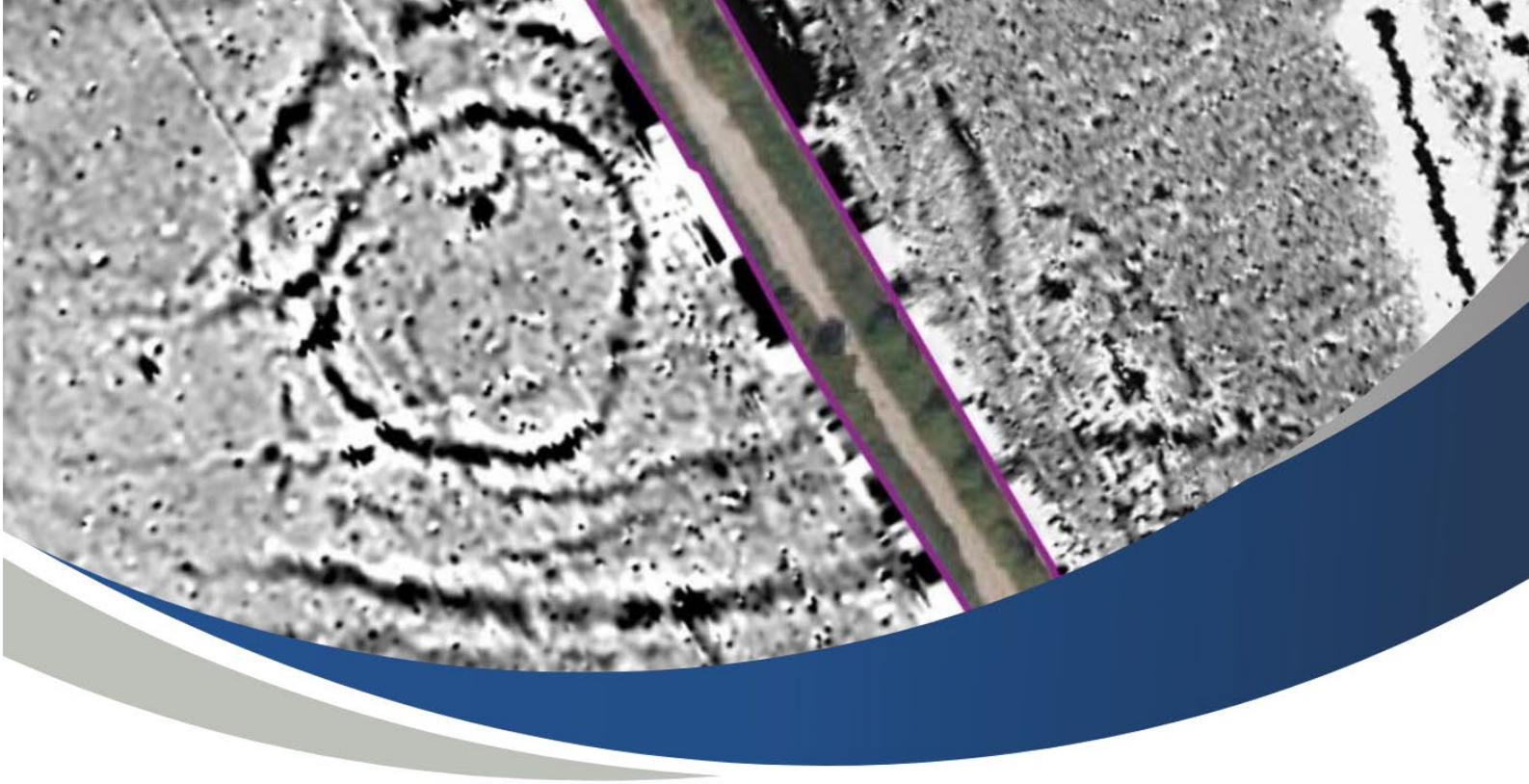


Geophysical Survey Report Southgreen, Kildare, Co. Kildare

Detection Device Number: 26R0073

Donald Murphy
February 2026
Report Status: Final

ACSU Ref.: 25179

ACSU
ARCHAEOLOGICAL CONSULTANCY SERVICES UNIT

HEAD OFFICE
Unit 21
Boyne Business Park
Greenhills, Drogheda
Co. Louth

041-9883396
041-2130310
info@acsu.ie
www.acsu.ie

PROJECT DETAILS

Project	Residential Development at Southgreen, Kildare, Co. Kildare
Report Type	Geophysical Survey Report
Licence No.	26R0073
Townland(s)	Southgreen, Kildare
RMP/SMR No.	N/A
RPS Id./NIAH Reg. No.	N/A
ITM Ref.	672177, 713388
Consultant	Archaeological Consultancy Services Unit, 21 Boyne Business Park, Greenhills, Drogheda, County Louth
Archaeologist	Donald Murphy, Robert Breen & Jeanne Rochford
Report Author(s)	Donald Murphy & Jeanne Rochford
Report Status	Final
Report Date	February 2026
ACSU Ref.	25179

VERSION CONTROL

Revision	Date	Description	Status	Author	Reviewed	Approved
1.0	13.02.2026	Geophysical survey results	Final	J.R D.M.	L.C.	D.M.

NON-TECHNICAL SUMMARY

This report details the results of a Geophysical Survey carried out at Southgreen, Kildare, Co. Kildare (ITM 672177,713388). The site measured c. 6.13 hectares and lies to the north of Kildare town. The assessment was carried out at the request of the client in relation to a Stage II Large Residential Development (LRD) submission for C2 lands, Southgreen, Co. Kildare.

The site contains no monuments as listed in the *Record of Monuments and Places* (RMP) or *Sites and Monuments Record* (SMR). The nearest monument to the site is located c. 0.5km to the north and is a mound (KD022-012----), and there are a further seven monuments associated with a religious house – Carmelite friars (KD022-029007-), including tombs, inscribed stones and a graveyard (KD022-029061-66) located c. 0.5km to the south. There are no Protected Structures as listed in the *Kildare County Development Plan 2023– 2029* or sites listed in the National Inventory of Architectural Heritage (NIAH) located within the site. The nearest such structure is Kilcumney House (RPS No. B22-31; NIAH Reg. No.11817082), located c. 75m to the southwest of the site. Cartographical sources and aerial imagery were examined as part of the assessment of the site. The site is illustrated as agricultural fields, with the townland and parish boundary between Kildare and Southgreen traversing the site, which was realigned by the subsequent map. No features, nor anomalies of archaeological significance were noted on the examined aerial imagery.

The geophysical survey was conducted by Donald Murphy, Robert Breen and Jeanne Rochford of Archaeological Consultancy Services Unit Ltd. (ACSU) under licence 26R0073 issued by the Department of Housing, Local Government and Heritage. A full detailed gradiometer survey was undertaken throughout the application area using a SENSYS MAGNETO MXV3 8-sensor fluxgate gradiometer cart system.

Two potential archaeological features were identified as a result of the geophysical survey and consist of two faint, positive, circular anomalies (**M1** & **M2**) in the southwest portion of Field 2, which could represent the remains of two ring ditches. Scatters of other anomalies also represent potential archaeology (?Archaeology), such as possible spread/pit remains that were recorded across the survey area. An archaeological interpretation of responses in these areas is highly tentative, and natural soil or geological origins, or recent land use, should be considered for these anomalies. A sample of these responses should be assessed through test trenching.

It is recommended that:

- Anomalies identified are targeted during a test trenching programme, in particular the potential ring-ditches (**M1** & **M2**), a sample of linear anomalies recorded as cultivation, possible pits, spreads and

any features of archaeological significance and potential. Any identified features shall be sufficiently sectioned to assess their depth, nature and archaeological potential. Once test trenching is complete, further mitigation might include preservation in situ (avoidance), excavation (preservation by record), and/or monitoring. The National Monuments Service shall be consulted in this regard to agree on an appropriate mitigation strategy for further works.

CONTENTS

1. INTRODUCTION 8
2. METHODOLOGY 8
3. SURVEY OBJECTIVES 9
4. SOILS, GEOLOGY AND TOPOGRAPHY 9
5. ARCHAEOLOGICAL ASSESSMENT 9
5.1 Archaeological & Historical Background 9
5.2 Previous Archaeological Investigations 12
5.3 Recorded Monuments 14
5.4 Record of Protected Structures and National Inventory of Architectural Heritage 18
5.5 Finds listed within the Topographical Files of the National Museum of Ireland 18
5.6 Cartographic Evidence 18
5.7 Aerial Photography 19
6. METHOD OF DATA INTERPRETATION 19
7. SURVEY RESULTS 20
8. IMPACT ASSESSMENT 21
9. CONCLUSIONS & RECOMMENDATIONS 22
10. REFERENCES 23
11. APPENDIX 1 – Summary Technical Information & Glossary of Terms 25

List of Figures

Figure 1	Location of site
Figure 2	Location of site, previous archaeological investigations and nearby *Sites and Monuments Record* sites
Figure 3	Extract from Down Survey (1656), showing approximate location of site
Figure 4	Extract from 1st edition Ordnance Survey (OS) 6-inch map (surveyed 1836 - published 1839), showing location of site
Figure 5	Extract from 3rd edition Ordnance Survey (OS) 25-inch map (surveyed 1908 - published 1909), showing location of site
Figure 6	Aerial view of site
Figure 7	Aerial view of site showing geophysical survey results (greyscale images)
Figure 8	Aerial view of site showing geophysical survey interpretation
Figure 9	Detail of proposed site development

List of Tables

Table 1	Previous archaeological investigations within the environs of the site
Table 2	Recorded Monuments in the environs of the site
Table 3	Geophysical survey results

1. INTRODUCTION

The following report outlines the results of a Geophysical Survey carried out at Southgreen, Kildare, Co. Kildare (ITM 672177,713388; Figures 1-2). The site measured c. 6.13 hectares and lies to the north of Kildare town. The assessment was carried out at the request of the client in relation to a Stage II Large Residential Development (LRD) submission for C2 lands, Southgreen, Co. Kildare.

The geophysical survey was conducted by Donald Murphy, Robert Breen, and Jeanne Rochford of Archaeological Consultancy Services Unit Ltd. (ACSU) under licence 26R0073, issued by the Department of Housing, Local Government, and Heritage.

2. METHODOLOGY

The detailed magnetometer survey was carried out using a SENSYS MAGNETO® MXV3 modular carrier that is configured to host 8 Sensys FGM650/3 sensors spaced at 0.5m intervals with a total survey width of 4m. The non-magnetic cart system is towed behind a quad bike, and readings are recorded at 200Hz. Data is captured every 20mm with a position accuracy of ±1 cm using a Trimble R10 RTK GNSS receiver mounted on the cart at a height of 1.5m. All data is recorded with SENSYS software MonMX v.5.01 on a Panasonic FZ-G1 TOUGHPAD tablet computer in .cfg format.

Data is collected along parallel survey transects using the digital display system in MonMX which provides a live stream of visual data. This allows for an accurate systematic survey without the need of establishing pre-determined grids. Magnetic data is exported from the MonMX software in. ASCII format and is imported to DW Consulting's TerraSurveyor64 v4.1.12.1 for processing. The data is initially de-striped (zero median traverse) and then clipped to a range of -1.5nT – +3nT. A TIF file is produced by TerraSurveyor software along with a corresponding world file (.TFW) which allows for automatic georeferencing when using CAD software. Raster images are georeferenced in ProgeCAD 2018 before being interpreted in AutoCAD LT 2025. Graphical interpretations that indicate anomalies identified are numbered so that they can be referenced in the survey results section of the geophysical survey report.

All work was carried out in accordance with the *IAI Code of Professional Conduct* (Institute of Archaeologists of Ireland 2006) and in accordance with the *EAC Guidelines for the use of Geophysics in Archaeology* (Schmidt et al. 2016), as well as English Heritage's *Geophysical Survey in Archaeological Field Evaluation* (David et al. 2008).

3. SURVEY OBJECTIVES

The survey aimed to establish the presence of any potentially existing but previously unknown monuments and any other archaeological features within the site and to inform a future programme of test trenching.

4. SOILS, GEOLOGY AND TOPOGRAPHY

The survey area consisted of two agricultural fields (Fields 1 & 2). The third field (Field 3), located within the southeastern portion of the site, was not suitable for survey because the area is overgrown; however, it was previously subject to a geophysical survey under Licence 18R0254. The site is adjacent to and north of the Southgreen Internal Link Road; it is bounded from the west by Southgreen Road and from the east by Old Road and private dwellings, with agricultural, grassed fields to the north. Kildare 38kV substation is located along the southwest boundary of Field 2, with several overhead powerlines traversing to and from the substation. Several of these needed to be avoided during the survey of this field and likely contributed to much of the magnetic disturbance within this area.

The site has an elevation of 107-112m Ordnance Datum (OD).

The underlying geology consists of nodular and muddy limestone and shale and is part of the Boston Hill Formation (Geological Survey Ireland). This bedrock geology is overlaid by limestone sands and gravels, and the soil groups consist of renzinas and lithosols (Teagasc Soil Guide).

5. ARCHAEOLOGICAL ASSESSMENT

5.1 Archaeological & Historical Background

The site is located within the townland of Kildare (Cill Dara) and Southgreen (An Fhaiche Theas). The townland of Kildare encompasses the town of Kildare and the area to the north of the railway line. The site lies in the Barony of Offaly East and West and the Civil Parish of Kildare and Tully.

An examination of the Placenames Database of Ireland (www.logainm.ie) can reveal important information about the natural and cultural heritage of an area. The townland of Kildare was first mentioned in AD 525 as Cill Dara (Annals of the Kingdom of Ireland by the Four Masters I-VII, ed. J. O'Donovan) and can be translated as ‘church of oak’; it was frequently mentioned in sources thereafter. The only monument recorded on the northside of the railway line in proximity to the site is a mound (KD022-012----), however there is no visible surface trace of the monument, it was depicted as hachured on both the 6-inch and 25-inch Ordnance Survey

maps, a number of monuments associated with Religious house – Carmelite friars KD022-029007- are located c. 0.5km to the south of the site, with the zone of archaeological potential associated with Kildare Historic Town (KD022-029) and its town defences (KD022-029001-) located c. 0.57km to the south.

Ring ditches and barrows

Excavation under licence 19E0009 (Murphy, Gibney, 2021) identified a previously unknown site consisting of multi-phase prehistoric ring ditches and Iron Age – Early Medieval burials. The site was located adjacent to the southwestern extent of the present application site, where the roundabout is now and to the south of it. The investigations exposed 35 burials (with 36 skeletons). These burials were orientated east to west in a mixture of simple and stone-lined graves. Three ring ditches, 11 pits, 3 kilns and 3 postholes were also recorded. A radiocarbon dating programme was also carried out, confirming that the pits in the northern portion of the site were of Early Bronze Age date. The unenclosed cemetery was Late Iron Age/Early Christian with two phases of activity recorded. This was indicated by the construction of ring ditches (mid-3rd century) and a later phase (5th–6th century), with kilns nearby indicating settlement. It is very likely that the archaeological activity recorded extends into the application site, as the ring ditch C7, excavated under licence 19E0009, extended to the east. The excavated portion of ring ditch C7 measured a maximum depth of 0.14m, suggesting the monument was likely levelled and truncated by previous agricultural activities.

Towards the end of the Neolithic and the beginning of the Bronze Age, features known as ‘barrows’ emerged. These can be defined as earthen or earth/stone construction mounds with a surrounding ditch or ditches, sometimes with a low external bank, typically less than 30 metres in diameter and most associated with cremation burials (O’Sullivan and Downey 2012). Ring ditches are defined by a circular or nearly circular ditch that is usually less than 20m and might be the remains of ploughed out barrows or round houses, and can be interpreted through an examination of associated features if found.

In 2002, in advance of the gas pipeline works from North Dublin to Limerick, ring ditches/barrows were excavated at Flemingtown, Co. Meath; Dalystown 1, Co. Westmeath; Knockuregare, Co. Limerick; and Rath, Co. Dublin (Grogan et al. 2007). All of these sites had substantial ditches, the largest having an external diameter of 38.75m. The excavations provide evidence that this type of funerary site occurred throughout the Bronze Age (2450–800 BC) and highlight the significance of liminal space for death and burial, as evidenced by ceremonial enclosures. McGarry (2009) states that, of all the barrows excavated in Ireland, about half have produced the remains of a single person, most commonly found under the mound and central to the barrow. Almost all sites, however, produce cremated human remains spread throughout the fill of the barrow ditches;

as can be seen at sites such as Ballybeen, Co. Antrim (Mallory 1984) and Ballydribbeen, Co. Kerry (Dunne 2003). Another interesting feature of barrows is the presence or absence of an 'entrance' or break in the ditch, which provides a causeway into the monument. Entrances are present in a number of ring-ditches and ring-barrows, and although the entrance may be orientated in any direction, there is a clear preference for them facing either east or south-east. It must be noted, however, that there are also many instances where entrances are not present, such as Donacarney, Co. Meath (Stirland 2017).

Kildare

Kildare Town is located on the western fringes of a fertile drift-covered limestone ridge, on the western limits of the agriculturally productive areas of the central plain. The town is in the watershed between the Rivers Liffey and Barrow, east of the peat bogs of the upper Barrow basin and west of the Curragh of Kildare.

The earlier name for the town was Druim Craig, denoting the ridge on which the town is built. The placename Kildare, or Cill Dara, means "the church or cell of oak," or "the oak tree," although there were likely earlier pagan roots to the settlement. The oak is thought to mark a pagan shrine. The first reference to Kildare is in AD 520.

St Brigid founded a monastery there for nuns in the early fifth or sixth century at the dawn of Christianity in Ireland. The foundation developed as a double monastery, with nuns under an abbess and monks under an abbot or bishop; they were in separate residential buildings but with common worship areas, though sexes were separated in the church by a screen (Gwynn and Hadcock 1988, 320). In the twelfth century, Geraldus Cambrensis recorded the still-held tradition of the perpetual flame at the shrine to St Brigid.

The monastery appeared to be influential in early Irish politics, with alliances to the Uí Failgi and the Uí Dúnainge (later Kings of Leinster), and claims in the seventh century by Cogitosus as a 'Treasury of Kings' (Andrews 1986). The various annals record sequences of bishops, abbots and abbesses as well as the numerous destructions and burnings suffered at the hands of faction dynasties.

Kildare had strong connections to the Uí Cennselaigh, a dominant Leinster family (Gwynn and Hadcock 1988, 83). In the early twelfth century, Kildare became one of the five Episcopal sees of Leinster, signifying the growing importance of the town. Kildare was a manorial settlement of the de Clare/Marshall family at the end of the twelfth century; it later passed to the de Vesci family.

County Kildare was formed by King John in 1210 along with the counties of Dublin, Louth, Meath, Carlow, Kilkenny and Wexford. Kildare was formed from the ancient Gaelic territories of Carbury, Offelan, Omurethi

and Ophaley. By 1216, the town was referred to as a borough, with burgesses mentioned in 1297. By then, the town of Kildare could boast a fine castle, a cathedral, Franciscan and Carmelite friaries, and a further church and hospital. It had passed to the FitzGeralds by 1319. During the fourteenth century, John FitzGerald was created Earl of Kildare, and the association with the FitzGerald family continues to the present day. Throughout the Middle Ages, Kildare was primarily a market town, with milling as one of its main activities (Thomas 1984).

The earlier pre-Norman medieval layout would have consisted of an inner perimeter enclosure around the monastery and a circular outer enclosure around the settlement, possibly as far as Market Square to the south-east and Priest's Lane to the northwest (Andrews 1986, 2). Although there is a record of a murage grant in 1515, Kildare is not listed as a walled town in the description of Ireland in 1598, and no maps survive from the seventeenth-century survey of the town. However, the circuit of the walled town can be estimated from a combination of placenames and cartographic evidence of street patterns. The cathedral stands in the northern quarter of the medieval town plan, according to Thomas. The line of the town wall would have extended from the cathedral perimeter wall, west to Fire Castle, then south to Clare Gate along the Black Ditch, and east to White Gate and the site of the castle. The park was probably originally the castle bailey. The northeastern wall extends from the park to join Ellis Gate; it then continues from this gate to the cathedral perimeter wall, north of Market Square, and through the site (Thomas 1984).

Kildare failed to develop in the medieval period and was not used by either the Marshalls or the FitzGeralds as their centre. Its location was unsuitable: it had no river access and was vulnerable to attack, being at the southwest edge of the Pale, close to the uncolonised Bog of Allen. Nonetheless, it was the recorded meeting place of parliaments in 1276-7 and 1310, and in 1599, Kildare was referred to as a city. The nunnery too declined after the Anglo-Norman conquest but continued until the general suppression of religious establishments under Henry VIII (Thomas 1984; Gwynn and Hadcock 1988).

5.2 Previous Archaeological Investigations

Field 3, located within the south-eastern portion of the site, was previously subject to a geophysical survey under Licence 18R0254 (Murphy & Breen 2019). In addition, during road improvement works associated with the construction of the adjacent Southgreen Link Road, a previously unknown archaeological site was excavated under Licence 19E0009. This site consisted of prehistoric ring ditches and Iron Age–Early Medieval

burials. This site was located adjacent to the south-western extent of the current site, encompassing the area of the present roundabout and land to its south.

The investigations exposed 35 burials (representing 36 individuals), oriented east–west, comprising a mixture of simple and stone-lined graves. Three ring ditches were recorded, along with 11 pits, three kilns, and three postholes. Radiocarbon dating indicated that pits in the northern portion of the site dated to the Early Bronze Age. The unenclosed cemetery was identified as Late Iron Age/Early Christian in date, with two distinct phases of use: an earlier phase in the mid-3rd century, and a later phase dating to the 5th–6th centuries. The presence of kilns suggests nearby settlement activity.

These findings indicate that the site lies within a sensitive archaeological landscape. However, a subsequent geophysical survey (Licence 22R0414; Murphy, Donald, 2023) and later test trenching (Licence 23E0053; Murphy, Deirdre, 2023) did not identify any archaeological remains in a site adjacent to and south of the current proposed development.

Listed below are the nearest previous archaeological investigations undertaken in the environs of the site (see Figure 2), which further demonstrate the overall archaeological potential of the site and its surrounding townlands (Table 1). The following information was taken from the *Database of Irish Excavation Reports* (www.excavations.ie), and associated reports were accessed through the National Monuments Service's (NMS) Virtual Reading Room.

Table 1: Previous archaeological investigations within the environs of the site

Excavation.ie reference	Licence No.	Site-Type	Investigation Type
2020:182 - KILDARE: Southgreen Road, Kildare	19E0009	Ring-ditch and Burials Period/Dating: Prehistoric (12700 BC-AD 400)	Geophysical survey Test Trenching Excavation
2023:179 - KILDARE: Southgreen Road, Kildare	22R0414 23E0053	No archaeology found	Geophysical survey Test Trenching
2019:530 - SOUTHGREEN, Kildare	18R0254 18E0734	No archaeology found	Geophysical survey Test Trenching

5.3 Recorded Monuments

The *Record of Monuments and Places* (RMP) and *Sites and Monuments Record* (SMR) are compiled and updated by the National Monuments Service and the National Historic Properties Service. The RMP is comprised of manuals that list all known archaeological sites and monuments in a county with accompanying maps (based on Ordnance Survey (OS) six-inch maps), locating these sites. All sites included in the RMP are protected under the National Monuments Acts (1930–2004). The SMR consists of all records stored in the Archaeological Survey of Ireland national database and is presented in the Historic Environment Viewer. The last published RMP for County Kildare is dated 1996, and as such, many of the sites listed in the SMR are scheduled for inclusion in the next revision of the RMP.

The site contains no monuments listed in the *Record of Monuments and Places* (RMP) and/or the *Sites and Monuments Record* (SMR). The nearest monument to the site is located c. 0.5km to the north and is recorded as a mound (KD022-012----); there is no visible surface trace of the monument. It was depicted as hachured on both the 6-inch and 25-inch Ordnance Survey maps.

Below (Table 2) is a list of the recorded monuments located in the environs of the site (Figure 2). These descriptions are derived from the National Monuments Service Archaeological Survey Database (https://heritagedata.maps.arcgis.com/apps/webappviewer/).

Table 2: Recorded Monuments in the environs of the site

KD022-012----	**Mound**	**KILDARE**
On a hilltop in improved pasture, with moderately steep slopes on all sides. Shown on the latest ed. (1939) of the OS 6-inch map as a raised circular area (est. diam. c. 25m) with a Trigonometrical station (OD 419 feet) on the NE sector, and a depression or possible quarry pit on the site limits NW-NE. The Trigonometrical station is no longer extant, and an ESB pole stands on or close to its former location. The depression has been infilled, and there is no visible surface trace of a mound. Six-Inch First edition: Hachured Six-Inch Latest edition: Hachured ITM Coordinates: 671815, 713901 Latitude and Longitude: 53.170738, -6.925873		
KD022-029007-	**Religious house - Carmelite friars**	**KILDARE**

Located to the WNW of St. Brigid's Cathedral (KD022-029005-) in a graveyard (KD022-029061-). The Carmelite Priory of St Mary was founded by William de Vesci in 1290. In 1539, it consisted of a church, belfry, dormitory, hall, and two chambers. All the buildings except the church and messuage were burned in 1540 (Gwynn and Hadcock 1970, 290). According to Bradley et al. (1986, vol. 3, 243-6), a late-18th century drawing by Cooper shows a roofless, single-aisled church, with two small traceried roundels above in the E wall, six pointed lancets and a flat lintelled doorway towards the W in the S wall (JKAS 1971-6, 436, 490). There are no visible remains of the priory, but it is indicated on Rocque's 1757 map immediately S of the modern Carmelite church. Late medieval limestone panels (KD022-029062-, KD022-029063-, KD022-029064-, KD022-029065- and KD022-029066-) set in the N transept wall of the modern church may have originated in the earlier church.

Compiled by: Gearóid Conroy

Date of upload: 23 January 2012

Six-Inch First edition: Not indicated

Six-Inch Latest edition: Not indicated

ITM Coordinates: 672477, 712608

Latitude and Longitude: 53.159030, -6.916266

KD022-029061-	Graveyard	KILDARE

Located to the WNW of St. Brigid's Cathedral (KD022-029005-), just S of the modern Carmelite church (which contains late medieval limestone panels: (KD022-029062-, KD022-029063-, KD022-029064-, KD022-029065- and KD022-029066-), and the probable location of the now levelled Carmelite Priory of St Mary (KD022-029007-).

Compiled by: Gearóid Conroy

Date of upload: 8 February 2012

Six-Inch First edition: 'Grave Yard'

Six-Inch Latest edition: 'Grave Yd.'

ITM Coordinates: 672477, 712594

Latitude and Longitude: 53.158904, -6.916269

KD022-029062-	Tomb - unclassified	KILDARE

Late medieval limestone panels (KD022-029062-, KD022-029063-, KD022-029064-, KD022-029065- and KD022-029066-) set in the N transept wall of the modern Carmelite church may have originated in the earlier Carmelite Friary (KD022-029007-) immediately to the S, however, according to Bradley et al. (1986 Vol. 3, 244-6), they are said to have come from the Franciscan Friary (KD022-029006-).

KD022-029062-: two rectangular end panels from a 16th century tomb; one (H 0.72m; Wth 0.66m) decorated in false relief with a depiction of Christ stripped of his garment, crowned with thorns and tied hand and foot, with an incised Roman capital inscription 'ECCE HOMO' (Hunt 1974, no. 84, pl. 234); the second panel (H 0.73m; Wth 0.66m) decorated in false relief with a crucifixion in an ogee-headed panel: Christ is nailed to a Latin cross, and is flanked by John and Mary (Hunt 1974, no. 83, pl. 233).

Compiled by: Gearóid Conroy

Date of upload: 8 February 2012

Six-Inch First edition: Not indicated

Six-Inch Latest edition: Not indicated

ITM Coordinates: 672441, 712650

Latitude and Longitude: 53.159412, -6.916795

KD022-029063-	Tomb - chest tomb	KILDARE

Late medieval limestone panels (KD022-029062-, KD022-029063-, KD022-029064-, KD022-029065- and KD022-029066-) set in the N transept wall of the modern Carmelite church may have originated in the earlier Carmelite Friary (KD022-029007-) immediately to the S, however, according to Bradley et al. (1986 Vol. 3, 244-6), they are said to have come from the Franciscan Friary (KD022-029006-).

KD022-029063---- is a 16th century broken panel (H 0.42m; Wth 0.29m) decorated in false relief with the upper part of a figure holding a patriarchal cross in the right hand, set in an ogee-headed panel. (Hunt 1974, 160, 243)

Compiled by: Gearóid Conroy

Date of upload: 8 February 2012

Six-Inch First edition: Not indicated

Six-Inch Latest edition: Not indicated

ITM Coordinates: 672447, 712647

Latitude and Longitude: 53.159384, -6.916706

KD022-029064	Inscribed stone	KILDARE

Late medieval limestone panels (KD022-029062-, KD022-029063-, KD022-029064-, KD022-029065- and KD022-029066-) set in the N transept wall of the modern Carmelite church may have originated in the earlier Carmelite Friary (KD022-029007-) immediately to the S, however, according to Bradley et al. (1986 Vol. 3, 244-6), they are said to have come from the Franciscan Friary (KD022-029006-).

KD022-029064---- is a rectangular panel (H 0.4m; Wth 0.6m) decorated with an animal in high relief. The head is turned back against the body with bared teeth and curved snout. The hair on the back is curled, the tail is foliated and the feet are clawed.

Compiled by: Gearóid Conroy

Date of upload: 9 February 2012

Six-Inch First edition: Not indicated

Six-Inch Latest edition: Not indicated

ITM Coordinates: 672450, 712649

Latitude and Longitude: 53.159402, -6.916661

KD022-029065-	Tomb - chest tomb	

Late medieval limestone panels (KD022-029062-, KD022-029063-, KD022-029064-, KD022-029065- and KD022-029066-) set in the N transept wall of the modern Carmelite church may have originated in the earlier Carmelite Friary (KD022-029007-) immediately to the S, however, according to Bradley et al. (1986 Vol. 3, 244-6), they are said to have come from the Franciscan Friary (KD022-029006-).

KD022-029065- is a rectangular panel (H 0.49m; Wth 0.61m) decorated in relief with undulating grape vine on the left and two animals. On the right is a centaur-like figure with a man's head and long beard, a long neck and body with two human hind legs. The knotted tail ends in a fleur-de-lys. There is a small animal, possibly a monkey, at the base of the panel.

Compiled by: Gearóid Conroy

Date of upload: 9 February 2012

Six-Inch First edition: Not indicated

Six-Inch Latest edition: Not indicated

ITM Coordinates: 672451, 712649

Latitude and Longitude: 53.159402, -6.916646

KD022-029066-	Inscribed stone	KILDARE

Late medieval limestone panels (KD022-029062-, KD022-029063-, KD022-029064-, KD022-029065- and KD022-029066-) set in the N transept wall of the modern Carmelite church may have originated in the earlier Carmelite Friary (KD022-029007-) immediately to the S, however, according to Bradley et al. (1986 Vol. 3, 244-6), they are said to have come from the Franciscan Friary (KD022-029006-).

KD022-029066- is a small rectangular panel (H 0.29m; Wth 0.20m) decorated in relief with an angel in a round-necked, pleated garment, wearing a head-band, and with hands joined. Possibly a depiction of St. Gabriel or St. Michael. (Hunt 1974, 160, no. 85)

Compiled by: Gearóid Conroy

Date of upload: 9 February 2012

Six-Inch First edition: Not indicated

Six-Inch Latest edition: Not indicated

ITM Coordinates: 672443, 712646

Latitude and Longitude: 53.159376, -6.916766

5.4 Record of Protected Structures and National Inventory of Architectural Heritage

The site contains no buildings/features that are Protected Structures, as listed in the *Kildare County Development Plan 2023–2029*, as well as no sites listed in the NIAH (Figure 2). The nearest such structure is Kilcumney House (RPS No. B22-31; NIAH Reg. No.11817082); located c. 75m to the southwest of the site.

5.5 Finds listed within the Topographical Files of the National Museum of Ireland

The Topographical Files of the National Museum of Ireland list all archaeological artefacts in the care of or known to the museum. Such a record can provide evidence for human settlement or activity in the absence of physical remains or documentary references. These consist of 180 finds listed for Kildare town and environs. These are mostly recorded as found in the vicinity of Killdare Barracks, the outskirts of Kildare town and from the vicinity of Kildare town. The latter includes a number of copper alloy buttons, seals, mounts, harness fittings, pendants, silver and copper coins, copper tokens, copper alloy buckles, buttons, badges, whistle, pipe tamper and many more.

5.6 Cartographic Evidence

A review of available historic mapping for the area was carried out to include the Ordnance Survey (OS) of Ireland (now Tailte Éireann) 6-inch (1836) and 25-inch (1908) maps (Figures 3-4). Potential archaeological or cultural heritage features are often marked on such maps, and they can provide a useful resource in identifying sites, particularly if they no longer have any above-ground remains.

The site is illustrated as comprising portions of large agricultural fields on the 1836 map, with the townland of Southgreen annotated as ‘Belonging to the Parish of Tully’. The townland of Southgreen is divided into two

parts by a townland boundary on the 1836 map, which is also the boundary between Fields 1 and 2; by the 1908 map, this boundary is shown as a field boundary, with no townland division indicated.

The two roads are shown immediately adjacent to, and to the east and west of the site and retain the same alignment and layout at the present day.

No monuments or features of archaeological significance were noted on the examined mapping.

5.7 Aerial Photography

A review of available aerial photography for the area was also undertaken as part of this assessment. Aerial photographs dating between 1995 and 2018 from the Tailte Éireann were assessed, along with Google Earth imagery dating between 2009 and 2025. Unrecorded archaeological sites can often be identified in aerial photographs as cropmarks or differential growth in a field, particularly during periods of drought, such as the summer of 2018.

The site and surrounding areas consist of agricultural fields with a small number of scattered residential dwellings. By the 2017 aerial imagery, a transformer station had been constructed adjacent to the site. Late 2019 imagery shows the works associated with the Southgreen Internal Link Road underway, with construction completed by 2021. Lands west of the site have been developed for housing, while lands to the east and south are also being developed.

Nothing of cultural heritage significance was identified within the site on the examined aerial imagery.

6. METHOD OF DATA INTERPRETATION

As outlined above, a detailed gradiometer survey that allows the detection of potential archaeological responses was conducted. The SENSYS MAGNETO MXV3 8-sensor fluxgate is a specifically designed gradiometer for use in archaeological prospection. Extremely sensitive, these instruments can detect variations in soil magnetism between 0.25nT and 10,000nT, affording diverse applications throughout various archaeological, soil morphological and geological conditions. The survey was geo-referenced through the MonMX software with a Trimble R10 RTK GNSS receiver accurate to ±1cm. The results were interpreted by examining the raw data as greyscale images that were produced in DW Consulting's TerraSurveyor64 software. Greyscale images are exported as TIFF files along with a corresponding World file (.TFW), which are then

imported to progeCAD 2018 for georeferencing and AutoCAD LT 2025 for interpretating. Processed raw data in the form of greyscale images are presented in Figure 7, and an interpretation is included in Figure 8.

7. SURVEY RESULTS

The geophysical survey was conducted in January 2026 by Donald Murphy, Robert Breen and Jeanne Rochford of ACSU under licence 26R0073 (Figures 7-8). The anomalies identified are listed in Table 3 below.

Table 3: Geophysical survey results

Anomaly No.	Form/Nature of Anomaly	Possible Source(s) of Anomaly	Description
M1	?Archaeology	Possible ring ditch	Very faint circular positive anomaly in the western portion of Field 2 with a diameter of c. 14.5m. This anomaly is located c. 28m northwest of M2.
M2	?Archaeology	Possible ring ditch	Faint circular positive anomaly in the southwest portion of Field 2 with a diameter of c. 13.5m. This anomaly is located c. 28m southeast of M1.
-	?Archaeology	Small to medium anomalies: pits, postholes, spreads, kilns, cut features	A series of positive anomalies occurs sporadically across the survey area. These might represent cut features such as pits, postholes, spreads, kilns, or other archaeological features. These may also be natural in origin.
-	Ferrous	Magnetic disturbance from modern debris	Bipolar anomalies sporadically occurring that are associated with magnetic interference from modern ferrous material, either in the topsoil or on the surface of the survey area.
-	Magnetic interference/ increased magnetism	Fencing, boundaries, modern surfaces	Broad ferrous responses are recorded predominantly along the field boundaries, which are likely associated with modern fencing or boundary features.
-	Magnetic interference/ increased magnetism	Magnetic interference from utility poles	Localised areas of high magnetic responses across Field 2 that are associated with utility poles and their ground fixtures which are present throughout this field.

Anomaly No.	Form/Nature of Anomaly	Possible Source(s) of Anomaly	Description
-	Linear trends	Cultivation	Positive linear trends occurring roughly east-west aligned in Field 1 and north-south aligned in Field 2 that likely represents agricultural land use, such as cultivation furrows.
-	Linear anomalies	Buried services	Perpendicular, negative, linear anomalies in Field 2 that likely represent buried services such as gas, water, electricity, etc.
-	Modern anomaly	Stone surface	An area of increased magnetic response is present in the southeast portion of Field 1, corresponding with a spread of stones in this area of the field, likely deposited for drainage purposes.
-	Natural/ underlying geology	Natural/changes in the underlying geology	Dipolar curvilinear anomaly in the south of Field 1 and extending into Field 2 that likely corresponds to changes in the underlying geology.

8. IMPACT ASSESSMENT

The purpose of this impact assessment was to establish whether the site contained evidence of previously unrecorded areas or features of historical, built, or archaeological significance, and to determine the potential impacts of the proposed development on such features.

A geophysical survey of the site was carried out under licence 26R0073. The site consists of 2 agricultural fields, with a third area currently deemed unsuitable for survey. This area (Field 3) had been previously subject to a geophysical survey under Licence 18R0254 under a separate application, with no definite anomalies identified in the survey. The proposed development site contains no monuments listed in the *Record of Monuments and Places* (RMP) and/or the *Sites and Monuments Record* (SMR).

Two potential archaeological features were identified as a result of the geophysical survey, which consist of two faint, positive, circular anomalies (**M1** & **M2**) in the southwest portion of Field 2 that could represent the remains of two ring ditches. Scatters of potential spread/pit remains of archaeological significance were also recorded across the survey area. An archaeological interpretation of these responses is highly tentative, and a natural soil or geological origin, as well as recent land use, should also be considered for these anomalies.

Linear anomalies that are not recorded field boundaries were also detected across Fields 1 and 2, which likely represent cultivation furrows and/or land drains.

9. CONCLUSIONS & RECOMMENDATIONS

The geophysical survey in the townland of Southgreen, Kildare, Co. Kildare, was conducted to assess the site's archaeological potential.

Two potential archaeological features were identified as a result of the geophysical survey and consist of two faint, positive, circular anomalies (**M1** & **M2**) in the southwest portion of Field 2 that could represent the remains of two ring ditches. Scatters of other anomalies also represent potential archaeology (?Archaeology), such as possible spread/pit remains that were recorded across the survey area. An archaeological interpretation of responses in these areas is highly tentative, and natural soil or geological origins, or recent land use, should be considered for these anomalies. A sample of these responses should be assessed through test trenching.

It is recommended that:

- Anomalies identified are targeted during a test trenching programme, in particular the two potential ring ditches (**M1** & **M2**), possible pits, spreads and any features of archaeological significance and potential. Any identified features shall be sufficiently sectioned to assess their depth, nature and archaeological potential. Once test trenching is complete, further mitigation might include preservation in situ (avoidance), excavation (preservation by record), and/or monitoring. The National Monuments Service shall be consulted in this regard to agree on an appropriate mitigation strategy for further works.

10. REFERENCES

Andrews, J. H. (ed) (1986) Irish Historical Towns Atlas Kildare. Royal Irish Academy.

David, A., Linford, N. and Linford, P. (2008) *Geophysical Survey in Archaeological Field Evaluation*. English Heritage, Swindon.

Dunne, L. (2003) Excavation of a ring-ditch in Ballydribbeen, Co. Kerry. Unpublished report prepared by Eachtra Archaeological Projects.

Grogan, E., O'Donnell, L. and Johnston, P. (2007) The Bronze Age Landscapes of the Pipeline to the West: An integrated archaeological and environmental assessment. Wicklow: Wordwell Ltd.

Gwynn, A. and Hadcock, R.N. (1988) Medieval Religious Houses Ireland. Irish Academic Press. Dublin

Institute of Archaeologists of Ireland (IAI). 2006. *IAI Code of Professional Conduct*. IAI, Dublin.

Mallory, J.P. (1984) 'The Longstone, Ballybeen, Dundonald, County Down' *Ulster Journal of Archaeology.* Vol. 47, 1-4.

McGarry, T. (2009) Irish prehistoric ring-ditches. In G. Cooney, K. Becker, J. Coles, M. Ryan and S. Sievers (eds), Relics of Old Decency: archaeological studies in later prehistory. Festschrift for Barry Raftery, 413–421. Bray: Wordwell Ltd.

Murphy, Donald., Breen R., 2019 Final Report on Geophysical Survey of a Proposed Development at Dunmurry Road, Southgreen, Kildare Town, Co. Kildare (18R0254), unpublished report by ACSU.

Murphy, Donald, Gibney, G., 2021 Archaeological Excavation at Southgreen Link Road, Kildare, Co. Kildare (19E009); unpublished report by ACSU

Murphy, Donald, 2023 Report on Geophysical Survey of Southgreen Rd., Kildare, Co. Kildare (22R0414), unpublished report by ACSU.

Murphy, Deirdre, 2023 Archaeological Assessment (Test Trenching) at Southgreen Rd., Kildare, Co. Kildare (23E0053); unpublished report by ACSU.

O'Donovan, J. Ed. Annals of the Kingdom of Ireland by the Four Masters I-VII.

O'Sullivan, M. and Downey, L. (2012) Burial Barrows. Archaeology Ireland, Vol. 26, No. 4, 33–37.

Stirland, J. (2017) Donacarney Little and Mornington, Co Meath. Unpublished report prepared by Archaeological Consultancy Services Unit Ltd.

Thomas, A. (1984) The Walled Towns of Ireland.

Schmidt, A., Linford, P., Linford N., David A., Gaffney C, Sarris A. and Fassbinder J. (2016) *EAC Guidelines for the use of Geophysics in Archaeology: Questions to Ask and Points to Consider*. EAC Guidelines 2. Europae Archaeologia Consilium (EAC), Association Internationale sans But Lucratif (AISBL), Namur, Belgium.

Other Sources

Database of Irish Excavation Reports (www.excavations.ie).

Extract from the First edition Ordnance Survey (OS) 6-inch map, 1836.

Extract from the Third edition Ordnance Survey (OS) 25-inch map, 1908.

Geological Survey Ireland Spatial Resources map viewer, Department of the Environment, Climate and Communications.

Kildare County Development Plan 2023–2029

National Inventory of Architectural Heritage (http://www.buildingsofireland.ie/).

National Monuments Service's (NMS) Virtual Reading Room.

Placenames Database of Ireland, developed by Fiontar & Scoil na Gaeilge (DCU) and The Placenames Branch, Department of Housing, Local Government and Heritage (www.logainm.ie).

Record of Monuments and Places (RMP) and Sites and Monuments (SMR), the Heritage Service, 7 Ely Place, Dublin 2 (https://heritagedata.maps.arcgis.com/apps/webappviewer/).

Teagasc, Environmental Protection Agency (EPA) and the Cranfield Institute 2016 Teagasc Soil Information System (Soil Association).

Topographical files of the National Museum of Ireland.

11. APPENDIX 1 – SUMMARY TECHNICAL INFORMATION & GLOSSARY OF TERMS

Detailed magnetometer Surveys offer an effective and efficient way of surveying large areas for anomalies associated with past human activity by mapping and visualising spatial variations in the local magnetic field. Anomalies of archaeological interest can be identified as they emit contrasting magnetic properties to that of the surrounding soil. This allows for the identification of various archaeological features such as kilns, hearths and burnt mounds as they result in strong magnetic responses. Magnetometer surveys also help to identify ditches and pits that usually contain a multitude of deposits of varying magnetic properties that stand out in contrast to the consistency of the surrounding undisturbed soil. This allows for the identification of sites such as enclosures, ring-ditches and field systems that have been over time, ploughed out of the visible landscape.

Survey results take the form of processed greyscale images and interpretation figures that can be georeferenced over satellite imagery or development plans for a full assessment of the archaeological impact of any given project.

A constant high quality of data is assured by experienced field staff operating in accordance with E*AC Guidelines for the use of Geophysics in Archaeology* (Schmidt et al. 2015) and English Heritage's *Geophysical Survey In Archaeological Field Evaluation* (David et al. 2008).

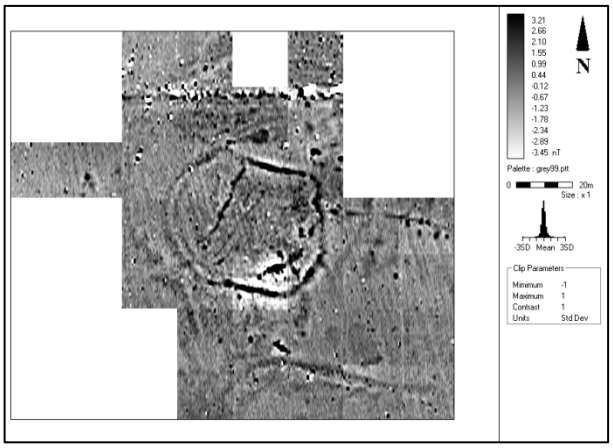




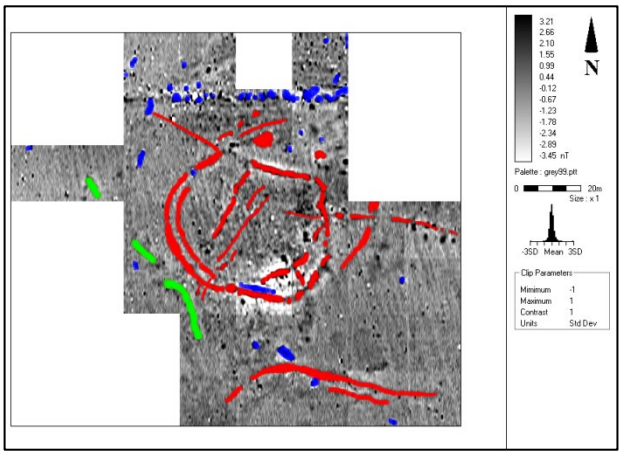
SENSYS MAGNETO® MXV3 modular carrier with 8 SENSYS FGM650/3 sensors spaced at 0.5m intervals

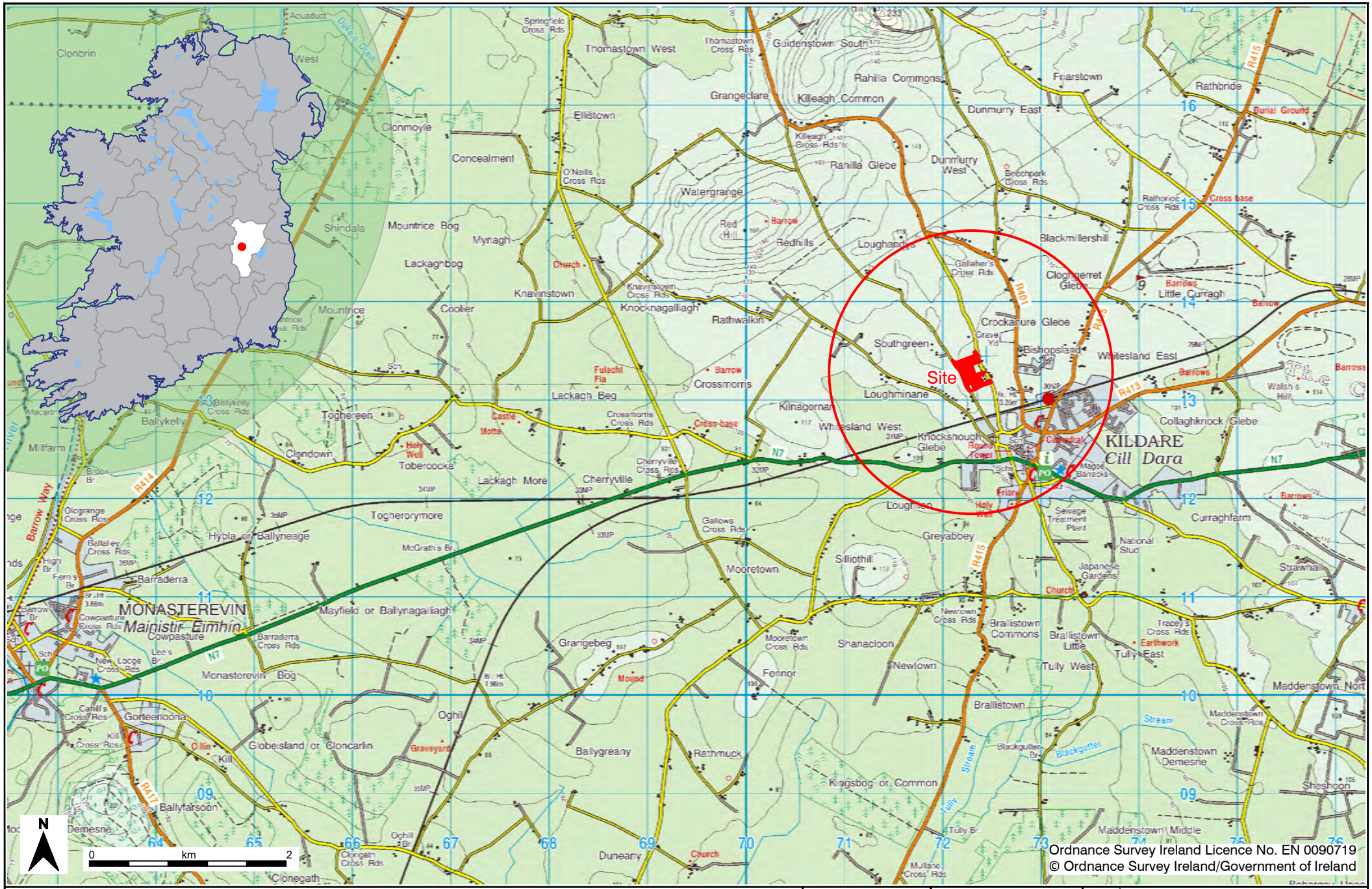
Data Display Formats

Greyscale: The greyscale format assigns a cell to each datum according to its location on the grid. The display of each data point is conducted at very fine increments, allowing the full range of values to be displayed within the given data set. This display method also enables the identification of discrete responses that may be at the limits of instruments detection.



Interpretation: The greyscale images are used to create interpretation drawings of the various anomalies that represent features of archaeological potential, early field systems, trends, cultivation, modern ferrous interferences and underlying geological changes.

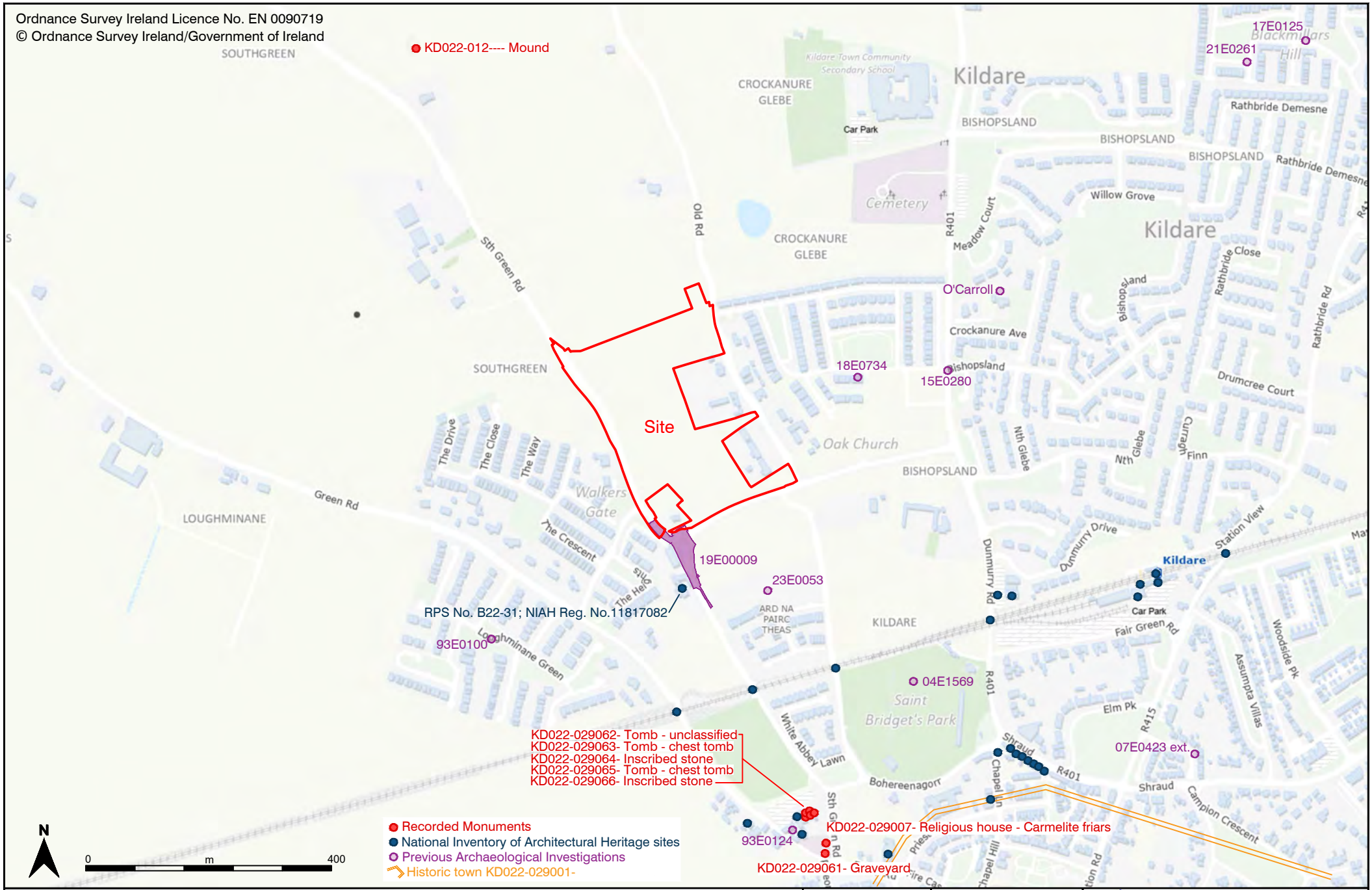




Ordnance Survey Ireland Licence No. EN 0090719
© Ordnance Survey Ireland/Government of Ireland

Project Southgreen, Kildare, Co. Kildare	**Date** February 2026	**Drawing No.** 25179_GR001	ARCHAEOLOGICAL CONSULTANCY SERVICES UNIT
Figure 1 Location of site		**Scale** 1:50,000 @ A4	

Ordnance Survey Ireland Licence No. EN 0090719
© Ordnance Survey Ireland/Government of Ireland



Project Southgreen, Kildare, Co. Kildare		**Date** February 2026	**Drawing No.** 25179_GR002
Figure 2 Location of site, previous archaeological investigations and nearby *Sites and Monuments Record* sites			**Scale** 1:8,000 @ A4

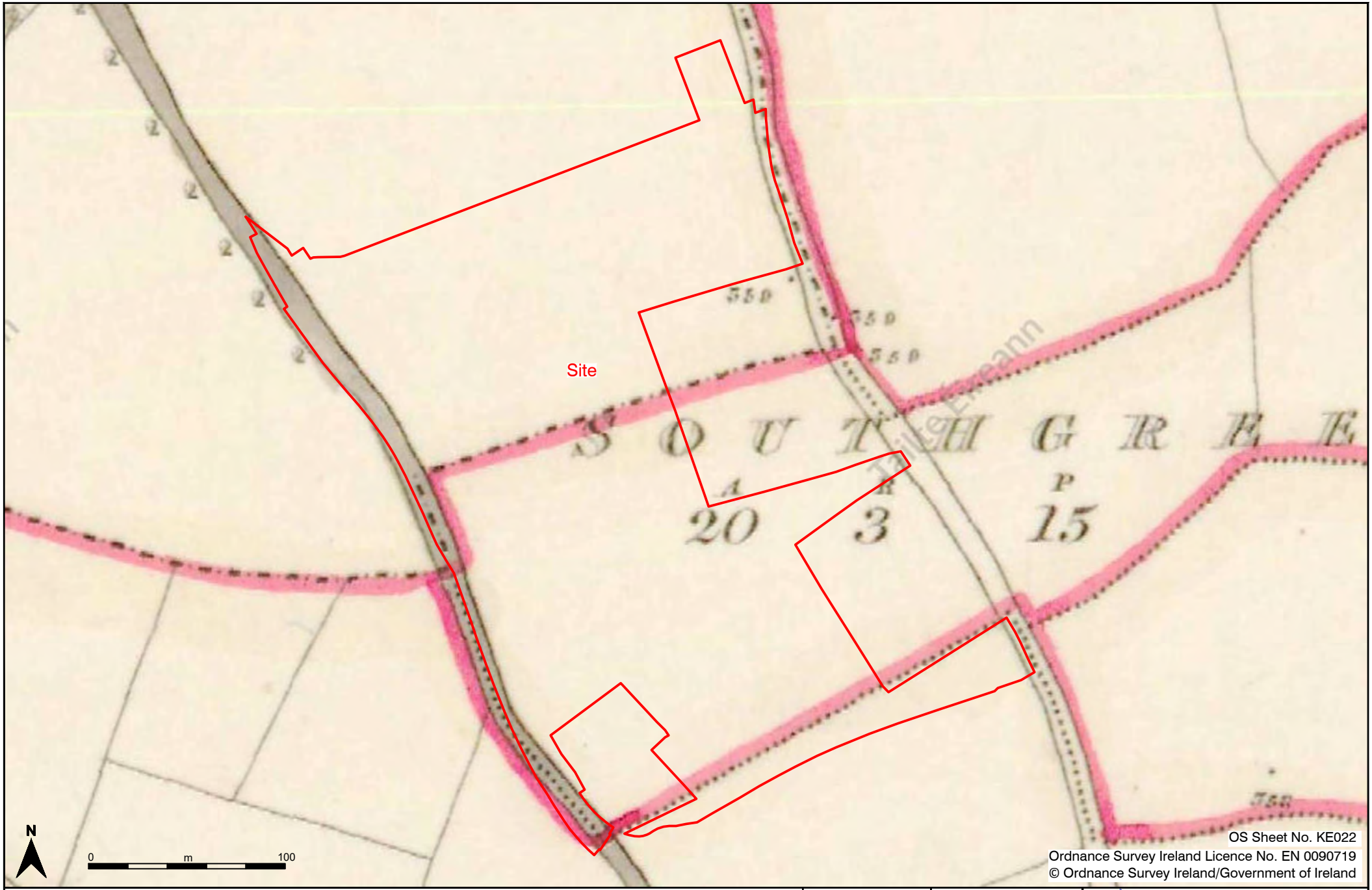
ARCHAEOLOGICAL CONSULTANCY SERVICES UNIT



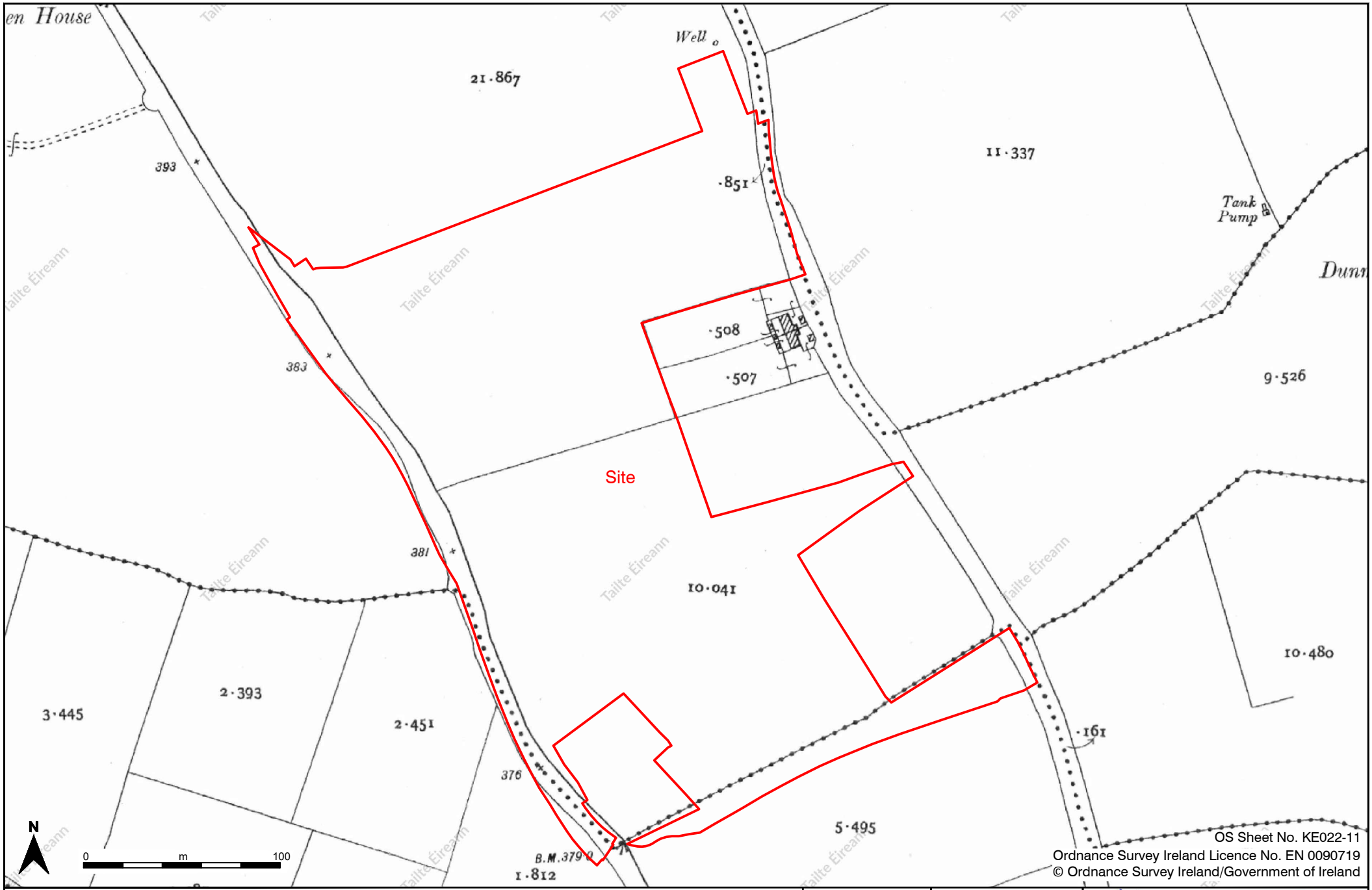
N

© The Down survey of Ireland, Trinity College of Dublin

Project Southgreen, Kildare, Co. Kildare	**Date** February 2026	**Drawing No.** 25179_GR003	ARCHAEOLOGICAL CONSULTANCY SERVICES UNIT
Figure 3 Extract from Down Survey (1656), showing approximate location of site		**Scale** Not to scale	



Project Southgreen, Kildare, Co. Kildare	**Date** February 2026	**Drawing No.** 25179_GR004	ARCHAEOLOGICAL CONSULTANCY SERVICES UNIT
Figure 4 Extract from 1st edition Ordnance Survey (OS) 6-inch map (surveyed 1836 - published 1839), showing location of site		**Scale** 1:2,500 @ A4	



Project Southgreen, Kildare, Co. Kildare		**Date** February 2026	**Drawing No.** 25179_GR005
Figure 5 Extract from 3rd edition Ordnance Survey (OS) 25-inch map (surveyed 1908 - published 1909), showing location of site			**Scale** 1:2,500 @ A4

ARCHAEOLOGICAL CONSULTANCY SERVICES UNIT



Project Southgreen, Kildare, Co. Kildare	**Date** February 2026	**Drawing No.** 25179_GR006	ARCHAEOLOGICAL CONSULTANCY SERVICES UNIT
Figure 6 Aerial view of site		**Scale** 1:2,500 @ A4	



Project Southgreen, Kildare, Co. Kildare	**Date** February 2026	**Drawing No.** 25179_GR007	ARCHAEOLOGICAL CONSULTANCY SERVICES UNIT
Figure 7 Aerial view of site showing geophysical survey results (greyscale images)		**Scale** 1:2,500 @ A4	



Project Southgreen, Kildare, Co. Kildare	**Date** February 2026	**Drawing No.** 25179_GR008	ARCHAEOLOGICAL CONSULTANCY SERVICES UNIT
Figure 8 Aerial view of site showing geophysical survey interpretation		**Scale** 1:2,500 @ A4	



*Proposed development plan courtesy of client

Project Southgreen, Kildare, Co. Kildare		**Date** February 2026	**Drawing No.** 25179_GR009
Figure 9 Detail of proposed site development			**Scale** 1:2,500 @ A4

ARCHAEOLOGICAL CONSULTANCY SERVICES UNIT