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ARCHAEOLOGY | CONSERVATION | HERITAGE | PLANNING

Archaeological Assessment Proposed residential development at Knockgriffin (Imokilly), Middleton, County Cork



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1. Introduction

John Cronin & Associates have been commissioned by **Haven Falls Ltd** to undertake an archaeological assessment of a proposed residential development at the lands in the townland of Knockgriffin (Imokilly) located c.2km to the northwest of Midleton, County Cork (**Figure 1**). The subject site is located within a proposed urban expansion zone in the Water-Rock area, Haven Falls Ltd are to apply for planning permission to Cork County Council which will involve the construction of up to 350 units with a neighbourhood centre. This report assesses the locations of the proposed infrastructure development and not the surrounding lands proposed for future housing developments.



Figure 1: General location of subject site within the wider landscape (Source: Heritage Maps.ie)

This assessment has been compiled in order to examine the potential impacts which development of the subject lands may have on the recorded and potential archaeological heritage resource of the area. The study area for this assessment comprised the footprint of the proposed development site along with the lands extending for 1km from its boundary. The assessment firstly outlines the methodology used in its compilation (**Section 2**) and then provides an archaeological and historical context for the study area, including a summary of the relevant legal and planning framework for the recorded and potential elements of the archaeological resource within its environs (**Section 3**). The results of a site inspection are described in **Section 4**, an assessment of impacts is provided in **Section 5** and conclusions and recommendations are presented in **Section 6**.

2. Methodology

This report is based on a programme of desktop research, site inspection and desk-based assessment.

Desktop study

A desktop study assessment has been carried out in order to identify all known archaeological sites, designated architectural heritage structures and other undesignated cultural heritage assets within the study area. The principal sources reviewed for this assessment of the known archaeological resource are the Sites and Monuments Record (SMR) and the Record of Monuments and Places (RMP). Between 1984 and 1992, the Archaeological Survey of Ireland (ASI) issued a series of county SMRs which lists known archaeological sites and places and this record formed the basis for the statutory RMP established under Section 12 of the National Monuments (Amendment) Act 1994. Similar in format to the SMRs (comprising a list and set of maps), the RMPs were issued for each county in the State between 1995 and 1998. Archaeological monuments included in the statutory RMP are legally protected and are generally referred to as 'Recorded Monuments'.

The ASI has continued to record and add entries to the SMR and has developed an online database and web viewer known as 'Historic Environment Viewer'. This has been developed to enhance the user's experience by facilitating access to the database of the National Monuments Service's Sites and Monuments Record (SMR) and the National Inventory of Architectural Heritage (NIAH) in a seamless one stop point of access for both data resources (Source: www.archaeology.ie).

In addition, the following sources were consulted as part of the desktop study:

- *Cartographic Sources* - The detail on cartographic sources can indicate past settlement and land use patterns in recent centuries and can also highlight the impact of modern developments and agricultural practices. This information can aid in the identification of the location and extent of unrecorded, or partially levelled, features of archaeological or architectural heritage interest. The cartographic sources examined for the study areas include the Down Survey (1650s), the first edition of the 6-inch Ordnance Survey (OS) maps (surveyed and published in the 1830s-40s), the 25-inch OS maps (surveyed and published 1887-1913).
- *Aerial photography* - In parallel with the cartographic study, a review publicly-accessible aerial photographic sources from the Ordnance Survey, Google and Bing Maps was undertaken.
- *Development Plans* - The local authority development plans relevant to the study area was consulted as part of this assessment. These plans outline the local authorities' policies for the conservation of the archaeological and architectural heritage resource and include the Record of Protected Structures (RPS) and any designated Architectural Conservation Areas (ACAs). The *Cork County Development Plan 2022- 2028* was consulted to review the planning authority's policies and objectives designed for the protection of the archaeological resource. The *Midleton Town Development Plan 2013* was also consulted.

- *Database of Irish Excavation Reports* - The Database of Irish Excavation Reports contains summary accounts of all archaeological excavations carried out in Ireland from 1969 to present.
- *Irish Heritage Council: Heritage Map Viewer* - This online mapping source collates various cultural heritage datasets and includes extracts from the National Museum of Ireland's records of artefact discovery locations as well as datasets provided by, among others, the National Monuments Service, local authorities, the Royal Academy of Ireland and the Office of Public Works. Current data was accessed via www.heritagemaps.ie
- *Literary Sources* - Publications consulted are listed in **Section 7** of this report.
- *UNESCO World Heritage Sites and Tentative List* - UNESCO seeks to encourage the identification, protection and preservation of cultural and natural heritage around the world considered to be of outstanding value to humanity. There are two world heritage sites in Ireland and a number of other significant sites are included in a Tentative List (2010) that has been put forward by Ireland for inclusion.

Field survey

Qualified and experienced archaeologists (Deirbhile Lynch and Seán Tiffin) carried out an inspection of the proposed development site on 6 October 2022. The site was assessed in terms of historic landscape, land use, vegetation cover, presence and potential for undetected archaeological and architectural heritage sites/features. Weather conditions were dry and moderately clear. The results of the site inspection are detailed in **Section 4**.

3. Context

Location

The subject site comprises a parcel of agricultural land located approximately 2.0km northwest of Midleton, County Cork (**Figure 2**). The landholding extends across the townland of Knockgriffin, (Imokilly) and encompasses sections of four fields and the entirety of one field. The underlying soil profiles of the site consists of irregularly bedded and nodular bedded argillaceous limestones with shale to the south and flaser-bedded sandstone and mudstone to the north (<https://www.gsi.ie/>).

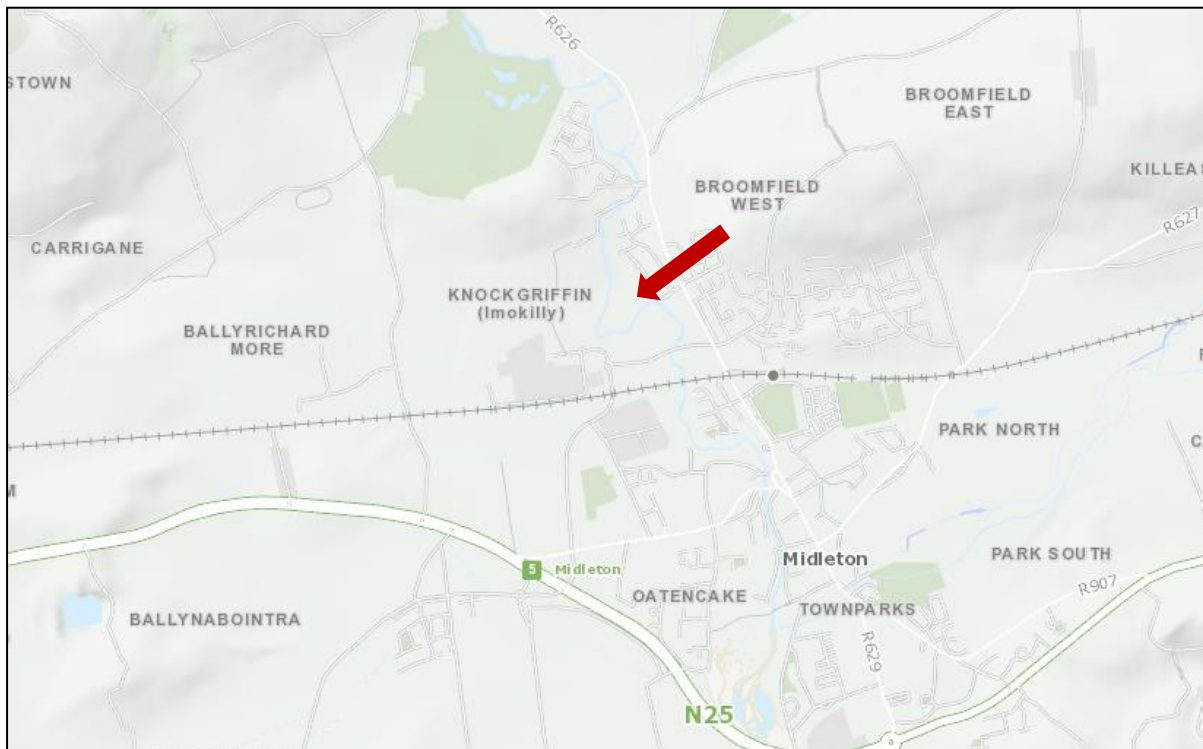


Figure 2: Location of the subject site (indicated by red arrow) (Source: Historic Environment Viewer)

In 2020, the southern portion of the proposed lands were subject to geophysical survey by EarthSound (20R0052). This licence of works revealed that there was significant modern magnetic disturbance related to adjacent buildings, roads, boundaries, and the train line. However, there was also potential archaeological evidence for ditches within the centre of the survey area, along with other features (pink shaded area in **Figure 3**). The report concluded that there were a number of areas which were suggestive of archaeological activity, agricultural deposits or geological structures (see **Figure 3**).

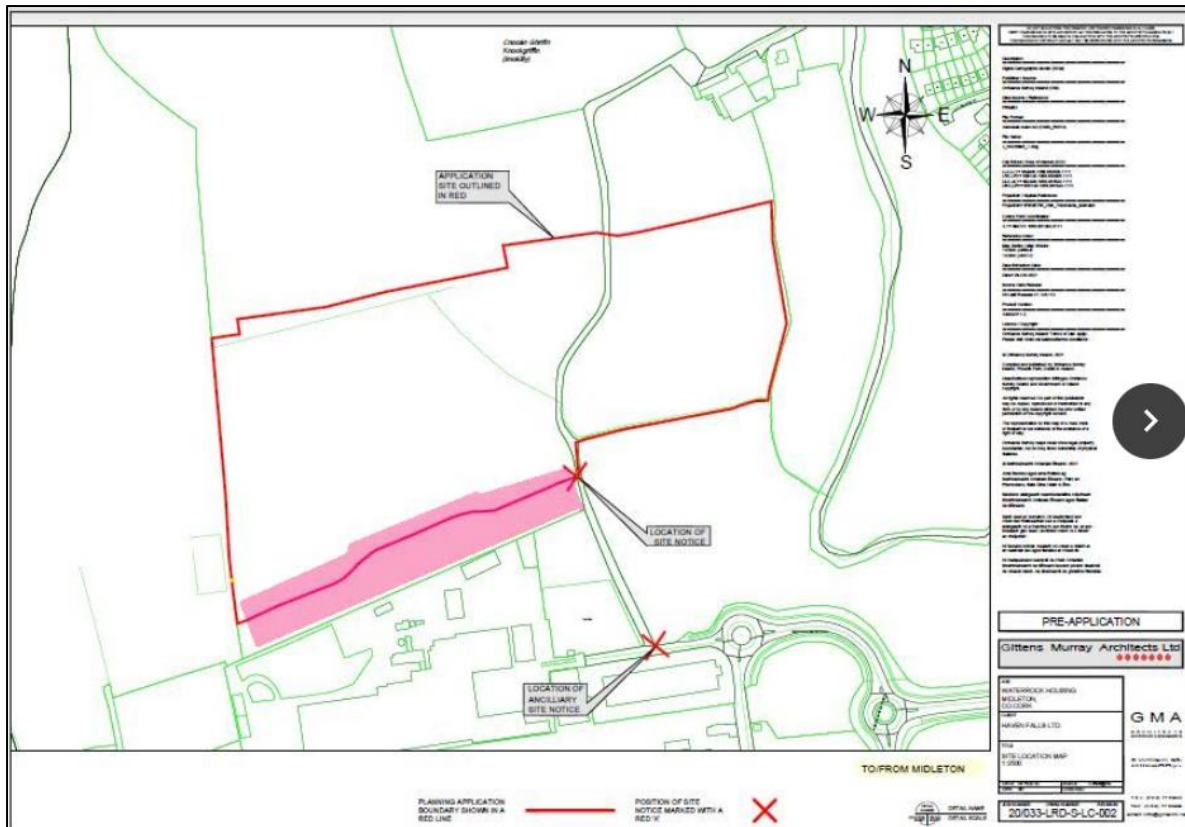


Figure 3: Redline showing proposed development site outlined in red with the extent of the previous geophysical survey area shaded in pink (Source: Gittens Murray Architects Ltd.)

Legal & Policy Framework

The management and protection of cultural heritage in Ireland is achieved through a framework of national laws and policies which are in accordance with the provisions of the Valetta Treaty (1995) (formally the *European Convention on the Protection of the Archaeological Heritage, 1992*) ratified by Ireland in 1997; the *European Convention on the Protection of Architectural Heritage* (Granada Convention, 1985), ratified by Ireland in 1997; and the *UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage, 2003*, ratified by Ireland in 2015. The locations of World Heritage Sites (Ireland) and the Tentative List of World Heritage Sites submitted by the Irish State to UNESCO were reviewed none are located within the region of the country which contains the study area. The closest site on the Tentative List of World Heritage Sites is The Rock of Cashel, which is located *circa* 70km northwest of the subject site.

The national legal statutes and guidelines relevant to this assessment include:

- National Monuments Act (1930) (and amendments in 1954, 1987, 1994 and 2004);
- Heritage Act (1995);
- National Cultural Institutions Act (1997);
- Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act (1999);
- Planning and Development Act (2000);
- *Architectural Heritage Protection: Guidelines for Planning Authorities*, Department of Arts, Heritage, and the Gaeltacht (2011); and
- *Framework and Principles for the Protection of the Archaeological Heritage*, Department of Arts, Heritage, Gaeltacht and the Islands, 1999.

Archaeological Heritage

The administration of national policy in relation to archaeological heritage management is the responsibility of the National Monuments Service (NMS) which is currently based in the Department of Housing, Local Government and Heritage. The National Monuments Act of 1930, and its Amendments, are the primary means of ensuring the satisfactory protection of the archaeological resource. They include several provisions that are applied to secure the protection of archaeological monuments. These include the designations of nationally significant sites as National Monuments, the Register of Historic Monuments (RHM), the Record of Monuments and Places (RMP), the Sites and Monuments Record (SMR), and the placing of Preservation Orders and Temporary Preservation Orders on endangered sites.

Section 2 of the National Monuments Act, 1930 defines a National Monument as ‘a monument or the remains of a monument, the preservation of which is a matter of national importance’. The State may acquire or assume guardianship of examples through agreement with landowners or under compulsory orders. Archaeological sites within the ownership of local authorities are also deemed to be National Monuments. **There are no National Monuments located within the study area.**

The National Monuments (Amendment) Act, 1994 made provision for the establishment of the RMP, which comprises the known archaeological sites within the State. The RMP, which is based on the earlier Register of Historic Monuments (RHM) and Sites and Monuments Record (SMR), provides county-based lists of all recorded archaeological sites with accompanying maps. All RMP sites receive statutory protection under the National Monuments Act 1994 and the NMS must be given two months’ notice in advance of any work proposed at their locations. There are **no recorded archaeological sites** (*as recorded by the Archaeological Survey of Ireland (ASI)*) located within the boundary of the subject site. There is one recorded archaeological site within the c.1km study area. This recorded archaeological site is a lime kiln (Monument Number: CO076-018----) in the townland of Water-Rock. The site is located c.460m to the southwest of the proposed development site.

The following is description taken from the Historic Environment Viewer:

Built against rock outcrop; heavily overgrown. Front (H c. 7m; Wth c. 6m) S-facing; corbelled recess (H 2.25m; Wth 2.4m; D 2.3m), rear formed by two slabs; stoking-hole evident. Recess arch filled with masonry, formerly supported by wooden lintel. Top of kiln enclosed by stone wall. Buttress against E wall. Funnel infilled. Remains of structure adjacent to SE corner.

The *Cork County Development Plan 2022 – 2028* includes the following relevant policies and objectives in relation to the protection of the archaeological resource:

16.2.13 Development proposals for archaeological sites that fall within the archaeological zone should be subject to preplanning discussion with the County Archaeologist and applications accompanied by an archaeological assessment. The planning authority may apply conditions relating to archaeology to individual permissions. These requirements are carried out on behalf of a prospective developer by an archaeologist and funded by the developer

HE 16-5 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 16-9 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.

HE16-13 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.

Archaeological & historical background

There are **no recorded archaeological sites** (as recorded by the Archaeological Survey of Ireland (ASI)) located within the boundary of the subject site. As noted previously, there is only one recorded archaeological site within the c.1km study area (**Table 1** and **Figure 3**); this is a lime kiln located c.460m to the southwest of the proposed development site.

Table 1: List of recorded archaeological sites located within 1km of the proposed development site

SMR No.	Class	Townland	ITM Easting	ITM Northing
CO076-018----	Kiln – Lime	Water-rock	586231	574186



Figure 4: Recorded archaeological site (as recorded by ASI) within 1km of the subject site (Source: Government of Ireland, Historic Environment Viewer)

The following presents summary details of the main periods within the Irish archaeological record with references to the recorded archaeological sites located within the study area. The dating framework used for each period is based on *Guidelines for Authors of Reports on Archaeological Excavations* as published by the National Monuments Service (NMS).

Prehistoric

Traditionally, the earliest recorded evidence for human settlement in Ireland dates to the Mesolithic period (7000–4000 BC) when groups of hunter-gatherers arrived on the island. However, recent evidence in the form of a butchered bear patella found in ‘Alice and Gwendoline’ Cave near Ennis in County Clare now suggests that humans were present in Ireland during the Palaeolithic period between 12,800 to 12,600 cal BC (Dowd and Carden, 2016, 161). Similarly, re-examination of a reindeer bone fragment discovered in Castlepook Cave near Doneraile, County Cork in 1905 revealed human butchery marks on the bone which was radiocarbon dated to 31,000 BC (Carden, 2020), establishing human activity in Ireland more than 20,000 years earlier than previously thought. While these prehistoric settlers did not construct settlements or monuments that have left any above ground traces, their presence can often be identified by scatters of worked flint in ploughed fields. There are no recorded sites from the Mesolithic period within the study area.

The Neolithic period (*circa* 4000-2400 BC) began with the arrival and establishment of agriculture as the principal form of economic subsistence, which resulted in more permanent settlement patterns. As a consequence of the more settled nature of agrarian life, new site-types, such as more substantial rectangular timber houses and various types of megalithic tombs, begin to appear in the archaeological record during this period. There are no recorded sites from the Neolithic period within the study area.

The Irish Bronze Age (*circa* 2400–500 BC) commenced with the arrival of metal-working techniques to the island and this technological advance resulted in the introduction of a new artefactual assemblage into the Irish archaeological record. This period was also associated with the construction of new monument types such as standing stones, stone rows, stone circles, barrows and *fulachta fia*. *Fulacht fia* translates as cooking places of the wild (or of deer), they are often interpreted as the remains of cooking sites and are the most numerous archaeological site type in Ireland, numbering some 7000 recorded examples. Radiocarbon dating of excavated examples has generally produced dates in the Bronze Age (*circa* 2400-500BC). A number of alternative interpretations have been forwarded as to the function of these archaeological sites, such as their potential uses as bathing, saunas, garment washing and dyeing, leather processing and even brewing sites (Hawkes 2015). There are no recorded sites from the Bronze Age within the study area.

The arrival of iron-working technology in Ireland saw the advent of the Iron Age (600 BC – 400 AD). This period has been traditionally associated with a Celtic ‘invasion’ but this view is no longer widely accepted as recent archaeological evidence points instead to a gradual acculturation of the Irish Bronze Age communities following centuries of contacts with Celtic-type cultures in Europe. Relatively little has been traditionally known about Iron Age settlement and ritual practices until recent decades when the corpus of evidence has been greatly increased by the discovery of Iron Age sites during schemes such as bog-cutting and road construction projects. There are no sites from the Iron Age within the study area.

Medieval and post-medieval periods

The early medieval period began with the introduction of Christianity and continued up to the arrival of the Anglo-Normans in the late twelfth century (*circa* 400–1169 AD). While the medieval period saw the emergence of the first phases of urbanisation around the larger monasteries and the Hiberno-Norse ports, the dominant settlement pattern was still rural-based and centred around enclosed farmsteads known as ringforts (earth/timber built) and cashels (stone built). Ringforts are one of the most numerous monuments in the Irish landscape, with some 45,000 recorded examples (Stout 1997, 53). These sites comprise broadly circular enclosures delimited by one or more concentric banks and ditches in the case of ringforts and drystone walls in the case of cashels. They were formerly known by the names *ráth/lios/cathair/dún*, which still form some of the most common place-name elements within the Irish landscape. The majority of excavated examples have produced evidence for the remains of timber houses, outbuildings and stockades as well as a variety of agricultural and craft activities such as grain processing and metalworking. There are no sites from the early Medieval period within the study area.

The arrival and conquest of large parts of Ireland by the Anglo-Normans in the late 12th-century broadly marks the advent of the Irish late medieval period, which continued up until the beginning of the post-medieval period in c.1550. Within the late medieval period, towns, markets, and fairs were established and change and reform was attempted in the Irish church. By the 15th-century the native Irish chieftains and lords began to establish tower houses and smaller castles as centres of territorial control. There are a number of likely late medieval recorded archaeological sites within the nearby historic town of Midleton (CO076-063005-).

The post-medieval period (1550+) saw the development of high and low status stone houses throughout the Irish country. During this period any given settlement cluster is likely to have consisted primarily of single-storey thatched cottages with associated farm buildings while two-storey farmhouses became more common in the nineteenth century. The historic town of Midleton (CO076-063005-) was granted to the FitzGeralds of Cloyne during the 16th century. They were held by them until the Cromwellian confiscations. The town was granted a charter in 1670. The town had use of the Cork harbour due to its location on the important route between Cork and Youghal (Power et al 2009). The lime kiln (CO076018----) dates to this period.

The Excavations Database

The Excavation Database contains summary accounts of all licensed archaeological investigations carried out in Ireland (North and South) from the 1960s to the present day. The database gives access to over 27,000 reports and can be browsed or searched using multiple fields/criteria. A search for the townland Knockgriffin/Townparks revealed four licenses of archaeological works.

The licenses are related to a series of archaeological testing which was carried out as part of the Midleton Northern Relief Road system project. Following testing, two mill-races, a wall and two drains which were associated with Avoncore Mills were preserved in-situ (06E1165). The remaining licenses revealed nothing of archaeological significance (06E1165, 06R0199, 06E1165 ext). See **Appendix 2** for summary accounts of these licenses.

Placenames

The Placenames Database of Ireland (available at www.logainm.ie) which provides translations of the Irish origins of townland names was consulted (**Table 2**). Townlands are the smallest unit

of land division in the Irish landscape and many may preserve early Gaelic territorial boundaries that pre-date the Anglo-Norman conquest. The boundaries and nomenclature of the Irish townlands were recorded and standardised by the Ordnance Survey in the 19th-century. The Irish roots of townland names often refer to natural topographical features, but some name elements may also give an indication of the presence of past human activity within the townland, e.g. dun, lios or rath indicate the presence of a ringfort while temple, saggart, termon or kill record an association with a church site. The proposed development site is located within the townland of Knockgriffin (Imokilly).

Table 2: Townland names and translations

Name	Irish	Translation	Indication of Archaeology?
Knockgriffin	Cnocán Ghrífin'	'Cnocán' hillock	Mentioned in 1632 at Knockangriffin and again in 1660 at Cnockanegriffin. No indication of archaeological significance.

Cartographic and aerial review

The detail on historic cartographic sources demonstrates the nature of past settlements and land use patterns in recent centuries and can also highlight the impacts of modern developments and agricultural practices. This information can aid in the identification of the location and extent of unrecorded or partially levelled features of archaeological or architectural heritage interest. The cartographic sources examined for the study areas include the first edition of the 1:10,560 (or "six-inch-to-one-mile!") OS maps (surveyed and published in the 1830s-40s) (see **Figure 4** below), the 1:2500 (or "25-inch") OS maps (surveyed and published 1887-1913) (see **Figure 5**) and later Cassini-projection six-inch maps (c.1940) (**Figure 6**).

The six-inch OS map shows the subject lands as irregular shaped fields. The site encompasses the entirety of four fields and portions of another four fields. Within the centre eastern portion there is a local access road and small dwellings fronting this access road. There is no indication for archaeological sites within the proposed development site on this edition. By the 25-inch historic OS map the field boundaries have been altered. The proposed development area on this map edition now encompasses three fields, the majority of one field and a small portion of another. The access road remains in the centre east portion of the site, however, the buildings which were previously depicted are no longer extant. There is no indication for archaeological sites within the subject lands on this edition, however, there may be remnants of these buildings which could be of local cultural importance.



Figure 5: Extract from the First Edition 6-inch OS map showing general location of development area (Source: Ordnance Survey of Ireland)

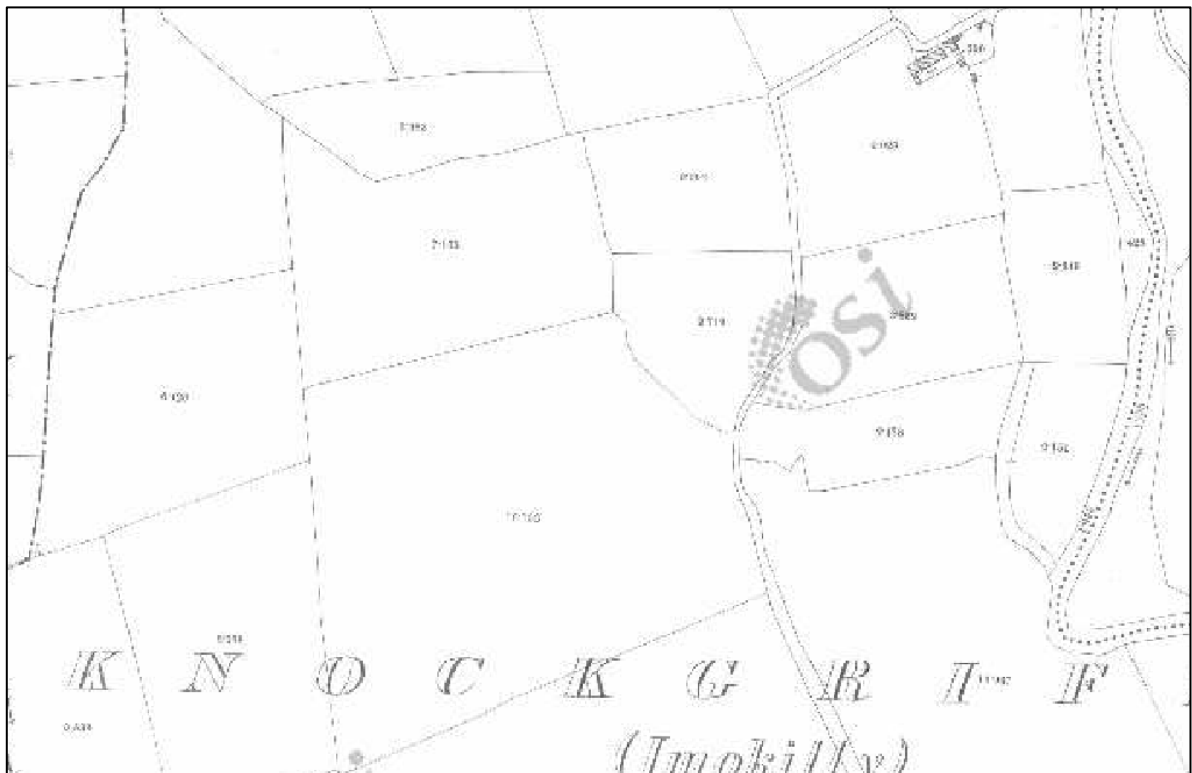


Figure 6: Extract from the 25-inch OS map showing general location of development area (Source: Ordnance Survey of Ireland)

A review of available orthorectified aerial imagery for a variety of years from 1995 to 2018 (Figures 6 -7) indicates that the site remained in use as agricultural land and was subject to

ploughing and crop produce mainly in the eastern portion of the site. See **Section 4** below for assessment of numbered fields.



Figure 7: Aerial view of the subject lands from 2003 (Source: Google Earth Pro)

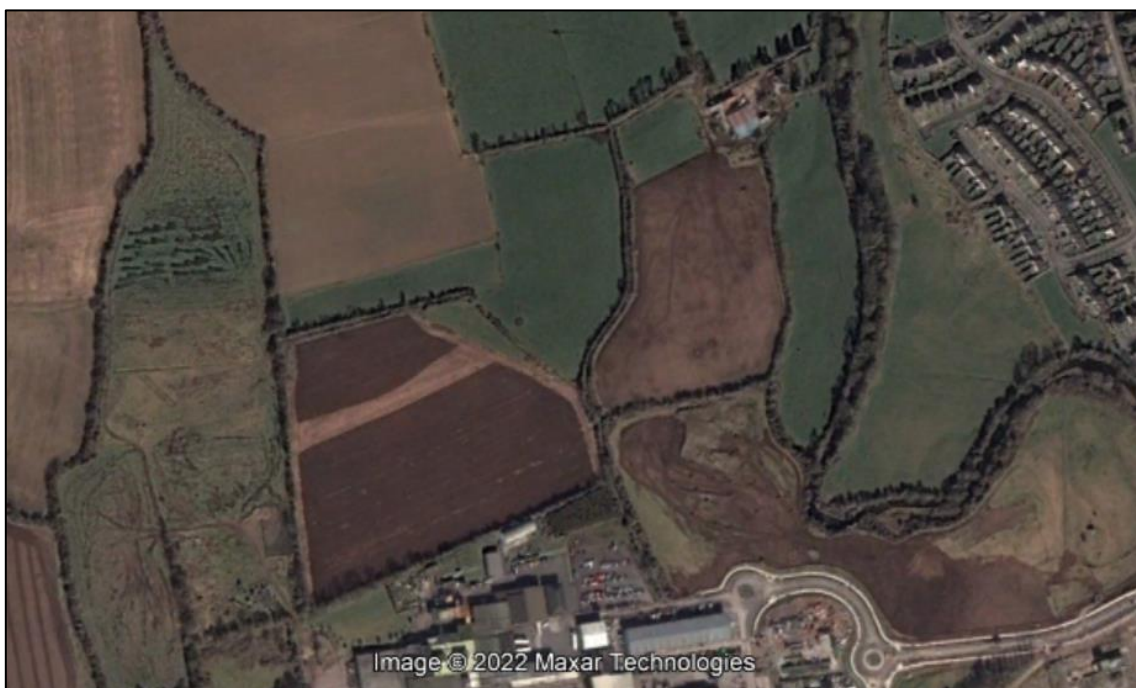


Figure 8: Aerial view of the subject lands from 2009 (Source: Google Earth Pro)

4. Description of subject lands

An inspection of the subject site was undertaken by qualified and experienced archaeologists (Deirbhile Lynch and Seán Tiffin) from the offices of John Cronin & Associates on 6th of October 2022. The site was assessed in terms of historic landscape, land use, vegetation cover, presence, and potential for undetected archaeological and architectural heritage sites/features. Weather conditions were dry and moderately clear at the time of survey, and this provided moderately good landscape visibility.



*Figure 9: Aerial view of the subject lands with numbers relating to the inspection of the subject site, see descriptions in **Table 3** below*

The 19th century buildings which were depicted on the 6-inch OS map edition were not visible during the field inspection, (see **Figure 10**) One of these buildings fronted the laneway between fields 3 and 4, while the other was within the laneway. This laneway is heavily overgrown and was not accessible nor is it suitable for geophysical survey. It is unlikely that there are in situ subsurface remains for these buildings as the land has been in use for tillage and ploughed frequently over the previous decades.



Figure 10: View of field 4, facing north

The subject site possessed no areas which presented obvious archaeological potential. While much of the land sloped gradually, there were levelled areas that could be considered as moderate archaeological potential, (see **Figures 11** and **12**).



Figure 11: View of field 1, facing northeast



Figure 12: View of field 5, facing northeast

In 2020, the southern portion of the proposed lands were subject to geophysical survey by EarthSound (20R0052). This licence of works revealed that there was significant modern magnetic disturbance related to adjacent buildings, roads, boundaries, and the train line. However, there was also potential archaeological evidence for ditches within the centre of the survey area (see **Figure 14**). The report concluded that there were a number of areas which were suggestive of archaeological activity, agricultural deposits or geological structures. This area will not need to be re-surveyed.



Figure 13: View of southern area of site which was previously subject to geophysical survey

Table 3: Field descriptions

Field number	Description
Field 1	<p>An irregular shaped field which measures c.235m north to south and c.282m east to west and measures c.5.90 hectares.</p> <p>The existing layout of this level field is present on the historic OSI maps, which show it as a vacant plot. The boundaries in all directions comprise tree-lined hedgerows that have become overgrown with scrub and gorse. In use as fallow during the time of the site inspection with a stony, recently ploughed surface. A review of the online aerial images indicated that the entire field has been in use as tillage land in recent decades. Nothing of archaeological significance was noted within this field during the site survey, however, there were levelled areas which may possess archaeological potential.</p>
Field 2	<p>An irregular shaped field which measures c.196m east to west, and c.35m north to south and extends for c.150m northwest to southeast in the eastern portion. The field measures c.1.0 hectare.</p>

Field number	Description
	<p>The existing layout of this field was not present in OSI historic maps. The field is bound to the north, east and west by medium height tree-lined hedgerows that have become overgrown with scrub and gorse. The field is bound to the south by an electric fence. The field gradually sloped to the east and was level to the west and northern portions. The field was in use as pasture during the site inspection. A review of the online aerial images indicated that the entire field has been in use as pasture in recent decades. Nothing of archaeological significance was noted within this field during the site survey, however, there were levelled areas which may possess archaeological potential.</p>
Field 3	<p>This is a rectilinear field which measures c.211m west-southwest to east-northeast and c.40m north to south. The field measures c.0.80 hectares.</p> <p>The existing layout of this field was not present in OSI historic maps. The boundaries in all directions comprise tree-lined hedgerows that have become overgrown with scrub and gorse. The field was in use as fallow during the time of the site inspection. A review of the online aerial images indicated that the entire field has been in use as tillage in recent decades. Nothing of archaeological significance was noted within this field during the site survey.</p>
Field 4	<p>An irregular shaped field which measures c.128m north to south and c.235m east to west and measures c.6.10 hectares.</p> <p>The existing layout of this level field is present on the historic OSI maps, which show it as a vacant plot by the Cassini 6-inch OS map edition. The boundaries in all directions comprise tree-lined hedgerows that have become overgrown with scrub and gorse. A low-lying power line traversed this field north to south. In use as pasture during the time of the site inspection. A review of the online aerial images indicated that the entire field has been in use as pasture in recent decades. Nothing of archaeological significance was noted within this field during the site survey.</p>
Field 5	<p>This is a rectilinear field which measures c.288m north to south and c.175m east to west and measures c.3.80 hectares.</p> <p>The existing layout of this field is present on historic OSI maps, which show it as a vacant plot by the Cassini 6-inch OS map edition.</p> <p>This field is gradually sloping to the eastern portion and more steeply sloped to the west. In use as possibly a fallow mustard field at the time of site inspection, with a stony, recently ploughed surface. A review of the online aerial images indicated that the entire field has been in use as tillage land in recent decades. No features of archaeological significance were noted within this field during the inspection, however, there were levelled areas which may possess archaeological potential.</p>

5. Assessment of impact

There are no recorded archaeological sites (as recorded by the Archaeological Survey of Ireland (ASI)) located within the boundary of the subject site. There is one recorded archaeological site within the c.1km study area. The site is a kiln – lime (C0076-018----) which is located c.460m to the southwest of the proposed development site.

Impact of proposed development on the archaeological sites within study area

There is **one** archaeological site recorded by the ASI within the 1km radius study area which surrounds the subject site. There is predicted to be **no direct impact** on the recorded archaeological heritage resource should the proposed development proceed.

Impact on unknown archaeology

No previously unrecorded potential archaeological features were noted within the subject lands. Furthermore, no previously unrecorded archaeological sites were found during this targeted site inspection. The location of the 19th century buildings presented no surface remains and have likely been completely removed through demolition. Furthermore, any subsurface remains have likely been disturbed by agricultural practices as the land has been subject to ploughing throughout previous decades. This invasive practice may have churned any remains of these historic buildings and therefore removed them from their original setting.

In 2020 geophysical survey was carried out by EarthSound on the southern portion of the proposed development lands. This survey revealed that while there were modern magnetic results, that there was also magnetic activity which could be interpreted as archaeological features. ***It is likely that this pattern is repeated within the remainder of Field 1 where the survey was carried out.***

In summary, the subject site comprises an undeveloped parcel of moderate to good quality agricultural land. As such the subject site possesses a ***moderate archaeological potential.***

6. Conclusions and recommendations

Conclusions

This assessment has been compiled to examine the potential impacts which the proposed development may have on both the recorded and potential archaeological heritage resource of the study area centred on the subject lands in Knockgriffin, County Cork. The study area for this assessment comprised the lands within the boundary of the proposed development, along with those extending for 1km from its boundary. Following consultation of the available and relevant datasets, historic documentary and cartographic sources and site inspection, the proposed development lands have been under agricultural use for several centuries and this assessment has concluded that they can be considered to possess a *moderate archaeological potential*.

Recommendations

As a result of this assessment and the recommendations issued by Ms Mary Sleeman, County Archaeologist with Cork County Council during the pre-planning process, a range of additional archaeological measures have been proposed to be undertaken including (a) a programme of archaeological geophysical survey (the area previously surveyed to the south will not require surveying) AND (b) a programme of archaeological testing of potential archaeological remains identified during the planned geophysical survey.

The results of the planned geophysical survey will be furnished to Cork County Council's County Archaeologist along with an outline of a proposed programme of archaeological testing. As of October 2022, it has not been possible to undertake a geophysical survey of the subject lands due to agricultural and survey constraints. It is anticipated that a geophysical survey will be completed by the end of 2022.

If archaeological features are revealed during the planned testing programme, these features should be recorded in written, drawn, and photographic formats and remain *in situ* until consultations are undertaken with the National Monuments Service on the appropriate mitigation strategy. Should the proposed mitigation measures be followed as recommended, this shall provide for either the avoidance of any revealed archaeological remains or the proper and adequate recording of this resource.

7. References/sources

- Cork County Council. 2022. *Cork County Development Plan 2022 – 2028*. Available at: <https://www.corkcoco.ie/en/resident/planning-and-development/cork-county-development-plan-2022-2028/volume-one> [Accessed 04/10/2022].
- Database of Irish Excavation Reports. Available at: logainm.ie/en/12489 [Accessed: 05/10/2022].
- Dowd, M. and Carden, R. 2016. First evidence of a Late Upper Palaeolithic human presence in Ireland. *Quaternary Science Reviews* 139, 158–63.
- Google Earth Pro. Available at: <https://www.google.com/earth/versions>. [Accessed: 05/10/2022].
- Government of Ireland. 2022. *Historic Environment Viewer*. Available at: <http://webgis.archaeology.ie/historicenvironment>. [Accessed 05/10/2022].
- Heritage Council. 2022. *Heritage Map Viewer*. Available at: <https://heritagemaps.ie/WebApps/HeritageMaps/index.html>. [Accessed 05/10/2022].
- Midleton Town Council. 2013. *Midleton Town Development Plan*. Available at: <http://corkcocoplans.ie/wp-content/uploads/bsk-pdf-manager/2016/07/Midleton-Town-Council-Plan-Written-Statement-and-Map-2013.pdf> [Accessed 05/10/2022]
- Ordnance Survey of Ireland. 2022. *Geohive*. Available at: <http://map.geohive.ie/mapviewer.html>. [Accessed 05/10/2022].
- Power, D., Byrne, E., Egan, U., Lane, S. and Sleeman, M. 1994 *Archaeological inventory of county Cork, vol. 2: East and South Cork*. Dublin. Stationery Office.

Appendix: Excavations Database entries

The following information is reproduced from the Database of Irish Excavation Reports (www.excavations.ie)

<i>Location</i>	<i>Licence</i>	<i>Summary</i>
Knockgriffin, Townarks, Midleton	06E1165 Máire Ni Loingsigh	A centreline test-trench was excavated along the proposed route of the Midleton Northern Relief Road, for a total distance of 1.15km. A total of 76 offsets, 10m long, were excavated at right angles to the centreline every 20m. The stratigraphy on the site consisted of mid-brown stony topsoil, 0.4–0.7m deep, over orange gravelly subsoil. A linear feature with topsoil fill, 1.6m wide by 0.5m deep, was noted in a field in the townland of Knockgriffin. No other archaeological finds or features were noted during testing. It is proposed to monitor the next phase of the development.
Knockgriffin, Townarks, Midleton	06E1165 Máire Ni Loingsigh	A centre-line test-trench was excavated along the proposed route of the Midleton northern relief road for a total distance of 1.15km. A total of 76 offsets, 10m long, were excavated at right angles to the centre line every 20m. The stratigraphy along the route of the proposed road consisted generally of mid-brown stony topsoil, 0.4–0.7m deep, over orange gravelly subsoil. There are no recorded monuments on the route, nor were any previously unrecorded monuments discovered during assessment and test-trenching. Following testing, part of two mill-races, a wall and two drains associated with Avoncore Mills (built c. 1824), in the townland of Townparks, were excavated. These features will be retained in situ under the proposed road.
Knockgriffin Townparks	06R0199 Máire Ni Loingsigh	A metal-detector survey of the site of the proposed bridge over the Owenacurra River was undertaken on 14 September 2007 following a period of dry weather. Construction of the single-span bridge will not impact on the riverbed. Both banks of the river and the shallow water at the river's edge were walked. The riverbank is in constant use for recreation and fishing purposes, with the result that there is quite a lot of modern rubbish littering the area. The metal detector registered frequent hits, but those that were identified were modern. It was impossible to identify all the hits. Nothing of archaeological significance was noted during the survey. The survey was undertaken in conjunction with test-trenching and excavation work (see No. 289 above, 06E1165) on the Midleton northern relief road.
Knockgriffin, Townparks	06E1165 ext Máire Ni Loingsigh	Topsoil-stripping and ground preparation work in two areas on the route of the proposed Midleton Northern Relief Road were monitored in 2008 (they had not been available for centre line testing which was carried out in 2006 and 2007). The areas, both in Knockgriffin, measured c. 150m north–south by 35–40m wide and 90m north–south by 35–40m wide. No archaeological features were identified. The two millraces in Townparks which were excavated in September 2007 (Excavations 2007, No. 289, 06E1165) were protected and infilled and are preserved in situ.