

13. **ARCHAEOLOGY AND CULTURAL HERITAGE**

13.1 **Introduction**

This archaeological and cultural heritage chapter was prepared by Tobar Archaeological Services. It presents the results of an archaeological and cultural heritage impact assessment for the Proposed Development.

Please note that in this chapter we refer to the Wind Farm Site (15 no. turbines, access roads, onsite substation borrow pits, temporary construction compound, forestry felling and all associated works), the Grid Connection Route (26km long running from the proposed wind farm site to Mullingar substation where upgrade works are proposed), the Proposed Turbine Delivery Route (junction accommodation works and all associated works), and the Proposed Development study area. Other elements of the Project are referenced accordingly (i.e. replacement planting lands). A full description of all elements of the Proposed Development is presented in Chapter 4 of this EIAR.

The purpose of this report is to assess the potential impacts of the Proposed Development on the surrounding archaeological, architectural and cultural heritage landscape. The assessment is based on both a desktop review of the available cultural heritage and archaeological data and a comprehensive programme of field surveys of the study area. The report amalgamates desk-based research and the results of field walking to identify areas of archaeological/architectural/cultural significance or potential, likely to be impacted by the Proposed Development. An assessment of potential impacts is presented and a number of mitigation measures are recommended where appropriate. The visual impact of the Proposed Development on newly discovered monuments/sites of significance as well as known recorded monuments is also assessed.

The lands comprise mainly of drained cutaway with two turbines are located in commercial forestry (T5 and T14) with an additional turbine (T15) located on pasture lands.

13.1.1 **Statement of Authority**

This section of the EIAR has been prepared by Miriam Carroll and Annette Quinn of Tobar Archaeological Services. Miriam and Annette both graduated from University College Cork in 1998 with a Masters degree in Methods and Techniques in Irish Archaeology. Both directors are licensed by the Department of Housing, Local Government and Heritage to carry out excavations and are members of the Institute of Archaeologists of Ireland. Annette Quinn and Miriam Carroll have been working in the field of archaeology since 1994 and have undertaken numerous projects for both the private and public sectors including excavations, site assessments (EIAR) and surveys. Miriam Carroll and Annette Quinn are directors of Tobar Archaeological Services which has been in operation for 17 years.

13.1.2 **Legislation and Guidelines**

This chapter has been prepared in compliance with all relevant EIA legislation and guidance (see Chapter 1: Introduction for relevant guidance and legislation).

13.1.2.1 **Current Legislation**

Archaeological monuments are safeguarded through national and international policy, which is designed to secure the protection of the cultural heritage resource. This is undertaken in accordance

with the provisions of the European Convention on the Protection of the Archaeological Heritage (Valletta Convention). This was ratified by Ireland in 1997.

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

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

Under the Heritage Act (1995) architectural heritage is defined to include ‘all structures, buildings, traditional and designed, and groups of buildings including street-scapes and urban vistas, which are of historical, archaeological, artistic, engineering, scientific, social or technical interest, together with their setting, attendant grounds, fixtures, fittings and contents...’. A heritage building is also defined to include ‘any building, or part thereof, which is of significance because of its intrinsic architectural or artistic quality or its setting or because of its association with the commercial, cultural, economic, industrial, military, political, social or religious history of the place where it is situated or of the country or generally’.

13.1.2.1.1 **Granada Convention**

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

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

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

The Council of Europe's definition of architectural heritage allows for the inclusion of structures, groups of structures and sites which are considered to be of significance in their own right, or which are of

significance in their local context and environment. The NIAH believes it is important to consider the architectural heritage as encompassing a wide variety of structures and sites as diverse as post boxes, grand country houses, mill complexes and vernacular farmhouses.

13.1.2.2 Statutory Consultation

Consultation with a number of statutory bodies regarding the Proposed Development was made, including the Development Applications Unit (DAU) of the Department of Housing Local Government and Heritage. No response was received from the DAU at the time of writing. A response was received from Meath County Council regarding the potential impact of the Proposed Development on Slieve na Calliagh (Loughcrew passage tomb cemetery and other monuments). Such potential impacts have been considered in this chapter (see section 13.3.1.1.3 below) and the LVIA Chapter 12 and associated photomontages.

13.1.2.3 Westmeath County Development Plan 2014-2020

The relevant policies and objectives of Westmeath County Council regarding archaeology and built heritage were consulted. Those pertaining to peatlands and archaeological assessment are detailed below while the other relevant policies and objectives are presented in Appendix 13-1.

Peatlands

It is a policy of Westmeath County Council:

P-PTL1 To protect the county's designated peatland areas and landscapes, including any historical walkways through bogs and to conserve their ecological, archaeological, cultural, and educational heritage.

P-PTL2 To ensure that peatland areas which are designated for protection under international and national legislation for their habitats, are conserved and managed appropriately to conserve their ecological, archaeological, cultural and educational significance.

It is an objective of Westmeath County Council:

O-PTL4 To consider designating peatlands at Coolnagun, Corlanna, Lower Coole, Mayne, Ballinealoe and Clonsura as archaeological heritage areas, where it is considered an ancient trackway or road may have been constructed.

Archaeological Assessment, Evaluation and Mitigation

The Westmeath County Development Plan 2014 – 2020 states that the Council will take necessary steps to ensure that the potential impacts of new development that may be injurious to potentially important archaeological sites are minimised at planning application stage. Where the impact of development proposals on important archaeological remains is unclear, or the relative importance of such remains is uncertain, the Council will normally require developers to provide further information in the form of an Archaeological Assessment or an Archaeological Evaluation.

13.1.2.4 Westmeath Draft County Development Plan 2021-2027

The draft Westmeath County Development Plan 2021-2027 has been prepared by Westmeath County Council and was consulted as part of this assessment. The majority of the policies and objectives relating to archaeology, built heritage and cultural heritage are similar to those contained in the CDP 2014-2020 and are presented in Appendix 13-3. In the draft CDP (2021-2027) the Hill of Uisneach, which is considered a nationally significant archaeological landscape, has been made a designated

Character area with associated panoramic views and buffer zones (see section 13.3.1.1.9 below). The landscape policies relating to the Hill of Uisneach character area are presented in Appendix 13-3.

13.1.3 Location and Topography

The Wind Farm Site is located approximately 2.4 kilometres north of Coole village, at its nearest point. The town of Castlepollard is located approximately 6.7 kilometres south-east of the Wind Farm Site, at its nearest point. The Wind Farm Site largely comprises cut-over drained peatland which is situated between the R394 and R396 regional public roads. A local public road, the L5755, also extends through the site and links the aforementioned regional roads. A number of existing narrow tracks that have been utilised for peat extraction activities extend from the public road giving access to the site.

It is understood that peat harvesting operations have been carried out on the lands at least since the mid-1940s and were harvested for turf supply to Dublin in the late 1950s. Consequently, the site is currently drained by numerous parallel drainage channels which were cut as part of the harvesting operations. Narrow strips of coniferous forestry are located around the boundaries of the peatland at the north-east, east and south-west, with further coniferous woodland located within the Proposed Development site separating the townlands of Clonsura and Doon towards the northern end of the site. The proposed borrow pit is situated approximately 700m to the south-east of the southern portion of the Wind Farm Site. It is located in pasture on sloping ground at an elevation of 80m-116m above Ordnance Datum. This area was also subject to a walk-over survey and photographic record.

A windscreen survey of the Grid Connection Route was also undertaken and an assessment of the proposed junction accommodation works on the proposed Turbine Delivery Route. These aspects of the Proposed Development are addressed in Sections 13.3.2. and 13.3.3.

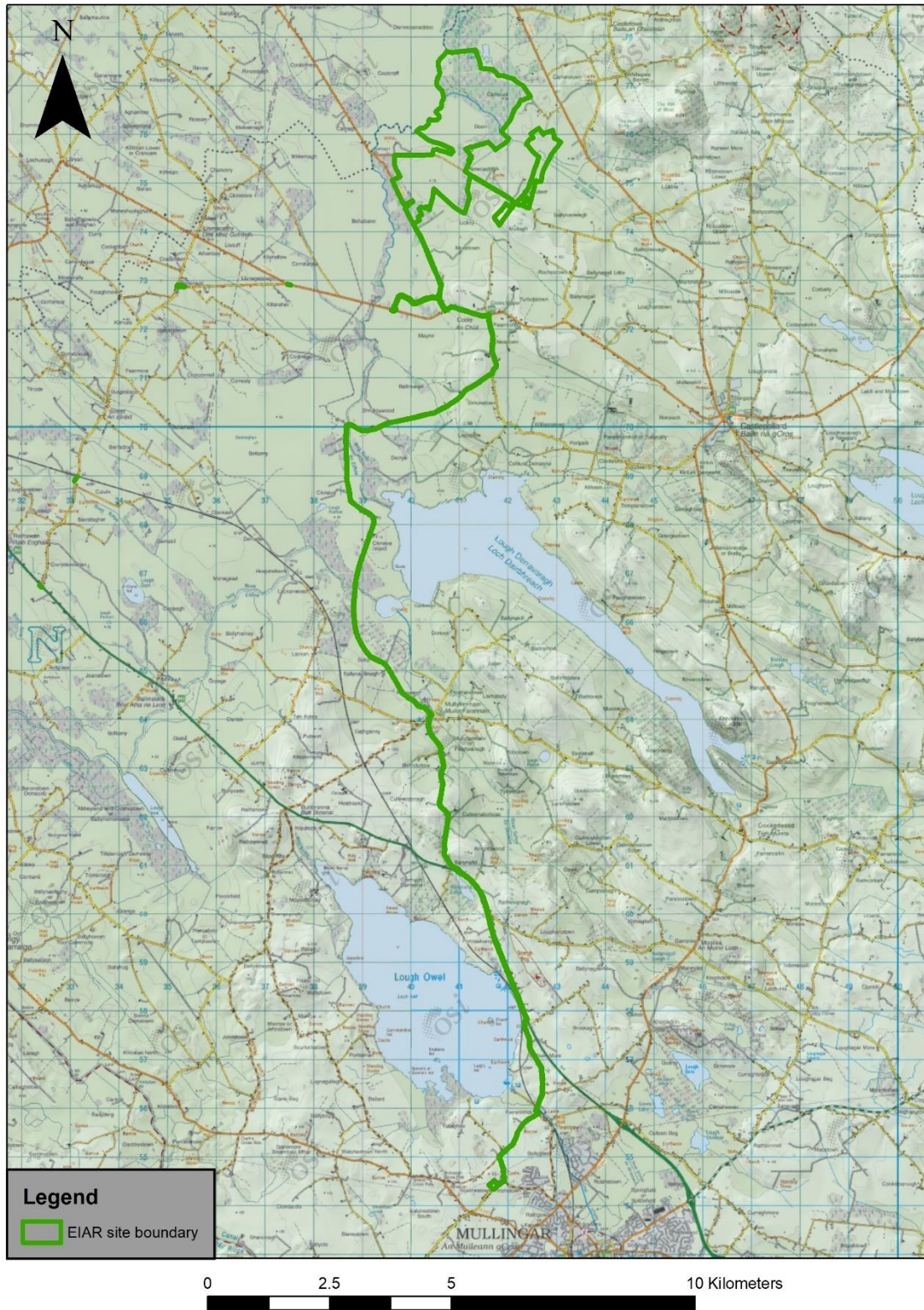


Figure 13-1: Site location map.

13.2 Methodology

The assessment of the archaeology, architecture and cultural heritage of the Proposed Development area included desk-based research as well as field inspection. A desk-based study of the Proposed Development site was undertaken in order to assess the archaeological, architectural and cultural heritage potential of the area and to identify constraints or features of archaeological/cultural heritage significance within or near to the Proposed Development site. Extensive field surveys of the study area was undertaken in June and July 2016 and again in March 2017 to determine if previously unrecorded archaeological/architectural or cultural heritage features were located in the area of the Proposed Development and to assess any potential impacts on known or previously unrecorded sites or monuments within the study area and along the proposed Grid Connection Route and Junction Accommodation Works along the proposed Turbine Delivery Route. A reassessment walk-over survey of the proposed turbines and associated infrastructure located in peatland was carried out in September 2020 in addition to a walk-over survey of the proposed T14 and T15 which are located in forestry and pasture, respectively. The reassessment survey of proposed turbines and infrastructure in peatland was undertaken as peat harvesting had occurred since the original walk-over survey was carried out in 2016 and 2017.

13.2.1 Geographical Information Systems

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

ArcGIS online viewshed analysis was also used to assess effects on setting of archaeological monuments. The Viewshed tool uses the Esri Elevation Analysis service to determine which areas are visible from specified observer points (the observer points being the monuments). Visibility settings are used to set the height of the observer (1.75m standard), the height of the observed features (turbine height), and the maximum viewing distance of the observer. This tool was utilised to ascertain the potential/theoretical visual effects on Cultural Heritage Assets. The results (visible areas) show the worst-case scenario since the model does not take trees or vegetation into consideration.

13.2.2 Desktop Assessment

A primary cartographic source and base-line data for the archaeological assessment was the consultation of the Sites and Monuments Record (SMR) and Record of Monuments and Places (RMP) for County Westmeath. All known recorded archaeological monuments are indicated on 6 inch Ordnance Survey (OS) maps and are listed in the aforementioned records. The 1st (1837) and 2nd (1911) edition OS maps for the area were also consulted as were aerial photographs.

The primary source and base-line data for the architectural assessment was the consultation of the Record of Protected Structures (RPS) and the National Inventory of Architectural Heritage (NIAH) for County Westmeath. Consultation of the historic mapping and field work assisted in the recording of previously unknown architectural/cultural heritage features deemed to be of significance.

Due to the proximity of County Longford which borders the site in the north-west, nearby monuments were also considered in the assessment.

The following sources were consulted for this assessment:

- The Record of Monuments and Places (RMP)
- The Sites and Monuments Record (SMR)
- The Topographical Files of the National Museum of Ireland (see Appendix 13-2 of this EIAR)
- First edition Ordnance Survey maps (OSI.ie)
- Second edition Ordnance Survey maps (OSI.ie)
- Third edition Ordnance Survey Map (Record of Monuments and Places for County Westmeath)
- Down Survey maps for County Westmeath (www.downsurvey.tcd.ie)
- Aerial photographs (copyright of Ordnance Survey Ireland (OSI.ie))
- Database of Irish Excavation Reports
- Westmeath County Development Plan 2014-2020
- Draft Westmeath County Development Plan 2021-2027
- National Inventory of Architectural Heritage (NIAH)
- Landed Estates Database (NUI Galway)
- EIS Westland Horticulture Ltd. Peat Harvesting Operations at Lower Coole, Mayne, Ballinaloe & Clonsura, near Coole and Finnea, County Westmeath
- McGuinness, D. 2012 The Prehistoric Burial Mounds and Related Monuments of County Westmeath - Vol I. Preliminary Account of The Monuments In The Lough Owel Area.

13.2.2.1 Record of Monuments and Places

A primary cartographic source and base-line data for the assessment was the consultation of the Sites and Monuments Record (SMR) and Record of Monuments and Places (RMP) for County Westmeath. All known recorded archaeological monuments are indicated on 6 inch Ordnance Survey (OS) maps and are listed in these records. The SMR/RMP is not a complete record of all monuments as newly discovered sites may not appear in the list or accompanying maps. In conjunction with the consultation of the SMR and RMP the electronic database of recorded monuments (www.maps.archaeology.ie/historicenvironment) was also consulted.

13.2.2.2 Cartographic Sources and Aerial Photography

The 1st (1837) edition and 2nd (1911) edition OS maps for the area were consulted, where available, as was OSI aerial photography on OSI.ie. The Down Survey maps for this area of County Westmeath were also consulted.

13.2.2.3 Topographical Files - National Museum of Ireland

Details relating to finds of archaeological material and monuments in numerous townlands in the country are contained in the topographical files held in the National Museum of Ireland. The files were consulted on the 21st and 22nd March 2016 (See Appendix 13-2).

13.2.2.4 Archaeological Inventory Series

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

13.2.2.5 County Development Plan

The Westmeath County Development Plan 2014- 2020 and the Draft County Development Plan 2021-2027 were consulted for the schedule of buildings (Record of Protected Structures) and items of cultural, historical or archaeological interest which may be affected by the Proposed Development. The townlands within and surrounding the study area were entered into the list of protected structures in the development plan to assess the proximity and potential impact of the Proposed Development on such structures. The development plan also outlines policies and objectives relating to the protection of the archaeological, historical and architectural heritage landscape of County Westmeath (see Appendix 13-3).

13.2.2.6 Excavations Database

The Excavations Database is an annual account of all excavations carried out under license. The database is available on line at www.excavations.ie and includes excavations from 1985 to 2020. This database was consulted as part of the desktop research for this assessment to establish if any archaeological excavations had been carried out within or near to the Proposed Development area.

13.2.2.7 National Inventory of Architectural Heritage (NIAH)

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

The purpose of the NIAH is to identify, record, and evaluate the post-1700 architectural heritage of Ireland, uniformly and consistently as an aid in the protection and conservation of the built heritage. NIAH surveys provide the basis for the recommendations of the Minister for the Environment, Heritage and Local Government to the planning authorities for the inclusion of particular structures in their Record of Protected Structures (RPS). The published surveys are a source of information on the selected structures for relevant planning authorities. They are also a research and educational resource. It is hoped that the work of the NIAH will increase public awareness and appreciation of Ireland's architectural heritage.

13.2.3 Field Inspection

The Proposed Development area was surveyed by Tobar Archaeological Services over several days between June and August 2016 and again in March 2017. The inspection consisted of an extensive walkover examination of the Wind Farm Site, an assessment of any remaining recorded monuments, architectural, built or cultural heritage items, where accessible, and an assessment of the potential direct and indirect impacts on those monuments. Any newly discovered archaeological monuments, items of built heritage or cultural heritage value within the Wind Farm Site were also recorded during the field inspection. Field inspection of proposed turbines T14 and T15 was carried out in September and October 2020 with a reassessment survey of proposed turbines and infrastructure in peatlands also undertaken during this period. A full photographic record of the Wind Farm Site was made. An inspection of the proposed Grid Connection Route and Junction Accommodation Works areas along the proposed Turbine Delivery Route was also undertaken in 2016 and 2017. The assessment of the proposed Grid Connection Route included the assessment of potential impacts to any heritage assets located along same and a photographic record. The site description and photographic record is presented in Appendix 13-1.

13.2.3.1 Limitations Associated with Fieldwork

No significant limitations were encountered during field survey.

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

A standardised approach was utilised for the assessment of impacts of visual setting (indirect effects) according to types of monuments and cultural heritage assets which may have varying degrees of sensitivity. The assessment of impacts on visual setting was undertaken using both the Zone of Theoretical Visibility (ZTV) map in the Landscape and Visual Impact Assessment (LVIA), as presented in Chapter 12 of this EIAR, and also viewshed analysis from specific cultural heritage assets (viewshed analysis is described in Section 13.2.1 above). The viewshed analysis used in the assessment of potential impacts on the visual setting of cultural heritage assets in the wider landscape considers the effects of the proposed turbines only. Other lower visibility Proposed Development infrastructure such as roads, grid connection, sub-station etc. are not included in the viewshed analysis. All other infrastructure (proposed roads, grid connection, sub-station, compounds etc) are assessed without the use of viewshed analysis.

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

Table 13-1: Cultural Heritage assets considered according to sensitivity.

Cultural Heritage Asset	Distance Considered
UNESCO World Heritage Sites (including tentative sites) – if relevant	25km
National Monuments (State Ownership and Preservation Order Sites)	15km
Recorded Monuments, RPS	5km
NIAH structures	5km
Undesignated sites, if relevant	500m

13.3 Existing Environment

13.3.1 Wind Farm Site

13.3.1.1 Archaeological Heritage

For the purposes of this report, archaeological heritage includes

- > UNESCO World Heritage Sites
- > Archaeological Landscapes or Areas of High Amenity (County Development Plan)
- > National Monuments (Ownership, Guardianship and Preservation Orders)

- Recorded archaeological monuments listed in the RMP/SMR
- Newly discovered archaeological sites
- Sites recorded in the Excavations Database

13.3.1.1.1 UNESCO World Heritage Sites (and those on tentative List)

County Westmeath has significant sites of National, Regional, and Local importance. The Ancient Royal site “The Hill of Uisneach” and its integral surrounding landscape was submitted by the State in 2010 for UNESCO World Heritage Site (WHS) Status. “The Hill of Uisneach” is an ancient ceremonial site of National importance (National Monument Number 155). Such is the importance of this site, that along with Cashel, Dún Ailinne, the Rathcroghan Complex, and the Tara Complex, it was submitted by Ireland as a ‘tentative’ World Heritage Site to UNESCO in 2010 under the title “The Royal Sites of Ireland”.

A recent study of prehistoric burial mounds in County Westmeath undertaken by Dr. David McGuinness (2012 and 2014) has added significantly to the understanding the potential inter-visibility of such mounds with and their relationship to other important ritual sites such as the Hill of Uisneach and the passage tombs of Loughcrew.

No monuments on the WHS list and tentative list are located within 25km of the proposed turbines. The Hill of Uisneach is on the WHS list and tentative list but is situated at a distance of approximately 28km to the south-west of the proposed turbines (Figure 13-2).

13.3.1.1.2 National Monuments

The term ‘national monument’ as defined in Section 2 of the National Monuments Act (1930) means a monument ‘the preservation of which is a matter of national importance by reason of the historical, architectural, traditional, artistic or archaeological interest attaching thereto’. National monuments in State care include those which are in the ownership or guardianship of the Minister for Housing, Local Government and Heritage (DHLGH). Section 5 of the National Monuments Act (1930) allows owners of other national monuments to appoint the Minister for DHLGH or the relevant local authority as guardian of such monuments, subject to their consent. This means in effect that while the property of such a monument remains vested in the owner, its maintenance and upkeep are the responsibility of the State. Monuments are also protected by Preservation Orders, also National Monuments.

As these monuments are categorised as being of National Importance, national monuments within 15km of the proposed turbines were assessed for impact on visual setting (Figure 13-3). Although located 16.3km from the nearest turbine, an assessment of potential impacts on the national monuments at Wattstown on Frewin Hill was also completed given their prominent siting in the landscape.

The potential impacts on these National Monuments are addressed below in Section 13.4.4.

Table 13-2: National monuments within 15km of the nearest proposed turbine.

NM No.	MONUMENT	ITM E	ITM N	RMP	DISTANCE TO NEAREST TURBINE (M)
263	Granard Motte	632935	780727	LF010-080001, LF010-080002,	8609 to T1
290 and 155	Loughcrew	657032	777374	ME015-003004, ME015-009001, ME015-010001, ME015-010002, ME015-011	14362 to T15

NM No.	MONUMENT	ITM E	ITM N	RMP	DISTANCE TO NEAREST TURBINE (M)
				and ME015-012001 to ME015-012007, ME009-072	
215	Fore Abbey	651053	770743	WM004-035010-, WM004-035004-, WM004-035003-	9631 to T15
220	Fore town gates (North and South)	650874 651156	770560 770214	WM004-035002-, WM004-097004-	9999 to T15
610	Mortimer's Castle	643545	766733	WM007-044	8194 to T14
606	Wattstown barrows	637655	758517	WM011-131, WM011-130	16343 to T14

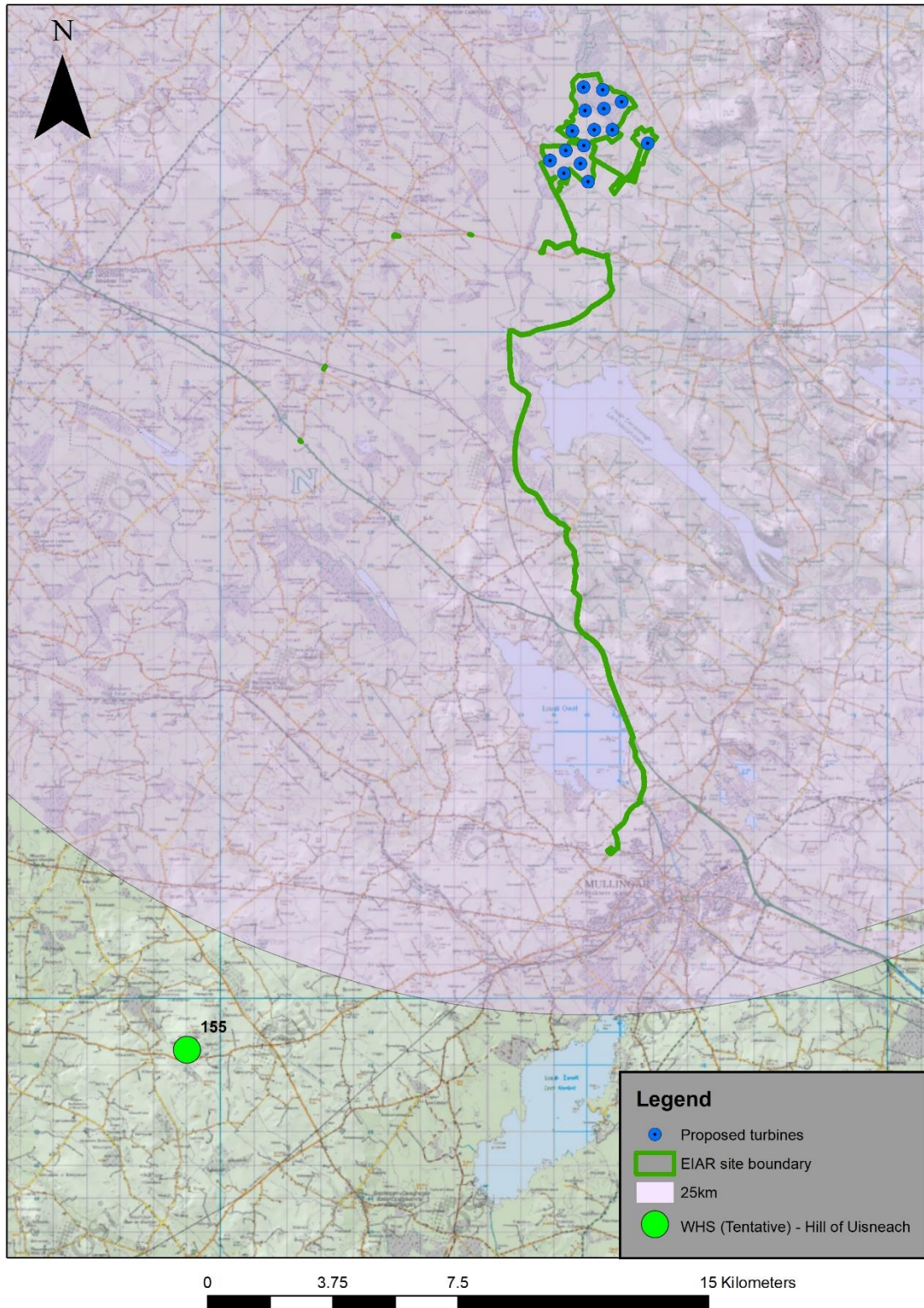


Figure 13-2: UNESCO World Heritage Sites on tentative list in relation to EIAR site boundary and proposed turbines.

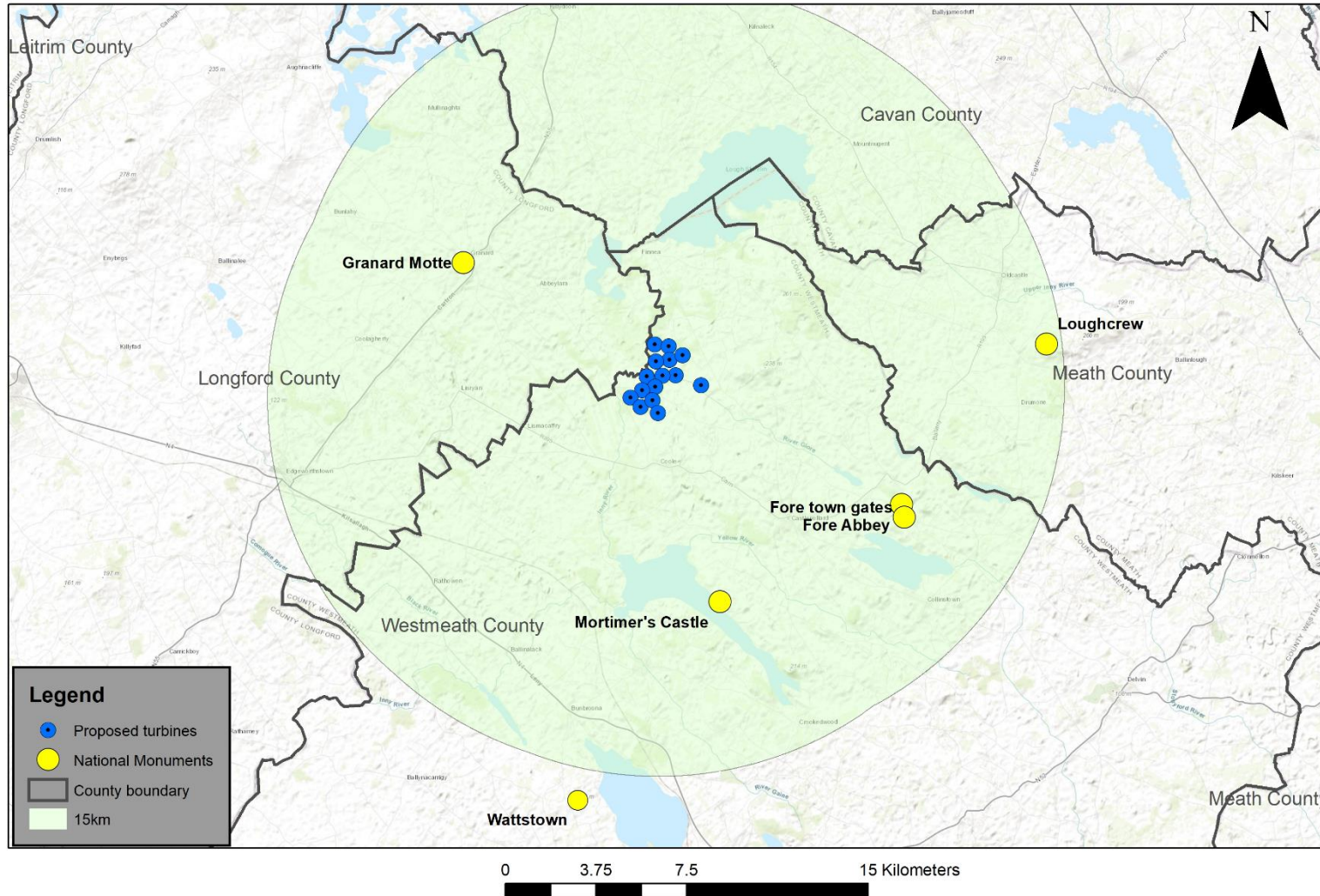


Figure 13-3: National monuments within 15km of proposed turbines.

13.3.1.1.3 **Visibility from National Monuments**

National Monument No. 263 Granard Motte, Co. Longford LF010-080001-, LF010-080002-, LF010-080003-, LF010-080004-

The National Monuments at Granard comprise a motte and bailey (LF010-080001), a hilltop enclosure (LF010-080002), an inauguration site (LF010-080003) and an unclassified castle (LF010-080004). All of the monuments are situated in pasture on the top of a hill to the south-west of Granard town and command impressive panoramic views of the surrounding countryside. The motte and bailey and hill top enclosure are extant monuments, the former having the most visible upstanding remains. The unclassified castle does not have any visible above-ground remains. A full description of all monuments is provided in Appendix 13-5 and an assessment of potential impacts is discussed in Section 13.4.4.1.2.

Viewshed analysis from this monument demonstrates that theoretically 14 turbines (Nos. 1-14) may be visible in full from the National Monument, while T15 may be visible from half the Tower up. This theoretical visibility does not assume the presence of natural screening, vegetation or forestry and is based on a bare landscape and therefore is a worst-case scenario. The Zone of Theoretical Visibility (utilised in the LVIA Chapter 12) suggests that 12-15 turbines will be visible from the monument which accords with the results of the Viewshed analysis. Photomontage (Viewpoint 14 in Photomontage booklet) carried out from the national monument shows that all proposed turbines are visible. The assessment of same in Appendix 12-3 of the LVIA chapter, however, notes that given the distance of the proposed turbines from this site they will not be incongruous or domineering and that the panoramic view of the lowlands from the national monument will not be obscured or obstructed.



Plate 13-1: Granard Motte, National Monument 263.

National Monument No. 290 and 155 Loughcrew Passage Tomb Cemetery & Other Monuments, Cairn & Standing Stone, Co. Meath (ME015-003004, ME015-009001,

ME015-010001, ME015-010002, ME015-011 and ME015-012001 to ME015-012007, ME009-072)

This complex of prehistoric monuments is located in County Meath c. 14km to the east of the nearest proposed turbine (T15). The Loughcrew Cairns, also known as the Slieve na Calliagh or Hill of the Witch, are a group of Neolithic passage tombs dating to 3000 BC. The tombs are located on three different hills and Cairn T, one of the largest tombs in the complex, is situated on Carnbane East. Inside this tomb lies a cruciform chamber, a corbelled roof and rock art. During the Vernal and Autumn Equinox people gather at dawn in Cairn T to watch sunlight enter the chamber and illuminate the inside of the tomb. A full description of the monuments is provided in Appendix 13.5 and an assessment of potential impacts is discussed in Section 13.4.4.1.2.

Viewshed analysis shows that theoretically none of the proposed turbines would be visible in full from this monument. It also shows that 11 turbines (Nos. 1-4 and 9-15) may be visible from mid tower up, while four turbines (Nos. 5-8) would theoretically not be visible. As outlined above this theoretical visibility does not assume the presence of natural screening, vegetation or forestry and is based on a bare landscape and therefore is a worst-case scenario. The Zone of Theoretical Visibility (utilised in the LVIA Chapter 12) suggests that 12-15 turbines will be visible from the monument which broadly accords with the results of the Viewshed analysis. Viewpoint 11 in the Photomontage Booklet also shows the potential views of the proposed turbines from the National Monument. An assessment of this view point in Appendix 12.3 of the EIAR notes that given the distance of the proposed turbines from the site they will not be 'incongruous or domineering' from the national monument.

National Monument No. 215 Fore Abbey, Co. Westmeath WM004-035010-, WM004-035004-, WM004-035003-

The Fore Special Heritage Area Management Study (2010, Westmeath County Council) has identified a Fore Special Heritage Area Boundary and the assessment takes this boundary into consideration. The nearest Turbine (T15) measures 9.6km from Fore Abbey and 6.3km to the associated heritage boundary. A full description of the monuments at Fore is provided in Appendix 13.5 and an assessment of potential impacts is discussed in Section 13.4.4.1.2.

Viewshed analysis shows that none of the proposed turbines are theoretically visible from the National Monument from either ground level, mid tower or hub height. The Zone of Theoretical Visibility (utilised in the LVIA Chapter 12) suggests that 1-3 turbines may be visible from Fore Abbey. This suggests that only a portion of the turbine blade may theoretically be seen from this location. Photomontage carried out from Fore Abbey (Viewpoint 22 in the Photomontage Booklet) demonstrates that the proposed turbines are largely screened from view by topography and vegetation.

National Monument No. 220 Fore Town Gates, Co. Westmeath WM004-035002, WM004-035008 and WM008-097/004

These monuments which comprise National Monument No. 220 are located c. 10km from the nearest proposed turbine, T15. A full description of the gates is provided in Appendix 13-5 and an assessment of potential impacts in Section 13.4.4.1.2.

Viewshed analysis shows that none of the proposed turbines are theoretically visible from this National Monument. The Zone of Theoretical Visibility (utilised in the LVIA Chapter 12) similarly suggests that none of the turbines are theoretically visible from Fore town gates.



Plate 13-2: Fore northern town gate WM004-035/002 (courtesy of NMS).

National Monument No. 610 Mortimer's Castle WM007-044 This monument is situated at the eastern shore of Lough Derravarragh and has good views to the south, east and west but limited views to the north due to rising ground. Views of the Proposed Development to the north-west will be limited from this location which is situated on private land with no public access to same. A full description of the monument may be read in Appendix 13-5 and an assessment of potential impacts is discussed in Section 13.4.4.1.2.

Viewshed analysis from this monument shows that theoretically no proposed turbines are visible from this location. The Zone of Theoretical Visibility (utilised in the LVIA Chapter 12) also suggests that none of the proposed turbines will be visible from this National Monument.

National Monument No. 606 Wattstown WM011-131, WM011-130

This national monument, comprising a complex of mound barrows on or near the summit of Frewin Hill, is located c. 16.3km from the nearest turbine, T14. It was previously visited and commanding views of the surrounding countryside were noted from this location. Although located over 16km south-west of the nearest turbine, T14, it was included in this assessment given its prominent location. A full description of the monuments at Wattstown may be read in Appendix 13-5 and an assessment of potential impacts is discussed in Section 13.4.4.1.2.

Viewshed analysis from this monument shows that theoretically all proposed turbines may be visible from mid tower up. As outlined above this theoretical visibility does not assume the presence of natural screening, vegetation or forestry and is based on a bare landscape and therefore is a worst-case scenario. The Zone of Theoretical Visibility (utilised in the LVIA Chapter 12) also suggests that 12-15 turbines will theoretically be visible from Wattstown. Photomontage from this location (Viewpoint 14, Photomontage Booklet) shows that all 15 proposed turbines are visible from this location. An assessment of this viewpoint in Appendix 12-3 of the EIAR notes that given the distance of the proposed turbines from the site they will not be 'incongruous or domineering' from the national monument.

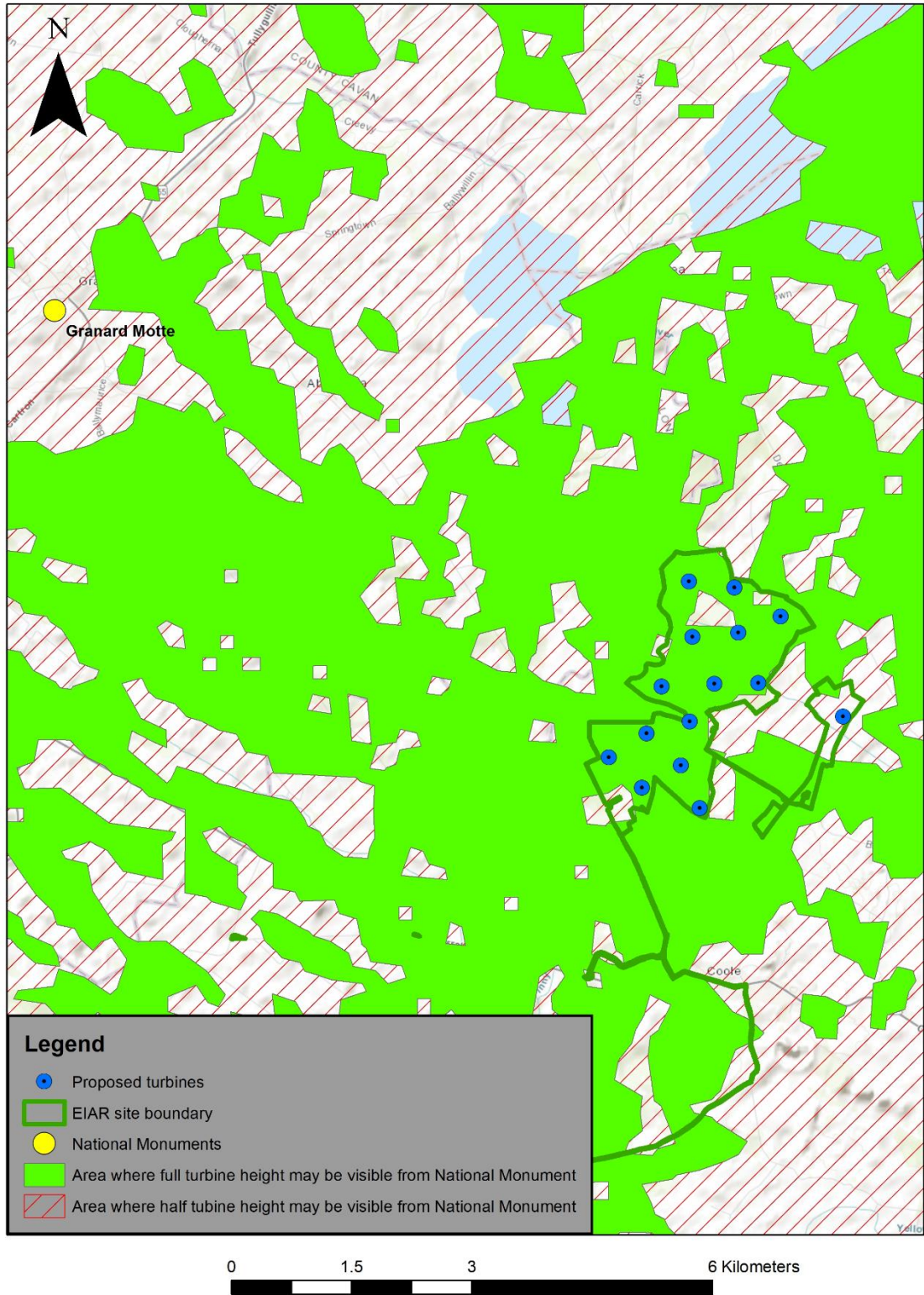


Figure 13-4: Viewshed analysis showing theoretical visibility of proposed turbines from Granard Motte, Nat. Mon. No. 263.

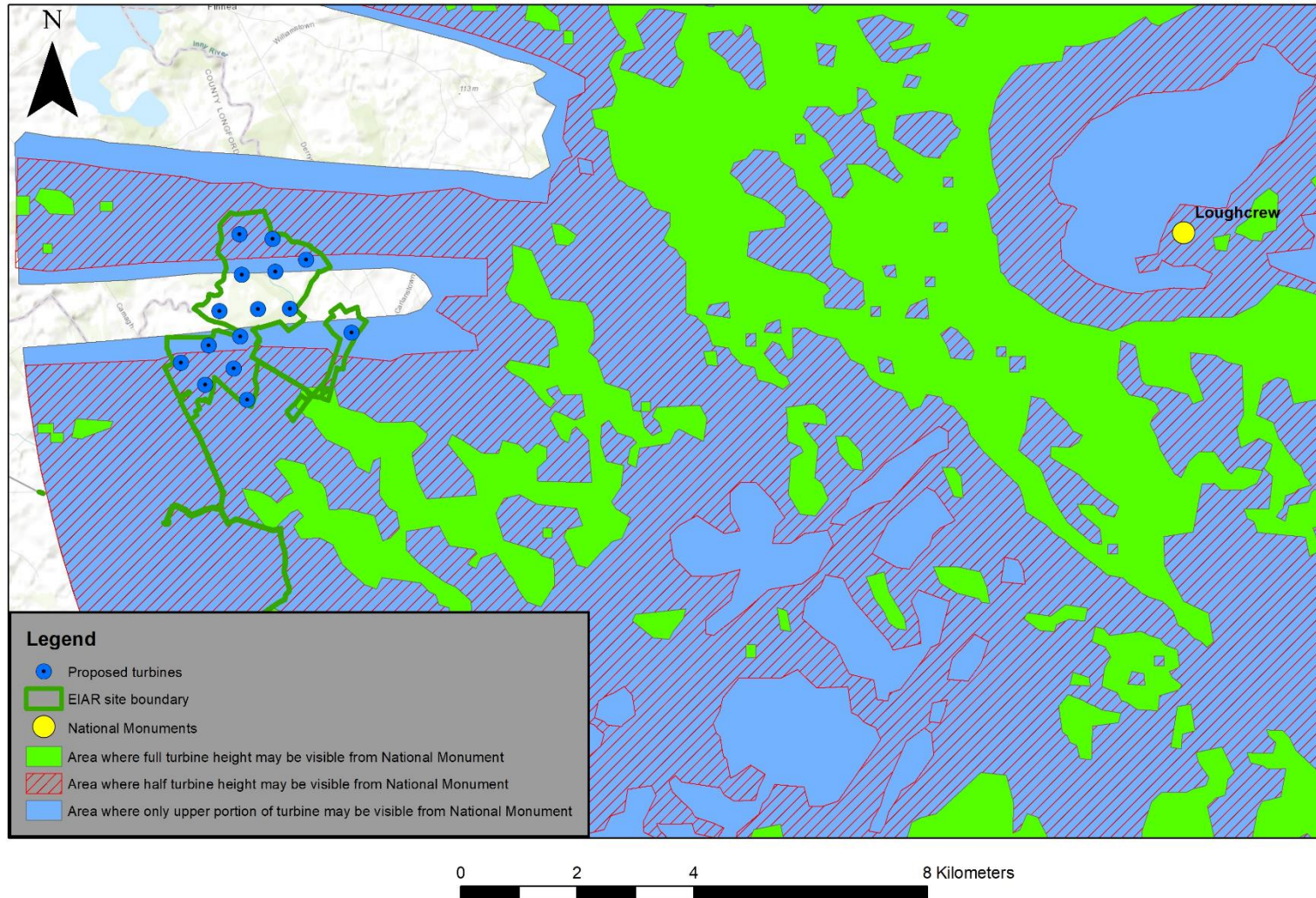


Figure 13-5: Viewshed analysis showing theoretical visibility of proposed turbines from National Monument 290 and 151 at Loughcrew, Co. Meath.

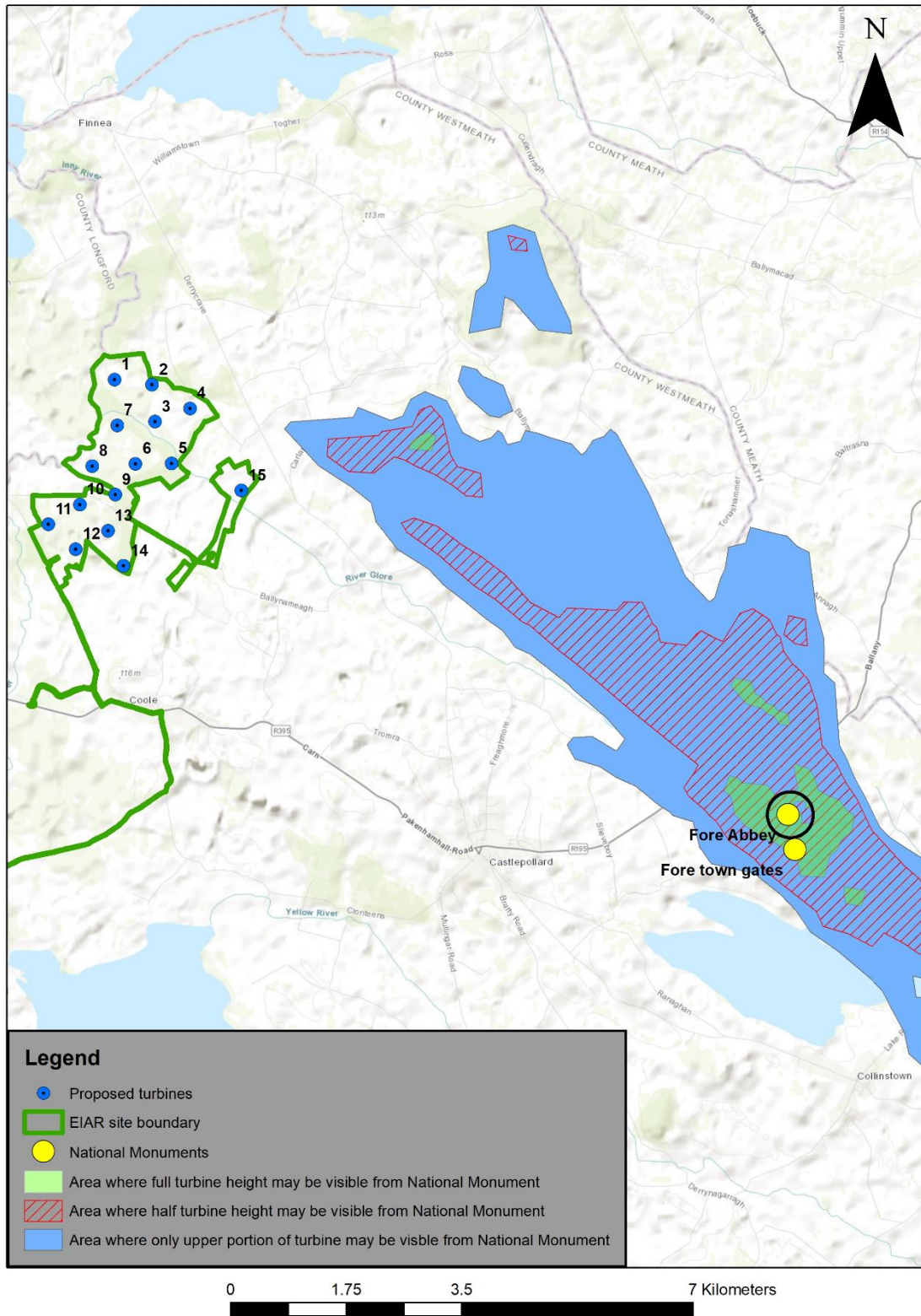


Figure 13-6: Viewshed analysis showing theoretical visibility of proposed turbines from National Monument 215, Fore Abbey. Note no turbines are located within the visible areas.

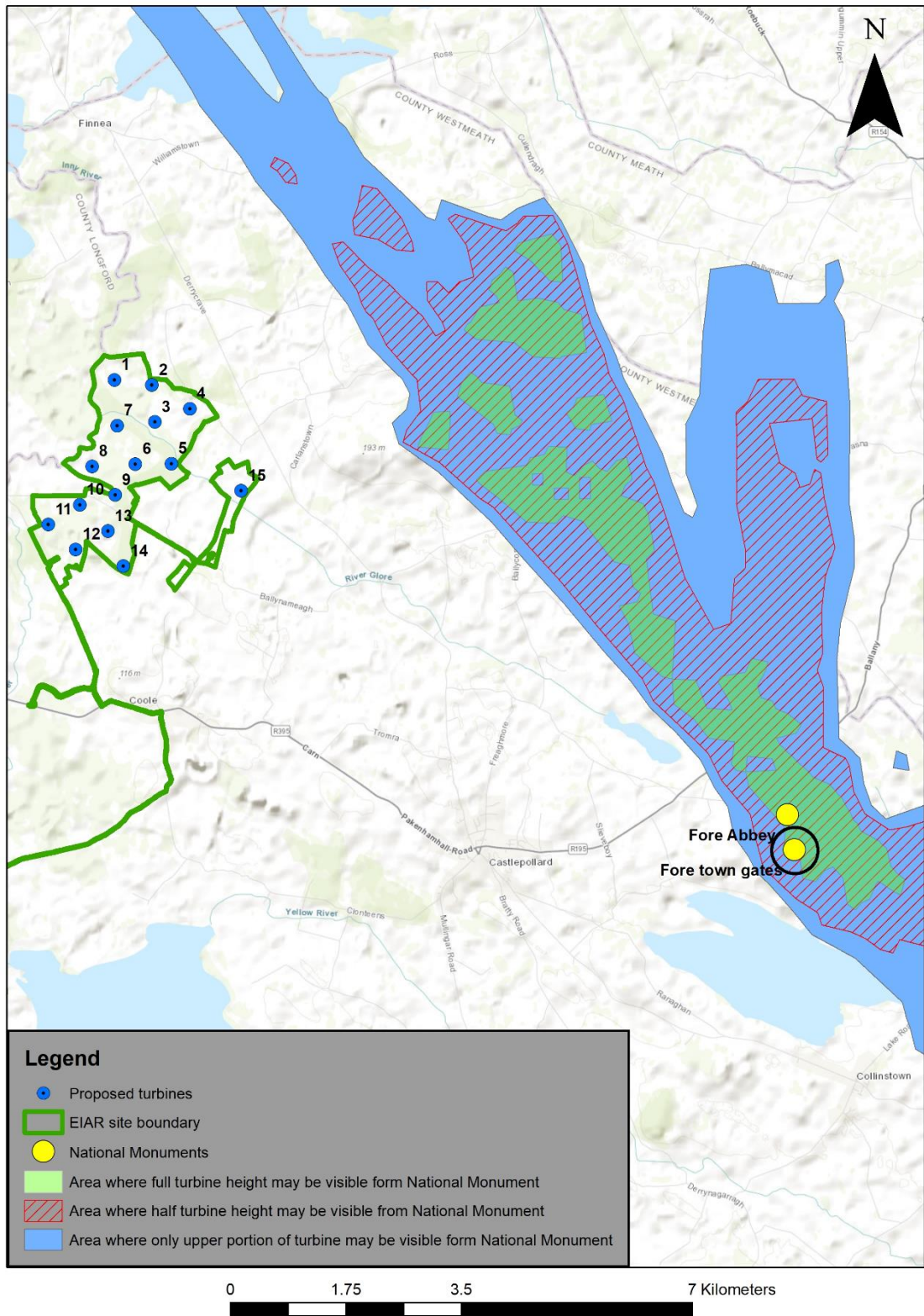


Figure 13-7: Viewshed analysis showing theoretical visibility of proposed turbines from National Monument 220 Fore town gates. Note no proposed turbines are located within the visible areas.

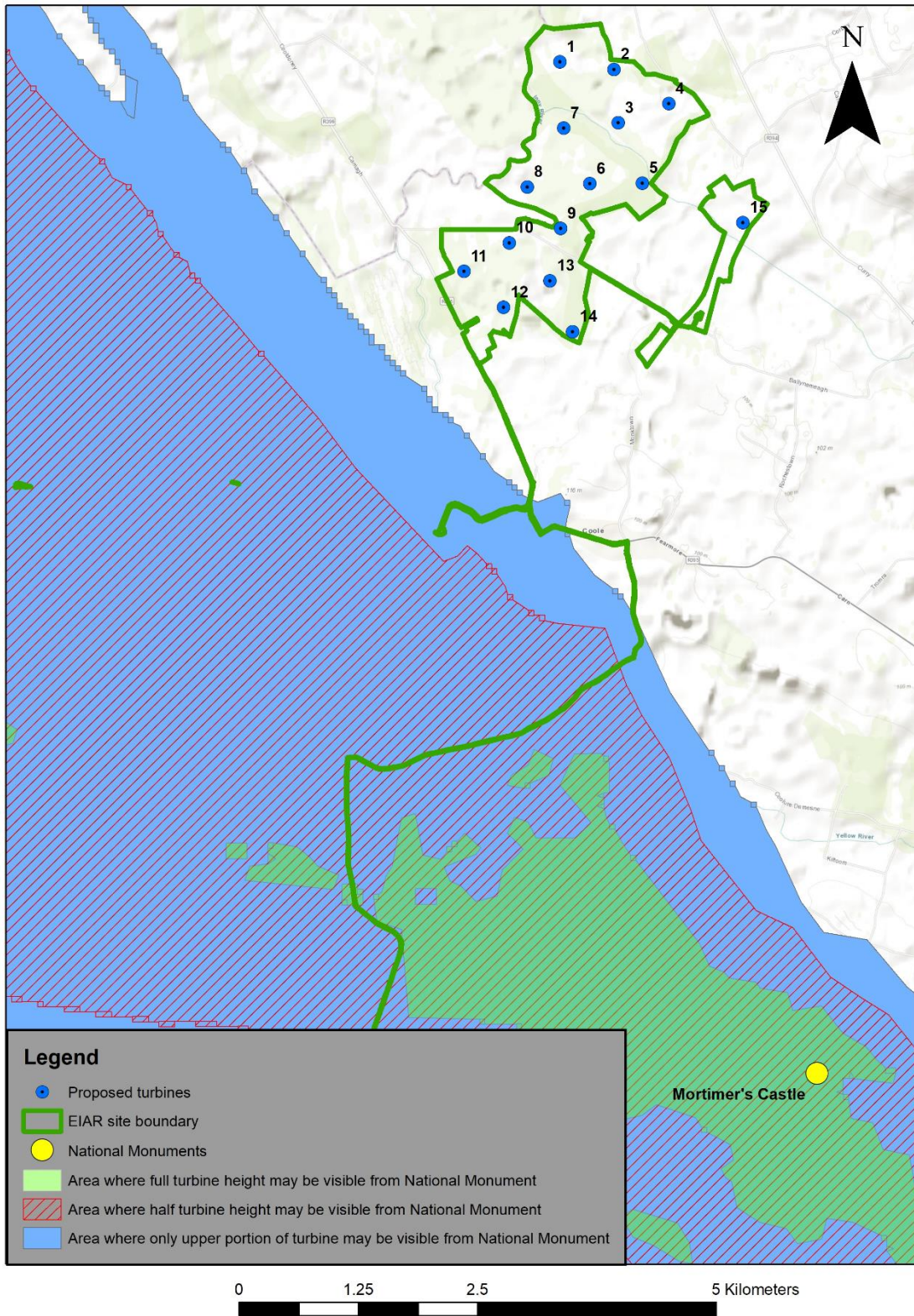


Figure 13-8: Viewshed analysis showing theoretical visibility of proposed turbines from Mortimer's Castle, National Monument No. 610. Note no turbines are located within the visible areas.

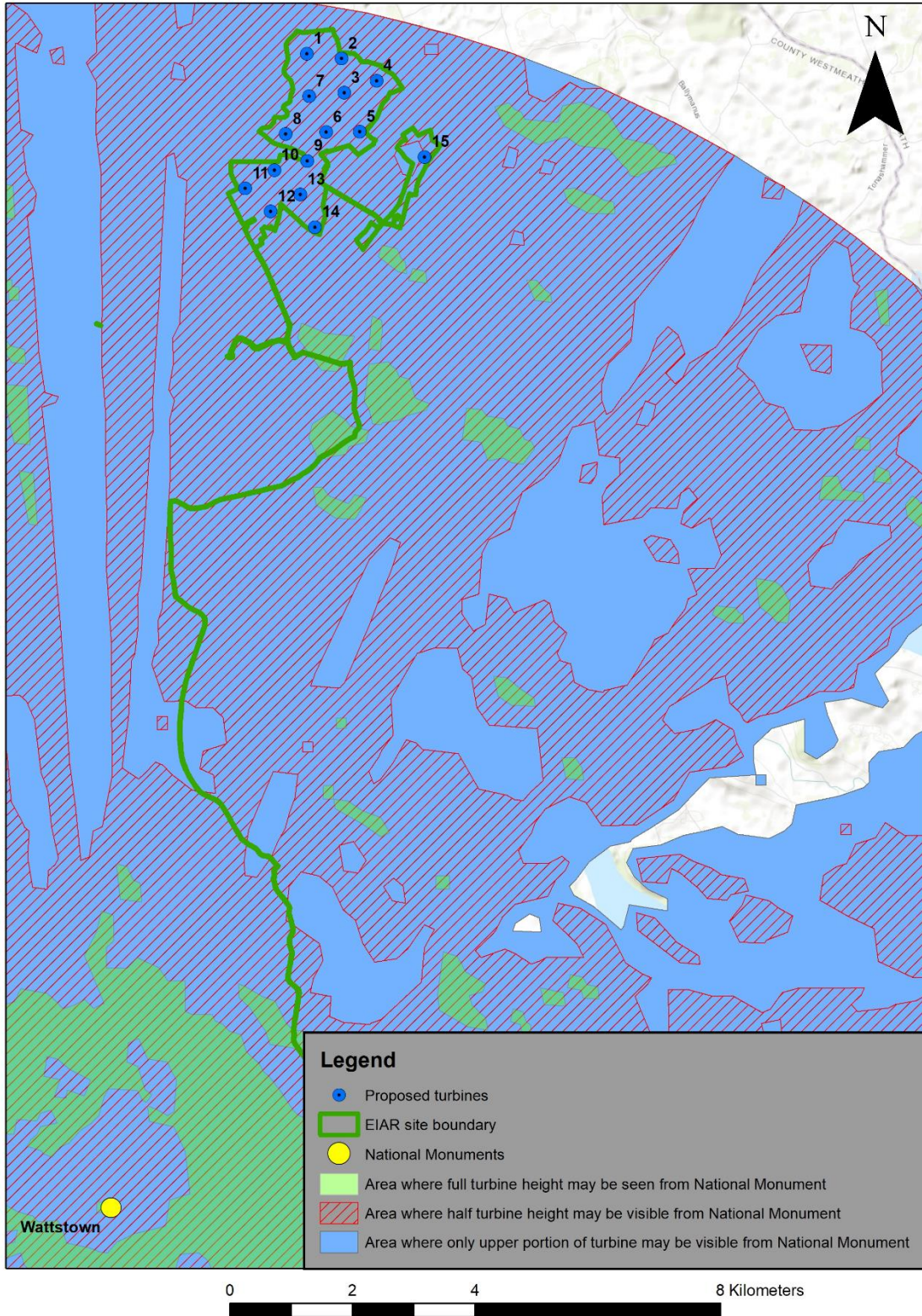


Figure 13-9: Viewshed analysis showing theoretical visibility of proposed turbines from Wattstown, National Monument No. 606.

13.3.1.1.4 Recorded Monuments within the Wind Farm Site

No recorded archaeological monuments are located within the Wind Farm Site. The nearest recorded monuments to the Wind Farm Site are discussed below in Section 13.3.1.1.6. Recorded monuments located along the Grid Connection Route are discussed in Section 13.3.2.1.

13.3.1.1.5 New Potential Archaeology Recorded within the Wind Farm Site

All areas of the Wind Farm Site were examined by means of a walk-over survey. No intrusive investigation was undertaken and the survey was limited to a visual inspection only. Within peatlands the inspection comprised a visual examination of the bog surface and an examination of adjacent drain sections in varying weather conditions.

One new potential archaeological monument was noted within the proposed Wind Farm Site during the walk-over survey of the proposed access road to T15. The possible monument is not indicated on any edition of the OS maps and has not been recorded as a monument by the Archaeological Survey of Ireland. It is located within the proposed Wind Farm Site at the eastern side of same, in the townland of Clonrobert (ITM Mid Pt 642438, 774830). It is situated in rough pasture in the south-east corner of an undulating field c. 875m south of T15 and 74m east of the proposed access road to same. It consists of a raised sub-rectangular area measuring c. 35m NE/SW x c. 24m E/W defined by a bank. At the north and north-east the bank is fairly well defined and appears to have an external fosse. At the west and east the bank is scarped, while at the south the bank is not well defined, possibly due to the proximity of the adjacent field boundary. At the west the scarped bank is c. 1m in height and level with the interior of the monument which slopes down gently from south to north. At the north the internal bank height is c. 0.4m above the interior. There is no definitive evidence for an external fosse at the west, and at the east this area is immediately adjacent to the later field boundary. At the north a linear fosse is apparent outside the bank, however, it extends further to the west outside the limits of the sub-rectangular raised area and it is not clear if it relates directly to this possible monument.



Plate 13-3: Potential new archaeological monument in Clonrobert townland, looking S.



Plate 13-4: As above, looking SW.

No new potential monuments, finds or features were noted within the remainder of the proposed Wind Farm Site, which is largely in peatland, during the walk-over surveys. It should be noted, however, that peatlands are regarded as areas of archaeological potential in terms of the occurrence of both monuments and artefacts within and below the bog. The Grid Connection Route is addressed separately in Section 13.3.2.1.

Irish raised bogs are recognised internationally for their archaeological, palaeo-environmental and cultural significance. More than 4,000 archaeological sites and several hundred artefacts have been identified within Irish raised bogs. The most common type of site which may be encountered is the trackway, or togher, which can be constructed of planks, roundwoods, brushwood, gravel or flagstones. Brushwood platforms, rows of wooden posts and traces of timber huts may also be discovered. Many objects have either been lost or deposited in our bogs over the centuries. These include tools, implements and weapons made from wood, stone or metal; ornaments made from bronze or even gold; wooden vessels, which sometimes contain bog butter; wooden deer traps and wheels and items of clothing made from leather or textile. Occasionally human bodies, or parts of bodies, as well as animal remains are found preserved in the peat.

While the majority of archaeological sites have been identified within industrial peatlands, their number and range demonstrates that all raised bogs can be regarded as areas of significant archaeological potential. In this regard while no new monuments or artefacts were identified during the field inspection for this assessment, the potential still exists for the uncovering of sub-surface remains or artefacts during the construction phase of the project.



Figure 13-10: Recorded monuments in relation to proposed Wind Farm Site – note none within the Wind Farm Site boundary.



Figure 13-11: Proposed road to T15 in relation to newly recorded potential archaeological monument.

13.3.1.1.6 Recorded Monuments within 5km of the Nearest Proposed Turbine

Two hundred and twelve (212) recorded monuments are located within 5km of the nearest proposed turbine. The monuments are labelled from 1-212 for ease of reference on Figure 13-13. Monuments within 5 kilometres of the proposed turbines are included here for purposes of assessing potential visual impacts in the wider landscape setting. The monuments are located in counties Westmeath, Longford and Cavan. The majority of the monuments within 5km of the nearest proposed turbine were not individually visited, however, being located on private lands. Where possible the nearest point along the public roads (adjacent to the sites) were utilised for the assessment in consultation with the Zone of Theoretical Visibility (ZTV) mapping and Landscape and Visual Impact assessment (Chapter 12 of the EIAR), particularly for monuments which may be perceived to have visual dominance or prominence within the landscape.

The 212 monuments are listed in Appendix 13-5 with the distance of the monument to the nearest proposed turbine. The majority of the monuments are located in excess of 1km from the nearest proposed turbine. There are no recorded monuments within the Wind Farm Site boundary, as shown in Figure 13-10. Seven monuments are located within 1km of the nearest proposed turbines, while 14 monuments are located between 1-2km from the nearest proposed turbines. Forty-four (44) monuments are located within 2-3km of the nearest proposed turbines with an additional 56 monuments located between 3-4km of the nearest proposed turbines. The remaining 91 monuments (almost 43%) are situated between 4-5km from the nearest proposed turbines. The density of monuments within 5km is regarded as relatively high, although it should be noted that the majority of same (69%) are located in excess of 3km from the nearest proposed turbines.

Figure 13-12 shows the numbers of monument types within 5km of the proposed turbines which are discussed below generally according to date range and/or site type. Figure 13-13 shows the recorded monuments within 5km of the nearest proposed turbines.

The proposed Grid Connection Route and monuments along same is addressed separately in Section 13.3.2.

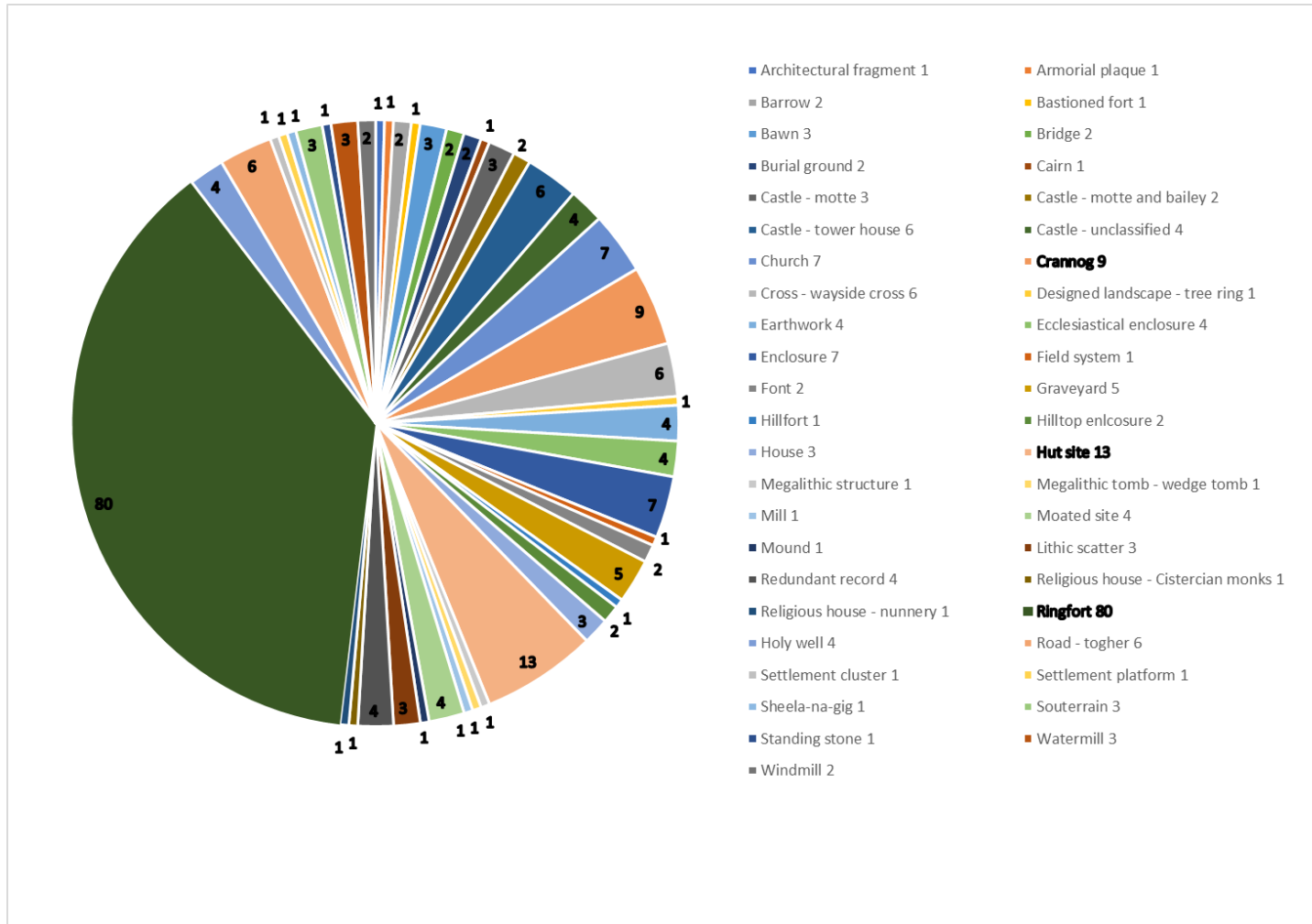


Figure 13-12: Number of monument types within 5km of the nearest proposed turbines.

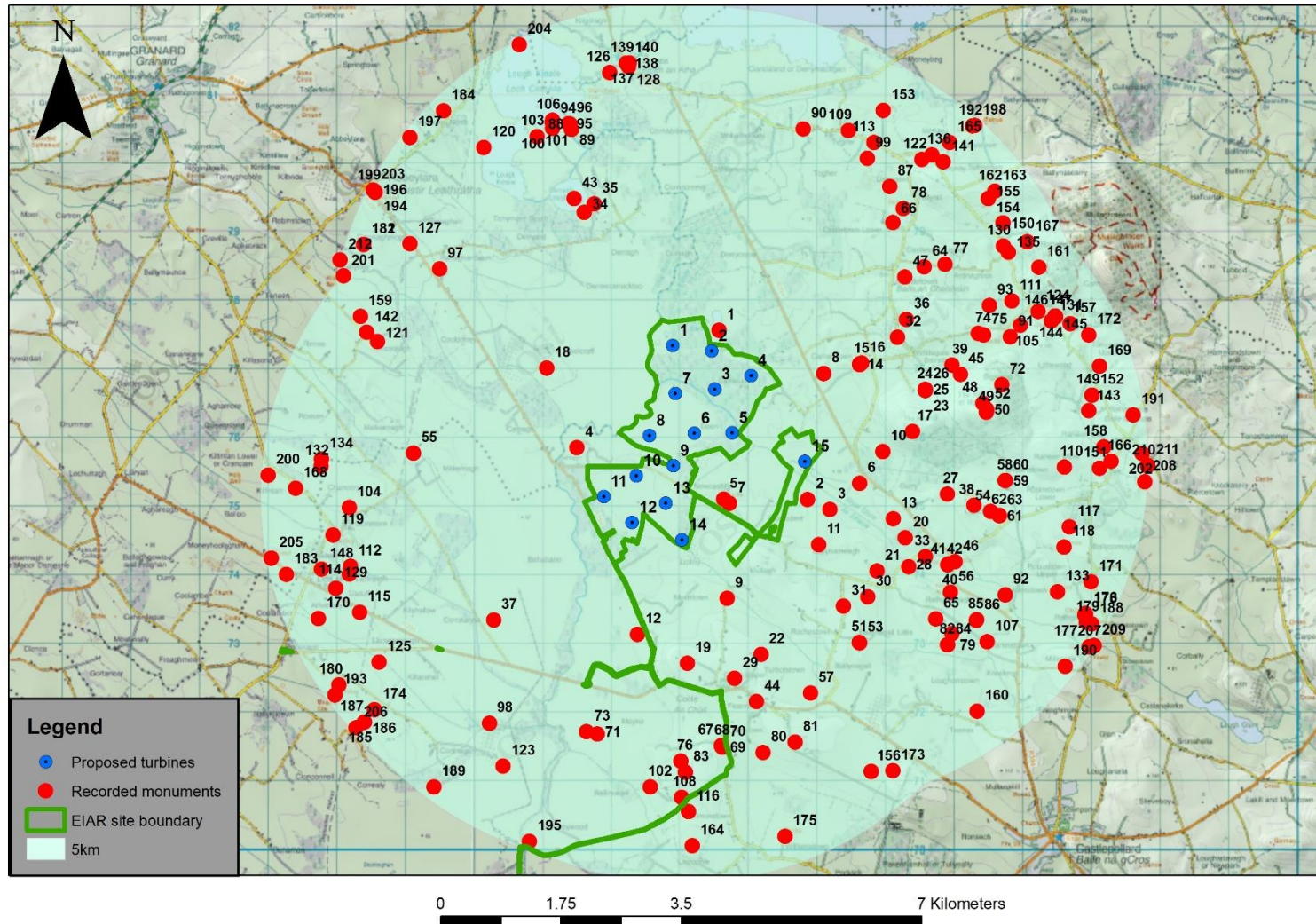


Figure 13-13: Recorded monuments within 5km of the nearest proposed turbine.

The Prehistoric Period

Nineteen monuments within 5km of the nearest proposed turbines date to the prehistoric period and comprise Barrows (2), Cairns (1), Standing Stones (1), Toghers (Road) (6), lithic scatters (3), megalithic tombs (2), a hillfort (1) and hilltop enclosures (2) and a mound (1).

Barrows

One mound barrow (Map ID 205) and a ring barrow (Map ID 171) are located within 5km of the nearest proposed turbines. Mound barrows comprise a circular or oval earthen or earth and stone mound with no external features. Mounds found in association with other barrow types are likely to be mound barrows. They are funerary in nature and contain and/or cover burials. Excavated examples have been dated to the Bronze and Iron Ages (c. 2400 BC - AD 400).

Cairns

One unclassified cairn (Map ID 17) is located within 5km of the nearest proposed turbines and is situated in a commanding position on the Rock of Curry c. 1.6km north-east of T15. It is described as follows on the Historic Environment Viewer:

Situated on a high hill top with extensive rock outcrop and limestone pavements, 20m NE of a steep cliff marked on all editions of the OS 6-inch maps as 'The Rock of Curry'. The Hill of Mael with its hilltop enclosure (WM003-008—) is 1km to the ENE. Slight remains of a poorly preserved circular-shaped round topped cairn (approx. diam. 12-14m; approx. H 0.75-1m) with slight depression off centre to SE. OS trig. station marking OD level of 610 ft. above sea level marked by cairn.

Cairns generally comprise a mound constructed primarily of stone, while unclassified examples cannot be classified as a specific cairn type. These can date to any period from prehistory onwards. The term cairn is derived from the Irish word 'carn' meaning a heap or pile of stones.

Standing Stones

One standing stone (Map ID 130) is located over 4km from the nearest proposed turbine, T4. Standing stones are generally described as a stone which has been deliberately set upright in the ground, usually orientated on a north-east-south-west axis, although other orientations do occur, and varying in height from 0.5m up to 6m. They functioned as prehistoric burial markers, commemorative monuments, indicators of routeways or boundaries and date from the Bronze and Iron Ages (c. 2400 BC - AD 500), with some associated with early medieval ecclesiastical and burial contexts (c. 5th-12th centuries).

Toghers - Roads

Five Class 1 toghers (Map IDs 71, 72, 98, 132 and 134) and one unclassified togher (Map ID 189) are located within 5km of the nearest proposed turbines. Toghers are monument types typically found in peat bogs of the Midlands and comprised a means of crossing or accessing the bog in ancient times. Class 1 toghers are defined as peatland trackways/causeways constructed of wood and intended to traverse a bog. They have a known orientation and in most instances they comprise substantial timber planks and have good structural definition. They may have several phases of construction indicative of long-term use and reuse. Class 1 toghers may date from the Neolithic (c. 4000-2400 BC) to the medieval period (5th-16th centuries AD). Unclassified toghers are peatland trackways/causeways constructed of wood that cannot be classified as a class 1, class 2 or class 3 due to its form or lack of surviving evidence. These may date from the Neolithic (c. 4000-2400 BC) to the medieval period (5th-16th centuries AD). Monuments such as toghers testify to the archaeological potential of peatlands in general and to those surrounding the Proposed Development site.

Mayne Bog Toghers

The nearest togher to the proposed turbines is that located at Mayne bog, over 3km to the south-west of the nearest proposed turbine, T14 and over 500m south of the proposed link road (Map ID 71 and 73). It has been assigned two RMP numbers WM002-038 and WM002-039 which are described below. The

toghers are situated c. 670m and 708m, respectively, to the south of the southernmost end of the proposed link road at Coole townland. The monuments are located within a peat bog and were visually inspected as part of this assessment in August 2016. Since their discovery in 2005 and partial excavation in 2006 significant deterioration of the monuments has occurred. The area of the togher was inspected by archaeologist Maurice F. Hurley in 2013 as part of an EIAR submitted by Westlands Horticulture Ltd (see below). At that time, the timbers at the east side of the trackway were apparent at a depth of 0.4m-0.5m below the bog surface, however, further to the west it was noted by Hurley that the timbers occurred closer to the surface and were scattered along same. When inspected by Tobar Archaeological Services in 2016 the very poorly preserved remains of the togher was visible intermittently on the bog surface over a distance of approximately 360m WNW/ESE. Over this distance the trackway was apparent as small scatters of highly fragmented timbers and no formally laid in situ planks were noted (Plate 13-7). Drain section faces were also examined and very little remains of the trackway were visible therein (Plate 13-6). In this regard, it was concluded that the majority of the surviving remains of the togher comprised the fragmented timber scatters on the bog surface, with the potential for the survival of slightly deeper timbers further to the east where the damaged tops of possible vertical timbers were visible (Plate 13-10).

As outlined above, the recorded monuments comprising the togher at Mayne Bog (WM002-038 and 039) are not located in close proximity to the proposed turbines or any other proposed associated infrastructure. The proposed link road at Coole townland comprises the nearest infrastructure at a distance of 670m-708m to the north of the monuments (Figure 13-14). The link road is also physically separated from Mayne Bog and the monuments therein by a public road. Given the physical separation and distance between the monuments and the proposed link road, no direct impacts to the toghers will occur as a result of the Proposed Development, should it proceed. Indirect (visual) impacts on monuments within 5km of the proposed turbines, including the toghers at Mayne, are dealt with in section 13.4.4 of this chapter.

The following outlines the description of the monuments at the time of their initial discovery and investigation, their subsequent inspection in 2013 by M.F. Hurley and a photographic record of the remains noted by Tobar Archaeological Services during an inspection of the monuments in 2016.

WM002-038 Road – Class 1 togher

This trackway was discovered in 2005 and subsequently partially excavated in 2006 (see below). Discovered in 2005 and investigated in September 2006, it was found to consist of a substantial togher orientated WNW-ESE that ran across industrial peatland from the Inny River on the W to an area of higher ground to the E. The recorded length of the trackway was 657m, but it was seen to extend beyond both limits. The trackway was investigated in a single cutting and 43 sightings of the trackway in drainage ditches were also recorded. The excavation exposed a structure composed of tightly packed transversely-laid oak planks, most of which had been mortised and fixed in place with roundwood pegs. The planks measured up to 4.4m in length, 0.3m in width and 0.06m in thickness. The substructure consisted of light brushwoods, plank fragments and wood chips which were scattered across the surface of the bog. Some of these elements had been arranged into three roughly longitudinal lines of brushwoods. A radio-carbon determination from the superstructure provided a date of 1200–820 bc (Whitaker and Leahy 2007; Whitaker 2009). A second trackway was discovered to the east immediately alongside it (WM002-039). A summary of the excavation is provided below (www.excavations.ie):

2006:2056 - Mayne Bog, Mayne, Westmeath

County: Westmeath

Site name: Mayne Bog, Mayne

Sites and Monuments Record No.: N/A

Licence number: 06E0928

Author: Jane Whitaker, ADS Ltd, Windsor House, 11 Fairview Strand, Dublin 3.

Site type: Plank trackway

In 2005 a plank trackway was reported to the Department of the Environment, Heritage and Local Government (DOEHLG) and was subsequently visited by Conleth Manning and Geraldine Stout. It

was discovered to be a substantial transversely laid plank trackway. In September 2006 a small-scale investigatory excavation was undertaken on behalf of the DOEHLG. The site was orientated north-south, running across industrial peatland from the River Inny on the east to an area of higher ground to the west. The recorded length of the trackway was 657m, but it was seen to extend beyond both recorded limits.

The trackway was investigated in a single cutting and 43 sightings of the trackway in drainage ditches were also recorded. This work was carried out on 11-14 September 2006. Excavation exposed a structure composed of tightly packed transverse oak planks, most of which had been mortised and fixed in place with roundwood pegs. The planks measured up to 4.4m in length, 0.3m in width and 0.06m in thickness. The substructure consisted of light brushwoods, plank fragments and wood chips which were scattered across the surface of the bog. Some of these elements had been arranged into three roughly longitudinal lines of brushwoods. A 14C date of 1200-820 bc was obtained from the superstructure.

Further archaeological and environmental investigations of the plank trackway have been recommended in order to ascertain the structure's full length, to develop a picture of the local environment at the time of its construction and to examine the role it may have played in the landscape'.

WM002-039 Road - Class 1 togher

Discovered in 2006 in the course of excavating a togher in Mayne bog (WM002-038). It was recorded at the same level as the excavated section of the togher and was oriented E-W. It was composed mainly of longitudinally placed brushwoods and varies in width from 1.3m to 2.9m and had an overall length of 383m.

The trackway was also inspected in 2013 by Maurice Hurley as part of the site inspection associated with an EIS/EIAR submitted by Westlands Horticulture Ltd. The author noted the following in relation to the trackway;

'The trackway is now apparent over a length of c. 450m, i.e. recorded in 35 drains. On the eastern side of the bog the timbers occur at a depth of 0.40m-0.50m below the current surface but further to the west the timbers run closer to the surface and in places, especially towards the west are now scattered along the surface of the bog (Attachment 8, Plate 11) currently in production. The timbers appear to be large planks resting on brushwood but in at least one instance a plank appears to be resting on a round-wood rail. The trackway appears to be 4.5m to 6m in width and where apparent the trackway surface is made of planks, some with mortices. This concurs with the evidence recorded in the excavation in 2006'.

Mitigation by archaeological monitoring during peat harvesting activities was recommended and a programme of dendrochronological dating in the 2013 EIS/EIAR.



Plate 13-5: Remnants of Togher WM002-038 in Mayne bog (Recorded and Photographed by Maurice Hurley, 2013, EIS/EIAR).



Plate 13-6: Highly fragmented remains of trackway timbers noted in drain section at west end of togher WM002-038 (Tobar Archaeological Services, August 2016).



Plate 13-7: Scatter of highly fragmented timbers comprising togher WM002-038, looking SE (Tobar Archaeological Services, August 2016).



Plate 13-8: Fragmented timber scatter on bog surface in vicinity of togher WM002-039 (Tobar Archaeological Services, August 2016).



Plate 13-9: Highly fragmented timber scatter in vicinity of togher WM002-039 – note no timbers in drain section in foreground (Tobar Archaeological Services, August 2016).



Plate 13-10: Possible vertical posts at east end of togher WM002-038, looking N (Tobar Archaeological Services, August 2016).



Plate 13-11: General view of fragmented timber scatter at east end of WM002-039, looking SW (Tobar Archaeological Services, August 2016).



Figure 13-14: Proposed link road in relation to Mayne Bog trackway (Map ID 71 and 73).

Lithic Scatters

Three lithic scatters (Map IDs 37, 88 and 103) are recorded within 5km of the nearest proposed turbine, the nearest being 2.4km from T11. They generally comprise a dense concentration of lithics in a spatially discrete area recovered from the surface, e.g. by fieldwalking, rather than from a particular archaeological context. They date from the prehistoric period (c. 8000 BC - AD 400).

Megalithic tombs

Two megalithic tombs are located within 5km of the nearest proposed turbine, c. 2.5-2.8km from T15. One comprises a wedge tomb (Map ID 38), while the other is unclassified (Map ID 54). Wedge tombs consist of a long burial gallery, sometimes with an antechamber or small closed end-chamber. They are generally broader and higher at the front, which invariably faces in a westerly direction. They are roofed by slabs laid directly on the side-walls which often have one or more rows of outer-walling. Evidence from the small number of excavated examples suggests that they were being built between 2,500 and 2,000 BC representing the last phase of megalithic tomb building in Ireland.

Unclassified megalithic tombs are those which cannot be classified as a court tomb, portal tomb, passage tomb or wedge tomb. These may date from the Neolithic to the Bronze Age (c. 4000 - c. 500 BC).

Hillforts and Hilltop Enclosures

One hillfort (Map ID 49) is located c. 2.7km from T15. Hillforts consist of a large enclosed area that is more than 1 hectare in size (diam. c. 110m), and usually encompassing between 2 and 22 hectares (diam. exceeding c. 160m). Hillforts are always located in high upland terrain – on top of, or on the spur or ridge of a hill or mountain, or on hills which, if not high, are very prominent locally. They are defined by an earthen or earth and stone bank/banks or a wall/walls and external fosse/fosses and can be circular, oval or more irregularly shaped in plan if following the contours of a hilltop. In the case of bivallate or multivallate examples, the banks are often widely spaced. They may have been important ceremonial tribal centres and/or permanent or temporary settlements. Some examples date from the Early Neolithic (c. 3600 BC), others from the Middle to Late Bronze Age (c. 1400-500 BC) with examples of reoccupation in the later Iron Age (c. 100-400 AD).

Two hilltop enclosures (Map ID 81 and 149) are located within 5km of the nearest proposed turbine. The former is located c. 3.3km south-east of T14 while the latter is situated c. 4.2km to the east of T15. This monument type consists of an enclosed area less than 2 hectare in size (diam. less than c. 160m) located in upland terrain – on ridges or plateaux, on the lower slopes of hills or mountains, and sometimes encompassing the domed summit of a hill. They are univallate, defined by an earthen bank or wall, sometimes with an external fosse. They are generally considerably larger than ringforts, and may date to any period from prehistory to the late medieval period (i.e. 4000 BC - 1700 AD).

The Early Medieval Period

The Early Medieval period is represented mainly by enclosures and ringforts of which there are 87 and crannógs of which there are nine within 5km of the nearest proposed turbine.

Ringforts and Enclosures

Ringforts and enclosures are the most numerous archaeological monuments in the Irish landscape. They consist of a circular or roughly circular area enclosed by an earthen bank formed by material thrown up from the digging of a concentric ditch on its outside. Ringforts are usually enclosed by a single bank (univallate) while bivallate or trivallate ringforts i.e. those enclosed by double or triple rings of banks are less common. The number of banks and ditches enclosing these monuments are considered to reflect the status of the site, rather than the strengthening of its defences. Sites enclosed by stone-built banks are known as cashels. Archaeological excavation has shown that the majority of ringforts functioned as enclosed farmsteads, built during the Early Christian period (5th – 9th century A.D.). Excavation within the interior of the monuments has traced the remains of circular and rectangular dwelling houses as well as smaller huts probably used to stall animals. The enclosing earthworks would also have protected domestic livestock from natural predators such as wolves and foxes.

Crannógs

Crannógs are settlement sites of the early medieval period which comprised an island, partly or wholly artificial, built up by dumping timber, earth and stones onto a lake or river bed, often revetted with

timber piles or a palisade. Derived from the Irish word 'crannóg'; the Irish word for tree is 'crann' and 'crannóg' principally means a piece of wood or a structure of wood. They date from the 6th to the 17th century AD. The nearest crannóg to the Proposed Development site is located in Clonsura townland, c. 319m to the north-east of T2 (Map ID 1). The monument (WM001-028) is currently inaccessible on foot due to the ground conditions of the area immediately surrounding the crannóg. It is described on the historic environment viewer as follows:

WM001-028

The precise location of this crannóg situated on the S end of the W shoreline of Lough Bane has not been identified. The monument is not visible on any of the OSI aerial photographs of the lake. The shape and size of the lake has been altered by drainage works and is now much smaller than its appearance of the OS 6-inch maps. A grove of trees visible at S end of the lake on reclaimed land may be the remains of the crannóg. In 1980 the site was described as following; 'This small Lough has a small island on the southern part of the western shoreline, which may be a possible crannóg. The only access to the Lough is from the Finnea-Castlepollard road to the east, and involves about a mile walk, the last 200 yards to the Lough's shore is inaccessible due to flooding, and the island itself is surrounded by thick bull-rushes and would be also impenetrable. I can only designate this site as a possible crannóg due to inaccessibility' (ASI Field Report 01/09/1980).

In 2004 this crannóg was described by O'Sullivan (2004, 60-1) as following; 'Located in the middle of Lough Bane, a small bog lake, about 100m from its S shoreline. A large, low, circular mound (approx. dims. 20m N-S x 35m E-W; H 1-2m), located on marshy ground. It appears as a low, grassy island surrounded by bull-rushes, surmounted with some trees and bushes. It appears to have an irregular surface and gradually sloping sides. It is a very isolated site, totally surrounded today by bogs and riverine marshes, all with very low agricultural potential. It is inaccessible today without a boat. However, the site may originally have been accessible by waterways from the Inny River, which flows through the bogs to the E, perhaps indicating its role on a significant routeway'.

Sites with religious or ritual association

Thirty-two monuments with religious or ritual associations are located within 5km of the nearest proposed turbine.

Four ecclesiastical enclosures (Map ID 42, 70, 147 and 177) are located within 5km of the nearest proposed turbine, the nearest (Map ID 42) being located 2.5km to the south-east of T15 in the townland of Lickbla (see description of church, graveyard and ecclesiastical enclosure at Lickbla below).

Ecclesiastical enclosures are defined as a large oval or roughly circular area, usually over 50m in diameter, defined by a bank/banks and external fosse/fosses or drystone wall/walls, enclosing an early medieval church or monastery and its associated areas of domestic and industrial activity. Such monuments date to the early medieval period (5th-12th centuries AD). Ecclesiastical sites comprise a location where a religious foundation existed but where there is insufficient evidence to allow for a more precise classification. These monuments can date from the medieval period (5th-16th centuries AD) up to the 18th century.

Seven churches and five graveyards are located within 5km of the nearest proposed turbine in addition to four holy wells. The nearest church and graveyard (WM003-038— and WM003-038001-) (Map ID 40 and 41) at Lickbla townland are located c. 2.5km from T15 and just under 3km from the proposed borrow pit at the side of the public road. They are described as follows on the historic environment viewer (www.webgis.archaeology.ie/historicenvironment):

'Located on rise of ground in undulating countryside with motte and bailey castle (WM003-037—) 50m to E, watermill 340m to WNW and Lady Well (WM003-098—) 400m to S. Ivy-covered ruins of a poorly preserved nave (int. dims. 11.4m E-W; 5.6m N-S) and chancel (int. dims. 5.7m E-W; 4.5m N-S; wall T 0.86m) church stands on high ground in the centre of an oval shaped graveyard (WM003-038001-). The building was impossible to examine in detail due to the dense cover of ivy and the interior of the nave

was inaccessible due to the dense cover of vegetation. Present remains consist of a nave and chancel church with post medieval entrance gate inserted into E end of S wall of chancel when chancel was converted into private burial area. The walls of the church are built with coursed rubble with base batter visible on E gable of church which survives to full height and contains a single light round-headed window with hollowed recessed spandrels and square hood-moulding above. The punch dressed jambs with glazing grooves of the medieval window do not match the round headed arch of the window which was possibly inserted into the window in the late 16th/ early 17th century. The interior of the chancel which is smaller in width than the nave was converted into a private burial area in the 19th century if not earlier. Inside the chancel in front of the E window there is the headstone of Reverend John Murray, priest of Castlepollard who died in 1805. Only the springing stones of the chancel arch survives on the S side. A low stone wall running across this opening was built in the post-medieval period blocking access from the nave into the chancel. Possible remains of a broken out window in NE corner of chancel.

There are two gaps in the S wall of the nave, the gap located off centre to E may be the remains of a broken out window with the other gap representing the remains of a destroyed doorway. The W wall is covered in ivy and impossible to examine as a result. The N wall of the nave contains a gap which possibly represents the remains of window located directly opposite the gap in the S wall marking the possible doorway into the church. A second broken out gap in the N wall located off centre to E possibly represents the remains of a broken out window. According to Cogan (1867, 400) the parish of Lickbla was dedicated to the Blessed Virgin and formed part of the monastic estate of Fore abbey (WM004-035010-). Cogan described the church ruins of Lickbla as following; ‘the old church measured fifty-five feet seven inches (16.75m) by eighteen feet six-inches (5.6m)’ (ibid.).’

It is also associated with the ecclesiastical enclosure at Lickbla (mentioned above) which is described as follows:

‘Situated on top of rise of ground in undulating countryside with motte and bailey castle (WM003-037-) 50m to E. Medieval church ruins (WM003-038-) stands in centre of graveyard (WM003-038001) which contains memorials of post-medieval date. The curvilinear shape of the graveyard wall along the S and W sides possibly indicates the presence of an Early Christian ecclesiastical enclosure (Swan 1988, 21).’



Plate 13-12: Church and graveyard at Lickbla, looking west.



Plate 13-13: Looking WNW towards proposed wind farm and borrow pit from graveyard at Lickbla.

A church and graveyard, font and associated ecclesiastical enclosure (Map ID 67, 68, 69 and 70) are located at Mayne c. 3km to the south-south-east of T14 and just under 3km from the proposed borrow pit. The church and graveyard and associated font (WM003-083—, WM003-083001- and WM003-083002-) at Mayne are described as follows:

Early 19th century C. of I. church dedicated to St. Nicholas which is no longer in use standing in N quadrant of graveyard (WM003-083002-). This church may have been built on the site of or incorporated fabric from a medieval church recorded in 1837 as located 'on the lands of Mayne stand the ruins of the ancient church' (Lewis 1837, 349). The precise location of this ancient church ruins have not been identified. It was recorded that 'a religious establishment is said to have been founded here by St. Fechan of Fore' (ibid., 348). Medieval church depicted on 17th century Down Survey map of Fore Parish. The hollowed spandrel of a limestone ogee-headed window belonging to the medieval church has been built into the E face of the W boundary wall of the graveyard. A cut stone mullion with diamond-shaped bar holes from a window belonging to the medieval church has been inserted into the W quadrant of graveyard to the SW of the C of I church where it may have been used as a gravemarker. Other cut stone fragments from the medieval church may have been built into the boundary wall of the graveyard or may have been used to mark graves elsewhere in the graveyard.

Church of Ireland building described by the National Inventory of Architectural Heritage as following: 'Freestanding Church of Ireland church, built c.1806, comprising two-bay hall with attached three-stage tower on square-plan to the west with crenellated parapet and corner pinnacles. Shallow sanctuary/chancel to east gable and single-storey vestry to northeast corner. Pitched natural slate roofs with raised limestone verges to nave and cast-iron rainwater goods. Cement rendered walls to hall over projecting stone plinth. Tower constructed of rubble limestone with ashlar limestone detailing, including projecting string courses and an ashlar parapet and ashlar pinnacles with ball finials over. Pointed-arched windows to nave and to chancel with timber Y-tracery, leaded windows and cut-stone sills. Pointed-arched doorcase to south face of tower with chamfered limestone surround, battened timber door, overlight with Gothic tracery and a tooled limestone hoodmoulding over with 'heart-shaped' stops' (www.buildingsofireland.ie). The Topographical Dictionary of Ireland described the present church as a 'neat building in excellent repair, erected in 1806, by aid of a gift of £500 from the Board of First Fruits' (Lewis 1837, 348). A late medieval font (WM003-083001-) located inside the church was not accessible at time of visit.



Plate 13-14: Doorway of church at Mayne.

Additional church and graveyards are located in excess of 4km from the nearest proposed turbine in Abbeylara and Foyran (Map ID 199 and 203). Also in Abbeylara are the ruins of a Cistercian monastery (LF011-036001) (Map ID 194) on the south-eastern outskirts of the village, c. 4.8km north-west of T1. This religious foundation is described as follows:

‘On low-lying ground, c. 40m to the NE of a stream, and within a graveyard (LF011-036004-). Said to have been ‘founded by St Patrick, who appointed St Guasacht its first abbot: it was refounded for monks of the Cistercian order, and dedicated to the Blessed Virgin, in 1205, by Lord Richard Tuit’, who was subsequently interred here in 1211 (Lewis 1837, vol. 1, 3). It is a daughter house of St Mary's abbey (DU018-343—), Dublin (Cal. papal letters, vol. 6, 198). Also known as the monastery of ‘St. Mary's de Lera alias de Grenardo’ (ibid. vol. 9, 29). In 1410 the pope issued an indulgence to penitents who gave ‘alms for the conservation and repair of church and monastery, which monastery has part of its buildings threatening ruin and collapsed’ (ibid., 218). It is not clear if these repairs were undertaken as in 1422 a monk informed the pope that the ‘monastery is threatened with ruin by the negligence of abbot Richard’ (ibid. vol. 7, 233). A second indulgence was issued in 1434 5 (ibid. vol. 8, 505-6). In 1552, after the dissolution of the monasteries, it was leased to Richard Nugent (Henry VIII-Eliz., vol. 1, 368) and in 1612 it was granted to Francis Shane (Cal. pat. rolls Ire., Jas I, 244).

Upstanding remains indicate that the original 13th-century abbey church consisted of a nave divided from the chancel by a central crossing-tower. Transepts extended off the N and S sides of the crossing-tower and a vaulted chamber or small chapel extended off the N side of the chancel. The cloister and conventual range of buildings were located on the S side of the church (Stalley 1987, 241).

Only the N, S and W sides of the crossing-tower (ext. dims. 10.6m N-S; 10.3m E-W; wall T 1m) and the adjoining sections of the N and S walls of the church survive, as well as traces of the transepts and chapel. A later turret was inserted in the angle between the S transept and the S wall of the nave. The crossing-tower, constructed of roughly coursed limestone rubble, originally had four high pointed arches of cut sandstone. In the 15th century the N and S arches were partially infilled to support a stone barrel-vaulted roof springing from N to S (*ibid.*). Possible remains of the original rib vaulting can be seen in the SW angle. Seven of eight wooden beam holes are visible in the N wall, just below the springing of the vault, and these may have supported a floor that was accessed through a square-headed doorway in the centre of the W wall of the tower. The springing of the stone vault over the ground floor of the small chapel is visible on the external face of the N wall of the chancel, as is the scar line of its roof. This structure was accessed from the almost completely destroyed N transept. The turret, housing a spiral stairs, may have replaced an earlier S aisle (*ibid.*) and it cuts across the original S and W arches of the crossing-tower. It is accessed through a broken-out sandstone doorway in the NW angle of the S transept and is lit by a series of square-headed narrow windows with sandstone surrounds. The stairs accessed the floor levels above the crossing-tower. Smaller pointed archways were inserted in the fill of the N and S arches. A tall pointed recessed niche is visible to the W of this opening in the N arch. A poorly preserved carving in relief on the chamfered face of its dressed stone surround may be a 15th-century mason's mark. Directly opposite in the infill of the S arch are the remains of a similar niche. At first-floor level a sheela-na-gig (LF011-036002-) is visible. Scar lines of steeply pitched roofs can still be seen on the external faces W and N walls of the crossing-tower. Narrow square-headed doorways located just below the scar lines gave access to the roof space over the nave and to an inserted floor over the N transept. A second square-headed doorway is visible above the doorway in the N wall and a series of putlog holes are also visible in this wall. In the 16th century the crossing-tower may have been modified again and turned into a fortified dwelling while the rest of the abbey buildings fell into a ruinous condition (*ibid.*). No visible surface trace of the cloister survives. In the field to the S low undulating earthworks appear to represent the grass-covered wall-footings of the S range of conventual buildings. About 25m to the NW of the abbey the wall-footings of an 18th/19th-century church (LF011-036003-) are evident. Numerous architectural fragments, including a dumb-bell pier from the cloister, are visible in the surrounding graveyard. In the field to the E very wide cultivation ridges run diagonally across the field from NE-SW. They may be associated with the abbey. (McNamee 1940a, 11; 1940b, 38; ITA Survey 1944; Hartnett 1954, 181; Leask 1960, vol. 3, 43, 45; O'Donovan 2003, 27).'



Plate 13-15: Religious house of Cistercian monks at Abbeylara, looking east.

Six wayside crosses (Map ID 74, 118, 124, 131, 133 and 179) are also located within 5km of the nearest proposed turbine. Wayside crosses comprise a memorial cross erected by the side of a road or thoroughfare. Such monuments date from the 12th to the 17th century AD. The nearest wayside cross is located in Bigwood townland at a distance of just over 3km from the nearest turbine, T15. It is described as follows:

‘This cross was recorded by the OS in 1873 as ‘part of an old cross, stands near the roadside about 18 inches (0.45m) high the bottom portion is destroyed. I. H. S. cut on face of cross’ (OS Name Book 1873, 33). Drawn by Du Noyer in the 19th century and described in 1928 as ‘The head and base of a plain cross 1ft. 9in. (0.53m) across the arms, having a solid ring 14in. (0.35m) in diameter. It is situated near a house on the south side of a lane leading from near Foyran church (WM001-042—) to Whitegate, and is almost a mile west of the former’ (Crawford 1928, 57, no. 1). Described in 1980 as ‘the cross is in a fragmentary condition, only the head (H 0.51m; Wth 0.5m) of the cross and its base remain. The cross has a solid ring head and short arms (L 0.1m; H 0.15m) and a slightly longer top (H 0.12m). The shaft has broken off just below the ring and is now missing. The ring and cross are well made and have bevelled edges. One face has suffered some damage around the edges and pieces of the ends of the arms are broken off. There is no sign of any carving or decoration on the cross. The base is a subrectangular stone (0.52m x 0.44m) with a rectangular socket (0.19m x 0.31m) cut into its flat upper surface. The socket is quite shallow and it is much larger than the cross, the shaft might have tapered from the base to the head. The socket is placed in the N side of a small low mound of earth and stones at the foot of a small thorn tree. This is situated in a wide roadside bank and on the S side of the modern roadway just NW of the castle site (WM001-036—) in a small valley W of Foyran Church (WM001-042—)’ (SMR file). A castle (WM001-036—) is only 80m to the SE of the wayside cross.’

While it is described as being extant in the description dating to the 1980s, no trace of the monument was apparent when visited in March 2017 by Tobar Archaeological Services, possibly due to overgrowth.

A burial ground at Carlanstown, c. 1km from the nearest proposed turbine, T4, was discovered during clearing operations in advance of quarrying in the late 1960s. The human remains were attributed

locally to a battle which is believed to have taken place on the hill. There is no above-ground remains of this site which was subsequently investigated by the National Museum of Ireland (NMI). It is described as follows:

‘The files of the National Museum of Ireland records that in May 1969 human remains were discovered during clearing operations in advance of quarrying at a sandpit at Carlanstown, Finnea, Co. Westmeath (Cahill & Sikora 2011, vol. 2, 519-20). The remains were found on top of a sand hill which stood c. 30m high, at a depth of approximately 0.3m below the surface. The hill is known locally as Caltragh, and there was apparently a local tradition of a battle at the place. The site was reported to the Gardaí at Finnea, who informed the NMI. An investigation was carried out by Dr Joseph Raftery. The burials appeared to extend over the whole hill. It was not possible to ascertain the disposition of any of the skeletons as most of them had been disturbed prior to Raftery's visit. According to local information human remains had been found at the site for over 50 years, and 45-50 years ago a plain gold finger ring was found with one burial. No artefacts were noticed on this occasion, and the human remains were not acquired. In 1971 a report was received stating that further remains had been discovered at the site, but the Gardaí were instructed to rebury the remains locally (NMI File).’

Four holy wells (Map ID 50, 56, 105 and 157) are located within 5km of the nearest proposed turbine. Holy wells typically consist of a well or spring, though in some unusual cases a natural rock basin, which usually bears a saint's name and is often reputed to possess miraculous healing properties. They may have their origins in prehistory but are associated with devotions from the medieval period (5th-16th centuries AD) onwards. The nearest holy well is that at Bigwood (Map ID 50) which is situated 2.7km from T15.

Medieval Period (Secular)

Monuments dating to the medieval period which had a secular function are represented by castles (Map ID 22, 64, 75 and 137), tower houses (Map ID 5, 90, 160, 175, 198 and 207), bawns (Map ID 16, 153 and 192) and mottes (Map ID 4, 46, 78, 180 and 188) (18), four moated sites (Map ID 2, 108, 166 and 193), a bridge (Map ID 138/139), three watermills (Map ID 33, 92 and 135) and a Sheela-na-gig (Map ID 196). Mottes, mottes and baileys and moated sites were all constructed by the Anglo-Normans in the late 12th-early 13th century. A motte and bailey comprises an early form of castle consisting of a flat-topped, steep-sided, earthen mound supporting a wooden tower, with an associated courtyard or bailey, which is often raised and enclosed by a bank and fosse. Sometimes mottes occur without any surviving evidence for the bailey and three such monuments are located within 5km of the nearest proposed turbine. The nearest motte (WM002-003—) (Map ID 4) is situated in Camagh townland c. 812m from the nearest turbine T11 and is described as follows:

‘Situated on natural rise of reclaimed pasture-land with wide views of the surrounding countryside. Inny River 170m to W, motte located on edge of floodplains of the nearby river. Poorly drained land and bog to the S. Heavily overgrown flat-topped steep-sided earthen mound (H c. 6m) with slight suggestion of a fosse at the base of the mound. No bailey visible. There are a series of banks and slight ditches about the foot of the motte. There are natural hollows to the SE and SW which appear to have contained water at one time. The archaeological significance of these features is uncertain, they could have functioned as possible fish-ponds.

Fredengren et al. (2010, 120) recorded that ‘The motte at Doon originally possessed a small bailey, which was destroyed in the late twentieth century, but a probable fish-pond beside it survives, suggesting that the site was the caput of a knight of some status’.



Plate 13-16: Motte WM002-003 from public road to south.

An example of a motte and bailey (WM003-037—) within 5km of the nearest proposed turbine is located at Rathcreevagh townland, c. 2.6km from the nearest turbine, T15 and c. 3km from the proposed borrow pit. It is described as follows:

‘Situated on rise of ground on poorly drained marshy land overlooking River Glore immediately to N and E. Lickbla church (WM003-038—) and graveyard (WM003-038001-) 50m to W, watermill (WM003-103—) 415m to WNW, Lady Well (WM003-098—) 410m to S. Present remains consist of a high steep-sided flat-topped mound the base of which is enclosed by a deep wide fosse and large external earthen bank present from E-S-W-WNW. An elevated crescent shaped bailey area is present from NW-N-E. There are the remains of an external fosse and remains of a small outer bank in the SE sector. Possible entrance gap at WNW where the enclosing bank runs onto the crescent shaped bailey area.’



Plate 13-17: Motte and bailey (WM003-037) at Rathcreevagh, looking ESE from adjacent public road.

The nearest moated site (WM003-004) (Map ID 2) is situated in the townland of Ballynameagh, c. 557m to the south of T15. It is described on the Historic Environment Viewer as follows:

Situated on a low natural rise of ground surrounded by wet poorly drained land with stream 80m to W. Rock of Curry and the Hill of Mael visible 1.8km and 2.8km to the ENE respectively. Cropmark of levelled enclosure visible on Digital Globe aerial photographs taken November 2011. Old cultivation ridges roughly aligned E-W can be seen running across surface of levelled monument. Depicted as a roughly rectangular-shaped enclosure on 1837 ed. OS 6-inch map. An OPW report from 1966 described the monument as a 'rectangular enclosure with slight bank and old thorn trees on bank. An oldish field or garden on edge of long (alt 200-300 ft) with shelter belt of thorns. Not ancient in appearance but not now used as a separate field' (OPW Field Report 08/12/1966). Today there are no surface remains visible of this levelled monument.

The nearest tower house to the proposed turbines is that at Newcastle townland (Map ID 5) which is situated 848m from the nearest turbine T13 and c. 600m from the proposed borrow pit. It is described on the Historic Environment Viewer as follows:

'Situated on top of a low natural ridge running roughly E-W on the demesne lands of Newcastle House 130m to NNW. There is an old quarry depression just N of the tower house. A series of linear cropmarks can be seen in the fields to the S and E of the tower house which appear to be associated with the landscaped demesne of Newcastle House. Tower House type castle depicted standing on low hillock on the 1657 Down Survey map of Fore barony (NLI, MS 723-4). The terrier of the Down Survey map of Lickbla parish lists Edward Nugent, described as an 'Irish Papist' and the owner of the lands and castle of Newcastle (ibid.). A roughly square-shaped four-storey lobby-entrance tower house (ext. dims. 9.1m x 8.3m E-W; wall T 0.74m-1.8m; approx. H 10m) composed of limestone rubble, with pronounced base-batter (H 2.5m) and dressed quoins. The main entrance consists of a flat headed opening (H 1.8m) now missing original stone surround located off centre to E in NE wall. The main entrance leads into a lobby area protected by overhead murder hole. A pointed doorway in this lobby leads into the main ground floor chamber which is lit by four narrow slit windows. The window in the SW wall is now blocked up. Corbels and beam holes indicate that there was wooden floor above at first

floor level. A mural stair, now partly broken through the SE wall gives access to the first & second floors. At first floor level a rectangular flat headed doorway gives access to the main chamber midway along the SE wall. The first floor chamber has two slit opes in the NE wall, one over the lobby area gives access to the murder hole which is in the floor of the window embrasure. There are single slit opes in the NW & SW walls, that in the SW wall is blocked. Angle embrasures at the N & W corners lead to narrow slits which emerge at the extremities of the NW wall. This floor is covered by a stone barrel vaulted ceiling part of which has collapsed. The second floor chamber has narrow windows in the NE, NW & SW walls. There is a second narrow window near the stair in the SW wall. In the E corner there is a broken out doorway giving access to a tiny room above the stair. A broken opening midway along the SE wall leads to a steep stairs giving access to the 3rd floor. A spiral stairs continued in the S corner gives access to the roof & probably an attic floor. The third floor has narrow slit windows in the NE, NW & SW walls & an angle slit now blocked in the W corner. A tiny room in the E corner at third floor level has a corbelled roof & must have been entered via narrow steep steps or a ladder from the entrance off the stair at 2nd floor level. Narrow slits in the E end of the N wall & broken openings in the SE wall gave light to this tiny room. A slit ope located high in the E end of the NE wall indicates another small room above these at 4th floor or attic level. There is no access to this now. There are no remains of fireplaces in the tower house. On the external face of the castle at the W end of the NW wall at second floor level there is a stone head with a flat face now very weathered. There are slight traces of attached structures on the NW side as shown on the 1911 OS 25-inch map which shows a wall running off the W angle of the castle. Depicted as free-standing tower house with no evidence for a bawn wall on the 1837 ed. OS 6-inch map. Set into the E end of ridge on which the castle is sited is a circular masonry structure which may have been an ice house. Nearby Newcastle House described by the National Inventory of Architectural Heritage as a 'Detached three-bay single-storey house over a raised basement house, built c.1830. Hipped natural slate roof with a single central ashlar limestone chimneystack, aligned parallel to roof ridge, having terracotta chimney pots over' (www.buildingsofireland.ie).'



Plate 13-18: Tower house WM003-001) at Newcastle townland, looking north from public road.

A bridge at Finnea/Kilgolagh (WM001-052/CV041-022) (Map ID 138/139) is located on the Cavan-Westmeath border and therefore has been assigned two RMP numbers. It is situated at a distance of

over 4km from the nearest proposed turbine T1. The upstanding remains of this structure comprise both the original medieval bridge and later post-medieval additions. It is described as follows:

‘Six arches of the nine-arched medieval bridge of Finnea survives intact (Manning 1997, 29). The present road bridge (Wth 5.53m) which crosses the Inny River connecting Westmeath to Cavan was rebuilt in 1877 by the Upper Inny Drainage Board under the supervision of engineer, James Dillon. A date stone commemorating this rebuild is visible in the E face of the W parapet wall. Under this rebuilding phase the middle three arches of the medieval bridge were replaced by a wide single central arch of rusticated stonework spanning the river channel. The three arches on the N side of the present river channel stand on dry ground in Co. Cavan, while the S arches also now on dry ground are in Co. Westmeath. In the 17th or early 18th century the medieval bridge was widened on its E side (Wth 2.05m), the straight joint of this addition is visible on the underside of the medieval arches. ‘Finnag Bridg’ is depicted on the 1657 Down Survey map of Fore Barony (NLI, MS 723-4). On this map a ruinous tower or castle (WM001-001—) is depicted standing in the field to the N of the road crossing the bridge and a cluster of dwellings stand either side of this roadway representing the medieval village or settlement of Finnea (WM001-059—). The surviving medieval arches (2.75m apart) are round headed (L 4.3m; Wth 2.48m) the undersides of which bear the impressions of wicker centering along with some of the projecting corbels which supported the wicker framing of the arch (pers. comm. Conleth Manning). The medieval road crossing the Inny River measured approximately 1.48m or 4ft 10 inches wide.

A 17th century armorial plaque (WM001-052001-) showing the arms of the first Earls of Westmeath is incorporated into the W face of the E parapet wall (H 1.27m; T 0.59m) of the 19th century section of the bridge. In his memoirs, the Earl of Castlehaven refers to a skirmish at this bridge in 1644 and to the fact that it was built of stone and had a castle (WM001-001—) at its southern end (Castlehaven 1815, 70). In 1644 the Earl of Castlehaven wrote that he commanded ‘a colonel with 5 or 600 foot, and 100 horse, to defend the bridge of Fienough (WM001-052—), that I might not be pursued; it was of stone, and a castle on our end. I sent with him shovels, pickaxes and spades, with plenty of ammunition’(ibid.) (Fredengren et al. 2010, 123, Pl. 3.28).’



Plate 13-19: Bridge WM001-052/CV041-022 at Finnea, looking NE.

Three watermills (Map ID 33, 92 and 135) are located within 5km of the proposed turbines. The nearest of these is situated in Lickbla townland c. 2.2km from T15. Here the medieval mill (WM003-103) has been succeeded by a post-medieval mill. It is described as follows:

‘The precise location of a medieval watermill in the townland of Lickbla has not been identified. A 1558 land grant to Sir Richard Nugent, Baron of Delvin included ‘a water-mill in Likebla’ (Morrin 1861, 395). There appears to have been two mills located in Lickbla. In 1647 a fine of £15 was levied on a group of mills in Co. Westmeath to pay Captain Ignatius Nugent of the Irish Confederate Army. The sum of £3 5s 4d. was levied on ‘Lady of Glancoe, or her tenants, two mills in Lickbla’ (Cal. S.P. Ire., 624). The 19th century corn mills beside Lickbla House may have been located on or close to the site of the medieval mill.’

Post-Medieval Period

Several recorded monuments dating to the post-medieval period are located within 5km of the proposed turbines and include a designed landscape feature (1) (Map ID 20), bastioned fort (1) (Map ID 126), two windmills (Map ID 19 and 123) and three houses (Map ID 15, 51 and 182). The nearest of these monuments comprises a fortified house (Map ID 15) at Carlanstown townland which is situated c. 1.5km from the nearest proposed turbine, T4. The remains at Carlanstown are described on the Historic Environment Viewer as follows:

‘Carlanstown House and its adjoining farmyard are enclosed by the bawn wall of Carlanstown Castle. In 1641 ‘Carolanstowne’ Castle was the property of Robert Nugent who was listed as an ‘Irish Papist’ in the 1657 Down Survey map of Lickbla parish (NLL, MS, 723-4). The castle is depicted as a large castellated structure on the 1657 Down Survey map of Fore Barony (ibid.). In 1864 George Victor Du Noyer sketched the bawn wall of Carlanstown Castle and drew up plans and elevation drawings of the angle towers (George Victor Du Noyer, “W face of Carlanstown Castle Co. W Meath. Sheet 1/3,” Royal Society of Antiquaries of Ireland, accessed November 20, 2017, <http://rsai.locloudhosting.net/items/show/23489>). The collection of Du Noyer drawings of this castle are available online on the Royal Society of Antiquaries of Ireland website (<https://rsai.locloudhosting.net/collections/show/2>). Described in 1826 as ‘the ruins of Carlanstown, formerly the mansion of a distinguished branch of the Nugent family. Sir Thomas Nugent, founder of this distinguished line of his family, and the first of the Nugents seated at Carlanstown, was second and youngest son of Richard, seventh baron of Delvin, and brother of Christopher, eighth baron of Delvin, progenitor of the Marquess of Westmeath’ (Brewer 1826, 234). In 1837 the construction of Carlanstown House was described as a ‘good farm-house has been built by the Duke of Buckingham on the site of the old mansion’ (Lewis 1837). The 1813 date-stone now built into the S wall of the stables may be related to this building phase. Present remains consist of a square shaped bawn (WM001-031—) enclosed by stone wall originally defended by four circular-shaped corner towers of which two now survive upstanding at NW and NE angles. A square-headed doorway on W side of bawn with scroll brackets (WM001-031001-) which may date from the late 17th or early 18th century and may have come from Carlanstown Castle. A tall rectangular chimney stack projecting externally from the W wall of the bawn close to a semi-circular shaped tower at S end of W wall probably marks the location of the 17th century house which stood in the SW quadrant of the bawn. The chimney stack served a ground floor fireplace now obscured by farm buildings. The protruding chimney stack is clearly shown on Du Noyer's sketch of the wall dating from 1864 (George Victor Du Noyer, “W face of Carlanstown Castle Co. W Meath. Sheet 1/3,” Royal Society of Antiquaries of Ireland, accessed November 20, 2017, <http://rsai.locloudhosting.net/items/show/23489>). To the N of the chimney stack the quoins of the NW angle of the house or castle may be seen rising above the top of the bawn wall immediately adjacent to a corrugated roofed farm outhouse. The semi-circular shaped tower at S end of W wall of bawn may have formed the SW angle of the fortified house and there may have been a gateway or entrance into the bawn immediately S of this semi-circular shaped tower. A horizontal gun loop in the ground floor of the semi-circular-shaped tower runs across into the adjoining section of bawn wall running S off tower which indicates that the bawn wall ran further S from the semi-circular shaped tower. Post-1700 farm buildings and farmyard occupies the S half of the bawn area. Carlanstown House stands along the line

of the destroyed S wall of the bawn. Carlanstown House was described by the National Inventory of Architectural Heritage as a 'Detached three-bay two-storey house, built c.1800, with projecting flat-roofed single-bay single-storey porch to centre of front façade (south). Possibly incorporating the fabric of an earlier house. Later two-storey extension adjoining to the east. This structure probably replaced an earlier house or castle (WM001-031001-) on the same site and forms part of an impressive group of structures with the extensive remains of a sixteenth/seventeenth century fortified bawn to the rear (north) of the present structure (www.buildingsofireland.ie).

The windmill (WM003-053) (Map ID 19) in Coole townland, is situated over 1.7km from the nearest turbine, T14. There is no longer any above-ground remains of this structure which was levelled in the 1980s. It is described as follows:

'Described in the 1970s as following 'The remains of a circular stone built windmill (int. diam. 4.5m; wall T 0.7m; H c. 5m) ivy covered on top. Large gap on NE (door ope) with opposite doorway on SW. Another doorway (H 2m; W 1.1m) nearly blocked up on NW and on SE. Window gaps on W and S. Joist holes inside. There is a slight tapering to walls both in the thickness and in the outside elevation. No earthwork surrounding it. Built on stone plinth. Sited on top of ridge with excellent view to NNE. A second site report described the structure as a ruined windmill of circular plan with four doorway openings, two of which are now blocked up. In 1980 it was recorded that this windmill had 'been levelled and no trace of it can now be seen. The site appears to be occupied by a relatively modern farm building built of stone and some brick with a galvanised roof. The site is on the summit of a long high natural ridge with extensive views (SMR File 04/03/1980).'

Windmills such as that at Coole comprise tower-like structures of stone, wood or brick with a wooden cap and sails which are driven around by the wind producing power to work the internal machinery. They date from the late medieval period (c. 1400 to the 16th century AD) onwards.

Miscellaneous Monuments

Other monument types are present within 5km of the nearest proposed turbine which can be multi-period (earthworks) or are no longer considered to be monuments (redundant records).

Four earthworks are located within 5km of the proposed turbines. These monuments comprise anomalous earthen structures, usually raised and occurring in a variety of shapes and sizes, that on field inspection was found to possess no diagnostic features which would allow classification within another monument category. They may date to any period from prehistory onwards. The nearest earthwork (WM003-005) is located in Carlanstown townland at a distance of 1.1km from T15 and has no above-ground remains.

Four redundant records are located within 5km of the proposed turbines. Records classed as 'Redundant record' are those that fulfil one or more of the following criteria: (1) a record identifying a location where, according to documentary sources (e.g., published reference, cartographic sources) or personal communication, a monument might have existed, but which, on inspection, was found not to be an archaeological monument (e.g. a natural feature); (2) a record classified using a term which is now obsolete (e.g. ecclesiastical remains); (3) a record created in error, a duplicate record or one which has no supporting evidence recorded on file or in the database; (4) an archaeological object (i.e. an artefact), e.g. a quernstone; (5) a record entered as a 'Shipwreck'. Shipwrecks are recorded in a separate database.

The nearest redundant record (LF011-049) is situated at Derragh Lough, c. 2.3km from the nearest proposed turbine, T1. It was previously classified as a crannóg but on inspection was found to consist of a natural rise.

Thirteen huts sites are also located within 5km of the nearest proposed turbine (Map ID 23, 26, 59, 61, 62, 82, 85, 152, 155, 163, 186, 187 and 211). Hut sites comprise a structure, usually discernible as a low, stone foundation or earthen bank enclosing a circular, oval or sub-rectangular area, generally less than

5m in maximum dimension. The remains are generally too insubstantial to classify as a house but the majority probably functioned as dwellings. They may date to any period from prehistory (c. 8000 BC - AD 400) to the medieval period (5th-16th centuries AD). The nearest of these monuments is that at Carlanstown (Map ID 23) which is 2km from T15.

13.3.1.1.7 **Archaeological Investigations undertaken within or adjacent to the proposed Wind Farm Site boundary**

Archaeological monitoring (under licence) of site investigation boreholes was carried out for the permitted Coole Wind Farm in June and July 2020. No archaeological finds, features or deposits were noted during this work (O'Donoghue and McCarthy, 2000).

The database of excavations undertaken in Ireland (www.excavations.ie) was checked for those carried out in close proximity to the proposed turbines, borrow pit and link road. No such excavations were carried out within the proposed Wind Farm Site, including the area of the proposed borrow pit, substation, or the proposed link road. The nearest excavation was that carried out on the Togher WM002-038 at Mayne bog which is described above in section 0.0.-401125664.35.126766.

Approximately 1km to the east of T4 an excavation took place on human remains found during quarry of a sand pit in Carlanstown the late 1960s. The site of the burials was subsequently added to the SMR as WM001-053 – Burial ground (Map ID 8). The entry for the excavation in the database is provided below. In Coole townland two entries relating to the same test excavation carried out at St Josephs hospital, Coole are recorded as follows:

2005:1530 - ST JOSEPH'S HOSPITAL, COOLE, Westmeath
County: Westmeath
Site name: ST JOSEPH'S HOSPITAL, COOLE
Sites and Monuments Record No.: SMR 3:57
Licence number: 05E1398
Author: Ciara McCarthy, for Arch-Tech Ltd, 32 Fitzwilliam Place, Dublin 2.
Site type: Testing
ITM: E 641601m, N 772440m

Seven test-trenches were excavated at the site of St Joseph's Hospital, Coole, Co. Westmeath. The site of an earthwork lies partly within the eastern portion of the Proposed Development. Five trenches were excavated in two fields in the west of the development. No features or artefacts of archaeological significance were identified. It was the intention to excavate six trenches in the vicinity of the earthwork. However, a large portion of the area was unavailable for testing due to the amount of building rubble, foundations and services located there. Two trenches were excavated in the south end. Modern disturbance in the form of large pits of rubbish and frequent services was noted. No features or artefacts of archaeological significance were identified. It is likely that the earthwork has been considerably disturbed by the construction of the hospital.

Carlanstown, Co. Westmeath, Westmeath
NMI Burial Excavation Records
County: Westmeath Site name: Carlanstown, Co. Westmeath
Sites and Monuments Record No.: SMR WM001-053 Licence number: —
Author: —
Site type: Graves of indeterminate date
ITM: E 642609m, N 776512m

In May 1969 human remains were discovered during clearing operations in advance of quarrying at a sandpit at Carlanstown, Finnea, Co. Westmeath.²⁸² The remains were found on top of a sandhill that stood c. 30m high, at a depth of approximately 0.3m below the surface. The hill is known locally as Caltragh, and there was apparently a local tradition of a battle at the place. The site was reported to the Gardaí at Finnea, who informed the NMI. An investigation was carried out by Dr Joseph Raftery. The

burials appeared to extend over the whole hill. It was not possible to ascertain the disposition of any of the skeletons, as most of them had been disturbed prior to Raftery's visit. According to local information, human remains had been found at the site for over 50 years, and 45–50 years ago a plain gold finger-ring was found with one burial. No artefacts were noticed on this occasion, and the human remains were not acquired. In 1971 a report was received stating that further remains had been discovered at the site, but the Gardaí were instructed to rebury them locally.

282. Parish of Lickbla, barony of Fore. SMR WM001-053—.

13.3.1.1.8 **Topographical Files of the National Museum of Ireland**

The topographical files of the National Museum were consulted on the 21st and 22nd March 2016 and again in February 2021 to assess the artefact bearing potential of the bog and Proposed Development area. All finds registered in the National Museum are detailed and described in Appendix 13-2. While relatively few finds are recorded from the townlands in the proposed Wind Farm Site in which the proposed turbines, substation and link road are located, a significant number of finds are recorded from the nearby townland of Mayne and demonstrates the archaeological potential of the bog.

13.3.1.1.9 **Archaeological Landscapes**

The Westmeath County Development Plan (2014-2020) was consulted for any designated archaeological landscapes within the county. No such landscapes are recorded therein. It is an objective of the CDP, however, 'to designate Fore, Kilbixy, Ardnurcher and the Hill of Uisneach as Archaeological Landscape Areas, in recognition of their numerous archaeological monuments and national heritage significance' (O-AH6, pg. 105).

The Draft Westmeath County Development Plan (2021-2027) was also consulted for this assessment. The Hill of Uisneach has now become a designated Character area as follows:

Extract from the CDP –

'13.15 Character Area 9 Hill of Uisneach

The Hill of Uisneach, a nationally significant archaeological landscape, is located 14.5 Kilometres west of Mullingar, north of the Mullingar to Ballymore Road. It has a central place, historically, geographically and metaphorically in the annals of Ireland and is internationally considered to be an important cultural landscape.

The Character Area includes the area surrounding the hill, from Killare and south to include the cultural landscape of features including the deserted 'famine village' and also incorporating a number of recorded monuments and the zone of archaeological potential around Uisneach. The land in the vicinity is in agricultural use and land cover on, and surrounding the Hill is predominantly that of pastureland with species rich hedges acting as field boundaries.

Traditionally Uisneach was the epicentre of Ireland where the five provinces met and legend has it that Ireland was divided from this point in ancient times. The large stone on the side of the hill is known as The Stone of Divisions or 'Ail na Mireann'. This stone is said to be at the exact centre of Ireland and the boundary lines of the provinces were said to meet here.

In recognition of the exceptional archaeological and cultural significance of the Hill of Uisneach, the site has been designated as a High Amenity Area. The elevation of the Hill of Uisneach confers both panoramic views, as well as visual prominence, which ensures that the site and its immediate context is very sensitive to adverse visual impacts. The Council recognise the significance and sensitivity of the Hill of Uisneach and given that the site is listed on the tentative list for UNESCO status since 2010, further protection has been afforded to the site by designating the area as a High Amenity Area with views from the perimeter skyline ridge identified as a Protected Panoramic View.

The extent of the High Amenity Area at the Hill of Uisneach is highlighted in turquoise above and contains Core and Buffer Areas with associated protective policies. From a landscape perspective, core and buffer areas are identified as locations where any development is likely to significantly alter the appearance and context of monuments [Core] and areas where developments should be carefully scrutinised to anticipate and avoid significant changes to the landscape context of the monuments or to the inter-relationship between the core area and relevant monuments in the surrounding landscape.

An Inner Core High Amenity Area [yellow shaded area] comprises the interior of the hilltop plateau that is visually isolated from the surrounding countryside. An Outer Core High Amenity Area [olive shaded area] that contains the majority of monuments can be readily identified by observing the field boundaries that enclose areas above the 160m contour. A High Amenity Buffer Area [turquoise shaded area] can be identified within the adjoining townland boundaries as follows: Ushnagh Hill, Mweelra, Rathnew and Kellybrook

The landscape policies relating to the character areas are presented in Appendix 13-4. The designated character area measures 27km from the nearest proposed turbine T14.

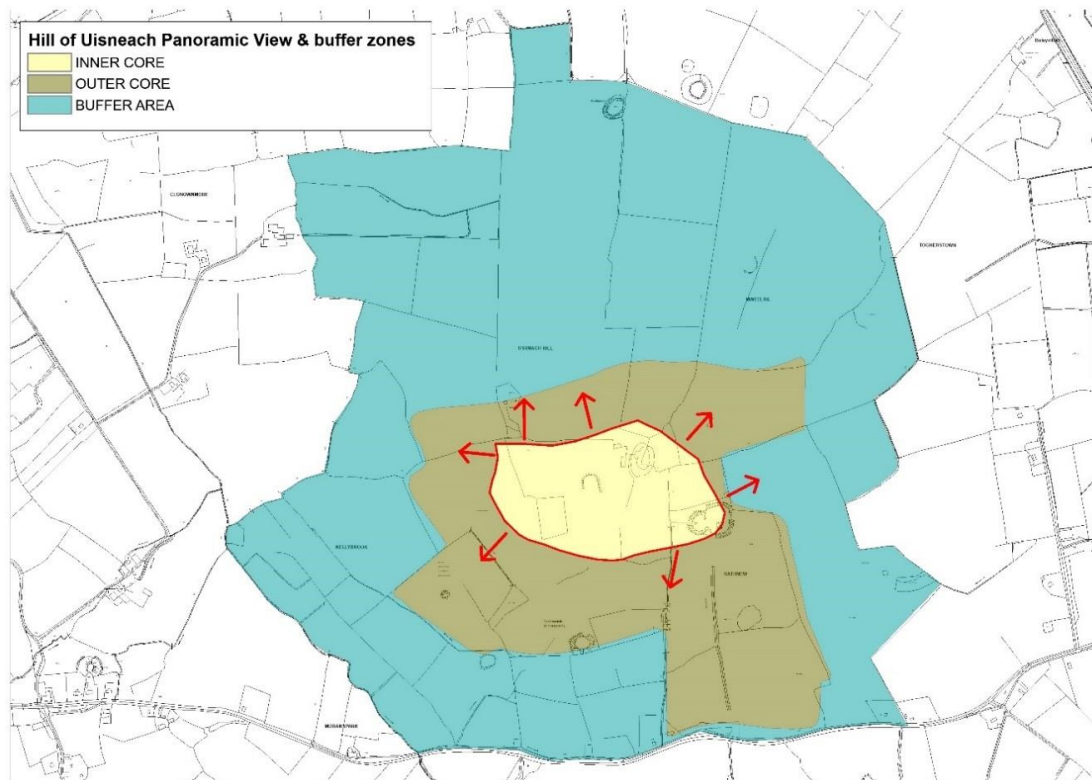


Figure 13-15: Hill of Uisneach panoramic view and visual buffer zones.

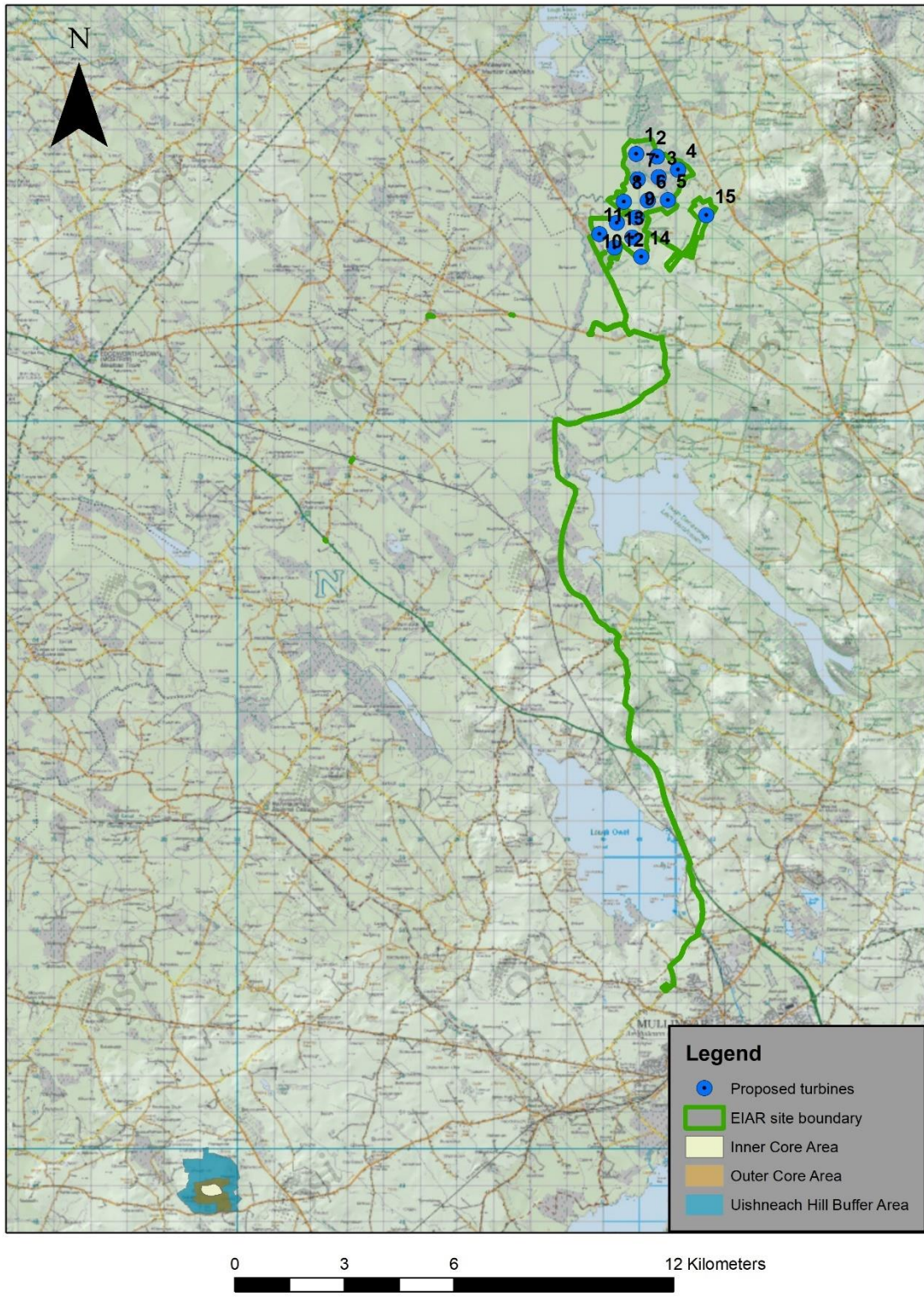


Figure 13-16: Proposed turbines in relation to Uisneach Hill buffer zones.

13.3.1.2 Architectural and Cultural Heritage

For the purposes of this report, architectural heritage includes known (documented) and newly recorded features, if present.

- Record of Protected Structures (RPS)
- NIAH structures
- NIAH Garden Surveys
- Any other structures / features noted during field assessment
- Cultural heritage items (tangible assets) likely to be impacted by the Proposed Development

13.3.1.2.1 Protected Structures within the Wind Farm Site boundary

The dataset of the Record of Protected Structures for County Westmeath was added to the constraints mapping for this assessment. The list of Protected Structures as presented in Volume 5 of the Westmeath County Development Plan (2014-2020) and volume 6 of the Draft County Development Plan (2021-2027) was also consulted for such structures which may be located in the vicinity of the proposed turbines, borrow pit, and link road. Protected Structures along the proposed Grid Connection Route are presented separately in Section 13.3.2 of this chapter.

No structures listed in the Record of Protected Structures are located within the proposed Wind Farm Site boundary.

The Architectural Heritage Protection Guidelines for Planning Authorities (2011) discusses the notion of curtilage and attendant grounds associated with protected structures. While the notion of curtilage is not defined by legislation, it is taken to be the 'parcel of land immediately associated with that structure and which is (or was) in use for the purposes of the structure.' (ibid., 191). In the case of a large country house items such as stable buildings, walled gardens, lawns and ha-has may all be considered to form part of its curtilage unless at a distance from the building (ibid.). It is also noted, however, that the extent of the curtilage of a protected structure would need to be determined on a case-by-case basis and 'ideally should be identified by the planning authority prior to inclusion of the structure in the RPS....' (ibid.). The Guidelines go on to say that in instances where the curtilage of a protected structure has not previously been identified 'a planning authority should take the opportunity to identify its extent at the time of making a declaration in respect of the protected structure' (ibid., 192).

A similar scenario exists when determining the attendant grounds of a protected structure. Attendant grounds are those lands located outside the curtilage but which are associated with the structure and are 'intrinsic to its function, setting and/or appreciation' (ibid.). A planning authority has the power to protect all features of importance which lie within the attendant grounds of a protected structure, however, such features must be specified in the RPS. The Guidelines go on to say that where the curtilage of a protected structure has not been established at the time of inclusion in the RPS, the planning authority should ensure that all important features are either 'a) specified as being in the attendant grounds of the protected structure or b) are themselves entered into the RPS and c) the owners and occupiers notified of the protection.'

No built heritage structures which are subject to legal protection are located within the Wind Farm Site boundary.

13.3.1.2.2 Protected Structures within 5km of the nearest proposed turbine

Fifty-three Protected Structures are located within 5km of the nearest proposed turbine and are listed in Table 13-3 below. Fifty-one of the structures are located in county Westmeath with two structures (RPS ID 135 and 136) in County Longford. The nearest of these structures is Newcastle House (RPS 003-009)

which is located in the townland of Newcastle c. 822m to the south of T5 and c. 700m to the north-west of the proposed borrow pit. It is described as ‘a detached three-bay single-storey house over a raised basement house, built c.1830. Hipped natural slate roof with a single central ashlar limestone chimneystack, aligned parallel to roof ridge, having terracotta chimney pots over’. At Carlanstown townland an early 20th century farmhouse (RPS 003-044) is located c. 980m north of T15. It is described as a ‘detached four-bay two-storey house, built c.1915, having projecting single-bay gable-fronted porch to the entrance front (north) and with lower two-storey wing attached to the east side. An appealing middle-sized early twentieth century house/farm house, of modest architectural aspirations, which retains its early form despite the recent loss of the original fittings to the majority of its openings.’

Table 13-3: RPS within 5km of the nearest proposed turbine.

RPS	NIAH	NAME	Td	ITM E	ITM N	Turbine No.	Distance (m)
001-001	15301001	The Bridge of Finnea	Finnea	640179	781453	1	4162
001-003	15301005	Market House	Finnea	640275	781314	1	4010
001-005	15301007	Waterpump	Finnea	640270	781328	1	4024
001-006	15301008	House	Finnea	640288	781318	1	4012
001-007	15301009	House	Finnea	640533	781255	1	3922
001-008	15301010	Our Lady of the Angels	Finnea	640826	781095	1	3749
001-004	15301006	Myles O'Reilly Monument	Finnea	640281	781324	1	4019
001-002	15301004	House	Finnea	640273	781350	1	4045
001-009	15400101	House - Gore Port	Clareisland Or Derrymacegan	643612	781672	2	4920
001-010	15400103	Tullystown National School	Tullystown	644945	779610	4	4001
001-011	15400104	Carlanstown House	Carlanstown	643606	777070	4	1621
001-013	15400106	House	Carlanstown	643785	777702	4	1959
001-014	15400107	St. Michael's Roman Catholic church	Castletown Lower	644040	778510	4	2599

RPS	NIAH	NAME	Td	ITM E	ITM N	Turbi ne No.	Distance (m)
001-012	15400105	Outbuilding s Carlanstown House	Carlanstown	643596	777097	4	1613
001-015	15400108	St. Michael's Parochial House	Castletown Lower	644082	778517	4	2636
001-016	15400109	Castletown Cottage	Castletown Lower	643911	779130	4	2934
001-017	15400110	Outbuilding sCastletown Cottage	Castletown Lower	643879	779153	4	2932
001-018	15400111	Balnacart Corn Mill	Rathshane	645731	778712	4	4150
001-019	15400112	Tullystown House	Tullystown	645295	780546	4	4912
001-020	15400113	Outbuilding sTullystown House	Tullystown	645240	780553	4	4881
001-022	15400116	Castletown Cottage	Castletown Lower	643906	779151	4	2948
003-009	15400301	Newcastle House	Newcastle	641658	775255	5	822
002-018	15400218	Float Railway Station	Lisduff	636493	773460	11	3757
002-019	15400219	Postbox	Lisduff	636484	773448	11	3770
002-020	15400221	House	Lismacaffry	635540	773959	11	4470
002-021	15400222	Water pump	Clonmore	636036	774720	11	3837
003-041	15400335	St. Nicholas Church of Ireland church	Mayne	641562	771519	14	3053
003-042	15400337	Simonstown House	Simonstown	641700	771198	14	3395

RPS	NIAH	NAME	Td	ITM E	ITM N	Turbi ne No.	Distance (m)
003-043	15400338	St. Joseph's Orthopaedic Hospital	Fearmore	642005	772205	14	2527
007-046	15400703	Outbuildings - Coolure House	Lispopple	641531	769689	14	4859
003-030	15400330	Turbotstown House and demesne	Turbotstown	642151	772845	14	2038
003-039	15400333	St. Mary's Roman Catholic church	Fearmore	641952	772256	14	2459
003-037	15400331	Outbuildings - Turbotstown House	Turbotstown	642056	772867	14	1967
003-038	15400332	Gate lodge (ruin), Turbotstown House	Turbotstown	641830	772378	14	2300
003-040	15400334	Former school building	Newtown	641630	771934	14	2662
003-046	15400341	Gate lodge/estate cottage	Tullynally	644111	770734	14	4907
003-047	15400338	St. Joseph's Orthopaedic Hospital	Fearmore(Fore By)	642070	772166	14	2589
003-047	15400338	St. Joseph's Orthopaedic Hospital	Fearmore(Fore By)	642005	772205	14	2527
003-010	15400302	Ballynameagh House	Ballynameagh	642813	774099	15	1563
003-011	15400303	Rathcreevagh Bridge	Rathcreevagh	644287	774203	15	2103
003-012	15400306	House	Curry	644481	774362	15	2147

RPS	NIAH	NAME	Td	ITM E	ITM N	Turbi ne No.	Distance (m)
003-013	15400307	Gilbertstown Mills	Gilbertstown	645680	773720	15	3496
003-044	15400339	House	Carlanstown	642976	776619	15	980
003-014	15400308	Bridge	Gilbertstown	645786	773569	15	3669
003-015	15400309	Gilbertstown House	Gilbertstown	645770	773505	15	3693
003-016	15400310	Tromra House	Tromra	645259	771824	15	4573
003-017	15400311	Gateway, Tromra House	Tromra	645370	771784	15	4667
003-018	15400312	Water pump	Ballycomoye	646906	775131	15	4168
003-019	15400313	House	Ballycomoye	646917	774635	15	4271
003-020	15400314	Ballycomoyl e National School	Raheen More	647036	775365	15	4274
003-036	15400329	Gaulstown House	Ballynagall	643693	772554	15	3241
135	13306008	House/Shop	Cloonaghmore	636475	779504	1	4880
136	13306009	House	Cloonaghmore	636497	779488	1	4853

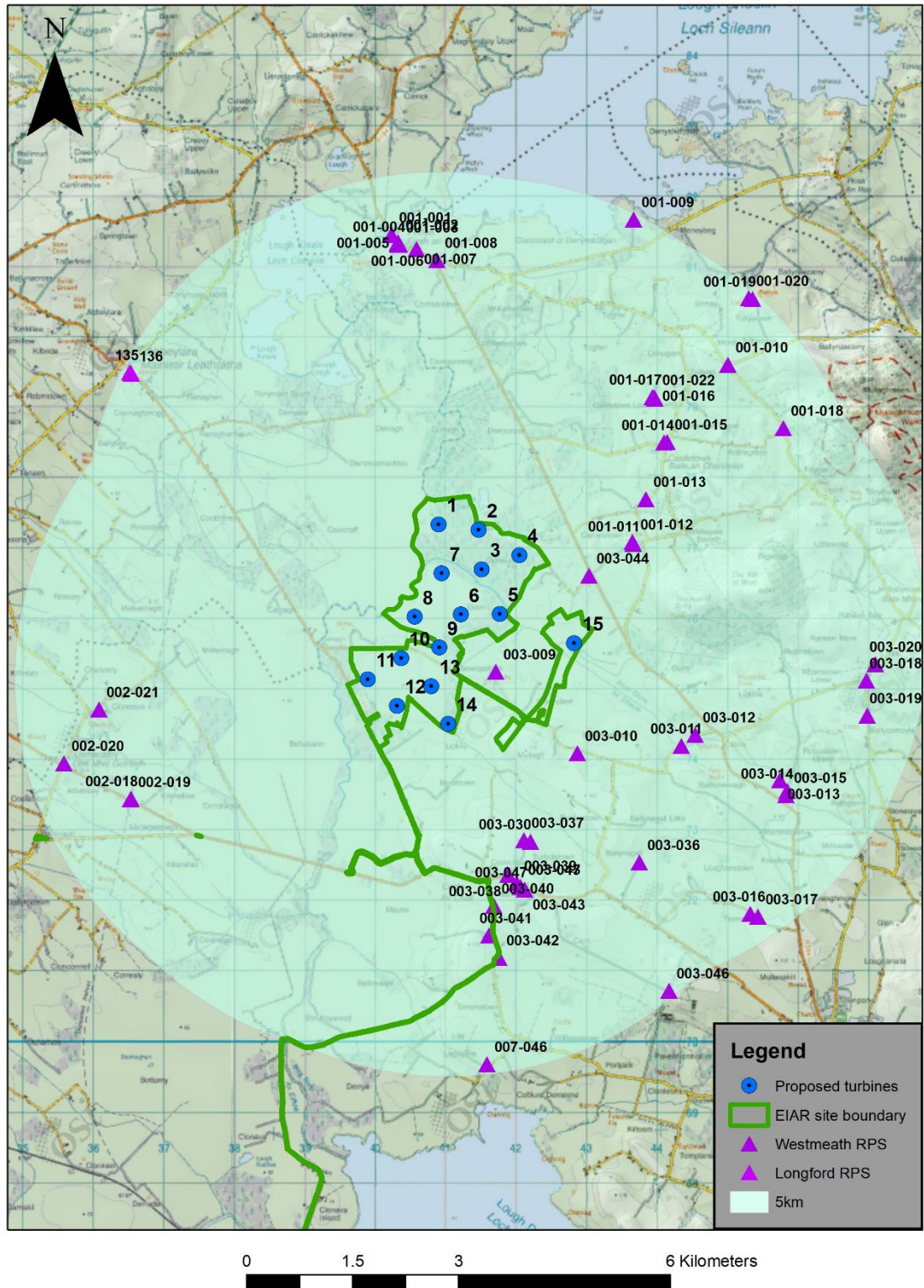


Figure 13-17: RPS structures within 5km of the nearest proposed turbine.

13.3.1.2.3

NIAH Structures within the Wind Farm Site boundary

No structures listed in the National Inventory of Architectural Heritage (NIAH) are located within the proposed Wind Farm Site boundary which includes the proposed substation, borrow pit area and proposed link road.

13.3.1.2.4

NIAH Structures within 5km of the nearest proposed turbine

Sixty-seven NIAH sites are located within 5km of the nearest proposed turbine and are listed below in

Table 13-4 and shown in Figure 13-18. The structures are located in Counties Westmeath and Longford. Only three NIAH structures (13401604, 15400339 and 15400301) are located within 1km of the nearest proposed turbines and are shown in bold. It is not intended to describe all of these sites individually as all structures are also listed in the Record of Protected Structures which is largely informed by the NIAH. Those structures closest to the proposed turbines and those visible from an adjacent public road are discussed below and a full description of same is provided in Appendix 13-6. Some NIAH structures located within 5km of proposed turbines are also located along the proposed Grid Connection Route and are therefore discussed in section 13.3.2 below.

Table 13-4: NIAH structures within 5km of the nearest proposed turbine.

NIAH	STRUCTURE	Td	RATING	ITM E	ITM N	Turbine No.	Distance (m)
15400301	Newcastle House	NEWCASTLE (Clonlonan By.)	Regional	641658	775255	5	822
13401604	Camagh Bridge	CAMAGH (GRANARD BY.)	Regional	639136	775621	11	855
15400339	farm house	CARLANSTOWN	Local	642976	776619	15	980
15400302	Ballynameagh House	BALLYNAMEAGH	Regional	642813	774099	15	1563
15400105	Carlanstown House	CARLANSTOWN	Regional	643604	777097	4	1622
15400104	Carlanstown House	CARLANSTOWN	Regional	643608	777066	4	1622
15400106	house	CARLANSTOWN	Local	643785	777702	4	1959
15400331	Turbotstown House	TURBOTSTOWN	Regional	642091	772838	14	2010
15400330	Turbotstown House	TURBOTSTOWN	Regional	642161	772847	14	2042
15400303	Rathcreevagh Bridge	CURRY,RATHCREEVAGH	Regional	644288	774203	15	2104
15400306	house	CURRY	Local	644480	774362	15	2146

NIAH	STRUCTURE	Td	RATING	ITM E	ITM N	Turbine No.	Distance (m)
15400305	Lickbla Mills	RATHCRE EVAGH	Regional	644520	774280	15	2228
15400304	Lickbla House	LICKBLA	Regional	644501	774255	15	2228
15400332	Turbotstown House	TURBOTSTOWN	Local	641830	772380	14	2298
15400333	St. Mary's Roman Catholic church	FEARMORE (Moygoish By.)	Regional	641963	772253	14	2466
15400338	St. Joseph's Orthopaedic Hospital	FEARMORE (Moygoish By.)	Regional	642019	772203	14	2535
15400107	St. Michael's Roman Catholic church	CASTLETOWN LOWER	Regional	644040	778510	4	2599
13401601	New Grove	COOLDONEY	Regional	638010	777033	11	2632
15400108	St. Michael's Parochial House	CASTLETOWN LOWER	Regional	644083	778517	4	2637
15400334	school	NEWTOWN (Delvin By.)	Local	641640	771884	14	2713
15400110	Castletown Cottage	CASTLETOWN LOWER	Regional	643880	779153	4	2932
15400109	Castletown Cottage	CASTLETOWN LOWER	Regional	643910	779130	4	2934
15400116	Castletown Cottage	CASTLETOWN LOWER	Regional	643906	779151	4	2948
15400335	St. Nicholas Church of Ireland church	MAYNE	Regional	641566	771520	14	3053

NIAH	STRUCTURE	Td	RATING	ITM E	ITM N	Turbine No.	Distance (m)
15400336	Moynere Rectory	MAYNE	Regional	641736	771367	14	3238
15400329	Gaulstown House	BALLYNAGALL (Delvin By.)	Regional	643694	772554	15	3241
15400337	Simonstown House	SIMONSTOWN (Farbill By.)	Regional	641707	771194	14	3401
15400307	Gilbertstown Mills	CLONGOWLY	Regional	645681	773720	15	3497
13401110	bridge	RANAGHAN, RANAGHANBAUN	Regional	637560	778762	1	3584
15400308	bridge	CLONGOWLY	Regional	645787	773569	15	3670
15400309	Gilbertstown House	CLONGOWLY	Regional	645771	773506	15	3693
15301010	Our Lady of the Angels	FINNEA	Regional	640829	781095	1	3749
15400218	Float Railway Station	LISDUFF	Regional	636493	773460	11	3757
15400219	post box	LISDUFF	Local	636485	773448	11	3770
15400102	church/chapel	TOGHER	Regional	643400	780478	2	3772
15400220	Float Railway Station	LISDUFF	Local	636467	773458	11	3781
15400222	water pump	CLONMORE (Clonlonan By.)	Regional	636037	774720	11	3836
15301009	house	FINNEA	Regional	640536	781256	1	3923
15400103	Tullystown National School	TULLYSTOWN	Regional	644945	779610	4	4001

NIAH	STRUCTURE	Td	RATING	ITM E	ITM N	Turbine No.	Distance (m)
15301008	house	FINNEA	Local	640291	781317	1	4010
15301005	Market House	FINNEA	Regional	640275	781314	1	4010
15301006	Myles O'Reilly Monument	FINNEA	Regional	640282	781324	1	4019
15301007	water pump	FINNEA	Regional	640271	781328	1	4024
15301004	shop/retail outlet; house	FINNEA	Local	640277	781349	1	4044
15301003	house	FINNEA	Regional	640223	781365	1	4068
15301002	house	FINNEA	Regional	640213	781382	1	4086
15400111	Balnacart Corn Mill	FOYRAN,RATHSHANE	Regional	645731	778712	4	4150
15301001	The Bridge of Finnea	FINNEA	National	640179	781453	1	4162
15400312	Ballycomoyle	BALLYCOMOYLE	Regional	646907	775131	15	4169
15400313	house	BALLYCOMOYLE	Regional	646918	774635	15	4271
15400314	Ballycomoyle National School	RAHEENMORE	Regional	647037	775365	15	4275
15400221	house	LISMACAFRY	Regional	635541	773959	11	4469
15400310	Tromra House	TROMRA	Regional	645259	771824	15	4573
15400311	Tromra House	TROMRA	Regional	645370	771784	15	4667
13306010	water pump	TONYMORRE SOUTH	Regional	636988	780127	1	4761

NIAH	STRUCTURE	Td	RATING	ITM E	ITM N	Turbine No.	Distance (m)
13401603	Killasona House	KILLASON A	Regional	635191	776384	11	4819
13401602	Killasona House	KILLASON A	Regional	635193	776420	11	4826
13306009	house	CLOONAG HMORE	Regional	636497	779476	1	4848
13306009	house	CLOONAG HMORE	Regional	636494	779491	1	4857
15400703	Coolure House	LISPOPPLE	Regional	641532	769689	14	4859
13306008	M. McCormack	CLOONAG HMORE	Regional	636477	779506	1	4879
15400113	Tullystown House	TULLYSTO WN	Regional	645241	780553	4	4881
15400341	gate lodge; worker's house	TULLYNAL LY	Regional	644110	770734	14	4907
15400112	Tullystown House	TULLYSTO WN	Regional	645296	780546	4	4913
15400101	Gore Port	HALLSFAR M	Regional	643613	781672	2	4920
13306005	house	CLOONAG HMORE	Regional	636407	779585	1	4977
13306005	house	CLOONAG HMORE	Regional	636402	779587	1	4983

Newcastle House (Reg. 15400301) is situated just over 800m to the south of T5 and is described in Appendix 13-6. It is associated with a garden as recorded in the NIAH Historic Gardens and Designed Landscapes survey (see Section 13.3.1.2.5 below). It is also included in the Record of Protected Structures (Ref. 003-009). The house is located off-road and is not accessible to the public. Further to the west in Camagh townland a stone road bridge (Reg. 13401604) is located on the River Inny, c. 855m from T11. This structure was visited during the site assessment phase of this project given its location on a public road.

One NIAH structure (Reg. 15400302) is located within c. 880m of the proposed borrow pit and comprises Ballynameagh House. It is visible from the adjacent public road and therefore was viewed from same during the site assessment phase of this project (Plate 13-20 and Plate 13-21). It is also included in the Record of Protected Structures (Ref. 003-010).

NIAH structure 15400339 in Carlanstown townland is located c. 980m from T15 and comprises a farmhouse which is also a protected structure (RPS 003-044).



Plate 13-20: View of NIAH structure 15400302 from public road, looking south.



Plate 13-21: View towards proposed borrow pit from public road adjacent to NIAH structure at Ballynameagh, looking NW.

A number of additional NIAH structures within 5km of the proposed turbines are visible from the surrounding public roads and include a bridge at Rathcreevagh/Curry townlands which is also a protected structure (Reg. 15400303, RPS 003-011), Lickbla House (Reg. 15400304) a short distance to the east and an adjacent water mill (Reg. 15400305). All of these structures are in excess of 2km from the nearest proposed turbine (T15) and c. 2.4km from the proposed borrow pit.

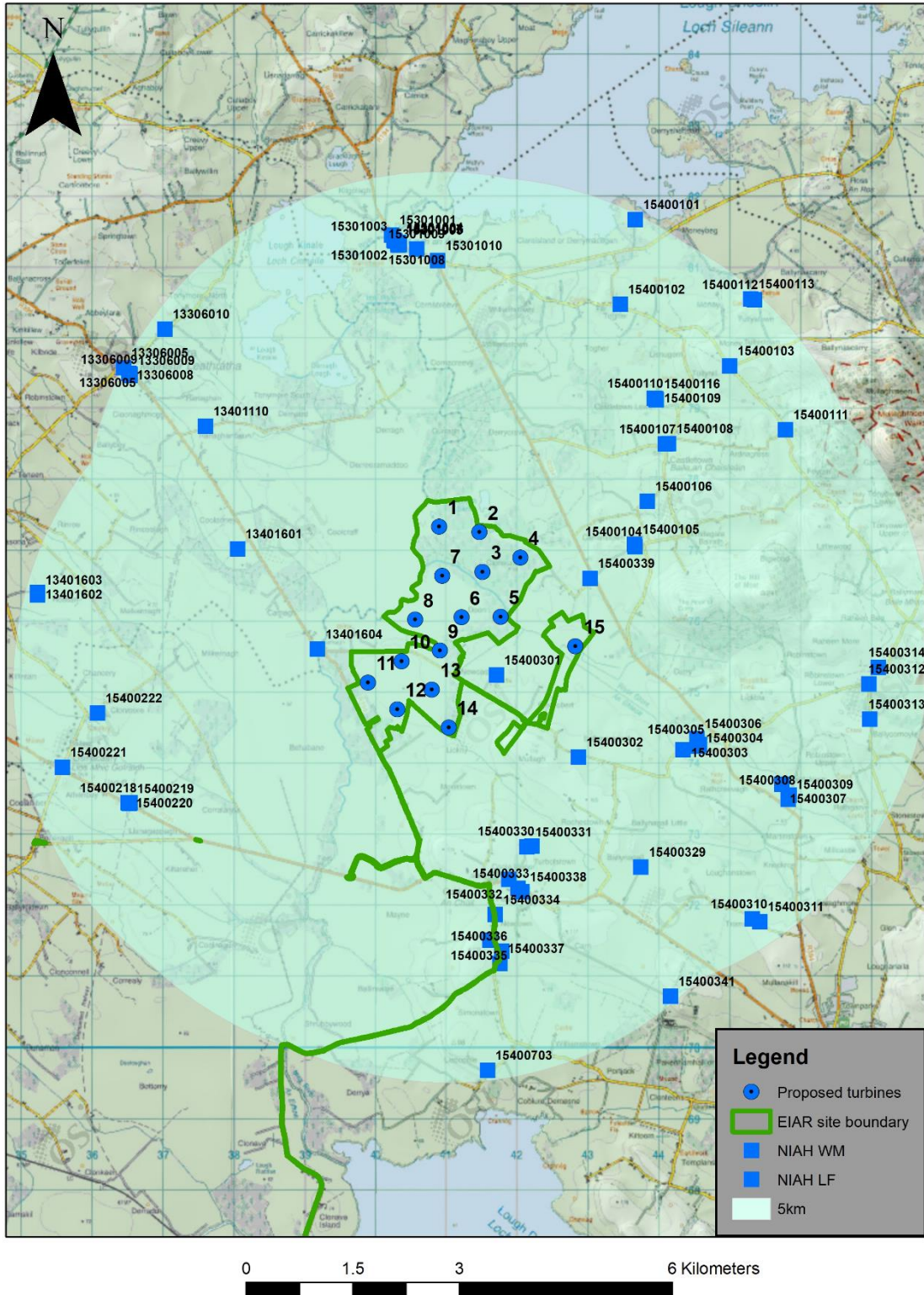


Figure 13-18: NIAH structures within 5km of the nearest proposed turbine.



Plate 13-22: View of Lickbla House (Reg. 15400304) from public road, looking east.



Plate 13-23: Entrance gates to Lickbla House from public road, looking SW. Note natural screening.



Plate 13-24: Water mills (Reg. 15400305) adjacent to Lickbla House, looking SE from adjacent public road.



Plate 13-25: View of house at Carlanstown (Reg. 15400339) from public road, looking WSW towards proposed turbines.

Carlanstown House (Reg. 15400104) occupies a prominent location on an elevated site to the east of the proposed turbines, albeit at a distance of c. 1.6km. The house is in private ownership and therefore access to same by the public is not possible, however, given its siting it is possible that some of the proposed turbines may be visible from this area. It is also included in the Record of Protected Structures (Ref. 001-011).

To the south of the proposed turbines in the vicinity of Coole village are further NIAH structures located adjacent to public roads or visible at a distance from same. Of these, of note is Turbotstown House (Reg. 15400330) (also a Protected Structure Ref. 003-030) which is visible from some surrounding public roads. As with many structures listed in the NIAH Turbotstown is in private ownership and not accessible to the public. Turbotstown House is also associated with an historic garden as recorded by the NIAH Garden Survey (see Section 13.3.1.2.5 below).

Three NIAH structures (15400332, 15400338 and 15400333) and are located on the outskirts of Coole village. St Mary’s RC church (Reg. 15400333) comprises a roadside structure clearly visible from the adjacent public road and is also a protected structure (Ref. 003-039). A short distance to the south-east is the complex of buildings forming the now disused orthopaedic hospital (Reg. 15400338, RPS 003-043). To the north-west of St Mary’s church is a gate lodge (Reg. 15400332) which was originally associated with Turbotstown House. The lodge is not accessible to the public, however, the associated gate pillars and driveway to Turbotstown house are visible from the public road. The gate lodge is also included in the Record of Protected Structures Ref. 003-038.



Plate 13-26: View towards Turbotstown House and associated historic garden, looking NW towards proposed turbines from public road.



Plate 13-27: St Mary's church (Reg. 15400333), looking west.



Plate 13-28: Part of the orthopaedic complex (Reg. 15400338).



Plate 13-29: View to north towards proposed borrow pit and turbines from NIAH structures 15400338 and 15400333 – note screen of trees.



Plate 13-30: Gate and pillars to Turbotstown House adjacent to gate lodge (Reg. 15400332).

Tullyally Castle (Reg. 15400321) is located in excess of 5km from the nearest proposed turbine at a distance of c. 5.4km south-east of T15, however, given that it is a significant historical site and accessible to the public it was also visited during the site assessment phase of the Proposed Development. The intervening distance between the proposed turbines and the natural vegetative screening will not permit

views of the proposed structures from Tullynally Castle. Theoretical visibility from the entrance and other parts of the demesne is discussed in Section 12.6.4.4 of the Landscape and Visual chapter of this EIAR.



Plate 13-31: Tullynally Castle (Reg. 15400321).



Plate 13-32: View from Tullynally Castle, looking north-west in general direction of proposed turbines.

13.3.1.2.5

NIAH Garden Survey

Westmeath contains many Historic Parks, Gardens and Demesnes, which are characteristic of a particular period of settlement in the county. The County Council recognises the contribution that these planned landscapes make to the appearance of the county, and their significance as a source of information about the past, and also that they are often the important setting of a Protected Structure; e.g. the manor house, estate houses, gate lodges, walled gardens, outbuildings and enclosed yards and gardens. Demesne is a term dating back to the Anglo Norman period for lands retained by the Lord of the Manor for his own use and occupation. The gardens tended to be formally laid out over large tracts of land radiating out from the principal residence and its gardens and walled gardens to include parkland, farmland, woodlands and additional properties such as farm outbuildings, stables, gate lodges and follies. Therefore, a strong relationship exists between the main house and the surrounding lands. The National Inventory of Architectural Heritage (NIAH), which is part of the Department of Housing Local Government and Heritage has carried out a survey of Historic Gardens and Designed Landscapes and produced a national database containing 225 entries for County Westmeath. The historic garden survey is based on analysis of mapping only and while they are not formally protected by way of their inclusion in the NIAH Garden survey, many contain Protected Structures. In such cases the protected structure and its curtilage and attendant grounds are protected.

The objective of the NIAH garden survey is to begin a process of understanding the extent of Ireland's historic gardens and designed landscape. Sites were identified using the 1st edition Ordnance Survey maps. These were compared with current aerial photography to assess the level of survival and change. This assessment is not an indication of a site's heritage importance. Fieldwork is now in progress to compile more accurate data and site assessments. The results will be added to the NIAH website as this work progresses.

Various factors have contributed to many of the significant changes that have occurred to such gardens and demesnes. Changes in aesthetic values and the development and expansion of our cities and towns have played a part, however, the most significant are a direct result of 150 years of history, particularly changes in land ownership arising from the Encumbered Estates Act 1849 to the Land Acts of the late nineteenth and early twentieth centuries.

The following gardens are located within 5km of the proposed turbines all of which are associated with demesne houses. It must be noted, however, that these gardens are for the most part located in private land and therefore not accessible to the public. The demesnes associated with a country or manor house is sometimes traceable on the 1st edition OS maps. Of the gardens listed below those with traceable demesne outlines are shown in Figure 13-19 The nearest historic garden and associated demesne are located immediately south-east of the proposed wind farm in Newcastle townland. The garden and demesne are associated with the upstanding Newcastle House which is also listed in the NIAH (Reg. 15400301) and is a Protected Structure (RPS No. 003-009). The house and garden are not accessible to the public.

Table 13-5: NIAH Garden Surveys/Demesnes within 5km of nearest proposed turbine.

REF	NAME	COUNTY	ITM E	ITM N	Feature Rich Index (mapping)
3668	Coolamber	Westmeath	635143	773518	Main features substantially present - peripheral features unrecognisable. Feature rich index - 3

REF	NAME	COUNTY	ITM E	ITM N	Feature Rich Index (mapping)
3671	Killasona House	Longford	635243	776417	Main features unrecognisable - peripheral features visible. Feature rich index - 4
3698	Fernsborough	Longford	637243	779217	Main features unrecognisable - peripheral features visible. Feature rich index - 3
3778	Newcastle	Westmeath	641642	775317	Main features unrecognisable - peripheral features visible. Feature Rich index - 5
3786	Williamstown House	Westmeath	642042	780416	Main features unrecognisable - peripheral features visible. Feature Rich index - 4
3795	Turbotstown House	Westmeath	642242	772718	Main features unrecognisable - peripheral features visible. Feature Rich index - 4
3827	Derrymacegan	Westmeath	643541	781616	Main features substantially present - peripheral features unrecognisable. Feature Rich index - 6
3831	Ballynagall, Rathgarve	Westmeath	643641	772618	Main features unrecognisable - peripheral features visible. Feature Rich index - 4

REF	NAME	COUNTY	ITM E	ITM N	Feature Rich Index (mapping)
3838	Castletown Cottage	Westmeath	643841	779217	Virtually no recognisable features. Feature Rich index - 2
3862	Annis Grove	Westmeath	644641	780616	Site named on 6" map but parkland not indicated. Virtually no recognisable features. Feature Rich index - 2
3913	Rathgarve Castle	Westmeath	646841	772918	Indicated on 1 st edition OS map.

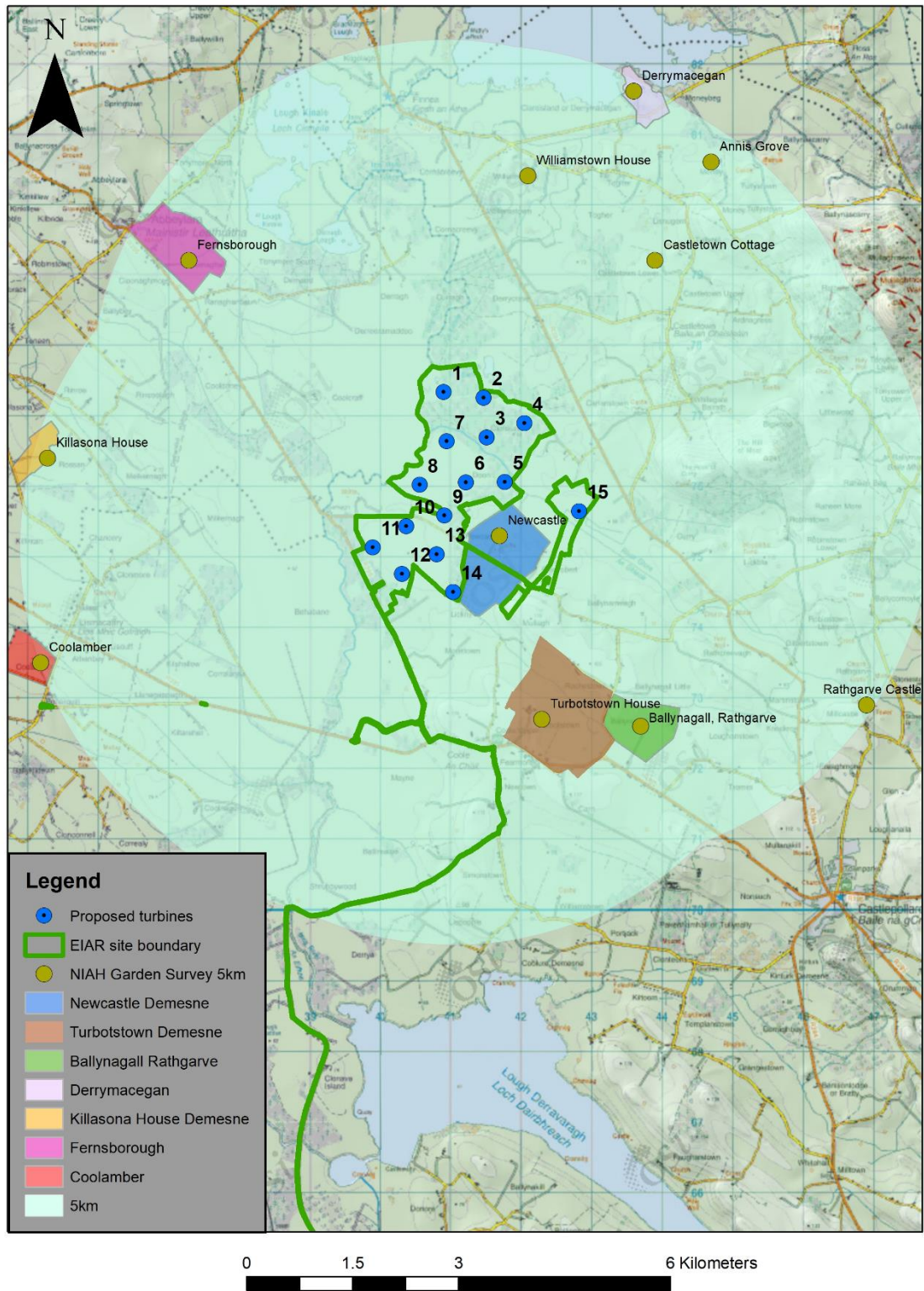


Figure 13-19: Historic gardens and demesnes within 5km of the nearest proposed turbine.

13.3.1.2.6 Language and the Gaeltacht

The proposed Wind Farm Site is not located within a designated Gaeltacht area, therefore there are no impacts on language in this regard (Census 2011, Gaeltacht Areas).

13.3.1.2.7 Placename Evidence

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

Townlands are the smallest land units which were determined and established in the Irish administrative system in the first half of the nineteenth century. Many of the townlands were in existence prior to that. Townland names are a valuable source of information, not only on the topography, land ownership and land use within the landscape, but also on its history, archaeological monuments and folklore.

Place names may be derived from geological, archaeological or topographical features within the landscape or may also have taken the name of an important or famous person who once lived in an area. Place name evidence can refer to archaeological monuments within the vicinity which may no longer be visible in the landscape or which are now only documented through local history or tradition. The database of Irish placenames, www.logainm.ie, was consulted for the meaning of the placenames located within and immediately surrounding the proposed Wind Farm Site, including borrow pit, substation and link road. The findings were as follows:

- Clonsura – no information
- Doon – no information
- Camagh – no information
- Newcastle – no information
- Mullagh – no information
- Carlanstown – no information
- Behabane – no information
- Coole (townland) – no specific information but usually derived from the Irish *an chuil* meaning the corner or nook
- Coole (village) – archival records on www.logainm.ie refer to it as *Cúl Corrac* a place where St Patrick is reputed to have built a church on his way from Fore to the Inny.
- Mayne – derived from the Irish *Maighean*
- Coolcraff – derived from the Irish *Cluain Creamha* which is recorded since 1836 as 'back of the hill of wild garlic', prior to that recorded as *Cloncrall* or *Cloncraue*.
- Derrycrave – no information
- Clonrobert – no information

Review of Cartographic Sources

A review of the available historic cartographic sources for the area including the first edition (1836-7) and second edition (1911) OS maps as well as the 17th century Down Survey maps was undertaken for any items of architectural or cultural heritage merit which may not appear in any records such as the NIAH or RPS.

The Down Survey is a mapped survey undertaken in the mid-17th century. Using the Civil Survey as a guide, teams of surveyors, mainly former soldiers, were sent out under Petty's direction to measure every townland to be forfeited to soldiers and adventurers. The resulting maps, made at a scale of 40 perches to one inch (the modern equivalent of 1:50,000), were the first systematic mapping of a large area on such a scale attempted anywhere. The primary purpose of these maps was to record the boundaries of each townland and to calculate their areas with great precision. The maps are also rich in other detail showing churches, roads, rivers, castles, houses and fortifications. Most towns are represented pictorially and the cartouches, the decorative titles, of each map in many cases reflect a specific characteristic of each barony.

The Wind Farm Site is largely located within the barony of Fore and partially within the parish of Lickbla, which is recorded in the Down Survey as 'Luckblea'. The barony map depicts the castles at Newcastle and Carlanstown townlands but does not show any features within the proposed Wind Farm Site itself which is primarily 'red bog'.

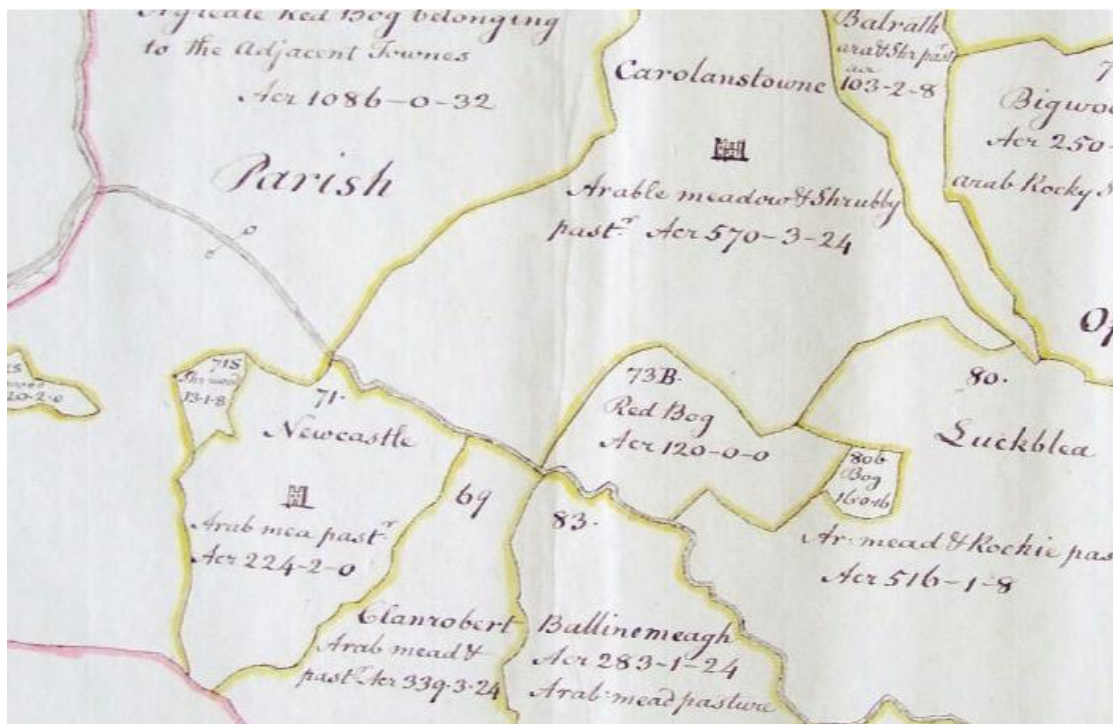


Figure 13-20: Extract from the Down Survey barony map of 'Luckblea' showing Newcastle and Clonrobert townlands and Carlanstown to the north.

The Ordnance Survey came to Ireland in 1824 in order to carry-out a precise admeasurement of the country's 60,000 or so townlands as a preliminary to the larger task of reforming Ireland's local taxation system. The townland boundaries were demarcated by a Boundary Commission, and the Ordnance Survey had the task of measuring them. In addition to boundaries the maps are truly topographical in content. Drawn at the large scale of six inches-to-one-mile (1:10,560) it was important to mark all buildings, roads, streams, placenames, etc, that were required for valuation purposes. Ultimately the maps were used as a basis for the rateable valuation of land and buildings in what became known as Griffith's Valuation. Working from north to south, the survey began in Antrim and Derry in 1829 and was completed in Kerry in 1842. It was published as thirty-two county maps between 1832 and 1846,

the number of sheets per county varied from 153 for County Cork to 28 for Dublin, each of the 1,994 sheets in the series depicting an area 21,000 by 32,000 feet on the ground. Each county was projected on a different central meridian and so the maps of adjacent counties do not fit neatly together at the edges. Map content stops at the county lines.

A review of the 1st and 2nd edition OS maps also shows the majority of the proposed Wind Farm Site as relatively featureless open bog. Some small farm settlements are depicted on both editions in Clonrobert townland through which the proposed access road to T15 extends. The proposed road does not traverse any of these settlements and no above ground remains of same were noted during field survey. An unnamed bridge is depicted crossing the River Glore c. 230m south-west of T15 in Clonrobert townland on the 2nd edition map (ITM 642551, 77582). The bridge is extant and comprises a stone built single-arched structure with some concrete additions to the parapet walls as well as modern steel railings. The bridge is located c. 41m north-west of the proposed access road to T15.



Plate 13-33: Stone bridge over the River Glore at Clonrobert townland, looking SW.



Figure 13-21: Unnamed bridge on 2nd edition 25 inch OS map in relation to proposed access road to T15.

Similarly a small settlement is indicated at the south-west end of the proposed borrow pit area on the 1st ed. (1837) mapping (Figure 13-22), however, it is not shown on the later edition and no above-ground remains were noted during field survey (Plate 13-34).



Plate 13-34: South-west end of proposed borrow pit, no surface trace of settlement indicated on 1st ed. OS map.

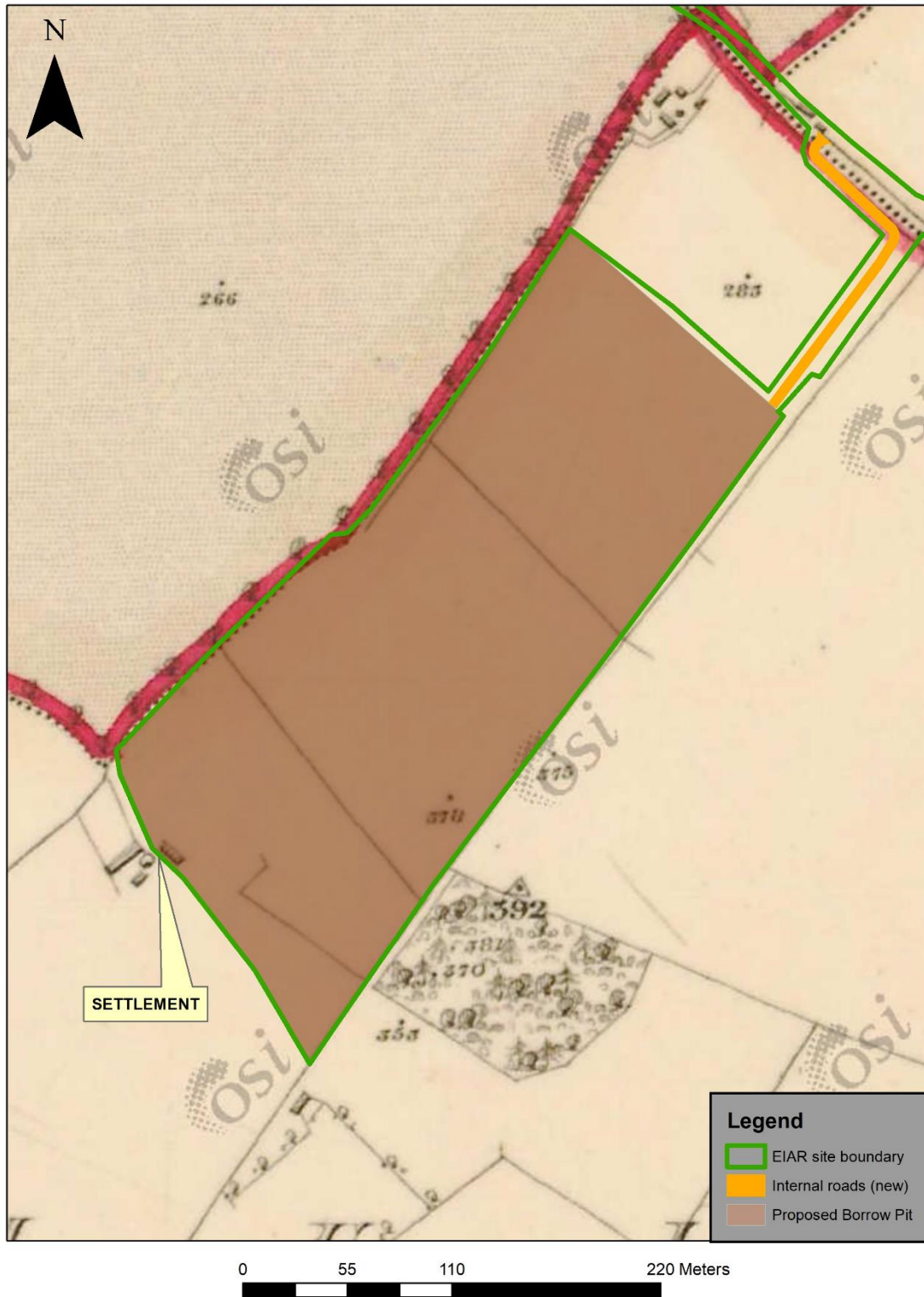


Figure 13-22: Area of proposed borrow pit on 1st edition 6-inch OS background showing settlement at SW end of same.

A number of structures are indicated on both editions of the historic maps adjacent to the proposed link road at Coole townland. By the 2nd edition the structures to the west are no longer indicated and no trace of same was apparent at the time of field survey, although this area is now planted with trees. The ruinous remains of one structure is extant towards the eastern end of the link road and is likely to be mid-19th century in date. The structure is located adjacent to the proposed link road (Figure 13-23). Should potential direct impacts to the structure occur as a result of ground works associated with the proposed link road such impacts may be ameliorated by suitable pre-construction and construction

mitigation measures. It should be noted that this building is not a protected structure or listed in the NIAH.



Plate 13-35: Ruinous remains of stone structure at east end of proposed link road.

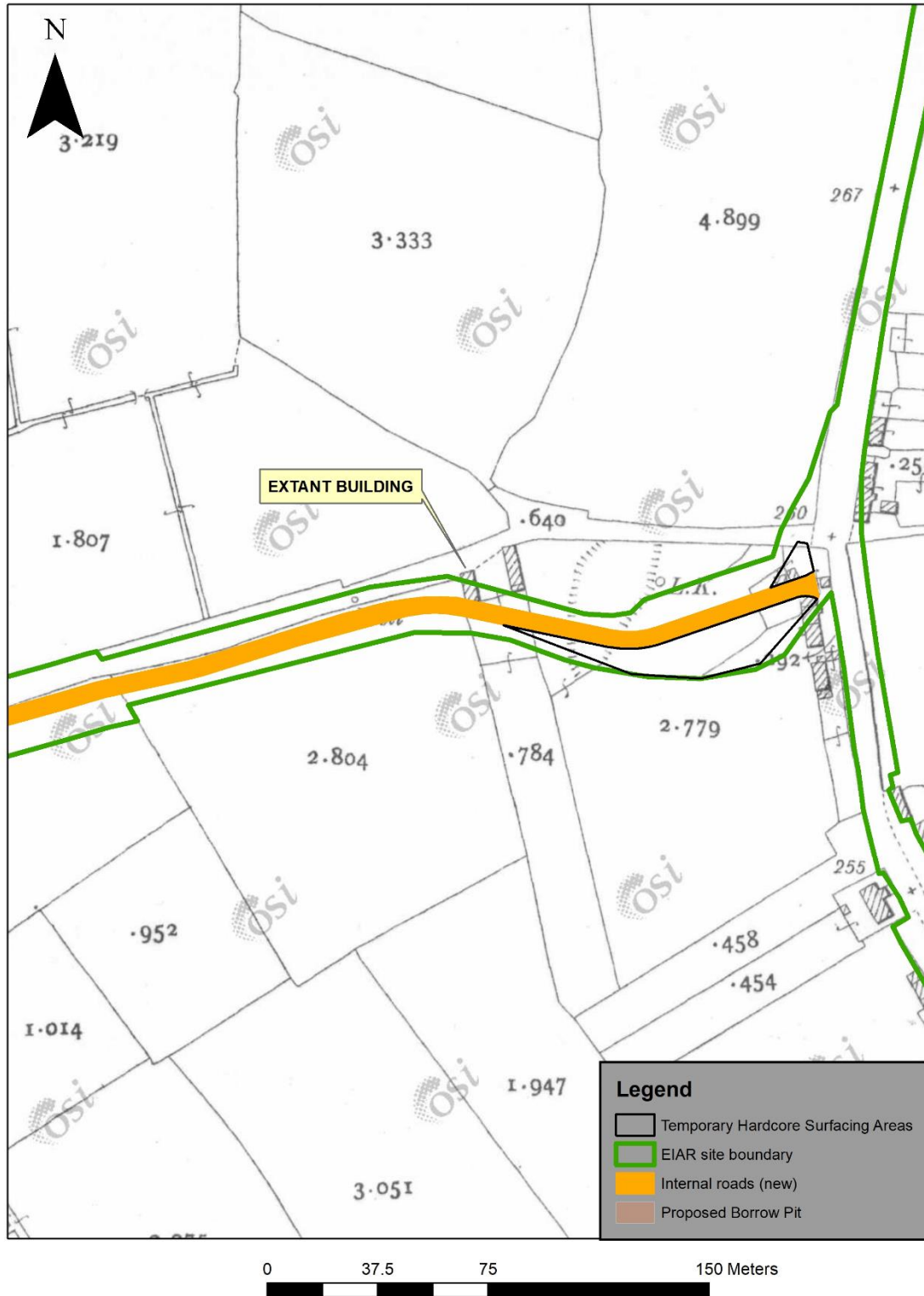


Figure 13-23: Proposed new link road on 2nd edition 25-inch OS background showing 19th century building.

13.3.1.2.9 Cultural Associations

Children of Lir Lough Derravarragh

The famous legend the Children of Lir is associated with Lough Derravaragh in north Westmeath, south-west of the proposed Wind Farm Site. The introduction of the proposed turbines and associated infrastructure will not impact on the association of the lake with the legend or peoples appreciation of same.

Táin Bó Cúailnge

A portion of the Táin trail extends through County Westmeath. This historic route follows the steps of legendary ancient Irish warriors who were travelling east to capture the Brown Bull of Cooley in the legend of Táin Bó Cúailgne. The trail is not located within the area of the proposed turbines, substation, borrow pit or link road and therefore will not be impacted by the Proposed Development.

13.3.2 Grid Connection Route

13.3.2.1 Archaeological Heritage along the Grid Connection Route

Archaeological heritage includes all recorded archaeological monuments listed in the RMP/SMR maps and also includes newly discovered archaeological sites. All such monument within 100m of the proposed Grid Connection Route are considered in this report. These monuments are addressed separately for clarity. National Monuments are those recorded monuments which are in the ownership / guardianship of the Minister for Housing, Local Government and Heritage. They are frequently referred to as being in 'State Care'. Archaeological heritage also includes sites which are subject to a preservation order.

The proposed Grid Connection Route extends from the proposed Wind Farm Site along public roads for a distance of approximately 26km before terminating at the existing Mullingar substation. The Grid Connection Route extends through the following townlands (from north to south): Monktown, Coole, Fearnmore, Mayne, Newtown, Ballinealoe, Simonstown, Shrubbywood, Clonava, Lackan, Soho, Ballynaclonagh, Abbeyland, Rathganny, Ballindurrow, Culleenabohoge, Culleendarragh, Knightswood, Ballynafid, Portnashangan, Cullen More, Farranistick and Irishtown.

13.3.2.1.1 National Monuments

Monuments in State Care

No national monuments in State Care are located along the proposed Grid Connection Route. The nearest National Monuments are those at Wattstown (NM No. 606) situated over 4km to the west on Frewin Hill. This will neither be directly or indirectly impacted by the proposed Grid Connection Route.

Monuments subject to a Preservation Order

One monument subject to a preservation order (Motte, WM007-072) is located within 100m of the proposed Grid Connection Route in Multyfarnham village. The description of the monument in the Archaeological Inventory of County Westmeath suggests that it is subject to a preservation Order since 1985. It is not however listed in the National Monuments Service published list (2010) (https://www.archaeology.ie/sites/default/files/media/publications/PO10V1_AllCounties.pdf). The monument is described as follows: *'Small flat-topped motte located immediately E of St. Nicholas' R.C. Church and 70m W of the River Gaine in the village of Multyfarnham. Medieval church (WM006-061-) and graveyard (WM006-061001-) located 110m to SW. Described in 1985 as following; 'The motte (top diam. 9.8m WSW-ENE; 12m NNW-SSE) is located on the E side of a low ridge with the River Gaine just to the E of it. It is a well preserved motte on the edge of Multyfarnham village. There is no indication of a bailey and if one existed it probably occupied the area now to the W of the motte as the natural slope is from the W to the E down to the nearby River Gaine. This area is now occupied by St. Nicholas R.C. Church' (SMR File, 12/03/1985). A second report from 1985 recorded that the monument consisted of 'a large roughly circular mound of earth and some stones. The N and W sides of the motte have been defaced by the boundary walls of a churchyard (on W) and by yards and gardens (on N). The E and S sides of the mound are regular and steep. A fosse-like depression at the base of the mound from SE-S-SSW continues on along the S side of the churchyard S wall' (SMR File). The flat-topped mound may be the site of the unlocated levelled castle (WM006-060—) that is depicted*

on the 1659 Down Survey parish map of Multyfarnham (NLI, MS 723-4). A preservation order was placed on this monument in 1985. Compiled by: Caimin O'Brien, 2015.

Since the Grid Connection Route is located 100m from the motte no impacts are anticipated.

13.3.2.1.2 Recorded Archaeological Monuments

Nineteen recorded monuments are located within 100m of the proposed underground Grid Connection Route and are listed in Table 13-6. The distances below are calculated from the indicative grid connection route to the centre points of the monuments and so in certain circumstances, the monuments may be closer. The mitigation measures take the actual monument extents into consideration however.

Table 13-6: RMPs within 100m of the proposed Grid Connection Route.

Map ID	RMP NO.	ITM E	ITM N	DESCRIPTION	Townland	DISTANCE (M)
1	WM003-083001	641561	771522	Font	Mayne	67
2	WM003-083	641566	771519	Church	Mayne	63
3	WM003-083002	641573	771501	Graveyard	Mayne	61
4	WM003-083003	641573	771501	Ecclesiastical enclosure	Mayne	61
5	WM003-087	640981	770770	Moated site	Ballinaloe	73
6	WM006-011	638766	770132	Ringfort - rath	Shrubbywood	89
7	WM006-076	640256	764303	Water mill - unclassified	Rathganny	55
8	WM006-059	640085	764257	Ecclesiastical site	Abbeyland	37
9	WM007-123	640392	764114	Bridge	Multyfarnham, Rathganny, Multyfarnham or Fearbranagh, Ballindurrow	29
10	WM007-072	640364	764022	Castle - motte	Ballindurrow	44
11	WM006-061	640289	763935	Church	Ballindurrow	30
12	WM006-061001	640295	763929	Graveyard	Ballindurrow	23
13	WM012-088	641410	760335	Ringfort - rath	Portnashangan	25

Map ID	RMP NO.	ITM E	ITM N	DESCRIPTION	Townland	DISTANCE (M)
14	WM012-089	641477	760240	Ringfort - rath	Portnashangan	0
15	WM012-090	641502	759994	Ringfort - rath	Portnashangan	46
16	WM012-164	642017	758859	Ringfort - rath	Portnashangan	80
17	WM012-165	642047	758402	Ringfort - rath	Culleen More	63
18	WM019-030	642293	755612	Barrow - mound barrow	Irishtown	93
19	WM019-034	641957	754631	Castle - unclassified	Irishtown	95

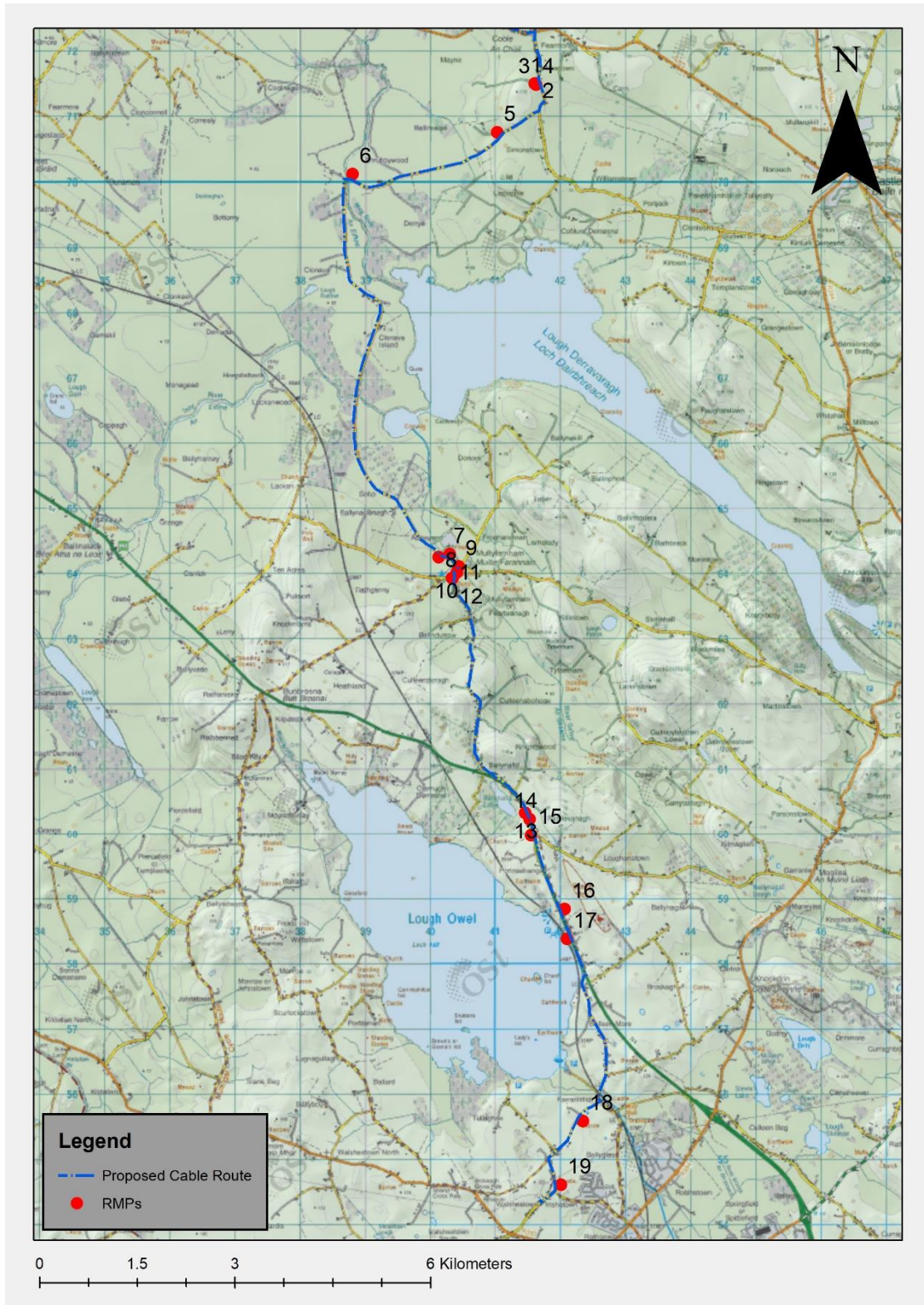


Figure 13-24: RMPs located along Grid Connection Route within 100m of same.

The site types that occur along the proposed Grid Connection Route include ringforts, church and graveyards, mottes and castles, a barrow, watermill and bridge.

Mayne Townland

In Mayne townland the proposed Grid Connection Route extends along the public road past four recorded monuments WM003-083, WM003-083001, 002 and 003 (Map ID 1-4) (church, font, graveyard and ecclesiastical enclosure). While the proposed cable will be placed in the public road outside the graveyard mitigation measures will be necessary given its proximity to the aforementioned monuments.



Plate 13-36: Route of proposed underground Grid Connection Route where it extends past church and graveyard at Mayne.

WM003-083001 Font

Freestanding limestone octagonal shaped font located inside St. Nicholas C of I church (WM003-083—) now disused and described by Roe (1968, 83) as a 'remarkable and beautifully proportioned octagonal vessel, the under panels of which are chamfered and slightly concave and completed by a chamfered octagonal moulding. The shaft (H 0.4m x Wth 0.14m) is octagonal and finished by a similar moulding, below which is a square base (Wth 0.54m; H 0.11m), the angles of which are so chamfered as to produce a sub-octagonal form. The basin (diam. 0.47m; D 0.19m; T 0.075m) is circular with slightly sloping sides, flat bottom and central drain'. The font is decorated with four human heads, three of which are mitred ecclesiastics and the fourth of a woman that project out from the panels (0.25m x 0.25m) on the side of the font. On the panel between the head of the woman and the mitred ecclesiastic there is an incised inscription in Roman capitals which reads 'ORATE P ME / THOMA / DOVILLE / VICARIO DE / MAYNE / R F S 1630' which translates as Pray for me, Thomas Dovile, Vicar of Mayne. A second inscription on the panel between two mitred ecclesiastics consists of the capital letters E F followed by a blank space then the letter S followed by the date 1630. One panel of the octagonal shaped shaft is decorated in low relief with 'a foliate motif of leady tendrils and a zig-zag band running from top to bottom of the design' (ibid.). The base of the font has four broad chamfer stops and the date 1640 crudely carved into it followed by the words 'OMEG V'. Font described in 1901 as an 'octagonal stone font in west porch of church: Four stone heads on outside of basin; two with mitres, one with biretta, and one with some sort of coif(?). On one face of the basin is "ORATE THOMA DOVILLE VIACRIO DE MAYNE R. F. S. 1636". The basin rests on an octagonal pillar, which stands on a square pedestal' (Anon. 1901, 120). Church was closed and inaccessible at time of visit.

WM003-083 Church

Early 19th century C. of I. church dedicated to St. Nicholas which is no longer in use standing in N quadrant of graveyard (WM003-083002-). This church may have been built on the site of or incorporated fabric from a medieval church recorded in 1837 as located 'on the lands of Mayne stand

the ruins of the ancient church' (Lewis 1837, 349). The precise location of this ancient church ruins have not been identified. It was recorded that 'a religious establishment is said to have been founded here by St. Fechan of Fore' (ibid., 348). Medieval church depicted on 17th century Down Survey map of Fore Parish. The hollowed spandrel of a limestone ogee-headed window belonging to the medieval church has been built into the E face of the W boundary wall of the graveyard. A cut stone mullion with diamond-shaped bar holes from a window belonging to the medieval church has been inserted into the W quadrant of graveyard to the SW of the C of I church where it may have been used as a gravemarker. Other cut stone fragments from the medieval church may have been built into the boundary wall of the graveyard or may have been used to mark graves elsewhere in the graveyard.

Church of Ireland building described by the National Inventory of Architectural Heritage as following: 'Freestanding Church of Ireland church, built c.1806, comprising two-bay hall with attached three-stage tower on square-plan to the west with crenellated parapet and corner pinnacles. Shallow sanctuary/chancel to east gable and single-storey vestry to northeast corner. Pitched natural slate roofs with raised limestone verges to nave and cast-iron rainwater goods. Cement rendered walls to hall over projecting stone plinth. Tower constructed of rubble limestone with ashlar limestone detailing, including projecting string courses and an ashlar parapet and ashlar pinnacles with ball finials over. Pointed-arched windows to nave and to chancel with timber Y-tracery, leaded windows and cut-stone sills. Pointed-arched doorcase to south face of tower with chamfered limestone surround, battened timber door, overlight with Gothic tracery and a tooled limestone hoodmoulding over with 'heart-shaped' stops' (www.buildingsofireland.ie). The Topographical Dictionary of Ireland described the present church as a 'neat building in excellent repair, erected in 1806, by aid of a gift of £500 from the Board of First Fruits' (Lewis 1837, 348). A late medieval font (WM003-083001-) located inside the church was not accessible at time of visit.

WM003-083/002 Graveyard

Early 19th century C. of I. church dedicated to St. Nicholas which is no longer in use standing in N quadrant of a subrectangular-shaped graveyard (int. dims. 48m N-S; 68m E-W) enclosed by a stone wall of post medieval date. The graveyard is entered through an iron gateway with stone stile to S on SE angle of graveyard. The C of I church standing in the N of the graveyard may have been built on the site of or incorporated fabric from a medieval church (WM003-083—) recorded in 1837 as located 'on the lands of Mayne stand the ruins of the ancient church' (Lewis 1837, 349). The hollowed spandrel of a limestone ogee-headed window belonging to the medieval church has been built into the E face of the W boundary wall of the graveyard. A cut stone mullion with diamond-shaped bar holes from a window belonging to the medieval church has been inserted into the W quadrant of graveyard to the SW of the C of I church where it may have been used as a gravemarker. Other cut stone fragments from the medieval church may have been built into the boundary wall of the graveyard or may have been used to mark graves elsewhere in the graveyard. It has been suggested that the curve in the graveyard wall from ENE to NNE may suggest that this section of graveyard wall follows the line of an earlier graveyard enclosure (SMR file 05/03/1980).

WM003-083/003 Ecclesiastical Enclosure

The semi-oval form of the graveyard (WM003-083002-) boundary wall possibly indicates the presence of an Early Christian ecclesiastical enclosure (Swan 1988, 21).

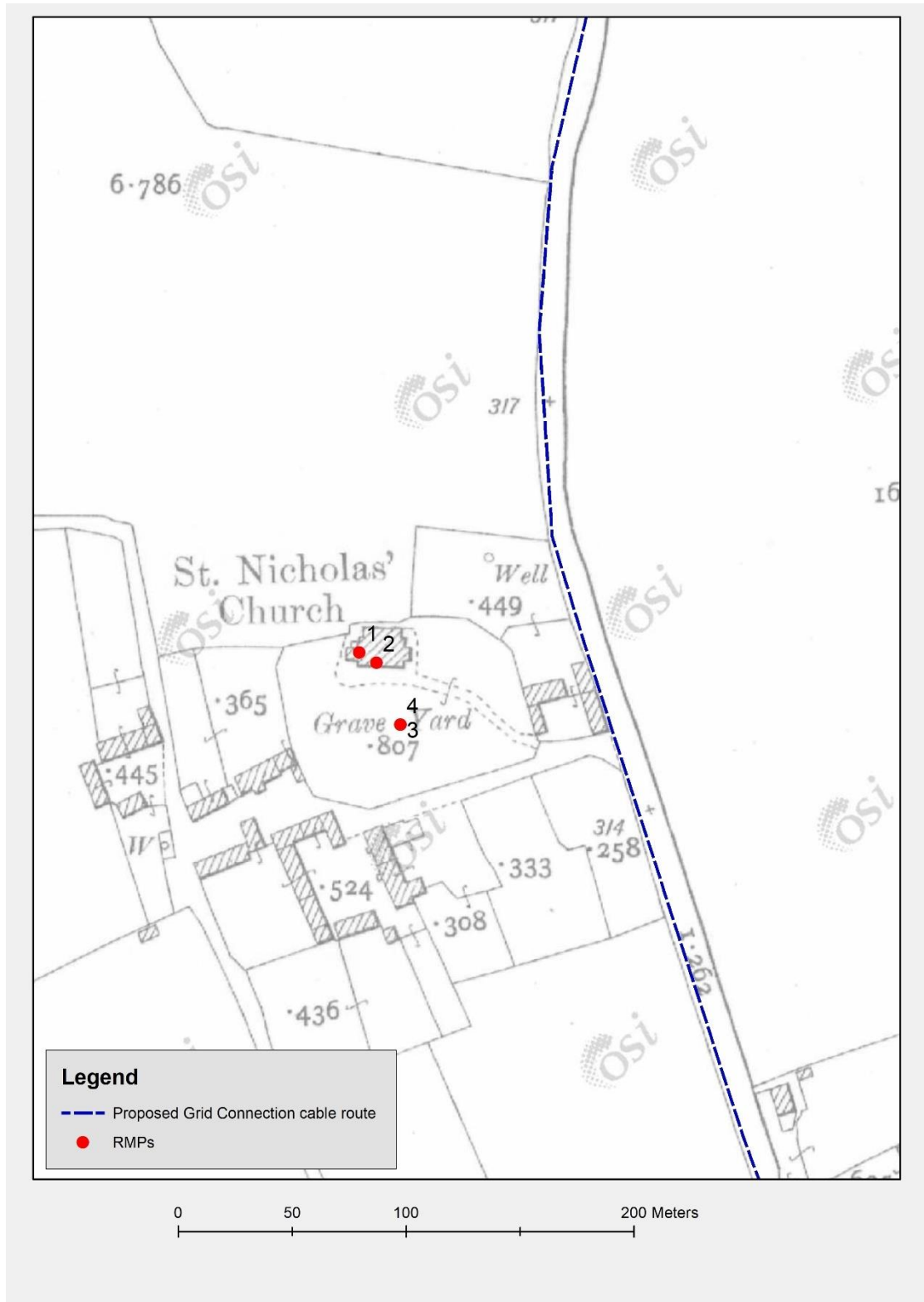


Figure 13-25: Detail of RMPs, Mayne townland adjacent to Grid Connection Route.

Ballinealoe Townland

WM003-087 moated site is located in private agricultural land off the public road. Situated on a small hillock, surrounded by gently undulating grassland. Bog visible 700m from SW-NW. Ringfort (WM003-088-) 190m to SSE. The field fence which forms the townland boundary with Mayne curves around the E edge of the monument. No surface remains of this levelled monument. Depicted as a rectangular

shaped earthwork with limekiln immediately to E on the 1837 ed. OS 6-inch map. Faint outline of levelled monument visible on Digital Globe aerial photograph taken November 2011. Outline of monument depicted on an estate map dating from 1781 (MS 21 F. 48 / (006)).

Shrubbywood Townland

The ringfort (WM006-011) is located off road in agricultural land and will not be impacted by the ground works associated with the proposed grid connection. It is situated on low-lying ground 60m to the E of the River Inny, and surrounded by bog land c. 500m away on all sides. A circular shaped area (diam. 33m NNE-SSW) enclosed by a poorly preserved earthen bank, best preserved at S and NNW, and almost completely levelled elsewhere, with slight traces of an external fosse at S. The site is bisected by a post-1700 field bank and drain running N-S. The interior is slightly raised.

Rathganny Townland

Water mill (WM006-076) is described as follows: 'In 1682 Sir Henry Piers of Tristernagh described the route of the River Gaine and the mills and bridges along its route. He wrote the following about the bridge (WM007-123—) at Multyfarnham; 'it passeth to Multifornan, where it falleth under another large bridge; thence to a mill, whence immediately it watereth the ground of the late Friery of Multifernan (WM006-058—)' (Vallancey 1786, 6). The 'Corn Mill' depicted standing on the banks of the River Gaine on the 1837 ed. OS 6-inch map may have been built on site of or in close proximity to the medieval mill of Multyfarnham'.

Abbeyland Townland

This ecclesiastical site (WM006-059) is described as follows: 'Situated in an area of pasture-land. Religious House-Franciscan Friars (WM006-058—) 190m to NE. Depicted on the 1837 ed. OS 6-inch map as 'convent', adjoining the townland boundary between Abbeyland and Multyfarnham. The convent buildings depicted on the 1837 ed. OS 6-inch map have been levelled, and no trace of any buildings survive. The Franciscan Friars site to the North-East although slightly beyond the 100m study area is described as 'a Franciscan friary which was founded by William Delamar in the thirteenth century and was reformed into an observant order in 1460 (Gwynn & Hadcock 1988, 241, 256). The patronage of the friary changed to the Nugents after the extinction of the Delamere line. In 1540 the friars had abandoned the friary which was described as consisting of 'a hall with buttery and kitchen, a church with cloister and a chapter-house beneath a dormitory, another hall with a chamber and other offices, all in sufficient repair, also a malt-house, brew-house and bakery, cemetery with a small wood, a garden, orchard and close, the site of 6 or more acres being surrounded with ditches of running water; outside were 43 acres of land, and a small island' (Gwynn & Hadcock 1988, 256). The friary was twice burnt and it was raided by the English at least six times between 1590 and 1617 (Gwynn & Hadcock 1988, 256). Today the franciscan abbey is still in use and incorporates portions of the medieval structure (SMR file). The medieval S transept forms the nave of the present Franciscan church. The archway under tower is now a chapel shrine to St. Anthony (SMR file)'.

The townland name Abbeyland is named after the archaeological monuments which have their origins in medieval times. The townland is considered to be of high archaeological potential therefore. Where the proposed Grid Connection Route traverses the townland of Abbeyland, construction stage mitigation is required.

Multyfarnham, Rathganny, Fearbranagh, Ballindurrow Townlands

A bridge (WM007-123) is located at the meeting point of the above townlands. In 1682 Sir Henry Piers of Tristernagh described the route of the River Gaine and the mills and bridges along its route. He wrote the following about the bridge at Multyfarnham; 'it passeth to Multifornan, where it falleth under

another large bridge; thence to a mill (WM006-076—), whence immediately it watereth the ground of the late Friery of Multifernan (WM006-058—)' (Vallancey 1786, 6).

The proposed Grid Connection Route does not cross the bridge however.

Ballindurrow Townland (Multyfarnham Village)

Castle Motte (WM007-072)

This monument is also described in Section 13.3.2.1.1 above as, according to the description in the archaeological inventory, is listed as a monument with a Preservation Order. Since the Grid Connection Route is located 100m from the motte no impacts are anticipated.

Church (WM006-061) and Graveyard (WM006-061001)

The medieval nave and chancel parish church dedicated to St Andrew in the village of Multyfarnham is depicted as a ruinous building on the 1659 Down Survey map of the parish of Multyfarnham (NLI, MS 723-4). In the papal Taxation of 1302-06 the church of Multyfarnham located in the deanery of Mullingar is valued at 100s. yearly (Cal. Doc. Ire., 259). In 1411 the rectory of the parish church of St. Andrew of Multyfarnham was described as being of lay patronage which is 'vacant at present by the death of Robert Oconyngean' and which was then conferred to Bernard Macmurkerchaid [Mac Murtagh], a clerk of the diocese of Ardagh' (Costello 1909, 84). In 1449 the death was recorded of 'Geoffry de Lemara [Delamere], rector of the parish church of Multyfarnham' (ibid., 98). In 1492 there is a reference to 'Thebaldus de la Mayr' [Theobald Delamere] who is described as the rector of the parish church of St. Andrew the Apostle of Multyfarnham (ibid., 170). Depicted as 'St Andrew's Chapel' and shown as a long rectangular building on 1837 ed. OS 6-inch map. Only the W gable of the church is depicted on the 1912 ed. OS 25-inch map.

The long rectangular church ruins stands on a low rise of ground with unlocated medieval castle site (WM006-060—) to N, possible motte (WM007-072—) 110m to NE with River Gaine 160m to NE. Franciscan friary (WM006-058—) 500m to N. Present remains consist of a short upstanding section of the N end of the W gable of a medieval nave and chancel church standing in the centre of a sub-triangular shaped graveyard (WM006-061001-). The remaining walls of the church ruins are indicated by recently exposed low wall footings. Inside the church ruins are some post-medieval headstones. Scattered throughout the graveyard are several architectural fragments belonging to the medieval church that have been inserted into the graveyard. These include the punch dressed arch stone of the original church doorway, two window sills and one chamfered punch dressed window jambstone. It is not clear if these fragments have been inserted into the graveyard to act as gravemarkers in the post medieval period or whether they have been inserted into the graveyard in recent times as part of graveyard clean up scheme.

St. Andrew's Church ruins were described in 1976 as following: 'Apart from some standing wall remains in the NW corner and some further rubble collapse at the E end of the N wall. Very little survives. The basic rectangular plan (quite large) of a medieval parish church (ext. dims. L approx. 20m E-W; 6.3m N-S; Wall T 1.05m) can be made out, the footings are now grass covered and mounded up. There is a door ope 6m W of the E end of the N wall showing reveal stone and another less obvious gap opposite in its S wall. The standing wall remains at the NW corner have been cemented or dashed over and look very unsightly. No features visible. The masonry underneath appears to be very small poor quality. There is no clear trace of an internal division. Headstones and tombstones within and without chapel – modern. The graveyard wall is high at W side of site but probably modern. Here at a distance of 9m out from this wall there is a low bank curving round to the S. It appears to be a double banked feature in places with a width of 4m between and so could be the remains of an earlier roadway' (SMR File 15/07/1976). Today there are no surface remains of this possible medieval roadway as a modern cemetery extension is now located on the W side of the medieval graveyard. In 1980 the church ruins were described as following: 'only a small portion of the west gable smothered in ivy and shored up with concrete approx by grass covered wall footings. The

building was aligned approx. E-W and measures approx. 9.5m N-S by approx. 26m E-W. The east end is rather disturbed. There are indications that the church was divided into a nave and chancel. The chancel being approx. 8m long by 8.5m wide N-S. Precise measurements are impossible because of long grass and collapsed stones. The ruin is within a roughly triangular graveyard bounded by a stone wall. There are several 19th and 20th century tombstones in the graveyard (SMR file 08/10/1980).

The graveyard (approx. dims. 65m N-S x 43m E-W) is on the S side of the village of Multyfarnham with medieval church ruins (WM006-061—). The graveyard stands on a low rise of ground with unlocated medieval castle site (WM006-060—) to N, possible motte (WM007-072—) 110m to NE with River Gaine 160m to NE. Franciscan friary (WM006-058—) 500m to N. The graveyard contains memorials dating from the 18th century onwards and is enclosed by a post-medieval stone wall with entrance gate at E and modern cemetery extension to W. Scattered throughout the graveyard are several architectural fragments belonging to the medieval church that have been inserted into the graveyard. It is not clear if these fragments have been inserted into the graveyard to act as gravemarkers in the post medieval period or whether they have been inserted into the graveyard in recent times as part of the graveyard clean up scheme.

Given the proximity of the church and graveyard to the proposed Grid Connection Route mitigation measures will be required.



Plate 13-37: Church and graveyard WM006-061 and 001 at south end of Multyfarnham village, looking NW.



Plate 13-38: Proposed Grid Connection Route where it extends along public road immediately adjacent to graveyard wall, looking north-north-east.



Plate 13-39: As above, looking north.

Portnashangan townland

Four ringforts (WM012-088, 089, 090 and WM012-164) are located within 100m of the proposed Grid Connection Route where it extends along the N4 National Road. WM012-088 and 90 would appear to have been investigated/excavated in advance of the construction of the roadway in the early 1990s. The latter (WM012-164) is located 80m from the N4 and proposed Grid Connection Route.

WM012-088

Situated at the bottom of a low ridge on good pasture which rises gradually S of the site, with Ballynafid Lake 110m to W. Depicted as a tree-lined enclosure and annotated as a 'fort' on the 1837 ed. OS Fair Plan map. Circular shaped area (approx. diam. 35m N-S) enclosed by a low earth and stone bank with external fosse only visible at E, and from W-WNW. Present wide entrance gap at SW with a second blocked up entrance at SE, neither of which are well defined. The enclosing bank is defaced and the profile has been sharpened in recent times. Post 1700 field fences intersect the perimeter of the monument at N, SE and SW. Cultivation ridges are visible running E-W across the interior of the monument. Modern dwelling and farm buildings adjacent to site on the S. Modern road running N-S intersects perimeter of monument at E. (Date of upload: 16 February 2018).

WM012-089

Situated on NW face of a ridge in grassland, overlooking Ballynafid Lake 180m to the NW. Ringfort (WM012-088—) 80m to NNW. Depicted on the 1837 OS Fair Plan map as a roughly oval-shaped earthwork with trees on the perimeter and annotated as 'fort'. A modern road is now located on the site of the monument. Described in 1980 as a poorly preserved ringfort consisting of a circular shaped area (approx. diam. 26m NE-SW; 25m NW-SE) enclosed by a low earth and stone bank (Wth 4.7m; H 0.4m) and shallow external fosse. The enclosing bank only survives from ESE-S and was reduced to a scarp elsewhere. The interior slopes gradually to the NNE.

WM012-090

Situated on N facing slope of a ridge in grassland, to the N of a farm yard, overlooking Ballynafid Lake 360m to NW. Ringfort (WM012-091—) 155m to E. An unusually large circular shaped area (approx. diam. 54m N-S; 47m E-W) enclosed by an earthen bank and external fosse. The bank has been levelled from NE-E-SE, and the outer face of the bank has been lined with dry-stone walling from SSE-SSW. The external fosse is visible from SSW-NW. A large hay barn has been built in the SE quadrant of the interior, and a wide trackway crosses the interior E-W, cutting through the enclosing bank at W, where a gate has been erected. The interior slopes gently towards N.

Excavation Summaries

The excavations are summarised as follows:

1990:116 - Portnashangan 1, Portnashangan, Westmeath

County: Westmeath

Site name: Portnashangan 1, Portnashangan

Sites and Monuments Record No.:

SMR 12:88

Licence number:

Author: Valerie J. Keeley, 29/30 Duke Street, Athy, Co. Kildare.

Site type: Ringfort

ITM: E 641342m, N 760321m

Prior to excavation the site was represented by a well defined circular bank 45m in external diameter. The construction of the proposed Longford Road Improvement Scheme is scheduled to remove the southern portion of the monument.

Excavation revealed a well constructed monument, represented by a bank with outer ditch. The bank measured 0.9m in height and was constructed from compacted boulder clay. Directly under this material a band of compacted grey soil measuring 0.15m-0.2m in thickness appeared. This appears to be evidence of the old ground surface. The ditch measured 1.2m in depth and 2.4m in width. The fill consisted of a loose brown clay which was devoid of habitation material. In one section a modern drain cut into the existing ditch. The interior of the monument produced no archaeologically significant material. Ceramics recovered from the area included a few sherds of medieval glazed ware but mostly fragments of modern delft. A struck chert flake was also found.

1990:117 - Portnashangan 3, Portnashangan, Westmeath

County: Westmeath

Site name: Portnashangan 3, Portnashangan

Sites and Monuments Record No.: N/A

Licence number: –

Author: Valerie J. Keeley, 29/30 Duke Street, Athy, Co. Kildare.

Site type: Ringfort

ITM: E 641442m, N 760021m

Only one section of the bank of the monument was visible, as over the years various farm buildings had been erected, thus interfering with the structure. The area to be affected by the Longford Road Improvement Scheme lies 10m to the north of the monument. This area was thoroughly investigated to ascertain if any trace of arm enclosing ditch could be detected. No archaeological material or structures were found to be present.

1993:221 - Portnashangan, Westmeath

County: Westmeath

Site name: Portnashangan

Sites and Monuments Record No.: SMR 12:88 and 12:90

Licence number: 93E0139

Author: Hilary Opie, 16 Ormond Sq., Dublin 7 for Project Director: V.J. Keeley-Schmidt.

Site type: Two ringforts

ITM: E 641314m, N 759412m

Excavations were carried out at two ringfort sites at Portnashangan, Mullingar, Co. Westmeath. Both sites were investigated prior to road development. The work took place between 20th September and 1st October 1993. The sites are referred to as "Site C" and "Site E" as both were previously excavated under these titles (Excavations 1990, 50),

Site C: Cuttings A, B and C1 were dug in the interior. They produced no finds or features of archaeological significance. In Cutting C2, a steep-sided V-shaped ditch had been cut into the subsoil. It was 2.5m wide and 0.75m deep with the subsoil dug from the ditch being thrown up to form the bank giving a total height/depth of 2.2m. Various layers of ditch fill were observed but no finds were recovered the could help with the dating. In cutting D the ditch was shallower and wider, being cut into the subsoil to a depth of 0.4m with a width of 4m. There were no finds from the ditch fill. A section cut through revealed the bank to be made up of redeposited subsoil measuring 0.9m at its highest point. It appears there was just one episode of construction rather than a build-up of the bank over time. The bank was sitting on a layer of white-grey subsoil, representing the original ground surface.

Site E Cuttings E and F contained no archaeological finds or features.

Cutting G – remains of the ringfort bank extended for 5m and to a height of 1m. However, much of the bank appears to be cut away with major disturbance being noted. The bank was constructed from redeposited subsoil and was sitting on a layer of white-grey subsoil which represents the original ground surface. This was very similar to that found on Site C. No sign of a ditch was observed.

Cutting H was very similar to Cutting G. However, here the bank extended for 2.3m and to a height of 0.5m and was constructed from stony redeposited subsoil with a small amount of clay. Of most interest was a deposit of animal bone found at the base of the bank, just above undisturbed subsoil levels. From their position they must date to a time contemporary with or prior to the construction of the bank. No remains of a ditch were found.

Given that the proposed Grid Connection Route will be placed within the N4 road take and that the monuments were subject to archaeological investigation, further impact to these sites is unlikely. A visual inspection of WM012-088 at the west side of the N4 would suggest that a portion of the monument remains extant. Depending on the precise route of the proposed underground Grid Connection Route (i.e. on the east or west side of the road) some mitigation may be required at the construction stage of the development.

WM012-164 Ringfort

Situated on a natural hillock, surrounded by gently undulating land with good views to the N, E and SE. The E shoreline of Lough Owel lies 225m to SW. Roughly circular-shaped area (approx. diam. 45m NE-SW) enclosed by an earth and stone bank mainly reduced to a scarp with slight remains of an external fosse best preserved at N. No clear entrance feature visible, the bank has several gaps all of which to be modern. The outer face of the bank has been modified from ESE-SE-SSE to form a post 1700 field boundary. The interior slopes quite steeply from NNW-SSE, traces of cultivation ridges are visible running E-W across the interior.

This will not be impacted by the proposed Grid Connection Route.

Culleen More Townland

A ringfort (WM012-165) is located in Culeen More townland and is described as follows: Situated on the shore of Lough Owel on WSW facing slope of rising ground with good views from SW-NW. Depicted on the 1837 OS Fair Plan map as an oval shaped enclosure annotated as 'fort'. A railway line (Sligo Branch of the MGWR) running N-S cuts through the site; only the E side of the monument survives. All that is now visible is semi-circular area (approx. diam. 50m N-S), enclosed by an arc of earthen bank curving from N-E-SE. The remains of a field fence running E-W, which is also the boundary with Portnashangan intersects the N perimeter of the monument.

The eastern extent of the monument is located close to the western edge of the N4. Construction stage monitoring should take place in the vicinity of the Grid Connection Route.

Irishtown Townland

WM019-030 Mound Barrow

A mound barrow (WM019-030) at Irishtown townland is located within 100m of the proposed Grid Connection Route but is situated off-road in pasture and will not be impacted by this aspect of the Proposed Development. Surveyed in 2012 and described by McGuinness (2012, 37) as following: ‘Tall, steep-sided conical tumulus (Diam. 16.5m NS x 18m EW), situated on low, natural eminence in kame and kettle-hole landscape, with a kettle-hole lake close by to NE (pers. comm. Seamus O'Brien). Ground level varies greatly around monument, so that its height ranges from 3.11m on SW side to 3.9m on NE side; ground falls away sharply to SE, making it difficult to distinguish between slope of mound and the natural slope, but it appears to have been highest on this side. Mound apparently had a rounded top originally, although there may have been a very small, flattened apex. The top has been dug into at some stage, possibly by treasure-hunters: an area c. 1.5m x c. 1.2m has been dug to a depth of c. 0.35m. There is some recent cattle-erosion around edges of mound, showing it to be composed of very stony earth. Various ledges or steps are also visible around its circumference, but none appears to run continuously around. While the clear steps on the Slane More barrows suggest the possibility that these ledges are original features, their irregular character and the smooth, elegant profile surviving on the SSW side strongly suggests that they are paths made by cattle climbing the mound or terraces resulting from soil-flow. There is an old, overgrown quarry just N of mound. Mound at Colleen More (WM019-013—) is just visible to NE and Knockdrin (WM012-1183—) is very prominent to ENE’.



Plate 13-40: Mound barrow WM019-030 at Irishtown, looking south-east.

WM019-034 Castle

The site of an unclassified castle WM019-034 is located within 100m of the proposed grid connection route towards the southern end of same. Situated in pasture, 2.3km NW of Mullingar town. A tower house type fortification is depicted standing in the townland of Irishtown on the Down Survey map of Mullingar Parish (NLI, MS. 723-4). In 1641 the lands of Irishtown were in the possession of Thomas Petit who is described in the terrier of the Down Survey of Mullingar parish as an 'Irish papist' (ibid). Depicted on the 1837 ed. OS 6-inch map as a series of small fields and plots, some containing buildings with a laneway running ENE-WSW through the centre, the buildings are annotated 'Castlemitchel'. Depicted on the revised 1913 ed. OS 25-inch map as a substantial roughly square-shaped earthwork which probably represents the bawn of the castle defined by an earthen bank with two rectangular buildings roughly aligned N-S standing in the centre that are annotated 'Castlemitchel'. A laneway running roughly E-W bisects the large square-shaped earthwork and provides access from the buildings to the public road which intersects the earthwork at W. Today there are no surface remains visible of the two buildings depicted on the OS 6-inch map.

Monument described in 1983 as the remains of a large subrectangular-shaped area (dims. 140m ENE-WSW; 135m NNW-SSE) enclosed by the remains of an earthen bank, an intervening fosse and an outer bank. The wide inner bank (Wth 4-8m; H c. 1m) is quite low and is particularly poorly preserved from SW-W and is irregular from W-NW. A shallow fosse is visible from WNW-NE and a very wide fosse is evident from ESE-S-W. There is a causeway across the fosse at the SW corner, however this may not be an original feature. An outer bank (Wth 4-6m; H 1.5m-2m) is visible from ESE-S-SSW and is not seen elsewhere. A modern farm shed has been built on the line of the bank at ENE. The interior has a very slight and uneven NW-facing slope. The stony foundation of the laneway running ENE-WSW which bisects the site on the 1837 ed. OS 6-inch map can be traced on the ground surface. The enclosing element of the castle survives today as an upstanding earthwork visible from WNW-NE-S-SSW, elsewhere it has been reduced to a low scarp. The enclosing elements of the castle are best preserved from E-S where it is visible as a bivalent tree-lined earthwork with intervening fosse. The low wall footings of a possible building probably the castle building itself can be seen in the NE quadrant of the enclosure. Castlemitchel was placed on the Register of Historic Monuments on the 25/04/1989 (Date of upload: 03 April 2019).

While the buildings are no longer extant, the original enclosing elements of the castle site may have extended as far as where the public road is now located. In this regard some construction stage mitigation measures will be required.

13.3.2.1.3 **New potential archaeological sites**

No new potential archaeological sites were noted along the proposed Grid Connection Route during the site inspection.

13.3.2.1.4 **Archaeological investigations undertaken along the proposed Grid Connection Route**

Each townland including Monkstown, Coole, Fearmore, Mayne, Newtown, Ballinealoe, Simonstown, Shrubbywood, Clonava, Lackan, Soho, Ballynaclonagh, Abbeyland, Rathganny, Ballindurrow, Culleenabohoge, Culleendarragh, Knightswood, Ballynafid, Portnashangan, Culleen More, Farranistick and Irishtown through which the proposed Grid Connection Route traverses. It's extents were checked in the database of Irish excavations to ascertain if any archaeological investigations produced positive results. The following summaries were returned.

Fearmore, Shrubbywood and Clonava

2007:1882 - Coolnagun Bog, Bottomy/Clonava/ Clonconnell/Clonkeen/Coolnagun/ Dunamon/Fearmore/Shrubbywood, Westmeath

County: Westmeath Site name: Coolnagun Bog, Bottomy/Clonava/ Clonconnell/Clonkeen/Coolnagun/ Dunamon/Fearmore/Shrubbywood

Sites and Monuments Record No.: N/A Licence number: 07E0907

Author: Jane Whitaker, ADS Ltd, Windsor House, 11 Fairview Strand, Dublin 3.

Site type: Survey

ITM: E 637602m, N 771297m

Latitude, Longitude (decimal degrees): 53.690035, -7.430699

This bog was surveyed as part of the 2007 Peatland Survey which concentrated on Bord na Móna's (BnM) Cuil na Gun and Mountdillon groups. It is located 3km west of Coole village. It is south of Milkernagh Bog (see No. 1881 above) and it too has been in moss peat production for two years, having previously been used for sod peat production. There was much evidence for redeposited peat, with large areas of bog containing buried rubbish in the form of concrete, plastic, peat sods and modern timber. There was a prominent ridge running north-south across the middle of the bog, with some large fallen oak trunks lying on it. To the south was a large area still in sod peat production, a

mosaic of large fields, old cuttings, stacks of cut sods and scrub. Although worked by private contractors, it was owned by BnM and so it was included in the field-walking.

Only one area of possible archaeology was found in the main bog and none in the private area. CNG001 comprised four sightings of timber with metal axe-cut toolmarks. The area where the wood was found was very disturbed and contaminated with modern material and therefore the site may be modern.

Mayne Townland

2006:2056 - Mayne Bog, Mayne, Westmeath

County: Westmeath Site name: Mayne Bog, Mayne

Sites and Monuments Record No.: N/A

Licence number: 06E0928

Author: Jane Whitaker, ADS Ltd, Windsor House, 11 Fairview Strand, Dublin 3.

Site type: Plank trackway

ITM: E 639270m, N 771812m

Latitude, Longitude (decimal degrees): 53.694535, -7.405390

In 2005 a plank trackway was reported to the Department of the Environment, Heritage and Local Government (DOEHLG) and was subsequently visited by Conleth Manning and Geraldine Stout. It was discovered to be a substantial transversely laid plank trackway. In September 2006, a small-scale investigatory excavation was undertaken on behalf of the DOEHLG.

The site was orientated north-south, running across industrial peatland from the River Inny on the east to an area of higher ground to the west. The recorded length of the trackway was 657m, but it was seen to extend beyond both recorded limits.

The trackway was investigated in a single cutting and 43 sightings of the trackway in drainage ditches were also recorded. This work was carried out on 11-14 September 2006. Excavation exposed a structure composed of tightly packed transverse oak planks, most of which had been mortised and fixed in place with roundwood pegs. The planks measured up to 4.4m in length, 0.3m in width and 0.06m in thickness. The substructure consisted of light brushwoods, plank fragments and wood chips which were scattered across the surface of the bog. Some of these elements had been arranged into three roughly longitudinal lines of brushwoods. A 14C date of 1200-820 bc was obtained from the superstructure.

Further archaeological and environmental investigations of the plank trackway have been recommended in order to ascertain the structure's full length, to develop a picture of the local environment at the time of its construction and to examine the role it may have played in the landscape.

Lackan Townland

1999:872 - LACKAN, MULTYFARNHAM, Westmeath

County: Westmeath Site name: LACKAN, MULTYFARNHAM

Sites and Monuments Record No.: SMR 6:70 Licence number: 99E0036

Author: Sylvia Desmond, 25 Rowan Hall, Millbrook Court, Milltown, Dublin 6, for Judith Carroll & Co. Ltd, Pine Forest Art Centre, Pine Forest Road, Glencullen

Site type: Ringfort with souterrain

ITM: E 637658m, N 765406m

Latitude, Longitude (decimal degrees): 53.637093, -7.430569

Eleven test-trenches were excavated by machine, during January 1999, on the site of a souterrain. It was proposed to erect two houses within the general area of this monument, the exact location of which was not known before the test excavations.

Five trenches for House 1, which varied from 10m to 20m long and were all 1.5m wide, were excavated by machine down to natural boulder clay, which was revealed at 0.3m below the sod. These trenches, in the southern portion of the site, revealed no archaeological remains.

A further six trenches, including a small cut for a sewage tank, ranging from 10m to 20m long and 1.5m wide, were excavated in the northern portion of the site for House 2. All of these trenches revealed charcoal flecking and archaeological features. The trenches revealed that the souterrain lay within the central area of the proposed location for this house. The souterrain passage ran completely across the width of the site for House 2 in an east-west direction. It was traced for a length of 25m, and it was obvious that it extended out under the present Multyfarnham road. The souterrain lay only 0.2m under the topsoil and consisted of large stones, 0.3m x 0.2m, laid flat. These stones appeared to form the roof of the souterrain, which was 1m wide.

Several other features were revealed within the trenches. Trench 1 revealed a linear feature cut into the natural boulder clay, 3.5m wide and 0.4m deep. Trench 2 revealed two linear features. Both were up to 3m wide with a maximum depth of 0.7m. The fill of these features contained a considerable amount of charcoal and bone. Although the features appeared as linear cuts, they may have been portions of pits, filled with occupation debris. Trench 2, within which the souterrain passage was clearly defined, also revealed areas of paving and deposits of charcoal. The souterrain passage was also clearly revealed in Trench 9 and again was associated with linear cuts and disturbed soil.

It was apparent that this large souterrain passage was within a substantial ringfort. The southern bank and ditch are well defined, but the western portion was very difficult to ascertain, as was the northern portion. The remains of the bank and ditch were investigated on the southern portion of the ringfort. The ditch was just under 1m wide and 0.6m deep, and the bank remained to a height of 0.6m, with a width of 2m. Observations on the ground indicate that the northern portion of the ringfort may have extended into the grounds of an extant cottage and that the ringfort may also have extended across the road. An approximate estimation of the ringfort within the area outlined for the houses is 38m north-south by 30m.

A small quantity of animal bone, together with some sherds of post-medieval pottery, was retrieved from the trenches.

2001:1287 - Lackan, Multyfarnham, Westmeath

County: Westmeath Site name: Lackan, Multyfarnham

Sites and Monuments Record No.: N/A Licence number: 99E0036

Author: Ruth Elliott, Judith Carroll & Co. Ltd, 13 Anglesea Street, Dublin 2.

Site type: Adjacent to ringfort

ITM: E 637658m, N 765406m

Latitude, Longitude (decimal degrees): 53.628210, -7.432740

Monitoring was conducted at Lackan on 30 June 2001 on the site of a residential development adjacent to a ringfort and souterrain (SMR 6:70). The original plans involved the construction of two houses, House 2 within the ringfort and House 1 just over 10m to the south. Testing carried out by Sylvia Desmond in 1999 (Excavations 1999, No. 872) concluded that House 2 would significantly affect the ringfort and souterrain. However, no archaeological material was uncovered in the area of House 1. Topsoil-stripping in the area of this house and its associated entranceway did not reveal any archaeological finds, features or deposits.

Ballindurrow Townland

2017:677 - Ballindurrow, Multyfarnham, Westmeath

County: Westmeath Site name: Ballindurrow, Multyfarnham

Sites and Monuments Record No.: WM007-072 Licence number: 17E0366

Site type: No archaeology found

ITM: E 640353m, N 764046m

Latitude, Longitude (decimal degrees): 53.624671, -7.389995

Monitoring was carried out of groundworks associated with the extension of a residential structure at Ballindurrow, Multyfarnham, County Westmeath. Monitoring was carried out in response to planning conditions attached to the development (Planning Ref.: 16/6287).

The development area is located on the western side of Main Street, Multyfarnham. The River Gaine is located c. 65m to the north-east of the site. There are seven recorded monuments within 500m of the development area. The most significant of these in relation to the development is a motte (WM007-072), which borders the site to the south-east. The motte is well-preserved although no trace of a bailey, if one ever existed, survives today.

Monitoring of topsoil stripping took place over two days in August 2017. Nothing of archaeological significance was identified during these works.

Ballynafid Townland

2004:1717 - BALLYNAFID, Westmeath

County: Westmeath Site name: BALLYNAFID

Sites and Monuments Record No.: N/A Licence number: 02E0430 ext.

Author: Patricia Lynch, 27 Hilltown Way, Swords, Co. Dublin, for Valerie J. Keeley Ltd.

Site type: No archaeological significance

ITM: E 640453m, N 760129m

Latitude, Longitude (decimal degrees): 53.589466, -7.388987

Monitoring was carried out on 10-26 March 2003 at Ballynafid prior to the construction of a new access road adjacent to a ringfort site (SMR 12:84). Previous monitoring was carried out by Grace Fegan (Excavations 2002, No. 1839).

The development involved the construction of an access road to facilitate the closing of two level crossings, XS11 and XS12. The road was to run parallel to the western boundary of the railway bridge. Following discussions with Iarnrod Eireann, the road was reduced from 5m to 4m in width. This was further reduced to 3m along the stretch adjacent to the ringfort, leaving a distance of over 6m from the base of the bank to the edge of the access road. A mechanical digger was used to remove the topsoil. One area of archaeological potential was identified and was excavated under the monitoring licence. This area of intense burning was considered to be non-archaeological.

No features of archaeological significance were identified during the monitoring.

13.3.2.1.5 **Topographical Files of the National Museum of Ireland**

A number of finds spots in the townlands through which the Grid Connection Route extends were noted.

Clonava

➤ 2009:258

Polished stone axehead found on the surface of a field by Professor Woodman while on a field trip to Lough Derravarragh around 1989. Nat grid ref ITM 639371/ 768309, L 8.7 W 6.322 T 1.744

Lackan

- 1993:15
Whetstone found beside a church and graveyard in Lackan in 1992.
OS6" no. 6
- 1964:80
Polished axehead found while cutting turf in the bog near the shores of lough Derravarragh, c. 12 ft deep in 1954.
No other information available
- 1969:825
Iron spearhead found in mud at the edge of the river Inny after the water level dropped due to drainage.
Description: leaf shaped blade with a short socket. L 28.2cm L (socket) 5.7 cm W of blade 4.9cm
No other information available

Soho

- 1874:33 Silver coin (There was no file with this number).

Ballynaclonagh

- 1941:1142, Honestone found in 1941 and sent to the museum.
OS6"sheet no. 6

Abbeyland

- 2009:127

Silver Elizabethan six pence coin found in a flower bed in the quadrangle of the Franciscan friary at Multifarnham, Abbeyland, Co. Westmeath. SMR number WM 006-058. OS6" sheet no. Westmeath 6
- 2009:117

Polished stone axehead, unknown type, was found by REV. Brady when removing a tree stump in the forest field Multyfarnham abbey. OS6" sheet no. 6. Nat grid ref 639576/764939

13.3.2.2 Architectural and Cultural Heritage along the Grid Connection Route

13.3.2.2.1 Protected Structures

The dataset of the Record of Protected Structures for County Westmeath was downloaded onto the base mapping for the assessment. All protected structures within 100m of the proposed Grid Connection Route were considered in terms of potential impacts to same as a result of the Proposed Development. Those protected structures which occur within 100m of the proposed Grid Connection

Route are listed in Table 13-7 below. It should be noted that all those listed are also included in the National Inventory of Architectural Heritage (NIAH) for County Westmeath.

Twenty structures listed in the RPS for County Westmeath are located within 100m of the proposed underground Grid Connection Route as follows.

Table 13-7: Protected Structures within 100m of the proposed Grid Connection Route.

RPS No.	NIAH REG.	STRUCTURE	Td.	RATING	ITM E	ITM N	DISTANCE TO CABLE (M)
019-239	15401916	Levington Railway Crossing Gates	Farranistick	Regional	642527	756025	0
019-237	15401913	Gate lodges, Levington Park,	Farranistick	Regional	642249	755704	2
019-236	15401912	Gateway, Levington Park	Farranistick	Regional	642242	755689	4
007-043	15304010	House	Rathganny	Regional	640350	764100	9
007-038	15304004	House	Ballindurrow	Regional	640329	763962	11
006-011	15304006	House	Ballindurrow	Regional	640327	764028	12
003-040	15400334	Former school building	Newtown	Local	641630	771934	13
007-040	15304007	Store (former forge)	Ballindurrow	Regional	640387	764090	26
007-039	15304005	St. Nicholas' Roman Catholic chapel	Ballindurrow	Regional	640343	764008	29
006-016	15304016	The Way of the Cross - Multyfarham Abbey	Abbeyland	Regional	640067	764372	30

RPS No.	NIAH REG.	STRUCTURE	Td.	RATING	ITM E	ITM N	DISTANCE TO CABLE (M)
007-042	15304009	Bridge	Multyfarnham Or Fearbranagh	Regional	640391	764114	34
006-017	15304017	Water pump	Ballindurrow	Regional	640278	764001	36
003-042	15400337	Simonstown House	Simonstown	Regional	641700	771198	38
012-001	15304001	Ballindurrow House	Ballindurrow	Regional	640614	763310	51
012-002	15401201	Former RIC barracks	Ballynafid	Regional	640740	760985	53
012-005	15401204	Ballynafid National School	Knightswood	Regional	641112	760825	56
003-041	15400335	St. Nicholas Church of Ireland church	Mayne	Regional	641562	771519	63
007-037	15304003	Rivervale House	Ballindurrow	Regional	640394	763807	67
012-001	15304001	Ballindurrow House	Ballindurrow	Regional	640627	763323	68
006-015	15304015	Bridge	Abbeyland	Regional	640149	764363	91

The closest protected structure to the Grid Connection Route comprises Levington railway crossing gates which are located on the public road along which the proposed Grid Connection Route extends. The level crossing gates are 19th century in date being part of the Dublin-Sligo railway line and are still in active use. They will not be impacted by works associated with the proposed Grid Connection Route.

Other protected structures in close proximity to the proposed Grid Connection Route comprise the gate lodge (Ref. 019-237) and gateway (019-236) to Levington Park house which is also included in the Record of Protected Structures (Ref. 019-234). The house is situated c. 130m to the north-west of the proposed underground Grid Connection Route in private property and will not be impacted by works

associated with the underground cable. The roadside features associated with the house as mentioned above are situated within 2-4m of the proposed Grid Connection Route which will extend along the adjacent public road. While it is unlikely that any direct impacts to these structures will occur as a result of the proposed Grid Connection Route some mitigation at the construction stage of the Proposed Development is recommended for this area.

It should be noted that the majority of the structures listed in Table 13-7 are located off-road or adjacent to the roadside and comprise houses or churches that will not be directly impacted by ground works associated with the construction of the proposed underground grid connection. Similarly, the route extends past a number of protected structures (including 007-043) that form the streetscape in Multyfarnham village but will not impact directly on same given that the proposed cable will be placed in the public road. Also, in Coole, Simonstown House (Ref. 003-042) is situated off-road in private property and will not be directly impacted by the works associated with the Grid Connection Route which will be placed within the public road c. 38m to the north-west.



Plate 13-41: Proposed Grid Connection Route in relation to gate lodges (Ref. 019-237) at entrance to Levington Park, looking NE.



Plate 13-42: Main entrance gates (Ref. 019-236) to Levington Park Demesne along Grid Connection Route.



Plate 13-43: Timber level crossing gates (Ref. 019-239) at Farranistick townland along Grid Connection Route (photo from www.buildingsofireland.ie).



Plate 13-44: Protected structure 007-043 adjacent to the proposed Grid Connection Route in Multyfarnham village (photo courtesy of www.buildingsofireland.ie).



Figure 13-26: RPS structures within 100m of the proposed Grid Connection Route at Coole.



Figure 13-27: RPS structures within 100m of the proposed Grid Connection Route in or near to Multyfarnham.



Figure 13-28: RPS structures within 100m of the proposed Grid Connection Route at Ballynafid and Farranistick.

13.3.2.2.2 NIAH structures

Twenty-two structures listed in the NIAH for County Westmeath are located within 100m of the proposed Grid Connection Route and are listed in Table 13-8 below and shown in Figure 13-29. The majority of these structures are also included in the Record of Protected Structures and are therefore also listed in Table 13-7 and discussed above in section 13.3.2.2.1.

Table 138: NIAH structures within 100m of the proposed Grid Connection Route.

MAP ID	REG NO.	DATE	Td.	RATING	STRUCTURE	IN USE AS	DISTANCE TO CABLE (M)
1	15304001	1800 - 1840	Ballindurrow	R	house	house	69
2	15304003	1800 - 1840	Ballindurrow	R	rectory/glebe/vicarage/curate's house	house	65
3	15304004	1800 - 1840	Ballindurrow	R	house	house	13
4	15304005	1830 - 1850	Ballindurrow	R	church/chapel	church/chapel	30
5	15304006	1820 - 1840	Ballindurrow	R	house	house	12
6	15304007	1830 - 1850	Ballindurrow	R		forge/smithy; outbuilding	25
7	15304009	1830 - 1870	Ballindurrow, multyfarnham, multyfarnham or fearbranagh	R	bridge	bridge	29
8	15304010	1800 - 1820	Rathganny	R	house	house	14
9	15304011	1880 - 1890	Rathganny	R	public house	public house	17
10	15304015	1830 - 1835	Abbeyland	R	bridge	bridge	89
11	15304016	1925 - 1935	Abbeyland	R	building misc	building misc	32
12	15304017	1870 - 1910	Ballindurrow	R	water pump	water pump	38
13	15400334	1820 - 1840	Newtown (delvin by.)	L	school	house	11
14	15400335	1800 - 1810	Mayne	R	church/chapel	church/chapel	66
15	15400336	1810 - 1820	Mayne	R	rectory/glebe/vicarage/c	house	51

MAP ID	REG NO.	DATE	Td.	RATING	STRUCTURE	IN USE AS	DISTANCE TO CABLE (M)
					urate's house		
16	15400337	1810 - 1830	Simonstown (farbill by.)	R	house	house	40
17	15401201	1820 - 1830	Ballynafid	R	RIC barracks	house	54
18	15401204	1845 - 1850	Knightswood	R	school	community centre	44
19	15401912	1800 - 1820	Farranistick	R	demesne walls/gates/railings	demesne walls/gates/railings	4
20	15401913	1800 - 1820	Farranistick	R	gate lodge	gate lodge	1
21	15401915	1850 - 1900	Irishtown (moyashel & magheradernon by.)	R	house	house	18
22	15401916	1850 - 1860	Farranistick	R	level crossing	level crossing	2

The nearest NIAH structures to the proposed underground Grid Connection Route are also those Protected Structures discussed above at Farranistick townland and comprise the level crossing (NIAH Reg. 15401916) and the gate lodge (NIAH Reg. 15401913) and gateway (NIAH Reg. 15401912) associated with Levington Park. As outlined above, while it is unlikely that any direct impacts to these structures will occur as a result of the proposed Grid Connection Route, which will be placed in the adjacent public road, some mitigation at the construction stage of the development is recommended for this area.



Plate 13-45: Stone wall, piers and cast iron gates at entrance to NIAH 15401915 at Irishtown townland along Grid Connection Route.

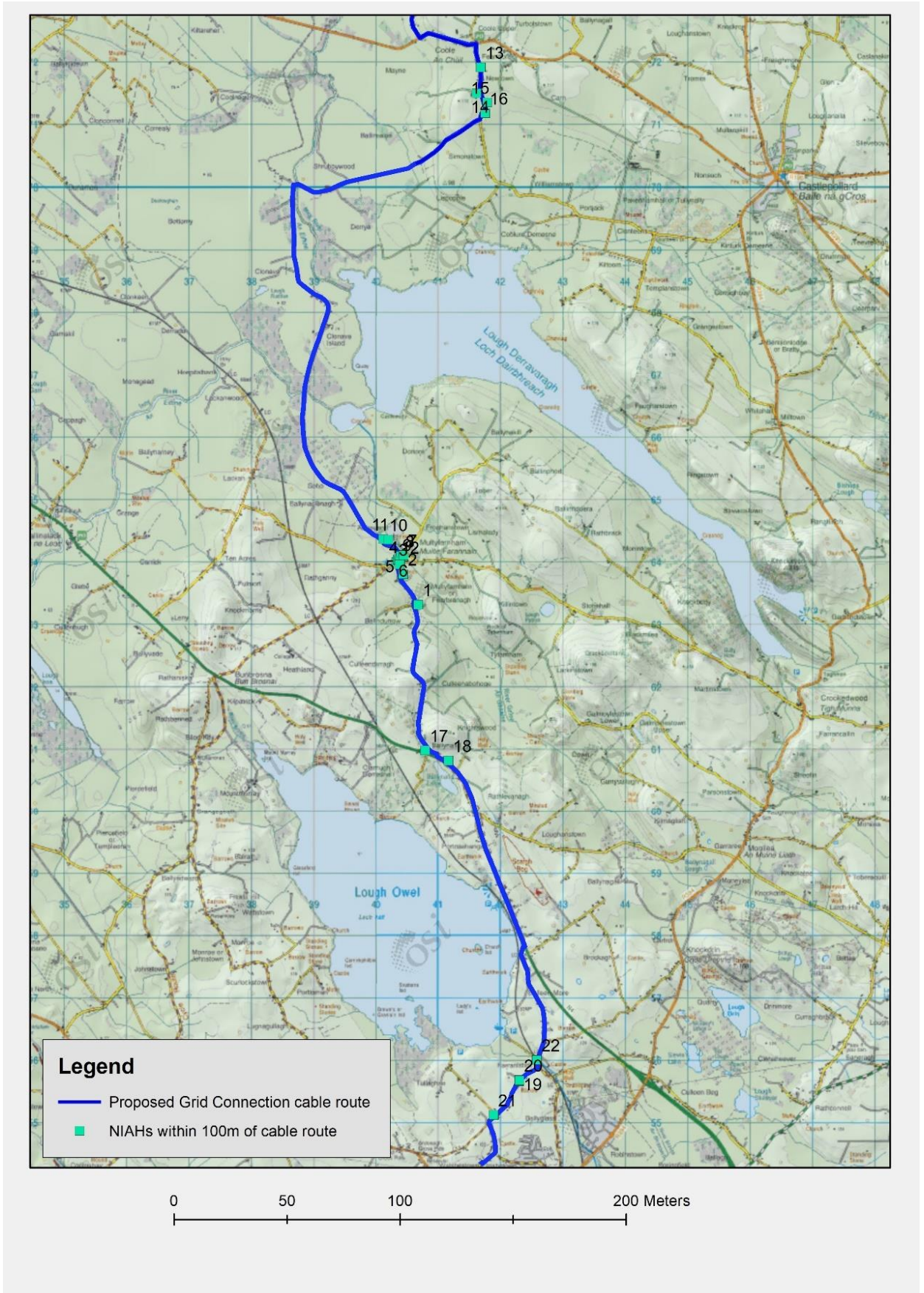


Figure 13-29: NIAH structures within 100m of proposed Grid Connection Route.

13.3.2.2.3 NIAH Garden Survey

No historic gardens are located in the immediate vicinity of the proposed Grid Connection Route. At Ballynaclonagh townland, north-west of Multyfarnham, the proposed route extends through the demesne associated with Ballynaclonagh House but will not impact on same as it will be placed within the public road. Further to the south at Farranistick townland the proposed Grid Connection Route extends past Levington Park, historic garden and associated demesne (see also section 13.3.2.2.1 above). No direct impacts to the historic garden will occur as a result of the proposed Grid Connection Route in this area.

13.3.2.2.4 Review of Cartographic Sources

A review of the available historic cartographic sources for the area including the first edition (1836-7) and second edition (1911) OS maps was undertaken for any items of architectural or cultural heritage merit which may not appear in any records such as the NIAH or RPS. No such features are depicted on the historic mapping for the majority of the proposed Grid Connection Route. A bridge is denoted on the proposed route on the 2nd ed. OS map at Shrubbywood/Clonva townlands where the public road crosses the River Inny. It is not shown on the earlier 1st ed. map and therefore is likely to be early twentieth century in date. The parapet walls are concrete rendered and topped with a metal railing. The Architectural Heritage Protection Guidelines for Planning Authorities (DoEHLG, 2004) outlines ‘best practice’ in relation to non-habitable protected structures such as bridges.

‘Bridges require careful consideration when any repair or alteration work is proposed. Bridges which are protected structures may include road, rail and canal bridges, aqueducts, viaducts and footbridges. They may incorporate features of special interest including abutments, parapets, cut-waters, refuges, balustrades, string courses, railings, lamp standards, plaques and paving. Where such features exist they should be identified and conserved. Proposals to reinforce, widen or infill sections of a bridge which is a protected structure, resulting in the concealment of any part of it, should be treated with caution. Where reinforcement is proven to be unavoidable, efforts should be made to ensure that the least possible structural and visual damage is caused to the bridge. Proposals to reinforce, widen or infill sections of a protected bridge will require alterations to the character and quality of the structure. Where the impacts are likely to be substantial and would damage the character and integrity of the protected structure to an unacceptable extent, alternative solutions should be explored’ (ibid, 208-209).

While the bridge such as that at Shrubbywood/Clonva are not formally protected by virtue of their inclusion in the NIAH or Record of Protected Structures they do form part of the built heritage of the county and care should be taken to ensure that direct or indirect impacts to such structures do not occur.



Plate 13-46: Bridge on River Inny along proposed Grid Connection Route at Shrubbywood/Clonva.

13.3.3 The Proposed Turbine Delivery Route – Junction Accommodation Works

Works are proposed at a number of junctions along the proposed Turbine Delivery Route, as described in detail in Section 4.3.17 of this EIAR. These areas were assessed in order to determine if archaeological or cultural heritage resources were located at or in the vicinity of the proposed Junction Accommodation works and any potential impacts to same.

13.3.3.1 Archaeology

No National Monuments, recorded monuments or any previously unrecorded sites noted during site inspection are located in the areas proposed for junction accommodation works.

13.3.3.2 Architectural and Cultural Heritage

No protected structures, NIAH structures or historic gardens are located in the areas proposed for junction accommodation works. One Protected Structure (006-007) which is also an NIAH structure (Reg. 15303008) is located adjacent to the proposed works at Joanstown off the N4 and comprises St Mary's RC church. No impacts to the church will occur as a result of the proposed surfacing works which will be situated c. 64m to the south-west of the structure.

Similarly, proposed junction accommodation works will also be located to the south-east of two Protected Structures 006-027 and 006-028, which comprise railway station buildings, at a railway level crossing in Rath townland. The buildings are situated at Street and Rathowen station which is now a level crossing. The proposed works will be situated at the east side of the public road at the edge of a pasture field and at its closest point will be 15m south-east of RPS 006-028 and c. 35m south-east of RPS 006-027. No impacts to the railway buildings will occur as a result of the proposed works. The protected structures 006-027 and 028 are also listed in the NIAH under Reg. No. 15400607 and 15400608. While

both structures have an NIAH register number only one (15400607) is described on the Buildings of Ireland website (www.buildingsofireland.ie) as follows:

Description

Detached three-bay single-storey former railway station, built in 1877. Now out of use and derelict. Pitched natural slate roof with overhanging eaves and cast-iron rainwater goods. Constructed of squared rusticated limestone over projecting chamfered plinth with flush brick quoins to the corners. Square-headed openings with brick dressings having the remains of timber sliding sash windows and the remains of timber door to the centre of the front façade (south). Located adjacent to level crossing (15400608), to the northwest of Rathowen and the south of Streete.

Appraisal

A modest small-scale railway station, as befits a small rural stop of this nature, which retains its early character despite being out of use for a considerable period of time. This unassuming station was built by The Midland and Great Western Railway in 1877, serving the Dublin-Sligo line, and was closed in 1963. It is well constructed using good quality materials and has a robust quality that is typical of the railway architecture of the Victorian period. It forms a pleasant group of railway-related structures with the level crossing gates and cross guards house adjacent to the east (15400608) and is an interesting, if subtle, reminder of the great age of the railways in Ireland during the late nineteenth-century. It adds another layer to the interest to the Streete area and is a modest addition to the industrial heritage of Westmeath.



Plate 13-47: Railway station building (NIAH Reg. 15400607) at Street and Rathowen station (Photo courtesy of www.buildingsofireland.ie).



Plate 13-48: Proposed junction accommodation works area at Boherquill townland, looking east.



Plate 13-49: Protected structure (006-007) and NIAH structure (Reg. 15303008) St Mary's RC church at Joanstown, looking ESE.

13.3.3.3 Review of Cartographic Sources

The available historic cartographic sources (1st and 2nd edition OS maps) were reviewed for items of cultural heritage merit in the proposed junction accommodation works areas. No such features were noted in the majority of the proposed works areas. At the east end of the proposed link road a number of buildings are shown on the second edition OS map in the area of the proposed Junction Accommodation Works, a short distance north of Coole Village. These structures are no longer extant and the area is under pasture.

13.4 Likely Significant Effects and Associated Mitigation Measures

13.4.1 Assessment of Likely Significant Effects

Significance of effects is usually understood to mean the importance of the outcome of the effects and the consequences of the change. Significance is determined by a combination of scientific and subjective concerns. Professional judgement has been utilised in determining such significance. According to the EPA Guidelines '*Significance is a concept that can have different meanings for different topics ...*'. The likely effects on the existing archaeological and cultural heritage environment are assessed using the criteria as set out in the EPA guidelines (2017). The following terminology is used when describing the likely effects of the Proposed Development from a Cultural Heritage Perspective.

13.4.1.1 Types of Impact

Direct impacts arise where an archaeological heritage feature or site is physically located within the footprint of the Proposed Development whereby the removal of part, or all of the feature or site is thus required.

Indirect impacts may arise as a result of subsurface works undertaken outside the footprint of the development, secondary environmental change such as a reduction in water levels and visual impacts.

Cumulative Impacts arise when the addition of many impacts create a larger, more significant impact.

Residual Impacts are the degree of environmental changes that will occur after the proposed mitigation measures have been implemented.

13.4.1.1.1 Magnitude of Effects (Significance)

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

- Slight: An effect which causes changes in the character of the environment which are not high or very high and do not directly impact or affect an archaeological site.
- Not Significant: An effect which causes noticeable changes in the character of the environment but without significant consequences.
- Imperceptible: An effect on an archaeological site capable of measurement but without noticeable consequences.

13.4.2 Construction Phase Potential Impacts (Indirect)

Indirect effects, in terms of archaeology, architectural and cultural heritage are considered to be those effects which happen away from 'the site'. This includes impacts on visual setting of any cultural heritage assets in the wider landscape. Since these effects are only possible once the proposed turbines are constructed, they are considered operational effects and are therefore discussed in Section 13.4.4 below. No indirect effects were identified which would occur at the construction stage.

13.4.3 Construction Phase Potential Impacts (Direct)

Direct Impact refers to a 'physical impact' on a monument or site. The construction phase of the Proposed Development consists largely of earthmoving activities such as peat and topsoil removal for access roads, turbine hardstand areas, substation, borrow pit, link road and excavation associated with the Grid Connection Route. The potential impacts on the known and potential archaeological, architectural and cultural heritage of the area are outlined below with the suggested mitigation measures.

13.4.3.1 Turbines

13.4.3.1.1 Impact on UNESCO World Heritage Sites, National Monuments and Recorded Monuments

As no UNESCO World Heritage sites, National Monuments or recorded monuments are located within the footprint of any proposed turbines no direct impacts on these aspects of the archaeological resource are identified. Similarly, as no Protected Structures, NIAH structures, historic gardens or items indicated on the historic mapping are located within the footprint of any proposed turbines no direct impacts on these aspects of the architectural and cultural heritage resource are identified.

Pre-Mitigation Impact

No direct impacts on the aforementioned archaeological, architectural and cultural heritage assets have been identified as a result of the proposed turbines.

Proposed Mitigation Measures

Since no direct effects to the known archaeological and cultural heritage resource were identified mitigation measures are not required.

Residual Impact

No residual impacts will occur.

Significance of Effects

The construction and erection of the proposed wind turbines will have no direct effects on National Monuments, Recorded Monuments, Protected Structures or NIAH. The significance of effects is therefore imperceptible.

13.4.3.1.2

Impact on unrecorded potential sub-surface sites

The proposed turbines are located within a peat bog which may be regarded as an area of archaeological potential. While no new archaeological sites were detected during the walk-over survey the potential exists for the bog to contain as yet unrecorded sub-surface sites and artefacts. It is possible that such sites may be uncovered either within the peat and/or at the level of the underlying natural subsoil. The excavation of the peat for the turbine bases and hardstands may impact on any new sites, if present.

Pre Mitigation Impact

Should new sites be present within the peat (currently not visible on the surface or in drain sections) the impact is likely to be significant negative and permanent (i.e. the extraction of peat by machinery would permanently remove the sites resulting in a significant negative impact).

Proposed Mitigation Measures

- A pre-construction walkover survey / inspection of areas proposed for excavation will be undertaken to re-assess the bog for new sites that may be exposed.
- If present, the sites shall be archaeologically excavated under licence prior to construction. The archaeologist will liaise with the DHLG&H regarding the methods being proposed for excavation.
- Pre-construction archaeological testing of turbine bases and hardstands proposed for excavation will be carried out prior to construction. A report setting out the findings will be submitted to the relevant authorities.
- Archaeological monitoring of ground works and metal detection of spoil during construction. A report on the results of the monitoring shall be compiled and submitted to the relevant authorities on completion of the project.

Residual Impact

The sites, if detected, during the pre-construction walkover, testing or monitoring will be preserved by record (archaeologically excavated) and therefore permanently removed with a full record made of same. In this regard, the potential impact after the mitigation measures is likely to be slight-moderate.

Significance of Effects

Slight-Moderate

13.4.3.2 Borrow Pit

13.4.3.2.1 Impact of Borrow Pit on UNESCO World Heritage Sites, National Monuments and Recorded Monuments

As no UNESCO World Heritage sites, National Monuments or recorded monuments are located within the footprint of the proposed borrow pit no direct impacts on these aspects of the archaeological resource are identified. Similarly, no Protected Structures, NIAH structures, historic gardens or items indicated on the historic mapping are located within the footprint of the borrow pit therefore no direct impacts on these aspects of the architectural and cultural heritage resource are identified.

Pre-Mitigation Impact

No direct impacts on the aforementioned archaeological, architectural and cultural heritage assets have been identified as a result of the proposed borrow pit.

Proposed Mitigation Measures

Since no direct effects to the known archaeological and cultural heritage resource were identified mitigation measures are not required.

Residual Impact

No residual impacts will occur.

Significance of Effects

Imperceptible.

13.4.3.2 **Impact on unrecorded potential sub-surface sites or features**

Pre Mitigation Impact

Should sub-surface sites or features be present within the proposed borrow pit the impact on such sites is likely to be significant negative and permanent (i.e. the removal of topsoil and the extraction of rock by machinery would permanently remove the sites resulting in a significant negative impact).

Proposed Mitigation Measures

- Pre-construction archaeological testing of the footprint of the proposed borrow pit will be carried out prior to construction. A report setting out the findings will be submitted to the relevant authorities.

Residual Impact

Sub-surface sites, if detected during the pre-construction testing will be preserved by record (archaeologically excavated) and therefore permanently removed with a full record made of same. In this regard, the potential impact after the mitigation measures is likely to be slight-moderate.

Significance of Effects

Slight-Moderate.

13.4.3.3 **Substation**

13.4.3.3.1 **Impact of Substation on UNESCO World Heritage Sites, National Monuments and Recorded Monuments**

As no UNESCO World Heritage sites, National Monuments or recorded monuments are located within the footprint of the proposed substation no direct impacts on these aspects of the archaeological resource are identified. Similarly, no Protected Structures, NIAH structures, historic gardens or items indicated on the historic mapping are located within the footprint of the substation therefore no direct impacts on these aspects of the architectural and cultural heritage resource are identified.

Pre-Mitigation Impact

No direct impacts on the aforementioned archaeological, architectural and cultural heritage assets have been identified as a result of the proposed substation.

Proposed Mitigation Measures

Since no direct effects to the known archaeological and cultural heritage resource were identified mitigation measures are not required.

Residual Impact

No residual impacts will occur.

Significance of Effects
Imperceptible.

13.4.3.3.2 **Impact on unrecorded potential sub-surface sites or features**

Pre Mitigation Impact

Should sub-surface sites or features be present within the footprint of the proposed substation the impact on such sites is likely to be significant negative and permanent (i.e. the removal of topsoil and/or peat from this area would permanently remove the sites resulting in a significant negative impact).

Proposed Mitigation Measures

- Pre-construction archaeological testing of the footprint of the proposed substation will be carried out prior to construction. A report setting out the findings will be submitted to the relevant authorities.

Residual Impact

Sub-surface sites, if detected during the pre-construction testing will be preserved by record (archaeologically excavated) and therefore permanently removed with a full record made of same. In this regard, the potential impact after the mitigation measures is likely to be slight-moderate.

Significance of Effects
Slight-Moderate.

13.4.3.4 **Other Infrastructure**

13.4.3.4.1 **Impact of Other Infrastructure on UNESCO World Heritage Sites, National Monuments and Recorded Monuments**

This section relates to other non-turbine elements i.e. access roads, construction compound and any other associated works. No UNESCO World Heritage sites, National Monuments or recorded monuments are located on the footprint of the proposed access roads, compound and any other associated works, therefore no direct impacts on these aspects of the archaeological resource are identified. Similarly, no Protected Structures, NIAH structures or historic gardens are located within the footprint of the aforementioned proposed infrastructure therefore no direct impacts on these aspects of the architectural and cultural heritage resource are identified.

An unnamed stone bridge spans the river Glore c. 40m to the north-west of the proposed access road to T15. While no direct impacts to this cultural heritage feature are identified mitigation is recommended in order to ensure its continued preservation during the construction stage of the project, should it proceed.

Pre-Mitigation Impact

No direct impacts on the aforementioned archaeological, architectural and cultural heritage assets have been identified as a result of the proposed infrastructure.

Proposed Mitigation Measures

- A buffer zone of 20m should be established around the unnamed bridge to the north-west of the proposed access road to T15 and maintained for the duration of the construction stage of the project.

Residual Impact

No residual impacts will occur.

Significance of Effects

Imperceptible.

13.4.3.4.2 **Impact of infrastructure on sub-surface archaeological features / sites**

The proposed infrastructure associated with the Proposed Development is largely located in peatland which may be regarded as being of high archaeological potential. While no new previously unrecorded sites or artefacts were noted during field survey it is possible that ground works for the proposed infrastructure such as roads, compounds or other associated works may impact on as yet undiscovered sites within the peat or at the level of the underlying natural boulder clay. It should be noted that this EIAR assesses the potential for peat extraction works on the site to continue as a worst-case scenario.

Pre Mitigation Impact

Removal of peat and other ground works for the proposed infrastructure may result in a permanent significant negative impact on sub-surface archaeological sites if present.

Proposed Mitigation Measures

- A pre-construction walkover survey / inspection of areas proposed for excavation will be undertaken to re-assess the bog for new sites that may be exposed.
- If present, the sites will be archaeologically excavated under licence prior to construction. The archaeologist will liaise with the DHLG&H regarding the methods being proposed for excavation.
- Pre-construction archaeological testing of roads proposed to be excavated and footprint of proposed compound will be carried out prior to construction. Liaise with DHLG&H should archaeology be uncovered. A report setting out the findings will be submitted to the relevant authorities.
- Archaeological monitoring of ground works and metal detection of spoil during construction. A report on the results of the monitoring shall be compiled and submitted to the relevant authorities on completion of the project.

Residual Impact

If new archaeological sites are detected, during the pre-construction re-inspection, testing or monitoring, they will be preserved by record (archaeologically excavated) and therefore permanently removed with a full record made. In this regard the potential impact after the mitigation measures is likely to be slight-moderate.

Significance of Effects

Slight to Moderate

13.4.3.4.3 **Impact of proposed link road on ruinous stone structure**

The remains of a 19th-20th century stone building are extant adjacent to the eastern end of the proposed link road. The building is not a Protected Structure or listed in the NIAH.

Pre Mitigation Impact

Given the proximity of the structure to the proposed link road, ground works associated with the construction of same may result in a negative impact to the stone structure, although it is proposed to preserve the building in situ.

Proposed Mitigation Measure

- Pre-construction archaeological building survey of remains accompanied by measured drawings.
- Archaeological monitoring of ground works in this area and removal of stone structure if necessary. A report on the monitoring should be compiled on completion of the work and submitted to the relevant authorities.

Residual Impact

A record will be made of the stone structure prior to construction works and monitoring of removal will be carried out, if necessary. In this regard the potential impact after the mitigation measures is likely to be slight-moderate.

Significance of Effects

Slight to moderate

13.4.3.5 Junction Accommodation Works

As no UNESCO World Heritage sites, National Monuments or recorded monuments are located within the footprint of the proposed junction accommodation works no direct impacts on these aspects of the archaeological resource are identified. Similarly, no Protected Structures, NIAH structures or historic gardens are located within the footprint of the works therefore no direct impacts on these aspects of the architectural and cultural heritage resource are identified. Some structures are shown on the historic mapping at the east end of the proposed link road in the area of the proposed Junction Accommodation Works but are no longer extant therefore no direct impacts are identified.

13.4.3.5.1 *Impact on potential sub-surface sites*

Sub-surface archaeological sites or features may exist within the areas proposed for topsoil removal resulting in a permanent severe negative impact if present.

Pre Mitigation Impact

Permanent significant negative impact if subsurface sites / features are present.

Proposed Mitigation Measures

- Archaeological monitoring of ground works for proposed junction accommodation works. A report on the monitoring should be compiled and the results submitted to the relevant authorities.

Residual Impact

Slight

Significance of Effects

Slight

13.4.3.6 Grid Connection Route

13.4.3.6.1 *Impact of Grid Connection on UNESCO World Heritage Sites, National Monuments*

No UNESCO World Heritage sites or national monuments in State Care are located along the proposed Grid Connection Route. The nearest National Monument is that at Wattstown (NM No. 606) over 4km to the west on Frewin Hill. This will not be impacted directly by the proposed Grid Connection Route.

One monument subject to a preservation order (Motte, WM007-072) is located within 100m of the proposed Grid Connection Route in Multyfarnham village. The description of the monument in the Archaeological Inventory of County Westmeath suggests that the monument is subject to a preservation Order since 1985. It is not however listed in the National Monuments Service published list (2010).

Since the Grid Connection Route is located 100m from the motte no impacts are anticipated.

Pre-Mitigation Impact

No direct impacts on the aforementioned archaeological assets have been identified as a result of the proposed Grid Connection Route.

Proposed Mitigation Measures

Since no direct effects to the aforementioned archaeological resource were identified mitigation measures are not required.

Residual Impact

No residual impacts will occur.

Significance of Effects

Imperceptible.

13.4.3.6.2 **Impact of Grid Connection Route on Recorded Monuments**

Nineteen recorded monuments are located within 100m of the proposed Grid Connection Route and are listed above in Table 13-6. Any potential impacts are discussed below within each townland (from north to south).

WM003-083, WM003-083001, 002 and 003 (church, font, graveyard and ecclesiastical enclosure), Mayne Townland

In Mayne townland the proposed Grid Connection Route extends along the public road past four recorded monuments WM003-083, WM003-083001, 002 and 003 (church, font, graveyard and ecclesiastical enclosure). While the proposed cable will be placed in the public road outside the graveyard mitigation measures will be necessary given its proximity to the aforementioned monuments.

Pre Mitigation Impact

Should sub-surface archaeology be present beneath the road surface (currently not visible on the surface) adjacent to the recorded monuments the impact is likely to be significant negative and permanent (i.e. the ground works would permanently remove the sites resulting in a significant negative impact and a total loss of information relating to the sites).

Proposed Mitigation Measures

Archaeological monitoring of ground works, including Joint Bay 7 during construction where they extend past the church and graveyard at Mayne. A report on the results of the monitoring shall be compiled and submitted to the relevant authorities on completion of the project.

Residual Impact

If new archaeological sites are detected during archaeological monitoring they will be preserved by record (archaeologically excavated) and therefore permanently removed with a full record made of same. In this regard the potential impact after the mitigation measures is likely to be slight-moderate.

Significance of Effects

Based on the assessment above there will be no significant effects.

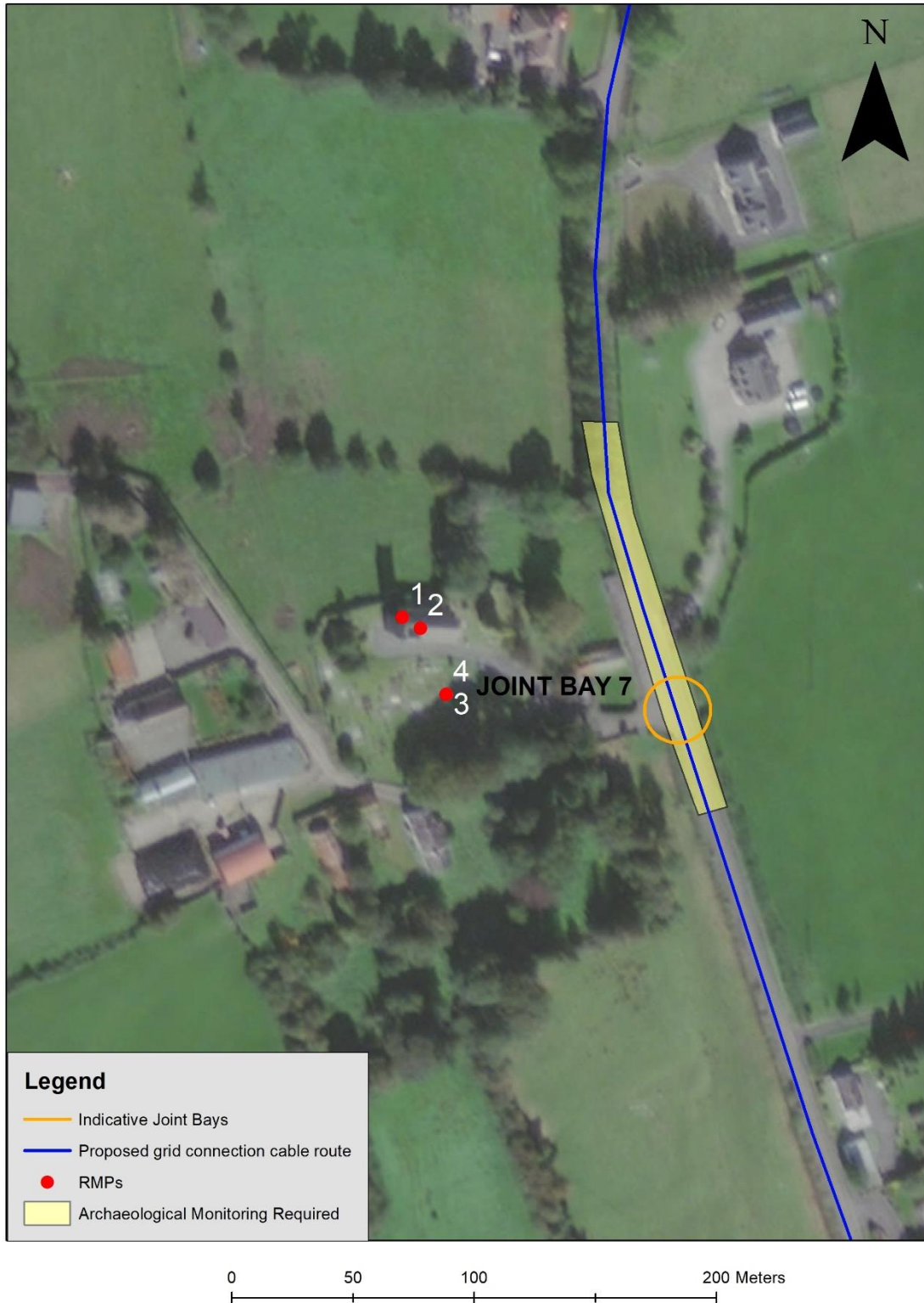


Figure 13-30: Area where archaeological monitoring is required in the vicinity of Recorded monuments in Mayne townland (See Table 13-6 above).

Water mill (WM006-076) at Rathganny Townland and Ecclesiastical site (WM006-059) at Abbeyland.

The proposed Grid Connection Route extends along the public road between the ecclesiastical site at Rathganny and the site of the medieval watermill (depicted as a 'Corn Mill' on the 1837 ed. OS 6-inch map). The corn mill may have been built on the site of or in close proximity to the medieval mill of Multyfarnham and in this regard the proximity of the proposed Grid Connection Route to the monument is such that mitigation measures are required during the construction stage of the project.

Pre Mitigation Impact

Should sub-surface archaeology be present beneath the road surface (currently not visible on the surface) adjacent to the recorded monuments, the impact is likely to be significant negative and permanent (i.e. the ground works would permanently remove any features resulting in a significant negative impact and a total loss of information relating to the site (if present)).

Proposed Mitigation Measures

Archaeological monitoring of ground works during construction where it extends past the monuments. A report on the results of the monitoring shall be compiled and submitted to the relevant authorities on completion of the project.

Residual Impact

If new archaeological features are detected during archaeological monitoring they will be preserved by record (archaeologically excavated) and therefore permanently removed with a full record made of same. In this regard the potential impact after the mitigation measures is likely to be slight-moderate.

Significance of Effects

Based on the assessment above there will be no significant effects.

Church and Graveyard WM006-061 and WM006-061-001 at Ballindurrow (Multyfarnham village)

At the south end of Multyfarnham village the proposed Grid Connection Route extends past a church and graveyard which are located at the west side of the public road. Given the proximity of the church and graveyard to the road it is possible that associated sub-surface remains may exist outside the graveyard wall beneath the road surface. Should they exist ground works associated with the proposed Grid Connection Route have the potential to impact directly on such remains.

Pre Mitigation Impact

Should sub-surface archaeology be present beneath the road surface adjacent to the church and graveyard the impact is likely to be significant negative and permanent (i.e. the ground works would permanently remove the sites resulting in a significant negative impact and a total loss of information relating to the sites).

Proposed Mitigation Measures

Archaeological monitoring of ground works during construction where they extend past the church and graveyard WM006-061 and WM006-061-001. A report on the results of the monitoring shall be compiled and submitted to the relevant authorities on completion of the Proposed Development.

Residual Impact

If new archaeological sites or features are detected during archaeological monitoring they will be preserved by record (archaeologically excavated) and therefore permanently removed with a full record made of same. In this regard the potential impact after the mitigation measures is likely to be slight-moderate.

Significance of Effects

Based on the assessment above there will be no significant effects.

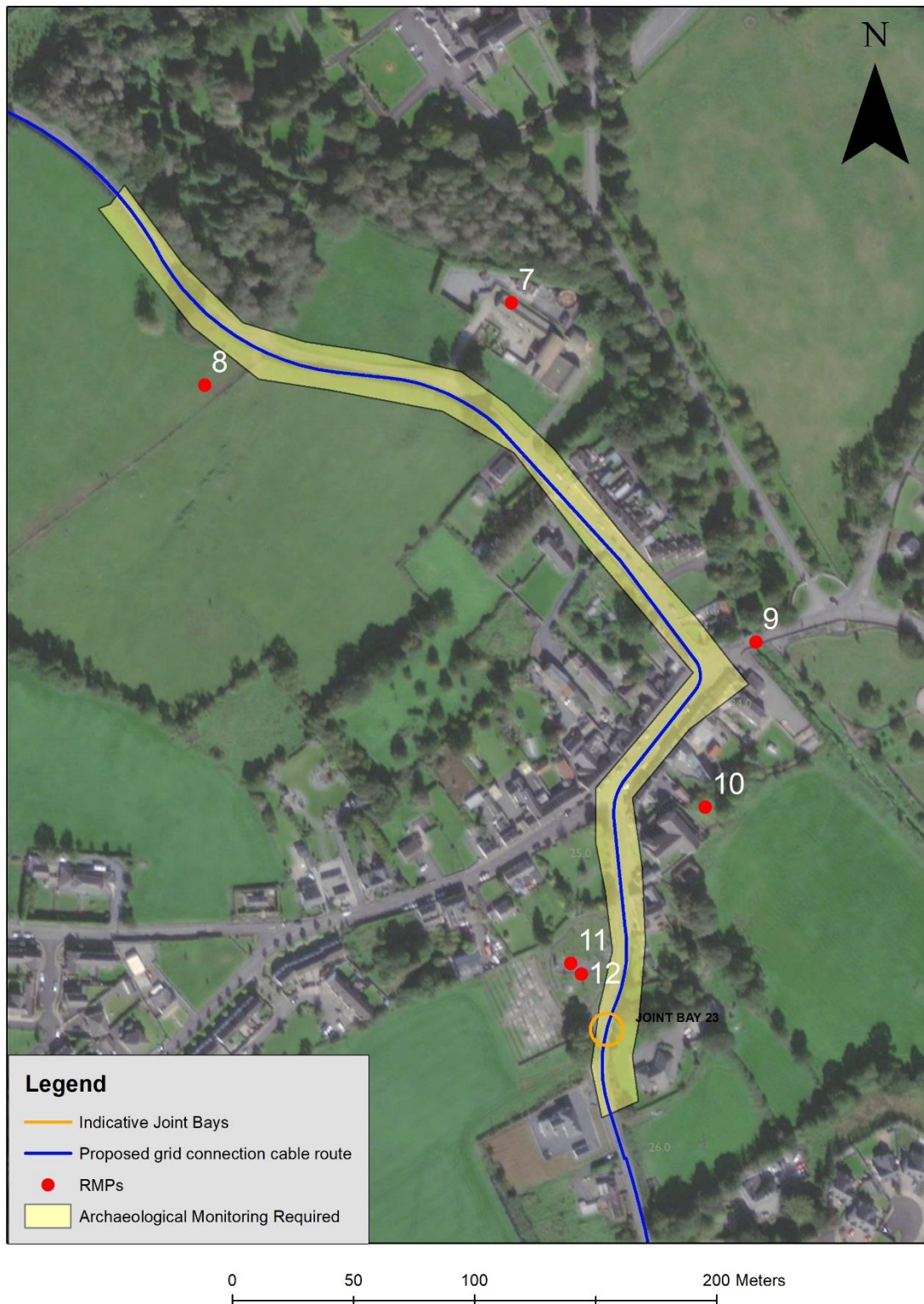


Figure 13-31: Archaeological monitoring required in the vicinity of RMPs at Rathganny, Abbeyland, Multyfarnham and Ballindurrow townlands (See Table 13-6 above).

WM012-088 – 090 Ringforts at Portnashangan

The proposed Grid Connection Route extends along the N4 National route past recorded monuments WM012-088 - 090 (ringforts) and through their SMR zones. The N4 is now located over the site of the monuments as they were excavated in 1993 as part of the archaeological investigations along the N4. As the Grid Connection Route section that is located along the N4 extends past the monument, the potential exists for the presence of sub-surface archaeological features in the immediate vicinity of the ringforts.

Pre Mitigation Impact

Should sub-surface archaeology be present beneath the road surface (currently not visible on the surface) along the proposed Grid Connection Route and joint bay 27 the impact is likely to be significant negative and permanent (i.e. the ground works would permanently remove the sites resulting in a significant negative impact and a total loss of information relating to the sites).

Proposed Mitigation Measures

Archaeological monitoring of ground works where the Grid Connection Route extends past the monuments. A report on the results of the monitoring shall be compiled and submitted to the relevant authorities on completion of the project.

Residual Impact

If new archaeological sites are detected during archaeological monitoring they will be preserved by record (archaeologically excavated) and therefore permanently removed with a full record made of same. In this regard the potential impact after the mitigation measures is likely to be slight-moderate.

Significance of Effects

Based on the assessment above there will be no significant effects.



Figure 13-32: Archaeological monitoring required in vicinity of RMPs in Portnashangan townland. Note original outline of ringforts on 25 inch map, overlaid with aerial mapping (See Table 13-6 above).

Ringfort (WM012-165) at Culeen More townland

The proposed Grid Connection Route extends along the N4 National route past recorded monuments WM012-165 (ringfort) and adjacent to its zone of notification. Depending on the precise route of the

grid connection along the N4 where it extends past the monument the potential exists for the presence of sub-surface archaeological features in the immediate vicinity of the ringforts.

Pre Mitigation Impact

Should sub-surface archaeology be present beneath the road surface (currently not visible on the surface) along the proposed Grid Connection Route the impact is likely to be significant negative and permanent (i.e. the ground works would permanently remove the sites resulting in a significant negative impact and a total loss of information relating to the sites).

Proposed Mitigation Measures

Archaeological monitoring of ground works where the Grid Connection Route extends past the monument. A report on the results of the monitoring shall be compiled and submitted to the relevant authorities on completion of the project.

Residual Impact

If new archaeological sites are detected during archaeological monitoring they will be preserved by record (archaeologically excavated) and therefore permanently removed with a full record made of same. In this regard the potential impact after the mitigation measures is likely to be slight-moderate.

Significance of Effects

Based on the assessment above there will be no significant effects.



Figure 13-33: Archaeological monitoring required in vicinity of RMPs in Culeen More townland. Original extent of ringfort shown on 1st Edition OS map (6 inch, 1840s) (See Table 13-6 above).

Castle WM019-034 at Irishtown

The site of an unclassified castle WM019-034 is located within 100m of the proposed Grid Connection Route towards the southern end of same. While the buildings are no longer extant, the original

enclosing elements of the castle site may have extended as far as where the public road is now located. In this regard construction stage mitigation measures will be required.

Pre Mitigation Impact

Should sub-surface archaeology be present beneath the road surface (currently not visible on the surface) along the proposed Grid Connection Route the impact is likely to be significant negative and permanent (i.e. the ground works would permanently remove the sites resulting in a significant negative impact and a total loss of information relating to the sites).

Proposed Mitigation Measures

Archaeological monitoring of ground works where the Grid Connection Route and Joint bay 36 extends past the monument will be required during construction. A report on the results of the monitoring shall be compiled and submitted to the relevant authorities on completion of the project.

Residual Impact

If new archaeological sites are detected during archaeological monitoring they will be preserved by record (archaeologically excavated) and therefore permanently removed with a full record made of same. In this regard the potential impact after the mitigation measures is likely to be slight-moderate.

Significance of Effects

Based on the assessment above there will be no significant effects.

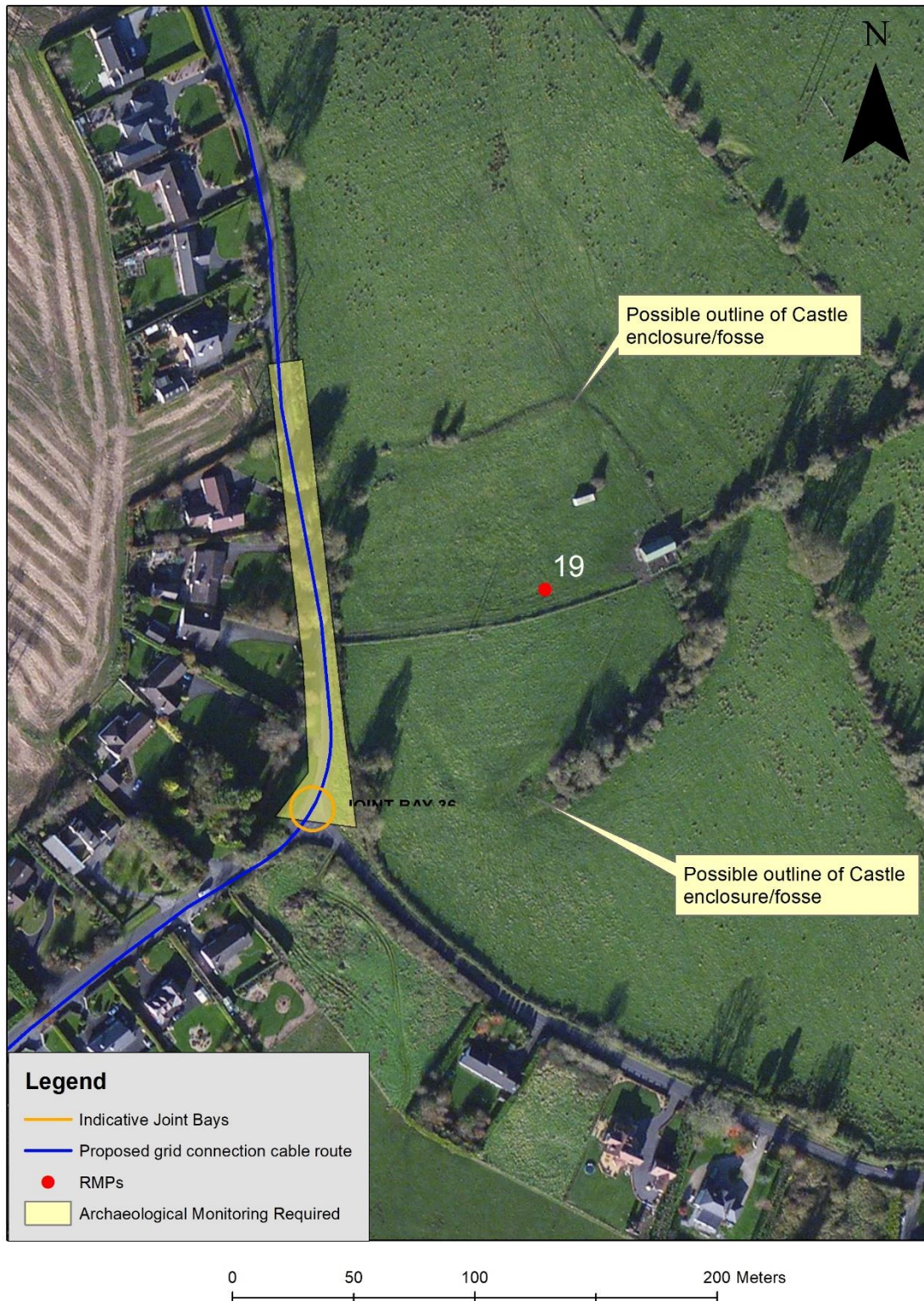


Figure 13-34: Archaeological monitoring required in vicinity of RMP in Irishtown townland (See Table 13-6 above).

13.4.3.6.3 Impact of Grid Connection Route on Protected Structures / NIAH

The majority of Protected Structures and NIAH structures located within 100m of the proposed Grid Connection Route are located off-road or adjacent to the roadside and comprise houses or churches that will not be directly impacted by ground works associated with the construction of the proposed Grid Connection Route. Similarly, the route extends past a number of NIAH structures and Protected

Structures that form the streetscape in Multyfarnham village but will not impact directly on same given that the proposed cable will be placed in the public road. Those structures which are located directly on the public road or smaller items which could potentially be subject to accidental damage or impact during construction works are itemised below.

Protected Structures (019-236 and 019-237) and NIAH structures (Reg. 15401913 and 15401912)

Protected structures 019-236 and 019-237, also listed in the NIAH (Reg. 15401913 and 15401912), are located immediately adjacent to the proposed Grid Connection Route at the roadside. They comprise a pair of two-storey gate lodges (Ref. 019-237, NIAH 15401913) marking the entrance to Levington Park Demesne and adjacent entrance gates (Ref. 019-236, NIAH 15401912). While it is unlikely that any direct impacts to these structures will occur as a result of the proposed Grid Connection Route some mitigation at the construction stage of the development is recommended for this area.

Pre Mitigation Impact

If no mitigation measures are implemented accidental damage to the structures could occur as a result of ground works and/or the movement of machinery. This would potentially result in a moderate and negative impact.

Proposed Mitigation Measure

Archaeological monitoring of ground works during construction where they extend past the NIAH/Protected Structures at Farranistick. A report on the results of the monitoring shall be compiled and submitted to the relevant authorities on completion of the project.

Residual Impact

None

Significance of Effects

Based on the assessment above there will be no significant effects.

13.4.3.6.4 **Impact of Grid Connection Route on Local Cultural Heritage**

A review of the available historic cartographic sources for the area including the first edition (1836-7) and second edition (1911) OS maps was undertaken for any items of architectural or cultural heritage merit which may not appear in any records such as the NIAH or RPS. No such features are depicted on the historic mapping for the majority of the proposed Grid Connection Route. A bridge is denoted on the proposed route on the 2nd ed. OS map at Shrubbywood/Clonva townlands where the public road crosses the River Inny.

Bridge at Shrubbywood/Clonva townlands

Pre Mitigation Impact

If no mitigation measures are implemented accidental damage to the structure could occur as a result of ground works and/or the movement of machinery. This would potentially result in a moderate and negative impact.

Proposed Mitigation Measure

Archaeological monitoring of ground works during construction where it extends past the bridge. A report on the results of the monitoring shall be compiled and submitted to the relevant authorities on completion of the project.

Residual Impact

None

Significance of Effects

Based on the assessment above there will be no significant effects.

13.4.3.7 Proposed Minor Works at Mullingar Existing Substation site

As part of the Proposed Development, the proposed Grid Connection Route cable will connect into the existing Mullingar 110kV substation where the upgrade works will consist of the construction of a dedicated bay for connection of the proposed Coole Wind Farm. The proposed joint bay is located in a working substation and in area already subject to ground disturbance thus reducing the presence of any potential archaeological features.

No impacts on the archaeological, architectural or cultural heritage resource are anticipated as part of the proposed minor works within Mullingar substation site.

13.4.4 Operational Phase Potential Impacts (Indirect)

Indirect impacts are where a feature or site of archaeological, architectural heritage merit or their setting is located in close proximity to a Proposed Development. Indirect impacts here are mainly concerned with impacts on setting.

Impacts on settings of sites may arise when a development is proposed immediately adjacent to a recorded monument or cluster of monuments. While the Proposed Development may not physically impact on a site, it may alter the setting of a monument or group of monuments. There is no standardised industry-wide approach for assessing the degree of impact to the setting of a monument. For purposes of assessing visual impact on setting, the uniqueness of the monuments, the potential interrelationships of monuments, the inter-visibility of monuments, visual dominance and whether a setting is altered or unaltered can be used to assess impact.

Potential impact to the visual amenity of a site or area and the significance of same is dependent on a number of factors regarding the sensitivity of the location or 'receptor' and the scale or magnitude of the Proposed Development. Similarly, the extent of the development and its duration and reversibility should all be considered (Guidelines for Landscape and Visual Impact Assessment 3rd edition – Consultation Draft). Professional judgement and experience are utilised in this assessment of impacts on setting as well as Viewshed Analysis in ArcGIS online.

Potential operational impacts are discussed below according to each element of the Proposed Development. Those elements of the Proposed Development which are not capable of impacting on the visual setting of monuments include proposed roads, underground cables etc and those elements which are deemed to be more likely to impact on visual setting which include turbines and substation buildings are discussed below.

13.4.4.1 Turbines

13.4.4.1.1 Impact of turbines on setting of UNESCO World Heritage sites (Tentative list)

No monuments on the WHS list and tentative list are located within 25km of the proposed turbines. The Hill of Uisneach is on the WHS list and tentative list but is situated at a distance of approximately 28km to the south-west of the proposed turbines.

Pre Mitigation Impact

The immediate visual setting of the Hill of Uisneach will not be impacted by the Proposed Development. The pre mitigation impact is likely to be Imperceptible as the asset is located at a distance of 28km from the proposed turbines.

Proposed Mitigation Measures

No mitigation measures proposed.

Residual Impact

Imperceptible.

Significance of Effects

Imperceptible.

13.4.4.1.2 **Impact of turbines on setting of National Monuments**

Impact of turbines on setting of National Monuments within 15km of the proposed turbines were considered for purposes of assessing potential impacts on visual setting. The assessment was based on the ZTV model, Viewshed analysis, field survey and the use of photomontage where applicable.

Granard Motte

The proposed turbines will be visible from this location given that the monument is located on elevated ground and commands extensive views of the surrounding countryside. The turbines will be apparent in the distance from the National Monument, the nearest proposed turbine (T1) being c. 8.6km to the south-east. When assessing impact on setting the current appreciation of the monument by the visiting public is a consideration. There is no formal access to Granard Motte for the public, however, access to the site is easily gained via an informal path/track which leads to the field in which the monument is located. The setting of the monument can be appreciated from the immediate surroundings of the motte. Given the distance between the monument and the proposed turbines the appreciation of the motte from this location will not be impacted by the Proposed Development. It is views that can be obtained from the monument in the direction of the proposed turbines that will be altered by the latter. The ZTV model, assuming no vegetation or screening, also shows that 12-15 turbines would theoretically be visible from here. Furthermore, the results of the Viewshed analysis from the monument also demonstrates that theoretically 14 turbines (Nos. 1-14) may be visible in full, while the upper portion of T15 may be visible from the National Monument. In this regard a change to the wider setting of the National Monument at Granard is noted but given the intervening distance and continued ability of the visitor to appreciate the monument itself, is regarded to be slight. No change to the immediate setting of the monument will occur.

Loughcrew

This complex of megalithic monuments is also located on elevated ground, albeit at a distance of c. 14km from the nearest proposed turbine (T15). The ZTV model, assuming no vegetation or screening, shows that 12-15 turbines would theoretically be visible from here. Photomontage taken from the monument complex demonstrates that the proposed turbines will be visible low down on the skyline to the west (see Photomontage Booklet, EIAR Vol. 2: Photomontage 11). The Viewshed analysis carried out from this monument also demonstrates that none of the proposed turbines would be visible in full. It also shows that 11 turbines (Nos. 1-4 and 9-15) may be visible from mid shaft up, while four turbines (Nos. 5-8) would theoretically not be visible. When assessing impact on setting the current appreciation of the monument by the visiting public is a consideration. The monuments at Loughcrew are publicly accessible and regularly visited, in particular at the Spring and Autumn equinox when the rising sun illuminates the passage and chamber of Cairn T. The experience of the monument by the visitor on this or any other occasion will not be impacted by the presence of the proposed turbines c. 14km to the west. Furthermore, the introduction of the proposed wind farm will not impact on the known astronomical alignments of the Loughcrew complex, primarily the illumination of the passage and chamber of Cairn T by the rising sun on the Spring and Autumn equinox given its location 14km to the west of same. No impact to the immediate setting of the complex will arise as a result of the proposed

turbines, however, a change to the wider setting is acknowledged and therefore a slight impact is identified.

Fore Abbey

This national monument is located c. 9.6km south-east of the nearest turbine, T15. The monument is publicly accessible and regularly visited. The ZTV model, assuming no vegetation or screening, shows limited visibility of turbines from this location. Similarly, the Viewshed analysis indicates no visibility of the proposed turbines from Fore Abbey. Photomontage taken from the National Monument demonstrates that a portion of the blades of four turbines will be visible from Fore Abbey and will be apparent low down on the horizon at a distance of over 9km (see Photomontage Booklet, EIAR Vol. 2: Photomontage 22). The proposed turbines will be largely screened from view by topography and vegetation. The appreciation of the National Monument by the visiting public will not be diminished as a result of the introduction of the proposed turbines at that distance and the immediate setting of the monument will not be impacted. Again, the wider setting of Fore Abbey will be altered as a result of the introduction of the proposed turbines and therefore a slight impact is identified.

Fore Town Gates

Located to the west and south-west of Fore Abbey the north and south town gates comprise roadside monuments that can be visited and appreciated from the public road by the passing visitor. The ZTV model, assuming no vegetation or screening, shows limited visibility of turbines from this location and the photomontage from the nearby Fore Abbey has shown limited visibility of a small number of turbine blades. Similarly, the Viewshed analysis run from this monument shows no theoretical visibility of the proposed turbines. The immediate setting of the town gates will not be impacted by the introduction of the proposed turbines and the appreciation of the monuments by the visitor will not be diminished. A change to the wider setting of the National Monuments will occur, at a distance of just under 10km from the nearest proposed turbine (T15), and therefore an impact is identified but is regarded as being not significant/imperceptible.

Mortimer's Castle

This National Monument is located over 8km to the south south-east of the nearest proposed turbine T14. It is located on private land and there is no formal public access to the site. The ZTV model, assuming no vegetation or screening, shows limited or no visibility of turbines from this location. Similarly, the Viewshed analysis also shows no theoretical visibility of the proposed turbines from this monument. At a distance of over 8km the nearest proposed turbine will not impact on the immediate setting of this monument which will remain unchanged. While the wider setting in which the monument is located will be altered as a result of the introduction of the proposed turbines the impact of same is regarded to be not significant/imperceptible.

Wattstown

Although 16.3km from the nearest proposed turbine T14, an assessment of potential impacts on the National Monuments at Wattstown on Frewin Hill was completed and Photomontage 14 in the Photomontage Booklet shows potential visibility from this location. The ZTV also shows that potentially 12-15 of the proposed turbines will be visible from this location. Similarly, the Viewshed analysis demonstrates that all 15 turbines will theoretically be visible from mid shaft up from Frewin Hill. At a distance of over 16km however, as shown on Figure 13-9, the nearest proposed turbine will not impact on the immediate setting of this monument which will remain unchanged. While the wider setting in which the monument is located will be altered as a result of the introduction of the proposed turbines the impact of same is regarded to be not significant/imperceptible, particularly given the distance of over 16km between the monument and the nearest proposed turbine. The views possible from Frewin Hill to Loughcrew to the north-east and the Hill of Uisneach to the south will not be impeded by the

proposed turbines. While access to the national monuments at Wattstown is possible, no formal public access is provided.

Pre Mitigation Impact

Table 13-9: Table of Pre-Mitigation Impacts on setting of National Monuments.

Nat Mon No.	Monument	Sensitivity	Distance to Nearest Turbine (M)	Significance of Impact
263	Granard Motte	High	8609 to T1	Slight
290 and 155	Loughcrew	High	14362 to T15	Slight
215	Fore Abbey	High	9631 to T15	Slight
220	Fore town gates (North and South)	High	9999 to T15	Not significant
610	Mortimer's Castle	Medium	8194 to T14	Not significant
606	Wattstown	High	16343 to T14	Not significant

Proposed Mitigation Measures
 No mitigation proposed

Residual Impact
 Slight-Not Significant Negative Impact

Significance of Effects
 Slight-Not Significant Negative Effect

13.4.4.1.3 **Impact of Turbines on setting of Recorded Monuments**

Two hundred and twelve (212) recorded monuments are located within 5km of the nearest proposed turbine. The table below presents the recorded archaeological monuments within 5km of the site according to their sensitivity (visual dominance, above ground trace, uniqueness, proximity to site etc) and the likely potential pre-mitigation impact on their setting. For example, low visibility monuments such as enclosures, ringforts and many earthen monuments at a distance of 3-5km from the nearest proposed turbine could be considered to have less potential to be impacted by the Proposed Development and therefore their sensitivity could be regarded as low. Monuments on higher ground (visually dominant) within close proximity to the site however may be more at risk in terms of impact on their setting. Monuments that do not have any surface trace are not capable of having their setting impacted and these impacts are categorised as 'not significant'. The ZTV model for the site, assuming no vegetation or screening, shows that virtually all areas within 5km would be capable of seeing the majority of turbines (see Figure 12-4 in Section 12.6.2 of Chapter 12: Landscape and Visual Assessment). This is the worst-case scenario however, as, in reality screening in the form of dense field boundaries and trees is provided from many locations within 5km of the Proposed Development.

The majority of the monuments are located on private land with no formal public access. Such monuments can therefore only be viewed/appreciated by the public from the nearest public road. It should be noted that the introduction of the proposed turbines will not impact on the immediate setting

of the 212 monuments by virtue of the fact that no recorded monuments are located immediately adjacent to a proposed structure. It is acknowledged, however, that a change to the wider setting of the monuments will occur as a result of the proposed turbines and consequently a minimum slight impact for all upstanding monuments is identified. Depending on the type of monument which occurs within 1km of the nearest turbine the impact identified may still be slight. For example, the nearest monument, WM001-028, comprises a crannóg which is not readily visible in the landscape given its low-lying position and form. In addition, it is inaccessible to the public and is not apparent from the nearest public road. Despite its proximity to the nearest turbine, therefore, the potential impact to same is still regarded as slight. The likely pre-mitigation impacts for each monument are summarised below.

Pre Mitigation Impacts

Table 13-10: Pre-Mitigation Impacts on setting of RMPs within 5km of the nearest proposed turbine

MAP ID	SMR	MONUMENT TYPE	Townland	SENSITIVITY OF ASSET	SIGNIFICANCE OF IMPACT	NEAREST TURBINE	DISTANCE (M)
1	WM001-028—	Crannog	Clonsura	Low	Slight	2	319
2	WM003-004—	Moated site	Ballynameagh	Low	Slight	15	557
3	WM003-029—	Enclosure	Ballynameagh	Low	Slight	15	788
4	WM002-003—	Castle - motte	Camagh (Fore By.)	Med-Low	Slight-moderate	11	812
5	WM003-001—	Castle - tower house	Newcastle (Fore By.)	Medium	Slight-moderate	13	848
6	WM003-101—	Enclosure	Curry	Low	Slight	15	860
7	WM003-002—	Ringfort - rath	Newcastle (Fore By.)	Low	Slight	14	875
8	WM001-053—	Burial ground	Carlanstown	Low	Slight	4	1057
9	WM003-109—	Enclosure	Monkstown	Low	Slight	14	1072
10	WM003-005—	Earthwork	Carlanstown	Low	Slight	15	1150
11	WM003-030—	Ringfort - rath	Ballynameagh	Low	Slight	15	1231
12	WM003-052—	Ringfort - rath	Cooles	Low	Slight	14	1518

MAP ID	SMR	MONUMENT TYPE	Townland	SENSITIVITY OF ASSET	SIGNIFICANCE OF IMPACT	NEAREST TURBINE	DISTANCE (M)
13	WM003-031—	Earthwork	Curry	Low	Slight	15	1539
14	WM001-031002-	Architectural fragment	Carlanstown	Low	Slight	4	1589
15	WM001-031001-	House - fortified house	Carlanstown	Low	Slight	4	1591
16	WM001-031—	Bawn	Carlanstown	Low	Slight	4	1620
17	WM003-003—	Cairn - unclassified	Curry	Medium	Slight-moderate	15	1633
18	LF016-009—	Ringfort - rath	Coolcraff	Low	Slight	8	1790
19	WM003-053—	Windmill	Coole	Low	Slight	14	1794
20	WM003-032—	Designed landscape - tree-ring	Curry	Low	Slight	15	1838
21	WM003-034—	Ringfort - rath	Ballynameagh	Low	Slight	15	1912
22	WM003-054—	Castle - unclassified	Tubotstown	Low	Slight	14	2026
23	WM001-032002-	Hut site	Carlanstown	Low	Slight	15	2038
24	WM001-032003-	Souterrain	Carlanstown	Low	Slight	15	2044
25	WM001-032—	Ringfort - rath	Carlanstown	Low	Slight	15	2044
26	WM001-032001-	Hut site	Carlanstown	Low	Slight	15	2044

MAP ID	SMR	MONUMENT TYPE	Townland	SENSITIVITY OF ASSET	SIGNIFICANCE OF IMPACT	NEAREST TURBINE	DISTANCE (M)
27	WM003-007—	Ringfort - rath	Curry,Lickbla	Low	Slight	15	2132
28	WM003-036—	Ringfort - rath	Rathcreevagh	Low	Slight	15	2153
29	WM003-056—	Ringfort - rath	Turbotstown	Low	Slight	14	2154
30	WM003-035—	Ringfort - unclassified	Ballynameagh	Low	Slight	15	2173
31	WM003-033—	Ringfort - rath	Ballynameagh	Low	Slight	15	2182
32	WM001-029—	Ringfort - rath	Carlanstown	Low	Slight	4	2204
33	WM003-103—	Water mill - unclassified	Lickbla	Low	Slight	15	2238
34	LF011-049—	Redundant record	Derragh Lough	Imperceptible	Imperceptible	1	2330
35	LF011-068—	Crannog	Derragh Lough	Low	Slight	1	2360
36	WM001-030—	Ringfort - rath	Carlanstown	Low	Slight	4	2402
37	WM002-035—	Prehistoric site - lithic scatter	Corralanna	Imperceptible	Slight	11	2408
38	WM003-039—	Megalithic tomb - wedge tomb	Lickbla	Med-low	Slight	15	2549
39	WM001-033—	Ringfort - rath	Balrath (Fore By.)	Low	Slight	15	2566
40	WM003-038—	Church	Lickbla	Medium	Slight	15	2568
41	WM003-038001-	Graveyard	Lickbla	Low	Slight	15	2569

MAP ID	SMR	MONUMENT TYPE	Townland	SENSITIVITY OF ASSET	SIGNIFICANCE OF IMPACT	NEAREST TURBINE	DISTANCE (M)
42	WM003-038002-	Ecclesiastical enclosure	Lickbla	Low	Slight	15	2569
43	LF011-051—	Crannog	Derragh Lough	Low	Slight	1	2580
44	WM003-057—	Enclosure	Fearmore (Fore By.)	Low	Slight	14	2590
45	WM001-034—	Ringfort - rath	Balrath (Fore By.)	Low	Slight	15	2599
46	WM003-037—	Castle - motte and bailey	Rathcreevagh	Medium	Slight	15	2632
47	WM001-018—	Ringfort - rath	Castletown Upper	Low	Slight	4	2661
48	WM003-008002-	Field system	Bigwood	Low	Slight	15	2731
49	WM003-008001-	Hillfort	Bigwood	Medium	Slight	15	2743
50	WM003-008003-	Ritual site - holy well	Bigwood	Low	Slight	15	2743
51	WM003-058001-	House - 17th century	Ballynagall Little	Medium	Slight	15	2755
52	WM003-008—	Ringfort - cashel	Bigwood	Low	Slight	15	2755
53	WM003-058—	Enclosure	Ballynagall Little	Low	Slight	15	2761
54	WM003-041—	Megalithic structure	Lickbla	Med-low	Slight	15	2805
55	WM002-002—	Ringfort - rath	Milkernagh	Low	Slight	11	2846

MAP ID	SMR	MONUMENT TYPE	Townland	SENSITIVITY OF ASSET	SIGNIFICANCE OF IMPACT	NEAREST TURBINE	DISTANCE (M)
56	WM003-098—	Ritual site - holy well	Rathcreevagh	Low	Slight	15	2850
57	WM003-062—	Ringfort - rath	Turbotstown	Low	Slight	14	2909
58	WM003-011—	Ringfort - rath	Lickbla	Low	Slight	15	2932
59	WM003-011001-	Hut site	Lickbla	Low	Slight	15	2935
60	WM003-011002-	Souterrain	Lickbla	Low	Slight	15	2935
61	WM003-040001-	Hut site	Lickbla	Low	Slight	15	2938
62	WM003-040002-	Hut site	Lickbla	Low	Slight	15	2938
63	WM003-040—	Ringfort - rath	Lickbla	Low	Slight	15	2942
64	WM001-019—	Castle - unclassified	Castletown Upper	Low	Slight	4	2974
65	WM003-059—	Ringfort - rath	Rathcreevagh	Low	Slight	15	2983
66	WM001-005—	Ringfort - rath	Castletown Lower	Low	Slight	4	3042
67	WM003-083001-	Font	Mayne	Low	Slight	14	3050
68	WM003-083—	Church	Mayne	Medium	Slight	14	3054
69	WM003-083002-	Graveyard	Mayne	Low	Slight	14	3073

MAP ID	SMR	MONUMENT TYPE	Townland	SENSITIVITY OF ASSET	SIGNIFICANCE OF IMPACT	NEAREST TURBINE	DISTANCE (M)
70	WM003-083003-	Ecclesiastical enclosure	Mayne	Low	Slight	14	3073
71	WM002-039—	Road - class 1 together	Mayne	Low	Slight	14	3077
72	WM001-054—	Redundant record	Bigwood	Imperceptible	Imperceptible	15	3083
73	WM002-038—	Road - class 1 together	Mayne	Low	Slight	14	3117
74	WM001-035—	Cross - Wayside cross	Bigwood	Low	Slight	15	3141
75	WM001-036—	Castle - unclassified	Bigwood	Low	Slight	15	3194
76	WM003-081—	Ringfort - rath	Mayne	Low	Slight	14	3219
77	WM001-020—	Ringfort - rath	Castletown Upper	Low	Slight	4	3256
78	WM001-017—	Castle - motte	Castletown Upper	Medium	Slight	4	3295
79	WM003-060—	Ringfort - rath	Rathcreevagh	Low	Slight	15	3297
80	WM003-084—	Ringfort - rath	Newtown (Delvin By.)	Low	Slight	14	3311
81	WM003-085—	Hilltop enclosure	Carn (Fore By., Collure Ed)	Medium	Slight	14	3375
82	WM003-061001-	Hut site	Rathcreevagh	Low	Slight	15	3380
83	WM003-082—	Ringfort - rath	Ballinaloe	Low	Slight	14	3381
84	WM003-061—	Ringfort - rath	Rathcreevagh	Low	Slight	15	3387

MAP ID	SMR	MONUMENT TYPE	Townland	SENSITIVITY OF ASSET	SIGNIFICANCE OF IMPACT	NEAREST TURBINE	DISTANCE (M)
85	WM003-063001-	Hut site	Rathcreevagh	Low	Slight	15	3403
86	WM003-063—	Ringfort - rath	Rathcreevagh	Low	Slight	15	3407
87	WM001-016—	Ringfort - rath	Lisnugent	Low	Slight	4	3417
88	LF011-065001-	Prehistoric site - lithic scatter	Derragh	Imperceptible	Slight	1	3479
89	LF011-065002-	Crannog	Derragh	Low	Slight	1	3479
90	WM001-004—	Castle - tower house	Togher	Medium	Slight	2	3496
91	WM001-037—	Ringfort - unclassified	Bigwood	Low	Slight	15	3501
92	WM003-106—	Water mill - unclassified	Gilbertstown	Low	Slight	15	3508
93	WM001-056—	Burial ground	Ardnagross	Low	Slight	15	3521
94	LF011-067001-	Redundant record	Lough Kinale	Imperceptible	Imperceptible	1	3558
95	LF011-075—	Crannog	Lough Kinale	Low	Slight	1	3570
96	LF011-067002-	Settlement platform	Lough Kinale	Low	Slight	1	3571
97	LF011-048—	Ringfort - rath	Cooldoney	Low	Slight	1	3574
98	WM002-042—	Road - class 1 togher	Corralanna	Low	Slight	12	3587
99	WM001-006—	Ringfort - rath	Togher	Low	Slight	4	3588

MAP ID	SMR	MONUMENT TYPE	Townland	SENSITIVITY OF ASSET	SIGNIFICANCE OF IMPACT	NEAREST TURBINE	DISTANCE (M)
100	LF011-074—	Redundant record	Derragh	Imperceptible	Imperceptible	1	3620
101	LF011-081—	Crannog	Lough Kinale	Low	Slight	1	3626
102	WM003-086—	Earthwork	Ballinaloe	Low	Slight	14	3627
103	LF011-066001-	Prehistoric site - lithic scatter	Derragh	Imperceptible	Slight	1	3701
104	WM002-001—	Ringfort - rath	Clonmore (Moygoish By.)	Low	Slight	11	3711
105	WM001-039—	Ritual site - holy well	Foyran	Low	Slight	15	3717
106	LF011-066002-	Crannog	Lough Kinale	Low	Slight	1	3721
107	WM003-064—	Mound	Rathcreevagh	Low	Slight	15	3734
108	WM003-087—	Moated site	Ballinaloe	Low	Slight	14	3747
109	WM001-055—	Church	Togher	Medium	Slight	2	3777
110	WM003-012—	Ringfort - rath	Raheen More	Low	Slight	15	3781
111	WM001-038—	Enclosure	Foyran	Low	Slight	15	3813
112	WM002-007—	Ringfort - rath	Lismacaffry	Low	Slight	11	3827
113	WM001-007—	Ringfort - rath	Togher	Low	Slight	4	3837
114	WM002-009—	Ringfort - rath	Lismacaffry	Low	Slight	11	3873
115	WM002-010—	Ringfort - rath	Lisduff	Low	Slight	11	3931

MAP ID	SMR	MONUMENT TYPE	Townland	SENSITIVITY OF ASSET	SIGNIFICANCE OF IMPACT	NEAREST TURBINE	DISTANCE (M)
116	WM003-088—	Ringfort - rath	Ballinaloe	Low	Slight	14	3954
117	WM003-043—	Ringfort - rath	Ballycomoye	Low	Slight	15	3969
118	WM003-042—	Cross - Wayside cross	Robinstown Lower	Low	Slight	15	3977
119	WM002-005—	Religious house nunnery - unclassified	Clonmore (Moygoish By.)	Low	Slight	11	3980
120	LF011-035—	Crannog	Lough Kinale	Low	Slight	1	3989
121	LF016-008—	Enclosure	Rincoolagh	Low	Slight	11	3995
122	WM001-008—	Ringfort - unclassified	Money	Low	Slight	4	4013
123	WM002-033—	Windmill	Coolnagun	Low	Slight	12	4015
124	WM001-040—	Cross - Wayside cross	Foyran	Low	Slight	15	4039
125	WM002-018—	Ringfort - unclassified	Coolnagun	Low	Slight	11	4061
126	WM001A001—	Bastioned fort	Finnea	Low	Slight	1	4079
127	LF011-047—	Ringfort - rath	Cloonaghmore	Low	Slight	1	4105
128	WM001-059—	Settlement cluster	Finnea	Low	Slight	1	4111
129	WM002-008—	Ringfort - rath	Lismacaffry	Low	Slight	11	4123
130	WM001-024—	Standing stone	Tullystown	Med-low	Slight	4	4128

MAP ID	SMR	MONUMENT TYPE	Townland	SENSITIVITY OF ASSET	SIGNIFICANCE OF IMPACT	NEAREST TURBINE	DISTANCE (M)
131	WM00 1-041—	Cross - Wayside cross	Foyran	Low	Slight	15	4132
132	WM00 2-036—	Road - class 1 together	Chancery	Low	Slight	11	4137
133	WM00 3-044—	Cross - Wayside cross	Robinstown Upper	Low	Slight	15	4142
134	LF016-019—	Road - class 1 together	Rossan	Low	Slight	11	4149
135	WM00 1-057—	Water mill - vertical-wheeled	Foyran,Rathshane	Low	Slight	4	4153
136	WM00 1-009—	Ringfort - rath	Money	Low	Slight	4	4158
137	WM00 1-001—	Castle - unclassified	Finnea	Low	Slight	1	4162
138	WM00 1-052—	Bridge	Finnea	Low	Slight	1	4165
139	CV041-022—	Bridge	Kilgolagh	Low	Slight	1	4165
140	WM00 1-052001-	Armorial plaque (present location)	Finnea	Low	Slight	1	4166
141	WM00 1-010—	Ringfort - rath	Money	Low	Slight	4	4184
142	LF016-007—	Ringfort - rath	Rincoolagh	Low	Slight	11	4200
143	WM00 3-010—	Ringfort - rath	Ballymanus	Low	Slight	15	4201
144	WM00 1-042—	Church	Foyran	Medium	Slight	15	4215

MAP ID	SMR	MONUMENT TYPE	Townland	SENSITIVITY OF ASSET	SIGNIFICANCE OF IMPACT	NEAREST TURBINE	DISTANCE (M)
145	WM001-042003-	Font	Foyran	Low	Slight	15	4215
146	WM001-042001-	Graveyard	Foyran	Low	Slight	15	4217
147	WM001-042002-	Ecclesiastical enclosure	Foyran	Low	Slight	15	4217
148	WM002-006—	Ringfort - rath	Lismacaffry	Low	Slight	11	4241
149	WM003-009—	Hilltop enclosure	Littlewood	Medium	Slight	15	4289
150	WM001-023—	Ringfort - rath	Tullystown	Low	Slight	4	4289
151	WM003-013001-	Souterrain	Raheen More	Low	Slight	15	4294
152	WM003-009001-	Hut site	Littlewood	Low	Slight	15	4296
153	WM001-003—	Bawn	Togher	Medium	Slight	2	4302
154	WM001-022—	Ringfort - rath	Tullystown	Low	Slight	4	4309
155	WM001-022001-	Hut site	Tullystown	Low	Slight	4	4309
156	WM003-089—	Ringfort - rath	Carn (Fore By., Collure Ed)	Low	Slight	14	4353
157	WM001-043—	Ritual site - holy well	Tonyowen Lower	Low	Slight	15	4357
158	WM003-055—	Earthwork	Raheen Beg	Low	Slight	15	4363

MAP ID	SMR	MONUMENT TYPE	Townland	SENSITIVITY OF ASSET	SIGNIFICANCE OF IMPACT	NEAREST TURBINE	DISTANCE (M)
159	LF011-046—	Ringfort - rath	Rincoolagh	Low	Slight	11	4408
160	WM003-071—	Castle - tower house	Tromra	Medium	Slight	15	4418
161	WM001-026—	Ringfort - rath	Rathshane	Low	Slight	15	4428
162	WM001-021—	Ringfort - rath	Tullystown	Low	Slight	4	4450
163	WM001-021001-	Hut site	Tullystown	Low	Slight	4	4450
164	WM007-001—	Ringfort - unclassified	Lispopple	Low	Slight	14	4452
165	WM001-011—	Ringfort - rath	Money	Low	Slight	4	4460
166	WM003-014—	Moated site	Ballymanus	Low	Slight	15	4462
167	WM001-025—	Ringfort - rath	Rathshane	Low	Slight	4	4465
168	LF016-014—	Ringfort - rath	Kilfintan	Low	Slight	11	4488
169	WM001-045—	Ringfort - unclassified	Tonyowen Upper	Low	Slight	15	4510
170	WM002-017—	Ringfort - rath	Athenboy	Low	Slight	11	4520
171	WM003-107—	Barrow - ring-barrow	Ballycomoye	Low	Slight	15	4522
172	WM001-044—	Ringfort - unclassified	Tonyowen Lower	Low	Slight	15	4529
173	WM003-090—	Ringfort - rath	Carn (Fore By., Collure Ed)	Low	Slight	14	4550
174	WM002-022—	Ringfort - rath	Coolnagun	Low	Slight	11	4557

MAP ID	SMR	MONUMENT TYPE	Townland	SENSITIVITY OF ASSET	SIGNIFICANCE OF IMPACT	NEAREST TURBINE	DISTANCE (M)
175	WM007-002—	Castle - tower house	Williamstown (Coolure Ed)	Medium	Slight	14	4567
176	WM003-068001-	Graveyard	Rathgarve	Low	Slight	15	4648
177	WM003-068002-	Ecclesiastical enclosure	Rathgarve	Low	Slight	15	4653
178	WM003-068—	Church	Rathgarve	Medium	Slight	15	4656
179	WM003-069—	Cross - Wayside cross	Rathgarve	Low	Slight	15	4723
180	WM002-019—	Castle - motte	Coolnagun	Medium	Slight	11	4731
181	LF011-041001-	Ringfort - rath	Ballyboy	Low	Slight	1	4735
182	LF011-041002-	House - indeterminate date	Ballyboy	Low	Slight	1	4735
183	LF016-017—	Ringfort - rath	Coolamber	Low	Slight	11	4762
184	LF011-034—	Ringfort - rath	Springtown	Low	Slight	1	4778
185	WM002-023—	Ringfort - rath	Coolnagun	Low	Slight	11	4786
186	WM002-023001-	Hut site	Coolnagun	Low	Slight	11	4786
187	WM002-024001-	Hut site	Tinode	Low	Slight	11	4786
188	WM003-070—	Castle - motte and bailey	Rathgarve	Medium	Slight	15	4802

MAP ID	SMR	MONUMENT TYPE	Townland	SENSITIVITY OF ASSET	SIGNIFICANCE OF IMPACT	NEAREST TURBINE	DISTANCE (M)
189	WM00 2-032—	Road - unclassified togher	Coolnagun	Low	Slight	12	4814
190	WM00 3-065—	Ringfort - rath	Millcastle	Low	Slight	15	4825
191	WM00 3-016—	Ringfort - rath	Ballymanus	Low	Slight	15	4833
192	WM00 1-014001-	Bawn	Tullystown	Medium	Slight	4	4859
193	WM00 2-020—	Moated site	Coolnagun	Low	Slight	11	4864
194	LF011-036001-	Religious house - Cistercian monks	Abbeylara	Medium	Slight	1	4874
195	WM00 6-011—	Ringfort - rath	Shrubbywood	Low	Slight	12	4876
196	LF011-036002-	Sheela-na-gig	Abbeylara	Low	Slight	1	4877
197	LF011-033—	Ringfort - rath	Tonymore North	Low	Slight	1	4882
198	WM00 1-014—	Castle - tower house	Tullystown	Medium	Slight	4	4885
199	LF011-036004-	Graveyard	Abbeylara	Low	Slight	1	4896
200	LF016-013—	Ringfort - rath	Kilfintan	Low	Slight	11	4898
201	LF011-045—	Ringfort - rath	Ballyboy	Low	Slight	1	4900
202	WM00 3-025—	Ringfort - rath	Ballymanus	Low	Slight	15	4913
203	LF011-036003-	Church	Abbeylara	Medium	Slight	1	4915

MAP ID	SMR	MONUMENT TYPE	Townland	SENSITIVITY OF ASSET	SIGNIFICANCE OF IMPACT	NEAREST TURBINE	DISTANCE (M)
204	LF011-052—	Crannog	Lough Kinale	Low	Slight	1	4916
205	LF016-016—	Barrow - mound barrow	Balloo	Low	Slight	11	4927
206	WM002-021—	Ringfort - rath	Correaly	Low	Slight	11	4936
207	WM003-066—	Castle - tower house	Millcastle	Medium	Slight	15	4943
208	WM003-006—	Church	Ballymanus	Medium	Slight	15	4961
209	WM003-066002-	Mill - unclassified	Millcastle	Low	Slight	15	4992
210	WM003-026—	Ringfort - rath	Ballymanus	Low	Slight	15	4993
211	WM003-026001-	Hut site	Ballymanus	Low	Slight	15	4998
212	LF011-040—	Ringfort - rath	Ballyboy	Low	Slight	1	5000

Proposed Mitigation Measures

No mitigation is proposed.

Residual Impacts

Same as Pre Mitigation Impacts

Significance of Effects

Same as Pre Mitigation Impacts

13.4.4.1.4 **Impact of Turbines on setting of RPS and NIAH structures**

Similar to Recorded monuments, National Monuments etc. the sensitivity of an asset is categorized on a case by case basis. Structures of National and World Heritage importance would be considered to be of High Sensitivity. Low visibility structures such as milestones, post boxes, bridges are less likely to have a setting associated with them and are less likely to be visually impacted in contrast to more dominant structures such as houses and churches which often have obvious visible remains. The sensitivity of an asset together with the distance from the proposed turbines dictates the significance of potential impacts.

These are categorized not based on individual monument visits (unless publicly accessible) but rather cartographic sources as well as the ZTV provided in the LVIA chapter. None of the structures listed below will be directly impacted and no significant or adverse impacts will take place. The immediate setting of the structures will not be impacted, however, a change to their wider setting will occur with the introduction of the turbines and therefore a slight impact for the majority of structures is acknowledged. The ZTV shows that the majority of turbines will be visible from most locations within 5km. The impact on setting decreases with distance and the sensitivity of the asset.

One NIAH/Protected Structure, Newcastle House (Reg. 15400301, RPS. 003-009) is located in relatively close proximity to the proposed turbines, being 822m from T5. The house is a protected structure and has an associated demesne/curtilage which is mapped on Figure 13-19. The proposed turbines are located outside the demesne and curtilage of the house and therefore will not impact on the immediate setting of same. The wider setting of the house and garden/demesne will be altered by the introduction of the proposed turbines however. The house is in private ownership and not accessible to the public. Public appreciation of the house is therefore limited to partial views from the adjacent public road and will not be significantly impacted by the introduction of the proposed turbines.

The NIAH structure of Camagh Bridge (NIAH Reg. 13401604) is located just over 800m to the west of the nearest turbine T11. It may be regarded as a relatively low-visibility structure and its immediate setting will not be impacted by the proposed turbines. An impact to its wider setting is acknowledged however.

Pre Mitigation Impact

Table 13-11: Table of pre-mitigation impacts on Protected Structures and NIAH structures within 5km of the nearest proposed turbine.

RPS	NIAH	NAME	TD	Sensitivity of Asset	Significance of Impact	Turbine No.	Distance (m)
001-001	15301001	The Bridge of Finnea	FINNEA	Low	Slight	1	4162
001-003	15301005	Market House	FINNEA	Low	Slight	1	4010
001-005	15301007	Waterpump	FINNEA	Low	Slight	1	4024
001-006	15301008	House	FINNEA	Low	Slight	1	4012
001-007	15301009	House	FINNEA	Low	Slight	1	3922
001-008	15301010	Our Lady of the Angels	FINNEA	Low	Slight	1	3749
001-004	15301006	Myles O'Reilly Monument	FINNEA	Low	Slight	1	4019
001-002	15301004	House	FINNEA	Low	Slight	1	4045
001-009	15400101	House - Gore Port	CLAREISL AND OR DERRY ACEGAN	Low	Slight	2	4920

RPS	NIAH	NAME	TD	Sensitivity of Asset	Significance of Impact	Turbine No.	Distance (m)
001-010	15400103	Tullystown National School	TULLYSTOWN	Low	Slight	4	4001
001-011	15400104	Carlanstown House	CARLANS TOWN	Low	Slight	4	1621
001-013	15400106	House	CARLANS TOWN	Low	Slight	4	1959
001-014	15400107	St. Michael's Roman Catholic church	CASTLETOWN LOWER	Low	Slight	4	2599
001-012	15400105	Outbuildings Carlanstown House	CARLANS TOWN	Low	Slight	4	1613
001-015	15400108	St. Michael's Parochial House	CASTLETOWN LOWER	Low	Slight	4	2636
001-016	15400109	Castletown Cottage	CASTLETOWN LOWER	Low	Slight	4	2934
001-017	15400110	Outbuildings Castletown Cottage	CASTLETOWN LOWER	Low	Slight	4	2932
001-018	15400111	Balnacart Corn Mill	RATHSHANE	Low	Slight	4	4150
001-019	15400112	Tullystown House	TULLYSTOWN	Low	Slight	4	4912
001-020	15400113	Outbuildings Tullystown House	TULLYSTOWN	Low	Slight	4	4881
001-022	15400116	Castletown Cottage	CASTLETOWN LOWER	Low	Slight	4	2948
003-009	15400301	Newcastle House	NEWCASTLE	Medium	Slight-Moderate	5	822

RPS	NIAH	NAME	TD	Sensitivity of Asset	Significance of Impact	Turbine No.	Distance (m)
002-018	15400218	Float Railway Station	LISDUFF	Low	Slight	11	3757
002-019	15400219	Postbox	LISDUFF	Low	Slight	11	3770
002-020	15400221	House	LISMACAFFRY	Low	Slight	11	4470
002-021	15400222	Water pump	CLONMORE	Low	Slight	11	3837
003-041	15400335	St. Nicholas Church of Ireland church	MAYNE	Medium	Slight	14	3053
003-042	15400337	Simonstown House	SIMONSTOWN	Low	Slight	14	3395
003-043	15400338	St. Joseph's Orthopaedic Hospital	FEARMORE	Low	Slight	14	2589
003-043	15400338	St. Joseph's Orthopaedic Hospital	FEARMORE	Low	Slight	14	2527
007-046	15400703	Outbuildings - Coolure House	LISPOPPLLE	Low	Slight	14	4859
003-030	15400330	Turbotstown House and demesne	TURBOTSTOWN	Medium	Slight	14	2038
003-039	15400333	St. Mary's Roman Catholic church	FEARMORE	Low	Slight	14	2459
003-037	15400331	Outbuildings - Turbotstown House	TURBOTSTOWN	Medium	Slight	14	1967
003-038	15400332	Gate lodge (ruin), Turbotstown House	TURBOTSTOWN	Medium	Slight	14	2300

RPS	NIAH	NAME	TD	Sensitivity of Asset	Significance of Impact	Turbine No.	Distance (m)
003-040	15400334	Former school building	NEWTOWN	Low	Slight	14	2662
003-046	15400341	Gate lodge/estate cottage	TULLYNALLY	Low	Slight	14	4907
003-047	15400338	St. Joseph's Orthopaedic Hospital	FEARMORE(FOREBY)	Low	Slight	14	2527
003-010	15400302	Ballynameagh House	BALLYNAMEAGH	Medium	Slight	15	1563
003-011	15400303	Rathcreevagh Bridge	RATHCREEVAGH	Low	Slight	15	2103
003-012	15400306	House	CURRY	Low	Slight	15	2147
003-013	15400307	Gilbertstown Mills	GILBERTSTOWN	Low	Slight	15	3496
003-044	15400339	House	CARLANTOWN	Low	Slight	15	980
003-014	15400308	Bridge	GILBERTSTOWN	Low	Slight	15	3669
003-015	15400309	Gilbertstown House	GILBERTSTOWN	Medium	Slight	15	3693
003-016	15400310	Tromra House	TROMRA	Medium	Slight	15	4573
003-017	15400311	Gateway, Tromra House	TROMRA	Low	Slight	15	4667
003-018	15400312	Water pump	BALLYCOMOYLE	Low	Slight	15	4168
003-019	15400313	House	BALLYCOMOYLE	Low	Slight	15	4271
003-020	15400314	Ballycomoyl e National School	RAHEENMORE	Low	Slight	15	4274
003-036	15400329	Gaulstown House	BALLYNAGALL	Medium	Slight	15	3241

RPS	NIAH	NAME	TD	Sensitivity of Asset	Significance of Impact	Turbine No.	Distance (m)
	15301003	House	FINNEA	Low	Slight	1	4068
	15301002	House	FINNEA	Low	Slight	1	4086
	15400102	Church	TOGHER	Low	Slight	2	3772
	15400220	Float Railway Station	LISDUFF	Low	Slight	11	3781
	15400305	Lickbla Mills	RATHCR EEVAGH	Medium	Slight	15	2228
	15400304	Lickbla House	LICKBLA	Medium	Slight	15	2228
	15400336	Moyne Rectory	MAYNE	Low	Slight	14	3238

Proposed Mitigation Measures

No mitigation proposed

Residual Impact

As outlined in table above

Significance of Impacts

As outlined in table above

13.4.4.1.5 **Impact of Turbines on setting of NIAH Historic Gardens**

The sensitivity of each garden / historic demesne is based on the survival rate of the asset and this is based on cartographic sources compared with historic OS mapping as described under Existing Environment above. The gardens identified in the NIAH survey are tabulated and mapped in section 13.3.1.2.5 above. As referred to in the aforementioned section, the demesne/garden at Newcastle is associated with the upstanding Newcastle House and is located adjacent to the site of the proposed turbines. The immediate setting of the garden will remain intact, however, its wider setting will be altered. Similarly, the demesne/garden at Turbotstown is at a distance of c. 2.1km from the nearest turbine (T14) and its immediate setting will therefore not be impacted. A change to its wider setting is acknowledged. Neither house/garden are open to the public and views of same may only be obtained from surrounding public roads.

Pre Mitigation Impact

A slight negative impact on the wider setting of historic gardens within 5km of the proposed turbines will occur.

Proposed Mitigation Measures

No mitigation being proposed

Residual Impact
Slight

Significance of Effects
Slight

13.4.4.1.6 **Impact of turbines on setting of items of cultural heritage merit**

An unnamed bridge is depicted on the 2nd edition map crossing the River Glore c. 230m south-west of T15 in Clonrobert townland. The bridge is extant and comprises a stone built single-arched structure with some concrete additions to the parapet walls as well as modern steel railings. The bridge is located c. 40m north-west of the proposed access road to T15.

Pre Mitigation Impact

A slight impact on the wider setting of this bridge as a result of the proposed turbines, in particular T15, is acknowledged.

Proposed Mitigation Measures

No mitigation proposed

Residual Impact
Slight

Significance of Effects
Slight

13.4.4.2 **Borrow Pit**

The operational phase of the proposed borrow pit will not impact on the immediate setting of any National Monuments, Recorded Monuments, Protected Structures or NIAH structures/gardens. A change to the wider setting of those assets within the vicinity of the proposed borrow pit is identified which will result in a slight short term impact. It is proposed to reinstate the borrow pit after its use, however, which will result in a reversal of the identified impact to 'not significant'

Pre Mitigation Impact

A slight negative impact on the wider setting of RMPs, RPS, NIAH and historic gardens within the vicinity of the proposed borrow pit will occur during its operational phase.

Proposed Mitigation Measures

Maintain natural screening around the perimeter of proposed borrow pit.

Residual Impact
Slight (short term)

Significance of Effects
Slight-Not significant

13.4.4.3 **Substation**

13.4.4.3.1 **Impact of the proposed substation on Heritage Assets (RMPs, RPS, NIAH, sub-surface sites)**

The proposed substation is not located immediately adjacent to any designated sites as outlined above. The wider setting of such assets may be altered by the introduction of the proposed substation resulting in a slight impact.

Pre Mitigation Impact

The substation site may have a slight negative impact on the surrounding archaeological and cultural heritage landscape as it will result in a change to their wider setting.

Proposed Mitigation Measures

Existing screening will be maintained to alleviate any potential impacts on setting.

Residual Impact

Slight

Significance of Effects

Slight

13.4.4.4 Grid Connection Route

13.4.4.4.1 **Impact of Grid Connection Route on heritage Assets (RMPs, RPS, NIAH, sub-surface sites)**

As the proposed Grid Connection Route is sub-surface, no impacts on setting are anticipated.

13.4.4.5 Other Infrastructure

This section relates to other non-turbine elements: access roads, construction compounds etc. The majority of these elements are low visibility or sub-surface such as proposed access roads, compounds etc. The construction compounds are also low-visibility and temporary and impacts on setting of heritage assets will not occur in this regard.

13.4.4.6 Junction Accommodation Works

No indirect impact or impact on setting of heritage assets will occur as a result of the proposed junction accommodation works.

13.4.5 Operational Phase Potential Impacts (Direct)

In terms of archaeology, architecture and cultural heritage, since peat removal and groundworks would be complete, no direct effects will occur at the operational stage.

13.4.6 Do-Nothing Scenario

An alternative land-use option to developing the Proposed Development would be to leave the site as it is under its current planning permission. As detailed in Section 1.1 of Chapter 1, a wind energy project comprising of 13 turbines and all associated infrastructure has current planning permission on the Proposed Development site. Where the land-use practices of commercial peat-harvesting and forestry continue in conjunction with the permitted wind energy project, it was designed to co-exist and operate independently of these land-uses to minimise impacts. Whilst there would be a change of land use within the footprint of the Proposed Development, to facilitate the wind turbines and infrastructure, this was found to be an acceptable part of the permitted development.

This EIAR assesses the potential for peat extraction works on the site to continue as a worst-case scenario. The Proposed Development has been designed to operate on this site in conjunction with any peat extraction activities. The section of the Proposed Development site that does not form part of the currently permitted wind energy development site has a current-land use practice of low-intensity pastoral agriculture. An alternative land-use option to developing a renewable energy project at this section of the Proposed Development site would be to leave the site as it is, with no changes made to

the current land-use practices of low intensity pastoral agriculture. The environmental effects of this are considered to be neutral.

A second potential Do-Nothing scenario exists for this project i.e. assuming that the permitted development is not constructed. In this scenario the existing baseline environment will evolve in one of two potential ways, either the peat extraction ceases and a rehabilitation plan is developed or the peat extraction continues and then a rehabilitation plan is developed.

If the Proposed Development were not to proceed, the potential impacts on heritage assets would not apply with no need for mitigation.

13.4.7 Worst-Case Scenario

The worst- case Scenario would be if the Proposed Development were to proceed without implementing mitigation measures. The mitigation measures are mainly relating to construction impacts (direct impacts on heritage assets) however. The potential impacts without mitigation measures would potentially result in an irreversible adverse impact on heritage with a partial-total loss of information relating to unrecorded heritage assets which may exist within the footprint of the proposed turbines, hardstands, access roads, substation and along the proposed Grid Connection Route.

13.5 Cumulative Impacts

Cumulative impact is defined as ‘The addition of many small impacts to create one larger, more significant, impact’ (EPA 2002, 33). It is also defined as ‘impacts that result from incremental changes caused by other past, present or reasonably foreseeable actions together with the project’ (EC 1999). Cumulative impacts encompass the combined effects of multiple developments or activities on a range of receptors. In this case the receptors are the archaeological monuments and architectural/cultural heritage sites in the immediate vicinity of the Proposed Development. Cumulative Impacts at the Construction and Operational Stages are considered.

13.5.1 Cumulative Impacts (Direct Impacts)

The addition of other projects to the Proposed Development was considered in order to assess Cumulative Impacts. These included all other wind farms in the vicinity, within 10-26km of the Proposed Development and the any peat harvesting activities should they continue within the peatland sections of the Proposed Development site.

Cumulative impacts for this Proposed Development are largely concerned with potential direct impacts to unrecorded sub-surface archaeological sites and artefacts which may exist within the area where it is proposed to construct the turbines and associated infrastructure. This EIAR assesses the potential for peat extraction works on the site to continue as a worst-case scenario. The bog is in private ownership and is not governed by any Code of Practice which sets out procedures and mitigation in relation to the discovery of archaeological sites and artefacts during peat harvesting. It is regarded as an area of high archaeological potential in terms of sub-surface archaeological sites and artefacts. The potential therefore exists for direct impacts to occur to as yet unknown sub-surface archaeological sites and artefacts which may be present within the peat. A potential direct impact to the same archaeological resource has been identified as a result of the proposed turbines and associated infrastructure without the implementation of appropriate mitigation measures. With the implementation of mitigation a slight-moderate impact is identified. As the on-going peat harvesting is not subject to similar mitigation the potential impact may increase to moderate when considered cumulatively with the proposed turbines and associated infrastructure.

13.5.2 Cumulative Impacts (Indirect Impact on Setting)

Cumulative impacts on setting are more likely to occur at the operational stage of the development (i.e. post-construction). In this regard in order to assess overall cumulative effects on archaeology and cultural heritage the proposed project is considered in the context of other developments, in particular other permitted and proposed wind farms as shown in Figure 13-35. This map shows the location of existing, permitted and proposed turbines within 25km of the Proposed Development wind farm site.

13.5.2.1 National Monuments

Granard Motte

The results of the Viewshed analysis from this monument demonstrates that theoretically 14 turbines (Nos. 1-14) may be visible in full from the National Monument, while T15 may be visible from half shaft up. In this regard a change to the wider setting of the National Monument at Granard is noted but given the intervening distance and continued ability of the visitor to appreciate the monument itself, is regarded to be slight. The existing turbine at Ballyjamesduff is located over 21km from the National Monument at Granard while the proposed Bracklyn and Ballivor Wind Farms are located over 35km from the motte. The proposed Ballyjamesduff turbine (under appeal) is also situated over 21km to the north-east of the monument. Given the significant distance of the existing and proposed wind farms no cumulative impacts on the setting of this National Monument as a result of the proposed turbines are identified.

Loughcrew

The Viewshed analysis carried out from this monument also demonstrates that theoretically none of the proposed turbines would be visible in full from this monument. It also shows that 11 turbines (Nos. 1-4 and 9-15) may be visible from mid shaft up, while four turbines (Nos. 5-8) would theoretically not be visible. No impact to the immediate setting of the complex will arise as a result of the proposed turbines, however, a change to the wider setting is acknowledged and therefore a slight impact is identified. When considering the other permitted and proposed turbines at least some of the proposed Bracklyn and Ballivor turbines will be visible from this National Monument in addition to the single existing turbine at Ballyjamesduff and the proposed turbine at Ballyjamesduff (under appeal). The proposed Bracklyn and Ballivor turbines are situated c. 18-19km to the south-south-east of Loughcrew while the existing Ballyjamesduff turbine and proposed Ballyjamesduff turbine are situated c. 13km to the north-west. The proposed turbines are situated c. 14m to the west. When considered together no cumulative impacts on the setting of the National Monument at Loughcrew are identified given the distance of the turbines from same.

Fore Abbey

The ZTV model, assuming no vegetation or screening, shows limited visibility of turbines from this location. Similarly, the Viewshed analysis indicates no visibility of the proposed turbines from Fore Abbey. A change to the wider setting of the national monument as a result of the proposed turbines is acknowledged but is regarded as slight. The viewshed analysis carried out from the monument also shows that no other proposed, existing or permitted turbines are visible from this location. In this regard no cumulative impacts on setting will occur.

Fore Town Gates

The ZTV model, assuming no vegetation or screening, shows limited visibility of turbines from this location. Similarly, the Viewshed analysis run from this monument shows no theoretical visibility of the proposed turbines. A change to the wider setting of the National Monuments will occur, at a distance of just under 10km from the nearest proposed turbine (T15), and therefore an impact is identified but is regarded as being not significant/imperceptible. No other existing or proposed turbines are theoretically

visible from this monument. No increase to the potential impacts on setting of the national monument is therefore identified when considered cumulatively with the proposed turbines.

Mortimer's Castle

The ZTV model, assuming no vegetation or screening, shows limited or no visibility of turbines from this location. Similarly, the Viewshed analysis also shows no theoretical visibility of the proposed turbines from this monument. While the wider setting in which the monument is located will be altered as a result of the introduction of the proposed turbines the impact of same is regarded to be not significant/imperceptible. No other existing, permitted or proposed turbines are theoretically visible from this monument therefore no cumulative impacts will arise as a result of the addition of the proposed turbines.

Wattstown

The ZTV shows that potentially 12-15 of the proposed turbines will be visible from this location. Similarly, the Viewshed analysis demonstrates that all 15 turbines will theoretically be visible from mid shaft up from Frewin Hill/Wattstown. While the wider setting in which the monument is located will be altered as a result of the introduction of the proposed turbines the impact of same is regarded to be not significant/imperceptible, particularly given the distance of over 16km between the monument and the nearest proposed turbine. When considered with other existing permitted and proposed turbines, none are located within 20km of this national monument. No cumulative impacts are identified as a result of the proposed turbines.

13.5.3 Cultural Heritage Assets within 5km of the proposed turbines

The indirect effects on setting of RMPs and other cultural heritage sites such as Protected Structures and NIAH structures within 5km of the proposed turbines has been addressed in this chapter of the EIAR. The ZTV shows that the proposed turbines will theoretically be visible from the majority of cultural heritage assets within 5km of the nearest proposed turbine. Few existing, permitted or proposed wind farms occur within 20km of the Proposed Development, however, with only one existing turbine at Ballyjamesduff. The proposed Bracklyn and Ballivor Wind Farms are situated c. 25km to the south-east, while the proposed turbine at Ballyjamesduff (under appeal) is located c. 16km to the north-east. When the proposed turbines are added to those existing, permitted or proposed wind farms more turbines may theoretically be visible from various monuments and cultural heritage assets within 5km. While the ability to see an increased number of turbines will result in a cumulative impact on setting in the wider landscape this is regarded as slight. No significant cumulative impacts will occur.

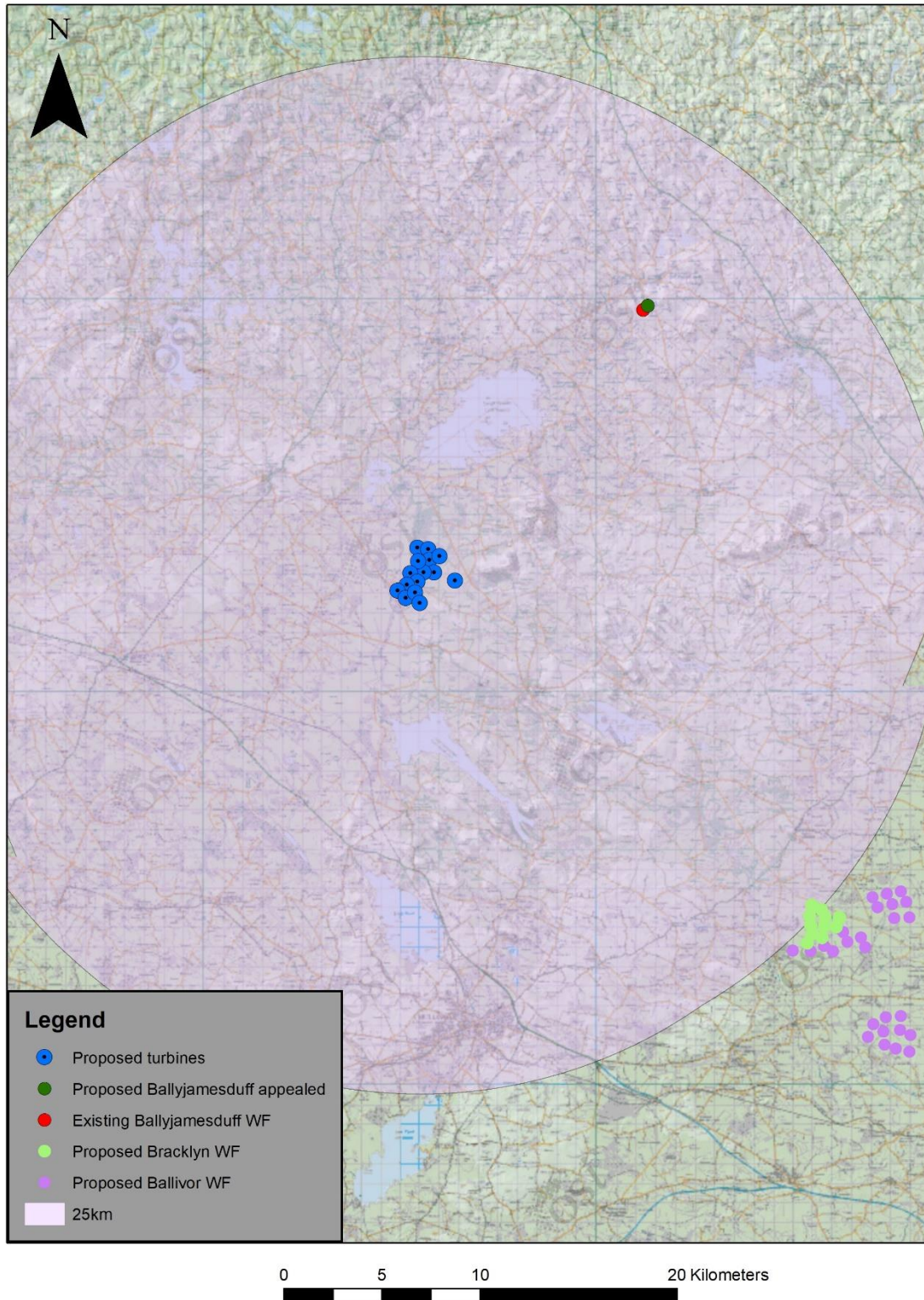


Figure 13-35: Proposed turbines in relation to existing and proposed turbines.

13.6 Decommissioning Phase

There will be no significant potential impacts on the archaeological, architectural and cultural heritage environment during the decommissioning of the development. Any potential direct impacts will already have been resolved through mitigation measures and the established access tracks will be used for the removal of the built features of the wind farm.

The wind turbines proposed as part of the Proposed Development are expected to have a lifespan of approximately 30 years. Following the end of their useful life, the wind turbines may be replaced with a new set of turbines, subject to planning permission being obtained, or the Proposed Development may be decommissioned fully. The onsite substation will remain in place as it will be under the ownership of EirGrid. A full description of the decommissioning phase is presented in Chapter 4 of this EIAR and a Decommissioning Plan is included as Appendix 4-11.

13.7 Conclusion

This report comprises an assessment of the potential impact of the Proposed Development. The potential impacts on the surrounding archaeological, architectural and cultural heritage landscape were assessed. The assessment was based on desktop research, field surveys, GIS based mapping, ZTV and Viewshed analysis. Through a detailed examination of the baseline data available and a detailed site inspection, it was concluded that while the archaeological potential of the area is high no new sites were noted within the peatland areas of the Proposed Development, nor are any recorded archaeological or architectural assets located therein. One new potential archaeological monument was detected within the Wind Farm Site boundary at Clonrobert townland. It comprises an enclosed rectangular area in pasture c. 74m east of the proposed access road to T15. No direct impacts to this potential monument as a result of the Proposed Development have been identified. Furthermore, direct impacts to recorded archaeological and architectural assets as a result of the proposed turbines, substation, associated infrastructure and borrow pit have not been identified.

Where potential impacts are possible appropriate mitigation measures have been recommended in order to minimise any such impacts. Recommended mitigation includes re-assessment surveys due to the changing levels within the bog as a result of peat harvesting, pre-development archaeological testing where turbine bases, roads etc will be excavated and archaeological monitoring during the construction stage of the project. Indirect effects on the setting of National Monuments within 15km, RMPs within 5km and RPS/NIAH within 5km were included in order to assess impacts on setting in the wider landscape. The proposed Grid Connection Route was subject to assessment. All cultural heritage assets within 100m of either side of the route were assessed for potential impacts to same as a result of the proposed Grid Connection Route. No direct impacts to the recorded or unrecorded archaeological, architectural or cultural heritage resource as a result of the proposed Grid Connection Route have been identified. Mitigation measures are recommended where deemed appropriate and include archaeological monitoring of ground works in specified areas along the proposed route. An assessment of potential impacts as a result of proposed Junction Accommodation Works along the proposed Turbine Delivery Route was also carried out. No direct or indirect impacts to the recorded archaeological or cultural heritage resource were identified. An assessment of cumulative impacts was also undertaken and no significant cumulative impacts have been identified as a result of the Proposed Development.