

# LAND at HIGHWORTHY HIGHER CLOVELLY DEVON

Results of a  
Historic Visual Impact Assessment



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Land at Highworthy, Higher Clovelly, Devon

# Land at Highworthy Higher Clovelly, Devon

## Results of a Historic Visual Impact Assessment

*For*

Tony Carver  
Of  
Natural Energy

*On behalf of*

J & S Davey & Partners

*By*



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## Summary

*This report presents the results of a limited historic visual impact assessment carried out by South West Archaeology Ltd. (SWARCH) on land at Highworthy, Higher Clovelly, Devon in advance of the construction of a single 11kW wind turbine.*

*This report focuses upon a single heritage asset, the highly significant and complex Clovelly Dykes.*

*The proposed turbine is fairly small in size and will not dominate the landscape as the larger forms are known to do. Although a visual feature, the modern impacts immediately within and on the edge of the monument will carry the eye more than the turbine, despite its moving blades. There will be direct inter-visibility, therefore this must be recognised as having an element of negative impact on such an important site, however that impact is certainly of a fairly minimal level; **negative/minor** impact.*

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## Acknowledgements

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The Staff of the Devon Record Office

## 1.0 Introduction

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<b>Location:</b>	Land at Highworthy
<b>Parish:</b>	Higher Clovelly
<b>County:</b>	Devon
<b>NGR:</b>	231659,121844

### 1.1 Project Background

This report presents the results of a desk-based assessment and historic visual impact assessment carried out by South West Archaeology Ltd. (SWARCH) on land at Highworthy, Higher Clovelly, Devon (Figure 1). The work was commissioned by Tony Carver of Natural Energy (the Agent) on behalf of J & S Davey & Partners (the Client) in order to assess the impact of the installation of an 11kW wind turbine on the heritage asset of Clovelly Dykes.

A previous report produced by Natural Energy assessed the impact of the turbine on all heritage assets within 2km of the proposal site, however further detail on the impact of the proposed turbine on Clovelly Dykes was requested by English Heritage.

### 1.2 Topographical and Geological Background

The proposed turbine site is located in a field located to the south-east and approximately 150m from Highworthy Farm which itself lies approximately 2km south of the main settlement at Higher Clovelly and approximately 1.6km from the hillfort of Clovelly Dykes. The site lies at approximately 200m AOD within a gently undulating landscape, the peaks of which sit roughly at the same level (see Figure 1).

The soils of this area are the well-drained fine loamy soils of the Neath Association (SSEW 1983). These overlie the mudstone, siltstone and sandstone of the Holsworthy Group (BGS 2014).

### 1.3 Historical & Archaeological Background

The parish of Clovelly lies in the hundred and deanery of Hartland. The manor was historically part of the royal demesne which passed through the hands of the Giffords to the Carys who possessed it until this branch of the family died out in 1724. The manor was subsequently purchased by Zachary Hamlyn whose family remained in possession into the 19<sup>th</sup> century.

The area around the proposed turbine site at Highworthy is classified by the Devon Historic Landscape Characterisation as *medieval enclosures based on strip fields*, with the surrounding landscape primarily consisting of Post-medieval and Modern enclosures of rough ground.

There has been little archaeological work in or around the immediate location of the proposed turbine, but prehistoric tools and arrowheads have been reported at the nearby farmsteads of East Dyke, Thornery and Slade and a number of features potentially dating from the prehistoric period through to the Second World War have been identified through aerial photography in the surrounding area.

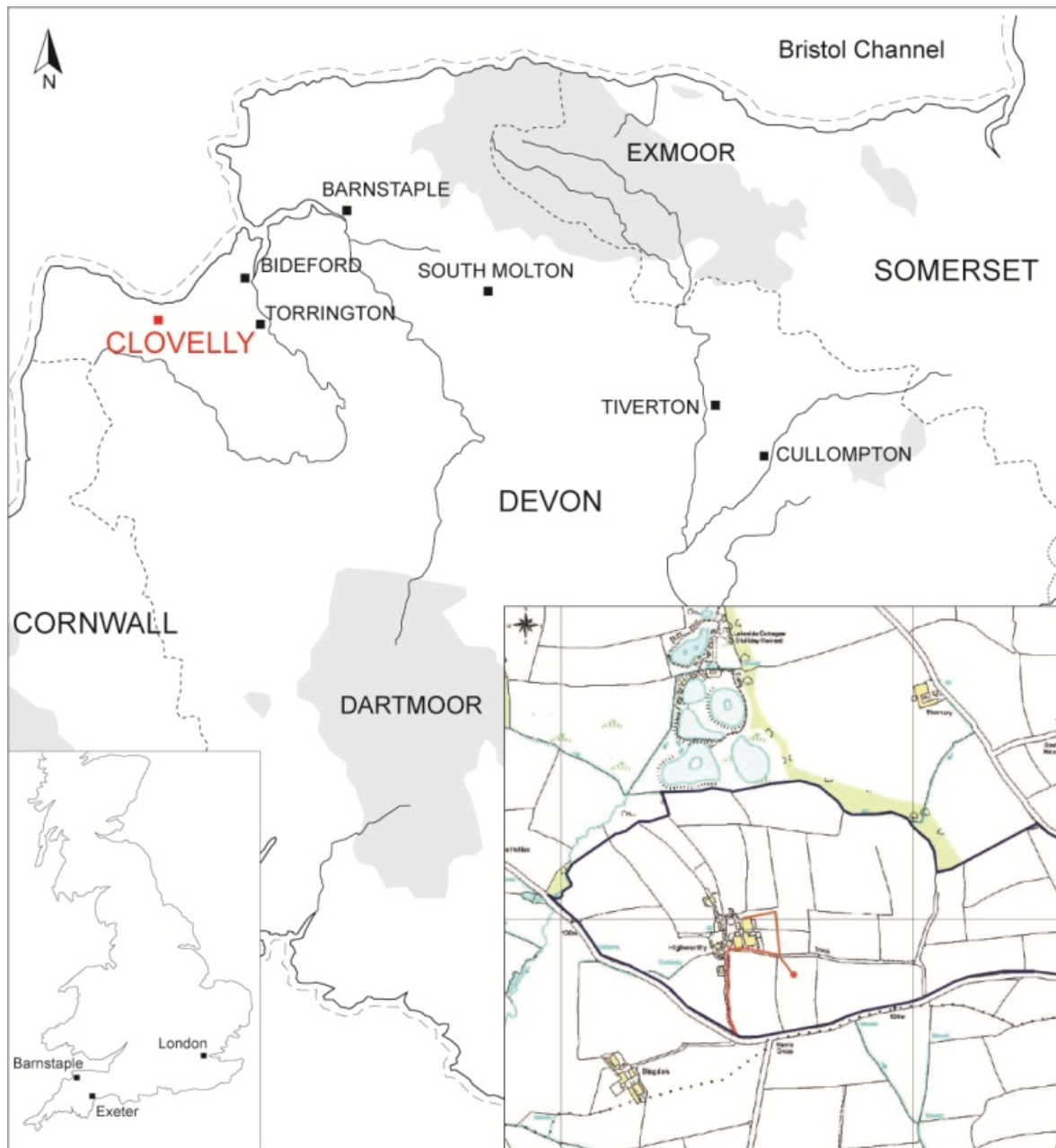


Figure 1: Site location (the location of the proposed turbine and access track is indicated).

#### 1.4 Methodology

This document follows the guidance as outlined in: *Standard and Guidance for Archaeological Desk-Based Assessment* (IfA 1994, revised 2012), *The Setting of Heritage Assets* (English Heritage 2011a), *Seeing History in the View* (English Heritage 2011b), *Managing Change in the Historic Environment: Setting* (Historic Scotland 2010), *Wind Energy and the Historic Environment* (English Heritage 2005), and with reference to *Visual Assessment of Windfarms: Best Practice* (University of Newcastle 2002), *Guidelines for Landscape and Visual Impact Assessment 2<sup>nd</sup> edition* (Landscape Institute 2002), *The Development of Onshore Wind Turbines* (Cornwall Council 2013), *Photography and Photomontage in Landscape and Visual Impact Assessment* (Landscape Institute 2011), *Visualisation Standards for Wind Energy Developments* (Highland Council 2010), and the *Visual Representation of Windfarms: Good Practice Guidance* (Scottish Natural Heritage 2006).

## 2.0 Site Inspection and Archaeological Background

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### 2.1 Site Inspection

The site was visited by Emily Wapshott in March 2014; the field was walked and photographed, the topography noted and descriptions made.

The site lies immediately north of the small junction of Harris Cross, on the parish road between the villages of Woolsery and Clovelly. The large farm complex lies several fields over to the north-west with another farm complex is located to the south-west at Blagdon. A third farm (Ashcroft) is visible south-south-east. The field lies within a roughly rectangular parcel of land, framed on the north, east and west by small tracks leading off the parish road. The field in which the turbine is to be sited lies in the middle of this parcel of land. It is accessed via a gate in its northern boundary, in the north-west corner of the field. The long parallel field boundaries lie roughly north-south in alignment, but become markedly more curvi-linear in their nature to the southern end of the field. This characteristic was also noted in the adjacent field, to the west. The field boundaries are comprised of stone-faced hedge-banks, fenced on the inner side which provide some immediate local blocking between field enclosures. The field is currently laid to grass pasture, with a fairly level shallow slope to the south of the field, with slight natural undulations. There are no obvious or defined earthworks within the enclosure and no evidence of crop marks or other archaeological indicators. The field may contain surviving below ground archaeology, but there is certainly no evidence of this at surface level. The field pattern in the general area would suggest this area is long established agricultural land, with evidence of earlier open field and strip field systems to the south towards Woolsery. There are wide views to the south-east, south and south-west from the field and the farm and farm buildings have direct inter-visibility with the site of the proposed turbine.

### 2.2 Assessment of Impact

Ground disturbance associated with the installation of supports, for the wind turbine, the concrete base pad and cabling or ancillary works during the construction phase could result in permanent, irreversible loss of below-ground remains of archaeological features within the development area, or of elements of these. The works, expected to be deeper than current topsoil levels, will affect any buried cut features, although these are likely to have already suffered some truncation during the construction of the smaller turbine.

The impact of the construction phase of the turbine would be **permanent** and **irreversible** on the buried archaeology immediately beneath the turbine site, and along the underground cable run and the access tracks. The limited 25 year cycle of the turbines operational phase will limit all negative impacts to **temporary/reversible**.



## 3.0 Visual Impact Assessment

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### 3.1 National Policy

General policy and guidance for the conservation of the historic environment are now contained within the *National Planning Policy Framework* (Department for Communities and Local Government 2012). The relevant guidance is reproduced below:

#### **Paragraph 128**

*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 129**

*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.*

### 3.2 Likely Impacts of the Proposed Development

#### 3.2.1 Types and Scale of Impact

Two general types of archaeological impact associated with wind turbine developments have been identified as follows:

- Construction phase – The construction of the wind turbine will have direct, physical impacts on the buried archaeology of the site through the excavation of the turbine foundations, the undergrounding of cables, and the provision of any temporary vehicle access ways into and within the site. Such impacts would be permanent and irreversible.
- Operational phase – A wind turbine might be expected to have a visual impact on the settings of some key heritage assets within its viewshed during the operational phase, given the height of its mast (18m to hub and 24.8m to tip). Such factors also make it likely that the development would have an impact on the immediate surrounding Historic Landscape Character. The operational phase impacts are temporary and reversible.

#### 3.2.2 Scale and Duration of Impact

The impacts of a wind turbine on the historic environment may include positive as well as adverse effects. However, turbines of any scale are large, usually white, and inescapably modern intrusive visual actors in the historic landscape. Therefore the impact of a wind turbine will almost always be **neutral** (i.e. no impact) or **negative** i.e. it will have a **detrimental impact** on the setting of ancient monuments and the vast majority of protected historic buildings.

For the purposes of this assessment, these impacts are evaluated on a five-point scale:

### Impact Assessment

<i>Neutral</i>	No impact on the heritage asset.
<i>Negative/unknown</i>	Where an adverse impact is anticipated, but where access cannot be gained or the degree of impact is otherwise impossible to assess.
<i>Negative/minor</i>	Where the turbine would impact upon the setting of a heritage asset, but the impact is restricted due to the nature of the asset, distance, or local blocking.
<i>Negative/moderate</i>	Where the turbine would have a pronounced impact on the setting of a heritage asset, due to the sensitivity of the asset and proximity of the turbine; it may be ameliorated by local blocking or mitigation.
<i>Negative/substantial</i>	Where the turbine would have a severe impact on the setting of a heritage asset, due to the particular sensitivity of the asset and/or close physical proximity; it is unlikely local blocking or mitigation could ameliorate the impact of the turbine in these instances.
<i>Group Value</i>	Where a series of similar or complementary monuments or structures occur in close proximity their overall significance is greater than the sum of the individual parts. This can influence the overall assessment.
<i>Permanent/irreversible</i>	Where the impact of the turbine is direct and irreversible e.g. on potential buried archaeology beneath the turbine base.
<i>Temporary/reversible</i>	Where the impact is indirect, and for the working life of the turbine i.e. c.25 years.

In addition, the significance of a monument or structure is often predicated on the condition of its upstanding remains, so a rapid subjective appraisal was also undertaken.

### Condition Assessment

<i>Excellent</i>	The monument or structure survives intact with minimal modern damage or interference.
<i>Good</i>	The monument or structure survives substantially intact, or with restricted damage/interference; a ruinous but stable structure.
<i>Fair</i>	The monument or structure survives in a reasonable state, or a structure that has seen unsympathetic restoration/improvement
<i>Poor</i>	The monument survives in a poor condition, ploughed down or otherwise slighted, or a structure that has lost most of its historic features
<i>Trace</i>	The monument survives only where it has influenced other surviving elements within the landscape e.g. curving hedgebanks around a cropmark enclosure.
<i>Not applicable</i>	There is no visible surface trace of the monument.

Note: this assessment covers the survival of upstanding remains; it is not a risk assessment and does not factor in potential threats posed by vegetation – e.g. bracken or scrub – or current farming practices.

### 3.2.3 Statements of Significance of Heritage Assets

The majority of the heritage assets considered as part of the Visual Impact Assessment have already had their significance assessed by their statutory designations; which are outlined below:

#### *Scheduled Monuments*

In the United Kingdom, a Scheduled Monument is considered an historic building, structure (ruin) or archaeological site of '**national importance**'. Various pieces of legislation, under planning,

conservation, etc., are used for legally protecting heritage assets given this title from damage and destruction; such legislation is grouped together under the term 'designation', that is, having statutory protection under the *Ancient Monuments and Archaeological Areas Act 1979*. A heritage asset is a part of the historic environment that is valued because of its historic, archaeological, architectural or artistic interest; those of national importance have extra legal protection through designation.

Important sites have been recognised as requiring protection since the late 19<sup>th</sup> century, when the first 'schedule' or list of monuments was compiled in 1882. The conservation and preservation of these monuments was given statutory priority over other land uses under this first schedule. County Lists of the monuments are kept and updated by the Department for Culture, Media and Sport. In the later 20<sup>th</sup> century sites are identified by English Heritage (one of the Government's advisory bodies) of being of national importance and included in the schedule. Under the current statutory protection any works required on or to a designated monument can only be undertaken with a successful application for Scheduled Monument Consent. There are 19,000-20,000 Scheduled Monuments in England.

#### *Listed Buildings*

A Listed building is an occupied dwelling or standing structure which is of special architectural or historical interest. These structures are found on the *Statutory List of Buildings of Special Architectural or Historic Interest*. The status of Listed buildings is applied to 300,000-400,000 buildings across the United Kingdom. Recognition of the need to protect historic buildings began after the Second World War, where significant numbers of buildings had been damaged in the county towns and capitals of the United Kingdom. Buildings that were considered to be of 'architectural merit' were included. The Inspectorate of Ancient Monuments supervised the collation of the list, drawn up by members of two societies: The Royal Institute of British Architects and the Society for the Protection of Ancient Buildings. Initially the lists were only used to assess which buildings should receive government grants to be repaired and conserved if damaged by bombing. The *Town and Country Planning Act 1947* formalised the process within England and Wales, Scotland and Ireland following different procedures. Under the 1979 *Ancient Monuments and Archaeological Areas Act* a structure cannot be considered a Scheduled Monument if it is occupied as a dwelling, making a clear distinction in the treatment of the two forms of heritage asset. Any alterations or works intended to a Listed Building must first acquire Listed Building Consent, as well as planning permission. Further phases of 'listing' were rolled out in the 1960s, 1980s and 2000s; English Heritage advise on the listing process and administer the procedure, in England, as with the Scheduled Monuments.

Some exemption is given to buildings used for worship where institutions or religious organisations have their own permissions and regulatory procedures (such as the Church of England). Some structures, such as bridges, monuments, military structures and some ancient structures may have Scheduled Monument status as well as Listed Building status. War memorials, milestones and other structures are included in the list and buildings from the first and middle half of the 20<sup>th</sup> century are also now included as the 21<sup>st</sup> century progresses and the need to protect these buildings or structures becomes clear. Buildings are split into various levels of significance; Grade I, being most important; Grade II\* the next; with Grade II status being the most widespread. English Heritage Classifies the Grades as:

- Grade I* buildings of exceptional interest, sometimes considered to be **internationally important** (forming only 2.5% of Listed buildings).
- Grade II\** buildings of particular importance, **nationally important**, possibly with some particular architectural element or features of increased historical importance; more than mere special interest (forming only 5.5% of Listed buildings).

*Grade II* buildings that are also **nationally important**, of special interest (92% of all Listed buildings).

Other buildings can be Listed as part of a group, if the group is said to have 'group value' or if they provide a historic context to a Listed building, such as a farmyard of barns, complexes of historic industrial buildings, service buildings to stately homes etc. Larger areas and groups of buildings which may contain individually Listed buildings and other historic homes which are not Listed may be protected under the designation of 'conservation area', which imposes further regulations and restrictions to development and alterations, focusing on the general character and appearance of the group.

#### *Parks and Gardens*

Culturally and historically important 'man-made' or 'designed' landscapes, such as parks and gardens are currently "listed" on a non-statutory basis, included on the 'Register of Historic Parks and Gardens of special historic interest in England' which was established in 1983 and is, like Listed Buildings and Scheduled Monuments, administered by English Heritage. Sites included on this register are of **national importance** and there are currently 1,600 sites on the list, many associated with stately homes of Grade II\* or Grade I status. Emphasis is laid on 'designed' landscapes, not the value of botanical planting; sites can include town squares and private gardens, city parks, cemeteries and gardens around institutions such as hospitals and government buildings. Planned elements and changing fashions in landscaping and forms are a main focus of the assessment.

### 3.3 Methodology

The methodology adopted in this document is based on that outlined in *The Setting of Heritage Assets* (English Heritage 2011), with reference to other guidance, particularly the *Visual Assessment of Windfarms: Best Practice* (University of Newcastle 2002). The assessment of visual impact at this stage of the development is an essentially subjective one, and is based on the experience and professional judgement of the authors.

Visibility alone is not a clear guide to visual impact: "the magnitude or size of windfarm elements, and the distance between them and the viewer, are the physical measures that affect visibility, but the key issue is human perception of visual effects, and that is not simply a function of size and distance" (University of Newcastle 2002, 2). People perceive size, shape and distance using many cues, so context is critically important. For instance, research on electricity pylons (Hull & Bishop 1988) has indicated scenic impact is influenced by landscape complexity: the visual impact of pylons is less pronounced within complex scenes, especially at longer distances, presumably because they are less of a focal point and the attention of the observer is diverted. There are many qualifiers that serve to increase or decrease the visual impact of a proposed development (see Table 1), some of which are seasonal or weather-related.

The principal consideration of this assessment is not visual impact *per se*. It is an assessment of the importance of setting to the significance of heritage assets, and the sensitivity of that setting to the visual intrusion of the proposed development. The schema used to guide assessments is shown in Table 1 (below).

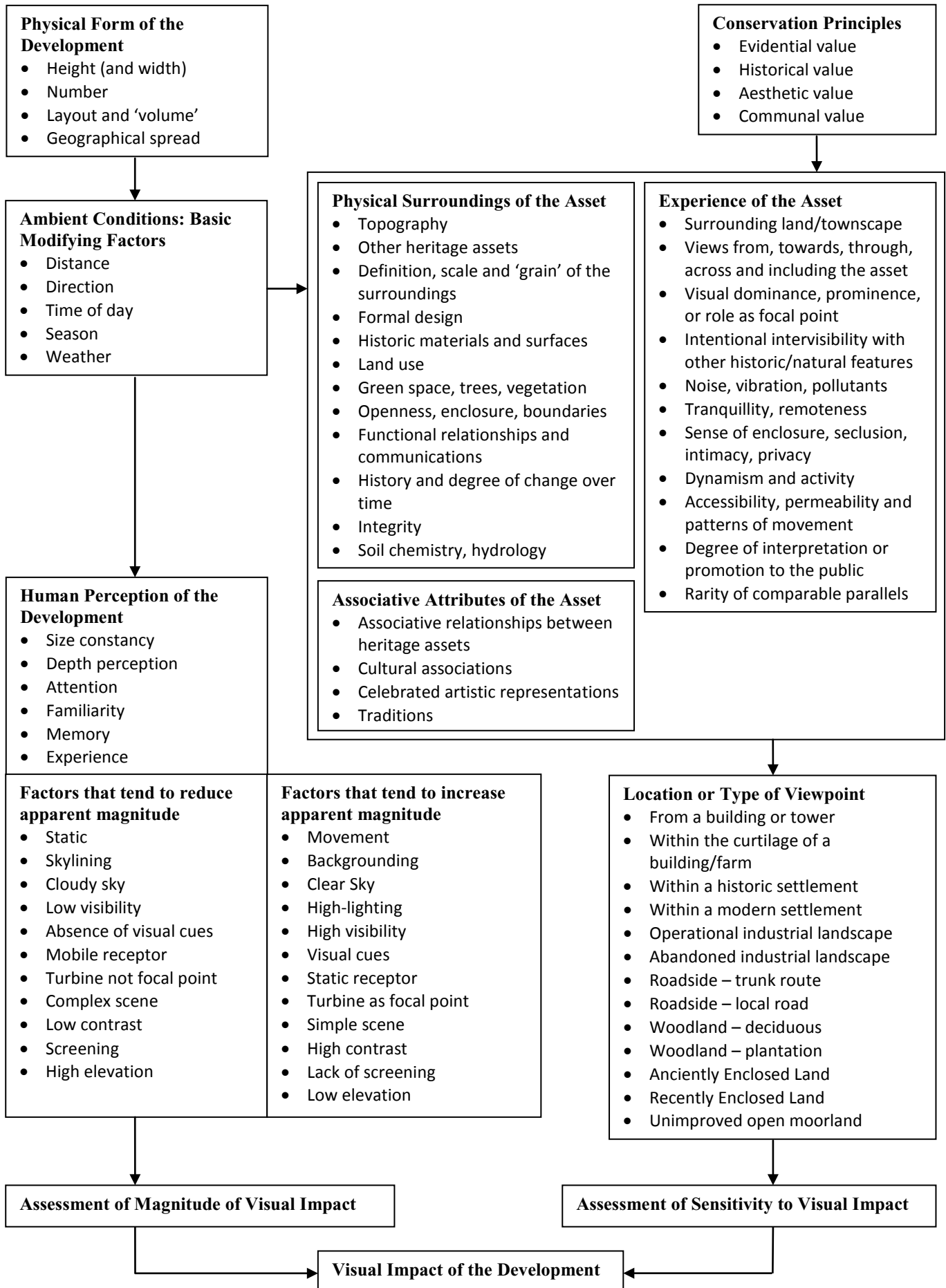


Table 1: The conceptual model for visual impact assessment proposed by the University of Newcastle (2002, 63), modified to include elements of *Assessment Step 2* from the Setting of Heritage Assets (English Heritage 2011, 19).

### 3.3.1 The Sinclair-Thomas Matrix

The Sinclair-Thomas Matrix was developed in order to predict the likely visual impact of windfarms in the wider landscape. This work took place in the late 1990s and remains virtually the only guidance on the subject. It was used, for instance, to help guide the development of the Cornwall planning advice (2013) on wind turbines (Nick Russell, *pers. comm.*).

In the following table (below), the figures quoted were developed with regard to windfarms rather than individual wind turbines, and should in this instance be treated as a worse-case scenario. Subsequent work has suggested it over-estimates the impact at middle distances, as it takes no account of differing landscape character or visual context (University of Newcastle 2002, 61).

The distances quoted are predicated on clear visibility, and local weather conditions would have a marked impact on the visibility of any given turbine. Work by Bishop (2002), undertaken with computer simulations and using a turbine 63m to tip, noted the following:

- The most significant drop in recognition rates occurred at 8-12km (clear air) and 7-9km (light haze);
- Visual impact drops rapidly at 4km and is at <10% at 6km in clear air;
- Visual impact drops rapidly at 4km and is at <10% at 5km in light haze;
- Low contrast in light haze reduces the distance threshold by 20%;
- High contrast can dramatically increase the potential impact of white towers;
- Ratings were highly sensitive to changing atmospheric conditions.

Descriptors	Zone	Height to tip (m)			
		41-45	52-55	70	95
		Approximate Distance Range (km)			
<b>Dominant:</b> due to large scale, movement, proximity and number	A	0-2	0-2.5	0-3	0-4
<b>Prominent:</b> major impact due to proximity, capable of dominating the landscape	B	2-4	2.5-5	3-6	4-7.5
<b>Moderately intrusive;</b> clearly visible with moderate impact, potentially intrusive	C	4-6	5-8	6-10	7.5-12
Clearly <b>visible</b> with moderate impact, becoming less distinct	D	6-9	8-11	10-14	12-17
<b>Less distinct:</b> size much reduced but movement still discernible	E	9-13	11-15	14-18	17-22
<b>Low impact:</b> movement noticeable in good light, becoming components in overall landscape	F	13-16	15-19	19-23	22-27
Becoming <b>indistinct</b> with negligible impact on the wider landscape	G	16-21	19-25	23-30	27-35
Noticeable in good light but <b>negligible impact</b>	H	21-25	25-30	30-35	35-40
Negligible or <b>no impact</b>	I	25	30	35	40

Table 2: The modified Sinclair-Thomas Matrix (after 1999).

In the following assessment, the single heritage asset; Clovelly Dykes, has been considered according to Sinclair-Thomas Matrix zones.

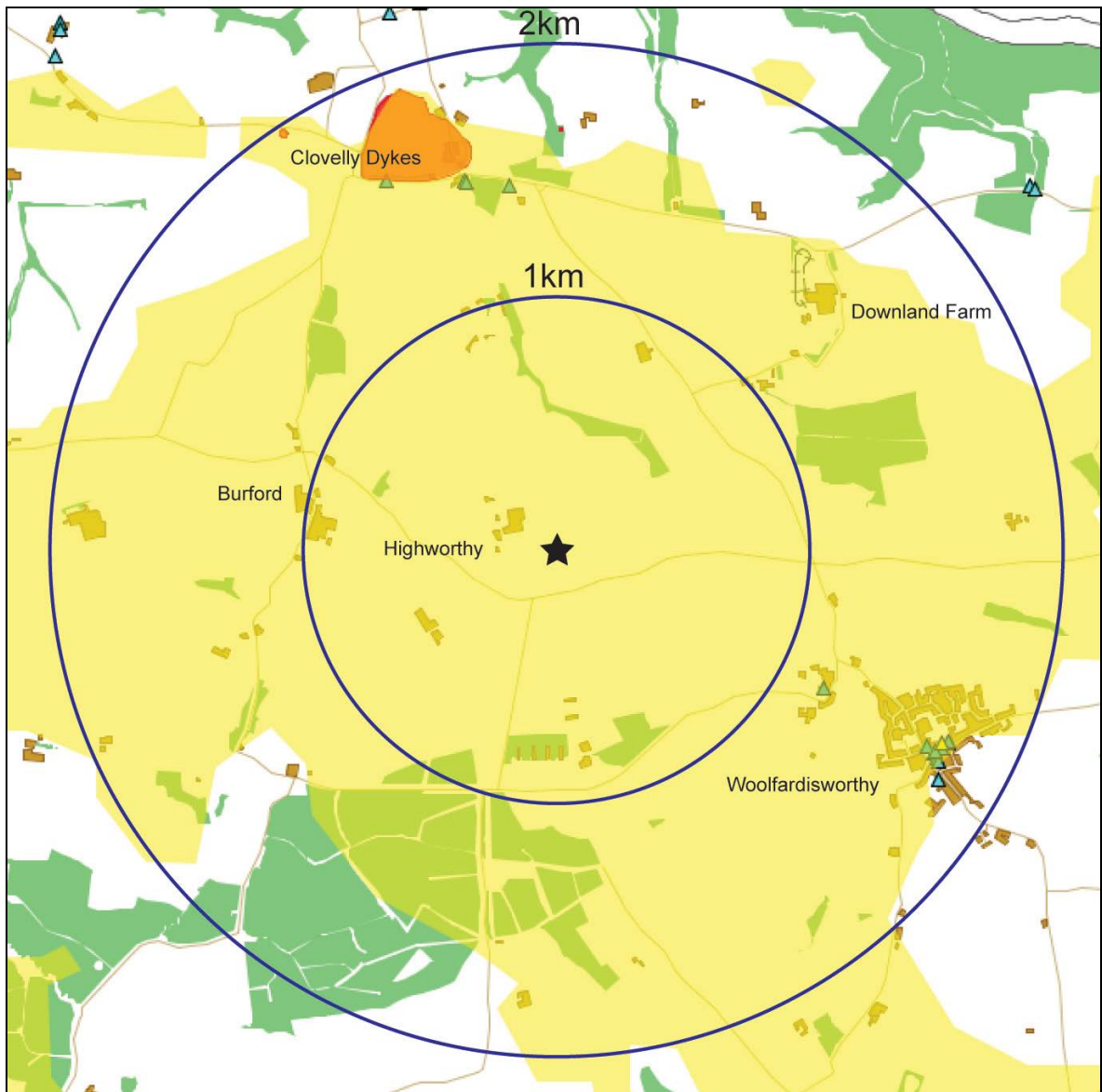


Figure 2: Location of the designated heritage asset within the ZTV (to tip) of the proposed turbine, out to 2km.

### 3.4 Results of the Viewshed Analysis

The viewshed analysis indicates that the Zone of Theoretical Visibility (ZTV) in this undulating landscape will be extensive within 2km of the turbine, in all directions, but very patchy beyond 2km. The visibility of the proposed turbine will diminish with distance, and will be locally blocked by intervening buildings within settlements, individual trees, woodlands, hedgebanks, and natural topography, particularly to the north and south-west. Theoretical visibility has been assessed as the visibility to the blade tip (24.8m). Up to 1km all HER records were consulted; up to 5km Listed Buildings (of all grades); Scheduled Monuments; Registered Parks and Gardens and Registered Battlefields were considered.

### 3.5 Field Verification of ZTV

On the whole, the ZTV mapping was found to be a fairly accurate representation of the likely inter-visibility between the proposed wind turbine and the surrounding landscape. The immediate area is characterised by fairly level ground with some slight hills and higher ridges of ground, running east-west, before the drop to the cliffs to the north and the deeper valleys to the south. Highworthy Farm itself lies within 0.5km to the north-west of the site. There are three scheduled monuments recorded within a 2km radius to the proposed turbine, including the highly significant Clovelly Dykes, which is the focus of this impact survey. This monument complex comprises a multi-vallated ditched and banked enclosure, which lies 1.5-1.75km away, and inter-visibility was generally confirmed to some extent for the surroundings of this monument. The settlement of Woolfardisworthy or Woolserly lies within 2km from the turbine, to the south-east, and the village of Clovelly lies 3-3.5km to the north, north-west, set on the cliffs, with the major district town of Bideford approximately 14-15km to the north-east.

### 3.6 Impact by Class of Monument/Structure

#### 3.6.1 Fortifications: Defended Settlement sites, Castles and Camps

Castles are large masonry or timber structures with associated earthenworks that were built during the medieval period (c.1050-1500). These structures were built with defence in mind, and were often constructed in highly prominent locations. They were also expressions of status and power, and thus highly visible statements about the wealth and power of their owners. 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. High status manorial sites could also be enclosed and 'defendable', both types of monument could be associated with deer parks, gardens or pleasure grounds.

Prehistoric fortifications were also built in highly prominent locations, and are also taken to represent visible expressions of status and power.

- Clovelly Dykes; high significance; scheduled monument; condition: fair to excellent. This is a large multi-vallate Iron Age hillfort, covering an area of over 8 hectares. The area is relatively level, forming a high undulating plateau before the ground falls away to the north to the sea. There is a shallow slope to the south, steeper slope to the south-west and the ground is fairly level to the east and west. The A39 road now forms the southern boundary of the main upstanding central portion of the hillfort, possibly cutting it off from any associated below ground remains in the fields to the south. A small roundabout associated with the road is built within the south-east corner of the earthworks, with a small service station and modern buildings. Running from the south-east corner up the eastern side of the upstanding and visible portion of the monument are a row of historic cottages and two large farm complexes to either side of a small parish road, which also breaches this eastern side of the monument and runs north to Clovelly village. These houses have been built between and on top of the outer banks. Some of the outer bank to the east, which encloses these houses, have been planted with trees and hedges. The majority of the monument lies as agricultural land, with banks surviving to significant heights, being fenced to form enclosures, with overgrowth allowed to develop on the banks. A long scrubby intake of land has been allowed to develop between the main part of the monument and the road. It appears additional gateways and openings may have been cut into the banks to form entrances between fields.

There are very few visual points from which to experience the monument, with only limited visibility over the banks and through gateways possible from the public roads. The monument



appears to survive to such an extent that the banks restrict visual links across the feature itself, with the overgrowth on the banks locally blocking views to the next enclosure within the inner or outer ring of outworks, except through gateways. The public cannot access the monument as it is part of an agricultural holding and the majority of the monument is shielded by its overgrown outer banks, which preclude views inwards and do not allow for the recognition of the patterns created by the banks. Wider experience of the monument is therefore limited and the monument holds no real landscape presence as much of it is shielded from view and the buildings and modern features around it carry the eye. Within the monument and to the north, where the ground starts to fall away to the cliffs, the monument does hold more landscape dominance. Proceeding along the A39 road, approaching the monument from the south-west, the outer banks and overgrowth which tops them are clearly visible and technically could hold presence except that the overgrowth and blocking of views to the inner banks belies the real nature of the feature (appearing as a hedge).

A turbine which lies over 1km away cannot directly impact the monument, neither its above nor below ground remains. Views from the monument are vital to our understanding of its function, as a multi-use enclosure; habitation with additional defensive abilities. Views to the north survive and views to the north-west, west and south-west also are clear, however the landscape is divided by hedge-banks and has been changed by agriculture and is not (the presumed) more open landscape of the Iron Age. To the south there are views over the fields, but views to the south-west are limited by the petrol station building and the buildings behind, as well as a sub-station. To the east of these buildings there is a long plantation of native and shrub trees which runs south. There will be views to the turbine on land to the south-east beyond the end of the woodland, as the turbine will be constructed on a slight ridge. There will also be views from the southern edge of the monument, alongside the A39 road, but there certainly will be no views from inside the monument, or to the north or east sides. From the top of the banks, outside and within the monument to the west and south-west sides, views to the turbine are expected; however, as it is on private land and these views cannot be confirmed.

The proposed turbine is fairly small in size and will not dominate the landscape as the larger forms are known to do. Although a visual feature, the modern impacts immediately within and on the edge of Clovelly Dykes will carry the eye more than the turbine, despite its moving blades. There will be direct inter-visibility, therefore this must be recognised as having an element of negative impact on such an important site, however that impact is certainly of a fairly minimal level; impact: **negative/minor**.

## 4.0 Conclusions

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### 4.1 Discussion and Conclusion

Of all the heritage assets lying within a 2km range of the proposed turbine, the Iron Age hillfort of Clovelly Dykes is by far the largest, most complete and most dominant in the landscape, and therefore likely to be most impacted by the erection of a wind turbine in the vicinity. However, a number of factors combine to already restrict the visibility of the monument itself and thus lessen the potential visual impact the turbine will have upon the monument, including the local topography, later and modern developments and the state of preservation of the hillfort itself.

Although a large amount of the earthwork remains of the hillfort are still extant the undulating and yet relatively level nature of the surrounding landscape and the later and modern buildings constructed in and around the hillfort gives the monument less prominence within the landscape. The generally well preserved and mostly overgrown banks of the monument shield the inner earthworks from view and give little away as to the nature of these features, the monument is also located on private land without public access.

The proposed turbine is fairly small in size and will not dominate the landscape as the larger forms are known to do. Although a visual feature, the modern impacts immediately within and on the edge of the monument will carry the eye more than the turbine, despite its moving blades. There will be direct inter-visibility, therefore this must be recognised as having an element of negative impact on such an important site, however that impact is certainly of a fairly minimal level; **negative/minor** impact.

## 5.0 Bibliography & References

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### Published Sources:

- Cornwall Council** 2012: *Technical Paper E4 (b) Annex 1: Landscape Sensitivity and Strategy Matrices for each Landscape Character Area*.
- Cornwall Council** 2013: *The Development of Onshore Wind Turbines*. Renewable Energy Planning Guidance Note 3.
- Bishop, I.D.** 2002: 'Determination of the thresholds of visual impact: the case of wind turbines', *Environment and Planning B: Planning and Design* 29, 707-18.
- Dyer, M. J. & Manning, P. T.** 1998: *Objective 5B: Lower Tamar Valley Recreation and Land Management Initiative: Cultural Heritage Appraisal*. Exeter Archaeology Report 98.60.
- Gelling, M. & Cole, A.** 2000: *The Landscape of Place-Names*. Shaun Tyas.
- English Heritage** 2005: *Wind Energy and the Historic Environment*.
- English Heritage** 2011a: *The Setting of Heritage Assets*.
- English Heritage** 2011b: *Seeing History in the View*.
- Highland Council** 2010: *Visualisation Standards for Wind Energy Developments*.
- Historic Scotland** 2010: *Managing Change in the Historic Environment: Setting*.
- Hull, R.B. & Bishop, I.D.** 1988: 'Scenic impacts of electricity transmission towers: the influence of landscape type and observer distance', *Journal of Environmental Management* 27, 99-108.
- Landscape Institute** 2002: *Guidelines for Landscape and Visual Impact Assessment* 2<sup>nd</sup> edition. London.
- Landscape Institute** 2011: *Photography and Photomontage in Landscape and Visual Impact Assessment*. Advice Note 01/11
- Land Use Consultants** 2010: *Joint Landscape Character Assessment for North Devon and Torridge Districts*.
- Scottish Natural Heritage** 2006: *Visual Representation of Windfarms: Good Practice Guidance*.
- Soil Survey of England and Wales** 1983: *Legend for the 1:250,000 Soil Map of England and Wales (a brief explanation of the constituent soil associations)*.
- University of Newcastle** 2002: *Visual Assessment of Windfarms: Best Practice*. Scottish Natural Heritage commission report F01AA303A.

### Websites:

- British Geological Survey** 2014: *Geology of Britain Viewer*.  
[http://maps.bgs.ac.uk/geologyviewer\\_google/googleviewer.html](http://maps.bgs.ac.uk/geologyviewer_google/googleviewer.html) [accessed 19.03.2014]
- Devon Historic Landscape Characterisation** 2014: *Historic Landscape Characterisation*  
[http://www.devon.gov.uk/index/environment/historic\\_environment/landscapes/landscape-characterisation.htm](http://www.devon.gov.uk/index/environment/historic_environment/landscapes/landscape-characterisation.htm) [accessed 19.03.2014]

## Appendix 1

### Details of the Key Heritage Asset

Name: Clovelly Dykes

UID: 32193

This monument includes a sub-triangular multivallate hillfort situated on the summit of a high upland ridge which has no naturally defended sides but which does command far reaching views in all directions and excellent sea views. The monument survives as a series of enclosures, demarcated by rampart banks and ditches. The innermost enclosure is sub rectangular in shape with an entrance to the east; the rampart measures up to 2.1m high, and the ditch survives as a buried feature. The second enclosure is concentric to the first with entrances to the east and south east. The rampart to this stands up to 3m high, the outer ditch is up to 3.5m deep.

The outermost enclosure is roughly triangular in plan and has a steep rampart up to 3m high. The outer ditch survives as a buried feature to the east, and south, but is up to 3m deep on the western and northern sides. There is a curving overlapped entrance to the north. Within the outer enclosure the hillfort seems to have been subdivided by two smaller ramparts which run approximately north to south on the western side, the banks attain a height of up to 2.5m and the accompanying ditches are both preserved as buried features. To the north west a large farm with its associated buildings has cut into the outer rampart and ditch.

A large number of modern structures and features are excluded from the scheduling; these are roadside signs and a sign for the nearby garage, a letter box, telephone and electricity supply poles, the farmhouse, a series of outbuildings including garages, covered yards and hard core, all tarmac and concrete surfaces, a group of cottages all other modern structures and all road surfaces; the ground beneath all these features is, however, included.

National Grid Reference: SS 31129 23486

## Appendix 2

### HVIA Supporting Jpegs



View from Kennerland Cross, looking across the farmland on which the turbine will be sited, towards the Clovelly Dykes hillfort on the skyline to the north-west; from the south-east.



The southern field boundary of the field in which the turbine is to be sited, facing onto the small parish road; from the south-east.



The eastern long field boundary, showing the pronounced curve, taken from within the adjacent field; from the south.



Land at Highworthy, Higher Clovelly, Devon



View northwards up the field, across the proposed site of the turbine, showing the fairly level grass pasture; from the south.



View from the turbine field to the farm complex at Highworthy; from the south-east.



Land at Highworthy, Higher Clovelly, Devon



View to the northern field boundary; a well maintained hedge-bank fenced on the inner field side; from the south.



View along the curving long western field boundary; from the south-south-east.





The western banks of Clovelly Dykes hillfort; from the north-west.



View through the gate in the inner western bank of the hillfort, to the inner enclosures; from the west.



Land at Highworthy, Higher Clovelly, Devon



View across the south-western corner of the surviving section of the hillfort; from the north-west.



View down the southern banks of the hillfort, where it has been truncated by the A39 road; from the west.



View across the fields to the south of the hillfort, where the outworks survive only below the ground, looking towards the location of the proposed turbine on the ridge of high ground to the south-south-east; from the north-west.



The inner south-eastern bank within the well preserved portion of the hillfort, behind the row of cottages; from the north-east.





The central and north-eastern inner banks and ditches, within the well preserved western half of the hillfort; from the south-east.



The row of cottages built within a section of the south-eastern outworks; from the north.





View across to some of the eastern outworks which survive in part but to a lesser extent to those to the west; from the north-west.



The small service station and other structures built to the south-east of the roundabout on the edge of the upstanding section of the hillfort, within the outworks; from the north.



The additional housing around the small service station which provides some local blocking to the hillfort to the south-east, with the banks of the monument visible to the left of the picture; from the north-east.



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