

13 CULTURAL HERITAGE

13.1 INTRODUCTION

This chapter assesses the impacts of the Project on the cultural heritage resource. The tangible elements of the cultural heritage resource can be understood as encompassing the archaeological resource comprising sites and monuments dating from the prehistory onward, including sub-surface remains, and the above ground architectural heritage resource, encompassing standing structures and sites of cultural importance often dating to the post-medieval and modern periods. In addition, assets such as placenames, language, historical associations, folklore and traditions are considered to form part of the intangible cultural heritage resource.

The Project refers to all elements of the application for the construction of Gortloughra Wind Farm as described in Chapter 2 (Development Description) of this EIAR which, in summary, comprises the following elements:

- The Wind Farm: the element of the Project that is defined as the Proposed Development. It consists of 8 no. wind turbines, site access tracks, Turbine Hardstands, 100 m permanent met mast, underground cabling, 1 no. borrow pit, 1 no. Temporary Construction Compound, and all site infrastructure on the wind farm.
- Grid Connection Routes and Onsite Substation and Control Building (subject to a separate planning consent process): This chapter also provides an assessment of 2 no. proposed Grid Connection Routes (GCRs) Options and an Onsite Substation and Control Building.
- Turbine Delivery Route (TDR) (subject to a separate planning consent process): The chapter also includes an assessment of accommodation works required to facilitate the delivery of turbines to the wind farm.

Where adverse effects on the cultural heritage resource are predicted, the chapter identifies appropriate mitigation strategies therein. The assessment considers the potential effects during the following phases of the Proposed Development:

- Construction of the Development
- Operation of the Development
- Decommissioning of the Development

Common acronyms used throughout this EIAR can be found in **Appendix 1.3**. Acronyms specific to this Chapter are as follows:

- ACA: Architectural Conservation Area
- ASI: Archaeological Survey of Ireland
- DHLGH: Department of Housing, Local Government and Heritage
- ICOMOS: International Council on Monuments and Sites
- NIAH: National Inventory of Architectural Heritage
- NMI: National Museum of Ireland
- NMS: National Monuments Service
- PO: Preservation Order
- RMP: Record of Monuments and Places
- RPS: Record of Protected Structures
- SMR: Site and Monuments Record
- ZON: Zones of Archaeological Notification

This chapter of the EIAR is supported by Figures provided in Volume III, and also in **Section 13.3.5**, and by the following Appendix document provided in Volume IV of this EIAR:

- **Appendix 13.1 Archaeological Inventory Descriptions**

13.1.1 Statement of Authority

The chapter was prepared by Tony Cummins and David Murphy of John Cronin and Associates. Mr Cummins holds B.A. and M.A. degrees in archaeology (University College Cork (UCC) 1992/1994) and has thirty years industry experience. Mr Murphy holds a B.A. degree in archaeology (UCC 2003) and has twenty-one years industry experience. Both individuals are licence eligible archaeologists and have extensive experience in preparing archaeological and cultural heritage assessments.

13.1.2 Assessment Structure

The results of the desktop studies and field surveys described in **Section 13.3** together with the other assessments are considered to allow the Board to carry out an assessment of the Development from a cultural heritage perspective. In line with the revised EIA Directive and the Environmental Protection Agency (EPA) 2022 *Guidelines on the information to be contained in Environmental Impact Assessment Reports*¹ the chapter provides considerations of effects based on the following:

- Assessment of cultural heritage baseline, including value and sensitivity
- Assessment of the type/magnitude/duration/significance of cultural heritage effects

¹ https://www.epa.ie/publications/monitoring--assessment/assessment/EIAR_Guidelines_2022_Web.pdf

- Assessment of cumulative cultural heritage effects
- Assessment of residual cultural heritage effects following mitigation

13.2 ASSESSMENT METHODOLOGY AND SIGNIFICANCE CRITERIA

13.2.1 Definition of Study Areas

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 specialists who prepared this chapter (see Section 13.1.1) and is considered suitable for the assessment of potential effects.

Local Study Area

The Study Area reviewed for the assessment of the Proposed Development comprised the area within its boundary and the surrounding lands extending for 2 km in all directions from its boundary. The extent of the 2 km Study Area around the Proposed Development is suitable as it facilitated the compilation of a baseline context for the known cultural heritage resource within its boundary and surrounds which informed the assessment of direct and indirect effects of potential medium-high magnitude on the locations and settings of known cultural heritage constraints within the environs of the Proposed Development.

Wider Study Area

A wider Study Area extending for 5 km from the Proposed Development was also reviewed for monuments that may possess potential ritual visual alignments across the wider landscape (e.g., stone circles, stone rows and megalithic tombs) in order to assess any potential high-to-medium magnitudes of indirect effects on their wider settings.

Proposed Development Study Area (including substation)

In addition, the wider landscape extending for 10 km in all directions from the Proposed Development was reviewed for National Monuments in State Care, including sites subject to Preservation Orders, and World Heritage Sites, including tentative list sites. The extent of this 10 km area is based on professional judgement and is suitable to appraise if the wider landscape contains individual or groupings of such visually sensitive monuments of national significance that may be susceptible to potential high-to-medium magnitudes of indirect effects on their wider settings. A review of the assessment of the significance of visual impacts on publicly accessible cultural heritage receptors within 20km of the Project

as presented in the Landscape and Visual Amenity Assessment chapter was also carried out (see Chapter 11).

Grid Connection and TDR Study Areas

A 100 m wide Study Area centred on the Grid Connection Route options 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 100 m Study Area centred on the GCR and TDR 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.

13.2.2 Assessment Methodology

The methodology used for this assessment is based on Environmental Protection Agency (EPA 2022) *Guidelines on the Information to be contained in Environmental Impact Reports* and the International Council on Monuments and Sites (ICOMOS 2011) *Guidance on Heritage Impact Assessments for Cultural World Heritage Properties* and (ICOMOS 2022) *Guidance and Toolkit for Impact Assessment in a World Heritage Context*. The chapter has been prepared in accordance 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 represents a concise summary of the criteria used to assess impacts of the Project on cultural heritage resources for the purposes of this chapter. This methodology is based on and has been informed by relevant EPA and ICOMOS guidelines (see **Section 13.2.3**).

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

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 and signage)
- Neutral Effect: no change or effects that are imperceptible, within the normal bounds of variation for the cultural heritage environment
- Negative/Adverse Effect: a change which reduces the quality of the cultural heritage resource such as physical or visual intrusion on features/setting of a constraint.

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 a development, which will result in its complete or partial removal.
- Indirect Effect: where a cultural heritage site or its setting in the landscape is located within the environs of a development.
- No Predicted Impact: where a development will not adversely or positively affect a cultural heritage site
- 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 EIA Development not be carried out
- 'Worst-case' Effects: the effects arising from a development 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.
- Reversible Effects: where effects can be undone through remediation or restoration
- 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 13.1**).

Table 13.1: Magnitude of Effect Assessment Indicators

Indicative factors for assessing the Magnitude of Effect on Cultural Heritage Constraints (per ICOMOS 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 an 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, visual change to many key aspects of the historic landscape, considerable changes to use or access.</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> <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 assessment criteria

The evaluation of the values of cultural heritage assets used for the purposes of assessment is not intended as definitive, but rather an indicator which contributes to a wider judgement based the individual circumstances of each asset. The value of all known or potential assets

that may be affected by development are ranked according to the following scale: Very High; High; Medium; Low and Negligible.

The factors for assessing the value of cultural heritage assets provided in **Table 13.2** have regard to the ICOMOS *Guidance on Heritage Impact Assessments for Cultural World Heritage Properties*² (ICOMOS 2011). This guidance is intended as indicative and is used in combination with a consideration of the condition/preservation; documentary/historical significance, group value, rarity, visibility in the landscape, fragility/vulnerability and amenity value of the cultural heritage assets on a case-by-case basis. The values assigned to identified cultural heritage assets within the reviewed Study Areas were determined following the completion of the desktop research combined with subsequent site inspections and are presented in **Section 13.4** of this chapter.

Table 13.2: Value Indicators for Cultural Heritage Constraints

Indicative factors for assessing Value of Cultural Heritage Assets (per ICOMOS 2011)	
Very High	World Heritage Sites (including Tentative List properties) Sites, buildings or landscapes of acknowledged international importance Intangible associations with individuals or innovations of global significance
High	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 contribute significantly to acknowledged national research objectives Archaeological Landscapes with significant group value Intangible associations with individuals or innovations of national significance
Medium	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	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	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 Potential	Assets whose importance has not been ascertained Buildings with some hidden (i.e., inaccessible) potential for historic significance

² https://www.iccom.org/sites/default/files/2018-07/icomos_guidance_on_heritage_impact_assessments_for_cultural_world_heritage_properties.pdf

Significance of Effects

The significance of effect can be described as *Profound, Very Significant, Significant, Moderate, Slight, Not Significant* or *Imperceptible* (**Table 13.3**) and is assigned based on the combined evaluation of effect magnitude and the value/sensitivity of the cultural heritage asset (**Table 13.4**).

Table 13.3: 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 13.4: Significance of Effects (per EPA EIAR Guidelines 2022)

Magnitude of Effect	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					

13.2.3 Relevant Legislation and Guidance

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 Convention³) and the 'European Convention for the Protection of Architectural Heritage' (Grenada Convention⁴) both of which were ratified by Ireland in 1997. While there is no current national legislation

³ <https://www.coe.int/en/web/culture-and-heritage/valletta-convention>

⁴ <https://www.coe.int/en/web/culture-and-heritage/granada-convention>

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 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);
- County Cork Development Plan 2022-2028;
- Department of Arts, Heritage and Gaeltacht (2011) *Architectural Heritage Protection Guidelines for Planning Authorities*⁵;
- Department of Arts, Heritage, Gaeltacht and the Islands (1999) *Framework and Principles for the Protection of the Archaeological Heritage*⁶
- Office of the Public Regulator (2022) *A Guide to Architectural Heritage*⁷;
- Office of the Public Regulator (2021) *Archaeology in the Planning Process*⁸;
- International Council on Monuments and Sites (2011) *Guidance and Toolkit for Impact Assessment in a World Heritage Context*⁹;
- International Council on Monuments and Sites (2011) *Guidance on Heritage Impact Assessments for Cultural World Heritage Properties*¹⁰; and

13.2.3.1 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 preservation, protection and promotion of Ireland's 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 2023¹¹ which provides an overview of its current 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

⁵ <https://www.gov.ie/en/publication/0937a-architectural-heritage-protection-guidelines-for-planning-authorities/>

⁶ <https://www.archaeology.ie/sites/default/files/media/publications/framework-and-principles-for-protection-of-archaeological-heritage.pdf>

⁷ <https://www.opr.ie/wp-content/uploads/2022/10/Planning-Leaflet-12-A-Guide-to-Architectural-Heritage.pdf>

⁸ <https://www.opr.ie/wp-content/uploads/2022/10/Planning-Leaflet-13-Archaeology-in-the-Planning-Process.pdf>

⁹ https://openarchive.icomos.org/id/eprint/2707/2/impact_assessment_22_v14.pdf

¹⁰ https://openarchive.icomos.org/id/eprint/266/1/Guidance_on_heritage_impact_assessments.pdf

¹¹ <https://www.archaeology.ie/news/enactment-of-historic-and-archaeological-heritage-and-miscellaneous-provisions-act-2023-and>

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), as we 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 Acts 1930 to 2014 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 Record of Monuments and Places to continue to have effect pending the establishment of a new Register of Monuments.

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 Acts that are applied to secure the protection of archaeological monuments. 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.

A National Monument is described 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' (Section 2, National Monument Act, 1930). There are no National Monuments in State Care or monuments with Preservation Orders located within the 2km Study Area. There are five National Monuments and two Preservation Order sites located within 10 km of the Proposed Development. None of the National Monuments in State Care are located with 5.7km of the Proposed Development (see Section 13.3.2.2).

The Record of Monuments and Places was established under Section 12 (1) of the National Monuments (Amendment) Act, 1994 (as amended) and was based on the Sites and Monuments Record and the Register of Historic Monuments. These records comprise lists and maps of all known archaeological monuments and places for each county in the State. The National Monuments Service maintains a Historic Environment Viewer online service which comprises an online interactive map/search facility that provide access to all records stored on its national database of sites and monuments. The Viewer includes designated areas around recorded monuments known as 'zones of notification' which do not comprise buffer zones but are intended to indicate areas of archaeological potential within their

environs¹². All archaeological sites listed in the Record of Monuments and Places receive statutory protection under the National Monuments (Amendment) Act 1994 (as amended) and no works can be undertaken at their locations, including their surrounding zones of notification, without providing two months advance notice to the National Monuments Service.

13.2.3.2 Architectural Heritage

The National Built Heritage Service (NBHS) is currently based in the DHLGH and is responsible for the preservation, protection and promotion of Ireland's architectural heritage resource. Protection of architectural or built heritage is provided for through a range of legal instruments that include the Heritage Act 1995 (as amended), the Architectural Heritage (National Inventory) and National Monuments (Misc. Provisions) Act 1999, and the Planning and Development Act 2000 (as amended). 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 Planning Authorities to maintain a 'Record of Protected Structures' 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. The current Record of Protected Structures for County Cork is published in the *County Cork Development Plan 2022-2028*. The Planning and Development Act 2000 (as amended) also provides for the inclusion of objectives for preserving the character of places, areas, groups of structures or townscapes of special interest designated as Architectural Conservation Areas.

The Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999 established the National Inventory of Architectural Heritage (NIAH), including the NIAH Historic Gardens and Designed Landscapes, to create a record of built heritage structures and associated lands within the State. While inclusion in a NIAH

¹² <https://www.archaeology.ie/sites/default/files/media/publications/archaeology-planning-process-pl13.pdf>

inventory does not provide statutory protection, the inventory is intended to advise Local Authorities on the compilation of their Records of Protected Structures.

13.2.3.3 Cork County Development Plan 2022-2028

Chapter 16 of the *Cork County Development Plan 2022-2028* includes a wide range of objectives in relation to the protection of the cultural heritage resource within the county. These objectives can be reviewed online¹³ and the following is list of relevant examples:

HE16-2: Protection of Archaeological Sites and Monuments

Secure the preservation (i.e. preservation in situ or in exceptional cases preservation by record) of all archaeological monuments and their setting included in the Sites and Monuments Record (SMR) (see www.archaeology.ie) and the Record of Monuments and Places (RMP) and of sites, features and objects of archaeological and historical interest generally. In securing such preservation, the planning authority will have regard to the advice and recommendations of the Development Applications Unit of the Department of Housing, Local Government and Heritage as outlined in the Frameworks and Principles for the Protection of the Archaeological Heritage policy document or any changes to the policy within the lifetime of the Plan.

HE16-3: Underwater Archaeology

Protect and preserve the archaeological value of underwater archaeological sites and associated underwater and terrestrial features. In assessing proposals for development, the development will take account of the potential underwater archaeology of rivers, lakes, wetlands, intertidal and sub-tidal environments through appropriate archaeological assessment by a suitably qualified archaeologist.

HE16-5: Zones of Archaeological Potential

Protect the Zones of Archaeological Potential (ZAPs) located within historic towns, urban areas and around archaeological monuments generally. Any development within the ZAPs will need to take cognisance of the upstanding and potential for subsurface archaeology, through appropriate archaeological assessment.

HE16-6: Industrial and Post Medieval Archaeology

Protect and preserve industrial and post-medieval archaeology and long-term management of heritage features such as mills, limekilns, forges, bridges, piers and harbours, water-related engineering works and buildings, penal chapels, dwellings, walls and boundaries, farm buildings, estate features, military and coastal installations. There is a general presumption for retention of these structures and features. Proposals for

¹³ <https://www.corkcoco.ie/sites/default/files/2022-06/volume-1-main-policy-material.pdf>

appropriate redevelopment including conversion should be subject to an appropriate assessment and record by a suitably qualified specialist/s.

HE16-8: Burial Places

Protect all historical burial places and their setting in County Cork and encourage their maintenance and care in accordance with appropriate conservation principles.

Objective HE16-9: Archaeology and Infrastructure Schemes

All large scale planning applications (i.e. development of lands on 0.5 ha or more in area or 1km or more in length) and Infrastructure schemes and proposed roadworks are subjected to an archaeological assessment as part of the planning application process which should comply with the Department of Arts, Heritage and the Gaeltacht's codes of practice. It is recommended that the assessment is carried out following pre planning consultation with the County Archaeologist, by an appropriately experienced archaeologist to guide the design and layout of the proposed scheme/development, safeguarding the archaeological heritage in line with Development Management Guidelines.

Objective HE16-10: Management of Monuments within Development Sites

Where archaeological sites are accommodated within a development it shall be appropriately conservation/ protection with provision for a suitable buffer zone and long-term management plan put in place all to be agreed in advance with the County Archaeologist.

HE 16-11: Archaeological Landscapes

To protect archaeological landscapes and their setting where the number and extent of archaeological monuments are significant and as a collective are considered an important archaeological landscape of heritage value.

Objective HE16-13: Undiscovered Archaeological Sites

To protect and preserve previously unrecorded archaeological sites within County Cork as part of any development proposals. The Council will require preservation in situ to protect archaeological monuments discovered. Preservation by record will only be considered in exceptional circumstances.

Objective HE 16-14: Record of Protected Structures

a) The identification of structures for inclusion in the Record will be based on criteria set out in the Architectural Heritage Protection Guidelines for Planning Authorities (2011).

b) Extend the Record of Protected Structures in order to provide a comprehensive schedule for the protection of structures of special importance in the County during the lifetime of the Plan as resources allow.

c) Seek the protection of all structures within the County, which are of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest. In

accordance with this objective, a Record of Protected Structures has been established and is set out in Volume Two Heritage and Amenity, Chapter 1 Record of Protected Structures.

d) Ensure the protection of all structures (or parts of structures) contained in the Record of Protected Structures.

e) Protect the curtilage and attendant grounds of all structures included in the Record of Protected Structures.

f) Ensure that development proposals are appropriate in terms of architectural treatment, character, scale and form to the existing protected structure and not detrimental to the special character and integrity of the protected structure and its setting.

g) Ensure high quality architectural design of all new developments relating to or which may impact on structures (and their settings) included in the Record of Protected Structures.

h) Promote and ensure best conservation practice through the use of specialist conservation professionals and craft persons.

i) In the event of a planning application being granted for development within the curtilage of a protected structure, that the repair of a protected structure is prioritised in the first instance i.e. the proposed works to the protected structure should occur, where appropriate, in the first phase of the development to prevent endangerment, abandonment and dereliction of the structure.

Objective HE 16-15: Protection of Structures on the NIAH

Protect where possible all structures which are included in the NIAH for County Cork, that are not currently included in the Record of Protected Structures, from adverse impacts as part of the development management functions of the County.

Objective HE 16-16: Protection of Non- Structural Elements of Built Heritage:

Protect non-structural elements of the built heritage. These can include designed gardens/garden features, masonry walls, railings, follies, gates, bridges, shopfronts and street furniture. The Council will promote awareness and best practice in relation to these elements.

HE 16-19: Vernacular Heritage

a) Protect, maintain and enhance the established character, forms, features and setting of vernacular buildings, farmyards and settlements and the contribution they make to our architectural, archaeological, historical, social and cultural heritage and to local character and sense of place.

b) Cork County Council encourages best conservation practice in the renovation and maintenance of vernacular buildings including thatched structures through the use of specialist conservation professionals and craft persons. Development proposals shall be

accompanied by appropriate documentation compiled by experienced conservation consultant.

c) There will generally be a presumption in favour of the retention of vernacular buildings and encouragement of the retention and re-use of vernacular buildings subject to normal planning considerations, while ensuring that the re-use is compatible with environmental and heritage protection.

The *Cork County Development Plan 2022-2028* also includes 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 (HE16-23: Cultural Heritage), linguistic heritage (HE16-22: Gaeltacht Areas), placenames (HE16-24: Naming of New Developments) and the arts (HE16-26: The Arts).

13.2.4 Desktop Study

This assessment presents the results of a desktop study of relevant published sources and datasets undertaken with the objective of identifying and presenting all recorded and potential archaeological, architectural and other cultural heritage sites/features/areas within the Study Areas of the Proposed Development, GCRs and TDR works areas. The principal sources reviewed for the assessment of the recorded archaeological resource were the Sites and Monuments Record (SMR) and the Record of Monuments and Places (RMP). The Record of Protected Structures (RPS) and the National Inventory of Architectural Heritage (NIAH) were consulted for assessing the designated architectural heritage resource. Details on the legal and planning frameworks designed to protect these elements of the cultural heritage resource are also provided.

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

Archaeological Inventory of County Cork Vols. 1 and 5: These publications present summary descriptions of recorded archaeological sites within this area of the county. In addition, current national online database resources pertaining to the recorded archaeological resource were reviewed on the National Monuments Service's Historical Environment Viewer (www.archaeology.ie) in January 2025. The inventory entries for the recorded archaeological sites located within, or in the close environs, of the Proposed Development are provided within the chapter and the entries for other sites within surrounding lands are provided in **Appendix 13.1**.

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 and was reviewed in January 2025.

Topographical Files of the National Museum of Ireland – These files comprise paper and digital records of known information on Irish artefacts, including their discovery locations. The file archive is stored in the museum premises in Kildare Street, Dublin and was inspected as part of the assessment. The file archive does not contain any entries for townlands extending into the Proposed Development.

Database of Irish Excavation Reports: This database contains summary accounts of all archaeological excavations carried out in Ireland (North and South) from 1970 to present. Current data was accessed via www.excavations.ie in January 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 to these sources 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 map editions published by the Ordnance Survey 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 **Volume III**.

Aerial/Satellite/LiDAR imagery: A review of available imagery of the Proposed Development was undertaken in order to review the extent of modern interventions and to ascertain if any traces of unrecorded archaeological sites were visible.

Irish National Folklore Collection: A review was undertaken of transcribed material from the National Folklore Collection archive which has been digitised and published online at www.duchas.ie.

UNESCO designated World Heritage Sites and 2023 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 examples have been included in a Tentative List (2022)

nominated by Ireland for inclusion 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 World Heritage or Tentative List sites are located within 10 km of the Proposed Development, GCR or TDR work areas. The nearest example to the Proposed Development is Sceilg Mhichíl which is located c.90 km to the west.

Relevant EIARs: A review of available EIAR cultural heritage chapters prepared for other wind farm developments located within 10 km of the Proposed Development was carried out and the results are detailed in **Section 13.6**.

13.2.5 Field Survey

Field surveys were carried out in June 2021, January and February 2023, April 2024 and December 2025. The surveys included inspections of the Proposed Development, GCR options and sections of the proposed TDR where ground works are required. The inspected lands were assessed in terms of historic landscape, existing land use, tree cover and the potential for the presence and survival of unrecorded archaeological and undesignated architectural heritage sites/features. The results of the field surveys, including the photographic record, are provided in **Section 13.2**.

13.2.6 Consultation

The Cork County Council Archaeologist made the following observations in relation to the assessment of the Proposed Development during the consultation process (dated 11/04/2022):

The study should be extended to include archaeological monuments in the wider landscape with astronomical association intervisible from the proposed development site and assessed the proposed development the impact on same. Certain Viewing points assessment should be guided by the appointed archaeologist.

Provide a clear definition on what is covered under Cultural heritage. All heritage features should be identified and assessed within the proposed development site i.e. inclusion of built heritage features as part of the tangible cultural heritage (i.e. outside what is identified as archaeological monuments and architectural heritage)

There is considerable concern regarding visual impact on the archaeological monuments both individually and collectively and their setting given the dense number and nature of the monuments within the development site. A robust assessment is required to demonstrate the visual impact of the development on the setting of the monuments

individually and collectively as a historic/prehistoric landscape and the significance of same should be provided.

Given the nature of the terrain and the density of the monuments there is significant potential to identify previously unrecorded archaeological sites both above and below ground and the results guide design and layout and some level of site testing may be required as part of the assessment.

The appointed archaeologist should be suitably qualified and experienced and liaise with the County Archaeologist when preparing the EIAR following site inspection.

The chapter includes reviews of archaeological monuments with potential astronomical associations within the wider landscape around the Proposed Development and assesses potential impacts on such alignments. A definition of what is covered under cultural heritage is provided within the chapter and potential impacts on all identified cultural heritage constraints within the Proposed Development are assessed. The chapter also provides an assessment of visual impacts on archaeological monuments within the Proposed Development both individually and collectively as an archaeological landscape. The mitigation measures detailed in **Section 13.5** include pre-development archaeological test trenching of the Proposed Development.

13.3 BASELINE DESCRIPTION

13.3.1 Introduction

The following sections present summary details of the main periods within the Irish archaeological record with references to known archaeological sites, designated architectural heritage structures listed in the Record of Protected Structures and National Inventory of Architectural Heritage and identified undesignated cultural heritage assets located within the 2 km, 5 km and 10 km Study Areas around the Proposed Development (Section 13.3.2), and the Study Areas centred on the Grid Connection Route options (Section 13.3.3) and Turbine Delivery Route work areas (Section 13.3.4). Datasets have been interrogated and retrieved from current state and Local Authority sources and are considered accurate at the time of writing in February 2025. The published archaeological inventory entries for the recorded archaeological sites referenced within this section of the chapter are provided in **Appendix 13.1**.

The dating framework used for each period of the archaeological record is based on the *Guidelines for Authors of Reports on Archaeological Excavations* as published by the National Monuments Service (2006)¹⁴.

13.3.2 The Proposed Development (including the Substation)

13.3.2.1 Archaeological Context

The published inventory entries of all recorded archaeological sites and designated architectural heritage structures within the 2 km Study Area encompassing lands within the Proposed Development and lands extending for 2 km from its boundary are provided in this section. Summary details on the origins, context, nature and function of the various monument types are provided along with references to relevant published material that will provide further information to the general reader.

There are ten recorded archaeological sites located within the boundary of the Proposed Development and these comprise 1 no. standing stone pair (CO093-024----), 1 no. mass-rock (CO093-084----), 5 no. hut sites (CO093-078001-, CO093-078002-, CO093-078004-, CO093-085---- and CO093-086----), 2 no. enclosures (CO093-087---- and CO093-078003-) and 1 no. field boundary (CO093-114----). The published Archaeological Survey of Ireland (ASI) descriptions of each of these sites are provided below and additional details and photographic records of each example are presented in **Section 13.3.5 (Table 13.11)**.

There are an additional 88 no. recorded archaeological sites located within the surrounding 2 km Study Area and the published ASI inventory descriptions for each example are provided in **Appendix 13.1**. In summary, these comprise the following site types:

- 2 no. anomalous stone groups
- 1 no. bullaun stone
- 2 no. burial grounds
- 1 no. burnt spread
- 9 no. enclosures
- 9 field boundaries
- 6 no. fulacht fiadh
- 1 no. 18th/19th century house
- 33 no. hut sites
- 1 no. lime kiln
- 1 no. mass-rock

¹⁴ <https://www.archaeology.ie/sites/default/files/media/publications/excavation-reports-guidelines-for-authors.pdf>

- 1 no. quarry
- 6 no. wedge tombs
- 4 no. ringforts
- 1 no. rock-scribing
- 7 no. standing stones
- 3 non-archaeological sites

Prehistoric Periods

Until the recent identification of Palaeolithic human butchery marks on a bear bone recovered from a cave site in County Clare, which was dated to c. 10,500 BC, 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 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. West Cork was an important mining area during this period, and this is reflected by the high amounts of Bronze Age monuments within the region. 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 is

one known prehistoric monument located within the boundary of the Proposed Development, and this comprises a standing stone pair (CO093-024----) which may be of Bronze Age date. These monuments are formed by two upright stones, typically about 2m in height, and are generally aligned in a NE-SW direction. The example within the Proposed Development now only retains one extant upright stone and has been described by the ASI as follows:

Standing stone pair (CO093-024----)

On bog-covered ridge c. 350m NW of summit (1284 ft.) of Shehy Beg mountain. One stone lies prostrate, partly concealed by peat. It measures at least 4.6m by 0.95m and is 0.5m T. Second stone, 3.6m to SW, is 0.95m L, 0.35m T and 2.2m H.

The review of the wider landscape extending for 5 km from the Proposed Development also revealed the presence of a number of other prehistoric monuments of potential Bronze Age date which may have been constructed to form potential visual alignments across the wider landscape. In summary, these comprise 2 no. stone circles, 6 no. wedge tombs, 4 no. stone rows and 4 no. standing stone pairs and these are all located within private lands outside the boundary of the Proposed Development. A summary of the archaeological context for these monument types and their associated alignment attributes is provided in the following paragraphs. **Table 13.6** presents the results of a review of the examples located within 5 km of the Proposed Development and includes their ASI inventory descriptions and an analysis of their recorded alignments in combination with their locations and distances in relation to the Proposed Development which was carried out to appraise any potential intrusions on their alignments (see also **Figure 13.3**).

There are two main concentrations of stone circles monuments in Ireland (a Mid-Ulster group and a Cork/Kerry group) and of the c.250 known examples in Ireland c.100 are located in County Cork, mostly within the western half of the county. This group comprises examples containing an uneven number (typically five or more) of upright stones symmetrically arranged so that one stone in the southwest end, the axial stone, is set directly opposite the two tallest stones which form the entrance while the other stones are often arranged to reduce in height from the entrance to the axial stone. The axis between the entrance and axial stones are typically aligned towards views to the west or southwest and may have potential visual alignments across the landscape towards solar events in these directions (e.g., solstices and equinoxes). Waddell¹⁵ has noted that some examples appear to possess no precise alignments on such events other than general views towards

¹⁵ Waddell, J. (1998). *The Prehistoric Archaeology of Ireland*. Galway: Galway University Press.

the southwest. O' Brien¹⁶ has noted that while a case has been made for associations with potential lunar alignments this is unlikely, and that alignments were more probably set towards the general direction of the setting sun in the general southwest quadrant during the darker months of the year. This alignment may have been an expression of ritual beliefs centred on themes of birth and rebirth based on an association between death and the setting/dying sun which formed an important focus of worship during prehistoric periods.

There are two stone rows located within 5 km of the Proposed Development and these form part of a distinctive Cork and Kerry group that contain three or more upright stones set on a straight line, generally aligned NE-SW, with their heights often descending from a tallest stone at the southwest end. There are also 5 standing stone pairs located within the 5 km area, including one example within the Proposed Development (CO093-024----) which comprise a sub-group of stone row monuments that typically share the same NE-SW alignment. There are six wedge tombs located within 5 km of the Proposed Development, and these consist of a long burial gallery formed by large stone slabs, sometimes with an antechamber or small closed end-chamber. They are generally broader and higher at the front, which tends to face towards the west and southwest directions. The monuments are roofed by slabs laid directly on the side walls which often have one or more rows of outer-walling. Evidence from the small number of excavated examples suggests that they were constructed between 2,500 and 2,000 BC and represent the final phase of megalithic tomb building in Ireland. They are mainly located in the western half of the country and there are currently 115 examples recorded in County Cork, with a noted concentration in the western half of the county.

In addition, a review of mountain summits within the wider landscape around the Proposed Development was also carried out in order to assess if they contain other monument types, such as stone cairns, that may have potential ritual attributes resulting from intervisibility between their locations. This revealed that there are no recorded archaeological sites of any type located on the summit of Shehy More or on the summits of Douce, Doughill, Foilastookeen and Conigar Mountains, which are located within the wider 10 km landscape to the west and northwest of the Proposed Development.

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).

¹⁶ O'Brien, W. (2012) *Iverni: A Prehistory of Cork*. Corl. The Collins Press.

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. While there are no archaeological site types that can be definitely dated to the early medieval period located within the Proposed Development, there are four ringforts located within the surrounding 2 km Study Area (see **Table 13.5**). Ringforts are the most common early medieval sites within the Irish landscape and comprise circular enclosures delimited by earthen banks formed of material thrown up from a concentric external ditch. The ubiquity of these enclosures within the Irish landscape is attested to by the fact that their original Gaelic names (rath and lios) still form some of the most common place-name elements in the country. Archaeological excavations have demonstrated that the majority comprised enclosed farmsteads containing the foundations of domestic and agricultural buildings.

The surrounding 2 km Study Area also contains a bullaun stone (CO093-081----) which comprises boulders with cut hemispherical hollows or basin-like depressions that may have functioned as mortars. While they are often found associated with early ecclesiastical sites other examples which do not appear to have ecclesiastical associations are also known, including within upland contexts.

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 archaeological site types, such as tower houses or ecclesiastical sites, which can be definitely dated to the late or high medieval monuments located within the 2 km Study Area.

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 early phase of the post-medieval period was a turbulent time in Ireland and saw a period of wars between the 1560s and 1603 with further conflict during the mid-17th century

Cromwellian Wars which resulted in extensive dispossession of forfeited Gaelic lands. An agricultural boom in the late 18th and early 19th centuries saw a rise in prices for both Irish tillage and dairy produce which resulted in landlords investing in extensive land improvement works within their holdings to increase productivity. This included widespread land drainage works and enclosure of open lands into field systems that survive to the present-day. 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 Topographical Dictionary of Ireland*¹⁷ provides descriptions of Irish parishes during the early decades of the 19th century and often provides information on contemporary land use patterns, historical events and the presence of notable archaeological sites and features of architectural heritage interest such as large country houses. The publication contains no references to the townlands extending within the Proposed Development or those within the surrounding 2 km Study Area.

There is one recorded post-medieval site located within the boundary of the Proposed Development, and this comprises a mass rock (CO093-084----). 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 Aifrin* 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. The example within the boundary of the Proposed Development has been described as follows by the ASI:

Mass-rock CO093-084----

In rough heather-clad hill grazing, on the S-facing slopes of Shehy Beg. A stone slab (1.8m E-W; 1.5m N-S; H 0.8m), resting on a table-like area of outcropping rock, is known locally as a mass-rock. Two smaller slabs, which lean to the E, are situated to the E of the mass-rock and may be the remains of a small animal shelter. The mass-rock is c. 70m to the S of the old 'Butter Path', which runs along the lower slopes of Shehy Beg.

¹⁷ Lewis, S. (1837) *Topographical Dictionary of Ireland*. 2 Volumes, Lewis & Company, London

Other recorded post-medieval sites within the surrounding 2 km Study Area comprise a recorded mass-rock (CO093-011002-) in Coolmountain townland, an 18th/19th century house (CO093-113----) in Shancrane West townland, a burial ground (CO093-011001-) in Coolmountain townland and a lime kiln (CO093-030----) in Shancrane East townland (see **Table 13.5** and **Figure 13.1**). Further details on the layout of the lands within the boundary of the Proposed Development and its environs during the 19th century are presented in the review of historical Ordnance Survey (OS) maps (**Section 13.4.10**).

Archaeological Sites of Indeterminate Date

The majority of the recorded archaeological sites located within the boundary of the Proposed Development are types (hut sites, field boundary and enclosure) that cannot be accurately dated without recourse to archaeological excavation. A number of these sites were identified and recorded during field-walking surveys of the area carried out by Tony Miller in recent decades and have since been added to the SMR.¹⁸

There is one recorded enclosure (CO093-087----) located within the north half of the Proposed Development and this comprises a small stone-built structure with a D-shaped plan. The potential exists that this may form the remains of a post-medieval agricultural structure, such as an animal pen, and its extant remains do not indicate that it comprises an unclassified settlement site of earlier date, such as an early medieval cashel site. The structure is recorded as follows by the ASI:

Enclosure CO093-087----

On a platform in rough hill grazing, on bog at the head of Kealkill valley on the W-facing slopes of Shehy Beg with views W to Bantry Bay. A D-shaped area (5m NW-SE), with the straight side at SE (L 4.6m) is defined by a roughly built collapsing drystone wall (T 0.8m; H up to 1.1m). Rubble is scattered in the interior and along both sides of the enclosing element. The entrance (Wth c. 0.8m) is at W. There is a hut site (CO093-086----) c. 20m to the S.

There is also one enclosure (CO093-078003-) located within the southern end of the Proposed Development and this comprises a small oval shaped structure with surviving traces of the lower course of a partly collapsed wall. The enclosure is recorded as follows by the ASI:

Enclosure CO093-078003-

In rough hill grazing on bog, on a terrace on the upper S-facing slopes of Shehy Beg with views across a valley to Nowen Hill. An oval area (5.6m N-S; 3.4m E-W) is defined by the lower courses of a partially collapsed drystone wall (T 0.8m; H 0.7m) protruding above the surface of the shallow

¹⁸ Miller, T. (2009) 'Some new upland sites'. *Journal of the Cork Archaeological Historical Society* **Vol. 114** (p. 33-38)

bog. A hut site (CO093-078004-) is in the N half of the enclosure and a second hut site (CO093-078002-) is c. 20m to the E.

There are 5 no. recorded hut sites within the boundary of the Proposed Development and an additional 33 no. examples are located within the surrounding 2 km Study Area (see **Table 13.5**). These sites are a common feature in the upland landscape of Ireland, particularly within western counties, and of the c. 500 examples recorded within County Cork, the vast majority are located within the western half of the county. These hut sites are often associated with booley farming which comprised the movement of livestock, such as cows, sheep and goats, into often remote upland grazing grounds during the summer months and included the construction of stone huts for the herders who watched over the livestock and also may have been used as milking sites and for churning butter. These types of huts are often called *clochán* in Irish and some examples may have originally been built entirely of stone, forming a distinctive beehive shape, while others may have only contained stone side walls which were roofed with thatch. While hut sites associated with booley farming are often considered to date to the post-medieval period the potential that some examples may date to earlier periods of the archaeological record cannot be discounted. For instance, O'Brien's¹⁹ programme of archaeological surveys and excavations on the Beara peninsula produced dating evidence indicating late prehistoric and early medieval dates for a number of investigated hut sites in that area of the county.

The hut sites within the boundary of the Proposed Development, and other examples in adjoining lands, are mainly concentrated on south-facing slopes in Shehy Beg townland. They typically survive as the low remains of partially overgrown wall footings (30cm-50cm high) that retain little above ground expression and have been recorded by the ASI as follows:

Hut Site CO093-078001-,

In rough hill grazing, on bog, on a terrace on the upper S-facing slopes of Shehy Beg. The remains of a circular hut site (2.6m N-S; 2.4m E-W) defined by a collapsed drystone wall (T 0.6m; H 0.4m) which protrudes above the surface of shallow bog. A jumble of stones adjoining the perimeter externally at the SE may represent the remains of an annexe or an entrance feature. Another hut site (CO093-078002-) is c. 20m to the NW.

Hut Site CO093-078002-

In rough hill grazing, on bog, on a terrace on the upper S-facing slopes of Shehy Beg. The remains of a circular hut site (diam. 1.7m N-S) defined by a jumbled, collapsed, drystone wall (T 0.6m; H

¹⁹ O'Brien (2009) *Local Worlds: Early Settlement Landscapes and Upland Farming in South-west Ireland*. Cork. The Collins Press.

0.4m) which protrudes above the surface of the bog. Another hut site (CO093-078001-) is c. 20m to the SE and an enclosure (CO093-078003) is c. 20m to the W.

Hut Site CO093-078004-

In rough hill grazing, within the N half of an enclosure (CO093-078003-). The remains of a circular hut site (diam. 1.8m) defined by a stone wall (T 0.6m; H 0.4m) which protrudes above the surface of shallow bog.

Hut Site CO093-085----

In rough hill grazing, on a terrace on the S-facing slopes of Shehy Beg. The remains of a circular hut site (diam. 2.8m) are defined by a collapsed drystone wall (T 0.7m; H 0.3m) the base of which is protruding above the surface of the bog. The interior of the hut site is level and the entrance (Wth 0.7m) is situated at the NNE.

Hut Site CO093-086----

In rough hill grazing, on bog, on the W-facing slopes of Shehy Beg. The remains of a circular hut site (diam. 2.4m) are defined by a jumbled, roughly built, drystone wall (T 0.5m; H 0.5m). Stones are scattered in the level interior, which is cut (D 0.3m) into the upslope at the E and raised (H 0.25m) at the W to give a level interior. There is an enclosure (CO093-087----) c. 20m to the N.

There is also one recorded field boundary (CO093-114----) located within the boundary of the Proposed Development and nine other examples are located within the surrounding 2 km Study Area. As with hut sites, these boundary features may potentially date to recent centuries, but the potential also exists that some examples may date to earlier periods of the archaeological record. The field boundary within the boundary of the Proposed Development has been recorded as follows by the ASI:

Field boundary CO093-114----

A length of pre-bog wall just protruding above the surrounding bog high (c. OD430m) on the southern slopes of Shehy Mountain. It closes off the eastern end of a level terrace with steep slopes to south and north. It is c. 60m in length and orientated northwest- southeast, curving noticeably in the northern half. A further short section of wall c. 6m in length and L-shaped is c. 12m to the west.

Table 13.5: Recorded Archaeological Sites Within 2 km Study Area

MONUMENT NO.	TYPE	CONDITION (Based on ASI Descriptions)	TOWNLAND	APPROX. DISTANCE FROM SITE
CO093-113----	18th/19th century house	Partially extant	SHANACRANE WEST	630m
CO093-027002-	Anomalous stone group	Low surface traces	TOOREEN	760m
CO093-054001-	Anomalous stone group	No surface traces	GLANYCARNEY	1,130m
CO093-081----	Bullaun stone	Extant	SHEHY BEG	155m
CO093-004----	Burial ground	Low surface traces	AN CHLOCHBHUAILE, CORNAIRE	1,795m
CO093-011001-	Burial ground	Extant	COOLMOUNTAIN	1,470m
CO093-104----	Burnt spread	No surface traces	COOLMOUNTAIN	525m
CO092-061001-	Enclosure	Low surface traces	GORTLOUGHRA	1,910m
CO092-075002-	Enclosure	Low surface traces	COOMCLOGH	430m
CO093-010----	Enclosure	Low surface traces	COOLMOUNTAIN, SHEHY MORE	940m
CO093-025----	Enclosure	Low surface traces	SHANACRANE WEST	600m
CO093-078003-	Enclosure	Low surface traces	SHEHY BEG	Within
CO093-080002-	Enclosure	Extant	SHEHY BEG	75m
CO093-087----	Enclosure	Extant - partially collapsed	GORTLOUGHRA	Within
CO093-088----	Enclosure	Extant - partially collapsed	SHEHY MORE	425m
CO093-099----	Enclosure	Extant - partially collapsed	SHEHY BEG	90m
CO093-101----	Enclosure	Low surface traces	SHEHY BEG	105m
CO093-110----	Enclosure	Low surface traces (partly removed)	SHEHY MORE	1,910m
CO092-064----	Field boundary	Low surface traces	GORTLOUGHRA	1,620m
CO092-075001-	Field boundary	Low surface traces	COOMCLOGH	430m
CO092-090----	Field boundary	Low surface traces	COOMCLOGH	1,765m
CO092-095----	Field boundary	Low surface traces	COOMCLOGH	1,765m
CO093-097----	Field boundary	Low surface traces	SHEHY BEG	60m
CO093-102----	Field boundary	Low surface traces	SHEHY BEG	175m
CO093-103----	Field boundary	Low surface traces	SHEHY BEG	150m
CO093-106----	Field boundary	Low surface traces	SHEHY BEG	80m
CO093-107----	Field boundary	Low surface traces	SHEHY BEG	335m
CO093-114----	Field boundary	Low surface traces	SHEHY BEG	Within
CO093-029----	Fulacht fia	No surface traces	SHANACRANE EAST	1,540m
CO093-054002-	Fulacht fia	Low surface traces	GLANYCARNEY	1,130m
CO093-090----	Fulacht fia	Low surface traces	TOOREEN	575m
CO093-094----	Fulacht fia	Unknown	TOOREEN	1,045m
CO093-108----	Fulacht fia	No surface traces	TOOREEN	660m
CO093-109----	Fulacht fia	Low surface traces	TOOREEN	640m
CO092-061002-	Hut site	Low surface traces	GORTLOUGHRA	1,910m
CO092-062001-	Hut site	Low surface traces	GORTLOUGHRA	1,620m
CO092-062002-	Hut site	Low surface traces	GORTLOUGHRA	1,635m
CO092-063001-	Hut site	Low surface traces (now in forestry)	GORTLOUGHRA	1,305m
CO092-063002-	Hut site	Partly demolished (in forestry)	GORTLOUGHRA	1,225m

MONUMENT NO.	TYPE	CONDITION (Based on ASI Descriptions)	TOWNLAND	APPROX. DISTANCE FROM SITE
CO092-063003-	Hut site	Low surface traces (now in forestry)	GORTLOUGHRA	1,195m
CO092-074----	Hut site	Low surface traces	COOMCLOGH	415m
CO092-075003-	Hut site	Low surface traces	COOMCLOGH	430m
CO092-075004-	Hut site	Low surface traces	COOMCLOGH	430m
CO092-075005-	Hut site	Low surface traces	COOMCLOGH	430m
CO092-075006-	Hut site	Low surface traces	COOMCLOGH	400m
CO092-075007-	Hut site	Low surface traces	COOMCLOGH	400m
CO092-075008-	Hut site	Low surface traces	COOMCLOGH	430m
CO092-075009-	Hut site	Low surface traces	COOMCLOGH	430m
CO092-076----	Hut site	Low surface traces	COUSANE	480m
CO092-079----	Hut site	Unknown	COUSANE	1,910m
CO092-097----	Hut site	Low surface traces	COOMCLOGH	1,970m
CO093-077001-	Hut site	Low surface traces	SHEHY BEG	145m
CO093-077002-	Hut site	Low surface traces	SHEHY BEG	100m
CO093-077003-	Hut site	Low surface traces	SHEHY BEG	90m
CO093-077004-	Hut site	Low surface traces	SHEHY BEG	90m
CO093-077005-	Hut site	Low surface traces	SHEHY BEG	100m
CO093-078001-	Hut site	Low surface traces	SHEHY BEG	Within
CO093-078002-	Hut site	Low surface traces	SHEHY BEG	Within
CO093-078004-	Hut site	Low surface traces	SHEHY BEG	Within
CO093-079001-	Hut site	Low surface traces	SHEHY BEG	80m
CO093-079002-	Hut site	Low surface traces	SHEHY BEG	125m
CO093-080001-	Hut site	Low surface traces	SHEHY BEG	25m
CO093-082----	Hut site	Low surface traces	SHEHY BEG	175m
CO093-083----	Hut site	Low surface traces	SHEHY BEG	145m
CO093-085----	Hut site	Low surface traces	SHEHY BEG	Within
CO093-086----	Hut site	Low surface traces	GORTLOUGHRA	Within
CO093-089----	Hut site	Low surface traces	SHEHY MORE	505m
CO093-093001-	Hut site	Unknown	SHANACRANE EAST	1,045m
CO093-093002-	Hut site	Unknown	SHANACRANE EAST	1,045m
CO093-098----	Hut site	Low surface traces	SHEHY BEG	80m
CO093-100----	Hut site	Low surface traces	SHEHY BEG	100m
CO093-115----	Hut site	Low surface traces	SHEHY BEG	10m
CO093-030----	Kiln - lime	Extant	SHANACRANE EAST	1,715m
CO093-011002-	Mass-rock	Extant	COOLMOUNTAIN	1,470m
CO093-084----	Mass-rock	Extant	SHEHY BEG	Within
CO093-056----	Quarry	Non-archaeological	GLANYCARNEY	1,255m
CO093-002----	Redundant record	Non-archaeological	AN CHLOCHBHUAILE	1,530m
CO093-031----	Redundant record	Non-archaeological	SHANACRANE EAST	1,820m
CO092-015----	Ringfort - rath	Extant (planted with trees)	DOIRE UÍ RÍORDÁIN THEAS	1,630m
CO093-028----	Ringfort - rath	Low surface traces	SHANACRANE EAST	1,180m

MONUMENT NO.	TYPE	CONDITION (Based on ASI Descriptions)	TOWNLAND	APPROX. DISTANCE FROM SITE
CO093-057----	Ringfort - rath	Low surface traces	GLANYCARNEY	1,955m
CO093-059----	Ringfort - rath	Low surface traces	DOIREACH	1,905
CO092-070----	Rock scribing	Extant	GLANYCARNEY	1,770m
CO092-083----	Souterrain	Unknown (now within forestry)	DOIRE UÍ RÍORDÁIN THUAIDH	1,500m
CO092-037----	Standing stone	Extant	GORTLOUGHRA	1,550m
CO092-077----	Standing stone	Extant (now within forestry)	COUSANE	600m
CO093-026----	Standing stone	Levelled	TOOREEN	630m
CO093-027001-	Standing stone	Extant	TOOREEN	760m
CO093-027003-	Standing stone	Extant	TOOREEN	760m
CO093-032----	Standing stone	Extant	SHANACRANE EAST	1,800m
CO093-055----	Standing stone	Extant	GLANYCARNEY	1,070m
CO093-024----	Standing stone pair	Partially extant (one stone levelled)	SHEHY BEG	Within
CO092-014----	Wedge tomb	Extant	DOIRE UÍ RÍORDÁIN THEAS	1,160m
CO093-001----	Wedge tomb	Extant	AN CHLOCHBHUAILE	900m
CO093-003----	Wedge tomb	Extant (partially collapsed)	AN CHLOCHBHUAILE	1,400m
CO093-006----	Wedge tomb	Extant	CORNAIRE	1,465m
CO093-007----	Wedge tomb	Extant (partially collapsed)	CORNAIRE	1,960m
CO093-076----	Wedge tomb	Extant (in forestry)	AN CHLOCHBHUAILE	850m

Table 13.6: Archaeological Sites with potential visual alignments within 5km of Site

Monument no.	Classification	ASI Inventory Description	Alignment as recorded by ASI	Approx distance from Site	Direct alignment towards turbine?
CO092-014----	Wedge tomb	In sheltered position c. 39m N of a low rocky ridge at head of Sruhaunphadeen valley to NE of Douce Mountain. Comprises gallery (L 3.1m; Wth 1.2m at W end, 0.95m at E) aligned ENE-WSW. Gallery sides each of two stones, those to W being shorter and set inside line of other two; inset backstone at E end. Gallery decreases in height from W to E; surrounded by closely set outer walling and covered by two roof stones. No indications of surrounding mound.	Open to WSW	1.9km to NW	No
CO093-076----	Wedge tomb	In rough grazing, close to the foot of a W-facing slope in a clearing within a coniferous plantation at the head of Sruhaunphadeen valley on the NE side of Douce Mountain. The wedge-shaped gallery (L 1.95m; Wth 1.12m at W, narrowing to 0.65m at E), aligned WNW-ESE, is closed by a double backstone (H 0.45m) at E. Both the N and S sides are each formed by two uprights with the larger of the two set at the W end; the W end of the S side is broken and appears to represent a detached third stone. Three close-set outer-wall stones flank the N side of the gallery and a single outer-wall stone stands outside the E end of the S side. The E end of the gallery is covered by a roof stone (1.5m x 1m: T 0.15m), sloping to the E. Several portions of a broken slab lie prostrate among the ferns immediately to the W of the entrance and may represent the remnants of the roof stone from the W half of the gallery. Another wedge-tomb (CO093-001----) is c. 150m to the NNE.	Open to WNW	1.1km to N	No
CO093-001----	Wedge tomb	On NW-facing slope beside isolated outcrop of rock, at head of Sruhaunphadeen valley to NE of Douce Mountain. Comprises small gallery (L 2m; Wth 1.25m at W end, 0.75m at E) open to SW, covered by single roofstone, represented by three sidestones to N, two to S and inset backstone at E end. No indications of surrounding mound	Open to SW (In forestry)	1.2km to N	No
CO093-003----	Wedge tomb	On shoulder of N-facing slope, close to outcropping rock, at head of Sruhaunphadeen valley to NE of Douce Mountain. Comprises ruined E end of gallery (L 2.9m; Wth c. 1.3m) aligned E-W; represented by two sidestones to S, one fallen sidestone to N and inset backstone at E end. Outer-wallstones are present to N and S of gallery. Displaced roofstone lies above E end. Traces of mound around N side of structure.	Open to W	1.6km to N	No
CO093-006----	Wedge tomb	On small bog-covered platform on steep S-facing slope at head of Sruhaunphadeen valley, to NE of Douce Mountain. Comprises gallery (L 3.4m; Wth 1.1m at SW end) open to SW, represented by two sidestones to N, three to S and inset backstone at E end; two outer-wall stones stand beyond N side. Traces of mound to S and W of gallery.	Open to SW	1.7km to N	No
CO080-019----	Wedge tomb	On wide expanse of open moorland on N-facing slope of valley of tributary of Sruhaunphadeen Stream. Comprises partly buried gallery (L 2m; Wth	Open to WNW	4.1km to NNW	No

Monument no.	Classification	ASI Inventory Description	Alignment as recorded by ASI	Approx distance from Site	Direct alignment towards turbine?
		1.1m at W end, 1m at E end) aligned ESE-WNW, represented by three sidestones to N, two to S and inset backstone at E end. Inclined stone at W end may be septal stone. Single outer-wall stone exposed at E end of N side. Gallery decreases in height from W to E; covered by roofstone, broken in two pieces. Incorporated in low mound (diam. 7m).			
CO093-008----	Wedge tomb	On valley floor at head of Sruhaunphadeen valley to NE of Douce Mountain, c. 150m to W of unclassified megalithic tomb (6429). Poorly preserved gallery (L 4.2m; Wth 1m) aligned NE-SW, represented by two sidestones to N and one to S; transverse stone near W end may indicate portico. Fallen stone to N of gallery may be outer-wall stone. Incorporated in mound (diam. c. 8m) crossed at E edge by field fence.	Open to SW	2.5km to N	No
CO093-007----	Wedge tomb	On small platform on steep N-facing slope of Sruhaunphadeen valley to NE of Douce Mountain. Comprises ruined gallery (L c. 3.5m; Wth 0.5m at E end), aligned ENE-WSW, irregularly constructed of small stones and surrounded by closely set outer walling. Two fallen stones at W end may be remains of facade. Incorporated in mound on edge of which lie two slabs, possibly displaced roof stones.	Open to WSW	1.8km to N	No
CO081-047----	Wedge tomb	In undulating hilly terrain, in an area of felled coniferous forestry. This wedge tomb is situated 20m N of a large expanse of outcropping rock. The remains comprise a gallery (L 2.73m; Wth 1.05m at W, narrowing to 0.95m at E), aligned WSW-ENE, represented by two sidestones at N, three to the S, and a single backstone at E. Two longitudinally set jambstones stand inside the W end. The gallery is surrounded by outer-walling, two stones to the N, one to the E, and four along the S side. A partially exposed prostrate slab (1.35m x 0.8m) lying immediately outside the S outer-walling may be a displaced roofstone. A second slab (L 1m; Wth 0.47m) lies in the gallery area.	Open to WSW (In forestry)	5km to NE	No
CO093-017----	Wedge tomb	In forest clearing between two ridges of outcropping rock high up on the N-facing slope of Mullaghmearogafin. Comprises short gallery (L 1.5m; Wth 0.8m at W, 0.75m at E end) aligned E-W, represented by two sidestones to N and S, and inset backstone at E end. The sidestones are doubled at the W end. Low transversely-set stone at W end of N side may be possible façade feature. Gallery decreases in height from W to E; E end covered by displaced roofstone. Stone row (6524) stands c. 150m uphill to S.	Open to W (In forestry)	4.3km to NE	No
CO093-062----	Wedge tomb	On low knoll, in rolling tillage in basin of Bandon River. Ruined gallery (L c. 3m; Wth c. 1m) aligned ENE-WSW, covered by three roofstones. W end of S side has collapsed. Kink in N wall and jamb-like stone at entrance suggests some form of portico arrangement. Outer-walling represented by two stones to S of gallery. No clear indications of surrounding mound.	Open to WSW	3.3km to SE	No
CO107-012----	Stone circle	In rolling pasture, on S side and near headwaters of Bandon river. Circle complete; N entrance stone fallen inwards, interior filled with field stones. Orthostats are 0.6m to 1m L, 0.35m to 0.5m T and 0.6m to 0.9m H. Internal measurement along main axis, aligned NE-SW, is 3m.	Open to SW	3.8km to SE	No

Monument no.	Classification	ASI Inventory Description	Alignment as recorded by ASI	Approx distance from Site	Direct alignment towards turbine?
CO092-051----	Stone circle	On low knoll at W end of Cousane gap, near head of Owngar river. Circle complete; stones are 1.1m to 2.7m L, 0.35m to 0.7m T and 0.4m to 0.7m H. Internal measurement along main axis, aligned E-W, is 3.15m.	E-W	3.8km to SW	No
CO092-013002-	Stone row	In forest, at head of Sruhaunphadeen Stream valley to NE of Douce Mountain. Probable row of three stones, aligned NE-SW, 4.65m in overall length. NE stone is considerably out of line with others and leans markedly to W; it measures 1.4m L, 0.2m T and, if erect, 0.7m H. Next stone, 0.9m to S, is 0.95m L, 0.5m T and 1.2m H. SW stone, 1.1m to SW of last, is 0.6m L, 0.4m T and 1.7m H. Loose boulder rests against its base.	NE-SW (In forestry)	2.6km to NNW	No
CO093-018----	Stone row	On shoulder of Mullaghmeagafin Mountain, overlooking Lee River valley to N. Row of three stones embedded in peat, aligned ENE-WSW, and 3.25m in overall length. NE stone is 0.6m L, 0.25m T and 0.65m H. Next stone, 0.4m to SW, is 0.45m L, 0.3m T and 0.45m H. SW and tallest stone, 0.85m from last, is 1m L, 0.6m T and 1.7m H.	ENE-WSW	4.2km to NE	Within environs (located in forestry)
CO107-011002-	Stone row	Incorporated in pre-bog fence. Row of five stones, aligned NE-SW, and 6.7m in overall length. NE stone is 0.9m L, 0.5m T and 0.75m H. Next stone, 1.2m to SW, is 0.85m L, 0.4m T and 1.1m H. Third stone, 1.2m further to SW, is 0.65m L, 0.5m T and 1m H. Fourth stone, 0.3m to SW is loose and may not be part of row; it is 0.55m L, 0.15m T and 0.6m H. SW stone is prostrate; it is over 1.2m by 0.9m and at least 0.4m T.	NE-SW	4.2km to SE	No
CO107-008----	Stone row	On small patch of pasture, on rocky ridge, in broad shallow valley of Bandon river. Row of four stones, aligned NE-SW, and 5.5m in overall length. NE stone is 0.85m L, 0.3m T and 1.2m H. Next stone, 0.4m to SW, is 0.75m L, 0.4m T and 1m H. Third stone, 0.5m further to SW, is 0.75m L, 0.2m T and 1.75m H. SW and tallest stone, 1.15m from last, is 1.1m L, 0.4m T and 2.1m H.	NE-SW	3.2km to SSE	No
CO093-024----	Standing stone - pair	On bog-covered ridge c. 350m NW of summit (1284 ft.) of Shehy Beg mountain. One stone lies prostrate, partly concealed by peat. It measures at least 4.6m by 0.95m and is 0.5m T. Second stone, 3.6m to SW, is 0.95m L, 0.35m T and 2.2m H.	Not recorded (only one of the stone pair is upright)	Within Site	Potentially but only one upright stone survives
CO093-014----	Standing stone - pair	On N side of valley of Caha river of lower SW slopes of Mullaghmeagafin mountain. Stones, aligned NE-SW, stand 1.6m apart; overall length 3.1m. NE stone is 0.85m L, 0.9m T and 1.6m H. SW stone is 0.7m L, 0.6m T and 1.15m H.	NE-SW	3.3km to ENE	No
CO092-035----	Standing stone - pair	In commanding position on shoulder of bog-covered hill on SE side of valley of Gortloughra river. Stones, aligned NE-SW, stand 1.8m apart; overall length 2.25m. NE stone is 0.55m L, 0.5m T and 1.3m H. SW stone is 0.9m L, 0.6m T and 2.1m H.	NE-SW	2.7m to W	No
CO092-066001-	Standing stone - pair	In rough hill grazing, on a terrace at the head of a valley sloping down to the NE, between Doughill Mountain to the NW and Douce Mountain to the SE. Two upright stones, aligned NE-SW, stand 0.8m apart and measure 2.2m in overall length. The NE stone (0.7m x 0.15m; H 0.75m) is rectangular in plan	NE-SW	3km to NW	No

Monument no.	Classification	ASI Inventory Description	Alignment as recorded by ASI	Approx distance from Site	Direct alignment towards turbine?
		and section. The SW stone (0.7m x 0.35m; H 1.05m) is also rectangular in plan and section and leans slightly to the SW. There is a hut site (CO092-066002-) c. 16m to the SE and a second standing stone-pair (CO092-067---) is c. 170m to the NE.			
CO092-067----	Standing stone - pair	In rough hill grazing, on a terrace at the head of a valley sloping down to the NE, between Doughill Mountain to the NW and Douce Mountain to the SE. Two stones, aligned NNE-SSW, stand 0.85m apart and measure 2.5m in overall length. The NNE stone (1.5m x 0.9m; H 1.35m) is roughly rectangular in plan and section. The SSW stone (1.3m x 0.75m; H 1.4m) is irregular in plan and section and leans slightly to the SE. There is a hut site (CO092-066002-) c. 180m to the SW and a second standing stone-pair (CO092-066001-) is c. 170m to the SW.	NNW-SSW	3.1km to NW	No

13.3.2.2 National Monuments in State Care and Preservation Orders within 10km

A review of the landscape extending for 10 km in all directions from the Proposed Development revealed that there are five National Monuments in State Care and two archaeological sites subject to Preservation Orders (PO) located within this area. These monuments are described in **Table 13.7** (see also **Figure 13.4**), and, in summary, they comprise the following:

- Stone row in Farrinahineeny townland (National Mon. No. 374)
- Standing stone pair in Clodagh townland (National Mon. No. 536)
- Tower house in Castledonovan townland (National Mon. No. 656)
- Stone circle and boulder burials in Breeny More townland (National Mon. No. 450)
- Stone row in Maughnasilky townland (no reference number assigned)
- Stone circle in Kealkill townland (PO no. 69/1938)
- Stone row in Dromdrasil townland (PO no. 12/1971)

None of the National Monuments in State Care are located within 5.7 km of the Proposed Development or are included in a National Monuments Service database of 'Monuments to Visit' which identifies National Monuments that are accessible to the public²⁰. These monuments include examples where the Office of Public Works maintain visitor services and those which have no formal visitor services, but which are accessible to the public. The list of examples with no formal visitor services is not exhaustive and the locations, and potential accessibility, of each of the National Monuments in State Care within the 10 km Study Area were reviewed (**Table 13.7**). In addition, the Office of Public Works has also published an online database of 'unguided sites' relating to monuments that are in their care but where no guided tours are available.²¹ This database includes two of the National Monuments within the 10 km Study Area and these comprise the stone rows at Maughanasilly and Farrannahineeny (see **Table 13.7**).

²⁰ <https://storymaps.arcgis.com/stories/f28042227ab8475b9a67e89879559db5>

²¹ <https://heritageireland.ie/unguided-sites/>

Table 13.7: National Monuments within 10 km of Site

National Monument No.	RMP No.	Class	Townland	Approx distance from nearest turbine	Description
374	CO093-043----	Stone Row	FARRANNAHINEENY	5.71km to east	This monument is included in an Office of Public Works database of 'unguided monuments' that are accessible to the public. The ASI record that this monument comprises four upright stones aligned in a NE-SW direction that forms a stone row measuring 8.2m in overall length. The recorded orientation of this monument is not aligned towards the Proposed Development.
536	CO107-040----	Stone Pair	CLODAGH	8.58km to south	Located in private land within no access facilities. The ASI record that this monument comprises two stones, aligned NE-SW, that stand to heights of 1.5m and 0.85m. The recorded orientation of this monument is not aligned towards the Proposed Development and a review of aerial satellite images revealed that it is now located within a clearing in a modern forestry plantation.
656	CO119-017002-	Tower house	CASTLEDONOVAN	9.66km to south	The ASI record that this comprises a rectangular, four storey tower house which was the castle of the O'Donovan family, potentially built about 1560 It stands to full height except for the SW corner, which had fallen, though significant consolidation and conservation works were undertaken by the Office of Public Works in recent years. The location of Castle Donovan was visited as part of this assessment. The gateway to a car park on the south side of the tower house was open and its surrounds are accessible to the public. While the entrance doorway in the west side of the tower house was 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 accessible views 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 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.
450	CO106-005001-	Stone Circle and Boulder Burials	BREENY MORE	9.69km to west-southwest	Located in private farmland with no access facilities. The ASI record that this comprises a stone circle with two surviving upright portal stones and an axial stone which form a NE-SW orientation. The other stones lie prostrate on the ground. The interior of the stone circle contains four boulder-burials which also form part of the National Monument. The recorded orientation of this monument is not directly aligned towards the Proposed Development and, as detailed in Section 13.3.2.1, the dominant ritual views of monuments such as stone circles appear to

National Monument No.	RMP No.	Class	Townland	Approx distance from nearest turbine	Description
					have been towards the southwest quadrant and the Proposed Development is located in the opposite direction.
No number assigned	CO092-019----	Stone Row	MAUGHANASILLY	9.7km to west	This monument is included in an Office of Public Works database of 'unguided monuments' that are accessible to the public. ²² The ASI record that this row contains five stones that are aligned NE-SW and measures 5.8m length. It was excavated in 1977, and the find recovered was a thumb-shaped flint scraper. The recorded orientation of this monument is not aligned towards the Proposed Development.
PO no. 69/1938	CO106-006001-	Stone Circle	KEALKILL	9.3km to west-southwest	The ASI record that this comprises a stone circle containing five upright stones with an internal measurement of 2.8m along the main axis which is aligned NE-SW. The stone circle was excavated in 1938, and no finds or burials were identified. A radial stone cairn and a pair of standing stones are also located close to the circle. While this monument is subject to a Preservation Order, it is not in State Care and is not listed as an accessible site in National Monument Service or Office of Public Work datasets. However, its location is indicated by road signs in the area and a gate stile on the road to the north facilitates walker access to the monument. In addition, it is included as a heritage site on the Sheep's Head Way walking trail. ²³ The recorded orientation of this monument is not directly aligned towards the Proposed Development and as noted above, the dominant ritual views of monuments such as stone circles appear to have been towards the southwest quadrant and the Proposed Development is located in the opposite direction.
PO no. 12/1971	CO107-008----	Stone row	DROMDRASDIL	3.7km southeast	Located in private farmland with no access facilities. The ASI record that this comprises a row of four stones, aligned NE-SW, and measures 5.5m in overall length. The recorded orientation of this monument is not aligned towards the Proposed Development.

²² <https://heritageireland.ie/unguided-sites/maughanasilly-stone-row/>

²³ https://thesheepsheadway.com/heritage-history/heritage_sites/kealkill_stone_circle/

13.3.2.3 Topographical Files of the National Museum of Ireland

The National Museum of Ireland's Topographical File archive, which is stored in the museum premises at Kildare Street, Dublin were inspected as part of the assessment. The archive does not contain files for any of the townlands extending within the Proposed Development.

13.3.2.4 Architectural Heritage

The Record of Protected Structures (RPS) and the National Inventory of Architectural Heritage (NIAH) do not list any structures within the Proposed Development or within 2 km of its boundary.

13.3.2.5 Database of Irish Excavations Reports

A review of this database revealed no licensed archaeological investigations, such as test trenching or monitoring have taken place within the boundary of the Proposed Development. A programme of archaeological monitoring of the installation of an ESB connection within the zone of archaeological potential of a disused children's burial-ground in an area of Coolmountain townland located c. 1.4 km outside the east end of the Proposed Development revealed nothing of archaeological significance.²⁴ A programme of archaeological test trenching within the environs of an anomalous stone group (CO093-054001-) located in Glanycarney townland, c.1.1 km to the south of the Proposed Development, also revealed nothing of archaeological significance.²⁵

13.3.2.6 Historic Maps

The first edition 6-inch Ordnance Survey (OS) map (published 1845) shows the area within the Proposed Development primarily occupied by vacant heathland (**Figure 13.5**). Small sections of the townland boundaries around Shehy Beg, Clogboola and Gortloughra townlands are shown extending within the Proposed Development and these do not follow any mapped features such as field divisions or routeways. Only one of the recorded archaeological sites within the Proposed Development is depicted on this map and this comprises the standing stone pair (CO093-024----) which is labelled as 'Gallauns' – an Irish term for standing stone monuments. While the hut and field boundary sites within the boundary of the Proposed Development and its environs are not depicted on the first edition 6-inch map, these types of structures were often not mapped by the 19th century OS surveyors. This map shows two small tracks extending through the boundary of the Proposed Development and these appear to be agricultural tracks rather than public roadways. The Proposed Development is outside the coverage area of the 25-inch edition

²⁴ <https://excavations.ie/report/2009/Cork/0020467/>

²⁵ <http://excavations.ie/report/2002/Cork/0007620/>

OS map (1888-1913 series) but is shown on the 2nd edition 6-inch map (published in 1902) (**Figure 13.6**). The detail on this map indicates that the lands within the Proposed Development remained as a vacant upland area at the start of the 20th century and the layout of the area does not appear to have been subject to notable modification in the second half of the 19th century. The review of these two editions of the historic 6-inch OS maps did not reveal the presence of any potential unrecorded archaeological sites or architectural heritage structures within the boundary of the Proposed Development.

13.3.2.7 Aerial/Satellite/LiDAR Images

A review of online aerial and satellite images published online by Tailte Éireann, Google Earth, Apple and Bing, which were captured between 1995-2023, did not reveal the presence of any potential unrecorded archaeological sites or other features of potential cultural heritage within the boundary of the Proposed Development. The imagery indicates that the layout of the lands within the Proposed Development has generally remained unchanged since the publication of the 6-inch OS maps in 1845 and 1902, other than the construction of the existing farm track network during the 1990s and 2000s. A review of LiDAR imagery of the Proposed Development commissioned by the Developer was also carried out and no potential unrecorded archaeological sites were noted (**Figure 13.7**).

13.3.2.8 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 associations.

The Proposed Development extends into four townlands (Gortloughra, Shehy Beg, Inchiroe and Cloghboola) which are the smallest unit of land division in the Irish landscape, and many 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 while *temple*, *saggart*, *termon* or *kill* may record associations with a church site. The translations of the townland names that extend into the Proposed Development were sourced from the Placenames Database (www.logainm.ie) and comprise: Gortloughra (*Gort Luachra*: field of the rushes), Shehy Beg (*Seithe Bheag*: likely named after mountain), Inchiroe (*An Inse Rua*:

red meadow of the river) and Cloghboola (*An Chlochbhuaile*: stony booley). The last name indicates an association with booleying which is an Irish term for a practice of transhumance farming whereby cattle and sheep were moved up to high open lands to graze during summer months.

The northwest end of the Proposed Development extends into the south end of the Múscraí Gaeltacht area. This area has seen a general decline in population during the modern period and there are no associated settlement centres located within the boundary of the Proposed Development and the nearest example is Ballingearry village which is located c.6.5 km to the north. The Múscraí Gaeltacht also has notable associations with other intangible elements of the cultural heritage resource such as music, including sean-nós singing, poetry and dance traditions. There are also no institutions, such as local museums or other heritage centres, associated with the intangible cultural heritage of the area located within the Proposed Development or its surrounds. The online database of the Irish National Folklore Schools Collection (www.duchas.ie) was reviewed and does not contain entries for any of the townlands within the 2 km Study Area.

There are references to a local tradition that an existing farm track that extends east-west through the southern half of the Proposed Development was formerly used as a butter road.²⁶ Butter production was an important part of dairy farming in west Cork and Kerry during the 18th and 19th centuries and it was transported by local farmers to the Butter Exchange in Cork city along routeways known as 'butter roads'. The use of wheeled transport in Ireland during the 18th century was rare in the regions outside the main road network between the cities and larger towns. Packhorses or ponies were, therefore, used to transport the butter to Cork at this time while the use of horsedrawn carts became more common following the construction of regional roads during the 19th century. The main butter roads to Cork city extended through the Millstreet and Macroom areas in the region of the county to the north of the Proposed Development while there was also extensive use of networks of smaller local roads and trackways throughout the county as transport routes. The butter, which was salted to assist in its preservation, was shipped from Cork port to the European mainland as well as other destinations. The butter road extending through the Proposed Development, as recorded by local tradition, may have followed sections of trackways shown within the Proposed Development on the historic OS maps that include the line of an existing farm track which has been subject to modern upgrading. It is noted that that the trackways shown on the historic OS maps terminate in a vacant land in the west end of the Proposed Development and do not form routes that extend across the wider

²⁶ Miller, T. (2009) 'Some new upland sites'. *Journal of the Cork Archaeological Historical Society* Vol. 114 (p. 33-38)

landscape. In addition, the existing public roadways within low-lying lands to the north and south of the Proposed Development are also present on the historic OS maps and would have likely formed more accessible and easier routes across the landscape.

13.3.3 Grid Connection Options

A review of 100 m wide Study Areas (50m either side of the centreline of the proposed grid route) to existing substations in Dunmanway (Option A) and Carrigdangan (Option B) was carried out to appraise the known and potential cultural heritage constraints within the vicinity of the two route options and to facilitate an appraisal of the potential presence of any elements of these constraints which may be susceptible to direct or indirect effects. The locations and details on the recorded archaeological sites located within the reviewed Study Areas for both options are presented in **Tables 13.8** and **13.9** which includes a summary of inspections of their locations (see also **Figure 13.8**). In summary, there are no recorded archaeological sites with known elements that extend within the roadways located in the two reviewed Study Areas. As detailed in **Tables 13.8** and **13.9**, the majority of the archaeological sites within the Study Areas around both options are within private lands and are set back at distances of 30 m - 50 m from the roadways that the options follow.

There are two recorded burial sites, which both may be associated with children's burial grounds, located in lands adjacent to sections of public roads that the grid route options follow (CO081-021---- and CO093-112----). The ASI records that there are no surface remains of graves at either location and this was confirmed by an inspection at their locations. It is likely that the construction of the public roads within the environs of these burial grounds has disturbed the ground surfaces within the footprint of the carriageways. In addition, a review of the locations of proposed joint bays and horizontal directional drilling (HDD) works required to facilitate the construction of the two grid connection options revealed that no proposed joint bays or HDD works are located within the environs of the two burial sites. The other recorded archaeological sites within the Study Areas around both options are located within fields adjacent to the roadways and are situated at distances of 20m-50m from the road margins with views towards their locations generally obscured by roadside hedgerows.

A review of the current Cork County Council Record of Protected Structures (RPS) and other structures listed in the National Inventory of Architectural Heritage (NIAH) revealed that there are no examples located within the Study Areas around both options. There are a number of masonry road bridges within the roadways that the route options follow which are shown on the 1st edition 6-inch OS (1845) and 2nd edition 6-inch OS (1902) maps. While

these are not listed in the RPS or NIAH they are of likely local cultural heritage significance. The proposed use of HDD methodologies to facilitate the grid connection works within the environs of these bridges will not require direct structural interventions or any potential underwater archaeological features that may exist within their associated watercourses.

Table 13.8: Dunmanway GCR (Option A): Recorded Archaeological Sites

Monument No.	Class	Townland	ASI Description (<i>italics</i>) and site inspection notes	Approx distance from route
CO081-021----	Burial ground	GORTNACARRIGA	<p><i>ASI Description: Named 'Plausnalanniv Burial Gd' and shown as semicircular area, defined by dotted line, on 1842 OS 6-inch map. In forestry, beside road and accessed by stile. Area of rock outcrop, free from forestry plantation, indicated burial ground. No grave markers noted.</i></p> <p>The section of road adjacent to this site is shown on the historic OS maps and no traces of potential grave features were noted along the roadside during the inspection of the area. The location of the graveyard is indicated by a roadside sign.</p>	On north side of road
CO093-007----	Megalithic tomb - wedge tomb	CORNAIRE	<p><i>ASI Description: On small platform on steep N-facing slope of Sruhaunphadeen valley to NE of Douce Mountain. Comprises ruined gallery (L c. 3.5m; Wth 0.5m at E end), aligned ENE-WSW, irregularly constructed of small stones and surrounded by closely-set outer walling. Two fallen stones at W end may be remains of facade. Incorporated in mound on edge of which lie two slabs, possibly displaced roofstones.</i></p> <p>Site is in private lands and is not visible from roadway</p>	50m south of road
CO093-006----	Megalithic tomb - wedge tomb	CORNAIRE	<p><i>ASI Description: On small bog-covered platform on steep S-facing slope at head of Sruhaunphadeen valley, to NE of Douce Mountain. Comprises gallery (L 3.4m; Wth 1.1m at SW end) open to SW, represented by two sidestones to N, three to S and inset backstone at E end; two outer-wall stones stand beyond N side. Traces of mound to S and W of gallery. Wedge-tomb (6393) stands c. 300m to W in Cloghboola townland.</i></p> <p>Site is in private lands and is not visible from roadway</p>	40m north of road
CO093-013----	Stone circle - multiple-stone	COOLMOUNTAIN	<p><i>ASI Description: In pasture on NE-facing slope in valley of headwaters of Caha river. Appears to have consisted of possibly eleven stones; diameter c. 9m. Two stones survive, 4m apart. N stone is 0.8m by 0.3m and 1.1m H; second stone is 1m x 0.4m and 1m H.</i></p> <p>Site is in private lands and is not visible from roadway</p>	47m east of road
CO093-035----	Redundant record	MONEYREAGUE	<p><i>ASI Description: Listed as a 'potential site – aerial photo' in the SMR (1988) and as a 'non-antiquity' in the RMP (1998). As a non-antiquity it does not constitute an archaeological monument.</i></p> <p>Site is in private lands and is not visible from roadway</p>	50m west of road
CO093-036----	Redundant record	MONEYREAGUE	<p><i>ASI Description: Circular haggard to rear of old farmyard, small section of stone wall survives.</i></p> <p>Modern house built at location</p>	50m west of road

Monument No.	Class	Townland	ASI Description (<i>italics</i>) and site inspection notes	Approx distance from route
CO093-037----	Redundant record	MONEYREAGUE	<p><i>ASI Description: Listed as a 'potential site – aerial photo' in the SMR (1988) and the RMP (1998). The current evidence is not sufficient to warrant accepting this as the location of an archaeological monument.</i></p> <p>Site is in private lands and is not visible from roadway</p>	20m south of road
CO093-038----	Standing stone	TULLAGH	<p><i>ASI Description: In pasture on SW-facing slope. Subrectangular stone aligned NNE-SSW (H 1.45m; 1.10m x 0.27m).</i></p> <p>Site is in private lands and views to its location from roadway obscured by a hedgerow</p>	40m east of road
CO093-067----	Standing stone	AN TÓCHAR	<p><i>ASI Description: In pasture on NW-facing slope. Rectangular stone aligned NNE-SSW (H 1.27m; 0.9m x 0.3m).</i></p> <p>Site is in private lands and views to its location from roadway obscured by a hedgerow</p>	50m north of road
CO093-071----	Redundant record	KEELARAHEEN	<p><i>ASI Description: Listed as a 'potential site – aerial photo' in the SMR (1988) and as a 'natural feature' in the RMP (1998). This is natural hillock and as such it does not constitute an archaeological monument.</i></p> <p>Site is in private lands and views to its location from roadway obscured by trees</p>	50m north of road
CO093-074----	Souterrain	KEELARAHEEN	<p><i>ASI Description: Discovered October 1989 when roof of chamber collapsed. In pasture on S-facing slope. At least three earth-cut chambers arranged in linear pattern N-S. Central chamber, circular in plan (diam. 2m); construction shaft at NW corner. Creepholes at N and S ends to inaccessible chambers. N chamber narrows towards NE, possibly original entrance.</i></p> <p>This sub-surface site is in private lands and its recorded location is not visible from the roadway. The ASI description does not refer to any elements extending under the roadway and its possible entrance at north end was noted within the field.</p>	25m south of road
CO093-112----	Children's burial ground	MONEYLEA	<p><i>ASI Description: Area of rough grazing immediately to the east of the public road. The land is south facing, overlooking the valley of Moneylea and Coolmountain with a rock face close to the east. This piece of land was known locally as a Children's Burial Ground and indicated by a local resident. Today there is no evidence for burial markers or any enclosing feature.</i></p> <p>The section of road adjacent to this site is not present on 1st edition 6-inch OS map (1845) but is present on the 2nd edition (1902) indicating that it was constructed during the second half of the 19th century. These maps do not indicate the presence of a burial ground at the location. No traces of potential</p>	Adjacent to east side of road

Monument No.	Class	Townland	ASI Description (<i>italics</i>) and site inspection notes	Approx distance from route
			grave features, including simple upright stone markers, were noted during the inspection.	

Table 13.9: Carrigdangan GCR (Option B): Archaeological Sites

Monument No.	Class	Townland	ASI Description (<i>italics</i>) and site inspection notes	Approx distance from route
CO081-021----	Burial ground	GORTNACARRIGA	<p><i>ASI Description: Named 'Plausnalanniv Burial Gd' and shown as semicircular area, defined by dotted line, on 1842 OS 6-inch map. In forestry, beside road and accessed by stile. Area of rock outcrop, free from forestry plantation, indicated burial ground. No grave markers noted.</i></p> <p>The section of road adjacent to this site is shown on the historic OS maps and no traces of potential grave features were noted along the roadside during the inspection of the area. The location of the graveyard is indicated by a roadside sign.</p>	Adjacent to north side of road
CO093-007----	Megalithic tomb - wedge tomb	CORNAIRE	<p><i>ASI Description: On small platform on steep N-facing slope of Sruhaunphadeen valley to NE of Douce Mountain. Comprises ruined gallery (L c. 3.5m; Wth 0.5m at E end), aligned ENE-WSW, irregularly constructed of small stones and surrounded by closely-set outer walling. Two fallen stones at W end may be remains of facade. Incorporated in mound on edge of which lie two slabs, possibly displaced roofstones.</i></p> <p>Site is in private lands and is not visible from roadway</p>	50m south of road
CO093-006----	Megalithic tomb - wedge tomb	CORNAIRE	<p><i>ASI Description: On small bog-covered platform on steep S-facing slope at head of Sruhaunphadeen valley, to NE of Douce Mountain. Comprises gallery (L 3.4m; Wth 1.1m at SW end) open to SW, represented by two sidestones to N, three to S and inset backstone at E end; two outer-wall stones stand beyond N side. Traces of mound to S and W of gallery. Wedge-tomb (6393) stands c. 300m to W in Cloghboola townland.</i></p> <p>Site is in private lands and is not visible from roadway</p>	40m north of road
CO093-022002-	Megalithic tomb - wedge tomb	CARRIGDANGAN	<p><i>ASI Description: Monument destroyed prior to 1896. On 1902 OS 6-inch map, the name 'Bealick' had been transferred c. 50m N, apparently in the belief that the name applied to some outcrop at that place (de Valera and O Nualláin 1982, 28). Early accounts and sketches indicate a gallery, aligned E-W, covered by two roofstones. Two further stones in advance of gallery at W end may represent short portico. (de Valera and O Nualláin 1982, 28, Co. 40)</i></p> <p>The recorded location of this levelled site is shown on the north side of the road on the 1845 OS map. An inspection of its former location revealed that it</p>	Adjacent to north side of road

Monument No.	Class	Townland	ASI Description (italics) and site inspection notes	Approx distance from route
			is obscured by a tall roadside hedgerow and no potential traces of archaeological features were noted along the roadside.	
CO093-022001-	Redundant Record	CARRIGDANGAN	<i>ASI Description: Listed as a 'natural feature' in the SMR (1988) and the RMP (1998). As a natural feature it does not constitute an archaeological monument.</i> Site is in private lands and is not visible from roadway	30m north of road

13.3.4 Turbine Delivery Route (TDR) Work Areas

Details on the work areas required to facilitate the delivery of turbines to the Proposed Development are provided in Chapter 2 (Project Description). There is one recorded archaeological site located within a 100 m wide corridor centred on ground work areas within third party lands that are required to facilitate the delivery of turbines to the Proposed Development. This comprises a wedge tomb (CO093-052002-) in Inchincurka townland which is recorded by the ASI to be located c. 10 m to the northeast of a section of vegetation clearance required for oversail and laying of a loadbearing area for wheel overrun at a T junction on the R585 road (see **Chapter 2; Table 2.5**). The ASI have described this wedge tomb as follows:

In level pasture, on N side of basin of Caha river. Narrow wedge-shaped gallery (L 2.8m; Wth 0.9m at W end, 0.25m at E) open to WNW. Covered by two roofstones; surrounded by closely-set outer-walling. At W end, outer walling and gallery sides linked by single slabs, forming a short facade. Incorporated in mound, 10.3m by 4m. (de Valera and O Nualláin 1982, 29-30, no.42).

A visual inspection of TDR Location 7 from the adjacent roadside did not reveal any extant traces of the wedge tomb at the location recorded by the ASI. The potential may exist that this site has been levelled or has been recorded by the ASI at an incorrect location. No surface traces of any potential unrecorded cultural heritage constraints were identified at the location which comprises a pasture field under low grass growth which afforded clear views of the ground surface at the recorded location of the wedge tomb.

The turbine delivery works will also require modifications of two road bridge parapets (TDR Locations 12C and 17A). These bridges are not listed as Protected Structures or included in the National Inventory of Architectural Heritage and an inspection of the existing parapets at both locations revealed that they are of modern concrete construction and are not of architectural heritage significance. In addition, there are no recorded cultural heritage constraints located within any of the proposed blade laydown areas or within 100 m of their locations.

13.3.5 Field Work

A description of the inspection of the GCR options is provided in **Section 13.3.3 (Tables 13.8 and 13.9)**, and a description of the inspection of relevant TDR work areas is provided in Section 13.3.4. The following section presents the results of the inspection of the Proposed Development and the recorded archaeological sites within its boundary. **Table**

13.11 includes extracts from the photographic record of the archaeological sites within the boundary of the Proposed Development.

The Proposed Development is situated on the south and north facing slopes on either side of an east to west ridge line that extends southwest of the summit of Shehy More. It generally contains areas of grassy moorland on the south-facing slopes with notably more dominant gorse growth on the north-facing slopes. There are localised areas of natural outcropping and surface spreads of stones and boulders located on both slopes. Turbines 1 and 2 and their associated access road, as well as a construction compound and borrow pit are located in lands on the north side of the ridge with the remaining turbines and associated site infrastructure located on the south side. There are several small, narrow streamlets extending down the slopes on both sides of the ridge but there are no larger streams or rivers located within the boundary of the Proposed Development. The layout of the lands within the boundary of the Proposed Development do not appear to have been significantly modified since the publication of the 6-inch OS maps of 1845 and 1902 (see **Section 13.3.2.6**) other than upgrading of sections of trackways visible on those map as well as the construction of new trackways.

An inspection of the known archaeological sites within the Proposed Development revealed that they all survive in the same condition as described in their published inventory entries which are provided in **Section 13.2.4**. Details on the recorded archaeological sites located within the boundary of the Proposed Development are provided in **Table 13.10**, which collates their ASI inventory descriptions as well as extracts from the photographic record compiled during the field surveys and mapping details of their locations in relation to proposed development areas.

Four of the hut sites (CO093-078001-, CO093-078002-, CO093-078004- and CO093-085---), a standing stone pair (CO093-024----), a mass-rock (CO093-084----), and an enclosure (CO093-078003-) within the southern half of the Proposed Development are located within the environs of an existing stone-surfaced farm track which extends east-west through this area of the Proposed Development and follows the route of a narrow trackway indicated on the historic OS maps (**Section 13.3.2.6**). Other sections of the existing farm track network within the south end of the Proposed Development, which extend to the locations of T7, T8 and T9, are not present on the historic OS maps and are of modern date. A review of Google Earth images confirmed that the construction of the existing farm track network within the Proposed Development was carried out during the late 1990s and the 2000s. The farm track

network was in agricultural use at the time of inspection and appears to have been constructed in order to facilitate access of the upland area by modern farm vehicles.

Sections of the existing stone-surfaced farm trackway within the south end of the Proposed Development will be upgraded as a Site Access Track as part of the Proposed Development (see Chapter 2). The existing modern farm track averages c.3.5 m in width and, within areas of relatively level ground, it is flanked by an adjacent earth-cut drainage ditch that measures up to 3.2 m in width and 0.5m in depth. The farm track and drainage ditch are below the level of the adjacent areas of undisturbed ground. An inspection of their cut sections confirmed that the ground surface within the overall corridor containing the track and drainage ditch has been reduced by machine down into natural subsoil within an excavated area measuring up to 6.7 m in width. There is a localised variance in the construction of the section of the existing farm track in the area where it extends across steep south-facing slopes between T3 and T4. The track has been cut by machine into the sloping ground in this area and has been widened on the south side with a battered deposit of soil and stones that appears to have been introduced to widen the track and to reduce the sharp gradient of the steep slopes on its southern side. The potential exists that this deposit of soil and stones comprises natural subsoil material extracted during the excavation of the existing track into the area of steeply sloping ground.

The section of the farm track extending eastwards from T3 to the location of the Onsite Substation and Control Building, follows the line of a narrow trackway shown on the historic OS maps. The inspection of this area confirmed that the ground excavation works during the construction of the existing farm track has reduced ground levels down into natural subsoil levels and has removed the trackway shown on the OS maps. A review of Google Earth images confirmed that the construction of the existing farm tracks was carried out during the late 1990s and the 2000s. The farm tracks were in agricultural use at the times of inspection, and all appear to have been constructed in recent decades in order to facilitate access of modern farm vehicles to the upland area.


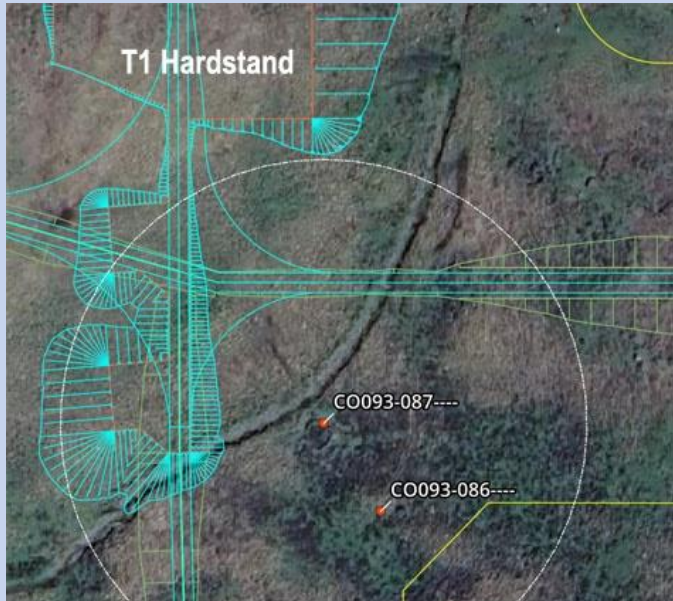
Table 13.10: Field Survey of Proposed Development Areas


Development Element	Distance to nearest archaeological site	6-inch OS Maps (1845 & 1902)	Aerial and LiDAR images	Field Survey Notes
Turbine 1	Enclosure CO093-087---- is located c.60m south of the hardstand and c. 25m from edge of access road to the location.	Shown as an area of vacant upland	No potential unrecorded archaeological sites noted	This location comprises a relatively level area of ground on a north facing slope which was covered in a low growth of rough grass. No surface traces of any potential unrecorded archaeological sites or other features of cultural heritage interest were noted at the location. The proposed access road extending to the location of this turbine from the north (which continues to Turbine 2) extends upslope through an area of grass and gorse covered land and no surface traces of any potential features of cultural heritage interest were noted during the inspection of its route.
Turbine 2	Enclosure CO093-087---- and hut site CO093-086---- located c.580m to the west	Shown as an area of vacant upland	No potential unrecorded archaeological sites noted	This location comprises an undulating rocky area of uneven ground on a north facing slope which was covered in a low growth of rough grass and gorse. No surface traces of any potential unrecorded archaeological sites were noted at the location of Turbine 2. A potential hut site (@ ITM 514341, 559947) was identified in lands to the west of Turbine 2 and appears to comprise the basal remains of a previously unrecorded 3.2m diameter hut site located outside the boundary of the Proposed Development.
Turbine 3	Hut site CO093-085---- located c. 100m to the northeast	Shown as an area of vacant upland	No potential unrecorded archaeological sites noted	This location comprises an undulating area of rocky, uneven ground at the south-facing base of a steep ridge slope and was covered in a low growth of rough grass. No surface traces of any potential unrecorded archaeological sites were noted at the location. The Site Access Track to the location will comprise an upgrade of an existing trackway that extends along the south end of the hardstand.
Turbine 4	Hut site CO093-078001- located c. 170m to west. A group of hut sites and enclosures with low surface expressions are also located c. 200m to the east in an area outside the boundary of the Proposed Development (see Figures 13.1 and 13.2).	Shown as an area of vacant upland	No potential unrecorded archaeological sites noted	This location comprises an undulating area of boggy ground with natural bedrock outcropping evident. No surface traces of any potential unrecorded archaeological sites were noted at the location. The Site Access Track to the location will comprise an upgrade of an existing trackway that extends to the northeast of the hardstand. A small quarry area is located within an area of natural bedrock on the north side of the section of the existing trackway extending to the east of T4. This appears to have been carried out by a machine excavator. There is no quarry shown at this location on the 1845 OS map and it, therefore, appears to be a modern extraction feature which is not of cultural heritage interest.



Development Element	Distance to nearest archaeological site	6-inch OS Maps (1845 & 1902)	Aerial and LiDAR images	Field Survey Notes
Turbine 6	Field boundary CO093-114--- located c. 160m to the north.	Shown as an area of vacant upland	No potential unrecorded archaeological sites noted	This location comprises an undulating area of rocky, uneven ground at the south-facing base of a steep ridge slope and was covered in a low growth of rough grass. No surface traces of any potential features associated with field boundary CO093-114---- or any potential unrecorded archaeological sites were noted within the hardstand area. The Site Access Track to the location will comprise an upgrade of an existing trackway located to the south of the hardstand.
Turbine 7	Standing stone pair CO093-024---- located c. 360m to the northeast	Shown as a small area of reclaimed fields.	No potential unrecorded archaeological sites noted	This location comprises a level area of improved pasture covered in a low growth of grass. No surface traces of any potential unrecorded archaeological sites were noted at the location. A small sheep paddock area of drystone and corrugated metal construction is located adjacent to the north end of the hardstand. This comprises a modified agricultural feature of negligible cultural heritage value.
Turbine 8	Standing stone pair CO093-024---- located c. 325m to the northeast	Shown as an area of vacant upland	No potential unrecorded archaeological sites noted	This location comprises an undulating area of boggy ground with natural bedrock outcropping evident. No surface traces of any potential unrecorded archaeological sites were noted at the location. The Site Access Track to the location will comprise an upgrade of an existing trackway that extends to the northeast of the hardstand.
Turbine 9	Hut site CO093-080001- located c. 125m to the northwest	Shown as an area of vacant upland	No potential unrecorded archaeological sites noted	This location comprises an undulating area of boggy ground with natural bedrock outcropping evident. No surface traces of any potential unrecorded archaeological sites were noted at the location. The Site Access Track to the location will comprise an upgrade of an existing trackway that extends to the northeast of the hardstand.
Met Mast	Hut site CO092-075007- located c. 430m to the west	Shown as an area of vacant upland	No potential unrecorded archaeological sites noted	This location comprises an undulating area of boggy ground and the access road from the east extends through an area of improved pasture. An upright stone (@ ITM 514060, 658693) was noted 10m to the south of the Site Access Track to the met mast location. It measures c. 1.45m in height by 0.25m in thickness and has a long E-W axis. The landowner was consulted in relation to this feature and confirmed that he erected it as a cattle scratching post in recent years. It, therefore, comprises a modern feature and is not an archaeological site.
Compound	Enclosure CO093-087---- located c. 880m to the southeast.	Shown as an area of vacant, unenclosed land to the south of a public road	No potential unrecorded archaeological sites noted	This location comprises undulating area of improved pasture within a low-lying area to the south of a public road. No surface traces of any potential unrecorded archaeological sites were noted at the location.


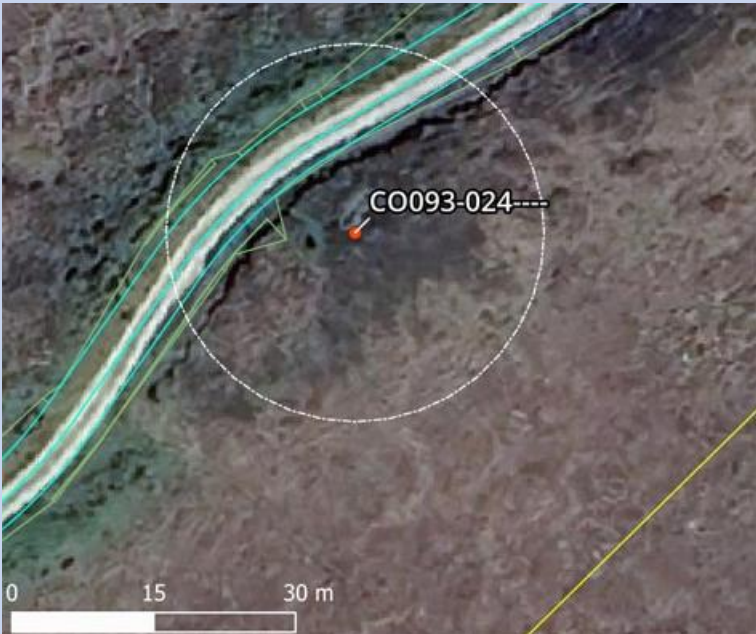
Development Element	Distance to nearest archaeological site	6-inch OS Maps (1845 & 1902)	Aerial and LiDAR images	Field Survey Notes
Borrow pit	Enclosure CO093-087---- located c. 440m to the southeast.	Shown as an area of vacant, unenclosed land	No potential unrecorded archaeological sites noted	This location comprises an undulating area of boggy ground on the lower north-facing ridge slopes. No surface traces of any potential unrecorded archaeological sites were noted at the location.


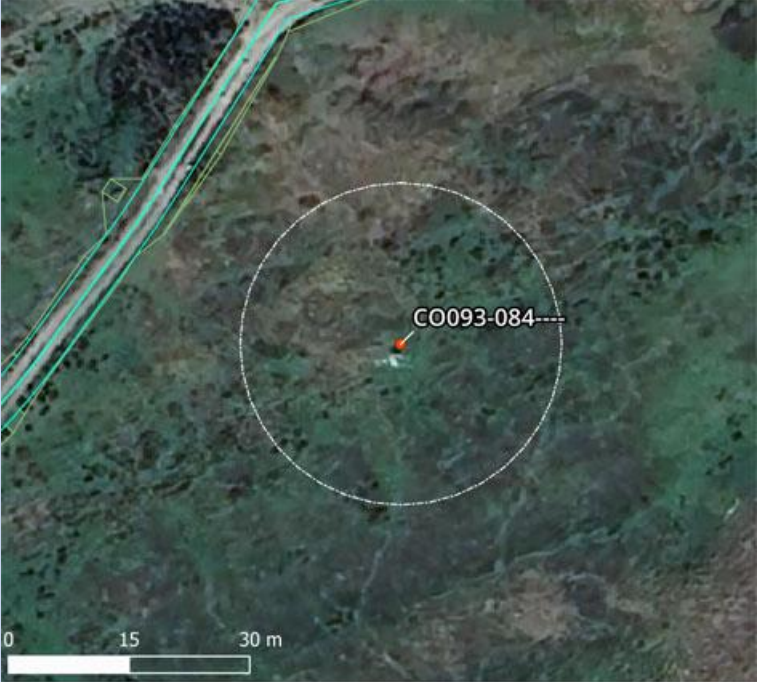
Table 13.11: Archaeological Sites within the boundary of the Proposed Development


Recorded Archaeological Site	Description
CO093-087---- Enclosure	<p>ASI Inventory Description: <i>On a platform in rough hill grazing, on bog at the head of Kealkill valley on the W-facing slopes of Shehy Beg with views W to Bantry Bay. A D-shaped area (5m NW-SE), with the straight side at SE (L 4.6m) is defined by a roughly built collapsing drystone wall (T 0.8m; H up to 1.1m). Rubble is scattered in the interior and along both sides of the enclosing element. The entrance (Wth c. 0.8m) is at W. There is a hut site (CO093-086----) c. 20m to the S.</i></p> <p>The extant remains of this enclosure site are as described by the ASI. The spreads of surface stones surrounding the extant sections appear to comprise areas of historic collapse and no recent disturbance was noted. An inspection of the surrounds of its location did not reveal any surface traces of unrecorded cultural heritage sites. The remaining sections of the enclosure wall extend above the grass and gorse growth and retain moderate visibility from surrounding lands but not from the wider landscape.</p>  <p>View of Enclosure CO093-087---- from southeast</p>  <p>Enclosure CO093-087---- and Hut site CO093-086---- (zone of notification = white circle)</p>


Recorded Archaeological Site	Description
CO093-086---- Hut site	<p>ASI Inventory Description: <i>In rough hill grazing, on bog, on the W-facing slopes of Shehy Beg. The remains of a circular hut site (diam. 2.4m) are defined by a jumbled, roughly built, drystone wall (T 0.5m; H 0.5m). Stones are scattered in the level interior, which is cut (D 0.3m) into the upslope at the E and raised (H 0.25m) at the W to give a level interior. There is an enclosure (CO093-087----) c. 20m to the N.</i></p> <p>The extant remains of this hut site are as described by the ASI. The location of the surviving basal stones of the hut are partially obscured by gorse and the surviving remains of the site retains low visibility from surrounding lands. An inspection of the surrounds of its location did not reveal any surface traces of unrecorded cultural heritage sites. (location of the hut is depicted on image in above entry for Enclosure CO093-087----)</p>  <p>View of Hut site CO093-086---- from north</p>


Recorded Archaeological Site	Description
CO093-085---- Hut site	<p>ASI Inventory Description: <i>In rough hill grazing, on a terrace on the S-facing slopes of Shehy Beg. The remains of a circular hut site (diam. 2.8m) are defined by a collapsed drystone wall (T 0.7m; H 0.3m) the base of which is protruding above the surface of the bog. The interior of the hut site is level and the entrance (Wth 0.7m) is situated at the NNE.</i></p> <p>The extant remains of this hut site are as described by the ASI. The surviving basal stones of the hut are obscured by gorse and sod growth and the surviving traces of the site retain low surface visibility. An inspection of the surrounds of its location did not reveal any surface traces of unrecorded cultural heritage sites. An existing stone-surfaced farm track is located 6m to the west of the hut.</p> <div data-bbox="472 598 1310 1151">  </div> <p>View of Hut site CO093-085---- from north</p> <div data-bbox="472 1207 1310 1906">  </div> <p>Hut site CO093-085---- (zone of notification = white circle)</p>

Recorded Archaeological Site	Description
CO093-024---- Standing stone - pair	<p>ASI Inventory Description: <i>On bog-covered ridge c. 350m NW of summit (1284 ft.) of Shehy Beg mountain. One stone lies prostrate, partly concealed by peat. It measures at least 4.6m by 0.95m and is 0.5m T. Second stone, 3.6m to SW, is 0.95m L, 0.35m T and 2.2m.</i></p> <p>This site remains in the same condition as described by the ASI. The above ground section of the extant upright stone indicates that it is the smaller of the two stones and is well-embedded in the ground with no indication of any leaning or ground instability noted at its location. There are no surface traces of a socket in the ground indicating the original location of the collapsed stone. The long axis of the extant upright stone is aligned east-west which likely indicates the original orientation of the pair. The existing farm track to the north is located 7.7 m from the upright stone. A 3.2 m wide cut drain extending along the south side of the farm track is located 4.5 m from the upright stone and 3.5m from the levelled stone. The ground surface within the footprint of the farm track and the adjacent drain has been reduced into natural subsoil. The site is located within a slightly raised area of ground and is visible from all directions apart from lands to west while it is screened by a slight terrain rise immediately to the west of its location.</p>  <p>View of stone pair CO093-024---- from east with existing track visible on right side of frame</p>  <p>Standing stone pair CO093-024---- and farm track to north</p>

Recorded Archaeological Site	Description
CO093-084---- Mass-rock	<p>ASI Inventory Description: <i>In rough heather-clad hill grazing, on the S-facing slopes of Shehy Beg. A stone slab (1.8m E-W; 1.5m N-S; H 0.8m), resting on a table-like area of outcropping rock, is known locally as a mass-rock. Two smaller slabs, which lean to the E, are situated to the E of the mass-rock and may be the remains of a small animal shelter. The mass-rock is c. 70m to the S of the old 'Butter Path', which runs along the lower slopes of Shehy Beg.</i></p> <p>This site remains in the same condition as described by the ASI. It is located within a partially sheltered area of slightly hollow ground and is located c.35m to the southeast of an existing farm track. The site is partially concealed by natural topography to the north while it retains a moderate level of visibility from other directions.</p>  <p>View of Mass Rock CO093-084---- from northeast</p>  <p>Mass Rock CO093-084---- and existing farm track to northwest</p>

Recorded Archaeological Site	Description
CO093-078001- Hut site	<p>ASI Inventory Description: <i>In rough hill grazing, on bog, on a terrace on the upper S-facing slopes of Shehy Beg. The remains of a circular hut site (2.6m N-S; 2.4m E-W) defined by a collapsed drystone wall (T 0.6m; H 0.4m) which protrudes above the surface of shallow bog. A jumble of stones adjoining the perimeter externally at the SE may represent the remains of an annexe or an entrance feature. Another hut site (CO093-078002-) is c. 20m to the NW.</i></p> <p>This site remains in the same condition as described by the ASI. It is located within a level area at the base of a steep hill slope to the north. The surviving basal stones are partially obscured by grass and reed growth and the site retains low visibility from the wider area. An existing farm track extending east-west across the steep slopes to the north is located c.16.5m from the hut. The basal remains of this hut site are clearly visible from its close environs but not from the wider area.</p>  <p>View of hut site CO093-078001- from east</p>  <p>Hut site CO093-078001- and sites to west (see below)</p>

Recorded Archaeological Site	Description
CO093-078002- Hut site	<p>ASI Inventory Description: <i>In rough hill grazing, on bog, on a terrace on the upper S-facing slopes of Shehy Beg. The remains of a circular hut site (diam. 1.7m N-S) defined by a jumbled, collapsed, drystone wall (T 0.6m; H 0.4m) which protrudes above the surface of the bog. Another hut site (CO093-078001-) is c. 20m to the SE and an enclosure (CO093-078003) is c. 20m to the W.</i></p> <p>This site remains in the same condition as described by the ASI. It is located within a level area at the base of a steep hill slope to the north. The surviving basal stones form a coherent outline of the collapsed hut and are less obscured than the stones forming the remains of hut site CO093-078001- to the southwest. The existing farm track to the north is located at a distance of 15m from the hut. The low basal remains of this hut site are clearly visible from its close environs but not from the wider area.</p>  <p>View of hut site CO093-078002- from north</p>

Recorded Archaeological Site	Description
CO093-078003- Enclosure and CO093-078004- Hut site	<p>ASI Inventory Description: CO093-078003- <i>In rough hill grazing on bog, on a terrace on the upper S-facing slopes of Shehy Beg with views across a valley to Nowen Hill. An oval area (5.6m N-S; 3.4m E-W) is defined by the lower courses of a partially collapsed drystone wall (T 0.8m; H 0.7m) protruding above the surface of the shallow bog. A hut site (CO093-078004-) is in the N half of the enclosure and a second hut site (CO093-078002-) is c. 20m to the E.</i></p> <p>ASI Inventory Description: CO093-078004- <i>In rough hill grazing, within the N half of an enclosure (CO093-078003-). The remains of a circular hut site (diam. 1.8m) defined by a stone wall (T 0.6m; H 0.4m) which protrudes above the surface of shallow bog.</i></p> <p>These sites remain in the same condition as described by the ASI. They are located within a level area at the base of a steep hill slope that rises sharply to the north. The surviving basal stones of the enclosure and its internal hut form a coherent outline of their original extent and are located within a grassy area surrounded by reeds. The low basal remains of the enclosure are clearly visible from its close environs but views from wider lands are largely obscured by reeds. The existing farm track to the north is located at a distance of 16.6m upslope from the enclosure. The basal remains of this hut site are clearly visible from its close environs but not from the wider area.</p> 

13.4 ASSESSMENT OF POTENTIAL EFFECTS

13.4.1 Introduction

The following section presents assessments of potential effects on identified cultural heritage constraints within the reviewed Study Areas. The existing condition of known cultural heritage constraints located within inaccessible private lands outside the boundary of the Proposed Development was appraised based on their classifications, inventory descriptions, as well as reviews of historical maps and modern aerial/satellite images. The archaeological sites within the reviewed Study Areas 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 not sensitive to any setting effects. It should be noted that all such archaeological sites retain the potential to possess subsurface features, artefacts, and other archaeological remains that may be of high value. While this cannot be ascertained without recourse to archaeological excavation, such attributes are unlikely to be sensitive to effects in the absence of direct impacts.

There are five National Monuments in State Care and two archaeological sites subject to Preservation Orders located within 10 km of the Proposed Development and these constraints are deemed to be of high value based on these designations under the National Monuments Act 1930 (as amended). The tables provided in **Section 13.4.5** present assessments of the significance of indirect effects based on the value/sensitivity of cultural heritage constraints combined with the duration, quality, type and magnitude of effects.

13.4.2 Construction Phase – Direct Impacts

The construction phase will not result in any predicted direct impacts on the recorded archaeological sites located within the boundary of the Proposed Development. Four of the hut sites (CO093-078001-, CO093-078002-, CO093-078004- and CO093-085----), a standing stone pair (CO093-024----), a mass-rock (CO093-084----), and an enclosure (CO093-078003-) within the southern half of the Proposed Development are located within the environs of an existing upgraded trackway, which was in use as an access route for farm vehicles at the time of inspection. This existing trackway has been reduced down to natural subsoil and will be subject to upgrading works in order to form a Site Access Track as part of the Proposed Development. The upgrading of this existing trackway will not require ground excavations works outside of its existing extent within the environs of known archaeological sites within the boundary of the Proposed Development. While the existing trackway is located in the close proximity of the above archaeological sites, its reuse as a Site Access Track will reduce the extent of ground works required within the boundary of the Proposed Development which will also reduce the potential for impacts on any unrecorded, subsurface archaeological remains. As described in **Table 13.10**, a potential unrecorded archaeological hut site was identified within the environs of the Proposed Development during field surveys. This is located outside the boundary of the Proposed Development and no direct impacts on this feature will, therefore, occur.

Table 13.11: Known archaeological sites in relation to nearest development area

Monument No.	Type	Condition	Distance from nearest development area
CO093-078003-	Enclosure	Low surface traces	Located 16.6m to south of existing farm track to be used as a Site Access Track. It is 5m south of an area of fill to be introduced on the south side of the track to reduce the gradient of a steep slope in this area. This will not require any ground excavation work within the fill area
CO093-087----	Enclosure	Extant - partially collapsed	Located 25m from new section of Site Access Track. This will not require ground excavation work within 25m of the site
CO093-114----	Field boundary	Low surface traces	Located 160m to the north of Turbine 6 hardstand. This will not require ground excavation work within 160m of the site
CO093-078001-	Hut site	Low surface traces	Located 16.5m to south of existing farm track to be used as a Site Access Track. It is 12m south of an area of fill to be introduced to reduce the gradient of a steep slope on the south side the existing track. This will not require any ground excavation work fill area.
CO093-078002-	Hut site	Low surface traces	Located 15m south of existing farm track to be used as a Site Access Track. It is 10m south of an area of fill to be introduced to reduce the gradient of a steep slope on south side of existing trackway to the north. This will not require any ground excavation work within the fill area.
CO093-078004-	Hut site	Low surface traces	Located 16.6m south of existing farm track to be used as a Site Access Track. It is 5m south of an area of fill to be introduced to reduce the gradient of a steep slope on south side of existing trackway to the north. This will not require any ground excavation work within the fill area.
CO093-085----	Hut site	Low surface traces	Located 6m from existing trackway which will be used as a Site Access Track. This will not require any ground excavation work within the environs of the site.
CO093-086----	Hut site	Low surface traces	40m from new section of Site Access Track. This will not require any ground excavation work within 40m of the site.
CO093-084----	Mass-rock	Extant	Located 35m from an existing trackway which will be used as a Site Access Track. This will not require any ground excavation work within the environs of the site

Monument No.	Type	Condition	Distance from nearest development area
CO093-024----	Standing stone pair	Partially extant (one stone levelled)	Located 7.7m from an existing trackway which will be used as a Site Access Track. This will not require any ground excavation work within the environs of the site

The potential for the presence of sub-surface archaeological sites and artefacts exists within the boundary of the Proposed Development. Given that the existence as well as location, extent and nature of any unrecorded, sub-surface archaeological remains are indeterminable the potential exists for direct, negative impacts on any unknown examples that may exist within proposed construction areas. As the existence, extent, value and magnitude of impact on any unrecorded archaeological features or artefacts within the boundary of the Proposed Development are unknown, the significance of potential construction phase impacts cannot be accurately quantified. However, ground works during the construction phase will have the potential to result in a permanent, direct, moderate to significant, negative effects on any such remains and therefore this will require mitigation.

There are no designated architectural structures (RPS or NIAH) located within the boundary of the Proposed Development and no undesignated buildings of architectural heritage interest were identified at proposed construction areas. It is, therefore, concluded that the construction phase of the Proposed Development will not result in any direct effects on the architectural heritage resource.

There are no recorded archaeological sites or designated architectural heritage structures located on the direct footprint of the GCR options and no sites with potential subsurface remains that may extend within the roadways that the options follow were identified. The use of HDD methodology at water crossings along the route options will avoid the need for any interventions to undesignated masonry bridges or any potential underwater archaeological features within their associated water channels. The proposed GCR options will, therefore, result in no predicted direct impacts on the known cultural heritage resource. In addition, the works required to facilitate the delivery of turbines to the Proposed Development will not result in any predicted direct impacts on the cultural heritage resource.

13.4.3 Construction Phase – Indirect Impacts

The Proposed Development will include the upgrade of an existing trackway located within the environs of four hut sites (CO093-078001-, CO093-078002-, CO093-078004- and CO093-085----), a standing stone pair (CO093-024----), a mass-rock (CO093-084----), and an enclosure (CO093-078003-) (**Table 13.11**). There are also two recorded archaeological

sites located within 25m and 40m of a new section of site access road in the north end of the Proposed Development (enclosure CO093-087----and hut site CO093-086----). While the construction phase will not result in any direct effects on these archaeological sites it is predicted to result in a low magnitude, short-term, slight, adverse indirect effect on their settings due to construction activity within their close environs that will result in restricted access to their locations. The inspection of the hut and enclosure sites within the environs of proposed development areas confirmed that only basal remains survive, and they do not retain sections of extant walling that might be susceptible to collapse resulting from vibrations resulting from construction traffic and ground works. An inspection of the mass-rock (CO093-084----) and the extant upright stone at Stone Pair CO093-024---- revealed that both are securely embedded in the ground surface and do not display any evident traces of instability.

There are no designated architectural heritage structures within 2 km of the Proposed Development and no significant indirect impacts on this element of the cultural heritage resource are predicted during the construction phase.

Given the absence of any recorded archaeological sites or designated architectural heritage structures within the public roads that form the GCR options no indirect effects on the cultural heritage resource are predicted to arise during the construction phase of the grid connection. In addition, the review of all proposed work locations required to facilitate the delivery of turbines to the Proposed Development identified one location (see Chapter 2; TDR Location 7) within the environs of a known archaeological site (wedge tomb CO093-052002-) in Inchincurka townland. The roadside vegetation clearance required for oversail and laying of a loadbearing area for wheel overrun at this location will result in a short term, indirect, negligible magnitude, not significant effect on this archaeological site.

The proposed Project extends within the Múscaí Gaeltacht area. While the construction phase of the Proposed Development and Grid Connection will see the arrival of construction workers to the area, this will be a short-term occurrence and will not result in permanent settlement of the area by non-Irish speakers. The Project is, therefore, predicted to result in a negligible, indirect, not significant impact on cultural and linguistic demographics of the Gaeltacht area during the construction phase.

13.4.4 Operational Phase – Direct Impacts

The operational phase of the Proposed Development, including the Onsite Substation and Control Building, will result in no predicted direct physical impacts on the known

archaeological, architectural and cultural heritage resources. In addition, the successful implementation of the mitigation measures outlined in **Section 13.5** will result in the preservation *in situ* (by avoidance) or the preservation in record (by archaeological excavation) of any unrecorded, sub-surface archaeological sites or features that may exist within proposed construction areas requiring ground reduction works. There will, therefore, be no predicted direct impacts on any such potential unrecorded archaeological sites during the operational phase.

The grid connection will comprise a buried cable within existing roadways and will, therefore, result in no predicted direct effects on the cultural heritage resource during the operational phase.

In the event that any turbines are required to be replaced, the same Turbine Delivery Route will be used during the operational phase. Similarly to the assessment in 13.4.3, no likely direct effects on the cultural resource are predicted.

13.4.5 Operational Phase – Indirect Impacts

There are ten recorded archaeological monuments located within the boundary of the Proposed Development and there are an additional 88 no. recorded archaeological sites located within 2 km of its boundary (**Tables 13.5 and 13.11** and **Figures 13.1 and 13.2**). There is a notable concentration of hut sites, enclosures and field boundaries located within, and in the close environs of the southern half of the Proposed Development. As noted in **Section 13.3.2**, the origins of these site types cannot be definitively determined without recourse to archaeological excavation and the potential that they may date from any period from late prehistory onward exists. While the majority of these archaeological sites individually possess low collapsed surviving surface remains that have a low sensitivity to indirect effects on their setting, as a concentrated group of sites within a relatively undisturbed area they are nonetheless considered to retain high value and sensitivity as an archaeological landscape. The operational phase of the Proposed Development will result in a considerable (medium magnitude) change to the setting of these archaeological sites as a combined landscape group which will result in a long term (reversible), indirect, significant adverse effect.

The Proposed Development will entail the establishment of information signage within the environs of archaeological sites located in proximity to site access tracks (see **Chapter 2; Section 2.11.2**). The location of these boards have been designed to avoid the close environs of all recorded archaeological sites and are shown on Drawing Nos. 6460-JOD-

GLWF-XX-DR-C-0205, 6460-JOD-GLWF-XX-DR-C-0206, and 6460-JOD-GLWF-XX-DR-C-0208. This aspect of the Proposed Development will enhance public access to elements of cultural heritage resource within the Proposed Development which will result in a slight, permanent, indirect, positive effect.

The recorded archaeological resource within an area extending for 5 km from the Proposed Development was assessed to determine the presence of other monuments within the wider landscape that may have potential visual alignments. This revealed the presence of a number of prehistoric monuments of potential Bronze Age date which may have been constructed to form potential ritual alignments across the wider landscape. These comprise 2 no. stone circles, 6 no. wedge tombs, 4 no. stone rows and 4 no. standing stone pairs (**Table 13.6** and **Figure 13.3**). These monuments, which are all located within private properties that are not accessible by the public, are listed in **Table 13.6** which includes their ASI inventory description and the results of a review of their recorded alignments in combination with their locations and distances in relation to the Proposed Development. This review was carried out to appraise if any potential high magnitude intrusions on their alignments will arise due to the presence of the proposed wind turbines. This revealed that none of the reviewed monuments within the surrounding 5 km landscape have recorded direct alignments that intersect with the locations of any of the proposed wind turbines. There is only one example (Stone Pair CO093-024----) located within 1 km of the turbines within the Proposed Development while the other examples are located at distances of 1.1 km to 4.2 km from the nearest proposed turbine.

Table 13.12 presents the results of an assessment of effects on the alignments of these monuments which includes details on their distances from the nearest turbine within the Proposed Development. The assessment also included a review of Zone of Theoretical Mapping (ZTV) provided in the Landscape and Visual Amenity assessment (**Chapter 11; Figure 11.10**) to assess if any intrusions by turbines will occur on general views within the wider periphery of their alignments. 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 potential, therefore, exists that the general views from the reviewed monuments, which are all located within private lands, may be screened by features such as field boundary tree lines within their environs which may reduce the magnitude and significance of visual effects. .

Table 13.12: Assessment of Long Term, Indirect, Adverse Effects on Monument Visual Alignments within 5 km

Monument no.	Classification	Approx distance from Site	Direct alignment towards turbine?	ZTV Map Review of Location	Value/Sensitivity	Magnitude of Effect on Alignment	Significance of Effect on Alignment
CO092-014----	Wedge tomb	1.9km to NW	No	3-4 turbines visible	High	Negligible	Slight
CO093-076----	Wedge tomb	1.1km to N	No	1-2 turbines visible	High	Negligible	Slight
CO093-001----	Wedge tomb	1.2km to N	No	1-2 turbines visible	High	Negligible	Slight
CO093-003----	Wedge tomb	1.6km to N	No	1-2 turbines visible	High	Negligible-	Slight
CO093-006----	Wedge tomb	1.7km to N	No	1-2 turbines visible	High	Negligible	Slight
CO080-019----	Wedge tomb	4.1km to NNW	No	5-6 turbines visible	High	Negligible	Slight
CO093-008----	Wedge tomb	2.5km to N	No	1-2 turbines visible	High	Negligible	Slight
CO093-007----	Wedge tomb	1.8km to N	No	1-2 turbines visible	High	Negligible	Slight
CO081-047----	Wedge tomb	5km to NE	No	No turbines visible	High	None	Neutral
CO093-017----	Wedge tomb	4.3km to NE	No	No turbines visible	High	None	Neutral
CO093-062----	Wedge tomb	3.3km to SE	No	7-9 turbines visible	High	Negligible	Slight
CO107-012----	Stone circle	3.8km to SE	No	7-9 turbines visible	High	Negligible	Slight
CO092-051----	Stone circle	3.8km to SW	No	3-4 turbines visible	High	Negligible	Slight
CO092-013002-	Stone row	2.6km to NNW	No	7-9 turbines visible	High	Negligible	Slight
CO093-018----	Stone row	4.2km to NE	In forestry	No turbines visible	High	None	Neutral
CO107-011002-	Stone row	4.2km to SE	No	7-9 turbines visible	High	Negligible	Slight
CO107-008----	Stone row	3.2km to SSE	No	7-9 turbines visible	High	Negligible	Slight
CO093-024----	Stone pair	Within Site	Original alignment not preserved	7-9 turbines visible	High	Potential Medium	Potential Significant
CO093-014----	Stone pair	3.3km to ENE	No	5-6 turbines visible	High	Negligible	Slight
CO092-035----	Stone pair	2.7m to W	No	5-6 turbines visible	High	Negligible	Slight
CO092-066001-	Stone pair	3km to NW	No	No turbines visible	High	None	Neutral
CO092-067----	Stone pair	3.1km to NW	No	No turbines visible	High	None	Neutral

Table 13.13 presents the results of the assessment of potential visual effects on National Monuments within the wider landscape, including sites subject to Preservation Orders. These effects are considered to be indirect due to the distances of these constraints from the Proposed Development. Kealkill Stone Circle (PO ref. 69/1938) is assessed in the Landscape and Visual Amenity (LVA) chapter (Chapter 11; Viewpoint 26). The significance of visual amenity impact on this receptor, which was considered to be of medium-high sensitivity as a visual receptor, was deemed 'Slight'. As detailed in **Table 13.13**, as a cultural heritage constraint with a visual alignment attribute, this monument is considered of high value/sensitivity. The recorded alignment of the stone circle is not orientated in the direction of the Proposed Development and, given its distance (9.4 km) from the Proposed Development, the significance of indirect effect on its wider setting is deemed to slight-moderate. The LVA Chapter also includes an assessment of potential visual effects on Gougane Barra, which while not a National Monument does comprise a notable tourism, recreation and heritage receptor located c. 7.5 km northwest of the Proposed Development. It was concluded that visual impacts on that receptor would be imperceptible to neutral in significance (Chapter 11; Viewpoint 5). A review of Zone of Theoretical Visibility maps compiled as part of the LVA assessment was carried out and revealed that no turbines will be visible from a number of the National Monuments located within 10 km of the Proposed Development (Castledonovan tower house, Breeny More stone circle and boulder burials, Maughanasilly stone row and Clodagh stone pair). It is concluded that the visual effect on these National Monuments will be neutral. In addition to Kealkill stone circle, the review of ZTV mapping revealed that turbines within the Proposed Development will be visible from Farrannahineeny stone row (5.71km to east) and Dromdrasdil stone row (3.7 km southeast). As detailed in **Table 13.13**, neither of these monuments have recorded alignments extending towards the Proposed Development and, in combination with their distances from its boundary, the potential operational phase, indirect, adverse visual effects are predicted to be slight-moderate in significance.

Table 13.13: 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
374	Farrinahineeny Stone Row	5.71 km to east	No	7-9 turbines visible	High	Negligible-Low	Slight-Moderate
536	Clodagh Stone Pair	8.58 km to south	No	No turbines visible	High	N/A	Neutral
656	Castledonovan Tower House	9.66 km to south	N/A	No turbines visible	High	N/A	Neutral
450	Breeny More Stone Circle	9.69 km to west-southwest	No	No turbines visible	High	N/A	Neutral
No number assigned	Maughnasilky Stone Row	9.7 km to west	No	No turbines visible	High	N/A	Neutral
PO no. 69/1938	Kealkill Stone Circle	9.4 km to west-southwest	No	5-6 turbines visible	High	Negligible-Low	Slight-Moderate
PO no. 12/1971	Dromdrasil Stone Row	3.7 km southeast	No	7-9 turbines visible	High	Low	Slight-Moderate

The grid connection will comprise a buried cable within existing roadways and will, therefore, result in no predicted indirect effects on the cultural heritage resource during the operational phase.

In the event that any turbines are required to be replaced using the same Turbine Delivery Route during the operational phase, no likely indirect effects on the cultural resource are predicted.

The Project partially extends into the south end of the Múscaí Gaeltacht area. The requirement for low numbers of onsite staff during the operation phase of the Project will be intermittent and this will not result in any predicted effects on the cultural and linguistic demographics of the Gaeltacht area.

13.4.6 Decommissioning Effects

No direct impacts on known elements of the cultural heritage resource are predicted during the decommissioning phase as there are no recorded cultural heritage constraints located within the footprint of the various elements of the Proposed Development that will be subject to decommissioning. Any previously unrecorded archaeological remains identified during the site investigations detailed in Section 13.5 will either be preserved by avoidance or preserved by record (excavation) and no decommissioning impacts on such potential features are predicted. The decommissioning of the Proposed Development will result in the reversal of the long term, indirect, adverse, slight to significant, visual effects on the settings of archaeological monuments located within the environs of the Proposed Development and the wider landscape.

13.5 MITIGATION MEASURES AND RESIDUAL EFFECTS

13.5.1 Construction Phase

The wind farm layout was informed by the archaeological desktop studies and field surveys undertaken during the design and assessment phases and was designed to avoid the known locations of the archaeological monuments within the boundary of the Proposed Development.

The mitigation measures presented in this section include pre-construction and construction phase archaeological site investigations as well as protection measures for known monuments. These mitigation measures are in accordance with guidelines for planning conditions for wind energy developments within close proximity to recorded archaeological

monuments as detailed in the *2006 Wind Energy Development Guidelines*²⁷ (Section 7.4) and the *2019 Draft Revised Wind Energy Development Guidelines*²⁸ (Section 7.6).

A pre-construction programme of archaeological test trenching of the locations of turbines, Turbine Handstands, site access tracks, Onsite Substation and Control Building, Temporary Construction Compound, borrow pit and Met Mast within the Proposed Development will be carried out by a suitably qualified archaeologist under a licence issued by the National Monuments Service. Due to the presence of a high number of known archaeological sites within the environs of the Project the appointed archaeologist will also carry out archaeological monitoring of construction phase ground works within all areas of the Proposed Development as well as along the GCR and at TDR Location 7, which is within the environs of a the recorded location of a wedge tomb (CO093-052002-) in Inchincurka townland.

In the event that any sub-surface archaeological features are identified during these site investigations they will be recorded by the appointed archaeologist and then securely cordoned off *in situ* 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 (archaeological excavation). Any archaeological features identified by the appointed archaeologist that will be preserved by avoidance will be securely cordoned off for the duration of the construction phase and clearly signed as a 'No Entry Area'.

The appointed archaeologist will also supervise the establishment of fenced off buffer zones extending 20 m from the outer edges of the known archaeological sites within the Proposed Development in advance of the commencement of the construction phase. Where sections of the existing trackway within the Proposed Development extend within 20 m of recorded archaeological sites then the edge of the construction areas will be fenced off at these locations under the supervision of the appointed archaeologist. All fenced off areas within the environs of known archaeological sites will be clearly signed as 'No Entry Areas' for the duration of the construction phase and their locations will be identified to onsite personnel during site inductions. No ground reduction works or other ancillary development works including, but not limited to, drainage/services, spoil storage, traffic/parking, compounds, or landscaping/planting, will occur within the archaeological exclusion areas. The construction phase will entail the introduction of an area of fill on the south side of a section of an existing

²⁷ <https://www.gov.ie/en/publication/f449e-wind-energy-development-guidelines-2006/>

²⁸ <https://www.gov.ie/en/publication/9d0f66-draft-revised-wind-energy-development-guidelines-december-2019/>

trackway to be used as a site access track in order to reduce the gradient of an area of steeply sloping ground adjacent to the existing trackway. The south end of the fill area is located within the environs of Enclosure CO093-078003- and hut sites CO093-078001-, CO093-078002- and CO093-078004-. A securely set protective barrier will be established at the south end of the fill area within the environs of these sites under the supervision of the appointed archaeologist who will also monitor this work. The protective barrier will be set on the existing ground surface and will not require any excavation works within the environs of the enclosure and hut sites.

The appointed archaeologist will also carry out ongoing inspections of the recorded archaeological sites within the boundary of the Proposed Development for the duration of the construction phase in order to confirm that no destabilisation of extant remains is occurring due to any potential vibration effects. In the event that any such effects are noted, works in the environs of the archaeological site will be halted while the National Monuments Service are consulted in order to determine appropriate additional mitigation measures. A small sheep paddock feature of negligible cultural heritage value was noted adjacent to the T7 hardstand during the field survey of the Proposed Development (**Table 13.11**). The appointed archaeologist will compile a written and photographic record of this feature in advance of construction works at this location.

The Project is partially located within the Múscraí Gaeltacht area and any signage erected within Gaeltacht areas of the public realm during the construction phase will include Irish and English text.

13.5.2 Construction Phase Residual Impacts – Direct

The mitigation measures presented in **Section 13.5.1** will provide for either the avoidance of the potential unrecorded, sub-surface archaeological resource within the footprint of proposed construction locations or the proper and adequate recording of this resource by full archaeological excavation. No residual construction phase direct impacts are predicted following the implementation of these mitigation measures.

13.5.3 Construction Phase Residual Impacts – Indirect

The buffer zone mitigation measures presented in **Section 13.5.1** will provide for protection of known archaeological monuments within environs of proposed construction locations. No residual construction phase indirect impacts are predicted following the implementation of these mitigation measures.

13.5.4 Operational Phase

Following the successful implementation of the archaeological mitigation measures presented in **Section 13.5.1**, the operational phase of the Project will result in no predicted direct impacts on the known archaeological, architectural and cultural heritage resources. The locations of the recorded archaeological sites within the boundary of the Proposed Development will remain as undeveloped areas during the operational phase which will not require any works at their locations to facilitate the operation of the wind farm. The amenity trail information signs will be erected during the construction phase and, therefore, no mitigation measures for direct operational phase impacts will be required.

As detailed in **Section 13.4.5**, the Project will result in a range of long term, indirect negative effects of a visual nature on the wider setting of archaeological sites within the environs of the Proposed Development which will range from slight to significant in significance. Given the nature of the wind farm turbines there are no mitigation measures that can address these indirect visual impacts, but it is noted that they will be reversed following the decommissioning phase.

13.5.5 Operation Phase Residual Impacts - Direct

No operational phase direct residual impacts on the cultural heritage resource are predicted following the successful implementation of mitigation measures.

13.5.6 Operation Phase Residual Impacts - Indirect

The operational phase will result in a range of slight to significant, long term residual indirect impacts on archaeological sites within the environs of the Project. It is noted that these effects will be reversible following decommissioning.

13.6 CUMULATIVE IMPACTS

A review of operational, permitted and proposed wind farm developments within 10 km of the Project was carried out in order to assess potential medium to high magnitude cumulative effects on the cultural heritage resource that have the potential to result in significant effects (**Table 13.14**). 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 and Kerry County Council planning enquiry systems as well as the Database of Irish Excavation Reports. A review of the cumulative ZTV mapping compiled as part of the Landscape and Visual Amenity assessment (Chapter 11) was also carried out.

A review of other proposed and permitted developments within 10 km of the Proposed Development (see **Appendix 2.4**) was carried out as part of the assessment of cumulative impacts and the results are provided below.

Table 13.14: Review of wind farms within 10km of the Project

Wind Farm	Status	No. of Turbines	Distance and Direction from the Proposed Development	Cultural Heritage Review
Shehy More Wind Farm	Operational	11	0.57 km North	A review of the Cultural Heritage Chapter in the EIS prepared for this development was carried out. ²⁹ The assessment concluded that the development would result in no predicted direct impacts or significant indirect impacts on the 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.
Barrboy Wind Farm	Permitted	5	4.38 km South	No planning files located online. There are no entries in the Database of Irish Excavation Reports for townlands within the development.
Carrigdangan Wind Farm	Operational	5	5.18 km West	A review of the Cultural Heritage Chapter in the EIS prepared for this development was carried out. ³⁰ The assessment concluded that the development would result in no predicted direct impacts or significant indirect impacts on the cultural heritage resource.
Kealkil Wind Farm	Operational	10	5.18 km Northwest	Archaeological monitoring of the construction of this wind farm did not reveal anything of archaeological significance. ³¹
Keel Energy Limited	Permitted	3	5.95 km Southeast	A review of the chapter of the Cultural Heritage in the EIAR prepared for this development was carried out. ³² The assessment concluded that the development would result in no predicted direct impacts or significant indirect impacts on the cultural heritage resource.
Derreenacrinig Wind Farm	Proposed	7	7.05 km Southwest	Archaeological monitoring of the ground works carried out during the construction of existing access roads and turbine hardstands within the site was carried out in 2017 and nothing of archaeological significance was identified.
Milane Hill Wind Farm	Operational	9	9.27 km South	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.
Cleanrath Wind Farm	Operational	9	9.80 km North	Archaeological testing and monitoring carried out as part of this development

²⁹ <https://planningdocs.corkcoco.ie/PlanningDocumentDisplay/documents/18a-13551>

³⁰ <https://planningdocs.corkcoco.ie/PlanningDocumentDisplay/documents/18a-15730>

³¹ <https://excavations.ie/report/2005/Cork/0013198/>

³² <https://planningdocs.corkcoco.ie/PlanningDocumentDisplay/documents/18a-215372>

Wind Farm	Status	No. of Turbines	Distance and Direction from the Proposed Development	Cultural Heritage Review
				revealed nothing of archaeological significance ³³
Grousemount Wind Farm	Operational	24	9.95 km North	Archaeological surveys and site investigations at this development site revealed various previously unrecorded archaeological sites including the low remains of upland hut sites ³⁴ . All of these were preserved <i>in situ</i> by avoidance within the development apart from one site which was preserved by record by an archaeological excavation which revealed it to be a cairn containing a Bronze Age 'short cist' ³⁵ .
Derragh Wind Farm	Operational	6	10.00 km North	A review of the Cultural Heritage Chapter in the EIS prepared for the for this development was carried out and revealed that it was assessed to result in no predicted direct impacts or any significant impacts on the cultural heritage resource ³⁶ . The assessment concluded that the visual impacts on archaeological sites within the surrounding landscape would be slight in significance.

Given the absence of significant direct impacts on the recorded cultural heritage resource arising from the Project in combination with the results of the review of wind farms identified in **Table 13.14**, the Proposed Development is not predicted to contribute to any significant direct cumulative impacts on the cultural heritage resource.

The review of available cultural heritage impact assessments of the wind farm developments listed in **Table 13.14** revealed that none predicted significant indirect construction, operational or cumulative effects on any cultural heritage assets within the wider environs of the wind farm locations.

A review of archaeological monument types with visual alignment attributes within 10 km of the Proposed Development revealed that none are recorded to be aligned towards its location (**Table 14.6**). The proposed development will, therefore, not result in any cumulative indirect effects on potential visual alignment attributes of these monuments in combination with the wind farms listed in **Table 13.14**. As detailed in **Table 13.13**, there are five National Monuments in State Care located within 10 km of the Proposed Development and none of the proposed turbines will be visible from four of these monuments. The

³³ <https://excavations.ie/report/2019/Cork/0029095/>

³⁴ <https://excavations.ie/report/2016/Kerry/0025172/>

³⁵ <https://excavations.ie/report/2018/Kerry/0027273/>

³⁶ <http://planning.corkcoco.ie/ePlan/AppFileRefDetails/156966/0>

Proposed Development will, therefore, not result in any cumulative visual effects on those four monuments in combination with the wind farms listed in **Table 13.14**. Turbines will be visible from one of the National Monuments in State Care (No. 374: Farrinahineeny Stone Row) within the 10 km study area, which is located 5.71 km to the east of the Proposed Development. The recorded alignment of this monument is not orientated towards the Proposed Development and the assessment of operational phase indirect effect on its wider setting is deemed to be slight-moderate. Shehy More Wind Farm extends within the area between this monument and the Proposed Development and the indirect, adverse cumulative effect on the wider setting of this monument is deemed to be moderate in significance.

There are two archaeological sites subject to Preservation Orders within the 10 km study area and these comprise Kealkill Stone Circle (PO no. 69/1938) and Dromdrasil Stone Row (PO no. 12/1971) which are located at respective distances of 9.4 km and 3.7 km from the Proposed Development. As detailed in **Table 13.13**, neither of these monuments have recorded alignments extending towards the Proposed Development and, in combination with their distances from its boundary, the potential operational phase, indirect, adverse visual effects are predicted to be slight-moderate in significance. None of the wind farms listed in **Table 13.14** are located within areas of the landscape between the Proposed Development and these two monuments. In addition, none of the reviewed wind farms are located within 10 km of Kealkill Stone Circle or within 5 km of Dromdrasil Stone Row. Given these factors, no likely significant cumulative effects on the wider setting of these two archaeological sites will occur.

It is, therefore, concluded that all elements of the Project will not act in combination with the reviewed wind farm developments to result in likely significant, indirect, adverse cumulative effects on the wider settings of National Monuments in State Care, Preservation Order sites or the recorded alignments of prehistoric monuments within the 10 km study area.

A review of other development types within 10 km of the Proposed Development (**Appendix 4.2**), 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. Permission has been granted for facilitating works for the provision of access to a walking route in Shehy Beg townland which will extend within the boundary of the Proposed Development (Cork County Council planning ref. 2374³⁷). This development will not require any disturbance of

³⁷ <https://planning.corkcoco.ie/ePlan/AppFileRefDetails/2374/0>

existing trackways within the boundary of the Proposed Development. A car park area will be provided in an area located outside the Proposed Development and there are no recorded cultural heritage constraints at that location. The Proposed Development will include the provision of information signage within the environs of archaeological sites located within its boundary. This will act in combination with the development of a walking route extending within the boundary of the Proposed Development to result in a slight-moderate positive cumulative effect by facilitating public to and awareness of the cultural heritage resource of the area.

13.7 CONCLUSIONS

The Proposed Development will not result in any predicted direct negative impacts on any known archaeological sites, designated architectural heritage structures or undesignated cultural heritage assets. The potential exists for the presence of unrecorded, sub-surface archaeological features within the boundary of the Proposed Development. A suitably qualified archaeologist will, therefore, be appointed to carry out programmes of pre-construction archaeological test trenching and construction phase archaeological monitoring under licence by the National Monuments Service.

In the event that any sub-surface archaeological remains are identified during site investigations, ground works will be halted at the relevant location while they are cleaned and recorded by the appointed archaeologist. The identified archaeological remains will then be left to remain *in situ* within cordoned off areas while the National Monuments Service are notified and consulted in relation to appropriate future mitigation strategies, which may entail preservation *in situ* by avoidance or preservation by record by archaeological excavations.

The Project will result in a range of slight-significant indirect visual effects on the settings of archaeological sites located within the boundary of the Proposed Development and surrounding lands during the operational phase. These indirect effects will be long-term in duration and will be reversed following the decommissioning phase.

13.8 SUMMARY OF SIGNIFICANT EFFECTS

The Project will have the potential to result in a significant, long-term, indirect effect on the receiving cultural heritage environment within, and in the environs of, the Proposed Development during the operational phase which will be reversed by the decommissioning phase. No potential direct significant effects on the known cultural heritage resource have been identified.

13.9 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 onsite archaeological works prior to and during the construction phase, the Project is not predicted to result in likely direct significant effects on the cultural heritage resource. The identified indirect, adverse, significant operational effect on the cultural heritage baseline within the boundary of the Proposed Development and its environs have the capacity to be reversed by the decommissioning phase.