

16 ARCHAEOLOGICAL, ARCHITECTURAL AND CULTURAL HERITAGE

16.1 Introduction

16.1.1 General

The following chapter details an archaeological, architectural and cultural heritage assessment undertaken at the site of a proposed development located within the townlands of Kilcarbery, Nangor, Deansrath, and Corkagh Demesne in, Dublin 22 (ITM 705145/730750). The proposed development area is currently formed by open fields. The assessment aims to ascertain any potential, likely and significant impacts that the proposed development may have on the existing archaeological, architectural and cultural heritage resource. The assessment was undertaken by Faith Bailey of Irish Archaeological Consultancy Ltd.

This study determines, as far as reasonably possible from existing records, the nature of the archaeological, architectural and cultural heritage resource in and within the vicinity of the development area using appropriate methods of study. Desk-based assessment is defined as a programme of study of the historic environment within a specified area or site that addresses agreed research and/or conservation objectives. It consists of an analysis of existing written, graphic, photographic and electronic information in order to identify the likely heritage assets, their interest and significance and the character of the study area, including appropriate consideration of the settings of heritage assets (ClfA 2014a). This leads to the following: -

- Determining the presence of known archaeological heritage sites that may be affected by the proposed development;
- Assessment of the likelihood of finding previously unrecorded archaeological remains during the construction programme;
- Suggested mitigation measures based upon the results of the above research.

The study involved detailed interrogation of the archaeological and historical background of the development area. This included information from the Record of Monuments and Places of County Dublin; the County Development Plan; the National Inventory of Architectural Heritage; the topographical files of the National Museum of Ireland, and cartographic and documentary records. Aerial photographs of the study area held by the Ordnance Survey of Ireland and Google Earth were also consulted. A geophysical survey of the proposed development area has been carried out, along with archaeological testing and a programme of archaeological preservation by record (excavation).

An impact assessment and a mitigation strategy have been prepared. The impact assessment is undertaken to outline potential negative impacts that the proposed development may have on the cultural heritage resource, while the mitigation strategy is designed to avoid, reduce or offset such impacts.

16.1.2 Definitions

In order to assess, distil and present the findings of this study, the following definitions apply: -

‘Cultural Heritage’ where used generically, is an over-arching term applied to describe any combination of archaeological, architectural and cultural heritage features, where –

- the term ‘archaeological heritage’ is applied to objects, monuments, buildings or landscapes of an (assumed) age typically older than AD 1700 (and recorded as archaeological sites within the Record of Monuments and Places)
- the term ‘architectural heritage’ is applied to structures, buildings, their contents and settings of an (assumed) age typically younger than AD 1700
- the term ‘cultural heritage’, where used specifically, is applied to other (often less tangible) aspects of the landscape such as historical events, folklore memories and cultural associations.

16.1.2.1 Impact Definitions

Imperceptible Impact

An impact capable of measurement but without noticeable consequences.

Not Significant

Effects which causes noticeable changes in the character of the environment but without noticeable consequences.

Slight Impact

An impact which causes changes to the character of the environment which are not significant or profound and do not directly impact or affect an archaeological feature or monument.

Moderate Impact

An effect that alters the character of the environment in a manner consistent with existing and emerging baseline trends. A moderate effect arises where a change to the site is proposed, which although noticeable, is not such that the archaeological integrity of the site is compromised and which is reversible. This arises where an archaeological feature can be incorporated into modern day development without damage and that all procedures used to facilitate this are reversible.

Significant Impact

An impact which, by its magnitude, duration or intensity, alters an important aspect of the environment. An impact like this would be where part of a site would be permanently impacted upon, leading to a loss of character, integrity and data about the archaeological feature/site.

Very Significant

Effects which, by its character, magnitude, duration or intensity significantly alters the majority of a sensitive aspect of the environment.

Profound Impact

Applies where mitigation would be unlikely to remove adverse effects. Reserved for adverse, negative effects only. These effects arise when an archaeological site is completely and irreversibly destroyed by a proposed development.

Impacts as defined by the EPA 2017 Guidelines (pg. 23).

16.2 Assessment Methodology

16.2.1 Consultation

During scoping and research for the assessment and EIAR a number of statutory and voluntary bodies were consulted to gain further insight into the cultural background of the receiving environment, as follows: -

- Department of Arts, Heritage and the Gaeltacht – the Heritage Service and Policy Unit, National Monuments Section: Record of Monuments and Places; Sites and Monuments Record; Monuments in State Care Database; Preservation Orders and Register of Historic Monuments;
- National Museum of Ireland, Irish Antiquities Division: topographical files of Ireland; and
- South Dublin County Council: Planning Section.

16.2.2 Study Methodology

Research for this assessment was undertaken over a number of phases. The first phase consisted of a paper survey of all available archaeological, historical and cartographic sources. The second phase involved a field inspection of the site. The third phase involved a detailed geophysical survey of the proposed development area. The fourth phase consisted of a programme of archaeological testing across the site and the fifth phase consisted of the preservation by record (excavation) of a number of archaeological features.

16.2.3 Paper Survey

- Record of Monuments and Places for County Dublin;
- Sites and Monuments Record for County Dublin;
- Monuments in State Care Database;
- Preservation Orders;
- Register of Historic Monuments;
- Topographical files of the National Museum of Ireland;
- Cartographic and written sources relating to the study area;
- South Dublin County Council Development Plan 2016-2022;
- National Inventory of Architectural Heritage;
- Place name analysis; and
- Excavations Bulletin (1970–2018).

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 Department of Culture, Heritage and the Gaeltacht (DoCHG) website – 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 DoCHG 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.

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

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

- William Petty, Down Survey Map, *Barony of Newcastle, Parish of Clondalkin* c. 1655
- John Rocque, *Map of the County of Dublin*, 1760
- John Taylor, *Map of the Environs of Dublin*, 1816
- William Duncan, *Map of the County of Dublin*, 1821
- Ordnance Survey maps of County Dublin 1843, 1871, 1909

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

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.

Development Plans contain a catalogue of all the Protected Structures and archaeological sites within the county. The South Dublin County Council Development Plan (2016-2022) was consulted to obtain information on cultural heritage sites in and within the immediate vicinity of the proposed development.

The National Inventory of Architectural Heritage (NIAH) is a government-based organisation tasked with making a nationwide record of locally, regionally, nationally and internationally significant structures, which in turn provides county councils with a guide as to what structures to list within the Record of Protected Structures. The NIAH have also carried out a nationwide desk-based survey of historic gardens, including demesnes that surround large houses.

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

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 1970–2018.

16.2.4 Field Inspection

Field inspection is necessary to determine the extent and nature of archaeological, architectural 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 field inspection entailed: -

- Inspecting the proposed development area and its immediate environs.
- Noting and recording the terrain type and land usage.
- Noting and recording the presence of features of archaeological/architectural 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.

16.2.5 Geophysical Survey

A geophysical survey is used to create 'maps' of subsurface archaeological features. Features are the non-portable part of the archaeological record, whether standing structures or traces of human activities left in the soil. Geophysical instruments can detect buried features when their electrical or magnetic properties contrast measurably with their surroundings. In some cases, individual artefacts, especially metal, may be detected as well. Readings taken in a systematic pattern become a dataset that can be rendered as image maps. Survey results can be used to guide excavation and to give archaeologists insight into the patterning of non-excavated parts of the site. Unlike other archaeological methods, geophysical survey is not invasive or destructive.

A geophysical survey of the proposed development area was carried out by J.M. Leigh Surveys Ltd. for Dermot Nelis Archaeology in May 2017 under licence 17R0016. The survey identified a possible former field system in the south of the site. The report is included as Appendix 16.1 within this EIAR.

16.2.6 Archaeological Testing

Archaeological test trenching is 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' (ClfA 2014a).

Archaeological testing was carried out across the proposed development area following on from the above geophysical survey. This was undertaken by Dermot Nelis Archaeology under licence 17E0367. Test trenches targeted geophysical anomalies and c. 16,000 linear metres of trenches were opened across the site. A total of nine potential archaeological features were identified during testing in three fields. The full Testing Report is included as Appendix 16.2 within this EIAR.

16.2.7 Archaeological Preservation by Record (Excavation)

The purpose of on-site excavations was to preserve-by-record through appropriate rescue excavation any significant archaeological features or deposits that were identified during earlier investigations, so as to mitigate impacts on the archaeological remains that may be discovered within the footprint of the project.

Archaeological excavation was carried out across the proposed development area following on from the above testing. This was undertaken by Dermot Nelis Archaeology under an extension to the licence 17E0367. The archaeological features excavated represented activity dating from the Bronze Age to the post-medieval period. The full Excavation Report is included as Appendix 16.3 within this EIAR.

16.3 Receiving Environment

The proposed development area is located in Kilcarbery, Clondalkin within the townlands of Kilcarbery, Nangor, Deansrath and Corkagh Demesne. These are located within the parishes of Kilbride and Clondalkin and Baronies of Newcastle and Uppercross. The site is currently formed by open fields and bordered to the west by the R132. Residential development of varying densities is located to the east and north and parkland is located to the south.

There are no recorded monuments within the proposed development area. The closest is the site of Nangor Castle (RMP DU017-037), which is situated c. 190m to the northwest (Figure 16.1).

There are no protected structures within the proposed development area. The closest is Deansrath House (RPS 142), which is located c. 290m to the north (Figure 16.2).



Figure 16.1: Proposed development area showing surrounding recorded monuments.

16.3.1 Archaeological and Historical Background

16.3.1.1 Prehistoric Period (7000 BC-AD 500)

Mesolithic Period (7000-4000 BC)

Although very recent discoveries may push back the date of human activity by a number of millennia (Dowd and Carden, 2016), 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 led a primarily, but not exclusively, mobile lifestyle. The presence of Mesolithic communities is most commonly evidenced by scatters of worked flint material, a by-product from the production of flint implements.

The current archaeological evidence suggests that the environs around Dublin were first inhabited towards the later part of this period. At this time people made crude flint tools known as Larnian (or Bann) Flakes. Small numbers of these flakes have been found along coastal areas of County Dublin such as Dun Laoghaire, Dalkey Island, and Loughlinstown and may indicate small-scale transient settlement along the riverbanks and seashores (Corlett, 1999). There are no known Mesolithic sites located within the immediate vicinity of the proposed development area.

Neolithic Period (4000-2500 BC)

During the Neolithic period, communities generally 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.



Figure 16.2: Proposed development area showing surrounding protected structures and NIAH structures.

While recent years have seen a large increase in the number of identified Neolithic settlement and habitation sites, the period is most commonly characterised by its impressive megalithic tombs. There is a possible Neolithic habitation site c. 410m to the southeast of the proposed development area (RMP DU021-012).

Bronze Age (2500-800 BC)

The Bronze Age was marked by the widespread use of metal for the first time in Ireland. As with the transition from Mesolithic to Neolithic, the transition into the early Bronze Age was accompanied by changes in society. The construction of megalithic tombs went into decline and the burial of the individual became typical. Cremated or inhumed bodies were often placed in a cist, which is a stone-lined grave, usually built of slabs set upright to form a box-like construction and capped by a large slab or several smaller lintels (Buckley & Sweetman, 1991). Barrows and pit burials are also funerary monuments associated with this period. A ring-barrow (RMP DU017-080) is recorded c. 730m northwest of the proposed development area within Kilmahuddrick, where excavation exposed a cist-like structure, cremated bone, and early Bronze Age pottery.

Another site type thought to reveal a glimpse of domestic life at this time is the burnt mound and *fulacht fiadh*. A common site within the archaeological record, they are normally interpreted as temporary cooking sites but may have been used for other industrial or even recreational functions. They survive as low mounds of charcoal-enriched soil mixed with an abundance of heat-shattered stones. They are usually horseshoe shaped and located in low-lying areas near a water source and are often found in clusters. Even when levelled by an activity such as ploughing, they are identifiable as burnt spreads in the landscape (Brindley & Lanting, 1990). There is one recorded *fulacht fiadh* (RMP DU017-084), located c. 530m to the northwest of the proposed development area, within the townland of Nangor.

Iron Age (800 BC-AD 400)

Until recently, the dearth of evidence representing the Irish Iron Age led to it being among the most enigmatic and least understood period in Irish prehistory. However, large scale commercial excavations carried out over the past two decades have produced large quantities of new data relating to Iron Age settlement and industry across the country. This raw excavation data is still being analysed and a picture of life during the Iron Age is being assembled (Becker 2012, 1).

As in Europe, two phases of the Iron Age have been proposed in Ireland; the Hallstatt and the La Tène (Raftery, 1994). The Hallstatt period generally dates from 700BC onwards and spread rapidly from Austria, across Europe, and then into Ireland. The later Iron Age or La Tène culture also originated in Europe during the middle of the 5th century BC. This theory however has been challenged in recent years by John Koch and Barry Cunliffe, amongst others. Cunliffe has put forward an opposing theory suggesting that the Insular Celtic Cultures originated in Western Europe (Koch and Cunliffe, 2013). There is no firmly dated evidence for Iron Age activity within the immediate vicinity of the proposed development

16.3.1.2 Early Medieval Period (AD 400-1100)

The early medieval period is depicted in the surviving sources as largely rural characterised by the basic territorial unit known as *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*. One of the most common indicators of settlement during this period is the ringfort. Ringforts were often constructed to protect rural farmsteads and are usually defined as a broadly circular enclosure. One of the most recent studies of the ringfort (Stout, 2017) has suggested that there is a total of 47,000 potential ringforts or enclosure sites throughout Ireland. They are typically enclosed by an earthen bank and exterior ditch and range from 25m to 50m in diameter. Ringforts can be divided into three broad categories – univallate sites, with one bank or ditch; multivallate sites with as many as four levels of enclosing features and platform or raised ringforts, where the interior of the ringfort has been built up. These enclosed farmsteads were intimately connected to the division of land and the status of the occupant. Ringforts are most commonly located at sites with commanding views of the surrounding environs, which provided an element of security. While raths, for the most part, avoid the extreme lowlands and uplands, they also show a preference for the most productive soils (Stout, 1997). One such site is located c. 1.5km to the southwest of the proposed development area (RMP DU021-020).

This period was also characterised by the introduction of Christianity to Ireland. An early medieval ecclesiastical enclosure is recorded c. 1.15km to the southwest of the proposed development area (RMP DU021-005003). The remains of this feature are associated with the church (RMP DU021-005001) and graveyard (RMP DU021-005002) of Kilbride. Many holy wells are often found in association with early ecclesiastical sites. Well veneration was not confined to Ireland or even to Europe and at least some holy wells in Ireland were important venues of pre-Christian ritual activity. A number of wells are actually formed by springs or consist of hollowed stones that collect water. There is a possible holy well (RMP DU021-009) located c. 465m to the east of the proposed development area.

16.3.1.3 Medieval Period (AD 1100-1600)

The beginning of the medieval period was characterised by political unrest that originated from the death of Brian Borumha in 1014. In 1171 AD, Dublin was besieged and taken by Diarmait MacMurchada and his Leinster forces supported by a force of Anglo-Norman knights led by Strongbow (Richard Fitz-Gilbert de Clare) and Raymond le Gros. Diarmait MacMurchada, deposed King of Leinster, sought the support of mercenaries from England, Wales and Flanders to assist him in his challenge for kingship. Norman involvement in Ireland began in 1169 AD, when Richard de Clare and his followers landed in Wexford to support MacMurchada. Two years later de Clare (Strongbow) inherited the Kingdom of Leinster and by the end of the 12th century the Normans had succeeded in conquering much of the country (Stout & Stout, 1997). The initial stage of the invasion of the country was marked by the construction of motte and bailey castles, which were later replaced with stone fortifications. There are a number of fortifications recorded in the study area of the proposed development, including Nangor Castle (RMP DU017-037), c. 245m to the northwest; a castle and moated site (RMP DU021-011001/2) c. 325m to the south-southeast and Deansrath Castle (RMP DU017-039), c. 445m to the north.

Nangor Castle (RMP DU017-037) was incorporated into a post medieval country house, which was later demolished. During the 16th century the records shown that Finian Bassenett was in residence at the castle (SMR file). Archaeological testing within the vicinity of the castle site during the 1990s produced 12th and 13th century pottery as well as indications of settlement possibly dating back to the early medieval period. A field system is recorded to the west of the castle site (RMP DU017-082), which produced 1600 sherds of medieval pottery during excavations in 2001 (SMR file).

16.3.1.4 Post-Medieval Period (1600-1900 AD)

During the second half of the 17th century Clondalkin town was affected by the Cromwellian Restoration and Williamite land settlements. Prior to 1641, the confiscation was aimed primarily against the Gaelic Irish. After that date all Catholic proprietors, comprising mainly Irish and Old English, found their lands subject to forfeiture unless they could prove 'constant good affection' to the English parliament (Goff, 1987). In the Irish Rebellion of 1641 a troop of horse from Dublin attacked and destroyed the town (southdublinhistory.ie).

The 18th century witnessed a more pacified Ireland and during this time industry was developed in the landscape. In the parish of Clondalkin the water power of the River Cammock was utilised and fed numerous millraces to operate a multitude of mills. The first edition OS map of 1843 shows a number of mills within the landscape surrounding the proposed development area, including an Oil and Corn mill (RMP DU021-008/ RPS 165/ NIAH 11209010), c. 340m to the east-northeast. The corn mill was used to grind grain for local consumption; however, it was recorded as being ruinous in 1663. The oil mill produced linseed oil that was extracted from the seed of the flax plant. In Griffith's Valuation of the 1850s the occupants of the mill are recorded as a Peter McNally and a Joseph Henry Esquire (askaboutireland.ie, southdublinhistory.ie).

The gunpowder mills at the Corkagh Mills complex, c. 830m to the south of the proposed development area, employed enough people to be perceived as a nationally important centre for the production of gunpowder. It was active from 1716 to 1815 and an explosion recorded at the mills in 1733 temporarily ceased production of gunpowder in the region.

With the onset of the 18th century, the political climate settled and this saw a dramatic rise in the establishment of large residential houses around the country. This was largely due to the fact that after the turbulence of the preceding centuries, the success of the Protestant cause and effective removal of any political opposition, the country was at peace. The large country house was only a small part of the overall estate of a large landowner and provided a base to manage often large areas of land that could be dispersed nationally. During the latter part of the 18th century, the establishment of a parkland context (or demesnes) for large houses was the fashion. Although the creation of a parkland landscape involved working with nature, rather than against it, considerable construction effort went into their creation. Major topographical features like rivers and mountains were desirable features for inclusion into, and as a setting, for the large house and parkland.

Multiple demesne landscapes and large houses were established throughout County Dublin during this period, due to the proximity of the city. The closest and largest demesne located within the area surrounding the proposed development is associated with Corkagh House. At the time of the first edition OS map (1843), a small section of the demesne is shown within the south-eastern corner of the proposed development area. However, by the time of the 1871 mapping the demesne landscape has been extended further into the proposed development area. Today, although a number of the outbuildings associated with the main house remain as protected structures on site, the house itself has been demolished. The demesne itself has been subject to a degree of development, but is predominantly in use as a public park today.

16.3.2 Geophysical Survey

A geophysical survey was carried out within the proposed development area on the 2nd of May 2017. The survey was conducted by J.M. Leigh Surveys Ltd on behalf of South Dublin County Council, under licence 17R0016. This survey comprised of a detailed gradiometer survey covering c. 35 ha. The proposed development area was found to contain high levels of ferrous signals resulting from modern disturbance.

The survey identified some responses of interest. Linear responses and trends are indicative of former boundary features. In the south of the application area, responses suggestive of former boundaries were also identified and it is possible that a former field system is represented here.

The full report has been included as Appendix 16.1 in this EIAR.

16.3.3 Summary of Archaeological Test Trenching

Consultation with the National Monuments Service (DoAHG) established that a programme of archaeological test trenching was required across the proposed development area. A programme of archaeological test trenching was designed in order to test the anomalies identified by the geophysical survey, and in order to ascertain whether subsurface archaeological features survive within the proposed development.

This assessment (Licence Ref.: 17E0367) was undertaken by Dermot Nelis and Colm Flynn of Dermot Nelis Archaeology, on behalf of South Dublin County Council from the 16th November to the 8th December 2017. A total of 80 trenches were mechanically investigated across the test area which had a combined length of c. 16,000 linear metres.

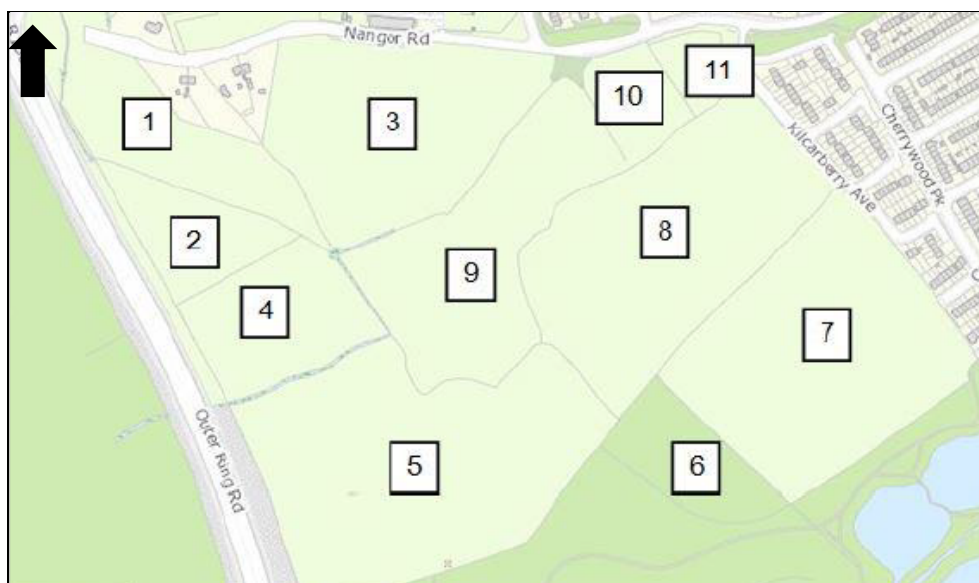


Figure 16.3: Field numbering for test trenching.

A total of nine possible archaeological features in three fields were identified during testing. The fields are marked on Figure 16.3. The archaeological areas were as follows: -

Field 6

Two possible archaeological features were recorded in separate trenches in Field 6. One consisted of an area of burning containing slag, measuring 3m x 3m, identified in the geological survey. The second was an irregular-shaped feature orientated northwest-southeast, measuring 1.5m x 1m.

Field 8

Five possible features were identified in Field 8. A possible area of burning, measuring 0.8m x 0.6m, was identified c. 55m to the west of a possible small pit (0.65m x 0.5m) filled with a friable mid-brown silty clay in Trench 1. A possible pit was recorded in Trench 3. A possible hearth with charcoal, measuring 1.3m x 1.0m x 0.2m, was discovered in Trench 4. An oval pit, measuring 1.3m x 1.0m x at least 0.30m deep, with blackened silt and heat fractured stone, was uncovered near the centre of Trench 5.

Field 9

Two features were recorded in separate trenches in Field 9. A pit, measuring 0.7m x 0.65m, with heat fractured stone and charcoal and an east-west oriented articulated possible dog burial of unknown date.

The assessment concluded that: -

“Test trenching revealed nine possible archaeological features in three fields (Fields 6, 8, and 9). All of these features, along with on average 5m x 5m buffer zones surrounding the features, are being excavated and recorded under Licence 17E0367 Ext. at the time of writing. As such, all known archaeological features within the proposed development area will have been fully excavated well in advance of construction works commencing on site. As a result, there will be no known archaeological features within the proposed development area when groundworks commence on site.

It is recommended that archaeological monitoring be carried out on all groundworks associated with the proposed development in Fields 3, 5, 6, 7, 8, 9, 10 and 11. Monitoring will be carried out under Licence to National Monuments Service- Department of Culture, Heritage and the Gaeltacht. Provision will be made for the full excavation and recording of any archaeological features or deposits that may be exposed during monitoring.”

Due to extensive ground disturbance noted in Fields 1, 2, and 4 (Figure 16.3) during the test trenching programme, it is considered that archaeological monitoring of construction works in these areas is not required.

The full Testing Report has been included as Appendix 16.2 in this EIAR.

16.3.4 Summary of Preservation by Record (Archaeological Excavation)

This excavation (Licence Ref.: 17E0367 Ext.) was undertaken by Dermot Nelis and Colm Flynn of Dermot Nelis Archaeology, on behalf of South Dublin County Council, intermittently between the 12th March to the 30th April 2018, over the course of 12 days. The objectives of the archaeological excavation were to preserve by record all features identified during the test trenching phase, and to establish if associated subsoil archaeological remains were present within the development area.

All archaeological features were located in areas which were previously identified during test trenching. No new areas were stripped of topsoil or excavated as part of the excavation works. The results of the programme of preservation by record are summarised below: -

Field 6

The archaeology in Field 6 consisted of a sub-circular pit/hearth (**C5**) and a linear feature (**C7**), neither of which was dateable. A possible pit identified in testing was designated as non-archaeological.

Field 8

The archaeological features excavated in Field 8 consisted of a hearth (C13) and posthole (C15) at the western end of the field, and a shallow pit (C17) containing 18/19th-century pottery at the north-eastern end. Two possible features were identified during test trenching in Trenches 1 and 3. These possible features (C19) and (C20) were deemed to not be of archaeological significance.

Field 9

The archaeological features excavated in Field 9 consisted of three associated pits from the middle/late Bronze Age, commonly associated with burnt mound sites, and a separate area containing the complete burial of a young sheep from the post-medieval or early modern period.

The full Excavation Report has been included as Appendix 16.3 in this EIAR.

16.3.5 Summary of Previous Archaeological Fieldwork within the Receiving Environment

A review of the Excavations Bulletin (1970-2018) has shown that prior to the works described above, no previous programmes of archaeological investigation had been carried out within the proposed development area. A number of archaeological investigations have been undertaken within the receiving environment, which are summarised below: -

A possible medieval pit furnace was excavated c. 30m to the south of the proposed development area in 2000 (Licence 00E0935; Bennett 2001:338), as part of works associated with laying of a pipeline. Further evidence of medieval activity was discovered during an excavation c. 220m to the southeast (Licence 01E0911; Bennett 2001:340). This excavation uncovered 20 human skeletons enclosed by a ditch, corn-drying kilns, possible structural features, linear features and finds of iron knives, bronze pins, animal bone, charcoal, iron slag, blue glass beads and two fragments of lignite bracelet.

Test-trenching near the demolished Nangor Castle (RMP DU017-037), c. 240m to the northwest of the proposed development area, produced evidence for a substantial ditch and an associated shallower linear feature (Licence 96E0273; Bennett 1996:068). The ditch may represent a ploughed-out rath or ring-ditch. Human remains, early medieval pottery, metal slag and medieval pottery were recorded. This suggests the area was occupied from the early medieval period to the 13th century.

In 2007, archaeological monitoring, c. 280m to the northwest, identified several features possibly associated with the now demolished 18th-century house that was built on the site of Nangor Castle (Licence 07E0588; Bennett 2007:530).

In 2000, the remains of a medieval field system, comprising intercutting ditches and gullies, was excavated c. 440m to the northwest of the proposed development area (Licence 00E0754; Bennett 2000:0226). This site has since been added to the RMP as DU017-082. Over 1600 sherds of medieval pottery, including Dublin-type wares and Leinster cooking ware, and an iron sickle were recovered.

16.3.6 Cartographic Analysis

William Petty's Down Survey Map, Barony of Newcastle, Parish of Clondalkin c. 1655

The Down Survey maps were compiled at a scale of 40 perches to one inch (the modern equivalent of 1:50,000) and represent the first systematic mapping of a large area on such a scale attempted anywhere. On Petty's map, the proposed development is located in an undetailed area between 'Corkan' (Corkagh Demesne) and 'Dunrath' (Deansrath) in the Parish of 'Clondalkine', (Clondalkin). No detail is shown of the proposed development. The Cammock River is depicted southwest travelling from Clondalkin town to the south of the proposed development.

John Rocque's Map of the County of Dublin, 1760 (Figure 16.4)

Rocque's map depicts the proposed development as a series of open fields. The Old Nangor Road passes east-west to the north of the site. Deansrath Castle (RMP DU017-039), Nangor Castle (RMP DU017-037), Corkagh House (RMP DU021-011001) are shown within the environs of the site, but no features or structures are marked within the site itself.



Figure 16.4: Extract from Rocque's map (1760) showing the approximate location of the proposed development.

John Taylor's Map of the Environs of Dublin, 1816

Taylor's map depicts the area of the proposed development in less detail than Rocque's and it is located in fields annotated as 'Lands of Kilbride'. Kilcarbery House (RPS 173/ NIAH 11209001) has been built to the west. There are no other changes of note.

William Duncan's Map of the County of Dublin, 1821

By the time this map the proposed development remains as open fields. No structures or sites of archaeological potential are marked within the site.

First Edition Ordnance Survey Map, 1843, scale 1:10,560 (Figure 16.5)

The first edition six-inch OS map of 1843 is the first to accurately depict the proposed development area. The map shows that the proposed development area is formed by a number of fields that vary in size and shape. The Old Nangor Road is shown to the immediate north of the site and several small buildings are depicted as fronting onto it. Two of these are within the north-eastern part of the development area. No other features or structures are marked within the site.

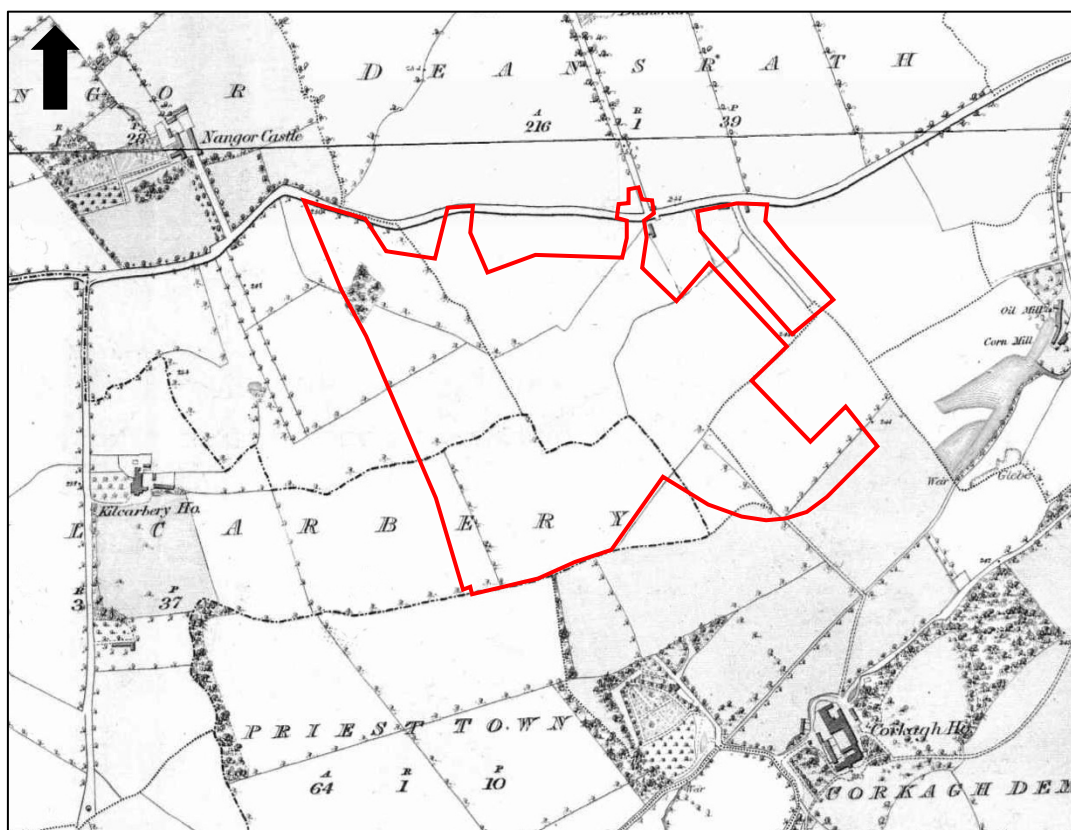


Figure 16.5: Extract from the first edition OS map (1843) showing the proposed development area.

In the wider area Nangor Castle (RMP DU017-037) is depicted to the northwest within a small demesne landscape. Kilcarbery House (RPS 173/ NIAH 11209001) is shown to the west, also with a small demesne indicated. To the southeast Corkagh House is shown, along with a large demesne landscape that extends into the southeast corner of the proposed development area. The Cammock River is shown as running through this demesne and serves a mill further to the northeast (RMP DU021-008, RPS 165/ NIAH 11209010).

Second Edition Ordnance Survey Map, 1871, scale 1: 10,560

By the time of this map, there are no major changes to note within the proposed development area, with the exception of the removal of some field boundaries and the slight extension into the site of the demesne associated with Corkagh House.

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

There are no major changes marked within the cartography of this map that relate to the proposed development area.

16.3.7 South Dublin County Council Development Plan 2016-2022

Archaeological Heritage

The South Dublin County Council Development Plan (2016–2022) recognises the statutory protection afforded to all Record of Monuments and Places (RMP) sites under the National Monuments Legislation (1930–2014). The development plan lists a number of aims and objectives in relation to archaeological heritage (Appendix 16.6).

There are no recorded monuments located within the proposed development area. However, there are seven groups or individual archaeological sites located within 500m of the site. The nearest consists of Nangor Castle (DU017-037), c. 245m to the northeast (Figure 16.1; Table 16.1, Appendix 16.4).

RMP No.	Location	Classification	Distance from development area
DU017-037	Nangor	Castle - unclassified	c. 245m northwest
DU021-011001-3	Corkagh Demesne	Castle, moated site, mill	c. 325m south-southeast
DU021-008*	Fairview	Mill	c. 340m east-northeast
DU021-012	Corkagh Demesne	Habitation site	c. 410m southeast
DU017-082	Nangor	Field system	c. 440m northwest
DU017-039*	Deansrath	Tower house	c. 445m north
DU021-009	Fairview	Well	c. 465m east-northeast

Table 16.1: Recorded Monuments within 500m of the proposed development area

(* Also listed as a protected structure)

Architectural Heritage

The South Dublin County Council Development Plan (2016–2022) recognises the statutory protection afforded to all protected structures under the Planning and Development Act. The development plan lists a number of aims and objectives in relation to archaeological heritage (Appendix 16.8).

There are no protected structures located within the proposed development area. The closest is Deansrath House (RPS 142), which is located c. 290m to the north (Figure 16.2, Table 16.2, Appendix 16.5). A further four individual or groups of structures are located within 500m of the proposed development area.

RPS No.	Location	Classification	Distance from development area
142	Saint Cuthbert's Court	Deansrath House	c. 290m north
176, 179, 181	Corkagh Demesne	Bridge, outbuildings & stables	c. 325m south-southeast
165*	Fairview	Mill	c. 340m east-northeast
173	Kilcarbery	Kilcarbery House	c. 405m west-southwest
135*	Deansrath	Tower House	c. 445m north

Table 16.2: Protected Structures within 500m of the proposed development area

(* Also listed as a recorded monument)

There are no Architectural Conservation Areas located within the proposed development area or within the surrounding environs.

16.3.8 National Inventory of Architectural Heritage

16.3.8.1 Building Survey

The building survey for South County Dublin was carried out in 2003. It was undertaken in order to inform the County Council in the compilation of the Record of Protected Structures.

There are no NIAH structures located within the proposed development area. However, two pairs of semi-detached early 20th century cottages are located within 20m of the site (NIAH 11209002-5), adjacent to the north-western extent.

A further five individual or groups of structures are located within 500m of the proposed development. Of these, three are also listed as protected structures (Figure 16.2, Table 16.3, Appendix 16.5).

NIAH No.	Location	Classification	Distance from development area
11209002/3	Old Nangor Road	Semi-detached 20 th century cottages	c. 20m east
11209004/5	Old Nangor Road	Semi-detached 20 th century cottages	c. 20m west
11209008/9	Old Nangor Road	Semi-detached 19 th century cottages	c. 215m east-northeast
11209006/7	Old Nangor Road	Semi-detached 19 th century cottages	c. 260m east-northeast
11209086, 87, 88*	Corkagh Demesne	Bridge, outbuildings & stables	c. 325m south-southeast
11209010*	Fairview	Mill	c. 340m east-northeast
11209001*	Kilcarbery	Kilcarbery House	c. 405m west-southwest

Table 16.3: NIAH Structures within 500m of the proposed development area

* (Also listed as a protected structure)

16.3.8.2 Garden Survey

Nangor Castle NIAH Ref.: DU-50-O-047312

The demesne associated with Nangor Castle was located to the immediate northwest of the proposed development area. The survey lists the demesne associated with Nangor Castle as having 'virtually no recognisable features.' This is due to the fact that all of the structures have been demolished and the former demesne has been truncated by the development of a new road network. One small section of woodland survives within the site, which once formed part of the planting within the landscape.

Corkagh House NIAH Ref.: DU-50-O-055303

A small section of this demesne once occupied the southeast section of the proposed development area. Today the NIAH survey lists the demesne as 'main features substantially present - some loss of integrity'. Whilst the outbuildings and stables survive within the site and are protected structures, the principal house has been demolished. Much of the former demesne landscape survives as a public park, although development has taken place in order to establish recreational facilities.

Kilcarbery House (NIAH Ref.: DU-50-O-045305)

The demesne associated with Kilcarbery House was located c. 350m west of the proposed development area. The survey listed the landscape as 'main features unrecognisable - peripheral features visible'. However, whilst the main house is present (RPS 142), a golf course has been established within its immediate environs and very little of the original landscape is now apparent.

16.3.8.3 Aerial Photographic Analysis

Inspection of the aerial photographic coverage of the proposed development area held by the Ordnance Survey (1995, 2000, and 2005), Bing Maps, and Google Earth (2008-2018) was undertaken as part of this assessment. This revealed that the site has comprised a series of open fields since 1995. The location of the archaeological test trenches that were excavated on the site is clearly visible within the 2018 Google Earth coverage (Plate 16.1).



Plate 16.1: Extract from 2018 Google Earth coverage, showing the extent of testing within the proposed development area.

16.3.9 Field Inspection

The field inspection sought to assess the proposed development area, its previous and current land use, the topography and any additional information relevant to the report. The field inspection was carried during December 2018.

The proposed development area consists of 11 fields under rough pasture, all of which vary in size and plan. The fields are divided by mature hedge lines and the overall site is level. The outer ring road forms the western boundary to the site, whereas the Old Nangor Road forms part of the northern boundary, along with property plots associated with residential structures fronting onto the road. To the east of the site is a modern residential development, whereas Corkagh Park is located to the south. The south-eastern section of the boundary between the park and the proposed development is formed by modern post and rail fences. The remainder is formed by a mature hedge line.

No previously unrecorded sites or areas of archaeological potential were noted during the field inspection. With regards to built heritage, no previously unrecorded structures of historic or architectural merit were noted within the proposed development area or its environs. The early 20th century cottages that are listed within the NIAH within the immediate vicinity of the site remain present. The associated garden plots are highly overgrown and the houses themselves are in poor condition.

16.3.10 Townland Boundaries

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

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

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

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

As discussed above, a series of townland boundaries is shown within the proposed development area. This is due to the presence of four townlands and a parish and barony boundary, all of which cross the site. All of the boundaries remain present today, and are formed by mature hedge lines.

16.3.11 Placename Analysis

Townland and topographic names are an invaluable source of information on topography, land ownership and land use within the landscape. They also provide information on history; archaeological monuments and folklore of an area. A place name may refer to a long-forgotten site, and may indicate the possibility that the remains of certain sites may still survive below the ground surface. The Ordnance Survey surveyors wrote down townland names in the 1830’s and 1840’s, when the entire country was mapped for the first time. Some of the townland names in the study area are of Irish origin and through time have been anglicised. The main reference used for the place name analysis is *Irish Local Names Explained* by P.W Joyce (1870). A description and possible explanation of each townland name in the environs of the proposed development are provided in the below table.

Name	Derivation	Possible Meaning
Kilcarbery	<i>Coill Chairbre</i>	Carberry’s wood
Nangor	<i>Nangar</i>	Place of nettles
Deansrath	<i>Ráth an Deagánaigh</i>	The ring-fort of the dean (or Deane)
Corkagh Demesne	<i>Diméin Chorcaí</i>	<i>Corcach</i> = marsh
Fairview	Likely to derive from English landowners	-
Gibraltar	Named after the English colony in southern Spain. The colony played a central role in the Battle of Trafalgar in 1805, and this place may have received the name soon afterwards. (The name would also have been popularly in England while it was under siege by	

	France and Spain between 1779 and 1783).	
Priest Town	Likely to derive from church landowners	-
Bawnoges	<i>Bánóg</i>	Little, green field
Clondalkin	<i>Cluain Dolcáin</i>	Dolcán's meadow
Kilbride	<i>Cill Bhríde</i>	St Bridget's Church
Uppercross	<i>Cros</i>	Upper/ Higher crossroads
Newcastle	Likely to derive from English landowners	-

Table 16.4: List of townlands, parishes, and baronies in the vicinity of the proposed development area.

16.3.12 Cultural Heritage Sites

The term 'cultural heritage' can be used as an over-arching term that can be applied to both archaeology and architectural features. However, it also refers to more ephemeral aspects of the environment, which are often recorded in folk law or tradition or possibly date to a more recent period. No specific cultural heritage sites or traditions have been identified during the course of this assessment that relate to the proposed development area.

16.3.13 Conclusion

The proposed development is situated in the townlands of Kilcarbery, Nangor, Deansrath, and Corkagh Demesne to the west of Clondalkin and to the north of the River Cammock. There are a total of seven individual or groups of sites located within 500m of the site that are listed within the RMP. The nearest consists of the site of Nangor Castle (RMP DU017-037), c. 245m to the northeast.

The proposed development area has been subject to geophysical survey, archaeological testing and a programme of preservation by recorded (archaeological excavation). A number of small features dating from the Bronze Age to the post-medieval period were recorded. Previous archaeological investigations in the wider study area also uncovered evidence of medieval and post-medieval activity.

There are five individual or groups of protected structures located within 500m of the proposed development area. The closest consists of Deansrath House (RPS 142), which is situated c. 290m to the north. There are seven individual or groups of NIAH structures recorded within 500m of the proposed development area. The closest of these consists of four semi-detached 20th century cottages located within 20m of the site. The cottages are not included in the RPS for South County Dublin and whilst extant, are not in good condition.

An inspection of the cartographic sources revealed that the site remained open fields throughout the post-medieval period. A small portion of the southeast corner of the site was formerly located within the demesne landscape associated with Corkagh House.

A field inspection has also been carried out as part of this assessment. No previously unrecorded sites of archaeological potential or structures of architectural heritage merit were identified within the proposed development area or its environs.

16.4 Characteristics of the Proposed Development

The proposed development subject of this SHD Planning Application will generally comprise: -

- 1,034 no. units (578 no. houses, 154 no. duplex / apartments and 302 no. apartments) ranging from 2 to 6 storeys, comprising the following: -
- 578no. own door houses, including: -
 - 449no. 3-bed 2-storey houses (House Type A, A1, A2, B, C, D, G & H).

- 31no. 4-bed 2-storey houses (House Type E & J).
- 98no. 4-bed 3-storey houses (House Type F & F1).
- 154no. own door duplex / apartments, in 3 to 4-storey buildings, including: -
 - 41no. 1-bed duplex / apartments (Type M1 & M2).
 - 49no. 2-bed duplex / apartments (Type K, N1 & N2).
 - 64no. 3-bed duplex / apartments (Type L, L1, L2 & L3).
- 302no. apartment units accommodated in 9no. 4 to 6-storey buildings (with own door access ground floor apartments), including: -
 - Block 1 accommodating 29no. apartments (6no. 1-beds, 18no. 2-beds and 5no. 3 beds).
 - Block 2 accommodating 24no. apartments (4no. 1-beds, 15no. 2-beds and 5no. 3 beds).
 - Block 3 accommodating 30no. apartments (13no. 1-beds and 17no. 2-beds).
 - Block 4 accommodating 30no. apartments (13no. 1-beds and 17no. 2-beds).
 - Block 5 accommodating 45no. apartments (12no. 1-beds, 22no. 2-beds and 11no. 3-beds).
 - Block 6 accommodating 37no. apartments (16no. 1-beds and 21no. 2-beds).
 - Block 7 accommodating 37no. apartments (16no. 1-beds and 21no. 2-beds) – Temporary creche at ground floor level to revert 7no. residential units on completion of permanent purpose-built creche in Phase 3.
 - Block 8 accommodating 33no. apartments (5no. 1-beds, 23no. 2-beds and 5no. 3-beds).
 - Block 9 accommodating 37no. apartments (16no. 1-beds and 21no. 2-beds).
- Private rear gardens are provided for all houses. Private patios / terraces and balconies are provided for all duplex and apartment units. Upper level balconies are proposed on elevations of all multi-aspect duplex and apartment buildings.
- Ancillary uses including the provision of 1 no. retail unit (c. 178 sq. m) and community building (c. 785 sq. m).
- 1no. temporary creche (c. 557 sq. m gross floor area in lieu of 7no. ground floor apartment units in Block 7 pending construction of permanent creche at Grange Square)
- 1no. permanent creche building at Grange Square (c. 909 sq. m gross floor area).
- New vehicular access from Outer Ring Road / Grange Castle Road (R136) to the west (left in and left out arrangement) and 2no. new vehicular access points onto Old Nangor Road (L5254) to the north and associated re-alignment of existing adjoining roadways.
- New street network, including spine road (c. 6m in width) extending from Outer Ring Road / Grange Castle Road (R136) to the west onto Old Nangor Road (L5254) to the north.
- New pedestrian and cycle path network.
- Provision of Public Open Space (c. 4.6 Ha) including: -
 - Oak Green Space (c. 7,453 sq. m).
 - Lime Green Space (c. 6,646 sq. m).
 - Grange Square (c. 2,606 sq. m).
- Provision of surface water attenuation measures (SuDs).
- Wastewater pumping station including 18hr storage tank and associated infrastructure.
- 1,510 no. surface car parking spaces.
- 1,105 no. covered bicycle parking spaces.

- Communal bin storage for all terraced houses, duplex / apartment and apartment blocks.
- All associated and ancillary site development, infrastructural, landscaping and boundary treatment works including bin storage.

A full description of the proposed development is provided in Chapter 3: Description of Proposed Development.

16.5 Potential Impact of the Proposed Development

16.5.1 Construction Stage

16.5.1.1 Archaeology

It is possible that ground disturbances associated with the proposed development will have a negative impact on isolated archaeological features or deposits that have the potential to survive beneath the current ground level and outside of the footprint of the excavated test trenches. Potential impacts may range from moderate negative to significant negative.

16.5.1.2 Architecture

No potential impacts upon the architectural heritage resource have been identified during the construction of the proposed development.

16.5.1.3 Cultural Heritage

No potential impacts upon the cultural heritage resource have been identified during the construction of the proposed development.

16.5.2 Operational Stage

16.5.2.1 Archaeology

No potential impacts upon the archaeological heritage resource have been identified during the operation of the proposed development.

16.5.2.2 Architecture

It is possible that the operation of the proposed development may result in a slight negative impact on the demesne landscape associated with Corkagh House. This will be due to visual impact of the development on the former demesne landscape, which is now in use as a park.

16.5.2.3 Cultural Heritage

No potential impacts upon the cultural heritage resource have been identified during the operation of the proposed development.

16.5.3 Do-Nothing Impact

If the development were not to proceed, no negative impacts would occur upon the archaeological, architectural and cultural heritage resource.

16.5.4 Cumulative

No cumulative impacts are predicted upon the archaeological, architectural or cultural heritage resource.

16.6 Ameliorative, Remedial or Reductive Measures

16.6.1 Construction Stage

16.6.1.1 Archaeology

All topsoil stripping that is associated with the proposed development will be monitored by a suitably qualified archaeologist. If any features of archaeological potential are discovered during the course of the works further archaeological mitigation may be required, such as preservation *in-situ* or by record. Any further mitigation will require approval from the National Monuments Service of the DoCHG.

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

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

16.6.1.2 Architecture

No mitigation is required.

16.6.1.3 Cultural Heritage

No mitigation is required.

16.6.2 Operational Stage

16.6.2.1 Archaeology

No mitigation is required.

16.6.2.2 Architecture

The boundary between the south-eastern section of the proposed development and Corkagh Park will be augmented with appropriate planting in order to minimise the visual disturbance of the former demesne.

16.6.2.3 Cultural Heritage

No mitigation is required.

16.7 Residual Impact of the Proposed Development

Following the completion of the above mitigation measures there would be no residual impact on the archaeological, architectural or cultural heritage resource from the proposed development.

16.8 Monitoring

The mitigation measures recommended above would also function as a monitoring system during construction to allow the further assessment of the scale of the predicted impacts and the effectiveness of the recommended mitigation measures.

16.9 Reinstatement

There are no reinstatement requirements in relation to the archaeological or cultural heritage resource.

16.10 Difficulties Encountered

No difficulties were encountered during the compilation of this chapter.