

11. ARCHAEOLOGY AND CULTURAL HERITAGE

11.1 Introduction

This archaeological and cultural heritage chapter was prepared by Tobar Archaeological Services. It presents the results of an archaeological and cultural heritage impact assessment of the Proposed Development which comprises a 110kV electrical substation, underground electrical cabling, access roads (new and upgrade of existing), borrow pits and all associated site works. A detailed description of the Proposed Development is provided in Chapter 4 of this EIAR.

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

11.1.1 Proposed Development

A full description of all elements of the Proposed Development is presented in Chapter 4 of the EIAR.

11.1.2 Statement of Authority

This section of the EIAR has been prepared by Miriam Carroll and Annette Quinn of Tobar Archaeological Services. Miriam and Annette both graduated from University College Cork in 1998 with a Masters degree in Methods and Techniques in Irish Archaeology. Both directors are licensed by the Department of Housing, Local Government and Heritage to carry out excavations and are members of the Institute of Archaeologists of Ireland. Annette Quinn and Miriam Carroll have been working in the field of archaeology since 1994 and have undertaken numerous projects for both the private and public sectors including excavations, site assessments (EIAR) and surveys. Miriam Carroll and Annette Quinn are directors of Tobar Archaeological Services which has been in operation for 19 years.

11.1.3 Legislation and Guidelines

11.1.3.1 Current Legislation

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

Both the National Monuments Acts 1930 to 2004 and relevant provisions of the Cultural Institutions Act 1997 are the primary means of ensuring protection of archaeological monuments, the latter of which includes all man-made structures of whatever form or date. There are a number of provisions under the

National Monuments Acts which ensure protection of the archaeological resource. These include the Register of Historic Monuments (1997 Act) which means that any interference to a monument is illegal under that Act. All registered monuments are included on the Record of Monuments and Places (RMP).

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

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

11.1.3.1.1 **Granada Convention**

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

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

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

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

11.1.3.2 Cork County Development Plan 2022

11.1.3.2.1 Archaeological Heritage

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

HE 16-2: Protection of Archaeological Sites and Monuments

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

HE 16-3: Underwater Archaeology

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

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

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

HE 16-5: Zones of Archaeological Potential

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

HE 16-6: Industrial and Post Medieval Archaeology

Protect and preserve industrial and post-medieval archaeology and long-term management of heritage features such as mills, limekilns, forges, bridges, piers and harbours, water-related engineering works and buildings, penal chapels, dwellings, walls and boundaries, farm buildings, estate features, military and coastal installations. There is a general presumption for retention of these structures and features. Proposals for appropriate redevelopment including conversion should be subject to an appropriate assessment and record by a suitably qualified specialist/s.

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

Protect and preserve the defensive archaeological record of County Cork including strategic battlefield, ambush and siege sites, and coastal fortifications and their associated landscape due to their historical and cultural value. Any development within or adjoining these areas shall undertake a historic assessment by a suitably qualified specialist to ensure development does not negatively impact on this historic landscape.

HE 16-8: Burial Places

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

HE 16-9: Archaeology and Infrastructure Schemes

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

HE 16-10: Management of Monuments within Development Sites

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

HE 16-11: Archaeological Landscapes

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

HE 16-12: Raising Archaeological Awareness

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

HE 16-13: Undiscovered Archaeological Sites

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

11.1.3.2.2 **Built Heritage**

The CDP 2022 also outlines objectives relating to built heritage such as Protected Structures and those listed in the NIAH.

HE 16-14: Record of Protected Structures

- a) The identification of structures for inclusion in the Record will be based on criteria set out in the Architectural Heritage Protection Guidelines for Planning Authorities (2011).
- b) Extend the Record of Protected Structures in order to provide a comprehensive schedule for the protection of structures of special importance in the County during the lifetime of the Plan as resources allow.
- c) Seek the protection of all structures within the County, which are of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest. In accordance with this objective, a Record of Protected Structures has been established and is set out in Volume Two Heritage and Amenity, Chapter 1 Record of Protected Structures.
- d) Ensure the protection of all structures (or parts of structures) contained in the Record of Protected Structures.
- e) Protect the curtilage and attendant grounds of all structures included in the Record of Protected Structures.
- f) Ensure that development proposals are appropriate in terms of architectural treatment, character, scale and form to the existing protected structure and not detrimental to the special character and integrity of the protected structure and its setting.

- g) Ensure high quality architectural design of all new developments relating to or which may impact on structures (and their settings) included in the Record of Protected Structures.
- h) Promote and ensure best conservation practice through the use of specialist conservation professionals and craft persons.
- i) In the event of a planning application being granted for development within the curtilage of a protected structure, that the repair of a protected structure is prioritised in the first instance i.e. the proposed works to the protected structure should occur, where appropriate, in the first phase of the development to prevent endangerment, abandonment and dereliction of the structure.

HE 16-15: Protection of Structures on the NIAH

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

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

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

HE 16-17: Areas of Special Planning Control

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

HE 16-18: Architectural Conservation Areas

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

- (a) Protecting all buildings, structures, groups of structures, sites, landscapes and all other features considered to be intrinsic elements to the special character of the ACA from demolition and non sympathetic alterations.
- (b) Promoting appropriate and sensitive reuse and rehabilitation of buildings and sites within the ACA and securing appropriate infill development.
- (c) Ensure new development within or adjacent to an ACA respects the established character of the area and contributes positively in terms of design, scale, setting and material finishes to the ACA.
- (d) Protect structures from demolition and non sympathetic alterations.
- (e) Promoting high quality architectural design within ACAs.
- (f) Seek the repair and re-use of traditional shopfronts and where appropriate, encourage new shopfronts of a high quality architectural design.
- (g) Ensure all new signage, lighting advertising and utilities to buildings within ACAs are designed, constructed and located in such a manner they do not detract from the character of the ACA.
- (h) Protect and enhance the character and quality of the public realm within ACAs. All projects which involve works within the public realm of an ACA shall undertake a character assessment of the said area which will inform a sensitive and appropriate approach to any proposed project in terms of design and material specifications. All projects shall provide for the use of suitably qualified conservation architects/ designers.
- (i) Protect and enhance the character of the ACA and the open spaces contained therein. This shall be achieved through the careful and considered strategic management of all signage, lighting, utilities, art works/pieces/paintings, facilities etc to protect the integrity and quality of the structures and spaces within each ACA.
- (j) Ensure the protection and reuse of historic street finishes, furniture and features which contribute to the character of the ACA.

HE 16-19: Vernacular Heritage

- a) Protect, maintain and enhance the established character, forms, features and setting of vernacular buildings, farmyards and settlements and the contribution they make to our architectural, archaeological, historical, social and cultural heritage and to local character and sense of place.
- b) Cork County Council encourages best conservation practice in the renovation and maintenance of vernacular buildings including thatched structures through the use of specialist conservation professionals and craft persons. Development proposals shall be accompanied by appropriate documentation compiled by experienced conservation consultant.
- c) There will generally be a presumption in favour of the retention of vernacular buildings and encouragement of the retention and re-use of vernacular buildings subject to normal planning considerations, while ensuring that the re-use is compatible with environmental and heritage protection.

HE 16-20: Historic Landscapes

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

11.1.3.2.3 Cultural Heritage

HE 16-23: Cultural Heritage

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

HE 16-24: Naming of New Developments

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

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

- a) Encouraging development within the Gaeltacht and in the Gaeltacht Service Town of Macroom, which promotes, facilitates or complements the cultural heritage, including Irish language use;
- b) Encouraging development within the Gaeltacht and the Gaeltacht Service Town of Macroom, which provides employment or social facilities, especially, but not exclusively, where these are of relevance to local young people;
- c) Resisting development within the Gaeltacht, which would be likely to erode the cultural heritage (including the community use of Irish language), unless there are over-riding benefits for the long-term sustainability of the local community or for the proper planning and sustainable development of a wider area;
- d) Ensuring that where the County Council erects signs within the Gaeltacht, these have Irish as their primary language, unless there are positive and over-riding reasons for doing otherwise;
- e) Discouraging the exhibition of advertisements within the Gaeltacht which do not use Irish as their primary language;
- f) Consider the requirement for the use of demanding linguistic impact analyses with planning applications for particular major developments. These would be cases where the potential impact of the development on the use of Irish as the community language is not immediately apparent and pivotal in the determination of the application.

- g) Facilitate the preparation and implementation of local Gaeltacht Plans, Programmes and Initiatives, including Language Plans and Conservation Plans such as the Múscraí Heritage Plan, in the interests of the proper planning and sustainable development of Cork's Gaeltachts, provided that such plans are in keeping with Council policy.
- h) Encourage the use of the Irish language, not just in Gaeltacht areas but throughout the County, particularly with regard to service provision, planning and development and Council initiatives/activities.
- i) The use of the Irish language is promoted in the design of developments e.g. business advertising, recreational and community facilities are clearly identified and provided and shop-front signage should be in the Irish language;
- j) The Plan encourages collaboration between Gaeltacht stakeholders, Gaeltacht communities and State agencies in the future planning and development projects to ensure the protection and promotion of the Irish language as the community language

11.1.3.3 **Kerry County Development Plan 2015-2021**

The Kerry County Development Plan 2015-21 outlines a number of objectives relating to archaeology and built heritage as follows.

11.1.3.3.1 **Archaeological Heritage including Archaeological Landscapes**

It is an objective of the Council to :-

H-25 Protect and preserve the underwater archaeological heritage of the County. In assessing proposals for development, the Council will take account of the rivers, lakes, intertidal and sub-tidal environments.

H-26 Secure the preservation of all sites, features and objects of archaeological interest within the County. In securing such preservation the Council will have regard to the advice and recommendations of the National Monuments Service, Department of Arts Heritage & the Gaeltacht, the National Museum of Ireland and the County Archaeologist.

H-27 Ensure that Proposed Development (due to location, size or nature) which may have implications for the archaeological heritage of the County are subject to an Archaeological Assessment which may lead to further subsequent archaeological mitigation – buffer zones/exclusion zones, monitoring, pre-development archaeological testing, archaeological excavation and/or refusal of planning. This includes areas close to archaeological monuments, extensive in area (half hectare or more) or length (1km or more) and development that requires an Environmental Impact Statement.

H-28 Ensure the protection and preservation of archaeological monuments and features, as yet not listed in the Record of Monuments & Places (RMP), Sites & Monuments Record (SMR) and as yet unrecorded, through ongoing review of the archaeological potential of the Plan area. In securing such protection the Council will have regard to the advice and recommendations of The National Monuments Service, Department of Arts, Heritage & the Gaeltacht and the County Archaeologist.

H-29 Ensure that development (including forestry, renewable energy developments and extractive industries) within the vicinity of a recorded monument, zone of archaeological potential or archaeological landscape does not detract from the setting of the feature and is sited and designed appropriately and sympathetically with the character of the monument/feature/landscape and its setting.

H-30 Ensure the active protection of the 18 identified, significant archaeological landscapes outlined in Volume 2 with particular emphasis on the landscape settings, views of and from the landscapes and monument/feature intervisibility within these landscapes.

H-31 Protect archaeological/historical graveyards within the County and to encourage and promote their maintenance in accordance with legislation, conservation principles and best practice.

H-32 Protect and preserve the industrial archaeological heritage of the County as reflected in such sites as mills, lighthouses, harbours, Valentia cable station etc. Proposals for refurbishment works or redevelopment of these sites should be subject to a full architectural and archaeological assessment.

H-33 Promote public awareness and facilitate appropriate advisory guidance in relation to the protection of the archaeological heritage of the County.

11.1.3.3.2 **Architectural Heritage**

H-34 Protect the architectural heritage and promote conservation-led regeneration and re-use of buildings, where appropriate.

H-35 Promote and improve the understanding of the architectural heritage of Co. Kerry.

H-36 Facilitate and exercise appropriate advisory guidance in relation to maintenance and development of the architectural heritage.

H-37 Encourage the retention of original building fabric such as cut stone, thatch, timber sash windows, timber doors, lime mortar, natural slate, render and joinery detailing.

H-38 Ensure that any development, modification, alteration, or extension affecting a protected structure and/or its setting:-

- Is appropriate in terms of the proposed materials, scale, density and layout,
- Addresses the issue of reversibility,
- Respects the original design plan and form,
- Demonstrates an understanding of the historical importance of the building and its setting and does not detract from the special character / interest of the protected structure,
- Deal sensitively with historically important features and fittings,
- Takes account of any protected species that may utilise the structure and accordingly mitigate any impacts on the species.

H-39 Ensure that the special interest of protected structure is not gradually eroded by minor alterations.

H-40 Ensure that measures to upgrade the energy efficiency of protected structures and historic buildings do not damage the historic fabric.

H-41 Encourage owners or prospective owners of protected structures to seek Section 57 Declarations in order to provide certainty about the type of works that may be undertaken without planning permission.

H-42 Promote the positive enhancement of existing ACAs and review the possibility of designating additional ACAs as is deemed appropriate. ACA designation helps to protect existing street layouts, historic building lines and traditional plot widths.

H-43 Ensure that any new development or alteration to a building within or adjoining an Architectural Conservation Area positively enhances the character of the area and is appropriate in terms of the proposed materials, scale, density and layout, proportions, plot ratio and building lines.

H-44 Ensure a balanced approach to maintenance and development of the architectural heritage, having regard to both the qualities of the given architectural context and the modern requirements to

safety, comfort and usage, thus facilitating continuity of use of the architectural heritage in a sustainable manner.

H-45 Encourage the protection, appreciation, retention and appropriate renovation of vernacular buildings throughout the County.

H-46 Facilitate the compilation of a comprehensive survey over the term of the plan of vernacular architecture in the south and west of the County to ensure that these buildings are identified and adequately protected in the record of protected structures.

H-47 Review the Record of Protected Structures including taking into consideration ministerial recommendations arising from the National Inventory of Architectural Heritage and add structures of special interest as appropriate, including industrial, maritime or vernacular heritage.

H-48 Implement statutory protection against unauthorized works, demolition, deterioration, dereliction or any alteration which would affect the character or special interest of a protected structure.

H-49 Support the designation of Listowel as a Historic Town.

The Kerry County Development Plan 2015-2021 also includes the Record of Protected Structures (RPS) for the county.

11.1.3.4 Draft Kerry County Development Plan 2022-2028

The Draft Kerry County Development Plan 2022-2028 was also consulted and contains the following information on the archaeological landscapes of the County and of The Paps which is situated just over 1km to the north and north-west of the Proposed Development boundary.

'The County has a richness of archaeological heritage with a number of very significant archaeological landscapes around the County. These landscapes are of Kerry, Regional, National and in some cases International significance (KS, RS, NS & IS) and every effort should be made to ensure their protection and preservation. The nineteen landscapes identified are described in detail in below. These important landscapes are listed for special protection with special emphasis on objectives that protect the monuments and their landscape settings but also their visual aspect and monument inter-visibility.'

'13. The Paps – Annaghbeg, Annaghmore, Doocarrig More, Gortacoreen, Gortderrig, Shrone More, Shrone Beg, Gortnagane, Raheen, Awnaskirtaun, Knocknabro, Knockagowan, Derrynafinnia, Derrymaclavode, Killeen, Carrigaveema & Coolcurtoga. (IS) According to legend The Paps are the earthly manifestation of the breasts (Paps) of the Mother Goddess Anu and would have been venerated as such throughout prehistory. The cairns on the summits of the mountains are likely to contain small passage tombs, while other features on the summit are also likely of similar date. The slopes of the mountains and surrounding area are littered with hutsites, enclosures, megalithic structures, triple banked barrow etc. While the locally important Christian focus at *'The City' in Gortnagane is likely to be of prehistoric origin also given the name Caher Crov Dearg and the likely association with the triadic mother goddess in the form Badb Catha or Raven of Battle. These sacred mountains and their surrounding archaeological, mythological and historic landscape are still venerated, albeit in Christian guise, to this day.'*

11.1.4 Location and Topography

The Proposed Development is located predominantly in County Kerry, with some elements in County Cork and is situated c. 3km north-west of the village of Ballyvourney (Figure 11-1). It is located along the lower slopes of the Derrynasaggart Mountain range at elevations of between 250m and 480m OD.

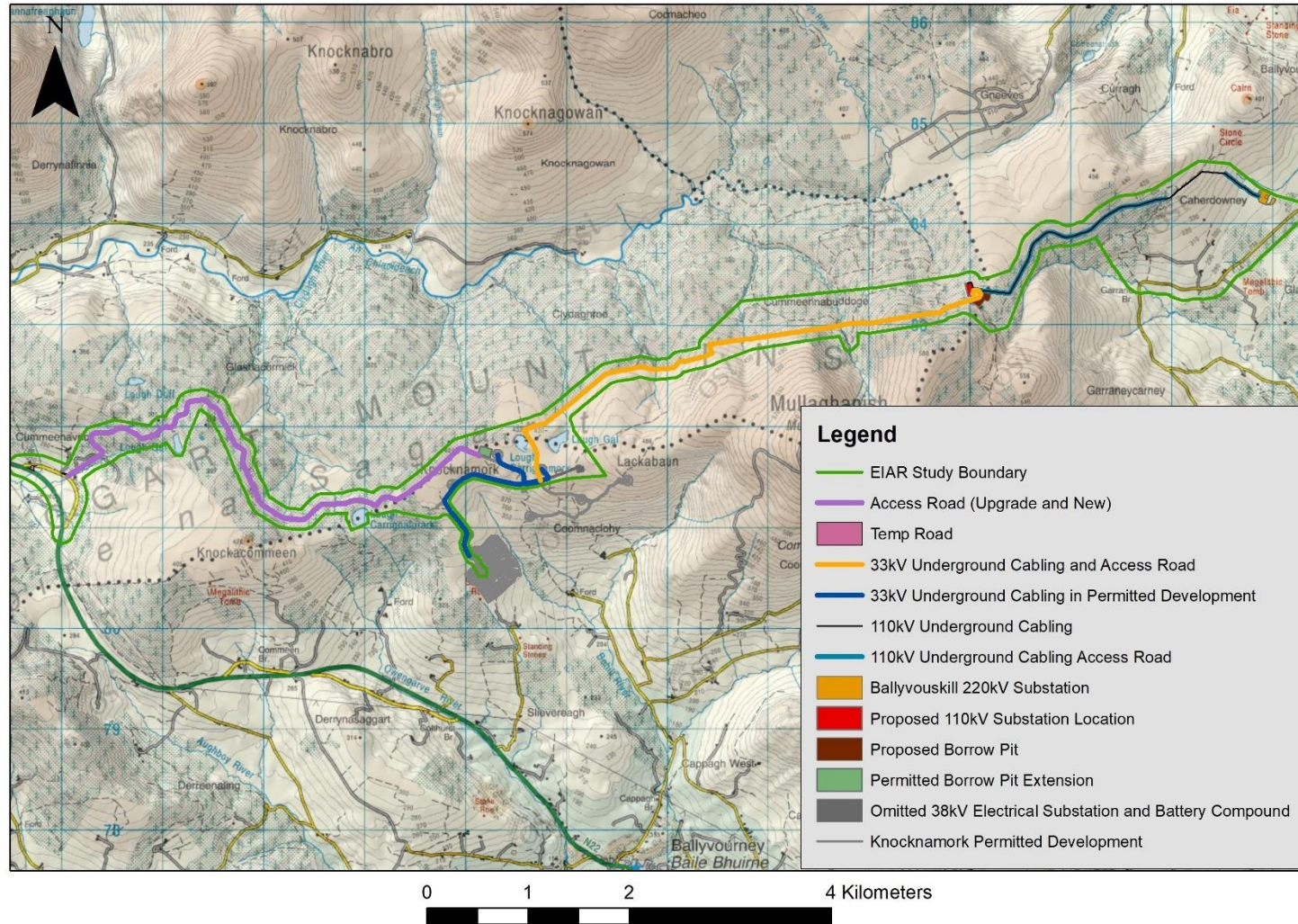


Figure 11-1: Site location map.

Tracts of commercial forestry and adjacent open mountainous terrain occupy much of the Proposed Development site, with existing forestry and agricultural tracks also present providing access to the site. The summit of The Paps are located c. 3.7-4km to the north-west of the EIAR boundary while the summit of Mullaghanish is situated c. 1km to the south of same.

11.2 Methodology

The assessment of the archaeology, architecture and cultural heritage of the Proposed Development site included GIS mapping and desk-based research. Field inspection of part of the proposed underground cabling routes was undertaken in 2018 during field work for the Permitted Development (Ref. No. 19/4972). Further field inspection of the Proposed Development site was carried out in October 2021. A desk-based study of the Proposed Development site was initially undertaken in order to assess the archaeological, architectural and cultural heritage potential of the area and to identify constraints or features of archaeological/cultural heritage significance within or near to the Proposed Development. Particular reference was made to any new cultural heritage constraints identified during previous field work in the area in addition to those included in the statutory and non-statutory archaeological and architectural datasets.

11.2.1 Geographical Information Systems

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

11.2.2 Desktop Assessment

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

The primary source and base-line data for the architectural assessment was the consultation of the Record of Protected Structures and the National Heritage of Architectural Heritage for Counties Cork and Kerry.

The following sources were consulted for this assessment:

- > The Record of Monuments and Places (RMP)
- > The Sites and Monuments Record (SMR)
- > The Topographical Files of the National Museum of Ireland (www.heritagemaps.ie)
- > First edition Ordnance Survey maps
- > Aerial photographs

- > Database of Irish Excavations
- > Kerry County Development Plan 2015-2021
- > Draft Kerry County Development Plan 2022-2028
- > Cork County Development Plan 2022
- > National Inventory of Architectural Heritage (NIAH)

11.2.2.1 Record of Monuments and Places

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

11.2.2.2 Cartographic Sources and Aerial Photography

The 1st and 2nd edition OS maps for the area were consulted, where available, as was aerial photography.

11.2.2.3 Topographical Files - National Museum of Ireland

Details relating to finds of archaeological material and monuments in numerous townlands in the country are contained in the topographical files held in the National Museum of Ireland. The database of topographical files was consulted on www.heritagemaps.ie.

11.2.2.4 Archaeological Inventory Series

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

11.2.2.5 County Development Plans

The current and draft County Development Plans were consulted for the schedule of buildings (Record of Protected Structures) and items of cultural, historical or archaeological interest which may be affected by the Proposed Development. The development plans also outline policies and objectives relating to the protection of the archaeological, historical and architectural heritage landscape of County Kerry and Cork. The dataset for the Cork and Kerry Record of Protected Structures was obtained from ArcGIS online published datasets and added to the base mapping for the development in order to accurately assess any potential impacts on such structures.

11.2.2.6 Database of Irish Excavation Reports

The database of Irish excavations contains annual summary accounts of all excavations carried out under license. The database is available on line at www.excavations.ie and includes excavations from 1985 to 2022. This database was consulted as part of the desktop research for this assessment to

establish if any archaeological excavations had been carried out within or near to the Proposed Development site.

11.2.2.7 National Inventory of Architectural Heritage (NIAH)

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

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

11.2.3 Assessment of Likely Significant Effects

The likely effects on the existing archaeological and cultural heritage environment are assessed using the criteria as set out in the EPA guidelines (2022). The following terminology is used when describing the likely effects of the Proposed Development from a Cultural Heritage perspective.

11.2.3.1 Types of Impact

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

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

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

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

11.2.3.1.1 Magnitude of Effects (Significance)

- Profound: Applies where mitigation would be unlikely to remove adverse effects. Reserved for adverse, negative effects only. An effect which obliterates sensitive characteristics. These effects arise where an archaeological site is completely and irreversibly destroyed.
- Very Significant: An effect which by its character, magnitude, duration or intensity significantly alters most of the sensitive aspect of the environment.
- Significant: An effect which by its character, magnitude, duration or intensity alters a sensitive aspect of the environment. An effect like this would be where part of a site

would be permanently impacted upon, leading to a loss of character, integrity and data about an archaeological site.

- Moderate: An effect that alters the character of the environment in a manner that is consistent with existing and emerging baseline trends. A moderate effect arises where a change to an archaeological site is proposed which though noticeable, is not such that the integrity of the site is compromised and which is reversible. This arises where an archaeological site can be incorporated into a modern day development without damage and that all procedures used to facilitate this are reversible.
- Slight: An effect which causes noticeable changes in the character of the environment without affecting its sensitivities. A slight effect not directly impact or affect an archaeological site.
- Not Significant: An effect which causes noticeable changes in the character of the environment but without significant consequences.
- Imperceptible: An effect on an archaeological site capable of measurement but without noticeable consequences.

11.3 Existing Environment

11.3.1 Archaeological Heritage

11.3.1.1 General Archaeological Overview

The Proposed Development is located in an area of counties Cork and Kerry which contain a wide variety of monument types which span in date range from the prehistoric period through to the post-medieval period. These monuments include hut sites, many of which are located in the Paps archaeological landscape. Prehistoric monuments such as standing stones, megalithic tombs and stone circles are also present in addition to fulacht fiadh. St Gobnait's Monastic Site is also located in Ballyvourney c. 4km to the south-east of the EIAR study boundary. A general overview of the monument types located within the surrounding landscape is presented below.

11.3.1.1.1 The Prehistoric Period

Megalithic Tombs

Megalithic tombs are burial chambers, sometimes with an antechamber or small closed end-chamber. They are roofed by slabs laid directly on the side-walls which often have one or more rows of outer-walling. Unclassified examples of megalithic tombs cannot be classified as a court tomb, portal tomb, passage tomb or wedge tomb. These may date from the Neolithic to the Bronze Age (c. 4000 - c. 500 BC).

Standing Stones

Standing Stones are a common feature of the prehistoric Irish landscape consisting of single, upright stones. They are known by various names such as gallán, dallán and long stone. All standing stones are not necessarily of the same date or have the same function. Excavations of standing stones have shown that some mark prehistoric burials and some may have had a ritual or commemorative function. They have similar axis to standing stone pairs and may therefore date to the Bronze Age (2400-500BC).

Hut Sites

The primary function and date of hut sites is slightly ambiguous. Examples of hut sites are known throughout the country, particularly in upland regions, and are frequently associated with the practice of transhumance or booleying. Transhumance refers to the practice of the seasonal movement of people and their livestock typically to higher pastures in the summer and lower valleys in the winter. In Ireland this practice is known as booleying and is believed to date to the early medieval period, although it continued well into the nineteenth and early twentieth century.

A number of hut sites were recorded on the lower southern slopes of the western Pap Mountain in 2001 (Coyne and Connolly 2002, 12-13). Two huts were subsequently investigated using limited test trenching in an attempt to glean more information regarding their date and function. A stone axe head and a perforated stone disk were recovered from a thin habitation or floor layer within Hut Site A indicating a prehistoric date for this structure. It is suggested that the other huts recorded on the slope of the mountain may be contemporary with Hut Site A and that the builders of the mountaintop cairn on the Paps may have inhabited the hut sites on the lower slopes of the mountains (*ibid.*, 14). A similar inference is drawn from the cairn and numerous hut sites at Turlough Hill in the Burren, Co. Clare (Coyne and O'Mahony, 2008).

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

11.3.1.1.2 *The Early Medieval Period*

Ringforts, Enclosures, Souterrains

Ringforts comprise earthen monuments while cashels take a similar form to the latter but are constructed using stone. Enclosures may represent the remains of ringforts or cashels but may not retain enough features to classify them as such or fall outside the acceptable size range for these monuments. Ringforts consist of a circular or roughly circular area enclosed by an earthen bank formed by material thrown up from the digging of a concentric ditch on its outside. Ringforts are usually enclosed by a single bank (univallate) while bivallate or trivallate ringforts i.e. those enclosed by double or triple rings of banks are less common. The number of banks and ditches enclosing these monuments are considered to reflect the status of the site, rather than the strengthening of its defences. Archaeological excavation has shown that the majority of ringforts functioned as enclosed farmsteads, built during the Early Christian period (5th – 9th century A.D.). Excavation within the interior of the monuments has traced the remains of circular and rectangular dwelling houses as well as smaller huts probably used to stall animals. The enclosing earthworks would also have protected domestic livestock from natural predators such as wolves and foxes.

Souterrains are frequently associated with ringforts, cashels and enclosures. Souterrains derive their name from the French *sous terrain* meaning 'under ground' and comprise an underground structure consisting of one or more chambers connected by narrow passages or creepways, usually constructed of drystone-walling with a lintelled roof over the passages and a corbelled roof over the chambers. Most souterrains appear to have been built in the early medieval period by ringfort inhabitants (c. 500 - 1000 AD) as a defensive feature and/or for storage.

11.3.1.1.3 Sites with religious or ritual association

Holy Wells

These sites comprise a well or spring, though in some unusual cases a natural rock basin, which usually bears a saint's name and is often reputed to possess miraculous healing properties. Holy wells may have their origins in prehistory but are associated with devotions from the medieval period (5th-16th centuries AD) onwards.

Bullaun Stones

Bullaun stones may also have religious associations. The term 'bullaun' (from the Irish word 'bullán', which means a round hollow in a stone, or a bowl) is applied to boulders of stone or bedrock with hemispherical hollows or basin-like depressions, which may have functioned as mortars. They are frequently associated with ecclesiastical sites and holy wells and so may have been used for religious purposes. Other examples which do not appear to have ecclesiastical associations can be found in bedrock or outcrop in upland contexts, often under blanket bog, and are known as bedrock mortars. They date from the prehistoric period to the early medieval period (5th-12th centuries AD).

11.3.1.1.4 St Gobnait's Monastic Site at Glebe Townland

Twelve monuments are included in this complex (CO058-034/001-012) and the site has strong cultural associations and is a site of pilgrimage and of National Significance. There is a strong pattern of Early Christian settlement in Múscraí. The most famous saint associated with the region is St. Gobnait, the sacred abbess of the monastery at Baile Bhuirne. It is thought that her church was established here in the sixth century most likely by St. Abban, who in local legend is thought to have been Gobnait's brother. Her pattern day is still celebrated on the 11th of February, the All - Ireland Review of 1900 records it as: 'St. Gobnet, Virgin and Abbess of Ballyvourney, Co. Cork (sixth century). It is related of her that she drove away a haughty invader by directing a swarm of bees against him. A fair and patron was held in her honour, at which the young men used to assemble on an eminence and invoke her to send them wealthy partners within the ensuing twelve months'. Folklore relates that the visiting sick would be cured by Gobnait and that the saint, who had a strong relationship with bees, used the properties of honey in the treatment of illness and healing of wounds. A shrine and holy well is carefully maintained where rosary beads, holy pictures and other personal offerings testify to an enduring devotion to Gobnait at Baile Bhuirne.

11.3.1.2 Proposed 110kV and 33kV Underground Cabling Routes

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

The Proposed Development includes underground electrical cabling (110kV) from the proposed 110kV electrical substation to the existing 220kV Ballyvouskill electrical substation and underground electrical cabling (33kV) connecting the Permitted Development (Ref. No. 19/4972) to the proposed 110kV electrical substation. The underground electricity cable will be installed predominantly following existing or permitted tracks and roads with some sections traversing areas of upland blanket bog, wet heath and grassland.

The proposed 33kV underground cabling route extends through the townlands of Slievereagh and Coomnacloghy, Co. Cork and Clydaghroe and Cummeennabuddoge, Co. Kerry. The proposed 110kV underground cabling route extends through the townlands of Cummeennabuddoge, Co. Kerry and Caherdowney, Co. Cork.

11.3.1.2.1 **National Monuments in State Care and Monuments Subject to Preservation Orders**

No National Monuments in State Care are located along the proposed 110kV or 33kV underground electrical cabling routes. The nearest National Monument comprises Knocknakilla stone circle (NM No. 420) in County Cork which is situated c. 3.9km to the east of the eastern end of the proposed 110kV underground electrical cabling route (Figure 11-2). This National Monument will not be directly or indirectly impacted by the proposed underground electrical cabling routes.

No monuments subject to a Preservation Order are located within 100m of the proposed 33kV or 110kV underground electrical cabling routes. The nearest monuments subject to a Preservation Order are again located in County Cork, c. 2.4km east of the eastern end of the proposed 110kV underground electrical cabling route (Figure 11-3). They comprise a multiple stone circle (PO No. 171/1941) and a wedge tomb (PO No. 170/1941) in the townland of Glantane East. These monuments will not be directly or indirectly impacted by the proposed underground electrical cabling routes.

11.3.1.2.2 **Recorded Archaeological Monuments**

No recorded monuments are located within 100m of the proposed 110kV or 33kV underground electrical cabling routes. The nearest recorded monument to the proposed 33kV underground electrical cabling route comprises standing stone CO058-080— which is situated in rough pasture c. 304m to the south of the southern end of the proposed cabling (Figure 11-4). The standing stone is described on the Historic Environment Viewer (HEV) as follows:

CO058-080—

Class: Standing stone

Townland: AN SLIABH RIABHACH

Scheduled for inclusion in the next revision of the RMP: Yes

Description: On hillside pasture on southern slopes of Derrynasaggart mountains, adjacent to a conifer plantation. The stone, (H 3m; Wth 2m, D 0.4m), is on an alignment of NE-SW with packing stones at base.

Compiled by: Matt Kelleher based on information supplied by Howard Grice

Date of upload/revision: 15 March 2022



Plate 11-1: Standing Stone CO058-080— looking NNW.

The nearest recorded monument to the proposed 110kV underground electrical cabling route comprises a five stone circle CO048-056— which is situated in the townland of Ballyvouskill c. 455m to the north of the proposed 110kV underground electrical cabling route (Figure 11-5). The monument is described on the HEV as follows:

CO048-056—

Class: Stone circle - five-stone

Townland: BALLYVOUSKILL

Scheduled for inclusion in the next revision of the RMP: Yes

Description: In cut-away bog, on saddle between two hills at NE end of Derrynasaggart Mountains. Probable axial stone and four prostrate slabs survive. Estimated main axis is aligned WNW-ESE. Circle is surrounded by fosse (D c. 0.3m; Wth 2m-2.5m), c. 12m diameter from outer rim to outer rim. Slight traces of external bank visible along E side.

The above description is derived from the published 'Archaeological Inventory of County Cork. Volume 3: Mid Cork' (Dublin: Stationery Office, 1997). In certain instances, the entries have been revised and updated in the light of recent research.

Date of upload/revision: 14 January 2009

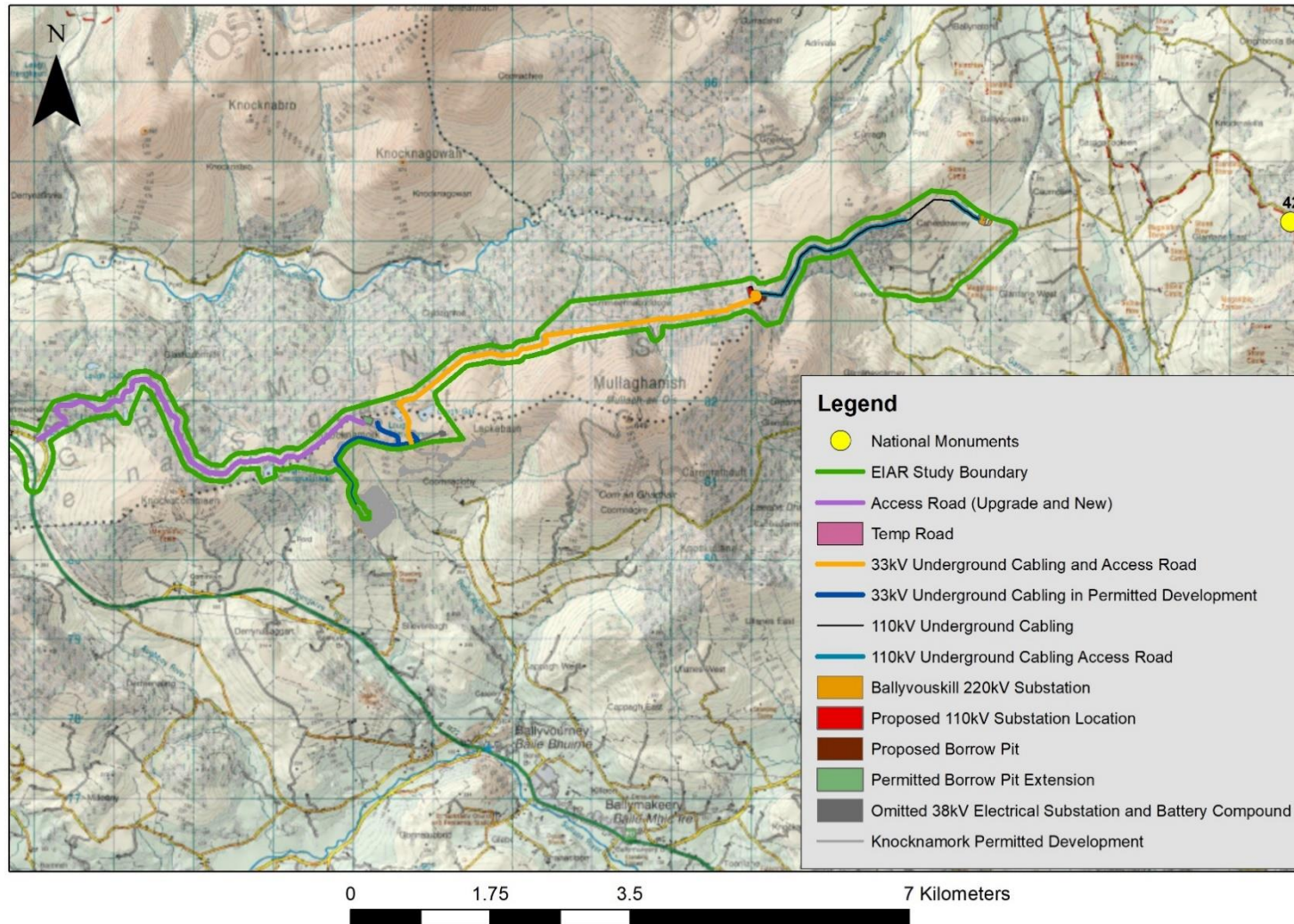


Figure 11-2: Proposed 110kV and 33kV underground cabling routes in relation to nearest National Monument No. 420.

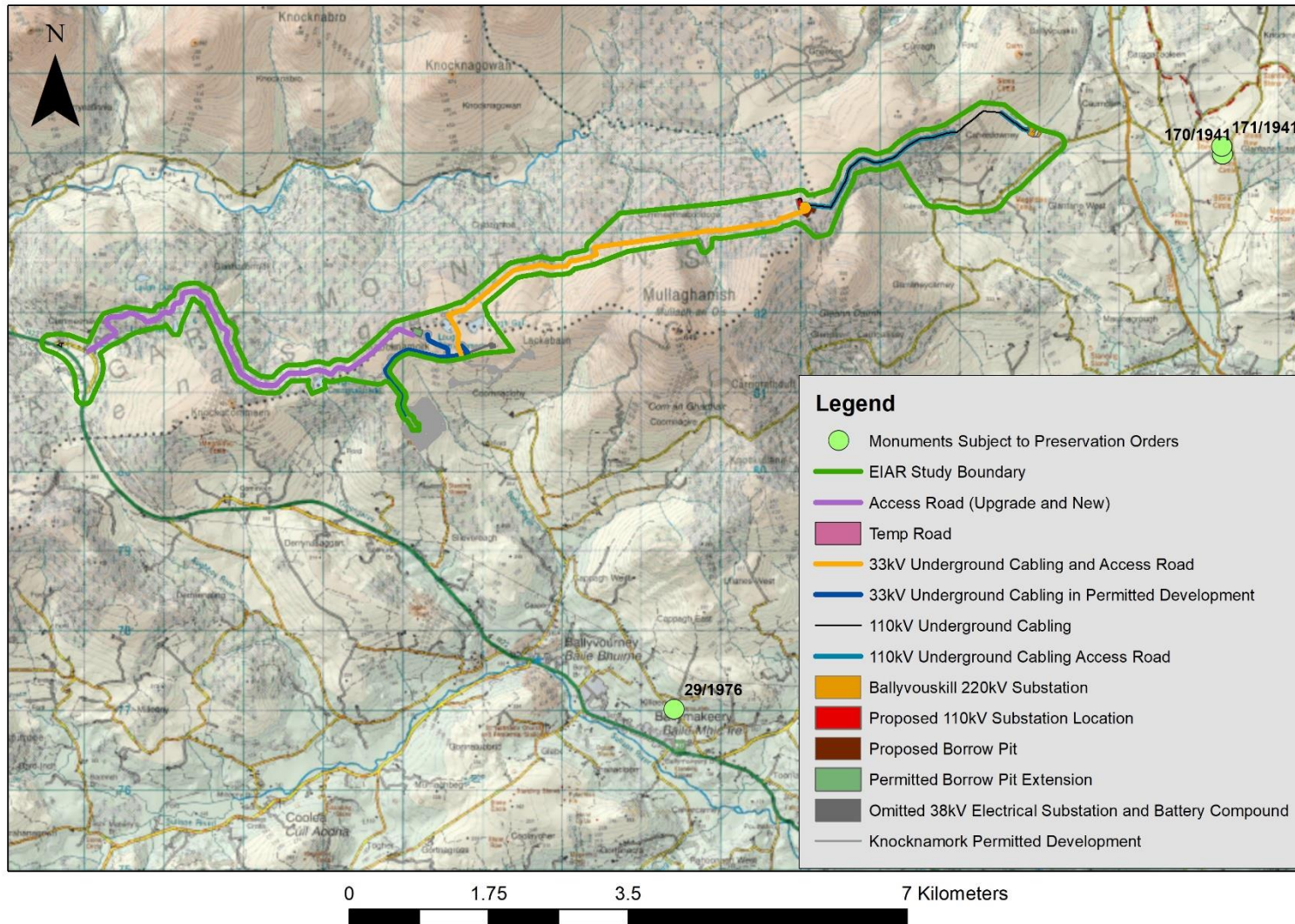


Figure 11-3: Proposed 110kV and 33kV underground cabling routes in relation to nearest monuments subject to Preservation Orders.

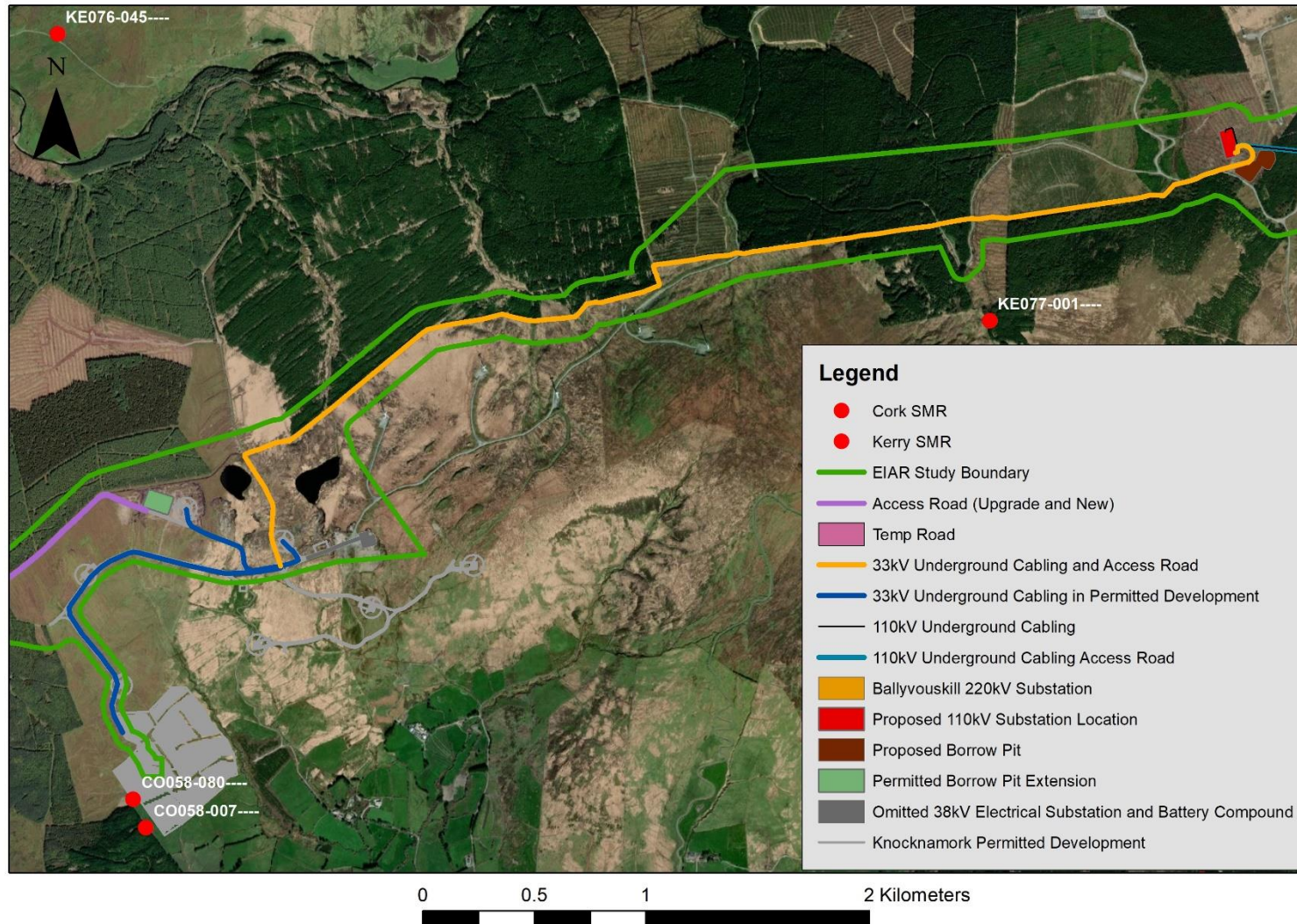


Figure 11-4: Proposed 33kV underground cabling route in relation to nearest recorded monument.

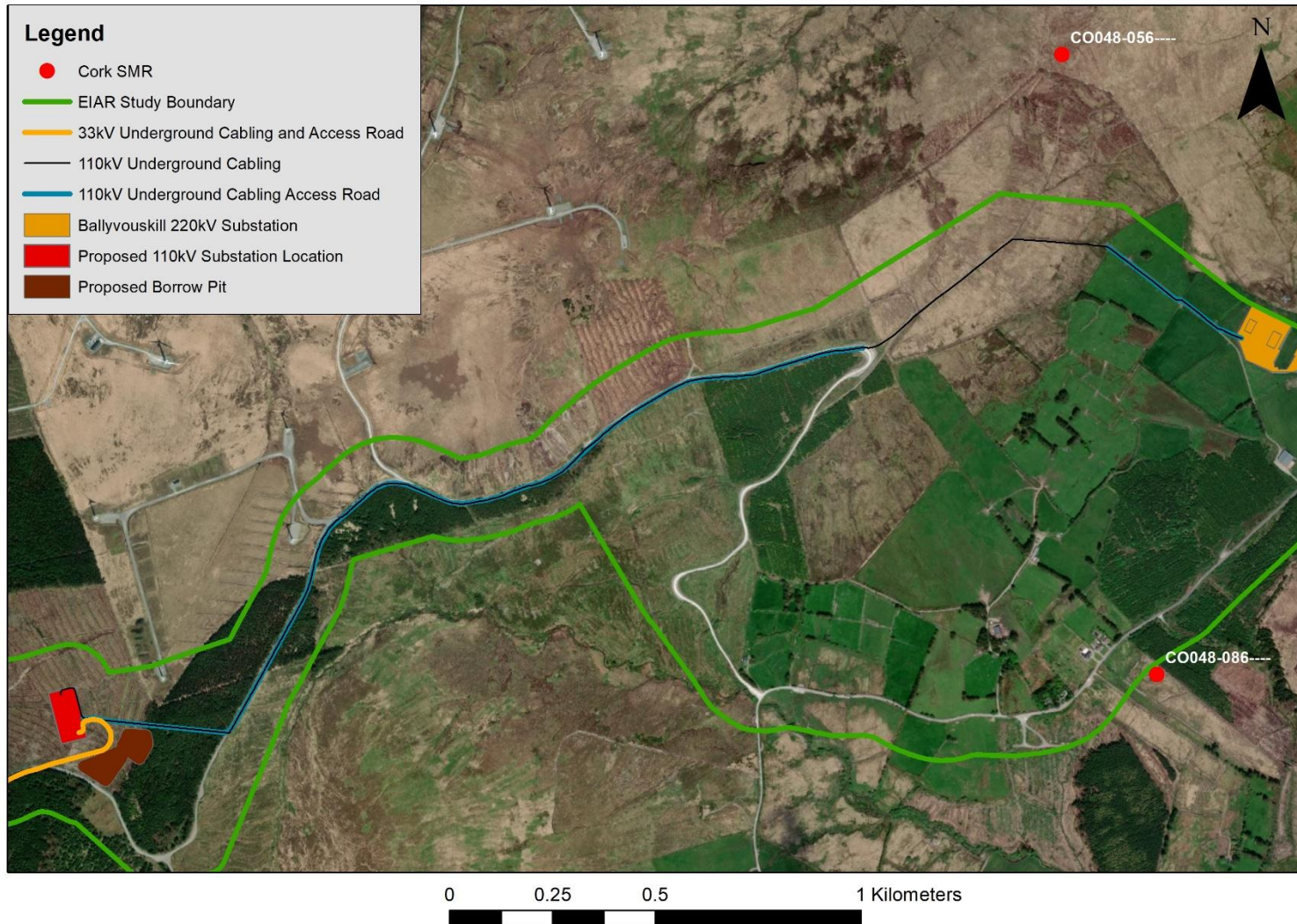


Figure 11-5: Proposed 110kV underground cabling route in relation to nearest recorded monuments.

11.3.1.2.3 Newly Recorded Archaeological Monuments

A number of previously unrecorded archaeological monuments were noted in the vicinity of the Proposed Development site during the walk-over survey carried out by Tobar Archaeological Services for the Permitted Development (Ref. No. 19/4972). The monuments largely comprised standing stones and a possible stone row. The majority of these monuments have not been added to the Sites and Monuments Record (SMR) and therefore do not appear on the HEV. Three of the stones (St st 3, 4 and 5) are located within 100m of the proposed 33kV underground electrical cabling route (Figure 11-6 and Figure 11-7). They comprise a possible standing stone pair and an adjacent single standing stone and are described as follows:

Three standing stones, hereafter St St 3, 4 and 5 were noted immediately north-west of an existing track along which the proposed 33kV underground electrical cabling route will extend. The stones comprise two upright monoliths and one semi-upright stone aligned in a row in grass-covered upland blanket bog. Standing stones 3 and 4 are located close together at the north-east end of the group, c. 4.1m apart. Given their proximity these stones may comprise a standing stone pair, with St st 5 comprising a single standing stone further (c. 17m) to the south-west.

Dimensions and alignment:

St st 3 – H. 1.16m, W. 0.8m, Th. 0.3m, aligned NE/SW.

St st 4 – H. 1m, W. 1.35m, Th. 0.33m, aligned N/S.

St st 5 – H. 1.1m, W. 1m, Th. 0.23m, aligned NE/SW.



Plate 11-2: Standing stones St st 3, 4 and 5 located adjacent to existing track along which the proposed 33kV underground electrical cabling route will extend (within the Permitted Development footprint), , looking SW.



Plate 11-3: Possible standing stone pair St st 3 and 4 (St st 4 in foreground), looking NE.



Plate 11-4: St st 5, looking NE towards St st 3 and 4.

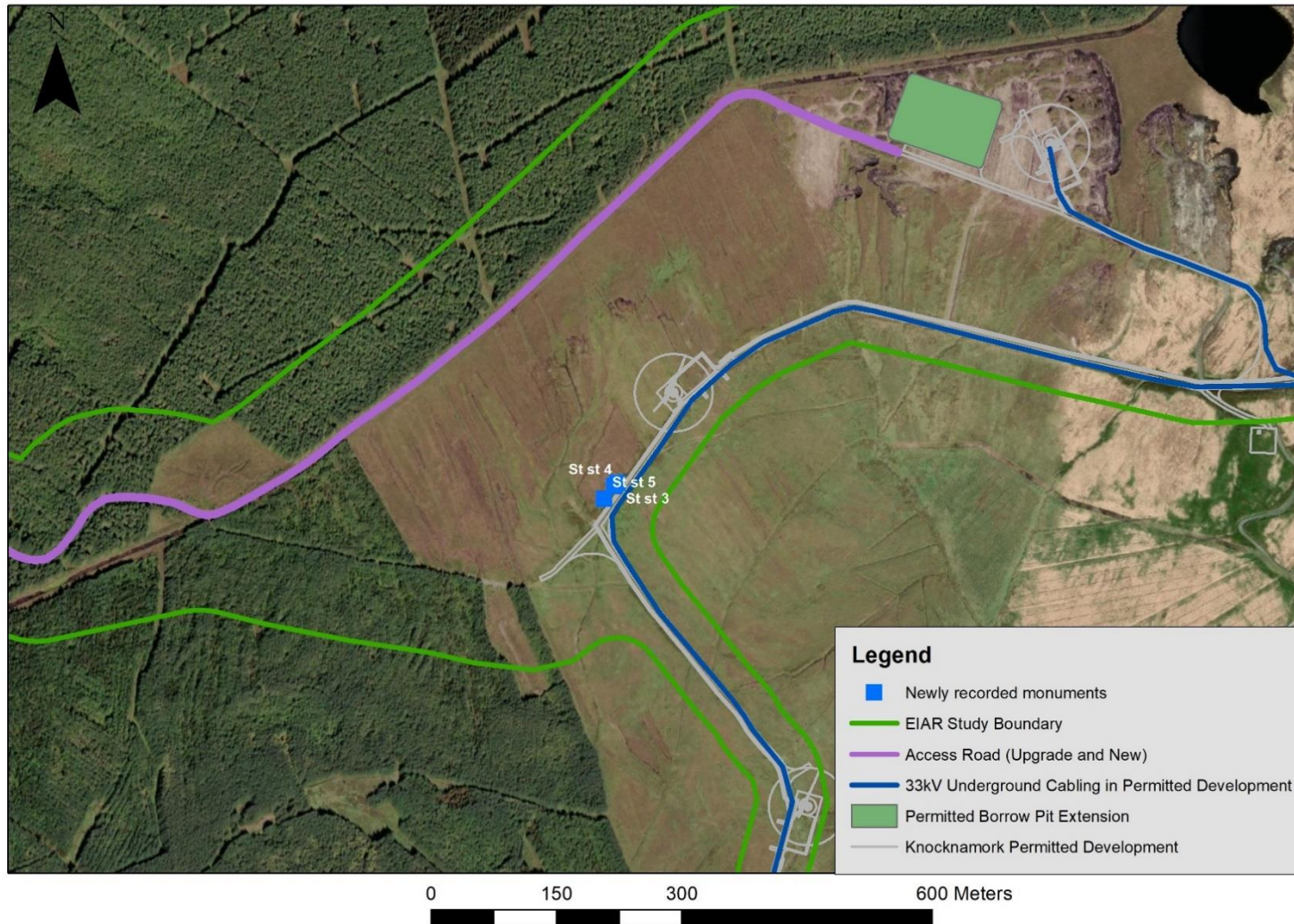


Figure 11-6: Newly recorded standing stones located to NW of the proposed 33kV underground cabling route (within the Permitted Development footprint).



Figure 11-7: Detail of location of Standing stones 3, 4 and 5 in relation to the adjacent proposed 33kV underground cabling route (within the Permitted Development footprint).

Table 11-1: Newly recorded monuments within 100m of the proposed 33kV underground cabling route.

Name	Description	Townland	ITM E	ITM N	Distance to Cable route
St st 3	Standing Stone Pair (with St St 4)	Slieveragh (Cork)	517772	581372	15m
St st 4	Standing Stone Pair (with St St 3)	Slieveragh (Cork)	517768	581368	16m
St st 5	Standing Stone	Slieveragh (Cork)	517756	581353	17m

11.3.1.2.4 Archaeological investigations undertaken along the Proposed Underground Electrical Cabling Routes

The townlands through which the proposed 110kV and 33kV underground electrical cabling routes extend were checked in the database of Irish excavations (www.excavations.ie) to ascertain if any archaeological investigations which produced positive results were carried out. A number of entries for Slieveragh townland were returned and relate to archaeological investigations and excavations undertaken for the N22 Baile Bhuirne to Macroom Road Scheme. The summaries as presented below are taken directly from www.excavations.ie.

2017:397 - N22 Baile Bhuirne to Macroom Road Scheme (Lot 1) - An Cheapach Thiar, An Cheapach Thoir, An Sliabh Riabhach, Baile Mhic Íre, Cúil na Cathrach, Doire na Sagart, Tonn Láin, Co. Cork, Cork

County: Cork Site name: N22 Baile Bhuirne to Macroom Road Scheme (Lot 1) - An Cheapach Thiar, An Cheapach Thoir, An Sliabh Riabhach, Baile Mhic Íre, Cúil na Cathrach, Doire na Sagart, Tonn Láin, Co. Cork

Sites and Monuments Record No.: CO058-045 Licence number: E004865

Author: Patricia Long, Rubicon Heritage Services Ltd

Site type: Various

ITM: E 521160m, N 577537m

Test excavations were carried out on behalf of Cork County Council on Lot 1, being the western (roughly) third of the scheme. The works were undertaken as part of Stages (i) of the archaeological services contract prior to the commencement of construction of the N22 Baile Bhuirne to Macroom Road Scheme, Co. Cork. Lots 2 and 3 of the scheme will be completed and reported on separately, under separate contracts.

The Minister for Arts, Heritage, Regional Rural and Gaeltacht Affairs, following consultation with the National Museum of Ireland, issued Directions to Cork County Council for test excavation works relating to the road development (A074). The registration number, E004865, was allocated by the National Monument Service for test excavation of Lot 1 of the proposed route, under the direction of Patricia Long of Rubicon Heritage Services Ltd assisted by directors James Hession, Stuart Elder and John O'Connor.

An Environmental Impact Study was carried out on the preferred route, including a chapter on cultural heritage (IAC 2009). A number of archaeological and architectural heritage constraints were identified along the route of the road and a number of recommendations were set out for the treatment of the sites and potential sites identified. In line with the recommendations of the EIS this report presents the

results of standard and wetland test excavations. Separate reports will be prepared for townland boundary and architectural heritage survey, metal detecting survey and underwater surveys which were also included in the Archaeological Consultancy Services contract. Geophysical survey had been carried out on the route prior to the commencement of the test trenching (Bonsall et al. 2017, Shanahan and Gleeson 2017).

Due to ecological constraints, the Lot 1 Stage (i) trenching was divided into Phase 1 and Phase 2. Phase 1 test trenching along the route was carried out between 22 May and 19 June 2017 while Phase 2 was carried out between 29 January and 28 February 2018. Phase 2 testing also included testing the corridor of a 110 KV powerline that runs within the roadtake at the western end. The route was divided into five areas (Area 1-5) and test trenches totalling approximately 12.02% of the lands made available in Phase 1 and 6.75% of the land in Phase 2 were excavated, which was 10.5% of the total lands made available.

During standard and wetland Stage (i) test trenching in Phase 1 a total of 16 areas of archaeological potential were identified. One of these was related to CO058-045, where the presence of a ditch and bank relating to a partly levelled ringfort were confirmed. The others were previously unknown, except for one which was noted as a possible burnt mound in the EIS (SAP1). During Phase 2 a further five areas of potential were identified; four of these were previously unknown sites. The remaining site represents additional archaeology at Cappagh East 2 within a stream exclusion zone which was trenched during Phase 2.

A total of 20 archaeological sites have been identified during test excavation in advance of the N22 Baile Bhuirne to Macroom Road Scheme in Lot 1.

Nine of the sites seem to represent prehistoric activity in the form of burnt mounds (Slieveragh 1 and 2, Cappagh East 2, Killeen 2, 3 and 5 and Ballymakeery 2, Toonlane 1 and 5). These sites could date from any time between the Neolithic period and the Iron Age. Slieveragh 1, 2 and Ballymakeery 2 contain mounds that seem very well preserved while the others have been extensively truncated by agricultural activity.

Three of the sites contained probable charcoal production pits which are likely to date to the Iron Age or early medieval period (Cappagh West 1, Cappagh East 1 and Ballymakeery 5). The pits at Cappagh West and Cappagh East, if they are charcoal production pits, are large examples of these features.

Evidence of metalworking in the form of slag was found at two sites and these are also likely to be Iron Age or early medieval in date (Killeen 1 and Toonlane 2). Killeen 1 is located in close proximity to an upstanding ringfort outside of the CPO and may be related to it.

A portion of an enclosure currently classified as an early medieval ringfort has also been identified (Ballymakeery 1). This site was known in advance of the archaeological investigations and further work should be able to confirm its nature and date.

The other five sites (Killeen 4, Ballymakeery 3 and 4, Toonlane 3 and 4) contained pits, post-holes and small linear features but there is currently no evidence to date the activity represented.

Further excavation will allow a full discussion on the past activity represented on the route of the road.

All the sites identified are within the proposed route of the new road and would suffer a direct and severe impact during construction. It is recommended that a suitable area around each archaeological area is stripped of topsoil to further define the nature and extent of the site. Where archaeological remains are confirmed, and where they cannot be preserved in situ, it is recommended that they be excavated prior to construction.

Bonsall, J., Grimson, H. and Garner, U. 2017 N22 Baile Bhuirne to Macroom Road Scheme. Archaeological Consultancy Services Stage (i) Geophysical Survey (R0450), 2 vols. Unpublished report by Earthsound Ltd for Cork County Council.

IAC Ltd. 2009 Cultural heritage. In McCarthy Hyder Consultants (compilers) N22 Baile Bhuirne – Macroom: environmental impact statement. 4 volumes. Chapter 8. Unpublished report by McCarthy Hyder for Cork County Council.

Shanahan, S. and Gleeson, M. 2017 Geophysical Investigation at selected areas within Slievareagh, Baile Bhuirne, Co. Cork. Unpublished report by Shanarc Ltd for Cork County Council.

2017:569 - Slievareagh 1, Cork

County: Cork Site name: Slievareagh 1

Sites and Monuments Record No.: N/A Licence number: E004903

Author: John O'Connor, Rubicon Heritage Services Ltd

Site type: Prehistoric burnt mound

ITM: E 518744m, N 579045m

Excavation by Rubicon Heritage Ltd at Slievareagh 1 was undertaken as part of the N22 Baile Bhuirne–Macroom Road Scheme (Lot 1) Archaeological Consultancy Services Contract. The excavation was carried out on behalf of Cork County Council and funded by Transport Infrastructure Ireland.

The excavation recorded the remains of three overlapping burnt mounds across three phases, with associated features that included two troughs, one of which contained a degraded in-situ timber lining a possible third trough, two post-holes, three stake-holes and two stake-hole that contained degraded in-situ stakes.

Phase I Mound C consisted of an irregular oblong spread of mound material. The typical horseshoe shape or U-shape often identified with burnt mounds was evident here, with different and deeper deposits in the two arms and a shallower centre. The mound extended over an area of c. 14 m east to west by 7.1 m north to south and was up to 0.5 m deep. This central area was waterlogged and appeared to be the location of a natural spring. Water accumulated swiftly and as such it was difficult to accurately record the lower archaeological deposits due to the constant influx of water. This was also the most likely location for a trough (050) associated with Mound C. Very little evidence of a cut trough remained, other than the southern end of a roughly rectangular cut.

Two radiocarbon dates were returned for Mound C activity, which represents the Phase I activities. Maloidae charcoal from context (033) produced the earliest date range of 2467-2235 cal BC (2 σ) (SUERC-85856) indicating that onsite activity possibly began in the years straddling the Late Neolithic and Chalcolithic periods. A sample of maloidae charcoal from context (37), the earliest deposit in the eastern arm of Mound C, returned a date range of 1607-1426 cal BC (2 σ) (SUERC-85863) showing that activity continued through to the Middle Bronze Age.

Phase II Mound A was located to the southeast of the site, mostly on the ridge of higher dry ground, but also on the peaty down slope to the west. It extended over parts of Mound C but did not cover trough (50). This irregularly shaped mound extended over an area c. 14 m north to south by 13 m east to west. All three cut features associated with this mound cut through natural subsoil (02) and were covered by mound material (03). The trough (19), which measured 1.84 m long, 1.7 m wide and 0.6 m deep was sub-rectangular and stone lined. Two post-holes (17) and (15) were uncovered to the southeast and east of the trough.

The three dates returned for Mound A activity fell within a broadly similar date range in the Middle Bronze Age. A sample of maloidae charcoal from the basal mound deposit (03) returned a date range of 1397-1215 cal BC (2 σ) (SUERC-85855). A sample of holly charcoal from stake-hole (16) returned a

date range of 1391-1131 cal BC (2σ) (SUERC-85860). A sample of maloidae charcoal from the upper Mound A contexts (34) returned a date range of 1385-1128 cal BC (2σ) (SUERC-86513).

Phase III Mound B was located to the west of Mounds A and C, with eastern Mound B layers lying stratigraphically over layers of mound material from both earlier mounds. It lay partially on the ridge of higher ground but also on the downward slope to the west and north. Material from the mound was spread across an area approximately 14 m north to south by 11.5 m east to west and was up to 0.62 m deep. A sub-rectangular timber lined trough (09) was uncovered on the western side of Mound B. The trough was cut through the layer of peat (07) and lower burnt mound deposit (24). It measured up to 2.04 m long (from southeast to northwest), was 1.2 m wide at the southeast end, narrowing to 0.94 m wide at the northwest end. The cut was deeper at the southeast end (0.28 m) than the northwest end (0.20 m), which is to be expected as it was cut into a downward slope.

The trough was lined by a series of worked oak planks (10), held in place with vertical oak stakes in the corners. Five timber planks were placed on edge along the sides, one along each long side, one at the northwest end and two at the deeper southeast end. Two large stones were placed at the southeast end of the trough and these appear to have been intentionally placed to form part of the trough's base along with eight horizontal planks. This left gaps in the lining of the base and, other than between Wood No's 7, 21 and 8, there was no evidence for any additional organic material such as moss or clay having been used.

Three radiocarbon dates were returned for Mound B; one from mound material, one from a fill of trough (09) and one from the timbers of the trough. The earliest date was from a sample of alder/buckthorn charcoal taken from mound material (06), which returned a date range of 1209-1015 cal BC (2σ) (SUERC-85862). Radiocarbon dating of oak wood from Timber 18 from the oak lining (10) of trough (09) returned a date range of 1122-931 cal BC (2σ) (SUERC-86514).

Dendrochronological dating evidence, from a different timber (Timber 5) from the trough, indicated that the measured tree-ring series dates from 1083 BC to 985 BC, which falls within the same period as the radiocarbon date range. The best estimated felling date range for the tree, from which this timber came from, is post 953 BC. Finally, maloidae charcoal from mound material (38) returned a date range of 1002-843 cal BC (2σ) (SUERC-85861).

Specialist analysis

The wooden-lined trough at Slieveveagh 1 was constructed of oak planks and included a series of oak stakes found close to the trough itself. The material was largely in a poor state of preservation and white rot had developed. Where axe marks and facet impressions could be analysed, they revealed that basic small metal hand axes (c.30mm wide) were used to cut and shape the wood. The use of oak as the primary wood implies that a wood selection bias was at play at Slieveveagh 1, whether this was influenced by local availability or functionality however is uncertain.

The charcoal assemblage compliments the worked wood collection, where the offcuts and debris of oak timbers served as a readily available source of firewood for fulacht fiadh activity from the Early to Late Bronze Age. As the pollen analysis reveals that oak was growing close by during this time this resource need not have been transported from too far a distance. Wood acquisition strategies at Slieveveagh 1 appear to favour oak throughout each phase of use, with hazel and pomaceous woods featuring in Middle Bronze Age activity and willow in the Late Bronze Age. This largely follows the pollen profile, mirroring the change in the local woodland during this time. The general absence of pine from the charcoal record, but which was a significant feature of the pollen index, provides interesting insights into the wood collection approach at the site, showing that other taxa were favoured above pine for construction of the troughs and for fuelling these features.

Pollen, micro-charcoal and non-pollen palynomorphs (NPPs) were analysed from two short core monoliths to gain an understanding of local vegetation history in the Slieveveagh area from approximately 2380 cal BC to 350 cal AD, a period covering the lifespan and use phase of the

excavated burnt mounds. During the Chalcolithic/Early Bronze Age periods the landscape around Slievreagh appears to have been densely wooded with a low human presence. There was a significant change around c.1800 cal BC with a large drop and eventual disappearance of *Pinus*. Human activity was at its greatest during the periods of 1300 – 800 cal BC, 800 – 530 cal BC and 260 cal BC – 10 cal AD, which coincided with the reductions in the *Quercus-Fraxinus-Corylus* woodland. Herbaceous pollen also increases, providing evidence for human activity close to the sampling site. The profile closes during the Late Iron Age c.350 cal AD, with evidence for considerable woodland regeneration during the ‘Late Iron Age Lull’.

While insect remains were recovered, they are not especially informative. The lowermost sample from Core 2 is of some interest in that it clearly derives from wetter conditions than those above it. The general indications are of open, stagnant water with some waterside vegetation and a little dung, which supports the theory that this was the location of a natural spring accessible during the site’s occupation. There is no hint as to the function of the site within the small insect assemblages recovered.

Dating

A total of eight radiocarbon dates were obtained for the three mounds, two troughs and one post-hole excavated at Slievreagh 1. These indicated that the burnt mound activity recorded at the site was intermittent from the Late Neolithic through to the Late Bronze Age. Four other radiocarbon dates were obtained from core samples through the natural peat. These returned a date range that covered the period from the Chalcolithic to the late Iron Age.

2017:579 - Slievreagh 2, Cork

County: Cork Site name: Slievreagh 2

Sites and Monuments Record No.: N/A Licence number: E004988

Author: Bruce Sutton, Rubicon Heritage Services Ltd

Site type: Prehistoric burnt mounds

ITM: E 519419m, N 578638m

Excavation at Slievreagh 1, as part of the N22 Baile Bhuirne–Macroom Road Scheme (Lot 1) Archaeological Consultancy Services Contract, recorded the remains of two burnt mounds, A and B, with a trough and well associated with Mound A. There was no stratigraphic relationship between the two mounds making it impossible to determine which was the earlier. At present there is no clear function for the site, other than the use of hot-stone technology to heat water. It is hoped that post-excavation analysis will give further information.

Mound A was located to the north-west of the site on a relatively level patch of ground on an otherwise sloping hillside. A layer of very soft light greenish yellow peaty clay was found between the main deposits of mound material and the natural subsoil, especially on the edges of the mound. This layer contained frequent plant fibre and wood fragment inclusions. It was not found over any of the cut features, suggesting that it was the remnants of an earlier topsoil layer, sealed by the burnt mound.

The mound consisted of six distinct layers of heat-shattered stone and measured approximately 15m x 15m, with a maximum depth of 1.2m.

There would appear to have been two phases of activity at Mound A (Phases I & II), with a third abandonment phase (Phase III). The first phase involved the excavation of the trough, well and the accumulation of the earliest layers of mound material. The second phase involved the building of a stone hearth, lining of the well and the laying of a stone path and platform. The third phase related to the accumulation of mound material in trough 021 after use.

Phase I

The trough appeared to be earliest feature on the site. This was filled with stones, which formed part of an intermittent stone lining around the edge of the trough. The trough contained one badly degraded

base plank. Stake-holes were cut in to the base with no clear pattern. A large mound of redeposited clay, lying adjacent to the mound, likely represents upcast from its construction.

Phase II

A path made of large stones extended from the top of the hill to the area between trough and pit (see below). The path was orientated from north to south and measured 6.7m long by up to 1.2m wide.

The remnants of a rough stone structure were found embedded in the final deposit from Phase I of the mound. This roughly oval structure, orientated east to west, was constructed with large slabs of red sandstone. It is possible that this was used as a hearth as the burnt mound grew around the trough.

A large sub-circular pit was located to the west of the trough. The feature was truncated to the south-west by a modern stone drain. The pit was lined with sub-angular stones of various sizes.

11.3.1.2.5 **Kerry Archaeological Landscapes**

One designated Archaeological Landscape (Site No. 13) (The Paps- Annaghbeg, Annaghmore / Doocarrig More / Gortacoreen/Gortderrig/Shrone More/ Shrone Beg / Gortnagane / Raheen / Awnaskirtaun / Knocknabro / Knockagowan / Derrynafinnia / Derrymaclavloide / Killeen / Carrigaveema / Coolcurtoga) is located to the north-west of the Proposed Development. The EIAR Study Boundary or any element of the Proposed Development including the proposed 33kV and 110kV underground cabling routes do not encroach into the designated landscape (Figure 11-8). The southern boundary for the Paps Archaeological Landscape is situated between c. 1km and 1.2km to the north of the EIAR boundary.

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

The dataset for the finds database of the National Museum of Ireland was consulted as part of the desktop assessment for this chapter on www.heritagemaps.ie. One find spot occurs within the EIAR study boundary a short distance south-west of the western shore of Lough Gal and 116m to the east of the proposed 33kV underground electrical cabling route in the townland of Coomnacloghy (Figure 11-9). The find comprises a polished stone axehead which is likely to date to the Neolithic period. Such a find provides direct evidence for the use of this area by people in the prehistoric period.

Name: 1963:59

Object Type: Polished Stone Axehead

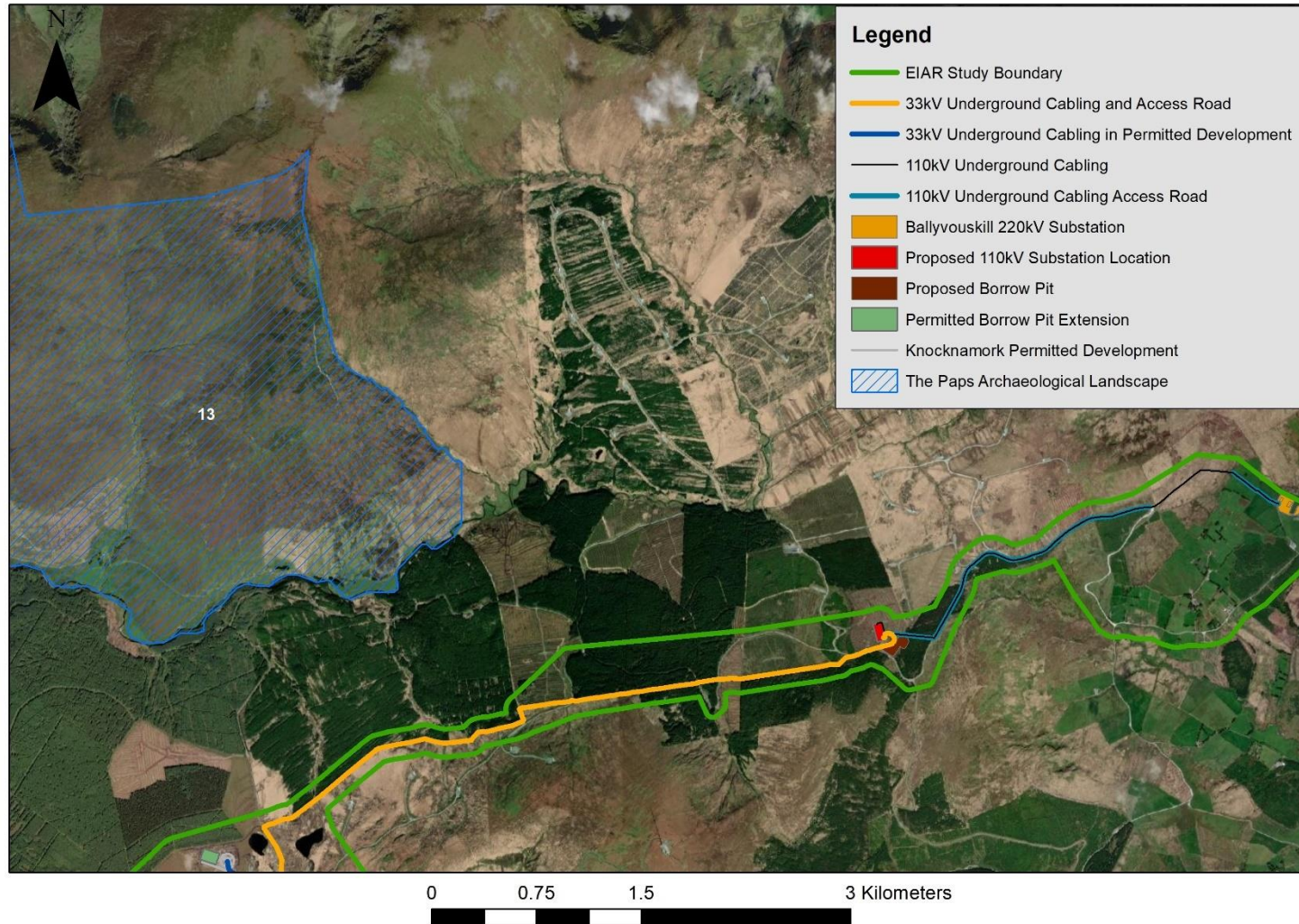


Figure 11-8: The Paps Archaeological Landscape in relation to EIA boundary and proposed underground cabling routes.

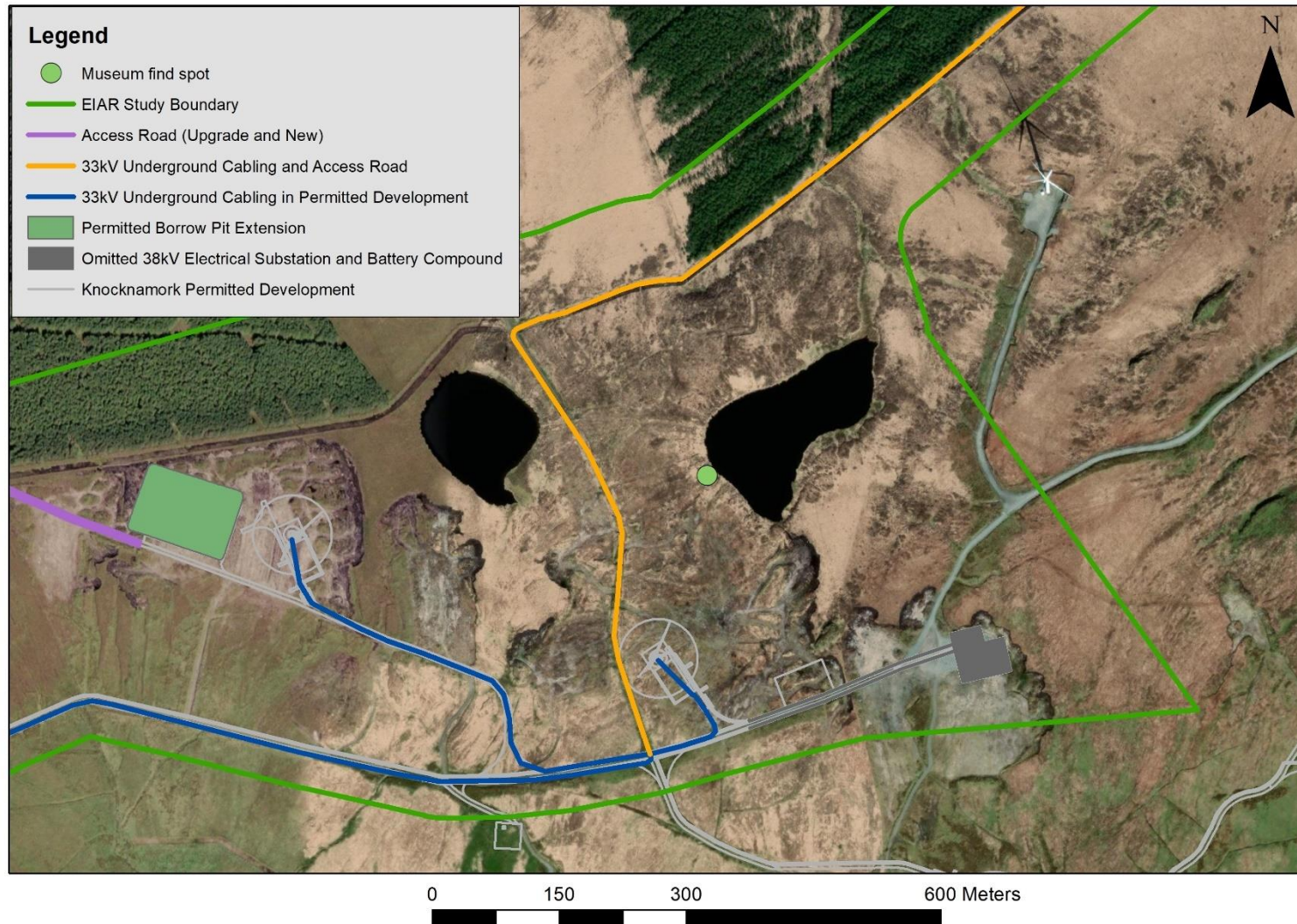


Figure 11-9: Museum find spot to east of proposed 33kV underground cabling route.

11.3.1.3 Proposed 110kV Substation

11.3.1.3.1 National Monuments in State Care and Monuments Subject to Preservation Orders

No National Monuments in State Care or those subject to a Preservation Order are located on or in close proximity to the proposed 110kV substation and associated access road. The nearest National Monument comprises Knocknakilla stone circle (NM No. 420) in County Cork which is situated c. 6.7km to the east (Figure 11-2).

No monuments subject to a Preservation Order are located on or in close proximity to proposed 110kV substation and associated access road. The nearest monuments subject to a Preservation Order are again located in County Cork, c. 5.3km to the east. They comprise a multiple stone circle (PO No. 171/1941) and a wedge tomb (PO No. 170/1941) in the townland of Glantane East (Figure 11-3).

Given the distance of between 5km and 6km from the proposed 110kV substation to the nearest National Monument and those subject to a Preservation Order no direct or indirect impacts to these monuments are identified.

11.3.1.3.2 Recorded Monuments

No recorded monuments are located on or immediately adjacent to the proposed 110kV substation or associated access road. The nearest recorded monument comprises a hut site (KE077-001—) in the townland of Cummeennabuddoge which is situated c. 1.3km to the south-west (Figure 11-4). The hut site is described on the HEV as follows:

KE077-001—

Class: Hut site

Townland: CUMMEENNABUDDOGE

Scheduled for inclusion in the next revision of the RMP: Yes

Description: In rough N-sloping boggy ground, in an evergreen forest, on the N slopes of Mullaghanish Mountain. The remains of a rectangular hut (4m NE-SW; 1.5m NW-SE) are defined by a partially collapsed, roughly built stone wall (T 1m; H 0.7m) surrounded by bog. A collapsed entrance occurs at SE.

Compiled by: Elizabeth Byrne, Ursula Egan and Sheila Ronan, Archaeological Survey Unit, University College, Cork.

Date of upload: 31 January 2011

11.3.1.3.3 Newly Recorded Archaeological Monuments

As outlined in section 11.3.1.2.3 above a number of previously unrecorded archaeological monuments were noted in the vicinity of the Proposed Development site during the walk-over survey carried out by Tobar Archaeological Services for the Permitted Development (Ref. No. 19/4972). The monuments largely comprised standing stones and a possible stone row. None of the newly recorded monuments are located on or in close proximity to the proposed 110kV substation or associated access road, nor were any additional monuments noted within the footprint of same during the recent walk-over survey. The nearest newly recorded monument comprises a possible standing stone (St st 6, ITM 520798, 583254) which is situated adjacent to an existing track c. 2.1km to the west of the proposed 110kV substation (Figure 11-10).

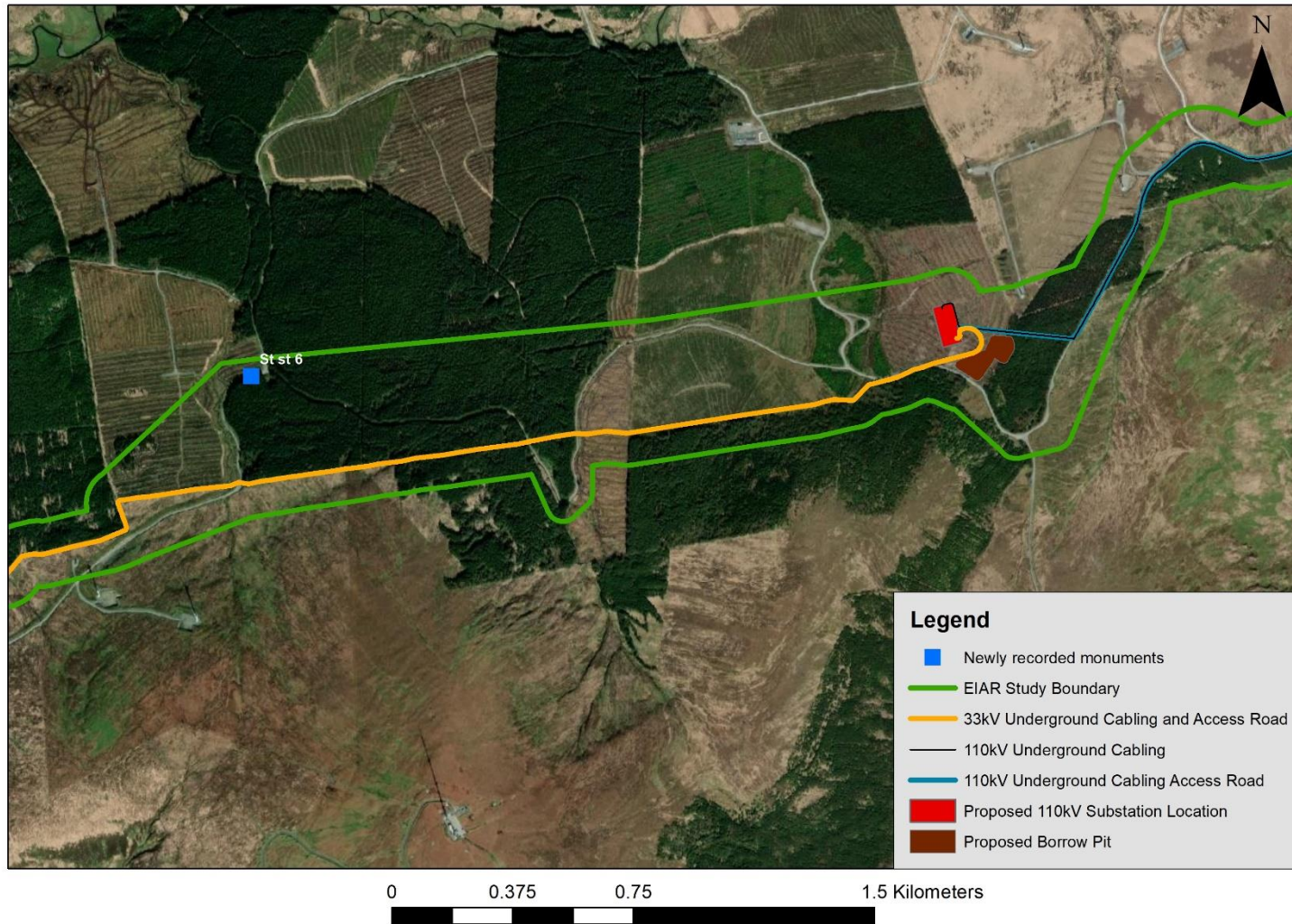


Figure 11-10: Proposed 110kV substation in relation to nearest newly recorded monument St st 6.

11.3.1.3.4 **Archaeological Investigations Undertaken in the Vicinity of the Proposed 110kV Substation**

The proposed 110kV substation is located in the townland of Cummeennabuddoge, Co. Kerry while the associated access road is situated in Cummeennabuddoge and Caherdowney, Co. Cork. No archaeologically positive results for either townland were returned from a search of the database of Irish excavations (www.excavations.ie).

11.3.1.3.5 **Kerry Archaeological Landscapes**

One designated Archaeological Landscape (Site No. 13) (The Paps- Annaghbeg, Annaghmore / Dooarrig More / Gortacoreen/Gortderrig/Shrone More/ Shrone Beg / Gortnagane / Raheen / Awnaskirtaun / Knocknabro / Knockagowan / Derrynafinnia / Derrymaclavode / Killeen / Carrigaveema / Coolcurtoga) is located to the north-west of the Proposed Development. The EIAR study boundary or any element of the Proposed Development including the proposed 110kV substation and associated access road do not encroach into the designated landscape. The southern boundary for the Paps Archaeological Landscape is situated between c. 1km and 1.2km to the north of the EIAR boundary and c. 3km north-west of the proposed 110kV substation (Figure 11-8).

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

The dataset for the finds database of the National Museum of Ireland was consulted as part of the desktop assessment for this chapter on www.heritagemaps.ie. One find spot occurs within the EIAR study boundary a short distance south-west of the western shore of Lough Gal in the townland of Coomnacloghy. The find comprises a polished stone axehead which is likely to date to the Neolithic period. It is situated c. 4.4km south-west of the proposed 110kV substation site and associated access road.

11.3.1.4 **Proposed Borrow Pit**

The development includes a proposed borrow pit a short distance to the south-east of the proposed 110kV substation.

11.3.1.4.1 **National Monuments in State Care and Monuments Subject to Preservation Orders**

No National Monuments in State Care or those subject to a Preservation Order are located on or in close proximity to the proposed borrow pit. The nearest National Monument comprises Knocknakilla stone circle (NM No. 420) in County Cork which is situated c. 6.6km to the east (Figure 11-2).

No monuments subject to a Preservation Order are located on or in close proximity to the proposed borrow pit. The nearest monuments subject to a Preservation Order are again located in County Cork, c. 5.1km to the east. They comprise a multiple stone circle (PO No. 171/1941) and a wedge tomb (PO No. 170/1941) in the townland of Glantane East (Figure 11-3).

Given the distance of between 5km and 6km from the proposed borrow pit to the nearest National Monument and those subject to a Preservation Order no direct or indirect impacts to these monuments are identified.

11.3.1.4.2 Recorded Monuments

No recorded monuments are located on or immediately adjacent to the proposed borrow pit. The nearest recorded monument comprises a hut site (KE077-001—) in the townland of Cummeennabuddoge which is situated c. 1.3km to the south-west (Figure 11-4) (see section 11.3.1.3.2 for monument description).

11.3.1.4.3 Newly Recorded Archaeological Monuments

A number of previously unrecorded archaeological monuments were noted in the vicinity of the Proposed Development site during the walk-over survey carried out by Tobar Archaeological Services for the Permitted Development (Ref. No. 19/4972). The monuments largely comprised standing stones and a possible stone row. The majority of these monuments have not been added to the Sites and Monuments Record (SMR) and therefore do not appear on the HEV. None of the newly recorded monuments are located on or in close proximity to the proposed borrow pit, nor were any additional monuments noted within the footprint of same during the recent walk-over survey. The nearest newly recorded monument comprises a possible standing stone (St st 6, ITM 520798, 583254) which is situated adjacent to an existing track c. 2.2km to the west of the proposed borrow pit (Figure 11-10).

11.3.1.4.4 Archaeological Investigations Undertaken in the Vicinity of the Proposed Borrow Pit

The proposed borrow pit is located in the townlands of Cummeennabuddoge, Co. Kerry and Caherdowney, Co. Cork. No archaeologically positive results for these townlands were returned from a search of the database of Irish excavations (www.excavations.ie).

11.3.1.4.5 Kerry Archaeological Landscapes

One designated Archaeological Landscape (Site No. 13) (The Paps- Annaghbeg, Annaghmore / Doocarrig More / Gortacoreen/Gortderrig/Shrone More/ Shrone Beg / Gortnagane / Raheen / Awnaskirtaun / Knocknabro / Knockagowan / Derrynafinnia / Derrymaclavlode / Killeen / Carrigaveema / Coolcurtoga) is located to the north-west of the Proposed Development. The EIAR study boundary or any element of the Proposed Development including the proposed borrow pit do not encroach into the designated landscape. The southern boundary for the Paps Archaeological Landscape is situated between c. 1km and 1.2km to the north of the EIAR boundary and c. 3km north-west of the proposed borrow pit (Figure 11-8).

11.3.1.4.6 Topographical Files of the National Museum of Ireland

The dataset for the finds database of the National Museum of Ireland was consulted as part of the desktop assessment for this chapter on www.heritagemaps.ie. One find spot occurs within the EIAR study boundary a short distance south-west of the western shore of Lough Gal in the townland of Coomnacloghy. The find comprises a polished stone axehead which is likely to date to the Neolithic period. It is situated c. 4.4km south-west of the proposed borrow pit.

11.3.1.5 Proposed Extension to Permitted Borrow Pit

The proposed extension to the permitted borrow pit is located in the same location as the previously permitted borrow pit and comprises an extension to the size of the latter. The permitted borrow pit was assessed as part of the comprehensive assessment of archaeology and cultural heritage carried out for the Permitted Development (Ref. No. 19/4972).

11.3.1.5.1 **National Monuments in State Care and Monuments Subject to Preservation Orders**

No National Monuments in State Care or those subject to a Preservation Order are located on or in close proximity to the proposed extension to the permitted borrow pit. The nearest National Monument is located over 10km to the south-east and comprises Lissacresig stone circle and ringfort (Nat. Mon. No. 571). The nearest monument subject to a Preservation Order is situated 5.7km to the south-east and comprises a cross slab (P.O. 29/1976).

Given the distance of between 5km and 11km from the proposed borrow pit extension to the nearest National Monument and those subject to a Preservation Order no direct or indirect impacts to these monuments are identified.

11.3.1.5.2 **Recorded Monuments**

No recorded monuments are located on or immediately adjacent to the proposed extension to the permitted borrow pit. The nearest recorded monument comprises a standing stone CO058-080—located c. 1.2km to the south-west (Figure 11-4).

11.3.1.5.3 **Newly Recorded Archaeological Monuments**

A number of previously unrecorded archaeological monuments were noted in the vicinity of the Proposed Development site during the walk-over survey carried out by Tobar Archaeological Services for the Permitted Development (Ref. No. 19/4972). The monuments largely comprised standing stones and a possible stone row. The majority of these monuments have not been added to the Sites and Monuments Record (SMR) and therefore do not appear on the HEV. Three of the stones (St st 3, 4 and 5) are located c. 530m to the south-west of the proposed extension to the permitted borrow pit (Figure 11-6).

11.3.1.5.4 **Archaeological Investigations Undertaken in the Vicinity of the Proposed Extension to the Permitted Borrow Pit**

The proposed extension to the permitted borrow pit is located in the townland of Coomnacloghy, Co. Cork. No archaeological excavations are noted in the Database of Irish Excavations for this townland, with the nearest comprising those undertaken in Slievareagh townland further to the south-west (see Section 11.3.1.2.4).

11.3.1.5.5 **Kerry Archaeological Landscapes**

One designated Archaeological Landscape (Site No. 13) (The Paps- Annaghbeg, Annaghmore / Doocarrig More / Gortacoreen/Gortderrig/Shrone More/ Shrone Beg / Gortnagane / Raheen / Awnaskirtaun / Knocknabro / Knockagowan / Derrynafinnia / Derrymaclavode / Killeen / Carrigaveema / Coolcurtoga) is located to the north-west of the Proposed Development. The EIAR Study Boundary or any element of the Proposed Development including the proposed extension to the permitted borrow pit do not encroach into the designated landscape. The southern boundary for the Paps Archaeological Landscape is situated between c. 1km and 1.2km to the north of the EIAR boundary (Figure 11-8).

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

The dataset for the finds database of the National Museum of Ireland was consulted as part of the desktop assessment for this chapter on www.heritagemaps.ie. One find spot occurs within the EIAR study boundary a short distance south-west of the western shore of Lough Gal in the townland of

Coomnacloghy. The find comprises a polished stone axehead which is likely to date to the Neolithic period. It is situated c.550m to the east of the proposed extension to the permitted borrow pit (Figure 11-9).

11.3.1.6 Access Road (Upgrade and New)

The proposed Access Road extends from the N22 National Route at the west and thereafter primarily along an existing forestry track before extending along a fire break towards its north-eastern end. Works associated with the Access Road will include a proposed temporary access road immediately north of the N22 and a junction widening at the south end of the Access Road.

11.3.1.6.1 National Monuments in State Care and Monuments Subject to Preservation Orders

No National Monuments or those subject to a Preservation Order are located along the areas Access Road, with no such monuments located within 10km of same (Figure 11-2 and Figure 11-3).

11.3.1.6.2 Recorded Monuments

One recorded monument KE076-086— Fulacht Fia is located in the vicinity of the southern end of the Access Road. It is located c. 77m to the east of the proposed temporary road and 210m west-north-west of the proposed junction widening at the south end of the Access Road. It is described in the HEV as follows:

KE076-086—

Class: Fulacht fia

Townland: CUMMEENAVRICK

Scheduled for inclusion in the next revision of the RMP: Yes

Description: Located in a level marshy field, on the immediate E side of a small stream, on the S side of the old Killarney-Ballyvourney road, on lower gently sloping mountain side on the 240m contour. The dominant aspect from the site is to the SE and W. This is a low grass-covered, kidney-shaped mound, measuring 15m N-S by 7m E-W, 1m in maximum height. A 1m wide entrance to a 2.5m wide trough, 0.4m below the crest of the mound. This trough area is on the W side of the mound, and is open to the nearby stream, which is approximately 5m away.

Compiled by: Frank Coyne

Date of upload: 06 September 2013

11.3.1.6.3 Newly Recorded Archaeological Monuments

A number of previously unrecorded archaeological monuments were noted in the vicinity of the Proposed Development site during the walk-over survey carried out by Tobar Archaeological Services for the Permitted Development (Ref. No. 19/4972). The monuments largely comprised standing stones and a possible stone row. The majority of these monuments have not been added to the Sites and Monuments Record (SMR) and therefore do not appear on the HEV. One such stone (St st 8) is located adjacent to the existing forestry track along which the Access Road extends (Figure 11-12). The upright stone (St St 8, ITM 514750, N581935) was noted just off the proposed route adjacent to an open barrier, immediately east of an existing forestry track. The antiquity of the stone is questionable as it appears to be placed within the made-up ground associated with the track. The stone is however, aligned NE/SW.



Plate 11-5: St st 8 adjacent to existing forestry track.

11.3.1.6.4 **Archaeological Investigations Undertaken in the Vicinity of the Access Road**

The proposed Access Road, temporary road and junction widening are located in the townlands of Cummeenavrik and Glashacormick, Co. Kerry and Slieveagh and Coomnacloghy in County Cork. No archaeologically positive results for these townlands, with the exception of Slieveagh, were returned from a search of the database of Irish excavations (www.excavations.ie). The summaries of excavations carried out in Slieveagh townland as part of the N22 Baile Bhuirne to Macroom Road Scheme are presented in Section 11.3.1.2.4 above.

11.3.1.6.5 **Kerry Archaeological Landscapes**

One designated Archaeological Landscape (Site No. 13) (The Paps- Annaghbeg. Annaghmore / Doocarrig More / Gortacoreen/Gortderrig/Shrone More/ Shrone Beg / Gortnagane / Raheen / Awnaskirtaun / Knocknabro / Knockagowan / Derrynafinnia / Derrymaclavode / Killeen / Carrigaveema / Coolcurtoga) is located to the north-west of the Proposed Development. The EIAR study boundary or any element of the Proposed Development including the proposed Access Road and Temporary Road do not encroach into the designated landscape. The southern boundary of the Paps landscape is situated c. 1.1km north of the proposed Access Road route ().

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

The dataset for the finds database of the National Museum of Ireland was consulted as part of the desktop assessment for this chapter on www.heritagemaps.ie. One find spot occurs within the EIAR study boundary a short distance south-west of the western shore of Lough Gal in the townland of Coomnacloghy. The find comprises a polished stone axehead which is likely to date to the Neolithic period. It is situated c. 674m east of the eastern end of the proposed Access Road (Figure 11-9).

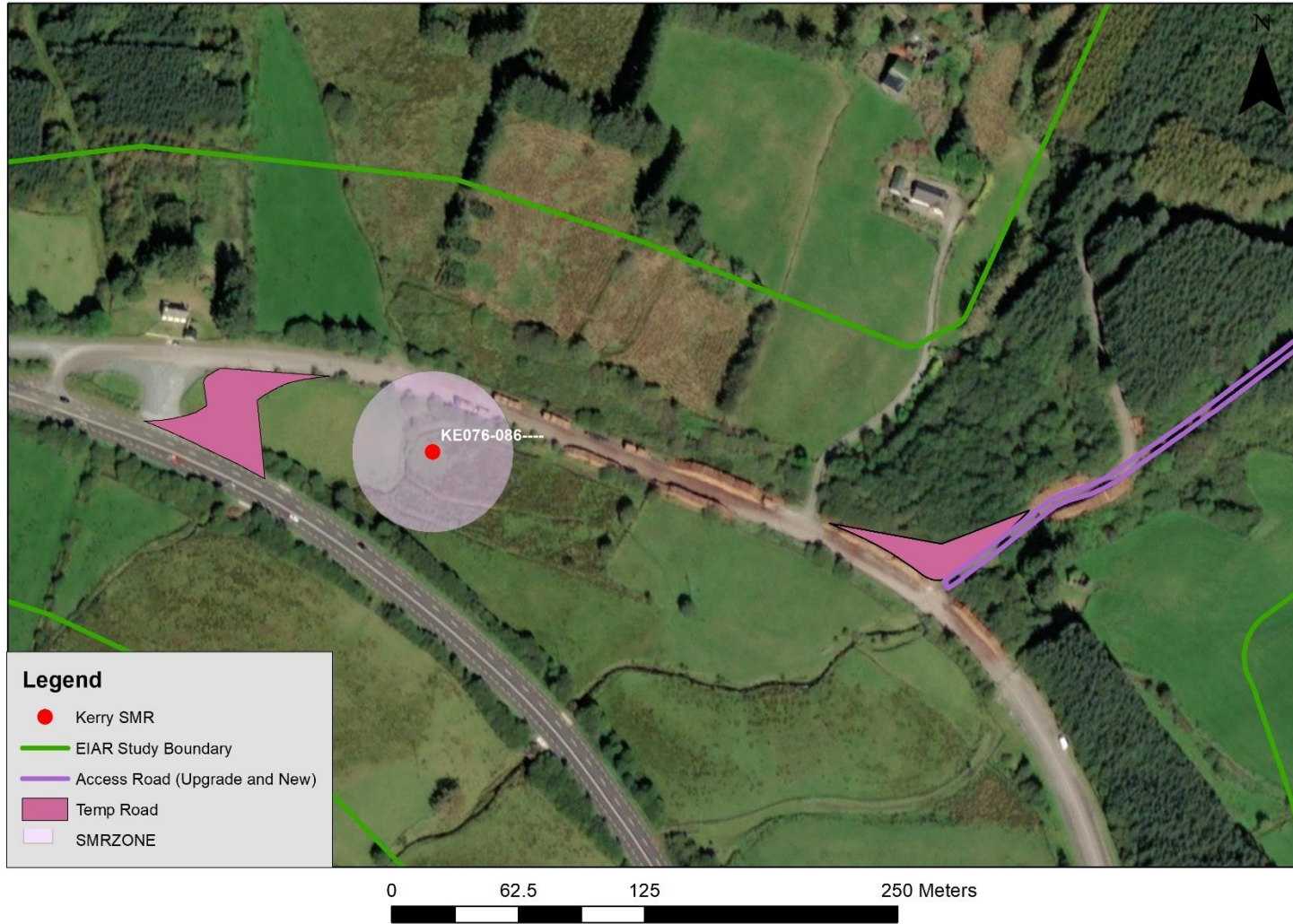


Figure 11-11: Proposed Access Road and Temporary Road in relation to nearby SMR.

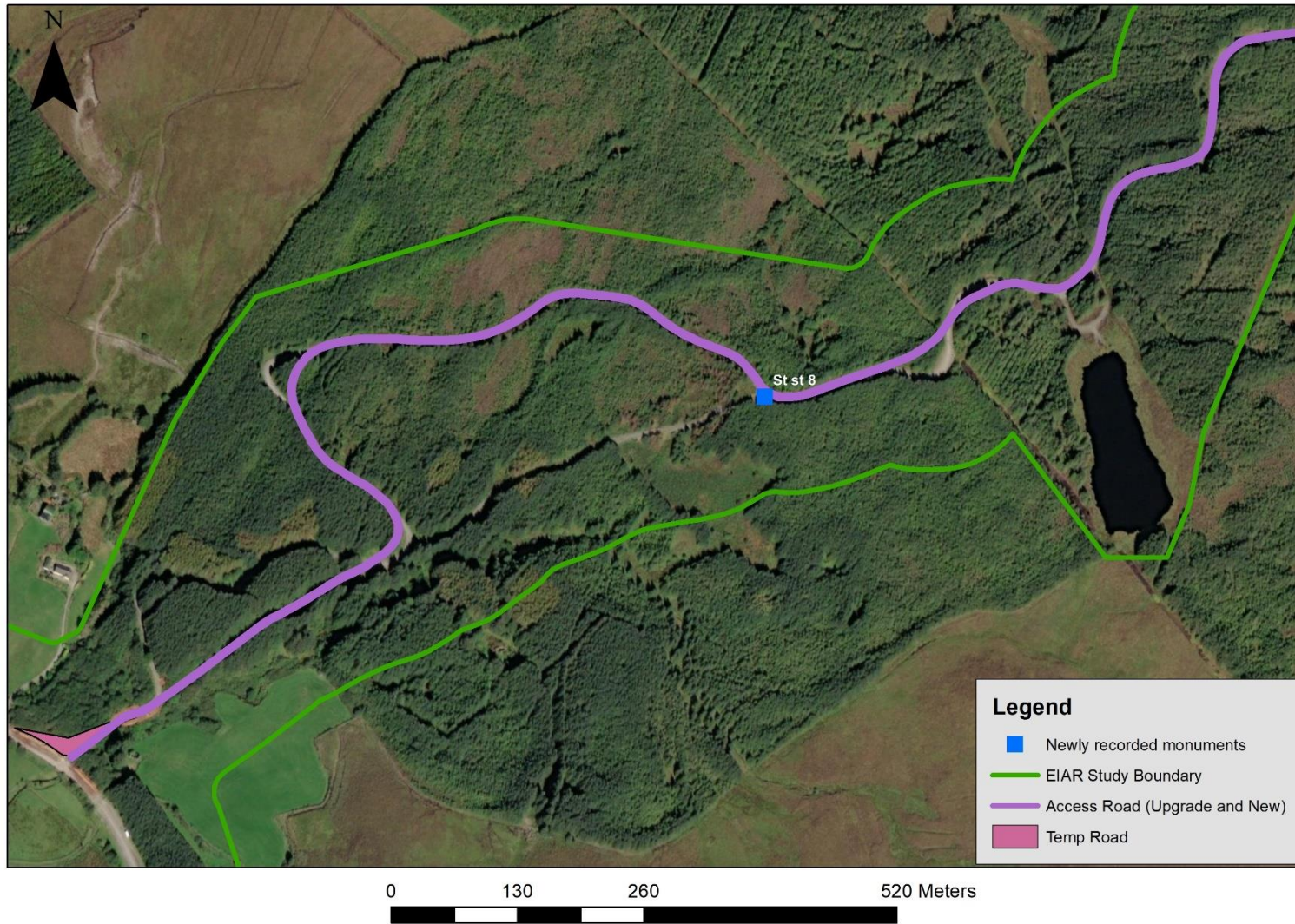


Figure 11-12: Proposed Access Road and Temporary Road in relation to newly recorded possible standing stone St st 8.

11.3.2 Architectural and Cultural Heritage

11.3.2.1 Proposed 110kV and 33kV Underground Cabling Routes

11.3.2.1.1 NIAH and Protected Structures

The dataset of the Record of Protected Structures (RPS) and the NIAH for Counties Cork and Kerry were downloaded onto the base mapping for the Proposed Development. No structures listed in either resource are located within 100m of the proposed 110kV or 33kV underground cabling routes. The nearest RPS structure to the 110kV underground cable is located c. 2.4km to the north-east of the eastern end of the proposed route and comprises Cloghboola National School (1802) (Figure 11-13). The nearest NIAH and RPS structures to the proposed 33kV underground cabling route are located in Ballyvourvey village c. 3.4km to the south-east and comprises Ballyvourney Bridge (RPS 00366) (NIAH Reg. 20905805) ().

11.3.2.1.2 NIAH Garden Survey

No historic gardens are located on or in close proximity to the 110kV or 33kV underground cabling routes. The nearest historic garden, associated with Liscahane House, is situated c. 4.8km to the north-east of the eastern end of the proposed 110kV underground cabling route.

11.3.2.1.3 Review of Cartographic Sources

A review of the available historic cartographic sources for the area within the EIAR study boundary was carried out for any items of architectural or cultural heritage merit which may not appear in any records such as the NIAH or RPS. No such features are depicted on the historic mapping for the proposed 110kV or 33kV underground cabling routes. On the first edition OS map the majority of both grid connection cabling routes are depicted as open mountainous terrain. Small field enclosures are indicated at the eastern end of the proposed 110kV underground cable route (Figure 11-16). The second edition OS map for this area of County Cork and Kerry is not available.

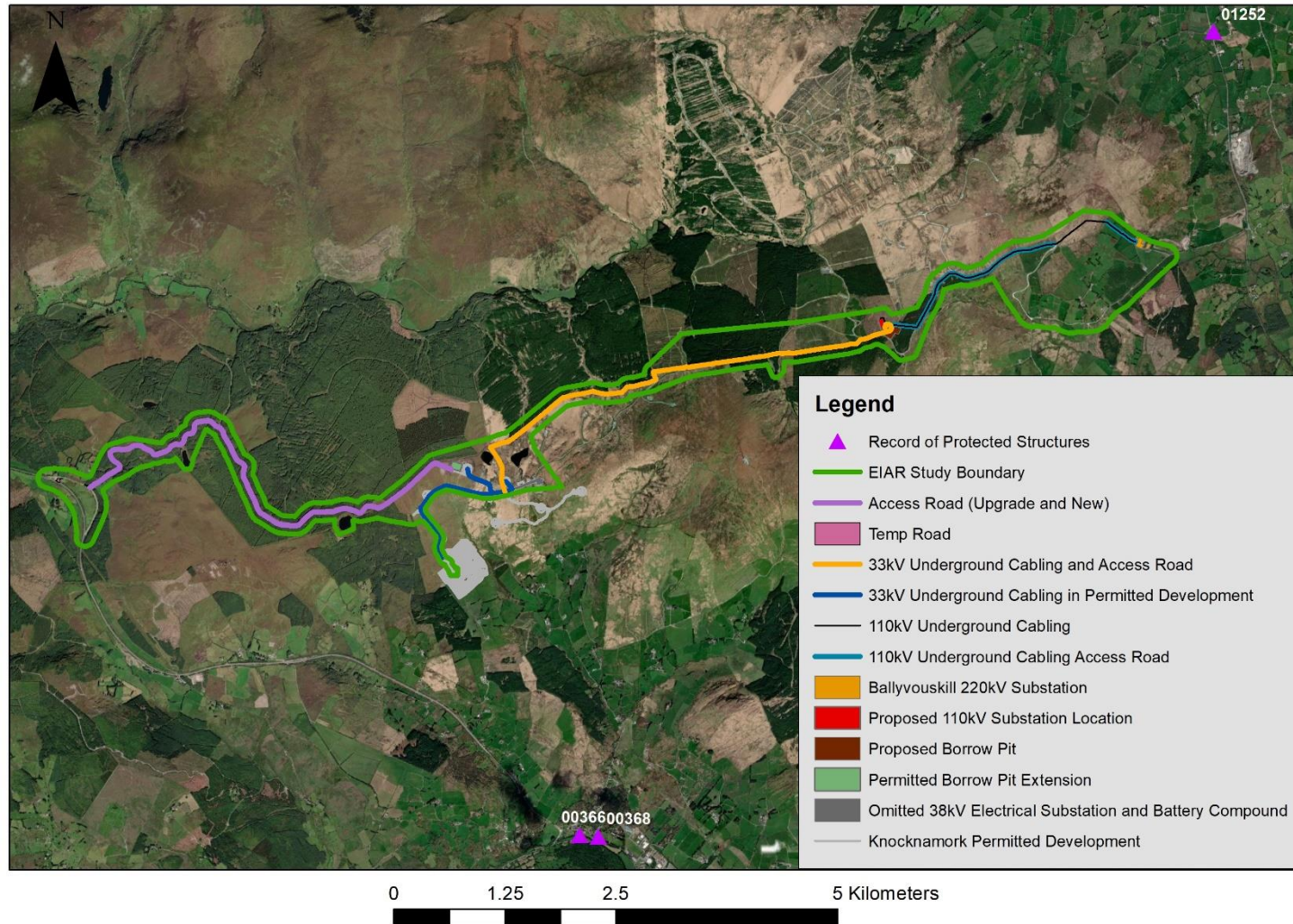


Figure 11-13: Nearest RPS structures in relation to the proposed 110kV and 33kV underground cabling routes.

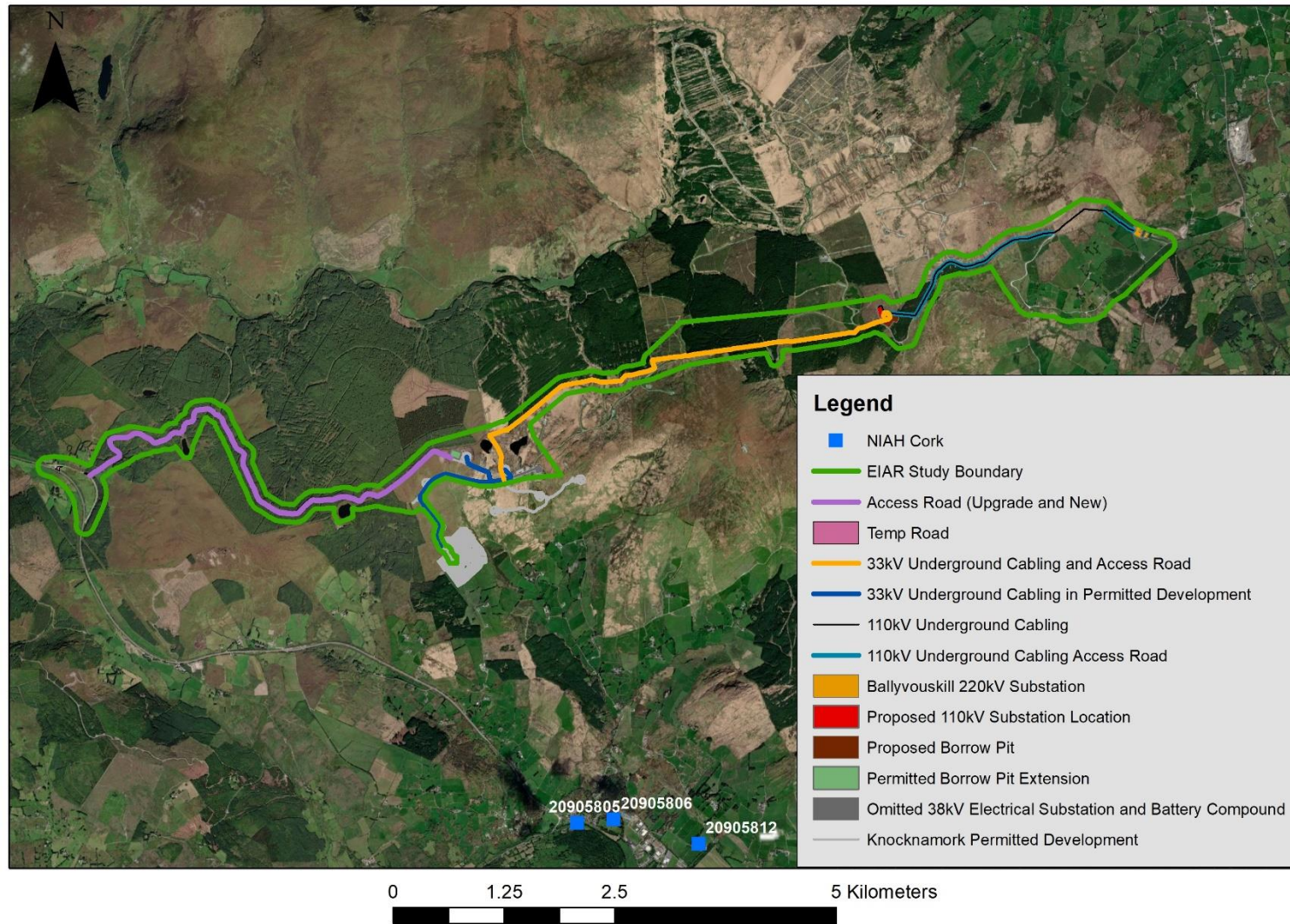


Figure 11-14: Nearest NIAH structures in relation to proposed 110kV and 33kV underground cabling routes.

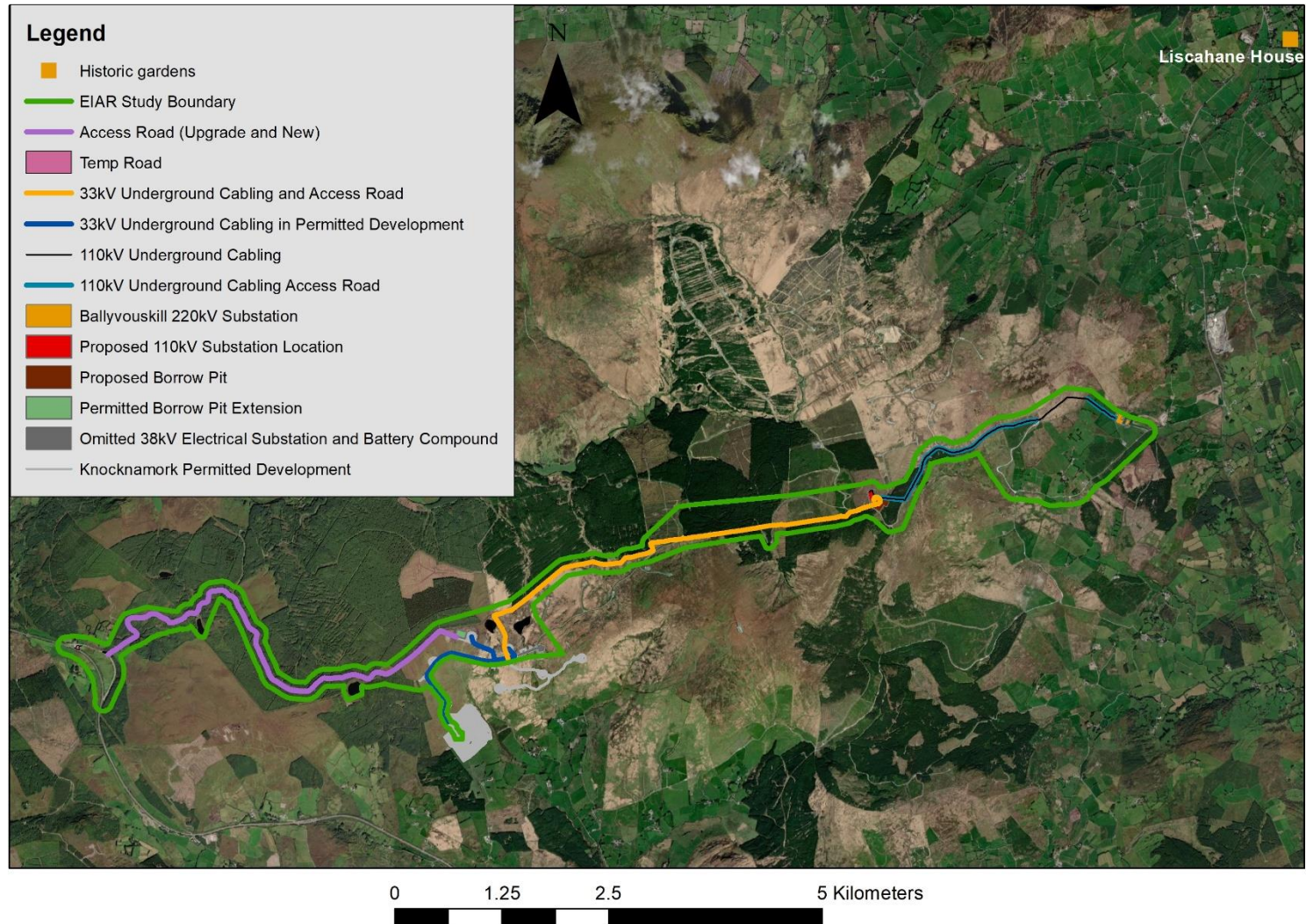


Figure 11-15: Nearest historic garden in relation to Proposed Development and EIAR study boundary.

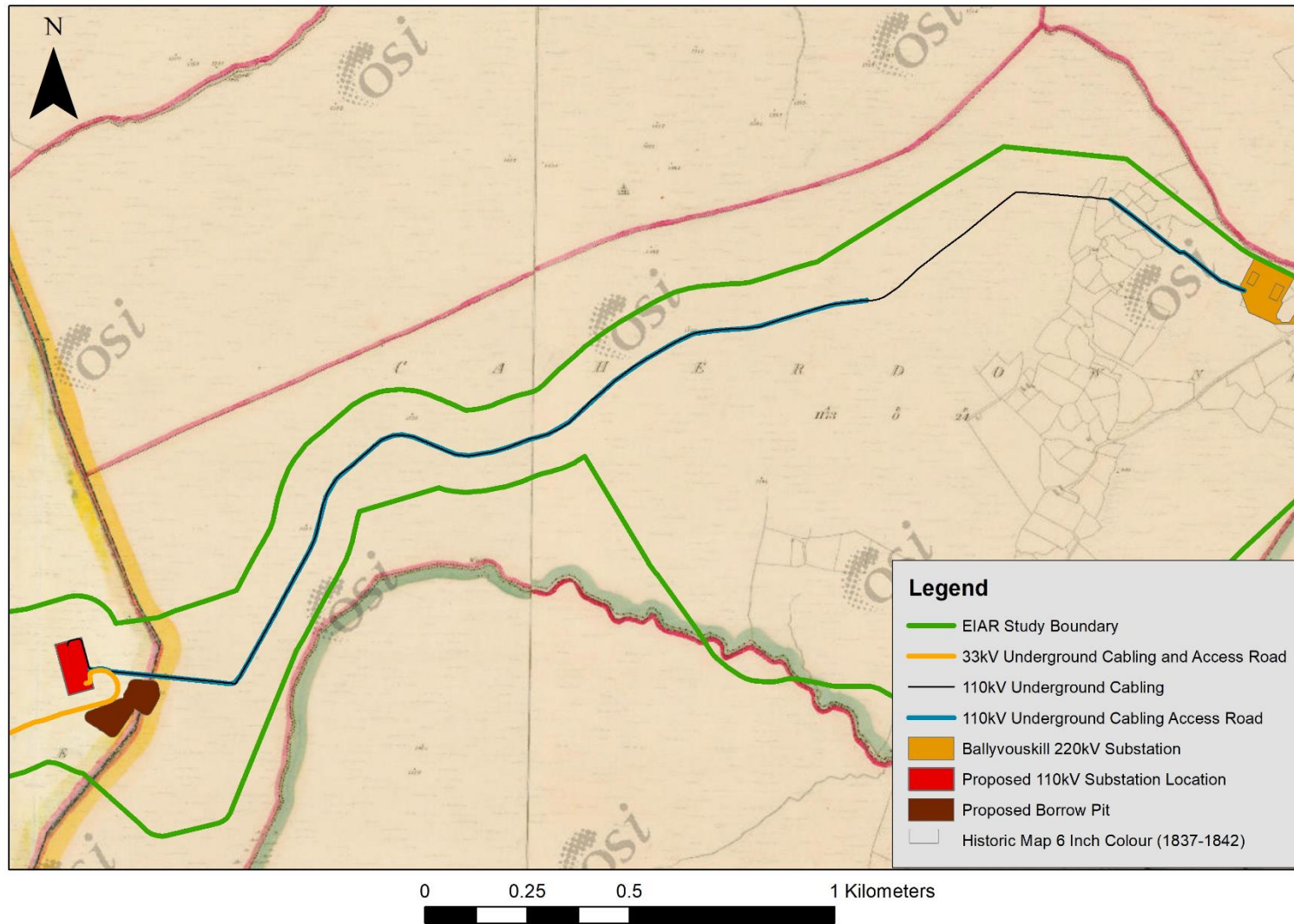


Figure 11-16: Proposed 110kV underground cabling route on first edition OS background.

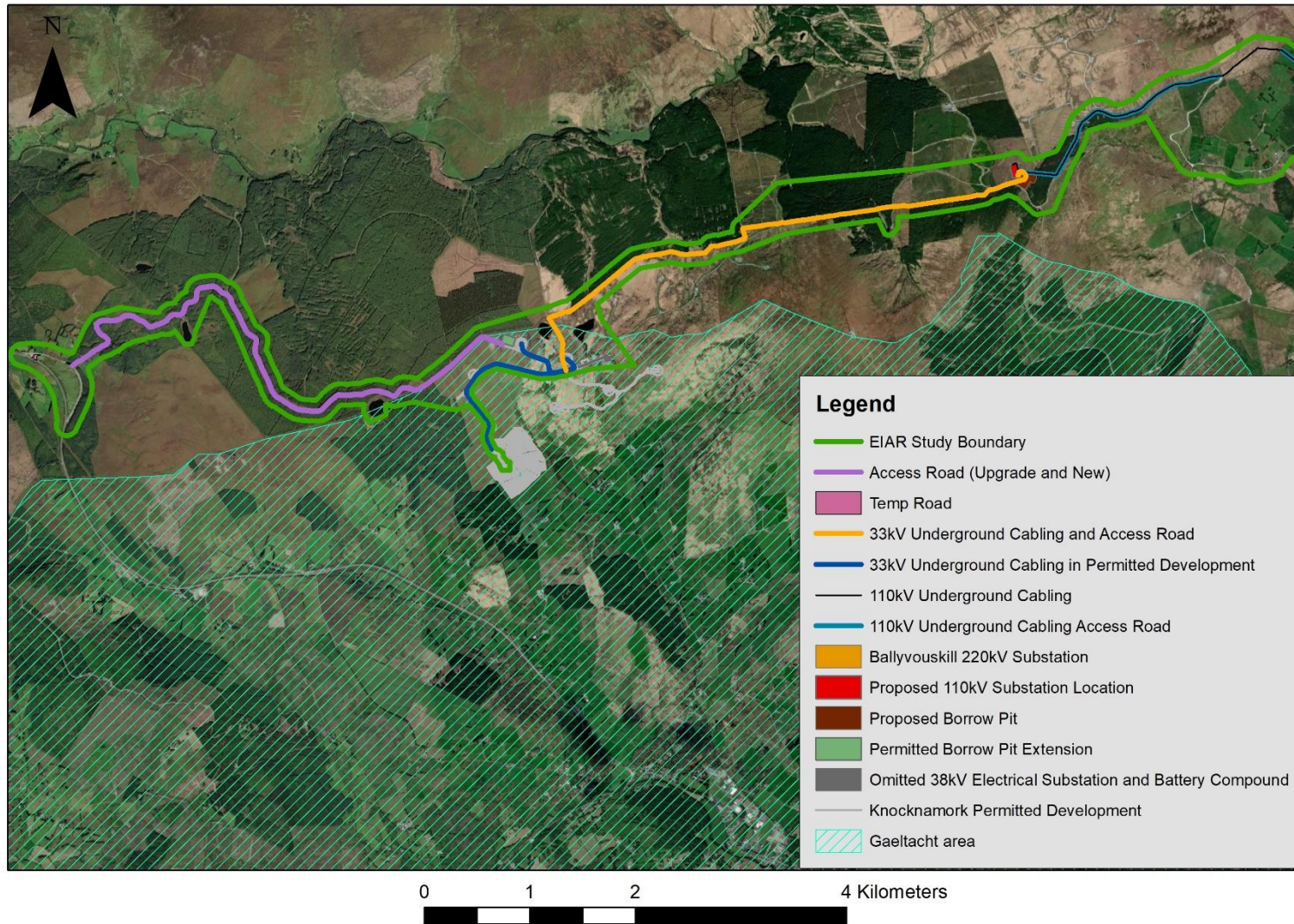


Figure 11-17: Proposed Development site and EIAR study boundary in relation to the Muscraí Gaeltacht.

11.3.2.1.4 **Gaeltacht**

A portion of the Proposed Development EIAR study boundary and the proposed 33kV underground cabling route are located within the Múscraí Gaeltacht (Figure 11-17). Whilst this development type will not impact on the Irish language (particularly during the operational phase of the project), it is recommended that signage in any areas within the Múscraí Gaeltacht should be erected in Irish, where relevant. This is in accordance with the Cork County Development Plan.

11.3.2.2 **Proposed 110kV Substation**

11.3.2.2.1 **NIAH and Protected Structures**

No NIAH or RPS structures are located on or in close proximity to the proposed 110kV substation and associated access road. The nearest RPS structure to the proposed 110kV substation is located c. 4.9km to the north-east and comprises Cloghboola National School (1802) (Figure 11-13). The nearest NIAH structures are located almost 6km to the south-east in Carriganimmy (Figure 11-18).

11.3.2.2.2 **NIAH Garden Survey**

No historic gardens are located on or in close proximity to the proposed 110kV substation or associated access road. The nearest historic garden, associated with Liscahane House, is situated c. 7km to the north-east of the proposed 110kV substation (Figure 11-15).

11.3.2.2.3 **Review of Cartographic Sources**

No features of potential architectural or cultural heritage merit are indicated on the available historic mapping in the area of the proposed 110kV substation and associated access road (Figure 11-16).

11.3.2.2.4 **Gaeltacht**

The proposed 110kV substation and associated access road are not located in a Gaeltacht area (Figure 11-17).

11.3.2.3 **Proposed Borrow Pit**

11.3.2.3.1 **NIAH and Protected Structures**

No NIAH or RPS structures are located on or in close proximity to the proposed borrow pit. The nearest RPS structure to the proposed borrow pit is located c. 4.9km to the north-east and comprises Cloghboola National School (1802) (Figure 11-13). The nearest NIAH structures are located almost 6km to the south-east in Carriganimmy (Figure 11-18).

11.3.2.3.2 **NIAH Garden Survey**

No historic gardens are located on or in close proximity to the proposed borrow pit. The nearest historic garden, associated with Liscahane House, is situated c. 7km to the north-east of the proposed borrow pit (Figure 11-15).

11.3.2.3.3 **Review of Cartographic Sources**

No features of potential architectural or cultural heritage merit are indicated on the available historic mapping in the area of the proposed borrow pit (Figure 11-16).

11.3.2.3.4 **Gaeltacht**

The proposed borrow pit is not located in a Gaeltacht area (Figure 11-17).

11.3.2.4 **Proposed Extension to the Permitted Borrow Pit**

11.3.2.4.1 **NIAH and Protected Structures**

No NIAH or RPS structures are located on or in close proximity to the proposed extension to the permitted borrow pit. The nearest RPS and NIAH structure to the proposed extension to the borrow pit is located c. 4.5km to the south-east and comprises Ballyvourney Bridge (RPS 00366) (NIAH Reg. 20905805) (Figure 11-13 and Figure 11-14).

11.3.2.4.2 **NIAH Garden Survey**

No historic gardens are located on or in close proximity to the proposed borrow pit. The nearest historic garden is that at Mount Leader c. 11.6km to the north-east.

11.3.2.4.3 **Review of Cartographic Sources**

No features of potential architectural or cultural heritage merit are indicated on the available historic mapping in the area of the proposed extension to the permitted borrow pit.

11.3.2.4.4 **Gaeltacht**

A portion of the Proposed Development EIAR study boundary and the proposed extension to the permitted borrow pit are located within the Múscraí Gaeltacht (Figure 11-17). Whilst this development type will not impact on the Irish language (particularly during the operational phase of the project), it is recommended that signage in any areas within the Múscraí Gaeltacht should be erected in Irish, where relevant. This is in accordance with the Cork County Development Plan.

11.3.2.5 **Access Road (Upgrade and New)**

11.3.2.5.1 **NIAH and Protected Structures**

No structures listed in the RPS or the NIAH are located on or in close proximity to the proposed areas Access Road and temporary road. The nearest RPS and NIAH structure is situated c. 4.3km to the south-east in Ballyvourney village and comprises Ballyvourney Bridge (RPS 00366) (NIAH Reg. 20905805) (Figure 11-13 and Figure 11-14).

11.3.2.5.2 **NIAH Garden Survey**

No historic gardens are located on or in close proximity to the areas Access Road and temporary road. The nearest historic gardens are located almost 9km to the north-west.

11.3.2.5.3 **Review of Cartographic Sources**

No features of potential architectural or cultural heritage merit are indicated on the available historic mapping in the area of the areas Access Road and temporary road. A number of small field enclosures are shown on the first edition OS map towards the south-west end of the Access Road in an area now planted with coniferous forestry (Figure 11-19).

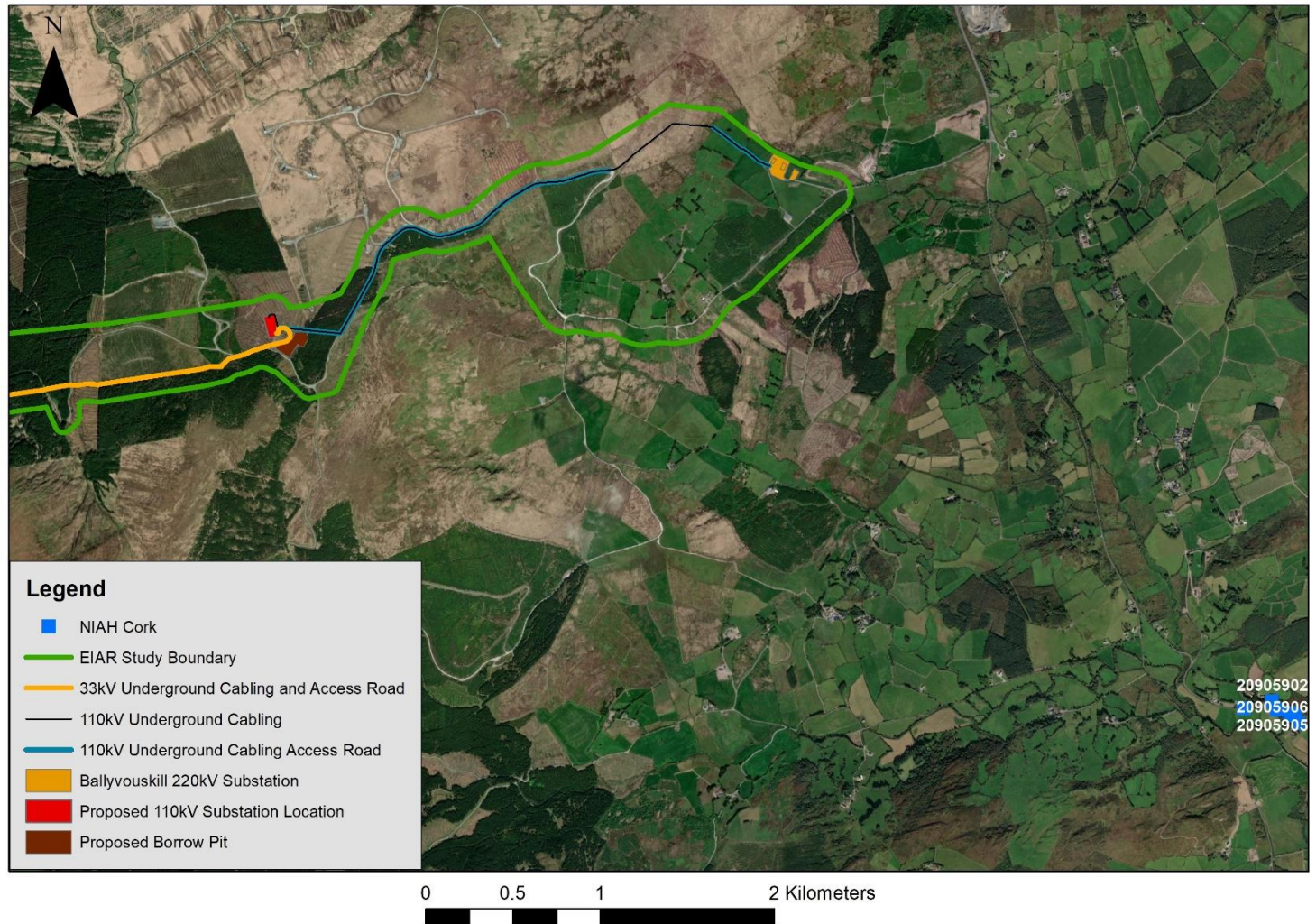


Figure 11-18: Proposed 110kV substation and borrow pit in relation to nearest NIAH structures.

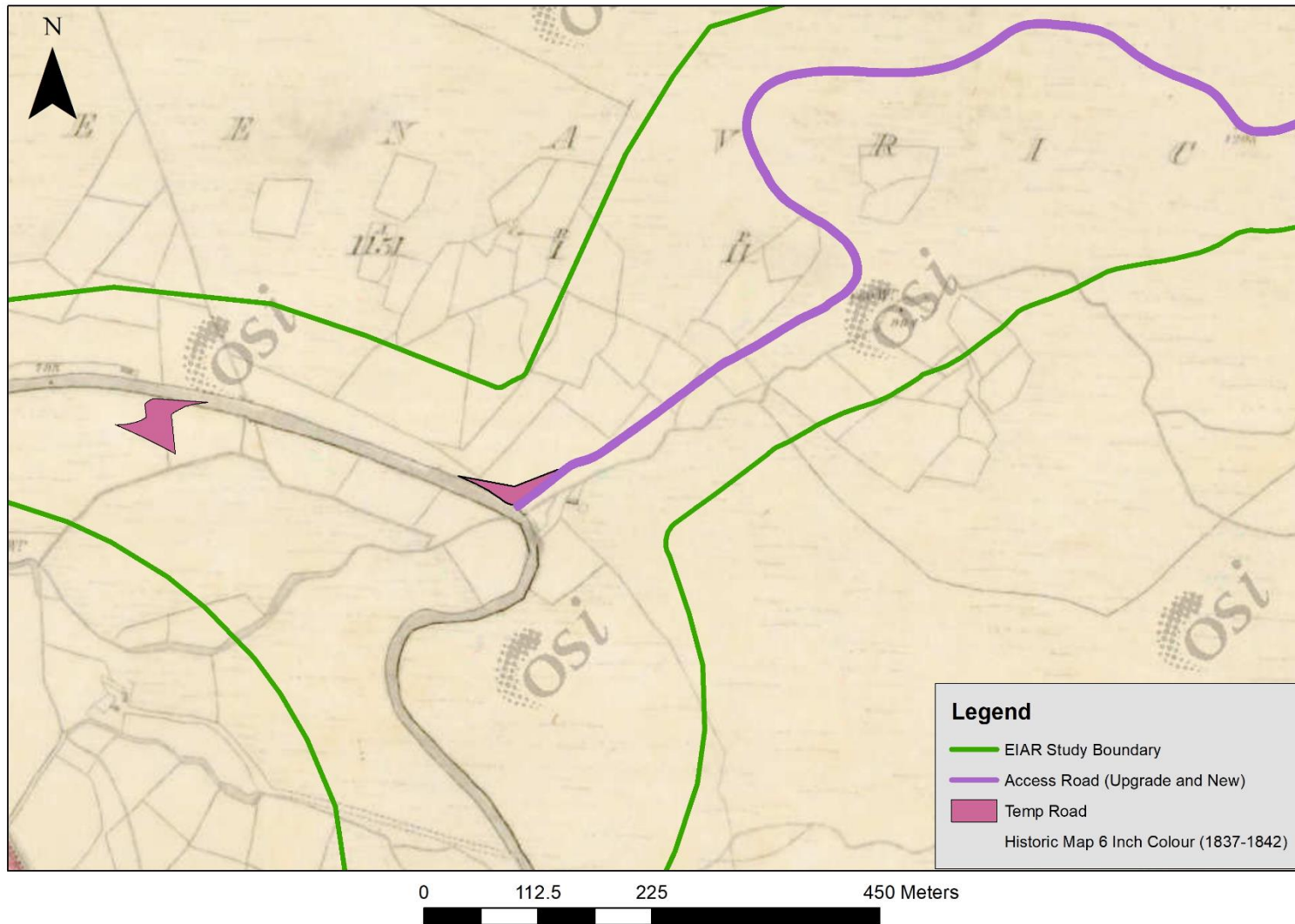


Figure 11-19: South-west end of Access Road and temporary road on 1st edition OS background.

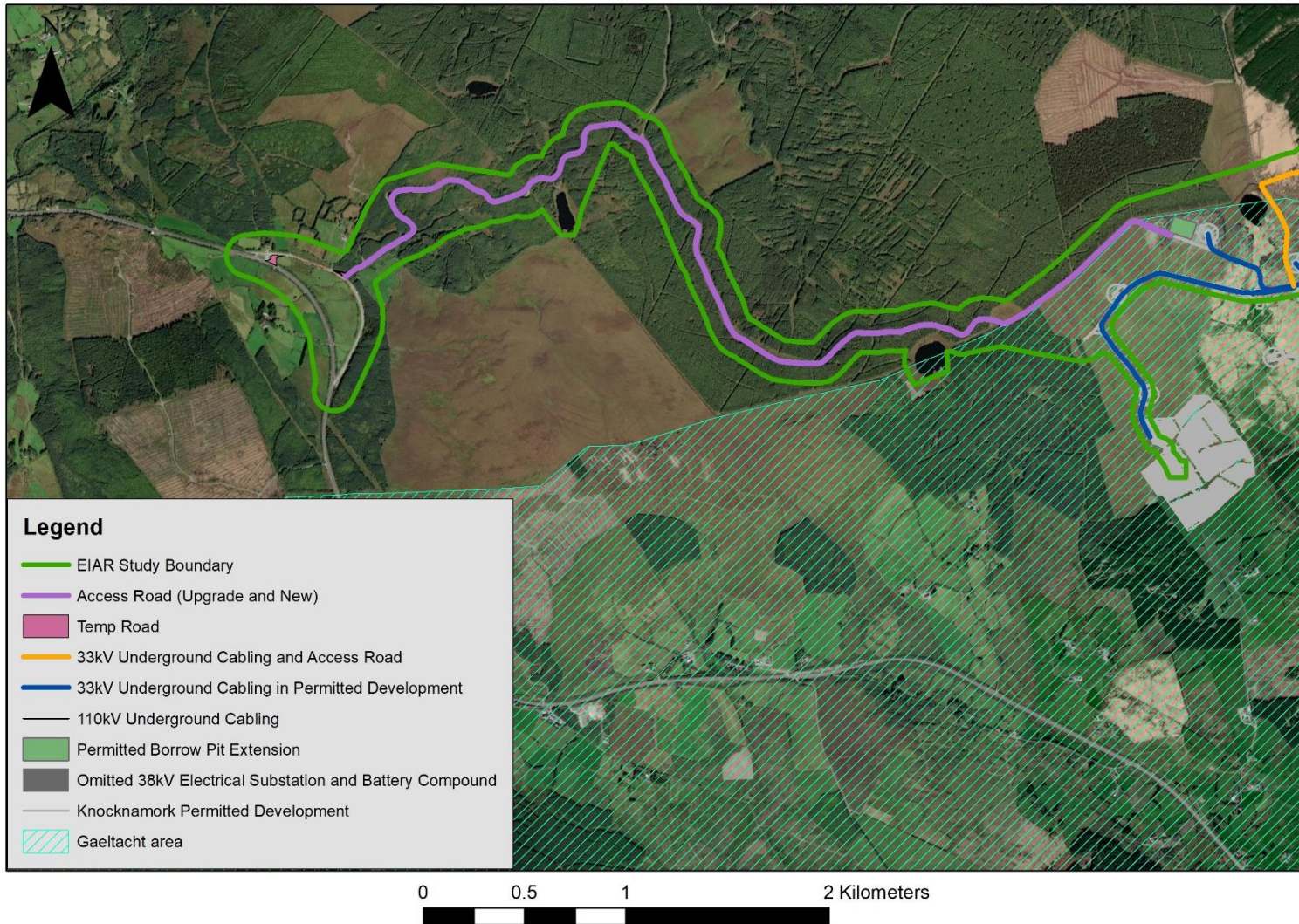


Figure 11-20: Access Road in relation to the Muscraí Gaeltacht.

11.3.2.5.4 **Gaeltacht**

The north-east end of the Access Road is located just inside the Múscraí Gaeltacht (Figure 11-20). Whilst this development type will not impact on the Irish language (particularly during the operational phase of the project), it is recommended that signage in any areas within the Múscraí Gaeltacht should be erected in Irish, where relevant.

11.4 **Likely Significant Effects and Associated Mitigation Measures**

11.4.1 **Do-Nothing Impact**

If the Proposed Development were not to proceed no potential impact to archaeology or cultural heritage would occur with no requirement for mitigation measures.

11.4.2 **Construction Phase Potential Impacts (Direct)**

Direct Impact refers to a ‘physical impact’ on a monument or site. The construction phase of the development consists of the construction of roads within which a trench for the proposed 110kV and 33kV underground cables will be excavated, ground works for the proposed 110kV substation and associated access road, ground works for the proposed borrow pit and limited ground works associated with the Access Road and temporary road. The potential impacts on the known and potential archaeological, architectural and cultural heritage of the area are outlined below with the suggested mitigation measures. Where any potential direct impacts occur they are negated through the use of suitable mitigation measures.

No impacts will occur as a result of not constructing the omitted 38kV substation and battery storage that was previously permitted.

11.4.2.1 **Proposed 110kV and 33kV Underground Cabling Routes**

11.4.2.1.1 **National Monuments in State Care / Preservation Orders**

No National Monuments in State Care or those subject to a Preservation Order are located on or in the immediate vicinity of the proposed 110kV or 33kV underground cabling routes. No direct impacts to this resource as a result of the underground cabling routes are therefore identified.

11.4.2.1.2 **Recorded Monuments**

No recorded monuments are located within 100m of the proposed underground cabling routes. No direct impacts to this resource as a result of the underground cabling routes are therefore identified.

11.4.2.1.3 **Newly Recorded Archaeological Monuments**

Three standing stones (St st 3, 4 and 5) are located c. 15m-17m to the north-west of the proposed 33kV underground cabling route which extends along an existing track. The stones were noted during a previous archaeological walk-over survey of the Permitted Development (Ref. No. 19/4972).

Pre Mitigation Impact

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

Proposed Mitigation Measures

- A 10m buffer zone should be established around the stones prior to the commencement of development. The buffer shall comprise durable temporary fencing with 'Keep Out' signage and should be maintained for the duration of the construction stage of the project.
- Archaeological monitoring of ground works associated with the 33kV underground cabling route where it extends past the standing stones. A report on the results of the monitoring shall be compiled and submitted to the relevant authorities on completion of the project.

Residual Impact

The potential impact after the implementation of the mitigation measures will be Imperceptible.

Significance of Effects

The significance of effects on the standing stones is likely to be Imperceptible.

11.4.2.1.4 **Unrecorded Potential Sub-surface Sites**

The potential exists for the proposed 110kV and 33kV underground cabling routes and associated access roads to contain as yet unrecorded sub-surface sites and artefacts. It is possible that such sites may be uncovered either within the peat/topsoil and/or at the level of the underlying natural subsoil. The excavation of topsoil /peat for the proposed underground cabling routes and associated access roads may impact on any new sites, if present.

Pre Mitigation Impact

Should new sites be present along the proposed underground cabling routes (currently not visible on the surface) the impact is likely to be significant negative and permanent (i.e. the excavation by machinery would permanently remove the sites resulting in a significant negative impact).

Proposed Mitigation Measures

- Archaeological monitoring of all ground works associated with the proposed underground cabling routes and associated roads. A report on the results of the monitoring shall be compiled and submitted to the relevant authorities on completion of the project.

Residual Impact

The sites, if detected, during archaeological monitoring will be preserved by record (archaeologically excavated) or preserved in-situ (avoidance) and therefore a full record made of same. In this regard, the potential impact after the mitigation measures is likely to be slight.

Significance of Effects

The significance of effects is likely to be Slight.

11.4.2.1.5 **Protected Structures/NIAH**

No Protected Structures, structures listed in the NIAH or Historic Gardens are located on or in the immediate vicinity of the proposed 110kV or 33kV underground cabling routes and associated access roads. No potential direct effects on this resource are therefore identified.

11.4.2.1.6 **Local Cultural Heritage Items**

A review of the available historic cartographic sources for the area including the first edition OS maps was undertaken for any items of architectural or cultural heritage merit which may not appear in any records such as the NIAH or RPS. No such features are depicted on the historic mapping along the proposed underground cabling routes. No potential direct effects to such items as a result of the proposed underground 110kV or 33kV cabling routes and associated roads are therefore identified.

11.4.2.2 **Proposed 110kV Substation**

11.4.2.2.1 **National Monuments in State Care / Preservation Orders**

No National Monuments in State Care or those subject to a Preservation Order are located on or in the immediate vicinity of the proposed 110kV substation. No direct impacts to this resource as a result of the proposed substation are therefore identified.

11.4.2.2.2 **Recorded Monuments**

No recorded monuments are located on or in the immediate vicinity of the proposed substation. No direct impacts to this resource as a result of the proposed substation are therefore identified.

11.4.2.2.3 **Newly Recorded Archaeological Monuments**

No newly recorded archaeological monuments are located on or in the immediate vicinity of the proposed substation. No direct impacts as a result of the proposed substation are therefore identified.

11.4.2.2.4 **Unrecorded Potential Sub-surface Sites**

The potential exists for the site of the proposed 110kV substation to contain as yet unrecorded sub-surface sites and artefacts. It is possible that such sites may be uncovered either within the peat/topsoil and/or at the level of the underlying natural subsoil. The excavation of topsoil /peat for the proposed substation may impact on any new sites, if present.

Pre Mitigation Impact

Should new sites be present within the footprint of the proposed 110kV substation (currently not visible on the surface) the impact is likely to be significant negative and permanent (i.e. the excavation by machinery would permanently remove the sites resulting in a significant negative impact).

Proposed Mitigation Measures

- Archaeological monitoring of all ground works associated with the proposed 110kV substation. A report on the results of the monitoring shall be compiled and submitted to the relevant authorities on completion of the project.

Residual Impact

The sites, if detected, during archaeological monitoring will be preserved by record (archaeologically excavated) or preserved in-situ (avoidance) and therefore a full record made of same. In this regard, the potential impact after the mitigation measures is likely to be slight.

Significance of Effects

The significance of effects is likely to be Slight

11.4.2.2.5 **Protected Structures/NIAH**

No Protected Structures, structures listed in the NIAH or Historic Gardens are located on or in the immediate vicinity of the proposed 110kV substation. No potential direct effects on this resource are therefore identified.

11.4.2.2.6 **Local Cultural Heritage Items**

A review of the available historic cartographic sources for the area including the first edition OS maps was undertaken for any items of architectural or cultural heritage merit which may not appear in any records such as the NIAH or RPS. No such features are depicted on the historic mapping in the area of the proposed substation therefore no direct impacts are identified.

11.4.2.3 **Proposed Borrow Pit**

11.4.2.3.1 **National Monuments in State Care / Preservation Orders**

No National Monuments in State Care or those subject to a Preservation Order are located on or in the immediate vicinity of the proposed borrow pit. No direct impacts to this resource as a result of the proposed borrow pit are therefore identified.

11.4.2.3.2 **Recorded Monuments**

No recorded monuments are located on or in the immediate vicinity of the proposed borrow pit. No direct impacts to this resource as a result of the proposed borrow pit are therefore identified.

11.4.2.3.3 **Newly Recorded Archaeological Monuments**

No newly recorded archaeological monuments are located on or in the immediate vicinity of the proposed borrow pit. No direct impacts as a result of the proposed borrow pit are therefore identified.

11.4.2.3.4 **Unrecorded Potential Sub-surface Sites**

The potential exists for the site of the proposed borrow pit to contain as yet unrecorded sub-surface sites and artefacts. It is possible that such sites may be uncovered either within the peat/topsoil and/or at the level of the underlying natural subsoil. The excavation of topsoil /peat for the proposed borrow pit may impact on any new sites, if present.

Pre Mitigation Impact

Should new sites be present within the footprint of the proposed borrow pit (currently not visible on the surface) the impact is likely to be significant negative and permanent (i.e. the excavation by machinery would permanently remove the sites resulting in a significant negative impact).

Proposed Mitigation Measures

- Archaeological monitoring of all ground works associated with the proposed borrow pit. A report on the results of the monitoring shall be compiled and submitted to the relevant authorities on completion of the project.

Residual Impact

The sites, if detected, during archaeological monitoring will be preserved by record (archaeologically excavated) or preserved in-situ (avoidance) and therefore a full record made of same. In this regard, the potential impact after the mitigation measures is likely to be slight.

Significance of Effects

The significance of effects is likely to be Slight

11.4.2.3.5 **Protected Structures/NIAH**

No Protected Structures, structures listed in the NIAH or Historic Gardens are located on or in the immediate vicinity of the proposed borrow pit. No potential direct effects on this resource are therefore identified.

11.4.2.3.6 **Local Cultural Heritage Items**

A review of the available historic cartographic sources for the area including the first edition OS maps was undertaken for any items of architectural or cultural heritage merit which may not appear in any records such as the NIAH or RPS. No such features are depicted on the historic mapping in the area of the proposed borrow pit therefore no direct impacts are identified.

11.4.2.4 **Proposed Extension to Permitted Borrow Pit**

11.4.2.4.1 **National Monuments in State Care / Preservation Orders**

No National Monuments in State Care or those subject to a Preservation Order are located on or in the immediate vicinity of the proposed extension to the permitted borrow pit. No direct impacts to this resource as a result of the proposed extension to the permitted borrow pit are therefore identified.

11.4.2.4.2 **Recorded Monuments**

No recorded monuments are located on or in the immediate vicinity of the proposed extension to the permitted borrow pit. No direct impacts to this resource as a result of the proposed borrow pit extension are therefore identified.

11.4.2.4.3 **Newly Recorded Archaeological Monuments**

No newly recorded archaeological monuments are located on or in the immediate vicinity of the proposed extension to the permitted borrow pit. No direct impacts as a result of the proposed borrow pit extension are therefore identified.

11.4.2.4.4 **Unrecorded Potential Sub-surface Sites**

The majority of the permitted borrow pit is located in an area of the Proposed Development site in which the peaty overburden has been removed. Some in situ grass-covered peat is located in the area of the proposed extension to the permitted borrow pit, therefore the potential exists for same to contain as yet unrecorded sub-surface sites and artefacts. It is possible that such sites may be uncovered either within the peat/topsoil and/or at the level of the underlying natural subsoil. The excavation of topsoil /peat for the proposed extension to the permitted borrow pit may impact on any new sites, if present.

Pre Mitigation Impact

Should new sites be present within the footprint of the proposed extension to the permitted borrow pit (currently not visible on the surface) the impact is likely to be significant negative and permanent (i.e. the excavation by machinery would permanently remove the sites resulting in a significant negative impact).

Proposed Mitigation Measures

- Archaeological monitoring of all ground works associated with the proposed extension to the permitted borrow pit. A report on the results of the monitoring shall be compiled and submitted to the relevant authorities on completion of the project.

Residual Impact

The sites, if detected, during archaeological monitoring will be preserved by record (archaeologically excavated) or preserved in-situ (avoidance) and therefore a full record made of same. In this regard, the potential impact after the mitigation measures is likely to be slight.

Significance of Effects

The significance of effects is likely to be Slight

11.4.2.4.5 **Protected Structures/NIAH**

No Protected Structures, structures listed in the NIAH or Historic Gardens are located on or in the immediate vicinity of the proposed extension to the permitted borrow pit. No potential direct effects on this resource are therefore identified.

11.4.2.4.6 **Local Cultural Heritage Items**

A review of the available historic cartographic sources for the area including the first edition OS maps was undertaken for any items of architectural or cultural heritage merit which may not appear in any records such as the NIAH or RPS. No such features are depicted on the historic mapping in the area of the proposed extension to the permitted borrow pit therefore no direct impacts are identified.

11.4.2.5 Access Road (Upgrade and New)

11.4.2.5.1 National Monuments in State Care / Preservation Orders

No National Monuments in State Care or those subject to a Preservation Order are located on or in the immediate vicinity of the proposed Access Road. No direct impacts to this resource as a result of the same are therefore identified.

11.4.2.5.2 Recorded Monuments

One recorded monument KE076-086— Fulacht Fia is located in the vicinity of the southern end of the proposed Access Road and temporary road. It is located c. 77m to the east of the proposed temporary road and 210m west-north-west of the proposed junction widening at the south end of the Access Road.

Pre Mitigation Impact

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

Proposed Mitigation Measure

Archaeological monitoring of ground works of the temporary road during the construction stage of the development. A report on the results of the monitoring shall be compiled and submitted to the relevant authorities on completion of the project.

Residual Impact

The potential impact after the implementation of the mitigation measures will be Imperceptible.

Significance of Effects

The significance of effects on recorded monument KE076-086— Fulacht Fia is likely to be Imperceptible.

11.4.2.5.3 Newly Recorded Archaeological Monuments

One newly recorded standing stone (St st 8) is located adjacent to the existing forestry track along which the Access Road extends.

Pre Mitigation Impact

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

Proposed Mitigation Measure

Archaeological monitoring of ground works of the Access Road during the construction stage of the development. A report on the results of the monitoring shall be compiled and submitted to the relevant authorities on completion of the project.

Residual Impact

The potential impact after the implementation of the mitigation measures will be Imperceptible.

Significance of Effects

The significance of effects on the newly recorded standing stone St st 8 is likely to be Imperceptible.

11.4.2.5.4 **Unrecorded Potential Sub-surface Sites**

The majority of the proposed Access Road extends along an existing track or an existing firebreak. Where works along the proposed Access Road or temporary road will involve the removal of in situ overburden (peat or topsoil) the potential exists for same to contain as yet unrecorded sub-surface sites and artefacts. It is possible that such sites may be uncovered either within the peat/topsoil and/or at the level of the underlying natural subsoil. The excavation of topsoil /peat for the proposed Access Road and temporary road may impact on any new sites, if present.

Pre Mitigation Impact

Should new sites be present along the proposed Access Road and temporary road (currently not visible on the surface) the impact is likely to be significant negative and permanent (i.e. the excavation by machinery would permanently remove the sites resulting in a significant negative impact).

Proposed Mitigation Measures

- Archaeological monitoring of all topsoil and/or peat removal associated with the proposed Access Road and temporary road. A report on the results of the monitoring shall be compiled and submitted to the relevant authorities on completion of the project.

Residual Impact

The sites, if detected, during archaeological monitoring will be preserved by record (archaeologically excavated) ore preserved in-situ (avoidance) and therefore a full record made of same. In this regard, the potential impact after the mitigation measures is likely to be slight.

Significance of Effects

The significance of effects is likely to be Slight

11.4.2.5.5 **Protected Structures/NIAH**

No Protected Structures, structures listed in the NIAH or Historic Gardens are located on or in the immediate vicinity of the proposed Access Road or temporary road. No potential direct effects on this resource are therefore identified.

11.4.2.5.6 **Local Cultural Heritage Items**

A review of the available historic cartographic sources for the area including the first edition OS maps was undertaken for any items of architectural or cultural heritage merit which may not appear in any records such as the NIAH or RPS. No such features are depicted on the historic mapping in the area of the proposed Access Road or temporary road therefore no direct impacts are identified.

11.4.3 Operational Phase Potential Impacts (Indirect)

Indirect impacts are where a feature or site of archaeological, architectural heritage merit or their setting is located in close proximity to a Proposed Development. Indirect impacts here are mainly concerned with impacts on setting. Impacts on settings of sites may arise when a development is proposed immediately adjacent to a recorded monument or cluster of monuments or any cultural heritage asset. While a Proposed Development may not physically impact on a site, it may alter the setting of a monument or group of monuments.

Potential impact to the visual amenity of a site or area and the significance of same is dependent on a number of factors regarding the sensitivity of the location or 'receptor' and the scale or magnitude of the Proposed Development. Similarly, the extent of the development and its duration and reversibility should all be considered (Guidelines for Landscape and Visual Impact Assessment 3rd edition – Consultation Draft).

The Proposed Development comprises proposed 110kV and 33kV underground cabling routes, a proposed 110kV substation, a proposed borrow pit, a proposed extension to the permitted borrow pit and a proposed Access Road and temporary road. The nature of the underground cables and associated access roads is such that no impacts on setting will occur as a result of either the 33kV or 110kV underground electrical cabling. Similarly, the proposed Access Road primarily comprises a route along which components and materials for the Proposed Development will be delivered to the Proposed Development site and in general will not result in any effects on setting to the archaeological, architectural or cultural heritage resource. Elements of the Proposed Development which are considered to be capable of having potential effects on setting are dealt with below.

No impacts will occur as a result of not constructing the omitted 38kV substation and battery storage that was previously permitted.

11.4.3.1 Proposed 110kV Substation

11.4.3.1.1 National Monuments in State Care / Preservation Orders

No National Monuments or those subject to a Preservation Order are located in close proximity to the proposed 110kV substation. No impacts to the immediate setting of any such monuments are therefore identified. The nearest National Monument to the proposed 110kV substation comprises Knocknakilla stone circle (NM No. 420) in County Cork which is situated c. 6.6km-6.7km to the east. The nearest monuments subject to a Preservation Order are located in County Cork, over 5km to the east.

While the introduction of the proposed 110kV substation will result in a change to the wider landscape within which these monuments are located given the distance between the latter and the proposed 110kV substation the potential effects on the wider setting of the monuments is considered to be Imperceptible.

11.4.3.1.2 Recorded Monuments

No recorded monuments are located in close proximity to the proposed 110kV substation therefore effects to the immediate setting of this aspect of the archaeological resource are not identified. The nearest recorded monument comprises a hut site (KE077-001—) in the townland of Cummeennabudodge which is situated in forestry c. 1.3km to the south-west of the proposed 110kV substation. The introduction of the proposed 110kV substation will result in a change to the wider setting of the recorded monument, however, the potential effects on setting are considered to be Not Significant.

11.4.3.1.3 **Newly Recorded Archaeological Monuments**

The nearest newly recorded monument comprises a possible standing stone (St st 6, ITM 520798, 583254) which is situated adjacent to an existing track c. 2.1km to the west of the proposed 110kV substation. While a change to the wider setting of the stone is acknowledged it is considered to be Not Significant.

11.4.3.1.4 **Kerry Archaeological Landscapes**

No element of the Proposed Development is located within The Paps designated archaeological landscape. The proposed 110kV substation is situated c. 3km south-east of the southern boundary of the designated landscape. While the introduction of the 110kV substation will result in a change to the wider setting in which the designated landscape is located, the potential effects to same are regarded as Not Significant.

11.4.3.1.5 **Protected Structures / NIAH**

No Protected Structures, items listed in the NIAH or Historic Gardens are located in close proximity to the Proposed Development. The nearest structures are situated c. 5-6km from the proposed 110kV substation. While the introduction of the 110kV substation will result in a change to the wider setting in which these structures are located the potential effects to same are regarded as Imperceptible.

11.4.3.1.6 **Local Cultural Heritage Items**

As no such items were noted on or in close proximity to the Proposed Development, no effects to the setting of same are identified.

11.4.3.2 **Proposed Borrow Pit**

11.4.3.2.1 **National Monuments in State Care / Preservation Orders**

No National Monuments or those subject to a Preservation Order are located in close proximity to the proposed borrow pit. No impacts to the immediate setting of any such monuments are therefore identified. The nearest National Monument to the proposed borrow pit comprises Knocknakilla stone circle (NM No. 420) in County Cork which is situated c. 6.6km-6.7km to the east. The nearest monuments subject to a Preservation Order are located in County Cork, over 5km to the east.

While the introduction of the proposed borrow pit will result in a change to the wider landscape within which these monuments are located, given the distance between the latter and the proposed borrow pit the potential effects on the wider setting of the monuments is considered to be Imperceptible.

11.4.3.2.2 **Recorded Monuments**

No recorded monuments are located in close proximity to the proposed borrow pit therefore effects to the immediate setting of this aspect of the archaeological resource are not identified. The nearest recorded monument comprises a hut site (KE077-001—) in the townland of Cummeennabuddoge which is situated in forestry c. 1.3km to the south-west of the proposed borrow pit. The introduction of the proposed borrow pit will result in a change to the wider setting of the recorded monument, however, the potential effects on setting are considered to be Not Significant.

11.4.3.2.3 **Newly Recorded Archaeological Monuments**

The nearest newly recorded monument comprises a possible standing stone (St st 6, ITM 520798, 583254) which is situated adjacent to an existing track c. 2.1km to the west of the proposed borrow pit. While a change to the wider setting of the stone is acknowledged it is considered to be Not Significant.

11.4.3.2.4 **Kerry Archaeological Landscapes**

No element of the Proposed Development is located within The Paps designated archaeological landscape. The proposed borrow pit is situated c. 3km south-east of the southern boundary of the designated landscape. While the introduction of the proposed borrow pit will result in a change to the wider setting in which the designated landscape is located, the potential effects to same are regarded as Not Significant.

11.4.3.2.5 **Protected Structures / NIAH**

No Protected Structures, items listed in the NIAH or Historic Gardens are located in close proximity to the Proposed Development. The nearest structures are situated c. 5-6km from the proposed borrow pit. While the introduction of the proposed borrow pit will result in a change to the wider setting in which these structures are located the potential effects to same are regarded as Imperceptible.

11.4.3.2.6 **Local Cultural Heritage Items**

As no such items were noted on or in close proximity to the Proposed Development, no effects to the setting of same are identified.

11.4.3.3 **Proposed Extension to Permitted Borrow Pit**

11.4.3.3.1 **National Monuments in State Care / Preservation Orders**

No National Monuments or those subject to a Preservation Order are located in close proximity to the proposed extension to the permitted borrow pit. No impacts to the immediate setting of any such monuments are therefore identified. The nearest National Monument is located over 10km to the south-east and comprises Lissacresig stone circle and ringfort (Nat. Mon. No. 571). The nearest monument subject to a Preservation Order is situated 5.7km to the south-east and comprises a cross slab (P.O. 29/1976).

While the introduction of the proposed extension to the permitted borrow pit will result in a change to the wider landscape within which these monuments are located given the distance between the latter and the proposed borrow pit extension the potential effects on the wider setting of the monuments is considered to be Imperceptible.

11.4.3.3.2 **Recorded Monuments**

No recorded monuments are located in close proximity to the proposed extension to the permitted borrow pit therefore effects to the immediate setting of this aspect of the archaeological resource are not identified. Standing stone CO058-080— is located c. 1.2km to the south-west of the proposed extension to the permitted borrow pit. The proposed extension to the permitted borrow pit will result in a change to the wider setting of the recorded monument, however, the potential effects on setting are considered to be Not Significant.

11.4.3.3.3 **Newly Recorded Archaeological Monuments**

The nearest newly recorded monument comprises a possible standing stone (St st 6, ITM 520798, 583254) which is situated adjacent to an existing track c. 530m to the south-west of the proposed extension to the permitted borrow pit. While a change to the wider setting of the stone is acknowledged it is considered to be Not Significant.

11.4.3.3.4 **Kerry Archaeological Landscapes**

No element of the Proposed Development is located within The Paps designated archaeological landscape. The proposed extension to the permitted borrow pit is located c. 1.5km south of the southern boundary of the designated landscape. While the extension to the permitted borrow pit will result in a change to the wider setting in which the designated landscape is located, the potential effects to same are regarded as Not Significant.

11.4.3.3.5 **Protected Structures / NIAH**

No Protected Structures, items listed in the NIAH or Historic Gardens are located in close proximity to the Proposed Development. The nearest structures are situated c. 4.5km from the proposed extension to the permitted borrow pit. While the introduction of the extension to the permitted borrow pit will result in a change to the wider setting in which these structures are located the potential effects to same are regarded as Imperceptible.

11.4.3.3.6 **Local Cultural Heritage Items**

As no such items were noted on or in close proximity to the Proposed Development, no effects to the setting of same are identified.

11.4.3.4 **Access Road (Upgrade and New)**

11.4.3.4.1 **National Monuments in State Care / Preservation Orders**

No National Monuments or those subject to a Preservation Order are located in close proximity to the proposed Access Road or temporary road. No impacts to the immediate or wider setting of any such monuments are therefore identified as a result of the proposed Access Road or temporary road.

11.4.3.4.2 **Recorded Monuments**

KE076-086— Fulacht Fia is located c. 77m to the east of the proposed temporary road at the south-west end of the proposed Access Road. A change to the wider setting of this monument as a result of the temporary road and junction widening area will occur but is considered to be Not Significant given the nature of the development proposals in this area.

11.4.3.4.3 **Newly Recorded Archaeological Monuments**

One newly recorded standing stone (St st 8) is located adjacent to the existing forestry track along which the Access Road extends. Given that the Access Road extends along an existing forestry track at this location effects on the setting of the possible monument are not identified.

11.4.3.4.4 **Kerry Archaeological Landscapes**

No element of the Proposed Development is located within The Paps designated archaeological landscape. While the Access Road (Upgrade and New) and temporary road will result in a change to

the wider setting in which the designated landscape is located, the potential effects to same are regarded as Imperceptible.

11.4.3.4.5 **Protected Structures / NIAH**

No Protected Structures, items listed in the NIAH or Historic Gardens are located in close proximity to the Proposed Development. While the proposed Access Road and temporary road will result in a change to the wider setting in which these structures are located the potential effects to same are regarded as Imperceptible.

11.4.3.4.6 **Local Cultural Heritage Items**

As no such items were noted on or in close proximity to the Proposed Development, no effects to the setting of same are identified.

11.5 **Cumulative Impacts**

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

11.5.1 **Cumulative Impacts (Direct Impacts)**

The addition of other projects to the Proposed Development was considered in order to assess Cumulative Impacts. These include the Permitted Development (Ref. No. 19/4972) to which the proposed 33kV and 110kV underground cabling routes and proposed 110kV substation relate in addition to a number of other permitted, existing and proposed developments as listed in Chapter 2 of the EIAR.

No direct cumulative impacts for the Permitted Development were identified in the 2019 EIAR. No direct impacts to the recorded archaeological or architectural heritage resource as a result of the Proposed Development have been identified. Where potential impacts to newly recorded monuments are identified appropriate mitigation measures are recommended. Similarly, where potential direct impacts to sub-surface archaeological features or deposits should they exist within the Proposed Development site are identified mitigation measures are recommended to ameliorate the impact. No residual direct impacts or direct cumulative impacts as a result of the Proposed Development will therefore occur, since all potential direct effects are dealt with through mitigation to alleviate or remove the impacts altogether. Such mitigation includes buffer zones and archaeological monitoring during the construction stage of the project should it proceed. In this regard, when the Proposed Development is added to the other projects there will be no increase in cumulative impacts.

11.5.2 **Cumulative Impacts (Indirect Impact on Setting)**

Cumulative impacts on setting are more likely to occur at the operational stage of the development (i.e. post-construction). In this regard in order to assess overall cumulative effects on archaeology and cultural heritage the Proposed Development is considered in the context of other developments. The proposed underground electrical cabling routes are underground and will not result in any impacts on setting and therefore no cumulative impacts will occur.

The nature of the underground cables and associated access roads is such that no impacts on setting will occur as a result of either the 33kV or 110kV underground electrical cabling. Similarly, the proposed Access Road primarily comprises a route along which components and materials for the Proposed Development will be delivered to the Proposed Development site and in general will not result in any effects on setting to the archaeological, architectural or cultural heritage resource. The elements of the Proposed Development capable of indirect effects on setting will result in Not Significant-Imperceptible impacts on setting in the wider archaeological and cultural heritage landscape as discussed above in Section 11.4.3. When added to other projects in the vicinity including the Permitted Development (19/4972), a slight increase in cumulative impacts on setting may occur. No significant effects to the setting of recorded monuments, newly recorded sites, Protected Structures or items listed in the NIAH will occur however.

11.6 Decommissioning Phase

There will be no significant potential impacts on the archaeological, architectural and cultural heritage environment during the decommissioning of the Proposed Development. Any potential direct impacts will already have been resolved through the implementation of appropriate mitigation measures. It is recommended, however, that the 10m buffer zone around the newly recorded standing stones also be implemented during the decommissioning phase of the project.

11.7 Conclusion

This chapter comprises an Environmental Impact Assessment Report (EIAR) of the potential impact of the Proposed Development on the Cultural Heritage resource. Cultural heritage includes archaeology, architectural heritage and any other tangible assets. The assessment was based on GIS based mapping, a desktop analysis of all baseline data. Field inspection of the Proposed Development site was also carried out, both in 2021 and in 2018 for the Permitted Development (19/4972).

All archaeological, architectural and cultural heritage (items that are capable of being impacted) constraints within 100m of either side of the proposed underground cabling routes and Access Road and temporary road were assessed, as well as those in the wider landscape surrounding the proposed 110kV substation and borrow pits. No direct impacts to any recorded or newly recorded constraints as a result of the Proposed Development were identified. Some mitigation measures have been recommended, however, to alleviate/remove any negative effects to potential sub-surface features and the standing stones located a short distance from the proposed 33kV underground cabling route.

An assessment of cumulative impacts was also undertaken taking into consideration projects in the vicinity, particularly the adjacent Permitted Development and other permitted, proposed and existing developments listed in Chapter 2. No residual direct impacts or direct cumulative impacts as a result of the Proposed Development will occur, however, since all potential direct effects are dealt with through mitigation to alleviate or remove the impacts altogether.

Cumulative impacts on setting are more likely to occur at the operational stage of a development (i.e. post-construction). In this regard in order to assess overall cumulative effects on archaeology and cultural heritage the Proposed Development was considered in the context of other developments. The proposed 110kV and 33kV underground cabling routes are underground and will not result in any impacts on setting and therefore no cumulative impacts will occur. The proposed 110kV substation and borrow pit and the extension to the permitted borrow pit will result in Not Significant-Imperceptible overall impacts on setting in the wider archaeological and cultural heritage landscape. When added to other projects in the vicinity including the Permitted Development (19/4972), a slight increase in cumulative impacts on setting may occur. No significant effects to the setting of recorded monuments, newly recorded sites, Protected Structures or items listed in the NIAH will occur however.