DRAFT

Environmental Statement (incl. Design & Access Statement)

For a single wind turbine on land at Higher Biscovillack Farm, Greensplat, St. Austell, PL26 8XY.

November 2025

CleanEarth
Unit 2a Bess Park Road
Trenant Industrial Estate
Wadebridge, Cornwall
PL27 6HB
www.cleanearthenergy.com

Table of Contents

Figures

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 CleanEarth (The Applicant) to Cornwall Council for full planning permission to develop a single wind turbine, up to 135m tip height, on land at Higher Biscovillack Farm, Greensplat, St Austell, PL26 8XY.

1.1.2 The proposed Higher Biscovillack turbine will comprise of:

> *'A single wind turbine with maximum blade tip height of 135m, along with associated works, equipment and necessary infrastructure including access track, crane pad and 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), historic and ecological constraints, existing infrastructure, and locally designated areas and features.

1.1.4 The proposed development would have an export capacity of 4.3MW 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. 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 will also help 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 turbine 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 **Table 1.**

[1] https://www.cornwall.gov.uk/media/uxgjk4jn/climate-emergency-dpd.pdf (Accessed 17th September 2025)

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

Section and Topic	**Contributor(s)**
Chapter 1 – Introduction	CleanEarth
Chapter 2 – The Proposal	CleanEarth
Chapter 3 – Outlined Construction Process	CleanEarth
Chapter 4 – EIA Screening	Cornwall Council
Chapter 5 – Evaluation of the Higher Biscovillack 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 – Conclusion	CleanEarth

1.1.7 This ES has been submitted to Cornwall Council as the 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 CleanEarth (CE) proposes to install a single wind turbine with a maximum blade tip height of up to 135m. The proposed turbine will feature a 3 bladed rotor design (for elevation drawings see **Appendix C**) with associated infrastructure including a crane pad, access track, and construction compound.

2.1.2 The proposed single wind turbine will generate electricity an estimated annual yield of over 11.2GWh of renewable energy. This is enough electricity generation to power over 2400 Cornish homes per annum, based on average electricity consumption figures[2].

2.1.3 Further ground and site investigations that occur after the planning consideration period may require that a small variance be made to the final location of the proposed wind turbine and the access track, which is common for wind turbine proposals. Therefore, a 25m micro siting allowance is requested for the turbine and associated infrastructure.

2.1.4 The proposal also seeks to create new areas of grassland and native hedgerow, resulting in a Biodiversity Net Gain (BNG) of 10.57% net gain in habitat and 10.37% net gain in hedgerow habitat. 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 Higher Biscovillack Farm, Greensplat and is located to the west of Greensplat public road, centred on National Grid Reference X: 199806, Y: 054453 at an elevation of approximately 221m AOD (Above Ordnance Datum).

2.2.2 The site sits approximately 2.8km northwest from the town of St Austell. The proposed turbine has been situated within a landscape which already has strong human and industrial influences; much of the immediate area is 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 sited and designed to be an addition to the existing and consented turbine developments within the proximate China clay area as presented in **Figure 1**. Nearby cumulative development includes:

- Operational Greensplat Turbine - located approximately 300m northeast of the proposed site;
- Operational Higher Goonamarth Turbine - located approximately 1.1km northwest of the proposed site;
- Operational Blackpool Turbine - located approximately 1.7km southwest of the proposed site;
- Operational Gunheath Turbine - located approximately 2.4km north of the proposed site;
- Under Construction Goonamarth 2 Turbine – situated approximately 930m northwest of the proposed site;
- Under Construction Burngullow Turbine – situated approximately 1.4km west of the proposed site;
- Under Construction East Karslake Turbine - situated approximately 1.4km northwest of the proposed site;
- Under Construction Longstones Turbine - situated approximately 1.7km northwest of the proposed site;
- Under Construction Wheal Martyn Turbine - situated approximately 1.8km north of the proposed site; and
- Pending Planning Dubbers Wind Turbines (x2) – situated approximately 3km northwest of the proposed site.

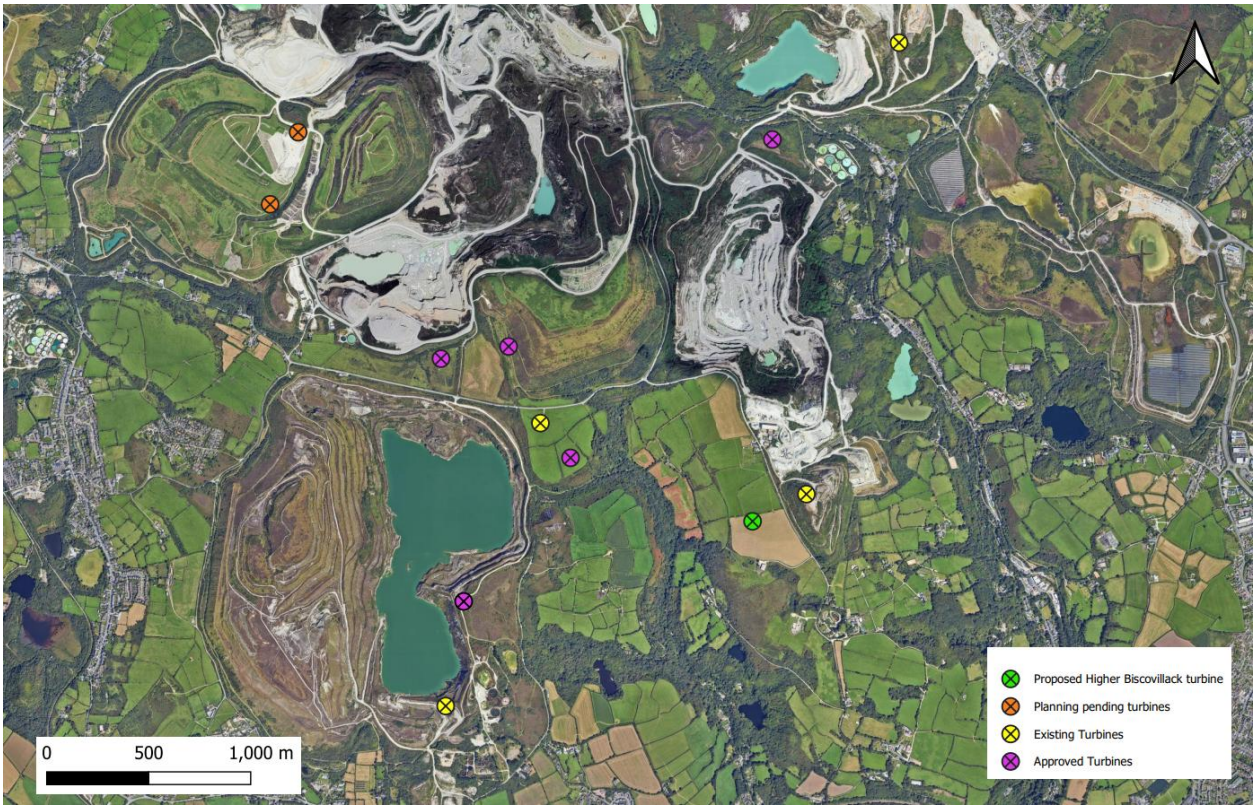

***Figure 1**: Map showing cumulative wind turbine development*

2.2.4 The site's prevailing character is industrial with an overriding influence of china clay works and tips, with very good ability to accommodate change without detriment to its landscape character. The proposed development will be perceived against the dominant backdrop of the surrounding mining landscape. In close proximity, the proposal will be viewed as a prominent vertical element, in combination and adjacent to similar scale operational, consented, and in planning wind turbines. As a result, the site is extremely well suited for wind energy development.

2.2.5 Although this area is a sparsely populated, CE recognises the residential properties within the surrounding area and have considered these properties within the technical assessments which support this proposal. The consideration resulted in siting the Proposed Development in Treverbyn Parish, far removed from more populated areas such as Trewoon, Trethowel, Stenalees and Treverbyn, with the closest habited residential property located 330m north of the turbine.

2.2.6 For additional detail on the site layout and location please refer to the plans in **Appendix B**.

2.2.7 It is concluded that the site is at low flood risk, as it lies within Flood Zone 1 and outside Flood Zones 2 and 3 (see Figure 2), which represent the areas of highest flood risk. 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 2**: Map showing flood risk zones near the proposed development*

2.2.8 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.

2.2.9 The proposed site has been selected for wind turbine development due to the high availability of wind resource and the alignment with Cornwall Council turbine siting guidance.

2.2.10 Where possible and economic to do so, CE will endeavour to use local installers, contractors, and manufacturers in a bid to support the local supply chain and further reduce carbon emissions associated with the construction of the renewable energy project. CE have established relationships with suppliers in Cornwall and the UK and will consider UK manufactured equipment where possible.

2.2.11 The operational lifespan of the proposed turbine is 35 years, after which the turbine 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 turbine beyond this 35-year period, however this would be subject to a further planning application considered by Cornwall Council.

2.2.12 The development proposal provides significant benefits across the key aspects of Sustainable Development – economic, social, and environmental:

- Estimated £12.5k per annum community benefit payment;
- Estimated saving of over 2,375 metric tonnes of carbon per annum;
- Estimated renewable energy generation equivalent to powering over 2,400 homes;
- 10.57% habitat biodiversity net gain; and
- 10.37% hedgerow biodiversity net gain.

3 Outlined Construction Process

3.1.1 The total development area will be approximately 3.7 hectares. The development will be carried out over a period of six-nine 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 foundation anchor
- Foundation concrete pour and curing
- Arrival of two telescopic cranes
- Turbine component delivery on heavy goods vehicles including tower foundation, four tower sections, three blades, nacelle, hub, and generator
- On-site assembly of the turbine into the foundation
- Installation of earthing and electrical connection, and commissioning
- Reinstatement of work
- Demobilisation from site

It is expected that the construction phase will follow the order above, however this may be subject to minor changes. Many of the tasks will be carried out simultaneously to reduce the time required on site.

3.1.2 The erection of the proposed turbine will typically last about 5-7 days, assuming good weather. Within this period, three cranes will be taken to and from site with the turbine components being delivered via heavy goods vehicles (HGVs). The turbine will then be assembled. Access to the site will follow existing public highways up to the site boundary, continuing along an existing farm track and then via a newly constructed track leading to the turbine location. The base of the operational turbine will occupy an area of approximately 20m in diameter.

3.1.3 A temporary crane hardstanding area approximately 3020m^2 (30m × 65m) will be required for the tower, nacelle, hub, generator, and blade installation. The proposed development areas are illustrated in PR4333-IFP-BP (Block Plans), and PR4333-IFP-LP (Location Plan) within **Appendix B**. When the proposed turbine is fully installed and commissioned, the ground above the crane hardstanding area can be reinstated. The development will utilise the existing site entrance, which will be widened to accommodate construction and operational requirements. A preliminary design of the site entrance is provided in **Appendix B**.

3.1.4 The abnormal loads will arrive at site via the A30 westbound. The route will take the first exit at Victoria Interchange and go straight on the roundabout to join the A391. The route will continue along 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 Road. The route then continues down Hensbarrow Hill Road until a left-hand turn is made to Greensplat Road. Finally, the route continues left on Greensplat Rd. until turning right onto site.

3.1.5 Once planning has been granted and an access programme devised, Cornwall Council's Roads Department will be advised on the number, dates and times of the transport proposed. Care will be taken when programming the route to avoid peak traffic flow periods during the mornings and evenings. Temporary traffic management will be required during transportation on existing highways.

3.1.6 Once installed, the wind turbine will require infrequent visits for the purpose of equipment maintenance or cleaning of the site. Such works typically require around 10 visits per year. The largest vehicles that are likely to be used during the operational phase are expected to be no larger than a 7.5t van or 4x4 vehicles. The facility will be unmanned, being remotely operated and monitored.

Outline Construction Summary:

- Initial construction is estimated to take 6-9 months with the turbine erection taking place over a week (assuming good weather).
- The construction phase will follow an agreed construction management plan to ensure impacts from the construction period are avoided or minimized.
- The project has a 35-year lifespan after which the turbine and its associated infrastructure will be decommissioned, and the land reinstated to a condition agreed with the LPA.

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 (LPA) prior to application, in order to assess whether there is a 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 proposals as EIA developments. Accordingly, it was agreed with the Cornwall Council 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 Higher Biscovillack 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/government/uploads/system/uploads/attachment_data/file/1182995/NPPF_Sept_23.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. 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 All generation will be exported directly to the local network and has the capacity to power the equivalent of over 2400 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 proposal for a single wind turbine, up to 135 metres in height, together with associated infrastructure. The Proposed Development is located by the Cornwall Emergency Development Plan Document (CEDPD) Policy Map as within an area suitable for wind energy development.

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.

[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).

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 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.

6 Energy & Planning Policy Appraisal

6.1 Introduction

6.1.1 The planning policy context relating to this planning application for a wind turbine on land at Higher Biscovillack Farm, St Austell are described below. Other specific legislation and local planning authority's (LPAs) 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 sections of this document.

6.2 Policy Context for Climate Change and Renewable Energy

6.2.1 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.

6.2.2 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.

6.2.3 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.

6.2.4 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'[9].

6.2.5 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.

6.2.6 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.

6.2.7 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

[9] British Energy Security Strategy, Accessed via: https://www.gov.uk/government/publications/british-energy-security-strategy/british-energy-security-strategy (Accessed 20th November 2025)

pace. Alongside this, the Department for Energy Security and Net Zero (DESNZ) released the Clean Power 2030 Action Plan[10] (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.

6.2.8 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.

6.2.9 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.

6.3 Decision Making

6.3.1 The starting point for the decision-maker is Section 38(6) of the Planning and Compulsory Purchase Act 2004, which requires that planning applications be determined in accordance with the development plan unless material considerations indicate otherwise. This principle is also reflected in the National Planning Policy Framework (NPPF).

6.3.2 In practice, this means the decision-maker must first assess 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) and the Climate Emergency Development Planning Document (CEDPD) (2023).

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

[10] UK Government Clean Power 2030 Action Plan: A New Era of Clean Electricity. Accessed via: https://assets.publishing.service.gov.uk/media/677bc80399c93b7286a396d6/clean-power-2030-action-plan-main-report.pdf (Accessed: 21st August 2025)

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

6.3.5 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.

6.3.6 This planning policy appraisal sets out the current legislation and guidance that is relevant to the proposed single wind turbine at land on Higher Biscovillack Farm. 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.

6.4 The National Planning Policy Framework, December 2024

6.4.1 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.

6.4.2 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.

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

"For decision-taking this means:

- 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."*

6.4.4 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.

6.4.5 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.

6.4.6 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

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

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."

6.4.7 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.

6.4.8 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.

6.4.9 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.

6.5 UK Government's Renewable and Low Carbon Energy Guidance, August 2023

6.5.1 The Ministry of Housing, Communities and Local Government issued the Renewable and Low Carbon Energy Guidance[12] in June 2015 and updated in August 2023. This guidance provides advice on the planning considerations relating to wind turbines. LPAs 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;
- Shadow Flicker;
- Energy output of the turbine;
- Cumulative Landscape and Visual Impact; and,
- Decommissioning and reinstatement.

6.5.2 These planning considerations have been fully addressed throughout the assessment of the Proposed Development and are supported by the detailed assessments presented in the respective technical chapters in this Environmental Statement.

6.6 Clean Power 2030 Action Plan (CP30), December 2024

6.6.1 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 turbine is 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 turbine has been designed and sited to minimise visual, noise and ecological impacts. Detailed assessments have addressed these considerations in line with CP30s principles of environmental protection and social acceptability.

[12] 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)

6.7 Cornwall Local Plan Strategic Policies 2010-2030, November 2016

6.7.1 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:

6.7.2 **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 Council 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" [13].

6.7.3 **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.

6.7.4 **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"[14]. 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;'

[13] 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)

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

6.7.6 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 turbine. The Proposed Development is estimated to generate over 11.2GWh annually, making a significant contribution to Cornwall Council's overarching aim of becoming a carbon neutral county by 2030, and is expected to save approximately 83,000 tonnes of carbon over its 35-year 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.

6.7.7 **Policy 21: Best Use of Land and Existing Buildings.** This policy 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 context of 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.

6.7.8 **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.

6.7.9 The Proposed Development is appropriately sited and scaled in line with the Cornwall Council CEDPD and Renewable Energy Landscape Sensitivity (RELS) Assessment. The proposed site is located within an area identified in the CEDPD as suitable for wind energy development. The RELS assessment 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 turbine. Further details of this guidance are provided in Section 6.10, with a comprehensive assessment of landscape considerations presented in **Chapter 7.**

6.7.10 The southern extent of the proposed site crosses Burngullow Common and Glover Valley CWS (County Wildlife Site), which has been designated for lowland heathland habitat. However, the ecological assessment supporting this application found that lowland heathland is not present within the site or the immediately adjacent southern areas. As such, it is concluded there would be no direct loss or damage to the primary feature of this CWS. Full consideration of ecological matters, including the biodiversity mitigation plan and biodiversity net gain (BNG), is provided in **Chapter 8.**

6.7.11 **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 archaeological investigation summarised in **Chapter 9.**

6.7.12 **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 high flood risk. The hydrological considerations addressed through this proposal are detailed in **Chapter 11**.

6.7.13 **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 **(Appendix K)**, discussed in **Chapter 14.**

6.7.14 **Policy 28: Infrastructure** relates to the provision of developer contributions to support and enhance local infrastructure affected by a development. In line with this policy, the Applicant will provide a community benefit to the local parish council, as has been done for previous

applications. The contribution will be proportionate to the scale of the Proposed Development and consistent with the requirements of Policy 28.

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

6.8 Cornwall Council Climate Change Action Plan (CCAP), July 2019

6.8.1 The Climate Change Action Plan[15], 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".

6.8.2 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.

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

6.9.1 The Climate Emergency Development Plan Document (DPD)[16] 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.

[15] Cornwall Council Climate Change Action Plan. Accessed via: https://www.cornwall.gov.uk/environment/climate-emergency/our-action-plan/ (Accessed: 21st August 2025)
[16] Cornwall Council Climate Emergency Development Plan Document: February 2023. Accessed via: https://www.cornwall.gov.uk/media/uxgjk4jn/climate-emergency-dpd.pdf (Accessed: 19th November 2025)

6.9.2 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.

6.9.3 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.

6.9.4 **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.

6.9.5 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.
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.

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

6.9.7 Other relevant CEDPD policies to the Proposed Development 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.**

6.10 Cornwall Council Supplementary Planning Guidance

6.10.1 The Cornwall Renewable Energy Planning Advice Supplementary Planning Document (SPD) is an important renewable policy document for Cornwall which supports the policies highlighted 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.

6.10.2 Whilst the SPD provides general advice on onshore wind developments, the Renewable Energy Landscape Sensitivity[17] (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

6.10.3 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 turbine. The guidance recommends the RLU should consist of occasional wind energy developments.

[17] Overall Assessment of Landscape Sensitivity. Accessed via: https://www.cornwall.gov.uk/media/lg2bemqc/eb021-rlu-13-st-austell-or-hensbarrow-china-clay-area.pdf (Accessed: 22nd August 2025)

6.10.4 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 (see **Appendix D** for plans), and is sited within an industrialised landscape already accommodating wind development, as detailed in Chapter 2: The Proposed Development.

6.10.5 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 turbine has been sited in accordance with this skyline guidance and has been assessed for heritage impacts, as detailed in **Chapter 9.**

6.10.6 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.

6.10.7 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).

6.10.8 The proposed turbine has been sited in accordance with this guidance and has been assessed for landscape impacts. This is discussed further in **Chapter 7.**

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 turbine will make the following contributions to national energy and environmental policies:

- The proposed wind turbine at Higher Biscovillack is estimated to save over 2,375 tonnes of carbon each year, compared to the equivalent fossil fuel production (depending on the UK energy mix at any one time).
- The turbine is estimated to generate over 11.2GWh of renewable energy a year, enough to power 2,400 homes.
- The proposed Higher Biscovillack turbine 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.

6.13 Energy Balance

- An estimate of the energy payback for modern wind turbine development is 6-12 months[18] 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 the turbine erection taking place over a week (assuming good weather).
- The construction phase will follow an agreed construction environmental management plan to ensure impacts from the construction period are avoided or minimised.
- The project has a 35-year lifespan after which the turbine and its associated infrastructure will be decommissioned, and the land reinstated to a condition agreed with the LPA.

[18] 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 20h November 2025)

7 Ecological Impact Assessment

7.1 Introduction

7.1.1 Western Ecology were instructed The Applicant to complete an Ecological Impact Assessment (EcIA) for the Proposed Development. A Preliminary Ecological Appraisal of the site was completed in September 2025.

7.1.2 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.

7.1.3 The full EcIA along with survey reports including Biodiversity Net Gain Report, bird and bat surveys can be found in **Appendix E**.

7.2 Assessment Methodology

7.2.1 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.

7.2.2 The Zone of Influence (ZOI) for the purpose of the assessment is immediate habitats that will be potentially impacted by the Proposed Development, and designated sites within the local landscape. Records for notable species were searched for within 2km.

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

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

7.2.4 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.

7.3 Impact Assessment Methodology

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

7.3.2 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.

7.3.3 Potential effects on valued receptors, adverse or positive, are identified for both the construction and operational phases. The effects are then assessed and characterised according to the following criteria:

- Direction (positive, adverse, or neutral)
- Magnitude of impact
- Spatial extent over which the impact would occur
- The temporal duration of the impact
- Permanence
- Frequency and timing
- Potential for cumulative effects

The assessment identifies any information gaps and any uncertainties that may be material in the confidence of predicting effects. Confidence in predictions is given as:

- Certain/near-Certain: probability estimated at 95% chance or higher.
- Probable: probability estimated above 50% but below 95%.
- Unlikely: probability estimated above 5% but less than 50%.
- Extremely Unlikely: probability estimated at less than 5%.

The precautionary principle is applied whenever there is substantial doubt.

7.3.4 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.

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

7.4 Ecological Baseline

Desktop Study

Statutory Nature Conservation Sites (SNCS)

7.4.1 Two Sites of Special Scientific Interest (SSSI) are located within 2km of the Site, both of which are designated for geological value:

- St Mewan Beacon SSSI – 1.6km south
- Wheal Martyn SSSI – 1.1km southeast

7.4.2 The Site is not within an area identified as a SSSI Impact Risk Zone for this type of development and so both SSSI's are scoped out from further consideration.

Non-statutory Nature Conservation Sites (NNCS)

7.4.3 There are three County Wildlife Sites (CWS) within 2km of the Site:

- A small section of Burngullow Common and Glover Valley CWS is located within the Site and is adjacent to the south of the site. This CWS is designated for presence of priority habitats such as lowland heathland.
- Longstone Downs CWS is located 1.2km northwest of the Proposed Development and is designated as an area containing the priority habitat lowland heathland.
- Hensbarrow CWS is located approximately 1.9km north of the Proposed Development. This CWS is designated for presence of priority habitats such as lowland heathland and priority species.

7.4.4 Due to limited transboundary effects and separation distance, Longstone Downs CWS and Hensbarrow CWS can be screened out at this stage. Burngullow Common and Glover Valley CWS are brought forward for further assessment.

Biological records

7.4.5 Biological records search identified several notable species and are detailed in Table 10 in Appendix 1 of the EcIA **(Appendix E)**.

Habitats

7.4.6 Habitats within the development, along with an assessment of their biodiversity value, are given in Table 4 and Map 1 of the EcIA **(Appendix E)**.

7.4.7 The majority of the Site is within an agricultural field, the grassland regularly grazed. There is a mosaic of bramble and gorse scrub which runs along the fence line to the south of the Site, and a section of gravel trackway provides access to the Site. Native hedgerows are located to the north of the site. The vegetated bank is mainly species from the adjacent fields, plus rare bracken and hart's-tongue fern. To the east of the Site, bordering the site entrance is a Cornish hedgebank which has no hedgerow however does have scattered sparse willow sp. and common ash. It is predominantly a vegetated bank made of earth and stone.

Species of nature conservation importance

Amphibians (common and widespread)

7.4.8 The Assessment Site is of Site value for amphibians. There is no aquatic habitats associated with the site likely to support breeding amphibians, however the hedgebank on-site all provide suitable terrestrial habitat for foraging and hibernating common amphibians.

Great crested newt (GCN)

7.4.9 The Assessment Site is of Negligible value for Great crested newt (GCN) as they are generally absent from Cornwall and therefore does not need to be considered further.

Badger

7.4.10 The Assessment Site is of Site value for badgers. The local area is likely to support badger populations; however, no badgers or setts were observed within the Proposed Development site. Grassland will likely provide foraging opportunities, while badgers are likely to disperse through the site in their use of habitats in the local area.

Bats

Roosting

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

Foraging and commuting

7.4.12 The Assessment Site is of Site value for four bat species – common pipistrelle, noctule and greater horseshoe.

7.4.13 The Assessment Site is of Negligible value for other bat species – Brown Long-eared, Myotis, barbastelle, Nathusius Pipistrelle, serotine, and soprano pipistrelle – which are not considered to be regularly active in the Assessment Site.

7.4.14 Much of the Assessment Site is of low importance for foraging bats due to a dominance of managed agricultural habitats within and around the site.

Birds

Breeding birds

7.4.15 The Assessment Site is of Site (provisional) value for breeding bird species.

7.4.16 A total of 18 bird species were recorded during the breeding bird transect in June 2025. Of these, 11 species are declining and included in the in the Red or Amber lists of conservation concern and 6 are species of principle importance.

7.4.17 Although results are only from a single survey visit, they give an indication of the likely breeding assemblage associated with the Assessment Site and surrounding land. The breeding assemblage is moderate, but one that is typical of the local China Clay area.

7.4.18 Breeding period Vantage Point (VP) surveys are currently ongoing, however the survey effort to date has recorded buzzard, common gull, greater black-backed gull, herring gull, hobby, kestrel, lesser black-backed gull, and sparrowhawk.

7.4.19 The breeding activity associated with the Assessment Site is considered to be of Site value however this will be updated once the full survey effort has been completed.

Birds - wintering

7.4.20 The value of the Assessment Site to wintering birds is to be determined upon completion of wintering VP surveys. The Proposed Development site features sufficient size and openness to provide suitability for notable wintering bird species. There are also records in the local area and these species may also be active around the airspace of the proposed turbine.

Nightjar

7.4.21 The Assessment Site is of Negligible value to nightjar. Suitable habitat is located within 500m south and comprises rough grassland, heathland and scattered scrub. No nightjar activity was

recorded during three survey visits between May and July 2025, and the species is considered to be absent from the area.

Common Dormice

7.4.22 The Assessment Site is of Negligible value for dormice. The hedgebank is sub-optimal for dormice due to lack of fruiting suitable species and it is unlikely that dormice would use the site.

Hedgehog

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

Reptiles

7.4.24 The Assessment Site is of Site value for reptiles. The grassland on site has limited thatch and is regularly grazed and so provides negligible potential for reptile species. However, the boundary habitats provide opportunity for foraging, dispersal and hibernation for species such as slow worm, common lizard, grass snake and adder.

Otters

7.4.25 The Assessment Site is of Negligible value for otter.

Water Vole

The Assessment Site is of Negligible value for water vole.

Notable Invertebrates

7.4.26 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 on-site.

Notable Plants

7.4.27 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 plants

7.4.28 The Assessment Site is of Negligible value for invasive non-native plants.

7.4.29 The ecological receptors taken forward for the assessment of significant effects are detailed in **Table 2** below.

Table 2: *Ecological receptors to be considered for significant effects*

Receptor	Relevant legislation/policy	Value
Burngullow Common and Glover Valley CWS	Local Plan	County
Glover Valley CWS	Local Plan	County
Cornish hedgebank	Habitat of Principal Importance, Local BAP habitat	Local
Amphibians (common and widespread)	Wildlife and Countryside Act 1981, Species of Principal Importance (common toad), Local BAP species (common toad)	Site
Badgers	Protection of Badgers Act	Site
Bats – foraging and commuting	European Protected Species, Species of Principal Importance,	Site: common pipistrelle, noctule and greater horseshoe
Birds - Breeding	Wildlife and Countryside Act 1981, Species of Principal Importance, Local BAP species	Site (provisional)
Birds - Wintering	Wildlife and Countryside Act 1981, Species of Principal Importance, Local BAP species	To be determined
Hedgehog	Wildlife and Countryside Act 1981	Site
Reptiles	Wildlife and Countryside Act 1981, Species of Principal Importance, Local BAP species	Site

7.5 Assessment of ecological impacts

Construction phase impacts

7.5.1 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.

7.5.2 The potential for adverse effects is largely short term.

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

Non-statutory nature conservation sites

Burngullow Common and Glover Valley CWS

7.5.4 The southern extent of the site contains Burngullow Common and Glover Valley CWS, designated for lowland heathland habitat. Lowland heathland is not a habitat which is present within the site or within the southern extent adjacent to the site. As such, there will be no direct loss/damage to the primary feature of this CWS.

7.5.5 Any unmitigated construction activities adjacent to this CWS have the potential to cause damage to habitats within the CWS.

7.5.6 It is near-certain that unmitigated construction would have a negligible impact on this CWS. If an effect were it to occur it would be short-term minor adverse.

Valued habitats

Cornish hedgebank

7.5.7 Approximately 40m of hedgebank is to be temporarily removed but will be reinstated after construction is complete. Enhancement of the retained hedgebank is proposed and there is potential to impact the retained hedgebank.

7.5.8 It is unlikely that unmitigated construction would have an impact on Cornish hedgebanks. If an effect were it to occur it would be short term and minor adverse.

Notable Species

Amphibians (common and widespread)

7.5.9 The Assessment Site is a Site value for common and widespread amphibians for foraging and hibernation. Unmitigated construction is unlikely to have an adverse effect on common and widespread amphibians. Were an impact to occur it would be short-term, minor adverse.

Badgers

7.5.10 The Assessment Site is of Site value for badgers who are likely to use it for foraging. Unmitigated construction phase is near-certain to have an adverse effect on badgers. The effect would be short-term, minor adverse.

7.5.11 Works would not cause damage, destruction or obstruction of a badger sett, nor disturbance of a badger whilst in a sett. No offence is predicted.

Bats - foraging and commuting

7.5.12 The Assessment Site is of Negligible value for Brown Long-eared, Myotis, barbastelle, Nathusius Pipistrelle, serotine and soprano pipistrelle. It is of Site value for common pipistrelle, noctule, and greater horseshoe species.

7.5.13 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 to impact local populations.

7.5.14 No nighttime works are planned for the construction phase. The short-term disturbance to these habitats are unlikely to affect local bat populations.

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

Breeding birds

7.5.16 The Assessment Site is likely to be of Site value to breeding bird populations and the construction phase has potential to impact breeding birds through disturbance or displacement and direct harm to nests.

7.5.17 The majority of breeding activity was recorded within habitats located at and beyond the field boundaries. Works associated with the temporary removal of approximately 40m of Cornish hedgebank has the potential to damage or destroy any individual nests that may be present. This impact is considered to be minor adverse and temporary.

7.5.18 Any breeding territories that may be associated with the open field would likely be more susceptible to disturbance where meadow pipit and skylark activity was recorded within 250m of the proposed construction areas. The impact is considered to be negligible.

7.5.19 Construction related disturbance is not anticipated to displace flight activity given that the Assessment Site is located within an active agricultural area and species are normalised to higher levels of noise, machinery movements and human presence.

Wintering birds

7.5.20 The wintering VP surveys are ongoing and the EcIA and bird survey reports in **Appendix E** will be updated once the survey effort is complete.

7.5.21 The construction phase would involve increased levels of disturbance, but it is not anticipated to displace winter flight activity as the Site is currently agricultural land located close to an operational mining area and species will be largely normalised to disturbance.

7.5.22 An assessment of the likely impact on winter/passage birds will be made once surveys are complete.

Hedgehog

7.5.23 The Assessment Site is suitable for foraging hedgehog. Unmitigated construction is unlikely to have an adverse effect on hedgehog. Any effect if it were to occur should be short-term, minor adverse.

Reptiles

7.5.24 The Assessment Site is of Site value for common and widespread reptile species. The primary pathway of effect would be potential for direct harm or injury during the construction phase resulting from works affecting hedgebank habitat at the construction site boundaries. However, reptiles would likely relocate as the construction site moves forward.

7.5.25 It is unlikely that unmitigated construction would have an adverse effect on individual reptiles, were they present. If an effect was to occur would be minor and short-term adverse.

Operational phase impacts

7.5.26 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.

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

Non-statutory nature conservation sites

Burngullow Common and Glover Valley CWS

7.5.28 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.

Habitats

Cornish hedgebank

7.5.29 A total of 40m of hedgerow habitat will be temporarily removed and reinstated once construction is complete. All other retained hedgebank habitat will be unimpacted by the Proposed Development. It is certain that unmitigated operational impacts would have a short term, minor adverse effect.

Species

Amphibians (common and widespread)

7.5.30 There will be no permanent loss of suitable habitat and changes in land management will result in enhanced hedgebanks and grassland/scrub adjacent to the site, which would enhance the site for amphibians.

7.5.31 Changes in land management make it near-certain that the operational phase will have a minor positive effect on this receptor for the period of its operation.

Badgers

7.5.32 No badger setts or evidence of badger were observed within the Assessment Site; however foraging badgers are likely present 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 minimal. It is certain that the operational phase would have a negligible effect on badgers.

Hedgehog

7.5.33 There will be no loss of suitable habitat and no adverse effect is predicted. Habitat creation would provide additional habitat, but this would not be significant. It is certain that the operational phase would have a negligible effect on hedgehog.

Bats

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

7.5.35 The limited loss of agricultural grassland is trivial and would have a negligible effect on foraging bats. The assessment site is of Negligible value for Brown Long-eared, Myotis, barbastelle, Nathusius Pipistrelle, serotine, and, soprano pipistrelle, and Site value for common pipistrelle, noctule, and greater horseshoe.

7.5.36 Due to their extremely low levels of activity during walked transects and remote monitoring, no realistic ecological pathway of effect exists for Brown Long-eared, Myotis, barbastelle, Nathusius Pipistrelle, serotine, and soprano pipistrelle.

7.5.37 Common pipistrelle are considered at the highest collision risk. 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. If an unlikely effect were it to occur it minor, permanent adverse.

7.5.38 Noctule bats are considered at highest risk from wind turbines. It is near-certain that the operational phase will have a negligible adverse 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.

7.5.39 Greater Horseshoe 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 negligible adverse effect on populations or individual Greater Horseshoe bats.

7.5.40 It is near certain that the operational phase would have a negligible impact on bat populations. Any effect, were they to occur, would relate to individual bats and would be similar to current operational impact: minor, permanent adverse at an individual level.

Breeding birds

7.5.41 Direct habitat loss associated with the operational phase concerns limited extents of agricultural modified grassland and approximately 40m of Cornish hedgebank. These areas are plentiful in the area and loss of limited extents in relation to the Proposed Development are unlikely to impact local breeding populations. Furthermore, the Cornish hedgebanks to the

north of the site will be enhanced providing at least a 10% Biodiversity Net Gain on-site. Direct habitat loss is unlikely to adversely affect breeding bird populations at the Assessment Site.

7.5.42 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.

7.5.43 The proposed turbine does not block any recorded flight corridors and it is predicted that birds will continue to be able to access resources in the local area without impediment. Most species recorded at the Assessment Site have been observed adjusting their flight patterns around operational turbines in the local area.

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

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

7.5.46 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.

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

7.5.48 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 a new turbine in this landscape, given the frequency of turbines in this local area. Barrier effect is not considered likely to impact the species recorded here.

7.5.49 The provisional number of collisions for target species during the breeding season is predicted as: buzzard (0.1), greater black-backed gull (0.01), herring gull (0.3), kestrel (0.1) and

sparrowhawk (0.02). For the all target species recorded, the predicted number of collisions is less than 0.5 individuals which is considered to be a negligible impact on local populations. This will be updated upon completion if the full survey effort.

7.5.50 It is near certain that the operational phase will have a negligible effect on local breeding bird populations.

Wintering birds

7.5.51 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.

7.5.52 Direct habitat loss associated with the operational phase concerns extents of agricultural modified grassland habitats, which are typically unlikely to support significant numbers of wintering birds. Therefore, direct habitat loss is considered to be unlikely to adversely affect wintering birds. This assessment will be completed upon completion of winter VP surveys.

7.5.53 There is potential for disturbance or displacement, should any notable wintering species be active on the land in the immediate vicinity of the proposed turbine. This assessment will be completed upon completion of winter VP surveys.

7.5.54 The proposed turbine does not block any recorded flight corridors, and it is predicted birds will continue to be able to access resources in the local area without impediment. The turbine located at Trenance Downs (Greensplat - PA14/07230) is sited atop of a spoil heap and situated at a higher elevation than the proposed turbine. Therefore, natural flight lines of birds transiting through the airspace to the east of the proposed turbine would be above the maximum blade height (135m) in order to clear the existing turbine.

7.5.55 Most of the species recorded have been observed adjusting their light patterns around turbines in the local area.

7.5.56 It is considered unlikely that a single wind turbine would create any barrier to birds transiting either north-south or east-west through turbine envelopes. Barrier effects are not predicted to adversely impact wintering birds; however this will be updated upon completion of winter VP surveys.

Reptiles

7.5.57 There will be no permanent loss of suitable habitat and an ecological pathway of adverse effect does not exist for the operational phase. Changes in land management will result in enhanced habitats for reptiles. Changes in land management make it near-certain that the operational phase will have a minor positive effect on this receptor for the period of its operation.

7.6 Mitigation

Construction phase

7.6.1 The following mitigation would be provided to minimise the unavoidable effects during the construction phase and set out in a Construction Environmental Management Plan (CEMP):

- **Nearby nature conservation sites (Burngullow Common and Glover Valley CWS) -** an Ecological Clerk of Works (ECoW) would be appointed to oversee any works within 100m of the CWS. Work areas would be clearly delineated with appropriate fencing, and no activity would take place outside the approved footprint. Mitigation would include contamination and sediment controls, appropriate soil handling and storage, daylight-only working, proper storage and transportation of hazardous waste materials, and reasonable management of vehicle parking and movements.

- **Temporary loss of Cornish Hedgebank -** mitigated by careful dismantling and separate storage of stone, topsoil and subsoil to reinstate in a new location.

- **Badgers and other mammals** – any trenches left open at night will have a means of escape and any security fencing would have a gap at each corner to allow badgers to exit the Site.

- **Reptiles and common and widespread amphibians** – Reasonable Avoidance Measures (RAMs) would be adopted. Habitat clearance with hibernation potential would be avoided between November and mid-March; where unavoidable, vegetation would be cut back to bank level during September and October. If construction is programmed for late March to October (the active reptile/amphibian season), vegetation would be removed in advance under ecological supervision to encourage animals to disperse into adjacent habitats.

- **Nesting birds** – potential bird nesting habitats would be protected from accidental damage during the construction phase by a suitable buffer zone. If construction activities are likely to impact any areas during the nesting season, a pre-works nesting bird survey of these areas will be undertaken.

Operational phase

7.6.2 In order to ensure successful reinstatement of the 40m of Cornish hedgebank, habitat recreation should follow an accepted methodology.

7.6.3 Full details of the mitigation to be undertaken during the construction and operational phases of the Proposed Development can be found within the EcIA in **Appendix E**.

7.7 Residual Impacts

7.7.1 Residual impacts are the effects that remain after all feasible mitigation measures have been applied. Residual impacts on valued ecological receptors during both the construction and operational phases are minimal, with no effects considered significant at the level of assessment. Details of potential impacts and their assessed significance are provided in Table 8 of the EcIA **(Appendix E)**. Where no reasonable pathway of effect exists and pre-mitigation impact has been discounted, the receptor is not considered.

7.7.2 The Proposed Development will involve the enhancement of other neutral grassland offsite, the creation of mixed scrub offsite and the enhancement of species rich native hedgerow associated with bank onsite. This will result in a 10.37% of net gain of hedgerow areas and a 10.57% biodiversity net gain in habitat areas.

7.8 Cumulative effects

7.8.1 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.

7.8.2 Five other turbines have been approved within the vicinity of the Proposed Development. These are Longstones (PA20/09318), East Karslake (PA24/05782), Wheal Martyn (PA21/07216), Higher Goonamarth 2 (PA24/08135) and Burngullow (PA23/09937) turbines – all within 2.5km of the Assessment site. Two wind turbines are pending application on land at Dubbers, approximately 2.8km from the Assessment Site.

Breeding Birds

7.8.3 The cumulative impact upon certain groups of target bird species from this proposed turbine, approved turbines and pending application turbines in the local area has been calculated and is shown in Table 9 of the EcIA in **Appendix E**.

7.8.4 The species recorded at the Assessment Site are largely similar to those recorded during VP survey work for other turbines in the area. It is anticipated that populations active in the local area will become quickly adapted to the presence of a new turbine in this landscape. Most species recorded here have been observed adjusting flight patterns to avoid existing operational turbines and it is unlikely that the proposed turbine would displace any birds from using habitats within the local landscape. Barrier effect is not considered likely to impact the species recorded here.

7.8.5 The provisional collision estimates predicted for this turbine are less than 0.5 individuals for all species. An impact of this magnitude would have a negligible cumulative impact upon bird species active in the local area.

Bats

7.8.6 The cumulative impact upon bats from this Proposed Development and nearby approved/pending planning turbines in the local area has been calculated. The findings of impact assessments for bats associated with these developments are summarised in Table 10 of the EcIA in **Appendix E.**

7.8.7 These turbine developments have found there to be no significant adverse impacts to local bat populations Within the wider landscape, extensive woodland associated with Glover Valley forms a natural habitat corridor between the existing turbine sites and the Proposed Development, which represents high value habitat likely to support significant levels of bat activity. The turbine developments included in the cumulative assessment are largely situated within unexceptional habitat which is widespread in the local landscape. At the landscape scale, bat activity in and around these turbine locations will be at low densities compared to optimal habitat such as that at Glover Valley.

7.8.8 No significant cumulative impact upon bat populations is predicted.

7.8.9 The full suite of ecological survey reports and the EcIA can be found in **Appendix E**.

7.9 Conclusion

7.9.1 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. Mitigation measures will be

implemented to minimise the unavoidable effects during the construction phase and operational phases of the Proposed Development.

7.9.2 The mitigation and enhancement recommended within this report is of a sufficient scale to ensure that the Proposed Development provides the required net gain for biodiversity by providing 10.37% net gain in hedgerow areas and a 10.57% biodiversity net gain in habitat areas. This proposal thereby aligns with the National Planning Policy Framework and Cornwall Council's Policy G2 – Biodiversity Net Gain, of Cornwall Councils Climate Emergency DPD (CEDPD), adopted on the 21st of February 2023. The Biodiversity Net Gain report for this proposal is provided in **Appendix E.**

7.9.3 The Proposed Development has also been prepared in accordance with Policy G3 – Canopy, of Cornwall Councils CEDPD. The Tree Canopy Statement for this proposal can also be found in **Appendix E.**

8 Heritage Impact Assessment

8.1 Introduction

8.1.1 South West Archaeology Ltd. (SWARCH) was commissioned by the Applicant to undertake a Heritage Impact Assessment (HIA) for the proposed wind turbine at Higher Biscovillack. 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.**

8.1.2 The assessment is divided into two main components. The first component addressed 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 addressed 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.

8.2 Guidance and Policy

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

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

8.2.3 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 ISEP.

8.3 Methodology

8.3.1 A desk-based assessment was completed to identify the potential direct impacts of the proposed wind turbine 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 geophysical survey was carried out on 13th - 14th October 2025 during which a brief walkover survey of the site was undertaken. This staged programme of archaeological investigation allowed the archaeological potential of the site and the significance of the archaeology to be measured.

8.3.2 The magnitude of the direct physical impact upon the identified archaeological assets due to the development was 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).**

8.3.3 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 turbine may be experienced.

8.3.4 The predicted significance of the indirect impacts upon the setting of designated heritage assets was 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).**

8.4 Results

Direct Impacts

8.4.1 Direct effects 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.

8.4.2 The site is located in the historic parish of St Austell (now within the modern parish of Treverbyn). The first available map to depict the site and the surrounding area is the 1748 Martyn Map. The site has been subject to little change during the past two centuries, with this area having been recorded as rough pasture and furze until its reclamation for agricultural purposes. Aerial photography suggests that it has remained largely unchanged in recent decades. In the area surrounding the site, the landscape became increasingly industrial during the post-medieval period, with various mines and quarries opening up across the landscape to exploit the mineral-rich lodes. In modern day, there is evidence for modern activity within the wider landscape related to China clay extraction.

8.4.3 Archaeological investigations in the form of both a geophysical survey and an archaeological evaluation were carried out in 2004. Two evaluation trenches were excavated within or adjacent to the site area, one just to the northeast of the proposed turbine location. No archaeological features were identified.

8.4.4 Table 3 in **Appendix F** present the geophysical survey results carried out as part of this assessment. The results show only post-medieval features and indicate the archaeological potential of the site to be low. The radiating linear anomalies observed are inconsistent with anthropogenic patterns (such as cultivation strips) and are likely geological in origin.

8.4.5 Accordingly, the proposed development is considered unlikely to have any significant direct effect on archaeological features. Further archaeological works are unlikely to provide meaningful additional information.

Indirect Impacts

8.4.6 The assessment identified and evaluated 52 heritage assets, as well as the historic environment. Each asset was considered individually to determine the significance of potential effects arising from the proposed development. Subsequently, the aggregate and cumulative impacts of the proposed development were assessed. A summary of the findings in relation to indirect impacts is presented in **Table 3** below.

8.4.7 For most designated heritage assets in the wider area, the proposed turbine 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**. For the remaining eight assets, the effect is assessed as **Negligible Adverse.**

8.4.8 The aggregate impact of the proposed development is an assessment of the overall effect of the single 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.**

8.4.9 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.**

8.4.10 It's determined the proposed turbine 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 heritage impacts*

Asset	Type	Distance	Value	Scale of Change	Significance of effect	Professional Judgement
Church Of St Ciricius And St Julitta	GI	6.5km	High	No change	Neutral	No change
Church Of All Saints	GI	8.6km	High	No change	Neutral	No change
Holy Trinity Church	GI	2.6km	High	No change	Slight	Negligible Adverse
Long Stone	GII*	3.9km	High	No change	Neutral	No change
Church Of St Mary	GII*	6.1km	High	No change	Neutral	No change
Leek Seed Chapel	GII*	6.3km	High	No change	Neutral	No change
Church Of St Mewan	GII*	2.6km	High	No change	Slight	Negligible Adverse
Pennans Farmhouse	GII*	7.0km	High	No change	Neutral	No change
Tregrehan House And Attached Steps And Parterre Walls With Urns	GII*	5.4km	High	No change	Neutral	No change
Church Of St Andrew	GII*	8.7km	High	No change	Neutral	No change
Meledor Farmhouse	GII*	7.1km	High	No change	Neutral	No change
Gover Railway Viaduct Including Piers To North	GII	1.5km	Medium	Negligible	Slight	Negligible Adverse
Outbuildings And Attached Garden Wall Adjoining North East Of Carthew Farmhouse	GII	1.6km	Medium	No change	Neutral	No change
Trelowth Methodist Church	GII	3.7km	Medium	No change	Neutral	No change
Bosinver Farmhouse	GII	3.3km	Medium	No change	Neutral	No change

Gaved Monument In The Churchyard About 18 Metres North East Of Chancel Of Church Of St Mewan	GII	2.6km	Medium	No change	Neutral	No change
Roseweek Cottage	GII	4.4km	Medium	No change	Neutral	No change
Engine House At Polgooth Mine	GII	3.9km	Medium	No change	Neutral	No change
Thomas Monument In The Churchyard About 9 Metres North Of North Trancept Of Church Of St Mewan	GII	2.6km	Medium	No change	Neutral	No change
Crow South East Of Higher Biscovillack Farmhouse (Farmhouse Not Included)	GII	0.5km	Medium	Negligible	Slight	Negligible Adverse
Nanzearth Farmhouse	GII	3.1km	Medium	No change	Neutral	No change
Gateway At The South West Entrance To The Churchyard Of St Mewan	GII	2.6km	Medium	No change	Neutral	No change
Cottage West Of Gunheath Farmhouse (Farmhouse Not Included)	GII	3.0km	Medium	No change	Neutral	No change
Cottage West Of Gunheath Farmhouse (Farmhouse Not Included)	GII	1.6km	Medium	No change	Neutral	No change
Trevarrick Hall	GII	2.0km	Medium	No change	Neutral	No change
Carthew Mill, Mill Cottage And Number 2	GII	1.4km	Medium	No change	Neutral	No change
Gewans Farmhouse	GII	3.7km	Medium	No change	Neutral	No change
Penrice	GII*	5.2km	High	No change	Neutral	No change
Kitchen Garden Walls To Penrice	GII	5.2km	Medium	No change	Neutral	No change
St Mewan Sunday School	GII	2.6km	Medium	No change	Neutral	No change
Carthew Farmhouse	GII	1.5km	Medium	No change	Neutral	No change
Mill Approximately 25 Metres North East Of Carthew Farmhouse	GII	1.6km	Medium	No change	Neutral	No change
Part of the china clay works known as Wheal Martyn	SM	1.1km	High	No change	Neutral	No change
Standing stone called the 'Long Stone' in the grounds of Penrice School	SM	3.9km	High	No change	Neutral	No change
Round cairn with beacon called Hensbarrow	SM	3.1km	High	Negligible	Slight	Negligible Adverse
Bowl barrow 270m south west of Castle Hill Farm	SM	8.7km	High	No change	Neutral	No change
Small multivallate hillfort 230m south-east of Great Prideaux	SM	6.2km	High	No change	Neutral	No change
A henge re-used as a medieval playing place, 75m north east of Castle Hill Farm	SM	8.9km	High	No change	Neutral	No change
Round called Castle Gotha	SM	5.6km	High	No change	Neutral	No change
Large multivallate hillfort with two bowl barrows known as Castle-an-Dinas, 335m north	SM	9.5km	High	No change	Neutral	No change

of Tresaddern 3.7kmBungalow						
Part of a mining complex at South Polgooth Mine	SM	4.6km	High	No change	Neutral	No change
Platform cairn 180m northwest of Hensbarrow Farm	SM	3.1km	High	No change	Neutral	No change
Earlier prehistoric hillfort, stone hut circle settlement and field system at Helman Tor	SM	9.6km	High	No change	Neutral	No change
Sticker Camp later Prehistoric-Roman round	SM	4.3km	Medium	Negligible	Slight	Negligible Adverse
Prehistoric and Roman settlement at Carvossa	SM	10.0km	High	No change	Neutral	No change
Resugga Castle later prehistoric univallate hillfort	SM	6.7km	High	No change	Neutral	No change
Round barrow 530m north west of Carnwinnick	SM	8.1km	High	No change	Neutral	No change
Earlier prehistoric hillfort and round cairn at St Stephen's Beacon	SM	3.7km	High	Negligible	Slight	Negligible Adverse
St Austell	CA	1.9km	Medium	No change	Neutral	No change
Charlestown	CA	4km	Medium	No change	Neutral	No change
WHS	WHS	4.3km	Very High	No change	Neutral	No change
China Clay Country	N/A		Medium	Negligible	Slight	Negligible Adverse
Historic Landscape						Minor Adverse
Aggregate Impact						Negligible Adverse
Cumulative Impact						Minor Adverse

8.5 Conclusion

8.5.1 The assessment concludes that the proposed development is unlikely to result in any significant direct effects on archaeological features. Historical mapping and aerial photography indicate that the site has remained in agricultural use for the past two centuries, while adjacent land has been subject to extractive activity as part of the China Clay Works. The geophysical survey completed onsite indicates the archaeological potential of the site is low.

8.5.2 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 turbine 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 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.** Overall, the overall impact on the historic environment is assessed as **Minor Adverse**.

8.5.3 Given the history of the site, the geophysical survey and previous archaeological investigations undertaken, it is concluded that monitoring works are unlikely to return any meaningful results and so further archaeological works are not recommended.

9 Noise Assessment

9.1 Introduction

9.1.1 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 at Longstones (PA20/09318), East Karslake (PA24/05782), Wheal Martyn (PA21/07216), Higher Goonamarth 2 (PA24/08135) and Burngullow (PA23/09937) a 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 2 x wind turbines at Dubbers also proposed by The Applicant. The full noise report is provided in **Appendix G**.

9.1.2 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'[19] issued in May 2013.

9.1.3 The predictions were undertaken at 13 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 been established in the planning applications for the consented turbines at Longstones (PA20/09318), East Karslake (PA24/05782), Wheal Martyn (PA21/07216), Higher Goonamarth 2 (PA24/08135) and Burngullow (PA23/09937).

9.1.4 The Total ESTU-R-97 Noise Limits are summarised in Table 2.2 and Table 2.3 in **Appendix G.**

9.1.5 A background noise assessment was conducted at selected Noise Monitoring Locations (NMLs) in the area as part of the Longstones (PA20/09318) and Greensplat (PA12/12138) planning applications to establish prevailing background noise levels. The locations of the three NMLs and 13 Noise Assessment Locations (NALs) are shown in Figure A1.1 in **Appendix G** and are also listed in **Table 4** below.

[19] 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 Higher Biscovillack WT (m)	Representative NML
NAL1- Newgate	197946	53255	2212	B
NAL2- Prideaux	198384	53077	1979	B
NAL3- 23 Carne Hill	198762	53393	1488	B
NAL4- Treglyn Gardens	199550	53677	817	B
NAL5- Secret Cottage (2 properties)	199152	53871	875	B
NAL6- Penisker Farm	199087	54161	776	B
NAL7- Biscovillack Farm	199576	54088	431	B
NAL8- Area 51 campsite	200157	54074	517	B
NAL10- Greystone Cottage	199819	54849	396	D
NAL11- Longstone Cottage	197688	55420	2328	A
NAL12- Longstone House	197633	55346	2349	A
NAL13- Carthew Farm Cottage	200287	55931	1554	C
NAL14- Adit (property north of Carthew)	200287	56332	1940	C

**A-C noise monitoring from Longstones planning application PA 20/09318 noise survey in July/August 2020*

***D noise monitoring from Greensplat wind turbine planning application PA 12/12138 noise survey in May 2012*

9.2 Noise Assessment Results

9.2.1 Figures A1.2a to A1.2n in **Appendix G** 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 shows 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.**

9.2.2 The assessment results show that predicted cumulative wind turbine noise levels are below the ETSU-R-97 Noise Limits at most of the Noise Assessment Locations, with three exceptions to the south of the proposed development:

- At NAL6- Penisker Farm there is an exceedance of up to 1.5dB during the daytime period at wind speeds of 7-9m/s (for northerly and easterly wind directions);
- At NAL7- Biscovillack Farm there is an exceedance of up to 2.3dB during the daytime period at wind speeds of 7-9m/s (for northerly and easterly wind directions); and,
- At NAL8- Area 51 campsite there is an exceedance of 0.8dB during the daytime period at wind speeds of 7-9m/s (for northerly and easterly wind directions).

9.2.3 The assessment is based on the candidate turbine model, a Vestas V117 4.3 MW operating in full mode (PO2) at Higher Biscovillack (in addition to other nearby turbines). It was found that in full power mode the turbine would meet noise limits at all receptors except for three to the south of the proposed turbine under certain wind speeds from northerly and easterly wind directions. TNEI has determined that, by applying the 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 properties can be achieved. It is proposed that the turbine be conditioned to these levels to ensure compliance throughout its operational lifetime. This demonstrates that the Vestas V117 4.3 MW is a suitable turbine model with respect to noise for the Higher Biscovillack site.

9.3 Conclusion

9.3.1 Predictions of wind turbine noise have been made, based upon sound power level data for a candidate turbine model, a Vestas V117 4.3MW Mode PO2, for the proposed Higher Biscovillack wind turbine. The five nearby consented single wind turbines at Longstones (PA20/09318), East Karslake (PA24/05782), Wheal Martyn (PA21/07216), Higher Goonamarth 2 (PA24/08135) and Burngullow (PA23/09937), along with 4 other operational EWT DW54 (500 kW) wind turbines, and the proposed 2 x wind turbines at Dubbers have all been considered as part of a cumulative noise assessment.

9.3.2 The predictions were undertaken at 13 Noise Assessment Locations which are residential properties in the immediate and wider area. For all the Noise Assessment Locations,

Total ETSU-R-97 Noise Limits (also referred to as the 'cumulative limit') have been established in the planning application noise reports for the consented wind turbines at Longstones (PA20/09318), East Karslake (PA24/05782), Wheal Martyn (PA21/07216), Higher Goonamarth 2 (PA24/08135) and Burngullow (PA23/09937).

9.3.3 The assessment results show that predicted cumulative wind turbine noise levels are below the Total ETSU-R-97 Noise Limits at most Noise Assessment Locations, with three exceptions. Through the use Low Noise Modes, the turbine's noise levels can be effectively reduced to ensure compliance with the ETSU-R-97 limits at all properties. It is proposed that these noise levels be provided as a condition to the consent to ensure compliance throughout the turbine's operational lifetime. This demonstrates that the candidate turbine model, the Vestas V117 4.3 MW, is suitable in terms of 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 turbine and associated infrastructure on Land at Higher Biscovillack Farm. The primary aim of the FRA was to ensure that the development will not increase flood risk elsewhere outside of the site, a suitable sustainable drainage scheme (SuDS) is recommended to comply with this. The full FRA and Hydrological Assessment can be viewed in **Appendix H.**

11.2. Site Description

Site Location

11.2.1. The Proposed Development site is located within the China Clay Works to the northwest of St. Austell, Cornwall. The site is positioned east of the Blackpool China Clay extraction pit and directly west of Greensplat Road.

Topography

11.2.2. The site has a high point of 228m Above Ordnance Datum (AOD) and generally falls in a northeast to southwest direction. Land to the west of this falls gently into the Gover Stream which runs in an approximate north to south alignment, 340m from the western boundary of the site.

Existing Usage

11.2.3. The development location currently accommodates a field and access track joining Greensplat Road. The site location is a greenfield site adjacent to operational China Clay Works.

Proposed Usage

11.2.4. The proposal is for the installation of a single wind turbine with associated foundations, hardstanding area and new access track. The existing site entrance and trackway will be developed into a longer access to the proposed wind turbine.

11.3. Hydrological and Hydrological Context

Hydrology

11.3.1. The local hydrology around the site is influenced largely by the existing watercourse which runs along the western boundary of the site, approximately 340m from the proposed wind turbine location. This watercourse would be the natural receptor for surface water runoff generated by the site.

11.3.2. The watercourse is identified as the Gover Stream, a tributary to the St Austell River which flows in a southerly direction towards the coast and outfalls to the coast at Pentewan.

11.3.3. The site lies within the catchment of Gover Stream. Runoff from the site will drain into the Gover Stream and subsequently into the St Austell River.

Hydrogeology

11.3.4. 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, at the southern boundary of the site, at the location of Gover Stream, the area is dominated by superficial deposits predominantly made up of alluvium. This constitutes unconsolidated detrital material deposited from the Gover Stream, resulting in soft to firm layers of clay, silt, and gravels.

11.3.5. 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.

11.3.6. 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.

11.3.7. 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 210m AOD, and therefore the groundwater should be well depressed beneath the ground surface.

11.4. Assessment of Flood Risk

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. Due to its geology, Cornwall generally does not experience much groundwater flooding. The predicted groundwater level at the site confirms that construction activities related to the proposal 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 wind turbine location is on relatively high ground and the potential for surface water accumulating in this location is limited. Additionally, the ground near the proposed turbine location slopes toward the Gover Stream and the Blackpool Pit. As a result, there is minimal potential for surface water to run towards the proposed wind turbine. 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

11.4.4. There are no mains sewers in the area. The nearest residential dwelling that lies upslope is 1.2km east of the access track to the proposed development. The likelihood of flooding from sewers is negligible.

Flooding from Reservoirs, Canals, and Other Artificial Sources

11.4.5. 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

11.4.6. 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 of the site, it is essential to understand and manage the surface water run-off from the development through a sustainable surface water drainage system.

11.4.7. The proposed surface water drainage system will ensure that the proposed development will not increase flood risk to third party's 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 3,950m^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 (Gover Stream) at a rate equivalent to the greenfield runoff rate, calculated as a maximum discharge of 3.8l/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 Gover Stream. An attenuation basin formed using a base area of 200m^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, reducing potential impact on Gover Stream.

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 south-westerly direction from the site, where it would be intercepted by the existing watercourse and flow into the Gover Valley as per the pre-developed scenario.

11.5.6. Due to the storage provided in the proposed drainage systems and design standard used, any exceedance flows are expected to be lower than the flows that would have occurred 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 5.** 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	Cut grass and verges surrounding basin/swales to allow for access	Monthly or as required (based on inspections)
	Clear upstream drainage features of debris	
	Inspect flow control device for blockages and remove any sediment in chamber.	
Occasional maintenance	Remove sediment and debris from inlet and outlet to basin and swales	As required, based on inspections
Monitoring	Inspect swales and detention basin and note rate of sediment accumulation	Monthly 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 in **paragraph 11.5.5.**

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 Flood Risk Assessment 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. The proposed drainage infrastructure has been designed in accordance with guidance outlined in the National Planning Policy Framework (NPPF), Planning Policy Guidance (PPG), and Drainage Guidance for Cornwall and therefore the 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)[20]. The PPG, first published 2015 and updated in 2023, states:

"*Wind turbines can potentially affect electromagnetic transmissions (e.g. 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*"[21].

[20] https://www.gov.uk/guidance/renewable-and-low-carbon-energy. Accessed 20th October 2025.
[21] 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	17/10/2025	No objection
Ministry of Defence	15/10/2025	No response to date	No response to date

12.3 Summary

12.3.1 Due to the positive consultation responses received from Atkins Global and JRC, the Applicant is confident that the proposed turbine is unlikely to adversely impact telecommunication links.

13 Shadow Flicker

13.1 Introduction

13.1.1 The Applicant has undertaken a shadow flicker analysis on the proposed single turbine on land at Higher Biscovillack Farm, Greensplat, St Austell, PL26 8XY. 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 candidate turbine model, a Vestas 117, 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, 39 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 turbine. This allows for the consideration of 1 window per receptor facing Turbine 1. These assumptions ensure that the modelling reflects the worst-case scenario.

13.2.3 In total, 10 properties were identified to theoretically experience shadow flicker in excess of 30 hours per year or for over 30 minutes a day. 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.

13.4.3 Further mitigation may include the planting of additional trees at the affected dwellings to generate more screening.

13.5 Conclusion

13.5.1 A study area of 10 times the rotor diameter of the candidate turbine model was considered (1,170m), within which, 39 properties were identified. Of these, 23 were found to potentially be impacted by shadow flicker – however, only 10 could experience over 30 minutes of flicker on any day or over 30 days per year.

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 turbine 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. In addition, supplementary mitigation measures, such as the planting of trees and shrubs to provide screening, could be implemented to further reduce effects.

13.5.4 Importantly, research evidence shows that shadow flicker does not occur at frequencies which may cause human health problems.

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 Higher Biscovillack Farm, Greensplat, St. Austell, PL26 8XY. The full CTMP report is provided in **Appendix K**.

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 the relevant authorities (including the local council, roads, and police authority) will be notified according to the requirements of the Abnormal Indivisible Loads (AIL) Roads Vehicles (Authorisation of Special Types) (General) Order 2003.

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 (**Appendix K**) 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 28 HGV movements. The longest component, the turbine blade will be a maximum of 57.5m in length.

14.2.4 A crane is required for the installation of the turbine, and whilst this is not categorised as an abnormal load, its movement is considered part of the turbine delivery sequence. Table 2 of the CTMP gives a breakdown of the proposed turbine component delivery vehicles and crane movements and Table 3 in the CTMP 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. Construction deliveries will be restricted to these routes where practical and suppliers will be briefed accordingly. The use of minor and unclassified roads will be avoided.

14.3.2 Abnormal Indivisible Loads (AIL) will arrive via the A30 westbound. The route will take the first exit at Victoria Interchange and take the first exit 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.
- Continuing down Hensbarrow Hill Rd until a left-hand turn is made to Greensplat Rd.
- Continuing left on Greensplat Rd. until turning right into site via an existing site entrance.

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

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 temporarily removed, in conjunction with oversail rights and heavy goods traffic management in the proximity of the Imerys quarries near the Proposed Development site. All street furnishings will be reinstated following the transportation phase. 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 A-F of the CTMP **(Appendix K)**.

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 **(Appendix K)**.

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 be-yond 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 street 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 28 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 Based on 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

15.1.1 A public consultation will be held on Wednesday 26th November, between 3pm-7pm in the Atrium at the Wheal Martyn Museum, Carthew, St Austell, PL26 8XG 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 the 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"*[22], 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 16.5km 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.

[22] Department for Levelling Up, Housing and Communities and Ministry of Housing, Communities & Local Government. Accessed via: https://www.gov.uk/guidance/renewable-and-low-carbon-energy (Accessed 3rd October 2025)

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 which included:

- Two Instrument Flight Procedure (IFP) Safeguarding Assessments:
  - Reference: CL-5436-RPT-002 V1.1, dated 26 November 2019; and
  - Reference: CL-5456-RPT-002 V1.0, dated 20 January 2020.
- Aeronautical Study:
  - Reference: CL5456-RPT-003 V2.2, dated 21 February 2020.
- Technical Safeguarding Assessment:
  - Reference: CL-5456-RPT-004 V1.2, dated 19 March 2020.

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[23].

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 turbine, with a tip height of up to 135m at a ground elevation of 221m, will reach a total elevation of 356m 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 impacts.

[23]CAP 168 - Licensing of Aerodromes, UK Civil Aviation Authority, Safety and Airspace Regulation Group, Edition 12 (January 2022). Accessed Via: https://www.caa.co.uk/our-work/publications/documents/content/cap-168/ (Accessed 6th October 2025)

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 Higher Biscovillack site in relation to a proposed wind turbine development. The full report can be found in **Appendix N.**

17.1.2 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 was developed to evaluate potential contaminant sources, pathways, and receptors, with each plausible linkage was qualitatively assessed following published guidance.

17.3 Results

17.3.1 A preliminary conceptual site model was developed to evaluate potential contaminant sources, pathways, and receptors, with each plausible linkage was qualitatively assessed following published guidance.

17.3.2 The historical mapping confirmed that the land has remained largely undeveloped agricultural pasture. Clay and metalliferous mining activity has occurred historically and continues to be is present in the wider area, however none of which directly affects the site.

17.3.3 No recorded instances of contaminated land, landfills, or pollution incidents of concern within the area of potential influence were identified.

17.3.4 The site lies within a zone where between 10% and 30% of properties exceed the radon action level. However, as the proposed development comprises a wind turbine rather than an occupied building, the associated risk is considered low.

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

17.3.6 All 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.

17.3.7 Overall, the assessment found no significant sources of contamination on or near the site. It is therefore concluded that this site is suitable for its intended future use and that no further investigation will be required.

17.4 Conclusion

17.4.1 The site has historically been an undeveloped field in an area of extensive mining clay works. No identified contaminant sources, pollution incidents, or landfill activities that present a material risk were identified during the assessment.

17.4.2 In the absence of a significant source of contamination, it is concluded that this 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 outlines the socioeconomic profile of Cornwall as well as describing recreational and tourist activities in proximity to the location of the Proposed Development. An assessment has been prepared to determine the impacts the proposed wind development could have on the local communities, economy and tourism as well as considering stakeholders and key businesses in Cornwall.

18.2 Baseline Assessment

Site Characteristics

18.2.1 There are no standardised criteria for assessing the socioeconomic effects of developments within the UK. However, many studies have reviewed the potential socioeconomic impact of renewable energy with particular focus on wind turbine development. This assessment draws on local data to estimate the potential impacts on employment and businesses.

18.2.2 The land in the vicinity of the proposed development is primarily used for quarrying, clay works, farmland and other agriculture. There is 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.

18.2.3 The Proposed Development site lies in an industrial area within the boundary of Cornwall. Cornwall is mainly comprised of towns and villages, with Truro being the only city, located approximately 20km southwest of the Proposed Development. The closest town to the development is St Austell which lies 2.8km southwest of the Proposed Development. The Proposed Development is located within Treverbyn Parish. The largest settlement within Treverbyn Parish is the village of Bugle which is located 4.7km northeast of the Proposed Development. The relevant population figures are presented in **Table 7** below.

Table 7: *Population Figures*

Area	Total resident population (all ages)

Treverbyn Parish	8,829[24]
Cornwall	570,305[25]
England	56,490,048[26]

Economic Activity

18.2.4 Employment data for Cornwall, the South West, and England has been sourced from Nomis Official Labour Market Statistics and is presented in **Table 8** below. According to the most recent census (2021), 254,248 residents aged 16 and over are in employment in Cornwall.

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 Motor-cycles	15.9	15.0
H: Transportation and Storage	3.5	5.0
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

[24] Treverbyn Parish https://treverbyn.parish.uk/ (Accessed: 26th August 2025)
[25] Office for National Statistics Census 2021. Accessed via: https://www.ons.gov.uk/visualisations/censuspopulationchange/E06000052/ (Accessed 22nd August 2025)
[26] 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)

18.2.5 The figure above indicates that two of the higher employment categories in Cornwall are construction and manufacturing - both of which are expected to benefit as a result of the proposed development. The Applicant endeavours 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 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 prioritising sustainable development directly linked to the renewable energy sector.

18.2.6 Moreover, Cornwall's Interim Policy Position Statement[27] 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 11.2GWh per year, enough electricity to power over 2,400 Cornish homes annually.

18.2.7 The National Planning Policy Framework (NPPF) updated in December 2024 sets out the Government's planning policies for England. The NPPF 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[28]. The plan sets out the actions required to transition to a carbon neutral county by 2030, particularly emphasising the importance of onshore wind development to achieve this goal. Furthermore, the Cornwall Council Climate Emergency Development Plan Document (CEDPD)[29] 2023 reinforces the priority of wind developments contributions to net zero plans. This proposal is expected to contribute towards this target by offsetting approximately 83,350 tonnes of carbon over the proposed turbine's 35-year lifetime.

18.2.8 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[30]. According to the ONS, this number was estimated to be 4,400 in 2019[31], a drop likely attributable to the change in legislation following the release of the 2015 Ministerial Statement on Onshore Wind which significantly limited the

[27] 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)
[28] Cornwall Council Climate Change Action Plan. Accessed via: https://www.cornwall.gov.uk/environment/climate-emergency/our-action-plan/ (Accessed: 26th August 2025)
[29] 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)
[30] 'Working for a Green Britain, Employment and Skills in the UK Wind & Marine Industries' (2011)
[31] https://www.ons.gov.uk/economy/environmentalaccounts/articles/windenergyintheuk/june2021

possibilities for onshore wind development in England. The UK Government's Onshore Wind Taskforce (2025) estimates that the onshore wind sector for Great Britain can support up to 20,000 direct and 25,000 indirect jobs by 2030[32]. 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

18.2.9 Cornwall Good Growth Plan states that Cornwall's Visitor Economy is the national leader for low-carbon energy experiences for visitors and residents, maximising links to the environment, heritage and culture. The Cornwall Growth Strategy Evidence Report 1[33] identifies the Visitor Economy as a core sector accounting for a high proportion of employment in Cornwall – employing 49,175 people in 2022.

18.2.10 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 towards onshore windfarms in UK rural landscapes[34][35][36][37]. 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 did not decline overall[38].

18.2.11 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. **Table 9** below shows the tourist attraction, type of activity and distance from the proposed site.

[32] Onshore Wind Taskforce strategy (accessible webpage) - GOV.UK (Accessed: 5th November 2025)
[33] Cornwall Growth Strategy Evidence Report 1 Spring 2024. Accessed via: https://www.cNornwall.gov.uk/media/heyn45pl/cornwall-good-growth-plan-evidence-report-1.pdf (Accessed: 26th August 2025)
[34] 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
[35] Aitchison, C. (2012). Tourism impacts of windfarms: Submitted to Renewables Inquiry Scottish Government. University of Edinburgh
[36] 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
[37] NU –Northumbria University. (2014). Evaluation of the impacts of onshore windfarms on tourism. https://www.northumberland.gov/uk/NorthumberlandCountyCouncil/media/Planning-and-Building/planning%20policy/Core%20strategy/Evidence%20based/EB14-Evaluation-of-the-impacts-of-onshore-wind-farms-on-tourism.pdf (Accessed: 5th November 2025)
[38] https://www.visitbritain.org/inbound-trends-uk-nation-region-county?area=1730 (Accessed: 5th November 2025)

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	1km east
St Austell Brewery Visitors Centre	Recreation	3km southeast
Roche Rock	Historic	4.5km north
The Eden Project	Recreation/Attractions	5.5km east
Charlestown Harbour	Historic/Recreation	5.5km southeast
Tregrehan Garden	Parks and Gardens	6.5km southeast
Screech Owl Sanctuary	Recreation/Education	7.5km northwest
The Lost Gardens of Heligan	Parks and Gardens	10km southeast
Lanhydrock Estate	Parks and Gardens	12km northeast
Restormel Castle	Historic	13km northeast
Bodmin Jail	Recreation	14km northeast
Bodmin Railway	Recreation	13.5km northeast
Royal Cornwall Showground	Recreation	15km north

**The table presents a representative summary of attractions in the area and does not present an exhaustive list*

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

18.2.13 The largest events in Cornwall which have a possibility of being impacted are the Royal Cornwall Show which takes place in early June for 3 days located 17.9km north of the Proposed Development, and Boardmasters Festival which takes place in mid-August annually, located 18.5km northwest. Delivery of the turbine components will be scheduled to not coincide with these events. 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 2,400 Cornish homes per year and will offset approximately 83,350 tonnes 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. Funds from similar projects in the area have historically been used 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 seeks to engage local businesses wherever possible during the construction phase of the development, which is expected to generate a substantial number of labour hours and create new employment opportunities, particularly within the construction sector. 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 based in Wadebridge; therefore, the proposed development directly supports local business and employment.

18.3.5 For aspects such as development services (consultancy, planning advice and project management), construction (roads, access, fences, foundation, etc.), civil and electrical engineering and grid enabling works (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.

Potential Adverse Impacts on the Wider community and Tourism

18.3.6 The main considerations on the wider community are:

- Noise;
- Transport;
- Shadow Flicker; and
- Landscape and Visual Amenity.

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

18.3.8 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[39]. The proposed development may provide similar opportunities.

18.3.9 Consequently, 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 proposed development has been assessed as having an overall positive socio-economic impact on the local area, representing 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 Applicant is a local Cornish business so the proposal will directly 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, F, G and J.**

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

19 Conclusion

19.1.1 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.

19.1.2 The proposal for '*a single wind turbine with maximum blade tip height of 135m, along with associated works, equipment and necessary infrastructure including access track, crane pad and construction compound"* is appropriately scaled and suitably located. It accords with the Cornwall Council Climate Emergency Development Plan, which designates the site as suitable for wind energy, and aligns with the supporting landscape sensitivity guidance that identifies the area as capable of accommodating Band D developments (turbines up to 150 m to tip), thereby supporting the scale of the proposed turbine.

18.0.1 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 11.2GWh resulting from this proposal will contribute significantly to the local and national carbon reduction targets by saving 2,375 tonnes of carbon annually.

18.0.2 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.'

18.0.3 Considerations of all likely impacts that could result from the proposed development summarised in the associated reports conclude the proposed development:

- 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 significant additional 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 on 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
- Will not have significant impact on transportation networks.

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

18.0.5 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.

List of Appendices

Appendix A
EIA Screening Statement
Appendix B
PR4333-IFL-LP-C
PR4333-IFP-BP
PR4333-IFL-ENTP-C

Appendix C
Vestas 117 Turbine Elevation Plan

Appendix D
LVIA Report
LVIA Figures

Appendix E
Ecological Impact Assessment
Bat activity surveys report
Bird Survey Report (and appendices)
Biodiversity Net Gain Report (and matrices)
Tree Canopy Statement
Green Infrastructure Statement

Appendix F
Heritage Impact Report

Appendix G
Noise Impact Assessment

Appendix H
Flood Risk Assessment

Appendix I

EMI Consultation Responses

Appendix J

Shadow Flicker Assessment

Appendix K

Construction Transport Management Plan

Abnormal Indivisible Load Route Survey

Appendix L

Pre-Application Consultation Report

Appendix M

Aviation Assessment

Appendix N

Contamination Assessment

Prepared by Stacey Hobbs (AIEMA, MScRes)

on behalf of Clean Earth

November 2025

CleanEarth
Unit 2a
Bess Park Road
Trenant Industrial Estate
Wadebridge
Cornwall
Pl27 6HB