Dubbers, St Stephen-in-Brannel, Cornwall

Heritage Impact Assessment

Heritage Consultancy

SOUTHWEST ARCHAEOLOGY

Dubbers, St Stephen-in-Brannel, Cornwall

Heritage Impact Assessment

Executive Summary

This report presents the results of a heritage impact assessment for two proposed wind turbines (135m to tip) at Dubbers, St Stephen-in-Brannel, Cornwall. The site is located in the middle of the Hensbarrow granite uplands within China clay country.

The two proposed turbines would be located to the west of Nanpean and Currian Vale. The pre-20th century landscape here has been destroyed by the expansion of China clay extraction; accordingly, there are no direct effects.

There are relatively few designated heritage assets in and around China clay country. The scale and artificiality of this landscape serve to diminish the apparent scale of the turbines, and the bench tips provide extensive screening. As a result, the number of designated heritage assets where an appreciable adverse effect could be experienced are few and, overall, the effect on the historic environment is adjudged to be Negligible Adverse.

Client	IMERYS plc.
Applicant	Cleanearth Energy Ltd.
Parish	St Stephens-in-Brannel
County	Cornwall
NGR	SW 197652 56441 and SW 197501 56094
Site Code	SDUB25
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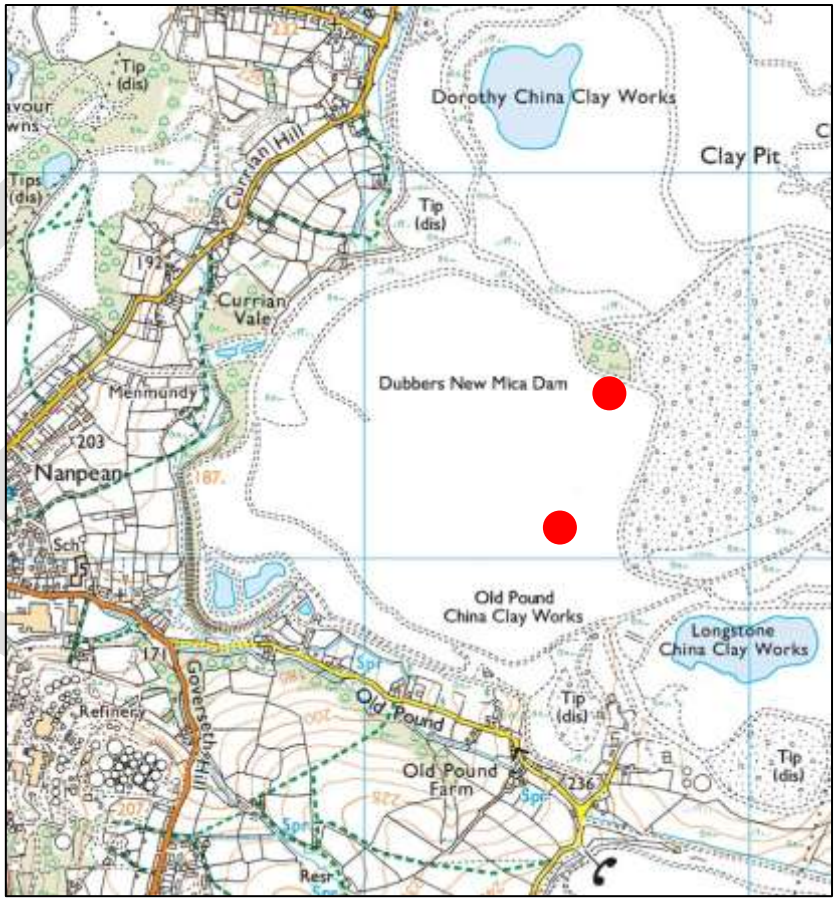

FIGURE 1: LOCATION MAP ©CROWN COPYRIGHT 2025. ALL RIGHTS RESERVED. LICENCE NUMBER 100022432. THE PROPOSED SITES ARE INDICATED.

1 INTRODUCTION

1.1 PROJECT BACKGROUND

South West Archaeology Ltd. (SWARCH) was instructed by Clean Earth Energy Ltd. (the Applicant) to prepare a heritage impact assessment (HIA) for two proposed wind turbines on land at Dubbers, St Stephen-in-Brannel, Cornwall.

1.2 LOCATION

The two proposed turbines would be located on a China clay tip west of Nanpean and NNE of Foxhole, towards the northern end of the parish of St Stephen-in-Brannel.

1.3 TOPOGRAPHY, GEOLOGY AND SOILS

Both proposed turbines would be located on a China clay bench tip, at an elevation of c.257m AOD. As such, the natural ground surface – where it survives - lies c.30m below the current land surface. The soils of this area are likely to have been the gritty loamy very acid soils with a wet peaty horizon and some thin iron panning of the Hexworthy Association[1]; which overlie the granites of the St Austell Intrusion[2].

1.4 SCOPE AND CONTEXT

This report is a summary of the impact of two proposed wind turbines on the buried archaeological resource (direct impacts) and an assessment for the potential for harm to the significance of designated heritage assets in the wider area through change to their setting.

1.5 DEVELOPMENT PROPOSALS

The proposals are for two wind turbines with access tracks, areas of hardstanding, and infrastructure. The wind turbines would both be Vestas V117 models, 135m to tip, hub/nacelle height of 76.5m, and a 117m diameter rotor.

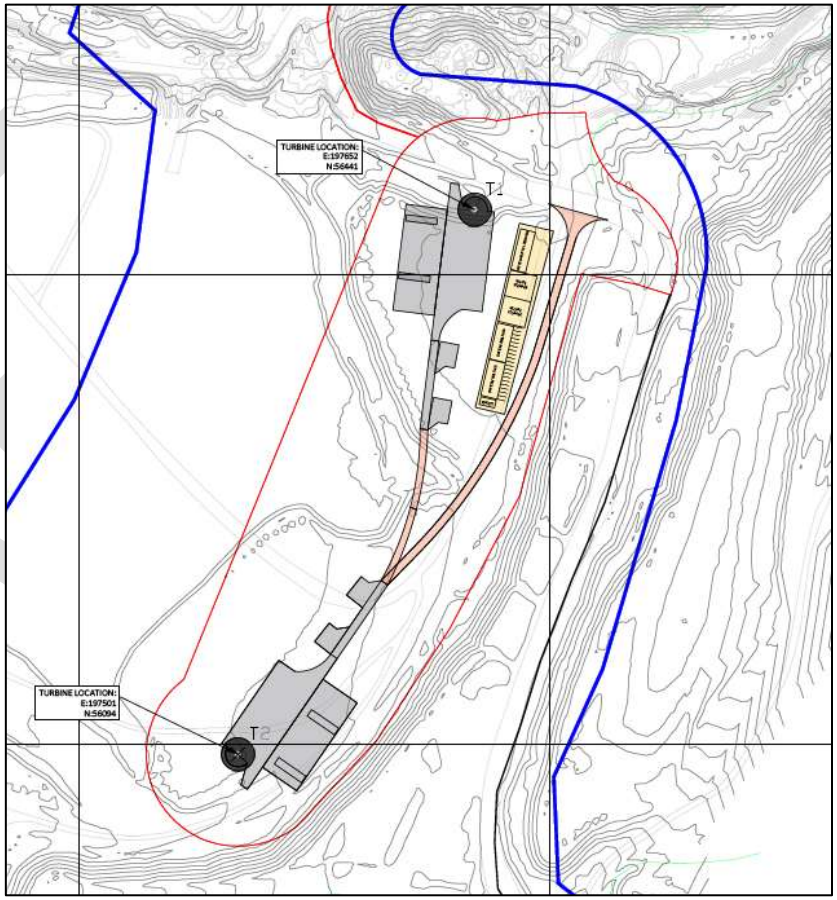

FIGURE 2: PLANS FOR THE TURBINES AND ASSOCIATED INFRASTRUCTURE (SUPPLIED BY THE APPLICANT).

1.6 CONSULTATION

This document is produced for submission to the LPA as part of the planning application. Up-to-date Historic England data on designated heritage assets, and the Cornwall and Scilly HER (*historic environment*

record) were consulted. It follows on from a short report issued as part of a PPA; the conservation officer issued a response to the PPA.

1.7 METHODOLOGY

The desk-based research and impact assessment were undertaken in accordance with the relevant guidance and in line with the SWARCH HIA methodology[3]. The site was visited on 22nd October 2025 by B. Morris; designated heritage assets in the local area were visited on the same day. Photographs of the site of the proposed turbines were taken to and from the heritage assets and are included in this report.

1.8 LIMITATIONS AND CAVEATS

The site visits were undertaken towards the end of October, and most trees still retained their leaves; thus, a best-case scenario for local screening was achieved.

For accurate visualisation, the gold standard is to produce images that replicate, as far as possible, what can be perceived by the human eye. Industry standard guidance states a FFS camera with a 50mm lens provides the closest analogue[4]. This is supported by recent studies[5], which supersede the research undertaken for The Highland Council[6] (note the most recent Highland Council guidance states both 50mm and 75mm imagery should be used[7]). The single image pictures should then be printed at 390×260mm and the printout held c.500mm from the eye as viewing on computer screens generates uncertainty when assessing visual effects[8].

The photographs used in this report were taken with a Canon EOS 650D with an 18-55mm lens and as such should be regarded as illustrative rather than definitive; the reader is directed to the LVIA that accompanies this application for rectified photography and photomontages. Some of the images used in the report are reproduced at the 390×260mm scale in Appendix 1

1.9 QUALITY ASSURANCE

This assessment has been undertaken by South West Archaeology Ltd. (SWARCH) is a Registered Organisation (RO) with the Chartered Institute for Archaeologists (CIfA) and a member of the Federation of Archaeological Managers & Employers (FAME). SWARCH employees working on this project are appropriately qualified academically and commercially, and are Members (MCIfA) of the Chartered Institute for Archaeologists; SWARCH directors hold doctoral qualifications in archaeology.

1.10 PREVIOUS WORK

The site itself has not been subject to any archaeological investigation. An excavation was undertaken at the Longstones site and Cocksbarrow c.0.8km to the east in advance of China clay extraction[9]. The China clay area itself is the subject of a series of reports that cover wide areas at a lower level of detail[10].

2 POLICY AND LEGISLATION

2.1 STATUTORY LEGISLATION

Ancient Monuments and Archaeological Areas Act 1979	*Confers a duty on the Secretary of State to maintain a Schedule of monuments of national importance and areas of archaeological importance. It is a criminal offence to carry out unauthorised works or to destroy or cause damage to a monument covered by this act as well as to metal detect without written consent.*
Planning (Listed Buildings and Conservation Areas) Act (1990)	*Part 1 confers a duty on the Secretary of State to maintain a List of buildings of special architectural or historic interest and provides a statutory duty to preserve the special character of heritage assets covered by this act, including their setting. It is a criminal offence to carry out works to a Listed Building which affect its character without the necessary authorisation.* *It requires consideration of the contribution a building makes to any group of buildings of which it forms part (group value).* *Part 2 requires local authorities to designate as Conservation Areas, areas of special architectural or historic interest. It requires that special attention is paid to preserving or enhancing the character or appearance of these areas in exercising planning functions*
Treasure Act (1996)	*Defines 'treasure' as: any object except a coin, over 300 years old with a metallic content of at least 10% precious metal, one of two or more coins found together meeting these criteria or one of at least 10 coins over 300 years old. It also makes provision for objects found in association with the above. There is a duty to notify the coroner of any find or acquisition of an object which may be covered by this act.*
Burial Act (1857)	*Covers the removal of human remains from a burial place and requirement for consent, often in the form of a license issued by the Ministry of Justice*
Hedgerow Regulations (1997)	*Contains criteria for the protection of 'important' hedgerows. This includes hedgerows marking a boundary of at least on historic (pre 1850) parish or township; is included in the schedule of monuments under the Ancient Monuments and Archaeological Areas Act 1979; is wholly or partly within a site which falls under this act or on land adjacent to and associated with any monument or feature on such a site; marks a boundary of a pre-1600AD estate or manor or is visibly related to any building or other feature of such an estate or manor; is recorded as an integral part of a field system pre dating the Inclosure Acts or is part of/related to any building or feature associated with such as system.*
Historic Buildings and Ancient Monuments Act (1953)	*Established the provision of a register of gardens of special historic interest*
National Heritage Act (1980, amended 1983 & 1997)	*1980: Established a National Heritage Memorial Fund* *1983: Established the Historic Buildings and Monuments Commission for England (now Historic England) with responsibly for overseeing heritage management and reporting to the Secretary of State.*
Electricity Act 1989	*Requires regard to the desirability of protecting sites, buildings and objects of architectural, historic or archaeological interest*

2.2 NATIONAL PLANNING POLICY FRAMEWORK

General policy and guidance for the conservation of the historic environment are now contained within the *National Planning Policy Framework* (Department for Housing, Communities and Local Government 2024). The relevant guidance is reproduced below:

Paragraph 202*: Heritage assets range from sites and buildings of local historic value to those of the highest significance, such as World Heritage Sites which are internationally recognised to be of Outstanding Universal Value. These assets are an irreplaceable resource, and should be conserved in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of existing and future generations.*

***Paragraph 207**: In determining applications, local planning authorities should require the applicant to describe the significance of any heritage assets affected, including the contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum the relevant historic environment record should be consulted and the heritage assets assessed using appropriate expertise where necessary. Where a site on which a development is proposed includes or has the potential to include heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation.*

***Paragraph 208**: Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise. They should take this assessment into account when considering the impact of a proposal on a heritage asset, to avoid or minimise conflict between the heritage asset's conservation and any aspect of the proposal.*

***Paragraph 210**: In determining applications, local planning authorities should take account of:*

a) the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation;
b) the positive contribution that conservation of heritage assets can make to sustainable communities including their economic vitality; and
c) the desirability of new development making a positive contribution to local character and distinctiveness.

***Paragraph 212**: When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation (and the more important the asset, the greater the weight should be). This is irrespective of whether any potential harm amounts to substantial harm, total loss or less than substantial harm to its significance.*

***Paragraph 213**: Any harm to, or loss of, the significance of a designated heritage asset (from its alteration or destruction, or from development within its setting), should require clear and convincing justification. Substantial harm to or loss of:*
a) grade II listed buildings, or grade II registered parks or gardens, should be exceptional;
b) assets of the highest significance, notably scheduled monuments, protected wreck sites, registered battlefields, grade I and II listed buildings, grade I and II* registered parks and gardens, and World Heritage Sites, should be wholly exceptional.*

***Paragraph 214**: Where a proposed development will lead to substantial harm to (or total loss of significance of) a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or total loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply:*
a) the nature of the heritage asset prevents all reasonable uses of the site; and
b) no viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation; and
c) conservation by grant-funding or some form of not for profit, charitable or public ownership is demonstrably not possible; and
d) the harm or loss is outweighed by the benefit of bringing the site back into use.

***Paragraph 215**: Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal including, where appropriate, securing its optimum viable use.*

***Paragraph 216**: The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that directly or indirectly affect non-designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.*

***Paragraph 219**: Local planning authorities should look for opportunities for new development within Conservation Areas and World Heritage Sites, and within the setting of heritage assets, to enhance or better reveal their significance. Proposals that preserve those elements of the setting that make*

a positive contribution to the asset (or which better reveal its significance) should be treated favourably.

***Paragraph 220**: Not all elements of a Conservation Area or World Heritage Site will necessarily contribute to its significance. Loss of a building (or other element) which makes a positive contribution to the significance of the Conservation Area or World Heritage Site should be treated either as substantial harm under paragraph 207 or less than substantial harm under paragraph 208, as appropriate, taking into account the relative significance of the element affected and its contribution to the significance of the Conservation Area or World Heritage Site as a whole.*

A further key document is the Planning (Listed Buildings and Conservation Areas) Act 1990, in particular section 66(1), which provides *statutory protection* to the setting of Listed buildings:

In considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses.

2.3 LOCAL POLICY

Cornwall Local Plan: Strategic Policies 2010-2030: Policy 24: Historic environment

Development proposals will be permitted where they would sustain the cultural distinctiveness and significance of Cornwall's historic rural, urban and coastal environment by protecting, conserving and where appropriate enhancing the significance of designated and non-designated assets and their settings.

Development proposals will be expected to:
• sustain designated heritage assets;
• take opportunities to better reveal their significance;
• maintain the special character and appearance of Conservation Areas, especially those positive elements in any Conservation Area Appraisal;
• conserve and, where appropriate, enhance the design, character, appearance and historic significance of historic parks and gardens;
• conserve and, where appropriate, enhance other historic landscapes and townscapes, including registered battlefields, including the industrial mining heritage;
• protect the historic maritime environment, including the significant ports, harbours and quays.

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

All development proposals should be informed by proportionate historic environment assessments and evaluations (such as heritage impact assessments, desk-based appraisals, field evaluation and historic building reports) identifying the significance of all heritage assets that would be affected by the proposals and the nature and degree of any effects and demonstrating how, in order of preference, any harm will be avoided, minimised or mitigated.

Great weight will be given to the conservation of the Cornwall's heritage assets. Where development is proposed that would lead to substantial harm to assets of the highest significance, including undesignated archaeology of national importance, this will only be justified in wholly exceptional circumstances, and substantial harm to all other nationally designated assets will only be justified in exceptional circumstances.

Any harm to the significance of a designated or non-designated heritage asset must be justified. Proposals causing harm will be weighed against the substantial public, not private, benefits of the proposal and whether it has been demonstrated that all reasonable efforts have been made to sustain the existing use, find new uses, or mitigate the extent of the harm to the significance of the asset; and whether the works proposed are the minimum required to secure the long term use of the asset.

In those exceptional circumstances where harm to any heritage assets can be fully justified, and development would result in the partial or total loss of the asset and/or its setting, the applicant will be required to secure a programme

of recording and analysis of that asset, and archaeological excavation where relevant, and ensure the publication of that record to an appropriate standard in a public archive.

Proposals that will help to secure a sustainable future for the Cornwall's heritage assets, especially those identified as being at greatest risk of loss or decay, will be supported.

3 METHODOLOGY

The purpose of heritage impact assessment is twofold: Firstly, to understand – insofar as is reasonably practicable and in proportion to the importance of the asset – the significance of a historic building, complex, area, monument or archaeological site (the 'heritage asset'). Secondly, to assess the likely effect of a proposed development on the heritage asset (direct impact) and/or its setting (indirect impact).

This assessment was undertaken in accordance with best practice and follows the guidance outlined in: *Conservation Principles*[11], *The Setting of Heritage Assets*[12], *Statements of Heritage Significance*[13] and guidance outlined in the *Principles of Cultural Heritage Impact Assessment* in the UK produced by CIfA, IHBC and IEMA[14]. In terms of known and quantified designated heritage assets in the local area, this is achieved with reference to the staged approach to proportionate decision making outlined in *The Setting of Heritage Assets*[15]. *Step one* is to identify the heritage assets that might be affected by the development.

For direct impacts it draws on existing sources of information (the local historic environment record, historical records, maps, aerial photographs, LiDAR), supplemented by observations made during a walkover survey, to arrive at an assessment of archaeological potential. If and as required, this may include recommendations for further work.

For indirect impacts it identifies the designated heritage assets in the local area (Listed buildings, Scheduled monuments, Conservation Areas, Parks and Gardens, Battlefields, World Heritage Sites) where, due to location, aspect, prospect, design or other factors, there is the potential for harm. The first stage of that process is to determine an appropriate search radius, and this would vary according to the height, size and/or prominence of the proposed development. The second stage in the process is to look at the heritage assets within the search

radius and assign to one of two categories:

- Category #1 assets: Where proximity to the proposed development, the significance of the heritage asset concerned, or the likely magnitude of impact, demands detailed consideration.
- Category #2 assets: Assets where location, current setting, significance would strongly indicate the impact would be no higher than negligible and detailed consideration both unnecessary and disproportionate. These assets are still listed in the impact summary table, but are otherwise scoped out of the assessment.

For *Step two* and *Step three*, and with an emphasis on practicality and proportionality, this assessment then groups and initially discusses heritage assets by category (e.g. churches, settlements, funerary remains etc.) to avoid repetitious narrative; each site is then discussed individually. The initial discussion establishes the baseline sensitivity of a given category of monument or building to the potential effect, the individual entry focuses on site-specific factors. Individual assessments should be read in conjunction with the overall discussion, as the impact assessment is a reflection of both. *Step four* makes recommendations for maximising enhancement and avoiding or minimising harm to an individual heritage asset, where this is applicable. *Step five* records the assessment of impact based on the professional judgement of the author.

4 DIRECT IMPACTS

There will be no direct impacts for this development as both turbines would be located on a bench tip, on the edge of an infilled mica dam.

The historic maps show the tip was preceded by a series of small and fairly regular field enclosures with unnamed cottage farmsteads. These are likely to be post-medieval enclosures, belonging to mining small-holdings (*post-medieval enclosed land*). The historic OS maps indicate T1 is located above the c.1900 Dubbers China clay pit; T2 is located on its associated spoil heaps.

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

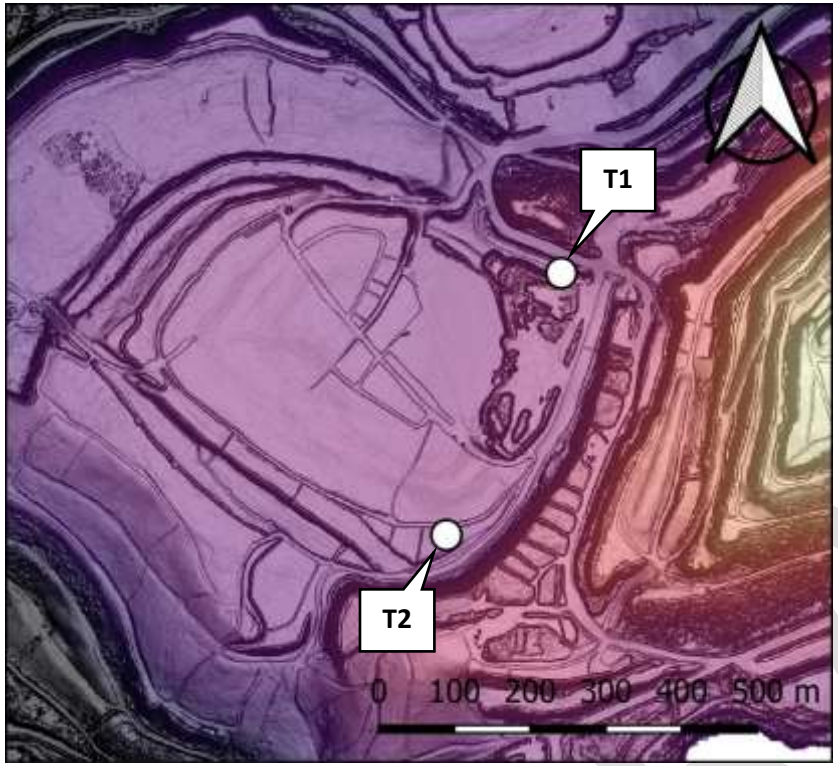

FIGURE 3: IMAGE DERIVED FROM 2022 ENVIRONMENT AGENCY 1M DSM LIDAR DATA. PROCESSED USING QGIS V3.16, THE RESULTS OF SLOPE ANALYSIS OVERLAID ON A SIMPLE COLOUR RAMP (DARK-TO-LIGHT) OF 200-340M AOD. DATA USED UNDER THE OPEN GOVERNMENT LICENCE V3.0. THE PROPOSED TURBINE SITES ARE INDICATED BY THE WHITE CIRCLES. THE UNNATURAL LANDSCAPE OF THE CHINA CLAY TIPS IS APPARENT.

4.1 SITE PHOTOGRAPHS

A walkover of the site was not undertaken due to constraints around access and the known non existent archaeological potential of the site. Photographs of the present condition of the site were provided by the agent to demonstrate the lack of archaeological potential and are included below. They give an indication of the extent of clay extraction on the site.

FIGURE 4: PHOTOGRAPH OF TRACKWAY ON SITE (PROVIDED BY AGENT)

FIGURE 5: VIEW OF SITE SHOWING TRACKWAY AND CLAY EXTRACTION (PROVIDED BY AGENT)

FIGURE 6: WASTE TIP ON SITE (PROVIDED BY AGENT)

FIGURE 7: VIEW OD SITE SHOWING SURROUNDING TOPOGRAPHY (PROVIDED BY AGENT)

5 INDIRECT IMPACTS

5.1 PARAMETERS

A search radius of up to 10km was adopted for this report. This is due to the relatively developed nature of its immediate landscape and the effects of topography and screening.

5.2 QUANTIFICATION

There is one Listed Building and one Scheduled Monument within 1km of the proposed site; there are 125 Listed Buildings or structures within 5km of the site (×2 GI; ×9 GII*; ×114 GII). These structures are scattered across the area. There are ×14 Scheduled Monuments within 5km of the site. There are ×5 Conservation Areas and x2 Registered Parks and Gardens within 10km of the site. There is one World Heritage Site property within 10km of the site. There are no Registered Battlefields within 10km of the site.

5.3 SCOPING

The scoping assessment is based on a Zone of Visual Influence (ZVI) was drawn up using Ordnance Survey Panorama data to produce a bare earth (i.e. worst case) scenario, and a Zone of Theoretical Visibility (ZTV) drawn up using 2023 Environment Agency 1m first-return LiDAR data. Viewsheds for turbine base, base of the rotor sweep (18m), hub/nacelle (76.5m) and blade end (125m) were calculated, to determine those locations where the potential for visible impact was greatest (i.e. the whole of the turbine or the whole of the rotor sweep was visible) as opposed to those where the visual impact was much reduced (i.e. just the hub/nacelle or blade ends were visible). Blade end (125m) as opposed to blade tip (135m) was utilised as a more reliable measure of any meaningful intervisibility with the site.

Both visualisation methods demonstrate the turbines would be most visible from viewpoints immediately to the west and from elevated

viewpoints to the south-west, with a more extensive ZVI to the hub/nacelle and blade end to the north and south.

A comparison between the ZVI and the ZTV demonstrates two things. Firstly, that the terrain data model used shows an earlier landscape, prior to the enlargement and extension of the bench tip at Dubbers. Secondly, that screening by vegetation and the built environment plays a key role. Actual intervisibility is much less extensive than the bare-earth model would suggest and the recent LiDAR data has been used to scope out assets that the bare-earth model would indicate have intervisibility.

Following this, the following scoping criteria were utilised to determine heritage assets indicated as having intervisibility by the ZTV/ZVI, which could not reasonably be expected to experience a meaningful effect on the appreciation of their significance as a result of the proposals. The following heritage assets were therefore scoped out of the assessment:

- Grade II Listed buildings beyond 5km from the proposed development.
- Grade II Listed buildings within 5km of the proposed development within Conservation Areas (which were scoped in)
- Classes of monument including wells, milestones, guideposts, crosses within churchyards, signposts, telephone boxes, gate piers and walls, headstones and tombs, bridges, mounting blocks, wash houses and wayside crosses except where located within 1km of the proposal and indicated on the ZTV as likely to experience intervisibility with the development
- All designated heritage assets beyond 10km due to the topography, land use and unlikelihood of any meaningful impact being experienced in this landscape beyond that distance.
- Registered Parks and Gardens with no significant views out in the direction of the site.
- Conservation Areas beyond 5km from the proposed development.

With an emphasis on practicality and proportionality, only those assets where there is the possibility for an effect greater than negligible (see Table 7 in Appendix 3) are considered here in detail and in summary Table 1. All other designated heritage assets can be seen mapped in Appendix 2, although they have been scoped out of this assessment due to their neutral relationship to the proposed development.

- Category #1 assets: Bible Christian Chapel, Church of St Mewan, Church of St Denys, Church of St Gomonda, Medieval chapel of St Michael on Roche Rock, Nanpean Cemetery War Memorial, Round cairn with beacon called Hensbarrow, Earlier Prehistoric hillfort and round cairn at St Stephens Beacon, Castle-an-Dinas, The China Clay District
- Category #2 assets: None

5.4 IMPACT BY CLASS OF MONUMENT OR STRUCTURE

5.4.1 NONCONFORMIST CHAPELS

Non-Conformist places of worship, current and former

Non-Conformist chapels are relatively common across the whole of Devon and Cornwall. They tend to be fairly modest structures in all but the largest settlements, lacking towers and many of the ostentatious adornments of older Church of England buildings. They are usually Grade II Listed structures, most dating from the 19th century, and judged to be significant more for their religious and social associations than necessarily any individual architectural merit. They can be found in isolated locations, but are more often encountered in settlements, where they may be associated with other Listed structures. In these instances, the setting of these structures is very local in character and

references the relationship between this structure and other buildings within the settlement. The impact of a wind turbine is unlikely to be particularly severe, unless it is built in close proximity.

What is important and why

Nonconformist chapels are typically 18th century or later in date, and some retain interior period fitments (evidential). Some of the better preserved or disused examples are representative of the particular ethos of the group in question, and buildings may be linked to the original preachers (e.g. John Wesley) (historical value). Congruent with the ethos of the various movements, the buildings are usually adapted from existing structures (early) or bespoke (later), and similar in overall character to Anglican structures of the same period (aesthetic value). They often have strong communal value, where they survive as places of worship (communal value).

Asset Name: **Bible Christian Chapel [in Nanpean] (*Clays Community Church*)**	
Parish: St Stephen-in-Brannel	*Within the ZTV*: Borderline (hub, screened)
Designation: GII	*Value:* Medium
Distance to the turbine: 0.7km	*Condition:* Fair
Listing: Bible Christian chapel with attached Sunday school. Dated 1886 with few later alterations. Granite rubble with brick dressings; partly rendered. Bitumenised slate roof with ridge tiles and gable ends. Gable end stack to rear with truncated brick shaft. Plan: Single auditorium plan with entrance at the front gable end and ritual east also at the front gable end. The chapel is built into the slope of the ground, and is 2-storey at the rear, where there is an integral Sunday school. Exterior: Symmetrical front with central C20 plank double doors with round arch in dressed stone with keystone; round-arched C19 4-pane sash with brick surround to right and left. Circular recessed datestone above with brick border and inscription: BCC AD 1886. The left and right sides have 2 larger round-arched 4-pane sashes with brick arches; at the left end is a C20 window with granite window at ground floor. The rear is rendered; ground floor has central C20 plank door with late C19 margin-glazed sash to right and left. First floor has two round-arched margin-glazed sashes. Interior: Plain, but with original fittings. The entrance at the front gable end leads to a shallow lobby with door to right and left. The ritual east end has a Communion rail with turned balusters. At the rear there are raked pews with carved front panels. Ceiled roof.	

Supplemental Comments: A small and nondescript chapel, still in use by the community. Replacement nPVC windows throughout, now aging. Extended to the west by one bay, so evidence for phasing.
Conservation Value: Aesthetically pleasing in its simplicity and slight gothic influence. Historically important to the immediate community and of the same local level of communal value. Evidential value within the building as it appears little altered.
Authenticity and Integrity: Very authentic, as still in use and appears little altered. High integrity as well-maintained.
Topographical Location & Landscape Context: Located on a west-facing slope. The landscape context is this valley landform which runs down to Nanpean.
Setting: Set alongside a narrow road, Old Pound. The chapel stands within a small plot, built into the slope, flanked by hedgebanks with some trees.
Principal Views: Views south across the fields, and down the road to the west. Some views across the fields towards Nanpean to the north-west. Views up the steep slopes to the east, although these are limited at ground level by conifer trees in a plantation immediately north-east of the building. Wider landscape views are possible over the roof of the chapel to the countryside beyond to the west and north-west from higher up Old Pound Road.
Landscape Presence: The chapel has some local presence along the Old Pound Road but no wider presence as it is a small low building set into the slope.
Sensitivity of Asset: The asset holds communal and religious value to the local area. However, it has no wider presence, and was not built with views in mind. Trees may screen views to the north-east.
Contribution of Setting to Significance of Asset: Incidental. The chapel lies on the slopes of clay country, in a chapel-town satellite settlement to Nanpean located along the road lower down in the valley. Its setting is of some importance, as it is located between the settlement and the industrial works, and presumably existed to serve residents and workers. The setting is still readily intelligible.
Scale of Change: The DMS Lidar indicates the hub of T2 should be visible from the field to the south, but the way the building is cut back into the slope, with trees along the lane and behind the chapel, would suggest *intervisibility* for those viewing or attending the chapel are unlikely to be an issue; it is possible that, under some weather conditions, T2 would be audible, though the noise report (see elsewhere) has determined its audibility would not exceed national noise limits.
Significance of Effect: Medium value + Minor Change = Slight effect
NPPF equivalence: **Less than Substantial Harm**
Professional Judgement: Minor Adverse

FIGURE 8: THE CHAPEL AT NANPEAN; VIEWED FROM THE EAST.

FIGURE 9: THE CHAPEL AT NANPEAN; VIEWED FROM THE SOUTH-WEST.

5.4.2 CHURCHES AND PRE-REFORMATION CHAPELS

Church of England parish churches and chapels; current and former places of worship

Most parish churches tend to be associated with a settlement (village or hamlet), and therefore their immediate context lies within the setting of the village. Church buildings are usually Grade II* or Grade I Listed structures, on the basis they are often the only surviving medieval buildings in a parish.

In more recent centuries the church building and associated structures functioned as *the* focus for religious devotion in a parish. At the same time, they were also theatres of social interaction, where parishioners of differing social backgrounds came together and renegotiated their social contract.

In terms of setting, most churches are still surrounded by their churchtowns. Viewed within the context of the settlement itself, churches are unlikely to be affected by the construction of a wind turbine unless it is to be located in close proximity. The location of the church within its settlement, and its relationship with these buildings, would remain unchanged: the church often being the visual focus on the main village street.

This is not the case for the church tower. While these structures are rarely open to the public, in rural communities they are frequently the most prominent visual feature in the landscape, especially where the church is itself located in a topographically prominent location. The towers of these structures were clearly *meant* to be highly visible, ostentatious reminders of the presence of the established church with its message of religious dominance/assurance. However, churches were often built and largely maintained by their laity, and as such were a focus for the *local* expression of religious devotion. It was this local devotion that led to the adornment of their interiors and the elaboration of their exteriors, including the tower.

As the parishes in Devon and Cornwall can be relatively small (certainly in comparison with the multi-township parishes of northern Britain) the tower would be visible to the residents of multiple parishes. This would have been a clear expression of the religious devotion – or rather, the competitive piety – of a particular social group. This competitive piety that led to the building of these towers had a very local focus, and very much reflected the aspirations of the local gentry. If the proposed turbine is located within the landscape in such a way to interrupt line-of-sight between towers, or compete with the tower from certain vantages, then it would very definitely impact on the setting of these monuments.

As the guidance on setting makes clear, views from or to the tower are less important than the contribution of the setting to the significance of the heritage asset itself. The higher assessment for the tower addresses the concern it will be affected by a new and intrusive vertical element in this landscape. However, if the turbine is located at some distance from the church tower, it will only compete for attention on the skyline from certain angles and locations.

Churchyards often contained Listed gravestones or box tombs, and associated yard walls and lychgates are usually also Listed. The setting of all of these assets is usually extremely local in character, and local blocking, whether from the body of the church, church walls, shrubs and trees, and/or other buildings, always plays an important role. As such, the construction of a wind turbine is unlikely to have a negative impact.

What is important and why

Churches are often the only substantial medieval buildings in a parish, and reflect local aspirations, prosperity, local and regional architectural trends; they usually stand within graveyards, and these may have pre-Christian origins (evidential value). They are highly visible structures, identified with particular geographical areas and settlements, and can be viewed as a quintessential part of the English landscape (historical/illustrative). They can be associated with notable local families, usually survive as places of worship, and are sometimes the subject of paintings. Comprehensive restoration in the later 19th century means many local medieval churches are associated with notable ecclesiastical architects (historical/associational). They are often attractive buildings that straddle the distinction between holistic design and piecemeal/incremental development, all overlain and blurred with the 'patina of age' (aesthetic/design and aesthetic/fortuitous). They have great communal value, perhaps more in the past than in the present day, with strong commemorative, symbolic, spiritual and social value. In general terms, the evidential, historical and communal value of a church would not be particularly affected by individual wind turbine developments; however, the aesthetic of the tower and its role as a visible symbol of Christian worship in the landscape/soundscape could be.

Asset Name: **Church of St Mewan (plus Grade II monuments in churchyard)**	
Parish: St Mewan	*Within the ZTV*: Borderline (hub, screened)
Designation: GII*	*Value:* High
Distance to the turbine: 4.9km	*Condition:* Fair/Good
Listing: Parish church. C12 origin; largely rebuilt mid - late C15 and restored circa 1851 by G.E. Street. Granite rubble with granite dressings. Some squared granite rubble, the tower in granite ashlar. Slate roofs with ridge tiles and gable ends with raised coped verges and cross finials. Plan: Nave and chancel in one, possibly of C12 origin and much rebuilt in C15 with the addition of a north chancel aisle. Mid C15 south aisle with south porch. Late C15 west tower, built to two stages only. Circa 1851, the north transept was rebuilt and other alterations made by G.E. Street. Exterior: The nave is concealed except for two bays to north, with two C19 windows, each with 2-centred arch, of 3-lights, with varied tracery and hood moulds. The chancel has 3 light C15 east window with cusped lights and Perpendicular tracery, 4-centred arch and hood mould. Slate headstone attached to the east wall with nowy head, hourglass, pierced heart and cherub, to Nicholas Robin, 1733. C19 lancet to north and south, with 2-centred arched head to north and 3-centred arched head to south. North transept. The north gable end has C19 3-light window with cusped lights and gable end stack. Single storey boilerhouse attached. To west a 2-centred arched doorway, the door with strap hinges, and 3-light window with cusped lights, all C19. North chancel aisle is of 2 bays. East end has C19 2-light window with cusped lights, 2-centred arch and hood mould. 3-light C19 north window with cusped lights and square head. Attached granite headstone	

to Ann .... of early C19 and marble headstone to Maria Vivian, 1898. The south aisle is of 5 bays with a chamfered plinth along the south side. Three windows to south, of C19, with cusped lights, 4-centred arches and hood moulds. Doorway at the east end with C19 door with strap hinges, 4-centred arch with recessed spandrels and square hood mould. Attached headstone, to William Andrew, 1818. East end has 3-light C15 Perpendicular window with cusped lights, 4-centred arch and hood mould. West end has similar 4-light C15 Perpendicular window, with Y tracery, 4-centred arch and hood mould. The south aisle is of 5 bays with a chamfered plinth along the south side. Three windows to south, of C19, with cusped lights, 4-centred arches and hood moulds. Doorway at the east end with C19 door with strap hinges, 4-centred arch with recessed spandrels and square hood mould. Attached headstone, to William Andrew, 1818. East end has 3-light C15 Perpendicular window with cusped lights, 4-centred arch and hood mould. West end has similar 4-light C15 Perpendicular window, with Y tracery, 4- centred arched and hood mould. The south porch is gabled, without plinth. 2-centred arched, chamfered outer doorway. Interior of the porch has pitched slate floor and C19 wooden benches to sides. C19 unceiled wagon roof. Inner doorway is chamfered with 2-centred arch, C19 door with strap hinges. West tower in 2 stages on moulded plinth with weathered set-back buttresses, embattled parapet with masks on the merlons, pinnacles with cable moulding and masks. Pyramidal roof with half-hipped dormers as bell-openings. West doorway has 4-centred arch with wave mouldings and hood mould, C19 door with strap hinges. C19 2-light west window with cusped lights, 4-centred arch and hood mould. Second stage to east has rectangular chamfered window; lancets for stair to north. Interior: All C19 common rafter roofs, except the chancel, which has 3-bay roof of C19 with cusped arched-ranges. Plastered walls except the chancel and north aisle. Tall 4-centred tower arch with Pevsner A-type piers and C19 wooden and glazed screen. 3-bay south arcade with Pevsner A-type piers and 4-centred arches, and a similar arch to the north transept. Chancel has a piscina with cusped arch to south. The east window in the chancel has C12 nook-shafts, probably re-used in the C19 restoration, with masks at the top of the shafts and a mask at the apex of the east wing. C19 panelled reredos. South aisle has an aumbry. Fittings: C19 benches in south aisle and chancel. C19 carved wooden pulpit in the nave. Re-carved C14 stone font in the nave with octagonal bowl and carved sides, set on a C12 shaft with palmette style carving. Fragment of similar C12 carving in nave. Monuments in nave: Marble monument on slate ground with urn, to William Oliver, 1838. The chancel: marble tablet to William Hocker, 1842. In south aisle a painted shield of arms to Sir Francis Layland, 1933. C19 stained glass.
Supplemental Comments: The church forms a fine group with the Sunday school and Rectory, war memorial and other Listed gravestones (considered above). The church and Sunday school stand within a wooded park-like churchyard with many ancient yews and other specimen trees planted in the 18th and 19th centuries.

Conservation Value: High aesthetic value this is a very decorative medieval church, of good historic character. High evidential value, it has complex developmental history (e.g. the tower looks unfinished or reduced). High communal value as the parish church and local historical value to the community.
Authenticity and Integrity: Very authentic as a medieval church, still in use. Appears little altered and in good condition; the churchyard is very well maintained.
Topographical Location & Landscape Context: The church is located on a south- and west-facing slope, to the eastern side of a river valley west of St Austell. The landscape context is the valley landform that drops down to Polgooth and the St Austell river estuary to the south.
Setting: Located in a small churchtown north of the main village. Set within a large wooded churchyard, raised with stone-faced banks, with several rectangular cemetery extensions to the east. A large and imposing stone rectory in formal gardens to the west, with the Sunday school and coach house complex of stone buildings to the north.
Principal Views: There are views to the west from the body of the church and churchyard over the adjacent Rectory garden and beyond to the fields. To the north the trees, Sunday school and rising ground limits views. To the east views are restricted at ground level by the trees and to the south some limited views are possible between trees to the fields and the rest of the village, as the ground slopes away from the church.
Landscape Presence: This is a visible local landmark asset, with an element of landscape dominance to its immediate and near environment. It is significantly more imposing from the south. It is not a skyline asset.
Sensitivity of Asset: The body of the church is relatively enclosed by the trees of the churchyard. The tower would not be screened from views and the proposed turbine would be 3km away. The spiritual, communal, and evidential value of the church, within the churchtown setting and wider parish, would not be affected; however, the aesthetic consideration of the value of the grouping at St Mewan could be adversely affected by the visible turbine inserted into that landscape. There is an element of cumulative impact as well, as several other turbines would also be visible. The various monuments within the churchyard would be wholly screened by the trees.
Contribution of Setting to Significance of Asset: Important. The cohesive historic character of the churchtown and the wooded churchyard enclose and protect views providing a historic bubble within which the assets can be experienced largely as intended, outside of encroaching modern impacts. Collectively each asset increases the significance of the next by complementing its setting and views.
Scale of Change: There are no views from the body of the church or the churchyard and there would be no effect on the attractive setting with the Rectory and Sunday school. Views across and through the surrounding landscape would include the proposed turbines and the church tower. The visual profile of the tower is limited

as it is quite squat. Considering views across the tower from elevated viewpoints to the south and south-east the turbines could be visually distracting, and there is a cumulative consideration with the operational turbines, although outside of the relevant landscape context.
Significance of Effect: High value + Negligible change = Slight effect
NPPF equivalence: **Less than Substantial Harm**
Professional Judgement: Negligible Adverse

FIGURE 10: THE CHURCH OF ST MEWAN; VIEWED FROM THE SOUTH-WEST.

Asset Name: **Church of St Denys**	
Parish: St Dennis	*Within the ZTV*: Borderline (tip)
Designation: GII*	*Value:* High
Distance to the turbine: 3.2km	*Condition:* Fair
Listing: Parish church. Probably late C14 - early C15, with later C15 tower; dated 1847 when the church was substantially rebuilt. The church was badly damaged by fire and is in the course of rebuilding at the time of survey (July 1987). Squared granite rubble with granite dressings. Granite ashlar tower. C20 slate roof with ridge tiles, gable ends with raised coped verges and cross finials. Plan: Nave and chancel in one, rebuilt in 1847 under the same gable with the south aisle, and a south porch of 1847. North aisle, rebuilt C19. West tower probably of late C15. Exterior: The east end includes the chancel and the south aisle; there are two 3- light windows with cusped lights, 4-centred arches and hood moulds, of the C19 rebuilding. The north side of the nave has two 2-light C19 windows with cusped lights and square heads. The south aisle is of 5 bays with the porch in the second bay from the west. All windows are C19, 2-light, with cusped lights and triangular hood moulds. West end blind, rebuilt probably in circa late C15 in granite ashlar. Gabled south porch has 4-centred arched outer doorway with moulded shafts to sides with caps and C19 cast iron gates. Pedimental panelled gable with datestone 1847 and obelisk finials. Interior of the porch has stone benches to sides and inner 4- centred arched doorway with roll-mouldings and cushion stops. The north aisle is of 2 bays, with 2-light and 3-light window with cusped lights and square hood moulds. Similar 2-light east window. The west tower is of 2 stages on chamfered plinth, without buttresses, with moulded string courses, embattled parapet with circular panelled pinnacles. Circular stair tower to north with lancets, parapet with coping. 4-centred arched west doorway forming a shallow internal porch; paired lancet above with Y tracery and hood mould. Second stage has 2-light bell-openings with cusped lights, Y tracery louvres and hood moulds. Second stage to north has single cusped light. Pyramidal lead roof. Interior: Plastered walls, and C20 5-bay arched-brace roof rising from stone corbels in the nave, chancel and south aisle, all in one. 4-centred tower arch, with inner arch with carved figures as springers. Stone newel stair in the stair tower. There is a 3-bay arcade to the north aisle, rebuilt C20, with octagonal piers. Fittings: Only the font remains, in the nave, in granite, with panelled sides and stem, probably C19. The church is built on the site of an Iron Age hill fort and is a prominent local landmark. The boundary wall of the churchyard is circular, following the outline of the fort and retains a good collection of C19 monuments, not all individually listed. Sources: Pevsner, N.: Buildings of England: Cornwall 1970.	
Supplemental Comments: This is an outstanding landscape asset, a local landmark and iconic for the clay country. It is of as much value for its picturesque setting amongst the trees on top of an Iron Age hillfort as for its ecclesiastical significance. It is a local myth/folklore that the name has less to do with Saint Denis and more with the siting of the church on an old hillfort or *dinas*.	
Conservation Value: Very high aesthetic value; iconic hilltop location within an oval embanked churchyard formed within a hillfort. High evidential value, within the structure of the church and beneath the structure and its churchyard. Also added evidential value within and beneath the former banks of the hillfort. High historical and communal value for the local community.	
Authenticity and Integrity: Authentic as a historic church (although restored after a fire in c.1987) and community hub, with a well-maintained park/green to the front within the inner embankment of the former hillfort. Also clearly has an earlier heritage, whilst no longer authentic as an Iron Age enclosure, the odd concentric embankments are a strong visual indicator of the more ancient past and form a key character of the site. In good condition structurally, but a more invasive 19th and late 20th century internal remodelling has stripped out much of the character inside.	

Topographical Location & Landscape Context: Built on the top of a low summit within the weathered multi-vallate hillfort. The ground falls smoothly away on all sides, a wide low valley to the west, steeper valleys to the east and south-east, the high Hensbarrow Downs to the south with the tall bench and conical sky tips. The land to the north drops to a flat open plain up towards Fraddon, divided by a spine of low ridged hills.
Setting: The church sits within a small oval enclosure to the north end of a larger oval enclosure of more regular shape. This in turn is enclosed by a drystone wall and there are a network of small fields radiating away. It is approached by a lane from the south-west, which turns and runs around the south-west side of the outer enclosure to a small car park to the west. The walls of both enclosures are topped with mature trees. The church stands just north-east of the modern mining settlement of St Dennis. To the south the landscape is now dominated by the china clay works, developed from the 19th century onwards. This has changed the focus of the landscape, with the sky tips being a particular visual draw. The church feels very separate from the rest of the landscape in many ways, held within its little bubble of surviving fields.
Principal Views: There are technically 360° views in and out. Indeed, the church compound is visible for miles around. However, the church building itself is a recessive structure, with squat tower and tall walls/banks and mature trees. These provide very comprehensive screening. There are key views up the approach to the ramparts, down a green lane to the village, and across to the downs and sky tips. Within the enclosure there is a key view across the church place and a key view through the gate to the church porch.
Landscape Presence: The location of the church is a *landmark asset*; the site is visually prominent, but it is the ramparts and the trees that are visible, not the building. Tis prominence is affected by the modern china clay works, with a particular focus on this side of the downs for large modern processing units and factories, huge industrial units, and drying towers. Significant numbers of turbines are now appearing within the wider landscape views and draw the eye, such as those north of Roche, those at Fraddon and several on the downs themselves.
Sensitivity of Asset: The asset would be sensitive to further modern additions to this landscape.
Contribution of Setting to Significance of Asset: Important. The church was built to both visually dominate and also to be liminal and set away from general humanity for spiritual purposes. The setting adds to the value of the monument which is also valued as a landscape feature, as well as its more obvious historical and architectural value.
Magnitude of Effect: The DSM ZTV indicates the hub/nacelle of the proposed turbine(s) would be visible from this location. The photomontage indicates views from the front (south-east) approach would feature the hub/nacelle of both turbines, just to the left of the two prominent sky tips on the ridgeline to the south.
The immediate setting is somewhat compromised, and the area around contains numerous factories/China clay processing works/pylons/turbines/telegraph poles/ masts etc. Cumulative impact is therefore an issue. However, the proposed turbines are located beyond the ridge to the south and, while visible, do not impinge on views to the church from areas to the east, south and west, and the church itself is comprehensively screened. As a result, any effect is unlikely to be meaningful.
Magnitude of Impact: High value + Negligible change = Slight effect
NPPF Equivalent: **Less than Substantial Harm**
Overall Impact Assessment: Negligible Adverse

FIGURE 11: ST DENYS AT ST DENNIS; VIEWED FROM THE SOUTH.

FIGURE 12: VIEW FROM ST DENYS BACK ACROSS CLAY COUNTRY; VIEWED FROM THE NORTH-EAST. THE TURBINES WOULD APPEAR TO THE LEFT OF THE CONICAL SKY TIPS.

Asset Name: **Church of St Gomonda**	
Parish: Roche	*Within the ZTV*: Borderline (base of rotor, screened)
Designation: GII*	*Value:* High
Distance to the turbine: 3.7km	*Condition:* Fair
Description: Parish church. C14, largely rebuilt mid C15; in 1822 substantially altered for the Rev. Thomas Fisher, later alterations, probably to the south porch, and restoration of 1890 by J. D. Sedding. Tower in squared granite, granite rubble, with granite dressings. Polyphant arcade. Slate roofs with ridge coping tiles, raised coped verges to the north transept. Plan West tower, nave and south aisle, north transept, chancel and south porch. The north transept is said to be on Norman foundations, largely rebuilt in the C14. The tower is of C15. In 1822, the nave, chancel and south aisle were rebuilt, the south arcade removed and the east front formed as one gable end. At some time after this, the south porch was probably rebuilt. In 1890, J.D. Sedding carried out a restoration, which re-instated the arcade between the south aisle and the nave, and renewed the roofs. There was a further proposal in 1900 for a vestry, which was not built, only the doorway through the east wall of the transept. Perpendicular style. 3-stage tower on moulded plinth, with set-back weathered buttresses rising to embattled parapet with polygonal corners, each supported by a carved figure or mask; no pinnacles. String courses to each stage. The west doorway has a 4-centred arch with roll-mouldings and recessed spandrels, square head with hood mould and square stops; plain C19 door. 4-light C15 Perpendicular window above, with Y tracery and cusped lights, hood mould and relieving arch. The top stage has 3-light bell-opening to each side, with 4-centred arch, cusped lights and upper tracery, slate louvres and hood mould. Clock at 2nd stage to east and north. 3-bay nave without plinth, has 2 north windows of 1822, with 4-centred arch an intersecting tracery. The north transept is of a single bay with gable end to north with cross finial, one similar early C19 window in north gable end stair descending to cellar to west, to a 4-centred arched doorway hollow-chamfered, with studded door. C19 east doorway with pointed arch. The south aisle is of 6 bays, with raised coped verges and cross finial. Windows of 1822, with intersecting tracery, porch in 2nd bay from west. The east gable end has a window of 1890, a copy of the tower west window, of 4-lights, with cusped lights and Y tracery, with hood mould. Gabled south porch has raised coped verges and cross finial, on plinth. 4-centred arched outer doorway, chamfered, with cast iron gates with diamond finials. Inner doorway is a tall 4-centred arch with roll-moulding and hood mould, much rebuilt, with C19 studded double doors. Granite floor and C19 arched-brace roof. The chancel has large east window of 1890, as at east end of aisle, of 6 lights, with cusped lights, Y tracery and hood mould with angel stops. Cross finial. Interior Tall 4-centred arch to tower; tower has north west door to stair, hollow- chamfered, with C19 studded door. Stone newel stair. The tower arch has triple shafts to sides with a concave moulding between each shaft, 3 orders of mouldings to arch, convex and concave. Nave and chancel in one, with wagon roof of 1890, ceiled over the chancel; similar roof to south aisle. The south arcade is of 6 bays, in polyhant, with standard A-type piers and lightly Tudor arched heads. Plain 4-centred chamfered arch to north transept, and at upper level to the east of the arch, the rood stair door, hollow-chamfered, with 4-centred arch and step stops. 2 steps remain at upper level on the north transept side. North transept also has C19 roof. Fittings: Fine late C12 Bodmin-type font in south aisle, in Pentewan stone; a large bowl on central stem with 4 corner shafts with bases. The shafts end in carved angels' heads, much restored and With one angel replaced. The bowl has interlaced snakes under chevron rim. In the nave, a pulpit, probably by Sedding, in Polyphant, on plinth with flight of steps. Royal arms over the south door, oil on canvas, probably circa 1800. Slate monument in the north transept, with incised nowy head, central cherub's head with wings, crossed bones to left and skull to right. Latin inscription and English verses, to Richard Treweeke, rector of the parish, 1732. The dedication is also referred to as St Gonandus, or St Gomond.	
Supplemental Comments: A very fine medieval church with tall tower located within a walled churchyard but at a busy road junction, so there is considerable aural intrusion. Open on the east side to the road and modernised village, more enclosed to the west side with trees and historic cottages. The setting to one side	

being very authentic, the other much more modern with more obviously intrusive modern elements. The church feels caught between the modern world and its heritage, somewhat adrift from its wider setting. The village hall, social club and sports fields have complicated the important views between the church and Roche Rock and its hermitage chapel; these buildings would have been linked in the historic landscape.
Conservation Value: High aesthetic value, decorated medieval church; high evidential value, with evidence of ancient origins and churchyard high cross. High communal value as parish church; local historical value to the community and as an ancient ecclesiastical site.
Authenticity and Integrity: Very authentic as a working parish church. Looks well maintained and largely unaltered since its last Victorian restoration.
Topographical Location & Landscape Context: The village is located on a high, slightly undulating plateau, which runs out to Victoria to the north, rising south of the village to Roche Rock, then again to the Carbis Common, now a china clay works. The village therefore lies on a slight north- and east-facing slope, the ground rising to a low summit just north-west and south of the village. The landscape context of the asset is this wide undulating plateau and the north-facing slopes of Carbis Common.
Setting: Located in the small village of Roche within a walled churchyard. The church stands in a small churchtown with the stone school building to the east, both buildings lie to the south of the modern settlement. The churchyard is very wooded to the south and west, more open to the north and east. Houses and gardens lie to the north and south, the road to the east and fields to the west.
Principal Views: The main views are to the village to the north, to the east across the road to the school and south-east to Roche Rock and the Grade I Listed Chapel. Views to the south and west are very much restricted by the deciduous trees along the boundaries in these directions and scattered within the churchyard.
Landscape Presence: This is a highly visible asset, both within the village and further afield. However, it retains only a local landscape presence, as its tower is subservient to Roche Rock and the clay tips behind.
Sensitivity of Asset: The body of the church and the churchyard are quite enclosed, especially to the south and west, but it is open to the east and south-east facing the road. There are views directly up onto clay country from the churchyard. The tower has wide views over the fields and surrounding landscape; it was intended to be a feature visible on a landscape level, but it has been subsumed by the modern settlement.
Contribution of Setting to Significance of Asset: Important. The enclosed part of the churchyard, which is bounded by mature trees, facilitates the experience of this structure as a rural village church. To the east, the edge of the modern settlement with its busy roads and intrusive road furniture, detracts from the experience of the church.
Magnitude of Effect: The DSM ZTV would indicate the tops of trees and structures around the church would have intervisibility to the base of the rotor sweep, but this strongly suggests at, at ground level, there would not be any intervisibility. The church lies well beyond the landscape context of the two proposed turbines, and the church would not appear in meaningful views from the north that would also include the two turbines. There is likely to be a small cumulative effect, but the immediate and extended setting of the church would be unaffected.
Magnitude of Impact: High value + Negligible Change = Slight effect
NPPF Equivalent: **Less than Substantial Harm**
Overall Impact Assessment: Neutral

FIGURE 13: THE CHURCH OF ST GOMONDA AT ROCHE; VIEWED FROM THE SOUTH-EAST.

Asset Name: **Medieval chapel of St Michael on Roche Rock**	
Parish: Roche	*Within the ZTV*: Borderline (hub)
Designation: GI/SAM	*Value:* High
Distance to the turbine: 3.7km	*Condition:* Fair
Listing: Chapel. Licensed 1409. Squared dressed granite. Plan: has the appearance of a 3-stage tower, with a lower room for a chaplain and the chapel above. The chapel is built on the side, near the top of a massive jagged outcrop of schorl and the floor of the lower room is the rock. The east front has a moulded string courses, at the	

first stage no windows, the 2nd stage has a small single light with trefoil head, moulded granite jambs and lintel with voussoirs. The 3rd stage has large 2-centred arched window with moulded jambs and relieving arch. Upper gable end. On the south side, there is a 4-centred arches doorway to the chaplain's room, with roll-moulded surround. Interior The floor between the chaplain's room and the chapel has been removed; at the upper level to north is a small window with flat lintel. St Michael's Chapel is of outstanding landscape value. The site would have been: chosen for its isolation, and as particularly suitable for a dedication to St Michael; now, no longer used as a chapel, and without a roof, it has also assumed the qualities a romantic folly. The combination of the jagged rock face and the dressed granite forms an architectural unity, whether it is viewed as a medieval chapel or as a romantic ruin. Ancient monument no, 191.
Supplemental Comments: This is an outstanding landscape asset, of as much value for its picturesque romantic ruin quality and iconic status in Cornwall as is for its medieval architecture. A classic anchorite chapel, set on an exposed and dramatic granite outcrop, just outside the village of Roche. It is associated with several ancient and fairly modern legends and folkloric tales, including Tristan and Iseult, Jan Tregeagle and a monk-leper. It is a Scheduled Monument and a Listed Building.
Conservation Value: Very high aesthetic value; its primary conservation value. High evidential value, within and beneath the structure and in the landscape surrounding the rock. High historical and communal value for the local community and wider Cornwall as an iconic site and for its ecclesiastical history and association with various famous legends and folklore tales.
Authenticity and Integrity: Very authentic as a romantic ruin, in good condition structurally, but obviously ruinous (it has lost all internal features, floors etc.)
Topographical Location & Landscape Context: Set onto and built into the rock outcrop at Roche, the outcrop rises abruptly from a gentle north-facing slope.
Setting: The monument is set high on the outcrop. The monument stands just south-east of the village of Roche on the edge of the high downs. To the south the landscape is now dominated by China clay works, developed from the 19th century onwards. This has changed the focus of the landscape.
Principal Views: There are technically 360° views but actually the monument is built into the rock to the north and south and only has very small windows to the east, set high, with the floor removed, so once in the chapel there are no exterior views. However, when climbing the rock to reach the chapel views are extensive and encompass much of the local area. Key views are back to the main 15th century parish church in the village, almost contemporary with the chapel. The key views to the chapel are from the north and north-east.
Landscape Presence: The chapel is an *outstanding landmark asset*; it holds visual dominance over a wide area but is now challenged by the modern China clay workings. Significant numbers of turbines are now appearing within the wider landscape views and draw the eye, such as those north of Roche near the A30/Victoria.
Sensitivity of Asset: The asset would be very sensitive to changes in its immediate landscape that might compete with its visual dominance and the important visual/religious function for which it was designed.
Contribution of Setting to Significance of Asset: Paramount. The chapel was built to both visually dominate and also religiously liminal, as appropriate for an anchorite cell where religious seclusion was a particular form of worship. The setting adds to the value of the monument which is now also valued as an iconic landscape feature, a romantic ruin, as well as for its more obvious historical and architectural value.
Magnitude of Effect: The setting is heavily compromised, with a sports field below it, pylons, operational turbines and masts in the wider landscape as well as the China clay tips. There are numerous operational turbines in the wider landscape and there is a clear issue of cumulative effect here. It sits within a small bubble of unimproved land, and by its very nature sites above and apart from the modern landscape. Miraculously it still holds immense landscape presence despite all the changes. The DSM ZTV indicated the hub/nacelle of the proposed turbine(s) would be visible from the top of the Rock, and the photomontage confirms that the upper blades would visible, just to the left of an electricity pylon. As such, the turbine(s) would be visible, but would not have a meaningful effect on the immediate and extended setting of the monument.
Magnitude of Impact: Very High value + Negligible change = Slight effect
NPPF Equivalent: **Less than Substantial Harm**
Overall Impact Assessment: Neutral

FIGURE 14: THE MEDIEVAL CHAPEL ON ROCHE ROCK; VIEWED FROM THE NORTH.

5.4.3 WAR MEMORIALS

War Memorials are typically located in order to be seen, often at road junctions, high points or central locations within the communities that they were designed to evoke remembrance within. Many examples are located within churchyards or cemeteries, but those which are typically afforded statutory protection are those located outside of these bounds. Many war memorials are located within a defined commemorative and separated space, segregated by bollards, etc. from daily life and affording them in most instances a very clearly defined setting. Context and setting is often confined to the settlement with which they are associated and therefore more distant developments do not tend to affect their relationships with their surroundings or public understanding of their meaning and significance. Almost all war memorials were originally established to commemorate a single community's loss in a single conflict, but they have often been appropriated to remember subsequent conflicts or tragedies. Some large memorials are afforded a much wider setting by their prominent positioning on hilltops above settlements, and in these instances they are more sensitive to developments.

What is important and why

All war memorials have strong communal value, in terms of commemorative power and symbolic, spiritual and social associations (communal). They are usually associated with a particular war and/or some events (historical/associational). Some are associated with notable architects (e.g. Edwin Lutyens) or architectural styles (arts and crafts) and thus strong elements of design and planning may be evident which contribute in a meaningful way to the experience of the monument and place (aesthetic/design).

Asset Name: **Nanpean Cemetery War Memorial**	
Parish: St Stephen-in-Brannel	*Within the ZTV*: Yes (hub)
Designation: GII	*Value:* Medium
Distance to the turbine: 1.3km	*Condition:* Good
Listing: The memorial is of granite stone construction, with a tall Celtic Cross on a square plinth, with recessed slate panels on all sides. The slate panel on south face of the plinth bears the following inscription: TO THE GLORY OF GOD/ AND IN MEMORY OF OUR BROTHERS/ WHO GAVE THEIR LIVES FOR KING AND COUNTRY/ IN THE GREAT WAR/ The names of the Fallen are inscribed in the slate panels on all sides of the plinth.	
Supplemental Comments: A tall and imposing war memorial in good condition, set within its own small enclosure next to the cemetery and main road. The associated St George's Chapel is a good historic structure (built 1879), forming a group with the School (built 1898) and the Mid-C20 Church Rooms (in a vernacular style, now a Spar shop)	
Conservation Value: Aesthetically very imposing and visually powerful, in a 'Celtic' style. High communal value for the community. No known direct historical value, other than obvious associations with the World Wars.	
Authenticity and Integrity: Very authentic as a historical war memorial. Appears in good condition and complete.	
Topographical Location & Landscape Context: The memorial stands in the valley on a level plot next to the church. The River Colls runs to the west. The valley is known as Curran Vale.	
Setting: It stands within a 19th century mining settlement next to a small gothic church. Whilst there are modern impacts (the adjacent Church Rooms has been	

converted into a shop and the road is busy with modern cars) its setting appears little changed since it was erected.
Principal Views: East and west along the road where it appears with the church.
Landscape Presence: The war memorial has a clear roadside presence and draws the eye; however, it is not visible on a landscape scale.
Sensitivity of Asset: The asset relates to its village setting and to the narrative of the community. It would only be sensitive to changes within its immediate setting.
Contribution of Setting to Significance of Asset: Important. The surviving relationship with the church is positive and allows us to understand this as a community memorial.
Magnitude of Effect: The turbine(s) would be visible on the high ground to the east. The DSM ZTV would indicate that T2 would be visible on the skyline behind the memorial in views from south-west, on the right of the visitor as they go through the wrought-iron gates and approach the memorial. While the turbine would not directly effect the significance of the memorial, it would impinge on the viewer's ability to appreciate its meaning and significance, especially during those occasions when and if it serves as the focus of Remembrance Day activities.
Magnitude of Impact: Medium value + Minor change = Slight effect
NPPF Equivalent: **Less than Substantial Harm**
Overall Impact Assessment: Minor Adverse

FIGURE 15: NANPEAN WAR MEMORIAL; VIEWED FROM THE SOUTH-WEST.

5.4.4 PREHISTORIC RITUAL/FUNERARY MONUMENTS

Stone circles, stone rows, barrows and barrow cemeteries

These monuments undoubtedly played an important role in the social and religious life of past societies, and it is clear they were constructed in locations invested with considerable religious/ritual significance. In most instances, these locations were also visually prominent, or else referred to prominent visual actors, e.g. hilltops, tors, sea stacks, rivers, or other visually prominent monuments. The importance of intervisibility between barrows, for instance, is a noted phenomenon. As such, these classes of monument are unusually sensitive to intrusive and/or disruptive modern elements within the landscape. This is based on the presumption these monuments were built in a largely open landscape with clear lines of sight; in many cases these monuments are now to be found within enclosed farmland, and in varying condition. Sensitivity to turbines is lessened where tall hedgebanks restrict line-of-sight.

What is important and why

Prehistoric ritual sites preserve information on the spiritual beliefs of early peoples, and archaeological data relating to construction and use (evidential). The better examples may bear names and have folkloric aspects (historical/illustrative) and others have been discussed and illustrated in historical and antiquarian works since the medieval period (historical/associational). It is clear they would have possessed design value, although our ability to discern that value is limited; they often survive within landscape palimpsests and subject to the 'patina of age', so that fortuitous development is more appropriate. They almost certainly once possessed considerable communal value, but in the modern age their symbolic and spiritual significance is imagined or attributed rather than authentic. Nonetheless, the location of these sites in the historic landscape has a strong bearing on the overall contribution of setting to significance: those sites located in 'wild' or 'untouched' places – even if those qualities are relatively recent – have

a stronger spiritual resonance and illustrative value than those located within enclosed farmland or forestry plantations.

Asset Name: **Round cairn with beacon called Hensbarrow**	
Parish: Treverbyn	*Within the ZTV*: Yes (hub)
Designation: SAM	*Value:* High
Distance to the turbine: 2.5km	*Condition:* Fair
SAM Text: The monument includes a round cairn, later re-used as a beacon, situated at the summit of an extremely prominent hill known as Hensbarrow Beacon. The cairn survives as a circular stony mound with a bell-shaped profile of up to 45m in diameter and 5.4m high. Known locally as 'Hainsborough' or 'Hensborough' and documented in 1310 as 'Hynesbergh', it was described by Carew in the 16th - 17th centuries as the site of the 'arch-beacon' of Cornwall, commanding an extensive view. A triangulation pillar and parish boundary marker stone have been built into the summit.	
Supplemental Comments: A large conical mound with a flat but uneven top, surmounted by a painted triangulation pillar. Accessed via a footpath through semi-enclosed fenced grazing on restored parts of the China clay landscape.	
Conservation Value: Evidential value will still be high, aesthetic value is limited but it is instantly recognisable as a cairn. No communal value. High historical value as a beacon and with medieval documentation of its reuse as such.	
Authenticity and Integrity: Very authentic as a beacon and also recognisable as an ancient cairn, reused in the landscape. It still stands in a fairly open setting despite the China clay tips. It appears in good condition and is a large example of its type. There are no obvious signs of antiquarian excavation.	
Topographical Location & Landscape Context: The monument is located on the summit of Hensbarrow, formerly a prominent hill rising up within the granitic uplands. The cairn is located slightly to the north of the summit, on level ground. The landscape context of the monument is the high downs, which also includes the adjacent China clay works and tips.	
Setting: Located within semi-enclosed rough upland grassland, on restored ground now used for grazing. A large bench tip wraps around the site to the north-east, east and south-east. Another tip is located *c*.500m to the west.	
Principal Views: There would have been 360° views across the granitic uplands; views north towards Roche survive, but views to the east are blocked by a bench tip, and views to the west overlook a vast extractive landscape.	
Landscape Presence: The monument is visible on the summit of the hill but is dwarfed by the scale of the adjacent spoil tip; it has no wider landscape presence.	
Sensitivity of Asset: The asset is technically sensitive to changes in its views and any landscape changes that affect its landscape presence and visibility. However, the significant effects of 19th/20th century and ongoing China clay extraction have already affected the setting and landscape context to such an extent the sensitivity is almost negated to further changes. The intervening tips are likely to provide screening.	
Contribution of Setting to Significance of Asset: Paramount. Its elevated position was key in both its use as a memorial and as a beacon. The scrap of surviving open ground to the north allows us to imagine its original setting, and this is of great benefit to interpretation. Generally, the landscape is so altered as to almost wholly divorce the monument from its intended setting.	
Scale of Change: The DSM ZTV and photomontage indicate the hub/nacelle of T1 , and the blade end of T2, would be visible, behind another bench tip to the south-west, where it will feature alongside the operational turbines. However, meaningful views from the monument are now restricted to the north, and the turbine would not affect those. Note that St Stephen's Beacon lies in this direction, and – had the bench tip not entirely screened this view – interrupting this line-of-sight would be considered a significant effect.	
Significance of Effect: High value + Negligible change = Slight effect	
NPPF equivalence: **Less than Substantial Harm**	
Professional Judgement: **Negligible Adverse**	

FIGURE 16: VIEW FROM HENSBARROW BEACON TOWARD THE SITE; FROM THE NORTH-EAST.

5.4.5 HILLFORTS

Hillforts are large embanked enclosures, most often interpreted as fortifications, and usually occupy defensible and/or visually prominent positions in the landscape. They are typically visible from all or most of the surrounding lower and higher ground, with the corollary that they enjoyed extensive views of the surrounding countryside. As such, they are as much a visible statement of power as they are designed to dissuade or repel assault. The location of these sites in the landscape must reflect earlier patterns of social organisation, but these are essentially visual monuments. They are designed to see and be seen, and thus the impact of wind turbines is often disproportionately high compared to their height or proximity.

What is important and why

Large Prehistoric earthwork monuments contain a vast amount of structural and artefactual data and represent a considerable time and resource investment with implications of social organisation; they were also subject to repeated reoccupation in subsequent periods (evidential). The more monumental examples may be named and can be iconic (e.g. Maiden Castle, South Cadbury), and may be associated with particular tribal groups, early medieval heroes and the work of antiquarians (historical). The range in scale and location make generalisations on aesthetics difficult; all originally had a design value, modified through use-life but then subject to hundreds if not thousands of years of decrepitude, re-use and modification. The best examples retain a sense of awe and sometimes wildness that approaches the spiritual. At the other end of the scale, the cropmarks of lost fortifications leave no appreciable trace.

Asset Name: **Earlier Prehistoric hillfort and round cairn at St Stephens Beacon**	
Parish: St Stephen-in-Brannel	*Within the ZTV*: Yes (base of rotor sweep)
Designation: SAM	*Value:* High
Distance to the turbine: 2.4km	*Condition:* Fair/Good
SAM Text: The monument includes an earlier prehistoric hillfort and round cairn, situated at the summit of the prominent hill called St Stephen's Beacon. The hillfort survives as a roughly oval enclosure surrounding the summit of the hill with an annexe to the north and is defined by a terrace or scarp of up to 7m wide and 2m high which has been partially fossilised in field boundary banks to the south. Other associated ditches, structures, layers, deposits and features will be preserved as buried features. The outer side of the terrace is partially revetted by large stones and marked in places by upright orthostats. The area of the hillfort has been the subject of mineral prospecting, evidenced by numerous pits. First noted in 1864 as being 'distinctly visible' and recorded variously as having between one up to three surrounding ramparts, the hillfort has been variously recorded as being of Neolithic through to Iron Age date. Within the enclosed area on the summit of the hill is a round cairn which was re-used as a beacon. It survives as a low, irregular spread of stones. The cairn was largely dismantled in 1853 when, according to Thomas, it actually measured up to 20m in diameter. The outer stone was removed and used to construct an engine house for Tin Hill Mine and, at this time, a lower platform of stones and a large cist containing ashes was found and left in situ. Its re-use as a beacon is largely inferred from its very prominent position and place-name evidence of 'St Stephen's Beacon', 'Foxhole Beacon' or 'Beacon Hill'.	
Supplemental Comments: A large site atop a natural hill. The ramparts are visible and quite pronounced in places, overgrown with scrub in others. The site is grazed but there is some cattle trample damage. Sweeping open views are possible from the summit, the monument sitting above the much-altered modern landscape and set apart as a survivor from a relict ancient landscape that is all but lost. Overshadowed by the China clay spoil tips on the other side of Foxhole. Some evidence of antisocial behaviour, with littering and dumping in and around the site, although not on it. Use of the site for mountain biking/scrambling observed previously.	
Conservation Value: High evidential value. Aesthetic value as an authentic relict archaeological site but built for function as a defensive/enclosed location. Historical value as an example of its type, minor local value of cairn, both for antiquarian excavation and later use as a beacon site. No known communal value.	
Authenticity and Integrity: The site is authentic as a Scheduled Monument, a Prehistoric enclosed hilltop site. Its banks are upstanding although much weathered and it may seal many significant deposits. The cairn has been affected by the removal of stone and antiquarian excavation. The site could and should be better managed for scrub growth, animal damage and weathering; the integrity of some of its banks is probably at risk if not better managed in the future.	
Topographical Location & Landscape Context: The monument occupies the summit of a prominent hill. The actual summit is a small level area set slightly to the north-west within the monument, the banks enclosing the upper slopes. The terraced area is roughly level on the mid/upper slopes. The landscape context is the hilltop and gentle slopes to the east and west and steeper slopes to the north and east, as well as the numerous China clay tip and pits in its immediate setting.	

Setting: The hill is set amongst the China clay tips and pits, many of which are now abandoned and flooded. The small settlement of Goonabarn lies just to the north, the road wrapping around the lower slopes of the hill. The bigger settlement of Foxhole lies to the east and former Carloggas Moor to the west.
Principal Views: The summit of the hilltop has 360° views over the surrounding China clay working landscape. The best views to the monument are from elevated points to the east and north-east.
Landscape Presence: The monument retains a landscape presence and is a visible feature. The topography of the hill has clearly been modified, but as this monument lies on the edge of a major extractive landscape, its landscape presence is significantly diminished. The complexities of a Prehistoric landscape, overlain by 17th-19th century agriculture and 19th-21st century China clay working is such that the monument is reduced to merely being a visible feature and the substantial clay tips and other associated features now command visual dominance.
Sensitivity of Asset: As a highly visible feature whose prominent position on the hilltop was intended to lend it visual dominance over and across the landscape, it would once have been sensitive to landscape change. However, the China clay workings have altered the landscape to such an extent that this sensitivity is seriously compromised.
Contribution of Setting to Significance of Asset: Integral. The enclosed site is defined by its hilltop setting, as it was likely built for a defensive/dominance reason, giving wide 360° views of the surrounding landscape. The wider historic medieval farming and later China clay working landscapes completely obscure the unenclosed upland landscape within which the asset was created. The modern China clay works are close and much of the wider landscape has been lost. It stands outside of its setting, divorced from its surroundings. Nonetheless, it remains significant. The immediate fieldscape within which it stands allows us to experience just a fragment of how open this site would once have been.
Scale of Change: The DSM ZTV indicates intervisibility to the base of the rotor sweep, and this is borne out by the photomontages. T1 and T2 would be clearly visible, side-by-side, to the north-west, to the left of a taller stabilised bench tip and across the greater part of the settlement of Foxhole, with its numerous 'white box' houses. As Hensbarrow Beacon lies beyond the bench tip, interrupting this line-of-sight would once have been significant; now there is no intervisibility between the beacons. Views from the site are now commanded by the sweeping panorama of the lowland areas to the south and south-west. The proposed turbines would be visible over the crest of the hillfort in views across the village of St Stephen below; while the ramparts of the hillfort are not perceptible from those viewpoints, it may hinder the ability to appreciate its commanding location.
Significance of Effect: High value + Negligible change = Slight effect
NPPF equivalence: **Less than Substantial Harm**
Professional Judgement: **Negligible Adverse**

FIGURE 17: THE VIEW FROM ST STEPHEN'S BEACON BACK ACROSS FOXHOLE TO THE LOCATION OF THE PROPOSED TURBINE; VIEWED FROM THE WSW.

Asset Name: **Castle-an-Dinas**	
Parish: St Columb Major	*Within the ZTV*: Yes (base of rotor sweep)
Designation: SAM	*Value:* High
Distance to the turbine: 6.8km	*Condition:* Good
SAM Text: The monument includes a large multivallate hillfort which contains two bowl barrows, situated at the summit of a prominent and distinctive hill known as Castle Downs. The hillfort survives as a roughly-circular enclosure covering an area of approximately 7 hectares defined by four concentric ramparts and ditches. The hillfort was first described by Hals (1655 - 1737), and historical research by Henderson in the 1930's suggested post-Roman occupation. The hillfort was partially excavated by Wailes between 1962 and 1964 when earthwork and magnetometer surveys and phosphate analysis were also completed. The work showed that all four ramparts (numbered 1 - 4 inner to outer) were of dump construction. Rampart 3 was much slighter, had up to six entrances and was stratigraphically earlier than the rest, but had never been deliberately back filled. Rampart 2 had a relatively slight outer ditch so was probably a counterscarp bank to rampart 1which had two phases of construction. The entrance to the fort was in the south west and in rampart 1 the entrance was cobbled, stone faced and slightly inturned. Little evidence of occupation was found within the interior, although only	

a small area was examined. This located some post holes, the remains of a possible hut, implying short-term occupation. The spring pond on the north side of the interior was investigated for organic remains and, although proven to be artificial, no specific dating or construction evidence could be determined. Within the interior of the hillfort are two bowl barrows. The north western barrow survives as a slight uneven circular mound with some protruding stones. The south eastern barrow survives as a circular mound measuring 17m in diameter and 0.9m high with a central excavation hollow. It was investigated by Borlase in 1871 and produced two pits but no finds.
Supplemental Comments: The monument is currently approached from the south via a long rough track which curves around an occupied house and terminates within a roughly metalled yard. Several mid-20th century concrete structures (the remains of a Wolfram mine), now under conversion to residential use, lie just to the west. A footpath leads up to the ramparts of the hillfort, which are, for the most part, in excellent condition. In places the ramparts have been damaged by visitor footfall, but the monument is otherwise in good condition. There is bracken growth across much of the earthworks.
Conservation Value: The monument has very high evidential value and also high historical and narrative value. The setting has aesthetic value, but the monument itself is too large to comprehend within a single sweep of the eye. There is no clear communal value.
Authenticity and Integrity: The monument is a highly authentic example of a relatively rare class of monument in Cornwall. It survives in good condition, and recent changes (i.e. the railway for the Wolfram mine) are not readily noticeable. Parts of the internal area have been the subject of antiquarian investigation, but the size of the hillfort means there is much that remains unsullied. Visitor pressure and bracken growth are issues to be addressed.
Topographical Location & Landscape Context: The hillfort is located on a prominent hilltop. The ground drops down to a valley to the west and north-west, with another prominent hilltop (Belowda Beacon) to the east and the expanse of Goss Moor to the south. The immediate landscape context is the hilltop, but the wider landscape context takes in these adjacent areas.
Setting: The hillfort now lies within recently enclosed land defined by straight hedgebanks or fences.
Principal Views: The monument enjoys wide 360° views and is visible across a wide area.
Landscape Presence: The ramparts survive sufficiently well, and the hilltop is sufficiently distinct, for this to qualify as a *landmark asset*.
Sensitivity of Asset: The asset was clearly designed to be highly visible. Thus, it is sensitive to changes in the wider landscape, especially to anything within its landscape context.
Contribution of Setting to Significance of Asset: Integral. The monument was clearly and deliberately located on this high point to command extensive views across the landscape, and to be highly visible. While the remains of the Wolfram mine and the long track and house detract from the approach to the site, it is still experienced as a relatively remote and liminal place.
Magnitude of Effect: The proposed turbine(s) would be visible from this monument, but at a distance. Principal views to and from the monument would be largely unchanged, as would the experiential aspect of the monument. At least 57 operational turbines are visible from the site; the proposed turbine would be much more remote and almost entirely screened by the topography/China clay tips.
Magnitude of Impact: Very High value + Negligible effect = Slight effect
NPPF Equivalent: **Less than Substantial Harm**
Overall Impact Assessment: Negligible Adverse

FIGURE 18: THE VIEW FROM CASTLE-AN-DINAS, LOOKING BACK TOWARDS CLAY COUNTY; VIEWED FROM THE NORTH.

5.4.6 INDUSTRIAL LANDSCAPES

The China Clay District

The China clay industry has had an indelible and dramatic impact on the granitic uplands of the St Austell area. Large areas have been lost to extraction or spoil tipping, leaving the remaining pockets of agricultural land or rough ground isolated amid a strange manufactured moonscape of pits, tips and haul roads. This industrial landscape has itself been remade several times over the last 200 years: early extraction was marked by shallow and limited surface works associated with finger tips and small-scale settling and drying areas. These were superseded by larger and deeper pits associated with the tall conical sky tips, the first examples of which appeared in the early 1900s. There may have been as many as 200 sky tips by the middle of the 20th century, the number and density of which led to the label *the Cornish Alps*. During the latter part of the 20th century, with respect to the Aberfan Colliery disaster but also responding to changing haulage systems, the sky tips were phased out and replaced by extensive bench tips. In the recent past, the bench tips began to be re-profiled to look less obviously artificial, creating a new kind of rounded profile more akin to the chalk hills of southern England. The scale of intervention matches the size of the China clay companies: in the 19th century there were multiple small companies operating in the St Austell district, today, the single operator is the company Imerys. Much of the evidence for early exploitation, as well as the distinctive lines of sky tips, has been lost; yet this extensive industrial landscape retains a slightly otherworldly feel, enhanced by the obvious poverty of much of the surrounding area.

What is important and why

The surviving elements of this landscape have *evidential value* in terms of their morphology and the possibility that earlier features and structures may yet survive adjacent or – more probably – beneath the tips. There is some *communal value*, in that the local population identifies with the more iconic elements within the landscape (i.e. the sky tips). Lastly, there is aesthetic value to these landscapes: while not pleasing in any standard way, the scale of human intervention invokes awe and a sense of otherworldliness. The remaining sky tips are more readily-appreciable and discrete 'monuments', many of which are highly visible and some which are regarded as *iconic*.

Asset Name: **The China Clay District**	
Parish: St Stephen-in-Brannel	*Within the ZTV*: Yes
Designation: Locally significant landscape	*Value:* Medium
Distance to the turbine: within the district	*Condition:* Variable, Poor to Good
Description: The 19th and early 20th century historic clay works dominate the landscape across the former downs north of St Austell. The area remains in continuous use. There were Grade II* listed buildings at Goonvean, Wheal Martyn is a Scheduled Monument, and there are Grade II Listed buildings in the St Austell River valley and further north around Carbis. The vast clay pits are a key component of the landscape but are essentially only visible from within the landscape; the features that define this area in the wider landscape are the spoil tips – the massive bench tips and the distinctive conical sky tips. The sky tips were a ubiquitous feature of the 'Cornish Alps' but now only a few remain. Those few are visually arresting and symbolic of the China clay industry, being of regular and uniform shape, unlike the undulating natural downs. Several of these, such as the one south of Stenalees and visible from the A391, may be described as being of *iconic* status within this landscape.	
Supplemental Comments: Whilst of obvious historic importance to Cornwall's wider socio-economic narrative this is also a busy working landscape, with dusty roads of thundering heavy plant and HGV lorries and the constant noise of working machinery. Lots of modern safety signage, lights, height barriers and telecoms infrastructure litter the landscape. This is far from pristine but is of continuing character and ongoing function, giving the visitor an idea of how stark and different the original workings must have seemed to a largely pastoral community.	
Conservation Value: Historic value and arguably a communal value, as this landscape is now tied to the identity of thousands of current and past workers and their families many who may have migrated to Cornwall for the work. The aesthetic value of the conical sky tips is high, with several being iconic to this region. The unused, restored areas are reworked for wildlife reserves, with scrub allowed to grow back and the flooded pits take on a bucolic wild beauty that is photogenic, even if the turquoise waters are lethal in reality. Aesthetically, the working areas are pale scars on the landscape, stark and shocking to the eye. Evidential value is low across the site as the workings strip away history to expose the China stone.	

Authenticity and Integrity: The landscape is very authentic and still in ongoing industrial quarrying use. The completeness of the historic landscape is very low as historic workings have been reworked, and ancient landscapes on the downs lost through the continual quarrying.
Topographical Location & Landscape Context: There are several sky tips close to the site of the proposed turbines. The largest, but not the most prominent, is located at Goonamarth Farm, c.2km to the south-east. There are two highly visible sky tips at Trelavour, and a third at Whitemoor. The two at Trelavour are located on the top of the ridge between St Dennis and Currian Vale.
Setting: The most prominent sky tips are located between Goos Moor/Str Dennis and Currian Vale and are associated with a series of current and former clay works.
Principal Views: These vary; Goonamarth tip has 360° views, with views to the south the most open and distant. The Trelavour and Whitemoor tips also enjoy extensive views to the north and south.
Landscape Presence: Within this confluence of valleys, gentle slopes and inverted pits, the uniform conical mounds visually distinct and draw the eye, forming a distinct skyline profile (particularly the Trelavour tips when viewed form the north). The Trelavour tips are local *landmark assets*.
Sensitivity of Asset: These assets are sensitive to any changes in the landscape that affect the skyline profile and its locally important/iconic status within the wider China clay working landscape.
Contribution of Setting to Significance of Asset: The China clay landscape is defined by geology; the setting is therefore the very reason for its existence. The surviving fragments of earlier historic landscapes within the current and 19th century China clay district lend an important chronological 'sense of place' within the wider narrative of Cornwall.
Scale of Change: The proposed turbines would be located NNW of the Goonamarth tip, and SSE of the Trelavour and Whitemoor tips. It would introduce two more tall vertical features into this landscape alongside the conical sky tips. This would have an appreciable effect on a skyline of the northern part of the China clay landscape, especially when viewed from the north, where the Trelavour tips are skyline features.
Significance of Effect: Medium value + Minor change = Slight effect
NPPF equivalence: **Less than Substantial Harm**
Professional Judgement: **Minor Adverse**

5.4.7 HISTORIC LANDSCAPE

General Landscape Character

The landscape of the British Isles is highly variable, both in terms of topography and historical biology. Natural England has divided the British Isles into numerous 'character areas' based on topography, biodiversity, geodiversity and cultural and economic activity. The County Councils and AONBs have undertaken similar exercises, as well as Historic Landscape Characterisation.

Some character areas are better able to withstand the visual impact of development than others. Rolling countryside with wooded valleys and restricted views can withstand a larger number of sites than an open and largely flat landscape overlooked by higher ground. The English landscape is already populated by a large and diverse number of intrusive modern elements, e.g. electricity pylons, factories, modern housing estates, quarries, and turbines, but the question of cumulative impact must be considered. The aesthetics of individual developments is open to question, and site specific, but as intrusive new visual elements within the landscape, they tend to be **adverse**.

The proposed site would be constructed within the *St Austell or Hensbarrow China Clay* Landscape Character Area (LCA CA17). It is described as:

A very varied, dramatic landscape of china clay waste tips and areas of rough vegetation, characterised by open pit mining. The mix of active and disused sites creates a dramatic 'lunar' landscape of huge, light-coloured waste tips and settling ponds within a relic pastoral farming landscape. A rugged area of great variation and drama. Dominant visual elements include the large white spoil heaps, either conical or flat-topped in form, aqua-blue pools, areas of rough ground and natural and naturally regenerated scrub and heath, as well as large quarry pits. The scale of these features contrasts dramatically with the small-scale field patterns. The fluctuating and changing condition and relationship of elements in this landscape, and the natural regeneration of heathland, new woodland planting and rough ground provides a vivid and dynamic visual landscape character quite unlike surrounding LCAs

This character area is characterised as a visually dynamic landscape of vast pits, spoil tips and vivid settling lakes that strongly contrast with the remnants of the small-scale agricultural landscape that preceded it. From a historic landscape perspective, the proposed turbines would clearly be an intrusive new element in this landscape, but it is not unprecedented. The scale and extent of modern intervention in this landscape means even the larger turbines are dwarfed by the size but particularly by the mass of the spoil tips. The kinetic quality of the turbines would introduce a new sense of movement into this landscape. The overall sensitivity of this LCAs to wind turbine developments is assessed as *moderate*, with the caveat that the granite outcrops of St Dennis and Roche are more sensitive[16].

The biggest issue with regards to the historic landscape is that of cumulative impact. There are operational turbines at Higher Goonamarth, on Trenance Down spoil tip, at Gunheath Quarry, a smaller turbine at Mount Stamper, and two consented turbines under construction at Longstones and Burngullow. In other LCAs, turbines serve to erode their relative distinctiveness; in this case, the pale spoil tips and vast pits have no parallel, and the incongruity of scale is rendered less meaningful. Where the proposed turbines encroach on the skyline south of St Dennis this could result in notable change, as this skyline is currently marked by the surviving sky tips and massive bench tips. The fact that the proposed turbines would match those of Goonamarth, Gunheath, Longstones and Burngullow lends visual congruence to the group. However, it also provides a precedent. On that basis, the overall impact on the historic environment is assessed as **Minor Adverse**.

As the turbine has an operational life of approximately 35 years it is possible it can be removed, and any negative visual effects revered. Thus, its impact is technically **temporary/reversible**.

5.4.8 AGGREGATE IMPACT

The aggregate impact of a proposed development is an assessment of the overall effect of a single development on multiple heritage assets. This differs from cumulative impact (below), which is an assessment of multiple developments on a single heritage asset. Aggregate impact is particularly difficult to quantify, as the threshold of acceptability will vary according to the type, quality, number and location of heritage assets, and the individual impact assessments themselves.

Based on the restricted number of assets where any appreciable effect is likely, the aggregate impact of this development is **Negligible Adverse**.

5.4.9 CUMULATIVE IMPACT

Cumulative impacts affecting the setting of a heritage asset can derive from the combination of different environmental impacts (such as visual intrusion, noise, dust and vibration) arising from a single development or from the overall effect of a series of discrete developments. In the latter case, the cumulative visual impact may be the result of different developments within a single view, the effect of developments seen when looking in different directions from a single viewpoint, of the sequential viewing of several developments when moving through the setting of one or more heritage assets.

The Setting of Heritage Assets 2011a, 25

*The key for all cumulative impact assessments is to focus on the **likely significant** effects and in particular those likely to influence decision-making.*

GLVIA 2013, 123

An assessment of cumulative impact is, however, very difficult to gauge, as it must take into account existing, consented and proposed developments. The threshold of acceptability has not, however, been established, and landscape capacity would inevitability vary according to landscape character. The proposed development would introduce two medium-sized turbines into a landscape already containing other

turbines (both operational, under construction and consented), and thus the cumulative effect will be enhanced. However, the number of designated heritage assets in this area where an appreciable effect is likely is fairly low. Therefore, and on balance, an assessment of **Minor Adverse** is appropriate.

5.4.10 INDIRECT IMPACT SUMMARY

The proposed turbines would be located towards the middle of the Hensbarrow uplands and China clay country. They would be set back from, but overlook, the valley containing Foxhole and Nanpean. To the east, within and around the working pits, are several operational turbines, several under construction, and others either consented or in planning.

There are relatively few designated heritage assets within China clay country, due to its marginal location and the tremendous impact the China clay industry has had on the landscape (and even significant designated heritage assets – the GII* Goonvean engine house – have fallen foul of the relentless expansion of the pits). The scale of the pits and bench tips serves to diminish the apparent relative scale of wind turbines here. For most designated heritage assets in the wider area the proposed turbine would form a background element, and one that, in most instances, would be well-screened by trees and buildings even where the bare-earth ZTV would indicate intervisibility.

The main issue is therefore the cumulative one. By the end of 2025 there will be five Enercon 115 turbines in the upper Gover valley just to the south-east. In cumulative terms they will take on the appearance of a wind farm, but one without the benefit of an overall landscape and siting strategy[17].

Table 1 (below) provides a summary of the likely impact of the proposed development on both category #1 and category #2 heritage assets. As with the individual assessments (above), this table presents the results of both the likely significance of effect *and* our professional judgement as to the likely impact of the proposed development (as per Tables 6 and 7 in Appendix 3). These assessments are for the operational function of the proposed development; constructional impacts are generally short-lived (if more intense); renewable developments are usually consented as temporary.

TABLE 1: SUMMARY IMPACT TABLE[18].

Name	List No.	Within ZTV/ZVI	Distance (km)	Type	Value	Scale of Change	Significance of Effect	Professional Judgement
Direct Impacts								
Buried archaeological features	n/a	n/a	On site	Non-Deg.	Low-Moderate	No Change	Neutral	No Change
Indirect Impacts (Scoped-in Assets)								
Bible Christian Chapel With Attached Sunday School	1143985	Yes	0.7	II	Medium	Negligible	Slight	Negligible Adverse
Longstone on Longstone Downs	1004343	Yes	0.8	SM	High	No Change	Neutral	No Change
Nanpean Cemetery War Memorial	1407730	Yes	1.3	II	Medium	Negligible	Slight	Negligible Adverse
Platform cairn 180m northwest of Hensbarrow Farm	1007292	Yes	1.9	SM	High	No Change	Neutral	No Change
Earlier prehistoric hillfort and round cairn at St Stephen's Beacon	1003091	Yes	2.4	SM	High	Negligible	Slight	Negligible Adverse
Round cairn with beacon called Hensbarrow	1004372	Yes	2.5	SM	High	Negligible	Slight	Negligible Adverse
House Immediately East Of The Old Rectory	1144085	Yes	3.2	II	Medium	No Change	Neutral	No Change
Cottage At SW 9646 5925	1247110	Yes	3.2	II	Medium	No Change	Neutral	No Change
Church Of St Dennis	1327433	Yes	3.2377018	II*	High	Negligible	Slight	Negligible Adverse
Trethosa School	1327466	Yes	3.5	II	Medium	No Change	Neutral	No Change
Chapel Of St Michael At Roche Rock	1327342	Yes	3.7	I	High	Negligible	Slight	Neutral
Church Of St Gomonda	1158829		3.7300762	II*	High	Negligible	Slight	Neutral
Gover Railway Viaduct Including Piers To North	1136662	Yes	4.0	II	Medium	No Change	Neutral	No Change
St Stephen Churchtown Cemetery War Memorial	1407749	Yes	4.2	II	Medium	No Change	Neutral	No Change
Church Of St Stephen	1137033	Yes	4.3	I	High	No Change	Neutral	No Change
Queens Head Inn	1144790	Yes	4.3	II	Medium	No Change	Neutral	No Change
Church Room	1312479	Yes	4.4	II	Medium	No Change	Neutral	No Change
Pendine Farmhouse	1327341	Yes	4.6	II	Medium	No Change	Neutral	No Change
Three bowl barrows between 120m and 820m south of Brynn Barton Cottage	1004231	Yes	4.9	SM	High	No Change	Neutral	No Change
Stable About 50 Metres West Of Bodinnick Farmhouse	1327461	Yes	4.9	II	Medium	No Change	Neutral	No Change
Barn Attached To South Of The Stable About 50 Metres West Of Bodinnick Farmhouse	1143987	Yes	4.9	II	Medium	No Change	Neutral	No Change
Church of St Mewan	1327442	Yes	4.9	II*	High	Negligible	Slight	Negligible Adverse
Meledor Farmhouse	1327463	Yes	5.1	II*	High	No Change	Neutral	No Change

Resugga Farmhouse	1136836	Yes	5.1	II	Medium	No Change	Neutral	No Change
Sticker Camp later Prehistoric-Roman round	1011994	Yes	6.0	SM	High	No Change	Neutral	No Change
Resugga Castle later prehistoric univallate hillfort	1017685	Yes	6.3	SM	High	No Change	Neutral	No Change
Part of a mining complex at South Polgooth Mine	1007288	Yes	6.5	SM	High	No Change	Neutral	No Change
Large multivallate hillfort with two bowl barrows known as Castle-an-Dinas, 335m north of Tresaddern Bungalow	1006713	Yes	6.8	SM	High	Negligible	Slight	Negligible Adverse
Round barrow 530m north west of Carnwinnick	1020751	Yes	7.1	SM	High	No Change	Neutral	No Change
Pennans Farmhouse	1144033	Yes	7.6	II*	High	No Change	Neutral	No Change
Penrice	1211821	Yes	7.9	II*	High	No Change	Neutral	No Change
Bowl barrow 270m south west of Castle Hill Farm	1005451	Yes	8.2	SM	High	No Change	Neutral	No Change
Small multivallate hillfort 230m south-east of Great Prideaux	1006663	Yes	8.3	SM	High	No Change	Neutral	No Change
Church Of St Enoder	1311865	Yes	8.4	I	High	No Change	Neutral	No Change
Round called Castle Gotha	1006695	Yes	8.4	SM	High	No Change	Neutral	No Change
A henge re-used as a medieval playing place, 75m north east of Castle Hill Farm	1006684	Yes	8.5	SM	High	No Change	Neutral	No Change
Three bowl barrows 670m and 775m north west of Homer Downs	1019064	Yes	8.6	SM	High	No Change	Neutral	No Change
Bank House	1144073	Yes	9.6	II*	High	No Change	Neutral	No Change
Town Hall	1144107	Yes	9.7	II*	High	No Change	Neutral	No Change
The Glebe House	1144067	Yes	9.7	II*	High	No Change	Neutral	No Change
Church Of St Ladoca	1310553	Yes	9.7	I	High	No Change	Neutral	No Change
Church Of St Columba	1144068	Yes	9.7	I	High	No Change	Neutral	No Change
Prehistoric and Roman settlement at Carvossa	1016890	Yes	9.8	SM	High	No Change	Neutral	No Change
Earlier prehistoric hillfort, stone hut circle settlement and field system at Helman Tor	1007306	Yes	10.1	SM	High	No Change	Neutral	No Change
China Clay Country		Yes		Non-deg	Medium	Minor	Slight	Minor Adverse
Historic Landscape							Slight	Minor Adverse
Aggregate Impact							Slight	Negligible Adverse
Cumulative Impact							Slight	Minor Adverse

6 CONCLUSIONS AND RECOMMENDATIONS

6.1 CONCLUSION

The two proposed turbines would be located to the west of Nanpean and Currian Vale. The historic cartographic sources indicate this broad, west-facing hillside was occupied by a string of post-medieval smallholdings but following the 20th century expansion of China clay extraction, those post-medieval farmsteads have been destroyed or deeply buried beneath a bench tip. Accordingly, there is little that can be said about the archaeological merit of the area.

The two proposed Vestas W117 wind turbines stand 76.5m to hub/nacelle and 135m to blade tip, with a rotor diameter of 117m. In addition, as the blades of the turbines sweep around, they draw the eye of the viewer, enhancing their visibility. However, there are relatively few designated heritage assets in and around China clay country, and some of those that form part of the National List have been destroyed or removed. In addition, the scale and artificiality of this landscape serve to diminish the apparent scale of the turbines, and the bench tips provide extensive screening.

As a result, the number of designated heritage assets where an appreciable adverse effect could be experienced are few. Due to the number of operational or consented turbines in the local area, there will be a slight cumulative effect. Overall, the effect on the historic environment is adjudged to be *Negligible Adverse*.

6.2 RECOMMENDATIONS AND MITIGATION

As the previous use of the site – as a China clay quarry and bench tip – has removed or deeply buried any archaeological sites or features, archaeological mitigation is irrelevant, and no further work is possible.

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8 PROJECT ARCHIVE

The archive code for this phase of the project is **SDUB25**.

The OASIS number for this project is **SOUTHWES1-538019**

There is no museum accession number for this project.

The documentary, digital, photographic and drawn archive is held and maintained by South West Archaeology Ltd. This archive consists of:

1. The physical paper archive, consisting of written and drawn site records, and notes. These are stored on the SWARCH premises at South Molton.

2. No physical artefacts have been retained from the site.

3. The digital archive, consisting of the report, digital photographs, digitised site plans and drawings etc. are stored on the SWARCH premises at South Molton. They will be transferred to a secure server: ArchivePC\Archives\St Stephen-in-Brannel-Dubbers-Turbine-SDUB25. Data backups are held offsite.

APPENDIX 1: SUPPORTING PHOTOGRAPHS

The following photographs are enlargements of landscape-scale photographs used in the report, reproduced at the required 390×260mm scale to satisfy the appropriate requirements. Printed at A3 and held at arms-length, these should provide a more realistic guide to the true scale of a particular view, within which the proposed turbine would be located.

VIEW FROM HENSBARROW BEACON TOWARD THE SITE; FROM THE NORTH-EAST. THE PHOTOMONTAGE INDICATES T1 WOULD BE VISIBLE TO THE RIGHT OF THE BENCH TIP ON THE SKYLINE; THE BLADE OF T2 WOULD BE VISIBLE OVER THE BENCH TIP. DISTANCE TO TURBINE: C.2.2KM.

NANPEAN WAR MEMORIAL; VIEWED FROM THE SOUTH-WEST. T2 SHOULD BE VISIBLE IN THIS VIEW TO THE RIGHT OF THE MEMORIAL. DISTANCE TO CLOSEST TURBINE: C.1.2KM.

THE VIEW FROM ST STEPHEN'S BEACON BACK ACROSS FOXHOLE TO THE LOCATION OF THE PROPOSED TURBINE; VIEWED FROM THE WSW. BOTH TURBINES WOULD BE VISIBLE IN THIS VIEW. DISTANCE TO CLOSEST TURBINE: C.2.1KM.

THE VIEW OF ST STEPHEN'S BEACON (SKYLINE RIGHT OF TELEGRAPH POLE) AND ST STEPHEN'S CHURCH (CENTRE LEFT), AS VIEWED FROM THE SOUTHERN SIDE OF ST STEPHEN-IN-BRANNEL (AT THE INTERSECTION OF PARK GWYN AND RECTORY ROAD). VIEWED FROM THE WSW. THE DSM ZTV INDICATES THE TURBINE(S) WOULD BE VISIBLE ON THE SKYLINE BEHIND THE BEACON. DISTANCE TO CLOSEST TURBINE C.4.4KM.

THE VIEW FROM ST DENYS BACK ACROSS CLAY COUNTRY; VIEWED FROM THE NORTH-EAST. THE TURBINES WOULD APPEAR TO THE LEFT OF THE CONICAL SKY TIPS. DISTANCE TO CLOSEST TURBINE C.3.2KM.

APPENDIX 2: FIGURES

TABLE 2: HERITAGE ASSETS RECORDED IN THE CSHER WITHIN 1KM OF THE SITE (CSHER)

No	Mon ID	Name	Summary
1	MCO2108	BLUE BARROW - Bronze Age barrow	The name Blue Barrow suggests the site of a barrow; the area is now covered by quarry waste.
2	MCO2466	COCKSBARROW - Bronze Age barrow	Cocks barrow was recorded on early maps and by Thomas; excavated in 1970 prior to removal by mineral extraction.
3	MCO2770	HALVIGGAN - Bronze Age barrow	The site of a barrow, marked on early OS maps and in the Tithe Award.
4	MCO3049	LONGSTONE DOWNS - Bronze Age barrow	The site of a barrow recorded by Thomas in 1852.
5	MCO3051	LONGSTONE DOWNS - Bronze Age barrow	Site of a barrow first recorded on the 1st Edition OS map.
6	MCO3052	LONGSTONE DOWNS - Bronze Age barrow	The site of a barrow, marked on the OS 1st Edition map.
7	MCO3053	LONGSTONE DOWNS - Bronze Age barrow	A barrow marked on the OS 1st Edition map.
8	MCO7451	LONGSTONE - Prehistoric standing stone, post hole, possible prehistoric burial	A menhir, recorded as 3.0m tall, was removed as a result of china clay workings.
9	MCO2466	COCKSBARROW - Bronze Age barrow	Cocks barrow was recorded on early maps and by Thomas; excavated in 1970 prior to removal by mineral extraction.
10	MCO8910	WHITEMOOR - Post Medieval smallholding, possible Iron Age or Romano-British round	An enclosure with raised interior now almost entirely covered by a clay spoil heap.
11	MCO8911	WHITEMOOR - Possible Iron Age or Romano British round	A circular field boundary shown on an estate map of 1861 suggests the site of a round. The site has been destroyed by a clay spoil heap.
12	MCO21241	NANPEAN - Medieval field system	Sheppard has suggested the site of an early field system near Nanpean.
13	MCO25258	OLD POUND - Medieval pound, Post Medieval pound	A pound was situated at Old Pound farm since 1748 at least. The pound no longer survives.
14	MCO25256	WHITEMOOR - Medieval field system, Post Medieval field system	Irregular fields are shown on the 1963 OS map at this spot.
15	MCO48267	MENMUNDY - Medieval streamworks, Post Medieval streamworks	Tin streaming extending from Currian Vale to Old Pound is visible on 1946 aerial photographs
16			
17			
18	MCO21242	NANPEAN - Medieval field system, Undated field system	A pattern of long linear fields boundaries aurvive to the SE of Nanpean.
19			
20	MCO48251	GOVERSETH - Medieval streamworks, Post Medieval streamworks	Evidence of streamworking can be observed on aerial photographs
21			
22			
23	MCO25265	LONGSTONE DOWNS - Medieval or Post Medieval boundary bank, Undated linear earthwork	Remains of a linear earthwork, now destroyed.

24	MCO26909	OLD POUND - Post Medieval streamworks	An eluvial streamworks at Old Pound survive and include a cutting, leat and heaps.
25	MCO48260	OLD POUND - Post Medieval trackway	Two lengths of track are visible on aerial photographs
26	MCO53518	NOPPIES - Post Medieval settlement	All that survives of Noppies settlement are low walls and heaps of rubble with large stones.
27	MCO53540	NOPPIES - Post Medieval settlement	The settlement of Hillcrest as it is named on the Tithe Map c1840, SE of Noppies, was occupied in 1990, but by 2008 it is lost to the expansion of Blackpool China Clay Works.
28	MCO53546	NOPPIES - Post Medieval settlement	A settlement to the NE of Noppies is recorded on the Tithe Map c1840; in 1990 it was abandoned.
29	MCO53557	LONGSTONE - Post Medieval settlement	The settlement of Longstone is recorded on the 1st Edition OS map c1880 and is still occupied.
30	MCO53558	OLD POUND - Post Medieval house	A settlement to the north of Old Pound is recorded on the 1st Edition OS map c1880 and is still occupied.
31	MCO53559	OLD POUND - Post Medieval barn, Post Medieval house, Post Medieval house, Post Medieval settlement, Modern farm building	The settlement of Old Pound is recorded on Tithe Map c1840 and it is still occupied.
32	MCO53562	OLD POUND - Post Medieval nonconformist chapel, Sunday School	Original Bible Christian Chapel, now ruinous and roofless. Served as Sunday School when replaced by adjacent 1886 chapel.
33	MCO53564	OLD POUND - Post Medieval settlement	A settlement to the NE of Old Pound is recorded on the Tithe Map c1840 and by 1990 it was ruinous and abandoned and subsequently consumed by china clay works to the north.
34	MCO53567	OLD POUND - Post Medieval settlement	All that survives of a settlement to the NW of Old Pound which is recorded on the Tithe Map c1840, is a single farm building ruinous in 1990.
35	MCO53568	OLD POUND - Post Medieval settlement	A settlement to the NW of Old Pound is recorded on the Tithe Map c1840; by 1990 it was ruinous and subsequently lost to china clay workings.
36			
37	MCO53570	OLD POUND - Post Medieval shop, Post Medieval barn, Post Medieval house, Post Medieval settlement	A settlement to the NW of Old Pound is recorded on the Tithe Map c1840 and it is still occupied, named 'Trelock'.
38	MCO53571	OLD POUND - Post Medieval prospecting pit, Post Medieval pit	A pair of circular features visible on aerial photograph, appear on the ground to be natural, possibly infilled prospecting or lode-back pits.
39	MCO53576	OLD POUND - Post Medieval settlement	A settlement to the NW of Old Pound is recorded on the Tithe Map c1840, named Fernleigh and it is still occupied.
40	MCO53630	NANPEAN - Post Medieval settlement	The settlement of 'Aunts' is recorded at this location on the Tithe Map c1840 has been completely destroyed.
41	MCO53634	OLD POUND - Post Medieval house, Post Medieval pigsty, Post Medieval settlement	A settlement to the NW of Old Pound is recorded on the 1st Edition OS map c1880 and consists of a house and a granite single storey pig shed.
42	MCO53636	OLD POUND - Post Medieval cottage pair	A settlement NW of Old Pound consists of a pair of cottages and they are recorded on the 1st Edition 1:2500 OS map c1880.

43	MCO54022	OLD POUND - Post Medieval terrace, Post Medieval settlement	A settlement at Old Pound consists of a terrace of three small workers' cottages.
44	MCO53695	CURRIAN VALE - Post Medieval settlement	All that survives of Whitemoor Cottage, a settlement to the ENE of Currian Vale, is one small granite single storey building with a single pitch roof; everything else has been destroyed by the expansion of china clay workings.
45	MCO53696	CURRIAN VALE - Post Medieval cottage pair	A settlement to the NE of Currian Vale is recorded on the Tithe Map c1840 and named Higher Cottages, they are still occupied and named 1 & 2 Tolcarne Villas.
46	MCO48285	CURRIAN VALE - Post Medieval shaft	A line of pits are visible on aerial photographs
47	MCO48285	CURRIAN VALE - Post Medieval shaft	A line of pits are visible on aerial photographs
48	MCO26908	LONGSTONE DOWNS - Post Medieval extractive pit	Surface mining on Longstone Downs was surveyed at 1:2500 by CAU in 1990
49			
50			
51	MCO48242	LONGSTONE DOWNS - Post Medieval leat	A leat 280m long and running N-S is visible as an earthwork ditch and bank on aerial photographs
52			
53	MCO48271	OLD POUND - Post Medieval quarry	Two large cut features are visible as earthworks on aerial photographs
54	MCO48272	LONGSTONE - Post Medieval extractive pit	Two extractive pits surrounded by spoil, a spoilheap and a prospecting trench are visible on aerial photographs
55			
56	MCO48273	OLD POUND - Post Medieval field boundary	Two linear features are visible as earthwork banks on aerial photographs
57			
58	MCO48275	OLD POUND - Post Medieval leat, Post Medieval extractive pit	A group of extractive pits and two possible leats are visible on aerial photographs
59	MCO48276	LONGSTONE DOWNS - Post Medieval ridge and furrow	Remains of earthwork ridge and furrow are visible on aerial photographs
60			
61	MCO48277	LONGSTONE DOWNS - Post Medieval trackway	A series of trackways criss cross over Longstone Down.
62	MCO48279	LONGSTONE DOWNS - Post Medieval quarry, Post Medieval extractive pit	A number of large cut features, ranging from 9m to 38m long, are visible as earthwork hollows on aerial photographs
63			
64	MCO48282	WHITEMOOR - Post Medieval leat	A long thin double ditch feature is visible on aerial photographs
65	MCO25257	DUBBERS - Post Medieval china clay works	Dubbers china clay works was worked at least from 1854 when a steam engine was installed
66			
67			
68			
69	MCO25309	LONGSTONE - Post Medieval china clay works	Longstone china clay works was to close in 1942 when owned by ECLP Co. Ltd.
70			
71			
72			

73	MCO26909	OLD POUND - Post Medieval streamworks	An eluvial streamworks at Old Pound survive and include a cutting, leat and heaps.
74	MCO12356	OLD POUND - Post Medieval mine	A mine adit at Old Pound was surveyed in 1990 and a cluster of extractive pits are visible on aerial photographs.
75			
76			
77	MCO48283	LONGSTONE DOWNS - Post Medieval spoil heap	Five parallel mounds, the longest of which is 96m, are visible on aerial photographs
78	MCO48284	WHITEMOOR - Post Medieval settling tank	A group of settling tanks enclosed by an earthwork bank is visible on aerial photographs
79			
80	MCO48285	CURRIAN VALE - Post Medieval shaft	A line of pits are visible on aerial photographs
81	MCO48269	LITTLEJOHNS - Post Medieval field boundary	A linear feature is visible as a single ditch on aerial photographs
82	MCO48270	WHITEMOOR - Post Medieval trackway	A trackway is visible on aerial photographs
83	MCO48287	WHITEMOOR - Post Medieval streamworks, Post Medieval extractive pit	A group of small extractive pits and trenches are visible as earthworks on aerial photographs
84	MCO53537	NOPPIES - Modern spoil heap, Modern pit, Modern trackway, Modern drain	Linear and circular marks visible on aerial photographs immediately north of Noppies (27913) are modern features, drainage lanes, tracks, pits and overgrown mounds.
85	MCO48278	LONGSTONE DOWNS - Modern military buildings	A line of at least 35 small square parchmarks, each roughly 5m x 5m, are visible on aerial photographs
86	MCO25308	DOROTHY - Modern china clay works	Dorothy china clay works was in operation in 1901 but was to close in 1942
87			
88			
89	MCO48280	LONGSTONE DOWNS - Modern military buildings	A line of at least 28 small square parchmarks, each roughly 5m x 5m, are visible on aerial photographs
90			
91			
92			
93	MCO48258	GOVERSETH HILL - Undated enclosure	A small single bank sub-circular enclosure, roughly 10m in diameter, is visible on aerial photographs.

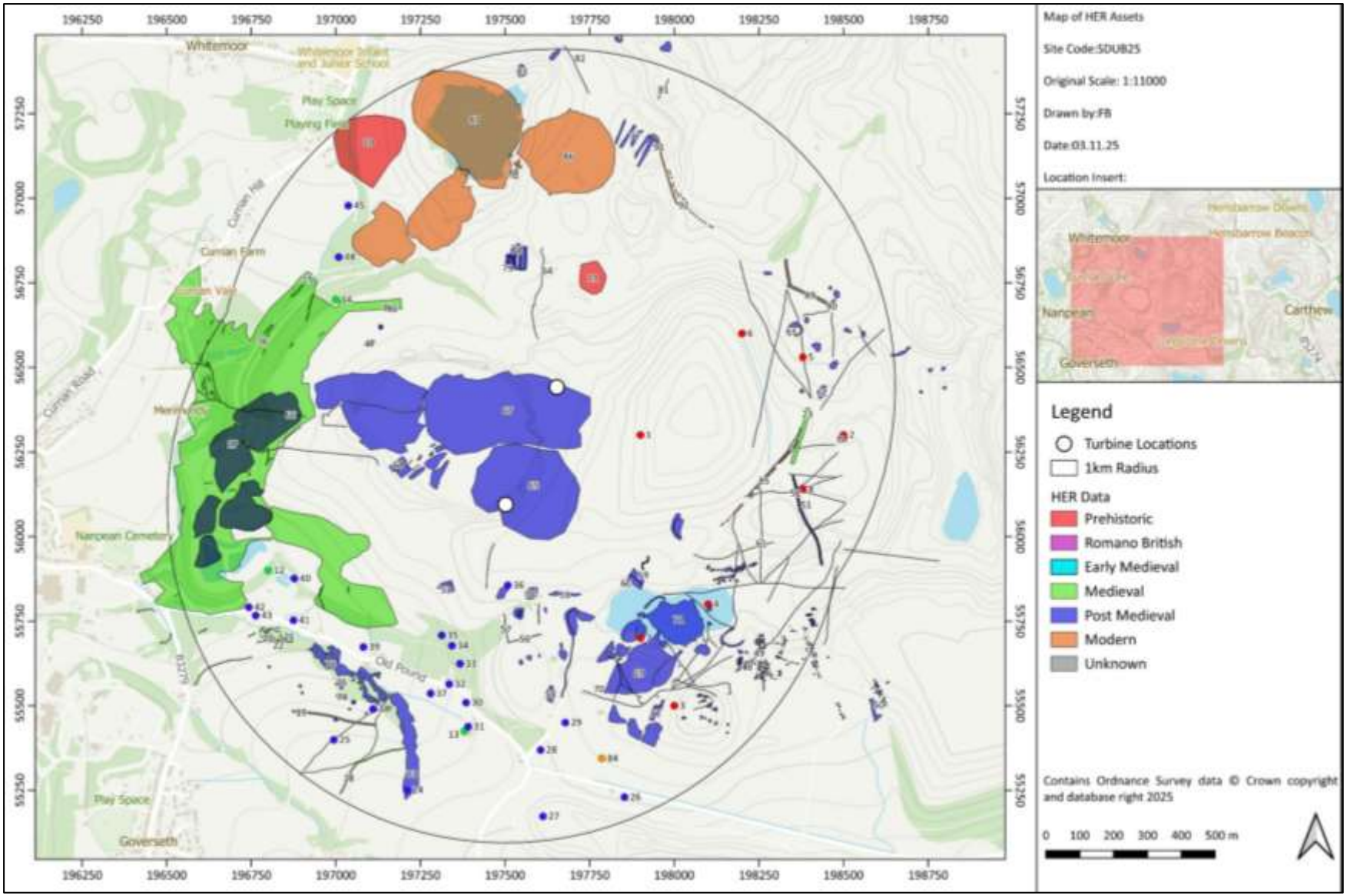

FIGURE 19: HERITAGE ASSETS WITHIN 1KM OF THE SITE RECORDED IN THE CSHER

TABLE 3: HERITAGE INTERVENTIONS WITHIN 1KM OF THE SITE RECORDED IN THE CSHER.

No	Event No	Type	Name
1	ECO2238	Excavation	Longstone Downs, St Stephen-in-Brannel and St Mewan
2	ECO2265		St Austell Barrows
3	ECO6	Building Survey	Old Pound Farmstead
4	ECO6	Building Survey	Old Pound Farmstead
5	ECO6	Building Survey	Old Pound Farmstead
6	ECO6725	Desk Based Assessment; Geophysical Survey; Watching Brief	Blackpool Pit Pipeline
7	ECO884	Building Survey	Hill Crest (Blackpool pit)
8	ECO884	Building Survey	Hill Crest (Blackpool pit)
9	ECO884	Building Survey	Hill Crest (Blackpool pit)
10	ECO481	Evaluation	Whitemoor, St Stephen-in-Brannell

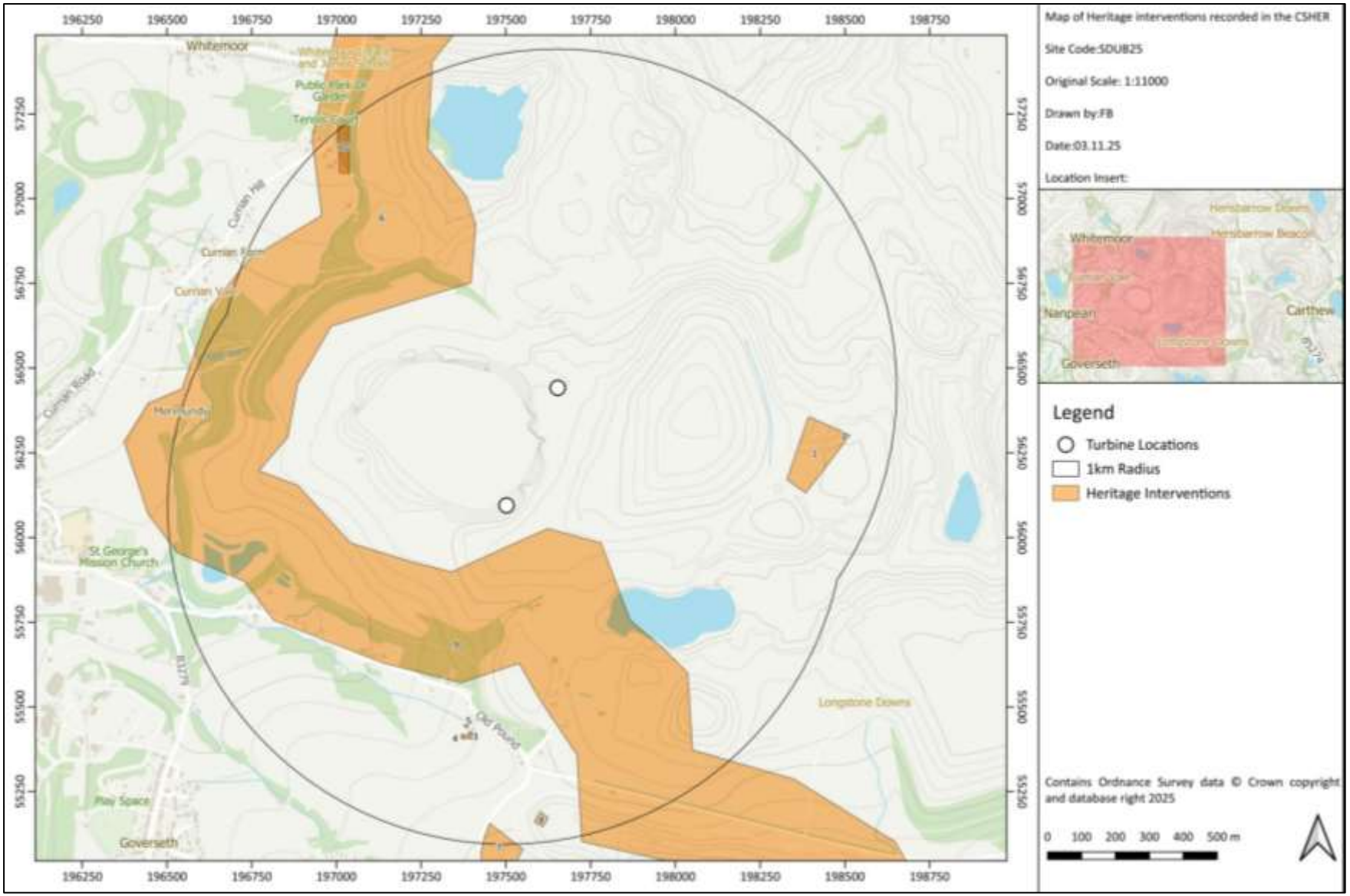

FIGURE 20: HERITAGE INTERVENTIONS WITHIN 1KM OF THE SITE RECORDED IN THE CSHER

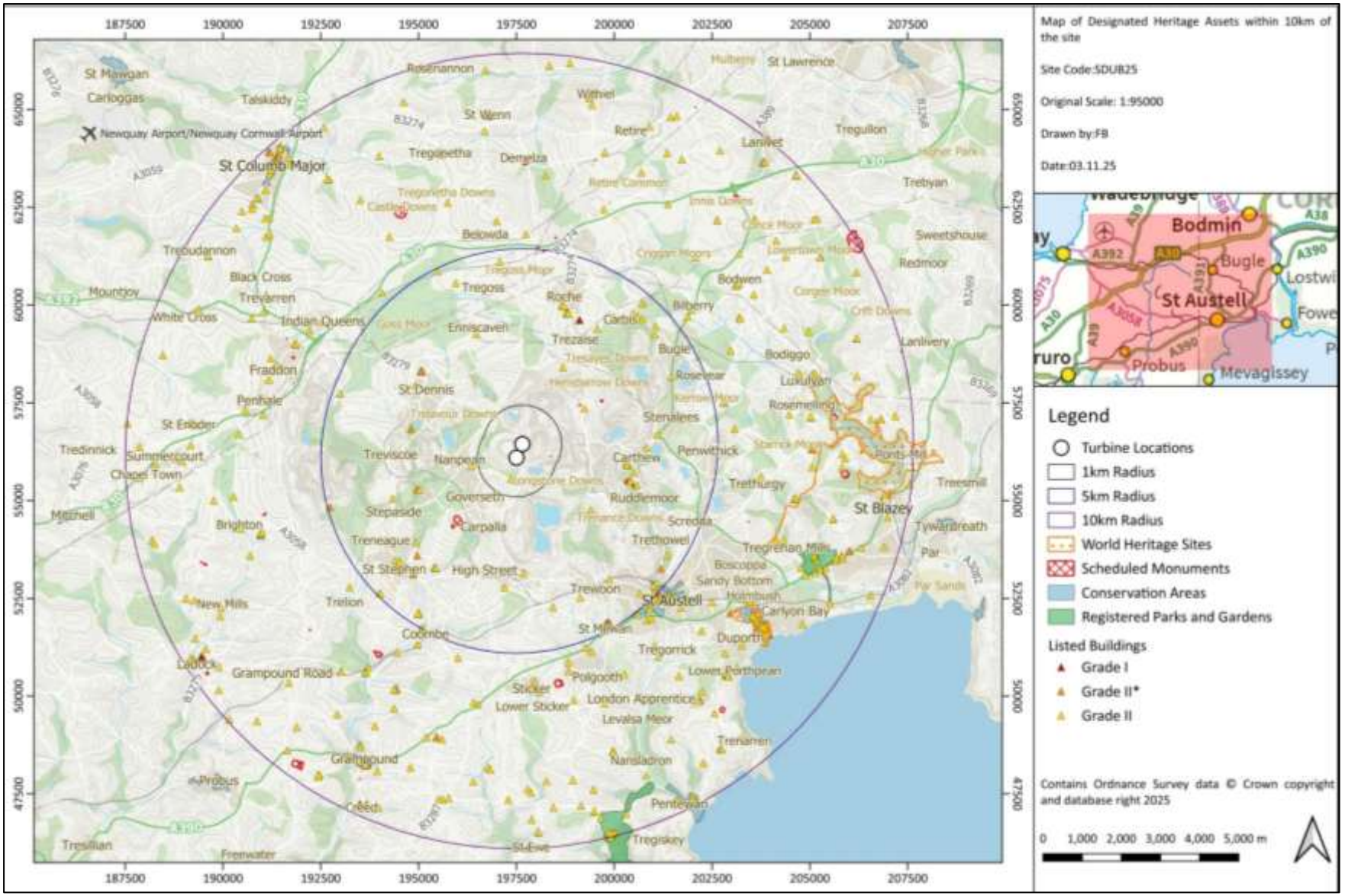

FIGURE 21: ALL DESIGNATED HERITAGE ASSETS WITHIN 10 KM OF THE SITE

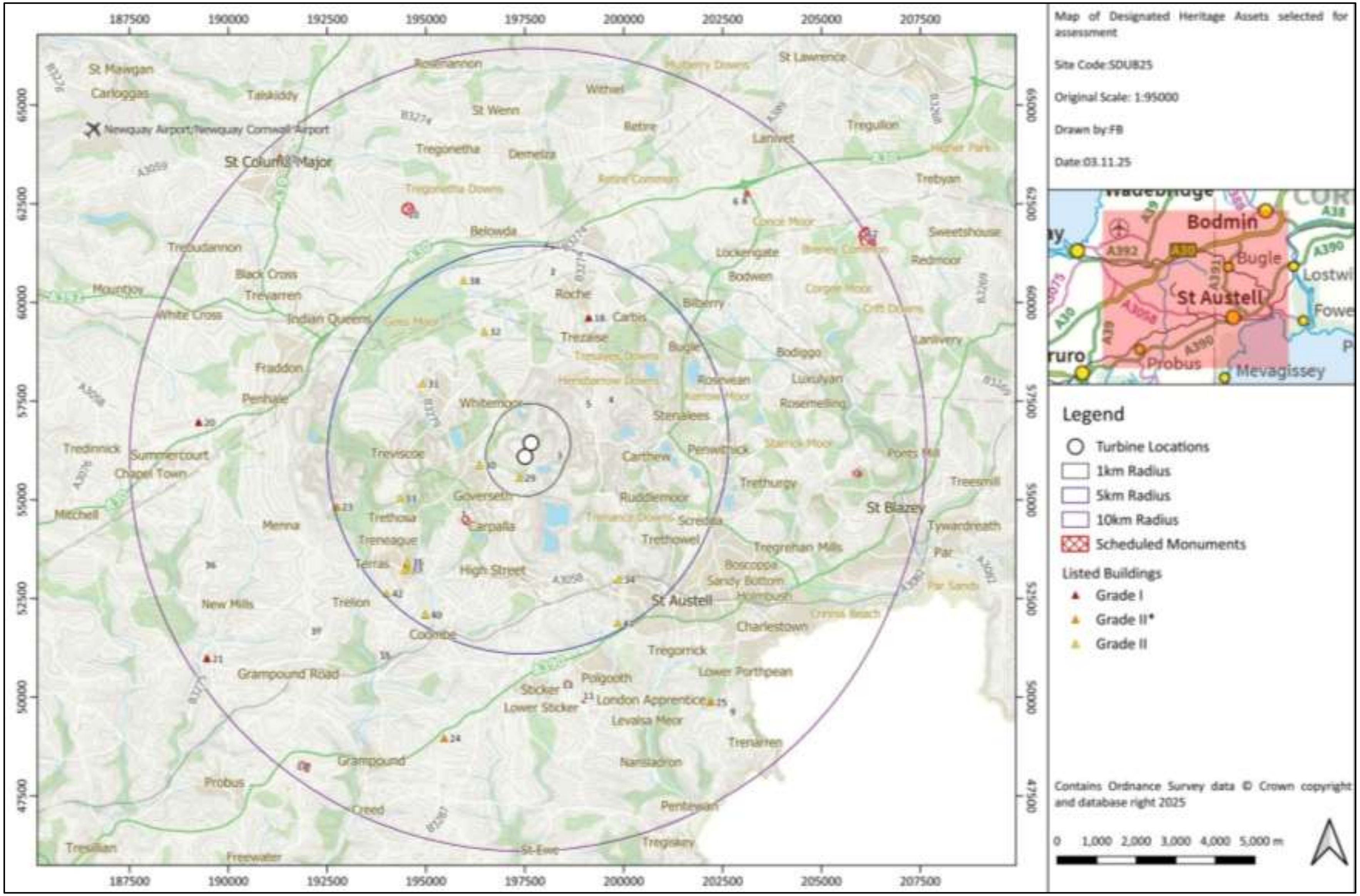

FIGURE 22: DESIGNATED HERITAGE ASSETS SELECTED FOR ASSESSMENT

TABLE 4: DESIGNATED HERITAGE ASSETS SELECTED FOR ASSESSMENT SHOWN ON FIGURE 22

No	List No	Name	Grade
1	1003091	Earlier prehistoric hillfort and round cairn at St Stephen's Beacon	SM
2	1004231	Three bowl barrows between 120m and 820m south of Brynn Barton Cottage	SM
3	1004343	Longstone on Longstone Downs	SM
4	1004372	Round cairn with beacon called Hensbarrow	SM
5	1007292	Platform cairn 180m northwest of Hensbarrow Farm	SM
6	1005451	Bowl barrow 270m south west of Castle Hill Farm	SM
7	1006663	Small multivallate hillfort 230m south-east of Great Prideaux	SM
8	1006684	A henge re-used as a medieval playing place, 75m north east of Castle Hill Farm	SM
9	1006695	Round called Castle Gotha	SM
10	1006713	Large multivallate hillfort with two bowl barrows known as Castle-an-Dinas, 335m north of Tresaddern Bungalow	SM
11	1007288	Part of a mining complex at South Polgooth Mine	SM
12	1007306	Earlier prehistoric hillfort, stone hut circle settlement and field system at Helman Tor	SM
13	1011994	Sticker Camp later Prehistoric-Roman round	SM
14	1016890	Prehistoric and Roman settlement at Carvossa	SM
15	1017685	Resugga Castle later prehistoric univallate hillfort	SM
16	1019064	Three bowl barrows 670m and 775m north west of Homer Downs	SM
17	1020751	Round barrow 530m north west of Carnwinnick	SM
18	1327342	Chapel Of St Michael At Roche Rock	I
19	1137033	Church Of St Stephen	I
20	1311865	Church Of St Enoder	I
21	1310553	Church Of St Ladoca	I
22	1144068	Church Of St Columba	I
23	1327463	Meledor Farmhouse	II*
24	1144033	Pennans Farmhouse	II*
25	1211821	Penrice	II*
26	1144073	Bank House	II*
27	1144107	Town Hall	II*
28	1144067	The Glebe House	II*
29	1143985	Bible Christian Chapel With Attached Sunday School	II
30	1407730	Nanpean Cemetery War Memorial	II
31	1144085	House Immediately East Of The Old Rectory	II
32	1247110	Cottage At Sw 9646 5925	II
33	1327466	Trethosa School	II

34	1136662	Gover Railway Viaduct Including Piers To North	II
35	1407749	St Stephen Churchtown Cemetery War Memorial	II
36	1144790	Queens Head Inn	II
37	1312479	Church Room	II
38	1327341	Pendine Farmhouse	II
39	1327461	Stable About 50 Metres West Of Bodinnick Farmhouse	II
40	1143987	Barn Attached To South Of The Stable About 50 Metres West Of Bodinnick Farmhouse	II
41	1327442	Church of St Mewan	II*
42	1136836	Resugga Farmhouse	II

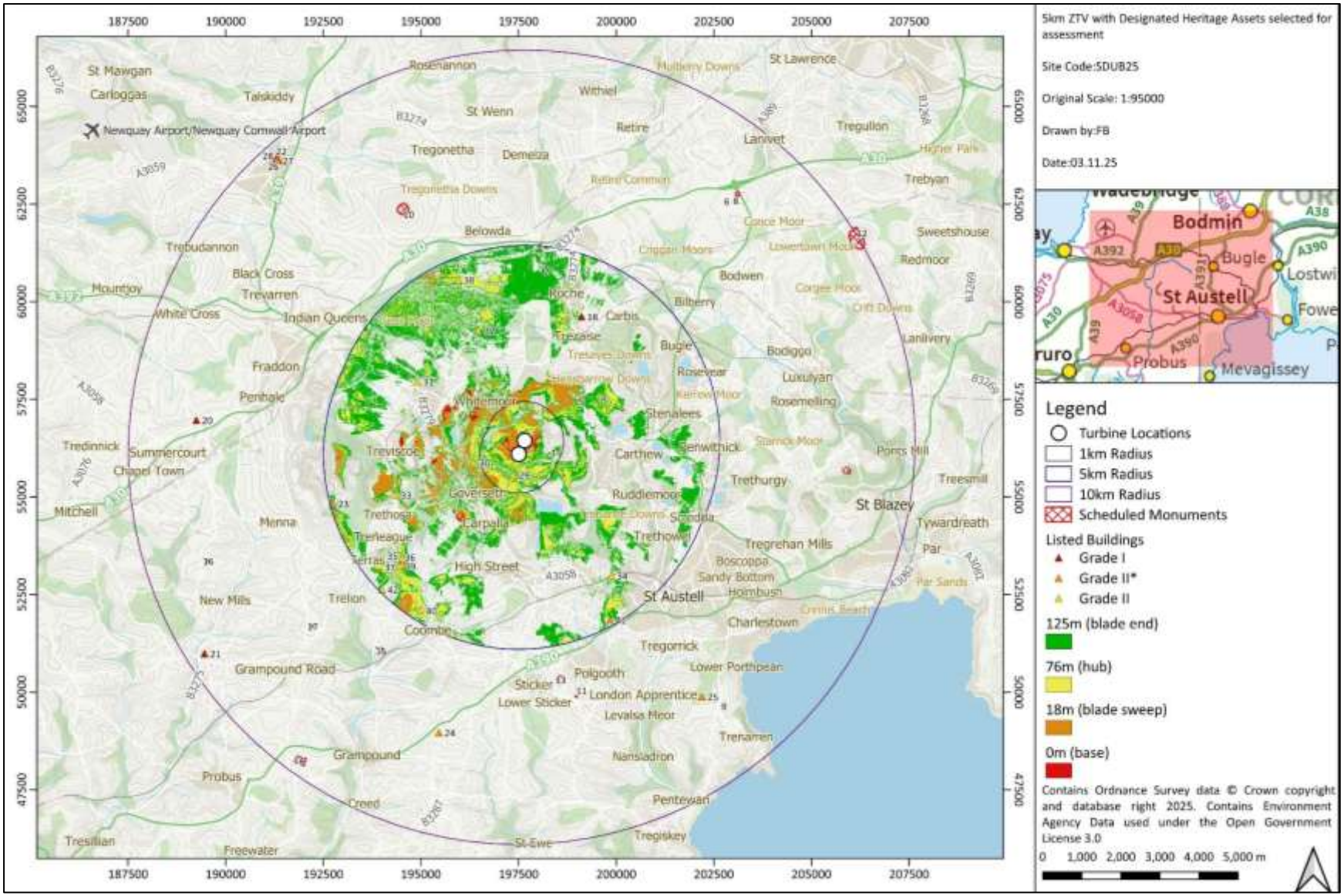

FIGURE 23: 5KM ZTV USING 1M DSM LIDAR DATA

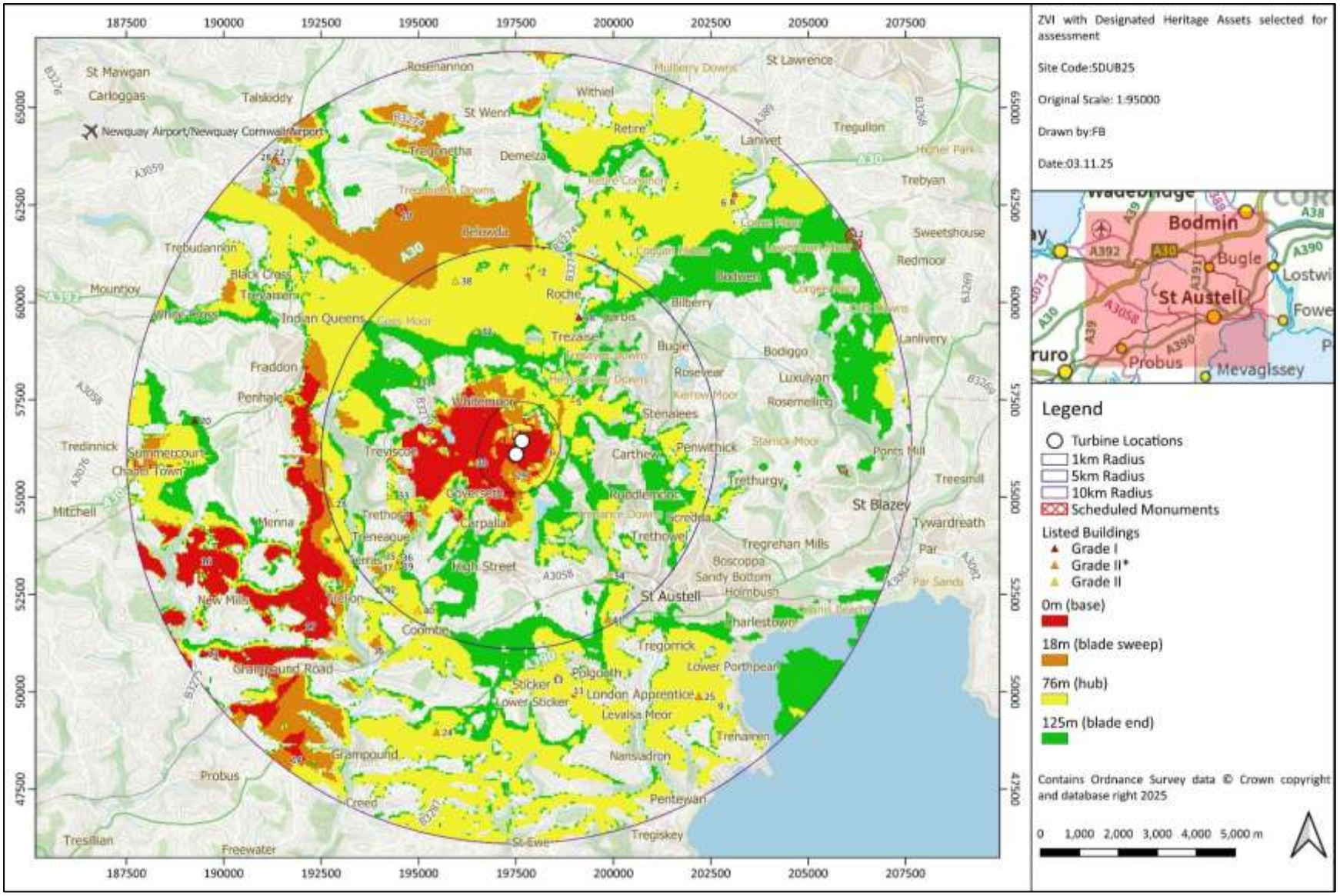

FIGURE 24:10KM ZVI PRODUCED USING OS PANORAMA (BARE EARTH) DATA.

APPENDIX 3: SUMMARY METHOD STATEMENT

TABLE 5: THE HIERARCHY OF VALUE/ IMPORTANCE (DERIVED FROM DMRB LA104 TABLE 3.2N).

Value (Sensitivity) of Receptor / Resource	Typical description
Very High	Very high importance and rarity, international scale and very limited potential for substitution e.g. elements of a WHS that convey OUV
High	High importance and rarity, national scale, and limited potential for substitution e.g. Grade I and II* buildings; Scheduled Monuments
Medium	Medium or high importance and rarity, regional scale, limited potential for substitution e.g. Grade II buildings
Low	Low or medium importance and rarity, local scale
Negligible	Very low importance and rarity, local scale.

TABLE 6: SIGNIFICANCE OF EFFECTS MATRIX (DERIVED FROM ICOMOS 2011, 9-10).

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

TABLE 7: PROFESSIONAL JUDGEMENT OF IMPACT (DERIVED FROM DMRB LA104 TABLE 3.4N).

Magnitude of Impact		Typical Description
Major	Adverse	Loss of resource and/or quality and integrity of resource; severe damage to key characteristics, features, or elements.
	Beneficial	Large scale or major improvement of resource quality; extensive restoration; major improvement of attribute quality.
Moderate	Adverse	Loss of resource, but not adversely affecting the integrity; partial loss of/damage to key characteristics, features or elements.
	Beneficial	Benefit to, or addition of, key characteristics, features, or elements; improvement of attribute quality.
Minor	Adverse	Some measurable change in attributes, quality, or vulnerability; minor loss of, or alteration to, one (maybe more) key characteristics, features, or elements.
	Beneficial	Minor benefit to, or addition of, one (maybe more) key characteristics, features, or elements; some beneficial impact on attribute or a reduced risk of negative impact occurring.
Negligible	Adverse	Very minor loss or detrimental alteration to one or more characteristics, features, or elements.
	Beneficial	Very minor benefit to or positive addition of one or more characteristics, features, or elements.
No change		No loss or alteration of characteristics, features, or elements; no observable impact in either direction.

TABLE 8: SCALES OF IMPACT AS PER THE NPPF, AS RELATED TO TABLE 5.

Scale of Impact		
No Change	*Neutral*	No impact on the heritage asset.
Less than Substantial Harm	*Negligible Adverse*	Where the developments may be visible or audible but would not affect the heritage asset or its setting, due to the nature of the asset, distance, topography, or screening.
	Minor Adverse	Where the development would have an effect on the heritage asset or its setting, but that effect is restricted due to the nature of the asset, distance, or screening from other buildings or vegetation.
	Moderate Adverse	Where the development would have a pronounced impact on the heritage asset or its setting, due to the sensitivity of the asset and/or proximity. The effect may be ameliorated by screening or mitigation.
Substantial Harm	*Major Adverse*	Where the development would have a severe and unavoidable effect on the heritage asset or its setting, due to the particular sensitivity of the asset and/or close physical proximity. Screening or mitigation could not ameliorate the effect of the development in these instances.
Total Loss	*Total Loss*	The heritage asset is destroyed.

[1] SSEW 1983: *Legend for the 1:250,000 Soil Map of England and Wales*.
[2] BGS 2025: https://geologyviewer.bgs.ac.uk
[3] SWARCH 2024: *Impact Assessment Methodology v.2.02*.
[4] Landscape Institute 2019: *Visual Representation of Development Proposals. Technical Guidance Note 06/19*. p28. Scottish Natural Heritage 2017: *Visual Representation of Wind Farm: Guidance, version 2.2*. Scottish Natural Heritage. p52.
[5] Palmer, J.F, Vanderheyden, V., Alves, G. & Sismani, G. 2017: 'Best Focal Length to Represent a Landscape View Using a Single-Frame Photograph', ResearchGate DOI:10.14627/537629024.
[6] Hunter & Livingstone 2012: *The Effect of Focal Length on Perceptions of Scale and Depth in Landscape Photographs. Implications of visualisations standards for wind energy developments. Final Report 17 May 2012*. The Highland Council.
[7] Highland Council 2016: *Visualisation Standards for Wind Energy Developments*. p10.
[8] Ladenburg, J. & Campbell, K. 2023: 'The Correlation Between Screen Size and Visibility of Renewable Energy Structures in Online Acceptance Studies: The Case of Wind Turbines', *Energy RESEARCH LETTERS* vol.4(3).
[9] Miles, H. & Miles, T. 1971: 'Excavations on Longstone Downs, St. Stephen-in-Brannel and St. Mewan', *Cornish Archaeology* 10, 5-28.
[10] CAU 1991: *The Archaeology of the St. Austell China-Clay Area. An Archaeological and Historical Assessment*. Report no. 1991R011.
[11] English Heritage 2008: *Conservation Principles*.
[12] Historic England 2017: *GPA3: The Setting of Heritage Assets*.
[13] Historic England 2019: *Statement of Heritage Significance: Analysing Significance in Heritage Assets*. HEAN 12.
[14] IEMA, IHBC & CIfA 2021: *Principles of Cultural Heritage Impact Assessment in the UK*.
[15] Historic England 2017: *GPA3: The Setting of Heritage Assets*, p6.
[16]chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://map.cornwall.gov.uk/reports_CCA/Cornwall%20CCA%2027%20St%20Austell%20or%20Hensbarrow%20China%20Clay%20area.pdf.
[17] I.e. as per Scottish Natural Heritage 2017: *Siting and Designing Wind Farms in the Landscape: Guidance. Version 3a*.
[18] See Appendix 1 for how the significance of effect has been determined.