

14 CULTURAL HERITAGE

14.1 INTRODUCTION

This chapter assesses the impacts of the Derreenacrinnig West Wind Farm Project, as described in **Chapter 2: Project Description**, on the cultural heritage resource, which encompasses heritage assets relevant to both the tangible (archaeology, architecture heritage); and non-tangible (history, folklore, tradition, place names etc.) elements of this resource.

The term 'Project' is used within the chapter to refer to all elements of the application for the construction of Derreenacrinnig Wind Farm which consists of the following elements:

- The Wind Farm: includes 3 no. wind turbines, site access roads, Turbine Hardstands, underground cabling and Temporary Construction Compound. This element of the Project is defined as the 'Proposed Development' and is what development consent is sought for.
- Grid Connection Route and Substation: This chapter also provides an assessment of the work required along the proposed Grid Connection Route and onsite 20kV substation.
- Turbine Delivery Route (TDR): The locations of the Turbine Delivery Route work areas are also assessed within this chapter.

The assessment considers the potential effects during the following phases:

- Construction phase;
- Operation phase, and
- Decommissioning phase.

Where negative effects on elements of the cultural heritage resource are predicted, the chapter identifies appropriate mitigation strategies therein.

Common acronyms used throughout this EIAR can be found in **Appendix 1.4**. This chapter of the EIAR is supported by Figures provided at the end of the chapter and by the following Appendix documents provided in Volume III of this EIAR:

- **Appendix 14.1 Photographic Record**
- **Appendix 14.2 Archaeological Inventory Descriptions**

A Construction and Environmental Management Plan (CEMP) is appended to the EIAR in **Appendix 2.1**. In the event planning consent is granted for the Proposed Development, the CEMP will be updated prior to commencement of development to address the

requirements of any relevant planning conditions, including any additional mitigation measures, which are conditioned and will be submitted to the planning authority for written approval. For the purpose of this application, a summary of mitigation measures is included in **Appendix 17.1**.

14.1.1 Statement of Authority

The chapter was prepared by Tony Cummins and David Murphy (John Cronin and Associates) who are both qualified archaeologists. Mr Cummins holds BA and MA degrees in archaeology (University College Cork (UCC), 1992/1994) and has accumulated 30 years continuous industry experience. He was confirmed as a licence eligible archaeologist by the National Monuments Service in 1998. Mr. Murphy holds a BA degree in archaeology (UCC 2003) and is also a licence eligible archaeologist with 21 years continuous industry experience. Both of these individuals have extensive experience in the preparation of impact assessments for renewable energy projects, including Ballinagree Wind Farm, Co. Cork and Grousemount Wind Farm, Co. Kerry.

14.1.2 Assessment Structure

The results of the desktop study and field surveys, which are provided in **Section 14.3** of this chapter, together with the other assessments are considered to allow the Planning Authority to carry out an assessment of the Project from a Cultural Heritage perspective. In line with the revised EIA Directive and current EPA guidelines (as detailed in **Section 14.2.2** below) the chapter provides considerations of effects based on the following:

- Assessment of cultural heritage value and sensitivity;
- Assessment of the magnitude of cultural heritage effects within;
- Assessment of the significance of cultural heritage impacts; and
- Assessment of cumulative cultural heritage impacts.

14.2 ASSESSMENT METHODOLOGY AND SIGNIFICANCE CRITERIA

14.2.1 Definition of Study Area

There are no professional guidelines which define the extent of study areas required to assess the effects of wind farm developments on the cultural heritage resource. The extent of the study areas used for this assessment are, therefore, informed by the years of experience and professional judgement of the specialist and are considered suitable for the assessment of potential effects. The study area reviewed for the assessment comprised the area within the Proposed Development and the surrounding lands

extending for 2 km in all directions beyond its boundary. The extent of this study area was chosen in order to compile a baseline context for the known cultural heritage resource within the Proposed Development and its environs as well as to assess potential direct and indirect effects on the locations and settings of known cultural heritage constraints within this area.

In addition, the wider landscape extending for 10 km in all directions from the Proposed Development was reviewed to determine the presence of any nationally significant cultural heritage constraints with heightened visual sensitivities, i.e., National Monuments, including sites subject to Preservations Orders and World Heritage sites including tentative list sites. This also included a review of other cultural heritage constraints with visual attributes that extend beyond their immediate settings within the 10 km area, such as archaeological monuments with ritual visual alignments across the wider landscape (e.g., stone circles, stone rows, stone pairs and megalithic tombs). The extent of the 10 km area was chosen in order to appraise if the wider landscape contains individual or groupings of such visually sensitive cultural heritage assets that may be susceptible to potential medium-to-high magnitudes of indirect impacts on their wider settings or alignment attributes.

A 200 m wide study area centred on the Grid Connection Route and work areas required to facilitate the delivery of turbines to the Proposed Development was reviewed in order to assess potential impacts of these elements of the Project. The extent of the 200 m study area centred on the Grid Connection Route and Turbine Delivery Route work areas is based on the localised small footprint of ground works required to facilitate the construction of these elements of the Project. This study area is suitable as it facilitated the compilation of a baseline context for the known and potential cultural heritage constraints within the vicinity of the localised footprints of these works and also allowed an appraisal of the potential presence of any previously unrecorded sub-surface elements of these constraints which may be susceptible to direct effects.

A review of Landscape and Visual Amenity chapter, including Zone of Theoretical Visibility maps, was also carried out as part of this assessment (see **Chapter 12**).

14.2.2 Assessment Methodology

The methodology used for this assessment follows guidelines presented in the *Guidelines for Information to be Contained in EIAR* (2022). The chapter complies with the requirements of Directive 2011/92/EU as amended by Directive 2014/52/EU, and the

Planning and Development Act, 2000 (as amended) and Planning and Development Regulations, 2001 (as amended).

14.2.3 Relevant Legislation and Guidance

The tangible elements of the cultural heritage resource can be broadly divided into the archaeological resource comprising sites and monuments dating from prehistory to the post-medieval period and the architectural heritage resource which encompasses standing structures and associated lands of cultural importance often dating to the post-medieval and modern periods. In addition, assets such as local placenames, folklore and traditions are considered part of the intangible cultural heritage resource.

The management and protection of the cultural heritage resource in Ireland is achieved through a framework of international conventions and national laws and policies. This framework was established in accordance with the provisions of the '*European Convention on the Protection of the Archaeological Heritage*' (the Valletta Convention) and the '*European Convention on the Protection of Architectural Heritage*' (Grenada Convention). Both of these conventions were ratified by Ireland in 1997. While there is no current national legislation providing legal protection for the Irish intangible heritage resource it is noted that the UNESCO *Convention for the Safeguarding of the Intangible Cultural Heritage*, 2003, which seeks to safeguard and promote awareness of this element of cultural heritage, was ratified by Ireland in 2015.

The legislation and guidelines that are relevant to this assessment comprise the following:

- Historic and Archaeological Heritage and Miscellaneous Provisions Act 2023
- National Monuments Act 1930 (as amended);
- Heritage Act 1995 (as amended);
- National Cultural Institutions Act 1997(as amended);
- Planning and Development Act 2000 (as amended);
- Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999;
- Department of Arts, Heritage and Gaeltacht (2011) *Architectural Heritage Protection: Guidelines for Planning Authorities*
- Department of Arts, Heritage, Gaeltacht and the Islands (1999) *Framework and Principles for the Protection of Archaeological Heritage*
- Office of the Public Regulator and Department of Housing, Local Government and Heritage (2022) *A Guide to Architectural Heritage*; and

- Office of the Public Regulator and Department of Housing, Local Government and Heritage (2021) *Archaeology in the Planning Process*

14.2.4 Archaeological Heritage

The National Monuments Service (NMS) is currently based in the Department of Housing, Local Government and Heritage (DHLGH) and is responsible for the protection the Irish archaeological resource.

The Historic and Archaeological Heritage and Miscellaneous Provisions Act 2023 was signed into law in October 2023. The DHLGH published an online guidance document in relation to this Act in November 2023¹ which provides an overview of its status, and this is summarised hereafter. While the Act is now law most of its provisions will not enter into force until the Minister has made one or more “Commencement Orders”. This means that Section 7 of the Act, which provides for the repeal of the National Monuments Acts 1930 (as amended) and related legislation, has not entered into force. Accordingly, the National Monuments Acts 1930 (as amended) remain fully in force and will continue to do so for the time being. The Act contains transitional provisions which will, if necessary, enable certain aspects of the existing National Monuments Act 1930 (as amended) to continue in operation notwithstanding their repeal post-commencement of the Act while successor provisions are being brought fully into operation. This includes provisions enabling the existing Record of Monuments and Places to continue to have effect pending the establishment of a new Register of Monuments. A commencement order made on 31st May 2024, insofar as it relates to the Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999 (other than Section 5), has come into operation. On 12 December 2024, further provisions of the Act came into operation, and these relate to historic wrecks and underwater archaeological objects, and also for Irish citizens (and a range of specified other persons), and vessels operating in international waters if they intend to engage in activities directed at underwater cultural heritage.

The National Monuments Acts 1930 (as amended), the Heritage Act 1995 (as amended) and relevant provisions of the National Cultural Institutions Act 1997 (as amended), therefore, remain the primary means of ensuring the satisfactory protection of the archaeological resource. There are a number of mechanisms under the National Monuments Act 1930 (as amended) that are applied to secure the protection of

¹<https://www.archaeology.ie/news/enactment-of-historic-and-archaeological-heritage-and-miscellaneous-provisions-act-2023-and>

archaeological monuments and areas. These include the designation of National Monument status, the Register of Historic Monuments, the Record of Monuments and Places and the Sites and Monuments Record as well as the placing of Preservation Orders and Temporary Preservation Orders on endangered sites.

Section 2 of the National Monument Act 1930 describes a National Monument as 'a monument or the remains of a monument, the preservation of which is a matter of national importance by reason of the historical, architectural, traditional, artistic or archaeological interest attaching thereto'. The prior written consent of the Minister of Housing, Local Government and Heritage is required for works at or in proximity to a National Monument in the ownership or guardianship of the Minister or a Local Authority or sites which are subject to Preservation Orders.

The Record of Monuments and Places (RMP) was established under Section 12(1) of the National Monuments (Amendment) Act, 1994 and was based on the earlier Sites and Monuments Record (SMR) and Register of Historic Monuments (RHM). This record comprises lists and maps of archaeological monuments and places for each county in the State. All archaeological sites listed in the RMP have statutory protection and any person (including a landowner) proposing to carry out, or to cause or to permit the carrying out of, any work at or in relation to a RMP site must give notice in writing to the Minister of Housing, Local Government and Heritage two months before commencing that work.

The NMS maintains an online Historic Environment Viewer² (HEV) which comprises an online interactive map/search facility that provides access to digital copies of the RMP as well as current SMR databases, which are subject to ongoing updates, including the addition of archaeological sites that have been identified since the publication of the RMP. The RMP and SMR mapping include designated areas around recorded archaeological sites which are known as 'zones of notification'. These zones do not comprise formal exclusion areas around archaeological monuments but are intended to indicate areas that require particular consideration in relation to potential impacts on the relevant monument³.

14.2.4.1 Architectural Heritage

The National Built Heritage Service (NBHS) is currently based in the Department of Housing, Local Government and Heritage (DHLGH) and is responsible for the protection of the Irish architectural heritage resource.

² <https://maps.archaeology.ie/HistoricEnvironment/>

³ <https://www.archaeology.ie/sites/default/files/media/publications/archaeology-planning-process-pl13.pdf> (see page 8)

The protection of the architectural heritage resource is provided for through a range of legal instruments that include the Planning and Development Act 2000 (as amended), the Heritage Act 1995 (as amended) and the Architectural Heritage (National Inventory) and National Monuments (Miscellaneous Provisions) Act 1999. Section (2.1) of the Heritage Act 1995, describes architectural heritage as follows:

All structures, buildings, traditional and designed, and groups of buildings including streetscapes and urban vistas, which are of historical, archaeological, artistic, engineering, scientific, social or technical interest, together with their setting, attendant grounds, fixtures, fittings and contents, and, without prejudice to the generality of the foregoing, includes railways and related buildings and structures and any place comprising the remains or traces of any such railway, building or structure.

The Planning and Development Act 2000 (as amended) requires Local Authorities to maintain a 'Record of Protected Structures' (RPS) of buildings and other structures that are of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest. All structures listed for protection in current development plans, are designated protected structures and planning permission is required for any works to such structures that would affect their character. A protected structure also includes the lands and other structures within its curtilage. While the notion of curtilage is not defined by legislation, the *Architectural Heritage Protection Guidelines for Local Authorities*⁴ (Department of Arts, Heritage and the Gaeltacht 2011), describes it as the parcel of land immediately associated with a structure and which is (or was) in use for the purposes of the structure. The Planning and Development Act 2000 (as amended) also provides for the inclusion of planning objectives for the preservation of the character of places, areas, groups of structures or townscapes of special interest which are designated as Architectural Conservation Areas.

The National Inventory of Architectural Heritage (NIAH), which includes a Historic Gardens and Designed Landscapes Survey, was established in order to create a record of built heritage structures and associated lands within the State. While inclusion in the NIAH does not provide statutory protection to a structure or associated lands, it does provide an indication of their architectural heritage value, and the inventory is intended to advise Local Authorities during the compilation of their Record of Protected Structures.

⁴ <https://www.gov.ie/en/publication/0937a-architectural-heritage-protection-guidelines-for-planning-authorities/>

14.2.4.2 Cork County Development Plan 2022-2028

The Cork County Development Plan 2022-2028⁵ includes a number of policies and objectives in relation to the protection of the cultural heritage resource within the county and these include objectives in relation to the protection of the archaeological resource (HE 16-9b: Management of Monuments within development sites, HE 16-10c: Undiscovered Archaeological Sites, HE 16-7 Battlefield, Ambush and Siege Sites and Defensive Archaeology, HE 16-9: Archaeology and Infrastructure Schemes, HE 16-6 Industrial and Post Medieval Archaeology and HE 16-9c Archaeological Landscapes). The Development Plan also includes a number of policies and objectives in relation to the protection of the architectural heritage resource within the county including the protection of designated structures and Architectural Conservation Areas (HE 16-14: Record of Protected Structures, HE 16-15: Protection of Structures on the NIAH and E 16-18: Architectural Conservation Areas) as well as non-designated features such as vernacular buildings, historic gardens and landscapes, masonry walls, railings, follies, gates, bridges and street furniture that are of built heritage significance (HE 16-16: Protection of Non-Structural Elements of Built Heritage, HE 16-19: Vernacular Heritage and HE 16-20: Historic Landscapes). The Development Plan also includes a number of policies and objectives in relation to the protection of the cultural heritage resource within the county, including aspects such as the cultural heritage of the county (HE 16-23: Cultural Heritage), linguistic heritage (HE 16-22: Gaeltacht Areas), placenames (HE 16-24: Naming of New Developments) and the arts (HE 16-26: The Arts).

14.2.5 Desktop Study

The assessment presents the results of a desktop study of relevant published sources and datasets undertaken in order to identify all recorded and potential archaeological, architectural and other cultural heritage sites/features/areas within the study areas of the Proposed Development, Grid Connection Route and Turbine Delivery Route work areas. The principal sources reviewed for the assessment of the recorded archaeological resource were the SMR and RMP. The current RPS for County Cork and the NIAH building and garden surveys were consulted for assessing the designated architectural heritage resource.

Other sources consulted as part of the assessment included the following:

Archaeological Inventory of County Cork Volumes 1 and 5:

⁵ <https://www.corkcoco.ie/en/resident/planning-and-development/cork-county-development-plan-2022-2028>

These publications present summary descriptions of recorded archaeological sites within this area of County Cork and relevant inventory entries are provided in **Appendix 14.2**. These inventories were published in 1992 and 2010, and, therefore, current SMR database records published on the Historic Environment Viewer were reviewed in March 2025.

Heritage Council of Ireland Map Viewer:

This online mapping source (www.heritagemaps.ie) collates various cultural heritage datasets provided by, among others, the National Monuments Service, the National Museum of Ireland, Local Authorities and the Office of Public Works. This online source was reviewed in March 2025.

Database of Irish Excavation Reports:

This online database (www.excavations.ie) contains summary descriptions of the results of archaeological site investigations (including monitoring, test trenching, excavations and underwater surveys) carried out in Ireland (North and South) from 1969 to present. Current data was accessed in March 2025.

Literary Sources:

Various published sources were consulted in order to assess the archaeological, historical, architectural heritage and folklore record of the study area and references for these are provided within the chapter.

Cartographic Sources:

A review of available historic cartographic sources was undertaken, and these included the 17th-century Down Survey and various map editions published by the Ordnance Survey (OS) from the mid-19th century onward. These sources can indicate the presence of past settlement patterns, including features of archaeological and architectural heritage significance that no longer have any surface expression. Relevant extracts from the reviewed cartographic sources are presented in **Figures 14.4** and **14.5** below.

Aerial and Satellite imagery:

A review of available imagery of the study area was undertaken in order to review the extent of modern interventions and to ascertain if any traces of unrecorded archaeological sites were visible within the boundary of the Proposed Development.

Irish National Folklore Collection:

A review of transcribed material from the National Folklore Collection archive which has been digitised and published online at www.duchas.ie was carried out in March 2025.

UNESCO designated World Heritage Sites and Tentative List:

There are currently two designated World Heritage sites in Ireland (Brú na Bóinne, Co. Meath and Sceilg Mhichíl, Co. Kerry). A number of other significant monuments have been included in a Tentative List (2022) nominated by Ireland for inclusion as World Heritage sites and these comprise the Passage Tomb Landscape of County Sligo, the Transatlantic Cable Ensemble, County Kerry and the Royal Sites of Ireland (Dún Ailinne County Kildare; Hill of Uisneach, County Westmeath; Rock of Cashel, County Tipperary; Rathcroghan, County Roscommon and Tara, County Meath). None of these tentative list sites are located in County Cork or are within the environs of its boundary.

14.2.6 Site Inspection

The inspections of the Proposed Development, Grid Connection Route and Turbine Delivery Route work areas entailed visual assessments of their locations in terms of historic landscape, the extent of construction works previously completed, and the potential for the presence and survival of unrecorded archaeological sites, architectural heritage structures and other features of cultural heritage significance. Extracts from the photographic record compiled during the Site inspection are provided in **Appendix 14.1**.

Archaeological inspections were previously conducted as part of planning reference 19/0010. The study area assessed comprised lands within the boundaries of the wind farm site, as well as lands within a 200-metre-wide corridor centred on the Grid Connection route. The assessments outlined that the works completed to date of the assessment had resulted in no impact on the archaeological resource of the area.

14.2.7 Assessment

The methodology used for this assessment follows guidelines presented in the *Guidelines for Information to be Contained in EIAR* (2022). The chapter complies with the requirements of Directive 2011/92/EU as amended by Directive 2014/52/EU, and the Planning and Development Act, 2000 (as amended) and Planning and Development Regulations, 2001 (as amended).

The following provides a summary of the criteria used to assess impacts in order to concisely outline the methodology specifically applied to the cultural heritage resource which has been informed by relevant EPA and ICOMOS guidelines (see **Section 14.2**).

Duration of Effect

The duration of effects is assessed based on the following criteria:

- Momentary (seconds to minutes)
- Brief < 1 day
- Temporary <1 year
- Short-term 1-7 years
- Medium Term 7-15 years
- Long Term 15-60 years
- Permanent > 60 years
- Reversible: Effects that can be undone, for example through remediation or restoration

Quality of Effect

The quality of an effect on the cultural heritage resource can be positive, neutral or negative:

- Positive Effect – a change which improves the quality of the cultural heritage environment, (e.g., increasing amenity value of a site in terms of managed access, signage, presentation or high-quality conservation/restoration and re-use of an otherwise vulnerable derelict structure)
- Neutral Effect – no change or effects that are imperceptible, within the normal bounds of variation for the cultural heritage environment
- Adverse Effect – a change which reduces the quality of the cultural heritage resource, (e.g., visual intrusion on the setting of an asset, physical intrusion on features/setting of a site)

Type of Effect

The types of effect on the cultural heritage resource can be described as follows:

- *Direct Effect* – where a cultural heritage site is physically located within the footprint of the Project, which will result in its complete or partial removal;
- *Indirect Effect* – Effects on the cultural heritage environment, which are not a direct result of the Project, often produced away from the Project site or because of a complex pathway;
- *Cumulative Effect* -The addition of many minor or insignificant effects, including effects of other projects, to create larger, more significant effects;
- '*Do-nothing Effects*' - The cultural heritage environment as it would be in the future should the Project not be carried out;

- *'Worst-case' Effects* - The effects arising from a Project in the case where mitigation measures substantially fail;
- *Indeterminable Effects* - When the full consequences of a change in the environment cannot be described;
- *Irreversible Effects* - When the character, distinctiveness, diversity or reproductive capacity of an environment is permanently lost; and
- *Residual Effects* - The degree of environmental change that will occur after the proposed mitigation measures have taken effect.

Magnitude of Effect

This is based on the degree of change, incorporating any mitigation measures, on a cultural heritage asset and can be negative or positive. The magnitude is ranked without regard to the value of the asset according to the following scale: High; Medium; Low and Negligible and has been informed by criteria published in the International Council on Monuments and Sites *Guidance on Heritage Impact Assessments for Cultural World Heritage Properties* (ICOMOS 2011) (**Table 14.1**).

Table 14.1: Magnitude of Impact Assessment Indicators for Cultural Heritage Assets

Indicative factors for assessing the Magnitude of Impact on the Cultural Heritage Asset (after ICOMOS Guidelines 2011)	
High	<p>Most or all key archaeological or architectural materials affected such that the resource is totally altered</p> <p>Comprehensive changes to setting</p> <p>Changes to most or all key historic landscape elements, parcels or components; extreme visual effects; fundamental changes to use or access; resulting in total change to historic landscape character</p> <p>Major changes to area that affect Intangible Cultural Heritage activities or associations or visual links and cultural appreciation</p>
Medium	<p>Changes to many key archaeological or historic building materials/elements such that the resource is clearly/significantly modified</p> <p>Considerable changes to setting that affect the character of a cultural heritage asset.</p> <p>Changes to the setting of a historic building, such that it is significantly modified</p> <p>Change to many key historic landscape elements, parcels or components, visual change to many key aspects of the historic landscape, considerable changes to use or access, resulting in moderate changes to historic landscape character</p> <p>Considerable changes to area that affect the Intangible Cultural Heritage activities or associations or visual links and cultural appreciation.</p>
Low	<p>Changes to key archaeological materials/historic building elements, such that the resource is slightly altered/slightly different</p> <p>Slight changes to setting of an archaeological monument</p> <p>Change to setting of a historic building, such that it is noticeably changed</p>

Indicative factors for assessing the Magnitude of Impact on the Cultural Heritage Asset (after ICOMOS Guidelines 2011)	
	<p>Change to few key historic landscape elements, parcels or components; slight visual changes to few key aspects of historic landscape; slight changes to use or access; resulting in limited change to historic landscape character</p> <p>Changes to area that affect the Intangible Cultural Heritage activities or associations or visual links and cultural appreciation</p>
Negligible	<p>Very minor changes to key archaeological materials or setting</p> <p>Slight changes to historic building elements or setting that hardly affect it</p> <p>Very minor changes to key historic landscape elements, parcels or components; virtually unchanged visual effects; very slight changes to use or access; resulting in very small change to historic landscape character</p> <p>Very minor changes to area that affect the Intangible Cultural Heritage activities or associations or visual links and cultural appreciation</p>

Value/Sensitivity assessment criteria

While various legal and planning designations exist for elements of the Irish cultural heritage resource (see **Section 14.2.3**) there is no formal criteria for grading the value of individual constraints. The evaluations used in this assessment have been informed by guidelines presented in the *Guidance on Heritage Impact Assessments for Cultural World Heritage Properties* (ICOMOS 2011). The evaluation of the values and sensitivities of cultural heritage constraints is, therefore, not intended as definitive but rather as an indicator which contributes to a wider judgment based on the individual circumstances of each asset.

The application of values included a consideration of their legal designations (e.g., National Monuments in State Care), condition/preservation; documentary/historical significance, group value, rarity, visibility in the landscape, fragility/vulnerability and amenity value on a case-by-case basis. Archaeological sites which possess little, or no surface expressions may retain low-medium sensitivity to effects on their wider setting while levelled archaeological sites that retain no visible surface traces are typically not sensitive to any effects on their settings. It is noted that archaeological monuments, whether extant or levelled, have the potential to possess sub-surface attributes, including artefacts and other archaeological remains, which may possess values that cannot be discerned without recourse to archaeological excavation but are unlikely to be affected in the absence of direct negative effects. The values of known or potential cultural heritage assets are ranked according to the following scale as defined by ICOMOS: Very High; High; Medium; Low, Negligible and Unknown (**Table 14.2**). The values assigned to

identified constraints within the study area were determined following the completion of desktop research and site inspections and are outlined in **Section 11.5.3**.

The values/sensitivities assigned to identified constraints within the reviewed study areas were determined following the completion of the desktop research combined with subsequent site inspections and are presented in **Section 14.4** of this chapter.

Table 14.2: Value Indicators for Cultural Heritage Assets

Indicative factors for assessing Value of Cultural Heritage Assets (after ICOMOS Guidelines 2011)	
Very High	<p><i>Potential for International Significance which may include</i></p> <ul style="list-style-type: none"> World Heritage Sites (including Tentative List properties) Assets of acknowledged international importance Assets that can contribute significantly to international research objectives Intangible associations with individuals or innovations of international significance
High	<p><i>Potential for National Significance which may include</i></p> <ul style="list-style-type: none"> Nationally designated sites, buildings and landscapes of significant quality, rarity, preservation and importance Undesignated assets of the quality and importance to be designated Assets that can contribute significantly to acknowledged national research objectives Archaeological Landscapes with significant group value Intangible associations with individuals or innovations of national significance
Medium	<p><i>Potential for Regional Significance which may include</i></p> <ul style="list-style-type: none"> Designated or undesignated assets that can contribute significantly to regional research objectives, including buildings that can be shown to have exceptional qualities in their fabric or historical associations Conservation Areas and historic townscapes containing buildings that contribute significantly to its historic character Intangible associations with individuals or innovations of regional significance
Low	<p><i>Potential for Local Significance which may include</i></p> <ul style="list-style-type: none"> Assets compromised by poor preservation and/or poor survival of contextual associations Assets of limited value, but with potential to contribute to local research objectives Historic Townscape or built-up areas of limited historic integrity in their buildings and settings Intangible associations with individuals or innovations of local significance
Negligible	<ul style="list-style-type: none"> Assets with very little or no surviving archaeological interest Landscapes with little or no significant historical interest Buildings or urban areas of no architectural or historical note; buildings of an intrusive character
Unknown	<ul style="list-style-type: none"> Assets whose importance has not been ascertained Buildings with some hidden (i.e., inaccessible) potential for historic significance

Significance of Effects

The significance of effect can be described as Profound, Very Significant, Significant, Moderate, Slight, Not Significant or Imperceptible (Table 14.3) and is assigned based on the combined evaluation of effect magnitude and the value of the relevant asset (Table 14.4).

Table 14.3: Significance of Effects (per EPA EIAR Guidelines 2022)

Significance	Description
Imperceptible	An effect capable of measurement but without significant consequences
Not Significant	An effect which causes noticeable changes in the character of the environment but without significant consequences
Slight	An effect which causes noticeable changes in the character of the environment but without affecting its sensitivities
Moderate	An effect that alters the character of the environment in a manner that is consistent with existing and emerging Baseline trends
Significant	An effect which, by its character, magnitude, duration or intensity alters a sensitive aspect of the environment
Very Significant	An effect which, by its character, magnitude, duration or intensity significantly alters most of a sensitive aspect of the environment
Profound	An effect which obliterates sensitive characteristics

Table 14.4: Significance of Effects (per EPA EIAR Guidelines 2022)

Magnitude of Impact	High	Not Significant/ Slight	Moderate/ Significant	Significant/ Very Significant	Very Significant/ Profound
	Medium	Not Significant	Slight	Moderate/ Significant	Significant/ Very significant
	Low	Not Significant/ Imperceptible	Slight/ Not Significant	Slight	Moderate
	Negligible	Imperceptible	Not Significant/ Imperceptible	Not Significant/ Slight	Slight
		Negligible	Low	Medium	High
		Value/Sensitivity of the Asset			

14.3 BASELINE DESCRIPTION

14.3.1 Introduction

The following sections presents summary details of the main periods within the Irish archaeological record with references to identified cultural heritage constraints located

within the study areas around the Proposed Development as well as the Grid Connection Route and Turbine Delivery Route work areas. Datasets have been interrogated and retrieved from current state and local authority sources and are considered accurate at the time of writing in March 2025. The published Archaeological Survey of Ireland inventory descriptions of recorded archaeological sites are presented in **Appendix 14.2**.

14.3.2 The Wind Farm Site: Archaeological and Historical Background

Prehistoric Periods

Until the recent identification of Palaeolithic human butchery marks on a bear bone recovered from a cave site in County Clare, the earliest recorded evidence for human activity in Ireland dated to the Mesolithic period (7000–4000 BC) when groups of hunter-gatherers lived on the heavily wooded island. The archaeological record indicates that these mobile groups tended to favour coastal, lake and river shores locations which provided a transport resource and also provided elements of their varied diet. They did not construct any settlements or monuments that have left any above ground traces although their presence in an area can often be identified by scatters of worked flints in ploughed fields or sub-surface traces of their settlements revealed during earth-moving undertaken as part of development works. The Neolithic period (4000-2400 BC) began with the arrival of agriculture and its establishment as the principal form of economic subsistence, which resulted in more permanent settlement patterns. As a consequence of the more settled nature of agrarian life, new site-types, such as substantial rectangular timber houses, field systems and various types of megalithic tombs, begin to appear in the archaeological record. There are no known archaeological sites dating to the Mesolithic or Neolithic periods located within the surrounding 2 km study area.

Metalworking arrived in Ireland with the advent of the Bronze Age period (c. 2400–500 BC). This new technology introduced a new artefactual assemblage into the Irish archaeological record and this period was also associated with the construction of new monument types such as standing stones, stone rows, stone circles and fulachta fiadh. The development of new burial practices meant that the construction of funerary monuments such as cairns, barrows, boulder burials and tumuli or cists was a common practice during this period. The arrival of iron-working technology in Ireland saw the advent of the Iron Age (600 BC – 400 AD). Relatively little has been known about settlement patterns during this period until recent decades when the corpus of evidence has been greatly increased by the discovery of Iron Age sites during archaeological investigations undertaken as part of various development projects.

There are a number of recorded archaeological sites located within 2 km of the proposed turbine locations which are of Bronze, or potentially Iron Age, date and these comprise 8 no. standing stones, 1 no. stone row, 1 no. wedge tomb and 1 no. fulacht fiadh (**Table 14.6** and **Figure 14.1**). The wedge tomb and standing stone monuments within the study area are associated with Bronze Age ritual activities while fulachta fia comprise burnt mounds or spreads that are typically interpreted as the remains of cooking sites. The presence of these monuments within the environs of the Proposed Development indicates the presence of settlement and ritual activities in the general area during late prehistory.

A review of the landscape extending for 10km from the Proposed Development also revealed the presence of various extant prehistoric monuments of probable Bronze Age date which may possess ritual alignments across the wider landscape. These comprise 13 no. stone circles, 14 no. standing stone pairs, 12 no. wedge tombs and 10 no stone rows (**Table 14.5** and **Figure 14.3**). For the general reader, details on these Bronze Age monument types with a particular reference to their context in County Cork can be found in *Iverni: A Prehistory of Cork* (O' Brien 2012)⁶ which notes that such monuments were often aligned towards the general direction of the setting sun in the southwest quadrant during the darker months of the year.

Stone circles are formed by a ring of upright stones set into the ground and are symmetrically arranged so that the lowest stone in the southwest end, known as the axial stone, is set directly opposite the two tallest stones which form the entrance to the circle. The other stones are often arranged to reduce in height from the entrance stones to the axial stone and the line between the entrance and axial stones are typically aligned towards the southwest. Stone rows comprise three or more upright stones erected in a straight line typically aligned to the southwest and the Cork/Kerry examples of this monument type often contain up to six upright stones. Standing stone pairs form a sub-group of stone rows which contain two upright stones while standing stones comprise monuments formed by a single upright stone. While the functions of these monuments within Bronze Age society can be difficult to discern, even following archaeological excavation, they are generally considered to be landscape markers that may have ritual, commemorative, territorial or ceremonial roles. Wedge tombs form the last phase of the construction of megalithic monuments during the period between 2,500 and 2,000 BC and they comprise small stone chambers formed by stone slabs covered with one-three flat

⁶ O'Brien, W. (2012) *Iverni: A prehistory of Cork*. The Collins Press.

capstones. They are generally broader and higher at the open entrance of the tomb which narrows to the closed back end thereby forming a wedge-shaped plan. The majority of wedge tomb were constructed so that their entrances face towards the west or southwest.

The methodology used to assess whether any of these monuments within 10 km of the Proposed Development have direct alignments towards its location entailed reviews of their Archaeological Survey of Ireland inventory descriptions to determine their condition and recorded alignments, which were then analysed by cross-referencing each of the monuments' locations in relation to the Proposed Development. This review revealed that only one example, a possible five stone circle (CO107-024----) located 3.1 km to the east of the nearest turbine, has a potential alignment directly facing towards the Proposed Development (**Figure 14.3**). A review of the Archaeological Survey of Ireland inventory description of this monument revealed that the only surviving remains comprise two upright stones which are recorded as possibly forming a remnant section of a partially levelled stone circle that may have had a potential original alignment to the west (see **Appendix 14.2**).

Table 14.5: Monuments with potential visual alignments within 10km of Site

Monument no.	Class	Condition (ASI)	Recorded Alignment (ASI)	Approx. distance from nearest turbine	Directly aligned towards Site?
CO092-004----	Stone circle - five-stone	Extant	NE-SW	9.8km to N	No
CO092-006----	Standing stone - pair	Extant	NE-SW	8.6km to N	No
CO092-014----	Wedge tomb	Extant	ENE-WSW	9.8km to N	No
CO092-019----	Stone row	Extant	NE-SW	9.4km to NW	No
CO092-035----	Standing stone - pair	Extant	NE-SW	7.3km to N	No
CO092-044----	Standing stone - pair	1 upright stone	n/a	5.98km to NNW	No
CO092-051----	Stone circle - five-stone	Extant	E-W	4.7km to N	No
CO093-001----	Wedge tomb	Extant	NE-SW	9.6km to N	No
CO093-024----	Standing stone - pair	1 upright stone	n/a	7.72km	No
CO093-062----	Wedge tomb	Partially extant	ENE-WSW	8.2km to NE	No
CO093-076----	Wedge tomb	Extant	WNW-ESE	9.6km to N	No
CO105-023----	Wedge tomb	Extant	NE-SW	9.5 to W	No
CO105-029001-	Multiple stone circle	Partially extant	E-W	7.62 to WNW	No
CO106-006001-	Multiple stone circle	Partially extant	NE-SW	6.92km to NW	No
CO106-006002-	Standing stone - pair	Extant	NE-SW	6.92km to NW	No
CO106-008----	Stone row	Extant	NE-SW	4.67km to NW	No
CO106-014001-	Stone circle - five-stone	Extant	ENE-WSW	4.91km to NNW	No
CO106-016001-	Multiple stone circle	Partially extant	NE-SW	4.6km to N	No
CO106-019----	Stone circle - five-stone	Extant	Not recorded	6km to WNW	Unknown
CO106-034----	Wedge tomb	Extant	NE-SW	1.96km to NW	No

Monument no.	Class	Condition (ASI)	Recorded Alignment (ASI)	Approx. distance from nearest turbine	Directly aligned towards Site?
CO106-035----	Standing stone - pair	Only one upright stone	n/a	2.1km to NW	No
CO106-039----	Stone row	Extant	NE-SW	1.67km to N	No
CO106-061----	Wedge tomb	Extant	NE-SW	2.4km to SE	No
CO106-062----	Wedge tomb	Partially extant	ENE-WSW	3.97km to NW	No
CO106-078----	Standing stone - pair	1 upright stone	n/a	5.33km to W	No
CO107-008----	Stone row	Extant	NE-SW	6.54km to ENE	No
CO107-011002-	Stone row	Extant	NE-SW	7.05km to ENE	No
CO107-012----	Stone circle - five-stone	Extant	NE-SW	8.28km to ENE	No
CO107-024----	Stone circle - five-stone	Partially extant	E-W	3.14km to E	Yes
CO107-025----	Stone row	Extant	NE-SW	3.43km to E	No
CO107-026----	Standing stone - pair	Extant	ENE-WSW	4.12km to E	No
CO107-040----	Standing stone - pair	Extant	NE-SW	3.89km to SE	No
CO107-067----	Stone row	Extant	NE-SW	5.74km to ENE	No
CO118-073001-	Stone circle - five-stone	Extant	NE-SW	9.63km to SW	No
CO118-076----	Stone row	1 upright stone	n/a	9.63km to SW	No
CO119-005----	Stone circle - five-stone	Extant	NE-SW	7.84km to WSW	No
CO119-027002-	Standing stone - pair	Extant	NNE-SSW	3.69km to SE	No
CO119-029----	Stone row	Extant	NE-SW	2.97km to SE	No
CO119-032----	Stone circle - five-stone	Partially extant	NE-SW	8.3km to SW	No
CO119-049----	Wedge tomb	Extant	E-W	5.4km to SW	No
CO119-080----	Standing stone - pair	Extant	NE-SW	6km to S	No

Monument no.	Class	Condition (ASI)	Recorded Alignment (ASI)	Approx. distance from nearest turbine	Directly aligned towards Site?
CO119-111----	Wedge tomb	Partly buried in bog	ENE-WSW	5.7km to SW	No
CO119-112----	Standing stone - pair	Extant	N-S	3.35km to SW	No
CO119-128----	Stone row	Extant	NE-SW	2.7km to S	No
CO120-001001-	Standing stone - pair	Extant	NE-SW	4km to SE	No
CO120-001002-	Stone circle - five-stone	Extant	NE-SW	4km to SE	No
CO120-066----	Wedge tomb	Partially extant	WSW-ENE	5km to SE	No
CO132-029001-	Standing stone - pair	Extant	NE-SW	8.3km to S	No
CO133-005----	Wedge tomb	Partially extant	E-W	9.5km to S	No

Early Medieval to Post-Medieval Periods

The early medieval period began with the introduction of Christianity to Ireland and continued until the arrival of the Anglo-Normans in the late 12th century (c. 400–1169 AD). While this period saw the emergence of the first phases of urbanisation around the larger monasteries and the Hiberno-Norse ports, the dominant settlement pattern continued to be rural-based and founded on an agricultural economy centred on enclosed farmsteads known as ringforts, with stone-built equivalents known as cashels. The early medieval church sites were often morphologically similar to ringforts but are often differentiated by the presence of features such as church buildings, graves, stone crosses and shrines. There are no recorded ringforts, cashels or early ecclesiastical sites located within the study area. Other archaeological site types within the study area, such as enclosures and hut site groups may potentially date to the early medieval period, but the potential also exists that they may date to other periods from late prehistory onward and their origins can often only be determined through archaeological excavation.

The arrival of the Anglo-Normans in the late 12th century broadly marks the advent of the Irish high medieval period which continued to c.1400 and was followed by the late medieval period which extended to c.1550. These periods saw the continuing expansion of Irish urbanisation as many of the port cities developed into international trading centres and numerous villages and towns began to develop throughout the country, often within the environs of Anglo-Norman manorial centres which were defended by masonry castles. By the 15th century, the native Irish chieftains and lords began to construct tower-house castles within their own landholdings as centres of territorial control. There are no recorded late or high medieval monuments located within 2km of the proposed turbines, although the location of a tower house known as Castle Donovan is located outside the south end of the study area (see **Section 14.3.4**).

The centuries following 1550 comprise the post-medieval period which continued into the middle of the 19th century and the period thereafter is often described as early modern. The post-medieval period saw the development of high and low status stone houses throughout the Irish countryside and rural settlement clusters at this time typically consisted of single-storey thatched cottages with associated farm buildings while two-storey farmhouses became more common during the 19th century. The settlement pattern throughout much of the rural landscape was greatly affected by the Famine period and its aftermath in the middle of the 19th century which saw the depopulation of many areas.

The 17th century Down Survey⁷ mapping shows the townland of Derreenacrinnig West, which contains the Proposed Development, as an area of vacant upland that the survey records was in the ownership of a Daniell O' Donovane (Catholic) in 1641 and formed part of the landholdings of a Captain Theophilus Sanford in 1670. *The Topographical Dictionary of Ireland*⁸ provides descriptions of Irish parishes during the 1830s and often provides information on land use patterns, historical events and notable archaeological sites and other features heritage interest such as large country houses. The Proposed Development is located within the civil parish of Dromdaleague and while Lewis's description of this area contains no references to the townland of Derreenacrinnig West, it does note that the upland areas of the parish were rocky and bare. Further details on the character of the Proposed Development and its environs during the 19th century are presented in the review of historical Ordnance Survey (OS) maps (**Section 14.4.9**). The 2 km study area contains three recorded archaeological sites of potential post-medieval date, and these comprise a well (CO106-094----), a roadway (CO106-090----) and a vernacular house (CO106-070----) (**Table 14.6** and **Figure 14.1**).

14.3.2.1 Record of Monuments and Places/Sites and Monuments Record

There are no recorded archaeological sites located within the Proposed Development boundary while there are 48 examples located within external lands extending for 2 km from the proposed turbine locations (**Table 14.6** and **Figure 14.1**). There are no examples located within 480 m of the proposed turbine locations within the Proposed Development and the majority (36 no.) are located at distances of over 1 km from the proposed turbine locations.

None of the archaeological sites within the 2 km study area are designated as National Monuments in State Care or have been assigned Preservation Orders but they are afforded legal protection by their inclusion in the RMP. Details on the archaeological context of these monuments are provided in **Section 14.3.2** and their published Archaeological Survey of Ireland (ASI) inventory descriptions are presented in **Appendix 14.2**.

⁷ <https://downsurvey.tchpc.tcd.ie/index.html>

⁸ Lewis, S. (1837) *Topographical Dictionary of Ireland*. 2 Volumes, Lewis & Company, London

Table 14.6: Recorded Archaeological Sites within 2km of the Proposed Development

Monument no.	Class	Condition*	Townland	Approx. distance from nearest turbine
CO106-034----	Wedge tomb	Extant in forestry	BARNAGOWLANE WEST	1,960m northwest
CO106-036----	Standing stone	Extant	COOMLEAGH EAST	1,790m north
CO106-037----	Standing stone	Extant	COOMLEAGH EAST	1,690m north
CO106-038----	Standing stone	Extant	COOMLEAGH EAST	1,670m north
CO106-039----	Stone row	Extant	COOMLEAGH EAST	1,670m north
CO106-054----	Enclosure	Partially extant	LEITRY UPPER	1,910m southeast
CO106-058----	Standing stone	Extant	GARRANES NORTH	1,710m southeast
CO106-059----	Standing stone	Extant	LEITRY UPPER	1,800m southeast
CO106-060----	Standing stone	Extant in forestry	LEITRY UPPER	1,780m southeast
CO106-065----	Standing stone	Extant	DERREENACRINNIG EAST	870m south
CO106-066----	Enclosure	Partially extant	DERREENACRINNIG EAST	775m south
CO106-066001-	Hut site	Low wall remains	DERREENACRINNIG EAST	775m south
CO106-066002-	Hut site	Low wall remains	DERREENACRINNIG EAST	775m south
CO106-067001-	Enclosure	Collapsed walling	DERREENACRINNIG EAST	1,010m south
CO106-067002-	Hut site	Low wall remains	DERREENACRINNIG EAST	1,050m south
CO106-067003-	Hut site	Collapsed walling	DERREENACRINNIG EAST	1,070m south
CO106-067004-	Enclosure	Collapsed walling	DERREENACRINNIG EAST	1,090m south
CO106-067005-	Hut site	Collapsed walling	DERREENACRINNIG EAST	1,130m south
CO106-067006-	Hut site	Low wall remains	DERREENACRINNIG EAST	1,170m south
CO106-067007-	Hut site	Low wall remains	DERREENACRINNIG EAST	1,050m south
CO106-067008-	Hut site	Low wall remains	DERREENACRINNIG EAST	1,050m south
CO106-068----	Enclosure	Low wall remains	DERREENACRINNIG EAST	1,200m south
CO106-068001-	Enclosure	Low wall remains	DERREENACRINNIG EAST	1,200m south
CO106-069----	Enclosure	Extant	DERREENACRINNIG EAST	1,300m south
CO106-070----	Vernacular house	No inventory entry	GARRANES NORTH	1,500m south
CO106-070001-	Field boundary	Low wall remains	GARRANES NORTH	1,500m south
CO106-071----	Redundant record	Field clearance	GARRANES NORTH	1,570m to south
CO106-072----	Hut site	Low wall remains	MULLAGHMESHA	1,680m southwest
CO106-073----	Hut site	Low wall remains	MULLAGHMESHA	1,530m southwest
CO106-073001-	Hut site	Low wall remains	MULLAGHMESHA	1,530m southwest
CO106-073002-	Hut site	Low wall remains	MULLAGHMESHA	1,530m southwest
CO106-090----	Road/trackway	No inventory entry	BARNAGOWLANE EAST	1,890m northeast
CO106-091----	Hut site	Low wall remains	BARNAGOWLANE EAST	1,530m northeast

Monument no.	Class	Condition*	Townland	Approx. distance from nearest turbine
CO106-091001-	Enclosure	Low wall remains	BARNAGOWLANE EAST	1,530m northeast
CO106-091002-	Hut site	Collapsed walling	BARNAGOWLANE EAST	1,530m northeast
CO106-092----	Standing stone	Extant	BARNAGOWLANE EAST	800m to north
CO106-093----	Fulacht fia	No surface trace	BARNAGOWLANE WEST	1,400m northwest
CO106-094----	Well	No inventory entry	BARNAGOWLANE WEST	1,730m northwest
CO106-103----	Hut site	Partially intact	MULLAGHMESHA	1,700m southwest
CO106-103001-	Hut site	Low wall remains	MULLAGHMESHA	1,700m southwest
CO106-107----	Hut site	Low wall remains	DERREENACRINNIG WEST	480m south
CO106-108001-	Hut site	Collapsed walling	GARRANES NORTH	900m south
CO106-108002-	Hut site	Collapsed walling	GARRANES NORTH	900m south
CO106-108003-	Hut site	Collapsed walling	GARRANES NORTH	900m south
CO106-108004-	Hut site	Collapsed walling	GARRANES NORTH	900m south
CO106-108005-	Hut site	Low wall remains	GARRANES NORTH	900m south
CO106-108006-	Hut site	Low wall remains	GARRANES NORTH	900m south
CO106-109----	Hut site	Low wall remains	GARRANES NORTH	1,560m to south

*summary of conditions based on Archaeological Survey of Ireland inventory descriptions and reviews of Google Earth imagery

14.3.2.2 National Monuments in State Care & Preservation Orders

The lands extending for 10 km in all directions from the Proposed Development contain five National Monuments in State Care (four prehistoric lithic monuments and a medieval castle), and an additional two prehistoric monuments which are subject to Preservation Orders (**Table 14.7** and **Figure 14.2**).

Table 14.7: National Monuments (NM) and Preservation Orders (PO) within 10km

Monument Name	National Monument No.	RMP ref.	Approx. distance from nearest turbine
Castle Donovan	NM 656	CO119-017002-	2.2km to south
Maughanasilly stone row	NM - no assigned number	CO092-019----	9.4km to northwest
Derryarkane stone circle	NM 600	CO106-019----	6km to west-northwest
Breeny More stone circle	NM 450 (PO 84/1940)	CO106-005001-	6.92km to northwest
Clodagh standing stone pair	NM 536	CO107-040----	3.89km to southeast
Kealkill Stone Circle	PO 69/1938	CO106-006001-	6.92km to northwest
Dromdrasdil Stone Row	PO 12/1971	CO107-008----	6.54km to northeast

Castle Donovan has a publicly accessible car park and was visited during the Site inspection carried out as part of this assessment. The gateway to the car park on the south side of the tower house was open and is accessible to the public. The National Monuments Service and Office of Public Works carried out an extensive programme of conservation and stabilisation works to the castle in the period between 2001-2014. The entrance doorway in the west side of the tower house was also open, there is no access to the main ground floor area or to the stairs extending to the floors above as both areas are closed with locked metal gates. There are, therefore, no public views to the location of the Proposed Development within lands to the north from the interior of the building. The car park on the south side of the castle is within a low-lying, level area created by the localised reduction of natural bedrock material and ground level views towards the north from the car park are obscured by a face of excavated bedrock that extends to the east and west of the tower house.

The remainder of the National Monuments and Preservation Order sites within the 10km area comprise prehistoric lithic monuments with potential visual alignment attributes across the wider landscape. As detailed in **Section 14.3.2 (Table 14.5)**, a review of the alignments of each of these monuments, as recorded by the Archaeological Survey of Ireland, revealed that none are aligned directly towards the proposed turbine locations.

14.3.2.3 Aerial and Satellite Imagery

A review of online aerial/satellite images of the Proposed Development, including those published by the Tailte Éireann from 1995 onward as well as Google Earth and Bing imagery, revealed that the location comprised a vacant, rocky upland area during the 1990s. The existing access track extending into the Proposed Development from the road to the west is visible on a 2000 image and appears to have been constructed as part of the creation of the existing commercial forestry plantation in the north end of the Proposed Development at that time. The wind farm roads and hardstands are clearly visible as cut features into the underlying natural subsoil and bedrock on a Google Earth image dating to 2018. No potential unrecorded archaeological sites or other features of potential cultural heritage interest were noted during the imagery review.

14.3.2.4 Cork County Development Plan 2022-2028

The Record of Protected Structures and Architectural Conservation Areas listed in this development plan do not include any structures within the 2 km study area.

14.3.2.5 National Inventory of Architectural Heritage

This inventory does not list any structures or associated gardens/lands within the 2 km study area.

14.3.2.6 Previous Archaeological Work in Study Area

Archaeological monitoring of the ground works carried out during the construction of the existing access roads and Turbine Hardstands within the Proposed Development was undertaken by Lane Purcell Archaeology in 2017. Monitoring revealed that the peat onsite ranged in thickness from 0.2 m to 0.6 m, with some deeper pockets approximately 1.75 m in depth, and overlay either bedrock or a compact, heavy white-grey sandy clay subsoil. No features or finds of archaeological significance were uncovered during the archaeological supervision of ground excavation works to underlying natural levels within the boundary of the Proposed Development. A 2011 programme of archaeological test trenching carried out within the townlands of Ardrah and Maughanaclea, which are located approximately 3.8 km north of the Proposed Development, identified a section of drystone walling of unknown date.⁹

14.3.2.7 Ordnance Survey Maps

The first edition 6-inch Ordnance Survey (OS) map of 1845 shows the majority of the Proposed Development within an area of vacant heathland with areas of reclaimed agricultural fields within low lying ground in the southern area. The detail on the 25-inch OS map of 1900 indicates that the layout of the lands within the Proposed Development had remained largely unchanged during the second half of the 19th century. No potential features of archaeological, architectural or vernacular heritage potential are depicted within the Proposed Development on the reviewed historic OS maps (**Figures 14.4 and 14.5**).

14.3.2.8 Undesignated Cultural Heritage Assets

While encompassing the protected archaeological and architectural heritage resources, cultural heritage also includes various undesignated assets such as demesne landscapes and vernacular structures as well as intangible assets such as folklore, placenames and historical events and associations. As noted in **Section 14.3.2.9**, the review of historic OS maps did not reveal the presence of buildings or structures of potential vernacular heritage significance within the Proposed Development.

⁹ <https://excavations.ie/report/2011/Cork/0022162/>

The Proposed Development is contained within the one townland (Derreenacrinnig West) which is the smallest unit of land division in the Irish landscape many of which may preserve early Gaelic territorial boundaries that pre-date the Anglo-Norman conquest. Townland boundaries were recorded and standardised by the Ordnance Survey (OS) during the 19th century and their names typically comprise anglicisations of their original Irish names which often refer to natural topographical features, past landowners and farming practices, but some may also indicate the presence of archaeological sites within the townland, e.g. lios or rath typically indicate the presence of a ringfort. The Irish origin of Derreenacrinnig is *Doirín an Chríonaigh* and the Placenames Database (www.logainm.ie) includes a translation of this name as 'little oak-wood of the withered sticks'. There are no townland boundaries extending through the Proposed Development.

The online digital records of the Irish National Folklore Collection were reviewed and contain no entries for Derreenacrinnig West townland (www.duchas.ie). In addition, the Proposed Development is not located within a Gaeltacht area and there are no local museums or other heritage centres, associated with the intangible cultural heritage of the area located within its boundary or close environs.

14.3.2.9 Site Inspection

While the ground excavation works carried out during the construction of the existing access roads and Turbine Hardstands were previously subject to archaeological monitoring, which identified nothing of archaeological significance, a field walking survey of the location of the completed civil infrastructure within the Proposed Development was carried out during this assessment as a confirmatory measure. This revealed that the existing access roads and hardstands within the Proposed Development have been completed, and their construction has reduced ground levels down into natural subsoil and bedrock levels. The access roads to the hardstand areas from the west and south extend up moderately sloping hillsides while the hardstands are situated along an east to west aligned ridge. The Proposed Development also contains an existing modern quarried area within a commercial forestry plantation in the north end and an access road also extends to this area. No potential unrecorded archaeological sites or other features of potentially cultural heritage interest were noted during the inspection of adjoining lands within the Proposed Development.

14.3.2.10 Wind Farm Summary

There are no recorded archaeological sites within the Proposed Development, and nothing of archaeological significance was identified during archaeological monitoring of

the construction of the existing access tracks, hardstands and other associated infrastructure. There are no designated architectural heritage structures located within the Proposed Development or within the surrounding 2 km study area and there are also no undesignated structures of potential vernacular significance located within its boundary.

The known archaeological sites within the 2 km study area (**Table 14.6**) are types commonly found within the Irish landscape and their Archaeological Survey of Ireland inventory descriptions indicate that they are in varying states of preservation (see **Appendix 14.2**). The majority of the recorded archaeological sites in the 2 km study area comprise enclosures and hut sites located over 1 km from proposed turbine locations, and they are recorded by the Archaeological Survey of Ireland as being collapsed or retaining low wall remains (**Table 14.6**). They are all located within private lands not accessible to the public and retain no discernible amenity or tourist attributes. None of the archaeological sites within the 2 km study area are listed as National Monuments in State Care but, regardless of the existing condition of their above ground remains, they have the potential to possess sub-surface features, artefacts and other archaeological remains, which may be of high value. This cannot be ascertained without recourse to archaeological excavation, but these attributes are unlikely to be subject to effects in the absence of direct impacts. The National Monuments within the surrounding 10 km area surrounding the Proposed Development (**Table 14.7**) have been assigned this designation due to their national significance and are assessed as being of high value. They are prehistoric lithic monuments with potential visual alignment attributes that extend beyond their immediate settings (**Table 14.5**).

14.3.3 Grid Connection Route

14.3.3.1 Archaeological Context

The following section details the results of a desktop study of the recorded archaeological and architectural heritage resource within a 200 m wide study area corridor centred on the Grid Connection route. There are 18 archaeological sites located within the reviewed study area, and these include a National Monument in State Care which comprises a five stone circle (CO106-019---) and a nearby standing stone (CO106-057----) (National Monument No. 600) in Derryarkane townland. The majority (10 no.) of the recorded archaeological sites within the study area date to the late prehistoric period.

Table 14.8: Recorded Archaeological Sites within 200 m wide study area

Monument No.	Classification	Townland	Approx. distance from route
CO105-023----	Wedge tomb	Crossogoe	95m to SW
CO105-058----	Radial-stone cairn	Shandrum Beg	30m to E
CO105-026----	Ringfort	Shandrum Beg	5m to W
CO105-071----	Standing stone	Shandrum Beg	100m to S
CO105-075----	Hut site	Shandrum Beg	70m to S
CO106-077002-	Standing stone	Derryarkane	20m to S
CO106-077001-	Fulacht fia	Derryarkane	50m to N
CO106-079----	Fulacht fia	Derryarkane	40m to S
CO106-022----	Enclosure	Maulikeeve	80m to S
CO106-057----	Standing stone	Derryarkane	55m to NW
CO106-019----	Stone circle	Derryarkane	85m to NW
CO106-021----	Standing stone	Maulikeeve	20m to S
CO106-056----	Souterrain	Maulikeeve	70m to N
CO106-020002-	Standing stone	Maulikeeve	70m to N
CO106-020001-	Ringfort	Maulikeeve	55m to N
CO106-114----	Standing stone	Maularaha	15m to NW
CO106-009----	Ringfort	Ardrah	80m to NE
CO106-083----	Mass rock	Ardrah	95m to E

A stone circle (five-stone) (CO106-019----), as well as a nearby standing stone (CO106-057----) which comprise a National Monument in State Care (National Monument No. 600), are located in a section of the study area in Derryarkane townland. Five-stone stone circles are a distinctive form of stone circle found in counties Cork and Kerry. They comprise a ring of five upright stones, symmetrically arranged so that one stone, the axial stone, is set directly opposite two stones, usually the tallest, marking the entrance to the circle. In the Derryarkane example, the north entrance stone is prostrate having fallen at some point in the past. Characteristically, the stones reduce in height to the axial stone, which is set consistently in the south-western part of the circle.

There is one megalithic tomb, a wedge tomb (CO105-023----), within the study area. This is located in an area of Crossogoe townland at a distance of c.95 m southwest of the western terminus of the Grid Connection route.

Although outside the 200 m wide study area, there is also another example of a stone circle of a type which is distinctive to the counties of Cork and Kerry within the general Grid Connection area. Located in Cappanaboul townland, the multiple-stone circle (CO105-029001-) most likely originally consisted of 13 stones, however, only 10 of these are still upright. The development of new burial practices during the Bronze Age period saw the construction of funerary monuments such as cairns, barrows, boulder burials and cists. There are two examples of such sites within the environs of the Grid Connection route. Located in the centre of the multiple-stone circle in Cappanaboul is a boulder-burial (CO105-029003-) consisting of a cover stone and one visible support stone. Approximately 470 metres to the southwest, in Shandrum Beg townland, is a peat-covered radial-stone cairn. These site together with an additional five standing stones within the study area demonstrate a landscape rich in ritual and funerary monuments dating to the late prehistoric period. Also dating to this period and located within a section of the study area in Derryarkane townland are two late prehistoric fulachta fiadh (CO106-077001- and CO106-079----).

There are three early medieval ringforts recorded within the study area, and these are located in the townlands of Ardrah (CO106-009----), Maulikeeve (CO106-020001-) and Shandrum Beg (CO105-026----). The study area also contains an enclosure site (CO106-022----) in Maulikeeve townland which may potentially form the remains of an unclassified ringfort.

There is one recorded post-medieval site located within study area, and this comprises a mass rock (CO106-083----). These were used as the sites of clandestine Catholic masses during the time of Penal Laws (1690s 1750s) when such practices were outlawed. They are known as Carrig na Aifrinn in Irish and often comprised natural boulders with flat tops that were used as altars although there are also examples that reused existing archaeological monuments, such as the ruins of abandoned churches, holy wells or megalithic tombs. They were typically located in remote areas in order to afford protection to the priest and their congregations and are often only identified based on local traditions.

14.3.3.2 Database of Irish Excavation Reports

The Database contains one entry describing the results of an archaeological site investigation within the environs of the 200 m study area corridor centred on the grid route connection. This entailed a programme of archaeological test trenching (Excavation Licence no. 17E0316) in advance of the construction of a single dwelling located c.60m to the north of a wedge tomb (CO106-063----) in Crossoge townland. This site investigation

revealed nothing of archaeological significance and the excavator noted that the potential existed that the archaeological site to the south of the location comprised a cist site rather than a wedge tomb.¹⁰

14.3.3.3 Designated Architectural Heritage Structures

A review of the Record of Protected Structures (RPS) published in the current Cork County Development Plan and the NIAH building and garden surveys revealed that these datasets do not list any structures or lands within the 200 m wide study area centred on the grid route connection. In addition, the route does not extend into, or within the environs of, an Architectural Conservation Area.

14.3.3.4 Cartographic and Aerial/Satellite Review

The following section provides an overview of the cartographic and aerial images of the Grid Connection route. The reviewed cartographic sources comprised the 1st edition 6-inch Ordnance Survey (OS) map (1845), and the 25-inch edition OS map (1899-1900). Both of these maps depict the lands which the Grid Connection route extends through as a mixture of mountainous heath land, rough grazing land and enclosed pasture fields of since at least the middle of the 19th century. There were no potential unrecorded archaeological sites or features of cultural heritage interest, such as vernacular buildings, noted within the footprint of the Grid Connection route during the review of these OS maps. The existing roadway that the underground cable element of the route will follow in the townlands of Shandrum Beg and Shandrum More is present on the 1st edition 6-inch OS map which also depicts a recorded ringfort (CO105-026----) which is shown within a section of a field adjacent to the west side of the road. A review of online aerial/satellite imagery sources including Tailte Éireann, Bing Maps, Google Maps and Google Earth, which contain imagery captured between 1995 and 2024, did not reveal the presence of any potential unrecorded archaeological sites within the study area.

14.3.3.5 Undesignated Cultural Heritage

The green field sections of the route do not extend into any former demesne lands there are no extant structures of any date located within its footprint. The route extends through a number of townlands and the translations of their names presented in **Table 14.9** were sourced from the Placenames Database (www.logainm.ie). The majority of the townland names refer to natural landscape features and historic land owners.

¹⁰ <https://excavations.ie/report/2017/Cork/0026050/>

Table 14.9: Translations of townlands within study area

Townland	Irish Origin	Translation	Archaeological Indicator?
Derreenacrinnig West	<i>Doirín an Chríonaigh Thiar</i>	Little oakwood of the withered sticks	No
Barnagowlane West	<i>Barr na Gabhlán Thiar</i>	Top of the forks	No
Glanareagh	<i>Gleann Creach</i>	Glen of the prey	No
Ardsbeg	<i>Na hArda Beaga</i>	The heights (small)	No
Ardrah	<i>Ardráth</i>	The high fort	Likely refers to a recorded ringfort within this townland (CO106-009)
Laharanshermeen	<i>Leathfhearann Seirmín</i>	Shermin's half land	No
Maularaha	<i>Meall an Reithe</i>	Knoll of the ram	No
Maulikeeve	<i>Meall Uí Chaoimh</i>	O'Keeffe's knoll/hillock	No
Derryarkane	<i>Doire Uí Earcáin</i>	O'Earcáin's oak grove	No
Cappanaboul	<i>Ceapach na bPoll</i>	Land plot of the pool	No
Skahanagh More	<i>An Sceachánach Mhór</i>	The big whitethorns?	No
Shandrum More	<i>An Seandrom Mór</i>	The old ridge (big)	No
Dromloughlin	<i>Drom Lochlainn</i>	Loughlin's ridge	No
Ballylicky	<i>Béal Atha Leice</i>	Mouth of the ford of the flagstone or flat rock	No

14.3.3.6 Field Inspection

The proposed OHL commences at the northern end of the proposed underground cable section in Shandrum Beg townland (ITM 503027, 553245). This section of the proposed route extends upslope and to the east, traversing elevated and marginal lands in Cappanaboul townland before connecting with the western end of the proposed OHL in Skahanagh More townland (ITM ref 504078, 553214). The total length of this section of the proposed route is c.1,200 m in length. The nearest recorded archaeological sites to the yet to be proposed OHL portion of the Grid Connection route comprise a standing stone (CO105-071----) and hut site (CO105-075----) located in Shandrum Beg townland (**Table 14.8**). The site of a stone circle (CO105-029001-) containing a boulder-burial (CO105-029002-) is also located within 140 m of this section of the route in Cappanaboul townland. The locations of all four sites were visited during the field inspection.

Located to the south of the proposed Grid Connection route, within Shandrum Beg townland, are a standing stone (CO105-071----) and a hut site (CO105-075----). There is

no direct line of sight between the nearest proposed pole locations of the OHL route and the locations of the standing stone and hut site, which are situated c.100 m and c.70 m from the proposed route of the OHL respectively. This is due to higher ground being positioned between these sites and the route of the OHL to the northeast, while the OHL route to the north and northwest extends across significantly lower ground.

To the north of the proposed OHL route, in the townland of Cappanaboul, is the site of a multiple stone circle (CO105-029001-) within which is a boulder-burial (CO105-029003-). These sites are located on a small peat covered platform at the north-western end of an elevated, unenclosed plateau of marginal land. The incomplete stone circle appears to have originally consisted of thirteen stones. Ten of these stones survive, two of which are prostrate. The dimensions of the orthostats range between 0.5 m to 1.3 m in length, 0.2m to 0.4 m in width and 0.7 m to 1.5 m in height. The stone circle encloses an internal area measuring 10.5 m E-W. The boulder-burial is centrally placed within the stone circle. It comprises a cover-stone measuring 1.6 m in length, 1.5 m in width and 0.7 m in height, there is one support stone visible beneath the cover stone. The sites are surrounded by post and barbed wire fencing which will assist in preventing any accidental damage occurring during the construction of the OHL. There are no natural topography or vegetation, such as hedgerows or trees, between the proposed OHL route and these sites and the OHL will likely be visible from their location.

Commencing at the proposed Derreenacrinnig Wind Farm substation the OHL Grid Connection route extends uphill to the north-northwest across an area of blanket bog and heathland on the south-facing slopes of the ridge at Derreenacrinnig West. Descending north-westwards from the crest of the ridge, the route cuts through c.300 metres of first and second rotation forestry before extending through an area dominated by rough unenclosed grazing in Barnagowlane townland. The route then descends downslope into the Mealagh River valley. This section of the OHL terminates south of the public road in the western portion of Barnagowlane townland (ITM grid 508901, 552735), the easternmost portion of the underground cable section commences at this point.

Beyond the section of proposed underground cabling, the OHL commences again and extends north-westwards from a point south of Glanareagh Hill traversing varying quality agricultural land before crossing the Mealagh River. To the north of the river there is a brief interruption in the route of the OHL as a c.112 m long section of the Grid Connection between the boundaries of Ardsbeg and Gortnacowly townlands (ITM 507734, 553749 to 507688, 553834) is proposed to be installed underground. Beyond this short proposed

underground section, the OHL continues upslope to the north side of the valley to Ardrah townland. From here, the proposed OHL route turns south-westwards again and extends through the townlands of Laharanshermeen, Maularaha, Maulikeeve, Derryarkane, Cappanabout while descending steadily and crossing areas of improved and unimproved grassland with occasional areas of heath and mature coniferous forestry.

The most westerly sections of the Grid Connection route extend across an area generally consisting of undulating, improved pastureland. It is across this landscape that the remaining two short sections of proposed OHL extend. These sections of OHL traverse portions of the townlands of Shandrum More, Dromloughlin and Ballylicky. There are five archaeological sites located within 50 m of the proposed OHL (see **Table 14.8**). The sites which were inspected comprised a standing stone (CO106-114----) Maularaha townland and a fulacht fia (CO106-079----) and a standing stone (CO106-07702-) in Derryarkane townland.

In addition, although outside the study area and not in immediate proximity to the Grid Connection route (being located c.160 m northeast of the proposed route), the recorded site of a stone row (CO106-008----) was also inspected to ascertain whether the proposed OHL impacts on the setting of the monument or if there is any associated visual impact on alignments or views associated with the monument. The stone row is situated on high ground c.190 m northwest of a recorded ringfort (CO106-009----). The OHL route approaches both sites from the southeast, extending in a southeast to northwest direction, and passes c.80 m to the southwest of the ringfort site. The OHL route utilises a natural dip in the landscape to the southwest of both recorded archaeological sites. Through the utilisation of this natural depression, the proposed OHL results in a very slight visual impact on the setting of both recorded sites. The stone row is aligned in a northeast to southwest direction (largest stone to southwest) and views in either direction are not impacted by the OHL. The main view to the southwest is blocked by a line of mature trees which surround a derelict farmhouse, the proposed OHL extends to the southwest of the treeline and is not visible from the stone row when facing south-westwards. The Archaeological Survey of Ireland records the stone row as comprising four aligned stones, a fifth smaller stone was noted at the northeast end of the alignment during the inspection.

An inspection of a standing stone (CO106-114----) in Maularaha, revealed that no direct impact will occur during the construction of this section Grid Connection. The standing stone is situated on a level area of boggy ground between two outcroppings of bedrock located c.20 m southeast of the OHL route. While the route of the OHL slightly

encroaches on the zone of notification (ZON) of the monument, no poles, or ground disturbance will be undertaken, within the zone. However, the construction of the proposed OHL may cause a slight visual impact on the setting of the standing stone.

As the OHL route continues to the southwest, it passes in proximity to the ZON of two further monuments in Maulikeeve townland, ringfort (CO106-020001-) and standing stone (CO106-021----). The ringfort is located on the crest of a hill c.55 m north of the route which provides expansive views in all directions. The OHL route traverses an area which is outside the ZON of the ringfort and there was no evidence of any ground disturbance works having taken place within the zone. As the OHL route extends through an adjacent field, which is at a lower level than the ringfort and beyond a shielding field boundary, it can be considered that the erection of the proposed OHL could have a very slight visual impact on the setting of the monument. The standing stone (CO106-020002-) and souterrain (CO106-056----) which are situated within the ringfort will be unaffected by the proposed OHL route.

The recorded site of a standing stone (CO106-021----) is located c.20m to the south of the OHL route. The ASI record no visible surface trace of the stone, its recorded location is heavily overgrown with gorse, brambles and young trees.

As the proposed OHL route continues to the southwest it extends through the townland of Derryarkane. Located within this townland is the site of a National Monument (ITM 505156, 553755) comprising Derryarkane stone circle (CO106-019----) (a five-stone circle) and an adjacent standing stone (CO106-057----) (National Monument No. 600). The field survey undertaken as part of a previous assessment of the Grid Connection route. The proposed OHL route passes in close proximity to three further sites in the west of Derryarkane townland. These sites comprise two fulachta fia (CO106-079----), (CO106-077001-) and a standing stone (CO106-077002-) and all three sites are situated in undulating poor quality pastureland. The proposed OHL to be located just outside the ZON of the more easterly fulacht fia (CO106-079----). The erection of the OHL in this area will have a slight visual impact on the setting of standing stone (CO106-077002-) and an imperceptible visual impact on the settings of both fulachta fia (CO106-079----) and (CO106-077001-).

Six separate sections of underground cabling, totalling 3.3 km in length, are proposed to be installed along the Grid Connection route. Commencing at the Ballylickey 110 kV substation, the most westerly section of underground cabling (c.200 m in length) is

proposed to extend from within the substation (ITM 501201, 553364) and skirt around the perimeter of the facility before connecting with the most westerly section of the overhead (OHL) which terminated to the immediate northeast of the substation (approx. ITM 501308, 553402).

The next proposed section of underground cabling extends south-westwards along a third-class road in Dromloughlin townland (commencing ITM 501672, 553546) before extending south-eastwards across varying quality pastureland within the same townland and linking with a previously constructed section of OHL (approx. ITM 502022, 553156). This section of the proposed underground cable within Dromloughlin measures c.624m in length.

The most extensive section of the proposed underground cable extends for c.1,081m through the townlands of Shandrum More and Shandrum Beg. Commencing at approx. ITM 502432, 552782 and initially extending down a farm laneway in a general south-eastward direction, the underground cable will extend north-eastwards beneath a third-class road before connecting with the proposed OHL which extends between Skahanagh More and Shandrum Beg townlands. The lands in the vicinity of this section of the underground cable route comprise a mixture of undulating improved and unimproved pastureland.

The shortest section of underground cabling is proposed to be installed in agricultural land in the vicinity of the boundary between Ardsbeg and Gortnacowly townlands north of the Mealagh River. This section measures c.112 m in length.

The second longest section (c.1,073 m) of the underground cable route is proposed to extend in a general west to east direction, largely beneath a third-class road in Gleanareagh townland which is located on the southern slopes of the Mealagh River valley. The topography in the vicinity of this section generally comprises moderate sloping ground, generally sloping downwards to the north, with the road traversing the landscape in an east to west direction. The southside of the road generally cuts into the sloping ground along this section. A final, short section of underground cabling is proposed to be installed on approach to the substation within the boundaries of the Derreenacrinnig West wind farm site.

There are two recorded archaeological sites located within the study area around the proposed underground cable sections of the route and these comprise a ringfort (CO105-

026----) and radial-stone cairn (CO105-058----) located in Shandrum Beg townland. Although not obvious from road level as the ringfort is elevated above the road (up to 3 m above) and obscured by a dense thicket of vegetation, the eastern portion of the ringfort directly abuts the western margin of the public road. The sub-oval shaped ringfort, which is defined by a low earthen bank, measures c.60 m NE-SW by c.40m NW-SE. As the road construction in this area cut significantly down into the hillside, it is highly unlikely that any archaeological remains associated with any potential enclosing ditch or outer ancillary features survive beneath the existing road surface.

Along the same section of the proposed route but situated c.30 m east of the road within a moderate quality pasture field, is the location of a radial-stone cairn (CO105-058----). This field lies at a lower level than the adjoining section of road. The sod covered, sub-circular cairn, which has a diameter of c.6 m and a maximum height of 0.5 m, is defined by three radially set stones and two further partially embedded slabs. A slight hollow is evident in its centre.

The underground cable route extends across agricultural land in the townland of Dromloughlin. Although there are no recorded archaeological sites in its vicinity, there is potential for the existence of sub-surface archaeological artefacts, features or deposits along this section of the route.

14.3.4 Turbine Delivery Route Work Areas

Temporary ground works required to accommodate the delivery of the turbine components to the Proposed Development will entail localised widening of sections of roadside margins along a section of a public road that extends through the townlands of Castledonovan, Derreenacrinnig East, and Derreenacrinnig West located to the south of the Proposed Development. The only recorded cultural heritage constraints located within 200 m of this section of road are Castle Donovan tower-house (National Monument no. 656) and a kiln (CO119-017001-) to the west of its location. This tower house is located 20 m to the west of the public road and the area between their locations is occupied by a modern car park which has been cut into natural bedrock (see **Section 14.3.2.2**). The building was subject to an extensive programme of conservation and stabilisation works carried out by the National Monuments Service and the Office of Public Works in the period between 2001-2014. No road widening works are proposed along the section of the existing public road within the environs of this monument.

A review of the historic OS maps indicates that the majority of the public road that the route follows is shown on the first edition 6-inch OS map (1845). A section of the road in the south end of Castledonovan townland is not present on that map but is shown on the 25-inch OS map (1900) indicating that that section was constructed in the second half of the 19th century. No potential unrecorded features of cultural heritage interest are depicted at the localised areas of proposed widening of existing road margins on the historic OS maps.

An inspection of the route was carried out as part of the assessment, and this also revealed no potential unrecorded cultural heritage constraints at the locations of proposed widening of existing road margins. There were also no historic masonry road bridges or other undesignated features of cultural heritage significance noted within the road corridor.

14.4 ASSESSMENT OF POTENTIAL EFFECTS

14.4.1 Construction Phase – Direct Impacts

14.4.1.1 *The Wind Farm*

The construction phase will entail the use of the existing site access tracks and hardstands within the Proposed Development and the construction of these features has reduced ground levels down into natural subsoils and bedrock. As detailed in **Section 14.3.2.6**, the construction of the existing onsite infrastructure was subject to archaeological monitoring, and this revealed nothing of archaeological significance at their locations. The proposed construction of Turbine Foundations within natural subsoil/bedrock levels in the previously disturbed hardstand areas will, therefore, have no potential to result in direct impacts on any unrecorded archaeological remains. No in-channel works within any watercourses will be carried out and no impacts on any potential underwater archaeological remains are predicted.

14.4.1.2 *Grid Connection Route*

Based on the review of the Baseline environment detailed in **Section 14.3.3**, there will be no direct adverse effects on any recorded archaeological sites, designated architectural heritage structures or undesignated cultural heritage features,

14.4.1.3 *Turbine Delivery Route Work Areas*

Based on the review of the Baseline environment detailed in **Section 14.3.4**, there will be no direct adverse construction phase effects on any recorded archaeological sites, designated architectural heritage structures or undesignated cultural heritage features,

resulting from the localised widening of existing roadside margins in the townlands of Castledonovan, Derreenacrinnig East, and Derreenacrinnig West.

14.4.2 Construction Phase – Indirect Impacts

14.4.2.1 The Wind Farm

There are no recorded archaeological sites, architectural heritage structures or other cultural heritage assets located within the Proposed Development or adjacent to its boundary and the construction phase will, therefore, result in no predicted indirect impacts on any element of the known cultural heritage resource.

14.4.2.2 Grid Connection Route

Based on the review of the Baseline environment detailed in **Section 14.3.3**, there will be no indirect adverse effects on any recorded archaeological sites, designated architectural heritage structures or undesignated cultural heritage features, due to the construction of the Grid Connection route.

14.4.2.3 Turbine Delivery Route Work Areas

Based on the review of the Baseline environment detailed in **Section 14.3.4**, there will be no direct adverse construction phase effects on any recorded archaeological sites, designated architectural heritage structures or undesignated cultural heritage features, resulting from the localised widening of existing roadside margins in the townlands of Castledonovan, Derreenacrinnig East, and Derreenacrinnig West.

14.4.3 Operational Phase – Direct Impacts

14.4.3.1 The Wind Farm

There are no recorded archaeological sites located within 480 m of any of the proposed turbine locations within the Proposed Development and there are no designated architectural heritage structures within the surrounding 2 km study area. The operational phase of the wind farm will, therefore, result in no predicted direct effects on the known cultural heritage resource.

14.4.3.2 Grid Connection Route

Based on the review of the Baseline environment detailed in **Section 14.3.3**, the Grid Connection route will result in no direct adverse effects on any recorded archaeological sites, designated architectural heritage structures or undesignated cultural heritage features during the operation phase.

14.4.3.3 Turbine Delivery Route

Based on the review of the Baseline environment detailed in **Section 14.3.4**, in the event that any replacement turbines need to be transported to the Proposed Development during the operation phase this will not result in any direct effects on the cultural heritage resource.

14.4.4 Operational Phase – Indirect Impacts

14.4.4.1 The Wind Farm

As detailed in **Table 14.6**, the nearest extant archaeological site with above ground remains (Hut site CO106-107----) is located c.480 m from the nearest proposed turbine. While the proposed turbines will be visible from the locations of a range of archaeological sites located in private properties within the 2 km study area, given their distances from the Proposed Development and the absence of monuments with ritual visual alignment attributes within this area, the Proposed Development will not result in a noticeable change on their settings and will have low magnitude effects on their settings and sensitivities. The Proposed Development will, therefore, result in slight, indirect, long term, adverse effects on the wider settings of known cultural heritage assets located within the 2 km study area during the operational phase.

As detailed in **Table 14.5**, a review of the recorded alignments of monument types such as megalithic tombs, stone circles, stone rows and stone pairs, within 10 km of the proposed turbines revealed that one example is orientated directly towards the Proposed Development. This comprises a stone circle (CO107-024----) which is located c.3.14 km to the east of the nearest proposed turbine. A review of the Zone of Theoretical Visibility (ZTV) mapping compiled as part of the Landscape and Visual Amenity assessment (**Chapter 12**) revealed that no turbines will be visible from the location of this monument. It is, therefore, concluded that the Proposed Development will not result in any significant adverse effects on ritual alignments associated with these prehistoric monument types.

Table 14.10 presents the results of the assessment of potential visual effects on the National Monuments, including sites subject to Preservation Orders, located within 10km of the Proposed Development. These effects are considered to be indirect due to the distances of these constraints from the Proposed Development. A review of Zone of Theoretical Visibility (ZTV) mapping compiled as part of the Landscape and Visual Amenity assessment (**Chapter 12**) was also carried out to assess whether turbines will be visible from their locations. It is noted that the ZTV mapping is based on bare ground visibility, and ignores features such as trees, hedges or buildings, which have the potential

to screen views. Given the complex vegetation patterns within this landscape, the main value of the ZTV mapping is to determine areas of the landscape from which the Proposed Development will definitely not be visible due to terrain screening. The review of the ZTV mapping revealed that no turbines will be visible from the majority of the National Monuments located within 10km of the Proposed Development and the effects on these monuments will, therefore, be neutral (**Table 14.10**).

The review of the ZTV mapping revealed that two turbines within the Proposed Development will be visible from Castle Donovan (2.2 km to south) and Clodagh stone pair (3.89km to southeast). As noted in **Section 14.3.4**, the location of the publicly accessible car park adjacent to Castle Donovan was visited during the Site inspection carried out as part of this assessment. The interior of the tower house is blocked by locked gates and, therefore, there are no public views towards the location of the Proposed Development from within the building. The views towards the Proposed Development from the reduced ground level within the adjoining car park are also partly obscured by a tall cut section of natural bedrock that extends across the north end of the car park area. Clodagh stone pair is located within private lands c.3.89 km to the east of the Proposed Development and its recorded alignment northeast-southwest is not orientated towards the locations of the proposed turbines. Given the distances of these monuments from the Proposed Development, a low magnitude of effect on their settings will occur and the indirect adverse effects on their wider landscape setting is deemed to be slight to moderate in significance (**Table 14.10**).

Table 14.10 Assessment of Long Term, Indirect, Adverse Effects on wider settings of National Monuments within 10 km

National Monument no.	Name	Distance from Nearest Turbine	Direct alignment towards turbine?	ZTV Map Review	Value/Sensitivity	Magnitude of Effect	Significance of Effect
600	Derryarkane stone circle	6 km to west-northwest	No	No turbines visible	High	None	Neutral
536	Clodagh Stone Pair	3.89 km southeast	No	2 turbines visible	High	Low	Slight-Moderate
656	Castledonovan Tower House	2.2 km south	N/A	2 turbines visible	High	Low	Slight-Moderate
450	Breeny More Stone Circle	6.92 km northwest	No	No turbines visible	High	None	Neutral
No number assigned	Maughnasilky Stone Row	9.4 km northwest	No	No turbines visible	High	None	Neutral
PO no. 69/1938	Kealkill Stone Circle	6.92 km northwest	No	No turbines visible	High	None	Neutral
PO no. 12/1971	Dromdrasil Stone Row	6.54 km northeast	No	No turbines visible	High	None	Neutral

The recorded archaeological monuments within an area extending for 10 km from the Proposed Development was also assessed to determine the presence of other monuments within the wider landscape that may have potential visually sensitive ritual alignments. This review revealed that only one example, a possible five stone circle (CO107-024----) located 3.1 km to the east of the nearest turbine, has a potential alignment towards the Proposed Development (**Figure 14.3**). A review of the Archaeological Survey of Ireland inventory description of this monument revealed that the only surviving remains comprise two upright stones which are recorded as possibly forming a remnant section of a partially levelled stone circle that may have had a potential alignment in a westerly direction (**Appendix 14.2**). While this monument is afforded legal protection by its inclusion on the Recorded of Monuments and Places, it is not designated as a National Monument considered to be of national significance. It is located within private lands not accessible to the public and is recorded as being only partially extant by the Archaeological Survey of Ireland. Given its distance from the Proposed Development in combination with its inaccessibility and partial surviving extent, the potential indirect, negative impact on its wider setting is appraised as being low in magnitude and slight in significance. Given the distances of the other monuments with visual alignment attributes from the Proposed Development in combination with the absence of recorded direct visual alignments towards its location, no predicted moderate or significant indirect negative effects on their wider settings are predicted and likely slight indirect impacts on their wider settings will be reversed following Decommissioning.

In conclusion, while the proposed turbines within the Proposed Development will be visible from various cultural heritage sites within the surrounding landscape, no likely significant, indirect effects on examples with notable visual or amenity sensitivities are predicted during the operational phase.

14.4.4.2 Grid Connection Route

The field inspections of the proposed OHL route as well as the proposed underground sections was carried out as part of the assessment. In addition, the locations of recorded archaeological sites within the environs of the route were also visited. While sections of the OHL will be visible from the archaeological sites within adjoining lands, the field inspections did not identify any likely significant indirect operation effects on their wider settings, and the significance of indirect effects is adjudged to be slight.

14.5 MITIGATION MEASURES AND RESIDUAL EFFECTS

14.5.1 Construction Phase

The ground reduction works on the footprint of the Proposed Development were previously subject to archaeological monitoring to the level of natural subsoil and bedrock material and nothing of archaeological significance was identified. There is no potential for the presence of archaeological features or objects below natural levels and, therefore, any further required ground reductions within the Proposed Development during the construction phase will not require any archaeological mitigation. There are also no recorded cultural heritage constraints located within the environs of the Proposed Development and no mitigation measures, such as protective cordons, will be required during the construction phase.

Archaeological monitoring of ground works within previously undisturbed areas along the grid route connection and Turbine Delivery Route work areas will be carried out during the construction phase. In the event that any archaeological features are identified during monitoring they will be recorded and then securely cordoned off while the National Monuments Service are consulted to determine further appropriate mitigation measures, which may include preservation in situ (by avoidance) or preservation by record (by archaeological excavation).

The Proposed Development will result in no predicted effects on any architectural or other cultural heritage constraints and, therefore, no mitigation measures for these elements of the cultural heritage resource are required.

14.5.2 Construction Phase Residual Impacts – Direct

The mitigation measures presented in **Section 14.5.1** will provide for either the preservation in situ of any currently unknown, sub-surface archaeological features within the Site by avoidance or the proper and adequate recording of this resource by full archaeological excavation. Preservation in situ shall allow for a negligible magnitude of effect resulting in a potential not significant/imperceptible significance of effect in the context of residual effect on the unrecorded archaeological resource. Preservation by record shall allow for a high magnitude of effect, albeit ameliorated by the creation of a full and detailed archaeological record, the results of which shall be publicly disseminated. This shall result in a potential slight to moderate range of significance of direct effects in the context of residual effects on the unrecorded archaeological resource.

14.5.3 Construction Phase Residual Impacts – Indirect

No residual construction phase indirect effects are predicted following the implementation of the mitigation measures described in **Section 14.5.1**.

14.5.4 Operational Phase

The operational phase of the Project will result in no predicted direct impacts on the known archaeological, architectural and cultural heritage resources and, therefore, no mitigation measures for direct operational phase impacts will be required.

The proposed turbines will result in a range of long term, indirect, adverse effects of a visual nature on the wider setting of archaeological sites within the environs of the Proposed Development during the operational phase which will range from slight to moderate in significance. Given the nature of the wind farm turbines there are no mitigation measures that can address these visual impacts.

14.5.5 Operation Phase Residual Impacts - Direct

No operation phase direct residual impacts on the cultural heritage resource are predicted.

14.5.6 Operation Phase Residual Impacts - Indirect

The operation phase will result in a range of slight to moderate, long term, negative residual indirect impacts on archaeological sites within the environs of the Proposed Development. It is noted that these indirect effects will be reversed following the Decommissioning phase.

14.5.7 Monitoring of Mitigation Measures

There are a number of obligatory processes to be undertaken as part of archaeological licence applications which will allow for monitoring of the successful implementation of the archaeological mitigation measures detailed in **Section 14.5.1**. These include the submission of method statements detailing the proposed strategy for all site investigations for the approval of the National Monuments Service as part of the licence application. A report will be compiled on all archaeological site investigations to comply with the licensing process which will clearly present the results in written, drawn and photographic formats and copies will be submitted to the National Monuments Service, the Planning Authority and the National Museum of Ireland.

14.6 CUMULATIVE IMPACTS

A review of wind farm developments within 10 km of the Proposed Development was carried out in order to assess potential cumulative impacts on the cultural heritage resource. This included a review of available archaeological and cultural heritage impact assessments of these developments included in the online planning files published on the Cork County Council (CCC) planning enquiry system as well as the Database of Irish Excavation Reports.

A review of other development types within the environs of the Proposed Development, which primarily comprise one-off residential houses and agricultural buildings, did not reveal any examples that will combine with the Proposed Development to result in any likely significant adverse cumulative effects on the cultural heritage resource.

Table 14.11: Review of Wind Farms within 10km of Proposed Development

Windfarm Name	Number of Turbines	Distance from Proposed Development	Status	Cultural Heritage Context
Killaveenoge	10	7.5 km southeast	Existing	A programme of archaeological monitoring of the construction phase of this wind farm was carried out to comply with a planning condition. Nothing of archaeological significance was identified. ¹¹
Milane Hill	9	5.2 km southeast	Existing	No planning files were located online and there are no entries in the Database of Irish Excavation Reports for townlands within the development. A review of the location of this development revealed that there are no recorded cultural heritage sites located within its footprint.
Shehy More	12	8.8 km northeast	Existing	A review of the Cultural Heritage Chapter in the EIS prepared for this development was carried out. ¹² The assessment concluded that the development would result in no predicted direct impacts or significant indirect impacts on the

¹¹ <https://excavations.ie/report/2015/Cork/0026315/>

¹² <https://planningdocs.corkcoco.ie/PlanningDocumentDisplay/documents/18a-13551>

Windfarm Name	Number of Turbines	Distance from Proposed Development	Status	Cultural Heritage Context
				cultural heritage resource. The assessment also concluded that residual effects following mitigation (monitoring of ground works and fencing around nearby sites) would be low or negligible.
Curraglass	7	9.8 km northwest	Consented	A review of the Cultural Heritage Chapter in the EIS prepared for this development was carried out ¹³ The assessment concluded that no significant construction, operation or cumulative effects on the cultural heritage resource would arise.
Dromleena	9	6.6 km east	Consented	No assessment reporting was located online. A review of the location of this development revealed that there are no recorded cultural heritage sites located within its footprint.
Knockeenboy	7	8.6 km southeast	Consented	No assessment reporting was located online. A review of the location of this development revealed that there are no recorded cultural heritage sites located within its footprint.

Given the absence of any direct effects on the recorded cultural heritage resource arising from the Proposed Development, in combination with the results of the above review of other wind farms, it is concluded that the proposed Project is not predicted to contribute to any significant direct cumulative impacts on the cultural heritage resource of the wider area.

The Proposed Development will result in a range of slight to moderate, indirect, negative impacts on the settings of recorded archaeological sites within the surrounding landscape. Given the distances and locations of the other reviewed wind farm developments from the Proposed Development, it is concluded that they will not act in combination to result in any likely significant, negative, indirect cumulative impacts on the settings of these

¹³ <https://planningdocs.corkcoco.ie/PlanningDocumentDisplay/documents/18a-20350>

monuments. In addition, a review of archaeological monument types with visual alignment attributes within the 10 km of the Proposed Development revealed that the Proposed Development will not result in any predicted likely moderate or significant indirect negative impacts on any of their settings or alignments. The review of available cultural heritage impact assessments of the wind farm developments listed in **Table 14.11** revealed that none of these assessments predicted any likely significant, indirect impacts on any monuments within the wider environs of the assessed wind farm locations. It is, therefore, concluded that the Proposed Development will not act in combination with the reviewed wind farm developments to result in likely significant indirect negative cumulative impacts on the settings or alignments of archaeological monuments with potential visual alignments across the wider landscape.

There are seven National Monuments, including sites subject to Preservation Orders, located within 10 km of the Proposed Development and the nearest example, Castle Donovan (National Monument 656), is located c.2.2 km to the south and the proposed turbines will be visible from its location (see **Table 14.10**). There are no other wind farms located between the location of this monument and the Proposed Development or within the close environs of any potential sightlines between their locations. The remaining National Monuments within the 10 km study area comprise prehistoric monuments with potential visual alignments (see **Table 14.7**). These monuments are located at distances of 4 km-9.6 km from the proposed turbine locations and none have recorded alignments towards the Proposed Development or its close environs. Of these monuments, the proposed turbines will be visible from only one example (National Monument 536: Clodagh Stone Pair). None of the wind farms detailed in Table 14.11 are located between this monument and the Proposed Development. Based on the results of the above review, no significant adverse cumulative impacts on the setting or alignments of National Monuments within the wider landscape are predicted.

14.7 DECOMMISSIONING IMPACTS

No direct impacts on known elements of the cultural heritage resource are predicted during the Decommissioning phase as there are no recorded cultural heritage assets located within or adjacent to the footprint of the various elements of the wind farm that will be subject to Decommissioning. The Decommissioning of the Proposed Development will result in the reversal of the long term, indirect, negative visual impacts on the archaeological monuments located within the environs of the Proposed Development and the wider landscape.

14.8 CONCLUSIONS

The Project will not result in any predicted direct negative impacts on any known archaeological monuments or architectural heritage structures. The Project will result in a range of slight to moderate, indirect adverse visual effects on the settings of archaeological monuments located within surrounding lands during the operational phase. These indirect effects will be long term in duration but will be reversed following the Decommissioning phase.

14.9 SUMMARY OF SIGNIFICANT EFFECTS

No predicted significant direct, indirect or cumulative effects on the Cultural Heritage resource arising from the proposed Project have been identified.

14.10 STATEMENT OF SIGNIFICANCE

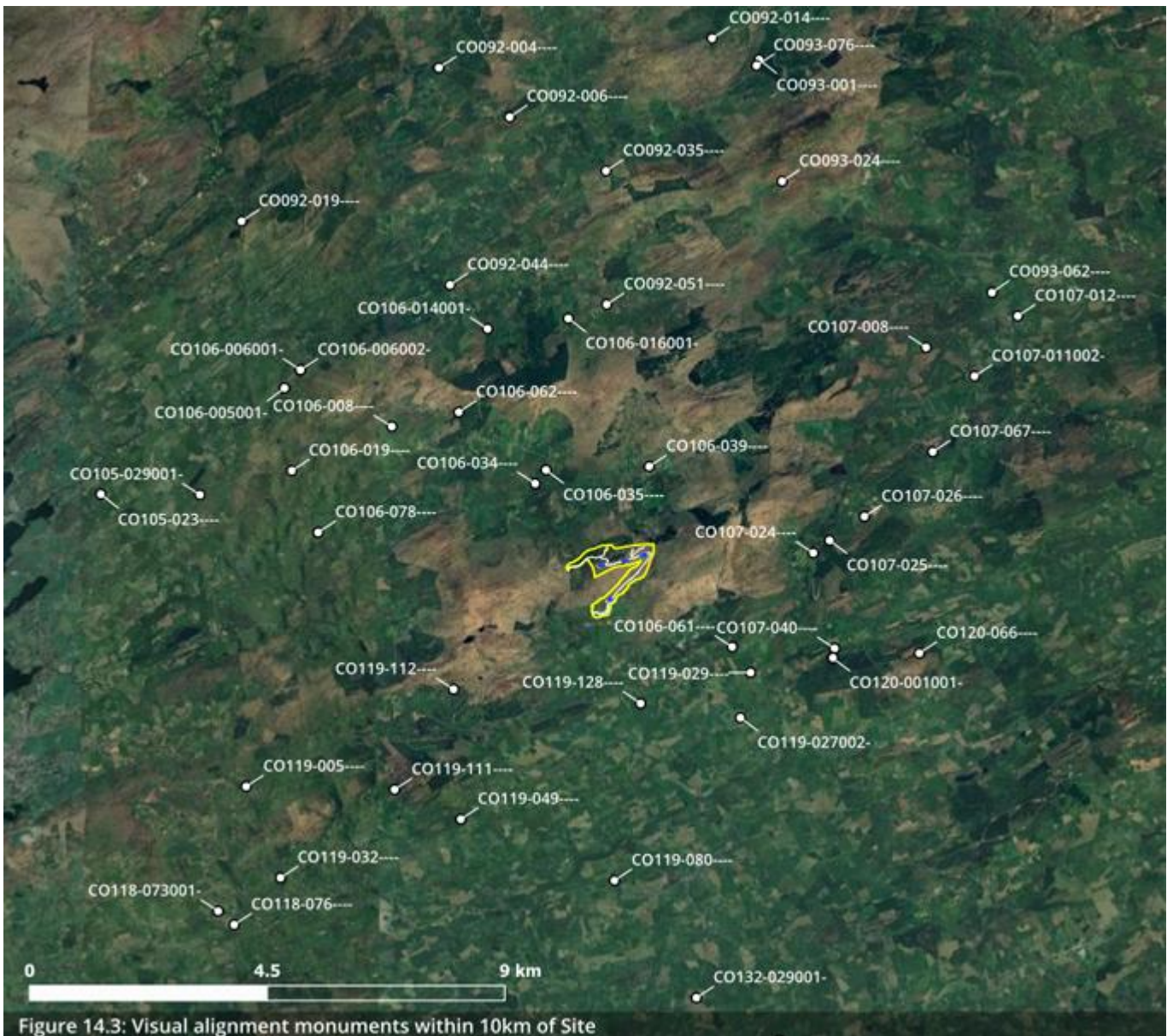
An assessment has been made of the potential for significant effects of the Project on the cultural heritage resource. Following the application of effective mitigation measures based on best practice guidelines, including archaeological inputs during the Project design process combined with archaeological monitoring of ground works within undisturbed areas during the construction phase, the Project is not predicted to result in likely significant effects on the cultural heritage resource.

14.11 FIGURES





Figure 14.2: National Monuments (NM) and Preservation Orders (PO) within 10km of Site



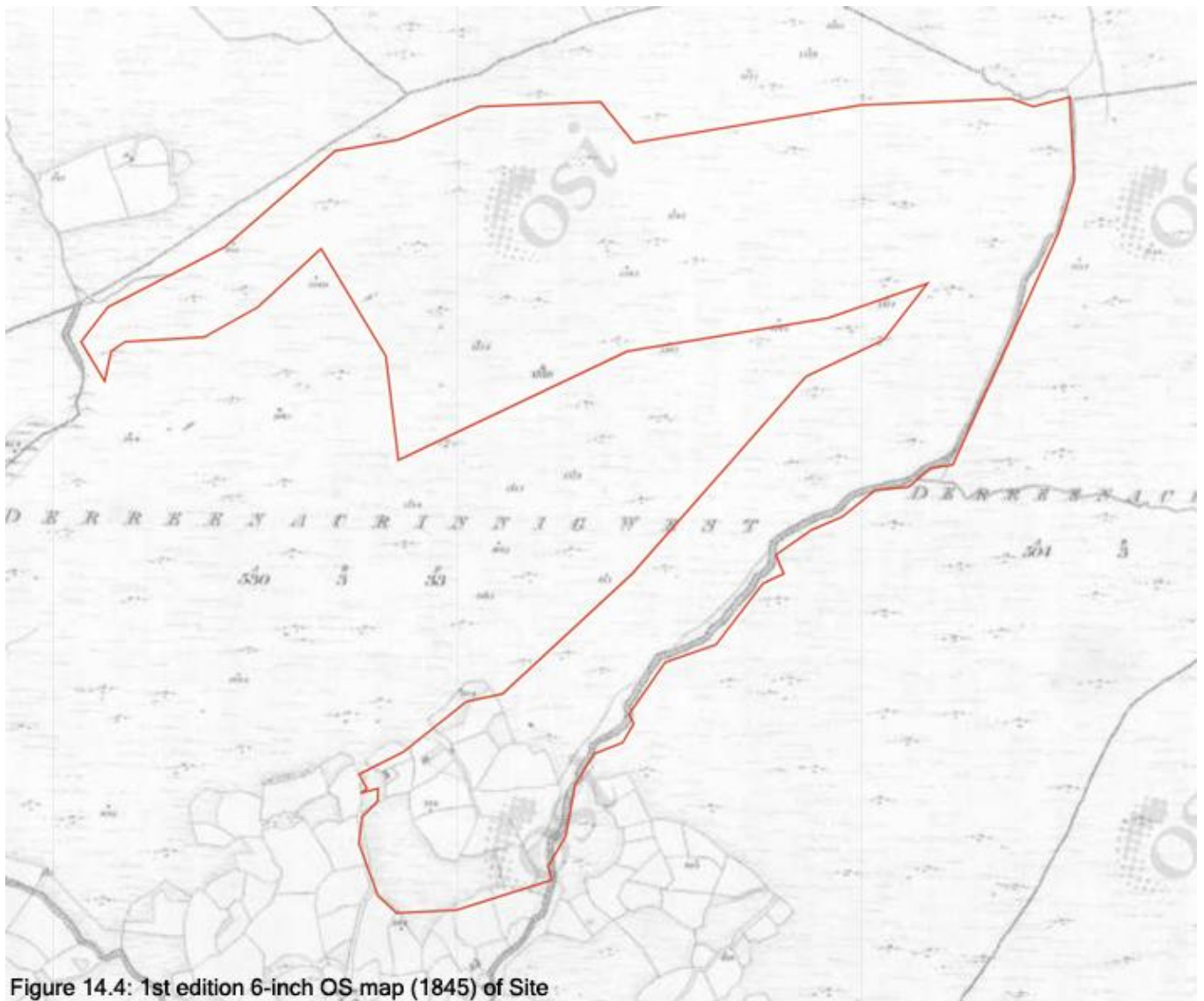


Figure 14.4: 1st edition 6-inch OS map (1845) of Site

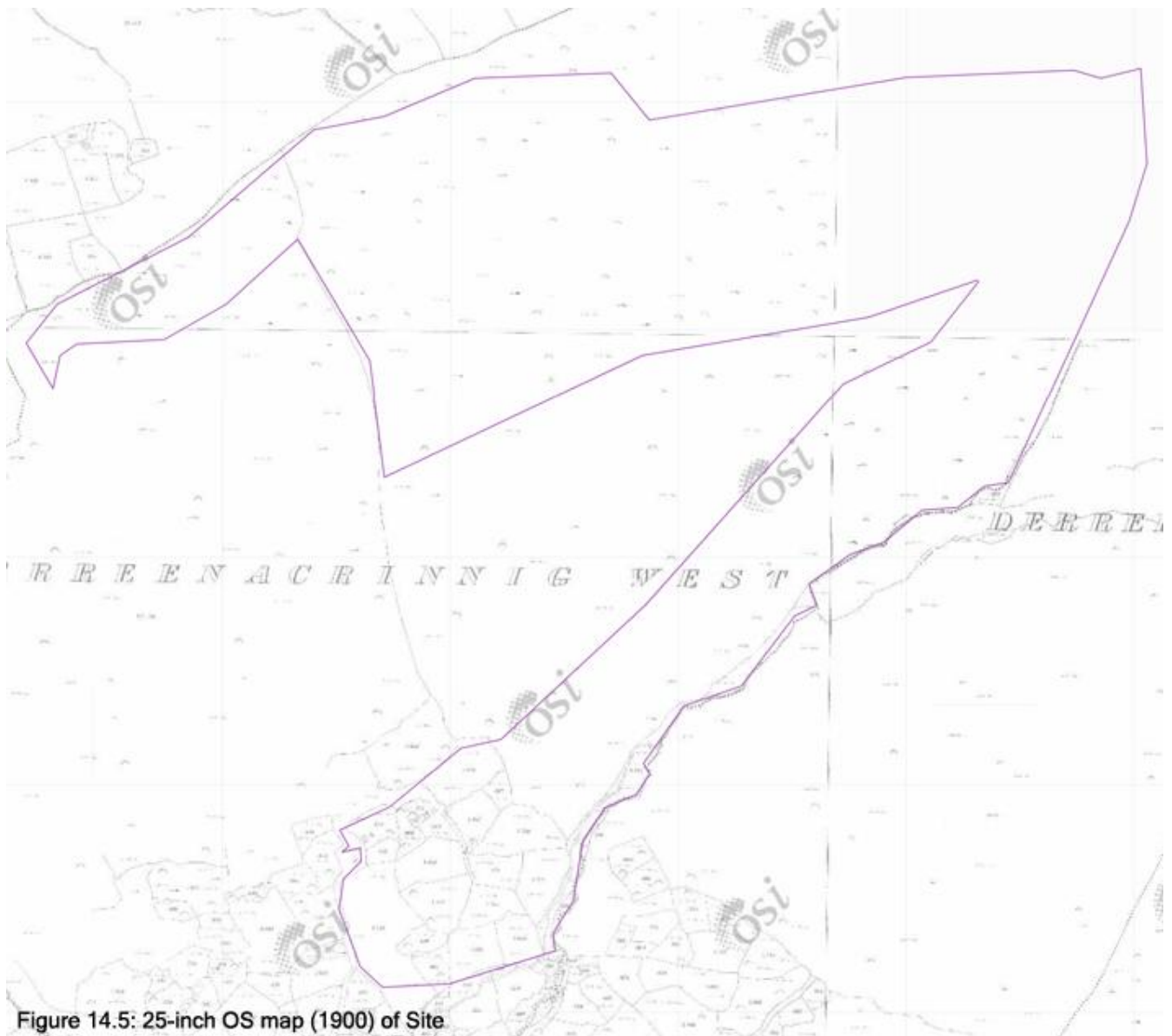


Figure 14.5: 25-inch OS map (1900) of Site