenced by surrounding industrial and mineral workings, wider views from these settlement fringes are possible, although often limited by intervening development, vegetation and variations in landform. As illustrated in **Viewpoint 9 (Figures 20A-20C, Appendix D),** from the fringes of a new housing development on the fringes of Foxhole/Goverseth, views are possible across the lower well-vegetated slopes, towards the rising tips.

7.3.22 The contained Greystones Caravan Park also occurs approximately 1.1km to the south. Set amidst a gently undulating landscape, wider views to the north towards the rising tips are possible although often restricted by intervening wider sloping landform and mature vegetation, in particular enclosing the settlement fringes.

7.3.23 Other settlements further afield, including St Stephen approximately 3.6km to the south-west and St Dennis approximately 2.4km to the north-west are focussed around a church, situated on elevated ground within the settlements. As illustrated in **Viewpoint 1 (Figures 12A-12D, Appendix D)**, from the elevated St Dennis Church, wider views are possible from these settlements across the surrounding settlement and farmland, including towards the conical and distinctive distant tips.

7.3.24 Roche is also situated approximately 3.4km to the north and views from the settlement fringes, as illustrated in **Viewpoint 2 (Figures 13A-13D, Appendix D)** from Roche Rock, are dominated by the surrounding tips, including the numerous lines of pylons that cross the landscape.

Scattered Residential Properties

7.3.25 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.

7.3.26 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.

7.3.27 There are however a number of residential properties within close proximity, including stretched out along Old Pound Road from the south-west to the south of the site. Old Pound Road connects with Goverseth Hill to the south-west, passing to the south of the site, before connecting with the permissive quarry road to the south, at the junction with Water Hill minor road. The housing lined Old Pound Road slopes up gently from the south-west to the south, with the well-vegetated slopes associated with the adjacent tip rising up immediately to the north of the houses. As illustrated in **Viewpoint 6 (Figures 17A-17C, Appendix D)** to the south and **Viewpoint 8 (Figures 19A-19C, Appendix D)** to the south-west, from gaps in the vegetative enclosure along Old Pound Road, views towards the adjacent rising tips, including towards the site, from the houses are possible, although often limited by intervening vegetation, development and subtle variations in landform.

National Trails, Recreational Routes, and National Cycle Routes (NCR)

7.3.28 The **high** sensitivity Southwest Coast National Trail crosses the study area to the south-east approximately 7.7km to the southeast of the site at its closest point. Views from the trail are focused across the coast and coastal fringes with views inland largely restricted by undulating and well-vegetated agricultural landscape.

7.3.29 The **high** sensitivity Saints Way recreational route crosses the study area from the northeast to the east, approximately 7.7km to the east of the site at its closest point. Views are possible, including scattered wind energy schemes in in the surrounding landscape.

7.3.30 Numerous **high** sensitivity 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. Views from the NCRs are largely restricted by the immediate enclosure of vegetation as well as wider screening by development and undulating landform. As illustrated in **Viewpoint 12 (Figures 23A-23C, Appendix D)** from NCR305 along a minor road crossing Goss Moor to the north, even from this open location, although views over the adjacent moorland and farmland are possible, long distance views are dominated and restricted by the distant tips on the horizon. 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 County Parks)

7.3.31 The **high** sensitivity Eden Project is located approximately 7.2km to the east of site, with the Lost Gardens of Heligan approximately 9.6km to the south.

7.3.32 The **high** sensitivity Wheal Martyn Museum and County Park is also located approximately 2.8km to the east. Focussed around a museum and visitor centre, there are also walks surrounding the centre, generally through woodlands scattered with historic remnants of the mining industry which will help to screen and restrict the influence of the proposed development. 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.

Local Public rights of Way, Bridleways and Cycleways

7.3.33 There are **medium-high** and **high** (within the National Landscape) sensitivity scattered public rights of way, bridleways and cycleways present within the study area.

7.3.34 The closest public rights of way to the site, branch out from Nanpean to the west, from Foxhole/Goverseth to the south-west and Greystones Caravan Park to the south, although the closest public right of ways, including 422/79/4, extending south from Old Pound and 422/83/1, extending west from Water Hill minor road appear to be not accessible and could not be found during the site survey.

7.3.35 As illustrated in **Viewpoint 5 (Figures 16A-16D, Appendix D)**, as the public right of way emerges from the enclosure of Nanpean, views are possible across the surrounding well-vegetated sloping fields, towards the rising tips. Selected close proximity views are possible from the nearby public rights of way, although often limited by variations in the immediate sloping landform as well as screening by development and vegetation.

7.3.36 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.

7.3.37 As illustrated in **Viewpoint 16 (Figures 27A-27D, Appendix D**), from a gap in enclosure along the public right of way at Innis Downs, views are possible across the immediate fields, towards the distant tips on the horizon. Scattered operational wind energy schemes are nestled within the view.

7.3.38 Even from a public right of way on the fringes of the National Landscape to the south-east, as illustrated in **Viewpoint 15 (Figures 26A-26D, Appendix D),** 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

7.3.39 There are scattered **medium-high** sensitivity open access areas within the study area.

7.3.40 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.

7.3.41 As illustrated in **Viewpoint 4 (Figures 15A-15D, Appendix D),** expansive views are possible from the open access area to the north-east adjacent to Hensbarrow Beacon across the landscape of rough grassland, dominated by large tips and quarry workings and punctuated by lines of pylons and scattered wind energy schemes.

7.3.42 Expansive views are also possible from St Stephen's Beacon open access area to the south-west. As illustrated in **Viewpoint 3 (Figures 14A-14D, Appendix D),** from this elevated and open location, views are possible across the adjacent settlement of Foxhole/Goverseth, spread out along the slopes, towards the distant tips.

7.3.43 From the open access areas further afield, as illustrated in **Viewpoint 2 (Figures 13A-13D, Appendix D)** from Roche Rock to the north-east and **Viewpoint 12 (Figures 23A-23C, Appendix D)** from Goss Moor to the north, views are possible across the intervening landscape, towards the distant tips, which form the horizon and restrict wider views, including towards other operational wind energy schemes.

7.3.44 However, from the more distant and elevated open access areas, towards the fringes of the study area, including from Castle-an-Dinas to the north-west, as illustrated in **Viewpoint 14 (Figures 25A-25D, Appendix D)** and from Helman Tor to the north-east, as illustrated in **Viewpoint 17 (Figures 28A-28D, Appendix D),** wider views are possible. From these elevated and open locations, 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

7.3.45 Numerous **low** sensitivity major roads pass through the study area, with the closest, A3058, crossing the study area from west to east, passing through St Austell to the southeast, approximately 2.9km to the south of the site at its closest point. Largely enclosed by development and mature vegetation, it is only from a few selected open locations, as the A3058 emerges from the enclosure of St Austell, that more expansive views across the wider industrial and farming landscape, scattered with operational wind energy schemes, are possible.

7.3.46 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 3.5km to the east of the site at the closest point. This is largely enclosed by development and mature vegetation and will only be seen from selected open locations that the more expansive views across the wider industrial and farming landscape, scattered with operational wind energy schemes, are possible.

7.3.47 Further afield, 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, they do not dominate.

7.3.48 *Minor Roads*

7.3.49 Numerous **medium-low** sensitivity minor roads cross the study area and are largely enclosed by mature linear trees, hedgerows and hedge banks. It will only be from selected high points, or from gaps in the enclosure, that views into the surrounding farmland and industrial influenced landscape towards the proposed development will be possible.

7.3.50 Old Pound Road is intermittently lined by houses and is bordered by the vegetation covered steep slopes of the adjacent tip as it rises dramatically towards the site. As illustrated in **Viewpoint 6 (Figures 17A-17C, Appendix D) and Viewpoint 8 (Figures 19A-19C, Appendix D),** from gaps in the vegetative enclosure along the minor road, views towards the adjacent rising tips, including towards the site, are possible, although often limited by intervening vegetation, development and subtle variations in landform.

7.3.51 As illustrated in **Viewpoint 7 (Figures 18A-18C, Appendix D),** however, as the Water Hill minor road moves away from the variable screening along Old Pound Road, more expansive views are possible from gaps in enclosure along the minor road, across the intervening vegetation and development, towards the rising tips, including towards the site.

7.3.52 Variations in the dramatically sloping landform associated with the industrial landscape helps to limit wider views towards the site from the permissive quarry road as it heads to the east, although views towards the nearby operational single wind turbines on the surrounding slopes is possible from gaps in enclosure along the minor road.

7.3.53 The permissive quarry road connects with Greensplat Road to the south-east and many views from Greensplat Road are restricted by intervening hedgebanks and linear vegetation. As illustrated in **Viewpoint 11 (Figures 22A-22D, Appendix D),** even from an open and elevated location along Greensplat Road to the south-east, the intervening tips help to limit wider views, including towards the site, although the operational single wind turbine at Higher Goonamarth Farm is perceived.

7.3.54 Views are also possible in close proximity from selected open locations along the surrounding network of minor roads, particularly as they emerge from the enclosure of the nearby settlements. As illustrated in **Viewpoint 10 (Figures 21A-21D, Appendix D),** from Currian Hill minor road, on the fringes of Nanpean, expansive views are possible across the immediate sloping fields, towards the dramatically rising tips.

7.3.55 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. As illustrated in **Viewpoint 12 (Figures 23A-23C, Appendix D)** from a minor road crossing Goss Moor to the north and **Viewpoint 13 (Figures 24A-24D, Appendix D),** from Chapel Hill minor road, near Sticker, to the south, selected views over the surrounding landscape is possible and although distantly perceived, wind energy schemes, do not dominate or largely influence the expansive view.

Railway Lines

7.3.56 A number of **low** sensitivity railway lines cross the study area, passing through St Austell to the southeast. Views of site would be generally restricted by a combination of adjacent development, undulating landform, and mature vegetation.

7.4 Design and Mitigation Measures

7.4.1 Mitigation measures have been incorporated into the distinct phases of the Proposed Development during the design process, and 'additional' landscape measures, focussed on enhancing biodiversity, and planning for construction, operation and decommissioning.

Designed in Mitigation

7.4.2 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 turbines for the site.

7.4.3 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) is listed in **paragraph 4.3 of Appendix D.**

Mitigation through the selection of the proposed wind turbines

7.4.4 The size and model of the proposed wind turbines were selected to provide a substantial amount of electricity generation.

7.4.5 The proposed wind turbines 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 turbines

7.4.6 The proposed wind turbines will be sited within a wider industrial working landscape already influenced by other operational, consented and potentially pending planning wind turbine developments. The proposed wind turbines would appear as additional vertical moving elements within a landscape already influenced by similar sized wind energy schemes.

7.4.7 The proposed wind turbines will be positioned away from high sensitivity receptors, such as public rights of way, residential properties and settlements.

7.4.8 The siting of the proposed wind turbines have 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 turbines foundation. As a result, during construction, there will be limited removal of vegetation, with associated **low impacts** and **minor adverse** effects on landscape elements.

Additional Landscape Mitigation Measures

7.4.9 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.

7.4.10 The additional landscape mitigation measures have been informed through liaison and agreement with the ecologist and with reference to the Ecological Impact Assessment, BNG Assessment and the Green Infrastructure Statement that accompanies this planning application.

7.4.11 In addition, in determining the additional landscape (and ecology) mitigation measures, reference has also been made to the LPA China Clay Restoration and Tipping SPD.

Construction

7.4.12 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
- All temporarily disturbed and excavated areas will be reinstated following the completion of construction activities.

Operation

7.4.13 Given the scale of the proposed wind turbines, 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. New tall structures 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.

7.4.14 The Dubbers Dam Woodland Project, an external tree-planting initiative located within the vicinity of the proposed turbines, will significantly increase canopy cover in the local area. Although this scheme is not commissioned by the Applicant linked to the proposed turbines, it will deliver considerable additional tree planting near the development site.

7.4.15 However, it should be acknowledged that the operational effects of the Proposed Development will be temporary, given the 35-year operation period.

Decommissioning

7.4.16 At the end of 35 years, the Proposed Development will be dismantled and removed and the site reinstated to previous conditions.

7.4.17 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.

7.5 Construction and Decommissioning Impacts and Effects

7.5.1 The construction and decommissioning activities are detailed within **Section 5 of Appendix D**. Any effects on landscape character and visual amenity receptors during the construction and decommissioning phases will be temporary. 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 be **low** and the effects will be **minor adverse**. The effects will be **not significant**.

7.6 Operational Impacts and Effects

7.6.1 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 8 and 9, Appendix D**) and the 10km radius study area (**Figures 10 and 11, Appendix D**).

7.6.2 The ZTVs illustrate the areas of potential visibility of one or two of the proposed wind turbines, 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 turbines 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.

7.6.3 Within the 20km radius study area, as illustrated in **Figures 8 and 9 of Appendix D,** 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.

7.6.4 Within the 20km radius study area, for the majority of the extent of potential visibility, both of the proposed wind turbines will have the potential to be perceived, although there are selected, and often substantial, but scattered, areas where only one of the proposed wind turbines will have the potential to be perceived.

7.6.5 Within the 10km study area, as illustrated in **Figures 10 and 11 of Appendix D**, the extent of potential visibility is broadly spread throughout the study area, 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 turbines will be relatively limited to the north-east, east and south-east.

7.6.6 As illustrated on the ZTVs, the main potential extent of visibility of the proposed wind turbines are 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.

7.6.7 There will also be limited potential visibility from the fringes of St Austell to the 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.

Viewpoint Analysis

7.6.8 Eighteen viewpoints, their location illustrated in **Figures 10 and 11 of Appendix D**, 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.

7.6.9 To illustrate the predicted views of the proposed wind turbines, photographic views, wireframes and photomontages have been produced for all of the viewpoints. The other wind energy schemes within the study area are also shown on all wireframe views.

Operational Impacts and Effects on Landscape Character

Landscape Elements

7.6.10 The proposed wind turbines will have minimal effects on any landscape elements. There will be loss of rough grassland for the new access tracks and the proposed wind turbine foundations. There will be limited removal of vegetation, with associated low impacts and minor adverse effects on landscape elements. The effects will be **not significant.**

7.6.11 However, the proposed additional landscape mitigation measures, focussed on biodiversity enhancements, including new areas of grassland, as well as enhancement to existing grassland and new mixed native scrub, will more than compensate for this limited loss and over time will provide low impacts and minor beneficial effects to landscape elements. The effects will be **not significant.**

Landscape Relevant Designations

7.6.12 The Proposed Development will not directly affect any landscape relevant designations.

7.6.13 However, with reference to the ZTVs **(Figures 8-11, Appendix D),** 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.

7.6.14 The **high** sensitivity Cornwall National Landscape occurs approximately 6.7km to the south-east of the proposed development at its closest point, extending to the south-eastern 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.

7.6.15 As illustrated in **Viewpoint 15 (Figures 26A-26D, Appendix D),** 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, just above the horizon.

7.6.16 At worst, the introduction of two additional moving and vertical elements 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.**

7.6.17 The **high** sensitivity Cornwall and West Devon Mining Landscape WHS occurs approximately 6.7km to the east and south-east of the proposed development at its closest point, extending to the eastern fringes of the study area.

7.6.18 Excluded from the ZTVs, there will be no potential influence on its setting. 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.**

7.6.19 The medium-high sensitivity AGLVs in 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.

7.6.20 As illustrated in **Viewpoint 17 (Figures 28A-28D Appendix D),** within the Helman Tor and Luxulyan Valley AGLV, approximately 7.4km to the east of the Proposed Development at its closest point, which extends to the eastern and north-eastern fringes of the study area, even from a high point adjacent to Helman Tor, the potential visibility will be extremely restricted, perceived barely above the distant horizon, will be difficult to 'pick out' within a landscape already indirectly influenced by scattered operational wind energy schemes.

7.6.21 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

7.6.22 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.**

7.6.23 The **high** sensitivity Trewithen Registered Park and Garden, approximately 7.6km to the south-east at its closest point, is excluded from the ZTV and will experience no potential influence on its setting as a result of the Proposed Development.

7.6.24 Only the fringes of the high sensitivity Heligan Registered Park and Garden, approximately 9km to the south at its closets point, are within the ZTVs. However, a combination of

distance and mature vegetation within and on the boundaries of the park and garden and within the wider undulating landscape will ensure there will be no indirect influence on its setting as a result of the Proposed Development.

7.6.25 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."

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

7.6.27 The high sensitivity Conservation Areas in the study area are excluded or largely 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, St Austell, approximately 4.6km to the south-east, which is largely excluded from the ZTVs, the density and screening provided by the surrounding development will ensure there will be no indirect influence on its setting.

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

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

7.6.30 No **high** sensitivity Ancient Woodlands will be directly affected by the Proposed Development. The closest, Bodinnick Wood, is approximately 4.7km to the south-west, within the Upper Fal Valley AGLV.

7.6.31 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

7.6.32 With reference to the ZTVs **(Figures 10-11) and the viewpoints (Figures 12-28) of Appendix D,** 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.

7.6.33 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.

7.6.34 As illustrated in **Viewpoint 3 (Figures 14A-14D), Viewpoint 5 (Figures 16A-16D), Viewpoint 9 (Figures 20A-20C) and Viewpoint 10 (Figures 21A-21D) of Appendix D,** within close proximity, the Proposed Development will be perceived as two prominent vertical elements, within the overall dramatic lunar landscape of huge, light coloured waste tips and settling ponds within a relic pastoral farming landscape.

7.6.35 Variable screening, even in close proximity, provided by intervening development, vegetation and variations in the industrial landform, as illustrated in **Viewpoint 4 (Figures 15A-15D), Viewpoint 6 (Figures 17A-17C), Viewpoint 7 (Figures 18A-18C), Viewpoint 8 (Figures 19A-19C)** and **Viewpoint 11 (Figures 22A-22D) of Appendix D**, will however help to reduce the influence of the Proposed Development, although still at least partially perceived.

7.6.36 Further afield, however, a combination of distance and screening provided by the undulating landscape, including the tips and spoil heaps, will help to reduce the wider influence of the Proposed Development on the St Austell or Hensbarrow China Clay Area (CCA27), as illustrated in **Viewpoint 1 (Figures 12A-12D) and Viewpoint 2 (Figures 13A-13D) of Appendix D.** Even if distantly perceived, the Proposed Development will be barely viewed as additional vertical elements 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).

7.6.37 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.**

7.6.38 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).

7.6.39 The RELS Assessment states that the "visually prominent natural granite outcrops of Roche and St Dennis would be highly sensitive to wind energy development." As illustrated in **Viewpoint 2 (Figures 13A-13D, Appendix D)** from Roche Rock, the blade tips of the Proposed Development will be barely (if at all) perceived, just above the intervening tips, within a landscape punctuated by prominent line of pylons. As illustrated in **Viewpoint 1 (Figures 12A-12D, Appendix D)** from St Dennis Church, the Proposed Development has

the potential to be perceived, behind and amidst the tips in the distance, although they do not dominate.

7.6.40 The Proposed Development also largely follows the relevant strategic guidance for wind energy development within the St Austell or Hensbarrow China Clay Area (RLU13) as listed in **paragraph 6.32 of Appendix D.**

7.6.41 The Proposed Development is also within an area suitable for Band D wind energy schemes, as identified within the St Stephen in Brannel Parish Council NDP.

7.6.42 The Proposed Development follows the guidance as identified within the NDP in Policy NE6 which states that any proposed wind energy development *"would not dominate, or prevent the understanding and appreciation of the distinctive historic landmarks, heritage assets, or the views of the china clay tips, lagoons and landforms associated with the Hensbarrow mining area, or the rising ground above the settlements, which mark the Cornish Distinctiveness of the area."*

7.6.43 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 Mid Cornwall Moors (CCA26).

7.6.44 As illustrated in **Viewpoints 12 and 16 (Figures 23A-23C and 27A-27D, Appendix D),** 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).

7.6.45 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 majority of the Mid Cornwall Moors (CCA26), the influence of the proposed development will easily go unnoticed.

7.6.46 Further to the north of the Proposed Development, extending to the fringes of the study area is the **medium** sensitivity Camel and Allen Valleys (CCA29), which is also partly within the locally recognised **medium-high** sensitivity Camel and Allen AGLV, towards the

northern fringes of the study area. 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 majority of the Camel and Allen Valleys (CCA29), including within the more intimate and well-vegetated **medium-high** sensitivity AGLV, the influence of the proposed development will easily go unnoticed.

7.6.47 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).

7.6.48 As illustrated in **Viewpoint 17 (Figures 28A-28D, Appendix D)**, even from a high point adjacent to Helman Tor 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**. 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**.

7.6.49 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).

7.6.50 As illustrated in **Viewpoint 13 (Figures 24A-24D) and Viewpoint 15 (Figures 26A-26D) in Appendix D**, 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.

7.6.51 The Proposed Development will be selectively and distantly viewed from within the Gerrans, Veryan and Mevagissey Bays (CCA22) as additional vertical elements 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. Although with the potential to be distantly

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

7.6.52 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) and the **medium-high** sensitivity Truro and Tresillian Valleys (CCA20).

7.6.53 The Proposed Development will have the potential to be selectively and distantly perceived as additional vertical elements 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**.

7.6.54 To the south, 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), which is also partly within the **medium-high** sensitivity Arrallas Farm/St Erme River Valleys AGLV. The Proposed Development will have the potential to be selectively and distantly perceived as additional vertical elements 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**.

7.6.55 To the west, north-west and north of the proposed development, extending to the fringes of the study area is the **medium** sensitivity St Newlyn East to St Columb Major (CCA25).

7.6.56 As illustrated in **Viewpoint 14 (Figures 25A-25D, Appendix D),** from the elevated and open fringes of Castle-an-Dinas, distant views are possible across the lower undulating landscape towards the distant tips and the Proposed Development with the potential to be selectively and distantly perceived as additional vertical elements within the 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.**

Operational Impacts and Effects on Visual Amenity Receptors and their Views

Settlements – Towns, Villages and Hamlets

7.6.57 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 4km to the south-east of the Proposed Development at its closest point, extending to the boundary with St Austell Bay. The Proposed Development will add two additional vertical elements

to the view with at worst, **negligible impacts** and **minor-negligible adverse** effects. The effects will be **not significant**.

7.6.58 Nanpean occurs approximately 1km to the west of the Proposed Development at its closest point. Stretched out along a network of minor roads, broadly extending from north to south, views across the nearby sloping fields, including towards the rising tips and the Proposed Development will be possible from selected open locations on the fringes of the settlement. As illustrated in **Viewpoint 5 (Figures 16A-16D)**, from a public right of way and **Viewpoint 10 (Figures 21A-21D)** within **Appendix D** from a minor road, as they emerge from the enclosure of Nanpean, views will be possible across the surrounding well-vegetated sloping fields, towards the rising tips. Selected close proximity views towards the Proposed Development from the settlement fringes, although often limited by variations in the immediate sloping landform as well as screening by development and vegetation, will be possible. The Proposed Development will be perceived within the adjacent industrial landscape as two vertical moving elements in the view. The magnitude of impact will be **medium**. The level of effect will be **moderate adverse**. The effects will be **not significant**.

7.6.59 Views towards the Proposed Development will also be possible from the fringes of the nearby settlement of Foxhole/Goverseth to the south-west and Whitemoor to the north-west. Set on the lower slopes, amidst the undulating landscape and heavily influenced by surrounding industry and mineral workings, wider views from these settlement fringes will be possible, although often limited by intervening development, vegetation and variations in landform. As illustrated in **Viewpoint 9 (Figures 20A-20C, Appendix D)**, from the fringes of a new housing development on the fringes of Foxhole/Goverseth, views will be possible across the lower well-vegetated slopes, towards the rising tips. The Proposed Development will be perceived within the adjacent industrial landscape as two vertical moving elements in the view. The magnitude of impact will be **medium**. The level of effect will be **moderate adverse**. The effects will be **not significant**.

7.6.60 The contained Greystones Caravan Park also occurs approximately 1.1km to the south. The Proposed Development will possible although often restricted by intervening wider sloping landform and mature vegetation, in particular enclosing the settlement fringes. The Proposed Development will be perceived within the adjacent industrial landscape as two vertical moving elements in the view. The magnitude of impact will be **medium**. The level of effect will be **moderate adverse**. The effects will be **not significant**.

7.6.61 Other settlements further afield, including St Stephen approximately 3.6km to the south-west and St Dennis approximately 2.4km to the north-west are focussed around a church, situated on elevated ground within the settlements. As illustrated in **Viewpoint 1 (Figures 12A-12D)**, from the elevated St Dennis Church, wider views will be possible from selected open locations within and on the fringes of these settlements across the surrounding settlement and farmland, including towards the conical and distinctive distant tips and the proposed development. At worst, the magnitude of impact will be **medium-low**, the level of effect will be **moderate-minor adverse**. The effects will be **not significant**.

7.6.62 Roche is also situated approximately 3.4km to the north and views from the settlement fringes, as illustrated in **Viewpoint 2 (Figures 13A-13D, Appendix D)** from Roche Rock, are dominated by the surrounding tips, including the numerous lines of pylons that cross the landscape. The Proposed Development will easily go unnoticed in the view, which is dominated by the more prominent pylons. At worst, the magnitude of impact will be **negligible**, the level of effects will be **minor-negligible**. The effects will be **not significant**. Although in reality the influence of the proposed development will be difficult to ascertain or be even noticeable and for the majority of the settlement, the magnitude of impact will be **no change**, the level of effect will be **neutral**.

Scattered Residential Properties

7.6.63 *I*ndividual **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.

7.6.64 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**.

7.6.65 There are however a number of residential properties within close proximity, including stretched out along Old Pound Road. The housing lined Old Pound Road slopes up gently

from the south-west to the south, with the well-vegetated slopes associated with the adjacent tip rising up immediately to the north of the houses.

7.6.66 As illustrated in **Viewpoint 6 (Figures 17A-17C)** to the south and **Viewpoint 8 (Figures 19A-19C) of Appendix D** to the south-west, from gaps in the vegetative enclosure along Old Pound Road, views towards the adjacent rising tips, including towards the Proposed Development, from the houses will be possible. At worst, the magnitude of impact will be **medium-high**, the level of effect will be **major-moderate**. The effects will be **significant**. However, many of the views from the houses stretched out along Old Pound Road will be limited by intervening vegetation, development and variations in landform, will restrict the influence on the views. The variations in landform, in combination with the sensitive siting of the proposed development will also ensure that for the majority of views, only part of the proposed wind turbines will be perceived, as illustrated in **Viewpoint 6 (Figures 17A-17C)** and **Viewpoint 8 (Figures 19A-19C) of Appendix D** which will reduce the influence of the proposed development. Views of the Proposed Development will not be overbearing or dominate the view.

National Trails

7.6.67 The **high** sensitivity South West Coast Path National Trail crosses the study area to the south-east approximately 7.7km to the south-east at its closest point. 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

7.6.68 The **high** sensitivity Saints Way recreational route crosses the study area from the north-east to the east, approximately 7.7km to the east at its closest point. 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**.

National Cycle Routes

7.6.69 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. 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.**

7.6.70 As illustrated in **Viewpoint 12 (Figures 23A-23C, Appendix D)** from NCR305 along a minor road crossing Goss Moor to the north, even from this open location, although views over the adjacent moorland and farmland are possible, long distance views towards the Proposed Development will be largely restricted by the distant tips on the horizon. At worst, only the blade tips of the Proposed Development will be perceived and 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**.

Places of Interest (including Country Parks)

7.6.71 The **high** sensitivity and renowned Eden Project, approximately 7.2km to the east and the **high** sensitivity Wheal Martyn Museum and Country Park, approximately 2.8km to the east are excluded from the ZTVs. 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**.

7.6.72 Even from the Lost Gardens of Heligan, approximately 9.6km to the south, which is within the ZTVs, a combination of distance and screening by mature vegetation both within and surrounding the place of interest will restrict any influence the Proposed Development may have on its setting. 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

7.6.73 There are **medium-high and high** (within the National Landscape) sensitivity scattered public rights of way, bridleways and cycleways present within the study area.

7.6.74 As illustrated in **Viewpoint 16 (Figures 27A-27D, Appendix D)**, from a gap in enclosure along the **medium-high** sensitivity public right of way at Innis Downs to the north-east, although views are possible across the immediate fields, including towards scattered operational wind energy schemes, only glimpses of the blade tips of the Proposed Development will be possible, just above the distant tips. The Proposed Development will easily go unnoticed in the view from the public right of way and the magnitude of impact will be **negligible**, the level of effect will be **negligible adverse**. The effects will be **not significant**.

7.6.75 Even from a public right of way on the fringes of the National Landscape to the south-east, as illustrated in **Viewpoint 15 (Figures 26A-26D, Appendix D)**, 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 has the potential to be viewed from the public right of way, just above the horizon. At worst, the introduction of two additional moving and vertical elements 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.**

7.6.76 It will generally only be from those few **medium-high** sensitivity public rights of way in close proximity that will experience exposed views.

7.6.77 As illustrated in **Viewpoint 5 (Figures 16A-16D, Appendix D)**, as the public right of way emerges from the enclosure of Nanpean, views will be possible across the surrounding well-vegetated sloping fields, towards the rising tips and the Proposed Development. The Proposed Development will be perceived as vertical moving elements, above the adjacent tip. The magnitude of impact will be **medium**, the level of effect will be **moderate adverse**. The effects will be **not significant**.

Open Access Areas

7.6.78 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.

7.6.79 As illustrated in **Viewpoint 4 (Figures 15A-15D, Appendix D)**, expansive views will be possible from the open access area to the north-east adjacent to Hensbarrow Beacon across the landscape of rough grassland, dominated by large tips and quarry workings and crossed and punctuated by lines of pylons and scattered wind energy schemes. The Proposed Development will have the potential to be perceived, although largely obscured by the intervening tips. The magnitude of impact will be **medium-low**, the level of effect will be **moderate-minor adverse**. The effects will be **not significant**.

7.6.80 Expansive views will also be possible from St Stephen's Beacon open access area to the south-west. As illustrated in **Viewpoint 3 (Figures 14A-14D, Appendix D)**, from this elevated and open location, views will be possible across the adjacent settlement of Foxhole/Goverseth, spread out along the slopes, towards the distant tips. The Proposed Development will be perceived as two moving vertical elements within the industrial

landscape. The magnitude of impacts will be **medium**, the level of effect will be **moderate adverse**. The effects will be **not significant**.

7.6.81 From the open access areas further afield, as illustrated in **Viewpoint 2 (Figures 13A-13D, Appendix D)** from Roche Rock to the north-east and **Viewpoint 12 (Figures 23A-23C, Appendix D)** from Goss Moor to the north, although views will be possible across the intervening landscape, towards the distant tips, which form the horizon and restrict wider views, including towards other operational wind energy schemes, the Proposed Development will be barely (if at all) perceived within the expansive view. 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.

7.6.82 However, from the more distant and elevated open access areas, towards the fringes of the study area, including from Castle-an-Dinas to the north-west, as illustrated in **Viewpoint 14 (Figures 25A-25D, Appendix D)** and from Helman Tor to the north-east, as illustrated in **Viewpoint 17 (Figures 28A-28D, Appendix D)**, wider views will be possible. Although 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

7.6.83 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 2.9km to the south of the Proposed Development at its closest point. At worst, only the blade tips of the proposed development will have the potential to be perceived, 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**.

7.6.84 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 3.5km to the east of the Proposed Development at its closest point. there will be limited potential for

glimpsed and fleeting 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**.

7.6.85 Further afield and for the vast majority of the lengths of the major roads, the Proposed Development will not be perceived. The major roads, including the A30 broadly extending across the study area from the north-east to the west, will be largely enclosed by rolling landform, adjacent development and surrounding mature vegetation which will restrict 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**.

Minor Roads

7.6.86 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.

7.6.87 As illustrated in **Viewpoint 6 (Figures 17A-17C, Appendix D)** to the south and **Viewpoint 8 (Figures 19A-19C, Appendix D)** to the south-west, from gaps in the vegetative enclosure along Old Pound Road, views towards the adjacent rising tips, including towards the Proposed Development, will be possible. 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 Old Pound Road will be limited by intervening vegetation, development and variations in landform, which will restrict the influence. The subtle variations in landform, in combination with the sensitive siting of the Proposed Development will also ensure that for the majority of views, only part of the proposed wind turbines will be perceived, as illustrated in **Viewpoint 6 (Figures 17A-17C, Appendix D)** and **Viewpoint 8 (Figures 19A-19C, Appendix D)**.

7.6.88 As illustrated in **Viewpoint 7 (Figures 18A-18C, Appendix D)**, however, as the Water Hill minor road moves away from the variable screening along Old Pound Road, more expansive views will be possible from gaps in enclosure along the minor road, across the intervening vegetation and development, towards the rising tips, including towards the Proposed Development, although at least partially limited by the intervening landform. The magnitude of impact will be **medium-high**, the level of effect will be **moderate-minor**. The effects will be **not significant**.

7.6.89 The permissive quarry road connects with Greensplat Road to the south-east and many views from Greensplat Road towards the Proposed Development will be restricted by intervening hedgebanks and linear vegetation. As illustrated in **Viewpoint 11 (Figures 22A-22D)**, even from an open and elevated location along Greensplat Road to the south-east, the intervening tips will help to limit wider views, although the operational single wind turbine at Higher Goonamarth Farm is perceived. Only the blade tips of one of the proposed wind turbines will have the potential to be perceived, adjacent and in combination with the operational wind turbine at Higher Goonamarth Farm and will easily go unnoticed in the view. At worst, the magnitude of impact will be **negligible**, the level of effect will be **negligible**. The effects will be **not significant**.

7.6.90 Selected close proximity views towards the Proposed Development will be possible as the minor road emerges from the enclosure of the settlement, although often limited by variations in the immediate sloping landform as well as screening by development and vegetation. The Proposed Development will be perceived within the adjacent industrial landscape as two vertical moving elements in the view. The magnitude of impact will be **medium**. The level of effect will be **minor adverse**. The effects will be **not significant**.

7.6.91 As illustrated in **Viewpoint 13 (Figures 24A-24D, Appendix D)**, from Chapel Hill minor road, near Sticker, to the south, from an open location along a minor road, otherwise enclosed by hedgebanks, views across the farmland landscape towards the distant tips, scattered with wind energy schemes, will be possible. Only part of the Proposed Development, above the intervening sloping landform, will have the potential to be perceived and will not dominate the view. The magnitude of impact will be **low**, the level of effect will be **negligible adverse**. The effects will be **not significant**.

7.6.92 As illustrated in **Viewpoint 12 (Figures 23A-23C)** from a minor road crossing Goss Moor to the north, only the blade tips will be perceived just above the intervening tips. The Proposed Development will easily go unnoticed in the view and at worst, the magnitude of impact will be **negligible**, the level of effect will be **negligible adverse**. The effects will be **not significant**.

Railway Lines

7.6.93 A number of **low** sensitivity railway lines cross the study area, connecting and passing through St Austell to the south-east, with wider views, including towards the Proposed

Development, generally restricted by a combination of adjacent development, undulating landform and mature vegetation.

7.6.94 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**.

7.7 Cumulative Impacts and Effects

7.7.1 The Proposed Development is considered in addition to operational wind energy schemes, consented, and pending planning.

7.7.2 To aid in the cumulative assessment, additional photomontages have been created for the viewpoints (**Viewpoints 1-5, Figures 12D-16D, Viewpoints 10-11, Figures 21D-22D and Viewpoints 13-17, Figures 24D-28D, Appendix D**), showing the Proposed Development in combination with the nearby consented and pending planning wind energy schemes. The location of the wind energy schemes within the 20km radius study area are illustrated in **Figure 3**.

Landscape Character

7.7.3 As illustrated in **Viewpoints 1-5 and 10 (Figures 12D-16D and 21D, Appendix D)**, 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 separate vertical moving elements, viewed as a small cluster, within an expansive industrial landscape.

7.7.4 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."

7.7.5 Further afield, as illustrated in **Viewpoints 13-17 (Figures 24D-28D, Appendix D)**, within the wider landscape of the study area, the Proposed Development will be distantly perceived as additional vertical elements, within an expansive industrial landscape, already influenced by wind energy schemes.

7.7.6 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 turbines even in combination with other wind energy schemes without creating a 'wind farm' landscape.

Visual Amenity Receptors and their Views

Combined Views

7.7.7 As illustrated in **Viewpoints 1-5 and 10 (Figures 12D-16D and 21D, Appendix D),** the Proposed Development has the potential to be perceived separated but in combination with the nearby operational and consented wind turbines.

7.7.8 Even in **Viewpoint 11 (Figure 22D, Appendix D)**, the Proposed Development, although with the potential to be viewed as part of a small cluster with the nearby consented single Band D wind energy schemes at Higher Goonamarth 2, Longstones and East Karslake, will be largely hidden behind the nearby tip, its additional cumulative influence difficult to ascertain.

7.7.9 Further afield, as illustrated in **Viewpoints 13-17 (Figures 24D-28D, Appendix D)**, from selected distant, elevated and open locations, the Proposed Development will be distantly viewed as additional vertical elements, within an expansive industrial landscape, already influenced by wind energy schemes.

Sequential Views

7.7.10 Sequential views of wind energy schemes will be possible from the transport corridors including the adjacent minor roads and public rights of way. The screening surrounding many of the transport corridors, 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. The addition of the Proposed Development, even in combination with the nearby consented and pending planning wind turbines will not create 'wind farm' dominated journeys.

7.8 Conclusion

7.8.1 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, farms, 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.

7.8.2 The site is not recognised for its value through any landscape relevant designations, although there are scattered landscape relevant designations within the study area.

7.8.3 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 and no landscape vegetation such as hedgerows will be lost. 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 within a wider industrial landscape also minimises the wider impacts on landscape character, landscape relevant designations and nearby visual amenity receptors.

7.8.4 During the operation period, the proposed wind turbines, due to their 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 turbines 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 additional built moving elements, in combination with the adjacent operational, consented and pending planning wind energy schemes, within an expansive industrial landscape already influenced by extensive development, including wind energy schemes.

7.8.5 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 turbines will

not be 'overbearing' or dominate the view, perceived 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.

7.8.6 In summary, the proposed development will:

- Add two built vertical moving elements 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 and St Stephen in Brannel Parish Council);
- Be perceived in close proximity as a prominent vertical elements, in combination and adjacent 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.

8 Ecology

8.1 Introduction

8.1.1 Western Ecology were instructed to complete an Ecological Impact Assessment (EcIA) for the Proposed Development. A preliminary ecological walkover of the site was completed in June 2025.

8.1.2 This chapter presents the ecological information relating to valued ecological receptors and assesses the effect of changes on these features and in habitat management within the Proposed Development area.

8.1.3 The full EcIA along with survey reports can be found in **Appendix E**.

8.2 Assessment Methodology

8.2.1 The development site is shown on **Map 1** of the EcIA in **Appendix E** and includes all areas within the planning application boundary and any immediately adjacent areas that may be affected.

8.2.2 The Zone of Influence (ZOI) for the purpose of the assessment is immediate habitats that will be potentially impacted by the Proposed Development, non-statutory nature conservation sites within 2km, statutory designated sites within 5km and any statutory designation sites within 10km which have been designated for species at risk of wind developments.

8.2.3 The ecological baseline for the development site was determined through:

- Desktop survey;
- Preliminary ecological appraisal;
- Bird vantage point surveys; and
- Bat activity surveys.

8.2.4 Full reports detailing the breeding bird and bat activity surveys can be found in **Appendix E** along with further details of the assessment methodology, including desktop survey methodology.

8.3 Impact Assessment Methodology

8.3.1 The assessment of impacts has been carried out in accordance with the principles described by the Chartered Institute of Ecology and Environmental Management.

8.3.2 The ecological feature of importance that is affected by an impact is referred to as the receptor. Impacts are considered in terms of the value of the receptor in the context of nature conservation, and the character of the impact. From these the significance of the impact is determined.

8.3.3 As part of the impact assessment, the available means to avoid, minimise or mitigate for adverse impacts are incorporated into the design, so that the final impact assessment identifies the residual (net) impacts that are predicted. The consequences for development control, policy guidance and legislative compliance can then be identified.

8.3.4 Further information on the method for valuation of receptors and impact assessment criteria can be found within the EcIA in **Appendix E.**

8.4 Ecological Baseline

Desk Study

8.4.1 The biological records search identified several notable species. Due to the broad scale of many records, it is not possible to determine if they relate to the site. The full records for notable species (excluding bat and birds) are detailed within **Table 1** of the EcIA in **Appendix E**.

Statutory Nature Conservation Sites (SNCS)

8.4.2 Several Sites of Special Scientific Interest (SSSI) are located within 5km of the site, as listed below:

- Wheal Martyn SSSI - 2.7km to the east.
- Tregargus Quarries SSSI - 3.5km to the southwest.
- Roche Rock SSSI - 3.5km to the north.
- St Mewan Beacon SSSI - 3km to the south.
- Trelavour Downs SSSI – 2km to the northwest.
- St Austell Clay Pits SSSI - 4.8km to the east.
- Mid Cornwall Moors SSSI - 2.5km to the north.

8.4.3 The above SSSI's were scoped out from further consideration based on separation distance and lack of habitat relevance in relation to the Proposed Development.

8.4.4 St Austell Clay Pits SSSI can be scoped out at this stage, as can effect on St Austell Clay Pits Special Area of Conservation (SAC) which it underpins.

Non-statutory Nature Conservation Sites (NNCS)

8.4.5 There is one NNCS located within 1km:

- Longstone Downs County Wildlife Site (CWS) situated approximately 600m southeast of the Proposed Development. This CWS is an area of lowland heath within the China Clay works. This CWS is to be considered to have County value.

Baseline Habitats

8.4.6 Habitats within the development area are detailed in **Map 1** and described in **Table 2** of the EcIA in **Appendix E**.

8.4.7 Much of the Site comprises of habitats relating to habitat restoration work within the wider site area. Areas of modified grassland and dense ruderal/ephemeral swards vegetate the lower flat areas, alongside tracks, banks and dry ditches. High steep banks to the north, east and south are vegetated with varied density scrub. Atop the eastern bank are sections of modified grass and ruderal/ephemeral mosaic interspersed with sections of unvegetated base substrate (quarry spoil), some with manure fertiliser overlain. An area towards the centre is in operational use for reworking of rock.

Species of nature conservation importance

Amphibians (common and widespread)

8.4.8 The Assessment Site is of Site value for amphibians as the area provides a mosaic of potential habitats, particularly ditches and grassland/scrub edges.

Badger

8.4.9 The Assessment Site is of Site value for badgers. The local area is likely to support badger populations, however at the Proposed Development site no setts or other field signs were observed. Depending on wider fencing, there may be limited foraging opportunities on site.

Bats - Roosting

8.4.10 The Assessment Site is of Negligible value for roosting bats due to lack of habitat.

Bats - Foraging and commuting

8.4.11 The Assessment Site is of Site value for four bat species – common pipistrelle, Nathusius's pipistrelle, brown long-eared and noctule with Low to Moderate night activity on site.

8.4.12 The Assessment Site is of Negligible value for the remaining bat species – barbastelle, serotine, Myotis spp. and Soprano pipistrelle – which were seldom recorded on site.

Breeding birds

8.4.13 The Assessment Site is of Site value for breeding bird species.

8.4.14 A total of 26 bird species were recorded during the three-breeding bird transects in April, May and June 2025. Of these, 14 species are declining and included in the in the BoCC5 Red or Amber lists and 7 are species of principle importance.

8.4.15 Results indicate that the wider assessment site and surrounding land supports good breeding bird assemblages typical of the local China Clay pits. Most bird activity was associated with the margins of the assessment site and consisted of common passerines such as chaffinch, blackbird, robin, willow warbler and wren. The open grassland areas also supported probable breeding activity from skylark and meadow pipit. Notable species such as grasshopper warbler and reed bunting were occasionally active however no breeding territories were recorded. Non-breeding species such as carrion crow, pheasant, magpie, wood pigeon and two gull species were also recorded.

8.4.16 Breeding period Vantage Point Surveys (VPS) were undertaken to inform collision risk modelling. These surveys recorded buzzard, common gull, greater black-backed gull, green sand piper, herring gull, kestrel, lesser black-backed gull, peregrine, mallard and sparrowhawk. The predicted number of collisions were: buzzard (0.6 per breeding season), herring gull (0.6), kestrel (1.9) and for all other bird species the estimated number of collisions per annum was <0.05.

Nightjar

8.4.17 The Assessment Site is of Local value to nightjar.

8.4.18 The Assessment Site does not provide optimal habitat for nightjar. However, nightjar activity was recorded within the wider survey area on two of the three survey visits. A

presumed pair was recorded with observed breeding behaviour, and a suspected nest site was located on the periphery of the assessment site. Foraging activity was also recorded within the wider survey area.

Wintering birds

8.4.19 There is potential for notable wintering species to be within the assessment site. Passage/wintering VPS are currently on -going, and this receptor will be valued once this survey has been completed.

Common Dormice

8.4.20 The Assessment Site is of Negligible value for dormice. Suitable habitat is limited and isolated from other suitable habitat in the local area, whilst also lacking good diversity of woody fruiting shrubs. It is considered unlikely that dormice are active in the area.

Hedgehog

8.4.21 The Assessment Site is of Site value for hedgehog. Grassland and scrub habitats provide foraging, dispersal and hibernation opportunities.

Reptiles

8.4.22 The Assessment Site is of Site value for reptiles. The grassland habitat provides negligible potential for foraging or hibernating reptiles. The grassland edge habitats and scrub habitat provide opportunities for foraging, dispersal and hibernation for reptile species such as slow worm, common lizard, grass snake and adder.

Otters

8.4.23 The Assessment Site is of Negligible value for otter.

Water Vole

The Assessment Site if of Negligible value for water vole.

Notable Invertebrates

8.4.24 The Assessment Site is of Negligible value for notable invertebrates. Habitats at this site are likely to support common and widespread invertebrates although there are no priority invertebrate habitats site.

Notable Plants

8.4.25 The Assessment Site is of Negligible value for notable plants. Rare liverwort Western Rustwort is present within the wider area, however no suitable habitat is associated with the Assessment Site.

Invasive non-native Species

8.4.26 Rhododendron *R. ponticum* is present within scrub habitats within the Site.

8.5 Assessment of ecological impacts

Construction phase impacts

8.5.1 During the construction phase, there is predictable adverse effects which are generally unavoidable; many are short term and can be minimised as part of the construction management.

8.5.2 The potential for adverse effects are largely short term.

8.5.3 Full details of all potential construction phase impacts can be found in **Appendix E**.

Non-statutory nature conservation sites

Longstone Downs CWS

8.5.4 This CWS is located approximately 600m southeast of the Assessment Site. It is unlikely that waterborne pollution from the assessment would reach this CWS. There is little potential for airborne pollutants to be created during the construction phase. It is near-certain that unmitigated construction would have no adverse effect on this CWS.

Species

Amphibians (common and widespread)

8.5.5 The Assessment Site is a Site value for foraging amphibians. There is potential for construction activities to result in accidental harm. Unmitigated construction is near-certain to have a minor, temporary adverse effect on common and widespread amphibians.

Badgers

8.5.6 The Assessment Site is of Site value for badgers. There is potential for adverse effects during the construction phase. It is unlikely that unmitigated construction would have an

effect on badgers. An effect, were it to occur, would be associated with becoming trapped within the site and would be short term, minor and adverse.

8.5.7 There is negligible potential to impact badger in a way that could be considered an offence under relevant wildlife legislation.

Bats - foraging and commuting

8.5.8 The primary pathway of effect during construction would be through impacts to habitat features used by foraging bats. There will be a temporary loss of limited area of habitat associated with construction due to storage areas/compounds, although loss of this limited extent is unlikely impact local populations.

8.5.9 No nighttime works are planned for the construction phase. Short term disturbance to these habitats is unlikely to affect local bat populations.

8.5.10 Unmitigated construction is near - certain to have a negligible effect on foraging and commuting bats.

Hedgehog

8.5.11 The Assessment Site is of Site value for hedgehog. There is potential for adverse effects during the construction phase. It is unlikely that unmitigated construction would have an effect on hedgehog and an effect, were it to occur, would be associated with becoming trapped within the site and would be temporary, minor, adverse.

Breeding birds

8.5.12 The Assessment Site is of Site value to breeding bird populations and the construction phase has potential to impact breeding birds through disturbance/displacement and direct harm to nests. The majority of breeding activity was recorded within scrub located at the edges of the Assessment Site which would be unimpacted during the construction phase.

8.5.13 The construction phase would involve clearance of limited extents of modified grassland and ruderal/ephemeral habitats, although very little breeding activity was recorded here, should any active nests be present here, there is potential for construction works to damage or destroy them. This impact is considered to be minor adverse, temporary and could be an offence under the Wildlife & Countryside Act (1981).

8.5.14 Breeding territories associated with the grassland areas would be likely to be more susceptible to disturbance given the open nature of these areas. Given the extent of available retained grassland habitat in the immediate area, and the temporary nature of any displacement or disturbance, this impact is considered negligible.

8.5.15 Any accidental damage to active nests that may be present within the construction area would be a temporary, minor adverse impact to breeding birds. This could also be considered an offence under the Wildlife & Countryside Act (1981) as amended.

Nightjar

8.5.16 Nightjar have been recorded within the wider Assessment Site including breeding activity. During the construction phase, pathways of impact would mostly concern increased levels of noise, vibration, machinery movements and human presence which would likely disturb or displace breeding nightjar.

8.5.17 The presence of a potential nesting site is approximately 220m from the nearest construction area, above the minimum buffer of 150m, and is also well screened. The foraging areas have greater separation distance, and it is anticipated that nightjar would continue foraging in the wider area. In addition, the construction period would only occur during daylight hours.

8.5.18 Unmitigated construction activities would have a negligible effect on breeding nightjar.

Wintering birds

8.5.19 The wintering VP surveys are ongoing, and the EcIA in **Appendix E** will be amended once the survey effort is complete.

8.5.20 The construction phase would involve increased levels of disturbance, which is not anticipated to displace winter flight activity, as the Site is located within an operational mining area and species will be largely normalised to disturbance.

Reptiles

8.5.21 The Assessment Site is of Site value for reptile species. The primary pathway of effect would be during vegetation clearance and accidental damage to areas where they may be present. The temporary loss of habitat would not affect foraging reptiles, or reptile populations.

8.5.22 It is probable that unmitigated construction would have an adverse effect on individual reptiles were they to be present. Any effect was it to occur would be **adverse, minor,** and short term.

Invasive non-native plants

8.5.23 Rhododendron is present onsite and there is potential to cause it to spread (further) during unmitigated construction. It is probable that unmitigated construction would result in the spread of this plant. Any effect would be adverse and long-term. However, against the background distribution of this plant within the mining areas, any impact would be trivial. Causing the spread of rhododendron in the wild may be considered an offence under relevant legislation.

Operational phase impacts

8.5.24 During the operational phase, there are predictable adverse effects including the permanent loss of habitat under the development, disturbance during maintenance, and barrier effects and displacement of birds.

8.5.25 Full details of potential operational phase impacts can be found in **Appendix E**.

Non-statutory nature conservation sites

Longstone Downs CWS

8.5.26 There will be no habitat loss within this CWS whilst the features for which this site has been selected are not susceptible to other operational effects and therefore it is certain that the operational phase would have a negligible effect.

Species

Amphibians (common and widespread)

8.5.27 The Assessment Site is of Site value for foraging amphibians; they may be present in ditches and margins. These habitats will be retained and no impact is predicted. Therefore, it is certain that the operational phase would have a negligible effect on amphibians.

Badgers

8.5.28 No badger setts or evidence of badger were observed within the Assessment Site, however foraging badgers are likely in the area and onsite. There is no realistic ecological pathway

of effect for impact to badgers during the operational phase, other than enhancement to meet Biodiversity Net Gain, although this is likely to be trivial. It is certain that the operational phase would have a negligible effect on badgers.

Bats (foraging and commuting)

8.5.29 No suitable features for roosting bats were within 200m of the Assessment Site. The primary pathway of effect would be through permanent habitat loss associated with the development and collision with moving blades.

8.5.30 Due to their extremely low levels of activity during walked transects and remote monitoring, no realistic ecological pathway of effect exists for Barbastelle, Serotine, Myotis spp. and Soprano Pipistrelle.

8.5.31 Nathusius' pipistrelle are at high collision risk. The current level of activity is Low to Moderate and likely to reflect the habitat types at this location, which appear largely unsuitable for flying invertebrates. It is probable that the operational phase will have a negligible adverse effect on populations of Nathisius' pipistrelle. Any effect, were it to occur, would be at an individual level due to the collision mortality, and would be unlikely, minor and permanent adverse.

8.5.32 Common pipistrelle are considered a high collision risk species. The current level of activity is Low and likely to reflect the habitat types at this location. It is near certain that the operational phase will have a negligible adverse effect on populations of common pipistrelle. Any effect, were it to occur, would be at an individual level due to collision mortality and would be unlikely, minor, permanent adverse.

8.5.33 Noctule are considered a high collision risk species. Levels of Noctule activity at the turbine sites were Low. It is near-certain that the operational phase will have a negligible effect on the populations of Noctule. Any effect, were it to occur, would be at an individual level due to collision mortality and would be minor adverse.

8.5.34 Brown Long-eared bats are at low risk from turbines. This bat is not considered at risk from turbines due to it's close to ground foraging ecology. It is near-certain that the operational phase will have a negligible adverse effect on populations or individual Brown Long-eared bats.

8.5.35 Low numbers of passes from other bats were recorded at the Assessment Site including barbastelle, serotine, Myotis spp. and Soprano pipistrelle. None of these species are active

within the vicinity of the turbines on a regular basis. It is near certain that the operational phase would have a negligible impact on barbastelle, serotine, Myotis spp. and Soprano pipistrelle.

Hedgehog

8.5.36 The Assessment Site is of Site value for hedgehog. There will be no suitable habitat, and no adverse effect is predicted. It is certain that the operational phase would have a negligible effect on hedgehog.

Breeding birds

8.5.37 Direct habitat loss associated with the operational phase concerns limited extents of modified grassland and ruderal/ephemeral habitats. These areas typically support very little breeding bird activity. The direct habitat loss is unlikely to adversely affect breeding bird populations at the Assessment Site.

8.5.38 Indirect habitat loss through displacement and disturbance is not considered likely to impact species breeding within and around the assessment site. Areas of retained habitat across the immediate area are likely to remain viable for the species that are already present. No adverse effects arising from disturbance or displacement is likely.

8.5.39 The proposed turbines are considered unlikely to disrupt flight paths used by birds that are active in the area. The turbines would be situated in the lee of an adjacent spoil heap which would remain at a greater height than the proposed maximum blade height. Therefore, natural flight lines of birds transiting through the airspace to the east of the turbines would be above blade height in order to clear the spoil heap. It is therefore considered unlikely that the presence of the turbines would create any barrier to birds transiting either north-south or east-west through the turbine envelopes.

8.5.40 Gulls were frequently observed flying higher than blade height and it is anticipated that the presence of two turbines here would not serve as a barrier.

8.5.41 Kestrel flight activity was broadly associated with two areas – to the east and west of the turbine locations. The majority of kestrel flight activity involved foraging with little transiting between areas. It is therefore unlikely that the two turbines would act as a barrier between these two foraging areas. It is not anticipated that the presence of two turbines here would prevent kestrels from accessing hunting grounds in the local area.

8.5.42 Buzzard flights consisted of soaring on thermals associated with steeper topography, some foraging activity and transiting flights. Flight heights were blade height and above and it is therefore anticipated buzzards would still be able to forage and transit through the area whilst the proposed turbines are operational.

8.5.43 For other species, the recorded flight activity suggests they are seldom active in the area and therefore the two turbines would not act as a significant barrier on transiting routes.

8.5.44 The species recorded here are largely similar to those recorded during VP survey work for other turbines in the area and are likely to be from the same local populations. It is anticipated that populations which are active in the area will quickly become adapted to the presence of two new turbines in this landscape, given the frequency of turbines in this local area. Barrier effect is not considered likely to impact the species recorded here.

8.5.45 Cumulative collision estimates for target species during the breeding season are provided in **Table 5** of **Appendix E**. For the majority of target species recorded, the predicted number of collisions is less than 1 individual per annum which is considered to be a negligible impact on local populations. Buzzard, herring gull and kestrel were the only species for which there were estimated to be more than 1 mortalities per annum.

8.5.46 Cumulative impacts are formally assessed in **Chapter 9** of **Appendix E.** Unmitigated operation of the proposed turbines delivers collision estimates of 2 kestrels per breeding season which is considered to represent a long-term, moderate adverse effect on breeding birds.

Nightjar

8.5.47 Nightjar breeding activity was recorded during survey visits. Foraging activity was associated with a flat area of extensive grassland approximately 200m to the west of the proposed location for Turbine 2. The main impacts arising from the operation of the two turbines would be displacement and collision.

8.5.48 Nightjar flights are documented to be consistently below 20m and therefore the nightjar breeding and foraging at the Assessment Site would be largely below the lowest point of blade sweep (18m). The location of the suspected nest site is also very well screened by local topography. Displacement or mortality due to collision caused by the unmitigated operation of the turbines would represent a long-term moderate adverse effect.

Wintering birds

8.5.49 The wintering VP surveys are currently ongoing and the value of the Assessment Site in relation to this receptor will be updated once the survey efforts are complete.

8.5.50 Direct habitat loss associated with the operational phase concerns limited extents of modified grassland and ruderal/ephemeral habitats, which are typically unlikely to support notable wintering foraging. Therefore, direct habitat loss is considered to be unlikely to adversely affect wintering birds.

8.5.51 The operation of turbines may result in an increase of displacement. There is extensive habitat located beyond 260m from the turbines which would remain available to any wintering species which may be active here. Therefore, disturbance/displacement would not adversely impact wintering birds, however this will be updated upon completion of the winter VP surveys.

8.5.52 The proposed turbines are considered unlikely to disrupt flight paths used by birds that are active in the area. It is considered unlikely that the presence of the turbines would create a barrier to birds transiting either north-south or east-west through the turbine envelopes. It is therefore predicted that barrier effect would not adversely impact wintering birds.

8.5.53 Gull species, kestrel and buzzard are all likely to be active within/around the Assessment Site during the winter period, it is anticipated that annual collision estimates for these species will increase as a result which will contribute to cumulative estimates. There is also potential for other notable species to be active here. The assessment will be updated upon completion of the winter VP surveys. An assessment of the likely impact on winter/passage birds cannot be made at this stage.

Reptiles

8.5.54 The Assessment Site is of Site value for reptile species. There will be no loss of suitable habitat, and no adverse effect is predicted. It is certain that the operational phase would have a negligible effect on reptiles.

Invasive non-native species

8.5.55 Rhododendron is present onsite and there is potential to cause it to spread (further) during habitat management. It is probable that unmitigated operational habitat would result in the spread of this plant. Any effect would be adverse and long-term. However, against the background distribution of this plant within the mining areas, any impact would be trivial.

8.6 Mitigation

Construction phase

8.6.1 The following mitigation would be provided to minimise the unavoidable effects during the construction phase:

- Design and delivery of a Construction Environmental Management Plan that incorporates ecological protections for all sensitive ecological features.
- Vehicle and machinery movements should follow only designated routes to help contain disturbance to the works areas.
- Prior to incidental vegetation removal, any activities affecting these habitats should be completed September to February outside the accepted bird nesting season. If unpracticable, 24-48 hours prior to works, these habitats should be inspected by a suitable person. If nesting birds are found, affected works are to be delayed.
- Mitigation would be adopted for reptiles and amphibians during site clearance during the period November to mid-March, whereby clearance of habitats which may provide hibernation potential should be avoided. If unavoidable, vegetation is to be cut back to bank level during September and October. Mitigation would also be adopted during the period late March to October (active reptile or amphibian season), areas should be de-vegetated prior to site activities under the supervision of an ecologist to disperse any animals into adjacent habitats.
- Any trenches left open overnight would have means of escape for mammals.

8.6.2 Full details of proposed mitigation during the construction phase can be found within the EcIA in **Appendix E.**

Operational phase

- Mitigation is required to avoid effects during the operational phase of breeding birds, wintering birds and nightjar, which would involve a bird mitigation strategy with measures such as habitat manipulation to minimise prey items and encourage bird activity away from turbines, while enhancing existing habitat with sufficient separation distance from the turbines. Monitoring will also likely be required to ensure habitat manipulation has been successful. The details of mitigation are to be determined once winter bird survey effort has been completed.

- A rhododendron management plan should be adopted detailing control in habitats managed for Biodiversity Net Gain during the operational period.

8.7 Residual impacts

8.7.1 Residual impacts on valued ecological receptors during the construction and operational phases are minimal, with no effect being significant at the level of assessment. Details of potential impacts and their significance at the level of assessment is given in **Table 6** of the EcIA in **Appendix E**. Where no reasonable pathway of effect exists and pre-mitigation impact has been discounted, the receptor is not considered.

8.7.2 The Proposed Development will involve the creation of modified grassland, other neutral grassland and mixed scrub habitat. As a result of this the proposed development will result in 11.37% of net gain in habitat areas within the vicinity of the site.

8.8 Cumulative effects

8.8.1 Cumulative impacts are those additional changes caused by a Proposed Development in conjunction with similar developments, or as the combined effect of several developments taken together.

8.8.2 Five other turbines have either been approved within the vicinity of the Proposed Development. These are Longstones, East Karslake, Wheal Martyn, Burngullow and Higher Goonamarth turbines.

Breeding Birds

8.8.3 The cumulative impact upon certain breeds of target bird species from this Proposed Development and approved turbines in the local area has been calculated. The findings of impact assessments for birds associated with the approved turbines are shown in **Table 7** of the EcIA in **Appendix E**.

Disturbance/ displacement

8.8.4 The species recorded at the Assessment Site are largely similar to those recorded during VP survey work for other turbines in the area and are likely to be from the same local populations. It is anticipated that populations active in the local area will become quickly adapted to the prese4nce of two new turbines in this landscape. Barrier effect is not considered likely to impact the species recorded here.

Collision risk

8.8.5 For the majority of target species recorded, the predicted number of collisions is less than 1 individual per annum which is considered to be a negligible impact on local populations, buzzard, herring gull and kestrel were the only species for which there were estimated to be more than 1 mortalities per breeding season.

8.8.6 Mitigation is therefore required to avoid collision mortalities during the operational phase. The winter VP survey is currently on-going and this mitigation requirement may need to be extended for birds which are active within the winter period. The details of mitigation will be determined once the winter survey efforts have been completed. Monitoring is also likely to be required to ensure habitat manipulation has been successful.

Bats

8.8.7 The cumulative impact upon bats from this Proposed Development and nearby approved turbines in the local area has been calculated. The findings of impact assessments for bats associated with the approved turbines are summarised in **Table 8** of **Appendix E**.

8.8.8 These other turbine developments have largely found there to be negligible to minor adverse impacts, and which were likely to affect individual bats rather than the respective populations. Given the separation distance of at least 1km with the above developments and the presence of large areas of unsuitable habitat between (associated with China Clay works) there is poor connectivity for the bat species recorded at the Assessment Site. No significant cumulative impact upon bats is predicted.

8.9 Conclusion

8.9.1 The scope of the ecological assessment was determined through a combination of desk study, fieldwork and analysis of the combined data. It has been determined that the Proposed Development will have no significant ecological effects on the site. Appropriate mitigation measures will be implemented to minimise the unavoidable effects during the construction phase and operational phases of the Proposed Development.

8.9.2 The mitigation and enhancement recommended are of a sufficient scale to ensure that the Proposed Development delivers the required biodiversity net gain, achieving an overall habitat net gain of 11.37%. The proposal therefore accords with the National Planning Policy Framework and Cornwall Council's Policy G2 – Biodiversity Net Gain within the Climate Emergency DPD. The Biodiversity Net Gain report supporting this proposal is provided in **Appendix E.**

8.9.3 The Proposed Development has also been designed in accordance with Policy G3 – Canopy, which seeks to increase canopy cover across Cornwall, and Policy G1 – Green Infrastructure Design and Maintenance, which aims to protect and enhance the natural environment as set out in the CEDPD. These policies collectively support climate resilience, biodiversity, ecosystem services and human health. The Tree Canopy Statement and Green Infrastructure Statement relating to this proposal are included in **Appendix E**.

9 Heritage Impact Assessment

9.1. Introduction

9.1.1. South West Archaeology Ltd. (SWARCH) was commissioned by the Applicant to undertake a Heritage Impact Assessment (HIA) for two proposed wind turbines at Dubbers, St Stephen-in-Brannel. The purpose of the assessment was to identify heritage assets within the site and its surroundings and subsequently evaluate the potential impacts of the proposed development on these assets. The full HIA report can be viewed in **Appendix F.**

9.1.2. The assessment is divided into two main components. The first component addresses the direct impacts of the proposed development - defined as the physical effect that the development may have on heritage assets within, or immediately adjacent to, the development site. The direct effects of the development were taken to be its direct physical effect on any buried archaeological resources. The second component of the assessment addresses the potential indirect impacts of the proposed development. Indirect impacts would occur where the proposed development would impinge on the setting of a heritage asset, though would not have a direct physical effect.

9.2. Guidance and Policy

9.2.1. General policy and guidance for the conservation of the historic environment are now contained within the National Planning Policy Framework (Department for Housing, Communities and Local Government 2024).

9.2.2. Relevant local policy is provided in the Cornwall Local Plan: Strategic Policies 2010-2030: Policy 24: Historic environment.

9.2.3. This assessment was undertaken in accordance with best practice and follows the guidance outlined in: *Conservation Principles, The Setting of Heritage Assets, Statements of Heritage Significance* and guidance outlined in the *Principles of Cultural Heritage Impact Assessment* in the UK produced by CIfA, IHBC and IEMA.

9.3. Methodology

9.3.1. A desk-based assessment was completed to identify the potential direct impacts of the proposed wind turbines on archaeological features, thus establishing the archaeological baseline for the site. The assessment included a search of documentary records, existing

archaeological surveys, historic maps, HER records, as well as research of Historic Landscape Characterisations, aerial photography, and LiDAR data. A visit to the surrounding local designated heritage assets was conducted on the 22nd October 2025. A site walkover was not undertaken due to constraints around access and the known non-existent archaeological potential of the site. Photographs of the present condition of the site were provided by the Applicant to demonstrate the lack of archaeological potential due to the extent of clay extraction on the site. These are presented in Figures 4 to 7 in **Appendix F**.

9.3.2. The magnitude of the direct physical impact upon the identified archaeological assets due to the development were rated and professional judgement was used to determine the significance of the potential impacts identified. The classifications and criteria used to make these judgements are outlined in Appendix 4 of the HIA report **(Appendix F).**

9.3.3. To identify the potential indirect impacts of the proposed wind turbine a proportional search radius of 10km was employed for the purposes of the assessment. Both Zone of Visual Influence (ZVI) and Zone of Theoretical Visibility (ZTV) maps were produced and examined to determine the areas from which the proposed wind turbine may be visible and used to identify designated heritage assets where appreciable effects from the proposed turbines may be experienced.

9.3.4. The predicted significance of the indirect impacts upon the setting of designated heritage assets were determined by considering the relative contribution of setting to the value of the asset – i.e., by determining the magnitude of the effect and the sensitivity of the heritage asset to that effect. Assessment of individual assets was informed by knowledge of the asset itself and of the type of asset it is, as well as through site visits to establish the setting of the asset at the time of investigation. This method enabled each identified asset to be assessed on an individual basis with the use of professional judgement. The classifications and criteria used to make these judgements are outlined in Appendix 4 of the HIA report **(Appendix F).**

9.3.5. **Table 2** below summarises the method used to assess the significance of effects due to the proposed development on identified heritage assets.

Table 2: Significance of effects matrix

		Scale and Severity of Change/Impact				
		No Change	Negligible Change	Minor Change	Moderate Change	Major Change
		Significance of Effect (either adverse or beneficial)				
Value	Very High	Neutral	Slight	Moderate or Large	Large or Very Large	Very Large
	High	Neutral	Slight	Slight or Moderate	Moderate or Large	Large or Very Large
	Medium	Neutral	Neutral or Slight	Slight	Moderate	Moderate or Large
	Low	Neutral	Neutral or Slight	Neutral or Slight	Slight	Slight or Moderate
	Negligible	Neutral	Neutral	Neutral or Slight	Neutral or Slight	Slight

9.4. Results

Direct Impacts

9.4.1. Direct impacts of the development relate to the potential for disturbance or destruction of archaeological features and deposits present within the footprint of the development. The level of impact depends on the presence and significance of any such remains.

9.4.2. Both turbines will be located on a bench tip, on the edge of an infilled mica dam. As a result, there will be no direct impacts for this development.

9.4.3. The historic maps show the tip was preceded by a series of small and fairly regular fields with unnamed cottage farmsteads, most likely post-medieval enclosures. The historic OS map indicates that T1 is located above the c.1900 Dubbers China clay pit and T2 is located on its associated spoil heaps.

9.4.4. Based on a comparison between historic OS maps and the LiDAR it is likely that below T2 the natural ground is buried under c.30m of China clay waste and the natural ground beneath T1 has been destroyed by China clay extractions.

9.4.5. A walkover of the site was not undertaken due to constraints around access and the known non-existent archaeological potential of the site. Figures 4 to 7 in **Appendix F** present the photos provided by the Applicant that demonstrate the lack of archaeological potential

through the extent of clay extraction. The assessment concludes the proposed development has no direct impacts and no further work is required.

Indirect Impacts

9.4.6. The assessment identified and assessed 44 heritage assets, the historic landscape, and the China Clay County. Each asset was assessed individually to identify the significance of the effects from the proposed development. Subsequently, aggregate and cumulative impacts were also determined. A summary of each individual asset's indirect impacts is presented in **Table 3** below.

9.4.7. For most designated heritage assets in the wider area, the proposed turbines would appear as a background element, and in many instances would be screened by trees and buildings. As **Table 3** shows, the effect on the majority of identified heritage assets is judged as **No Change**. Two sites were judged as **Neutral** effect**,** and the remaining seven assets, the effect is assessed as **Negligible Adverse.**

9.4.8. The aggregate impact of the proposed development is an assessment of the overall effect of the proposed development on multiple heritage assets. Based on the restricted number of assets where any appreciable effect is likely, the aggregate impact of the proposed development is judged to be **Negligible Adverse.**

9.4.9. The cumulative impact refers to the effect of multiple developments on a single heritage asset. The cumulative effect will be enhanced by the addition of the proposed wind turbine into the landscape; however, the number of designated heritage assets in this area where an appreciable effect is likely is fairly low. Therefore, the assessment concludes that the cumulative impact would be **Minor Adverse.**

9.4.10. It is determined that the proposed turbines would introduce a perceptible new element into the landscape, but such features are not unprecedented with operation turbines already in the area and other under construction or consented. The presence of other turbines at the same scale in the surrounding area will provide a degree of visual coherence. The scale and extent of modern intervention within the area means that large turbines appear relatively modest when viewed with the size and number of spoil tips. On this basis, the overall impact on the historic environment is assessed as **Minor Adverse.**

Table 3: *Summary of indirect impacts.*

Asset	Type	Distance	Value	Scale of Change	Significance of effect	Professional Judgement
Bible Christian Chapel With Attached Sunday School	II	0.7km	Medium	Negligible	Slight	Negligible Adverse
Longstone on Longstone Downs	SM	0.8km	High	No change	Neutral	No change
Nanpean Cemetery War Memorial	II	1.3km	Medium	Negligible	Slight	Negligible Adverse
Platform cairn 180m north-west of Hensbarrow Farm	SM	1.9km	High	No change	Neutral	No change
Earlier prehistoric hillfort and round cairn at St Stephen's Beacon	SM	2.4km	High	Negligible	Slight	Negligible Adverse
Round cairn with beacon called Hensbarrow	SM	2.5km	High	Negligible	Slight	Negligible Adverse
House Immediately East Of The Old Rectory	II	3.2km	Medium	No change	Neutral	No Change
Cottage At SW 9646 5925	II	3.2km	Medium	No change	Neutral	No change
Church Of St Dennis	II*	3.2377018km	High	Negligible	Slight	Negligible Adverse
Trethosa School	II	3.5km	Medium	No change	Neutral	No change
Chapel Of St Michael At Roche Rock	I	3.7km	High	Negligible	Slight	Neutral
Church Of St Gomonda	II*	3.7300762km	High	Negligible	Slight	Neutral
Gover Railway Viaduct Including Piers To North	II	4.0km	Medium	No change	Neutral	No change
St Stephen Churchtown Cemetery War Memorial	II	4.2km	Medium	No change	Neutral	No change
Church Of St Stephen	I	4.3km	High	No change	Neutral	No change
Queens Head Inn	II	4.3km	Medium	No change	Neutral	No change
Church Room	II	4.4km	Medium	No change	Neutral	No change
Pendine Farmhouse	II	4.6km	Medium	No change	Neutral	No change
Three bowl barrows between 120m and 820m south of Brynn Barton Cottage	SM	4.9km	High	No change	Neutral	No change

Stable About 50 Metres West Of Bodinnick Farm-house	II	4.9km	Medium	No Change	Neutral	No change
Barn Attached To South Of The Stable About 50 Metres West Of Bodinnick Farmhouse	II	4.9km	Medium	No Change	Neutral	No change
Church of St Mewan	II*	4.9km	High	Negligible	Slight	Negligible Ad-verse
Meledor Farmhouse	II*	5.1km	High	No Change	Neutral	No change
Resugga Farmhouse	II	5.1km	Medium	No Change	Neutral	No change
Sticker Camp later Prehis-toric-Roman round	SM	6.0km	High	No Change	Neutral	No change
Resugga Castle later prehis-toric univallate hillfort	SM	6.3km	Medium	No Change	Neutral	No change
Part of a mining complex at South Polgooth Mine	SM	6.5km	High	No Change	Neutral	No change
Large multivallate hillfort with two bowl barrows known as Castlean-Dinas, 335m north of Tresad-dern Bungalow	SM	6.8km	High	Negligible	Slight	Negligible Ad-verse
Round barrow 530m north west of Carnwinnick	SM	7.1km	High	No Change	Neutral	No change
Pennans Farmhouse	II*	7.6km	High	No Change	Neutral	No change
Penrice	II*	7.9km	High	No Change	Neutral	No change
Bowl barrow 270m south west of Castle Hill Farm	SM	8.2km	High	No Change	Neutral	No change
Small multivallate hillfort 230m south-east of Great Prideaux	SM	8.3km	High	No Change	Neutral	No change
Church Of St Enoder	I	8.4km	High	No Change	Neutral	No change
Round called Castle Gotha	SM	8.4km	High	No Change	Neutral	No change
A henge re-used as a medie-val playing place, 75m north east of Castle Hill Farm	SM	8.5km	High	No Change	Neutral	No change
Three bowl barrows 670m and 775m north west of Homer Downs	SM	8.6km	High	No Change	Neutral	No change
Bank House	II*	9.6km	High	No Change	Neutral	No change
Town Hall	II*	9.7km	High	No Change	Neutral	No change

The Glebe House	II*	9.7km	High	No Change	Neutral	No change
Church Of St Ladoca	I	9.7km	High	No Change	Neutral	No change
Church Of St Columba	I	9.7km	High	No Change	Neutral	No change
Prehistoric and Roman settlement at Carvossa	SM	9.8km	High	No Change	Neutral	No change
Earlier prehistoric hillfort, stone hut circle settlement and field system at Helman Tor	SM	10.1km	High	No Change	Neutral	No change
Historic Landscape					Slight	Minor Adverse
China Clay County	Non-Deg		Medium	Minor	Slight	Minor Adverse
Aggregate Impact					Slight	Negligible Adverse
Cumulative Impact					Slight	Minor Adverse

9.5. Conclusion

9.5.1. The assessment concludes there will be no direct impacts as a result of the proposed development. Historical maps indicate that post-medieval smallholdings were located on the site; however, the expansion of China Clay extraction in the 20th century destroyed or buried these structures beneath the bench tip. As the previous use of the site – as a China clay quarry and bench tip – has removed or deeply buried any archaeological sites or features, archaeological mitigation is irrelevant, and no further work is possible.

9.5.2. There are relatively few designated heritage assets within China Clay Country, reflecting its marginal location and the extensive transformation of the landscape by the China clay industry. For most designated heritage assets in the wider area, the proposed turbines would appear as a background element, and in many instances would be screened by trees and buildings. As a result, only a few designated heritage assets are likely to experience any appreciable adverse effect. For most, the effect of the proposed turbine is judged as **No Change**, with two sites judged as **Neutral** and the remainder assessed as **Negligible Adverse.** Consequently, the aggregate impact of the proposed development is judged to be **Negligible Adverse** and the cumulative impact as **Minor Adverse.**

10 Noise

10.1 Introduction

10.1.1 TNEI Services Ltd were contracted by The Applicant to undertake a noise assessment for the two proposed wind turbines at Dubbers. The full assessment report can be found in **Appendix G**.

10.1.2 Predictions of wind turbine noise have been made, based upon sound power level data for the Vestas V117 4.3NW Mode PO2, the candidate turbine model for the proposed development. Five nearby consented single Wind Turbines have all been considered as part of a cumulative noise assessment, along with 4 other operational EWT DW54 (500 kW) wind turbines and a potential additional 1 x wind turbine at Higher Biscovillack also proposed by The Applicant.

10.1.3 The turbine noise prediction model used is considered to provide a realistic impact assessment and considers current good practice, inclusive of the institute of Acoustics document 'A Good Practice Guide to the Application of ETSU-R-97 for the Rating and Assessment of Wind Turbines'[17] issued in May 2013.

10.1.4 The predictions were undertaken at 18 Noise Assessment Locations (NALs) which are representative of residential properties in the immediate and wider areas. Total ETSU-R-97 Noise Limits (cumulative limits) have already been set for 14 of the NALs in the planning applications for Longstones (PA20/09318), East Karslake (PA24/05782), Wheal Martyn (PA21/07216), Goonamarth 2 (PA24/08135) and Burngullow (PA23/09937). For the proposed development, 4 additional receptors were considered. Avondale Terrace, Whitemoor, Menmundy Cottage and Old Pound. Total Noise Limits have been set at these NALs derived from background noise levels at a proxy location, Longstone House, and in line with other consented developments in the area.

10.1.5 A background noise assessment was conducted at selected Noise Monitoring Locations (NMLs) in the area as part of the Longstones (PA20/09318), East Karslake (PA24/05782), Wheal Martyn (PA21/07216) planning applications to establish prevailing background noise levels. The locations of the three NMLs (A, B and C) and the 19 NALs are shown in Error! R eference source not found. below.

[17] https://www.ioa.org.uk/sites/default/files/IOA%20Good%20Practice%20Guide%20on%20Wind%20Turbine%20Noise%20-%20May%202013.pdf (accessed 22/10/2025)

Table 4: *Noise Assessment Locations and corresponding Noise Monitoring Location.*

NALs	**X (Easting)**	**Y (Northing)**	**Distance to nearest Dubbers WT (m)**	**Representative NML**
NAL1-Newgate	197946	53255	2874 (T2)	B
NAL2-Prideaux	198384	53077	3144 (T2)	B
NAL3-23 Carne Hill	198762	53393	2981 (T2)	B
NAL4-Treglyn Gardens	199550	53677	3169 (T2)	B
NAL 5-Secret Cottage (2 properties)	199152	53871	2769 (T2)	B
NAL6-Penisker Farm	199087	54161	2500 (T2)	B
NAL7-Biscovillack Farm	199576	54088	2886 (T2)	B
NAL8-Area 51 campsite and house east of Greensplat Rd	200157	54074	3337 (T2)	B
NAL10-Greystone Cottage	199819	54849	2631 (T2)	D
NAL11-Longstone Cottage	197688	55420	699 (T2)	A
NAL12-Longstone House	197633	55346	760 (T2)	A
NAL13-Carthew Farm Cottage	200287	55931	2684 (T1)	C
NAL14-Adit (property North of Carthew)	200287	56332	2637 (T1)	C
NAL15-Avondale Terrace, Whitemoor	197045	56977	810 (T1)	A
NAL16-Menmundy Cottage	196525	56368	1014 (T2)	A
NAL17-Old Pound	197154	55665	552 (T2)	A
NAL18-Old Pound near Clay Community Church	197341	55594	525 (T2)	A

10.1.6 The four new receptors (NAL15-NAL18) have been set with Total Noise Limits derived from background noise levels at the proxy location, Longstone House. Due to NAL15- Avondale Terrace, Whitemoor and NAL16- Menmundy Cottage being far away from all other wind turbines in the area, no other cumulative development is expected to contribute to noise

levels experienced at these properties as such the daytime fixed minimum limit was reduced to 35dB for these two receptors.

10.1.7 The total ESTU-R-97 Noise Limits for all NALs are summarised in **Table 2.2 and Table 2.3 in Appendix G.**

10.2 Noise Assessment Results

10.2.1 **Figures A1.2a to A1.2r** present the cumulative noise predictions at each NAL in a graphical format. A breakdown of the individual wind turbine predictions is also provided on each figure. **Table 3.1** presents the predicted sound levels cumulatively and for individual wind turbines, **Tables 3.2 and 3.3** show the compliance of these predictions with both the daytime and nigh-time Total ETSU-R-97 Limits. All tables can be found in **Appendix G.**

10.2.2 The compliance tables show that predicted cumulative wind turbine noise levels are below the ETSU-R-97 Noise Limits at most of the Noise Assessment Locations, with marginal exceptions for 3 receptors south of the Proposed Development:

- NAL11 Longstone Cottage – Exceedance up to 0.8dB daytime 7-8m/s, easterly winds
- NAL12-Longstone House - Exceedance up to 0.2dB daytime 7-8m/s, easterly winds
- NAL18- Old Pound near Clay Community Church - Exceedance up to 0.5dB daytime 7-8m/s, easterly winds

10.2.3 Exceedances are only observed in easterly winds at speeds of between 7-8m/s. Mitigation is required in these circumstances for the candidate turbine to comply with the Total noise limits. TNEI has determined that, by applying the candidate turbine's programmable Low Noise Modes to reduce sound power levels to those specified in **Appendix G, Annex 4 – Suggested Noise Condition** for these wind speeds and directions, compliance at all NALs is achieved. It is proposed that the turbines are conditioned to these levels to ensure compliance throughout their operational lifetime.

10.3 Conclusion

10.3.1 Predictions of wind turbine noise have been made, based upon sound power level data for a candidate turbine model, the Vestas V117 4.3MW Mode PO2 for the proposed development. Five nearby consented single Wind Turbines at Longstones, East Karslake, Wheal Martyn, Goonamarth 2 and Burngullow have all been considered as part of a cumulative noise assessment, along with 4 other operational EWT DW54 (500 kW) wind

turbines and a potential 1 x wind turbine at Higher Biscovillack also proposed by The Applicant have all been considered as part of a cumulative noise assessment.

10.3.2 The predictions were undertaken at 18 Noise Assessment Locations which are residential properties in the immediate and wider area. For most of the Noise Assessment Locations, Total ETSU-R-97 Noise Limits (also referred to as the 'cumulative limit') have already been set in the planning application noise reports of wind turbines consented at Longstones (PA20/09318), East Karslake (PA24/05782), Wheal Martyn (PA21/07216), Goonamarth 2 (PA24/08135) and Burngullow (PA23/09937). Four additional receptors were considered for the proposed development: Avondale Terrace, Whitemoor, Menmundy Cottage and Old Pound with total Noise Limits derived from background noise levels at a proxy location, Longstone House, for these receptors.

10.3.3 The assessment results show that predicted cumulative wind turbine noise levels are below the Total ETSU-R-97 Noise Limits at most of the Noise Assessment Locations, with three exceptions which can be mitigated via the use of Low Noise Modes in specific time periods, wind speeds and directions. This indicates that the candidate turbine model, a Vestas V117 4.3MW, would be a suitable wind turbine model in regard to noise for the proposed development.

11 Flood Risk Assessment and Hydrological Assessment

11.1 Introduction

11.1.1. The Applicant commissioned Engineering & Development Solutions (EDS) to undertake a Flood Risk Assessment (FRA) and Hydrological Assessment for the proposed wind turbines and associated infrastructure at Dubbers. The primary aim of the FRA was to ensure that the Proposed Development will not increase flood risk elsewhere outside of the site.A suitable sustainable drainage scheme (SuDS) is recommended to manage surface water runoff from the development. The full FRA and Hydrological Assessment can be viewed in **Appendix H.**

11.2. Site Description

Site Location

11.2.1. The Proposed Development for two wind turbines and associated infrastructure is located within the Old Pound China Clay mining area to the northwest of St. Austell, Cornwall. The site is a former clay works and disused Mica Mine.

11.2.2. Existing haul roads will be used to access the site from Greensplat road to the northeast.

Topography

11.2.3. The site has a high point of 271m Above Ordnance Datum (AOD) and generally falls in a westerly and south westerly direction towards the old Dubbers Mica Mine. Land to the southwest of this slopes gently to the village of Nanpean which is located approximately 1km away.

11.3. Hydrological and Hydrogeological Context

Hydrology

11.3.1. The local hydrology around the site is influenced largely by the former China Clay workings around the site, with several unnamed watercourses at the base of these features. These watercourses would be the natural receptor for surface water runoff generated by the site.

11.3.2. The unnamed watercourses follow the ground profile and fall to the west towards the village of Nanpean; a system of open channels and culverts pass through the village before

a confluence with the River Fal. The runoff from the site will drain into these channels to the catchment area illustrated in **Figure 4** of **Appendix H.**

Hydrogeology

11.3.3. The site is underlain by an igneous intrusion of predominantly granite bedrock, commonly known as the St. Austell Intrusion. The local environment is dominated by intrusions of silica-rich magma. Additionally, the west of the site is dominated by superficial deposits.

11.3.4. The area is designated as a 'Secondary A' Aquifer type. This describes permeable layers which can support local water supplies and may form an important source of base flow to rivers.

11.3.5. The area is classified as having a 'High' Groundwater Vulnerability. This is a measure of the vulnerability of groundwater to a pollutant discharged at ground level, based upon hydrological, geological, hydrogeological, and soil properties within the area.

11.3.6. To identify the depth of groundwater in the vicinity of the site, BGS borehole records were searched. It is anticipated that the groundwater levels at the site will be at an estimated elevation of approximately 160m AOD. The ground level at the site is approximately 257m AOD, and therefore the groundwater will be well depressed beneath the ground surface.

11.4. Assessment of Flood Risks

Fluvial and Tidal Flooding

11.4.1. The Environment Agency's Indicative Flood Risk Map for Planning (**Figure 8** of **Appendix H**) shows that the entire site is located within Flood Zone 1, having a less than 1 in 1000 annual probability of river and sea flooding. The site is therefore **not at risk** from either fluvial or tidal flooding.

Groundwater Flooding

11.4.2. The predicted groundwater level at the site confirms that construction activities related to the Proposed Development are unlikely to interact with groundwater flows and will take place above the phreatic surface. Therefore, the risk of groundwater flooding or impact of the proposed works on the groundwater regime is considered to be **low** and has not been examined further.

Overland Flow

11.4.3. The Proposed Development is located on relatively high ground which is sloped towards Dubbers mine.

11.4.4. As a result, there is minimal potential for surface water to run towards the Proposed Development. This is further confirmed by the Environment Agency's Flood Risk from Surface Water Map extract (**Figure 9** of **Appendix H**) which places the site in an area of very low risk of flooding from surface water. Therefore, flooding from surface water is **not** considered to represent a significant risk to the development.

Flooding from Sewers

11.4.5. There are no mains sewers in the area. The nearest upslope residential dwelling is 1km west of the development. Therefore, he likelihood of flooding from sewers is **negligible.**

Flooding from Reservoirs, Canals, and Other Artificial Sources

11.4.6. The Environment Agency's flood risk mapping service does not indicate that the site is at risk of flooding from reservoirs. Furthermore, the water level within the Blackpool Pit is at a significantly lower elevation than the site and escape of water from the pit would not represent a flood risk to the site. Therefore, flooding of the site from reservoirs and other artificial water bodies is **not** considered to be a significant risk.

Flooding as a Result of Development

11.4.7. The development of the site will alter the nature of the surface permeability across the site through the implementation of the hardstanding and access track. To reduce the risk of flooding in areas downstream, it is essential to understand and manage the surface water runoff from the development through a sustainable surface water drainage system (SuDS).

11.4.8. The proposed SuDS will ensure that the Proposed Development will not increase flood risk to third parties downslope.

11.5. Proposed Sustainable Drainage System (SuDS)

11.5.1. Due to the site's location in the China Clay mining area, it is unlikely that an infiltration-based drainage system would work effectively, due to the high clay content in the subsoil. Therefore, an attenuation-based drainage system is proposed for the development. Please see **Appendix H** for an outline of the design standards used to inform the SuDS design and for details of the drainage calculations performed.

Drainage Design

11.5.2. The design introduced approximately 8,300m^2 of equivalent impermeable area. It is proposed to drain the impermeable areas of the development by means of a series of shallow swales laid along the lower perimeter of the hardstanding area and access road. The swales will convey flows to a surface detention basin constructed close by. Flow from the basin will be discharged into the local surface water environment (unnamed tributary) at a rate equivalent to the greenfield runoff rate, calculated as a maximum discharge of 10.3l/s.

11.5.3. The system will provide initial filtering of the site runoff during the construction phase and settlement in the detention basin to reduce the impacts of silt laden runoff on the watercourse downstream. An attenuation basin formed using a base area of 450m^2 with a water depth of 1.2m and a side slope of 1:3 would provide sufficient storage for the 1 in 100 year plus 50% allowance for a climate change storm event. The basin will usually remain dry but will provide temporary storage and silt settlement during extreme rainfall.

11.5.4. A conceptual surface water drainage layout can be viewed in **Appendix H.**

Exceedance Events

11.5.5. Although unlikely, it is possible that water may flood the system if the proposed drainage system were to become blocked or in the event of a storm in excess of the 1 in 100-year return period rainfall event occurring (including climate change allowance). The overflowing water would run over ground in a westerly and south westerly direction from the site, where it would be intercepted by the existing watercourse.

11.5.6. Due to the storage provided in the proposed drainage systems and design standard used, any exceedance flows would be lower than would flow offsite in the pre-development scenario for a similar storm event.

Maintenance

11.5.7. Maintenance activities for the systems will broadly comprise regular maintenance, occasional tasks, and remedial work where necessary, as detailed in **Table 1 of Appendix H.** Inspection of the surface water drainage system can generally be undertaken during routine site visits.

11.5.8. Management and maintenance responsibility for the infrastructure will be the responsibility of the site owner/operator.

***Table 5**: Detention Basin and Swales Typical Maintenance Activity Schedule.*

Detention Basin and Swales		
Maintenance Activity	Required Action	Typical Frequency
Regular maintenance	t grass and verges surrounding basin/swales to allow for access	nthly or as required (based on inspections)
	Clear upstream drainage features of debris	
	pect flow control device for blockages and remove any sediment in chamber.	
Occasional maintenance	move sediment and debris from inlet and outlet to basin and swales	required, based on inspections
Monitoring	pect swales and detention basin and note rate of sediment accumulation	nthly in the first year, then annually
	Check detention basin to ensure emptying is occurring	Annually

Residential Risks After Development

11.5.9. Rainfall over and above the design event could cause the sustainable drainage system to flood; however, any exceedance flows would be dealt with as outlined above.

Construction Stage Drainage

11.5.10. To limit the potential for silt discoloured water to run off the site during construction, it is proposed that the attenuation basin and swale collection system be constructed at the front end of the works. Any runoff from the subsequent construction of the hardstanding and turbine foundation may then be intercepted by the SuDS system. The runoff will be filtered, and settlement will occur within the conveyance swales and attenuation basin.

11.5.11. It is proposed that a temporary line of silt fencing be installed downslope of the works area during the construction phase to mitigate the potential effects of temporary additional impermeable surfaces on site. Additionally, moveable straw bales provided at the lower end of the access track will allow interception and filtration of any runoff bypassing the SuDS system along the access.

11.6. Conclusion

11.6.1. The FRA and Hydrology Assessment concludes that there is no risk of flooding on site, and that the development will not increase the risk of flooding elsewhere with the installation of the proposed sustainable drainage system.

11.7.1. Provided the recommendations outlined in this report are adopted in the development proposal then there is the capacity to manage the surface water runoff from the development onsite. The proposed drainage infrastructure has been designed in accordance with guidance outlined in the NPPF, PPG, and Drainage Guidance for Cornwall and therefore the Proposed Development is entirely appropriate on this site from a flood risk perspective.

12 Electro Magnetic Interference (EMI)

12.1 Introduction

12.1.1 Wind turbines have the potential to affect electromagnetic transmissions, including radio, television, and telecommunications signals, primarily through physical obstruction or signal reflection.

12.1.2 Current national planning guidance on this matter is set out within the *Planning Practice Guidance for Renewable and Low Carbon Energy* (PPG)[18]. The PPG, published 2015 and updated in 2023, states:

"*Wind turbines can potentially affect electromagnetic transmissions (eg radio, television and phone signals). Specialist organisations responsible for the operation of electromagnetic links typically require 100m clearance either side of a line of sight link from the swept area of turbine blades. Ofcom acts as a central point of contact for identifying specific consultees relevant to a site.*"

12.1.3 While the *Planning for Renewable Energy: A Companion Guide to PPS22* (2004) has been superseded by the above guidance, it may still be treated as a material consideration where its technical advice remains relevant. The Companion Guide provides useful explanatory context and describes two ways in which wind turbine developments may interfere with electromagnetic transmissions:

- The blocking or deflecting of the line of site of transmissions (as with any large structure) or
- The dispersal of signals.

12.1.4 The PSS22 also states "*it is the responsibility of the developers to address any potential impacts, taking account of Civil Aviation Authority, Ministry of Defence and Department for Transport for guidance in relation to radar and aviation, before planning applications are submitted. Local Planning Authorities should satisfy themselves that such issues have been addressed before considering planning applications'*[19].

[18] https://www.gov.uk/guidance/renewable-and-low-carbon-energy (Accessed 20th October 2025)

[19] Office of the Deputy Prime Minister, Planning Policy Statement 22. Accessed 20th October 2025 via: https://www.inbalance-energy.co.uk/further_reading_books/planning_permission/planning_policy_statement_22_renewable_energy.pdf

12.2 Consultation Responses

12.2.1 In accordance with guidance, the telecommunications and aviation organisations listed in **Table 6** have been consulted.

Table 6: Responses from telecommunications and aviation organisations

Consultee	Date of Consultation Initiated	Date of Consultation Received	Consultation Response
Atkins Global	15/10/2025	16/10/2025	No objection
Joint Radio Company (JRC)	15/10/2025	16/10/2025	No objection
Ministry of Defence (MOD)	15/10/25	Not received	Not received

12.3 Summary

12.3.1 Due to the consultation responses received, the Applicant is confident that the proposed turbines are unlikely to adversely impact telecommunication links.

12.3.2 The turbines can be fitted with MOD accredited visible or infrared aviation safety lighting, should this be deemed necessary, to mitigate any low-flying concerns - as done in line with MOD feedback for consented turbines in the area. Any concerns raised by the MOD will be addressed following consultation.

12.3.3 Details of the correspondence to date can be found in **Appendix I.**

13 Shadow Flicker

13.1 Introduction

13.1.1 Clean Earth (The Applicant) has completed a shadow flicker analysis for the proposed development of two wind turbines up to 135m to tip on land at Dubbers China-Clay Works, Nanpean, St. Stephen-in-Brannel, PL26 8XT. The full assessment can be found within **Appendix J.**

13.1.2 Shadow flicker describes the effect of the sun passing behind the rotating blades of a wind turbine, causing a shadow that flicks on and off. Under certain combinations of geographical position and time of day, properties in the local vicinity to the turbine may be affected by shadow flicker. Concerns have been expressed that the stroboscopic effects of shadow flicker may induce epilepsy or similar symptoms. However, the operating speed of the blades on the proposed wind turbine would cause shadow flicker at a substantially lower frequency range than that considered to induce photosensitive epilepsy. As a result, there are no predicted adverse health effects of the development caused by shadow flicker.

13.1.3 Guidance on shadow flicker states that properties within a radius of 10 times the rotor diameter centred on the turbine may be affected by shadow flicker. Based on the 117m rotor diameter of the candidate turbine, The Applicant has carried out modelling of the potential shadow flicker using a study radius of 1,170m. Industry-standard Resoft Windfarm software has been utilised for this analysis. Planning guidance on shadow flicker recommends that the effects of shadow flicker at a given property should not exceed 30 minutes a day or 30 hours a year.

13.2 Assessment

13.2.1 The Vestas-117 wind turbine model has a rotor diameter of 117m. From this measurement, a 1,170m study area has been set out. The potential shadow flicker effects beyond this distance can be considered negligible.

13.2.2 In total, 111 residential properties were identified within the study area, a summary of the shadow flicker modelling and associated map can be found in **Appendix J**. As standard practice dictates, it has been assumed that each house within the study area has a window of 1m x 1m, located on the house to the nearest point to the turbine. It is assumed that each window is positioned at a height-to-centre of 2m above ground level, directly facing the proposed wind turbines. This allows for the consideration of 1 representative window

per receptor facing turbines 1 & 2 and represents a worst-case scenario in relation to conditions assuming the window directly faces the turbines, no screening between residential properties and the turbines and all year-round sunny weather.

13.2.3 In total 26 properties were identified to theoretically experience shadow flicker in excess of 30 hours per year or for over 30 minutes a day threshold. The full set of results, the graphical output of shadow flicker events for all houses and a map showing the modelled properties can be found in **Appendix J**.

13.3 Limitations

13.3.1 It is important to note that all shadow flicker values produced by the analysis represent theoretical maximum figures of shadow flicker impact. The modelling calculations assumes that the wind turbine is always operational and does not take into account common UK winter weather conditions (e.g. cloud cover, wind speed and direction). The modelling assumes no screening by trees or hedges and walls are present, which are expected to greatly reduce potential shadow flicker effects. Furthermore, some of the affected dwellings may not have windows facing the development, and any affected windows may well be in rooms that are not generally in use when adverse effects may occur. Consequently, the actual shadow flicker experienced by properties identified in this study is likely to be considerably lower.

13.4 Mitigation

13.4.1 Minimising any potential effects of shadow flicker on neighbouring properties has been considered in the positioning of the turbine, by maximising the distance of the development site from the existing properties. Notwithstanding this, monitoring and mitigating measures will be put in place to address any potential shadow flicker impacts that may arise.

13.4.2 A shadow flicker mitigation programme will be installed into the turbine upon commissioning to ensure that all impacts could be eliminated in the presence of conditions that would cause shadow flicker. This is achieved by installing light meters on the wind turbine and programming the turbine to switch off during potential shadow flicker occurrences that have been pre-determined – this programme can be initiated at any time during the operational life of the proposed wind turbine and will allow for the turbine's shutdown immediately if a valid complaint from an impacted receptor is received which would then effectively nullify any shadow impact.

13.5 Conclusion

13.5.1 In total, 111 properties lie within the 1,170m study area. Of which 64 of the properties would potentially be impacted by shadow flicker – however, only 26 could theoretically experience over 30 minutes of flicker on any day or over 30 days per year threshold.

13.5.2 It is important to note that all shadow flicker values given are the theoretical maximum hours of shadow flicker that will be experienced. The modelling calculations assumes the turbine is always operational and takes no account of weather conditions (cloud cover, wind speed and direction) or screening by trees or hedges, which can be expected to greatly reduce potential shadow flicker effects. Consequently, the actual amount of shadow flicker experienced by these properties is likely to be significantly lower than predicted.

13.5.3 For properties where shadow flicker could occur intermittently, the proposed turbines will be installed with a precautionary shadow flicker mitigation programme, allowing the turbine to shut down if shadow flicker occurs – ensuring all shadow flicker impact is eliminated.

14 Transport

14.1 Introduction

14.1.1 The Applicant has completed a Construction Transport Management Plan (CTMP) which identifies the high-level philosophy for the management of construction traffic and abnormal load deliveries associated with the construction of the Proposed Development. It is intended to be a working document that will be developed further and agreed with Cornwall Council prior to construction.

14.1.2 The report documents travel logistics of construction traffic and turbine components from the A30 to land at Dubbers China-Clay Works, Nanpean, St. Stephen-in-Brannel, PL26 8XT.

14.1.3 During the operational stage of the proposed development, traffic to the site will be minimal. On occasion a visit to the site by maintenance personnel, using light vehicles such as a light van or a 4x4 may be required. There may be a requirement for abnormal loads to access the site during operation in the unlikely event of a repair or major component replacement, but this eventuality is not expected.

14.1.4 Upon decommissioning of the wind turbines, there may be further impact on road traffic during the removal of equipment and building materials from the Site but this is not expected to be more than the construction phase.

14.1.5 Each Abnormal Load Movement will be planned and notified to every local council, road, and police authority according to the requirements of the Abnormal Indivisible Loads (AIL) Roads Vehicles (Authorisation of Special Types) (General) Order 2003.

14.1.6 The full report can be found in **Appendix K**.

14.2 Construction Traffic

14.2.1 Subject to successfully securing planning permission, the Applicant intends to construct the development in an approximate construction programme of approximately 6-9 months.

14.2.2 The CTMP estimates traffic generation associated with construction activities – **Table 1** of the CTMP gives a breakdown of vehicle types and number of movements.

14.2.3 The turbine components: generators, nacelles, hubs, turbine blades and tower sections will contribute to an estimated 52 HGV movements. The longest component, the turbine blade will be a maximum of 57.5m in length.

14.2.4 Two cranes are required for the installation of each turbine, and whilst these are not categorised as abnormal loads, their movement is considered as part of the turbine delivery sequence – **Table 2** of the CTMP gives a breakdown of the proposed turbines component delivery vehicles and crane movements and **Table 3** provides an indicative construction programme.

14.3 Transport Route

14.3.1 The route of general construction traffic will depend on the location from which materials are sourced, however it is anticipated that all material deliveries will arrive via A30 and A391 (Roche Bypass). Construction deliveries will be restricted to these routes where practical and suppliers will be briefed accordingly.

14.3.2 Abnormal Indivisible Loads (AIL) will arrive the A30 westbound, the route will take the first exit at Victoria Interchange and go straight over at the roundabout to join the A391.

- The route will continue on the road and cross straight over the first roundabout, and again, straight over for the second roundabout.
- On the third roundabout, the third exit is used to access Hensbarrow Hill Rd.
- It then bears right at the signposted junction for Brookland Sand & Aggregates.
- From here, loads will turn right onto site using the existing entrance - shown in **Appendix F** of the CTMP.
- Loads will continue along with unclassified haul roads to the development area.

14.3.3 The indicative transport route is shown in **Figure 2** of the CTMP.

14.3.4 Sections of the main highways may require using the full width of the carriageway for long loads and hence such loads would require a police escort. Street furnishings along the route will need to be removed, in conjunction with oversail rights and heavy goods traffic management in the proximity of the Imerys quarries near the Proposed Development site. Details of necessary street furniture material and associated traffic management will be formalised post-planning – swept path analysis of the route is shown in **Table 5** and Appendix of the CTMP.

14.4 Mitigation Measures

14.4.1 There are a number of traffic management measures proposed to minimise the effect of general construction traffic on the road network. Many of these measures can also be applied to the movement of abnormal loads.

14.4.2 Following receipt of planning approval, a full site investigation will be conducted, including exploration for suitable material for use on access tracks and crane hardstanding. Using site material would significantly reduce the number of vehicle movements required for imported stone.

14.4.3 Geogrids will be used to minimise road and hardstanding thicknesses and excavated material will be reused and landscaped on site following construction - reducing the over-all requirement for imported material

14.4.4 Measures to reduce dust and debris and examples of traffic signage are included in the CTMP.

14.4.5 The proposed working hours during the construction phase of the development are 0730 – 1800 hours. Although out of hours (1800 – 0730) working will not be normally required, certain works may have to be undertaken during this period and will be agreed with the LPA.

14.4.6 Abnormal load deliveries will be scheduled outside of peak travel hours to minimise disruption to other road users.

14.4.7 Contractor parking will be entirely on site within the construction compound. Parking beyond the site boundary, on the local road network, will be prohibited.

14.5 Conclusion

14.5.1 The potential impact of the HGV traffic associated with the proposed construction on the local road network is expected to be minimal due to the new road network, the scale and duration of works. All removal of traffic furniture will be temporary and reinstated following the transportation phase.

14.5.2 The turbine components: generators, nacelles, hubs, turbine blades and tower sections will contribute to an estimated 52 HGV movements.

14.5.3 Consideration of adequate visibility splays have been provided, as well as the proposition of the required signage and traffic management procedures to ensure any potential impact to existing road users is minimised.

14.5.4 On the basis of the above, it is not deemed that the potential impact relating to construction traffic over the construction period would be significant. Any major impacts would be of short duration, for example during abnormal load movements.

15 Pre-Application Consultation

15.1 Introduction

15.1.1 A public consultation will be held on Tuesday 25th November, between 5pm-8pm at Brannel Room, 22 Fore Street, St Stephen, St Austell, PL26 7NN where details of the proposal will be available.

15.1.2 The full suite of reports will also be published online at www.cleanearthenergy.com, where comments can be submitted up to 21 days following the event.

16 Aviation

16.1 Introduction

16.1.1 This chapter assesses the potential impact of Proposed Development on aviation interests. The assessment is in line with the UK Civil Aviation Authority's (CAA) Policy on Wind Turbine Developments which requires developers to undertake their own pre-planning assessment of potential civil aviation related issues . A comprehensive and independent Aviation Statement, conducted by Straten Consulting, can be found in **Appendix M.**

16.1.2 The UK Government's guidance on renewable energy and low carbon energy (published 2014, updated 2023) states that "wind turbines may have an adverse effect on air traffic movement and safety. Firstly, they may represent a risk of collision with low flying aircraft, and secondly, they may interfere with the proper operation of radar by limiting the capacity to handle air traffic, and aircraft instrument landing systems" , therefore, full consideration should be applied during the planning process.

16.1.3 The proposed site is situated on the final approach path for Runway 30 at Cornwall Airport Newquay (CAN), approximately 12.95km from the Aerodrome Reference Point (ARP).

16.1.4 The Applicant has undertaken multiple wind turbine projects in the China Clay area since 2019, maintaining ongoing engagement with Cornwall Airport Newquay (CAN) regarding development feasibility. In response to initial concerns, independent aviation consultants were commissioned to carry out assessments.

16.1.5 Technical discussions concluded in March 2020, confirming the suitability of turbine developments in the area, subject to a maximum elevation limit and a commitment to notify CAN of any material changes.

16.1.6 The agreed restriction requires turbines to remain below 401m AOD (ground level plus tip height). Straten Consulting reviewed the proposed development against this limit and previous assessments to confirm compliance and assess potential impacts on CAN.

16.2 Analysis

16.2.1 Cyrrus conducted a series of aviation assessments and an Aeronautical study to consider the potential impact of the proposed turbine on the Airport, Airspace and aircraft operations.

16.2.2 Straten Consulting performed an updated review of the Instrumental Flight Procedures (IFPs) which confirmed the IFP designs are current.

16.2.3 The results of the review against the published procedures in the UK Aeronautical information Publication (AIP) Amendment 09/2025 found no impact of the proposed turbine on aviation operations.

16.3 Cornwall Airport Newquay (CAN)

16.3.1 CAN is the only airport that could potentially be impacted by the proposal. The physical safeguarding of licenced aerodromes is defined in Chapter 4 of the CAA publication CAP168 – Licensing of Aerodromes .

16.3.2 An Instrument Flight Procedure (IFP) Safeguarding Assessment conducted and determined that wind turbines within the China Clay area would need to remain below an elevation of 401m (above mean sea level) in order not to impact the IFPs. The proposed turbines, with a tip height of up to 135m at a ground elevation of 257m, will reach a total elevation of 392m which is well below the 401m restriction. Therefore, there will be no impact on Aviation operations.

16.3.3 An Aeronautical Study was conducted to determine the potential impact to aircraft operations using the airspace in the vicinity of the Site and the Airport. This study concluded no impact.

16.3.4 A Technical Safeguarding assessment was conducted to determine the potential impact the site could have on the Airport's Instrumental Landing System (ILS) which concluded no impact.

16.4 Other Infrastructure

16.4.1 There are no impacts to Navigational Aids, radio stations for air-ground-air communications, to any NATS infrastructure or to any UK Met Office weather radar.

16.5 Conclusion

16.5.1 The assessments undertaken in support of The Proposed Development categorically show that it will have no adverse safety impact on the operation or functioning of aviation interests in the area and Cornwall Airport Newquay.

17 Contaminated Land Risk Assessment

17.1 Introduction

17.1.1 Wheal Jane Consultancy was commissioned by The Applicant to undertake a Phase 1 Preliminary Risk Assessment to evaluate the potential for land contamination at the Dubbers site in relation to the Proposed Development for two wind turbines. The full report can be found in **Appendix N**.

17.1.2 The Site is currently split into two sections. The northern section forms part of the existing China Clay Works which has concluded works and is now undergoing restoration. The southern section is separated from the northern section by a deer fence, consists entirely of open grassland with no built structures present.

17.1.3 The objective of the assessment is to examine past and present site conditions to identify any potential risk of contamination or ground instability resulting from historical and contemporary site usage.

17.2 Methodology

17.2.1 The assessment was undertaken in accordance with BS10175:2011+A2:2017 and the Land Contamination Risk Management (LCRM) framework to identify potential land contamination and geotechnical risks associated with the proposed development.

17.2.2 The methodology included a desk-based review of geological, hydrological, environmental, and historical information from trusted sources including the British Geological Survey, Landmark Environmental Data, and historic Ordnance Survey maps.

17.2.3 A site walkover survey was carried out on 2nd October 2025 to confirm current conditions and identify any visible evidence of contamination.

17.2.4 A Preliminary Conceptual Site Model (CSM) was developed to identify potential contaminant sources, pathways, and receptors. Each plausible pollutant linkage was qualitatively assessed in accordance with published LCRM guidance.

17.3 Results

17.3.1 Historical mapping confirmed that the Site formed part of the Dubbers China Clay Works, containing a former quarry and clay pit. However, given that the proposed development involves only two wind turbines and associated infrastructure, the potential for a contamination pathway is considered **low.**

17.3.2 Key environmental settings relating to the Site were assessed. No recorded instances of contaminated land, landfills, or pollution incidents of concern within the area of potential influence were identified.

17.3.3 The Site lies within a zone where 5–10% of properties exceed the radon action level. As the proposed development does not include any occupied buildings, the associated risk is assessed as **low.**

17.3.4 Naturally occurring levels of heavy metals in the local geology are within **acceptable** levels.

17.3.5 The majority of potential pollutant linkages identified are considered **low risk**, with no evidence of contamination capable of causing harm to potential receptors including humans, fauna and flora found.

17.3.6 The exception being historic metalliferous mining activities which are considered at **moderate risk**.

17.3.7 In the absence of a significant contamination source or viable pollutant linkage, the Site is considered suitable for the proposed development, and no further investigation is deemed necessary at this stage.

17.4 Conclusion

17.4.1 The historical mapping confirmed that the Site has previously formed part of the Dubbers China Clay Works, including quarry and clay pit operations. However, due to the limited scope of the proposed wind turbine development, no contamination pathways of concern have been identified.

17.4.2 In the absence of a significant source of contamination, it can be concluded that the proposed Site is suitable for its intended future use and that no further investigation will be required.

18 Socioeconomic

18.1 Introduction

18.1.1 This chapter will assess the socioeconomic profile of Cornwall and the socioeconomic impacts of the Proposed Development. It begins by outlining the socioeconomic profile of Cornwall including demographic and economic characteristics, before describing the recreational and tourist activities surrounding the Proposed Development. It also provides an assessment of the potential impacts of the proposed development on local communities, the economy, and tourism, considering relevant stakeholders and key businesses in Cornwall.

18.1.2 There are no prescribed standard criteria for assessing the socioeconomic effects of developments within the UK. There are however many studies available to review the potential socioeconomic impact of renewable energy which particularly focuses on wind turbine development. The assessment is based on a local review estimating the potential socioeconomic impacts to employment and business.

18.2 Baseline Assessment

Site Characteristics

18.2.1 The Proposed Development site lies within an industrial area within the boundary of Cornwall. Cornwall is mainly comprised of towns, with Truro as the only city, approximately 18.8km from the Proposed Development. The closest town of St Austell lies approximately 5.7km from the Proposed Development. The Proposed Development is located in St Stephen in Brannel Parish. The largest settlement within the parish is St Stephen, located approximately 4.2km southwest of The Proposed Development.

18.2.2 Quarry and clay works, farmland and subsequent agriculture, are in the vicinity of the proposal. There are various tourist attractions identified within a 15km study area surrounding the area which contribute to the cultural heritage value in Cornwall, some of which are in near proximity to the site.

***Table 7** - Population Figures*

Area	Total resident population (all ages)

St Stephen-in-Brannel	7,556[20]
Cornwall	570,305[21]
England	56,490,048[22]

Economic Activity

18.2.3 Employment data was provided from the Nomis Official Labor Market Statistics for Cornwall, South West Region and England[23] and is shown below. As of 2021, 254,248 of residents aged 16 and over were employed.

Table 8 *- Employment Figures for Cornwall 2021*

Job Type	Cornwall %	England%
A: Agriculture, forestry and fishing	2.8	0.8
B: Mining and Quarrying	0.5	0.2
C: Manufacturing	6.4	7.3
D: Electricity, Gas, Steam and Air Conditioning Supply	0.4	0.6
E: Water Supply; Sewerage, Waste Management and Remediation Activities	0.8	0.7
F: Construction	10.7	8.7
G: Wholesale And Retail Trade; Repair of Motor Vehicles and Motorcycles	15.9	15.0
H: Transportation and Storage	3.5	5.0

[20] St Stephen-in-Brannel Parish https://st-stephen-in-brannel.parish.uk/ (Accessed: 26th August 2025)
[21] Office for National Statistics Census 2021. Accessed via: https://www.ons.gov.uk/visualisations/censuspopulationchange/E06000052/ (Accessed 22nd August 2025)
[22] Cornwall Local Authority, South West Region and England Country. Accessed via: https://www.nomisweb.co.uk/sources/census_2021/report?compare=E06000052,E12000009,E92000001 (Accessed: 22nd August 2025)
[23] Cornwall Local Authority, South West Region and England Country. Accessed via: https://www.nomisweb.co.uk/sources/census_2021/report?compare=E06000052,E12000009,E92000001 (Accessed: 22nd August 2025)

I: Accommodation and Food Service Activities	8.6	4.9
J: Information and Communication	2.3	4.7
K: Financial and Insurance Activities	1.2	3.8
L: Real Estate Activities	1.6	1.6
M: Professional, Scientific and Technical Activities	5.1	6.7
N: Administrative and Support Service Activities	5.0	5.3
O: Public Administration and Defence; Compulsory Social Security	5.5	5.8
P: Education	9.1	9.9
Q: Human Health and Social Work Activities	15.7	14.6
R, S, T, U: Other	4.9	4.6

18.2.4 The figure above indicates that two of the higher employment categories in Cornwall are construction and manufacturing - both of which will be contributed to as a result of the Proposed Development. The Applicant endeavors to employ local businesses and contractors for onsite construction and general support activities. The construction and transportation phase of the project is estimated to last for 12 months. By promoting such employment opportunities this proposal will help to minimise unemployment in Cornwall and contribute towards Cornwall's economic aims. Specifically, the Cornwall Good Growth Plan 2024-2035[24] directly supports projects such as this, by providing local skills training, local employment opportunities and strengthening the supply chain through local contractors, whilst investing and prioritizing sustainable development directly linked to the renewable energy sector.

18.2.5 Moreover, Cornwall's Interim Policy Position Statement[25] regarding housing sets the target of building 4,421 homes in Cornwall per year, which will subsequently increase electricity demands. This proposal will help meet these demands by generating over 25GWh per year, enough electricity to power over 5,500 Cornish homes annually.

[24] Cornwall Good Growth Plan 2024-35. Accessed via: https://www.cornwall.gov.uk/media/24dkjyyb/cornwall-good-growth-plan-update-03_03_2025.pdf (Accessed: 22nd August 2025)
[25] Cornwall Interim Policy Position Statement April 2025. Accessed via: https://www.cornwall.gov.uk/media/4vgdpzic/interim-policy-statement-final-april-2025.pdf (Accessed: 22nd August 2025)

18.2.6 The National Planning Policy Framework (NFFP) was updated in 2024 and sets out the Government's planning policies for England. The NFFP provides guidance for sustainable planning developments, supporting the transition to net zero by 2050. Cornwall Council declared a climate emergency in January 2019 and subsequently published The Climate Change Action Plan[26]. The plan sets out the actions required to transition to a carbon neutral county by 2030, particularly emphasizing the importance of onshore wind development to achieve this goal. Furthermore, the Cornwall Council Climate Emergency Development Plan Document (CEDPD)[27] 2023 reinforces the priority of wind developments contributions to net zero plans. This proposal is expected to contribute towards this target by offsetting approximately over 180,000 metric tonnes of carbon over the proposed turbines 35 year lifetime.

18.2.7 In 2010 employment in the UK's large scale onshore wind industry was estimated to be 6,000 direct and full-time equivalent (FTE) employees[28]. According to the ONS, this number was estimated to be 4,400 in 2019[29], a drop likely attributable to the change in legislation following the release of the 2015 Ministerial Statement on Onshore Wind which significantly limited the possibilities for onshore wind development in England. Due to its scale and location, the proposed development has the potential to substantially increase employment in this sector and provide particular benefit to the local economy. Despite the drop in employment in the sector, CE have continued to grow and support the local economy through well paid, high-skill jobs within this industry and here in Cornwall.

Recreational and Tourist Activity

18.2.8 Cornwall Good Growth Plan states that Cornwall's Visitor Economy is the national leader for low-carbon energy experiences for visitors and residents, maximizing links to the environment, heritage and culture. The Cornwall Growth Strategy Evidence Report 1[30] identifies the Visitor Economy as a core sector accounting for a high proportion of employment in Cornwall – employing 49,175 people in 2022.

18.2.9 Studies suggest that the public are not likely to be deterred from visiting an area due to wind turbine presence, with 70-90% of tourists displaying neutral to positive attitudes

[26] Cornwall Council Climate Change Action Plan. Accessed via: https://www.cornwall.gov.uk/environment/climate-emergency/our-action-plan/ (Accessed: 26th August 2025)
[27] Cornwall Council Climate Emergency Development Plan Document: February 2023. Accessed via: https://www.cornwall.gov.uk/media/uxgjk4jn/climate-emergency-dpd.pdf (Accessed: 26th August 2025)
[28] 'Working for a Green Britain, Employment and Skills in the UK Wind & Marine Industries' (2011)
[29] https://www.ons.gov.uk/economy/environmentalaccounts/articles/windenergyintheuk/june2021.
[30] Cornwall Growth Strategy Evidence Report 1 Spring 2024. Accessed via: https://www.cornwall.gov.uk/media/heyn45pl/cornwall-good-growth-plan-evidence-report-1.pdf (Accessed: 26th August 2025)

towards onshore windfarms in UK rural landscapes[31][32][33][34]. There have been more than 60,000 additional international visitors to Cornwall & Scillies in 2019 compared to 2009, showing that during the time that wind farm development has expanded, tourism has not declined overall[35].

18.2.10 A desk-based assessment by the Applicant was undertaken to identify the main tourist attractions within a 15km radius of the site. This radius was chosen due to a greater potential of visual impact within this distance. Error! Reference source not found. below s hows the tourist attraction, type of activity and distance from the proposed site.

Table 9 - *Tourist Attractions in Relation to the Site*

Tourist Site	Type of Activity	Approx. distance to the proposed turbine
Wheal Martyn Clay Works	Arts and Culture	3km southeast
Roche Rock	Historic	3.5km north
Screech Owl Santuary	Recreation/Education	5.5km northwest
Lanhydrock	Parks and Gardens	12km northeast
Tregrehan Garden	Parks and Gardens	6.5km southeast
St Austell Brewery Visitors Centre	Recreation	5.5km southeast
The Eden Project	Recreation/Attractions	7.5km east
Charlestown Harbour	Historic/Recreation	7.5km southeast
The Lost Gardens of Heligan	Parks and Gardens	10km southeast
Restormel Castle	Historic	13km northeast
Bodmin Railway	Recreation	13.5km northeast

[31] Modrue, T., Moss, O. (2020) The impacts of onshore windfarms on a UK rural tourism landscape: objective evidence, local opposition and national politics. Journal of Sustainable Tourism 20 (2): 1-23
[32] Aitchison, C. (2012). Tourism impacts of windfarms: Submitted to Renewables Inquiry Scottish Government. University of Edinburgh
[33] Regeneris Consulting and the Tourism Co. (2014). Study into the potential economic impact of windfarms and associated grid infrastructure on the Welsh tourism sector, commissioned by the Welsh government
[34] NU –Northumbria University. (2014). Evaluation of the impacts of onshore windfarms on tourism.
[35] https://www.visitbritain.org/inbound-trends-uk-nation-region-county?area=1730 (Accessed: 22nd August 2025)

Bodmin Jail	Recreation	14km northeast
Royal Cornwall Show-ground	Recreation	15km north

18.2.11 As noted in the LVIA and HVIA reports provided within **Appendix D** and **Appendix F** respectively, no significant visual impact is expected on any of these historic assets.

18.2.12 The largest events in Cornwall which have a possibility of being impacted are the Royal Cornwall Show which takes place early June for 3 days, located 15.9km north of the Proposed Development, and Boardmasters Festival which takes place 6th-10th August annually, located 15.7km north. Delivery of the turbine components will be scheduled to not coincide with this event. The separation between the events and the Proposed Development is sufficient to ensure that any potential impacts are negligible.

18.3 Impact Assessment

18.3.1 The direct and indirect impacts of the Proposed Development on the local area can be separated into the following areas:

1) Economic and social benefits for the local community;
2) Economic benefits from construction and operation; and
3) Potential adverse impacts on the wider community and tourism.

Economic and Social benefits for the local community

18.3.2 There will be several economic and social benefits as a result of the Proposed Development. The proposed turbine will generate enough electricity to power over 5,500 Cornish homes per year and will offset over 180,000 metric tons of carbon over the proposed turbine's 35-year lifetime.

18.3.3 There is also a commitment to share a portion of the revenue with the wider local community through a local Community Benefit Fund. This has historically been used on similar projects for the construction or restoration of vitally important community projects such as playgrounds or improvements to local amenities which do not have access to public funds.

Economic benefits from construction and operation

18.3.4 The Applicant always endeavors to hire local businesses within the construction phase of the development, which brings a significant number of manhour tasks, creating new jobs particularly within the construction phase. This, in turn, indirectly benefits third party suppliers, such as accommodation and local subsistence spending while the development, construction and operational works are underway. The Applicant is also a Cornish company therefore the Proposed Development directly contributes economically to a local business.

18.3.5 Based on the construction aspects such as services (consultancy, planning advice and project management), construction (roads, access, fences, foundation, etc.), civil and electrical engineering and improvements to cabling (throughout the site and to the grid point of connection), a portion of this money will be fed into local businesses who are contracted to complete these works. There will also be a further benefit to the local economy through operational costs involved in maintaining the Proposed Development throughout its 35-year lifespan.

Collaborative Benefits

18.3.6 The Applicant has conducted a Collaborative Benefits Report which adheres to the Cornwall Councils 2023 Climate Emergency Development Plan Document (CEDPD) which introduced Policy RE1 – Renewable and Low Carbon Energy which includes the requirement:

(f) '*Commercial led energy schemes with a capacity over 5MW shall provide an option to communities to own at least 5% of the scheme subject to viability*'.

18.3.7 This report outlines the potential benefits between The Applicant and the community in regard to community ownership or a shared ownership structure. This report can be found in Appendix O.

Potential Adverse Impacts on the Wider community and Tourism

18.3.8 The main considerations on the wider community are:

- Noise;
- Transport;
- Shadow flicker; and
- Landscape and visual amenity.

18.3.9 These aspects have been assessed individually in their respective sections of this document and are deemed to not have the potential to significantly impact the wider community.

18.3.10 Educational visits can be another social benefit of wind turbine developments, providing opportunities to expand student's knowledge on the importance of climate change and renewable energy. In Cornwall the Energy Recovery Centre already offers an opportunity to learn about waste management strategies[36]. The proposed development may provide similar opportunities.

18.3.11 As a result, the Proposed Development is not expected to have any significant adverse impacts on tourism, recreation, and social attractions in the local area.

18.4 Conclusion

18.4.1 The project has been assessed as having an overall positive socio-economic impact on the local area. The Proposed Development represents a significant additional source of revenue for local businesses within the construction industry which will consequently filter through to other local businesses in the wider community.

18.4.2 Furthermore, provision of a Community Benefit Fund will support community projects to continue or allow for new projects to be established. In addition, The Applicants headquarters in Wadebridge will contribute to local employment and raising the profile of industrial and technology companies in Cornwall.

18.4.3 Individual reports have been conducted to assess amenity impacts, these can be found within **Appendix D, G and J.**

[36] https://suezcornwall.co.uk/community-and-education/education-activities/cornwall-energy-recovery-centre-visitor-centre/ (Accessed: 11th November 2025)

19 Conclusion

19.1.0 This Environmental Statement details a proposal that is in response to Cornwall Council's declaration of a 'climate emergency' made on the 22nd of January 2019, through the collective support of 117 Cornwall Councillors. Following this, the preparation of the Climate Action Plan and CEDPD have enforced the idea of positive movement towards a more positive decision-making process in determining renewable energy proposals.

18.0.1 The proposal for *'Two wind turbines with maximum blade tip height of 135m, along with associated works, equipment and necessary infrastructure including access tracks, crane pads, cabling, electrical housing and a temporary construction compound'*.

18.0.2 The proposal allows for the investment into the local economy and infrastructure through the securing of a grid connection direct to the national framework. Furthermore, the estimated annual yield of over 25GWh resulting from this proposal will contribute significantly to the local and national carbon reduction targets by saving over 180,000 tonnes of carbon over the project lifetime.

18.0.3 Both the economic and environmental benefits of this proposal are aligned with the policies of the Cornwall Local Plan Strategic Policies 2010-2030 and reflect the core intent of the National Planning Policy Framework which is to secure 'economic, environmental and social progress for this and future generations.'

18.0.4 Considerations of all likely impacts that could result from the Proposed Development summarised in the associated reports conclude:

- Is in line with national guidance and is supported by national, regional, and local policy on renewable energy and sustainable development;
- Will not give rise to unacceptable landscape and visual impact, due to its siting within the industrial china clay area and amongst consented and existing turbine schemes;
- Will not adversely impact any habitats or species of conservation importance;
- Will have no adverse impacts on heritage assets or their settings;
- Will meet the statutory noise criteria given in ETSU-R-97;
- Will not adversely impact hydrology, with the application of appropriate measures;

- Will not adversely impact telecommunication links or any airports of aviation assets in the region;
- Will meet the accepted shadow flicker limits of the residents of the properties located nearest to the proposed wind turbine, with the application of appropriate measures;
- Will not have significant impact on transportation networks; and
- Received support in principle from the local Parish, subject to reviewing the full planning application.

18.0.5 The report findings re-affirm the suitability of the proposal and its location, aligning with policy by confirming all impacts *'are either acceptable or can be made acceptable'*; in this case through considered mitigation and design.

18.0.6 In determining the proposal, the local authority should give weight to the local and national policy framework which highlights the need for decision makers to *'take a positive approach that reflects the presumption in favour of sustainable development'*. Furthermore, it should be recognised that the overall benefits of the proposal outweigh the associated impacts and restrictive legislation.

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Collaborative Benefit Report

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