

ARCHAEOLOGICAL ASSESSMENT AT TIMOLIN CO. KILDARE

ON BEHALF OF IRISH WATER

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ABSTRACT

Irish Archaeological Consultancy Ltd has prepared this report on behalf of Irish Water, to study the impact, if any, on the archaeological and historical resource of the proposed development of a Septic Tank, Treatment Plant and Percolation Area (OS Sheet KD036). The report was undertaken by Paul Duffy of IAC Ltd.

The proposed development area is situated within a plot of land to the rear of two separate housing developments. The plot contains the existing Kildare County Council settlement tank, percolation area and stand pipes. The plot has seen recent ground disturbance and dumping which has resulted in an uneven surface covered in weeds and scrub.

The Record of Monuments and Places locates recorded monument KD036-026 - a castle site - within the footprint of the proposed development area. This appears to be based on anecdotal evidence collected in 1903 in which the informant recounts having seen 'ancient thick walls with arches in them, some thirty years ago [c. 1870] standing at the back of the one-sided street of Timolin, not far from the mill, in a plot formerly held by a man named Darby Doolan'. This 'one-sided street' is not immediately evident from the historic mapping but it must refer to the road leading through the village south-eastwards to the mill. This places the observed remains within the vicinity of the proposed development area. Evidence from the historic mapping however suggests that the proposed development area may have been occupied by burgess plots in the medieval period, indicating that the proposed development area is unlikely to represent the castle site. Further, the field inspection of the site revealed that no features relating to such a castle survive within the proposed development area.

A further 15 recorded monuments are located within 500m of the proposed development area. These include St. Mullins Church which is a listed as a Protected Structure (RPS Site B36-40) in the Kildare County Development Plan. A mill race borders the southeastern boundary of the proposed development area. This millrace is associated with Timolin Corn and Saw Mills which is a Protected Structure listed as RPS Site B36-24 in the Kildare County Development Plan. This mill complex represents an industrial archaeological site.

There may be a direct negative impact upon the recorded monument, which is listed as the site of a castle (KD036-026) and is believed to be located within or in close proximity to the proposed development. This would be caused by ground disturbances associated with the proposed development. In addition, there will be a direct negative impact upon the potential relict burgage plots within the footprint of the proposed development area and any associated archaeological remains that have the potential to survive in the area without surface expression. This would be caused by ground disturbances associated with the proposed development.

It has therefore been recommended that further investigations be carried out within the proposed development area, such as geophysical survey and/or archaeological test trenching. These works should be carried out by an archaeologist under licence to the Department of Arts, Heritage and the Gaeltacht. Full provision should be made for the resolution of any archaeological features/deposits that may be discovered, should that be deemed to be the most appropriate manner in which to proceed.

CONTENTS

Αl	BSTRA	СТ		
C	List of	Figure	S	iv
1.	1.1 1.2	Gener	alevelopment	1
2	ME 2.1 2.3	Paper	Surveynspection	2
3	3.1 3.2 3.3 3.4 3.5	Archae Summ Cartog Count	OF DESKTOP STUDY eological and Historical Background ary of Previous Archaeological Fieldwork graphic Analysis y Development Plan Photographic Analysis	5 12 13
4	4.1 4.2	Field I	DF FIELD INSPECTIONnspectionsions	16
5	5.1 5.2	Impac	t Assessmenttion	18
6	REF	ERENC	ES	
ΑI	PPEND	IX 1	SMR/RMP SITES WITHIN THE SURROUNDING AREA	l
ΑI	PPEND	IX 2	STRAY FINDS WITHIN THE SURROUNDING AREA	VII
Αl	PPEND	IX 3	LEGISLATION PROTECTING THE ARCHAEOLOGICAL RESOURCE	. XI I
ΑI	PPEND	IX 4	IMPACT ASSESSMENT AND THE CULTURAL HERITAGE RESOURCE	XV
ΑI	PPEND	OIX 5	MITIGATION MEASURES AND THE CULTURAL HERITAGE RESOUR	RCE

FIGURES

PLATES

LIST OF FIGURES

Figure 1 Site location

- Figure 2 Extract from the RMP map showing the proposed development area
- Figure 3 Current ground plan of proposed development area
- Figure 4 Extract from the Down Survey map of the Barony of Noragh and Rabane (1654-6) showing the approximate location of the proposed development area
- Figure 5 Extract from Noble and Keenan's map of Kildare 1752 showing the approximate location of the proposed development area
- Figure 6 Extract from Taylors map of Kildare (1783) showing the approximate location of the proposed development area
- Figure 7 Extract from the first edition 6-inch OS map (1837-8) showing the proposed development area
- Figure 8 Extract from the first edition 6-inch OS map (1837-8) showing the Fair Green to the northeast of the proposed development area
- Figure 9 Extract from the 25-inch OS map (1906-9) showing the proposed development area

LIST OF PLATES

- Plate 1 Fencing surrounding the septic tank, facing east
- Plate 2 Septic tank covers, facing southeast
- Plate 3 Route of former millrace at southeastern boundary of proposed development area, facing east
- Plate 4 Overgrown and uneven character of the eastern portion of the proposed development area
- Plate 5 Manhole towards centre of proposed development area, facing northwest towards septic tank
- Plate 6 Proposed development area with pasture field to right and allotments to left, facing northwest
- Plate 7 Adjacent field, showing ground sloping upwards to the northwest and large dumps of spoil/garden waste to the left
- Plate 8 View northwest along possible relict burgage plot

1. INTRODUCTION

1.1 GENERAL

The following report details an archaeological assessment undertaken in advance of a proposed septic tank, water treatment plant and percolation area development at Timolin, County Kildare (Figure 1). This assessment has been carried out to ascertain the potential impact of the proposed development on the archaeological and historical resource that may exist within the area. The assessment was undertaken by Paul Duffy of Irish Archaeological Consultancy Ltd, on behalf of Irish Water.

The archaeological assessment involved a detailed study of the archaeological and historical background of the proposed development site and the surrounding area. This included information from the Record of Monuments and Places of County Kildare, the topographical files within the National Museum and all available cartographic and documentary sources for the area. A field inspection has also been carried out with the aim to identify any previously unrecorded features of archaeological or historical interest.

1.2 THE DEVELOPMENT

Irish Water propose to construct a septic tank, water treatment plant and percolation area on Kildare County Council owned lands within the townland and village of Timolin. The project involves "the design, supply, installation and commissioning of a new wastewater treatment package plant and percolation area. This includes all associated site works. It is envisaged that the upgrade will involve the removal, disposal and replacement of the existing primary settlement tank. The works shall mainly consist of the following main processes:

- Secondary biological treatment using mechanical aeration, including settlement
- 2- Flow measurement, using and open channel type flow meter
- 3- Interconnecting pipe work
- 4- Remote alarm system
- 5- Upgraded percolation/polishing filter in accordance with current standards."

2 METHODOLOGY

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

2.1 PAPER SURVEY

- Record of Monuments and Places for County Kildare;
- Sites and Monuments Record for County Kildare;
- National Monuments in State Care Database;
- Preservation Orders List;
- Register of Historic Monuments;
- Topographical files of the National Museum of Ireland;
- Cartographic and written sources relating to the study area;
- Kildare County Development Plan 2013-2019, Ballitore/Moone/Timolin Local Area Plan 2002
- Aerial photographs;
- Excavations Bulletin (1970–2014)

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

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

National Monuments in State Care Database is a list of all the National Monuments in State guardianship or ownership. Each is assigned a National Monument number whether in guardianship or ownership and has a brief description of the remains of each Monument.

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

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

Register of Historic Monuments was established under Section 5 of the 1987 National Monuments Act, which requires the Minister to establish and maintain such a record. Historic monuments and archaeological areas present on the register are afforded statutory protection under the 1987 Act. The register also includes sites under Preservation Orders and Temporary Preservation Orders. All registered monuments are included in the Record of Monuments and Places.

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

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

Sir William Petty, Down Survey Map, 1654-56, County of Kildare Noble and Keenan's Map of County of Kildare 1752 Alexander Taylor A map of the County of Kildare 1783 Ordnance Survey maps of County Kildare (1837-8, 1907-09)

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

Protected Structures are structure that a planning authority considers to be of special interest from an architectural, historical, archaeological, artistic, cultural, scientific, social, or technical point of view. Every planning authority is obliged to have a Record of Protected Structures (RPS) that includes structures of special interest in its functional area and into which details of protected structures are entered. The RPS forms part of the Development Plan.

Development Plans contain a catalogue of all the Protected Structures and archaeological sites within the county. The County Kildare Development Plan (2013-

2019) was consulted to obtain information on cultural heritage sites in and within the immediate vicinity of the proposed development. The Ballitore/Moone/Timolin Local Area Plan 2002 was also consulted.

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

Excavations Bulletin is a summary publication that has been produced every year since 1970. This summarises every archaeological excavation that has taken place in Ireland during that year up until 2010 and since 1987 has been edited by Isabel Bennett. This information is vital when examining the archaeological content of any area, which may not have been recorded under the SMR and RMP files. This information is also available online (www.excavations.ie) from 1970–2014.

2.3 FIELD INSPECTION

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

The archaeological field walking inspection entailed:

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

3 RESULTS OF DESKTOP STUDY

3.1 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

3.1.1 General

The area of proposed development is located within the townland of Timolin, County Kildare (OS map 36). The proposed development area occurs within the zone of archaeological potential relating to the castle site KD036-026. The proposed development area is located to the rear of two separate residential developments and lies immediately northeast of an area currently in use as allotments and immediately southwest of a small enclosed field of pasture.

3.1.2 Prehistoric Period

Mesolithic Period (c. 7000–4000BC)

The Mesolithic period is the earliest time for which there is clear evidence for prehistoric activity in Ireland. During this period people hunted, foraged and gathered food and appear to have had a mobile lifestyle. The most common evidence found to show the presence of Mesolithic communities at a site consists of scatters of worked flint material, a by-product from the production of flint implements. Although County Kildare has scant archaeological evidence dating to the Mesolithic period, the current archaeological evidence suggests that the wider environs of the proposed development area were first inhabited towards the early part of the Mesolithic period. A recent survey of the Barrow River Valley (Kador, 2007) has found traces of these earliest inhabitants all along the valley. This suggests that the valley was an important focus for Ireland's Mesolithic people. A number of stone tools were uncovered during excavations at Ardreigh Graveyard, c. 11km to the west of the proposed development area (Moloney et al). The stone tools recovered mainly dated to the early Mesolithic with one polished stone axe dating to the later Mesolithic (6700 - 4000 BC). Further afield, a selection of timbers from a pine trackway discovered in Lullymore Bog, c. 35km to the north of the proposed development area returned dates from the later Mesolithic. The pine trackway was constructed of transversely laid, radially split pine suggesting a significant expenditure of labour and a significant attempt to alter the physical landscape (Brindley and Lanting 1998).

Neolithic Period (c. 4000–2500BC)

In the Neolithic period, communities became less mobile and their economy became based on the rearing of stock and cereal cultivation. The transition to the Neolithic was marked by major social change. Communities had expanded and moved further inland to more permanent settlements. This afforded the development of agriculture which demanded an altering of the physical landscape. Forests were rapidly cleared and field boundaries constructed. Pottery was also being produced, possibly for the first time. The advent of the Neolithic period also provided the megalithic tomb. There are four types of tomb; court cairn, portal, passage and wedge. The court, portal and passage style tombs are of pure Neolithic date, while the wedge tomb

straddles the Neolithic to Bronze Age transition. No Megalithic Tombs have been recorded within County Kildare to date.

Whilst there is a dearth of ritual sites within the county, evidence for domestic activity from this period has been identified within the archaeological record within the landscape surrounding the proposed development. A total of seven early Neolithic rectangular houses were excavated at Corbally, 14km to the north of the development area (Smyth 2014). Excavations at Ballysaxhills in Kilcullen, c. 15km north of the development area identified a further Neolithic rectangular house constructed of slot trenches which contained the remains of a number of substantial oak planks (KD028-082). The excavations produced stone tool artefacts as well as some early ceramics, demonstrating that the fertile plains of north Kildare were exploited by Neolithic farmers.

Bronze Age Period (c. 2500–800BC)

The Bronze Age in Ireland was marked by the use of metal for the first time. As with the transition from Mesolithic to Neolithic, the transition into the early Bronze Age was accompanied by changes in society. Megaliths were replaced in favour of individual, subterranean cist or pit burials that were either in isolation or in small cemeteries. These burials contained inhumed or cremated remains and were often, but not always, accompanied by a pottery vessel. Different forms of burial barrows were also being constructed during this period, as well as ceremonial monuments such as henges.

There is a significant amount of evidence of Bronze Age activity within the landscape surrounding the proposed development area. This evidence includes two rectangular cists of Ordovician shales and slates (Mount 1997), which are located c. 410m north-northeast (KD036-037) and c. 460m northwest (KD036-036) of the proposed development area. A standing stone (KD036-027001), which appeared to be marking a cist burial (KD036-027002) is located c. 190m to the northwest of the proposed development area. Several concentrations of ring barrows are located on the surrounding areas of high ground, c. 1.5km south at Simonstown West (KD038-056) and c. 3.5km to the northeast at Mullamast (KD036-009014).

Iron Age Period (c. 800BC - AD400)

The number and variety of barrow types on the plains of the Curragh, which stretch south to Mullamast indicate a long period of barrow construction within the landscape and highlights the importance of the Kildare plain, not only as a burial ground but also as an intricate part of a ritual and social landscape (Clancy 2006). A number of Iron Age burials were uncovered during Ó Riordáin's research excavations at the Curragh in the 1950's. The interments displayed possible signs of sacrificial activity, with one being decapitated and another splayed within the grave cut (Ó Riordáin 1995). The famous Mullamast standing stone, which is now housed in the National Museum of Ireland, bears La Tène style decoration which are of late Iron Age date. This stone originally stood at Mullamast c. 3.15km to the northwest of the proposed development area.

3.1.3 Early Medieval Period (AD400-1100)

The early medieval period is portrayed in the surviving literary sources as entirely rural, characterised by the basic territorial unit known as a túath. Byrne (1973) estimates that there were probably at least 150 kings in Ireland at any given time during this period, each ruling over his own túath. During the early medieval period,

defensive enclosures known as ringforts were constructed to protect farmsteads. These are one of the most frequently recorded archaeological site types and c.

50,000 examples are recorded in the Irish landscape.

Ringforts are regarded as defended family homesteads and the extant dating evidence suggests they were primarily built between the 7th and 9th centuries AD (Stout 1997, 22-31). Ringforts are often accompanied by underground passages known as souterrains. These features were used for storage and also as places of refuge in times of attack (Clinton 2001). The occurrence of two souterrains (KD036-025005 and 006) c. 120m to the southwest of the proposed development area may suggest that a ringfort or secular settlement once stood at or close to the site of the current church of Timolin; however, souterrains can also be associated with early ecclesiastical sites (Clinton 2001). One of these souterrains (KD036025005) was uncovered in 1903 below the road immediately to the north of the present cemetery (now de-listed). It was of dry stone construction, roofed with flags (measuring 0.6m in width, 0.9m in depth) and extended north towards the mill. It was reported to have contained human bones. A second possible souterrain (KD036-025006) was found close to the eastern end of the present church. Both are now filled in (SMR file). A ringfort survives in the landscape c. 580m to the west of the proposed development area.

This period is also characterised by the foundation of a large number of such ecclesiastical sites throughout Ireland, in the centuries following the advent of Christianity in the 5th century AD. These early churches tended to be constructed of wood or post-and-wattle (O'Sullivan et al 2014). Between the late 8th and 10th centuries, mortared stone churches gradually replaced the earlier structures. Many of the sites, some of which were monastic foundations, may have originally been defined by an enclosing wall or bank similar to that found at the coeval secular sites. This enclosing feature was probably built more to define the sacred character of the area of the church than as a defence against aggression. An inner and outer enclosure can be seen at some of the more important sites; the inner enclosure surrounding the sacred area of church and burial ground and the outer enclosure providing a boundary around living quarters and craft areas. Where remains of an enclosure survive, it is often the only evidence that the site was an early Christian foundation.

As discussed below in the cartographic analysis, there is some evidence in the curving boundary wall of Timolin graveyard and associated curves in the road and in several field boundaries to suggest that an early ecclesiastical monastic foundation one stood at this site. The name Timolin itself derives from *Tigh Mo Linne*, meaning the house of Moling. Moling was a 7th century saint and a bishop of Ferns who is

reputed to have founded many churches in the region, most famously, St. Mullins in County Carlow (Ó Riain 2011).

The early ecclesiastical site at Moone (KD036-031) c. 1km to the southwest boasts one of the best preserved High Crosses of the period. This granite cross, dating to the 8th or 9th century is associated with an early ecclesiastical foundation, which is attributed to St. Colmcille (Richardson and Scarry 1990).

3.1.4 Medieval Period (AD1100–1600)

The piecemeal conquest by the Anglo-Normans of Ireland, which commenced in 1169, had a fundamental impact on the Irish landscape. Most of the province of Leinster came under Strongbow's control after the conquest. During this time, the well-established centre of Kildare was attractive to Strongbow and in 1170 it became his primary base. By the end of the 12th century Norman settlement was effective over the whole county, as marked by the beginning of the rule of the Fitzgerald family as Earls of Kildare. During this period, the Anglo-Normans built castles of stone construction or large flat-topped mounds or mottes with timber structures atop (Harbison 1997) in order to defend their recently acquired lands.

The subinfeudation of formerly Gaelic-held lands to loyal Norman barons was an effective mechanism by which powerful lords such as Strongbow ensured control over their territories. In the late 12th/early 13th century, the barony of Narragh and Reban East was held by Robert Fitz-Richard. It was this baron who founded a convent for nuns of the Arroasian order c. 1200, at Timolin (KD036-025002) (Gwynn and Hadcock 1970). Fitz-Richard also built a castle at Timolin (KD036-026), which is believed to have been situated within close proximity (or even within) the proposed development area. It is unclear whether this castle was originally an earth and timber construction in keeping with the initial Anglo-Norman fortifications, or a stone castle, the like of which were being increasingly constructed from the later 12th century onwards. The erection of a stone castle at the site seems more probable given that the convent buildings would most likely have been constructed of stone. Evidence for master masons at Timolin in this period survives in the Timolin Effigy, a sculpted graveslab depicting a recumbent knight (KD036-025003) which is currently housed within St. Mullins Church c. 120m to the southwest of the proposed development area. This effigy has been dated to c. 1200 on the basis of the shape of the mail hood and skullcap, which finds close parallel in the great seal of King John and is thought to represent the founder Robert Fitz-Richard (Ffrench 1895). The SMR file for the castle (KD036-026) contains anecdotal evidence from the turn of the 20th century relating to the possible location of the castle. These accounts make reference to 'thick walls with arches in them standing at the back of the one-sided street of Timolin not far from the mill...' (FitzGerald 1903). This description, while imprecise, puts these walls in the vicinity of the proposed development area. Further references to the castle at Timolin in the 17th century are discussed below.

Another notable feature of the Anglo-Norman control of Kildare was the proliferation in the foundation of European monastic orders in the county. While a small number of Cistercian and Augustinian canons had been established in Ireland

prior to the coming of the Anglo-Normans, the new administration facilitated the introduction of the Carmelites, Benedictines, Dominicans Franciscans and Crutched Friars to the country. It is generally thought that the Arroasian convent at Timolin was founded c. 1200 by FitzRichard (FitzGerald 1899).

According to an inquisition held at Naas (1541) monastery at time of suppression, consisted of 'site and precincts of the abbey.... Of the walls of a church, a belfry, a dormitory, a courtyard (aula), and three rooms within the precincts there' (FitzGerald 1899). The accounts of the siege of Timolin (1643) mentions a nunnery (KD036-025002), a church and belfry presumably associated with the monastery, and a castle (KD036-026).

The survival of a number of mill races, sluices and buildings at Timolin is of interest considering that Tracy Collins, in her discussion of the holdings of the Timolin convent states that:

'Mills are another archaeological indicator of monastic estates. Rights to build mills and water rights were part of a "manorial monopoly" enjoyed by both lay and monastic estates. They provided a convenient block grant of income to a monastic house, as mills could have been directly used by the monastery, while also providing an income when others paid to use it' (2014).

A medieval ceramic, line-impressed floor tile decorated with quatrefoil within four quarter circles enclosing vine leaves was recovered from the graveyard at Timolin (KD036-025007) in 2010 (NMI 2010C2:658). The graveyard is located c. 70m to the southwest of the proposed development area. This tile is likely to relate to the Augustinian foundation of Arrouaise nuns at Timolin (KD036-025002) and suggests a certain status for the buildings of the convent.

Linear strip fields running southeast of the road, towards the mill race, which are visible on the first edition OS six inch mapping, may represent relict burgage plots fossilised in the later field boundaries. Such plots have the potential to represent the remains of a medieval settlement at Timolin. When considered in conjunction with the linear street pattern with a church at one end, a fair green (visible on first edition OS mapping) at the northeastern end and the presence of a castle site, Timolin is likely to have constituted a small, unrecorded medieval borough.

The wider landscape displays signs of heavy settlement throughout the medieval period. Two moated sites occur within proximity of the proposed development area; one at Ballycore (WI020-025) c. 2km to the northeast and the other at Ballitore (KD036-048) c. 2.4km to the north-northwest. A motte and bailey castle is also situated c. 1.6km northwest at Ballycore (WI020-010) emphasising the initial need of protection experienced by the Anglo-Norman settlers.

Substantial evidence for medieval settlement was also uncovered during excavations c. 1.8km to the north at Ballitore. At this location, metalled surfaces, cereal drying kilns and a series of pits and postholes were excavated. A King John penny, was also

recovered and dated the site to between the 12th and 13th centuries (Bennett 2007:862).

From the 14th century onwards, the Gaelicisation of the Anglo-Norman families coupled with ongoing wars in France, which drained military resources from the English Kingdom, led to a resurgence of Gaelic culture. This resurgence resulted in a significant contraction of the English colony in Ireland and large parts of Kildare were wasted and became borderlands where warfare between the Gaelic Irish and the English settlers became endemic.

Archbishop Alen supressed the convent at Timolin in 1530. The archbishop's justification for this move was more than likely the danger posed to the nuns at Timolin in what had become an exposed border area. The benefits accruing to himself and to the King belie the archbishop's true motive and also foreshadowed the wholesale dissolution of the monasteries that was to follow from 1536 during Henry VIII's reign.

3.1.5 Post-Medieval Period (AD1600-1900)

The 17th century, which witnessed the final reduction of all of Ireland to English authority, was marked by two major conflicts. In 1641 a war between the King and Parliament was sparked off by the rebellion of the Catholics in Ulster and resulted in 11 years of conflict and turmoil. The second great conflict was the war between James II and William of Orange of 1689-91.

Timolin was directly affected by the conflicts of the 17th century when, in 1643, the town was besieged by forces under the Marquis of Ormond. Following a canon battery, the castle fell and the population of the town were put to the sword (Fitzgerald 1899). Two eyewitness accounts of this siege survive (ibid) and, although written by men on opposite sides of the conflict, both narratives broadly agree on the sequence of events. The Parliamentarian forces of Ormond surrounded Timolin where several hundred Royalists had fortified the castle and also the steeple of the convent. The castle was augmented by 'good works about this house' (ibid) suggesting the employment of ravelins and or the digging of earthworks. A culverin was positioned to fire upon the castle and a barrage was begun and continued for 24 hours. The several hundred men defending the castle surrendered following hours of barrage and were all killed on the spot. The culverin was then turned on the convent steeple where a small force of approximately 50 men was holding out. Despite dogged resistance the 'ancient withered wall was easily sunk down by the ordnance' (ibid). The town was overrun and reports state that in the region of 600 men women and children were massacred (ibid). No precise locational detail can be inferred for the castle from these texts.

Following the pacification of the county, the 17th and 18th centuries saw a dramatic rise in the establishment of large residential houses. The large country house was only a small part of the overall estate of a large landowner and provided a base to manage often large areas of land that could be located nationwide. Lands associated with the large houses were generally turned over to formal gardens, which were

much the style of continental Europe. Gradually this style of formal avenues and geometric gardens designs was replaced during the mid-18th century by the adoption of parkland landscapes – to be able to view a large house within a natural setting. Although the creation of a parkland landscape involved working with nature, rather than against it, considerable constructional effort went into their creation. Earth was moved, field boundaries disappeared, streams were diverted to form lakes and quite often roads were completely diverted to avoid travelling anywhere near the main house or across the estate.

The fact that no estate house or demesne land are depicted at Timolin on the first edition OS mapping would seem to suggest that the castle site at Timolin did not persist as a manorial centre into the 18th century. This may have been due to the devastation of the castle and the population during the 1643 siege. Formally laid out gardens and areas of planted parkland are visible however; surrounding Mooneabbey Demesne c. 1km to the southwest. Evidence of industry is also visible on the 19th century mapping with the ruins of a mill and mill sluices depicted c. 35m south of the proposed development area. The mill race bounds the site to the southeast. The upstanding mill building is recorded as a protected structure in the Kildare County Development Plan 2011-2017 as B36-24 and is described in the National Inventory of Architectural Heritage as a:

'a fine and imposing rubble stone building of the early nineteenth century, which was built on the site of earlier mills that have their origins in Medieval times when Saint Mullin established a monastery here. The current building is of considerable social importance for continuing the industrial tradition on this site. An austere building of solid wall masses, the original openings are of small proportions that were conducive to keeping the interior cool and dry. Although altered in the late twentieth century to accommodate an alternative use, the building retains much of its early or original character, most notably to the north and east where render has not been applied. Complementing the mill are the numerous attendant outbuildings that are individually of importance. The mill owner's house retains early fenestration and, being attached to the mill building, forms a neat and compact industrial group. The mill race to the south west and the mass-concrete water tank are also of some technical interest. The outbuilding to south-east is also an important component of the complex and may actually be of an earlier date it is possible that the building was, or incorporates the fabric of, a medieval chapel associated with Saint Mullin's monastery. The mill is attractively set in mature grounds and forms an imposing landmark in the area.'

The current St. Mullin's Church dates to this period. The church is recorded as a protected structure in the Kildare County Development Plan 2011-2017 as B36-40 and is described in the National Inventory of Architectural Heritage as a:

'Church of Ireland church, built 1738, originally single-cell. Renovated, c.1815, with single-bay three-stage sandstone entrance tower added to east. Extended, c.1823, comprising single-bay double-height lower chancel to east.

Renovated, c.1975, with entrance tower truncated to accommodate use as single-bay double-height gabled projecting porch with bellcote to gable.'

Samuel Lewis, writing in 1837, the same year that surveying for the first edition 6 inch mapping commenced by the Ordnance Survey, records that:

'The parish comprises 2240 statute acres, chiefly under tillage, though there is some good pasture: the land is in general good, and there is no waste; fuel is scarce and only to be obtained from the bog of Narraghmore, about two miles distant. Here are quarries of sandstone and pebble limestone, which latter is burnt for manure. The village of Timolin contains 34 houses: fairs are held there on Easter-Monday and on June 28th.'

3.2 SUMMARY OF PREVIOUS ARCHAEOLOGICAL FIELDWORK

A review of the Excavations Bulletin (1970-2014) has revealed that several archaeological investigations have been undertaken in the vicinity of the proposed development.

An archaeological evaluation was carried out immediately south and southwest of the proposed development area in 1999. The work was undertaken in advance of the construction of the six houses, which border the site to the west/southwest. Six trenches were excavated by machine within the zone of notification surrounding castle site KD036-026. No features, deposits or structures, either associated with or independent of the castle, were uncovered. However, a total of 18 sherds of pottery, all of which appeared to be of medieval date, were recovered during the evaluation (Bennett 1999:425, Licence Ref.: 99E0558).

A second phase of works involved monitoring of groundworks at the site in 2000. An additional six sherds of similar pottery were uncovered (Bennett 2001:675, Licence Ref.: 99E0558 ext.).

The final phase of monitoring at this residential development site was undertaken in May 2002. An additional seven sherds of medieval pottery were recovered during this phase of monitoring, but no features were uncovered (Bennett 2002:0984, Licence Ref.: 99E0558).

An archaeological watching brief was undertaken at the site of a school extension and associated works c. 160m southwest on various dates from May to September, 1996. All site clearance and foundation/excavation works associated with the construction phases and provision of services for the scheme were supervised. No features or finds of archaeological interest were uncovered in the areas disturbed by the development works (Bennett 1996:202, Licence Ref.: 96E0140).

Further monitoring at this location was undertaken in in January 2002. All siteclearance and foundation works associated with the construction of the extension and the provision of additional services were monitored. No features or finds of archaeological interest were uncovered in the areas disturbed by the development (Bennett 2002:0983, Licence Ref.: 96E0140 ext.).

An archaeological evaluation was undertaken at the site of a proposed bungalow development c. 240m southeast of the proposed development area. Four trenches and the external foundations of the house were excavated in order to ascertain the archaeological potential of the overall site. No stratigraphy or finds of archaeological interest were uncovered (Bennett 1996:201, Licence Ref.: 96E0187).

In 1980, deep ploughing dislodged a large capstone measuring 1.60m x 1.15m revealing a short rectangular cist (KD036-036) in the townland of Timolin c. 480m northwest of the proposed development area. The sides consisted of single slabs, the cist measuring 0.75m x 0.35m internally with its long axis running northwest – southeast. The floor of the cist was paved. It contained the disarticulated, unburnt remains of a single adult male. Some of the long bones were stacked towards one side of the cist, their long axes parallel to that of the cist. The burial was accompanied by two Food Vessels, one of Bowl type placed mouth upwards in one corner, the other of Vase type was disturbed in antiquity and consisted of rim sherds (Bennett 1980-84:00123).

A second cist (KD036-047004), which was discovered within 100m of KD036-036, was of standard construction, consisting of a long slab on each side and a short one at either end. A large capstone was still in position when the site was first inspected. On its removal, the cist was found to contain a scattered inhumation likely representing no more than one individual. There were no articulated remains, pottery vessels or other artefacts. It seems likely that the burial was disturbed at some time in the past (Bennett 1980-84:0124).

3.3 CARTOGRAPHIC ANALYSIS

Down Survey Map of the Barony of Noragh and Rabane, 1654-6 (Figure 4)

Timolin is represented as a cluster of buildings adjacent to the Bothoge River to the northeast of the village of Moone. A total of four buildings are shown as simple rectangles and very little further detail can be discerned from this map.

Noble and Keenan 1752, (Figure 5)

Timolin is represented in some detail on this map. The main street is depicted with a terrace of buildings along the eastern side of the road with sporadic buildings on the western side. The main street exhibits a pronounced curve towards the northeast which is not visible on later mapping. A church is represented to the rear of the terrace of buildings. The Bothoge River is visible curving towards the main street. A mill is depicted close to the junction of the main street and the river. A triangular area is annotated as a fair green to the immediate northeast of the town. No evidence of a castle is visible.

Alexander Taylor's Map of the County Kildare, 1783, (Figure 6)

The main road through Timolin is visible on this mapping as is the course of the Bothoge River, which follows its current course. Buildings are depicted lining both sides of the road in the centre of the village. At this scale, no detail is shown of the proposed development area. The church at Timolin is represented, as is a mill and the mill race located immediately to the southeast of the proposed development area. A turnpike is shown at the northeastern limit of the town suggesting that the road was used relatively frequently.

First Edition 6-inch Ordnance Survey Map, 1837-9, scale 1:10560 (Figure 7&8)

This is the first accurate historic mapping coverage of the area containing the proposed development area. The village of Timolin is depicted within a landscape of enclosed fields. The field pattern surrounding the village however is noticeably different. The village is dominated by the church and site of the monastery in the southern portion, which is defined by a curving graveyard wall to the south. This curve is mirrored in a slight curve in the road that runs into the village to the north of the church. Five very long narrow strip fields run southeast from the road through the proposed development area. These fields may represent relict medieval burgage plots. The northernmost field has a curving northern boundary, which appears to mirror the curve of the river to the south of the town. The Bothoge River is depicted curving around the south of the village. This watercourse has potentially been routed around the southern portion of the village in the past although this may be a natural meander. A string of terraced buildings are visible along the eastern side of the road. No buildings are depicted at the proposed development area. A ruined mill and a mill race are depicted immediately southeast of the proposed development area. A fair green is depicted and annotated to the northeast of the kernel of settlement at Timolin (Figure 7). This green is defined by a fork in the road which runs to the northwest and southeast of the green.

Ordnance Survey Map, 1906-9, scale 1:2500 (Figure 9)

The proposed development area is now shown with three long fields. The site of the ruined mill is now the site of a corn mill and saw mill and sluices are represented on the mill race c. 35m south of the proposed development area. The buildings fronting the road to the northwest of the proposed development area are visible as individual terraced cottages. In addition to the annotations 'St. 'Mullin's Church', 'Monastery (site of)' and 'Graveyard', the 'Kehoe Slab' is also annotated. This refers to a 17th century graveslab KD036-025007 which was dedicated to a Donagh Kehoe in 1633.

3.4 COUNTY DEVELOPMENT PLAN

The Kildare County Development Plan (2013–2019) recognises the statutory protection afforded to all RMP sites under the National Monuments Legislation (1930–2004). The development plan lists a number of aims and objectives in relation to archaeological heritage (Appendix 3). The Ballitore/Moone/Timolin Local Area Plan 2002 re-iterates some of these policies (Appendix 3).

The RMP lists 16 designations recorded within 500m of the proposed scheme. The closest of these recorded monuments is the castle site KD036-026, which is located

within the development area. Whilst this castle is known from documentary sources, it is not clearly recorded on any cartographic representation of Timolin.

Table 1: Recorded Archaeological Sites (RMPs) within a 500m radius of the proposed development area

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RMP NO.:	LOCATION:	CLASSIFICATION:	DIST. FROM PROPOSED DEVELOPMENT:
KD036-026	Timolin	Castle - unclassified	0m
KD036-025001	Timolin	Ecclesiastical site	70m southwest
KD036-025007	Timolin	Graveyard	70m southwest
KD036-029	Timolin	Armorial plaque	110m southwest
KD036-025002	Timolin	Religious house - Augustinian, of Arrouaise nuns	120m southwest
KD036-025003	Timolin	Graveslab	120m southwest
KD036-025004	Timolin	Graveslab	120m southwest
KD036-025005	Timolin	Souterrain	120m southwest (no location map available)
KD036-025006	Timolin	Souterrain	120m southwest
KD036-027001/2	Timolin	Standing stone & cist	190m northeast
KD036-028/001	Timolin	Church, site of & burial ground	220m south
KD036-046	Timolin	Habitation site	300m west
KD036-037	Timolin	Cist	410m north-northeast
KD036-036	Timolin	Cist	460m northwest

3.5 AERIAL PHOTOGRAPHIC ANALYSIS

Inspection of the aerial photographic coverage of the proposed development area held by the Ordnance Survey (1995, 2000, 2005) and Google Earth (2003, 2009, 2011, 2012) revealed that the septic tank that currently occupies the northeast corner of the proposed development area has been in existence since at least 1995. The remainder of the proposed development area was open grassland until 2011 when the current allotments, which are visible in the western portion of the proposed development area appear. It is unclear from the aerial photos at what point the overburden and disturbance evident on site dates from. It is probable however that this is quite recent – between 2012 and 2015.

Cropmarks and relict field boundaries representing the long, linear strip fields visible on the historic mapping can be seen to the northeast of the proposed development area on all of the aerial photography.

4 RESULTS OF FIELD INSPECTION

4.1 FIELD INSPECTION

The field inspection sought to assess the site, its previous and current land use, the topography and any additional information relevant to the report. During the course of the field investigation the proposed development area and its surrounding environs were inspected. The inspection was carried out on the 16th of September in dry, sunny conditions.

The proposed development area comprises a rectangular plot of approximate dimensions 20m northeast—southwest by 100m southeast—northwest. The northeast corner of the site is occupied by a small enclosure fencing off a septic tank (Plates 1 and 2). The western half of the plot is currently in use as allotments by the residents of the surrounding houses (Plate 2). The plot itself slopes towards the south-eastern boundary which is defined by the route of a former millrace (Plate 3).

The eastern area of the plot has been subject to recent disturbance which has resulted in large dumps of soil being pushed towards the lower portion of the site. The eastern portion of the plot is overgrown and very uneven underfoot suggesting recent dumps of spoil and clippings/garden waste (Plate 4). A manhole suggestive of recent disturbance was observed near the centre of the site (Plate 5).

The proposed development area is flanked to the northeast by a sloping pasture field housing several horses at the time of the inspection, and to the southwest by a row of residential buildings (Plate 6).

The adjacent field, which is devoid of weeds/vegetation cover, displays the sloping nature of the ground well (Plate 7). If the medieval castle KD036-026 was indeed constructed somewhere in this area, a location at the top of this slope would have been preferable. No evidence of such a previous structure was identified during the inspection. Some evidence of the potential relict burgage plots was observed to the northwest of the adjacent field (Plate 8).

No sites or features suggestive of the purported medieval castle site were observed. With the exception of the dried up mill race and the potential burgage plot, no features of archaeological interest were observed.

4.2 CONCLUSIONS

The proposed development area comprises a rectangular plot of approximate dimensions 20m northeast—southwest by 100m southeast—northwest. The northeast corner of the site is occupied by a small enclosure fencing off a Kildare County Council septic tank. The western half of the plot is currently in use as allotments by the residents of the surrounding houses. The eastern side of the plot has seen recent ground disturbance and dumping which has resulted in an uneven surface covered in weeds and scrub.

The proposed development contains a recorded monument (KD036-026), which is listed as an early 13th century castle site. The field inspection of the site revealed that no features relating to such a castle survive within the proposed development area. In addition, it is not depicted within the historic mapping resource. A further 15 recorded monuments are located within 500m of the proposed development area.

Analysis of the historic mapping identified a series of long narrow strip fields running southeast from the rear of properties fronting the road. This type of arrangement may be consistent with medieval burgage plots. If this is the case, the fact that these fields run through the proposed development area on the first edition OS mapping would suggest that the castle site was not in this location. However, evidence from the first edition OS map does suggest that the proposed development area is located within a medieval settlement. The possible burgage plots, along with a church and earlier monastery, are all bounded to the south by the Bothoge River. The first edition OS map also shows a fair green to the northeast of the settlement. The mill race/sluices forming the southeast boundary of the proposed development area is visible on the historic mapping and comprises part of the industrial archaeological site of Timolin Mill.

A review of the Excavation Bulletin (1970-2014) revealed that archaeological investigation immediately to the southwest of the proposed development area failed to identify any features or deposits relating to a castle. However, a small quantity of medieval pottery was recovered from this area, which would be in keeping with the interpretation of the area comprising burgage plots during the medieval period (Bennett 1999:425).

Evidence identified by this study for a castle at Timolin derives from accounts of the siege of Timolin in 1643 and from anecdotal evidence recorded in 1903 (FitzGerald 1903). Based on this evidence, the RMP places the castle site in the northern portion of the proposed development area. Quoting a Dan O' Shaughnessy, FitzGerald recounts that the informant observed 'ancient thick walls with arches in them, some thirty years ago [c. 1870] standing at the back of the one-sided street of Timolin, not far from the mill, in a plot formerly held by a man named Darby Doolan'. This 'one-sided street' is not immediately evident from the historic mapping but it must refer to the road leading through the village south-eastwards to the mill as this is shown on the mapping with some buildings on the southern side but none on the northern side. No further information was forthcoming relating to a Darby Doolan. A Patrick Doolan is listed in Griffith's Valuation as holding land at Timolin in 1851 but this is in the north of the townland away from the village. An alternative possibility for the castle site location may be c. 120m to the southwest in close proximity to the church and monastery site.

5 IMPACT ASSESSMENT AND MITIGATION STRATEGY

Impacts can be identified from detailed information about a project, the nature of the area affected and the range of archaeological resources potentially affected. Archaeological sites can be affected adversely in a number of ways: disturbance by excavation, topsoil stripping; disturbance by vehicles working in unsuitable conditions; and burial of sites, limiting access for future archaeological investigation.

5.1 IMPACT ASSESSMENT

- There may be a direct negative impact upon the recorded monument, which
 is listed as the site of a castle (KD036-026) that is believed to be located
 within or in close proximity to the proposed development. This would be
 caused by ground disturbances associated with the proposed development.
- There will be a direct negative impact upon the potential relict burgage plots within the footprint of the proposed development area and any associated archaeological remains that have the potential to surface in the area without surface expression. This would be caused by ground disturbances associated with the proposed development.
- The mill race forming the southeast boundary of the proposed development area comprise part of the industrial archaeological site of Timolin Mill. The proposed works are located predominantly towards the northern end of the plot. It is therefore not foreseen that the proposed works will impact upon the mill race bordering the proposed development area. Similarly, given the location of the proposed works and the sub-surface nature of the proposed development, no indirect (visual) impact is foreseen upon the mill complex, mill race or sluices.

5.2 MITIGATION

We recommend the following actions in mitigation of the impacts above.

- It is recommended that further investigations be carried out within the proposed development area, such as geophysical survey and/or archaeological test trenching. These works should be carried out by an archaeologist under licence to the Department of Arts, Heritage and the Gaeltacht. Full provision should be made for the resolution of any archaeological features/deposits that may be discovered, should that be deemed to be the most appropriate manner in which to proceed.
- No mitigation is required in relation to the mill race/sluices which border the southeastern boundary of the site.

Please note that all recommendations are subject to approval by the National Monuments Service of the Heritage and Planning Division, Department of Arts, Heritage and The Gaeltacht.

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APPENDIX 1 SMR/RMP SITES WITHIN THE SURROUNDING AREA

SMR NO.	KD036-026
RMP	Yes
TOWNLAND	Timolin
PARISH	Timolin
BARONY	Narragh and Reban East
I.T.M.	680043, 693415
CLASSIFICATION	Castle - unclassified
DIST. TO DEVELOPMENT	Proposed development intersects zone of notification
DESCRIPTION	File not located by NMS staff – description not available
REFERENCE	www.archaeology.ie, SMR file

SMR NO.	KD036-025001
RMP	Yes
TOWNLAND	Timolin
PARISH	Timolin
BARONY	Narragh and Reban East
I.T.M.	680039, 693276
CLASSIFICATION	Ecclesiastical site
DIST. TO DEVELOPMENT	70m southwest
DESCRIPTION	A seventh century foundation of St Moling, Bishop of Ferns. There is no visible trace of any structure of this date. According to an inquisition held at Naas (1541) monastery at time of suppression, consisted of 'site and precincts of the abbey Of the walls of a church, a belfry, a dormitory, a courtyard (aula), and three rooms within the precincts there' (JKAS 1899, 413-25). Fitzgerald also quotes two accounts of a siege of Timolin (1643) which mentions a nunnery (KD036-025002), a church and belfry presumably associated with the monastery, and a castle (KD036-026), of which there are no visible surface traces. The Aroasian convent was probably founded c. 1200 by FitzRichard (effigy KD036-025004). Fitzgerald also describes two possible souterrains; one (KD036-025005) discovered below the road to the north of the present cemetery (now de-listed), and the second (KD036-025006) close to the east end of the present church.
REFERENCE	www.archaeology.ie, SMR file

SMR NO.	KD036-025007
RMP	Yes

TOWNLAND	Timolin	
PARISH	Timolin	
BARONY	Narragh and Reban East	
I.T.M.	680009, 693266	
CLASSIFICATION	Graveyard	
DIST. TO DEVELOPMENT	70m southwest	
DESCRIPTION	A rectangular graveyard, containing a Protestant church which houses a fine effigy (KD036-025004). The graveyard occupies the site of a possible early monastery (KD036-025001) and contains a possible souterrain (KD036-025006); a second possible souterrain (KD036-025005) may have lain immediately to the north of the graveyard (now de-listed).	
REFERENCE	www.archaeology.ie, SMR file	

SMR NO.	KD036-029
RMP	Yes
TOWNLAND	Timolin
PARISH	Timolin
BARONY	Narragh and Reban East
I.T.M.	679921, 693382
CLASSIFICATION	Armorial plaque
DIST. TO DEVELOPMENT	110m southwest
DESCRIPTION	A seventeenth century limestone slab (measuring 0.4m by 0.4m) bearing Archbold coat-of-arms and following inscription in relief 'BEATVS QVI TELLISIT SVP EGENVM ET PAVPERE 1630', which translates as 'Blessed is he who considereth the needy and poor'. Mounted on west facing wall of house in Timolin.
REFERENCE	www.archaeology.ie, SMR file

SMR NO.	KD036-025002
RMP	Yes
TOWNLAND	Timolin
PARISH	Timolin
BARONY	Narragh and Reban East
I.T.M.	680039, 693276
CLASSIFICATION	Religious house - Augustinian, of Arrouaise nuns
DIST. TO DEVELOPMENT	120m southwest
DESCRIPTION	A seventh century foundation of St Moling, Bishop of Ferns. There is no visible trace of any structure of this date. According to an inquisition held at Naas (1541) monastery at time of suppression,

consisted of 'site and precincts of the abbey Of the walls of a
church, a belfry, a dormitory, a courtyard (aula), and three rooms
within the precincts there' (JKAS 1899, 413-25). Fitzgerald also
quotes two accounts of a siege of Timolin (1643) which mentions a
nunnery (KD036-025002), a church and belfry presumably
associated with the monastery, and a castle (KD036-026), of which
there are no visible surface traces. The Aroasian convent was
probably founded c. 1200 by FitzRichard (effigy KD036-025004).
Fitzgerald also describes two possible souterrains; one (KD036-
025005) discovered below the road to the north of the present
cemetery, and the second (KD036-025006) close to the east end of
the present church.
www.archaeology.ie, RMP file

SMR NO.	KD036-025003
RMP	Yes
TOWNLAND	Timolin
PARISH	Timolin
BARONY	Narragh and Reban East
I.T.M.	680017, 693283
CLASSIFICATION	Graveslab
DIST. TO DEVELOPMENT	120m southwest
DESCRIPTION	A seventeenth century grave slab known as 'The Kehoe Stone' lies in the graveyard (KD036-025007). Its decoration consists of a plain cross with stepped base in relief and the inscription 'Donagh Kighow Alisonne Vrghbold Kighow' with the date 1633 (JKAS 1899, 422-424).
REFERENCE	www.archaeology.ie

SMR NO.	KD036-025004
RMP	Yes
TOWNLAND	Timolin
PARISH	Timolin
BARONY	Narragh and Reban East
I.T.M.	680016, 693283
CLASSIFICATION	Graveslab
DIST. TO DEVELOPMENT	120m southwest
DESCRIPTION	Fine carboniferous limestone effigy (measuring 2m in length), in bas-relief, showing a knight covered by a large shield, of late twelfth or early thirteenth century date, thought to represent Robert FitzRichard who founded a convent (KD036-025002) for

Arroasian nuns in Timolin c. 1200. Previously located in the graveyard (KD036-025007), but was moved into the Protestant church in 1907 (JKAS 1891-5, 149).

REFERENCE www.archaeology.ie, SMR file

SMR NO.	KD036-025005
RMP	No
TOWNLAND	Timolin
PARISH	Timolin
BARONY	Narragh and Reban East
I.T.M.	Not recorded
CLASSIFICATION	Souterrain
DIST. TO DEVELOPMENT	120m southwest
DESCRIPTION	Fitzgerald (JKAS 1903, 163-7) mentions two possible souterrains in the immediate vicinity of the monastery (KD036-025001). One (KD036025005) was uncovered in 1903 below the road immediately to the north of the present cemetery (now de-listed). It was of dry stone construction, roofed with flags (measuring 0.6m in width, 0.9m in depth) and extended north towards the mill. It was reported to have contained human bones. A second possible souterrain (KD036-025006), apparently similar, was found close to the east end of the present church. Both are now filled in.
REFERENCE	www.archaeology.ie, SMR file

SMR NO.	KD036-025006
RMP	Yes
TOWNLAND	Timolin
PARISH	Timolin
BARONY	Narragh and Reban East
I.T.M.	680035, 693284
CLASSIFICATION	Souterrain
DIST. TO DEVELOPMENT	120m southwest
DESCRIPTION	Fitzgerald (JKAS 1903, 163-7) mentions two possible souterrains in the immediate vicinity of the monastery (KD036-025001). One (KD036025005) was uncovered in 1903 below the road immediately to the north of the present cemetery (now de-listed). It was of dry stone construction, roofed with flags (measuring 0.6m in width, 0.9m in depth) and extended north towards the mill. It was reported to have contained human bones. A second possible souterrain (KD036-025006), apparently similar, was found close to the east end of the present church. Both are now filled in.

REFERENCE www.archaeology.ie, SMR file

SMR NO.	KD036-027001
RMP	Yes
TOWNLAND	Timolin
PARISH	Timolin
BARONY	Narragh and Reban East
I.T.M.	679953, 693605
CLASSIFICATION	Standing stone
DIST. TO DEVELOPMENT	190m northeast
DESCRIPTION	Fitzgerald records that a standing stone similar to the Simonstown stone (KD038-005) formerly stood near the village of Timolin but had been removed 'many years ago'. "An old man in the village of Moone, now aged seventy-six, named John Brochal, who brought this long stone to my notice, also informed me that a similar stone formerly stood on Mr. Bagenall's land in a field forninst Mac Evoy's public house in Timolin, but that it was removed many years ago by a former tenant of the name of Miley. A slab lined grave, containing bones, was at the same time discovered near its base" (JKAS 1906, 464-465). A possible cist (KD036-027002) containing bones was discovered near its base.
REFERENCE	www.archaeology.ie, SMR file

SMR NO.	KD036-027002
RMP	Yes
TOWNLAND	Timolin
PARISH	Timolin
BARONY	Narragh and Reban East
I.T.M.	679953, 693605
CLASSIFICATION	Cist
DIST. TO DEVELOPMENT	190m northeast
DESCRIPTION	No description available
REFERENCE	www.archaeology.ie, SMR file

SMR NO.	KD036-028
RMP	Yes
TOWNLAND	Timolin
PARISH	Timolin
BARONY	Narragh and Reban East
I.T.M.	680038, 693145

CLASSIFICATION	Church
DIST. TO DEVELOPMENT	220m south
	Fitzgerald records that a chapel and burial ground close to Timolin had been levelled. "Before the chapel of Moone was built, its predecessor stood in a field close to the village of Timolin, on the opposite side of the Bothoge. The field still goes by the name of the 'Chapel Field', though no trace of either church or burial ground remains.
REFERENCE	www.archaeology.ie, SMR file

SMR NO.	KD036-028001
RMP	Yes
TOWNLAND	Timolin
PARISH	Timolin
BARONY	Narragh and Reban East
I.T.M.	680038, 693145
CLASSIFICATION	Burial ground
DIST. TO DEVELOPMENT	220m south
DESCRIPTION	Fitzgerald records the levelling of a chapel (KD036-028) and burial ground close to Timolin 'on the opposite side of the Bothoge' in the 'Chapel Field' (JKAS 1899, 425).
REFERENCE	www.archaeology.ie, SMR file

SMR NO.	KD036-046
RMP	No
TOWNLAND	Timolin
PARISH	Timolin
BARONY	Narragh and Reban East
I.T.M.	679733, 693435
CLASSIFICATION	Habitation site
DIST. TO DEVELOPMENT	300m west
DESCRIPTION	This was one of a series of archaeological investigations carried out on the proposed route of the N9 realignment at the Moone-Timolin-Ballitore Hill. A series of low earthen banks or mounds were noted in the initial paper survey. Four cuttings were excavated (99E0203) investigating different parts of the feature. No structural remains were found: the 'banks' and 'mounds' were irregularities left by gravel-digging. Some scattered medieval pottery was found in the topsoil along with a few metal objects of unknown date.

REFERENCE www.archaeology.ie, SMR file

SMR NO.	KD036-037
RMP	Yes
TOWNLAND	Timolin
PARISH	Timolin
BARONY	Narragh and Reban East
I.T.M.	679925, 693826
CLASSIFICATION	Cist
DIST. TO DEVELOPMENT	410m north-northeast
DESCRIPTION	No description available
REFERENCE	www.archaeology.ie, SMR file

SMR NO.	KD036-036
RMP	Yes
TOWNLAND	Timolin
PARISH	Timolin
BARONY	Narragh and Reban East
I.T.M.	679733, 693785
CLASSIFICATION	Cist
DIST. TO DEVELOPMENT	460m northwest
DESCRIPTION	No description available
REFERENCE	www.archaeology.ie, SMR file

Soothy Riddle

APPENDIX 2 STRAY FINDS WITHIN THE SURROUNDING AREA

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

MUSEUM NO	1981:121
TOWNLAND	Timolin
PARISH	Narragh and Reban East
BARONY	Kildare
FIND	Human remains
FIND PLACE	Cist burial
DESCRIPTION	Skeletal remains
REFERENCE	Topographical Files, National Museum of Ireland

MUSEUM NO	1981:361.2
TOWNLAND	Timolin
PARISH	Narragh and Reban East
BARONY	Kildare
FIND	Charcoal
FIND PLACE	Cist burial
DESCRIPTION	Charcoal sample from upper fill of cist, found with 1981:361.1
REFERENCE	Topographical Files, National Museum of Ireland

MUSEUM NO	1981:361.1
TOWNLAND	Timolin
PARISH	Narragh and Reban East
BARONY	Kildare
FIND	Ceramic bipartite bowl
FIND PLACE	Cist burial
	Thirteen sherds physically numbered with suffixes a-o. Also 11 unnumbered sherds bagged separately. In addition to this, two bags, both containing tiny pottery fragments and one also containing a pot.
REFERENCE	Topographical Files, National Museum of Ireland

MUSEUM NO	1981:360.2
TOWNLAND	Timolin
PARISH	Narragh and Reban East
BARONY	Kildare
FIND	Human remains

FIND PLACE	Cist burial
DESCRIPTION	Two boxes unburnt bone
REFERENCE	Topographical Files, National Museum of Ireland

MUSEUM NO	1981:360.1
TOWNLAND	Timolin
PARISH	Narragh and Reban East
BARONY	Kildare
FIND	Ceramic tripartite bowl
FIND PLACE	Cist burial
DESCRIPTION	Ceramic bowl, Ó Ríordáin And Waddell type Tripartite.
REFERENCE	Topographical Files, National Museum of Ireland

MUSEUM NO	1981:342
TOWNLAND	Timolin
PARISH	Narragh and Reban East
BARONY	Kildare
FIND	Human remains
FIND PLACE	Cist burial in ploughed field
DESCRIPTION	Unburnt human remains
REFERENCE	Topographical Files, National Museum of Ireland

MUSEUM NO	2010C2:658
TOWNLAND	Timolin
PARISH	Narragh and Reban East
BARONY	Kildare
FIND	Floor tile
FIND PLACE	Timolin Church
DESCRIPTION	Ceramic line-impressed floor tile. Decorated with quatrefoil within four quarter circles enclosing vine leaves
REFERENCE	Topographical Files, National Museum of Ireland

MUSEUM NO	1945:36
TOWNLAND	Moone
PARISH	Moone
BARONY	Kilkea and Moone
FIND	Handle
	Found during excavation of a sand pit beside a hill facing Moone Abbey. Found approximately four ft. from surface. Said to be the burial of Squire Yeats (owner of the Abbey) executed for espionage by Insurgents in 1898.
DESCRIPTION	Semi-circular iron handle, bar with a round cross section. Bar tapers inwards

towards both ends; twists abruptly outwards at a right angle on one end, other end is broken. Probably conserved. Least intact of the three handles found, 1945:34 and 1945:35.

REFERENCE Topographical Files, National Museum of Ireland

MUSEUM NO	1945:35
TOWNLAND	Moone
PARISH	Moone
BARONY	Kilkea and Moone
FIND	Handle
FIND PLACE	Found during excavation of a sand pit beside a hill facing Moone Abbey. Found approximately four ft. from surface. Said to be the burial of Squire Yeats (owner of the Abbey) executed for espionage by Insurgents in 1898.
DESCRIPTION	Semi-circular iron handle, bar with a round cross section. Bar tapers inwards towards both ends; twists abruptly outwards at a right angle on both ends. Tips on both ends are damaged. Well preserved, probably conserved. Found with three others, 1945:34 and 1945:36.
REFERENCE	Topographical Files, National Museum of Ireland

MUSEUM NO	1945:35
TOWNLAND	Moone
PARISH	Moone
BARONY	Kilkea and Moone
FIND	Handle
FIND PLACE	Found during excavation of a sand pit beside a hill facing Moone Abbey. Found approximately four ft. from surface. Said to be the burial of Squire Yeats (owner of the Abbey) executed for espionage by Insurgents in 1898.
DESCRIPTION	Semi-circular iron handle, bar with a round cross section. Bar tapers inwards towards both ends; twists abruptly outwards at a right angle on both ends. Tips on both ends are damaged. Well preserved, probably conserved. Most intact of the three handles found, 1945:35 and 1945:36.
REFERENCE	Topographical Files, National Museum of Ireland

MUSEUM NO	1945:33
TOWNLAND	Moone
PARISH	Moone
BARONY	Kilkea and Moone
FIND	Stirrup
FIND PLACE	Found during excavation of a sand pit beside a hill facing Moone Abbey. Found approximately four ft. from surface. Said to be the burial of Squire Yeats (owner of the Abbey) executed for espionage by Insurgents in 1898.
	Piece of iron, possibly thread of a stirrup. Leaf shaped bar of iron with ends turned upwards at right angles. Both upward angled bars broken. Probably conserved.

Topographical Files, National Museum of Ireland

MUSEUM NO	1945:32
TOWNLAND	Moone
PARISH	Moone
BARONY	Kilkea and Moone
FIND	Human remains
FIND PLACE	Found during excavation of a sand pit beside a hill facing Moone Abbey. Found approximately four ft. from surface. Said to be the burial of Squire Yeats (owner of the Abbey) executed for espionage by Insurgents in 1898.
DESCRIPTION	BC16: 3 boxes of unburnt skeletal remains BC16: 1 box of unburnt skeletal remains BC17: 3 boxes of unburnt skeletal remains
REFERENCE	Topographical Files, National Museum of Ireland

MUSEUM NO	X194
TOWNLAND	Moone
PARISH	Moone
BARONY	Kilkea and Moone
FIND	Stone high cross sample
FIND PLACE	High cross at Moone
DESCRIPTION	Written on the label 'portions of the dowell of the head of the high cross of Moone, April 1893'.
REFERENCE	Topographical Files, National Museum of Ireland

APPENDIX 3 LEGISLATION ARCHAEOLOGICAL RESOURCE

PROTECTING

THE

PROTECTION OF CULTURAL HERITAGE

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

THE ARCHAEOLOGICAL RESOURCE

The National Monuments Act 1930 to 2004 and relevant provisions of the National Cultural Institutions Act 1997 are the primary means of ensuring the satisfactory protection of archaeological remains, which includes all man-made structures of whatever form or date except buildings habitually used for ecclesiastical purposes. A National Monument is described as 'a monument or the remains of a monument the preservation of which is a matter of national importance by reason of the historical, architectural, traditional, artistic or archaeological interest attaching thereto' (National Monuments Act 1930 Section 2).

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

OWNERSHIP AND GUARDIANSHIP OF NATIONAL MONUMENTS

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

REGISTER OF HISTORIC MONUMENTS

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

PRESERVATION ORDERS AND TEMPORARY PRESERVATION ORDERS

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

RECORD OF MONUMENTS AND PLACES

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

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

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

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

THE PLANNING AND DEVELOPMENT ACT 2000

Under planning legislation, each local authority is obliged to draw up a Development Plan setting out their aims and policies with regard to the growth of the area over a five-year period. They cover a range of issues including archaeology and built heritage, setting out their policies and objectives with regard to the protection and enhancement of both. These policies can vary from county to county. The Planning and Development Act 2000 recognises that proper planning and sustainable development includes the protection of the archaeological heritage. Conditions relating to archaeology may be attached to individual planning permissions.

The Kildare County Development Plan 2011-2017 contains the following policies with regard to the archaeological resource:

- **AH 1:** To have regard to the Record of Monuments and Places (RMP) and the Urban Archaeological Survey when assessing planning applications for development. No development shall be permitted in the vicinity of a recorded feature where it detracts from the setting of the feature or which is injurious to its cultural or educational value.
- **AH 2:** To seek to protect and preserve archaeological sites which have been identified subsequent to the publication of the Record of Monuments and Places (RMP).
- **AH 3:** To ensure that development in the vicinity of a site of archaeological interest is not detrimental to the character of the archaeological site or its setting by reason of its location, scale, bulk or detailing and to ensure that such proposed developments are subject to an archaeological assessment. Such an assessment will seek to ensure that the development can be designed in such a way as to avoid or minimise any potential effects on the archaeological heritage.
- **AH 4:** To protect historic burial grounds within the county and encourage their maintenance in accordance with conservation principles in co-operation with the Historic Monuments Advisory Committee and National Monuments Section of the Department of the Environment, Heritage and Local Government (DoEHLG).
- **AH 5:** To ensure that disturbance, removal and alteration of the line of town defences are suitably safeguarded within the historic towns and settlements of County Kildare.
- **AH 6:** To retain where possible the existing street layout, historic building lines and traditional plot widths where these derive from medieval or earlier origins. 210 // Kildare County Development Plan 2011–2017
- **AH 7:** To promote and support in partnership with National Monuments Section of the Department of the Environment, Heritage and Local Government (DoEHLG), the concept of Archaeological Landscapes where areas contain several Recorded Monuments.
- **AH 8:** To encourage, where practicable, the provision of public access to sites identified in the Record of Monuments and Places under the direct ownership, guardianship or control of the Council and/or the State.

AH 9: To encourage the provision of signage to publicly accessible recorded monuments.

The Ballitore/Moone/Timolin County Development Plan drafted in 2002 contains the following directive with relation to archaeology:

14. Archaeology

All developments within the village centres, where considered appropriate, may be required to carry out an archaeological survey and assessment to the requirements of Duchas – The Heritage Service and Kildare County Council.

APPENDIX 4 IMPACT ASSESSMENT AND THE CULTURAL HERITAGE RESOURCE

POTENTIAL IMPACTS ON ARCHAEOLOGICAL AND HISTORICAL REMAINS

Impacts are defined as 'the degree of change in an environment resulting from a development' (Environmental Protection Agency 2003: 31). They are described as profound, significant or slight impacts on archaeological remains. They may be negative, positive or neutral, direct, indirect or cumulative, temporary or permanent.

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

- Permanent and temporary land-take, associated structures, landscape mounding, and their construction may result in damage to or loss of archaeological remains and deposits, or physical loss to the setting of historic monuments and to the physical coherence of the landscape.
- Archaeological sites can be affected adversely in a number of ways: disturbance by excavation, topsoil stripping and the passage of heavy machinery; disturbance by vehicles working in unsuitable conditions; or burial of sites, limiting accessibility for future archaeological investigation.
- Hydrological changes in groundwater or surface water levels can result from construction activities such as de-watering and spoil disposal, or longer-term changes in drainage patterns. These may desiccate archaeological remains and associated deposits.
- Visual impacts on the historic landscape sometimes arise from construction traffic and facilities, built earthworks and structures, landscape mounding and planting, noise, fences and associated works. These features can impinge directly on historic monuments and historic landscape elements as well as their visual amenity value.
- Landscape measures such as tree planting can damage sub-surface archaeological features, due to topsoil stripping and through the root action of trees and shrubs as they grow.
- Ground consolidation by construction activities or the weight of permanent embankments can cause damage to buried archaeological remains, especially in colluviums or peat deposits.
- Disruption due to construction also offers in general the potential for adversely affecting archaeological remains. This can include machinery, site offices, and service trenches.

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

PREDICTED IMPACTS

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

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

APPENDIX 5 MITIGATION MEASURES AND THE CULTURAL HERITAGE RESOURCE

POTENTIAL MITIGATION STRATEGIES FOR CULTURAL HERITAGE REMAINS

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

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

DEFINITION OF MITIGATION STRATEGIES

ARCHAEOLOGICAL RESOURCE

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

Full Archaeological Excavation can be defined as 'a programme of controlled, intrusive fieldwork with defined research objectives which examines, records and interprets archaeological deposits, features and structures and, as appropriate, retrieves artefacts, ecofacts and other remains within a specified area or site on land, inter-tidal zone or underwater. The records made and objects gathered during fieldwork are studied and the results of that study published in detail appropriate to the project design' (IFA 2008).

Archaeological Test Trenching can be defined as 'a limited programme of intrusive fieldwork which determines the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts within a specified area or site on land, inter-tidal zone or underwater. If such archaeological remains are present field evaluation defines their character, extent, quality and preservation, and enables an assessment of their worth in a local, regional, national or international context as appropriate' (IFA 2009).

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

disturbed or destroyed. The programme will result in the preparation of a report and ordered archive (IFA 2008).

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