

Newtownmoyaghy, Kilcock, Co. Meath
Archaeological Impact Assessment

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Newtownmoyaghy, Kilcock, Co. Meath

Archaeological Impact Assessment

SITE NAME	Newtownmoyaghy, Kilcock, Co. Meath
CLIENT	McGarrell Reilly Homes
INVESTIGATION TYPE	Archaeological Impact Assessment
LICENCE NO	19E0547
PLANNING REF	n/a
TOWNLAND(S)	Newtownmoyaghy
IRISH TRANSVERSE MERCATOR	689530, 739680
RMP NO	ME049-A003001 & ME049-A003002
RPS NO	n/a
ARCHAEOLOGICAL CONSULTANT	Archer Heritage Planning Ltd.
ARCHAEOLOGIST	Liam Coen
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SUMMARY

A desk-based study and field survey followed by test-excavations was carried out on lands in the townland of Newtownmoyaghy, Co. Meath to the north-east of Kilcock town (ITM 689530, 739680). The overall site comprises 24.77 ha with two areas zoned for residential development, 8.38 Ha in the northern block and 6.07 Ha in the southern block. The site is comprised of agricultural land to the north of the Rye River but with extensive ongoing construction work in the immediate area including a link road and a flood relief scheme between the two residential blocks. This Archaeological Impact Assessment report sought to identify and describe known and potential archaeological or cultural heritage constraints within and/or immediately adjacent to the site and found;

- There are two Record of Monuments and Places (RMP) sites within the area of the proposed works, Ring-ditches ME049-A003001 & ME049-A003002.
- Aerial photographs and historical mapping of the site indicated no further archaeological potential.
- The field survey noted extensive disturbance of the site from the ongoing construction in adjacent areas particularly in the southern residential block.
- The northern residential block is largely untouched except for a portion along its southern boundary.
- A previous EIS (Arch-Tech, 2009) for the wider area recommended geophysical survey, test trenching, building survey, wade survey, metal detection and targeted test trenching.
- Geophysical survey (10R138) undertaken within the site and adjacent areas identified numerous anomalies but only one feature of strong potential (outside of current application area)
- Test trenching (10E0397) within the larger McGarrell Reilly development site included portions of this subject site and found several areas of archaeological interest though none in the subject site.
- Further test trenching (11E0109) and monitoring of ground-works (10E0397, 17E0017) associated with the link road and adjacent developments uncovered no further archaeological material or features.
- Test-excavations (19E0547) confirmed the presence of Ring-ditches ME049-A003001 & ME049-A003002 (Archaeological Area 1) in the southern residential block and an Early Medieval enclosure and associated ditch (Archaeological Area 2) in the northern residential block.

RECOMMENDATION

The two archaeological areas, 1 and 2, contain archaeological features and material of a moderate to high significance. Groundworks associated with residential development of this site would result in significant negative impacts on the archaeological features.

Although the optimum mitigation measure would be to preserve the archaeological features in situ within an appropriate exclusion zone, development proposals make this unviable due to the difficulties in redesigning the proposal (see section 6.1 below).

Therefore, it is recommended that the archaeological features should be preserved-by-record, *i.e.* be subject to full archaeological excavation under licence from the Department of Culture, Heritage and the Gaeltacht in consultation with the National Museum of Ireland.

Following mitigation of any impacts to the identified archaeological site, all ground disturbance works across the remainder of the development site should be monitored by a suitably qualified archaeologist.

NOTE: All conclusions and recommendations expressed in this report are subject to the approval of The Department of Culture, Heritage and the Gaeltacht (DCHG) and the relevant local authorities. DCHG may issue alternative or additional recommendations.

Status	Date	Prepared by	Reviewed by	Approved by
Final	18 th December 2019	LC (Archer)	AOC (Archer)	CMcG

1. INTRODUCTION

This archaeological impact assessment report for a proposed residential development at Newtownmoyaghy townland, Co. Meath on the north-eastern outskirts of Kilcock has been prepared by Archer Heritage Planning Ltd for McGarrell Reilly Homes. The report aims to identify and describe known and potential archaeological and cultural heritage constraints within the site and offer recommendations for the mitigation of such impacts.

1.1 Proposed Development

This report is being undertaken in advance of a Strategic Housing Development (SHD) application to *An Bord Pleanála*. The overall development site of 24.77 ha covers three different planning zoning objectives: Open Space, Residential and Community. For the Community zoning will be car parking and changing rooms to serve the GAA pitch which is just east of the application boundary. On the Open Space zoning will be developed two parks incorporating the areas subject to a flood relief scheme.

Within the Residential zoning the proposed development comprises 575 No. residential dwellings within 2 No. area separated by a green belt with a combined area of 14.45 hectares of residential zoned land. The northern site (8.38 ha) will facilitate the development of 309 No. residential dwellings while the site to the south (6.07Ha) will provide for 266 No. residential units. A net density of 39.8 units per hectare will be achieved across both sites.

The development will consist of:

- i. The construction of 575 No. residential units, all with private amenity space, with a cumulative Gross Floor Area of 60,326.9 square meters comprising:
 - a. 43 No. 2-bedroom, 2-storey houses and associated amenities and car parking;
 - b. 270 No. 3-bedroom, 2-storey houses and associated amenities and car parking;
 - c. 45 No. 4-bedroom, 2-storey houses and associated amenities and car parking;
 - d. 30 No. 4-bedroom, 3-storey houses and associated amenities and car parking;
 - e. 3 No. apartment blocks ranging in height from 3-5 storeys providing for:
 - i. 20 No. 1-bedroom apartment units with all associated amenities and car parking; and,
 - ii. 46 No. 2-bedroom apartment units with all associated amenities and car parking;
 - f. 121 No. duplex and corner block units 3-storeys in height providing for;

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- i. 15 No. 1-bedroom duplex units with all associated amenities and car parking;
 - ii. 21 No. 2-bedroom duplex units with all associated amenities and car parking;
 - iii. 6 No. 3-bedroom duplex units with all associated amenities and car parking;
 - iv. 29 No. 1-bedroom corner block units with all associated amenities and car parking;
 - v. 42 No. 2-bedroom corner block units with all associated amenities and car parking; and,
 - vi. 8 No. 3-bedroom corner block units with all associated amenities and car parking.
 - ii. The construction of a creche with a gross floor area of 623 square metres, an associated external play area and 14 No. car parking spaces;
 - iii. The provision of 314 No. bicycle parking spaces incorporating 163 No. long-term bicycle parking spaces and 151 No. short-term bicycle parking spaces;
 - iv. New boundary walls and fences, open space, internal site roads, pavements, public lighting, tree planting, bin storage, ESB substations and all ancillary works;
 - v. Provision of new GAA changing room facilities with a Gross Floor Area of 97 square meters, associated entrance road and 40 No. car parking spaces;
 - vi. The erection of 2 No. 13m lattice masts in the southern section of the site together with the relocation underground of 2 No. 10kV and 2 No. 38kV overhead lines;
 - vii. Infrastructure works including:
 - o Surface Water – Surface water from the northern site will be discharged into 1 No. detention basin to the south of the proposed development site. Surface water from the southern site will be discharged into a detention basin to the southeast of the development site.
 - o SUDS measures such as permeable paving, swales, filter trenches etc. will be provided to intercept and provide treatment to surface-water run-off at source.

2. SITE DESCRIPTION

The overall site comprises 24.77 ha, in the townland of Newtownmoyaghy, Co. Meath on the north-eastern outskirts of the town of Kilcock (Figure 1). The site is comprised of agricultural land to the north of the Rye River but with extensive ongoing construction work in the immediate area. The area zoned for residential is divided into two land-blocks. The northern block, c. 8.38 ha, comprises a series of

pasture fields bounded by mature hedgerows overlooking a road and residential development under construction and the Rye Water River to the south. The southern block, c. 6.07 ha, comprises a large, relatively level, field and a second sloping field with an intervening mature hedgerow that lies to the east of the road. As part of the road and the neighbouring residential development, large-scale flood-relief works have been undertaken in the area between the two land-blocks and the southern block has been subject to construction traffic in the recent past.

3. METHOD STATEMENT

The following sources were consulted in the preparation of this report:

- Record of Monuments and Places (RMP)¹
- Record of Protected Structures (Meath Development Plan 2013–2019, Appendix 8)
- Aerial photography (various collections including National Museum of Ireland, Geological Survey of Ireland and/or Ordnance Survey Ireland)
- Historical maps (including early edition Ordnance Survey (OS) maps and pre-Ordnance Survey held at Trinity College Map Library).
- Reference material (journals, papers, books *etc*) held by the National Library of Ireland, local libraries and/or on-line search facilities/collections (*e.g.* JSTOR *etc*)
- Relevant on-line databases (*e.g.* Excavation Bulletin; NRA Archaeological Database).

4. ARCHAEOLOGICAL ASSESSMENT

4.1 General Archaeological Background

The name Kilcock is derived from the Irish '*Cill Coca*' or the Church of Coca who was an early Christian missionary who founded the first Church in Kilcock circa 550 A.D. The Church was built on high ground on the southern bank of the Rye Water River. The area has been inhabited since early prehistory. Early documentation concerning Kilcock dates from at least the 8th century, when a battle is recorded between rival kings near the church of St. Coca close to the county border (Costello 1988, 95). The High King Donnchad of the Ui Neill defeated Ruaidri mac Faelain and Laidcnen King of Ui Cheinnselaig near Kilcock in 780 A.D. and then burned much of northern Kildare (Byrne 1973, 158). Although the exact position of the battle is unknown, the proposed development area is bordered to the south by the boundary with County Kildare. The county border also functioned as the border between the Kingdoms

¹ Archive Unit National Monuments Service, Department of Arts, Heritage and the Gaeltacht, Floor 2, Block 6, Irish Life Centre

of Meath (Brega) and Leinster (Laigin). At the start of the 10th century, the area around Kilcock was in the territory of the Ui Cheitig, while the area to the north of the Rye Water lay within Brega (*ibid.*). The continuing political importance of this border area can be seen in the numbers of annalistic references to the churches of Kilcock and nearby Kilglyn (from original testing report 10E0397ext).

The overall development site has been subjected to geophysical survey (Nichols 2010) with archaeological test excavations (Bayley 2010) undertaken on the link road, areas subject to the flood relief scheme and portions of the southern residential block. No archaeological material was identified during those test-excavations within the current site footprint, although two burnt spreads (probable *fulachta fiadh*) were identified a short distance to the south-west. The testing indicated a low-moderate potential for the presence of sub-surface archaeology existing across the site, and it was noted that no testing was carried out in the central part of the southern residential block. It was recommended that archaeological monitoring of all topsoil stripping and groundworks on the development site be carried out by a suitably qualified archaeologist.

4.2 Record of Monuments & Places

The Record of Monuments and Places (RMP) is a statutory inventory of archaeological sites protected under the National Monuments Acts 1930-2004 (Section 12, 1994 Act). It is compiled and maintained by the Archaeological Survey of Ireland (ASI) and comprises descriptive lists and maps of all sites, monuments and zones of archaeological potential, recorded to date in the country. The inventory concentrates on pre-1700 AD sites and is based on a previous inventory known as the Sites and Monuments Record (SMR) which does not have legal protection or status. The ASI has established a publicly accessible website (www.archaeology.ie) containing details of recorded holdings and includes recently discovered sites recorded in the course of recent archaeological excavations. The table below (see Figure 2) shows the entries in the vicinity of the site with the two ring-ditches within the site footprint highlighted in **bold**.

SMR No	Class	Townland	ITM	Distance to site
KD005-002003	Coffin resting stone	Kilcock	688621,739814	520m (E)
According to Simms (1999, 183-4), local tradition relates that in the past, Catholic funerals had to remain outside the gates of the graveyard (KD005-002002-) until the burial fees were paid and the coffin was rested on a stone in the interim. A small roughly dressed block of stone beside the E pier of the entrance gates is pointed to as having been the coffin-resting stone.				
KD005-002004	Children's burial ground	Kilcock	688646,739830	510m (E)
According to Simms (1999, 185), the old graveyard in Kilcock (KD005-002002-) was closed for burials from August 1899, but despite (or perhaps because of) the closure, 'still-born' babies were buried there.				
KD005-002001	Church	Kilcock	688646,739830	510m (E)

SMR No	Class	Townland	ITM	Distance to site
This may have been the church mentioned in 1303 in an Ecclesiastical Commissioners Report as being capable of accommodating 90 people, and which may have been given into the control of the Knight's Hospitallers. Located to NE of centre in a graveyard (KD005-002002). Known locally as 'St Coca's Church', it may occupy the site of a 6thC monastery (KD005-002). Traces of the levelled church may survive as a slightly raised, rectangular area (dims L c. 18m E-W; Wth c. 6m; H 0.2-0.5m), at the NE edge of which a short length of walling (traceable L c. 3m; Wth 0.65m) composed of small blocks of mortared stone, projects through the sod cover.				
KD005-002	Ecclesiastical Site	Kilcock	688646,739830	510m (E)
'Cell-choca, the monastery of the 6thC virgin Cocha (Chuaca)' was located at Kilcock. No visible surface trace of the monument survives, but a later, medieval church (KD005-002001-) and graveyard (KD005-002002-) may occupy its site.				
KD005-002002	Graveyard	Kilcock	688646,739830	510m (E)
On Church Lane, just N of the square in Kilcock village, and known locally as 'St Coca's Graveyard', it may occupy the site of a 6thC monastery (KD005-002). The graveyard is sub-rectangular in plan (dims. L c. 50m NE-SW; Wth c. 40m), enclosed by a high wall (av. H 2m; T 0.5m) and is entered through a gate at the W end of the S wall. The S two-thirds of the yew-planted interior is higher (H c. 1m) than the rest and contains the majority of burials, dating from early-18th to early-20th c. Traces of a levelled church (KD005-002001) are visible just NE of centre. The graveyard was also used as a Children's Burial Ground (KD005-031). There are also references to the presence of a now inaccessible, underground burial vault in the graveyard.				
KD005-003	Ring ditch	Branganstown	689404, 739061	250m (S)
In gently undulating tillage. Visible on a 1970 aerial photograph (CUCAP BDH 31) as the cropmark of a small circular area defined by a fosse (est. max. diam. c. 15m), probably a ring-ditch or ploughed-out ringbarrow. No visible surface trace survives, although there is a slight rise in the field at the location (SMR file).				
KD005-022	Ritual Site- Holy well	Kilcock	688692,739800	460m (WSW)
Located NE of the square in Kilcock village and indicated, but not named, on the 1st. Ed. (1838) of the OS 6-inch map. Known locally as 'Tubbermohocca' and dedicated to the 6th century St Coca, sister of St Kevin of Glendalough, the well was apparently covered in the mid-19th century. It was rediscovered recently when a man-hole cover was lifted to reveal a circular well (diam c. 0.8m), several metres deep and lined with small, undressed mortared stone walling. The well was dry on day inspected.				
KD005-029	Font	Kilcock	688537,739854	610m (W)
In a 19th century catholic church, to where it was moved, probably from a now levelled church (KD005-002001-) in a graveyard (KD005-002002-) c. 70m to the SE. A fine granite font (H 1m), octagonal in plan, the basin and chamfered base of which bear panelled decoration, including shields and representations of both human and animal faces.				
KD005-030	Market Cross	Kilcock	688520, 739550	700m (SE)
At the W end of the 'Fair Green' to the S of Kilcock village was a stone known as being the Kilcock market cross. The photograph shows a small, rectangular, granite (?) cross base with a broad mortise in its upper surface. Traditionally used as a coffin-resting stone.				
ME049A003001	Ring Ditch	Newtownmoyaghy, Kilcock	689563, 739510	-
Situated on a slight E-W ridge in a fairly level landscape. The cropmark of a small circular feature (diam. c. 5m) defined by a single fosse feature is visible on a Geohive image (1995). The ring-ditch (ME049A003002-) is c. 40m to the E along the rise. Both features are also visible on the OSI images (1995). The features were first noted by Tom Condit in 2017.				
ME049A003002	Ring Ditch	Newtownmoyaghy, Kilcock	689602, 739506	-
Situated on a slight E-W ridge in a fairly level landscape. The cropmark of a small circular feature (diam. c. 4m) defined by a single faint fosse feature is visible on a Geohive image (1995).				

SMR No	Class	Townland	ITM	Distance to site
The ring-ditch (ME049A003001-) is c. 40m to the W along the rise. Both features are also visible on the OSI images (1995). The features were first noted by Tom Condit in 2017.				
ME049A004001	Ring Ditch	Newtownmoyaghy, Kilcock	689961, 739490	190m (NE)
Situated on an E-W ridge in an undulating landscape. The cropmark of a small enclosure (diam. c. 5m) defined by a single continuous fosse feature is visible on Google Earth (28/06/2018). The ring-ditch (ME049A004002-) is c. 30m to the E and ring-ditch (ME049A004003-) is c. 90m to the SSW. It was first reported to the National Monuments Service by Brian Doyle.				
ME049A004002	Ring Ditch	Newtownmoyaghy, Kilcock	689966, 739494	220m (NE)
Situated on an E-W ridge in an undulating landscape. The cropmark of a small enclosure (diam. c. 5m) defined by a single continuous fosse feature is visible on Google Earth (12/07/2013; 28/06/2018). The ring-ditch (ME049A004001-) is c. 30m to the W and ring-ditch (ME049A004003-) is c. 120m to the SW. It was first reported to the National Monuments Service by Brian Doyle.				
ME049A004003	Ring Ditch	Newtownmoyaghy, Kilcock	689908, 739418	100m (NE)
Situated in what might be a low-lying position in an undulating landscape. The cropmark of a small enclosure (diam. c. 10m) defined by a single continuous fosse feature is visible on Google Earth (28/06/2018). The ring-ditches (ME049A004001-; ME049A004002-) are c. 90m to the NNE and c. 120m to the NE respectively. It was first reported to the National Monuments Service by Brian Doyle.				
ME049-030	Ring Ditch	Dolanstown	689003, 740515	550m (NW)
Situated on a slight rise in a level landscape. The cropmark of a small circular area (int. diam. c. 5m) defined by a wide fosse feature (Wth c. 3m) is visible on Google Earth (28/06/2018). It was first reported by Anthony Murphy.				

Table 1: Archaeological sites in vicinity of the proposed development

4.3 Previous Archaeological Excavations

Several archaeological investigations have been undertaken within and nearby the proposed development producing evidence from the prehistoric to the medieval. The table below is comprised of entries from the Excavation Database www.excavations.ie.

There have been a number of archaeological investigations in association with the construction of the link road, on-going construction of neighbouring residential areas and flood relief scheme for the Rye Water River. Following an EIA prepared by Arch Tech in 2009, a geophysical survey (Nichols 2010, see 4.8 & Figure 5) identified a possible enclosure and areas of burning, south-west of the new link road. Test trenching (Bayley 2010, see 4.9 & Figure 6) in the footprint of the link road; flood relief scheme; areas adjacent to the Rye Water River; and a neighbouring residential development revealed two burnt spreads in the area to the south-west (outside current site) but no archaeological features were identified in the link road. Further test trenching of a neighbouring development site (Bayley 2011) including portions of the link road, revealed no archaeological features. Monitoring of the topsoil stripping for the southern section of the link road was carried out in Dec 2013 – January 2014 (Walsh 2014) and the western section in March 2016 (O'Connell 2016) with no archaeological features

identified. Monitoring of the topsoil stripping for a neighbouring residential development (O'Connell 2017) also identified no archaeological features or material.

To the west in the townlands of Newtownmoyaghy, Balfeaghan and Dolanstown running along the northern bank of the Rye River archaeological monitoring took place under licence number 18E0296 over a period of 1 month from 4th June – 29th June 2018 associated with flood relief works for the river.

One potential archaeological feature was observed during the topsoil strip monitoring comprising the remains of a disturbed Fulacht Fia on the edge of the Mill Race in Dolanstown. This feature was excavated from 16th-20th July under licence no. 18E0377 and revealed scattered, adulterated, burnt mound material (*i.e.* heat-shattered stone in a charcoal-rich soil) mixed up in peaty soil. It was deemed to be *ex-situ* material, possibly thrown up by the excavation of the adjacent mill-race in the nineteenth century or more recent works to the Rye Water River. Metal detection of a sample of material from the Rye River was carried out under licence number 18R0136 with a small number of positive responses of modern material (*e.g.* drink cans) noted.

Excavation No.	RMP	OS Ref	Location	Ex. Bulletin Ref.	Author
03E1905	N/A	688510, 739520	Fairgreen, Kilcock	2004:0828	K. Wiggins
No material of archaeological significance was noted throughout the development area.					
02E1842	N/A	689923, 740025	The square, Kilcock	2004:0829	E. Kiernan
No material of archaeological significance was noted throughout the development area.					
04E0764	N/A	688932, 741725	Calgath, Meath	2004:1193	S. Linnane
No material of archaeological significance was noted throughout the development area.					
05E0672	N/A	688515, 739594	Boycetown, Commons East, Kilcock	2005:755	E. O'Carroll
No material of archaeological significance was noted throughout the development area.					
06E0156	N/A	688574, 739745	Kilcock, meath	2006:1591	D. Sweetman
No material of archaeological significance was noted throughout the development area.					
07E0589	N/A	689682, 739775	The Square, Kilcock	2007:821	C. Ni Lionan
Excavations revealed a 19 th -century floor surface and a brick wall which may be associated with a distillery that was depicted as located on the site on the first-edition OS map.					
10E0397; 10R139	N/A	713427, 770518	Newtownmoyaghy, Kilcock	2010:530	D. Bayley
Testing was undertaken in advance of a proposed distribution road and associated works at Newtownmoyaghy, Kilcock, Co. Meath. The work was undertaken on behalf of McGarrell Reilly Homes between 11 and 14 October 2010. The proposed distributor road traverses both the Rye Water flood-plain and the higher flat ground. Testing was carried out in conjunction with a geophysical survey of the site undertaken by John Nichols of Target Geophysics (10R138). A total of 49 trenches were excavated within the area of proposed development. Testing was confined to the limit of the proposed distribution road and associated flood mitigation works. The anomalies highlighted in the geophysical survey as being of archaeological potential appear to have been from natural sources, as no archaeological remains were identified in the test-trenches excavated across the anomalies. A metal-detection assessment of the material dredged from the Rye Water yielded nothing of archaeological significance.					

Excavation No.	RMP	OS Ref	Location	Ex. Bulletin Ref.	Author
<p>Two areas of archaeological activity, burnt spreads, were identified during the testing programme. The first burnt spread measured 7.14m x 6.52m x 0.1m deep. The second measured 10.4m x 10.9m x 0.15m deep. These comprised black silty clay with charcoal and heat-affected stone inclusions. The proposed flood alleviation works will have an adverse impact on these burnt spreads, so it was recommended that they be fully excavated prior to the development works. An area in the south and south-west of the test area was not tested, as the ground had been severely disturbed during recent sewerage pipe-laying works. These sewerage works also appear to have disturbed a large length of what the EIS identified as mounds of upcast riverine silts on the banks of the Rye Water River.</p>					
10D44; 10R146	N/A	689287, 739269	Newtownmoyaghy, Meath	2010:531	E. Kiernan
<p>Moore Marine Services was commissioned by Irish Archaeological Consultancy (IAC) on behalf of McGarrell Reilly Homes to carry out an impact assessment of a proposed distribution road bridge across the Rye River at Newtownmoyaghy, Kilcock, Co. Meath.</p> <p>The underwater assessment was commissioned in order to locate, define and ascertain the character, condition and extent of any archaeological features, deposits or objects which may be affected by the development. It took place on 20 October 2010. Weather on the day was clear and dry, with few clouds and periodic sunshine. Water flow at the time of the survey was moderate with a generally firm riverbed and good visibility. The maximum recorded water depth was 0.4m and the average was 0.3m.</p> <p>The site of the proposed crossing of the Rye River comprised a 250m stretch of the third order Rye River at Newtownmoyaghy, Co. Meath. This west–east-orientated stretch of the river was situated c. 500m to the east of Kilcock town, adjacent to the R148 and the Royal Canal. It was flanked to the north by agricultural grassland and to the south by the R148 and Royal Canal.</p> <p>The desktop assessment concluded that, whilst there have been no artefacts recovered from the site, no previous excavations carried out in the immediate vicinity and there are no recorded monuments or places at the proposed development, it is situated in a wider landscape which is of significant archaeological and historical importance.</p> <p>The field survey recorded that the likelihood of the project impacting on archaeology was very low. This was due to the fact that the river had been dredged in the recent past. The presence of a large dredge spoil heap on the northern banks of the river, the vertical mechanically excavated riverbanks and the paucity of recorded finds, both modern and ancient, indicated that a programme of dredging appeared to have removed any archaeology which may have been present.</p>					
10E0402	N/A	689132, 739775	Newtownmoyaghy, Meath	2010:532	A. Giacometti
<p>Test-trenching for a proposed infrastructural development in a large field to the east of Kilcock was conducted in September–October 2010. The testing programme identified a large number of 18th-, 19th- and 20th-century features, mostly agricultural but also including three brick kilns, gravel-quarrying pits and sewerage drains. The brick kilns were recorded and none of the features were considered to be of significant archaeological significance.</p>					
11E239; 11R87	N/A	688582, 740625	Dolanstown, Kilcock	2011:474	F. Walsh
<p>No material of archaeological significance was noted throughout the development area.</p>					
11E109	N/A	688842, 739940	Newtownmoyaghy, Kilcock	2011:492	D. Bayley
<p>Testing was undertaken within the site of a proposed distribution road and associated works at Newtownmoyaghy, Kilcock, in April 2011.</p> <p>Fifteen test trenches were excavated across the development area. The remains of two walls, a brick-lined hearth and cobbled surfaces were identified in four of the trenches (Trenches 4, 5, 14 and 15), located outside the infrastructural works but within the wider development area. These most likely represent the remains of structures shown on Larkin's map of 1812 and the first-edition OS map. Nothing of archaeological significance was identified in any of the remaining trenches.</p>					
10E0397ext	N/A	698363, 739558	Newtownmoyaghy, Kilcock	2013:194	F. Walsh
<p>Monitoring is ongoing as part of the development of a distribution road within the townland of Newtownmoyaghy, which is located to the east of Kilcock town. Monitoring of topsoil stripping was recommended in a testing assessment that was undertaken by IAC Ltd in 2010 (2010:530). During testing no features were identified within the wayleave of the proposed distribution road.</p> <p>Monitoring of topsoil stripping commenced at the site in December 2013 and lasted for 11 days into January 2014. No archaeological features or deposits were located during the course of works.</p>					

Excavation No.	RMP	OS Ref	Location	Ex. Bulletin Ref.	Author
14E0378	KD005-002002, KD005-002004	688696, 739886	Commons East, Kilcock	2014:009	M. McGonigle
At the base of the fill material was a metalled surface, which proved on excavation to date to the 19th century and may have been associated with a corn mill just north of the site. Four fragments of disarticulated human bone were retrieved from the uppermost layer of overburden (topsoil).					
13E0467	KD005-002002, KD005-002004	688696, 739886	Commons East, Kilcock	2014:245	M. McGonigle
Some dis-articulated bone, thought to be human, was uncovered in one of the trenches (T1) closest to the adjacent graveyard. Test trenches excavated beyond this area produced nothing of archaeological significance					
17E0158	Adjacent to KD005-003	688903, 738974	Branganstown, Co. Kildare	2017:102	J. McStirland
<p>A total of 12 test trenches were excavated. The testing strategy targeted anomalies and features identified during the geophysical survey. For the purposes of the test trenching the site of the proposed development was subdivided into the four fields that make up the overall development site.</p> <p>Field 1</p> <p>The earlier geophysical survey identified the presence of a weakly defined large curving anomaly, the general appearance of which suggested that it is of possible geological origin. Two test trenches (10-11) were excavated across this feature and confirmed that the anomaly was not of an archaeological nature and appears to represent underlying geological formations.</p> <p>The geophysical survey also identified the presence of three linear type responses within this field. These features are also visible on the ground and represent agricultural field boundaries, one of which is indicated on the first edition OS map. A single test trench (9), was excavated across one of these boundaries. The test trench confirmed that these features are relatively modern field boundaries/drainage ditches.</p> <p>Fields 2-3</p> <p>A large oval/sub-circular enclosure, which was truncated by a modern hedgerow, was identified as a result of the geophysical survey. This large enclosure measures approximately 100m in diameter and appears to have an attached annex located to the north, with evidence of an internal smaller circular enclosure to the south. There is also a suggestion of another internal ditch along the south-west. The survey also identified evidence of two further possible enclosing ditches located west of the main enclosure.</p> <p>A total of 5 test trenches (1-4, 12) were excavated across the large oval/sub-circular enclosure and confirmed these features were archaeological in nature. A quantity of medieval pottery retrieved from the features indicates that the enclosure represents medieval settlement activity, possibly a Norman ringwork. The enclosing ditches vary from 2m to 6m in width and 1 to 2m in depth. A number of internal and external features were also identified.</p> <p>Field 4</p> <p>Three linear-type anomalies were identified within this field during the geophysical survey and appear to represent agricultural field boundaries. A total of three trenches (6-8) were excavated across the anomalies. Their appearance within the trenches suggests that they were formed by underlying geological formations and are not of an archaeological nature.</p> <p>The results of an earlier geophysical survey and the targeted test trenching strategy clearly indicates that Fields 2-3 contains the presence of a large enclosure. The sections excavated through the enclosing features confirmed that they are archaeological in nature. Pottery retrieved from the features indicated that the enclosure represents medieval settlement activity and may represent a possible Norman ringwork. The targeted test trenching carried out within Fields 1 and 4 identified no potential archaeological features or deposits. However, because of the limited nature of the testing and the presence of the enclosure within Fields 2-3, it is recommended that further, more intensive testing be carried out throughout the site of the proposed development.</p> <p>The proposed development will impact on the enclosure site. A portion of the enclosure extends below green space at the centre of the development and it may be possible to preserve that portion of the site in situ. The remainder of the enclosure should be preserved by record where preservation in situ is not possible which will involve a full archaeological excavation of the site.</p>					
17E0068	n/a	688655,739857	Super Valu, Kilcock	2017:208	David Murphy
Two separate phases of archaeological mitigation were carried out under licence 17E0068 at the site of a carpark extension at Super-Valu, Kilcock, Co. Kildare. The site lies partially within the zone of notification of the late medieval					

Excavation No.	RMP	OS Ref	Location	Ex. Bulletin Ref.	Author
<p>St Coca's church (KD005-002001-) and graveyard (KD005-002002-) site (located to the immediate south-west of the subject site). In late February 2017 testing was undertaken at the site. In total 180m² of test trenching was completed. The tested areas of the site proved to be heavily disturbed with extensive deposits of 20th-century construction/demolition-related debris present across the site; less contaminated 19th-century infill deposits were also evident, particularly at lower levels within the trenches. The northern cluster of test trenches demonstrated that this portion of the site was substantially composed of relatively recent construction related debris as well as 19th-century infill deposits, these infill deposits were more evident to the west of the area. No human bone or anything of archaeological interest was encountered in any of the trenches in the northern portion of the site (Trenches 1/4, 2, 3) and no further archaeological mitigation was deemed necessary in this area.</p> <p>A similar stratigraphy was evident across the majority of the trenches in the southern portion of the site (Trenches 5, 6, 7). However, the north-western end of Trench 5 proved to be less disturbed by the modern demolition debris and here at a depth of 0.7-0.8m a concentration of disarticulated human bone was revealed. The bones (which included skull, mandible and femur fragments) that became loose during trench excavation were retrieved and the area was investigated for the presence of a grave cut or any articulated remains. Although investigation proved that the bones were disarticulated and ex-situ, it was deemed appropriate that due to the concentration evident, with greater amounts likely to be revealed beneath, the remaining disarticulated bones be left in-situ with no further excavation of the trench undertaken.</p> <p>A further concentration of disarticulated human bone was identified within the topsoil at the planned Trench 10 location, again, loose bones were retrieved, and the trench was not excavated. Subsequent osteological examination of the retrieved bone revealed that the comingled remains consisted of at least two adults and one juvenile. Several bones from the assemblage had pathological conditions. The remains could not be sexed accurately but based on the size there was one possible male. Disarticulated bone concentrations uncovered in Trenches 5 and 7 were identified as animal.</p> <p>The archaeological testing phase had identified the southern portion of the site as possessing higher potential for disarticulated human bone concentrations, with a more moderate potential identified across the central portion of the site, particularly underlying the disturbed upper levels. Based on the recommendations outlined in the subsequent JCA testing report, and approved by the National Monuments Service, a redesigned carpark layout and landscaping plan was devised and implemented. The revised plan reduced the number of parking spaces from 70 to 53, with the vast majority of the spaces now focused on the northern and north-central portions of the site. As part of the revised plan a larger area in the southern portion of the site, adjacent to St Coca's church and graveyard site, remained undeveloped and was instead rehabilitated with an enhanced and non-intrusive landscaping plan. The revised plans ensured that no significant excavations were undertaken across the land parcel, with the only ground reductions being the clearance of overburden and debris to a general depth of 0.2m. This was the formation level for the new carpark and introduced material was built up from this level.</p> <p>In the extreme southern portion of the site, only vegetation and overlying debris were removed to allow for the introduction of topsoil prior to landscaping.</p> <p>A further phase of archaeological mitigation was undertaken at the site during October and November 2017. These works were carried out under an extension to licence 17E0068. On this occasion, all ground clearance and reduction work across the southern and central portions of the carpark extension site was monitored. A further seven fragments (four from the southern area, three from the central area) of disarticulated, potentially human, bone was retrieved during this phase of monitoring. All fragments were recovered from the heavily disturbed upper 0.2m of soil. No evidence of grave cuts, articulated remains or anything else of archaeological significance was revealed during this phase of monitoring. The retrieved bone fragments have been added to the existing analysed sample of human bone recovered from the site during previous mitigation phases.</p> <p>All development work at the site has now been completed and no further archaeological mitigation is scheduled. It has been recommended by John Cronin and Associates that the combined bone sample, containing the analysed human bone from the previous mitigation phases and the seven fragments of disarticulated, potentially human, bone retrieved during the recent monitoring phase, be reinterred, with religious blessing, in the landscaped green area, adjacent to the walls of St Coca's church and graveyard site, at the southern end of the completed development.</p>					
17E0017	n/a	689138, 739793	Newtownmoyaghy	2017:604	A. O'Connell
<p>Monitoring was carried out in advance of a residential development at Newtownmoyaghy, Kilcock, Co. Kildare. The site is a low-lying pasture field with the Rye Water River to the south. Topsoil stripping was monitored over a period of 3 months from 5 Jan–20 March 2017. Topsoil varied in depth from 0.25-0.3m and overlay an orange-brown clay subsoil; sherds of 19th-century pottery were uncovered along with a number of plough furrows. No archaeological features were observed during monitoring.</p>					

Table 2: Previous archaeological investigations in the wider area

4.4 Cartographic Sources

Analysis of historic mapping can show human impact on landscape over a prolonged period. Large collections of historical maps (pre- and early Ordnance Survey maps as well as estate or private maps) are held at the Glucksman Map Library, Trinity College and other sources (UCD Library, Ordnance Survey Ireland, local libraries and published material). The development of the site and its vicinity recorded through the nineteenth and twentieth century cartography are described in Table 3 below (Figures 3). **No potential archaeological features were recorded within the subject site.**

Map	Date	Description
Historic 6inch OSi First Edition	1838	The area in question looks similar to the modern layout with existing road and field boundaries in place
Historic 25inch	1907-11	No significant change from earlier map.

Table 3: Cartographic sources relating to the site

4.5 Aerial photography

Aerial photography (or other forms of remote sensing) may reveal certain archaeological features or sites (earthworks, crop marks, soil marks) that for many reasons may not be appreciated at ground level. Online orthostatic photographs of the site were examined (Ordnance Survey Ireland 1995, 2000 & 2005; Google/Bing Maps 2018, see Figure 4).

Two ring-ditches, RMP no. ME049-A003001 & ME049-A003002, are visible on the OSi 1995 photograph.

A cluster of three ring-ditches, RMP no. ME049A004001, ME049A004002 & ME049A004003 are visible on Google Earth 2018 in the field immediately to the east of the southern land-block.

Aerial Photograph	Date	Description
OSi	1995	Black and white photograph. A relatively poor resolution compared to modern photographic resources but two ring-ditches, RMP no. ME049-A003001 & ME049-A003002, are visible
Google Earth	2018	Two ring-ditches, RMP no. ME049-A003001 & ME049-A003002 are not visible in photo but three more ring-ditches are evident in field to the east

Table 4: Aerial Photographs

4.6 Architectural Heritage

The National Inventory of Architectural Heritage (NIAH) was established on a statutory basis under the provisions of the Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999. Its purpose is to identify, record, and evaluate the post-1700 architectural heritage of Ireland, uniformly and consistently as an aid in the protection and conservation of the built heritage. It is intended to provide a basis for recommendations of the Minister of Culture, Heritage and the Gaeltacht (DCHG) to Local Authorities for the inclusion of particular structures in Records of Protected Structures (RPS).

Local Authorities have a statutory responsibility to safeguard architectural heritage in accordance with Part IV of the Planning and Development Act 2000. Under S.51 (1), a Council must compile a Record of Protected Structures (RPS), which lists all structures which are of special *architectural, historical, archaeological, artistic, cultural, scientific, social* or *technical* interest. The protection, unless otherwise stated, includes the exterior and interior of the structure, lands lying within its curtilage (boundary), other structures and their interiors within the curtilage, plus all fixtures and fittings which form part of the interior or exterior of any of these structures. Buildings can be added to, or deleted from the RPS at any time, though generally this occurs when the development plan is being reviewed.

The closest Protected Structures are the Little Church of the Assumption (RPS no. ME049-103) and adjacent farmhouse (RPS no. ME049-102) and they lie c. 350m to the south-west.

RPS No.	Address	Description	ACA
ME049-102	Newtownmoyaghy, environs of Kilcock	A 2 storey, 4 bay farmhouse with three stacks. There is an outbuilding to site	n/a
ME049-103	Newtownmoyaghy, environs of Kilcock	Detached single-cell church, built c.1820, with four-bay north elevation, blank elevation to south and single-bay apse to east. Single-bay porch to north elevation. Pitched slate roof with limestone copings.	n/a

Table 5: Record of Protected Structures in vicinity of site

There are no Protected Structures located in or adjacent to the site. There are no entries from the National Inventory of Architectural Heritage (NIAH) on or in the immediate vicinity of the site.

4.7 Site visit

The overall site comprises 24.77 ha and is composed of two land-blocks zoned for residential development with other areas for community and green space in the townland of Newtownmoyaghy,

Co. Meath on the north-eastern outskirts of the town of Kilcock (Figure 1). The site visit and walk-over survey took place 22nd February 2019 in dry and sunny conditions. The northern residential block comprises a large pasture field bounded by mature hedgerows with portions of two fields to the east. The site boundary is composed of the rear gardens of neighbouring houses that front onto a local road in the north-western corner. The northern land-block overlooks a road and residential development under construction and beyond that the Rye Water River to the south and south-east. A small portion in the south of the large field has been subject to construction traffic and the storing of spoil from the adjacent construction works. The northern land-block is apparently otherwise untouched by construction works but thick grass growth obscured any identification of possible archaeological features on the ground.

The southern block comprises a large, relatively level, field and a second sloping field with an intervening mature hedgerow that lies to the east of the road and residential development. Aerial photographs (Google Earth 2018) have indicated that the southern land-block has been subject to construction traffic in the recent past, apparently associated with construction works for a flood relief scheme, part of which lies between the two subject land-blocks. During the site visit and walk-over survey no evidence was identified of the two ring-ditches; RMP no. ME049-A003001 & ME049-A003002; located in the southern land-block. The level field of the southern land-block may have been recently ploughed as there are no significant wheel ruts and thin but even grass growth while the sloping southern field of the southern block is overgrown with tall grass and abundant evidence along its margins of construction traffic and debris.

Both the northern and southern land-blocks contain overhead power-lines and recently disturbed ground. These factors will reduce the available land for any potential geophysical survey.

No further archaeological material or features were identified during the walk-over survey.

4.8. Geophysical survey, Detection Licence 10R138

Geophysical survey was conducted across 9 fields at the site of a proposed mixed use development in Branganstown and Newtownmoyaghy townlands, to the E of Kilcock, in Counties Kildare & Meath (Figure 5). The investigation was undertaken on behalf of McGarrell Reilly Homes, and follows a request for further information in connection with proposed development at the site. This survey was conducted under license to the Department of Environment, Heritage, & Local Government (Detection License 10R138).

Geophysical investigation at the site has identified the remains of 1 suspected enclosure. This is located in the south-western portion of the proposed development (Field 7, Area K), and anomalies indicative of burnt/fired remains and pit type features have also been recorded. Further responses have been highlighted from survey within the site boundary, a number of which may be of potential interest. The majority, however, demonstrate characteristics more typically associated with natural variation in the

underlying soils and geology, and responses from modern ferrous debris. For the purposes of clarification a number of these anomalies may require further investigation by archaeological testing or monitoring prior to the proposed development of the site. Remains of several disused boundaries and former cultivation have also been recorded.

4.9 Test-excavation, Licence no. 10E0397

Test trenching took place between 11th and 14th October 2010 using a mechanical excavator equipped with a flat, toothless bucket, under strict archaeological supervision (Figure 6). Testing was carried out by David Bayley of IAC Ltd under licence 10E0397 (Bayley 2010). A total of 49 trenches were excavated within the area of proposed development, including the residential area to the south-west of the link road, the link road itself and adjacent areas for the flood relief scheme. These targeted potential archaeological anomalies that were identified during geophysical survey of the entire area. No features of archaeological significance were identified within the footprint of the distribution road. The testing programme identified two previously unknown burnt spreads in the southern part of the development area. These will not be impacted upon by the stripping of the distribution road. Nothing of archaeological significance was identified in any of the other test trenches. C3 and C4 appeared to represent the ploughed out remains of burnt mound sites (also commonly referred to as fulachta fiadh) which are one of the most common field monuments found in the Irish landscape. Burnt mound sites are typically located in areas where there is a readily available water source, often in proximity to a river or stream or in places with a high water table. In the field burnt mounds may be identified as charcoal-rich mounds or spreads of heat shattered stones, however, in many cases the sites have been disturbed by later agricultural activity and are no longer visible on the field surface. Nevertheless even disturbed spreads of burnt mound material often preserves the underlying associated features, such as troughs, pits and gullies, intact. The remaining anomalies highlighted in the geophysical survey as being of archaeological potential appear to have derived from natural sources, as no archaeological remains were identified.

4.10 Archaeological Monitoring, Licence no. 10E0397ext.

Archaeological monitoring, under licence no. 10E397 ext., commenced on 12th December 2013 and continued for 11 days into January 2014 under varying weather conditions in the footprint of the link road (Walsh 2014). A mechanical excavator with a toothless grading bucket was used to strip the topsoil down to the level of the natural subsoil. Topsoil consisted of brown loam and measured on average c. 0.2–0.3m in depth. Natural sub-soils consisted of a dark- orangey brown clay with varying amounts of small angular stones. In places there were patches of rounded stones and gravels. This varied to a greyish mid-brown clay over a yellowish grey compact silty clay with patches of rounded stones. The

remains of post medieval field boundaries and drains (as identified during testing) were also identified during monitoring. No features or deposits of archaeological significance were identified during the programme of archaeological monitoring.

4.11 Archaeological Monitoring, Unlicensed

The groundworks to facilitate road construction for the link road were undertaken in March 2016 (O'Connell 2016). The northern area of the link road was a green-field site under grazing, topsoil was removed by a mechanical excavator with a ditching bucket under archaeological supervision. Topsoil was 20-30cm deep overlying a brown-orange sub-soil. A number of plough furrows were evident running north-south through the site; no archaeological finds or features were noted during the monitoring.

4.12 Test Excavation, Licence no. 19E0547

4.12.1 Methodology

It was proposed to excavate 20 trenches (approx. 2805 linear metres) by mechanical excavator under archaeological supervision in the footprint of the northern and southern residential blocks. A 16-ton tracked excavator with a 2.4m grading bucket was used to excavate the trenches. The trenches were targeted on assessing the archaeological potential of the general area, comprising the two residential blocks, with two trenches specifically located to assess the archaeological potential of two potential ring-ditches, RMP no.'s ME049-A003001 & ME049-A003002, identified as crop-marks in aerial photography. Excavation proceeded in level spits no greater than 0.2m to the top of the first archaeological horizon if present. Each revealed surface was inspected for archaeological remains and any features identified within the trenches were tested to determine their extent, composition and depth and to ascertain potential dating material.

4.12.2 Results

The subsoil of the southern block comprised mottled brown and grey clay with extensive areas of sand and gravel likely as a consequence of the proximity to the Rye Water River. Minor changes to the Method Statement trench layout were implemented due to the presence of construction spoil, some flooded areas and overhead powerlines (Figure 7). The subsoil of the northern block comprised mottled brown boulder clay of the Straffan soil association². Two areas of archaeological interest were identified during the test excavation, areas 1 & 2.

² <http://gis.teagasc.ie/soils/map.php> [accessed 03rd September 2019]

Area 1

Area 1 consists of two ring-ditches; RMP no. ME049A003001- and ME049A003002-; identified previously as crop-marks and now confirmed as archaeological features in Trenches 3 and 4 (Figure 8). The cut, F1, of the first ring-ditch, ME049A003001-, is circular in plan, has an external diameter of 15.75m north-west/south-east and contains a single fill, F2, comprising a friable brown sandy clay with frequent small stone inclusions. The cut varies from 1.05-2.70m in width, has a V-shaped profile and the test-slot in the southern arc of the cut revealed a depth of 0.80m. No break in the cut signifying an entrance was identified with c. 50% of the circuit uncovered. No evidence for internal features or potential cremation material was identified.

The second ring-ditch, ME049A003002-, lies 23.5m to the east. Its cut, F3, also circular in plan, was 12.3m east/west in external diameter and varies in width from 0.85-1.15m and the test slot in the southern arc revealed a depth of 0.30m. Its only fill, F4, comprised a friable brown sandy clay with frequent small stone inclusions. The northern arc of the cut was not clearly delineated in the test-trench due to the presence of the overlying plough-zone however no obvious break in the cut signifying an entrance was identified with c. 65% of the circuit uncovered and no evidence for internal features or potential cremation material was identified.

Ring-ditches are prehistoric funerary or ritual monuments; usually containing cremated material in the interior or in the ditch fills though examples absent of burial evidence are not unknown (Waddell 1998 161). They share similarities with a variety of barrow-types (Newman 1997 155-170), and some examples discovered under the topsoil with no above surface expression may even be degraded barrows.

Area 2

Area 2 consists of the remains of a plectrum shaped enclosure, F5, with an entrance gap of 2.95m in the south-east (Figure 9). It was identified in Trenches 10, 11 and 12 with five smaller test trenches and three extensions of Trenches 11 and 12 excavated to establish its orientation. The south-western, south-eastern and northern portions are relatively straight with sharp turns identified at the north-western, north-eastern and southern arcs. The width varies from 2.00-2.50m and two test-slots in the northern and south-eastern parts revealed depths of 0.95m and 1.20m respectively. The upper fill, F6, of the enclosure ditch is uniform throughout and comprises a friable brown silty clay with small and medium stone inclusions with a depth of 0.55m. The lower fill comprised a friable greyish brown silty clay with occasional snail shell and frequent small and medium sized stone inclusions. Two small fragments of animal bone were retrieved from the lower fill of the south-western test slot.

The remains of a smelting pit, F7, was identified c. 8.5m to the north of the enclosure. It measured 0.20m in diameter and contained a dark brown silty sand fill, F8, with charcoal and oxidized clay around its perimeter and several small pieces of slag.

An east-north-east/west-south-west orientated ditch, F9, extended off the northern portion of the enclosure (Figure 10). It was identified in Trenches 11 and 12 and extended for at least 116m. Its northern extent couldn't be established due to the proximity of overhead power-lines. The width varies from 1.0-1.8m and a test-slot in Trench 12 revealed a depth of 0.35m. Its fill, F10, comprises a friable brown sandy clay with small & medium sized stone inclusions.

The form and dimensions of the enclosure would suggest that it is from the Early Medieval period and such sites are commonly called ring-forts. The smelting pit, F7, and ditch, F9, are features commonly associated with such enclosures.

The table below provides the details of the test-trenches.

Trench	Dimensions L x B x D in metres	Orientation	Description
1	100 x 2.4 x 0.4-0.6	N/S	No archaeology present
2	120 x 2.4 x 0.4-0.6	N/S	No archaeology present
3	120 x 2.4 x 0.4-0.6	N/S	Area 1; Ring-ditch ME049A003001-, F1 cut, F2, fill, extended by 20 lin.m. to expose ring-ditch
4	95m x 2.4 x 0.35-0.55	NE/SW & N/S	Ring-ditch ME049A003002-, F3 cut, F4, fill, extended by 25 lin.m. to expose ring-ditch
5	130 x 2.4 x 0.3-0.5	NW/SE	No archaeology present, 10 m break for overhead powerline
6	180 x 2.4 x 0.25-0.5	NW/SE	No archaeology present, 10 m break for overhead power-line
7	330 x 2.4 x 0.4-0.75	WNW/ESE	No archaeology present, 2 x 10 m breaks for overhead power-lines
8	60 x 2.4 x 0.4-0.6	NE/SW	No archaeology present
9	100 x 2.4 x 0.4-0.6	NE/SW	No archaeology present
10	250 x 2.4 x 0.4-0.55	NE/SW	Enclosure, F5 cut, F6 fill, 4 extra trenches of 26 lin. m excavated between T10 & 11 to expose cut. Test slot in F5 excavated: 2.18 W x 0.95 D. Smelting pit F7 cut & F8 fill to the NE
11	250 x 2.4 x 0.4-0.6	NE/SW	Enclosure, F5 cut, F6 fill, 1 extra trench of 23 lin. m excavated between T11 & 12 to expose cut. Ditch cut F9 & fill F10 to the NW
12	250 x 2.4 x 0.35-0.6	NE/SW	Enclosure, F5 cut, F6 fill, 2 extra trenches of 39 lin. m excavated from T12 to expose cut. Test slot in F5 excavated: 2.55 W x 1.20 D. Ditch cut F9 & fill F10 to the NW, test slot in F9 excavated: 1.62 W x 0.35 D
13	150 x 2.4 x 0.4-0.6	NE/SW	No archaeology present
14	100 x 2.4 x 0.4-0.55	NE/SW	No archaeology present
15	100 x 2.4 x 0.35-0.6	NE/SW	No archaeology present
16	60 x 2.4 x 0.4-0.55	NE/SW	No archaeology present
17	60 x 2.4 x 0.35-0.6	N/S	No archaeology present
18	150 x 2.4 x 0.4-0.55	N/S	No archaeology present
19	60 x 2.4 x 0.4-0.55	N/S	No archaeology present
20	100 x 2.4 x 0.35-0.6	N/S	No archaeology present

Table 6: Test trench results

5. SIGNIFICANCE

This assessment of significance follows the criteria listed in Appendix 2 of the Guidelines for the Assessment of Archaeological Heritage Impact of National Road Schemes (Anon. 2006, 51).

Archaeological Area 1

Criteria	Description
Existing Status	The site is listed on the published Record of Monuments and Places; RMP no. ME049A003001- and ME049A003002-.
Condition/ Preservation	There is no visible surface expression of these monuments, which were initially identified by aerial photography. The main element of the monuments (i.e. the ring-ditch) is not visible and yielded no evidence for excellent preservation of ecofacts within the sectioned archaeological deposits or extensive survival of artefacts.
Documentation	Not applicable
Group Value	The ring-ditches are potentially the surviving remains of features that are part of a cemetery of ring-ditches/barrows.
Rarity	Ring-ditches are a common type of prehistoric monument with 188 other examples in the county ³ .
Visibility	The site is not visible from the ground.
Vulnerability	The monument is in a Greenfield setting; its location and potential significance is known to the landowner and to the statutory authorities. There is no immediate threat from its current land use.
Amenity Value	None. The site is privately owned and not visible at ground level.

Table 7: Significance Criteria Archaeological Area 1

Following this examination of the criteria, it is suggested that Archaeological Area 1 is currently of medium-high significance. Although ring-ditches are a commonly encountered monument and both an above surface expression or evidence for human remains are absent the presence nearby of several others (e.g. RMP no. ME049A004001/2/3) are suggestive of a cemetery. Future excavations at the site may provide additional information to enable a fuller assessment of its significance.

Archaeological Area 2

Criteria	Description
Existing Status	The site is not listed on the published Record of Monuments and Places and has no current statutory protection.
Condition/ Preservation	There is no visible surface expression of this monument. The main element of the monument (i.e. the enclosure ditch) is not visible and yielded no evidence for excellent preservation of ecofacts within the sectioned archaeological deposits or extensive survival of artefacts. However, the enclosure is potentially the surviving remains of an enclosed settlement.
Documentation	Not applicable

³ Search of Historic Environment Viewer website maintained by National Monuments Service 05/09/2019

Criteria	Description
Group Value	Not applicable
Rarity	Ringforts are the most common type of early medieval monument and the second most common field monument in the country.
Visibility	The site is not visible from the ground.
Vulnerability	The monument is in a Greenfield setting; its location and potential significance is known to the landowner and has been reported to the statutory authorities. There is no immediate threat from its current land use.
Amenity Value	None. The site is privately owned and not visible at ground level.

Table 8: Significance Criteria Archaeological Area 2

Archaeological Area 2 is considered of medium significance. No above surface expression is evident and these enclosures are a commonly encountered monument. Future excavations at the site may provide additional information to enable a fuller assessment of its significance.

6. CHARACTERISTICS OF THE PROPOSED DEVELOPMENT

The overall development site of 24.77 ha covers three different planning zoning objectives: Open Space, Residential and Community. For the Community zoning will be car parking and changing rooms to serve the GAA pitch which is just east of the application boundary. On the Open Space zoning will be developed two parks. The Open Space between the two residential blocks has undergone extensive landscaping works associated with a flood relief scheme involving the excavation of a large channel to accommodate potential flood waters.

Within the Residential zoning the proposed development comprises 575 No. residential dwellings within 2 No. area separated by a green belt with a combined area of 14.45 hectares of residential zoned land. The northern site (8.38 ha) will facilitate the development of 309 No. residential dwellings while the site to the south (6.07Ha) will provide for 266 No. residential units. The layout will provide for a mix of dwellings and will include 388 No. housing units in the form of detached, semi-detached and terraced houses, 121 No. duplex units and 66 No. 1 and 2-bedroom apartments. A net density of 39.8 units per hectare will be achieved across both sites.

6.1 Constraints on proposed development (see Figure 11)

There are significant constraints on the design and layout of the development proposal, relating to Planning Guidelines and the physical site topography. These are outlined below.

The setting of this proposed development site in Kilcock is a strategic location within the Metropolitan Area as identified in the Regional, Spatial and Economic Strategy. The site's location within the Development Area Boundary of Kilcock in the Meath County Development Plan and its residential zoning is considered that any restriction placed on these lands would have a detrimental effect on the proposed scheme.

The archaeology areas, as identified equate to a total of 0.41 Hectares (0.36Ha on the northern site and 0.05Ha on the southern site). Should a restriction of 20m be placed around these sites it would reduce the total site area available for development by a combined total of 1.86Ha (1.38Ha on the northern site and 0.48Ha on the southern site). This reduction would equate to a loss of 127 no. dwellings across both sites, comprising 59 no. houses and 22 no. duplexes on the northern site and 10 no. houses and 36 no. apartments on the southern site.

It is understood that Archaeological Area 1 is of Medium-High significance while Archaeological Area 2 is considered to be of Medium significance. The avoidance of any impacts on archaeological heritage and the preservation of archaeological sites and monuments in-situ are always the preferred option. However, in the case of the proposed development at Kilcock, it is considered that the avoidance of the archaeological sites would require a substantial revision to the layout including a significant reduction in density, substantial increase in Public Open Space and would be detrimental to the scheme in its current form.

The proposed design incorporates the irregular shape of the site which is bounded by the R124 along the southern boundary and the R125 along the north-western boundary; existing housing forms the western boundary with agricultural lands forming the northern and eastern boundaries. The topography of the lands varies with a general fall south-eastwards across the lands of approx. 7.5m (highest level of +70.00 and lowest level is +62.50m). Earth flood embankments are also located within the lands protecting flood risk zones.

The current design includes 0.6HA of Public open space and an additional 3HA is provided by the adjoining extensive parklands. The provision of strategically placed discrete open spaces within the residentially zoned land facilitates legibility of hierarchy and distinction of character on a qualitative basis. Retaining Archaeological Area 1 & 2 would include an increase of 1.86HA of Public Open Space within areas that would not allow efficient design and usability within this irregular shaped site. Connectivity and accessibility to the GAA grounds to the south of the site would be reduced and areas for residential development would be isolated and segregated in the northern part of the site.

The preservation of these archaeological sites and monuments in-situ would result in a redesign of the site to include approximately 440 units which would equate to 30.4 units/HA which would not be consistent with national policy objectives to increase densities on land zoned for residential use within the Dublin Metropolitan Area and would have a negative impact on achieving the sustainable development of these lands.

7. IDENTIFICATION OF LIKELY SIGNIFICANT IMPACTS

The current development proposal will involve considerable ground disturbance works across the subject site including excavations and other groundworks (e.g. provision of access roads and service trenches), movement of machines and storage of material in sensitive areas.

The potential impact is based on Appendix 4 of the Guidelines for the Assessment of Archaeological Heritage Impact of National Road Schemes (Anon. 2006, 54). It is concluded that the proposed development works will have a profound negative impact on the archaeological remains at the site.

8. RECOMMENDATIONS

The Framework and Principles for the Protection of the Archaeological Heritage (1999) outlines the State's general principles in relation to the management and protection of archaeological heritage. This document outlines that avoidance of developmental impacts on archaeological heritage and preservation in situ of archaeological sites and monuments are always the preferred option. However, in this case, there are significant constraints on the design and layout of the proposed scheme from relevant planning guidelines. Avoidance of the archaeological sites recorded in this assessment would require a very substantial revision of the layout of the development, which would be difficult to achieve given the nature and type of development proposed.

Recommendation 1

Should this development proceed, it is recommended that the archaeological sites identified in this assessment be subject to full archaeological excavation in advance of construction and carried out under licence to the Department of Culture, Heritage and the Gaeltacht in consultation with the National Museum of Ireland.

Recommendation 2

Following mitigation of any impacts to the identified archaeological site, all ground disturbance works across the remainder of the development site should be monitored by a suitably qualified archaeologist.

NOTE: All conclusions and recommendations expressed in this report are subject to the approval of The Department of Culture, Heritage and the Gaeltacht (DCHG) and the relevant local authorities. As the statutory body responsible for the protection of Ireland's archaeological and cultural heritage resource, the DCHG may issue alternative or additional recommendations.

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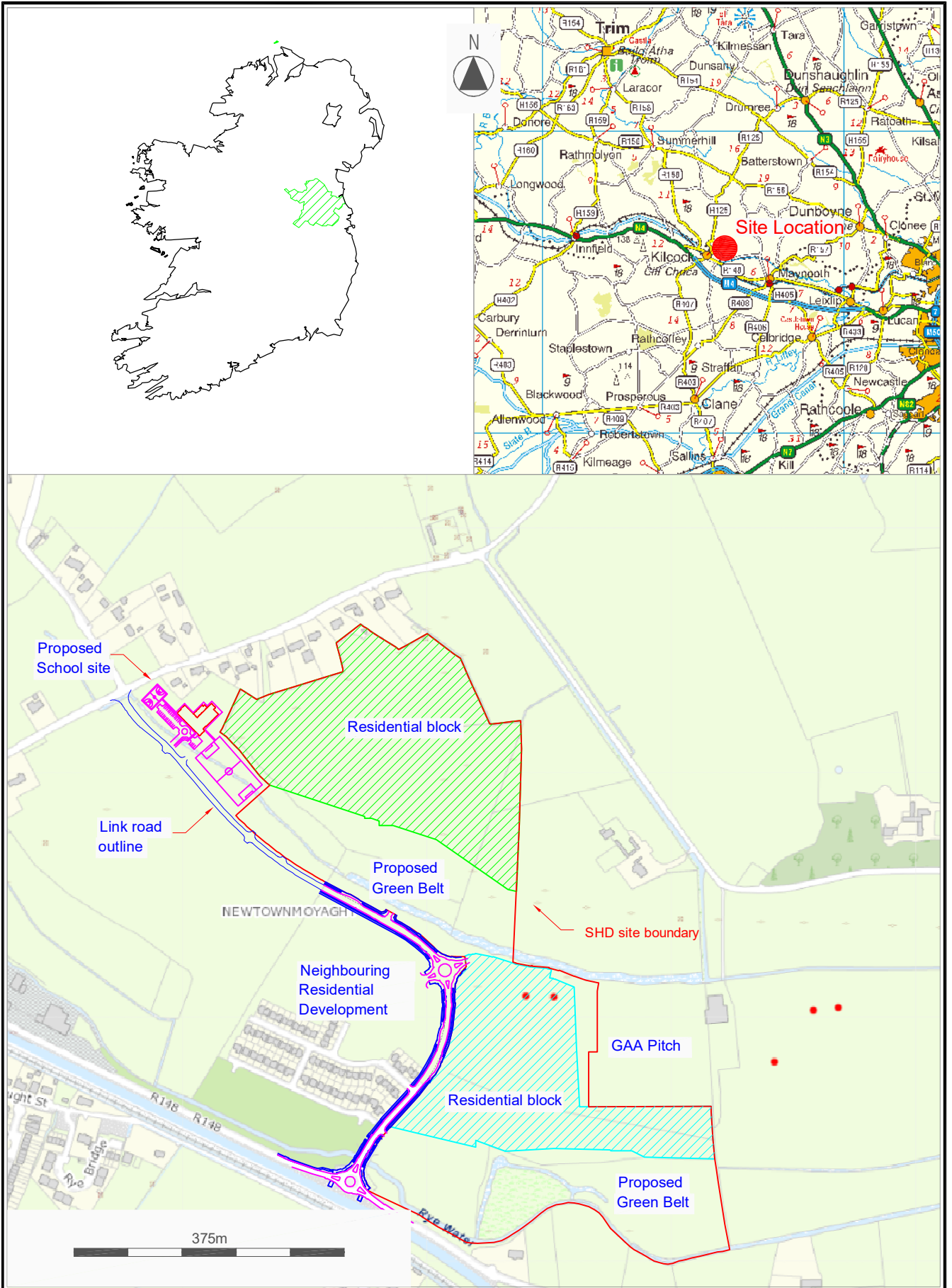
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Liam Coen

Liam Coen BA

18th December 2019

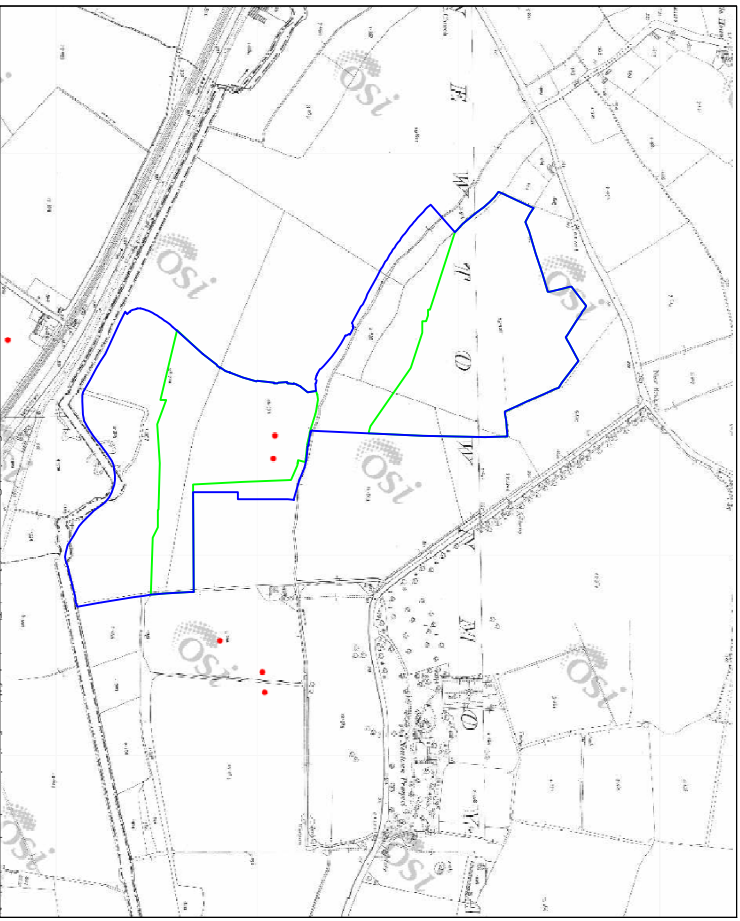
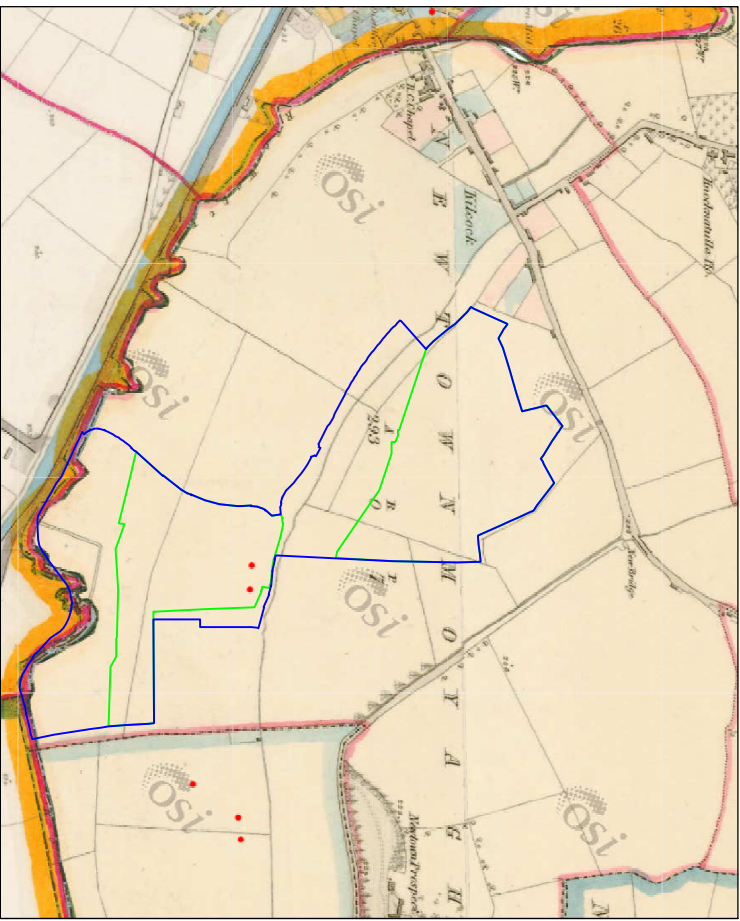


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 CLIENT: McGarrell Reilly Group Ltd

Scale: 1:7500 A4
 Date: November 2019
 Origin: www.archaeology.ie
 Ref: 2019_13_Ass_01

Figure 1: Site location



- (i) 1st Edition OS Map (1838)
- (r) 3rd Edition OS Map (1907-11)



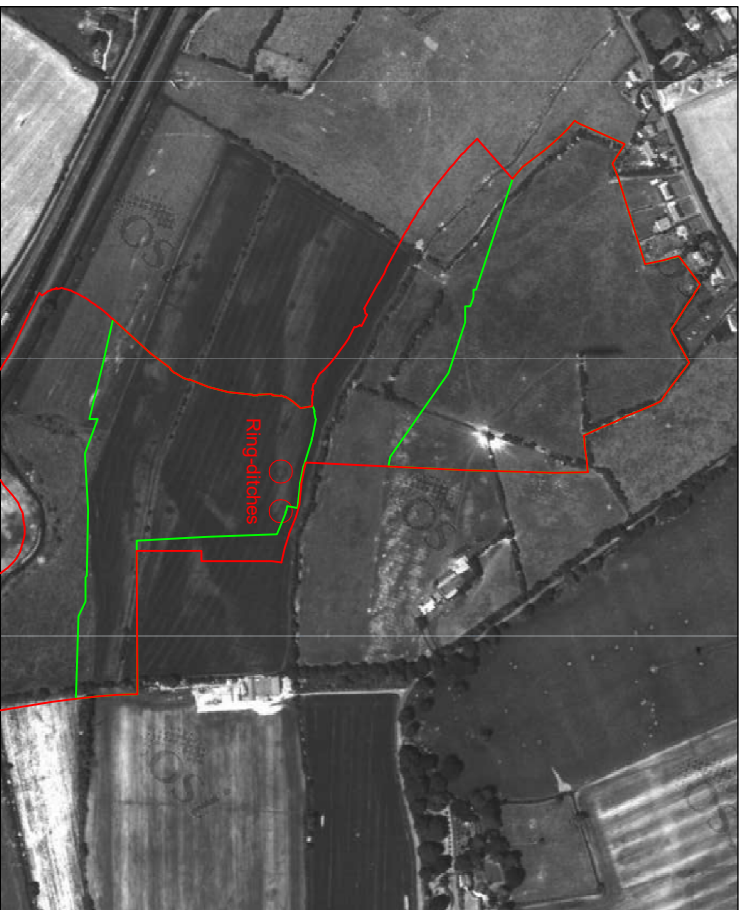
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Scale: Not to scale
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Figure 3: Extracts from early historical maps



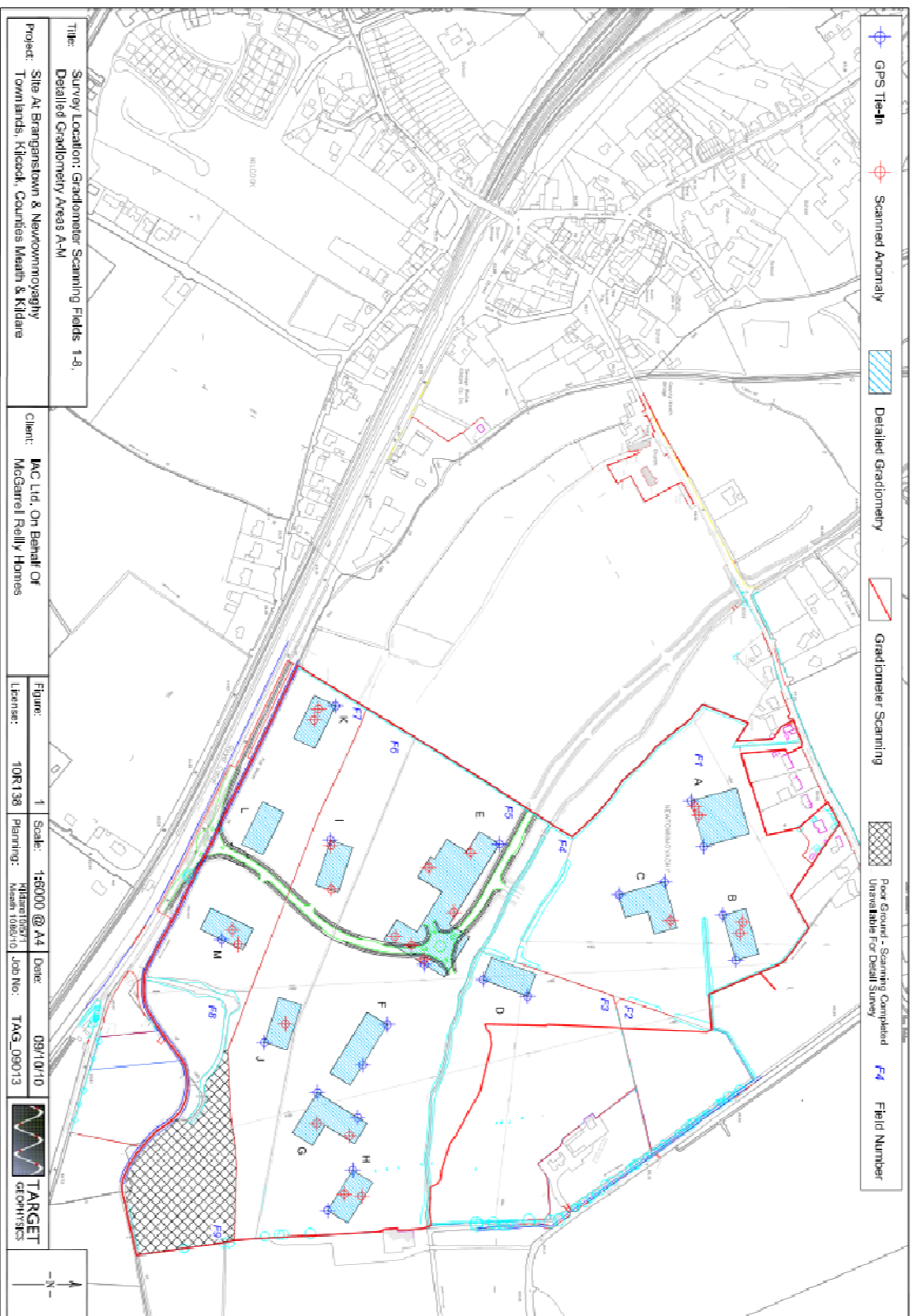
(i) 1995 Aerial Photograph OSI
 (r) 2018 Google Earth



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Figure 4: Aerial photographs

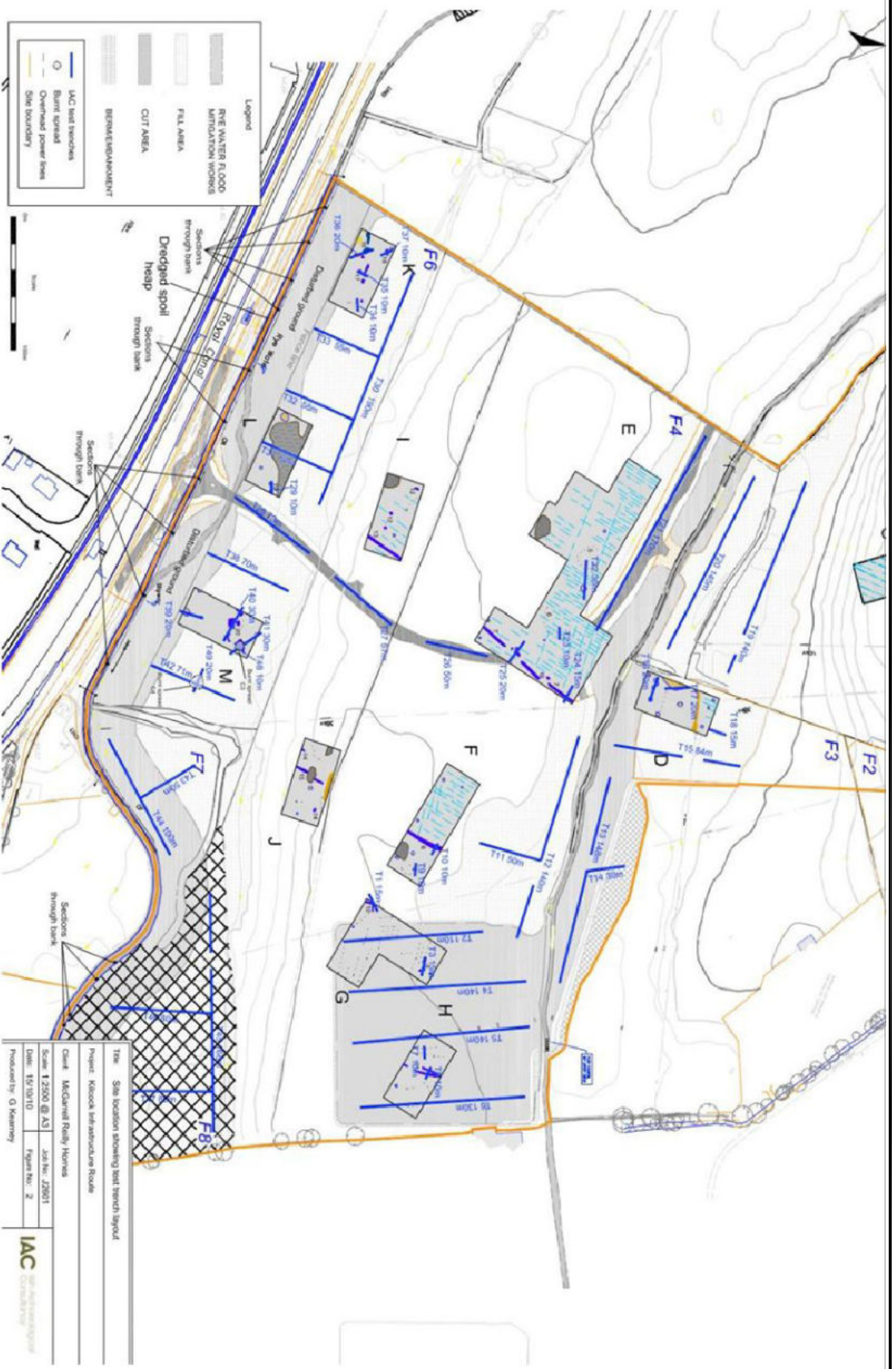


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Figure 5: Geophysical survey data, detection licence 10R138

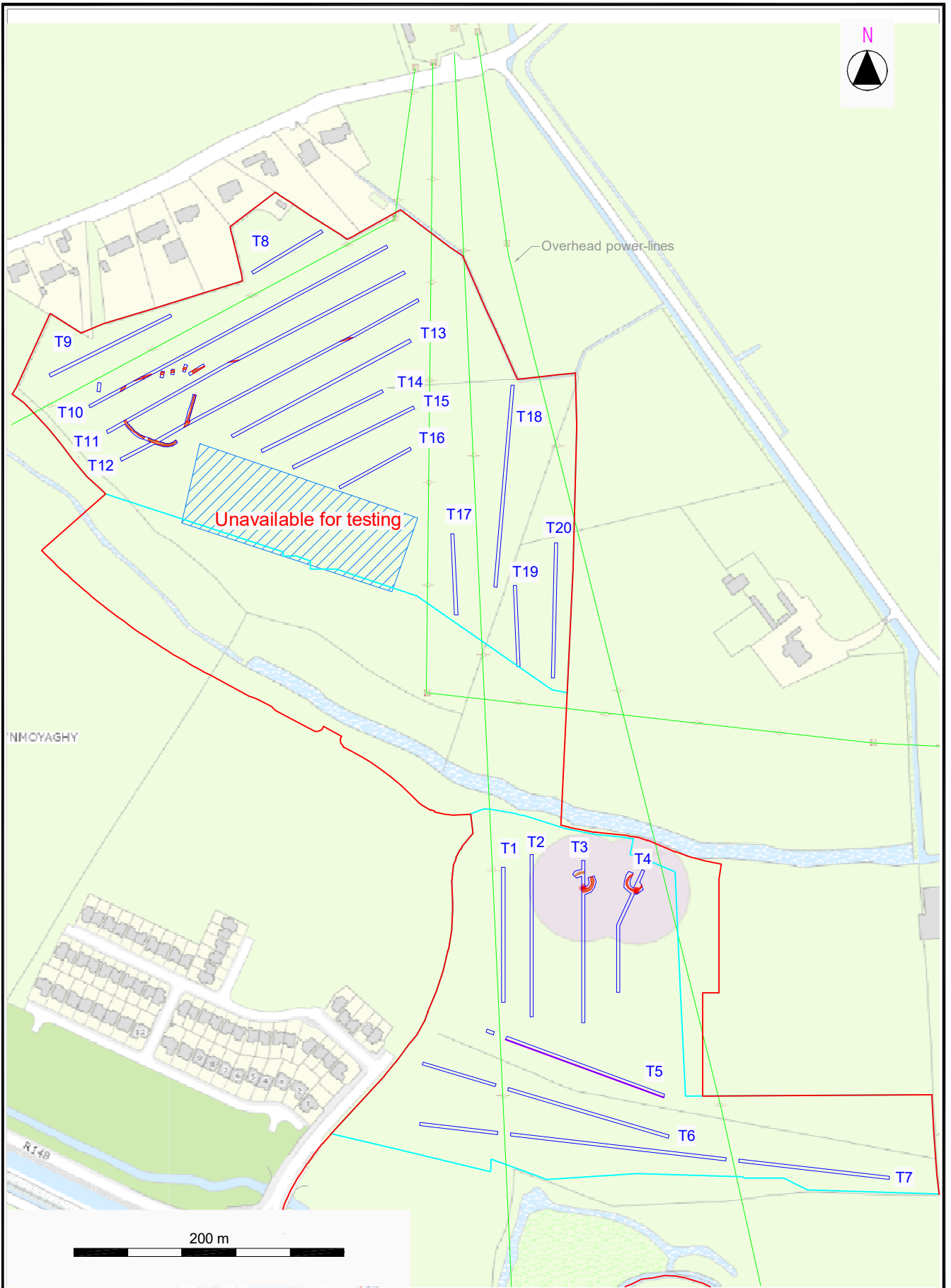


Archer
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Figure 6: Test trench layout; licence no. 10E0397



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Origin: Archer Heritage

Ref: 2019_13_Ass_07

Figure 7: Test trench layout, licence no. 19E0547

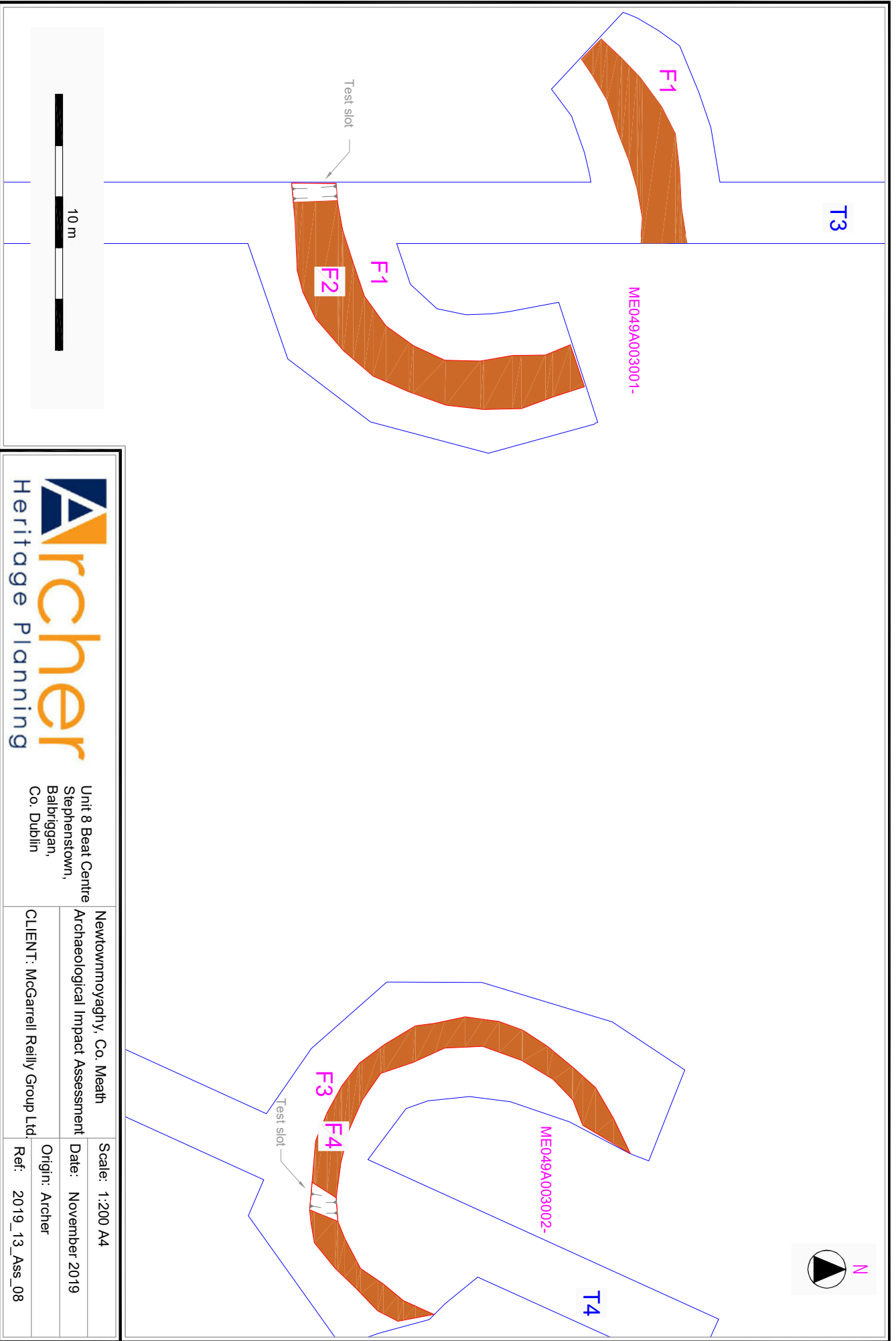


Figure 8: Details of ring-ditches

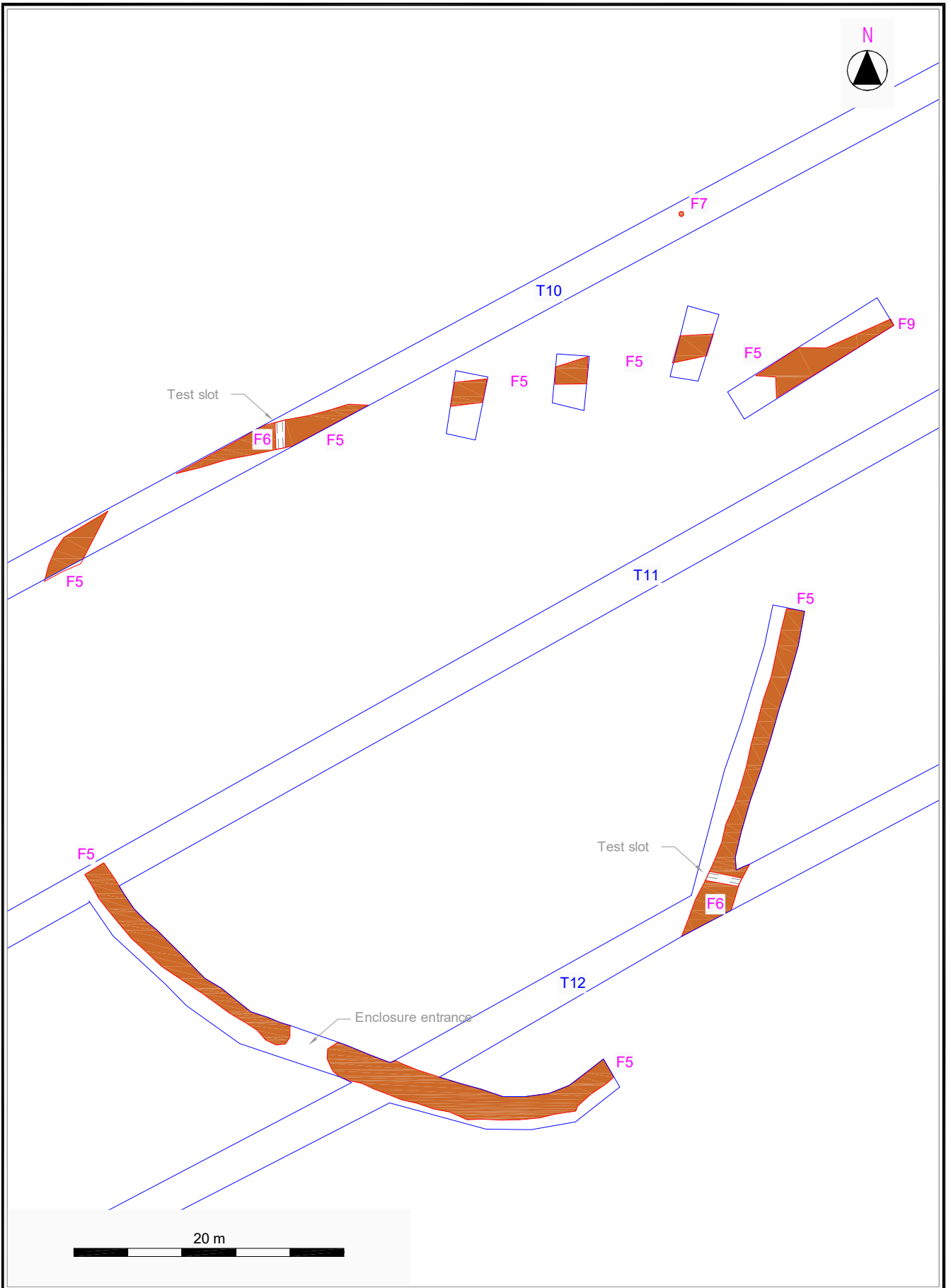
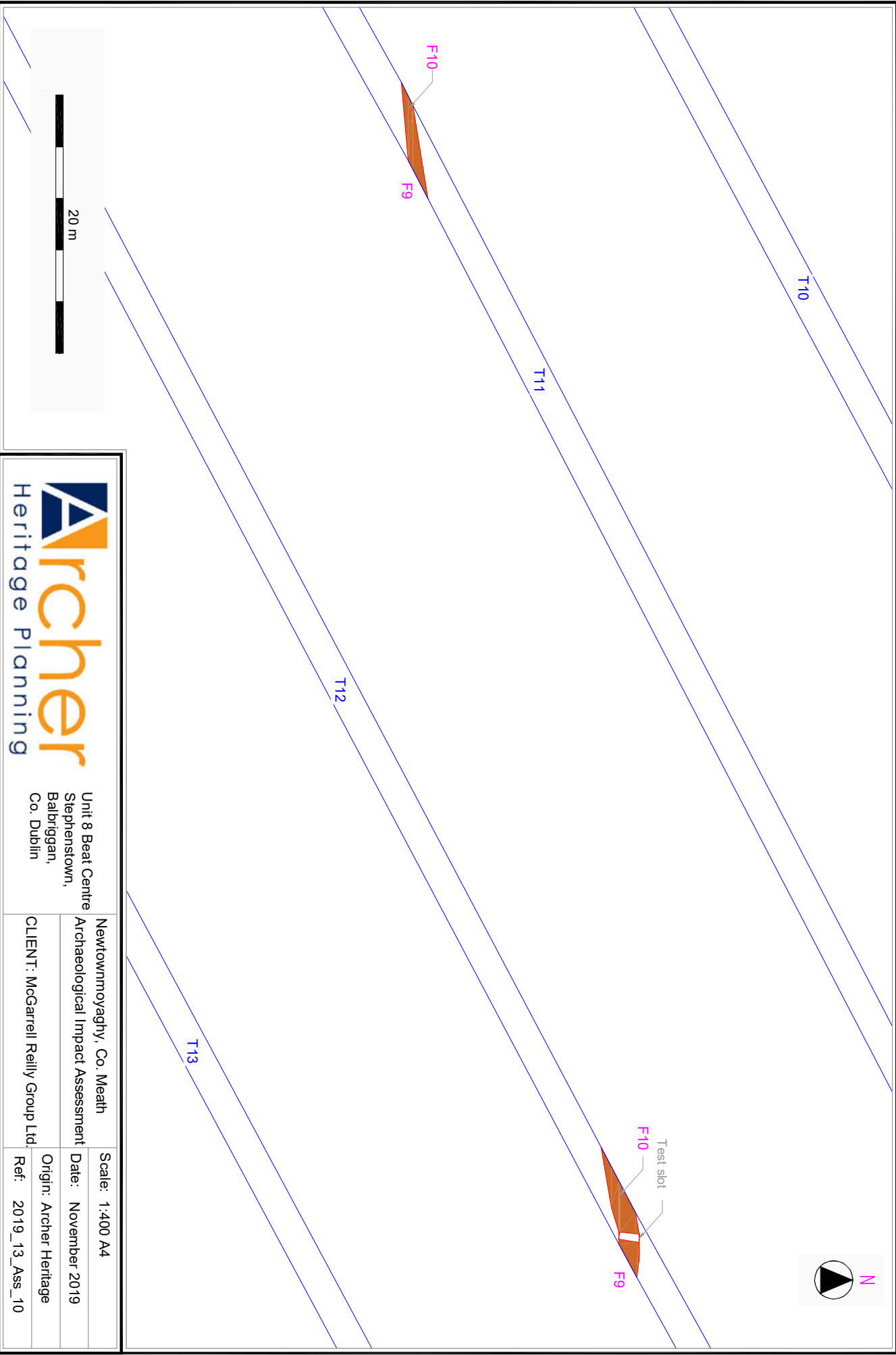


Figure 9: Details of enclosure



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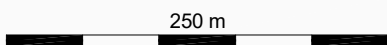
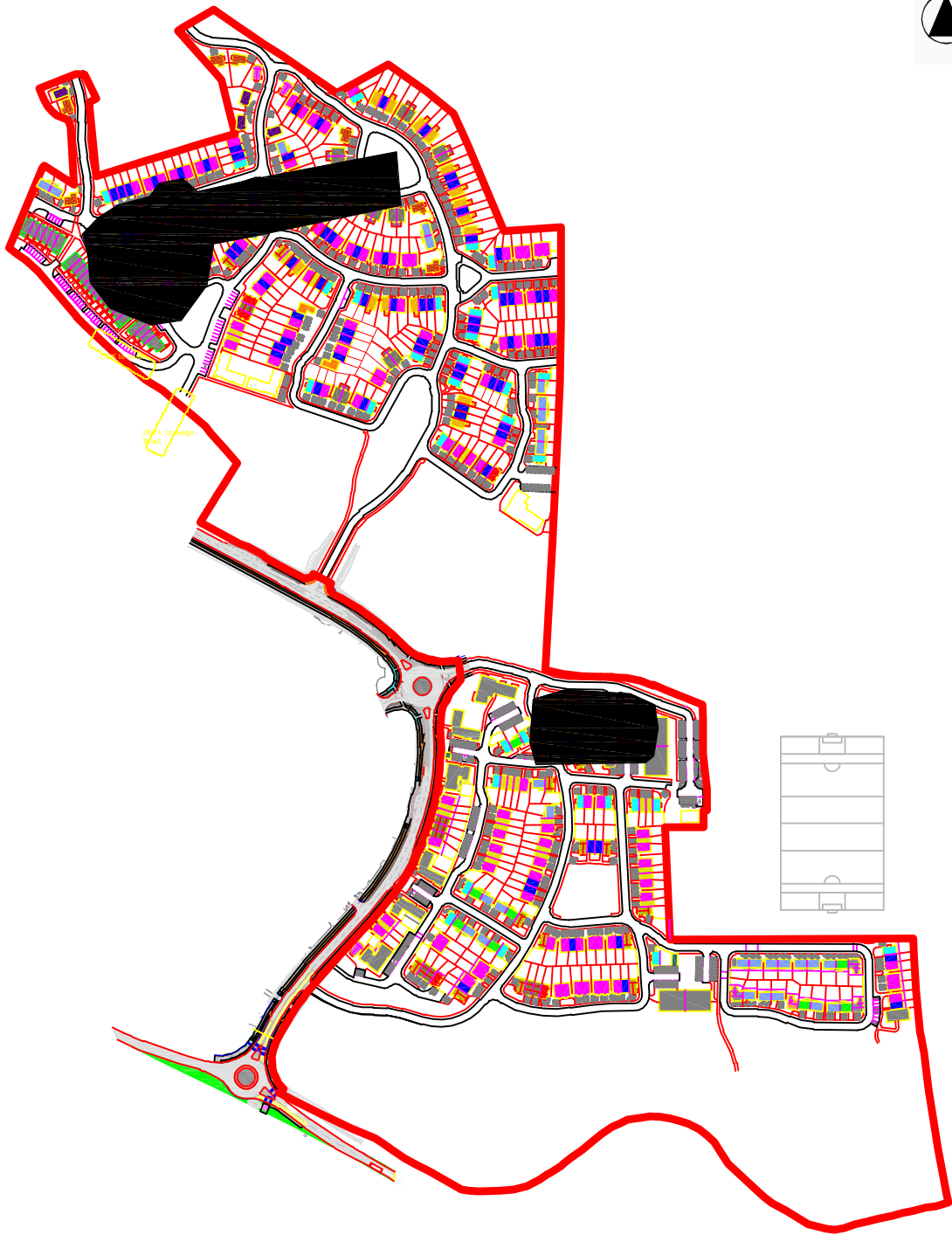
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Figure 10: Details of associated field boundary



Key:  Areas of archaeology with 20m exclusion zone



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Origin: Client/Archer

Ref: 2019_13_Ass_11

Figure 11: Proposed development layout with areas of archaeology superimposed



Plate 1: Western arc of ring-ditch F1 looking N



Plate 2: E-facing section in ring-ditch F1



Plate 3: Southern arc of ring-ditch F3 looking W



Plate 4: North-east facing section in ring-ditch F3



Plate 5: Trench 7 looking WNW



Plate 6: Trench 9 looking NE



Plate 7: Smelting pit, F7, in Trench 10



Plate 8: Southern arc of enclosure ditch F5 in Trench 12 extension looking W



Plate 9: Western facing section in enclosure ditch F5 in Trench 10



Plate 10: Possible entrance in enclosure ditch F5 in extension between Trench 11 & Trench 12 looking E



Plate 11: South facing section in enclosure ditch F5 in Trench 12



Plate 12: Internal edge of south-eastern arc of enclosure ditch F5 in Trench 12 extension looking S



Plate13: West facing slot in ditch F9 in Trench 12



Plate 14: Trench 16 looking SW



Plate15: Trench 17 looking S



Plate 16: Trench 20 looking N