

Archaeological Impact Assessment of the Old Weather Station, Dunningstown Road, Kilkenny.

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1. Introduction

This report describes an Archaeological Impact Assessment (AIA) of a proposed small residential housing development at The Old Weather Station, Dunningstown Road, Kilkenny. The report was commissioned by Kilkenny County Council who are, in accordance with Part 8 of the Planning and Development Regulations 2001 to 2021, progressing the design and delivery of the six-unit residential housing development.

The AIA report sets out the historical and archaeological background of the study area as well as the results from a site inspection. The assessment outlines the potential archaeological and/or cultural remains/features on the site and within its environs and presents the impacts, if any, of the development on the archaeology and/or cultural heritage.

2. Method of Study

This AIA comprised a walkover survey of the site and its environs as well as a desk-based study. No on-site intrusive archaeological investigations were undertaken. The walkover inspection entailed an examination of the site for known and potential archaeological sites, features and anomalies along the route. This was to gain an overall understanding of the terrain and the archaeological environment. A photographic survey and written descriptions were undertaken of all upstanding archaeological/architectural structures/features of note.

The desk study entailed an examination of documentary, cartographic and aerial photographic sources. Sources examined included the following:

- Documentary Sources, both Primary and Secondary.
- Ordnance Survey series of published maps: 1840, 1901-05 and 1945-46.
- Review of Aerial Photographs.
- Sites and Monuments Record (SMR) for County Kilkenny.
- Record of Monuments and Places (RMP) for County Kilkenny.
- Consultation of the Archaeological Survey Database, Archaeological Survey of Ireland, National Monuments Service, Department of Housing, Local Government and Heritage.
- Urban Archaeological Survey of County Kilkenny. OPW.
- Kilkenny City and County Development Plan, 2021-2027.
- Kilkenny City Record of Protected Structures (RPS).
- National Inventory of Architectural Heritage (NIAH) for County Kilkenny.
- Archaeological Excavations Bulletin Database.

3. Existing Environment

3.1 Site Location

The proposed development is sited at the The Old Weather Station, Dunningstown Road, Kilkenny. Dunningstown Road is predominantly a residential road on the northwest outskirts of Kilkenny City, mainly consisting single house plots. A continuation of Grange Road, which commences at the Lord Edward St./Loreto View/Butt's Green junction, this road extends parallel to the Kilkenny City/Freshford regional road (R693), leading to the county's northwest hinterland.

The site fronts the northeast side of Dunningstown Road. A housing estate – the Grange and Talbot's Court – is located to east and southeast, whilst a large tillage field is to the west, on the opposite side of Dunningstown Road. To the northwest/north is a green field; and a private dwelling house and garden to the south (*Fig.1*).

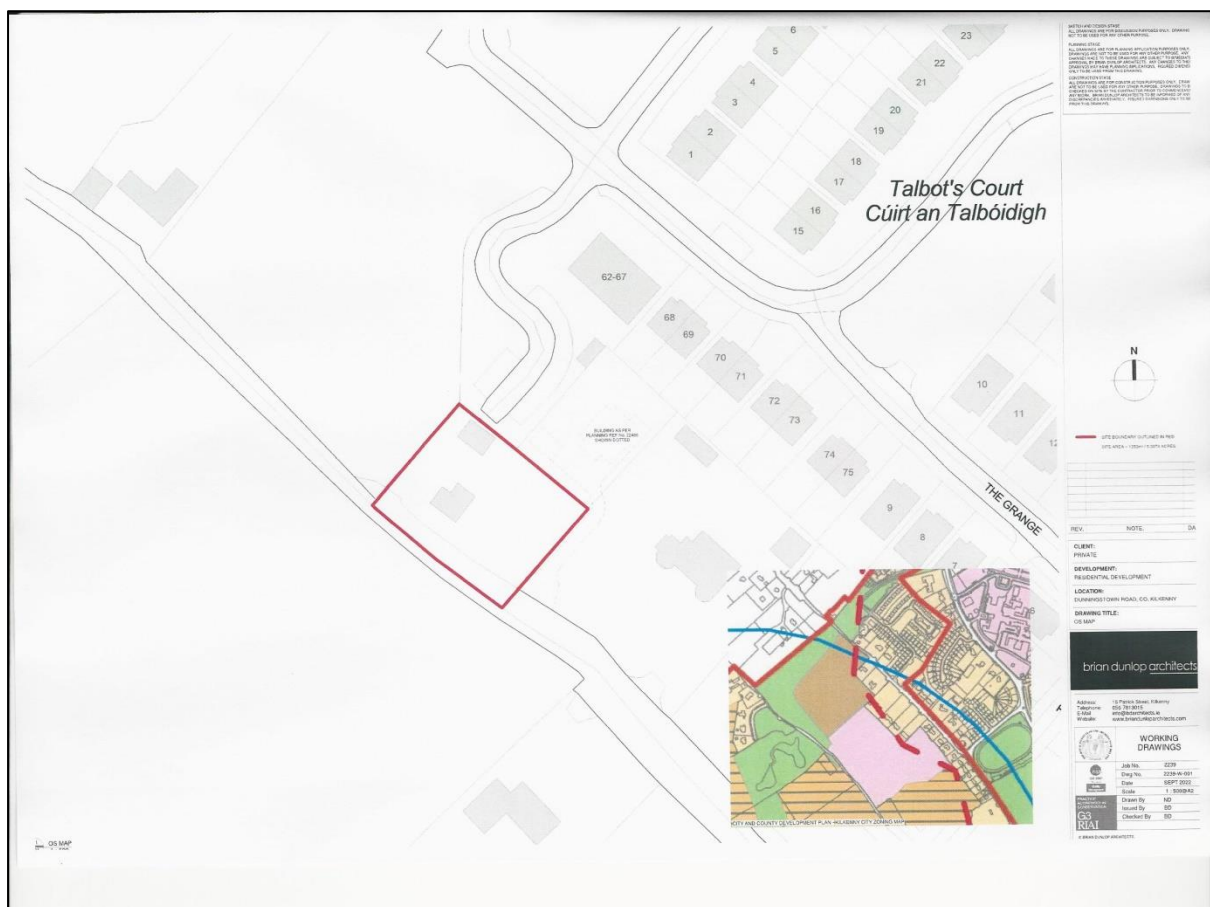


Figure 1. Site Location Highlighted in Red.

3.2 Development Proposal

Kilkenny County Council propose to build on the site a small residential development comprising six age-friendly residential apartment units. It will front the public road, with the entrance to the south and a driveway accessing the rear. Car-parking will be sited to the rear, whilst there will be a public open space in the northeast part of the site, covering an area of 230m² (Figs.2&3).

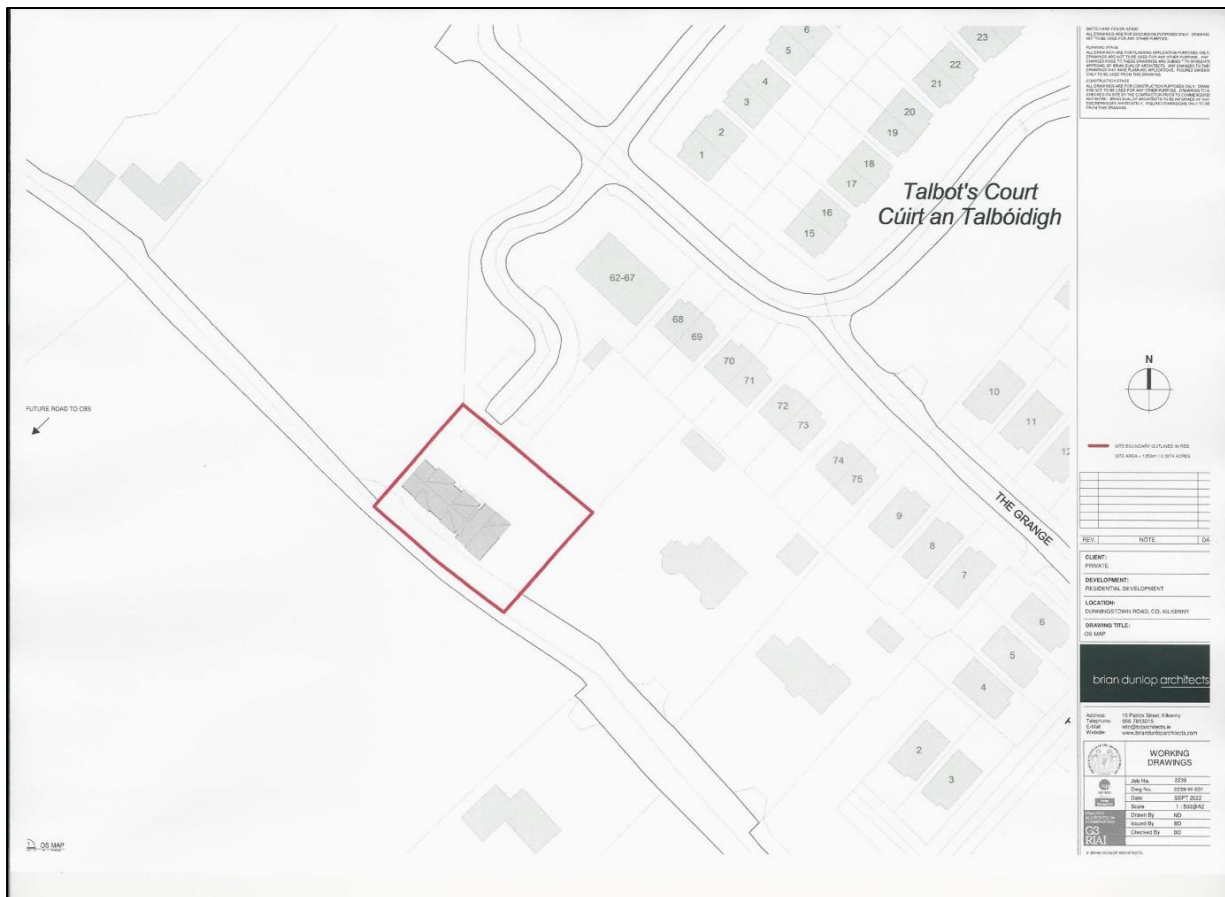


Figure 2. Proposed Layout of Site.

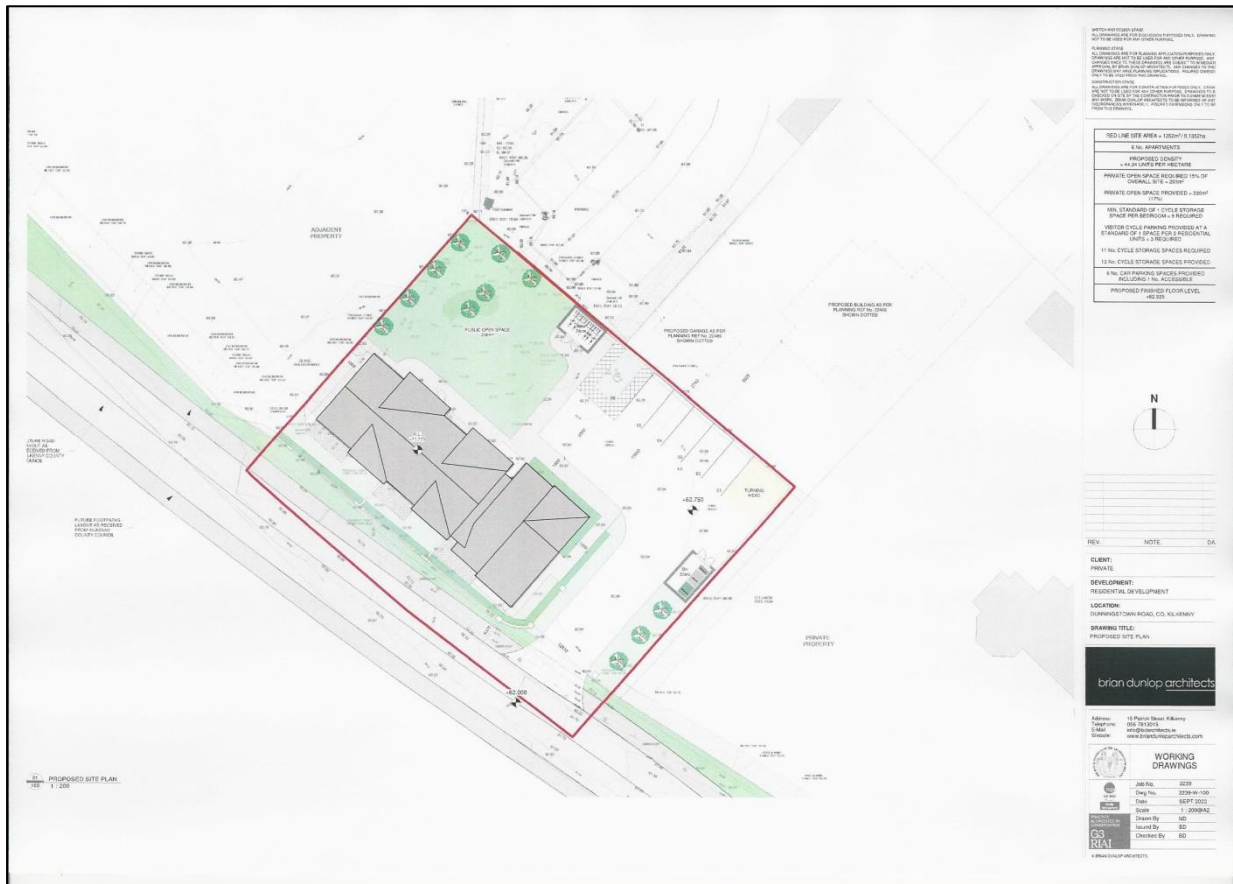


Figure 3. Proposed Development Site Plan.



Figure 4. Housing Development Layout.

3.3 Site Inspection

The site was inspected in late September 2022, with weather conditions fair. Site access is facilitated via a narrow third class road fronting its east side. Although within a rural setting, the area is built-up with one-off housing and a housing estate to the east and southeast. A proposal is also pending to build a new CBS Secondary School and associated road on the opposite side of the public road to the site.

This site is located on a slight hillock, 66m above sea level and *circa* 1m/1.5m above the road level, which rises slightly upwards from south to north (*Pl.1*). A small site, measuring *circa* 43m x 29m, it is bounded by the public road on its west side (*Pl.1*) and a pasture field to the north (*Pl.2*). A housing estate is to its northeast (*Pl.3*); and a small paddock/garden to its southeast, both of which are lower than the site. To the south is a private house and garden. All site boundaries are defined by a metal fence, in excess of 2m high, with a gated entrance at the north end of its west side.

The interior of the site comprises two vacant single storey buildings in the northern part of the site (*Pls.5-6*), with a tarred surface between them and the northern boundary. Inside the gate, in the northwest corner, is dense overgrowth including brambles and small trees (*Pl.7*). The remainder of the site consists rough, uneven ground under a cover of high thin grass (*Pls.8-9*). Defunct weather boxes on stilts still survive in the southern half of the site (*Pls.8-9*).



Pl. 1. View of Site from Public Road.



Pl.2. Pasture Field to the North.



Pl.3. Housing Estate to the East.



**Pl.4. Looking West:
Location of Ring-ditch (KK019-007).**



Pl.5. Northeast Part of Site.



Pl.6. Northwest Part of Site.



Pl.7. Overgrown Northwest Part of Site.



Pl.8. South Part of the Site.



Pl. 9. Looking North at Site.

4. History and Archaeology of the Site and Environs

4.1 Historical Background

The site is located in the townland of Coolgrange, the parish of St. Canice and within the barony of Crannagh. Coolgrange derives its name from the Irish *An Ghráinseach Fhur*. In 1655 it was known as Could Grange (Churchland) and by 1839 the townland was referred to in Irish as *Cúil Gráinsighe* which translates as “corner or angle of the grange”¹. Covering an area of 159 acres, it is a long narrow townland, widening at its northern end. The site occupies a small area towards its southern end. The townland boundary between, Coolgrange and Lousybush, extends along Dunningstown Road.

Coolgrange townland is located within St. Canice’s parish, a large parish, incorporating substantial sections of Kilkenny city. The present day St. Canice's covers the entire civil parish of St. Maul's as well as the civil parish of St. Canice's. Its area, city and rural combined, is 6,957 statute acres. Its rural district covers a small area and had two ecclesia or parish churches, each with its own separate parochial district within the present civil parish of St. Canice's². These were the churches of Ballyfinnan or Newtown and Thornback. Thornback, 2 miles north of the city, was an independent parish, whilst the Cathedral parish and Ballyfinnan were vested in the Vicars Choral of St. Canice's³. The parochial church of Thornback (KK014-056), situated in the townland of Troyswood, on a high bank over the river Nore, was referenced as far back as the fourteenth century. The church was in a ruinous state, whilst a part of a castle (KK014-056003) joined (*sic*) the church ruins⁴. It was noted in the 1839 Ordnance Survey Letters (OSL) that Thornback was also known as Druimdelig and a burial place of note⁵. It lost its status, becoming little more than a chapel and its parish and was merged into St. Canice's parish⁶.

¹ www.logainm.ie

² Rev. W. Carrigan. History and Antiquities of the Diocese of Ossory. 1905.

³ *Ibid.*

⁴ Rev. M. O'Flanagan (Ed.). Letters Containing Information Relative to the Antiquities of the County of Kilkenny Collected during the Progress of the Ordnance Survey in 1839. 1930.

⁵ *Ibid.*

⁶ Rev. W. Carrigan. History and Antiquities of the Diocese of Ossory. 1905.

There are no references to the townland of Coolgrange in the OSL of 1839 and no mention by Rev. Carrigan to the townland of any antiquities within, when compiling the History and Antiquities of the Diocese of Ossory in the early twentieth century.

The modern history of the site relates to Met Éireann establishing a weather station in May 1957 at a green field location, just off the Dunningstown Road. This weather station was closed in early 2008 and has remained vacant ever since.

4.2 Archaeological Background

There are seven recorded archaeological monuments recorded in the Record of Monuments and Places (RMP) for County Kilkenny within 1 km of the development site. The nearest monument is a ring-ditch (KK019-007), on the opposing side of Dunningstown Road and *circa* 40m to the northwest (*Fig.5*); whilst the furthest monument within the 1km, is a burial (KK019-139), located *circa* 900m east northeast.

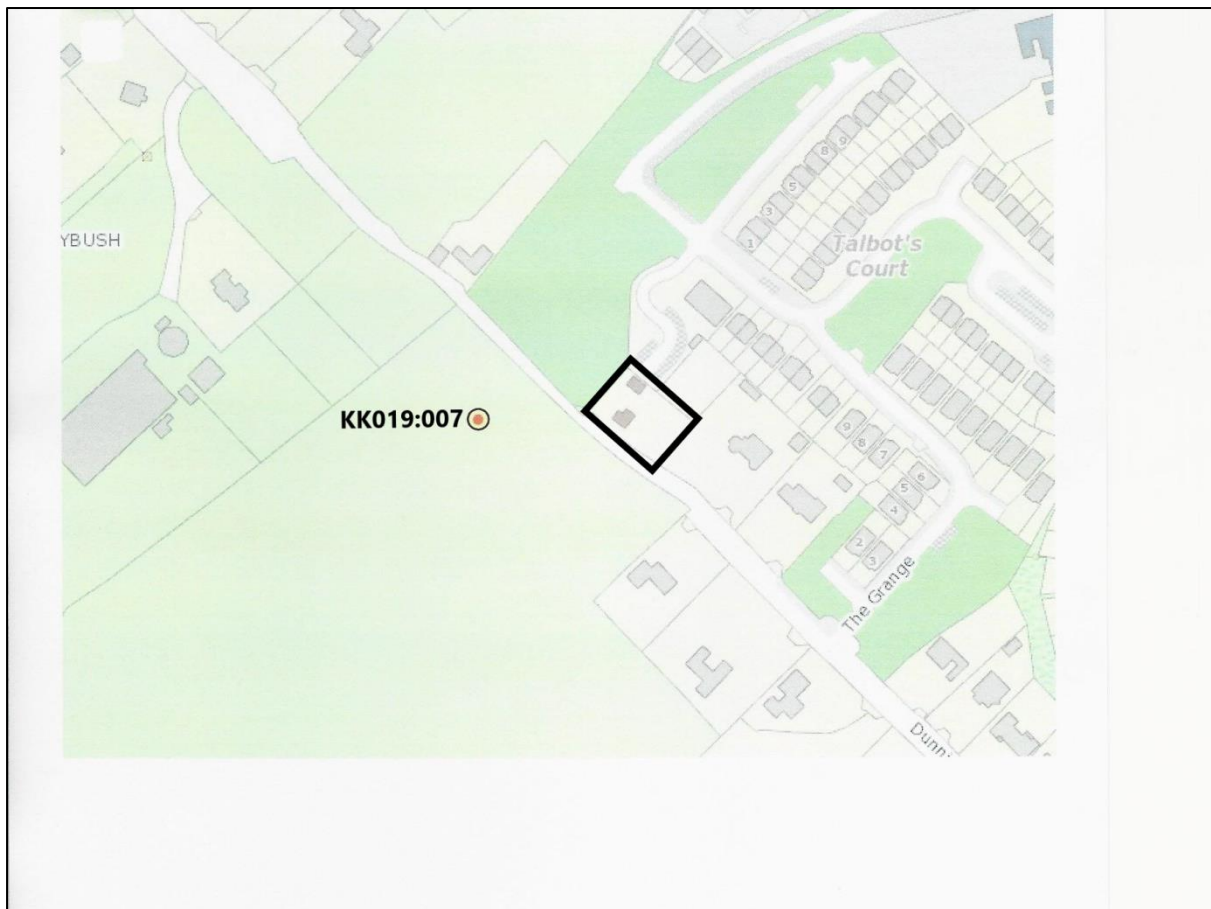


Figure 5. OSI Map after (ASI). Showing Site Highlighted in Black and Nearest Monument (KK019-007).

The recorded monuments are set out as follows:

RMP No.	Townland	ITM Ref.	Classification
KK019-007	Lousybush	649318/657446	Ring-ditch
KK019-008	Talbotsinch	649807/657708	Enclosure
KK019-124	Raheennagun	648844/657790	Enclosure
KK019-006	Raheennagun	648688/657755	Ringfort
KK019-009	Talbotsinch	650189/657313	Enclosure
KK019-139	Friarsinch/Dunmore	650266/657727	Burial
KK019-112	Coolgrange	649253/657995	Burial

The following descriptions of the above recorded monuments within 1km of the development site are taken from the ASI accessed from the National Monuments Service website (www.archaeology.ie)

KK019-007

Description: A ring-ditch identified by aerial photography in 1967. Located in a large tillage field, it comprises a small circular enclosure with a diameter of 10-15m. The site is visible as the cropmark of a fosse on the aerial photograph (CUCAP ASW054).

Compiled by M. Tunney. Uploaded in August 2013.

This site is presently subject to archaeological investigations as part of advance works for the construction of the new CBS Secondary School (see Section 4.3).

KK019-008

Description: On the edge of a ridge overlooking the River Nore which flows *circa* 100m to the east. The monument comprises a large D-shaped enclosure measuring *circa* 93m (NW/SE) x 46m (NE/SW) with the straight northeast edge (*circa* 93m long) extending parallel to the edge of the ridge. A large shed has been built across the north portion of the monument and a concrete yard and car-park has been constructed on top of the south portion of the enclosure.

Compiled by J. Farrelly. Uploaded in July 2020.

KK019-124

Description: Denoted as a spring on the First Edition (1839-40) OS 6-inch map immediately south southwest of the enclosure. Located in a tillage field, it was identified on an aerial photography (GB90.CH.03, July 1960) shows a cropmark of a curvilinear enclosure (diameter of *circa* 35m). Defined by a fosse and with an entrance facing southeast. There is a ringfort (KK019-006) *circa* 110m to the west.

Compiled Dr. G. Barrett and J. Farrelly. Uploaded in October 2020.

KK019-006

Description: Denoted on the First Edition (1839-40) OS 6-inch map and the 1945-46 revision as a circular enclosure with an internal diameter of *circa* 42m and an external fosse, 7-10m wide. A townland boundary extends along the edge of the northeast sector and a field boundary extends northeast/southwest along the northwest edge of the monument. It is described by O'Kelly in 1969 as a 'partly-demolished rath'. The interior is covered with grass and some trees and scrub.

Compiled by J. Farrelly. Uploaded in September 2020.

KK019-009

Description: Located near the edge of ridge overlooking the River Nore which flows *circa* 200m to the east, and its flood plain. A large roughly circular enclosure with a diameter of *circa* 80m, it was identified as a cropmark of a wide deep fosse on aerial photographs. There is a clear entrance in the east quadrant. A housing estate was subsequently built over this monument.

Compiled by J. Farrelly. Uploaded in September 2020.

KK019-139

Description: Burials were uncovered during the laying of underground services beneath the existing road surface of Bleach Road. The river Nore is *circa* 150m southwest of the burials at its nearest point. Indications suggested that the human bone assemblage included several individuals. The road forms the boundary between two townlands and it is probable that the burials extend eastward into Dumore townland and westward into Friarsinch townland.

Compiled by J. Farrelly. Uploaded in December 2019.

KK019-012

Description: A burial was found in 1988 during quarrying gravel. Situated on a low east-west ridge, the burial comprised an incomplete upper half of the skeleton of an adult female in an unlined grave aligned east/west.

Compiled by M. Tunney. Uploaded in August 2013.

4.3 Previous Archaeological Works in the Vicinity

The archaeological excavations (www.excavations.ie) database – 1978 to 2022 - was consulted and the following summary of the excavations undertaken within the environs of the proposed development site are set out as follows:

Lousybush Townland

Entry No. 2022:091

Excavation Licence No. 22E0154

Archaeological testing of the proposed development site at CBS Secondary School, Lousybush, County Kilkenny, entailed the excavation of 58 linear test trenches totalling 3,710 linear metres within a 7.5 hectare area. The licensed use of a metal-detector was incorporated into the test trenching investigations to assist in artefact retrieval (Detection Device Licence Ref. 22R0067). However, no potential archaeological artefacts were recovered.

Potential archaeological features were uncovered within eight of the 58 test trenches investigated within the two fields. In total over 13 potential archaeological features were identified, including two potential barrows, four pits including a potential bowl furnace and burnt spread and two associated pits. These features have been categorised into three distinct archaeological sites and in summary comprise the following:

Site 01, located at the north-western corner of Field 1, within the general area of RMP-K019-007, consisted a potential barrow approximately 10m in diameter, a smaller barrow-type feature between 5-6m in diameter, a possible cremation pit, bowl furnace and two potential refuse pits. Several linear and curvilinear features and charcoal stains on the surface of the subsoil were also revealed which may indicate the presence of further archaeological activity.

Site 02, located within a large natural hollow towards the centre of Field 2, consisted an extensive fulacht fiadh defined by one large mound of heat-shattered stone 1.5-2m below the existing surface level and overlying an extensive deposit of colluvium or hill wash. A possible surface deposit containing a possible flint core and two potential pieces of flint debitage and a possible linear feature were uncovered at a similar depth in an adjacent test trench.

Site 03, located towards the south-eastern corner of Field 2 consisted a curvilinear spread of heat-shattered stone measuring 3.5m in width with two small possible pits at its north-west margins. Paudie Dunne, John Cronin & Associates, 3A Westpoint Trade Centre, Ballincollig, Co. Cork.

Loughmacask Townland

Entry No. 2010:427

Excavation Licence No. 10E0226

Testing was undertaken in order to study the impact on the potential archaeological resource within the footprint of a proposed residential development at Loughmacask, c. 1.5km north-west of the centre of Kilkenny city. It followed an EIA report, and subsequent geophysical survey carried out by Target Geophysics. Loughmacask can be translated as the ‘Lake of MacCask’. Further testing was carried out adjacent to this under licence 10E0225.

The overall testing programme involved the excavation of 39 trenches across the proposed development area. A total of 22 of these trenches were excavated specifically to investigate potential archaeological features identified by the geophysical survey. Testing did not reveal any archaeological features or deposits. However, it was thought possible that previously unrecorded subsurface archaeological remains might be present within the proposed development area. As a result, it was recommended that all ground disturbance works associated with the proposed development be monitored.

Due to the presence of a potato crop at the location of the proposed temporary well and associated pipeline, it was not possible to excavate test-trenches at this location. The well and pipeline are located c. 60m north-west of the remains of ringfort KK019–006. Although the proposed infrastructure will not directly impact on the site, it was thought possible that ground disturbance associated with the construction of the well may impact on associated remains located beneath the existing ground level. It was therefore recommended that testing be carried out as originally proposed at the site of the temporary well and pipeline. Dave Bayley, IAC, Bray, Co. Wicklow.

Granges Rd./Dean St./Thomas St., Kilkenny City

Entry No. 2005:815

Excavation Licence No. 05E0463

Monitoring was requested as a planning condition on the construction of a storm-drain pipeline trench from Granges Road to an outfall at the Bregagh River just beyond Butts Roundabout, Kilkenny city. Part of the proposed route extended through the zone of archaeological potential for the historic town and across the suggested western line of the monastic enclosure of St Canice's Church. Nothing of archaeological interest was noted. E. Devine, Kilkenny Archaeology Threecastles, Co. Kilkenny.

Coolgrange Townland

Excavation Licence No. E1098

In January 1988 human remains were discovered during quarrying operations at Talbot's Inch, Co. Kilkenny. The site was in the townland of Coolgrange in east County Kilkenny, approximately 2km north-west of Kilkenny City.³⁸ It consists a low gravel ridge, extending approximately north/south and rising at its maximum to approximately 9m above the level of the surrounding field. The site lay at an altitude of 70–80m above sea level. Adjacent sites marked on the SMR include a ringfort in Raheennagun townland and two enclosures in Lousybush and Talbotsinch townlands respectively. The quarry had been worked sporadically for approximately 100 years but no previous discoveries of human remains had been noted. At the time of Ó Floinn's investigation most of the east side of the ridge had been removed. On arrival, the bones lay as they had been discovered, on the gravel scree at the base of the quarry, but the original location of the burial must have been close to the crest of the ridge.

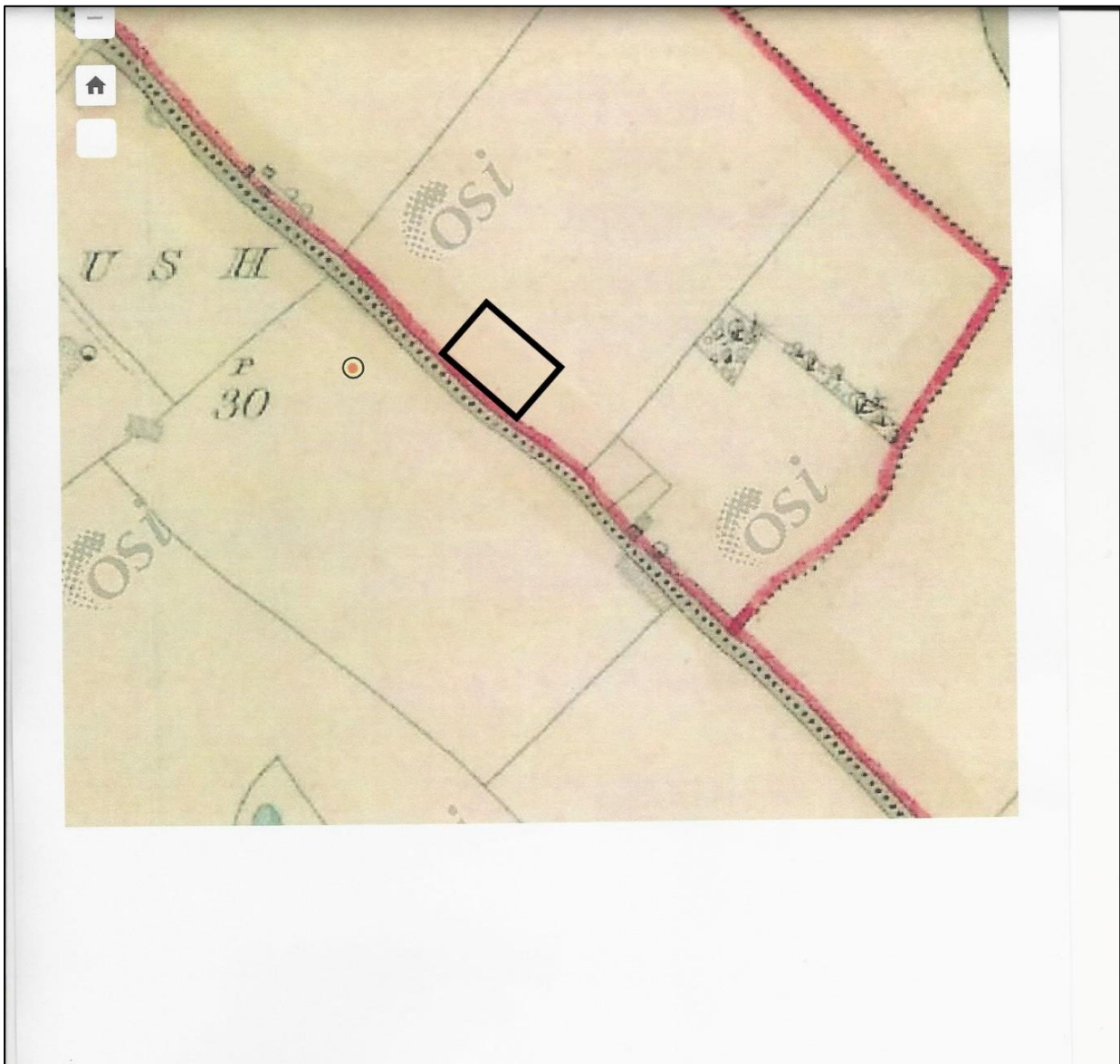
There was no indication of any stone lining in the grave, nor was there any trace of a grave-pit in the area from which the burial was thought to have come. The burial consisted an inhumation; and no artefacts were found in the vicinity of the bones, which comprised a cranium, mandible, vertebrae and arm bones of an adult female. As no further bones came to light, it would appear the remains found represented the western extremity of a burial aligned east/west; and therefore that the head was placed to the west. In the absence of associated finds or other dating evidence, this burial must be regarded as undated. R. Ó'Floinn. NMI, Kildare St., Dublin.

4.4 Architectural Heritage

There are no Protected Structures recorded in the Kilkenny City Record of Protected Structures (Kilkenny City and County Development Plan, 2021-2027) or in the National Inventory of Architectural Heritage (www.buildingsofireland.ie) within the vicinity of the development site (i.e. within ½ km).

4.5 Cartographic and Aerial Photographic Sources

An examination of earlier Ordnance Survey (OS) maps including the First Edition 6-inch series (1839 [Fig.6]); 25-inch OS series (1903 [Fig.7]) and the revised 6-inch OS series (1945-46) revealed the area of the site was part of a large field covering 9.17887 acres. This did not change between 1839/40 (Fig.6) and 1945/46. In the second half of the twentieth century the field was sub-divided, with the weather station built in 1957 on a small plot fronting the public road.



**Figure 6. First Edition Ordnance Survey Map (1839).
Site Location Highlighted in Black.**

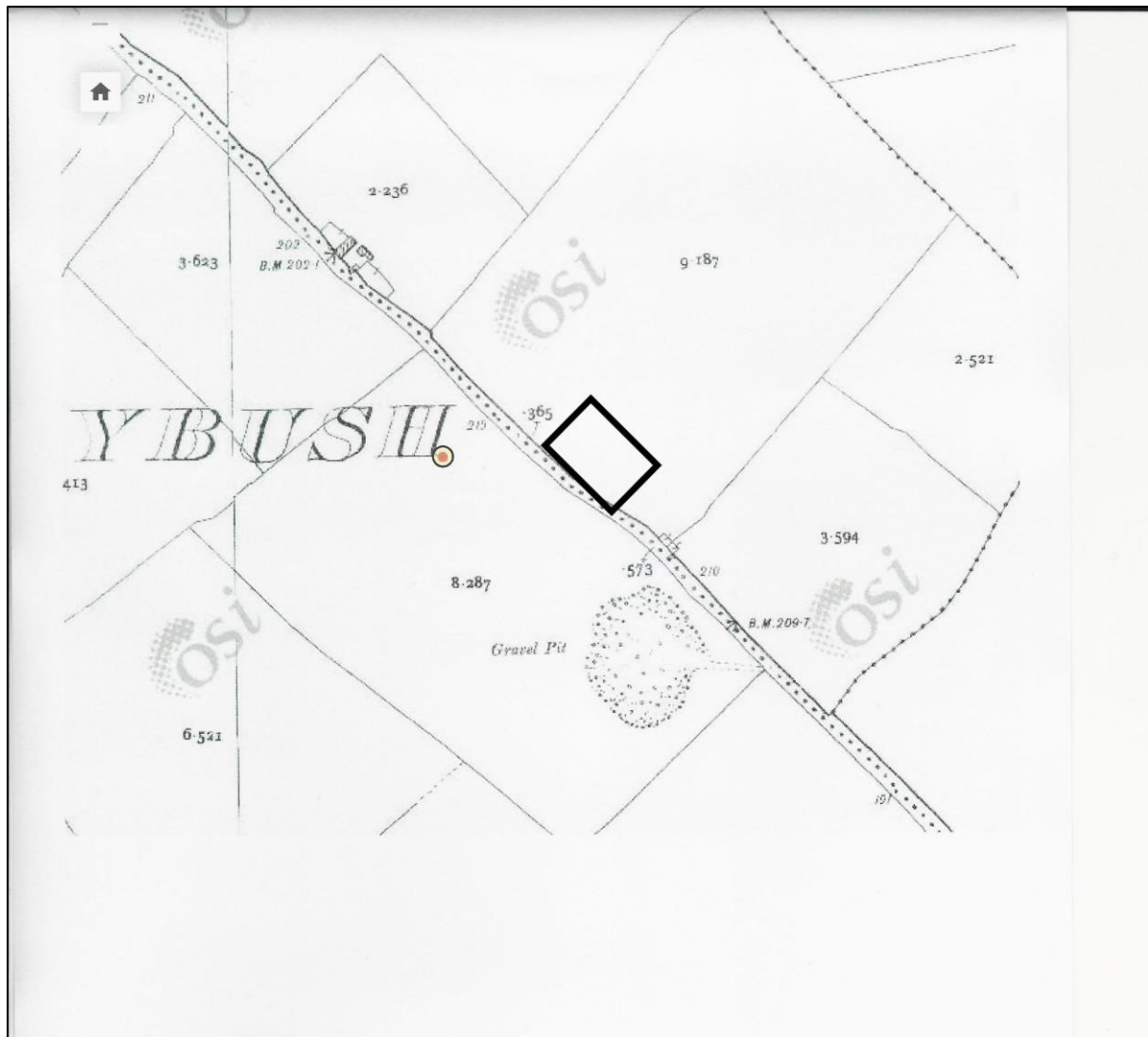


Figure 7. 25-inch OS Series (1903). Site Location Highlighted in Black.

An examination of aerial photography (OSI Map Genie 1995, 1999, 2004, 2005 & 2011) revealed further information about the site and its environs. By the end of the 20th century further sub-division of the field had been undertaken with two plots being developed for single housing. This was part of the general development along Dunningstown Road of single houses in the latter part of the 20th century and early 21st century. The field containing the weather station was subject to extensive development for housing estates (the Grange and Talbots Court) by 2004.

5. Impact of the Proposed Development

5.1 Introduction

There may be a direct impact where sites of archaeological, architectural and cultural heritage significance are located within the footprint of a proposed development, which can potentially be impacted upon by sub-surface ground disturbances. In relation to the proposed development, there is no site of archaeological, architectural and cultural heritage within the proposed development's footprint.

It is evident from the review of known recorded archaeological monuments and the database of archaeological excavations, that the proposed development is located in an area of archaeological potential. As a result, there is potential that ground works associated with the construction of the proposed residential development could have an impact on previously unrecorded archaeological deposits/remains that the site may retain. The recorded ring-ditch (KK019-007), located *circa* 40m to the northwest in a large tillage field on the opposite side of the road to the site, comprises a small circular enclosure. Ongoing archaeological investigations at this site and its immediate environs have revealed archaeological features including two potential barrows, a possible cremation pit, a potential bowl furnace and two potential refuse pits⁷. Other findings, in the centre of an adjoining field, included an extensive fulacht fiadh whilst in the southeast corner of the same field a curvilinear spread of heat-shattered with two small possible pits was revealed⁸.

5.2 Potential Direct Impact on Recorded Archaeological Monuments

There is no recorded archaeological monument within the footprint of the site of the proposed development. Accordingly there will be no impact on known archaeological monuments.

5.3 Potential Direct Impact on Unrecorded Archaeological Monuments

⁷ P. Dunne. Excavations Bulletin Database. 2022

⁸ *Ibid.*

There may be unrecorded archaeological deposits associated with the nearby archaeological monument (KK019-007) that could be impacted on by the proposed development. Ongoing archaeological investigations in the vicinity of this monument have indicated extensive human activity over a large area.

5.4 Potential Direct Impact on Architectural Heritage Sites

There are no protected structures or architectural heritage sites within the proposed development site or its environs (i.e. within ½ km). Accordingly there will be no impact on such structures/sites.

5.5 ‘Do Nothing’ Scenario

In this instance, there would be no impact on any potential unrecorded sub-surface archaeological deposits/remains.

5.6 ‘Worst Case’ Scenario

Were the development to proceed without appropriate mitigation, it could impact on unrecorded archaeological deposits/remains associated with the nearby archaeological monuments. Archaeological deposits/remains are irreplaceable and if impacted upon without appropriate mitigation, a valuable resource is permanently lost.

6. Mitigation Measures

Should the proposed residential development proceed, it is recommended all groundworks to be archaeologically monitored.

Archaeological monitoring shall consist the following:

- The applicant is required to employ a qualified archaeologist to monitor all groundworks associated with the development.
- Should archaeological material be found during the course of monitoring, the archaeologist may have work on the site stopped, pending a decision as to how best to deal with the archaeology.
- The developer shall be prepared to be advised by the Department of Housing, Local Government and Heritage with regard to any necessary mitigation measures, such as preservation *in situ*, redesign or excavation and should facilitate the archaeologist in recording any material found.
- The Planning Authority of Kilkenny County Council and the Department of Housing, Local Government and Heritage shall be furnished with a report describing the results of the monitoring.

Mary Henry

Mary Henry Archaeological Services Ltd.

5th October 2022.