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ARCHAEOLOGICAL, ARCHITECTURAL AND CULTURAL HERITAGE ASSESSMENT OF THE PROPOSED CAPPAKEEL SOLAR FARM 110KV SUBSTATION AND GRID CONNECTION, COUNTY LAOIS

ON BEHALF OF: ORSTED ONSHORE IRELAND MIDCO LIMITED

ITM: 654535, 703149 TO 653636, 692844

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ABSTRACT

This assessment has been prepared on behalf of Orsted Onshore Ireland Midco Limited, to study the impact, if any, on the archaeological, architectural and historical resource of a proposed substation and grid connection associated with the Cappakeel Solar Farm, County Laois (ITM 654535, 703149 to 653636, 692844). It was carried out by Johnnie Gallacher of IAC Archaeology.

There are three recorded monuments within the 100m study area of the proposed substation, including two enclosures (LA009-065, LA009-066) and a horizontal water mill (LA009-022). The two enclosures are located to the immediate west of the substation and the layout of the development has been developed in order to avoid direct impacts on these monuments. The proposed grid connection will travel to the immediate west of these enclosure before joining the existing road network. Further to the south, the grid connection will travel through a short section of the ZAP associated with Dunamase Castle/Rock of Dunamase, which is a National Monument in State Ownership (LA013-052; Nat. Mon. 615). The proposed grid connection is confined to within the existing roadway within the ZAP. There are no additional recorded monuments located within 50m of the proposed grid connection.

There is one Protected Structure located within the study area of the proposed scheme, which is also listed in the NIAH Building Survey. This comprises a post medieval church located c. 20m east of the grid connection (RPS 379/ NIAH 12801301). The proposed grid connection also passes three former demesnes, all listed in the NIAH Garden Survey, although in each case the grid connection follows the existing roads adjacent to the demesne and does not enter the estate.

The proposed grid connection is partially located within the ZAP associated with the Rock of Dunamase (LA013-052; Nat. Mon. 615), which is a National Monument in State Ownership. It is possible that archaeological features associated with the castle survive beneath the current road surface, which the grid connection will follow as it passes to the southeast of the castle. Excavations associated with the laying of the cabling may result in a negative impact on any such remains.

Archaeological monitoring of all ground disturbances should be carried out within the ZAP for the Rock of Dunamase. This will require Ministerial Consent form the DoHLGH. If any features of archaeological potential are discovered during the course of the works further archaeological mitigation may be required, such as preservation in situ or by record. Any further mitigation will require approval from the National Monuments Service of the DoHLGH.

The proposed substation and a section of the grid connection (within the now permitted Cappakeel Solar Farm) is located within undisturbed greenfield in close proximity to known archaeological monuments. There is potential for archaeological features to survive in these areas below the current ground level. Any such features would be

directly and negatively impacted by the construction of the substation and grid connection.

It is recommended that prior to the commencement of construction a geophysical survey is carried out across the footprint of the proposed substation and grid connection within the greenfield areas of the scheme. This should be followed by a programme of targeted archaeological test trenching, designed to assess the nature, extent and significance of any archaeological anomalies that are identified. Both programmes of investigation will require a licence from the National Monuments Service of the DoHLGH.

Dependent on the results of these assessments, further mitigation may be required, such as preservation in-situ or by record and/or archaeological monitoring. Any further mitigation will require approval from the National Monuments Service of the DoHLGH.

Following completion of the above mitigation measures, there will be not significant negative impacts up on the archaeological resource.

No direct or indirect impacts have been identified in relation to the proposed scheme and the architectural heritage resource and as such no mitigation is required.

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1 INTRODUCTION

1.1 GENERAL

The following report details an archaeological, architectural and cultural heritage assessment undertaken in advance of a proposed substation and grid connection route running from Cappakeel Solar Farm to the R426. The scheme will be located within the townlands of Dysart, Coolnacarrick, Greatheath, Cremorgan, Money Upper, Lamberton Demesne, Killenny, Aghnahily, Ballygormill South, Ballygormill North, Ballinlough, Raheen, Hophall, Heathlodge, Ballycarroll, Morett, Powelstown, Derrytrasna, Esker, Park or Dunamase, and Carigeen, County Laois (Figure 1; ITM 654535, 703149 to 652666, 692463).

This assessment has been carried out to ascertain the potential impact of the proposed development on the archaeological, architectural and cultural heritage resource that may exist within the area. The assessment was carried out by Johnnie Gallacher of IAC Archaeology, on behalf of Orsted Onshore Ireland Midco Limited.

The study area for the proposed substation is 100m, whereas the grid connection study area is 50m. The grid connection will be primarily confined to the existing road network. The assessment consulted information from the Record of Monuments and Places of County Laois, the topographical files within the National Museum of Ireland and all available cartographic and documentary sources for the area. A field inspection has also been carried out with the aim to identify any previously unrecorded features of archaeological or historical interest.

1.2 DEVELOPMENT DESCRIPTION

The proposed 110kV Substation and associated Grid Connection is subject to a Strategic Infrastructure Development (SID) application to An Coimisiún Pleanála, under section 182A of the PDA.

110kV Substation Details

The proposed 110kV substation is located within the West Parcel (A) at the townland of Morett, and will provide a Loop-In/Loop-Out (LILO) grid connection to the national grid via the existing Portlaoise – Cushaling 110kv Overhead line, which traverses the substation site.

Grid Connection Details

An underground Tail-Fed connection within the public roadway from the 110kV substation in Morett to the Coolnabacky 110kV Substation, within the townlands of Dysart, Coolnacarrick, Greatheath, Cremorgan, Money Upper, Lamberton Demesne, Killenny, Aghnahily, Ballygormill South, Coolnabacky, Ballygormill North, Ballinlough, Raheen, Hophall, Heathlodge, Ballycarroll, Morett, Powelstown, Derrytrasna, Esker and Greatheath.

2 METHODOLOGY

Research for this assessment was undertaken in two phases. The first phase comprised a paper survey of all available archaeological, historical and cartographic sources. The second phase involved a field inspection of the scheme.

2.1 PAPER SURVEY

- Record of Monuments and Places for County Laois;
- Sites and Monuments Record for County Laois;
- National Monuments in State Care Database;
- Preservation Orders List;
- Topographical files of the National Museum of Ireland;
- Cartographic and written sources relating to the study area;
- Laois County Development Plan 2021–2027;
- Place Names;
- Aerial photographs;
- Excavations Bulletin (1970–2025); and
- National Inventory of Architectural Heritage.

Record of Monuments and Places (RMP) is a list of archaeological sites known to the National Monuments Section, which are afforded legal protection under Section 12 of the 1994 National Monuments Act and are published as a record.

Sites and Monuments Record (SMR) holds documentary evidence and field inspections of all known archaeological sites and monuments. Some information is also held about archaeological sites and monuments whose precise location is not known e.g. only a site type and townland are recorded. These are known to the National Monuments Section as 'un-located sites' and cannot be afforded legal protection due to lack of locational information. As a result, these are omitted from the Record of Monuments and Places. SMR sites are also listed on a website maintained by the Department of Housing, Local Government and Heritage (DoHLGH) – www.archaeology.ie.

National Monuments in State Care Database is a list of all the National Monuments in State guardianship or ownership. Each is assigned a National Monument number whether in guardianship or ownership and has a brief description of the remains of each Monument. The Minister for the DoHLGH may acquire national monuments by agreement or by compulsory order. The state or local authority may assume guardianship of any national monument (other than dwellings). The owners of national monuments (other than dwellings) may also appoint the Minister or the local authority as guardian of that monument if the state or local authority agrees. Once the site is in ownership or guardianship of the state, it may not be interfered with without the written consent of the Minister.

Preservation Orders List contains information on Preservation Orders and/or Temporary Preservation Orders, which have been assigned to a site or sites. Sites

deemed to be in danger of injury or destruction can be allocated Preservation Orders under the 1930 Act. Preservation Orders make any interference with the site illegal. Temporary Preservation Orders can be attached under the 1954 Act. These perform the same function as a Preservation Order but have a time limit of six months, after which the situation must be reviewed. Work may only be undertaken on or in the vicinity of sites under Preservation Orders with the written consent, and at the discretion, of the Minister.

The topographical files of the National Museum of Ireland are the national archive of all known finds recorded by the National Museum. This archive relates primarily to artefacts but also includes references to monuments and unique records of previous excavations. The find spots of artefacts are important sources of information on the discovery of sites of archaeological significance.

Cartographic sources are important in tracing land use development within the development area as well as providing important topographical information on areas of archaeological potential and the development of buildings. Cartographic analysis of all relevant maps has been made to identify any topographical anomalies or structures that no longer remain within the landscape.

Documentary sources were consulted to gain background information on the archaeological, architectural and cultural heritage landscape of the proposed scheme.

Development Plans contain a catalogue of all the Protected Structures and archaeological sites within the county. The Laois County Development Plan 2021–2027 was consulted to obtain information on cultural heritage sites in and within the immediate vicinity of the proposed scheme.

Place Names are an important part in understanding both the archaeology and history of an area. Place names can be used for generations and in some cases have been found to have their root deep in the historical past.

Aerial photographic coverage is an important source of information regarding the precise location of sites and their extent. It also provides initial information on the terrain and its likely potential for archaeology. A number of sources were consulted including aerial photographs held by the Ordnance Survey and Google Earth.

Excavations Bulletin is a summary publication that has been produced every year since 1970. This summarises every archaeological excavation that has taken place in Ireland during that year up until 2010 and since 1987 has been edited by Isabel Bennett. This information is vital when examining the archaeological content of any area, which may not have been recorded under the SMR and RMP files. This information is also available online (www.excavations.ie) from 1970–2025.

The National Inventory of Architectural Heritage is a state initiative established under the provisions of the Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999 tasked with making a nationwide

record of significant local, regional, national and international structures, which in turn provides county councils with a guide as to what structures to list within the Record of Protected Structures. The NIAH have also carried out a nationwide desk-based survey of historic gardens, including demesnes that surround large houses.

2.2 FIELD INSPECTION

Field inspection is necessary to determine the extent and nature of archaeological and historical remains and can also lead to the identification of previously unrecorded or suspected sites and portable finds through topographical observation and local information.

The archaeological and architectural field inspection entailed -

- Walking and driving the proposed scheme and its immediate environs.
- Noting and recording the terrain type and land usage.
- Noting and recording the presence of features of archaeological, architectural or historical significance.
- Verifying the extent and condition of any recorded sites.
- Visually investigating any suspect landscape anomalies to determine the possibility of their being anthropogenic in origin.

3 RESULTS OF ARCHAEOLOGICAL, ARCHITECTURAL AND CULTURAL HERITAGE ASSESSMENT

3.1 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

The proposed scheme is located within 21 townlands in County Laois (Table 1, Figure 1). The proposed substation site will be located in a greenfield area within the now permitted Cappakeel Solar Farm in the townland of Morrett. This proposed development was subject to specific archaeological assessment in March 2025 by IAC Archaeology (Brooks 2025). The grid connection is primarily confined to the existing road network in a rural area. The road is mostly bordered by arable farms, as well as some scrubland and scattered settlement (Figure 2a).

TABLE 1 Townlands within the study area

TOWNLAND	PARISH	BARONY
Aghnahily	Dysartenos	Maryborough East
Ballinlough	Kilteale	Maryborough East
Ballycarroll	Kilteale	Maryborough East
Ballygormill South	Fossy or Timahoe	Cullenagh
Carrigeen	Fossy or Timahoe	Stradbally
Coolnacarrick	Dysartenos	Stradbally
Cremorgan	Kilcolmanbrack	Cullenagh
Derrytrasna	Fossy or Timahoe	Stradbally
Dysart	Dysartenos	Maryborough East
Esker	Fossy or Timahoe	Cullenagh
Greatheath	Kilteale	Maryborough East
Greatheath	Coolbanagher	Portnahinch
Heathlodge	Kilteale	Maryborough East
Hophall	Dysartenos	Maryborough East
Killenny	Killenny	Stradbally
Lamberton Demense	Dysartenos	Maryborough East
Money Upper	Fossy or Timahoe	Stradbally
Morett	Coolbanagher	Portnahinch
Park or Dunamase	Dysartenos	Maryborough East
Powelstown	Dysartenos	Stradbally
Raheen	Kilteale	Maryborough East

The proposed grid connection traverses the Zone of Archaeological Potential (ZAP) associated with National Monument the 'Rock of Dunamase' (LA013-052; Nat. Mon. 615), which comprises a large medieval castle site. No other recorded monuments are situated within 50m of the proposed grid connection.

The proposed substation site is located to the immediate east of two recorded enclosure sites (LA009-065 and 066). The layout of the substation was designed in order to prevent impacts on these monuments, which will also be avoided by the layout of the arrays associated with the permitted Cappakeel Solar Farm.

Holy Trinity Church (RPS 379; NIAH 12801301) is situated c. 20m east of the proposed grid connection. There are no other protected structures of NIAH structures within 50m of the proposed grid connects or substation site.

3.1.1 Prehistoric Period (c. 8000 BC – AD 500)

Recent discoveries may suggest the possibility of a human presence in the southwest of Ireland as early as the Upper Palaeolithic (Dowd and Carden 2016); however, the Mesolithic period (c. 8000–4000 BC) is the earliest time for which there is clear evidence for prehistoric human colonisation of the island of Ireland. During this period people hunted, foraged and gathered food and appear to have led a primarily mobile lifestyle. The presence of Mesolithic communities is most commonly evidenced by scatters of worked flint material, a by-product of the production of flint implements. There are no recorded Mesolithic sites within the study areas associated with the proposed scheme.

During the Neolithic period (c. 4000–2500 BC) communities became less mobile and their economy became based on the rearing of stock and cereal cultivation. The transition to the Neolithic was marked by major social change. Communities had expanded and moved further inland to more permanent settlements. This afforded the development of agriculture which demanded an altering of the physical landscape. Forests were rapidly cleared and field boundaries were constructed. Pottery was also being produced, possibly for the first time. The advent of the Neolithic period also provided the megalithic tomb. There are four types of megalithic tombs in Ireland, namely the Court Cairn, Portal tomb, Passage tomb and Wedge tomb; of which the latter style straddles the Neolithic to Bronze Age transition. There are no recorded Neolithic sites within the study corridor of the proposed scheme.

The Bronze Age (c. 2500–800 BC) is marked by the use of metal for the first time. As with the transition from Mesolithic to Neolithic, the transition into the early Bronze Age was accompanied by changes in society. Megalithic tombs were replaced in favour of individual, subterranean cist or pit burials that were either in isolation or in small cemeteries. These burials contained inhumed or cremated remains and were often, but not always, accompanied by a pottery vessel. There are no recorded Bronze Age sites within the study corridor of the proposed scheme.

There is increasing evidence for Iron Age (c. 800 BC–AD 500) settlement and activity in recent years as a result of development-led excavations. Yet this period is distinguishable from the rather rich remains of the preceding Bronze Age and subsequent early medieval period, by a relative paucity within the current archaeological record. There are no recorded Iron Age sites within the study corridor of the proposed scheme.

While there are no recorded prehistoric sites within the study area of the proposed scheme, examples are recorded in the wider landscape and it is likely that the landscape was utilised throughout the prehistoric period.

3.1.2 Early Medieval Period (AD 500–1100)

The early medieval period is depicted in the surviving sources as an almost entirely rural based society. Territorial divisions were based on the *túath*, or petty kingdom, with Byrne (1973) estimating that there may have been at least 150 kings in Ireland at any given time. This period, with a new religious culture and evolving technologies, saw significant woodland clearance and the expansion of grassland. A new type of plough and the horizontal mill were two innovations that improved agriculture and allowed for the population to increase. Consequently, from c. AD 500 onwards, the landscape became well settled, as evidenced by the profuse distribution of ringforts, a dispersed distribution of enclosed settlements, normally associated with various grades of well-to-do farming and aristocratic classes in early medieval Ireland (Stout and Stout 1997).

Enclosure sites may represent ringforts or similar sites which have been damaged to a point where they cannot be positively recognised, or which are smaller or more irregular in plan than the accepted range for a ringfort. Two enclosures are recorded within the 100m study area of the proposed substation (LA009-065, LA009-066), both of which were identified from Google Earth satellite imagery. These are situated to the immediate west of the substation site. A further early medieval site, comprising the site of a water mill, is located c. 90m northeast of the proposed substation site (LA009-022).

An early medieval presence has been identified at the Rock of Dunamase (LA013-052; Nat. Mon. 615) (Hodkinson 1993; 1994; 1995; 1997; Larsson 2008). Its name in Irish, *Dún Masc*, means 'the fort of Masc'. Masg was son of Augen Urgruidh, 4th son of Sedha Sithbhaic, who was King of Leinster (SMR File). It was the stronghold of the O'Mores, Kings of Leix. Its first and only mention in the annals is for the year AD 843/4 when it was raided by the Vikings and the abbot of Terryglass was murdered (Annals of Inisfallen, 844; Annals of the Four Masters, 843; Larssen 2008, 7).

3.1.3 Medieval Period (AD 1100–1600)

County Laois was located outside of The Pale, which were the lands under the possession of the English Crown that centred on the city of Dublin. During the years 1175-1325, Anglo-Norman Lords had control of the best land in the county, founding boroughs at Castletown, Dunamase, Durrow and Timahoe. The arrival of the Anglo-Normans saw a change in the social structure with the introduction of the feudal system, economic and agricultural change, military improvements and, to the Gaelic Irish, a new language. The rural landscape became a network of manorial centres; these units would generally contain a castle (motte and bailey), a manorial house and a number of dwellings, with extensive surrounding acreage. The Anglo-Normans constructed early earth and timber castles; called mottes and baileys, which were in some cases replaced by stone castles later.

The remnants of these Anglo-Norman fortifications, manor farms and later stone built castles such as Dunamase attest to the presence of the Anglo-Normans in County Laois from the late 12th century onwards. The proposed grid connection passes through the ZAP for Dunamase Castle (LA013-052; Nat. Mon. 615). It was a stronghold of the O'Mores, Kings of Leix, during the early medieval period. In 1170 Diarmait MacMurchada gave it to Strongbow, as part of his daughter Aoife's dower and it passed

to Roger de Mortimer in the partition of Leinster in 1247 (SMR file). Leask states that the castle was built c. 1250 by William de Braose, however he had been dead since 1247, when the Marshall lordship was partitioned (Bradley et. al. 1986, 25). The archaeological record suggests that the main castle was developed during the early 13th century with the complex abandoned in c. 1330. This is reflected in an inquisition of De Mortimers lands in 1323, which recorded that the castle had been burned by the Irish. Further records from 1342, note that Laoighseach O Mordha destroyed the 'castrum nobile de Dunmaske' and usurped De Mortimers power (O'Leary 1909-11, 165). Excavation results suggest that the castle was not inhabited after the mid-14th century, instead showing evidence of slow decay.

3.1.4 Post-Medieval Period (AD 1600–1800)

While historical accounts (O'Byrne 1856) describe a reoccupation of Dunamase Castle (LA013-052; Nat. Mon. 615) in the 17th century, as well as a destructive siege conducted by Cromwellian forces, although no archaeological evidence have been recorded to support this. A small assemblage of 17th century pottery recorded at the site derived from the upper rubble. While the castle does appear to have been destroyed by gunpowder, it is not clear when this occurred, and it may have been in the 18th century. A renovation was subsequently attempted in the final decades of the 18th century.

The ending of the Williamite Wars, c. 1691, saw the beginning of a comparative politically calm era, which allowed the country's landowners the security to experiment with the latest styles of architecture without the need to refer to defensive matters. This saw a dramatic rise in the establishment of large residential houses around the country in the 18th and 19th centuries. The large country house was only a small part of the overall estate of a large landowner and provided a base to manage often large areas of land that could be dispersed nationally. During the latter part of the 18th century, the establishment of a parkland context (or demesnes) for large houses was the fashion. Although the creation of a parkland landscape involved working with nature, rather than against it, considerable construction effort went into its creation. Major topographical features like rivers and mountains were desirable features for inclusion in, and as a setting, for the large house and parkland.

The first edition OS map of 1841 depicts three demesnes adjacent to the proposed grid connection. These comprise, from north to south, Heath House demesne (NIAH Garden 176), Lamberton Demesne (NIAH Garden 175) and Cremorgan House (NIAH Garden 196).

Heath House comprises a ddetached seven-bay, two-storey Georgian country house, constructed c. 1770 (NIAH Ref. 12801308), although other resource record a date of 1727 (https://laoishouses.wordpress.com/2021/05/23/the-heath-house/). The house was owned by the O'Reilly family for some time (https://landedestates.ie/estate/112). Within the vicinity of this demesne, the grid connection is restricted to a road which runs alongside the southeastern demesne boundary. This road was already in existence at the time of the 1841 mapping.

Lamberton Demesne is located in the townlands of Lamberton Demesne, Hophall, Derrytrasna and Ballygormill North. Upstanding remains of a three-bay single-storey Victorian Gothic gate lodge (NIAH Ref. 12801803), constructed c. 1880, with a gabled projecting porch are noted c. 90m west of the proposed grid connection. The grid connection will run along the existing road, which runs alongside the northern and eastern demesne boundary. This road was already in existence at the time of the 1841 mapping.

The southern extent of the proposed grid connection runs adjacent to the townland of Cremorgan, where the former demesne of Cremorgan House (NIAH Garden 196) is situated. It was formerly the property of the O'More family (https://thecullenaghmountainproject.wordpress.com/2010/12/09/early-christian-settlement-ad500-1000/).

The Holy Trinity Church (RPS 379; NIAH 12801301) is situated c. 20m east of the proposed grid connection. It is dated 1845 (NIAH File).

3.2 SUMMARY OF PREVIOUS ARCHAEOLOGICAL FIELDWORK

A review of the Excavations Bulletin (1970–2025) has revealed a number of previous investigations have been carried out within or immediately adjacent to the proposed scheme. All of these investigations occurred in association with Dunamase Castle (LA013-052; Nat. Mon. 615). A series of OPW-funded research excavations were undertaken there during the 1990s (Licence No. 93E0150; Hodkinson 1993; 1994; 1995; 1997). Testing, monitoring and excavation were also carried out in 2005 under the same licence (Larsson 2008; Bennett 2005:884). More recently, an excavation directed by Colm Flynn of Horizon Archaeology began to the northeast of the castle prior to the construction of a car park (Kiernan 2025). No report is yet available for these works.

These works have led to a good understanding of the development of the castle. An early medieval presence on the site has been proven by archaeological remains of a *dún* or fortified settlement. In the late 12th century the main hall were constructed, along with a gate tower and the castle as a whole was extended and enlarged in the early 13th century. The investigations have indicated that the castle was abandoned in the 1330s and was not inhabited in the later medieval period. Very little evidence for post medieval activity on the site is recorded, with the exception of an attempted renovation of the main hall in the late 18th century.

3.3 CARTOGRAPHIC ANALYSIS

Map of Tudor Plantation of 'Leis' and 'Offalie', c. 1563

The parts of Laois and Offaly that were planted in the 1550s are depicted on a 16th century map, which survives in three versions; the Cotton, Carew and Greenwich maps. The proposed grid connection and substation at this time is placed within lands to the east of Portlaoise, which is annotated as 'Protectour'. The esker, now known as the Ridge of Portlaoise, is shown running alongside the Triogue.

Sir William Petty, Down Survey: *Map of the Barony of Maryborough* c. 1655

This map depicts the proposed scheme within the barony of 'Portnehinch', 'Mariburogh' and Stradbally, before reaching the barony of Cullinagh in the south. Dunamase Castle is depicted but few other details are marked within the landscape containing the proposed scheme.

First Edition Ordnance Survey Map, 1841, scale 1:10,560

This is the first accurate historic mapping coverage of the area containing the proposed scheme. The map is described here from north to south. The proposed substation is located within a green field area, with the grid connect crossing open fields to join what is now the L7815. The grid connection then turns south to follow the existing road network all of which are marked within the historic mapping. The L3813 is depicted as a small local routeway. Upon crossing the Morrett-Greatheach townland boundary, the road is marked as a track rather than road.

The Rock of Dunamase (LA013-052) is depicted as occupying high ground with hachures (including the slope) extending as far as the road that contains the grid connection and passes to the east and south of the castle. Further south, 'Piggott's Castle' (LA013-061001) is also labelled over 50m to the west of the scheme, but it is marked as 'in ruins' and surrounded by several buildings; much as it is today. Lamberton Demesne is shown as a shaded area, indicating its demesne status. Lands in the neighbouring townlands of Hophall, Derrytrasna and Ballygormill North are also shown as having comprised parts of that landed estate.

Ordnance Survey Map, 1909, scale 1:2,500

There is no significant changes to note within the cartography of this map that relate to the proposed scheme.

3.4 DEVELOPMENT PLAN

3.4.1 Record of Monuments and Places

The Laois County Development Plan 2021-2027 recognises the statutory protection afforded to all Record of Monuments and Places (RMP) sites under the National Monuments Legislation (1930–2014). The development plan lists a number of aims and objectives in relation to archaeological heritage (Appendix 2).

The proposed grid connection traverses the ZAP for the Dunamase Castle, also known as the Rock of Dunamase, which is a National Monument in State Ownership (LA013-052, Nat. Mon. 615). The ZAP derives from the 1998 RMP map. For clarity, the ZAP is shown on Figure 2b and this aligns with the 'Archaeological Significance Zone' as depicted in the Laois County Development Plan 2021-2027.

In addition, there are three recorded monuments within 100m of the proposed substation in the townland of Morett (Table 2, Figures 2a-c).

TABLE 2: Recorded archaeological sites within the study areas

RMP NO./ NAT. MON.	LOCATION	CLASSIFICATION	DISTANCE FROM SCHEME
LA013-052/ Nat. Mon. 615	Park or Dunamase	Castle - Anglo-Norman masonry castle	c. 80m west (grid connection within the ZAP)
LA009-065	Morett	Enclosure	To the immediate west of substation
LA009-066	Morett	Enclosure	To the immediate west of substation
LA009-022	Morett	Water mill – horizontal wheeled	c. 90m northeast of the substation

3.4.2 Record of Protected Structures

The Laois County Development Plan 2021-2027 recognises the value of the built heritage and is committed to the protection and enhancement of this heritage by providing measures for the protection of architectural heritage. These include the establishment of a Record of Protected Structures (RPS) and the designation of Architectural Conservation Areas (ACAs), which are detailed in Appendix 3.

There is one structure included on the RPS within study area of the scheme (Figure 2a-b, Table 3). This is the Holy Trinity Church (RPS 379), which is situated c. 20m east of the proposed grid connection in the townland of Ballycarroll. This structure is also listed in the NIAH Building Survey (NIAH 12801301). There are no Architectural Conservation Areas within the study area of the proposed scheme.

TABLE 3: Protected Structures within the study area

RPS NO.	LOCATION	NAME	DISTANCE FROM SCHEME
379	Ballycarroll	Holy Trinity COI Church	c. 20m east

3.5 NATIONAL INVENTORY OF ARCHITECTURAL HERITAGE

3.5.1 Building Survey

A review of the architectural survey was undertaken as part of this assessment. There is one structure listed in the NIAH Building Survey within the study areas (Table 4, Figures 2a-b), which is also a Protected Structure.

TABLE 4: NIAH Buildings within the study area

NIAH REF.	LOCATION	NAME	DISTANCE FROM SCHEME
12801301	Ballycarroll	Holy Trinity Church	c. 20m east

3.5.2 Garden Survey

The first edition Ordnance Survey map of County Laois (1841) shows the extent of demesne landscapes as shaded portions of land within the study area of the proposed scheme. These were established as a naturalised landscaped setting for the large houses of the landed gentry. The 1841 OS map depicts three demesnes within or

adjacent to the grid connection. These comprise, from north to south, Heath House demesne (NIAH Garden 176), Lamberton Demesne (NIAH Garden 175) and Cremorgan House (NIAH Garden 196).The extent of the former demesne landscapes are depicted on Figures 2a-c.

3.6 CULTURAL HERITAGE

3.6.1 Placenames

Townland and topographic names are an invaluable source of information on topography, land ownership and land use within the landscape. They can also provide information on the history; archaeological monuments and folklore of an area. A place name may refer to a long-forgotten site and may indicate the possibility that the remains of certain sites may still survive below the ground surface. The Ordnance Survey surveyors wrote down townland names in the 1830s and 1840s when the entire country was mapped for the first time. Some of the townland names in the study area are of Irish origin and through time have been anglicised.

A description and possible explanation of each townland name in is provided in Table 5.

TABLE 5: Toponomy of local townlands

PLACENAMES	ORIGIN	DERIVATION	POSSIBLE MEANING
Ballinlough	*Irish*	*Bhaile an Locha*	The town of the lake
Greatheath	*English*	-	The big heath
Morett	*Irish*	*Maigh Reichead*	The ploughed or tilled plain
Dysart	*Irish*	*An Díseart*	Hermitage (literally desert)
Coolnacarrick	*Irish*	*Cúil na Carraige*	The corner, nook of the rock?
Lamberton Demesne	*English*	-	The name is believed to stem either from the placename of Lamerton, Devon, England, or from 16th century English planter Thomas Lamden.
Aghnahily	*Irish*	*Achadh na hAidhle*	The field of the (shoulder-like) projection?
Hophall	*English*	-	Hophall
Powelstown	*English*	-	The town of Paol – after 16th century planter Thomas Apoell
Killenny	*Irish*	*Cill Fhinnigh*	The church of (saint) Finneach
Heathlodge	*English*	-	Heath Lodge
Raheen	*Irish*	*An Ráithín*	Small ringfort
Ballycarroll	*Irish*	*Baile Uí Chearúill*	The town of Ó Cearúill
Dunamase	*Irish*	*Dún Másc*	The fort of Másc
Park	*English*	-	Park
Derrytrasna	*Irish*	*Doire Trasna*	The transverse (oak-)wood
Money Upper	*Irish*	*An Muine Uachtarach*	Upper thicket

PLACENAMES	ORIGIN	DERIVATION	POSSIBLE MEANING
Carrigeen	*Irish*	*Carraig Fhinn*	The rock of Fionn
Ballygormill South	*Irish*	*Baile Uí Ghormaíle Theas*	The town of Ó Gormaíle
Cremorgan	*Irish*	*Críoch Mhuireagáin*	The boundary of Muireagán
Esker	*Irish*	*An Eiscir*	Ridge

3.6.2 Townland Boundaries

The townland is an Irish land unit of considerable longevity as many of the units are likely to represent much earlier land divisions. However, the term townland was not used to denote a unit of land until the Civil Survey of 1654. It bears no relation to the modern word 'town' but like the Irish word *baile* refers to a place. It is possible that the word is derived from the Old English *tun land* and means 'the land forming an estate or manor' (Culleton 1999, 174).

Gaelic land ownership required a clear definition of the territories held by each sept and a need for strong, permanent fences around their territories. It is possible that boundaries following ridge tops, streams or bog are more likely to be older in date than those composed of straight lines (ibid. 179).

The vast majority of townlands are referred to in the 17th century when land documentation records began. Many of the townlands are mapped within the Down Survey of the 1650s, so called as all measurements were carefully 'laid downe' on paper at a scale of forty perches to one inch. Therefore, most are in the context of pre-17th century landscape organisation (McErlean 1983, 315).

In the 19th century, some demesnes, deer parks or large farms were given townland status during the Ordnance Survey and some imprecise townland boundaries in areas such as bogs or lakes were given more precise definitions (ibid.). Larger tracks of land were divided into a number of townlands and named Upper, Middle or Lower, as well as Beg and More (small and large) and north, east, south and west (Culleton 1999, 179). By the time the first Ordnance Survey had been completed a total of 62,000 townlands were recorded in Ireland.

The proposed grid connection primarily follows the existing road network and as result, where it crosses townland boundaries, the physical boundary has previously been removed to facilitate the roadway in the past. The northern extent of the proposed grid connection, where it passes through undisturbed greenfield as part of the permitted Cappakeel Solar Farm, is located entirely within the townland of Morett and does not traverse any townland boundaries (Figure 2a).

3.7 TOPOGRAPHICAL FILES OF THE NATIONAL MUSEUM OF IRELAND

Information on artefact finds from the study area in County Laois has been recorded by the National Museum of Ireland since the late 18th century. Location information relating to these finds is important in establishing prehistoric and historic activity in the

study area. A number of stray finds have been recorded from within the vicinity of the proposed grid connection. These are listed in Appendix 3.

3.8 AERIAL PHOTOGRAPHIC ANALYSIS

Inspection of the aerial photographic coverage of the proposed scheme held by the Tailte Eireann (1995–2013), Google Earth (2008–2025) and Bing Maps revealed the proposed grid connection follows existing roads that have been present since the first edition Ordnance Survey mapping in 1841. In some of the coverage the two recorded monuments located to the west of the proposed substation are visible and the extents of these monument has informed the location of the substation, so that the monuments are avoided.

No previously unidentified archaeological remains were identified in or adjacent to the proposed scheme.

3.9 FIELD INSPECTION

The field inspection sought to assess the scheme, its previous and current land use, the topography and any additional information relevant to the report. During the course of the field investigation the proposed substation site was inspected on foot, whereas the proposed grid connection was inspected by car.

The proposed substation site occupies part of a large field currently under arable production. Two circular enclosures are recorded in the central of this field, to the immediate west of the substation (LA009-066 & LA009-065) (Plate 1) Here the ground is relatively flat before it slopes slightly to the north. The recorded enclosure sites possess no surface expression, having been identified due to the presence of crop marks, which indicate the extent of the monuments. From the site of the substation, the grid connection passes to the immediate west of the recorded enclosure sites before crossing a field boundary and turning west along the southwest boundary of the permitted Cappakeel Solar Farm. No previously unrecorded sites of archaeological potential were noted in this location.

To the west of the permitted Cappakeel Solar Farm, the grid connection joins the existing road network and runs in a southerly direction. It follows a narrow local road, which is flanked by hedgerows and scattered modern development. At the townland boundary of Great Heath, the grid connection enters the eastern portion of heath land, which is marked with a cattle grid. Here the existing road is not flanked by boundaries. The grid connection continues across the heath, passing to the immediate west of a masonry graveyard wall (associated with a post medieval church), before crossing another cattle grid to exit the heath land. The existing road continues through an arable landscape, flanked by scattered modern development. The road bounds Heath Lodge demesne to the east, but no features associated with this landscape were noted in the vicinity of the road and grid connection route. The character of the landscape remains unchanged where the road and grid connection pass through the townlands of Ballinlough and Ballycarroll.

To the southwest of Ballycarroll the proposed grid connection enters the eastern side of the ZAP associated with Dunamase Castle (LA013-052, Nat. Mon. 615). Here, the grid connection will also pass c. 20m to the west of a Church, which is listed as a protected structure (RPS 379). Here the existing road is exceptionally narrow and flanked by mature trees and hedges. The existing road climbs a moderate northeast facing slope and passes the public access point to Dunmase Castle and the recorded church. The road is wider at this location, as it is often used for visitor parking for the castle. The castle is clearly visible on higher ground to the northwest (Plate 2).

From the widened section of road, the grid connection follows a narrow road down a southwest facing slope, passing residential properties, before crossing the N80 and continuing in a southerly direction through the townland of Dysart. A large number of modern residences flank the road before it passes into a rural landscape in the southern portion of the townland. The road remains narrow and is flanked by mature hedgerows. This character continues through the townlands of Coolnacarrick, Powelstown and Hophall. At the junction of the local road with the R426, the grid connection turns southeast. Here the road is wide and a masonry demesne wall associated with Lamberton House demesne is located to the west of the road verge. The grid connection route follows the R426 to the south. Sections of this road have been subject to slight modern realignment. The road is flanked by a mixture of residential development and agricultural lands.



Plate 1: Location of proposed substation and enclosures (LA009-065-066), facing northwest



Plate 2: Dunamase Castle, facing northwest from the proposed grid connection

No previously unrecorded sites or areas of archaeological potential or structures of architectural heritage merit were noted within the footprint of the proposed scheme during the course of the field inspection.

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4 CONCLUSIONS

This assessment was commissioned by Orsted Onshore Ireland Midco Limited to assess the potential for the survival of archaeological and architectural features in advance of a proposed substation and grid connection development, associated with the permitted Cappakeel Solar Farm. The substation site is located within a greenfield area in the townland of Morett (within the proposed solar farm development). The grid connection route will be confined to the local and regional road network.

There are three recorded monuments within the 100m study area of the proposed substation, including two enclosures (LA009-065, LA009-066) and a horizontal water mill (LA009-022). The two enclosures are located to the immediate west of the substation and the layout of the development has been developed in order to avoid direct impacts on these monuments. The proposed grid connection will travel to the immediate west of these enclosure before joining the existing road network. Further to the south, the grid connection will travel through a short section of the ZAP associated with Dunamase Castle/Rock of Dunamase, which is a National Monument in State Ownership (LA013-052; Nat. Mon. 615). The proposed grid connection is confined to within the existing roadway within the ZAP. There are no additional recorded monuments located within 50m of the proposed grid connection.

There is one Protected Structure located within the study area of the proposed scheme, which is also listed in the NIAH Building Survey. This comprises a post medieval church located c. 20m east of the grid connection (RPS 379/ NIAH 12801301). The proposed grid connection also passes three former demesnes, all listed in the NIAH Garden Survey, although in each case the grid connection follows the existing roads adjacent to the demesne and does not enter the estate.

A review of the Excavations Bulletin (1970-2025) has shown that no previous archaeological fieldwork has been carried out within the proposed scheme. Works undertaken in the study area primarily relate to Dunamase Castle.

The field inspection has been carried out as part of this assessment. This confirmed the greenfield nature of the proposed substation site and also confirmed that the recorded enclosures to the west of the site possess no surface expression (LA009-065, LA009-066). No previously unrecorded features of archaeological potential were noted within the greenfield areas of the proposed scheme. The field inspection also confirmed that the proposed grid connection follows existing local and regional roads and passes through the ZAP associated with Dunamase Castle, which is a national monument.

5 IMPACT ASSESSMENT AND MITIGATION STRATEGY

Impacts can be identified from detailed information about a project, the nature of the area affected and the range of archaeological resources potentially affected. Archaeological sites can be affected adversely in a number of ways: disturbance by excavation, topsoil stripping; disturbance by vehicles working in unsuitable conditions; and burial of sites, limiting access for future archaeological investigation. Upstanding archaeology can be affected adversely by direct damage or destruction arising from development, from inadvertent damage arising from vibration, undermining etc. and also by indirect impacts to a building's visual setting, view or curtilage.

It should be noted that the substation site has been specifically designed to avoid direct impacts on the adjacent recorded monuments.

5.1 IMPACT ASSESSMENT

5.1.1 Archaeological Heritage

- The proposed grid connection is partially located within the ZAP associated with the Rock of Dunamase (LA013-052; Nat. Mon. 615), which is a National Monument in State Ownership. It is possible that archaeological features associated with the castle survive beneath the current road surface, which the grid connection will follow as it passes to the southeast of the castle. Excavations associated with the laying of the cabling may result in a negative impact on any such remains.

- The proposed substation and a section of the grid connection (within the permitted Cappakeel Solar Farm) is located within undisturbed greenfield in close proximity to known archaeological monuments. There is potential for archaeological features to survive in these areas below the current ground level. Any such features would be directly and negatively impacted by the construction of the substation and grid connection.

5.1.2 Architectural Heritage

- No direct or indirect impacts have been identified in relation to the proposed scheme and the architectural heritage resource.

5.2 MITIGATION

5.2.1 Archaeological Heritage

- Archaeological monitoring of all ground disturbances should be carried out within the ZAP for the Rock of Dunamase (LA013-052; Nat. Mon. 615). This will require Ministerial Consent form the DoHLGH. If any features of archaeological

potential are discovered during the course of the works further archaeological mitigation may be required, such as preservation in situ or by record. Any further mitigation will require approval from the National Monuments Service of the DoHLGH.

- It is recommended that prior to the commencement of construction a geophysical survey is carried out across the footprint of the proposed substation and grid connection within the greenfield areas of the scheme. This should be followed by a programme of targeted archaeological test trenching, designed to assess the nature, extent and significance of any archaeological anomalies that are identified. Both programmes of investigation will require a licence from the National Monuments Service of the DoHLGH.

  Dependent on the results of these assessments, further mitigation may be required, such as preservation in-situ or by record and/or archaeological monitoring. Any further mitigation will require approval from the National Monuments Service of the DoHLGH.

- Following completion of the above mitigation measures, there will be not significant negative impacts up on the archaeological resource.

5.2.2 Architectural Heritage

- No mitigation is required with regards to the architectural heritage resource.

It is the developer's responsibility to ensure full provision is made available for the resolution of any archaeological remains, both on site and during the post excavation process, should that be deemed the appropriate manner in which to proceed.

Please note that all recommendations are subject to approval by the National Monuments Service of the Heritage and Planning Division, Department of Housing, Local Government and Heritage.

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www.geohive.ie – Ordnance Survey Ireland National Townland and Historical Map Viewer (including Aerial imagery 1995, 2000, 2005 and 2013).
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APPENDICES

APPENDIX 1 SMR/RMP SITES WITHIN THE STUDY AREA

SMR NO.	LA013-052
RMP STATUS	Yes
TOWNLAND	Park or Dunamase
PARISH	Dysartenos
BARONY	Maryborough East
I.T.M.	652943 , 698204
CLASSIFICATION	Castle - Anglo-Norman masonry castle
DIST. FROM DEVELOPMENT	c. 80m northwest
DESCRIPTION	National Monument No. 615. Known as Dun Masc, the fort of Masc, from Masg, son of Augen Urgruidh, 4th son of Sedha Sithbhaic King of Leinster. It was the stronghold of the O'Mores, Kings of Leix. In 1170 Diarmait MacMurchada gave it to Strongbow, as part of his daughter Aoife's dower and it passed to Roger de Mortimer in the partition of Leinster in 1247. In 1609 it was granted to Donat O'Brien, earl of Thomond. In 1641 it was taken by Sir Charles Coote but it was recaptured by Eoin Rua O'Neill in 1646. It was dismantled by the Cromwellian generals Hewson and Reynolds in 1650. Sir John Parnell constructed banqueting halls and other buildings here in 1795 (O'Leary 1909-11, 161). Leask states that the castle was built c.1250 by William de Braose, however he had been dead since 1247, when the Marshall lordship was partitioned (Bradley et. al. 1986, 25). An inquisition of De Mortimers lands in 1323 found that the castle had been burned by the Irish, and in 1342, on the death of Laoighseach O Mordha it was recorded that he had destroyed the castrum nobile de Dunmaske and usurped De Mortimers power (O'Leary 1909-11, 165). Dunamase castle is specifically mentioned in the 1538 submission of Piers Mac Maolsheachlainn O Mordha which he made as part of the policy of surrender and regrant (Bradley et. al. 1986, 25). The castle is co-extensive with the rock outcrop and it consists of a Keep with an inner ward, a middle ward with a sallyport in SE side of the curtain wall and a twin-towered gatehouse, an outer ward with gatehouse, and an external traingular shaped bailey (int. dims. 80m by 60m). The keep appears to be the earliest building dating from c. 1220 and may be as early as 1180 (Bradley et. al. 1986, 25). The castle appears to have developed in a number of stages. The initial defences consisted of the rectangular Keep (ext. dims. 19.8m E-W; 21.3m N-S) and the inner ward (wall T 0.9m; H 2.2m) which fortified the summit of the rock. On the 1790 plan of Dunamase Castle drawn by Ledwich, the inner ward was protected by three mural towers of which today only the foundations of one survives at W (Bradley 1986, 28-9). The middle ward was added to this and subsequently the outer ward and its gatehouse, both of which were constructed in the thirteenth century. The middle ward was entered through a twin-bastioned gatehouse

	located on the E side of the castle. There is evidence for a square mural tower along the curtain wall of the middle ward at S. Wall footings of a rectangular hall along inner face of curtain wall of middle ward just inside gatehouse to N. The outer ward was entered through a gatehouse located at SE side of castle and accessed by a stone causeway which bridged the deep rock cut ditch that defends the castle at S. This causeway is a later feature and replaces an earlier drawbridge which provided access across the rock cut ditch and into the gatehouse of the outer ward (Bradley et. al. 1986, 31). The Keep was substantially remodelled c. 1600 and is the only part of the castle to have been altered in the seventeenth century (Bradley et. al. 1986, 25; Leask 1941, 64-5). Excavations on behalf of the OPW, in and around the barbican gatehouse of the castle, took place over a three-week period in October. At the rear of the gatehouse, a cobbled area was exposed running along the inside of the surviving section of the east curtain wall. This is believed to be the original courtyard level. Analysis of the standing fabric of the gateway showed that this level originally continued out to the rebate for the door towards the front of the passage and that the original road level had been reduced, more or less, to that seen at the start of excavation. At the same time parts of the passage walls were refaced down to the new level. On the outside of the door rebate was a drawbridge pit which was cut into a redeposited clay layer forming the surface to which the road level was cut. The pit was divided into two halves by a stone wall standing to a height of c. 0.8m, which ran out to another wall which closed off the front of the gatehouse. This cross wall was not explored to its full depth but the outer face curved across the opening of the gatehouse and had an external batter. On either side of the passageway at the base of the door rebate was a posthole and these postholes were interpreted as receiving the jambs for the modified gate. There was some evidence to suggest that the gatehouse may have been placed on an earlier earthwork but the short duration of the excavation did not allow this possibility to be pursued further. There was also evidence to show that the gatehouse and surviving portion of the east curtain were built earlier than the west curtain. There was no artefactual evidence to date the various phases of the gatehouse. The existence of a drawbridge pit, a 13th-century introduction, would suggest a mid to late 13th-century date for the building of the barbican, while the modifications to the gatehouse probably post-date the Cromwellian slighting of the castle. The second season of excavations for the OPW concentrated around the inner gatehouse and the adjacent sections of curtain wall. The area excavated included a large area on the inside of the curtain both west and east of the gatehouse, the gatehouse passage, the front of the gatehouse and the area in front of the curtain wall east of the gatehouse. As expected, the gatehouse was found to be square fronted. Three new arrow loops were identified in each of the chambers flanking the gate-passage, and the position of the portcullis was located. There was no trace of any form of drawbridge arrangement. There was, however, evidence that the portcullis slot had been defaced and that, at a slightly later date, a fire had been set in the front of the passage and within the eastern flanking chamber. It appears that there was a period of steady decay both before and after the

	main phase of dismantling the front of the tower. To the east of the gatehouse an earlier gatehouse was revealed. This was a rectangular stone building measuring 10m by 8m, with opposed openings c. 2m in width set slightly west of centre in the long wall. The walls stand to a height of between 1m and 3m. The defences of this gateway consisted simply of the gate itself, presumably protected from the wall head. The passage rose through the building and there was no evidence to suggest any internal division of the ground floor level and, in the absence of any trace of vaulting, it is believed that the upper floors were wooden. In the second phase of the building, stone batters were added against the south wall on either side of the gate and to the north-east corner of the building. That at the north-east corner was built around a square wooden upright which was possibly part of the wooden stair for access to the upper stories. In the third phase, which is contemporary with the building of the new gatehouse, the gate was blocked off and an arrow loop inserted into the blocking and a second loop cut into the south wall east of the gate. The batter was also continued across the blocking and the north door was narrowed down. At the same time the inside of the building was levelled up with a thick layer of crushed sandstone. The ground level to the north of the building had risen by this time and it was necessary to insert a step down into the building and a drain which ran across the building to open out through the new batter. With the blocking of the early gatehouse the south wall was adapted to become part of the new curtain, while the inside of the building seems to have been used for ancillary purposes. For a time it appears to have been a smithy and then for a short while it was divided into three, with raised platforms at either end. Then, at a time when its roof is believed to have been off, a circular daubed wicker structure c. 2.8m in diameter was inserted into the north-west corner. The function of this is not clear, but char
REFERENCE	www.archaeology.ie/ SMR file

SMR NO.	LA013-129
RMP STATUS	No
TOWNLAND	Dysart
PARISH	Dysartenos
BARONY	Maryborough East
I.T.M.	651798 , 696815
CLASSIFICATION	Enclosure
DIST. FROM DEVELOPMENT	To the immediate west
DESCRIPTION	Cropmark of sub-rectangular-shaped enclosure (approx. diam. 54m) N-S visible on Google earth aerial imagery. See attached image taken from Google Earth aerial photographs taken 02/07/2018
REFERENCE	www.archaeology.ie/ SMR file

SMR NO.	LA013-060
RMP STATUS	No
TOWNLAND	Dysart

PARISH	Dysartenos
BARONY	Maryborough East
I.T.M.	651664 , 696581
CLASSIFICATION	Enclosure
DIST. FROM DEVELOPMENT	To the immediate west
DESCRIPTION	Cropmark of sub-rectangular-shaped enclosure (approx. diam. 54m) N-S visible on Google earth aerial imagery. See attached image taken from Google Earth aerial photographs taken 02/07/2018
REFERENCE	www.archaeology.ie/ SMR file

SMR NO.	LA009-022
RMP STATUS	Yes
TOWNLAND	Morett
PARISH	Coolbanagher
BARONY	Portnahinch
I.T.M.	651664 , 696581
CLASSIFICATION	Water mill - horizontal-wheeled :
DIST. FROM DEVELOPMENT	c. 90m northeast
DESCRIPTION	Mill discovered in 1952 and investigated that year by Lucas and Danaher (Lucas 1953, 15-27). Understructure of the mill consisting of the dam, large wooden trough and the wheelhouse was uncovered. Site now levelled and covered over. No visible surface remains.
REFERENCE	www.archaeology.ie/ SMR file

APPENDIX 2 ARCHITECTURAL SITES WITHIN THE SURROUNDING AREA

RPS NO.	379
NIAH NO.	12801301
TOWNLAND	Ballycarroll
PARISH	Lea
BARONY	Maryborough East
I.T.M.	653152, 698129
CLASSIFICATION	Church/chapel
DIST. FROM DEVELOPMENT	c. 20m east
DESCRIPTION	Detached four-bay Church of Ireland church, dated 1845, with bellcote to gable and chancel.
REFERENCE	Laois County Development Plan 2021–2027 / NIAH Survey

APPENDIX 3 TOPOGRAPHICAL FILES

MUSEUM NO	1962, 46 A-D
TOWNLAND	Ballinlough
PARISH	Kilteale
BARONY	Maryborough East
FIND	A small tin box
FIND PLACE	Found after bulldozing the top of a gravel ridge
DESCRIPTION	Small tin box now broken into four parts.
REFERENCE	NMI Topographical Files

MUSEUM NO	1962, 47
TOWNLAND	Ballinlough
PARISH	Kilteale
BARONY	Maryborough East
FIND	A Trephined Human Skull
FIND PLACE	Found after bulldozing in a burial-ground
DESCRIPTION	Adult make skull with 2cm-3cm trephine on right parietal bone.
REFERENCE	NMI Topographical Files

MUSEUM NO	1962, 48 A-E
TOWNLAND	Ballinlough
PARISH	Kilteale
BARONY	Maryborough East
FIND	Human Skull and Bones from a Skull Burial
FIND PLACE	Found after bulldozing in a burial-ground
DESCRIPTION	Adult female skull in good condition. Dound buried together with piece of ileum and 3 rib parts in a burial-ground on top of a gravel ridge. This appears to have been a deliberate "skull-burial".
REFERENCE	NMI Topographical Files

MUSEUM NO	P1949:25
TOWNLAND	Ballinlough
PARISH	Kilteale
BARONY	Maryborough East
FIND	Skeletal remains
FIND PLACE	Shallow burial pit, sandpit on eiscer ridge
DESCRIPTION	Skull (broken and incomplete) and long bones of an adult male
REFERENCE	NMI Topographical Files

MUSEUM NO	2013:372
TOWNLAND	Park or Dunamase

PARISH	Dysartenos
BARONY	Maryborough East
FIND	Fragment of a gilt copper alloy mount
FIND PLACE	Said to have been found near the Rock of Dunamase
DESCRIPTION	A small fragment of a gilt copper alloy mount now roughly semi-circular in shape. There are two circular perforations, the larger towards the centre and the smaller towards the edge on the rhs. There was a similar perforation on the opposite side, now broken. The fragment is flat. The decoration consists of two cast animal heads in relief, between them are two hair-spring coils. Traces of other motifs including a small interlace motif survive as do traves of gilding.
REFERENCE	NMI Topographical Files

MUSEUM NO	1981:209
TOWNLAND	Park or Dunamase
PARISH	Dysartenos
BARONY	Maryborough East
FIND	Faunal remains
FIND PLACE	-
DESCRIPTION	-
REFERENCE	NMI Topographical Files

MUSEUM NO	Wk. 84,85
TOWNLAND	Aghnahily
PARISH	Dysartenos
BARONY	Maryborough East
FIND	Two food vessels
FIND PLACE	-
DESCRIPTION	-
REFERENCE	NMI Topographical Files

MUSEUM NO	2005_14
TOWNLAND	Esker
PARISH	Fossy or Timahoe
BARONY	Cullenagh
FIND	Human bone
FIND PLACE	National Park
DESCRIPTION	Human remains
REFERENCE	NMI Topographical Files

APPENDIX 4 LEGISLATION PROTECTING THE ARCHAEOLOGICAL RESOURCE

PROTECTION OF CULTURAL HERITAGE

The cultural heritage in Ireland is safeguarded through national and international policy designed to secure the protection of the cultural heritage resource to the fullest possible extent (Department of Arts, Heritage, Gaeltacht and the Islands 1999, 35). This is undertaken in accordance with the provisions of the *European Convention on the Protection of the Archaeological Heritage* (Valletta Convention), ratified by Ireland in 1997.

THE ARCHAEOLOGICAL RESOURCE

The National Monuments Act 1930 to 2014 and relevant provisions of the National Cultural Institutions Act 1997 are the primary means of ensuring the satisfactory protection of archaeological remains, which includes all man-made structures of whatever form or date except buildings habitually used for ecclesiastical purposes. A National Monument is described as '*a monument or the remains of a monument the preservation of which is a matter of national importance by reason of the historical, architectural, traditional, artistic or archaeological interest attaching thereto*' (National Monuments Act 1930 Section 2).

A number of mechanisms under the National Monuments Act are applied to secure the protection of archaeological monuments. These include the Register of Historic Monuments, the Record of Monuments and Places, and the placing of Preservation Orders and Temporary Preservation Orders on endangered sites.

The National Monuments Act 1930, as amended by various acts including but not limited to, the National Monuments (Amendment) Act 1954, the National Monuments (Amendment) Act 1987, the National Monuments (Amendment) Act 1994 and the National Monuments (Amendment) Act 2004 (together the National Monuments Acts) make provision for the protection and preservation of national monuments, archaeological monuments and archaeological objects in Ireland. The description of the existing environment in this chapter takes account of those statutory designations and the chapter takes account of the legislative monitoring and licencing requirements as mitigation.

The Historic and Archaeological Heritage and Miscellaneous Provisions Act 2023 (the 2023 Act) was enacted by the Oireachtas in late 2023 and aims to address a range of structural issues, simplify terminology, as well as provide a single accessible piece of legislation. At the date of writing many sections of the 2023 Act have yet to commence. It is not anticipated that this will result in statutory protection being extended to any potential receptors apart from those already considered in the Cultural Heritage chapter and the chapter already identifies as mitigation the various archaeological investigations and licencing requirements that will come into force when the 2023 Act is commenced. Accordingly, the EIAR conclusions are likely to be unchanged should the 2023 Act commence fully while the application is moving through the planning process.

OWNERSHIP AND GUARDIANSHIP OF NATIONAL MONUMENTS

The Minister may acquire national monuments by agreement or by compulsory order. The state or local authority may assume guardianship of any national monument (other than dwellings). The owners of national monuments (other than dwellings) may also appoint the Minister or the local authority as guardian of that monument if the state or local authority agrees. Once the site is in ownership or guardianship of the state, it may not be interfered with without the written consent of the Minister.

REGISTER OF HISTORIC MONUMENTS

Section 5 of the 1987 Act requires the Minister to establish and maintain a Register of Historic Monuments. Historic monuments and archaeological areas present on the register are afforded statutory protection under the 1987 Act. Any interference with sites recorded on the register is illegal without the permission of the Minister. Two months' notice in writing is required prior to any work being undertaken on or in the vicinity of a registered monument. The register also includes sites under Preservation Orders and Temporary Preservation Orders. All registered monuments are included in the Record of Monuments and Places.

PRESERVATION ORDERS AND TEMPORARY PRESERVATION ORDERS

Sites deemed to be in danger of injury or destruction can be allocated Preservation Orders under the 1930 Act. Preservation Orders make any interference with the site illegal. Temporary Preservation Orders can be attached under the 1954 Act. These perform the same function as a Preservation Order but have a time limit of six months, after which the situation must be reviewed. Work may only be undertaken on or in the vicinity of sites under Preservation Orders with the written consent, and at the discretion, of the Minister.

RECORD OF MONUMENTS AND PLACES

Section 12(1) of the 1994 Act requires the Minister for Arts, Heritage, Gaeltacht and the Islands (now the Minister for the Department of Housing, Local Government and Heritage) to establish and maintain a record of monuments and places where the Minister believes that such monuments exist. The record comprises a list of monuments and relevant places and a map/s showing each monument and relevant place in respect of each county in the state. All sites recorded on the Record of Monuments and Places receive statutory protection under the National Monuments Act 1994. All recorded monuments on the proposed development site are represented on the accompanying maps.

Section 12(3) of the 1994 Act provides that '*where the owner or occupier (other than the Minister for Arts, Heritage, Gaeltacht and the Islands) of a monument or place included in the Record, or any other person, proposes to carry out, or to cause or permit the carrying out of, any work at or in relation to such a monument or place, he or she shall give notice in writing to the Minister of Arts, Heritage, Gaeltacht and the Islands to carry out work and shall not, except in case of urgent necessity and with the consent of the Minister, commence the work until two months after giving of notice*'.

Under the National Monuments (Amendment) Act 2004, anyone who demolishes or in any way interferes with a recorded site is liable to a fine not exceeding €3,000 or imprisonment for up to 6 months. On summary conviction and on conviction of indictment, a fine not exceeding €10,000 or imprisonment for up to 5 years is the penalty. In addition, they are liable for costs for the repair of the damage caused.

In addition to this, under the *European Communities (Environmental Impact Assessment) Regulations 1989,* Environmental Impact Statements (EIS) are required for various classes and sizes of development project to assess the impact the proposed development will have on the existing environment, which includes the cultural, archaeological and built heritage resources. These document's recommendations are typically incorporated into the conditions under which the proposed development must proceed, and thus offer an additional layer of protection for monuments which have not been listed on the RMP.

THE PLANNING AND DEVELOPMENT ACT 2024

Under planning legislation, each local authority is obliged to draw up a Development Plan setting out their aims and policies with regard to the growth of the area over a five-year period. They cover a range of issues including archaeology and built heritage, setting out their policies and objectives with regard to the protection and enhancement of both. These policies can vary from county to county. The Planning and Development Act 2024 recognises that proper planning and sustainable development includes the protection of the archaeological heritage. Conditions relating to archaeology may be attached to individual planning permissions.

Laois County Development Plan 2021 – 2027

It is the policy of Laois County Development Plan:

AH 1 Manage development in a manner that protects and conserves the integrity and character of archaeological heritage of the county which avoids adverse impacts on sites, monuments, settings, features or objects of significant historical or archaeological interest and secure the preservation in-situ or by record of all sites and features of historical and archaeological interest.

AH 2 Support the preservation or conservation of historically significant street patterns, building lines and plot widths in its towns and villages as well as the preservation of features such as town walls, historic revetments, and public realm features such as granite kerbing, historic drinking fountains, cobbles, vent pipes whether or not they benefit from protection in their own right.

AH 3 Protect the intrinsic value, character, integrity and settings of monuments and places in the Record of Monuments and Places (RMPs) and any forthcoming statutory register and protect Zones of Archaeological Potential against inappropriate development.

AH 4 In areas of archaeological potential, where groundworks are proposed, ensure that all works are undertaken to the highest standard and the resultant information made publicly available. Developers will be required to have regard to Archaeology and Development: Guidelines for Good Practice for Developers (ICOMOS, 2000) in planning and executing development in sensitive areas. The Council favours the preservation in-situ of archaeological remains, where areas of archaeological potential are located in town centres or villages, preservation of archaeological remains by record will be considered.

AH 5 Encourage, where practicable, the provision of public access and signage to sites identified in the Record of Monuments and Places under the direct ownership, guardianship or control of the Council and/or the State.

AH 6 Work closely with the relevant State bodies to deliver the conservation objectives of the Rock of Dunamase and redevelopment of Fort Protector to secure funding 300 Policy Objectives for Archaeological Heritage for the preservation and development of these culturally important sites.

AH 7 Require visual impact statements for developments within the area around the Rock of Dunamaise in order to assess the potential impacts of development in the area.

AH 8 Work with stakeholders including the OPW, the Heritage Council, the Arts Council, local communities, Bord Failte and businesses to support the development of heritage and cultural tourism in County Laois.

AH 9 Maximise the potential of Dunrally Viking Fort, as a heritage/cultural and tourism site.

AH 10 Protect where appropriate industrial heritage structures or elements of significance identified in the Laois Industrial Archaeology Survey by adding them to the Record of Protected Structures during the lifetime of the Development Plan.

DM Standard for Archaeological Heritage

DM AH 1 Archaeological Potential

In areas of archaeological potential, where groundworks are proposed, the Council favours the preservation in-situ of archaeological remains, where areas of archaeological potential are located in town centres or villages, preservation of archaeological remains by record will be considered.

Where it is proposed to undertake groundworks to lands within an area of archaeological potential or in the vicinity of Recorded Monuments or Zones of Archaeological Potential, the Council will require the preparation of an archaeological field evaluation by a licensed archaeologist, the details of which will be submitted with a planning application. Such development shall be assessed in the context of the following documents:-

- Accord with the Framework and Principles for the Protection of Archaeological Heritage (DoAHG, 1999).
- The National Monuments Acts 1934-1994.
- Heritage Council's Archaeology and Archaeology and Development Guidelines for Good Practice for Developers (2000).

APPENDIX 5 LEGISLATION PROTECTING THE ARCHITECTURAL RESOURCE

The main laws protecting built heritage are the Architectural Heritage (National Inventory) and National Monuments (Miscellaneous Provisions) Act 1999 and the Planning and Development Act, 2024. The Architectural Heritage Act requires the Minister to establish a survey to identify, record and assess the architectural heritage of the country. The background to this legislation derives from Article 2 of the 1985 Convention for the Protection of Architectural Heritage (Granada Convention). This 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 National Inventory of Architectural Heritage (NIAH) was established in 1990 to fulfil Ireland's obligation under the Granada Convention, through the establishment and maintenance of a central record, documenting and evaluating the architecture of Ireland (NIAH 2024, page 3). As inclusion in the inventory does not provide statutory protection, the survey information is used in conjunction with the Architectural Heritage Protection Guidelines for Planning Authorities to advise local authorities on compilation of a Record of Protected Structures as required by the Planning and Development Act, 2024.

PROTECTION UNDER THE RECORD OF PROTECTED STRUCTURES AND COUNTY DEVELOPMENT PLAN

Structures of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest can be protected under the Planning and Development Act, 2024.

The Act states that 'A planning authority shall prepare and maintain a record of every structure, part of a structure and specified feature within the attendant grounds of a structure within its functional area that, in the opinion of the planning authority, forms part of the architectural heritage of the area and is of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest'.

At any time after preparing a record of protected structures under section 306 , a planning authority may (a) add a structure, a specified part of a structure or a specified feature within the attendant grounds of a structure to the record of protected structures where the authority considers the structure, the part, or the feature, as the case may be, to be of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest or value (b) delete a structure, a specified part of a structure or a specified feature within the attendant grounds of a structure from the record of protected structures where the authority considers that the protection of the structure, part or feature, as the case may be, is no longer warranted.

ARCHAEOLOGICAL

Archaeological interest is essentially defined by the degree to which material remains can contribute to our understanding of any period or set of social conditions in the past.

Structures can have the characteristics of both architectural and archaeological interest as these are not mutually exclusive. The standing walls of a sixteenth-century tower house will have both characteristics of interest. The party walls or basements of houses of late appearance may contain medieval fabric and reveal information of archaeological interest. Fragments of early fabric, including carved or worked stone, may have been reused in later buildings giving these structures archaeological interest. A complex of industrial buildings may have archaeological interest because of its potential to reveal artefacts and information about the evolution of industry that may be useful to archaeologists, historians and the general public.

ARCHITECTURAL

The characteristics of architectural interest may be attributed to a structure or part of a structure with such qualities as the following:

- A generally agreed exemplar of good quality architectural design;
- The work of a known and distinguished architect, designer or engineer;
- An exemplar of a building type, plan form, style or styles of any period but also the harmonious interrelationship of differing styles within one structure;
- A structure which makes a positive contribution to its setting, such as a group of structures or a streetscape in an urban area, or the landscape in a rural area;
- A structure with an interior that is well designed, rich in decoration, complex or spatially pleasing.

HISTORICAL

The notion of historical interest underpins a general belief that it is worthwhile to conserve and preserve information, sites and structures from past centuries. The level of importance of the historical connection and its relationship to the existing fabric of the structure should be assessed. The historical interest relating to a structure or parts of a structure may be identified in various ways.:

- A structure may have historical interest as the location of an important event that occurred in or is associated with it. It may have historical interest in its association with a historic personality. Some associations or events may be so important that the structure retains its significance regardless of subsequent alteration;
- A structure may have influenced, or been influenced by, a historic figure. Important people may have lived in the structure or have been otherwise associated with it, e.g. its architect, builder or patron. Places in which evidence of an association with a person survive in situ, or in which the settings are substantially intact, are of greater significance than those which are much changed or in which much evidence does not survive;
- Historical interest can be attributed where light is thrown on the character of a past age by virtue of the structure's design, location, materials or original use;
- A structure may be a memorial to a past event;
- A structure itself may be an example of the effects of change over time. The design and fabric of the structure may contain evidence of its former use or symbolic meaning. This may be the case with former churches or gaols that have since changed and, in so doing, illustrate a historic development;

- Some features and fixtures may survive, e.g. in consistory courts and courts of law, that are important evidence of former legal or liturgical practice and may have special historical interest for that reason;
- Some unusual structures may have historical or socio-historical interest, e.g. early electricity substations, "Emergency"-era lookout posts or sentry boxes. Although not yet of popular heritage significance, such structures can nonetheless have special historical and social interest;
- Special historical interest may exist because of the rarity of a structure. Either few structures of an identifiable type were built at a particular time or few have survived. In either case, the extant structure may be one of the few representative examples of its time that still exists in a local, regional or national context. The rarity of surviving examples of a building type can ensure that special historical interest accrues to them.

TECHNICAL

Technical interest in a structure relates to the art of the structural engineer in devising solutions to problems of spanning space and weatherproofing enclosures. It may be found in structures which are important examples of innovative, unusual or virtuoso engineering design or use of materials. A structure may be of technical interest for one or more of the following reasons:

- It displays engineering or structural innovation in its construction or design such as the use of cast- or wrought iron prefabrication or the early use of concrete;
- It is the work of a distinguished engineer;
- It is an exemplar of the engineering design practice of its time. For example, a bridge may be a masonry arch, an iron suspension or a concrete span;
- It displays technically innovative or unusual construction materials, such as early examples of Coade stone, cement plank cladding or glazed curtain walling;
- It contains innovative mechanical fixtures, machinery or plant or industrial heritage artefacts that describe the character of production processes. The specifically industrial aspect of some sites like mills, mill ponds or mines can often have a technical interest;
- Technical interest can be ascribed to the innovative engineering qualities of structure, as distinct from the building's appropriateness for use or its appearance.

CULTURAL

The characteristic of cultural interest permeates architectural heritage and can, in the broadest terms, include aesthetic, economic, historic, scientific or social values of past and present generations. Special cultural interest apply to:

- Those structures to which the Granada Convention refers as 'more modest works
- of the past that have acquired cultural significance with the passing of time';
- Structures that have cinematic or literary associations;
- Other structures that illustrate the development of society, such as early libraries, print works, schoolhouses or swimming baths.

SCIENTIFIC

The scientific interest, or research value, of a structure will depend on the importance of the data involved and on its quality and/or rarity. Its scientific interest should also be assessed as to how well it represents the area of research in question and the degree to which the structure may contribute further objective information. For example:

- The results of scientific research may be seen in the execution of the structure;
- The materials used in the structure may have the potential to contribute to scientific research, e.g. extinct plant or pollen species preserved in the base layers of ancient thatch roofs;
- The structure may be associated with scientific research that has left its mark on the place, e.g. early Ordnance Survey benchmarks carved into stone work.

SOCIAL

The characteristic of social interest embraces those qualities for which a structure, a complex or an area has become a focus of political, spiritual, symbolic or other sentiment to any group of people. A community may have an attachment to a place because it is an essential reference point for that community's identity, whether as a meeting place or a place of ceremony, ritual or tradition. The configuration, disposition or layout of a space or group of structures, where they facilitate behaviour that would otherwise be difficult or impossible, may be of social interest. For example:

- The features and fixtures that testify to community involvement in the creation of a structure, or have a spatial form or layout indicating community involvement in the use of a structure, could include such elements as memorials, stained glass or statues;
- A structure may display vernacular traditions of construction and may be in a group or setting which illustrates the social organisation of the inhabitants. Most obviously this would include thatched houses. In vernacular buildings, elements of the plan form – direct entry, lobby entry, opposing doors, outshots, etc. – and/or the roofing material may be distinctive and have special social interest;
- Types of decoration may have social as well as artistic interest, such as shell houses or the local manifestation of exuberant or astylar stucco decoration where it is particular to a region or town;
- A social interest could also be attributed to structures illustrating the social philosophy of a past age, as in the case of philanthropic and social housing developments. Structures which illustrate a particular lifestyle or social condition, e.g. holy wells, are to be found in many parts of the country.

ARTISTIC

Special artistic interest may be attributed to a structure itself, or to a part of a structure, for its craftsmanship, decoration or design. Examples could include:

- Decoratively carved sculpture or statuary that is part of an architectural composition;
- Ceramic, faience or mosaic tiled or decoratively carved timber shopfronts;
- Fittings and fixtures including chimneypieces, chandeliers or sconces, staircases and wainscoting;
- Decorative plasterwork ceilings;

- Religious art in a place of worship including stained glass or Stations of the Cross;
- Funerary monuments within a graveyard;
- Decorative cast- or wrought iron gates or railings;
- The relationship of materials to each other, and to the totality of the building in which they are situated, if these have been designed as an ensemble.

(From the NIAH Handbook 2024 pages 15–17)

The Local Authority has the power to order conservation and restoration works to be undertaken by the owner of the protected structure if it considers the building to need repair. Similarly, an owner or developer must make a written request to the Local Authority to carry out any works on a protected structure and its environs, which will be reviewed within three months of application. Failure to do so may result in prosecution.

Laois County Development Plan 2021 – 2027

Policy Objectives for Protected Structures

PS 1

Consult with the Department of Environment, Heritage and Local Government in considering planning applications that may affect Protected Structures or Architectural Conservation Areas (ACA). The Council will have regard to comments made by the Department and relevant guidelines such as the Architectural Heritage Protection: Guidelines for Planning Authorities (DAHG, 2011) and other pertinent guidelines regarding energy ratings for Protected Structures.

PS 2

Protect and conserve buildings, structures and sites contained in the Record of Protected Structures in accordance with 'Architectural Heritage Protection Guidelines for Planning Authorities' 2004 and ensure the effective promotion of the Architectural Heritage provisions of Planning and Development Act 2000 (as amended) and therefore the protection of Laois's built heritage, including Architectural Conservation Areas (ACAs) and Protected Structures.

PS 3

Any development, modification, alteration, or extension affecting a Protected Structure must be prepared by suitably qualified persons and Accompanied by appropriate documentation as outlined in the Architectural Heritage Protection Guidelines for Planning Authorities [DAHG, 2011] to enable a proper assessment of the proposed works and their impact on the structure or area and be carried out to best practice conservation standards. Its setting will be considered against the following criteria, and whether it is: a) Sensitively sited and designed; b) Compatible with the special character; c) Views of principal elevations of the protected structures are not obscured or negatively impacted; d) Of a premium quality of design and appropriate in terms of the proposed scale, mass, height, density, layout, and material so that the integrity of the structure and its curtilage is preserved and enhanced. Where appropriate, the

Protected Structure status is used as a stimulus to the imaginative and considered design of new elements.

PS 4
Where the restoration or refurbishment of a Protected Structure or a key Architectural Conservation Area building that is in poor or fair condition is proposed and is for a purpose compatible with the character of the building, the relaxation of development management standards on unit sizes, amenity space or parking will be considered by the Council.

PS 5
Refuse planning permission for the demolition of any protected structure unless the Council is satisfied that exceptional circumstances exist. The demolition of a protected structure with the retention of its façade will likewise not generally be permitted.

PS 6
Favourably consider the change of use of any structure included on the Record of Protected Structures provided such a change of use does not adversely impact on its intrinsic character. In certain cases, the Planning Authority may relax site zoning restrictions / development standards in order to secure the preservation and restoration of the structure.

PS 7
Review and update the Record of Protected Structures on an on-going basis and to make additions and deletions as appropriate.

PS 8
Integrate climate-change adaptation measures into all heritage works and maintenance plans by demonstrating green ways of working in historic buildings, ensuring that the carbon footprint of adaptation measures is considered.

PS 9
Promote the repair and reuse of existing building stock, including heritage buildings, a sa means of avoiding unnecessary carbon outlays with new build.

PS 10
Support proposals to improve the thermal performance of historic buildings with renewable energy technologies. Such proposals shall be sensitive to traditional methods of construction to ensure that the proposed works are appropriate and do not cause damage to the structure, require the removal of historic fabric such as original windows, doors and floors, or have a detrimental visual impact.

DM PS 1 DEVELOPMENT WITHIN THE CURTILAGE OF A PROTECTED STRUCTURE
In considering applications for development within the curtilage and/or attendant grounds of a protected structure, the Council shall have regard to the following:

- The various elements of the structure which give the protected structure its special character and how these would be impacted on by the proposed development.
- The proximity of any new development to the main protected structure and any other buildings of heritage value.
- The design of the new development that should relate to and complement the special character of the protected structure.
- Outward and inward views from the protected structure are to be protected.

High quality design will be a foremost consideration when assessing proposals for development within the curtilage of a protected structure, with particular emphasis on siting, building lines, proportions, scale, massing, height, roof treatment and materials. This does not preclude innovative contemporary buildings. High quality contemporary interventions will be encouraged over historic pastiche. Development proposals should include appraisal of the wider context of the site and structure including its demesne landscape, where applicable.

DM PS 2 RESTORATION OF A PROTECTED STRUCTURE

The following information is required to be submitted with respect to applications for permission for restoration, refurbishment, demolition development or change of use of protected structures:

- An Architectural Assessment Report as per the Architectural Heritage Protection: Guidelines for Planning Authorities" (2011) Department of the Arts, Heritage and Gaeltacht carried out by a suitably qualified person;
- A comprehensive schedule of proposed work that follows the guidelines set out in the Architectural Heritage Protection: Guidelines for Planning Authorities" (2011) Department of the Arts, Heritage and Gaeltacht.

DM PS 3 ARCHITECTURAL ASSESSMENT REPORT

The following information is required to be submitted with respect to applications for permission for restoration, refurbishment, demolition development or change of use of protected structures:

- An Architectural Assessment Report as per the Architectural Heritage Protection: Guidelines for Planning Authorities" (2011) Department of the Arts, Heritage and Gaeltacht carried out by a suitably qualified person;

A comprehensive schedule of proposed work that follows the guidelines set out in the Architectural Heritage Protection: Guidelines for Planning Authorities" (2011) Department of the Arts, Heritage and Gaeltacht.

APPENDIX 6 IMPACT ASSESSMENT AND THE CULTURAL HERITAGE RESOURCE

POTENTIAL IMPACTS ON ARCHAEOLOGICAL AND HISTORICAL REMAINS

Impacts are defined as 'the degree of change in an environment resulting from a development' (Environmental Protection Agency 2022). They are described as profound, significant or slight impacts on archaeological remains. They may be negative, positive or neutral, direct, indirect or cumulative, temporary or permanent.

Impacts can be identified from detailed information about a project, the nature of the area affected and the range of archaeological and historical resources potentially affected. Development can affect the archaeological and historical resource of a given landscape in a number of ways.

- Permanent and temporary land-take, associated structures, landscape mounding, and their construction may result in damage to or loss of archaeological remains and deposits, or physical loss to the setting of historic monuments and to the physical coherence of the landscape.

- Archaeological sites can be affected adversely in a number of ways: disturbance by excavation, topsoil stripping and the passage of heavy machinery; disturbance by vehicles working in unsuitable conditions; or burial of sites, limiting accessibility for future archaeological investigation.

- Hydrological changes in groundwater or surface water levels can result from construction activities such as de-watering and spoil disposal, or longer-term changes in drainage patterns. These may desiccate archaeological remains and associated deposits.

- Visual impacts on the historic landscape sometimes arise from construction traffic and facilities, built earthworks and structures, landscape mounding and planting, noise, fences and associated works. These features can impinge directly on historic monuments and historic landscape elements as well as their visual amenity value.

- Landscape measures such as tree planting can damage sub-surface archaeological features, due to topsoil stripping and through the root action of trees and shrubs as they grow.

- Ground consolidation by construction activities or the weight of permanent embankments can cause damage to buried archaeological remains, especially in colluviums or peat deposits.

- Disruption due to construction also offers in general the potential for adversely affecting archaeological remains. This can include machinery, site offices, and service trenches.

Although not widely appreciated, positive impacts can accrue from developments. These can include positive resource management policies, improved maintenance and access to archaeological monuments, and the increased level of knowledge of a site or historic landscape as a result of archaeological assessment and fieldwork.

PREDICTED IMPACTS

The severity of a given level of land-take or visual intrusion varies with the type of monument, site or landscape features and its existing environment. Severity of impact can be judged taking the following into account:

- The proportion of the feature affected and how far physical characteristics fundamental to the understanding of the feature would be lost;
- Consideration of the type, date, survival/condition, fragility/vulnerability, rarity, potential and amenity value of the feature affected;
- Assessment of the levels of noise, visual and hydrological impacts, either in general or site-specific terms, as may be provided by other specialists.

APPENDIX 7 MITIGATION MEASURES AND THE CULTURAL HERITAGE RESOURCE

POTENTIAL MITIGATION STRATEGIES FOR CULTURAL HERITAGE REMAINS

Mitigation is defined as features of the design or other measures of the proposed development that can be adopted to avoid, prevent, reduce or offset negative effects.

The best opportunities for avoiding damage to archaeological remains or intrusion on their setting and amenity arise when the site options for the development are being considered. Damage to the archaeological resource immediately adjacent to developments may be prevented by the selection of appropriate construction methods. Reducing adverse effects can be achieved by good design, for example by screening historic buildings or upstanding archaeological monuments or by burying archaeological sites undisturbed rather than destroying them. Offsetting adverse effects is probably best illustrated by the full investigation and recording of archaeological sites that cannot be preserved *in situ*.

DEFINITION OF MITIGATION STRATEGIES

ARCHAEOLOGICAL RESOURCE

The ideal mitigation for all archaeological sites is preservation *in situ*. This is not always a practical solution, however. Therefore, a series of recommendations are offered to provide ameliorative measures where avoidance and preservation *in situ* are not possible.

Archaeological Test Trenching can be defined as 'a limited programme of intrusive fieldwork which determines the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts within a specified area or site on land, inter-tidal zone or underwater. If such archaeological remains are present field evaluation defines their character, extent, quality and preservation, and enables an assessment of their worth in a local, regional, national or international context as appropriate' (CIfA 2020a).

Full Archaeological Excavation can be defined as 'a programme of controlled, intrusive fieldwork with defined research objectives which examines, records and interprets archaeological deposits, features and structures and, as appropriate, retrieves artefacts, ecofacts and other remains within a specified area or site on land, inter-tidal zone or underwater. The records made and objects gathered during fieldwork are studied and the results of that study published in detail appropriate to the project design' (CIfA 2020b).

Archaeological Monitoring can be defined as 'a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons. This will be within a specified area or site on land, inter-tidal zone or underwater, where there is a possibility that archaeological deposits may be disturbed

or destroyed. The programme will result in the preparation of a report and ordered archive (CIfA 2020c).

Underwater Archaeological Assessment consists of a programme of works carried out by a specialist underwater archaeologist, which can involve wade surveys, metal detection surveys and the excavation of test pits within the sea or riverbed. These assessments are able to access and assess the potential of an underwater environment to a much higher degree than terrestrial based assessments.

ARCHITECTURAL RESOURCE

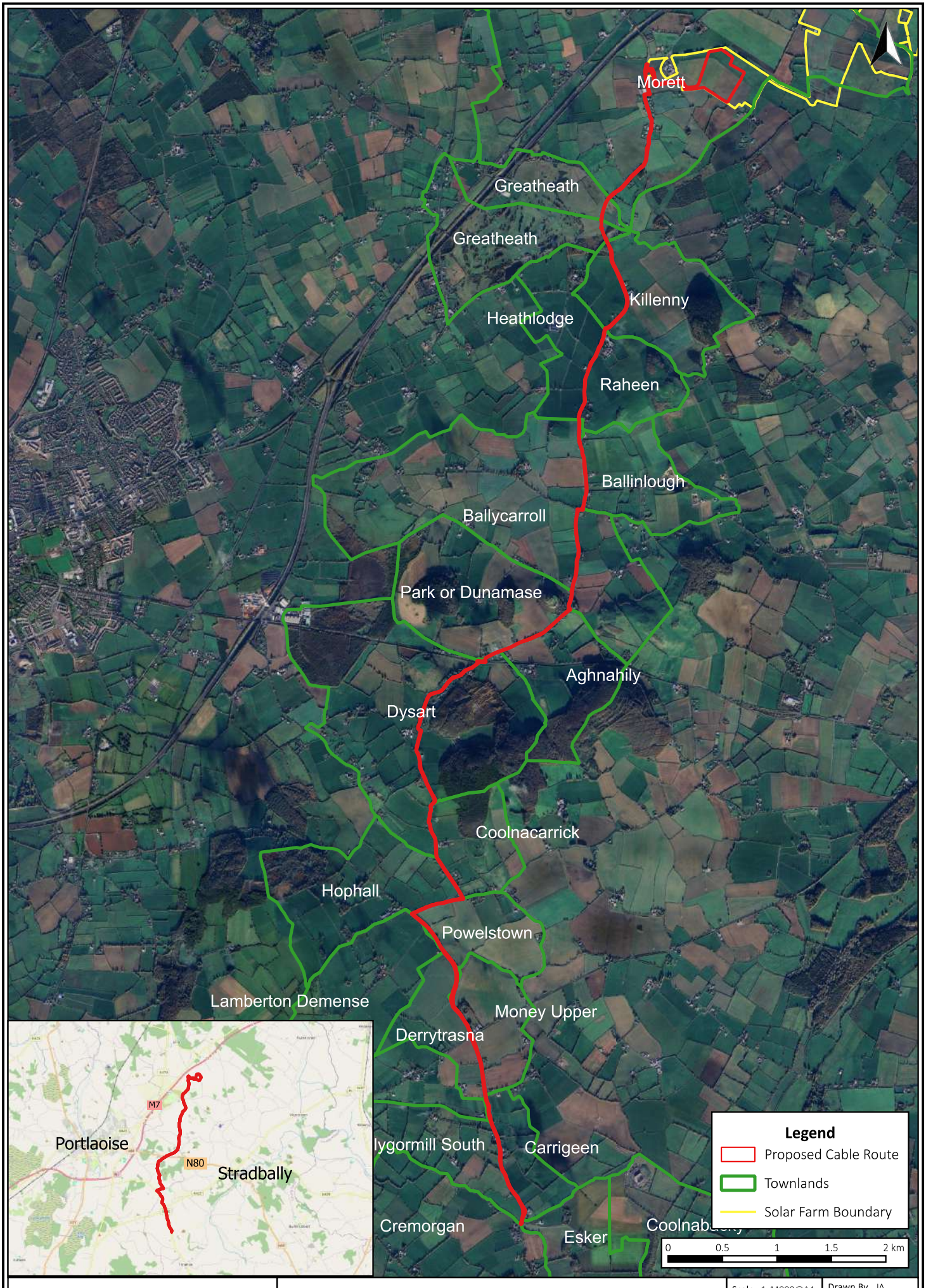
The architectural resource is generally subject to a greater degree of change than archaeological sites, as structures may survive for many years but their usage may change continually. This can be reflected in the fabric of the building, with the addition and removal of doors, windows and extensions. Due to their often more visible presence within the landscape than archaeological sites, the removal of such structures can sometimes leave a discernable 'gap' with the cultural identity of a population. However, a number of mitigation measures are available to ensure a record is made of any structure that is deemed to be of special interest, which may be removed or altered as part of a proposed development.

Conservation Assessment consists of a detailed study of the history of a building and can include the surveying of elevations to define the exact condition of the structure. These assessments are carried out by Conservation Architects and would commonly be carried out in association with proposed alterations or renovations on a Recorded Structure.

Building Survey may involve making an accurate record of elevations (internal and external), internal floor plans and external sections. This is carried out using an EDM (Electronic Distance Measurer) and GPS technology to create scaled drawings that provide a full record of the appearance of a building at the time of the survey.

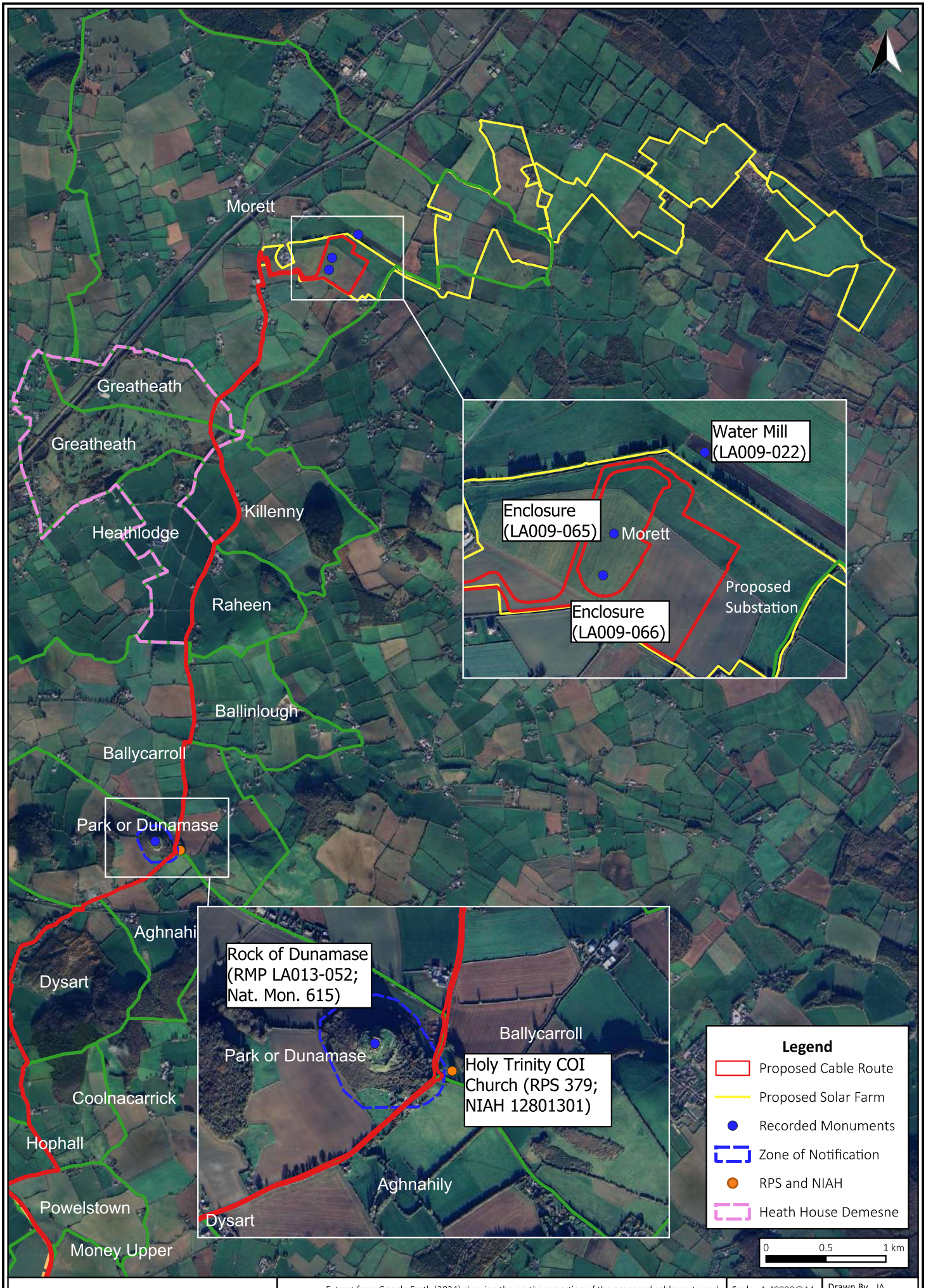
Historic Building Assessment is generally specific to one building, which may have historic significance, but is not a Protected Structure or listed within the NIAH. A full historical background for the structure is researched and the site is visited to assess the standing remains and make a record of any architectural features of special interest. These assessments can also be carried out in conjunction with a building survey.

Written and Photographic record provides a basic record of features such as stone walls, which may have a small amount of cultural heritage importance and are recorded for prosperity. Dimensions of the feature are recorded with a written description and photographs as well as some cartographic reference, which may help to date a feature.



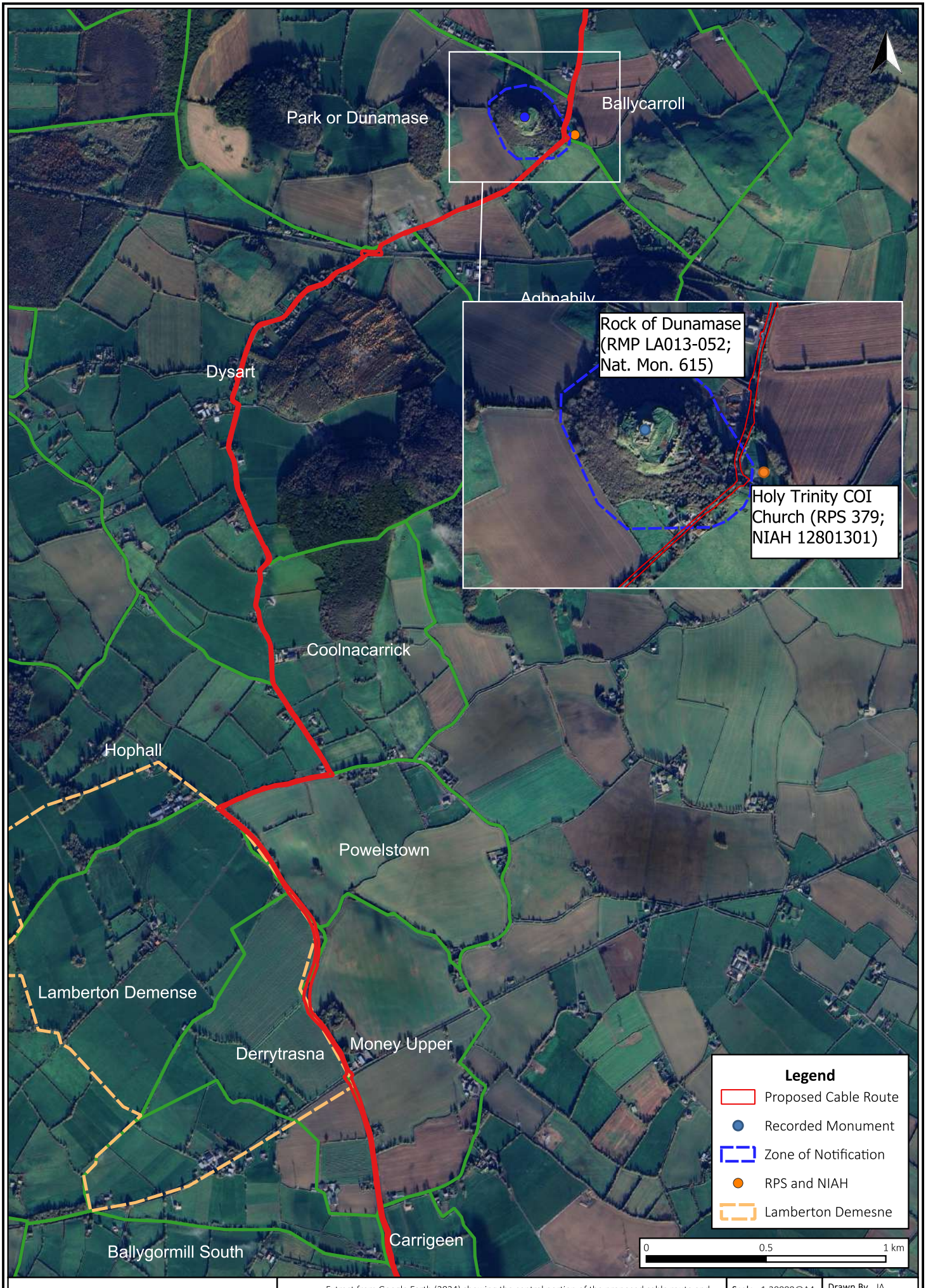
IAC Archaeology

Title	Location of proposed cable route	Scale 1:44000@A4	Drawn By JA
		Date 09.04.2026	Checked By JG
Project	Cappakeel Cable Route, County Laois	Job No. J4366.1	Approved By FB
			Fig. 1 Rev. -



IAC Archaeology

Title	Extract from Google Earth (2024) showing the northern portion of the proposed cable route and nearby archaeological and architectural sites	Scale 1:40000@A4	Drawn By JA
		Date 09.04.26	Checked By JG
Project	Cappakeel Cable Route, County Laois	Job No. J4366.1	Approved By FB
		Fig. 2a	Rev. -



IAC Archaeology

Title	Extract from Google Earth (2024) showing the central portion of the proposed cable route and nearby archaeological and architectural sites	Scale 1:20000@A4	Drawn By JA
		Date 09.04.26	Checked By JG
Project	Cappakeel Cable Route, County Laois	Job No. J4366.1	Approved By FB
			Fig. 2b Rev. -



IAC Archaeology

Title	Extract from Google Earth (2024) showing the archaeological and architectural sites within the study area of the southern portion of the proposed cable route	Scale 1:20000@A4	Drawn By JA
		Date 09.04.25	Checked By JG
Project	Cappakeel Cable Route, County Laois	Job No. J4366.1	Approved By FB
			Fig. 2c / Rev. -