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## INTRODUCTION

### Background

- 12.1 This cultural heritage chapter was prepared by SLR Consulting Ltd and presents the results of a cultural heritage impact assessment encompassing both buried archaeological remains and above ground built heritage, undertaken as part of the Environmental Impact Assessment Report (EIAR) for the Proposed Development.
- 12.2 The purpose of this chapter is to assess the effects of the Proposed Development on the surrounding archaeological and cultural heritage landscape (for example, National Monuments and Protected Structures). The assessment is based on a desktop review of the accessible archaeological and cultural heritage data including known areas of archaeological/cultural significance that could potentially be impacted by the Proposed Development. A site assessment and geophysical survey were also undertaken to further establish setting impacts upon built heritage and known and unknown archaeological remains. A description of likely significant effects is presented, and appropriate mitigation methods are proposed as required.

### Scope of Work / EIA Scoping

- 12.3 The Proposed Development Site is located within the administrative counties of Westmeath and Meath, within the River Deel Lowlands, upon undulating land comprising of forestry and agricultural field boundaries.
- 12.4 All elements of the Proposed Development are described in **Chapter 2** of this EIAR.
- 12.5 The scope of the cultural heritage assessment was set out in the Scoping Report dated November 2022 and included as **Appendix 1-3** to this EIAR. The key features for assessment were proposed in this document, which was issued for consultation as described in **Chapter 1** of this EIAR.
- 12.6 The following assets were scoped out during the scoping process. It was concluded that the proposed turbines would have no potential impacts upon the contributing aspects of setting of the assets.

**Table 12-1: Scope of Cultural Heritage Assessment**

Asset	Description	Reason for Scoping Out
Carnybrogan, Co. Westmeath (Reg. No: 15400916)	The asset is a detached three-bay single-storey vernacular house, built in c.1860 with a lobby entry plan.	The asset's special interests which warrant its designation comprise its architectural and technical interests. It is an appealing small-scale vernacular house of picturesque appearance set within an enclosed plot of land, which retains its early character and form. The asset does not derive its significance from its setting; its interests are derived entirely from its physically preserved architecture and technical interests.  The construction activities including the widening of the road up to c.15m to the south of the asset and the grid access route would not cause direct effects to the asset, nor would it cause any effects to the setting of the asset.

Asset	Description	Reason for Scoping Out
		<p>The provision of the 33kV cable would be, once constructed, entirely below ground and the TDR would not require works at this location. The house would remain physically unaffected and unaltered by these construction activities, including the plot in which it is set in to the north of the road. There are also no associated aspects affected which would be considered curtilage to the asset. Whilst the turbines would be visible from the asset, there would be no predicted setting impacts as the asset does not derive its significance from its setting.</p>
<p>Graulty's Bridge, Mulliganstown, Westmeath (Reg.No: 15400901)</p>	<p>The asset is a triple-arched road bridge of the Stoneyford River, built c.1800. Constructed using rubble limestone with toughly dressed limestone voussoirs to arches.</p>	<p>The asset is a well built 19th century bridge which has retained its form and fabric, deriving its significance through its architectural, technical and setting aspects. The asset's setting derives the entirely from its position over the Stonyford River, providing the context of the bridge.</p> <p>The introduction of proposed turbines would not cause any effects to the ability to understand, appreciate and experience the bridge within its setting comprising its association with the Stonyford River. Overall, the magnitude of impact would be none and the significance of effect would be nil.</p>
<p>Snipe's Bridge, Cavestown, Westmeath (Reg.No: 15400917)</p>	<p>The asset is a double-arched road bridge over the Stoneyford River. Constructed using rubble limestone with toughly dressed limestone voussoirs to arches.</p>	<p>A well built and preserved bridge retaining its early form and fabric, attesting to the high level of craftsmen quality available at the time of construction. The asset's setting derives the entirely from its position over the Stonyford River, providing the context of the bridge.</p> <p>The introduction of proposed turbines would not cause any effects to the ability to understand, appreciate and experience the bridge within its setting comprising its association with the Stonyford River. Overall, the magnitude of impact would be none and the significance of effect would be nil.</p>

## Statement of Authority

- 12.7 This chapter of the EIAR has been prepared by Gwynaeth McCullough, Project Archaeology and Heritage Consultant at SLR Consulting.
- 12.8 Gwynaeth McCullough, has over two years' experience as an Archaeology and Heritage Consultant, with academic qualifications including a BSc (Hons) degree in Archaeological and Forensic Sciences from the University of Bournemouth. She has been responsible for assisting and delivering cultural heritage environmental impact assessment reports and planning statements for renewable energy developments. Her work spans multiple jurisdictions, working throughout Ireland, Scotland, England, and Wales. Gwynaeth has been responsible for the delivery of cultural heritage chapters and thorough assessment of direct and indirect effects (including setting). Furthermore, Gwynaeth is an Associate of the Chartered Institute for Archaeologists (ACIfA).

- 12.9 This chapter has been reviewed by Charlotte Dawson, Principal Consultant at SLR Consulting. Charlotte is a member of the Institute for Archaeologists (MCI(A) and has worked within Archaeology and Heritage Consultancy for over 18 years across all sectors. She specialises in the successful determination of planning applications with built heritage and archaeological constraints, achieved through a site-specific understanding of archaeological and built heritage risk.

## REGULATORY BACKGROUND

### National Legislation

- 12.10 Within Ireland, archaeological monuments and cultural heritage resources are protected through international policy together with national legislation and policy, which are implemented in agreement with the requirements of the European Convention on the Protection of the Archaeological Heritage (Valetta Convention). This was ratified by Ireland in 1997.
- 12.11 Archaeological monuments are primarily protected under the National Monuments Acts of 1930 to 2004 and sections of the National Cultural Institutions Act of 1997. Statutory protection is afforded at different levels to National Monuments, monuments included on the Register of Historic Monuments, and the Record of Monuments and Places.
- 12.12 Article 2 of the 1985 Convention for the Protection of the Architectural Heritage of Europe (Granada Convention) emphasises the importance of maintaining inventories of archaeological and cultural heritage assets and for documentation to be prepared at the earliest opportunity in the event of a threat to these assets. The National Inventory of Architectural Heritage (NIAH) was established to fulfil the obligations of the Granada Convention and aims to be a central record of all architectural cultural heritage in Ireland. Article 1 of the Granada Convention defines architectural cultural heritage as:
- Monument: all buildings and structures of conspicuous historical, archaeological, artistic, scientific, social or technical interest, including their fixings and fittings;
  - Group of Buildings: homogenous 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; and
  - 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.
- 12.13 The NIAH forms the basis for the recommendations for the Minister for Housing, Local Government and Heritage to the local authority for architectural cultural heritage assets to be included on the Record of Protected Structures (RPS). The RPS is a mechanism for the statutory protection of Ireland's architectural cultural heritage, formed under the provisions of the Planning and Development Act (2000) as amended. Architectural cultural heritage assets identified by the Minister as being of Regional, National or International rating within the NIAH are included in the recommendations for each local authority's RMP.

## Guidelines

- 12.14 Relevant guidance documents have been published by the Minister for Arts, Heritage, and the Gaeltacht, the Environmental Protection Agency (EPA), and the professional archaeological body the Chartered Institute for Archaeologists. These guidance publications have been followed in this assessment and include the following:
- Framework and Principles for the Protection of the Archaeological Heritage (1999);
  - Architectural Heritage Protection: Guidelines for Planning Authorities (2011);
  - Regional Spatial and Economic Strategy for Eastern & Midland Regional Assembly 2019 – 2031;
  - Chartered Institute for Archaeologists Standard and Guidance for Historic Environment Desk Based Assessment (2014); and
  - Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (2022).

## Regional Spatial and Economic Strategy for Eastern & Midland Regional Assembly 2019 - 2031

- 12.15 Relevant Regional Policy Objectives are provided as follows:

### Environmental Assessment and Assessment of Greenhouse Gas (GHG) Emissions:

*'RPO 3.5: Identification of suitable employment and residential lands and suitable sites for infrastructure should be supported by a quality site selection process that addresses environmental concerns such as landscape, cultural heritage, ensuring the protection of water quality, flood risks and biodiversity as a minimum.'*

### Sustainable Growth:

*'RPO 3.7: Local authorities shall have regard to environmental and sustainability considerations for meeting sustainable development targets and climate action commitments, in accordance with the National Adaptation Framework. In order to recognise the potential for impacts on the environment, local authorities shall address the proper site/route selection of any new development and examine environmental constraints including but not limited to biodiversity, flooding, landscape, cultural heritage, material assets, including the capacity of services to serve any new development.'*

## Local Planning Policy and Development Control

### Westmeath County Development Plan, 2021 – 2027

- 12.16 The Principle for Cultural Heritage is as follows:

*'Safeguard cultural heritage features and their settings through responsible design and positioning of development, by preserving protected places, features, buildings and landscapes of cultural, archaeological or architectural heritage.'*

- 12.17 **Aim 14.1** is as follows:

*‘Westmeath County Council “recognises the importance of identifying, valuing and safeguarding our archaeological, architectural and cultural heritage for future generations and aims to do so by means of proper management, sensitive enhancement and/or appropriate development of this resource.’*

12.18 The Policy Objectives for Cultural Heritage are to :

*‘CPO 14.1: Improve accessibility to our cultural heritage and maximise its potential as a learning resource.*

*CPO 14.2: Promote the understanding of cultural heritage in terms of its inherent and unique character and to recognise what elements should be preserved, conserved or enhanced.’*

12.19 The Archaeology Policy Objectives are as follows:

*‘CPO 14.5: Seek to ensure the protection and sympathetic enhancement of archaeological heritage, and in this regard, applications will be referred to the National Monuments Service, Department of Culture, Heritage & the Gaeltacht for comment.*

*CPO 14.6: Seek to ensure the protection of archaeological sites and monuments and their settings and archaeological objects that are listed in the Record of Monuments and Places, in the ownership/guardianship of the State, or that are the subject of Preservation Orders or have been registered in the Register of Historic Monuments. Seek to ensure the protection and preservation of archaeological sites, which have been identified subsequent to the publication of the Record of Monuments and Places.*

*CPO 14.7: Ensure that any development adjacent to an archaeological monument or site shall not be detrimental to the character of the archaeological site, or its setting and shall be sited in a manner which minimises the impact on the monument and its setting. Development which is likely to detract from the setting of such a monument or site will not be permitted.*

*CPO 14.9: Encourage and promote the appropriate management and maintenance of the County’s archaeological heritage, including historical burial grounds, in accordance with conservation principles and best practice guidelines.*

*CPO 14.10: Consult with the National Monuments Service in relation to proposed developments adjoining archaeological sites.*

*CPO 14.11: Ensure that archaeological excavation is carried out according to best practice as outlined by the National Monuments Service, Department of Culture, Heritage, and the Gaeltacht, The National Museum of Ireland and the Institute of Archaeologists of Ireland.’*

12.20 The Protected Structures Policy Objectives are as follows:

*‘CPO 14.24: Protect and conserve buildings, structures and sites contained in the Record of Protected Structures and to encourage the sympathetic re-use and long-term viability of such structures without detracting from their special interest and character.*

*CPO 14.25: Protect the architectural heritage of Westmeath through the identification of Protected Structures, the designation of Architectural Conservation Areas (ACAs), the safeguarding of designed landscapes and historic gardens, and the recognition of structures and elements that contribute positively to the vernacular and industrial heritage of the County.*

*CPO 14.27: Seek that the form and structural integrity of Protected Structures is retained as part of any redevelopment proposal and that the relationship between the Protected Structure and any complex of adjoining buildings, designed landscape features, or designed views or vistas from or to the structure is considered.’*

## Meath County Development Plan, 2021 - 2027

### 12.21 **Heritage Policy 1** is to:

*'to protect sites, monuments, places, areas or objects of the following categories:*

*Sites and monuments included in the Sites and Monuments Record as maintained by the National Monuments Service of the Department of Culture, Heritage and the Gaeltacht;*

*Monuments and places included in the Record of Monuments and Places as established under the National Monuments Acts;*

*Historic monuments and archaeological areas included in the Register of Historic Monuments as established under the National Monuments Acts;*

*National monuments subject to Preservation Orders under the National Monuments Acts and national monuments which are in the ownership or guardianship of the Minister for Culture, Heritage and the Gaeltacht or a local authority;*

*Archaeological objects within the meaning of the National Monuments Acts; and Wrecks protected under the National Monuments Acts or otherwise included in the Shipwreck Inventory maintained by the National Monuments Service of the Department of Culture, Heritage and the Gaeltacht.'*

### 12.22 **Heritage Policy 2** is to:

*"To protect all sites and features of archaeological interest discovered subsequent to the publication of the Record of Monument and Places, in situ (or at a minimum preservation by record) having regard to the advice and recommendations of the National Monuments Service of the Department of Culture, Heritage and the Gaeltacht and The Framework and Principles for the Protection of the Archaeological Heritage (1999).*

### 12.23 **Heritage Policy 3** is to:

*'Heritage Policy 3: To require, as part of the development management process, archaeological impact assessments, geophysical survey, test excavations or monitoring as appropriate, for development in the vicinity of monuments or in areas of archaeological potential. Where there are upstanding remains, a visual impact assessment may be required.'*

### 12.24 **Heritage Policy 4** is to:

*'To require, as part of the development management process, archaeological impact assessments, geophysical survey, test excavations or monitoring as appropriate, where development proposals involve ground clearance of more than half a hectare or for linear developments over one kilometre in length; or developments in proximity to areas with a density of known archaeological monuments and history of discovery as identified by a suitably qualified archaeologist.'*

### 12.25 **Heritage Policy 5** is to:

*'To seek guidance from the National Museum of Ireland where an unrecorded archaeological object is discovered, or the National Monuments Service in the case of an unrecorded archaeological site.'*

## METHODOLOGY

### Introduction

- 12.26 The methodology used to assess the direct and indirect effects of the Proposed Development upon Cultural Heritage was guided by ‘*Guidelines on the Information to be Contained in Environmental Impact Assessment Reports*’, published by the Environmental Protection Agency (EPA) in 2022.
- 12.27 In accordance with the EPA (2022) Environmental Impact Assessment Guidelines, the assessment identifies effects as either direct or indirect, adverse or beneficial, and short term, long term, or permanent.
- 12.28 Direct effects are those which change the cultural heritage significance of an asset through physical alteration. For purposes of this assessment, indirect effects are those effects which cause change within the asset’s setting and thereby change the cultural heritage significance of an asset.
- 12.29 Direct effects on the cultural heritage significance of an asset have been assessed on the basis of a combination of the cultural heritage significance of the asset (where known), the probability of further assets being located within the effected areas and their likely significance, and the magnitude of effect on those assets to be caused by the implementation of the Proposed Development.
- 12.30 Indirect effects on the significance of cultural heritage assets have been identified and assessed with reference to the EPA Guidelines (2022). The assessment has been carried out in the following stages:
- initial assessment of intervisibility and other factors leading to the identification of potentially effected assets;
  - assessment of the cultural heritage significance of potentially effected assets;
  - assessment of the contribution of the setting to the cultural heritage significance of those assets;
  - assessment of the magnitude of effect of the Proposed Development Site on the contribution of settings to the significance of assets (by causing change within those settings); and
  - prediction of the significance of the effect.
- 12.31 Where direct effects on known archaeological features have been identified, mitigation by design is proposed wherever possible. Where not possible, mitigation by means of a proportionate level of archaeological recording is proposed, pending agreement with the Department of Housing, Local Government and Heritage and An Bord Pleanála.

### Study Area

- 12.32 There is no guidance mandating the size of the study area required for the cultural heritage assessment of wind farms. Based upon a review of the historic landscape and the exercise of professional judgment, two study areas were implemented for purposes of the current assessment, as follows:
- a 1km-radius study area as measured from the Proposed Development Site boundary, to inform the predictive model of unknown buried archaeology; and

- a 5km-radius study area as measured from the Proposed Development Site boundary, to inform the settings assessment, in conjunction with a Zone of Theoretical Visibility.

## Effects Scoped Out

12.33 Assessment of the following has been scoped out:

- effects on the setting of cultural heritage assets located at a distance in excess of 5km from the Proposed Development, unless identified as being of particular sensitivity to change; and
- effects on the setting of cultural heritage assets within the 5km study area that are beyond the Zone of Theoretical Visibility (ZTV), and so would not have visibility of the Proposed Development, and where there are no identified 'third points' (co-visibility) of the cultural heritage asset and the Proposed Development.

## Impact Assessment Methodology

12.34 In accordance with the relevant industry guidance, the impact assessment process adhered to was as follows:

- determination of the Significance of the Cultural Heritage Asset effected;
- determination of the Magnitude of Effect of the Proposed Development upon that Cultural Heritage Asset; and finally
- determination of the Significance of Effect of the Proposed Development.

12.35 The first two variables – Significance and Magnitude of Effect – are determined on the basis of the available evidence, using professional judgment. The third variable – Significance of Effect – comprises the product of the first two and is quantified using a standardised matrix (see **Table 12-4**).

12.36 The concepts of Significance, Magnitude of Effect and Significance of Effect are discussed in detail below.

## Significance

12.37 To allow for a detailed, justifiable, and intelligible determination of effect; it is necessary to establish a consistent terminology for discussing the importance of heritage assets. This is referred to variously in statute, policy, and guidance, including 'importance', 'interest', 'significance', and 'special interest'. For the purposes of this assessment, the term 'significance' has been used consistently hereafter.

12.38 The Framework and Principles for the Protection of the Archaeological Heritage, which relates specifically to archaeological remains, provides the following:

*'Any material remains which can contribute to understanding past societies may be considered to have an element of archaeological significance... Archaeological significance or interest may also be seen in terms of the potential for sites, monuments or artefacts to enable people to experience directly the evidence for past societies and through this allow them to better understand and appreciate their own past.'*

12.39 A more detailed approach is provided within Architectural Heritage Protection: Guidelines for Planning Authorities (2011), which conceives of heritage significance as deriving from the following categories of 'special interest':

- Architectural;
- Historical;
- Archaeological;
- Artistic;
- Cultural;
- Scientific;
- Technical; and
- Social.

12.40 These guidelines, which derive principally from the terms of UNESCO’s Granada Convention, makes the further point that these categories are not mutually exclusive, such that an asset might derive its significance from one, multiple or all of these interests.

12.41 In accordance with this guidance, the significance of the cultural heritage assets described within this assessment is discussed in terms of these contributing interests, enabling consistent, detailed, justifiable, and intelligible determinations of cultural heritage significance to be made.

12.42 **Table 12-1** shows the potential levels of cultural heritage significance of an asset, based upon their statutory status, protection and grading. Where non-designated, the level of significance of an asset is described with regard to a scale of significance ranging from Highest to Negligible. This table acts as an aid to consistency in the exercise of professional judgement and provides a degree of transparency for others in evaluating the conclusions reached by this assessment (EPA, 2022).

**Table 12-2: Cultural Heritage Significance**

Significance	Explanation
Highest	Sites of international importance, including:- <ul style="list-style-type: none"> <li>• World Heritage Sites;</li> </ul>
High	Site of National importance, including:- <ul style="list-style-type: none"> <li>• National Monuments in State Ownership;</li> <li>• National Monuments under a Preservation Order; and</li> <li>• Nationally Important assets recorded in the NIAH and the Record of Protected Structures</li> </ul>
Medium	Sites of Regional importance, including:- <ul style="list-style-type: none"> <li>• Sites on the Record of Monuments and Places, found within the relevant County Development Plan;</li> <li>• Regionally Important assets recorded in NIAH and the Record of Protected Structures.</li> </ul>
Low	<ul style="list-style-type: none"> <li>• Sites recorded within the Sites and Monuments Record (SMR) which are not included within the Records of Monuments and Places; and</li> <li>• Locally Important assets recorded in the (NIAH and the Record of Protected Structures.</li> </ul>
Negligible	Negligible or no heritage significance
Unknown	Further information is required to assess the significance of these assets.

## Magnitude of Effect

- 12.43 Determining the magnitude of any likely effects requires consideration of the nature of the change to the baseline cultural heritage conditions that would result from the construction, operation and decommissioning of the Proposed Development.
- 12.44 Effects might be direct (e.g., physical truncation of buried remains as a result of ground disturbance) and/or indirect (e.g., adverse change to the setting of cultural heritage assets, both visually, and as a result of noise, vibration, traffic movements etc.).
- 12.45 Effects may be beneficial or adverse and may be short-term, long term or permanent.
- 12.46 Magnitude of effect has been assessed with reference to the criteria set out in **Table 12-2**. The magnitude of both beneficial and adverse effect is assessed according to the same scale of effect, from high to neutral/none (EPA, 2022).

**Table 12-3: Magnitude of Effect**

Magnitude of effect	Explanatory criteria
High Beneficial	The Proposed Development would considerably enhance the cultural heritage significance of the effected asset, or the ability to understand, appreciate and experience it.
Medium Beneficial	The Proposed Development would enhance to a clearly discernible extent the cultural heritage significance of the effected asset, or the ability to understand, appreciate and experience it.
Low Beneficial	The Proposed Development would enhance to a minor extent the cultural heritage significance of the effected asset, or the ability understand, appreciate, and experience it.
Very Low Beneficial	The Proposed Development would enhance to a very minor extent the cultural heritage significance of the effected asset, or the ability understand, appreciate, and experience it.
Neutral/None	The Proposed Development would not effect or would have harmful and enhancing effects of equal magnitude on the cultural heritage significance of the effected, or the ability to understand, appreciate, and experience it.
Very Low Adverse	The Proposed Development would erode to a very minor extent the cultural heritage significance of the effected asset, or the ability understand, appreciate, and experience it.
Low Adverse	The Proposed Development would erode to a minor extent the cultural heritage significance of the effected asset, or the ability to understand, appreciate, and experience it.
Medium Adverse	The Proposed Development would erode to a clearly discernible extent the cultural heritage significance of the effected asset, or the ability to understand, appreciate, and experience it.
High Adverse	The Proposed Development would considerably erode the cultural heritage significance of the effected asset, or the ability to understand, appreciate and experience it.

## Significance of Effect

- 12.47 The significance of effect levels and criteria are presented in **Table 12-3**.

12.48 **Table 12-4** provides a matrix that relates cultural heritage significance to magnitude of effect (incorporating contribution from setting where relevant), to establish the likely overall significance of effect. This assessment has been undertaken separately for direct effects and indirect effects; the latter being principally concerned with effects resulting from development within the setting of cultural heritage assets (EPA, 2022). Where a Very Significant (or greater) effect is identified using this method, it would be considered a Significant Effect for purposes of EIA.

**Table 12-4: Significance Effects Criteria**

Significance of Effect	Description
Profound	An effect which obliterates sensitive characteristics.
Very Significant	An effect which, by its character, magnitude, duration, or intensity significantly alters most of a sensitive aspect of the environment.
Significant	The development would create an effect on a designated asset which, by its character, magnitude, duration, or intensity alters a sensitive aspect of the environment
Moderate	An effect which alters the character of the environment in a manner that is consistent with existing or emerging trends
Slight	The development would not have an effect that causes noticeable changes in the character of the environment but without effecting its sensitivities
Not Significant/ Imperceptible	The development would have no effect which causes noticeable changes in the character of the environment but without significant consequences

**Table 12-5: Significance of Effect Matrix**

Magnitude of Effect	Significance (excluding negligible and unknown)			
	Highest	High	Medium	Low
High beneficial	Profound	Very Significant/Profound	Significant/Very Profound	Moderate
Medium beneficial	Profound	Significant	Moderate	Slight
Low beneficial	Very Significant	Slight/Moderate	Slight	Slight
Very low beneficial	Significant	Not Significant/Slight	Not Significant	Imperceptible/Not Significant
Neutral/None	Not Significant/ Imperceptible	Not Significant/ Imperceptible	Not Significant/ Imperceptible	Not Significant/ Imperceptible
Very low adverse	Significant	Not Significant/Slight	Not Significant	Imperceptible/Not Significant
Low adverse	Very Significant	Slight/Moderate	Slight	Slight
Medium adverse	Profound	Significant	Moderate	Slight
High adverse	Profound	Very Significant/Profound	Significant/Very Significant	Moderate

## Zone of Theoretical Visibility (ZTV) Analysis

- 12.49 The assessment of visual effects has been assisted by a ZTV calculation, prepared principally for landscape and visual effect assessment, and presented in **Figure 12-1**. The ZTV maps predict the degree of visibility of the Proposed Development from points within a study area around the Proposed Development Site, as would be perceivable by an observer of average height. The ZTV model has been used to inform the assessment of the likely effect of the Proposed Development upon cultural heritage assets within the study area as a result of change to setting.
- 12.50 The ZTV is theoretical, being based on landform only ('bare earth'), and it does not take into account the screening or filtering effects of intervening vegetation, buildings or other surface features. As such, it is likely to overestimate the actual level of visibility of the Proposed Development.
- 12.51 Assets that fall outside the ZTV are excluded from any further assessment, except where a view has been identified which includes a cultural heritage asset and the wind turbines (a 'third point') and either contributes to or enables an appreciation of the asset's cultural heritage significance.

## Cumulative Effects

- 12.52 A cumulative effects assessment is presented later in this chapter. The assessment has considered all developments identified in **Appendix 1-1**. However, it is considered that the most likely source of any cumulative effects would arise from other wind energy developments within 10km of the effected cultural heritage asset (depending on the cultural heritage significance of the asset), which have either been consented, are subject of an active planning application or are subject of a planning appeal.
- 12.53 Assessment of potential cumulative effects has been limited to those assets for which Proposed Development would itself result in a moderate (or greater) direct/indirect effects. The existing presence of any operational wind farms within the study areas and surrounding landscape has been considered as part of the baseline assessment.

## Mitigation

- 12.54 A statement of the mitigation proposed for any identified significant effects is provided after the results of the impact assessment. The potential for (and desirability of) mitigating any effects by design, e.g., avoidance of direct effects on cultural heritage assets, has been a consideration throughout the design process. Similarly, the potential to remove, re-locate and/or re-size specific turbines in order to reduce any possible indirect effects has also formed part of the design process. The use of screening to mitigate any effects resulting from change to setting is rarely feasible for wind turbines, given their scale, but has also formed a consideration.

## Residual Effects

- 12.55 A statement of the anticipated residual effects, i.e., following the implementation of the relevant mitigation measures, has been provided.

## Sources Consulted

12.56 The following sources were consulted:

- The Historic Environment Viewer as maintained by the Government of Ireland (Online) (accessed 11/07/2023);
- The Record of Monuments and Places (RMP) (accessed 11/07/2023);
- The Record of Protected Structures (RPS) from the Westmeath County Development Plan 2021-2027 (accessed 18/01/2024);
- The Record of Protected Structures (RPS) from the Meath County Development Plan 2021-2027 (accessed 18/01/2024);
- The Sites and Monuments Record (SMR) (accessed 18/01/2024);
- The National Inventory of Architectural Heritage (NIAH) (accessed 18/01/2024).
- The Database of Irish Excavation Reports (accessed 18/01/2024);
- Geological Survey Ireland Spatial Resources (accessed 18/01/2024);
- Lewis' Topographical Dictionary of Ireland (accessed 18/01/2024);
- Irish Townlands Online Database (accessed 18/01/2024);
- Placenames Database of Ireland (accessed 18/01/2024); and
- The Down Survey of Ireland (<http://downsurvey.tcd.ie/down-survey-maps.php#c=Kildare>) (accessed 18/01/2024).
- The following Ordnance Survey Maps were consulted using the online National Townland and Historical Map Viewer:
  - 1655 Down Survey Map of Clonarny parish
  - Larkin's 1808 Map of County Westmeath
  - Larkin's 1812 Map of County Meath
  - 1837 OS Fair Survey Map (drawn by R.Creighton)
  - 18th century Barony Map by Sr William Petty

## Geophysical Survey

12.57 As part of the assessment of the potential impacts of the Substation Site, the geophysical survey within the Substation Site boundary was conducted by Archaeological Consultancy Services Unit (ACS) between the 10th and 13th of March 2022. The survey was conducted using a Bartington GRAD 601-2 dual-sensor fluxgate gradiometer system, mounted on a non-magnetic cart, at sample intervals of 0.25m and traverse intervals of 1m for the whole survey area. Further details can be found in the geophysical report found in **Appendix 12-1**.

## Site Visit

- 12.58 A site visit was undertaken to evaluate cultural heritage assets designated on the NIAH and known national monuments within the Site. This was to establish the extent of cultural heritage assets within and around the Site, and confirm their presence, condition and setting.

## Limitations Encountered

- 12.59 The cultural heritage baseline has been gathered from the sources outlined above. It therefore shares the same range of limitations in terms of the comprehensiveness, completeness and accuracy of those sources.
- 12.60 With respect to assessing indirect effects resulting from change to setting, as stated earlier, the ZTV is a theoretical, 'bare earth' model. As such, the results of the ZTV are likely to overestimate the actual level of visibility of the Proposed Development, as it does not take account of any intervening vegetation, built form or other surface features.

## EXISTING ENVIRONMENT

### Methodology and Study Area

- 12.61 The type and density of recorded cultural heritage assets can be used to inform a predictive model of what further, as of yet undefined, buried remains may exist within the Proposed Development Site. To inform this predictive model, a buffer zone of 1km around the Proposed Development Site was used. The gazetteer of the heritage assets within 1km of the Proposed Development Site can be found in **Appendix 12-2**. Baseline information has been gathered using sources identified in this chapter.

### Archaeological Baseline

- 12.62 The Proposed Development site is located within the River Deel Lowlands, the Site is located upon the higher elevations of undulating land. The landscape within the Site and within 1km has been modified due to intensive agricultural development including cultivation, land improvement, drainage and ancient forestry.
- 12.63 The Site is based upon the higher elevations of undulating land, overlying soil types comprising gley types with poor drainage, brown earths and basin peats. The landscape within the Site and within 1km has been modified due to intensive agricultural development including cultivation, land improvement, drainage, peat extraction and forestry plantations.
- 12.64 A full description of the existing environment within the Proposed Development area can be found in **Chapter 2**.

## BASELINE CONDITIONS

### Nationally Designated Heritage Assets

#### Designated Heritage Assets

12.65 There are no nationally designated cultural heritage assets within the Site or within 1km of the Site boundary. **Figure 12-1** shows the regionally important designated heritage assets around the site, and **Table 12-5** below lists those that are taken forward for assessment in this chapter.

**Table 12-6: Designated Heritage Assets to be assessed**

Name	Designation ID (NIAH)	Record of Protected Structures Number	Distance from Site Boundary	Distance from nearest Turbine	Within ZTV
Early to late 18th Century Rosmead House, Cavestown	15400921	009-048	0.23km	0.36km	Yes
Triumphant Arch, Rosmead House	15400904	009-034	0.56km	1km	Yes
Ballinlough castle/country house	15400906	009-035	1.1km	1.6km	Yes
Ballinlough house	15400909	009-037	1.2km	2km	Yes
Ballinlough Stables	15400907	009-036	1.1km	1.6km	Yes
Ballinlough walled garden	15400915	009-044	1.1km	1.6km	Yes
Ballinlough outbuilding	15400914	009-043	1.1km	1.6km	Yes
Ballinlough demesne walls	15400902	009-032	0.7km	0.9km	Yes
Ballinlough gates and railings	15400903	009-033	0.7km	c.1.1km	Yes

12.66 All other assets within 10km were considered for assessment but were since excluded due to the asset and its approach, having limited visibility of the development and the contributing factors to the significance of the monument, not likely to be impacted by the Proposed Development.

## Known Heritage Assets within the Site

### *Prehistoric and Roman*

- 12.67 There are no known prehistoric or Roman assets within the Site. Approximately 0.9km to the southeast of the Site are two undated barrows, comprising of a ring-barrow (**WM009-038**) and mound-barrow (**WM009-039**) measuring 7.7m x 7m with a flattened apex, which are typically late prehistoric in date.

### *Early Medieval and Medieval*

- 12.68 There are no early medieval or medieval heritage assets located within the Main Wind Farm Development Site. There is an Early Medieval Ringfort within the west of the Proposed Substation Site (**ME023-010**). A geophysical survey was conducted within the Proposed Substation Site to establish any potential associated remains with the ringfort and their extent (**Appendix 12-1**). The geophysical survey was successful at identifying anomalies which are considered potential archaeology associated with the ringfort (**ME023-010**), representing a U-shaped annex to the southeast of the ringfort. An array of potential anomalies that could represent general activity such as pits, spreads, and structures are recorded within, and are likely to be archaeological in nature due to their location. A number of anomalies which could also be archaeology to the east, comprising linear ditches, pits and spreads of an agricultural nature.
- 12.69 A crannog (**WM009-005**), which typically date between the 6<sup>th</sup> and 17<sup>th</sup> centuries, is located c.180m to the northeast of the Proposed Development Site boundary, located at the Newtown Lough. c.700m northwest of the crannog is a moated Site (**ME023-011**), which is located c.220m to the north of the Site boundary. Moated sites typically date between the 13<sup>th</sup> and 14<sup>th</sup> centuries. If the proximity of these two assets were to associate them, these would date to the later medieval period. However, these assets are otherwise undated.
- 12.70 Medieval activity exists to the south and west of the Proposed Development Site, with a possible medieval settlement (**WM009-036**) located c.115m to the south of the Site boundary, and medieval field system with a possible associated medieval settlement c.240m to the west (**WM009-034002**) and medieval castle or tower house (**WM009-034001**). Clonarney Church, recorded on 19th century OS mapping, seems to be the remains of Clonarney Castle which is located in the same located on the 1655 Down Survey map of Clonarney parish, a tower house type structure. There is no confirmed dating of the asset, but it could possibly date to around the late medieval to early post-medieval.
- 12.71 The medieval assets are mostly situated along the Stonyford River to the west of the Proposed Development Site, with the exception of the crannog and moated assets, which are situated to take advantage of the waterbody north of the Site.

### *Post-medieval*

- 12.72 There is a post-medieval asset located within the Proposed Development Site, an unclassified castle, within the northern cluster, c.300m to the southeast of Turbine 1. It is situated on a low rise overlooking Newtown Lough, and it possibly the Site of Newtown Castle.
- 12.73 There is also one other potential post-medieval asset, which are earthworks c.450m to the southeast of Turbine 7. The earthwork is depicted on Larkin's 1808 Map of County Westmeath, however no remains are now visible, and it is located in an area of forestry plantation.

- 12.74 Rosmead House, a partially dismantled building, is an 18<sup>th</sup> century country house (**15400921**) located within the southern end of the Site, which comprises the central focal point of the Rosmead Estate, comprising the Rosmead House, the Triumphant Arch (**15400904**) c.0.5km to the southeast of the Site, and non-designated cultural heritage assets comprising a quadrangle and walled garden, located c.30m and 200m respectively to the northwest of the house. Rosmead House is a detached seven-bay and three-storey over basement house, dating from the 18<sup>th</sup> century. The quadrangle now has a modern barn attached to the northeast end.
- 12.75 The estate may have extended further than what is now apparent, with the ringfort to the northeast of the Site (**WM00529**) being suspected as an estate feature, as the grounds are now unkempt, although many of the purposefully planted trees, tree belts and tree groups are still extant, with the main drive and lawns around the house maintained. Land past these areas is under agricultural use.
- 12.76 Ballinlough Castle (**15400906**), house (**15400909**), walled garden (**15400915**), outbuildings (**15400914**) and stables (**15400907**) are located over 1.3km to the southeast of the Site. The boundary walls, railings and main entry gate (**15400902** and **15400903**) is located less than c.700m from the Site boundary. Overall, the assets comprise a group heritage asset of Ballinlough estate, of which the existing buildings originated in the 18<sup>th</sup> century.

### *Unknown*

- 12.77 There is a single ringfort within the Main Wind Farm Development Site which remains unclassified (**WM009-018**), location c.40m to the east of Turbine 5's foundation and c.20m from the crane hardstanding area. Ringforts date anywhere from Bronze Age to the beginning of the medieval periods. There are 8 other ringforts within the 1km buffer of the Site (**ME023-010**, **ME023-009**, **ME022-029**, **WM009-017**, **WM009-016**, **WM009-014**, **WM009-040**, **WM009-033**). These assets are relatively spread on the elevated segments of land around the Proposed Development Site. There is a single ringfort (**ME023-010**) located c.100m to the west of the Proposed Substation. With the frequency of these assets located within the vicinity of the Site, it is apparent that these were a common form of settlement during a certain period, likely contemporary with the Early Medieval ringfort to the west of the substation.

## Historic Mapping and Historic Land-Use Assessment

- 12.78 A review of the online historic mapping available from the National Library of Ireland and Irish townlands and historical map viewer online was undertaken. The earliest map that shows the Site as an identifiable area is the West Meath 1837 map<sup>1</sup> (drawn by R. Creighton). The map does not show any additional unknown heritage assets. There is also an 18<sup>th</sup> century Barony Map, completed by Sir William Petty during the Down Survey Project. The Barony Map of West Meath marks the town on Newtown roughly within the region of the Site, but the detailing is poor.

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<sup>1</sup> "Topographical Dictionary of Ireland" by Samuel Lewis, 1837.

- 12.79 The earliest map of sufficient scale and detail to cover the development is the 1837 First Edition Ordnance Survey map. The main differences between this map and the Barony Map are changes in area coverage of woodland plantations and the formations of field boundaries, mainly boundaries that have since been removed. Additionally, there are some isolated agricultural outbuildings within the north of the primary Site, which are now no longer extant. These are not labelled with names, but there is no longer any trace of these buildings, either being demolished with identifiable remains, being located within groups of trees or having been quarried.

## *Down Survey of Ireland 1659*

- 12.80 The 1659 Down Survey shows the Site of the Proposed Development Site was in the Parish of Castletowne, barony of Delvin and county of Westmeath, whilst the substation element of the Proposed Development Site to the north is located in the parish of Killallon, barony of Foore and county of Meath. On the Down Survey, the Proposed Substation Site is in the Down Survey area of Ballbogestowne, and the wind farm Site in Newtowne.
- 12.81 For the Proposed Development Site, the north lies within the townland of Newtown, the south Cavestown and Rosmead, while a small east to west section within the centre lies within the small townland of Carnybrogan. The substation is located within the townland of Galboystown.

## *A Topographical Dictionary of Ireland 1837*

- 12.82 Castletown within Delvin is mentioned as a market town, but otherwise the townships within the Site are not further discussed within the topographical dictionary of Ireland (1837). Westmeath is described as follows:
- “The surface of the county, though nowhere rising into tracts of considerable elevation, is much diversified by hill and dale, highly picturesque in many parts, and deficient in none of the essential of rural beauty, but timber. – None of the hills are so high as to be incapable of agricultural improvement. – The lakes are large, picturesque and very numerous, mostly situated in the norther and central parts, the southern being flat and overspread with bog”.*
- 12.83 County Meath is described as comprising 567,127 acres, of which 561,527 are cultivated land, and only 5,600 acres of unimproved mountain and bog.

## **LIDAR**

- 12.84 There is a lack of available LiDAR data for the Site, and therefore only satellite and historical satellite imagery has been used to try to identify any unrecorded archaeological features within the Site.

## **Aerial Photography**

- 12.85 The online aerial imagery of NCAP (National Collection for Aerial Photography as part of Historic Environment Scotland) for Ireland was examined for evidence of archaeological sites. No oblique aerial imagery was found. No further archaeological sites were identified.

## Excavation History

- 12.86 There have been no previous archaeological related investigations within the Proposed Development Site. No archaeological investigations proximate to the Site boundary have found and classified any archaeological deposits or features.

## Discussion of the Archaeological Potential

- 12.87 The potential for archaeology within the main Wind Farm Site and the Substation Site are discussed separately below.

### *Within the Proposed Wind Farm Development Site*

- 12.88 Analysis of the historic environment suggests that the landscape within the Site has been utilised from the prehistoric to post-medieval periods. The extent of prehistoric activity within the Site is the ring barrow (**WM009-038**) and mound barrow (**WM009-039**), located on a rise to the southeast of the Site. The lack of any other recorded prehistoric settlement activity indicates that prehistoric activity within the vicinity was funerary- and not settlement-related.
- 12.89 Archaeological activity within the study area primarily comprises ringforts, including the ringfort within the Main Wind Farm Site and six ringforts within the vicinity. Ringforts typically date from the Bronze Age to the beginning of the Medieval periods, although most date to between 500 AD to 1000 AD, but these assets have no confirmed dating. Some of these features have been recorded through historic mapping, and are no longer extant, with some only being visible as cropmarks. The ringfort within the Main Wind Farm Site (**WM009-018**) is suspected to be a tree-ring within the historic boundary of Rosmead House as a feature, rather than a ringfort. Considering the level of agricultural, woodland plantation and peat extraction activity within the Site, it is unlikely that the asset has survived in any discernible form. These assets therefore contribute very little to discerning the potential for unknown archaeological remains within the Site.
- 12.90 To the north of the Site there is a crannog (**WM009-005**), potentially evidence of early medieval to medieval settlement within the study area. The only archaeological remains which would be related to the crannog within the Site boundary would be agricultural, based around the body of water and crannog. Due to the level of later agricultural activity surrounding the body of water, and woodland plantations, any such remains would not be anticipated to survive.
- 12.91 The assets which potentially date to the medieval period focus upon the lower elevations along the Stonyford River, which runs along the southwest boundary of the Site. These include a field system with a potential abandoned settlement (**WM009-034002**) to the southwest of the Proposed Development Site, and a medieval deserted settlement to the south (**WM009-036**). The Clonarney Church, which is in the location of the medieval field system and potential settlement, is suspected to be the remains of Clonarney Castle, which is depicted on the 1655 Down Survey Map of Clonarny parish.<sup>2</sup> This asset could originate

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<sup>2</sup> The Down Survey of Ireland, Westmeath.

from the medieval period and have continued into the post-medieval period. Considering these assets, and their focus upon the Stonyford River, it is unlikely that any settlement activity occurred further within the Site. At most, there is some potential for agricultural features, such as field boundaries and ditches, although these have likely been incorporated into post-medieval and later features and are not discernible.

- 12.92 The 1659 Down Survey for Cavestown, Rosmead, Carbybrogan and Newtown parishes all cover the land within the Site and comprised a significant amount of plantation compared to settlement, with the largest population being located in Newtown with a population of 28, and Cavestown and Rosmead having 11. The landcover comprised mostly plantation with Cavestown and Rosmead having 429 acres, Carbybrogan having 54 acres, and Newtown having 160 acres of plantation. In summary this depicts a landscape comprising of agricultural and plantation land, with a small number of farms or settlements. Considering the historic mapping, this landscape has remained largely unchanged throughout the post-medieval to the modern period.
- 12.93 Rosmead Estate boundary, located within the southern extent of the Proposed Development Site, likely was formed by the tree banding to the north, although the ringfort to the northeast (**WM009-018**) is suspected to have formed a feature within the Rosmead Estate. It is unlikely that any features of the Rosmead estate would survive as buried features, deposits or materials, which have not already been identified. Any features of the Estate further from the house would have been aesthetic, comprising decorative vegetation, and utilisation of the natural topography to create views.
- 12.94 Therefore, the only potential post-medieval assets to be located within the Proposed Wind Farm Development Site would be field boundaries and cultivation deposits, with post-medieval agricultural buildings being unlikely, considering their demolition would have been thorough, in order to continue use of the land for agricultural and plantation purposes.

### *Within the Grid Connection and Substation*

- 12.95 The Proposed Substation Site which will accommodate the substation element, the Proposed Cable Corridor including the 110 kV grid connection and track has identified archaeology within the boundary, primarily the earthwork remains of the Early Medieval Ringfort within the west (**ME023-010**), and the anomalies of potential archaeology associated with the asset identified by the geophysical survey. The anomalies characterized potential settlement and agricultural activity.

## ASSESSMENT OF EFFECTS

### Potential Construction Effects

#### Wind Farm

- 12.96 The Proposed Development will comprise eight turbines, with turbine foundations, hardstanding areas for the cranes and levelling and clearing areas for temporary hardstanding spaces. This will also include laying down vehicle tracks across the Site and infrastructure related to the continued function of the wind farm, as well as tree felling of woodland plantation.
- 12.97 These activities would require below-ground disturbances which have potential to directly impact archaeological remains within the Site, outlined below.

## Grid Connection and Substation

- 12.98 The proposed Cable Corridor extends from the L5542 in Westmeath and follows the N52 north from the central east boundary of the Site into the village of Clonmellon, and then west along the L6821. It then turns north into the substation Site. The Proposed Cable Corridor enters the Proposed Substation Site and follows the trackway to the location of the Proposed Substation. The area of the substation building and infrastructure is within the east of the Substation Site boundary.
- 12.99 The Proposed Development at this location would avoid the Early Medieval Ringfort (ME023-010) and the cluster of archaeological potential within the U-shaped annex identified by the geophysical survey.
- 12.100 The proposed access track and grid connection route in combination with the proposed substation would truncate three potentially archaeological anomalies detected during the geophysical survey; a linear feature and a large and small pit.
- 12.101 The ringfort and the cluster of anomalies which represent an established area of settlement outwith the ringfort are considered to be of archaeological interest. The anomalies within the substation would contribute to our understanding of the ringfort, although to a lesser degree than the anomalies more directly associated with the ringfort to the west. The removal of these anomalies would potentially remove archaeological features associated with the ringfort and would be considered to result in an effect on the features of the asset.

## Layout Considerations

- 12.102 The assessment of effects is based on the Proposed Development described in **Chapter 2**. The Proposed Development has undergone a number of design revisions in response to all environmental and technical constraints identified as part of the baseline research and field studies. The final proposed layout as shown on **Appendix 12-2** therefore embeds design-based mitigation to avoid disturbance of known cultural heritage assets.
- 12.103 Turbine 5 was positioned to avoid impacts upon the potential ringfort or Rosmead estate feature (**WM009-018**), and T1 was kept away from the potential Newtown Lough Castle area. The substation went through a number of revisions once the geophysical survey of the substation site was complete, avoiding the more substantial areas of anomalies associated with the ringfort (**MS023-010**).

## Predicted Construction Effects

- 12.104 Assessment of the potential direct effects on heritage assets is based on the **maximum** likely effect that could be caused by the Proposed Development.
- 12.105 In the worst-case scenario, the Proposed Development would have a direct effect upon the following:
- Archaeological remains associated with the Early Medieval Ringfort (**ME023-010**);
  - Archaeological remains of the potential Early Medieval Ringfort (**WM009-018**);
  - Unknown features associated with Rosmead Estate;
  - Potential remains of Newtown Castle (**WM009-004**);
  - Any remnant post-medieval agricultural features, such as field boundaries; and
  - Any remaining post-medieval building remains within the north of the Site.

- 12.106 None of the above are listed under Preservation Orders as of the published list in June 2019 (National Monuments Service).
- 12.107 Any remnant unknown post-medieval agricultural features would not contribute to our understanding of farming practices during the period within this region, and therefore be of no archaeological significance. The architectural, material and characteristics of the buildings which would contribute to their local significance have been removed and would contribute nothing to our understanding of agricultural building and architecture of this period, therefore any such remains would also be of no archaeological significance. Considering the level of alteration of boundaries, practices such as ploughing and woodland, remains of either type would not likely be preserved to an extent to be identified and provide information. Overall, they would be considered of negligible significance, and therefore complete removal would not be considered significant harm.
- 12.108 There is some potential that the estate related to the Rosmead house may have extended further northeast than is discernible on the historic mapping and satellite imagery. The current remnant remains of the estate are confined to the west, c.620m northeast. However, it is not likely that any remains outside of this area would still survive in the current landscape, considering the level of disturbance from agriculture and ancient woodland. These features would have only existed as feature earthworks, which would have been entirely removed if they had been present. Therefore, there are no potential effects to any Rosmead estate features within the Site. Overall, although the remains may range from negligible to low significance, no magnitude of effect is predicted, and therefore there will be no harm to significance.
- 12.109 The unclassified ringfort (**WM009-018**) and potential location and remains of Newtown Castle (**WM009-004**), located within the Main Wind Farm Development Site, will not be truncated by any of the groundworks during construction.
- 12.110 Turbine 5 is located c.20m away from the recorded feature's buffer zone (**WM009-018**) and is not predicted to cause direct effects to the feature. The tree felling of woodland would involve the cutting down of trees and leaving the roots in place within the ringfort and its Zone of Notification (WM009-018). This would not cause any ground disturbance, as no below ground disturbance would occur, whilst the continued disturbance of any potential archaeological deposits and stratified remains by the growing roots would be prevented. Overall, the felling of these trees while leaving the roots in place would cause a medium beneficial magnitude of effect resulting in a very significant beneficial impact.
- 12.111 The ringfort within the Proposed Substation Site (MS023-010) and its associated remains would be of archaeological interest. Investigation of features associated with the ringfort would contribute to our understanding of the asset. However, the anomalies which have potential to be truncated by the Proposed Cable Corridor and substation are potential archaeological features which outlie the core cluster of anomalies which are directly associated with the ringfort. Their level of significance and whether they are associated with the ringfort is not defined, and they may be later, modern features. At most, these features would be archaeological deposits of the lowest significance associated with the ringfort, such as agricultural features and pits.
- 12.112 These features would contribute little toward the overall understanding of the asset. Truncation or complete removal of these assets would be considered to cause an insignificant adverse effect, as it would cause a low level of erosion to an asset of low sensitivity. The significance of effect would be considered slight to moderate, as although the individual assets are not considered to be of much archaeological interest, their cumulative contribution to the understanding of the ringfort may be significant depending on

the character, extent and preservation of these assets and how they are associated with the ringfort and contribute to the overall understanding of the settlement.

### *Proposed Mitigation*

- 12.113 Mitigation in the form of strip, map and sampling has been suggested, in order to further understand any potential archaeological features which may be associated with the ringfort (**ME023-010**) prior to their truncation or complete removal within the footprint of the development within the Substation Site, preserving the assets by record. A geophysical survey has already been conducted across the Site, successfully identifying anomalies, and shall inform the mitigation scheme.
- 12.114 Mitigation is subject to agreement with An Bord Pleanála.

### *Residual Effects*

- 12.115 The implementation of design mitigation outlined above would minimise the potential loss of the archaeological resource that could occur as a result of the construction of the Proposed Development. No significant residual direct effects are anticipated from the construction of the Proposed Development.

## Operational Effects of the Proposed Development

### *Rosmead Country House (15400921), the Triumphant Arch (15400904) and curtilage buildings*

- 12.116 Rosmead House is a detached seven-bay and three-storey over basement house, dating from the 18<sup>th</sup> century, extant on a square plan. Records show it was occupied in 1901, but in 1940 the house was dismantled and is now in ruins set in unkempt grounds. The external shell of the building remains. The Triumphant Arch is located to the southwest, at the entry of the estate's historical land boundary.

### **Description and history**

- 12.117 The house was built by Hans Widman Wood in the 18th century, representing an important component of the eighteenth-century domestic built heritage of County Westmeath. The architecture and orientation of the building allowed for alignment with panoramic vistas overlooking wooded grounds and the Stonyford River. There is an outline left of the no longer extant pillared porch. The house was built out of deep-grey limestone and a parapeted roofline, with high quality workmanship.
- 12.118 The quadrangle is located just to the north-west of the building, c.30m north-west. A modern barn has been constructed on its northeastern end. The walled garden is located c.200m further to the north-west, approximately 0.9 hectares in size. The 'Triumphal Arch' is located at the end of the path that connects the house to the road. It's about 650m to the south-west, with the path winding to the southeast c.220m before turning southwest across the weir and connects to the main road. The pathways that once linked the house to the quadrangle and the walled garden are not present on satellite imagery, and have been overgrown, as these are not features of the estate that are maintained.
- 12.119 Originally in the hands of the Widman Wood family, there is a good record of occupation of the estate, including Admiral Hercules Robinson (1789 – 1864), Frances Elizabeth

Robinson and son Herculed George Robert Robinson (1824 – 1897) who was known as Baron Rosmead, and George Charles Mostyn (1804 – 1883).

## Significance

12.120 The asset is listed on the NIAH and is on the Record of Protection Structures for Westmeath. The group of asset's significance derives from architectural, historical and social interests and also from its setting. This derives from its extant remains which are of architectural value due to their unique and high-quality designs, its recorded history associated with historic figures, and its setting which contributes to how we understand, appreciate and experience the estate.

## Setting

12.121 The setting of the estate provides a demonstration of what the estate may have provided an impression of prior to its partial dismantling around 1940. There are still open vistas across green spaces, ornamental trees in the lawns approaching the house and treelines along the Stonyford River, which would have prevented any views of the house until after passing the river to the south and approaching the house directly. The quadrangle building, walled garden and the Triumphal arch still demonstrate the approach through the estate to the main house, the views which would have been key within the house and across the property, the preferred aesthetics during that period within the region and the prosperity and level of society of the people who lived there. Landscaped features still remain, such as groups of historic woodland, lawns and open spaces and walkways past the house and the drive.

12.122 However, considering the house currently stands as a ruin, only comprising of its outer walls, the landscaping is under agricultural use and unkempt and the quadrangle building c.30m to the northwest of the house has been converted into an agricultural building, with a large modern barn attached to the northeast side, the appreciation of the overall estate has been diminished.

## Contribution of Setting to Significance

12.123 Overall, the setting does contribute to the cultural significance of the asset.

12.124 These assets collectively still demonstrate the approach through the estate to the main house, the views which would have been key within the house and across the property, the preferred aesthetics during that period within the region and the prosperity and level of society of the people who lived there.

12.125 The key contributors to the asset's setting comprise the following:

- The approach through the Triumphant Arch (15400904) along the drive from the south after crossing the weir;
- The Stonyford River and views towards it;
- The views to ancient wooded areas, treelines and ornamental trees on the lawn proximate to the house;
- the openness of approach to and around the house to the east and southeast;
- the views which the open landscape provides to the southeast and east from the house; and

- its visual and non-visual associations with its extant historically related buildings, particularly the adjacent quadrangle and walled garden to the northwest.

### Development Effects

- 12.126 The Proposed Development would comprise eight wind turbines, with infrastructure and tracks. The turbine closest to the asset would be Turbine 8, c.370m to the northeast of Rosmead House. The proposed turbines, most notably Turbine 8, would be visible from Rosmead House (Viewpoint 23 and 25, see **Book 2, Vol IV** of the EIAR).
- 12.127 The Turbine 8 would have a clear presence from the entrance of the estate at the Triumphant Arch (15400904), along the drive toward the northeast, but within the periphery of views facing northwest toward the house, and generally around the historic estate. The turbine would be located within the historic boundary of the estate, an area now comprising an agricultural field which no longer contributes to the setting of the house, however the intrusion of the turbine within the views would be considered to distract from the ability to appreciate the asset within views to the northeast along the approach and toward to the asset.
- 12.128 The estate has been eroded to a high degree, and whilst the visibility of the turbine would be considered to dominate the skyline to the northeast, the current level of preservation of the estate and the assets reduces the ability to appreciate, understand and experience the estate, and therefore its overall significance derived from its setting. The magnitude of impact is therefore considered low adverse, as Turbine 8 and the visibility of turbines within the Site would be considered to slightly erode the ability to appreciate the approach from the Triumphant Arch to Rosmead House along the drive and when navigating around the northeast of the Rosmead House within its estate. The site of the turbine is not considered to still contribute to the setting of Rosmead estate and the setting of the house; it is comprising the backdrop of the house and the estate and is not part of a key view to or from any of the assets across the estate.
- 12.129 Overall, it is considered, using professional judgement, that the Proposed Development would cause a low adverse magnitude of effect to the setting of Rosmead estate and its contained designated buildings, including Rosmead House and the Triumphant Arch, therefore a slight significance of impact upon these assets are predicted in EIA terms.

### *Ballinlough Castle (15400906) and associated buildings, comprising Ballinlough estate*

#### Description and history

- 12.130 Ballinlough castle (**15400906**) comprises the main country house dating to the early 18th century, which possibly incorporates the fabric of an earlier fortified house, within the centre of an estate with associated buildings. This includes a cottage flanking a north gate entrance of the estate (**15400909**), a walled garden (**15400915**), outbuilding (**15400914**), stables (**15400907**) and the gateway (**15400903**) and boundary walls (**15400902**). The main castle/house is an amalgamation of structures and renovations made in the 17th to 18th centuries. The demesne walls, gates and railings front the road, backed by woodland, which bounds the estate from the north, northwest and west. Lawns occupy the other spaces of land within the estate, providing walks, views and landscaping which contribute to the aesthetic layout of the estate.
- 12.131 Upon entering into the estate from the north, the drive to the main house takes a southwest direction before turning southeast, in order to take a route through the landscaped area, with bodies of water, woodland and open lawn. The outbuilding, stables and walled garden

are located to the southeast of the main house, forming a linear route through the estate, and ensuring the main house is the focus upon the initial approach to the core of the estate.

- 12.132 The estate has a length of history, dating as far back as the 17th century. In 1641 George Nugent was listed as the owner of 197 acres of land in Ballinlough and is described in the Down Survey as an 'Irish Papist'. In the 17th century the townland of Ballinlough was known as 'Ballinglagbomile' (Baile Locha na Bó Maoile, 'the town of the lake of the hornless cow'). However, there is no castle depicted on the 1655 Down Survey map of the Delvin Barony or Killua Parish.

### Significance

- 12.133 The asset's significance derives from its historical, architectural, archaeological, artistic and social interests and setting characteristics. It is designated as regionally significant on the NIAH and on the Westmeath Record of Protected Structures. Collectively, the assets create an enclosed 17<sup>th</sup> to 18<sup>th</sup> century of buildings with high quality craftsmanship and materials, representing a regionally significance point of wealth and prosperity, with landscaping to compliment and create an isolated and pleasant parkland setting.

### Setting

- 12.134 The entirety of the setting contributing to the historical assets which comprise the Ballinlough estate is contained within the boundary of the estate. External views are prevented using the landscape, such as the higher slopes to the southwest, and woodland and tree belts, and the boundary is established using the outer wall. The lawns along the approach into the estate from the north are flanked with lawns, with the previous golf courses on the western lawns now restored, and once again contributing to the setting along the approach and the overall estate's setting.
- 12.135 The buildings are nucleated within the centre of the estate, which historically had woodland encompassing the area, creating a more isolated centre. The main approach through the gateway to the north, and along the northern drive, still utilises the planted woodland to create a sense of approach, preventing visibility to the house until shortly north of the house. Traversing through the estate still provides the experience of a 17th to 18th century estate, with the architecture and landscaping incorporated to create setting within the landscape, and linking the assets together, with the improvements made in the later periods which show its continued level of wealth and use. Overall, although the significance of the asset is considered low to medium, there is no anticipated magnitude of effect, and therefore no effects upon the asset's significance are predicted.

### Contribution of Setting to Significance

- 12.136 The following aspects are considered to contribute to the asset's setting:
- The buildings collectively within the estate, which contribute to the architectural interests and understanding of chronological development of the estate, including the house in the north (**15400909**), a walled garden (**15400915**), outbuilding (**15400914**), stables (**15400907**);
  - Landscaped land to the east and west of the northern drive and from the buildings, including bodies of water and woodland;
  - Groups of woodland to the west and south of the nucleated buildings, and the limited views to the lawn to the west in specific view corridors;

- Designed views within the estate from the buildings, such as green lawn and water features from the main country house, and green corridors through woodland from the stables and walled garden;
- the walls which create a sense of isolation from the external landscape, with the gate providing the only sense of entering the estate.

### Development Effects

- 12.137 The development would introduce 8 turbines c.1km to the northwest of the estate boundary. The bare earth ZTV indicates there would be visibility of all 8 turbines within areas of the estate, some of which are proximate to the designated buildings within the estate, including the castle (Viewpoint 18).
- 12.138 Although there would be potential visibility of turbines within the estate, this would primarily be within the views west from the west lawns, views west along the approach and proximate to the house. Trees create visual barriers along the boundary of the estate facing west and southwest, which would reduce the visibility of the turbines in view.
- 12.139 The approach toward the core of the estate, being Ballinlough Castle (**15400914**) and stables (**15400907**), would face southeast along the drive, which would have no intrusion of turbines within these views. Groups of trees would prevent views of the turbines from the immediately area of the Listed Buildings within the core of the estate, however certain viewpoints of appreciation around and toward the main house from the south are predicted to also have visibility of turbines within the periphery of these views, and along the exit of the estate to the north.
- 12.140 Views of the turbines within the estate would not intrude on any contributing aspects of the Listed Building's setting within the estate, including the views of the assets upon their approach and within their setting which comprises the estate. However, the intrusion of turbines within the views from the estate to the west, due to their proximity, would cause a low adverse effect on the ability to appreciate and experience the assets whilst within their setting. Overall, this would be considered a slight significance of effect in EIA terms.

### *The series of Ringforts*

- 12.141 There are a large number of ringforts within the environment of the Site, with nine located within 1km of the windfarm and substation Site boundaries (listed below). These assets form an early medieval settlement pattern that has little understanding. Collectively, the pattern of the ringforts is considered to have a setting, where the landscape in which these ringforts, and their potential relationships, contribute to how we continue to understand, appreciate, and experience these assets and settlement patterns during their occupation.

### Description and history

- 12.142 Ringforts are archaeological features, typically circular or oval areas surrounded by an earthen bank with an external fosse or stone wall. The term unclassified ringfort is used when the surviving remains are insufficient to determine whether the monument was originally a rath or cashel. Cashel ringforts can be circular, oval or rectangular, surrounded by stone walls. A rath ringfort is normally circular or oval, and instead a surrounded by an earthen bank with an external fosse. Ringforts functioned as residences and/or farmsteads, and broadly date from 500 to 1000 AD. Rath ringforts which comprise two or three banks and fosses are equated to higher status sites belonging to upper grades of society, but these types of rath ringforts are very rare.

## Significance

- 12.143 The ringforts within the region of the Site comprise rath or unclassified ringforts (**ME022-029, ME023-010, ME023-009, WM009-017, WM009-014, WM009-016, WM009-018, WM009-033, WM009-040**). All of them are located on rises or hillocks within an undulating landscape, providing a Site of good drainage and views, with the exception of an unclassified ringfort to the northwest of the Site (WM009-016), which is located in reclaimed bog land and marked on the 1837 OS map as a form, but is no longer apparent.
- 12.144 These assets are significant due to the frequency and preservation of these features within the landscape, although there is a lack of information contributing to our understanding of their period and utilisation. These features were clearly a large part of the community which occupied this region and seems to have been the norm. The ringfort proximate to the substation site boundary (**ME023-010**) is potentially a rare type of rath ringforts, with traces of three earthen banks, separated by fosses, located on a rise. Another rath ringfort proximate to the larger Site boundary (**WM009-017**) has two potential earthen banks, but the asset has been bisected by a field fence and eroded by post-1700 field fences in the outer banks. These are particularly rare in form, and the information within the preserved remains of this feature can provide highly significance archaeological information. Some ringforts are poorly preserved due to agricultural activities, woodland plantations, and fencing for field boundaries.
- 12.145 The setting of these assets also contributes to their significance, through providing an understanding of how these assets were utilised, considering higher ground was utilised, providing better drainage but also views around the surrounding landscape. These assets are not visible to one another, but they would have provided views to their own surrounding land and any approaches to the settlement.
- 12.146 The ringfort within the Site (**WM009-018**) is depicted as a circular feature lined by trees in the 1837 OS Fair Plan map, and rather looks like a designed landscape feature associated with Rosmead House, an estate to the southwest, rather than a ringfort. It could be that the feature originated as a ringfort and was incorporated into a feature. The asset's description as a National Monument describes the asset as indiscernible above ground. It is likely the feature was heavily impacted by later activities, and there are no more visible remains of the asset, although it is noted that an in-field assessment was not undertaken as part of this assessment and therefore its lack of presence cannot be confirmed.

## Setting

- 12.147 The setting of these assets comprises the intangible relationship between the ringforts, which form a larger landscape of early medieval settlements. The topography of the landscape in which the assets are located is relatively level land with low undulating slopes, with water sources in the form of Loughtontown Lough and the Stonyford River, a landscape ideal for domestic settlements with access to water sources. Overall, the setting of the group of assets comprise;
- Water courses such as the Stonyford River and Loughtontown lough;
  - Low lying landscape and geology ideal for agriculture and domestic settlements;
  - Ringfort – rath (ME022-029)
  - Ringfort – rath (ME023-009)
  - Ringfort – rath (ME023-010)

- Ringfort – unclassified (WM009-033)
- Ringfort – rath (WM009-040)
- Ringfort – rath (WM009-014)
- Ringfort – unclassified (WM009-016)
- Ringfort – rath (WM009-017)
- Ringfort – unclassified (WM009-018) (suspected tree ring associated with Rosmead house).

## Contribution of Setting to Significance

12.148 Whilst their contemporary landscape has been significantly altered, the placement of these ringforts and their intangible relationships within and with the landscape still contributes to our further understanding of the early medieval settlement distribution and potential relationships between the assets, and the ability to appreciate and experience them.

## Development Effects

12.149 The development involves the construction of a wind farm, comprising of 8 turbines, and a substation with a grid connection. These turbines would have some degree of visibility to all the above ringforts.

12.150 The setting of the ringforts within proximity of the Proposed Development Site have a primarily intangible relationship with one another and the landscape, comprising undulating hills used to build upon where drainage was better for settlement, and nearby water courses. Whilst the turbines would be visible from the ringforts, their settlement pattern, locations within the landscape and proximity to resources such as water courses comprise their contributing aspects of their setting, as these would have been key considerations for domestic settlement at the time. The turbines would not cause any direct effects upon the contributing aspects of setting, nor would they be located in such a way that would interrupt the ability to interpret the spatial relationship of these ringforts with their environments or one another.

12.151 Overall, the magnitude of effect is considered neutral; there are no predicted significance of effects to the group of asset's setting. Therefore, no effect upon the significance of the group of assets is predicted.

## Residual Effects

12.152 There are no predicted significant operational effects on the setting of heritage assets from the proposed turbines, and as such there is no residual effect.

## Cumulative Effects

12.153 Cumulative effects have been considered with regard to any wind farm developments 50m to blade tip or greater that are:

- consented or the subject of valid but currently undetermined planning or s36 applications; and
- within 15km of assets of any nationally important assets anticipated to be subject to a Moderate adverse effect (or above) as a result of the Proposed Development.

- 12.154 The following proposed/consented wind farm has been considered when identifying cumulative effects, however, its distance from the Proposed Development Site means that cumulative impacts to above or below ground heritage features are unlikely.

Wind Farm	No. of Turbines	Tip height (m)	Status	Approximate Distance (km)
Bracklin Wind Farm (311565)	9	185	Consented	4.0km South

- 12.155 As outlined in above Sections 12-50 and 12-51 no assets assessed have met the criteria to be assessed for cumulative effects.

## Summary and Statement of Significant Effects

- 12.156 This assessment has considered data from a diverse range of sources in order to identify any heritage assets which may be effected by the Proposed Development. The potential effects on the identified assets, mitigation measures for protecting known assets during construction and the residual and cumulative effects of the Proposed Development have been considered.
- 12.157 In summary, the assessment has found that the Proposed Development would cause no significant indirect effects to heritage assets within or outside the Site. A slight significance of effect was identified to Ballinlough Castle (**15400906**), within Ballinlough Estate and Rosmead Country House (**15400921**) and the Triumphant Arch (**15400904**) and the Rosmead estate curtilage buildings. There were no predicted indirect effects upon the series of Ringforts (**ME022-029, ME023-010, ME023-009, WM009-017, WM009-014, WM009-016, WM009-018, WM009-033, WM009-040**) across the landscape. In all cases, the significance of effect upon all of these assets were neutral.
- 12.158 The assessment found no potential for direct adverse impacts to any known archaeological remains within the Wind Farm Site boundary, and a beneficial impact upon the ringfort (WM009-018) through the felling of woodland on the asset although this does not rule out impacts upon any unknown archaeological remains, which would comprise remains of relatively low significance and be considered to have no more than a slight adverse significance of effect.
- 12.159 However, it found that the development within the Proposed Development Site boundary west of Clonmellon could potentially cause direct harm to potential archaeological remains of low significance related to the Early Medieval Ringfort (**ME023-010**) or other archaeological remains, identified as anomalies by the geophysical survey. These anomalies represent a linear feature and two pit-like features, which the track and grid-connection within the substation site has potential to truncate. The magnitude of effect would be considered very low adverse, meaning the significance of effect upon potential archaeology would be slight. Archaeological mitigation has been proposed, and the information gained and contributed to the archaeological record through archaeological works suggested (strip, map and sample) would offset the loss of the archaeological remains. Mitigation for this has been laid out in section 12.94. Overall, whilst the significance of effect upon the potential archaeological remains would be slight to moderate adverse with the implementation of mitigation, the recovery and recording of archaeological remains prior to removal would contribute to the archaeological record, furthering our understanding of the asset.

## REFERENCES

### Legislation

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- Heritage Act 1995;
- National Monuments Acts 1930, 1954, 1987, 1994, 2004;
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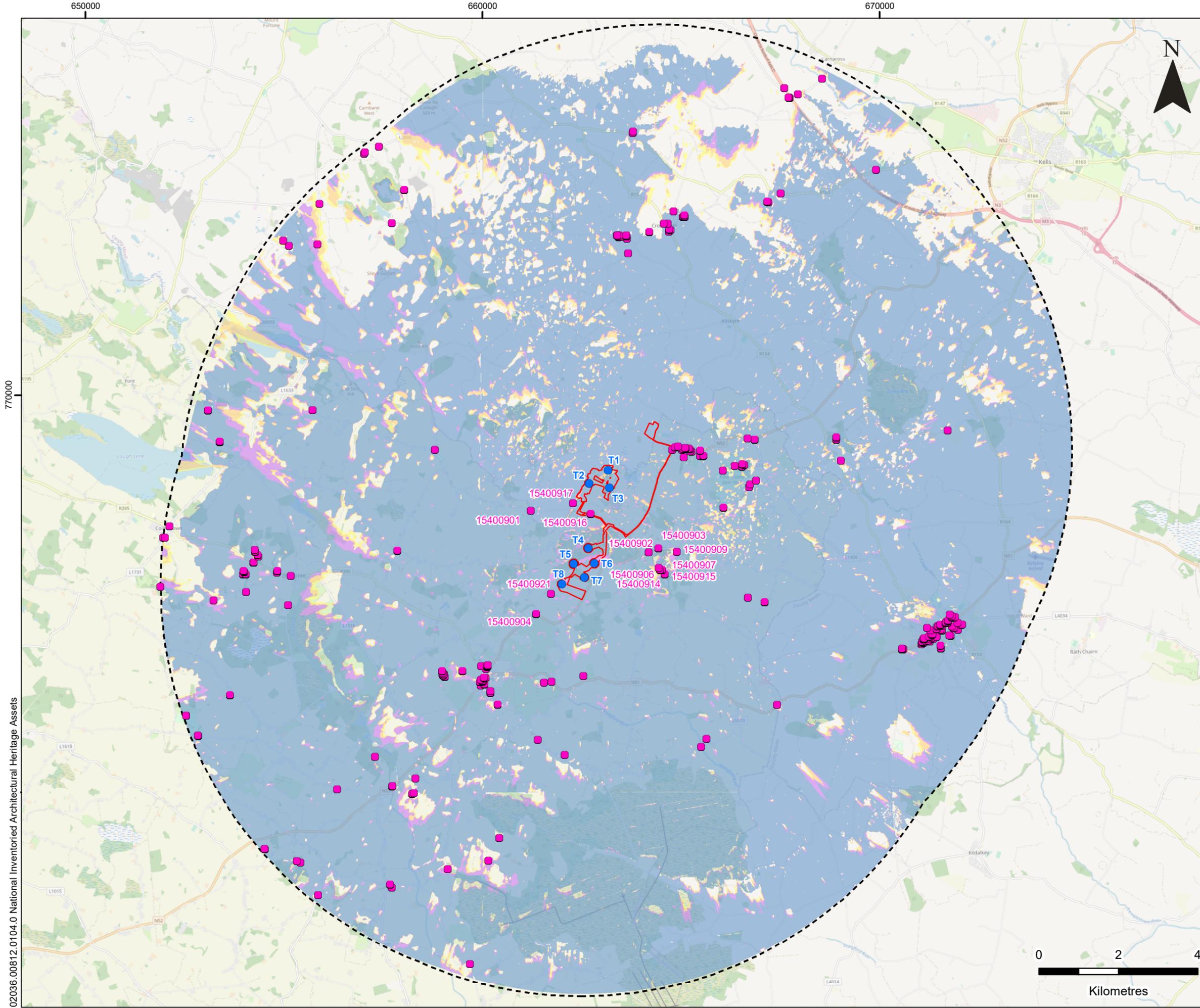
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- **Ordnance Survey of Ireland (1908)** Historic 25-Inch First Edition. Available at: <https://osi.maps.arcgis.com/apps/webappviewer/index.html>
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- **The Down Survey of Ireland (1655-56)** Available at: <http://downsurvey.tcd.ie/index.html>

## FIGURES

**Figure 12-1: Designated Cultural heritage assets**

**Figure 12-2: Non-designated cultural heritage assets**





**LEGEND**

- Proposed Development Site Boundary
- Proposed Turbine Location
- Proposed Development Site Boundary 10 km Buffer
- National Inventory of Architectural Heritage (NIAH)

**Zone of Theoretical Visibility (ZTV) Bare Earth Scenario**  
**Number of Turbine Tips Visible**

- 1 - 2
- 3 - 4
- 5 - 6
- 7 - 8

**Note**  
 ZTV provided by Macroworks. See Landscape chapter for further details.



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**KNOCKANARRAGH WIND FARM  
 ENVIRONMENTAL IMPACT  
 ASSESSMENT REPORT**  


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**CULTURAL HERITAGE**  


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**NATIONAL INVENTORIED  
 ARCHITECTURAL HERITAGE ASSETS**

**FIGURE 12-1**

Scale 1:90,000 @ A3	Date OCTOBER 2023
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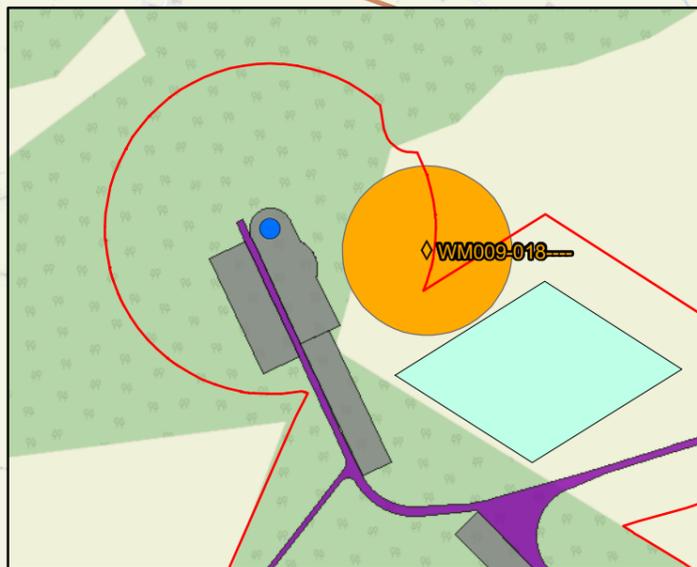
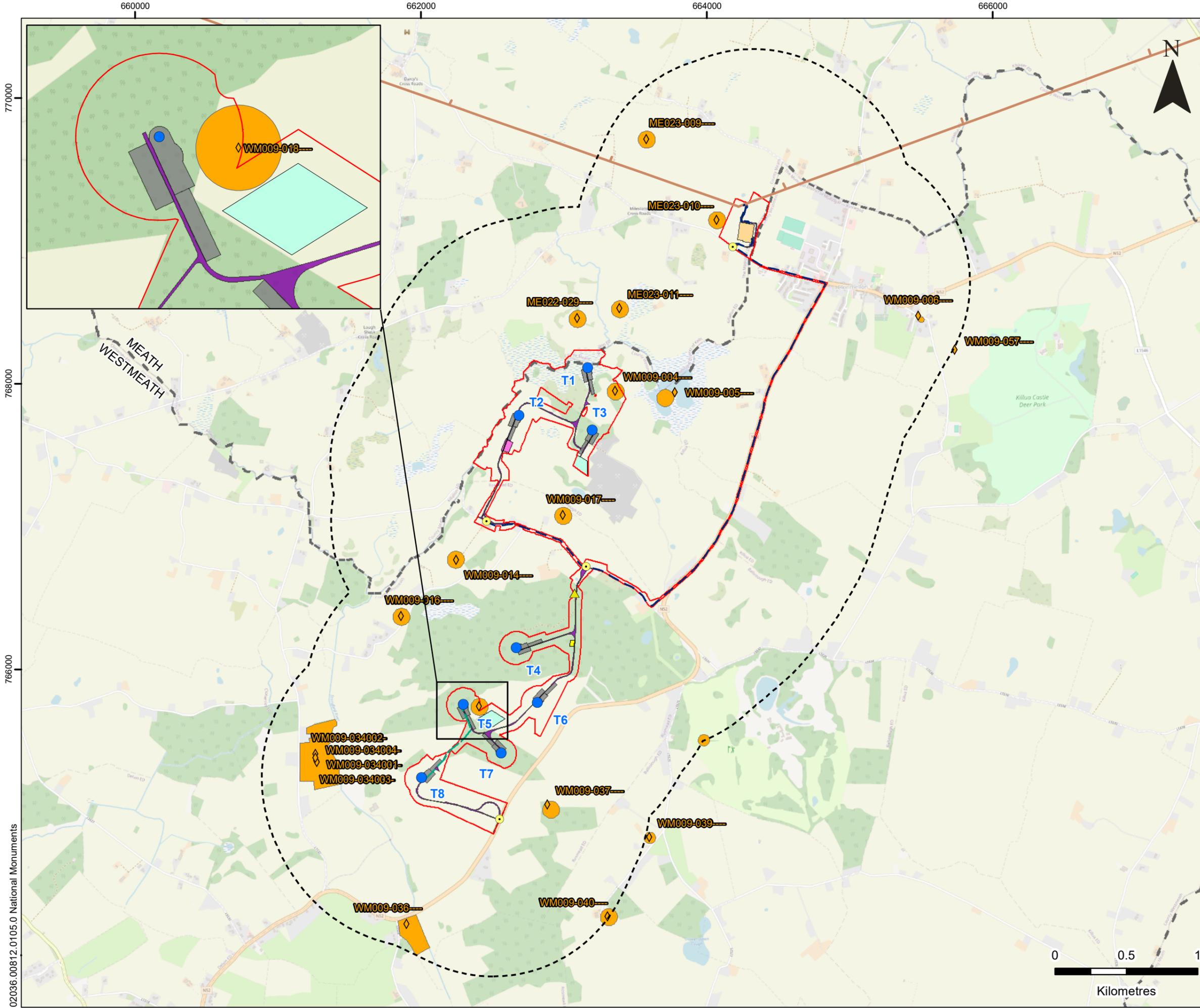
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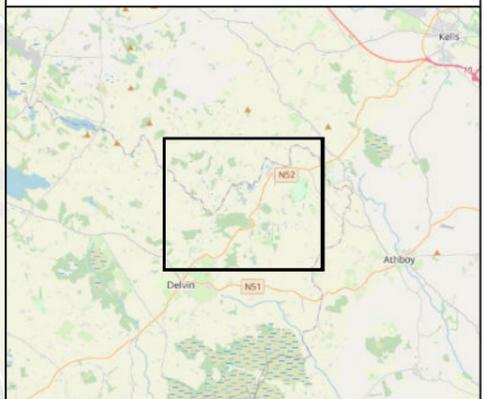
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- LEGEND**
- Proposed Development Site Boundary
  - Proposed Turbine Location
  - Proposed Development Site Boundary 1 km Buffer
  - ◆ Proposed Site Access
  - ▲ Proposed Main Ring Unit
  - Proposed Cable Route
  - Proposed Internal Collector Cable
  - Proposed Access Track
  - Proposed Temporary Construction Compound
  - Proposed Operational Compound
  - Proposed Substation Location
  - Proposed Borrow Pit
  - Proposed Crane Hardstanding
  - Existing High Voltage Transmission Line
  - County Boundary
  - ◆ National Site and Monument
  - National Site and Monument Zone



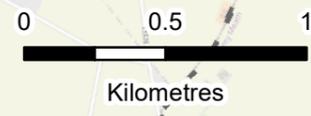
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**NATIONAL SITES AND  
 MONUMENT ASSETS**

**FIGURE 12-2**

Scale 1:25,000 @ A3	Date MARCH 2024
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02036\_00812\_0105.0 National Monuments

## APPENDICES

Technical Appendix 12-1: Geophysical Survey Report

Technical Appendix 12-2: CULTURAL HERITAGE GAZETTEER

Technical Appendix 12-3: SITE PHOTOGRAPHS

(Refer to EIAR Volume III for Appendices)