

14. ARCHAEOLOGICAL, ARCHITECTURAL AND CULTURAL HERITAGE

14.1 Introduction

This cultural heritage chapter was prepared by Tobar Archaeological Services Ltd. It presents the results of an archaeological, architectural and cultural heritage impact assessment of the construction, operation and decommissioning of the Proposed Development, located at Curraglass, Cappaboy Beg, Dereendonee, and Inchi More in Co. Cork.

The purpose of this chapter is to assess the potential direct and indirect effects of the Proposed Development on the surrounding archaeological, architectural and cultural heritage landscape. The assessment is based on both a desktop review of the available cultural heritage and archaeological data and a field inspection of the Proposed Development footprint and the Site. An assessment of potential effects, including cumulative effects, is presented.

As detailed in Section 1.1.1 in Chapter 1 (Introduction), for the purposes of this EIAR, the various project components are described and assessed using the following references: 'Proposed Development', 'proposed turbines', the 'Site', the '2020 Application' and the 'Kealkill Wind Farm'. Please see Section 1.1.1 of this EIAR for further details.

14.1.1 Proposed Development

The Proposed Development will comprise 3 no. wind turbines, access roads, a site entrance, a borrow pit, peat and spoil management areas, internal electrical cabling, a temporary construction compound and a permanent meteorological mast. All wind farm site cabling will be laid underground. It is proposed to utilise the existing windfarm infrastructure from the Kealkill Wind Farm, including the continued use of the existing onsite 38kV substation and associated underground cable at the Site.

A full description of all elements of the Proposed Development is detailed in Chapter 4 (Description of the Proposed Development) of this EIAR.

14.1.2 Location and Topography

The Site is located within a southwestern valley of the Shehy Mountains approximately 6.8km northeast of Kealkill and 3.8km southwest of Ballingearry. The approximate location for the centre of the Site is E508999, N562646. The Site covers an area of approximately 270 hectares in total, the majority of which is planted with mixed forestry. The Site ranges in elevation from 111m above ordnance datum (m OD), in the turbine component turning area of the Site, to 347m OD in the north of the Site. The Site is located within the townlands of Inchi More, Cappaboy Beg, Derreendonee and Curraglass and is situated on the southwesterly slopes of Doughill Mountain of the Shehy Mountains. The section of Site that covers the turbine component turning area for turbine delivery, is located in low lying lands along the R584 at the bottom of the northern slopes of the Doughill Mountain. This pocket of the Site contains an existing private gravel track, with a mix of agricultural grasslands on either side of the track, and the boundary with the R548 Regional Road includes gorse willow hedgerow. The turbine component turning area is located 2.2km northeast of the Site entrance.



Figure 14.1: Site location.

14.1.3 Statement of Authority

This chapter of the Environmental Impact Assessment Report (EIA) has been prepared by Miriam Carroll of Tobar Archaeological Services Ltd. Miriam graduated from University College Cork in 1998 with a Masters degree in Methods and Techniques in Irish Archaeology. She is licensed by the Department of Housing, Local Government and Heritage (DHLGH) to carry out excavations and is a

member of the Institute of Archaeologists of Ireland. Miriam has been working in the field of archaeology since 1994 and has undertaken numerous projects for both the private and public sectors including excavations, site assessments (EIAR) and surveys. Miriam Carroll is a director of Tobar Archaeological Services which has been in operation for over 20 years.

14.1.4 Relevant Guidance and Legislation

14.1.4.1 Guidance

The assessment of the potential effects of the Proposed Development on cultural heritage has been carried out in accordance with the various planning policies and strategy guidance detailed in Section 1.2 in Chapter 1 (Introduction) of this EIAR and the following:

- Architectural Heritage Protection Guidelines for Planning Authorities (Department of Arts, Heritage and the Gaeltacht, 2011).
- Department of Arts, Heritage, Gaeltacht and the Islands, 1999, Framework and Principles for the Protection of the Archaeological Heritage, 1999.
- Guidance on Setting and the Historic Environment, Historic Environment Division, February 2018.
- Cork County Development Plan 2022-2028.
- Kerry County Development Plan 2022-2028

14.1.4.2 Legislation

Archaeological monuments are safeguarded through national and international policy, which is designed to secure the protection of the cultural heritage resource. This is undertaken in accordance with the provisions of the European Convention on the Protection of the Archaeological Heritage (Valletta Convention). This was ratified by Ireland in 1997.

Both the National Monuments Acts 1930 to 2004 and relevant provisions of the Cultural Institutions Act 1997 are the primary means of ensuring protection of archaeological monuments, the latter of which includes all man-made structures of whatever form or date. There are a number of provisions under the National Monuments Acts which ensure protection of the archaeological resource. These include the Register of Historic Monuments (1997 Act) which means that any interference to a monument is illegal under that Act. All registered monuments are included on the Record of Monuments and Places (RMP).

The Record of Monuments and Places (RMP) was established under Section 12 (1) of the National Monuments (Amendment) Act 1994 and consists of a list of known archaeological monuments and accompanying maps. The Record of Monuments and Places affords some protection to the monuments entered therein. Section 12 (3) of the 1994 Amendment Act states that any person proposing to carry out work at or in relation to a recorded monument must give notice in writing to the Minister (Environment, Heritage and Local Government) and shall not commence the work for a period of two months after having given the notice. All proposed works, therefore, within or around any archaeological monument are subject to statutory protection and legislation (National Monuments Acts 1930-2004).

The term 'national monument' as defined in Section 2 of the National Monuments Act 1930 means 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'*. National monuments in State care include those which are in the ownership or guardianship of the Minister for Arts, Heritage and the Gaeltacht. Section 5 of the National Monuments Act (1930) allows owners of other national monuments to appoint the Minister for the Arts, Heritage and the Gaeltacht or the relevant local authority as guardian of such monuments, subject to their consent. This means in effect that while the property of such a monument remains vested in the owner, its maintenance and upkeep are the

responsibility of the State. Some monuments are also protected by Preservation Orders and are also regarded as National Monuments. National Monuments also includes (but not so as to limit, extend or otherwise influence the construction of the foregoing general definition) every monument in Saorstát Éireann to which the Ancient Monuments Protection Act, 1882, applied immediately before the passing of this Act, and the said expression shall be construed as including, in addition to the monument itself, the site of the monument and the means of access thereto and also such portion of land adjoining such site as may be required to fence, cover in, or otherwise preserve from injury the monument or to preserve the amenities thereof.

The Historic and Archaeological Heritage and Miscellaneous Provisions Act 2023 will replace the existing National Monuments Acts (1930-2014) when it is brought into force by Ministerial Order. The majority of provisions of the Act have not yet come into force. One Commencement Order relating to Sections 1-6 and Section 7 insofar as relates to the Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999 (other than section 5) came into effect on the 31st May 2024. These provisions relate to World Heritage Property in the State, inventories, the protection of certain records, the promotion of heritage, and the issuing of statutory guidance. Certain related and supporting provisions concerning implementation and enforcement are also commenced (www.archaeology.ie/news). The provisions now in force allow for the establishment and maintenance of inventories of relevant things of archaeological interest, architectural heritage, and wrecks of archaeological or historic interest. This bolsters the status of existing inventories recording sites of archaeological, historic and architectural interest, both on land and under the sea. It also ensures that legal protection is afforded to certain records or archaeological objects in the event that a person or company in possession of such records is no longer in a position to maintain them, which further strengthens existing practices (<https://www.gov.ie/>).

Under the Heritage Act (1995) architectural heritage is defined to include *'all structures, buildings, traditional and designed, and groups of buildings including street-scapes 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...'* A heritage building is also defined to include *'any building, or part thereof, which is of significance because of its intrinsic architectural or artistic quality or its setting or because of its association with the commercial, cultural, economic, industrial, military, political, social or religious history of the place where it is situated or of the country or generally'*.

14.1.4.3 Granada Convention

The Council of Europe, in Article 2 of the 1985 Convention for the Protection of the Architectural Heritage of Europe (Granada Convention), states that *'for the purpose of precise identification of the monuments, groups of structures and sites to be protected, each member State will undertake to maintain inventories of that architectural heritage'*. The Granada Convention emphasises the importance of inventories in underpinning conservation policies.

The NIAH was established in 1990 to fulfil Ireland's obligations under the Granada Convention, through the establishment and maintenance of a central record, documenting and evaluating the architectural heritage of Ireland. Article 1 of the Granada Convention establishes the parameters of this work by defining 'architectural heritage' under three broad categories of Monument, Groups of Buildings, and Sites:

- Monument: all buildings and structures of conspicuous historical, archaeological, artistic, scientific, social or technical interest, including their fixtures and fittings;
- Group of buildings: homogeneous groups of urban or rural buildings conspicuous for their historical, archaeological, artistic, scientific, social or technical interest, which are sufficiently coherent to form topographically definable units;
- Sites: the combined works of man and nature, being areas which are partially built upon and sufficiently distinctive and homogenous to be topographically definable,

and are of conspicuous historical, archaeological, artistic, scientific, social or technical interest.

The Council of Europe's definition of architectural heritage allows for the inclusion of structures, groups of structures and sites which are considered to be of significance in their own right, or which are of significance in their local context and environment. The NIAH believes it is important to consider the architectural heritage as encompassing a wide variety of structures and sites as diverse as post boxes, grand country houses, mill complexes and vernacular farmhouses.

14.1.4.4 **Cork County Development Plan 2022-2028**

14.1.4.4.1 **Archaeological Heritage**

The Cork County Development Plan 2022-2028 (CCDP) came into effect on 6th June 2022. It outlines a number of objectives relating to archaeology as follows.

HE 16-2: 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.

HE 16-3: 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.

HE 16-4: Zones of Archaeological Potential in Historic Towns and Settlements

Proposed development works in Historic Towns and settlements, Zones of Archaeological Potential, Zones of Notification and the general historic environs in proximity to the zones, should take cognisance of the impact potential of the works, and all appropriate archaeological assessments employed to identify and mitigate the potential impacts.

HE 16-5: 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.

HE 16-6: 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 appropriate redevelopment including conversion should be subject to an appropriate assessment and record by a suitably qualified specialist/s.

HE 16-7: Battlefield, Ambush and Siege Sites and Defensive Archaeology

Protect and preserve the defensive archaeological record of County Cork including strategic battlefield, ambush and siege sites, and coastal fortifications and their associated landscape due to their historical

and cultural value. Any development within or adjoining these areas shall undertake a historic assessment by a suitably qualified specialist to ensure development does not negatively impact on this historic landscape.

HE 16-8: 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.

HE 16-9: 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.

HE 16-10: 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.

HE 16-12: Raising Archaeological Awareness

As part of the Heritage Plan it is an objective to develop a management plan, if resources allow, for the archaeology of County Cork, which could include an evaluation of the Historic Character Assessment of Cork County helping to identify areas for tourism potential, and strategic research while also promoting best practice in archaeology and encouraging the interpretation, publication and dissemination of archaeological findings from the development application process.

HE 16-13: 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.

14.1.4.4.2 **Built Heritage**

The CCDP also outlines objectives relating to built heritage such as Protected Structures and those listed in the NIAH.

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.

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.

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 16-17: Areas of Special Planning Control

Establish areas of special planning control within Architectural Conservation Areas where appropriate. These areas will include a scheme setting out objectives for the conservation and enhancement of the special character of the area and will be based on an Architectural Appraisal of each town.

HE 16-18: Architectural Conservation Areas

Conserve and enhance the special character of the Architectural Conservation Areas included in this Plan. The special character of an area includes its traditional building stock, material finishes, spaces, streetscape, shopfronts, landscape and setting. This will be achieved by;

- a) Protecting all buildings, structures, groups of structures, sites, landscapes and all other features considered to be intrinsic elements to the special character of the ACA from demolition and nonsympathetic alterations.
- b) Promoting appropriate and sensitive reuse and rehabilitation of buildings and sites within the ACA and securing appropriate infill development.
- c) Ensure new development within or adjacent to an ACA respects the established character of the area and contributes positively in terms of design, scale, setting and material finishes to the ACA.
- d) Protect structures from demolition and non-sympathetic alterations.
- e) Promoting high quality architectural design within ACAs.
- f) Seek the repair and re-use of traditional shopfronts and where appropriate, encourage new shopfronts of a high quality architectural design.
- g) Ensure all new signage, lighting advertising and utilities to buildings within ACAs are designed, constructed and located in such a manner they do not detract from the character of the ACA.
- h) Protect and enhance the character and quality of the public realm within ACAs. All projects which involve works within the public realm of an ACA shall undertake a character assessment of the said area which will inform a sensitive and appropriate

approach to any Proposed Development in terms of design and material specifications. All projects shall provide for the use of suitably qualified conservation architects/ designers.

- i) Protect and enhance the character of the ACA and the open spaces contained therein. This shall be achieved through the careful and considered strategic management of all signage, lighting, utilities, art works/pieces/paintings, facilities etc to protect the integrity and quality of the structures and spaces within each ACA.
- j) Ensure the protection and reuse of historic street finishes, furniture and features which contribute to the character of the ACA.

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.

HE 16-20: Historic Landscapes

- a) Recognise the contribution and importance of historic landscapes and their contribution to the appearance of the countryside, their significance as archaeological, architectural, historical and ecological resources.
- b) Protect the archaeological, architectural, historic and cultural element of the historic/heritage landscapes of the County of Cork.
- c) All new development within historic landscapes should be assessed in accordance with and giving due regard to Cork County Councils 'Guidance Notes for the Appraisal of Historic Gardens, Demesnes, Estates and their Settings' or any other relevant guidance notes or documents issued during the lifetime of the Plan.

14.1.4.4.3 **Cultural Heritage**

The CCDP also outlines objectives relating to Cultural Heritage.

HE 16-23: Cultural Heritage

Protect and promote the cultural heritage of County Cork as an important economic asset and for its intrinsic value to identity of place and the well-being of people within the County.

HE 16-24: Naming of New Developments

Promote and preserve local place names, local heritage and the Irish language by ensuring the use of local place names or geographical or cultural names which reflect the history and landscape of their setting in the naming of new residential and other developments. Such an approach will be a requirement of planning permissions for new developments.

HE 16-25: Gaeltacht Areas Protect the linguistic and cultural heritage of the Gaeltacht areas of Cork by:

- a) Encouraging development within the Gaeltacht and in the Gaeltacht Service Town of Macroom, which promotes, facilitates or complements the cultural heritage, including Irish language use;

- b) Encouraging development within the Gaeltacht and the Gaeltacht Service Town of Macroom, which provides employment or social facilities, especially, but not exclusively, where these are of relevance to local young people;
- c) Resisting development within the Gaeltacht, which would be likely to erode the cultural heritage (including the community use of Irish language), unless there are over-riding benefits for the long-term sustainability of the local community or for the proper planning and sustainable development of a wider area;
- d) Ensuring that where the County Council erects signs within the Gaeltacht, these have Irish as their primary language, unless there are positive and over-riding reasons for doing otherwise;
- e) Discouraging the exhibition of advertisements within the Gaeltacht which do not use Irish as their primary language;
- f) Consider the requirement for the use of demanding linguistic impact analyses with planning applications for particular major developments. These would be cases where the potential impact of the development on the use of Irish as the community language is not immediately apparent and pivotal in the determination of the application.
- g) Facilitate the preparation and implementation of local Gaeltacht Plans, Programmes and Initiatives, including Language Plans and Conservation Plans such as the Múscraí Heritage Plan, in the interests of the proper planning and sustainable development of Cork's Gaeltacht's, provided that such plans are in keeping with Council policy.
- h) Encourage the use of the Irish language, not just in Gaeltacht areas but throughout the County, particularly with regard to service provision, planning and development and Council initiatives/activities.
- i) The use of the Irish language is promoted in the design of developments e.g., business advertising, recreational and community facilities are clearly identified and provided and shop-front signage should be in the Irish language;

The Plan encourages collaboration between Gaeltacht stakeholders, Gaeltacht communities and State agencies in the future planning and development projects to ensure the protection and promotion of the Irish language as the community language.

14.1.4.5 **Kerry County Development Plan 2022-2028**

The Kerry County Development Plan 2022 – 2028 (KCDP) was adopted on 4th July 2022. It outlines a number of policies and objectives relating to archaeology, built heritage and cultural heritage. The relevant policies and objectives relating to the designated archaeological landscapes within the KCDP are detailed below as follows:

14.1.4.5.1 **Archaeological Landscapes**

It is an objective of the Council to:

KCDP 8-28 Ensure the active protection of the 19 identified, significant archaeological landscapes outlined in Volume 3 with particular emphasis on the landscape settings, views to and from the landscapes and monument/feature inter-visibility within these landscapes.

Volume 3 of the KCDP details the following regarding the identified Archaeological Landscapes within the County including that of Dromagorteen / Crinagort / Curragraigue / Erneen (No. 18) which is situated c. 8km to the west of the Proposed Development boundary.

'The County has a richness of archaeological heritage with a number of very significant archaeological landscapes around the County. These landscapes are of Kerry, Regional, National and in some cases International significance (KS, RS, NS & IS) and every effort should be made to ensure their protection

and preservation. The nineteen landscapes identified are described in detail in below. These important landscapes are listed for special protection with special emphasis on objectives that protect the monuments and their landscape settings but also their visual aspect and monument inter-visibility.'

'18. Dromagorteen/Crinagort/Curragraigue/Erneen (NS) Megalithic tombs, stone circles, boulder burial, standing stones, cairns, fulachtaí fiadh, extensive hut site complexes and field systems. Similar to Drombohilly/Uragh area, extensive evidence for activity from the Late Neolithic/Early Bronze Age to the Late Bronze Age.'

14.1.5 Statutory Consultations

14.1.5.1 Cork County Council

No scoping response specifically relating to archaeology, architectural or cultural heritage was received from Cork County Council.

14.1.5.2 Department of Housing Local Government and Heritage

A scoping request was issued to the DAU of the DHLGH; however, no archaeology, architectural or cultural heritage related responses were received from the National Monuments Services /Development Applications Unit of the Department of Housing, Local Government and Heritage (DHLGH).

14.1.5.3 Heritage Council

A scoping request was issued to the Heritage Council which was acknowledged, however, no response was received to date.

14.1.5.4 An Taisce

A scoping request was issued to An Taisce which was acknowledged, however, no response was received to date.

14.2 Assessment Methodology

The assessment of the archaeology, architecture and cultural heritage of the Proposed Development included geographic information system (GIS) mapping, desk-based research and field inspection. See Section 14.2.5 below for methodology regarding assessment of indirect (visual) effects.

14.2.1 Geographical Information Systems (GIS)

GIS is a computer database which captures, stores, analyses, manages and presents data that is linked to location. GIS is geographic information systems which includes mapping software and its application with remote sensing, land surveying, aerial photography, mathematics, photogrammetry, geography and tools that can be implemented with GIS software. GIS was used to manage the datasets relevant to the archaeological and architectural heritage assessment and for the creation of all the maps in this section of the report. This involved the overlaying of the relevant archaeological and architectural datasets on georeferenced aerial photographs and road maps (i.e. Economic and Social Research Institute (ESRI)), where available. The integration of this spatial information allows for the accurate measurement of distances of a proposed development from archaeological and cultural heritage sites and the extraction of information on 'monument types' from the datasets. Areas of archaeological or architectural sensitivity may then be highlighted in order to mitigate the potential negative effects of a development on archaeological, architectural and cultural heritage.

14.2.2 Desktop Assessment

The following sources were consulted as part of the desktop assessment for the Proposed Development:

- The Record of Monuments and Places (RMP)
- The Sites and Monuments Record (SMR)
- National Monuments in State Care County Cork

- National Monuments in State Care County Kerry
- The Topographical Files of the National Museum of Ireland (www.heritagemaps.ie)
- First edition Ordnance Survey maps (Tailte Eireann)
- Second edition Ordnance Survey maps (Tailte Eireann)
- Aerial photographs (copyright of Tailte Eireann)
- Excavations Database
- National Inventory of Architectural Heritage (NIAH)
- Record of Protected Structures
- Cork County Development Plan 2022-2028
- Kerry County Development Plan 2022-2028
- Previous Archaeological Assessments, where relevant

Each of these are discussed in the following sections.

14.2.2.1 **Record of Monuments and Places, Sites and Monuments Record and National Monuments**

A primary cartographic source and base-line data for the assessment was the consultation of the SMR and RMP for County Cork. All known recorded archaeological monuments are indicated on 6-inch Ordnance Survey (OS) maps and are listed in these records. The SMR/RMP is not a complete record of all monuments as newly discovered sites may not appear in the list or accompanying maps. In conjunction with the consultation of the SMR and RMP the electronic database of recorded monuments and SMRs which may be accessed at www.heritagedata.maps.arcgis.com was also consulted.

A review of all National Monuments in State Care and those subject to Preservation Orders in Counties Cork and Kerry was also undertaken as part of the assessment.

14.2.2.2 **Cartographic Sources and Aerial Photography**

The 1st (1840s) and 2nd (1900s) edition OS maps for the area were consulted, where available, as was Tailte Eireann aerial photography.

14.2.2.3 **Topographical Files - National Museum of Ireland**

Details relating to finds of archaeological material and monuments in numerous townlands in the country are contained in the topographical files held in the National Museum of Ireland. In order to establish if any new or previously unrecorded finds had been recovered from the Site these files, as available on Heritage Maps (www.heritagemaps.ie), were consulted (accessed in May 2025) for each townland within and immediately adjacent to the Site.

14.2.2.4 **Archaeological Inventory Series**

Further information on archaeological sites may be obtained in the published County Archaeological Inventory series prepared by the Department of Housing, Local Government and Heritage (DHLGH). The archaeological inventories present summarised information on sites listed in the SMR/RMP and include detail such as the size and location of particular monuments, as well as any associated folklore or local information pertaining to each site. The inventories, however, do not account for all sites or items of cultural heritage interest which are undiscovered at the time of their publication. Many sites have been discovered since the publication of the Inventory Series, which have now been added to the Sites and Monuments Record.

14.2.2.5 Record of Protected Structures

The CCDP was consulted for the schedule of buildings (Record of Protected Structures) and items of cultural, historical or archaeological interest which may be affected by the Proposed Development. The dataset for the Cork Record of Protected Structures was added to the base mapping for the Proposed Development in order to accurately assess any potential effects on such structures.

14.2.2.6 Excavations Database

The Excavations Database is an annual account of all excavations carried out under license. The database is available online at www.excavations.ie and includes excavations from 1985 to 2025. This database was consulted in May 2025 as part of the desktop research for this assessment to establish if any archaeological excavations had been carried out within or near to the Site.

14.2.2.7 National Inventory of Architectural Heritage (NIAH)

This source lists some of the architecturally significant buildings and items of cultural heritage and is compiled on a county-by-county basis by the Department of Housing, Local Government and Heritage (DHLGH). The NIAH database was consulted for all townlands within and adjacent to the Site. The NIAH survey has been published and the digital dataset was downloaded on to the base mapping for the Proposed Development (www.buildingsofireland.ie). The NIAH is a state initiative under the administration of the DHLGH and established on a statutory basis under the provisions of the Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999.

The purpose of the NIAH is to identify, record, and evaluate the post-1700 architectural heritage of Ireland, uniformly and consistently as an aid in the protection and conservation of the built heritage. NIAH surveys provide the basis for the recommendations of the Minister for the Department of Culture, Heritage and the Gaeltacht to the planning authorities for the inclusion of particular structures in their Record of Protected Structures (RPS).

14.2.2.8 Previous Assessments

Archaeological monitoring of construction works associated with Kealkill Wind Farm was undertaken in 2005 by Tobar Archaeological Services. The results of the monitoring is discussed in Section 14.3.2.2 below. As part of the 2020 Application, a cultural heritage assessment of that Proposed Development was also undertaken by Tobar Archaeological Services.

14.2.3 Field Inspection

The Site was subject to a walk-over survey and windscreen survey in February and March 2020 as part of the assessment of the 2020 Application and again in March 2025 as part of the assessment of the Proposed Development. A photographic and descriptive record was made of the Site and any features of interest therein. The photographic record is included as Appendix 14-1 of this EIAR.

14.2.3.1 Limitations Associated with Fieldwork

The Site in general is largely covered in dense forestry at differing stages of maturity. The presence of existing roads, however, allowed good general access to the Site and no significant limitations were encountered during fieldwork.

14.2.4 Assessment of Likely Significant Effects

The likely effects on the existing archaeological, architectural and cultural heritage environment are assessed using the criteria as set out in the *Guidelines on the Information to be Contained in Environmental Impact Assessment Reports* (EPA, 2022) and described in section 1.7 of Chapter 1 (Introduction). The following terminology is used when describing the likely effects of the Proposed Development from a Cultural Heritage perspective.

14.2.4.1 Types of Effect

- Direct effects arise where an archaeological heritage feature or site is physically located within the footprint of the development whereby the removal of part, or all of the feature or site is thus required.
- Indirect effects may arise as a result of subsurface works undertaken outside the footprint of the development, secondary environmental change such as a reduction in water levels and visual effects.
- Cumulative effects arise when the addition of many effects create a larger, more significant effect.
- Residual effects are the degree of environmental changes that will occur after the proposed mitigation measures have been implemented.

14.2.4.1.1 Magnitude of Effects (Significance)

- Profound: Applies where mitigation would be unlikely to remove adverse effects. Reserved for adverse, negative effects only. These effects arise where an archaeological site is completely and irreversibly destroyed.
- Very Significant: An effect which by its character, magnitude, duration or intensity significantly alters most of the sensitive aspect of the environment.
- Significant: An effect which by its character, magnitude, duration or intensity alters a sensitive aspect of the environment. An effect like this would be where part of a site would be permanently impacted upon, leading to a loss of character, integrity and data about an archaeological site.
- Moderate: A moderate effect arises where a change to an archaeological site is proposed which though noticeable, is not such that the integrity of the site is compromised and which is reversible. This arises where an archaeological site can be incorporated into a modern day development without damage and that all procedures used to facilitate this are reversible.
- Slight: An effect which causes changes in the character of the environment which are not high or very high and do not directly impact or affect an archaeological site.
- Not Significant: An effect which causes noticeable changes in the character of the environment but without significant consequences.
- Imperceptible: An effect on an archaeological site capable of measurement but without noticeable consequences.

14.2.5 Methodology for the assessment of effects on visual setting (indirect effects)

A standardised approach was utilised for the assessment of effects of visual setting (indirect effects) according to types of monuments and cultural heritage assets which may have varying degrees of sensitivity. This assessment does not include visits to each and every site as this is considered to be beyond the scope of this EIAR as they are mainly located on private lands to which the public have no access. The assessment of effects on visual setting was undertaken using both the Zone of Theoretical Visibility (ZTV) map in the Landscape and Visual Impact Assessment (LVIA), as presented in Chapter 13 (Landscape & Visual) of this EIAR, and also photomontages / photowires from specific cultural

heritage assets or other relevant locations. The analysis used in the assessment of potential effects on the visual setting of cultural heritage assets in the wider landscape of 10km and 20km considers the effects of the proposed turbines. The tall, vertical nature of the proposed turbines make them the most prominent elements of the Proposed Development from a visual perspective and have the most potential to give rise to significant, indirect, effects.

Other components of the Proposed Development are not deemed to be as visually prominent as the proposed turbines. While the proposed Met Mast is a tall element of proposed infrastructure, at a distance it is not considered a visually intrusive structure. The existing onsite 38kV substation is sited within surrounding coniferous forestry in the Site and will be entirely screened from view outside of the immediate proximity to the Site.

While direct physical effects to a site or monument can easily be assessed in quantitative terms, the assessment of effects on setting can be subjective and as such is a matter of qualitative, professional judgement and experience. The distances outlined in Table 14.1 used in the assessment of effects on setting are regarded as appropriate and are based on professional judgement.

Table 14.1: Distance considered from the proposed turbines to cultural heritage assets according to sensitivity

Cultural Heritage Asset	Distance Considered from the proposed turbines
UNESCO World Heritage Sites (including tentative sites)	25km
National Monuments (State Ownership and Preservation Order Sites)	10km
Sites and Monuments and Recorded Monuments, RPS	5km
NIAH structures	5km
Undesignated sites, if relevant	500m

The **potential** visual effects of the turbines on the setting of cultural heritage assets are graded according to two criteria (Table 14.2):

- Distance to the nearest turbine:** Each increment of distance is numbered from 1-5 in severity with 1 being the lowest in severity (i.e. 4-5km from the nearest turbine and 5 being the most severe (0-1km from the nearest turbine)).
- Number of turbines visible on ZTV.** Each increment is also numbered from 1-3 with 1 being the least severe (i.e. 1 turbine visible) and 3 being the most severe (3 turbines visible).

The number values are then multiplied to arrive at a potential effect (from Imperceptible to Moderate). For the purposes of the Proposed Development there are no Significant effects. Very Significant and Profound are reserved for adverse direct effects which result in the total removal of cultural heritage assets which does not occur from visual effects. The following table is used to ascertain the potential visual effect not assuming any vegetation, existing buildings, and any other screening in the landscape.

Table 14.2: Grading of Potential visual effects according to Distance and No. of Turbines visible from Cultural Heritage Assets

No. of Turbines Visible (ZTV)	1 (1)	2 (2)	3 (3)
Distance of asset to turbine			
4-5km (1)	1	2	3
3-4km (2)	2	4	6
2-3km (3)	3	6	9
1-2km (4)	4	8	12
0-1km (5)	5	10	15
Imperceptible (0)	Not Significant (1-5)	Slight (6-10)	Moderate (11-15)

14.3 Existing Environment

14.3.1 Results of Field Inspection

During field work undertaken in 2020 as part of the cultural heritage assessment for the 2020 Application a previously unrecorded hut site was noted within the Site. The hut site is not located within the footprint of any proposed infrastructure and is located to the east of an existing site road. It is situated in an area of clear-felled forestry and may not have been detected previously due to it having been surrounded by mature trees. The hut site is situated c. 35m east of the existing road and c. 78m south of a proposed section of new road which will remove the sharp bends along the existing road.

The hut site was recorded in 2020 as follows:

‘The hut site is sub-rectangular in plan measuring 1.2m in height (max). The collapsed walls measure 1m in width. The hut measures 3m in length by 2.5m in width (internally) and 5m in length and 4.4m in width externally. A small possible annex, possibly a collapsed hut, is located to the south of the latter and now consists of a mound of stone measuring 4.6m in length by 2.4m in width (external). The hut is located on a north-facing slope in clear-felled forestry. Trees had been planted close to the monument. Also of note are a number of poorly preserved stone field boundaries throughout the clear-felled section of forest. These are shown on the 6-inch OS map (1840s)and it is likely that the hut site is associated and contemporary with the boundaries given its location within the fields.’



Plate 14.1: Poorly preserved hut site looking NE (2020).



Plate 14.2: Hut site looking NE (2025).

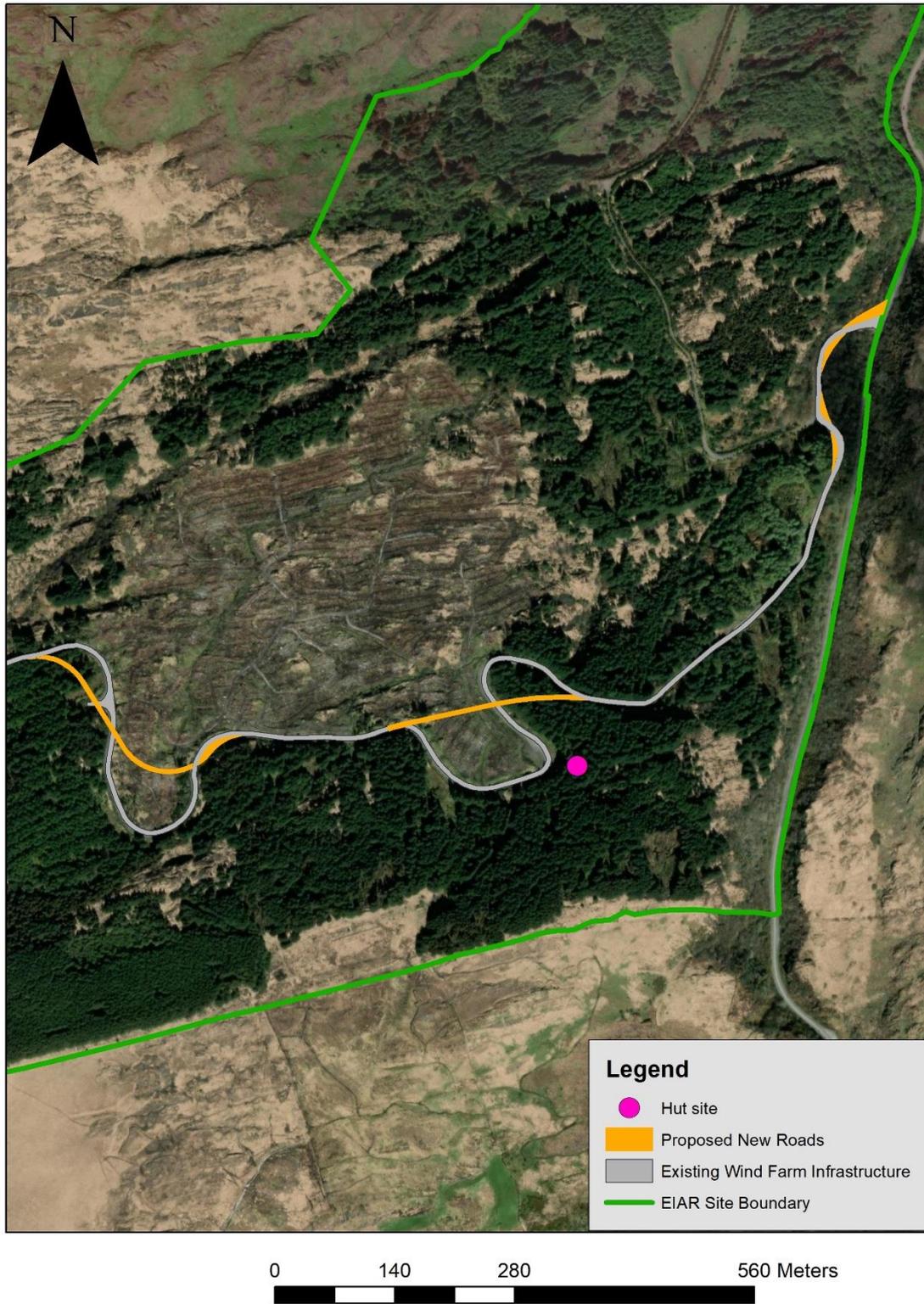


Figure 14-2: Location of hut site noted in 2020 within EIAR site boundary.

14.3.2 Archaeological, Architectural and Cultural Heritage

Archaeological heritage includes UNESCO World Heritage Sites and those on the tentative list, National Monuments in State Care and those which are subject to a preservation order, sites listed in the RMP/SMR, newly discovered archaeological sites and potential sub-surface archaeology.

Architectural heritage includes Protected Structures, NIAH structures and historic gardens while cultural heritage also includes items not included in the RPS or NIAH which may be indicated on the historic mapping or noted during field survey. Such items may include gate piers, local vernacular architecture, field walls, etc. Each of these are addressed in the following sections.

A number of documentary and cartographic sources (as listed in Section 14.2.2 above) were utilised in order to ascertain the potential for the presence of cultural heritage features on or within the area of the Proposed Development. Section 14.3.2.1 addresses the Proposed Development, Section 14.3.3 addresses the existing 38kV overhead line and Section 14.3.4 addresses the proposed turbine delivery route. Cultural heritage includes items such as buildings, farmhouses, gates, bridges, piers, and stone field boundaries.

14.3.2.1 Proposed Development

14.3.2.1.1 UNESCO World Heritage Sites and those on Tentative List

No UNESCO World Heritage Sites (WHS) or those on the Tentative list are located within 25km of the nearest proposed turbine. The nearest WHS (Tentative list) comprises the Valentia Transatlantic Cable Station, Co. Kerry which is situated c. 67km to the north-west of the proposed turbines.

14.3.2.1.2 National Monuments

National Monuments are those recorded monuments which are in the ownership / guardianship of the Minister for Housing, Local Government and Heritage. They are frequently referred to as being in 'State Care'. National Monuments also include those which are subject to a Preservation Order. No National Monuments or those subject to a Preservation Order are located within the Site. Three National Monuments in State Care and two monuments subject to a Preservation Order are located within 10km of the nearest proposed turbine and are listed in Table 14.3 and shown on Figure 14.3. The nearest National Monument comprises Maughnasilly Stone Row which is located c. 5.8km south-west of the nearest proposed turbine, T3 while the nearest monument subject to a Preservation Order are those at Kealkill c. 7.7km south-west of T3. The monuments are described below.

Table 14.3: National Monuments and those subject to a preservation order within 10km of the nearest proposed turbine

Nat. Mon. /PO No.	SMR NO.	ITM E	ITM N	CLASS	TOWNLAND	TURBINE ID	DISTANCE TO NEAREST TURBINE (m)
0	CO092-019—	504311	558498	Maughanasilly Stone Row	Maughanasilly	T3	5835
450	CO106-005001-	505009	555213	Breeny More Stone Circle & boulder burials	Breeny More	T3	7730
600	CO106-019—	505220	553806	Derryarkane Stone Circle & Standing Stone	Derryarkane	T3	9060
69/1938	CO106-006001-, CO106-006002- & CO106-006003-	505353	555654	Stone circle - five-stone, Standing stone – pair & Cairn - radial-stone cairn	KEALKILL	T3	7283
84/1940	CO106-005001-	505044	555318	Stone circle - multiple-stone	BREENY MORE	T3	7730

National Monument (No Number) Maughnasilly Stone Row

Maughnasilly Stone Row is located c. 5.8km south-west of the nearest proposed turbine, T3. The ZTV demonstrates theoretical visibility of 3 turbines from this location. It was visited as part of this assessment and is described on the Historic Environment Viewer (HEV) as follows:

CO092-019— : Stone row : MAUGHNASILLY

Description: Prominently situated on bog-covered hillock on NW slopes of Knockbreteen. This row of five stones, aligned NE-SW, is 5.8m in overall length. It was excavated in 1977 (Lynch 1981, 69-74). The NE stone is 0.4m L, 0.25m T and 0.5m H. The next stone, 0.5m to SW, is 0.8m L, 0.3m T and 1.3m H. The third stone, 1.05m further to the SW, leans to the SW; it is 0.3m L, 0.45m T and 1.05m H. A fragment, 1.3m by 0.5m by 0.3m, has been split from this stone and lies beside it at the NE. The fourth stone, 0.9m from the third, is 0.5m L, 0.3m T and 0.95m H. Beside this is a prostrate slab, 3.5m in maximum dimension. The SW stone, 0.25m from the last, is 1.1m L, 0.35m T and 1.05m H. The only find recovered from the excavation was a thumb-shaped flint scraper. Charcoal from the basal peat overlying the site gave a C14 determination of 3265 ± 55 bp (GrN-9281). (Ó Nualláin 1988, 234, no. 33; Roberts 1988, Ch. 5, no. 29). This is a National Monument in State Ownership.

The above description is derived from the published 'Archaeological Inventory of County Cork. Volume 1: West Cork' (Dublin: Stationery Office, 1992). In certain instances the entries have been revised and updated in the light of recent research.



Plate 14.3: Maughnasilly Stone Row, looking NE.

National Monument 450 and Preservation Order 84/1940 Breeny More Stone Circle & boulder burials

National Monument No. 450 encompasses a multiple stone circle (also subject to a Preservation Order 84/1940) within which are a number of boulder burials. It is located c. 7.7km south-west of the nearest

proposed turbine, T3, in an area in which the ZTV demonstrates theoretical visibility of the 3 no. proposed turbines. It is described on the HEV as follows:

CO106-005001- : Stone circle - multiple-stone : BREENY MORE

Description: In pasture, on a platform on a NW-facing slope on the S side of Owvane river valley. Circle represented by two entrance stones and an axial stone, measuring 1.1m to 1.6m L, 0.4m to 0.6m T and 1m to 2m H. Two prostrate slabs on the perimeter may be displaced orthostats. Internal measurement along the main axis, aligned NE-SW, is c. 14m. Within the circle is a regular group of four boulder-burials (CO106-005002-, CO106-005003-, CO106-005004-, CO106-005005-). (Ó Nualláin 1984, 19, no. 24; Roberts 1988, Ch. 5, no. 27). This is a National Monument in State Care (no. 450).

The above description is derived from the published 'Archaeological Inventory of County Cork. Volume 1: West Cork' (Dublin: Stationery Office, 1992). In certain instances the entries have been revised and updated in the light of recent research. Date of upload/revision: 14 January 2009

National Monument 600 Derryarkane Stone Circle & Standing Stone

This National Monument comprising a five stone circle and a nearby standing stone is located just over 9km south-west of the nearest proposed turbine, T3. The ZTV demonstrates no theoretical visibility of the proposed turbines from this location. The monuments are described on the HEV as follows:

CO106-019— : Stone circle - five-stone : DERRYARKANE

Description: On level shoulder on SE-facing slope of Mealagh river valley. Circle complete; N entrance stone prostrate. Orthostats are 1m to 1.2m L, 0.5m T and 1m to 1.2m H. Beside and to S is spread of stones c. 8m in diameter; possible field clearance. Standing stone (CO106-057—) c. 26m to S. (WBBS). Myler (1998, 37) records that the 'stone circle is situated within a small area enclosed by ditches on three sides'.

The above description is derived from the published 'Archaeological Inventory of County Cork. Volume 1: West Cork' (Dublin: Stationery Office, 1992). In certain instances the entries have been revised and updated in the light of recent research. Date of upload/revision: 24 January 2013

CO106-057— : Standing stone : DERRYARKANE

Description: On level shoulder on SW-facing slope of Mealagh river valley. Upright stone (H 0.8m; 0.7m x 0.4m) aligned NW-SW. Five-stone circle (CO106-019—) c. 26m to N. (WBBS). Myler (1998, 37) records 'a low spreading cairn of randomly placed stones on the SE side of this stone which has a diameter of 8 yards and a height of 1ft'.

The above description is derived from the published 'Archaeological Inventory of County Cork. Volume 1: West Cork' (Dublin: Stationery Office, 1992). In certain instances the entries have been revised and updated in the light of recent research. Date of upload/revision: 24 January 2013

Preservation Order 69/1938 Stone circle - five-stone, Standing stone – pair & Cairn - radial-stone cairn

The monuments subject to a Preservation Order (69/1938) at Kealkill comprise a five stone circle, standing stone pair and radial stone cairn. The ZTV demonstrates theoretical visibility of the 3 no. proposed turbines from this area. A photowire visualisation (VP 02) created from the monuments demonstrates visibility of the proposed turbines which are located over 7km to the north-east. The photowire illustrates how the proposed turbines will be apparent as low structures on the distant horizon. The monuments are described on the HEV as follows:

CO106-006001- : Stone circle - five-stone : KEALKILL

Description: On level bog-covered shoulder, on NW-facing slope of W end of Maughanaclea Hills. Excavated in 1938 (O Ríordáin 1939, 46-49). Circle complete; stones are 0.7m to 1.65m L, 0.25m to 0.45m T and 0.65m to 1.2m H. Internal measurement along main axis, aligned NE-SW, is 2.8m. Excavation showed that stones were not deeply sunk in ground, but were packed at base with small stones. Two shallow trenches intersecting at right angles, filled with dark humified soil, were found within circle, and interpreted as trenches for crossed wooden sleepers which may have held an upright. No finds recovered from circle. Complex also comprises radial stone cairn (CO106-00603-) to E and pair of standing stones (CO106-00602-) to NE. (O Nualláin 1984, 41, no. 81; Roberts 1988, Ch.5, no. 26) The above description is derived from the published 'Archaeological Inventory of County Cork. Volume 1: West Cork' (Dublin: Stationery Office, 1992). In certain instances the entries have been revised and updated in the light of recent research. Date of upload/revision: 14 January 2009. This monument is subject to a preservation order made under the National Monuments Acts 1930 to 2014 (PO no. 69/1938).

CO106-006002- : Standing stone - pair : KEALKILL

Description: On level bog-covered shoulder, on NW-facing slope of W end Maughanaclea Hills. Part of complex including five-stone circle (CO106-00601-) and a radial-stone cairn (CO106-00603-). Excavated in 1938 (Ó Ríordáin 1939, 46-49). Stones, aligned NE-SW, stand 1.6m apart. SW stone is 1.5m L and 0.4m T; it had been broken at ground level and would have stood 5.3m H. Excavator removed stump and erected fallen piece in socket. NE stone is 1.85m L, 0.5m T and 2.65m H. (Ó Nualláin 1988, 246, no. 119) The above description is derived from the published 'Archaeological Inventory of County Cork. Volume 1: West Cork' (Dublin: Stationery Office, 1992). In certain instances the entries have been revised and updated in the light of recent research. Date of upload/revision: 14 January 2009. This monument is subject to a preservation order made under the National Monuments Acts 1930 to 2014 (PO no. 69/1938).

CO106-006003- : Cairn - radial-stone cairn : KEALKILL

Description: On level bog-covered shoulder on NW-facing slope of W end of Maughanaclea Hills. Complex, which also includes five-stone circle (CO106-00601-) and pair of standing stones (CO106-00602-), excavated in 1938 (O Ríordáin 1939,46-49). Cairn stands c. 2m SE of standing stones and 5m E of circle. Excavation revealed ring of eighteen radially-set stones and sockets (diam. c. 6m), under remains of cairn spread 1m beyond stones. Three large, round closely-set sockets, in trench, aligned NE-SW, were found on NW perimeter of cairn. Lying on surface beneath cairn towards W were two large stones with arc of smaller stones between them. Three fragments of scallop shells found 0.3m below cairn surface. (O Nualláin 1984b, 75, no. 13) The above description is derived from the published 'Archaeological Inventory of County Cork. Volume 1: West Cork' (Dublin: Stationery Office, 1992). In certain instances the entries have been revised and updated in the light of recent research. Date of upload/revision: 14 January 2009. This monument is subject to a preservation order made under the National Monuments Acts 1930 to 2014 (PO no. 69/1938).

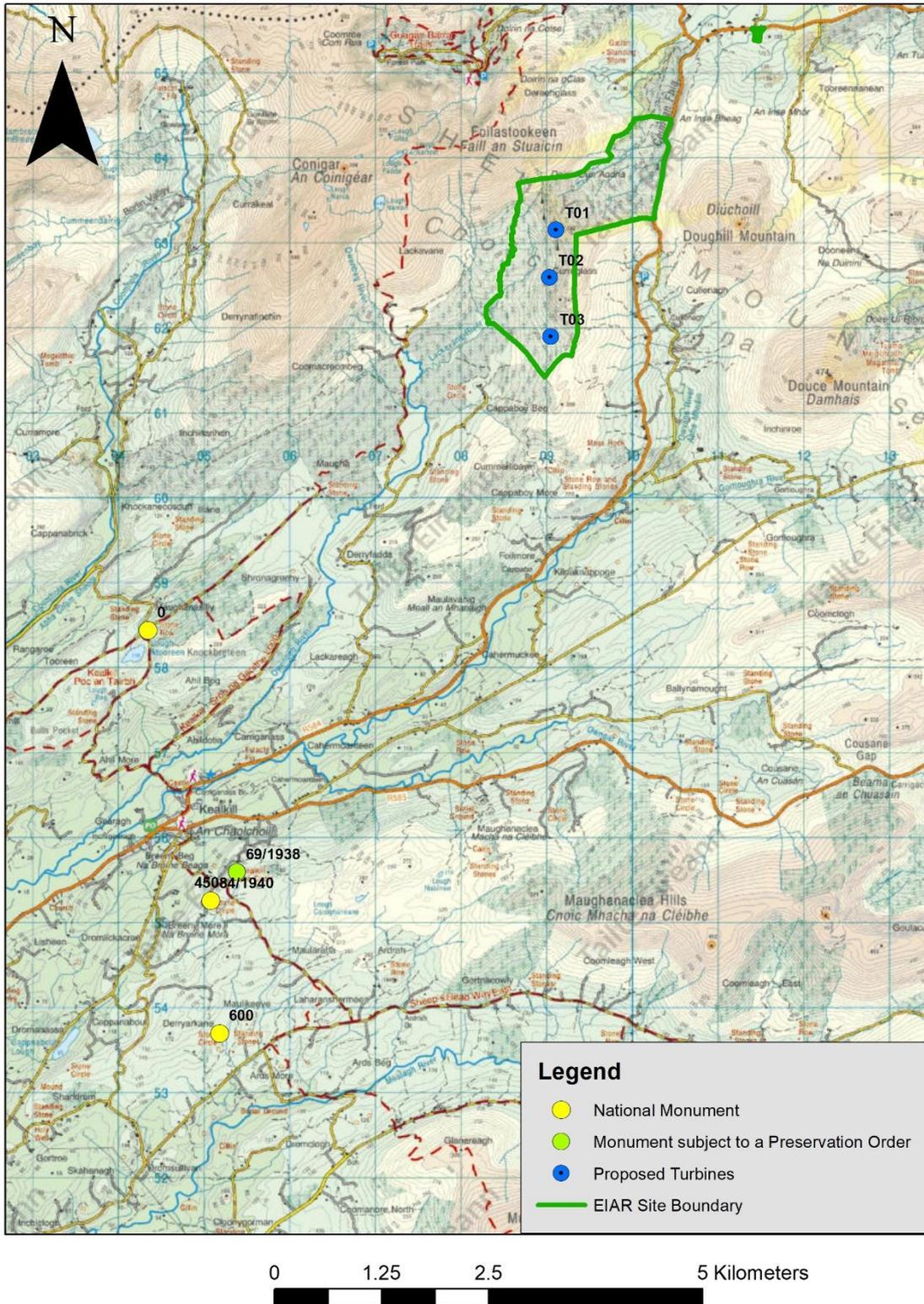


Figure 14.3: National Monuments and those subject to a Preservation Order within 10km of the nearest proposed turbine.

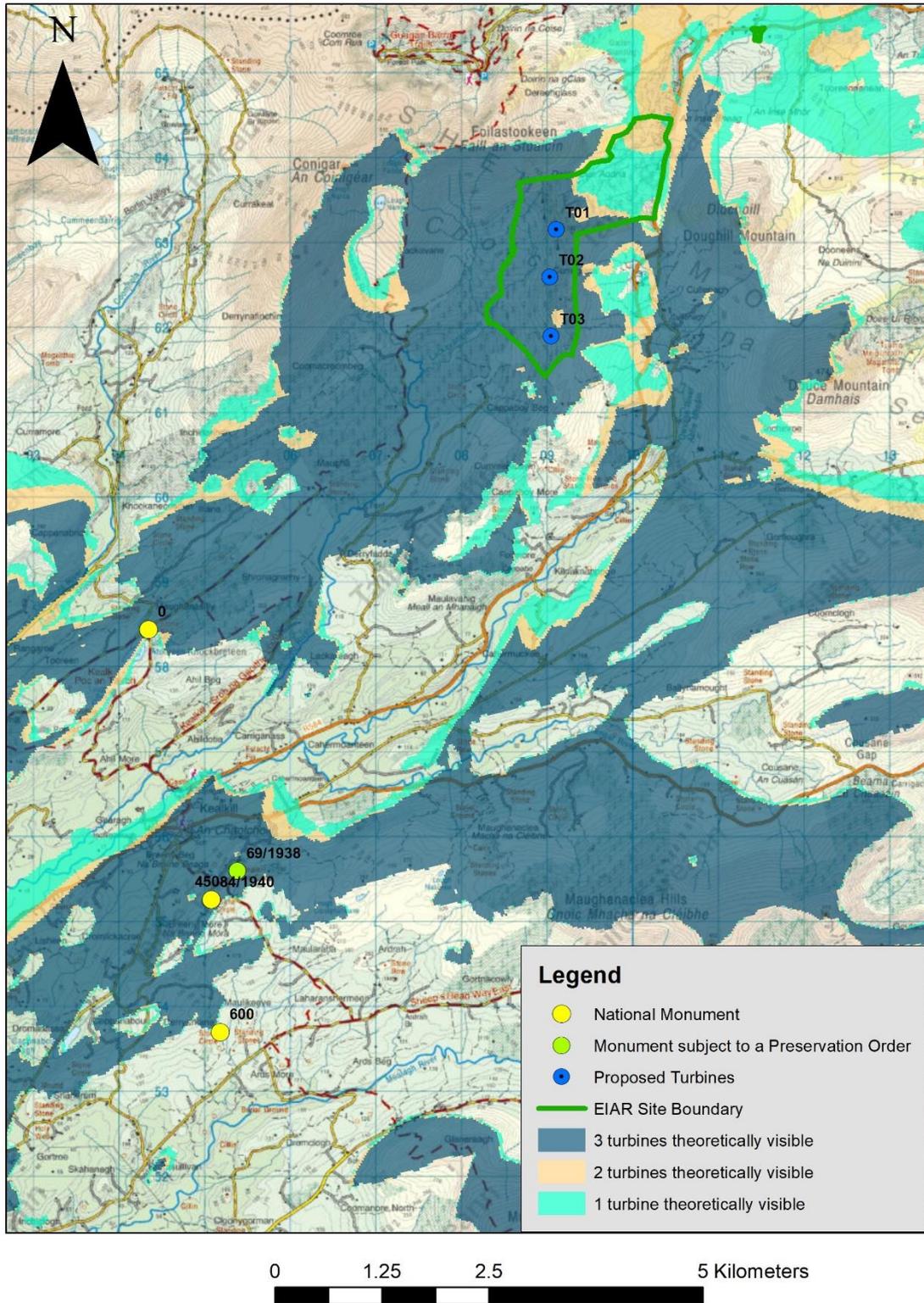


Figure 14.4: National Monuments and those subject to a Preservation Order within 10km of the nearest proposed turbine with ZTV.

14.3.2.1.3 **Recorded Monuments within the EIAR Site Boundary**

No recorded monuments are located within the EIAR site boundary. The nearest monuments are situated c. 370m to the west of the EIAR site boundary and are discussed in Section 14.3.2.1.5 below.

14.3.2.1.4 **Previously Unrecorded Monuments within the EIAR Site Boundary**

No previously unrecorded monuments were noted within the Site during the walk-over survey. The hut site noted within the EIAR site boundary is discussed in Section 14.3.1 above. While the hut is of unknown date it is located within a series of poorly preserved low stone walls which are depicted on the first (1829-41) and third (1830s -1930s) edition OS maps. It is possible that the hut is associated with the boundaries which may relate to the enclosing of fields for agricultural purposes in the 19th century.

14.3.2.1.5 **Recorded Monuments within 5km of the nearest proposed turbine**

A total of two hundred and four (204) recorded monuments are located within 5km of the nearest proposed turbine.

A large cluster of multi-period archaeological monuments are located in Doire Mhic Coirín and Dooneens townlands c 3km to the east of the proposed turbines. The complex of archaeological sites is largely separated from the Site by a large intervening hill known as Doughill Mountain thus screening the majority of this area from view. Seventy six (76) monuments were detected and identified by Tobar Archaeological Services during a programme of field inspection and topographical survey in 2010. The sites were subsequently added to the record of monuments and places. The ZTV shows that none of the proposed turbines are theoretically visible from the majority of the monuments within the complex of sites at Dooneens. Four of the complex of 76 monuments are located in an area where 1 turbine may theoretically be seen.

Five monuments are located within 1km of the nearest proposed turbine (T1) and comprise three redundant records and two huts sites situated to the west of and outside the Site. Redundant records are those that fulfil one or more of the following criteria (National Monuments Service - Scope Notes 2023):

- (1) a record identifying a location where, according to documentary sources (e.g., published reference, cartographic sources) or personal communication, a monument might have existed, but which, on inspection, was found not to be an archaeological monument (e.g. a natural feature);
- (2) a record classified using a term which is now obsolete (e.g. ecclesiastical remains);
- (3) a record created in error, a duplicate record or one which has no supporting evidence recorded on file or in the database;
- (4) an archaeological object (i.e. an artefact), e.g. a quernstone;
- (5) a record entered as a 'Shipwreck'. Shipwrecks are recorded in a separate database.

The locations of the hut sites and redundant records as shown on the HEV is incorrect as in reality the monuments are situated slightly further to the east.

The monument descriptions as provided on the HEV are presented below in addition to photographs of the sites taken as part of field work carried out for the 2020 Application.

CO092-057— : Redundant record : CURRAGLASS (Bantry By.)

Description: Listed as a 'hut site' in the RMP (1998). In rough moor grass grazing on a S-facing hillslope overlooking the valley of the Lackavane River. According to local information, the roughly constructed, drystone walled (T 0.7m; H 1m), structure (4.5m E-W; 3.5m N-S) was built as a fionnán enclosure (to protect a cock of fionnán or moor grass from farm animals) and is associated with the ruins of the 19th century farm house to the S. The evidence is not sufficient to warrant accepting this as the location of an archaeological monument. Compiled by: Connie Murphy. Date of upload: 29 January 2015.

The correct location for the monument is c. 148m north of where it is shown on the HEV. See Plate 14-4 below.



Plate 14-4: CO092-057— Redundant record looking East.

CO092-058— : Redundant record : CURRAGLASS (Bantry By.)

Description: Listed as a ‘hut site’ in the RMP (1998). In rough moor grass grazing on a S-facing hillslope overlooking the valley of the Lackavane River. According to local information, the roughly constructed, drystone walled (T 0.6m; H 1m), circular enclosure (diam. 5m) was a fionnán enclosure (to protect a cock of fionnán or moor grass from farm animals) and is associated with the ruins of the 19th century farm house to the S. These structures were still in use into the first half of the 20th century. The evidence is not sufficient to warrant accepting this as the location of an archaeological monument. Compiled by: Connie Murphy. Date of upload: 29 January 2015.

This monument is located 127m north of where it is shown on the HEV. See Plate 14-5 below.



Plate 14-5: CO092-058— Redundant record looking East.

CO092-059— : Redundant record : CURRAGLASS (Bantry By.)

Description: Listed as a ‘hut site’ in the RMP (1998). In rough moor grass grazing on a S-facing hillslope overlooking the valley of the Lackavane River. According to local information, the partially collapsed, roughly constructed, drystone walled (T 0.6m; H 0.7m) circular enclosure (diam. 5m) was a fionnán enclosure (to protect a cock of fionnán or moor grass from farm animals) and is associated with the ruins of the 19th century farm house to the S. These structures were still in use into the first half of the 20th century. The evidence is not sufficient to warrant accepting this as the location of an archaeological monument. Compiled by: Connie Murphy. Date of upload: 29 January 2015.

This monument is located c. 97m north of where it is shown on the HEV. See Plate 14-6 below.



Plate 14-6: Redundant record CO092-059— looking south.

CO080-030002- : Hut site : CURRAGLASS (Bantry By.)

Description: The remains of a ruinous rectangular hut site (4m N-S; 2.5m E-W) defined by roughly hewn drystone walls (H 0.6m). There is a door ope (With 0.75m; H 0.75m) towards the E end of the S wall. Another hut site (CO080-030001-) is c. 27m to the NW. (J. Kiely pers. comm.). The above description is derived from 'The Archaeological Inventory of County Cork. Volume 5' (Dublin: Stationery Office, 2009). Date of upload: 22 December 2009.

This monument is incorrectly located on the HEV. It is situated 71m NNE (at ITM E508116, N563237) from where it is shown on the viewer. See Plate 14-7 below.



Plate 14-7: CO080-030002- Hut site looking south-east.

CO080-030001- : Hut site : CURRAGLASS (Bantry By.)

Description: The remains of a ruinous rectangular hut site (5m E-W; 3.3m N-S) defined by roughly hewn drystone walls (T 0.7m; H 0.4m). The interior of the hut site is raised above the general ground level. There is another hut site (CO080-030002-) c. 27m to the SE. (J. Kiely pers. comm.). The above description is derived from 'The Archaeological Inventory of County Cork. Volume 5' (Dublin: Stationery Office, 2009). Date of upload: 22 December 2009.

The correct location (ITM E508086, N563245) of this monument is 36m north of that shown on the HEV. See Plate 14-8 below.



Plate 14-8: Rectangular hut site CO080-030001.

A table of recorded monuments within 5km of the nearest proposed turbine is detailed in Appendix 14-2.

Prehistoric Period

The prehistoric period is represented by at least 144 monuments including standing stones, fulachta fia, hut sites, stone rows, stone circles, radial stone enclosure, field systems, field boundaries, a radial stone cairn and megalithic tombs.

Fulacht Fia

Fulacht fia comprise a horseshoe-shaped or kidney-shaped mound consisting of fire-cracked stone and charcoal-enriched soil built up around a sunken trough located near or adjacent to a water supply, such as a stream or spring, or in wet marshy areas. The first recorded use of the Irish term 'fulacht fiadh/fia' (cooking pit of the deer or of the wild) as relating to ancient cooking sites was in the 17th century. These are generally interpreted to have been associated with cooking and date primarily to the Bronze Age (c. 2400-500 BC).

Field Boundaries (stone walls) and Field Systems

These low visibility monuments account for the majority of monument types within the study area with 55 examples in the vicinity. Again, they could span from the prehistoric period through to the Medieval period. The majority of the field boundaries were discovered in Dooneens townland to the east of the Proposed Development during an archaeological and topographical survey undertaken by Tobar Archaeological Services in 2010 for a Proposed Development project (not developed). Of the field walls discovered in Dooneens, stone walls constituted 55% (52 walls) of the total number of newly recorded monuments within the study area which was 76 in total. Many of the walls were similar in appearance and mainly survived to one-two courses in width and height and are largely collapsed. No particular construction methods were apparent as many merely consist of a row of seemingly randomly placed stones. Ten (10) walls located in the north-western portion of the Dooneens study area were found in cut-away bog, some projecting from beneath bog sections. These have been interpreted as pre-bog walls therefore and are likely to be prehistoric in date. The majority of features identified in Dooneens consist of poorly preserved stone walls which are distributed throughout the site. When looked at in isolation, these walls appear fragmentary, discontinuous, dispersed and survive to little more than one-two courses in height. When viewed in their entirety, however, a system of field enclosure extending throughout the study area becomes apparent. The practice of enclosing fields for agricultural purposes in Ireland dates back to the Neolithic period, with the Céide fields in county Mayo providing a well known example. Regularly laid out stone-wall enclosed fields are usually interpreted as evidence for a pastoral farming economy while cultivation ridges and clearance cairns indicate that tillage was practiced (Byrne *et al.* 2009, 128, after Caulfield 1983, 195-215).

The chronology of the stone walls at Dooneens is somewhat ambiguous. The vast majority of walls noted during the site survey do not appear on the first or second editions of the Ordnance Survey maps. In general these features are located on high or sloping ground at a remove from present-day roads and tracks. Conversely, the fields indicated on the OS maps are those located on the lower slopes of grassy pasture which are centred around small settlements and farm holdings. Furthermore, distinct construction methods which could potentially assist in dating the walls are not apparent, due mainly to their ruinous state. Field systems such as that at Dooneens have been identified in other upland areas in Ireland, primarily through research studies such as that undertaken at Monavullagh, Co. Waterford (Moore 1995) and the Beara Peninsula, Co. Cork (O'Brien 2009). In a study of three early settlement landscapes on the Beara Peninsula field walls of varying date were recorded throughout (*ibid.*). The date of such walls and field systems was determined where possible by a number of means including archaeological excavation. Primarily, the antiquity of the walls is suggested by the overlying growth of blanket peat which in Beara may be up to 1m (*ibid.*, 50). At least five examples of previously unrecorded pre-bog walls were noted at Dooneens. These walls have been exposed in sections of cut-away bog and in some cases are visible extending into uncut turf banks. While the precise date of the walls is unknown their antiquity is certainly indicated by the growth of blanket peat over these structures. Blanket bogs developed in the Irish landscape after millennia of human settlement and are essentially post-neolithic in date (Aalen *et al.* 1997, 117). While their formation follows a complex local and regional pattern their initiation and spread in the first and second millennia BC is believed to have been stimulated by deteriorating climate and woodland clearance (*ibid.*).

In the north-western portion of the townland where pre-bog walls were recorded, the peat had completely covered some walls leaving no trace above ground. Elsewhere on the site it is not clear if the walls noted during survey were originally peat-covered and have been subsequently exposed through erosion processes and degrading of the blanket peat, or if they were built after the cessation of peat formation. In most cases wall height reaches only 0.3m-0.6m which may suggest that the lower courses of the walls may remain buried beneath shallow peat deposits. Conversely, these readily visible walls may simply be of more recent date. Ultimately, it is only through further investigative procedures such as excavation that the precise date of the majority of the walls at Dooneens may be determined. A series of targeted excavations of pre-bog walls in the Barrees Valley, Co. Cork provided approximate dates for wall construction through the radiocarbon dating of charcoal and organic sediment collected from the overlying peat (O'Brien 2009, 275). In most cases the walls are believed to have been built sometime in the early centuries AD (*ibid.*, 278-284).

The date of walls and field systems may also be suggested through association with other monument types. In upland areas field walls and systems such as those identified at Dooneens are frequently either directly or spatially associated with standing stones, huts, *fulachta fia*, megalithic tombs, etc. This association is then used as an indicator of date for walls and field systems which are generally difficult to place in a chronological timeframe, particularly when located in a landscape which has changed little over the centuries but continues to be utilised for agricultural purposes to the present day. Few direct associations occur between walls and other monument types at Dooneens, although in five cases walls are directly associated with huts, also of unknown date. In the north-western portion of Dooneens the pre-bog walls identified may be spatially associated with a number of different site types. Eight pre-bog cairns are located in the vicinity of the pre-bog walls and while not directly associated would appear to be spatially connected. Also, given both their presence beneath the bog a general chronological association may also be inferred.

Radial Stone Cairn

Perhaps more significantly, however, is the location of a possible radial stone cairn (CO080-047—) which is situated less than 100m to the east of the walls noted in cut-away bog in Dooneens. Radial stone cairns are somewhat enigmatic monuments which are believed to be Bronze Age in date through their occasional association with stone circles, stone rows and pairs of standing stones (Power *et al.* 1992, 26). The monument consists of a circular arrangement of twelve radially set stones with the two tallest stones at the south-west forming an entrance like feature. Radial cairns are distinctive monuments and are so-called due to the alignment of the stone's long axes towards the centre of the circle. They are known in small numbers and are concentrated in the south-west of Ireland in counties Cork and Kerry.

One radial stone cairn at Kealkill, Co. Cork was excavated by Ó Ríordáin in the late 1930s. While the excavation did not establish a function or date for the monument they are believed to be Bronze Age burial monuments. Usually these sites consist of a cairn of stones edged by the radially set stones around its perimeter. At Dooneens, however, the cairn or mound of stones does not survive with only the radially set stones now visible. This monument also differs in size from other radial cairns which generally measure c. 7m in diameter. The Dooneens example measures only c. 3.5m in diameter, making it significantly smaller than its west Cork and Kerry counterparts. In the absence of any other comparable monument types or dating evidence however the radial cairn at Dooneens should be regarded as potentially Bronze Age in date and as a possible funerary monument.

The ZTV suggests that there will be no theoretical visibility of the proposed turbines from this monument.

Hut Sites

Hut sites account for 31 of the 204 monuments within 5km of the nearest proposed turbine. The majority of the huts sites are located to the east of the Proposed Development in areas where the ZTV demonstrates no theoretical visibility of the proposed turbines. Two of the huts (CO080-030002- and CO080-030001-), discussed above, are situated to the west of the Site in an area where all three turbines will theoretically be visible.

Eleven of the huts are located in Dooneens and Doire Mhic Coirnín and were identified during the aforementioned survey. Some of these monuments may date to the prehistoric period but their date can span from prehistory through to the medieval period. The primary function and date of hut sites is slightly ambiguous. Examples of hut sites are known throughout the country, particularly in upland regions, and are frequently associated with the practice of transhumance or booleying. Transhumance refers to the practice of the seasonal movement of people and their livestock typically to higher pastures in the summer and lower valleys in the winter. In Ireland this practice is known as booleying and is believed to date to the early medieval period, although it continued well into the nineteenth and early twentieth century.

Other uses for hillside huts has been noted at Mount Brandon, County Kerry, where it is suggested that they functioned as temporary habitations for seaborne pilgrims. It is also thought that they were used as habitation sites such as booleying huts during the year when pilgrimage was not taking place. An extensive series of pre-bog walls was also noted on the southern slopes of Mount Brandon. It is noted in that instance that although pre-dating the bog, the peat may still have been growing well into the medieval period. In this regard, such walls could be early medieval in date rather than prehistoric (Archaeology Ireland Heritage Guide No. 29). Furthermore, the potentially lengthy chronology of hut sites means that while some may be prehistoric others may date to the early or later medieval period or indeed to more modern times (*ibid.*).

Cairns (unclassified)

Nine unclassified cairns are located within the 5km study area with the majority being located in An Inse Mhór townland to the east of the Proposed Development. A number of these sites are located in cut-away bog while another example is partially visible extending under an uncut turf bank. It is clear therefore that the cairns pre-date the bog and have been exposed where turf cutting and other ground works have taken place. They are also likely to share some relationship (either spatial or chronological) with the adjacent pre-bog walls and possibly the radial stone cairn. The cairns are all similar in form and dimensions and given their presence beneath the bog would appear to represent ancient clearance features. Clearance cairns have been recorded elsewhere in Ireland including county Kerry. Fifteen clearance cairns were recorded on Beginish Island, Co. Kerry one of which was excavated by O'Kelly (1956). He interpreted the presence of the cairns as being suggestive of the practice of tillage, a theory which was reinforced by the discovery of two quern stones (O'Sullivan and Sheehan 1996, 385). At Beginish an early medieval date was ascribed to the clearance cairns and associated houses and field walls (*ibid.*). Other cairns which are likely to represent ancient clearance features have been recorded on the Beara Peninsula (O'Brien 2009, 44). Five cairns recorded on the sloping hillside at Gurrane are located in an area of pre-bog field patterns which also contain *fulachta fia* (*ibid.*). A group of 17 cairns

near Castletownbere are partly covered by blanket bog and may also be associated with pre-bog field patterns (*ibid.*). In general the majority of the cairns recorded on the peninsula are located in areas that have a wide variety of Bronze Age monuments and may therefore share a similar date range. The same may be suggested of the cairns at Dooneens given their association with pre-bog walls and the radial stone cairn. Caution should be exercised however when attempting to date these features in the absence of archaeological excavation. Two of the unclassified cairns are located in an area where the ZTV demonstrates theoretical visibility of 1 proposed turbine. Potential effects are addressed in Section 14.4.

Wedge Tombs

Three wedge tombs are located within 5km of the nearest proposed turbine. All are located in excess of 4km from the nearest proposed turbine. One of the tombs (CO080-005—) is located to the north-east of the Proposed Development in an area where the ZTV demonstrates theoretical visibility of all 3 no. proposed turbines. The other two wedge tombs are situated to the east of the Proposed Development in area with no theoretical visibility of the proposed turbines.

Wedge tombs are the most widespread of the megalithic tomb types found in Ireland. Their name is derived from a wedge-shaped chamber which is usually higher and wider at one end. Wedge tombs were used as places of burial and can contain both burnt and unburnt human remains as well as grave goods such as pottery. Radiocarbon dates from a number of excavated wedge tombs suggests a late Neolithic-Early Bronze Age (2500-1800 BC) date for these monuments.

Standing Stones

Eighteen standing stones are located within the 5km study area with a particular concentration to the south of the Proposed Development, all in excess of 1.5km from the nearest proposed turbines. Standing stones are a common feature of the prehistoric Irish landscape consisting of single, upright stones. They are known by various names such as gallán, dallán and long stone. All standing stones are not necessarily of the same date or have the same function. Excavations of standing stones have shown that some mark prehistoric burials and some may have had a ritual or commemorative function. They have similar axis to standing stone pairs and may therefore date to the Bronze Age (2400-500BC).

Stone Rows

One stone row is located within the 5km study area and is located 4.9km from the nearest proposed turbine, T1. Stone rows consist of a row of three or more stones erected in a line. Two main types have been recognised - a Cork and Kerry group, in which the row comprises up to six stones, typically about 2m in height, with their long axes usually set in line, and a mid-Ulster group, where the row comprises numerous stones, usually not exceeding 1m in height, often found in association with cairns and stone circles. They are considered to have been aligned on various solar and lunar events and date to the Bronze Age (c. 2400-500 BC).

Although stone rows are associated with lunar and solar events and are aligned NE/SW, this example is located 4.9km to the east of the Proposed Development in an area where the ZTV demonstrates no theoretical visibility of the proposed turbines.

Stone Circles

Multiple stone circles are a distinctive form of stone circle found only in counties Cork and Kerry. They comprise a ring of free-standing stones, uneven in number (between 7 and 19) and symmetrically arranged so that one stone, the axial stone, is set directly opposite two stones, usually the tallest, marking the entrance to the circle. Characteristically, the stones reduce in height to the axial stone, which is set consistently in the south-western part of the circle. The diameters of these circles rarely exceed 10m. These circles form part of the funerary/ritual tradition of the Bronze Age (c. 2400-500 BC). Five stone circles are also a distinctive form of stone circle found only in counties Cork and Kerry. They comprise a ring of five free-standing stones, symmetrically arranged so that one stone, the axial stone, is set directly opposite two stones, usually the tallest, marking the entrance to the circle. Characteristically, the stones reduce in height to the axial stone, which is set consistently in the south-western part of the circle. These circles are thought to have a ritual function and are dated to the

Bronze Age (c. 2400-500 BC). One multiple stone circle and one five stone circle are located within 5km of the nearest proposed turbine. The five stone circle (CO092-004—) at Cappaboy Beg townland is located c. 1.1km south-west of T3 in an area where the ZTV demonstrates theoretical visibility of all 3 no. proposed turbines. The multiple stone circle at Derrynafinchin townland c. 4.2km to the west of the nearest proposed turbine T2 is located in an area where the ZTV demonstrates no theoretical visibility of the proposed turbines.

The Early Medieval Period

The Early Medieval period is represented by enclosures, ringforts and souterrains which account for 35 of the 204 monuments within 5km of the nearest proposed turbine.

Enclosures consist of an area defined by an enclosing element (e.g. bank, wall, fosse, scarp), or indicated as such cartographically, and occurring in a variety of shapes and sizes, possessing no diagnostic features which would allow classification within another monument category. These may date to any period from prehistory onwards. Enclosures with a diameter greater than 70m should be classed as Large Enclosure, of which there is one within 5km of the nearest proposed turbine. Ringforts are a roughly circular or oval area surrounded by an earthen bank with an external fosse. Some examples have two (bivallate) or three (trivallate) banks and fosses, but these are less common and have been equated with higher status sites belonging to upper grades of society. They functioned as residences and/or farmsteads and broadly date from 500 to 1000 AD.

Monuments with Religious Associations

At least 10 monuments within 5km of the nearest proposed turbine have religious associations and may date to a number of time periods. The monuments comprise mass-rocks (2), burial grounds (2), a graveyard, holy wells (2), a hermitage and bullaun stones (2). Some of these monuments are found near to or in association with each other. The nearest of these comprises a mass rock (CO092-007—) at Cappaboy Beg townland c. 1.3km from the nearest proposed turbine, T3.

Mass rocks are rocks or earthfast boulders used as an altar or a stone-built altar used when Mass was being celebrated during Penal times (1690s to 1750s AD), though there are some examples which appear to have been used during the Cromwellian Period (1650s AD).

Holy wells comprise a well or spring, though in some unusual cases a natural rock basin, which usually bears a saint's name and is often reputed to possess miraculous healing properties. They may have their origins in prehistory but are associated with devotions from the medieval period (5th-16th centuries AD) onwards. Holy trees are often found in association with holy wells. They comprise a named tree or bush, sometimes associated with a particular saint, often considered to have miraculous properties. They are generally found in close proximity to holy wells and formed part of the associated patterns or rounds performed on certain days. They are known in Irish as 'bile', which translates as sacred tree, sometimes corrupted into the English words 'bell' or 'bellow'.

Gouganebarra

Three of the monuments with religious associations, CO080-012001- Hermitage, CO080-012002- Ritual site - holy well and CO080-012003- Graveyard, are located in Gougane Barra at Doire Na Coise townland between 2.8km and 2.9km north of the nearest proposed turbine, T1. The Hermitage occupies an oval island (c. 60m E-W; c. 70m N-S), joined to S shore of Gouganebarra Lake by causeway (L c. 20m) which incorporates holy well (CO080-012002-). At NW corner of island is square enclosure (21m N-S; 20.6m E-W), with central open court (L 13.4m); immediately E of enclosure are fragmentary ruins covering area c. 24m E-W and c. 16.5m N-S; in SE corner of island is neo-Romanesque chapel, erected c. 1890. The former two features are remains of a hermitage established here in late 17th century by Carmelite priest Denis O'Mahony (Smith 1750, vol. 1, 192-3; Croker 1824, 275-84; Windele 1844, 288-94; MacCarthy 1935, 85-9).

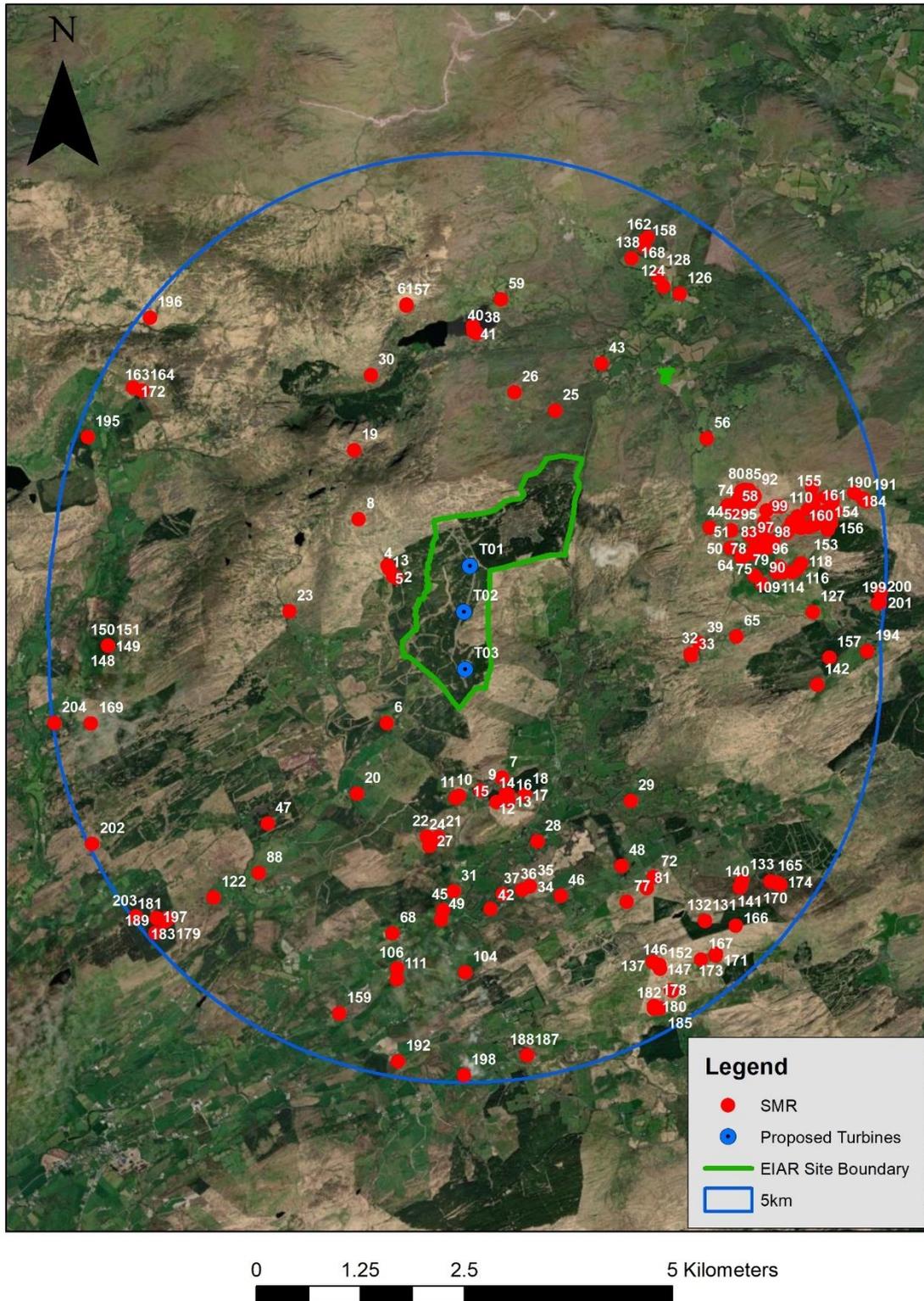


Figure 14.5: Recorded monuments within 5km of the nearest proposed turbine.

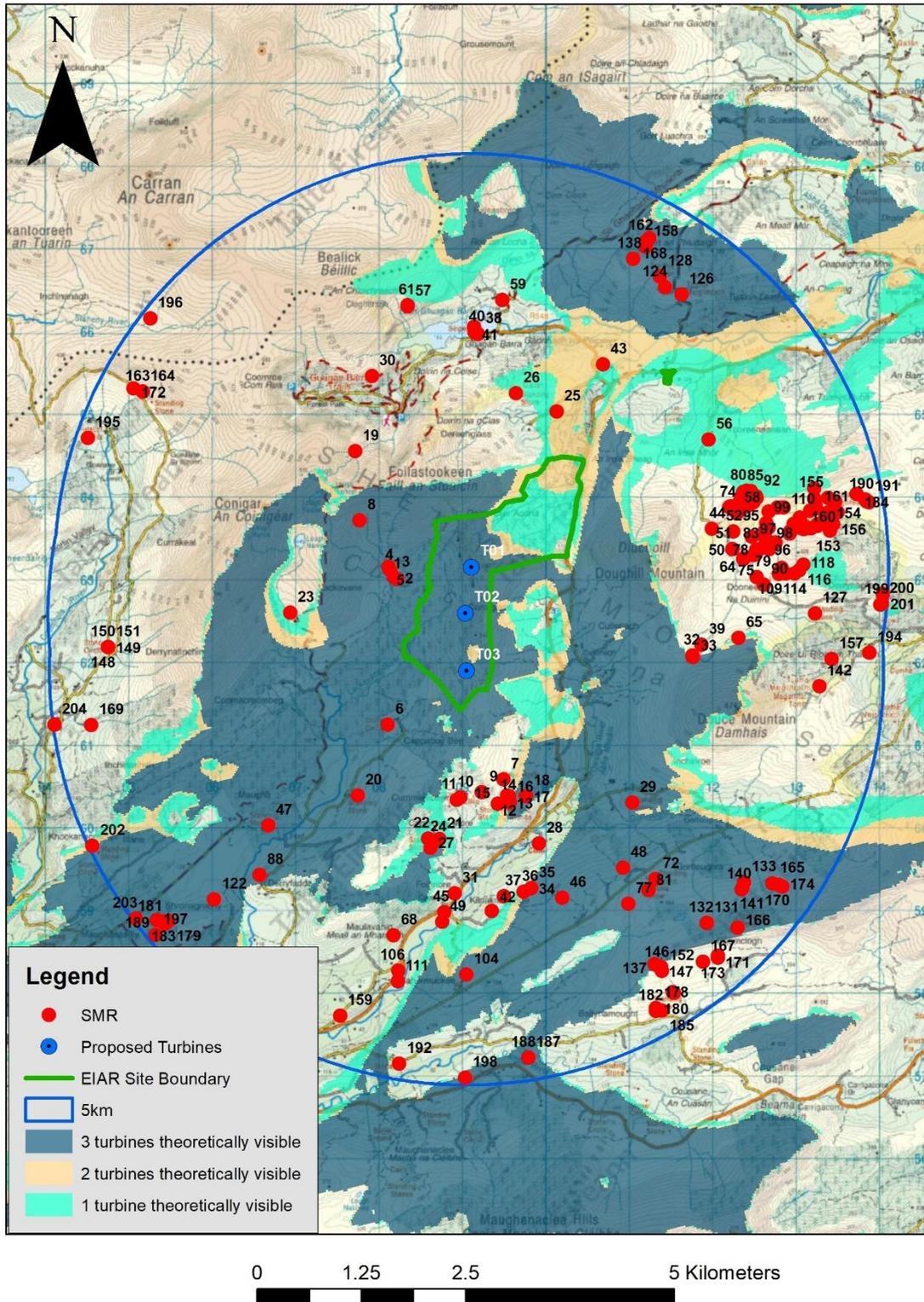


Figure 14.6: Recorded monuments within 5km of the nearest proposed turbine with ZTV.

14.3.2.2 Excavations Database

The database of excavations carried out in Ireland (www.excavations.ie) was consulted for any such licensed work which took place on or adjacent to the Proposed Development. As outlined above and in Chapter 1 (Introduction), the Proposed Development utilises existing wind farm infrastructure at the Site. All groundworks associated with the construction phase of the Kealkill Wind Farm were

monitored under licence 05E1062 by Tobar Archaeological Services in 2005. No archaeological finds, features or deposits were uncovered. The entry in the excavations database is as follows:

2005:193 - CAPPABOY AND CURRAGLASS, Cork

County: Cork

Site name: CAPPABOY AND CURRAGLASS

Sites and Monuments Record No.: N/A

Licence number: 05E1062

Author: Miriam Carroll, Tobar Archaeological Services

Author/Organisation Address: 15 Willowfields, Ladysbridge, Castlemartyr, Co. Cork

Site type: No archaeology found

Period/Dating: N/A

ITM: E 509694m, N 559922m

Monitoring of groundworks associated with the construction of a ten-turbine wind farm was undertaken over several weeks in late 2005. The site is located in the Shehy Mountains, to the north of the village of Kealkil, Co. Cork. The extraction of peat deposits from the site was monitored but did not reveal the presence of any archaeological finds or features.

14.3.2.3 Topographical Files of the National Museum of Ireland

The topographical files of the National Museum of Ireland on www.heritagemaps.ie were consulted for archaeological finds from the townlands within or adjacent to the Proposed Development. No finds are recorded within the Site with the nearest shown on www.heritagemaps.ie being located at Gougane Barra c. 2.6km to the north of the Site. It consists of a Greek Coin of Asia Minor (brass) (1930:A96).

14.3.2.4 Sub-Surface Archaeological Potential

The Proposed Development utilises existing wind farm infrastructure at the Site. Ground works associated with that development were subject to archaeological monitoring during which time no sub-surface archaeological features were uncovered. The Site is also extensively covered with tracts of coniferous forestry. In this regard the overall potential for the presence of sub-surface archaeology within the Proposed Development is considered to be low.

14.3.2.5 Archaeological Landscapes

The Proposed Development is not located in or immediately adjacent to areas which have been designated as Archaeological Landscapes in the Kerry County Development Plan.

The Dromagorteen / Crinagort / Curragraigue / Erneen archaeological landscape as identified in the Kerry County Development Plan (2022-2028) is located c. 8km west of the Proposed Development boundary and c. 8.5km west of T1.

The KCDP describes the landscape as follows:

18. Dromagorteen/Crinagort/Curragraigue/Erneen (NS) Megalithic tombs, stone circles, boulder burial, standing stones, cairns, fulachtaí fiadh, extensive hut site complexes and field systems. Similar to Drombohilly/Uragh area, extensive evidence for activity from the Late Neolithic/Early Bronze Age to the Late Bronze Age.

The ZTV demonstrates no theoretical visibility of the proposed turbines from that designated landscape.

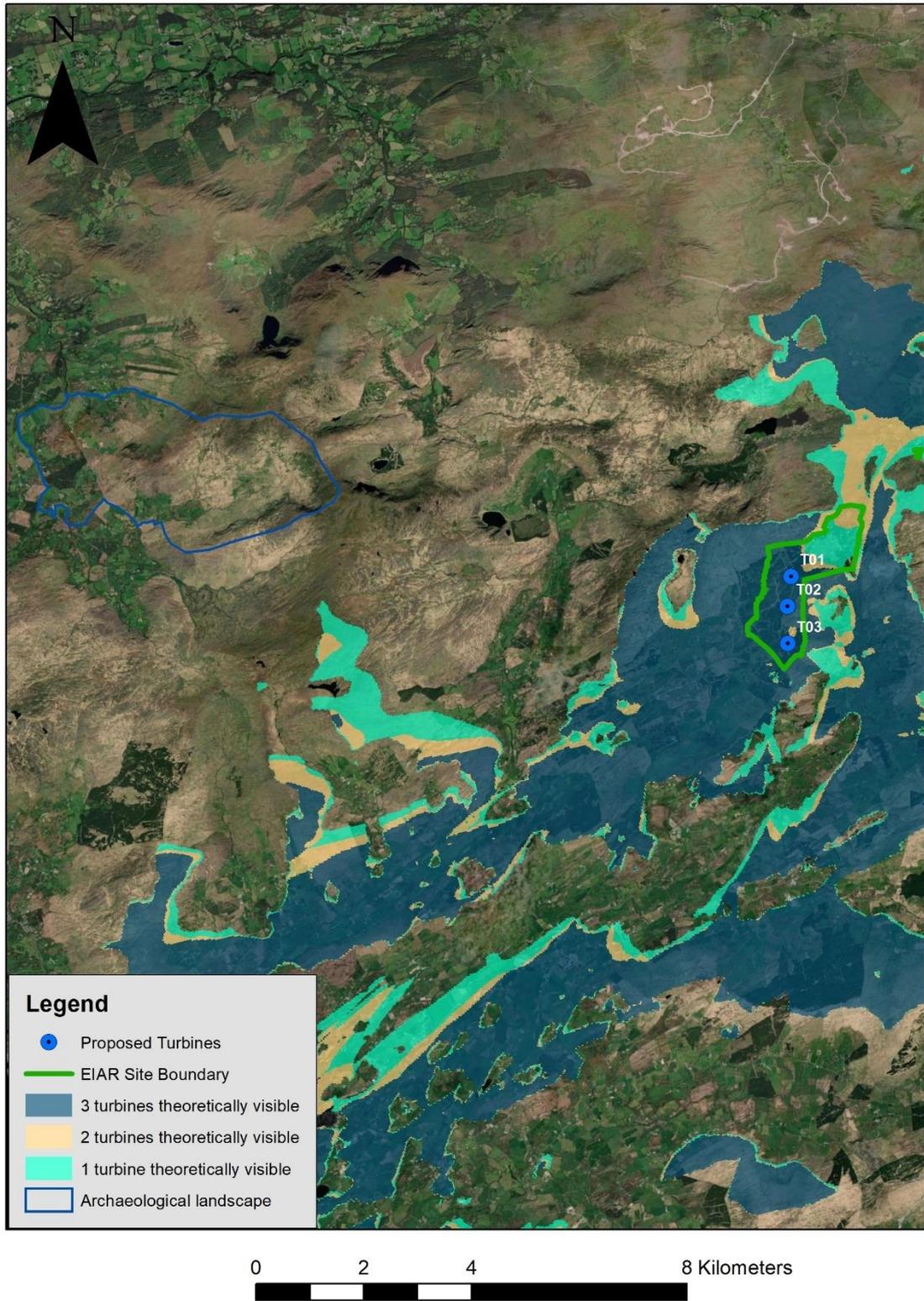


Figure 14.7: Archaeological landscape No. 18 as identified in the KCDP in relation to the Proposed Development.

14.3.2.6 Protected Structures within 5km of the nearest proposed turbine

No Protected Structures are located within the Site.

Only one Protected Structure (Ref. 1279) is located within 5km of the nearest proposed turbine and is located c. 2.9km to the north at Gougane Barra. It comprises the Oratory of St Finbarr and is also included in the NIAH (Reg. 20908001) It is listed in Table 14.4 below and shown on Figure 14.8. The ZTV demonstrates no theoretical visibility of the proposed turbines from this location.

Table 14.4: RPS structure within 5km of the nearest proposed turbine.

RPS ID	NIAH REG.	STRUCTURE	ITM E	ITM N	TURBINE	DISTANCE TO TURBINE (m)
1279	20908001	Oratory of St. Finbarrs	509146	566105	T1	2901

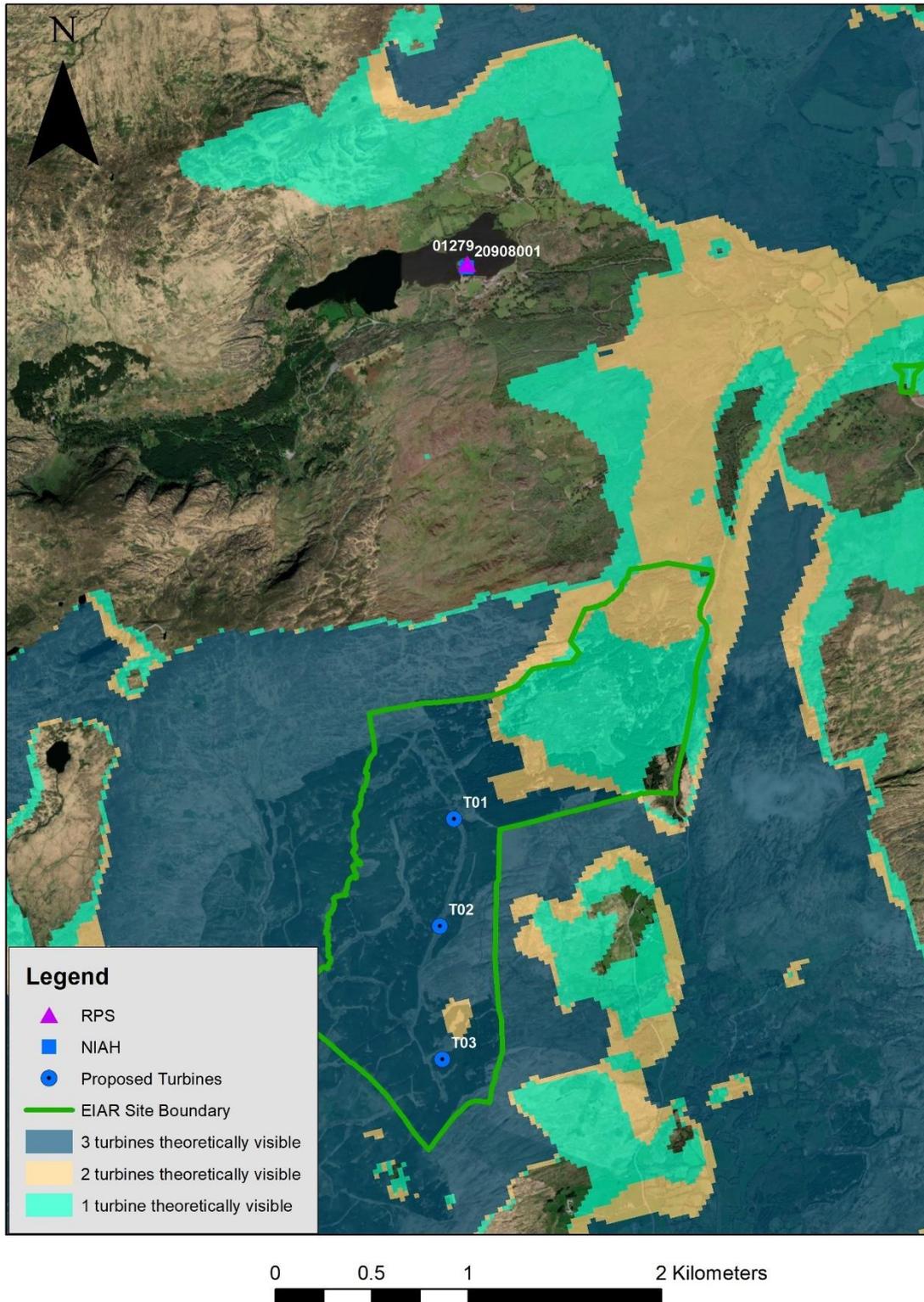


Figure 14.8: Protected structure and NIAH structure at Gougane Barra within 5km of the nearest proposed turbine.

14.3.2.7 NIAH Structures and Historic Gardens within 5km of the nearest proposed turbine

No NIAH structures or historic gardens are located within the Proposed Development boundary. One NIAH structure (Reg. 20908001), which is also a Protected Structure (see Section 14.3.2.6 above), is

located within 5km of the nearest proposed turbine. No historic gardens are located within 5km of the nearest proposed turbine.

The NIAH structure (Reg. 20908001) comprises Saint Finbarr's Oratory in Gougane Barra and is described on www.buildingsofireland.ie as follows.

Description

Freestanding gabled-fronted single-cell Celtic Revival style Roman Catholic church, built 1903, with three-bay side elevations and recent sacristy to side (north). Pitched artificial slate roof with uPVC rainwater goods, cross on east gable and string course with corbels. Coursed limestone walls with concrete quoins. Round-headed openings with block-and-start concrete surrounds and fixed-pane stained glass windows. Round-headed door opening with carved limestone surround, comprising engaged columns flanking entrance, with moulded archivolt, chevrons, hood moulding and sculpted head above. Timber battened double-leaf doors with wrought-iron strap hinges. Interior with barrel vaulted ceiling and freestanding altar.

Appraisal

Set on a tiny island in the lake which is the source of the River Lee, the spectacular setting contributes greatly to this building's character and charm. Oileán an Chuilinn [Holy Island] was the site of An Mhainistir Naomh Finbarr [Saint Finbarr's Monastery] and is an area of archaeological significance. The church was designed by S.F. Hynes in the Celtic Revival style, and is an interesting reminder of the interest which was growing at that time in Irish culture and tradition, in art, architecture and literature. The altar and stained glass, which were designed by M.J.C. Buckley, add artistic interest.'

14.3.2.8 Cartographic Evidence and Local Cultural Heritage

The available historic Ordnance Survey maps were consulted for any items of cultural heritage merit that may be located within the Site. Field survey also assisted in determining if any local cultural heritage features were located in the vicinity of any Proposed Development infrastructure.

The Ordnance Survey came to Ireland in 1824 in order to carry-out a precise admeasurement of the country's 60,000 or so townlands as a preliminary to the larger task of reforming Ireland's local taxation system. The townland boundaries were demarcated by a Boundary Commission, and the Ordnance Survey had the task of measuring them. In addition to boundaries the maps are truly topographical in content. Drawn at the large scale of six inches-to-one-mile (1:10,560) it was important to mark all buildings, roads, streams, placenames, etc, that were required for valuation purposes. Ultimately the maps were used as a basis for the rateable valuation of land and buildings in what became known as Griffith's Valuation. Working from north to south, the survey began in Antrim and Derry in 1829 and was completed in Kerry in 1842. It was published as thirty-two county maps between 1832 and 1846, the number of sheets per county varied from 153 for County Cork to 28 for Dublin, each of the 1,994 sheets in the series depicting an area 21,000 by 32,000 feet on the ground. Each county was projected on a different central meridian and so the maps of adjacent counties do not fit neatly together at the edges. Map content stops at the county lines.

The early Ordnance Survey maps are an unrivalled source for the period immediately before the Great Irish Famine (1847-50) when the population was at the highest level ever recorded. The maps depict an open landscape in the area of the proposed turbines and infrastructure. Only the northern section of the Site shows some small settlements and boundaries. Some poorly preserved stone boundaries were noted within some sections of clear-felled forestry and no trace of any buildings were noted. The aforementioned hut site (See Section 14.3.1) which is located in an area associated with the 19th century field walls is not marked on the 6 inch mapping however.

The location of the townland boundary between Curraglass and Derreendonee is traversed by an existing forest road. No trace of the boundary was noted. No infrastructure is proposed to be located along or on top of this townland boundary location. No other boundaries will be traversed by any

proposed element of the Proposed Development. No impacts to the townland boundaries will therefore occur.

14.3.2.9 Townlands and administrative boundaries

Townlands and administrative boundaries may indicate the presence of archaeological features within a development site. Administrative counties are subdivisions of pre-established counties which were formed for administrative purposes in the nineteenth and twentieth centuries. Baronies are administrative units larger than civil parishes and originally established as the primary subdivision of counties by the British administration in Ireland. Irish baronies which were formed at the time of the Norman conquest were usually named either after Irish territories, or from places which had been of importance in pre-Norman times. Irish baronies came into existence at different periods. The division of Ireland into counties and baronies was a process which continued down to the reign of James I. The original baronies in Ireland were the domains of the Norman barons; in the final stage of development they were divisions of counties created merely for greater convenience of administration. The word barony is of feudal origin, and was applied to a tenure of a baron, that is, of one who held his land by military service, either directly from the king, or from a superior feudal lord who exercised royal privileges. The origin of the Irish barony (a division of land corresponding to the English hundred) is to be found in the grants of lands which were made to the barons of Leinster and the barons of Meath (Liam Price, 'Ráith Oinn', Éigse VII, lch. 186-7). Civil parishes are administrative units larger than townlands and based on medieval ecclesiastical parishes. Civil parishes, modern Catholic parishes and Church of Ireland parishes may differ in extent and in nomenclature. Counties are administrative units larger than baronies and originally established by the British administration in Ireland between the twelfth and the seventeenth centuries. Some of these were subsequently subdivided into smaller administrative county units.

Townlands are the smallest land units which were determined and established in the Irish administrative system in the first half of the nineteenth century. Many of the townlands were in existence prior to that. Townland names are a valuable source of information, not only on the topography, land ownership and land use within the landscape, but also on its history, archaeological monuments and folklore. Logainm.ie was utilised to ascertain the origin of the townland names within the Proposed Development (Table 14.5).

Table 14.5: Townlands within the Proposed Development and their meaning.

Townland Name	Meaning
Doirín Dún Aodha (Derreendonee) (In the Gaeltacht) https://www.logainm.ie/9737.aspx	Little Derry or Oakwood
An Currach Glas (Curraglass) https://www.logainm.ie/8424.aspx	Green Moor
An Inse Mhór (Inchi More) https://www.logainm.ie/en/22965	Big river meadow
An Cheapach Bhuí Bheag https://www.logainm.ie/en/8420	Small yellow plot or tillage plot

14.3.2.10 The Gaeltacht

The north-east portion of the Site, including the turbine component turning area, is located within the Gaeltacht in the townland of Doirín Dún Aodha. The Proposed Development is located within the Lee

Valley catchment, a culturally distinct area of the Múscraí Gaeltacht. This includes Baile Bhúirne (Ballyvourney), Baile Mhic Íre (Ballymakeera) and Cúil Áodha (Coolea) on the river Sullane, Beál Átha 'n Ghaorthaidh (Ballingeary) and Guagán Barra (Gougane Barra) on the river Lee and the villages of Reidh na nDoirí (Renaniree) and Cill na Martra (Kilnamartra) astride the ridge that forms a watershed between the two valleys.

The Site itself is located in an area now utilised for a commercial forestry plantation and existing wind farm infrastructure, therefore the overall context of the Site has changed in recent decades. The County Development Plan 2022-2028 notes that *'The Plan encourages collaboration between Gaeltacht stakeholders, Gaeltacht communities and State agencies in the future planning and development projects to ensure the protection and promotion of the Irish language as the community language.* (CCDP, 372).

Whilst the Proposed Development will not impact on the Irish language, it is recommended that signage in any areas within the Múscraí Gaeltacht if relevant should be erected in Irish. This is in accordance with the County Development Plan Policy HE 16-25 Gaeltacht Areas (CCDP 2020-2028, 372).

14.3.3 The continued use of the existing onsite 38kV substation

It is proposed to continue the use of the existing onsite 38kV substation within the Proposed Development. The existing onsite 38kV substation is located west of T3 and will be accessed via the existing access road. It includes all the existing onsite 38kV substation components necessary to consolidate the electrical energy generated by each wind turbine, and export that electricity from the existing onsite 38kV substation to the national grid. This includes the short section of underground 38kV cabling that connects the existing onsite 38kV substation to the existing 38kV overhead line.

14.3.4 Proposed Turbine Delivery Route

It is proposed that large wind turbine components will be delivered to the Site, from the Port of Cork. For the purposes of assessment, the turbine components and other abnormal loads will be transported, from Ringaskiddy Port, west on the N22, before turning southwest along the R585 Regional Road via Crookstown to the junction with the R584 Regional Road at the village of Kealkill. From Kealkill, the turbine delivery route will continue along the R584 to Ballylickey, where a reversing manoeuvre occurs at Ballylickey bridge. Once the manoeuvre is complete, the turbines will travel northeast back along the R584, through Kealkill towards Ballingeary. The proposed turbines will travel past the Site entrance, performing a reversing manoeuvre at the turbine component turning area further along the R584, before travelling back south along the same road and accessing the Site from the north via the existing entrance. This is the preferred route for turbine delivery.

The turbine component turning area along the R584 will require removal of fencing and vegetation and the temporary placement of hardcore, so the area can be used during the delivery of large turbine components. Once the turbines have been delivered, this area will be returned to its original state. No recorded Cultural Heritage assets are located at the turbine component turning area.

At Kealkill (Carriganass townland) a bridge listed on the National Inventory of Architectural Heritage (NIAH) as being of regional importance (NIAH Ref 20910601) is located on the proposed turbine delivery route. Although it is not currently subject to statutory protection by way of inclusion on the record of protected structures, it is considered to be of local cultural heritage significance. Immediately adjacent to the bridge to the west of same is Carriganass castle and bawn (RMP CO106-001— and CO106-001001-) which are also included in Cork County Councils Record of Protected Structures (RPS ref. 00680). The proposed turbine delivery route will pass over the adjacent bridge and in close proximity to the bawn wall of the castle. There will be no direct effects to Carriganass Castle and bawn

wall during the delivery of the turbines to the Site. Where there is a requirement, specialised blade transportation equipment can be used to lift the blade so it avoids structures within the surrounding area.

14.4 Likely Effects and Associated Mitigation Measures

14.4.1 Do Nothing Scenario

If the Proposed Development were not to proceed, the potential to effect Cultural Heritage would be removed.

The opportunity to capture part of Cork's valuable renewable energy resource would be lost, as would the opportunity to contribute to meeting Government and EU targets for the production and consumption of electricity from renewable resources and the reduction of greenhouse gas emissions. An alternative land use option to developing a renewable energy project at the Site would be to leave the Site as it is, with no changes made to the current land use compromises of commercial forestry, agricultural land and unutilised existing wind farm infrastructure that remains at the Site from the Kealkill Wind Farm. The opportunity to generate local employment and investment and to diversify the local economy would be lost.

14.4.2 Construction Phase Potential Effects (Indirect)

Indirect effects, in terms of archaeology, architectural and cultural heritage are considered to be those effects which happen away from the Site. This includes effects on visual setting of any cultural heritage assets in the wider landscape. Since these effects are only possible once development is operational, they are considered operational effects and are therefore discussed in Section 14.4.4 below. No indirect effects were identified which would occur at the construction stage.

14.4.3 Construction Phase Potential Effects (Direct)

Direct effects refers to a 'physical effect' on a monument or site. The construction phase of a development may consist of earthmoving activities such as topsoil removal and excavation works as part of the construction phase. This may have a number of potential negative effects on the known and potential archaeological heritage. These are outlined below with the suggested mitigation measures.

14.4.3.1 UNESCO World Heritage Sites and those on Tentative List

Identification of Effect

No UNESCO World Heritage Sites (WHS) or those on the Tentative list are located within 25km of the nearest proposed turbine. The nearest WHS (Tentative list) comprises the Valentia Transatlantic Cable Station, Co. Kerry which is situated c. 67km to the north-west of the proposed turbines.

No direct effects to such assets as a result of the Proposed Development are therefore identified.

14.4.3.2 National Monuments

Identification of Effect

No National Monuments or those subject to a Preservation Order are located within or adjacent to the Proposed Development and therefore no direct effects to these aspects of the archaeological resource are identified.

14.4.3.3 Recorded Monuments

Identification of Effect

No recorded monuments are located within the Proposed Development boundary. No direct effects to recorded monuments resulting from the Proposed Development are therefore identified.

14.4.3.4 Newly Recorded site within the Proposed Development Boundary

A hut site was recorded within the Proposed Development boundary, albeit poorly preserved and in clear-felled forestry. The hut site is situated just 35m from the existing road (utilised as part of the Kealkill Wind Farm. It is proposed to construct a small section of interlinking road in order to avoid using the existing sharp bends. The new section of road will then measure 78m to the north of the hut site. While no potential direct effect to the hut site as a result of ground works for the new sections of road is identified, accidental damage to the structure as a result of the movement of machinery may occur.

Pre-Mitigation Impact

The proximity of the newly recorded hut site to the section of proposed new road is such that accidental damage to the monument may occur during groundworks.

Proposed Mitigation Measures

To protect the monument from accidental damage a 30m buffer zone will be established around the hut site prior to the commencement of construction works.

Residual Effect

No residual effects will occur if the mitigation measures are implemented.

Significance of Effects

The construction of the sections of proposed new roads will not have any direct effect on the hut site. The overall significance of effects after the implementation of mitigation measures is likely to be Imperceptible and not significant.

14.4.3.5 Sub-surface Archaeological Potential

The Site is located within a previously operational wind farm (Kealkill Wind Farm). Numerous existing roads, hardstands and turbine bases were constructed as part of the Kealkill Wind Farm, in addition to the existing 38kV overhead line. The Proposed Development is partially located on existing infrastructure thereby minimising the potential for uncovering any sub-surface archaeological features or

deposits. Furthermore, the Kealkill Wind Farm was subject to licenced archaeological monitoring at the construction stage in 2005 (Tobar Archaeological Services). No potential archaeological features were uncovered at the time of monitoring. The potential for the Site to contain as yet unrecorded sub-surface archaeological sites and artefacts is considered to be low.

The excavation of topsoil /peat for the new turbine bases, hardstands and roads where they are located in undisturbed ground may, however, directly affect any sub-surface archaeological features or deposits, if present.

Pre-Mitigation Effect

Should sub-surface archaeological sites or features be present within the Site (currently not visible on the surface) the effect to same is likely to be significant, negative and permanent (i.e. the excavation by machinery would permanently remove the features resulting in a direct, negative and permanent effect).

Proposed Mitigation Measures

- Archaeological monitoring of ground works (including pre-commencement site investigation works) in areas of previously undisturbed ground. If archaeological finds, features or deposits are uncovered during archaeological monitoring, the developer will be prepared to provide resources for the resolution of such features whether by preservation by record (excavation) or preservation in situ (avoidance). The National Monuments Service will be informed of such findings to discuss how best to proceed. On completion of the work, a report on the results of the monitoring will be compiled and submitted to the NMS and the Local Authority.

Residual Effect

Any archaeological features or sites, if detected during monitoring, will be preserved by record (archaeologically excavated) or preserved in-situ (avoidance) and therefore a full record made of same. In this regard, the potential effect after the mitigation measures is likely to be Not Significant.

Significance of Effects

The construction stage will not have any significant effects on unrecorded potential sub-surface sites since they will be dealt with by way of mitigation measures. The overall significance of effects will be Not Significant.

14.4.3.6 Protected Structures

Identification of Effect

No Protected Structures subject to statutory protection are located within the Site therefore no potential direct effects to this resource are identified.

14.4.3.7 NIAH structures and Historic Gardens

Identification of Effect

No NIAH structures or historic gardens are located within the Site therefore no potential direct effects to this resource are identified.

14.4.4 Operational Phase Potential Effects (Indirect)

Indirect effects are where a feature or site of archaeological, architectural heritage merit or their setting is located in close proximity to a proposed development. Indirect effects here are mainly concerned with effects on setting of cultural heritage sites.

Effects on settings of sites may arise when a development is proposed immediately adjacent to a recorded monument or cluster of monuments. While the Proposed Development may not affect a site, it may alter the setting of a monument or group of monuments. There is no standardised industry-wide approach for assessing the degree of effect to the setting of a monument. For purposes of assessing visual effects on setting, the uniqueness of the monuments, the potential interrelationships of monuments, the inter-visibility of monuments, visual dominance and whether a setting is altered or unaltered can be used to assess effect. The nature and dominance of the Proposed Development is also taken into consideration and the topography within which the Proposed Development is located. Operational effects are considered largely as a result of the proposed turbines rather than other elements of the Proposed Development which would not be dominant in the wider landscape setting in general. The assessment of effects on visual setting was undertaken using both the Zone of Theoretical Visibility (ZTV) map in the Landscape and Visual Impact Assessment (LVIA), as presented in Chapter 13 (Landscape & Visual) of this EIAR, and also with reference to photomontages / photowires. The ZTV is a bare-ground model which does not take screening vegetation into account.

14.4.4.1 UNESCO World Heritage Sites and those on Tentative List

No UNESCO World Heritage Sites (WHS) or those on the Tentative list are located within 25km of the nearest proposed turbine. The nearest WHS (Tentative list) comprises the Valentia Transatlantic Cable Station, Co. Kerry which is situated c. 67km to the north-west of the proposed turbines.

No potential effects to the setting of such sites as a result of the Proposed Development are therefore identified.

14.4.4.2 National Monuments

Identification of Effect

No National Monuments or those subject to a Preservation Order are located within or adjacent to the Proposed Development. Three National Monuments in State Care and two monuments subject to a Preservation Order are located within 10km of the nearest proposed turbine.

National Monument (No Number) Maughnasilly Stone Row

The nearest National Monument comprises Maughnasilly Stone Row which is located c. 5.8km south-west of the nearest proposed turbine, T3. The ZTV demonstrates theoretical visibility of the 3 no. proposed turbines from this location. A photowire (PWVP – D) created from the adjacent cross roads to the south-west, however, demonstrates no visibility of the proposed turbines from this location.

At a distance of 5.8km from the Proposed Development, a change to the immediate setting of Maughnasilly Stone Row will not occur. A change to the wider setting in which the monument is located is acknowledged and is regarded as Slight and not significant.

National Monument 450 and Preservation Order 84/1940 Breeny More Stone Circle & boulder burials

National Monument No. 450 encompasses a multiple stone circle (also subject to a Preservation Order 84/1940) within which are a number of boulder burials. It is located c. 7.7km south-west of the nearest

proposed turbine, T3, in an area in which the ZTV demonstrates theoretical visibility of the 3 no. proposed turbines. At a distance of 7.7km from the Proposed Development, a change to the immediate setting of the monuments at Breeny More will not occur. A change to the wider setting in which the monument is located is acknowledged and is regarded as Slight and not significant.

National Monument 600 Derryarkane Stone Circle & Standing Stone

This National Monument comprising a five stone circle and a nearby standing stone is located just over 9km south-west of the nearest proposed turbine, T3. The ZTV demonstrates no theoretical visibility of the proposed turbines from this location. In this regard no potential effects to the immediate or wider setting of these monuments as a result of the Proposed Development is identified.

Preservation Order 69/1938 Stone circle - five-stone, Standing stone – pair & Cairn - radial-stone cairn

The monuments subject to a Preservation Order (69/1938) at Kealkill comprise a five stone circle, standing stone pair and radial stone cairn. The ZTV demonstrates theoretical visibility of the 3 no. proposed turbines from this area. A photomontage (VP 13) created from the monuments demonstrates visibility of the proposed turbines which are located over 7km to the north-east. The photowire illustrates how the proposed turbines will be apparent as low structures on the distant horizon. At a distance of over 7km from the Proposed Development, a change to the immediate setting of the monuments will not occur. A change to the wider setting in which the monuments are located is acknowledged and is regarded as Slight and not significant

Mitigation Measures

The distance of the National Monuments and those subject to Preservation Orders from the proposed turbines will mitigate potential visual effects. It is also noted that natural screening, boundaries, buildings and vegetation are not taken into account in the ZTV model and therefore potential visual effects will in reality be less severe.

Residual Effect

The residual effect is considered to be Slight and not significant

Significance of Effects

The overall significance of effects will be Slight and not significant.

14.4.4.3 Recorded Monuments

Identification of Effect

No recorded monuments are located within the Site. A total of two hundred and four (204) recorded monuments are located within 5km of the nearest proposed turbine.

The ZTV shows that 55 of the 204 monuments are located in areas where 3 turbines will theoretically be visible. Seven monuments are located where 2 turbines will theoretically be visible, with 9 monuments in areas where 1 turbine will theoretically be visible. One hundred and thirty-three (133) monuments are located in areas where none of the proposed turbines will theoretically be visible.

Both the distance to the nearest turbine and the number of turbines visible from each asset are used to arrive at a level of potential effect on setting. Potential effects on setting as detailed in Appendix 4-3 are

based on the worst-case scenario in that natural screening, boundaries, buildings and vegetation are not taken into account in the ZTV model. In reality the effect will be reduced since the ZTV model does not take natural screening and buildings into consideration which will alleviate if not remove the effect on setting altogether. Furthermore, many of these monuments may not be readily discernible in the landscape which further ameliorates effects on setting.

No potential visual effect is concluded for redundant records and the theoretical significance of effects for such monuments is graded as N/A in Appendix 14-3. An Imperceptible significance of effect is concluded for monuments located where no turbines will theoretically be visible, i.e. for 133 of the 204 monuments located within 5km of the nearest proposed turbine.

Of the monuments located nearest to the proposed turbines (Map ID 1-5) to the west of the Proposed Development, three of these comprise Redundant records and therefore no potential visual effect to these monuments is concluded. A theoretical Moderate effect to the wider setting of the two hut sites CO080-030002- and CO080-030001- (Map ID 4 and 5) is noted, however, the presence of screening and in particular forestry plantations may ameliorate this potential effect.

The stone circle at Cappaboy Beg (CO092-004— Map ID 6) is situated over 1km south-west of the nearest proposed turbine, T3. The ZTV suggests theoretical visibility of the 3 no. proposed turbines from this location and therefore a Moderate effect to its wider setting is concluded. The stone circle is aligned NE/SW and therefore on the 21st June (Summer Solstice) it's alignment is likely to be associated with the rising sun on this date. Data on the rising / setting and various equinoxes is available on <https://www.suncalc.org>. An assessment of the potential effect of the proposed turbines on this potential alignment has shown that T3 is located along the trajectory of the rising sun during summer solstice albeit at a distance of 1.1km to the north-east. Although the proposed turbine is located along the trajectory of the rising sun on the 21st June there are a number of mitigating factors which would reduce if not remove the overall potential negative effects on the monument. These are as follows:

- At a distance of 1.1km from the stone circle, potential negative effects on the immediate setting of the monument will not occur.
- Intervening topography, land contour data and forestry suggest that the shadow flicker would not impact on the monument.
- The monument is not accessible to the public.
- At a distance of 1.1km to the north-east it is not considered that T3 will affect the potential alignment the stone circle has with the rising sun.

A full table of potential effects on setting of recorded monuments within 5km of the nearest Proposed Turbine is detailed in Appendix 14-3.

Mitigation Measures

The distance of recorded monuments from the proposed turbines in addition to the low-visibility /sub-surface nature of some of the monuments will mitigate potential visual effects. Additionally, many of these monuments are located on private lands which are not formally accessible to the public. It is also noted that natural screening, boundaries, buildings and vegetation were not taken into consideration in the ZTV and will potentially screen some visual effects.

Residual Effect

The residual effects will be the same as those identified in the table of Potential Effects.

Significance of Effects

The overall significance of effects ranges from Imperceptible to Moderate and is not significant.

14.4.4.4 Newly Recorded Monuments

Identification of Effect

A hut site was recorded within the Proposed Development boundary, albeit poorly preserved and in clear-felled forestry. The hut site is situated just 35m from the existing road (utilised as part of the Kealkill Wind Farm and forestry works). It is proposed to construct a small section of interlinking road in order to avoid using the existing sharp bends. The new section of road will then measure 78m to the north of the hut site which is situated c. 960m north-east of T1.

The ZTV demonstrates that 1 of the proposed turbines may be visible from the area where the hut site is located. In this regard the effect on setting is considered to be Not Significant. Furthermore, the hut site is regarded as low visibility and is located within an area clear-felled and replanted. The original landscape setting has been much altered in this location.

Mitigation Measures

The distance of the hut site from the proposed turbines in addition to its low-visibility nature will mitigate potential visual effects. It is also noted that natural screening, boundaries, buildings and vegetation were not taken into consideration in the ZTV and will potentially screen some visual effects.

Residual Effect

The residual effects will be Not Significant.

Significance of Effects

The overall significance of effects is regarded as Not Significant.

14.4.4.5 Sub-surface Archaeology

Potential visual effects to sub-surface archaeology which may exist within the Site are negated by the sub-surface nature of such features that do not have any above-ground elements on which the Proposed Development will have a visual effect.

14.4.4.6 Archaeological Landscapes

The Dromagorteen / Crinagort / Curragraigue / Erneen archaeological landscape as identified in the Kerry County Development Plan (2022-2028) is located c. 8km west of the Proposed Development boundary and c. 8.5km west of T1. The ZTV demonstrates no theoretical visibility of the proposed turbines from the designated landscape therefore no potential visual effects as a result of the Proposed Development are identified.

14.4.4.7 Protected Structures

Identification of Effect

No Protected Structures subject to statutory protection are located within the Site. Only one Protected Structure (Ref. 1279) is located within 5km of the nearest proposed turbine and is located c. 2.9km to the north at Gougane Barra. It comprises the Oratory of St Finbarr and is also included in the NIAH (Reg. 20908001) The ZTV demonstrates no theoretical visibility of the proposed turbines from this location therefore no potential visual effects as a result of the Proposed Development are identified.

14.4.4.8 NIAH Structures and Historic Gardens

Identification of Effect

No NIAH structures or historic gardens are located within the Proposed Development boundary. One NIAH structure (Reg. 20908001), which is also a Protected Structure (Ref. 1279) is located within 5km of the nearest proposed turbine. No historic gardens are located within 5km of the nearest proposed turbine. The ZTV demonstrates no theoretical visibility of the proposed turbines from the NIAH structure, therefore no potential visual effects as a result of the Proposed Development area identified.

14.5 Cumulative Effects

Cumulative effect is defined as ‘The addition of many small impacts to create one larger, more significant, impact’ (EPA 2022). Cumulative effects encompass the combined effects of multiple developments or activities on a range of receptors. In this case, the receptors are the archaeological monuments and architectural/cultural heritage sites in the vicinity of the Proposed Development. The potential cumulative effects between the Proposed Development and the other projects described in Chapter 2 (Background to the Proposed Development) of the EIAR, hereafter referred to as the other projects, have been considered in terms of effects on archaeology and cultural heritage.

The other projects considered in relation to the potential for in combination effects arising from construction, operational and decommissioning phases of the Proposed Development and for which all relevant data was reviewed include those listed below:

14.5.1 Non-Wind Farm Projects within 25km

A list of all extant planning applications within 25km of the proposed turbines was considered in terms of cumulative effects. The majority of these applications comprise agricultural and residential developments such as single dwelling houses, and agricultural buildings in addition to other larger

developments such as quarries, larger residential developments, battery energy storage systems, solar PV developments, etc. Such developments if located in proximity to archaeological monuments or other cultural heritage assets may have the potential to directly or indirectly affect such features. It is considered, however, that the planning authority would have regard to the protection of any known or unknown cultural heritage sites through the requirement for assessments or implementation of appropriate mitigation measures through the planning process or the discharge of conditions attached to a grant of planning permission, where relevant.

14.5.2 Other Wind Farms

Several other existing, permitted or proposed wind farms are located within 25km of the proposed turbines as detailed in Chapter 2 (Background to the Proposed Development).

14.5.3 Cumulative Effects (Direct Effects – Construction stage)

The addition of other projects to the proposed turbines was considered in order to assess Cumulative Effects. These included wind farms within 25km of the proposed turbines. Direct effects for the Proposed Development are considered to be confined to within the Site and relate to construction effects.

14.5.3.1 Cumulative effects (direct) considering other windfarms within 25km

14.5.3.1.1 Cumulative effects to UNESCO World Heritage sites (tentative), National Monuments in State Care, Recorded Monuments, NIAH and RPS

No UNESCO World Heritage Sites, National Monuments in State Care, Recorded Monuments, RPS structures or NIAH sites are located within the footprint of the Proposed Development and therefore no direct effects on these resources were identified when considering the Proposed Development alone. When the Proposed Development is added to other projects therefore, it does not result in direct cumulative effects since none were identified in the first place. The aforementioned cultural heritage assets are located away from the Site and therefore are not capable of being directly affected by the Proposed Development. No cumulative effects will occur therefore.

14.5.3.1.2 Cumulative effects on potential sub-surface archaeology

Potential direct effects identified at the construction stage of the Proposed Development are those which may occur to hitherto unknown sub-surface archaeological finds, features or deposits. This potential effect was identified as being direct, permanent and negative. After the mitigation measures are implemented, however, these potential effects will be Not Significant. The overall significance of effects is therefore Not Significant.

The same potential construction stage effect could be identified for the other wind farm projects since groundworks could impact on hitherto unknown archaeological, finds, features or deposits or other cultural heritage assets. In this regard there could potentially be a cumulative effect when the Proposed Development is added to the other wind farm sites. Mitigation measures seek to alleviate such negative effects if not remove the effect altogether and therefore there will be no significant cumulative effects on sub-surface remains.

If the mitigation measures prescribed in this EIAR are implemented then cumulative direct effects to unknown sub-surface archaeology will not occur, regardless of the other identified cumulative projects.

14.5.4 Cumulative Effects (Indirect Effects – Operational Stage)

Indirect effects on setting occur at the operational stage of the development (when turbines are operational). In this regard in order to assess overall cumulative effects on archaeology and cultural heritage, the Proposed Development is considered in the context of its operation in combination with other wind farms within 25km of the proposed turbines. See Chapter 2 (Background to the Proposed Development), section 2.9.1.1 for detail regarding the methodology for cumulative assessment.

14.5.4.1 UNESCO World Heritage sites (tentative)

No UNESCO World Heritage Sites (WHS) or those on the Tentative list are located within 25km of the nearest proposed turbine. No potential effects to the setting of such sites as a result of the Proposed Development are therefore identified. No potential cumulative effects will therefore occur to this aspect of the Cultural Heritage resource when considering the Proposed Development with the identified cumulative projects.

14.5.4.2 National Monuments

No National Monuments or those subject to a Preservation Order are located within the Site. Three National Monuments in State Care and two monuments subject to a Preservation Order are located within 10km of the nearest proposed turbine.

A change to the immediate setting of the National Monuments and those subject to Preservation Orders will not occur, however, a change to their wider setting is acknowledged and ranges from Imperceptible to Slight.

When considered cumulatively with other wind farms within 25km of the proposed turbines the ZTV demonstrates theoretical visibility of the Proposed Development turbines and some of the existing turbines of Shehy More WF, Carrigareirk WF, Derragh WF and Cleanrath WF and the proposed Maughanaclea WF. In this regard there is potential for cumulative effects to the wider setting of the National Monuments and those subject to a Preservation Order within the 10km study area. No cumulative effects to the immediate setting of the monuments are identified, however, as neither the Proposed Development turbines or the existing, permitted or proposed turbines are located immediately adjacent to same, and in this regard potential cumulative effects to setting are to the wider setting within which the monuments are located and are regarded as Not Significant.

14.5.4.3 Archaeological Landscapes

The Dromagorteen / Crinagort / Curragraigue / Erneen archaeological landscape as identified in the Kerry County Development Plan (2022-2028) is located c. 8km west of the Proposed Development boundary and c. 8.5km west of T1. The ZTV demonstrates no theoretical visibility of the proposed turbines from the designated landscape therefore no potential visual effects as a result of the Proposed Development are identified. No potential cumulative effects will therefore occur to this aspect of the Cultural Heritage resource when considering the Proposed Development with the identified cumulative projects.

14.5.4.4 Recorded Monuments

No recorded monuments are located within the Site. A total of two hundred and four (204) recorded monuments are located within 5km of the nearest proposed turbine.

The ZTV shows that 55 of the 204 monuments are located in areas where 3 no. proposed turbines will theoretically be visible. Seven monuments are located where 2 no. proposed turbines will theoretically

be visible, with 9 monuments in areas where 1 no. proposed turbine will theoretically be visible. One hundred and thirty-three (133) monuments are located in areas where none of the proposed turbines will theoretically be visible. An Imperceptible significance of effect is concluded for monuments located where no proposed turbines will theoretically be visible, i.e. for 133 of the 204 monuments located within 5km of the nearest proposed turbine.

The overall significance of effects to recorded monuments within 5km ranges from Imperceptible to Moderate and is not significant. The distance of recorded monuments from the proposed turbines in addition to the low-visibility /sub-surface nature of some of the monuments will mitigate potential visual effects. Additionally, many of these monuments are located on private lands which are not formally accessible to the public. It is also noted that natural screening, boundaries, buildings and vegetation were not taken into consideration in the ZTV and will potentially screen some visual effects.

When considered cumulatively with other wind farms within 25km of the proposed turbines the ZTV demonstrates theoretical visibility of the Proposed Development turbines and some of the existing turbines of Shehy More WF, Carrigareirk WF, Derragh WF and Cleanrath WF and the proposed Maughanaclea WF. In this regard there is potential for cumulative effects to the wider setting of the recorded monuments within the 5km study area. No cumulative effects to the immediate setting of the monuments is identified, however, as the proposed turbines are not located immediately adjacent to same, and in this regard potential cumulative effects to setting are to the wider setting within which the monuments are located and are regarded as Not Significant.

14.5.4.5 Protected Structures and NIAH

No Protected Structures subject to statutory protection are located within the Site. Only one Protected Structure (Ref. 1279) is located within 5km of the nearest proposed turbine and is located c. 2.9km to the north at Gougane Barra. It comprises the Oratory of St Finbarr and is also included in the NIAH (Reg. 20908001) The ZTV demonstrates no theoretical visibility of the proposed turbines from this location therefore no potential visual effects as a result of the Proposed Development are identified. No potential cumulative effects will therefore occur to this aspect of the Cultural Heritage resource when considering the Proposed Development with the identified cumulative projects.

14.6 Decommissioning Phase

There will be no significant potential effects to the archaeological, architectural and cultural heritage environment during the decommissioning phase of the Proposed Development. Any potential direct effects will already have been resolved through mitigation measures during the construction phase. Therefore, there is no potential for any cumulative effects to arise during the decommissioning phase.

14.7 Conclusion

This Cultural Heritage chapter was prepared by Tobar Archaeological Services Ltd. It presents the results of an archaeological, architectural and cultural heritage impact assessment of the Proposed Development. The assessment was based on desktop research, field survey, GIS based mapping, ZTV and was also assisted by representative photomontages and photowire images. A detailed examination of the available baseline data was undertaken in addition to a comprehensive site inspection. The latter comprised a walk-over survey of the Site and any proposed infrastructure therein.

Where potential effects have been identified, such as to potential sub-surface archaeology appropriate mitigation measures have been recommended in order to minimise any such effects. Recommended mitigation includes archaeological monitoring of construction stage ground works where these occur in previously undisturbed ground and the establishment of a buffer zone around a previously newly recorded hut site.

Potential indirect effects on the setting of any UNESCO World Heritage Sites and those on a Tentative List within 25km, National Monuments within 10km, recorded monuments within 5km and RPS/NIAH structures within 5km were included in order to assess potential effects on setting in the wider landscape. No UNESCO WHS or those on a Tentative List are located within 25km of the nearest proposed turbine. The ZTV demonstrates no theoretical visibility of the proposed turbines from the majority of cultural heritage assets within 5km. Both the distance to the nearest turbine and the number of turbines visible from each cultural heritage asset were used to arrive a level of potential effect on setting. Potential effects on setting are based on the worst case scenario in that natural screening, boundaries, buildings and vegetation are not taken into account in the ZTV model and in reality, the potential effect is likely to be less. Furthermore, many of these monuments may not be readily discernible in the landscape which further ameliorates effects on setting.

An assessment of potential cumulative effects was also undertaken taking into consideration other planning applications and identified cumulative wind farm projects within 25km. While some potential cumulative visual effects to the wider setting of cultural heritage assets is possible when considered with the identified cumulative wind farm projects, no significant cumulative effects have been identified and no cumulative effects to the immediate setting of cultural heritage assets will occur.

No significant direct or indirect effects to the recorded cultural heritage resource as a result of the Proposed Development have been identified. Where potential direct effects to sub-surface archaeology have been identified appropriate mitigation measures are proposed in order to ameliorate this potential effect.