



# University of Leicester

## Archaeological Services

An Archaeological Investigation for  
Cadeby Quarry Extension, on Land to  
South of Bosworth Road, Kirkby  
Mallory, Peckleton, Leicestershire  
NGR: SK 4337 0922 centre

Tim Higgins




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**An Archaeological Investigation for Cadeby Quarry Extension  
on land to the South Bosworth Road, Kirkby Mallory  
Peckleton, Leicestershire**

**NGR: SK 4337 0922**

**Tim Higgins (with contributions from Patrick Clay, Nicholas. J. Cooper,  
Rebecca Hearne, Malin Holst, Katie O'Keefe, and Rachel Small)**

**For: Lafarge Tarmac Ltd**

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## **An archaeological investigation for Cadeby Quarry Extension, on land to the South Bosworth Road, Kirkby Mallory Leicestershire NGR: SK 4337 0922 (X.A69.2011)**

***Tim Higgins (with contributions from Patrick Clay, Nicholas. J. Cooper, Rebecca Hearne, Malin Holst, Katie O’Keefe and Rachel Small)***

### **Summary**

*University of Leicester Archaeological Services (ULAS) carried out an archaeological excavation on land to the south of Bosworth Road, Kirkby Mallory, Peckleton, Leicestershire (SK 4377 0922). The work was undertaken as a condition of planning permission in advance of an extension to Cadeby Quarry.*

*Following geophysical and fieldwalking surveys and a trial trench evaluation the archaeological excavation revealed multi period activity comprising a Bronze Age ring ditch and cremation cemetery, Iron Age and Roman settlement with field systems, Anglo-Saxon settlement and Anglo Saxon burials. The Bronze Age cremation area was associated with pits containing Rusticated Beaker and Food Vessel sherds. The Iron Age Roman enclosures were associated with pits, one of which contained saddle quern fragments. The Roman activity to the south-east comprised enclosures, pits and a rectangular structure of beam slot construction.*

*The presence of Anglo-Saxon settlement and funerary activity is significant, comprising sunken featured buildings with 5th-6th century pottery, a pit containing loom weights and possible graves with metalwork including a spear, knife, and a bucket handle.*

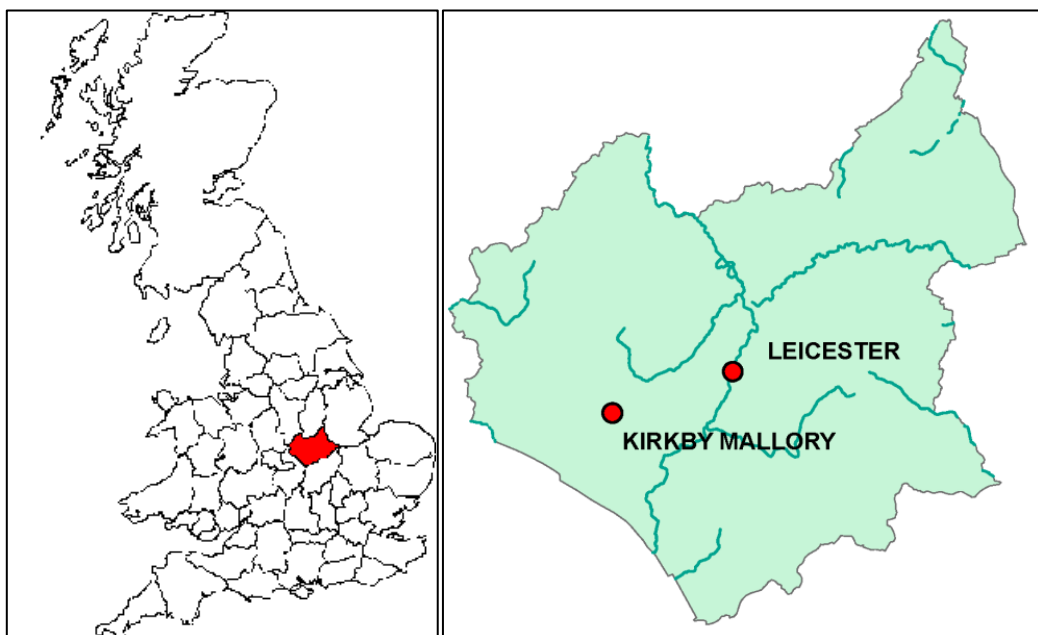


Figure 1 Site location within the UK and Leicestershire

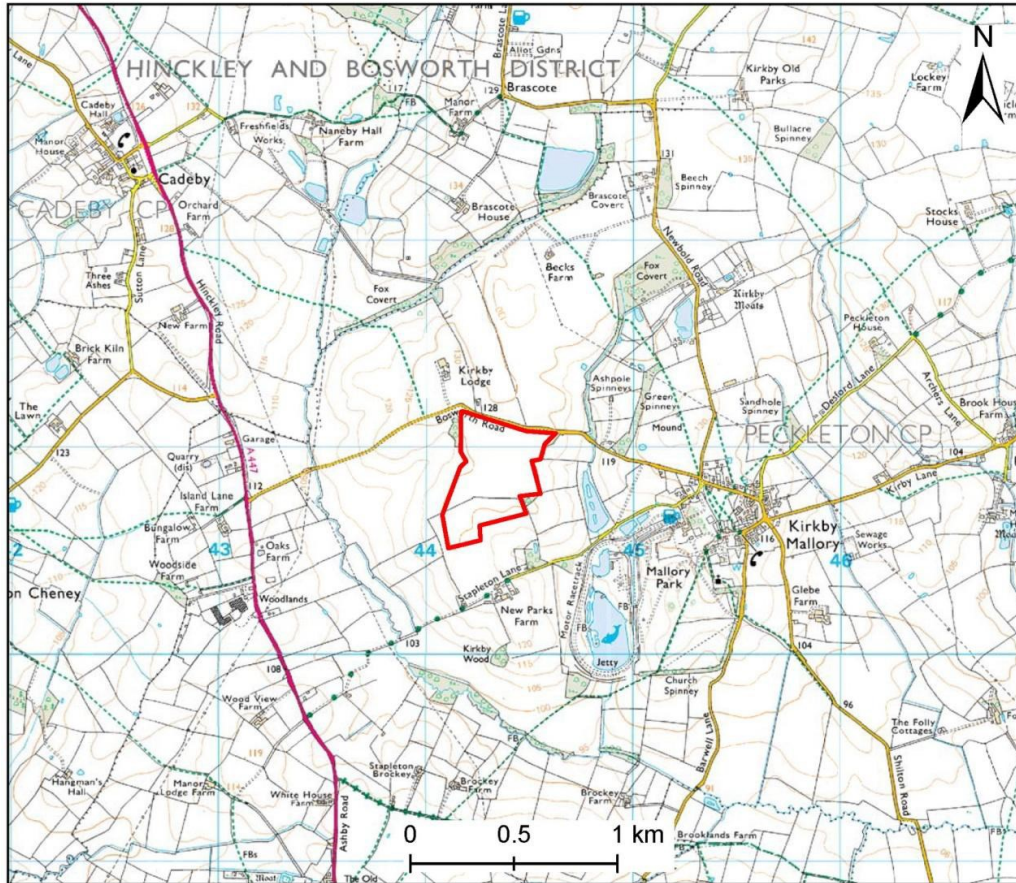


Figure 2 Site location

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## Introduction

This report presents the results of an archaeological excavation carried out by University of Leicester Archaeological Services (ULAS) on land for the extension of Cadeby Quarry, on land to the south of Bosworth Road, Kirkby Mallory, Peckleton, Leicestershire (NGR: SK 4337 0922 Figures 1- 4).

Archaeological work was carried out by ULAS on behalf of Tarmac Ltd (later Lafarge Tarmac) in advance of gravel extraction. This document covers the final stage of archaeological investigation that was carried out for the extension to Cadeby Quarry, Leicestershire. An Archaeological Desk-Based Assessment for the area requested by Leicestershire County Council Historic and Natural Environment Team, as archaeological advisors to the planning authority, had identified that the development site lies in an area rich in archaeological remains of prehistoric and Roman date (Speed 2009, 1). While a fieldwalking survey was largely negative (Coward 2010, 1), a subsequent geophysical survey located areas of archaeological potential including possible prehistoric enclosures (Austrums and Biggs 2010, 8). Archaeological evaluation of the site by trial trenching, revealed archaeological settlement evidence consisting of an enclosure of Iron Age (c. 700 BC – AD 43) or Roman (AD 43-410) date, within which was evidence for a building and a cremation

burial while close by a pit of early to mid-Anglo-Saxon date (*c.* AD 410-650) was located (Speed 2011).

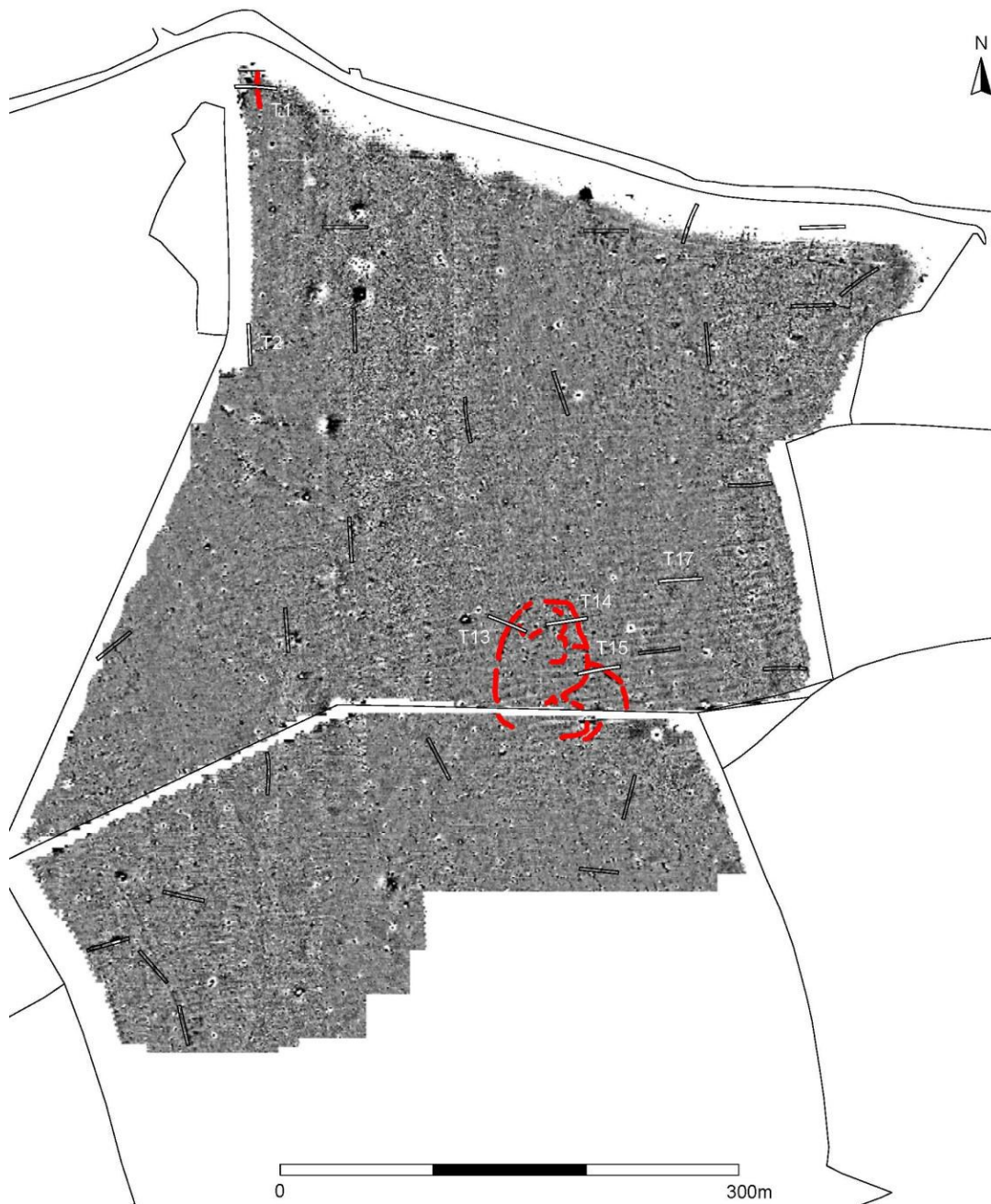


Figure 3 Geophysical survey results showing location of geophysical anomalies and location of trial trenches

In view of the results of the evaluative work two areas were identified as requiring investigation. The work began as an archaeological controlled machine strip of the eastern area in June 2011 over an area of *c.*2.1ha, followed by an excavation of the archaeological deposits in September 2011. Area 2 was examined in August 2014 and October 2015 and a few further dispersed archaeological deposits were located. All work followed the Written Scheme of Investigation (WSI; ULAS 2011) approved by Leicestershire County Council in their capacity as the minerals planning authority



## Site description, topography and geology

The development area lies within the parish of Peckleton and consists of two arable fields that lay on a broad flat summit of a hill covering an area of *c.*12.25 ha (Figure 2-4). The larger northernmost field lies immediately to the south of Bosworth Road, Kirkby Mallory at *c.*125m OD. The remaining area lies directly to the south and comprises the northern half of a field that lies to the north of New Park Farm on Stapleton Lane, and slopes down from north to south from *c.*127m OD to 118m OD.

The Ordnance Survey Geological Survey of Great Britain, Sheet 155 indicates that the underlying geology was likely to consist of glacial-fluvial Pleistocene sand and gravel, with Mercia Mudstone in the immediate surrounding fields.

## Historical Background (from Speed 2009)

The earliest reference to Kirkby Mallory is in the Domesday Book. It is recorded as Cherchebi within the hundred of Guthlaxton. It notes that Hugh of Grandmesnil owns 2 ½ plough shares of land, 2 villages and 2 freemen have 1 ½ ploughs. The value prior to the survey was 12d, which by the time of the survey it had decreased to 10s. It is also recorded that Serlo holds 5d of land from Hugh. He has land for ½ a plough, 1 smallholder with woodland ½ a league long and 3 furlongs wide. The value was 2s, and by the time of the survey had increased slightly to 3s.

Kirkby is a common village name in the Midlands and North of England meaning “village with a church”. Mallory refers to the name of the local landowner, and 12th century references include ‘Malory’ or ‘Mallorre’. The church of All Saints dates to the early 13th century. In the 14th century ownership of land went to William of Clown, Abbot at Leicester Abbey. Following the dissolution of the monasteries in the 1540s ownership of land in the village passed to Thomas Harvey, and is recorded as having 25 families living there. In the 17th century a Rectory was built. Land around the village was enclosed in 1771, totalling 780 acres. By 1801 Kirkby Mallory had a population of 243, with around 50 houses. The main occupation of the inhabitants of the time was possibly framework knitting. The population level changed little throughout the 19th century. Up until the 1920s land around the village was owned by the Kirkby Hall Estate, in this decade the land was split up and sold off to individuals. The village has a motor racing circuit (500m south-west of the site). Mallory Park was part of a 200 acre estate owned by the Noel family; in the 1940s it was a pony trotting track, while in the 1950s it became a motorcycle scrambling venue, and later a motor racing circuit.

The earliest surviving map for the area is a 1785 map of Mallory lordship. This shows the development area to have been divided into many more fields than there are in later Ordnance Survey maps. The development area was owned by the Mallory family, with the fields to the north of Bosworth Road owned by Lea and Claerson. The 1886 first edition Ordnance Survey map for the area shows the fields have been remodelled and reduced in number since 1785, and these are largely the same today.

## Archaeological Background

An Archaeological Desk-Based Assessment carried out in 2009 identified that there were no known sites recorded on the Historic Environment Record within the application area (Speed 2009, 18). However, the site lies within an area rich in archaeological remains, particularly of prehistoric and Roman date (*ibid*, 3). In March 2010 a fieldwalking survey was conducted but proved largely negative, although two worked lithics (a flake and scraper), were found in close together (Coward 2010, 3). In June 2010 a geophysical survey identified areas of archaeological potential including two sets of possible ditched enclosures, ditches, and pits (Austrums and Biggs 2010, 3). A subsequent evaluation by trial trenching revealed Iron Age or Roman enclosures, with evidence for a building and a cremation and a pit of early to mid-Anglo-Saxon date.

## Aims and Methodology

### *Project Aims*

The archaeological work was recognised as having the potential to contribute to the national and regional research aims including:

1. The development of Neolithic-Bronze Age ceremonial and funerary practices (Clay 2006, 74; Knight et al 2012, 6.3.6).
2. The transition from Iron Age to Roman settlement (Willis 2006, 131; Knight et al 2012, 6.4.5)
3. The transition from Roman to Anglo-Saxon settlement (Vince 2006, 163; Knight et al 2012, 6.6.7)
4. Early Anglo-Saxon funerary practices (Vince 2006, 169; Knight et al 2012, 6.6.2)

### *Methodology*

The main objectives of the archaeological work were:

- To identify the presence/absence of any earlier building phases or archaeological deposits.
- To establish the character, extent and date range for any archaeological deposits to be affected by the proposed ground works.
- To record any archaeological deposits to be affected by the ground works.
- To produce an archive and report of any results.

## Excavation Results

The overall area strip for gravel extraction covered *c.*12.25ha. The main area of investigation covered 5.4 ha. while a further 4 ha. was examined by a controlled watching brief to the north-west (Figure 4). The plough soil across the entire area was approximately *c.*0.3m deep and overlay mixed subsoil comprising orange brown sands and gravels, down to a further depth of *c.*0.3m. Further machining revealed the natural substratum, which consisted of orange brown sandy-clay, with patches of gravel.

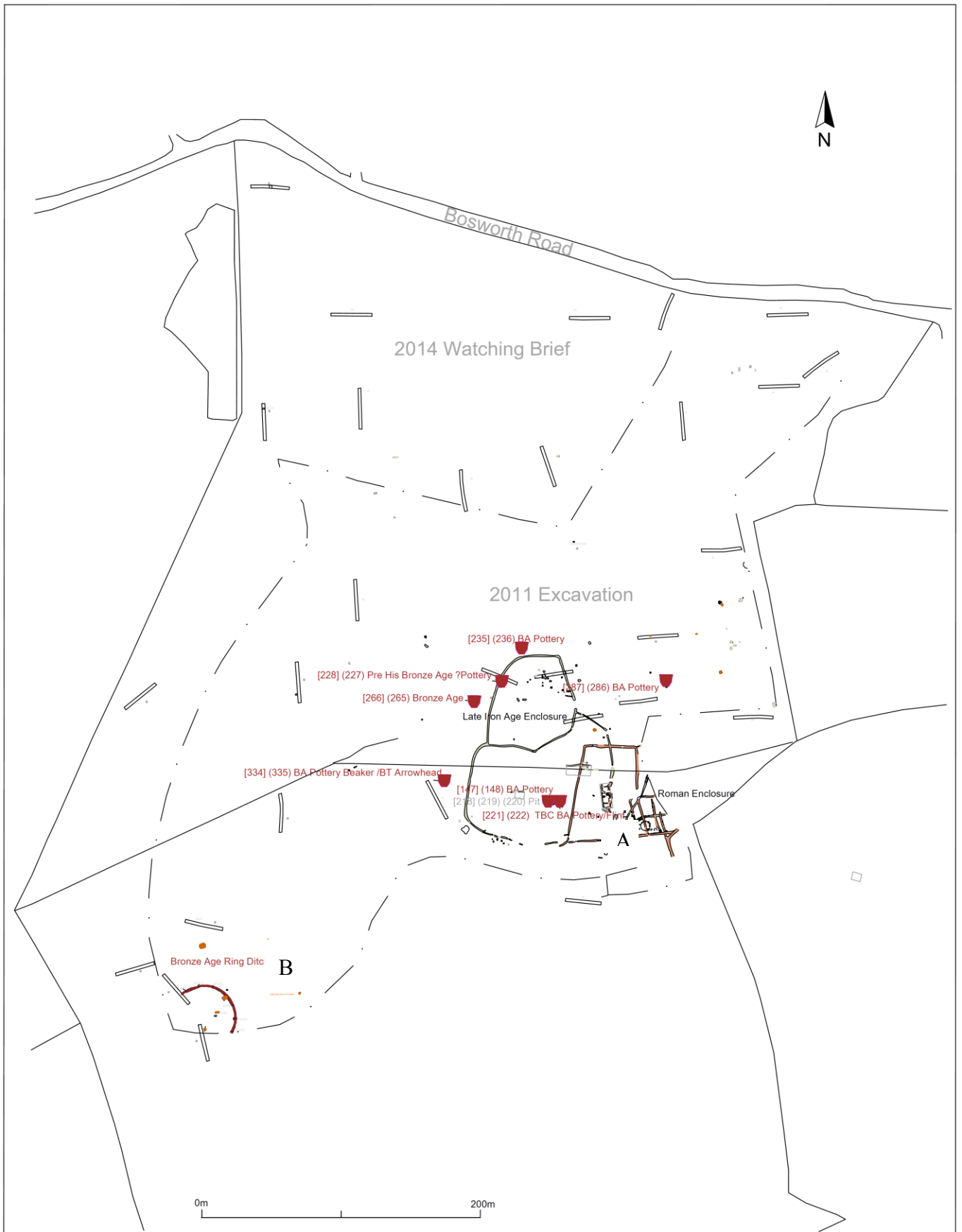


Figure 4 Plan of archaeological features identified during the excavations and location of previous evaluation trenches

During the controlled subsoil strip of 2011, an extensive spread of archaeological features had been uncovered. The location of these features could be broadly split into two areas: A and B (Figure 4). Area A contained archaeological features that were located towards the east and south-east and comprised Bronze Age cremation urns, Iron Age enclosures, Roman enclosures and Anglo-Saxon settlement evidence. The second location Area B contained a Bronze Age Ring ditch and further Anglo-Saxon settlement evidence, which were located 200m away from Area A in the south-west corner of the stripped area. An additional light scatter of dispersed archaeological features were present spread across the stripped zone located between the two areas but only a few of these features produced datable finds. A second area located in the north-west corner of the quarry was stripped in 2014 which again revealed a very light scatter of dispersed and mainly undated features.

All the archaeological features showed evidence of considerable horizontal truncation due to ploughing. This plough erosion had not only truncated the features but also potentially removed other more shallow features entirely.

### Bronze Age Ring Ditch

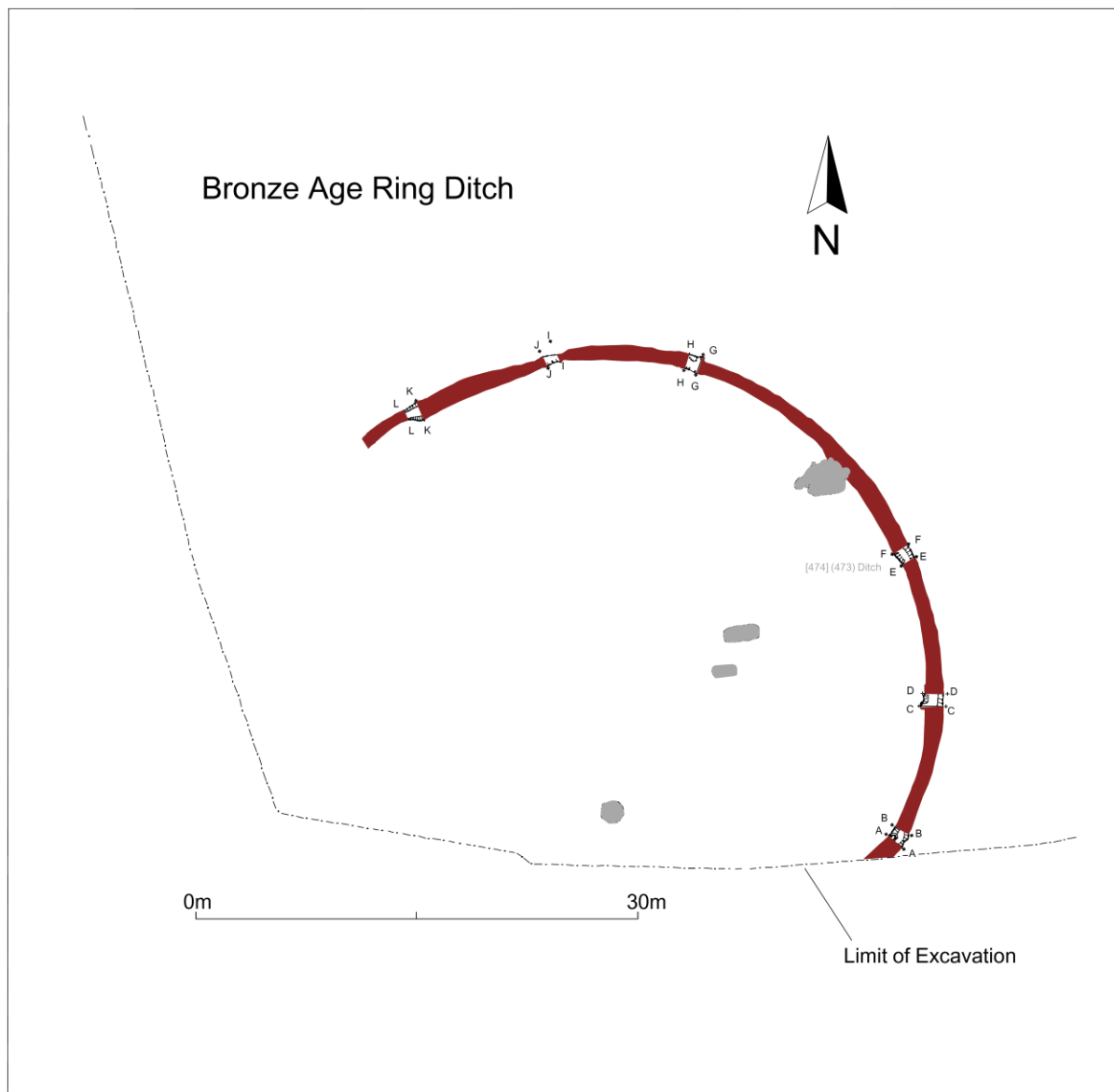


Figure 5 Bronze Age Ring Ditch Area B

*Ditch primary cut and fill [496] (495) [512] (503)*

*Ditch Sub phase recut [498] (497) [500] (499)*

*Ditch secondary cut and fill [474] (473) [476] (475)*

In the south-western corner of Area B a large truncated circular ring ditch [496] [512] was located (Figure 5). Part of ring ditch had been removed with plough erosion while another part extended beyond the limit of excavation. Sufficient of the ring ditch was exposed to extrapolate an enclosure that measured *c.*40 in diameter with the ditch itself measuring *c.*0.90m – 1.55m in width with a depth *c.*0.4m (Fig. 5). No additional Bronze Age features were identified within the enclosure area or in the immediate external area. Unfortunately no Bronze Age ceramic finds were found within the various fills of the ring ditch. The feature had suffered from significant degrees of plough erosion and the samples taken failed to provide sufficient material for environmental or scientific dating evidence.

Excavation of several sections across the ditch revealed that much of the profiles had been eroded away but sections revealed two possible phases of ditch with some possible further re-cuts suggesting maintenance and redefinition of the ditch.

The first phase ring ditch consisting adjoining curvilinear segments [496] and [512] delimited an irregular sub-circular area. Much of the profile of the original ditch survived the second phase ditch to indicate that it had fairly steep sloping internal side and an outer edge that had a more gradual slope to a broad flat base. The cut measured up to 1.55m wide and 0.40m deep and contained reddish brown and greyish sandy-silt, mixed with small rounded pebbles. This layer had apparently filled the ditch before it was recut, perhaps suggesting deliberate back filling or collapse of material from the sides of the ditch (495) and (503). Some of the sections displayed potential re-cuts [498] and [500]. Much of the profile of these potential re-cuts had been removed as result of the second major cutting episode. Both cuts contained a compacted reddish brown sandy-silt fill mixed with abundant small round pebbles, (497) and (499), suggesting perhaps more erosion.

At some stage, the original ditch circuit was redefined and replaced with a slightly shallower feature with entirely different profile, [474] and [477] (Figure 6 all sections). This re-cut appeared to be narrower than its predecessor, with a maximum depth of 0.40m and measured 0.70m to 0.80m wide. The profile had 45 degree sloping sides that gradually tapered to a rounded base. The fill of this re-cut comprised brown fine sandy-silt mixed with occasional charcoal flecks and abundant small pebbles. The ditch fills within this re-cut suggested the gradual infilling of the ditch over time.

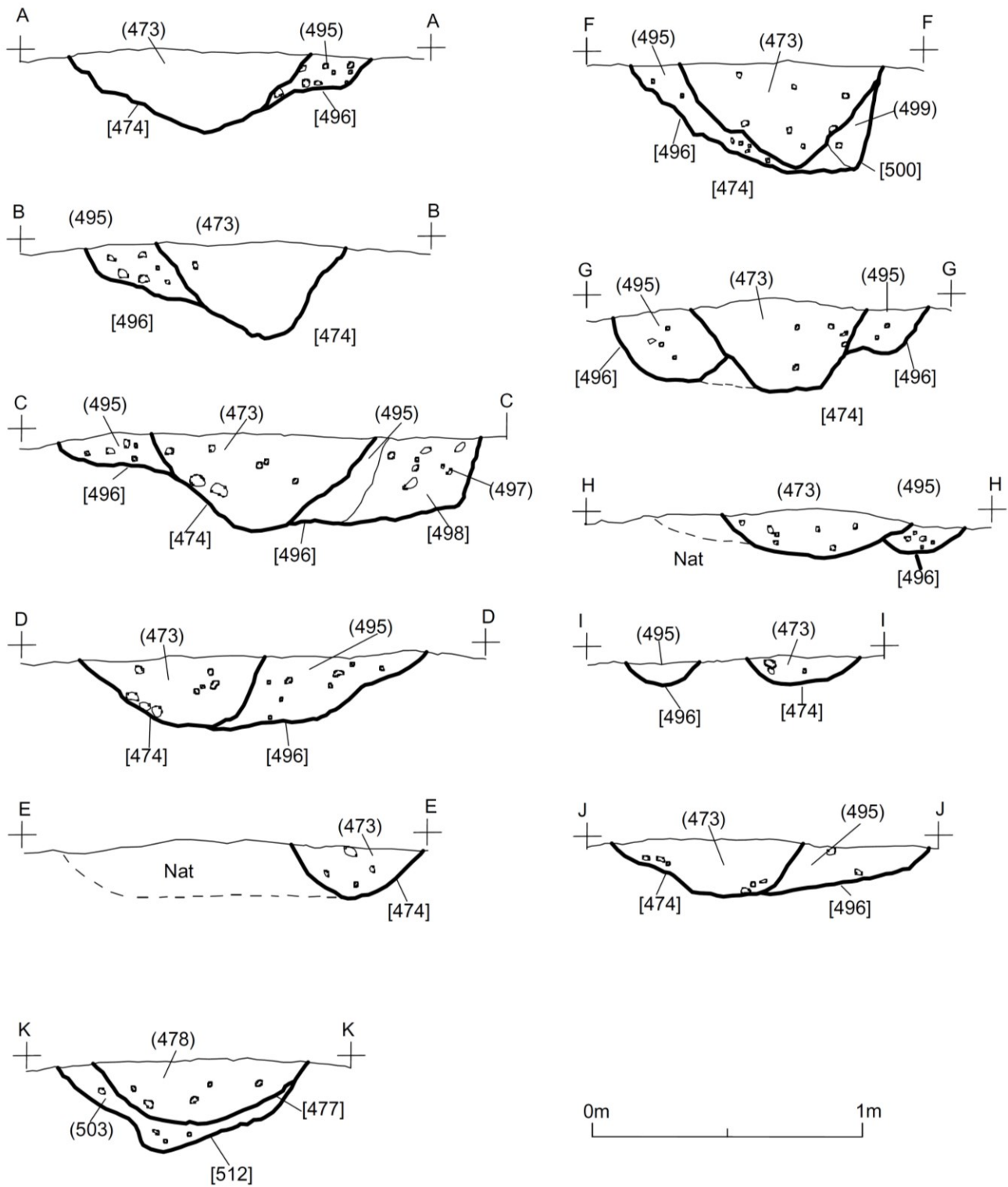


Figure 6 Bronze Age Ring Ditch Sections

## The Bronze Age Funerary deposits

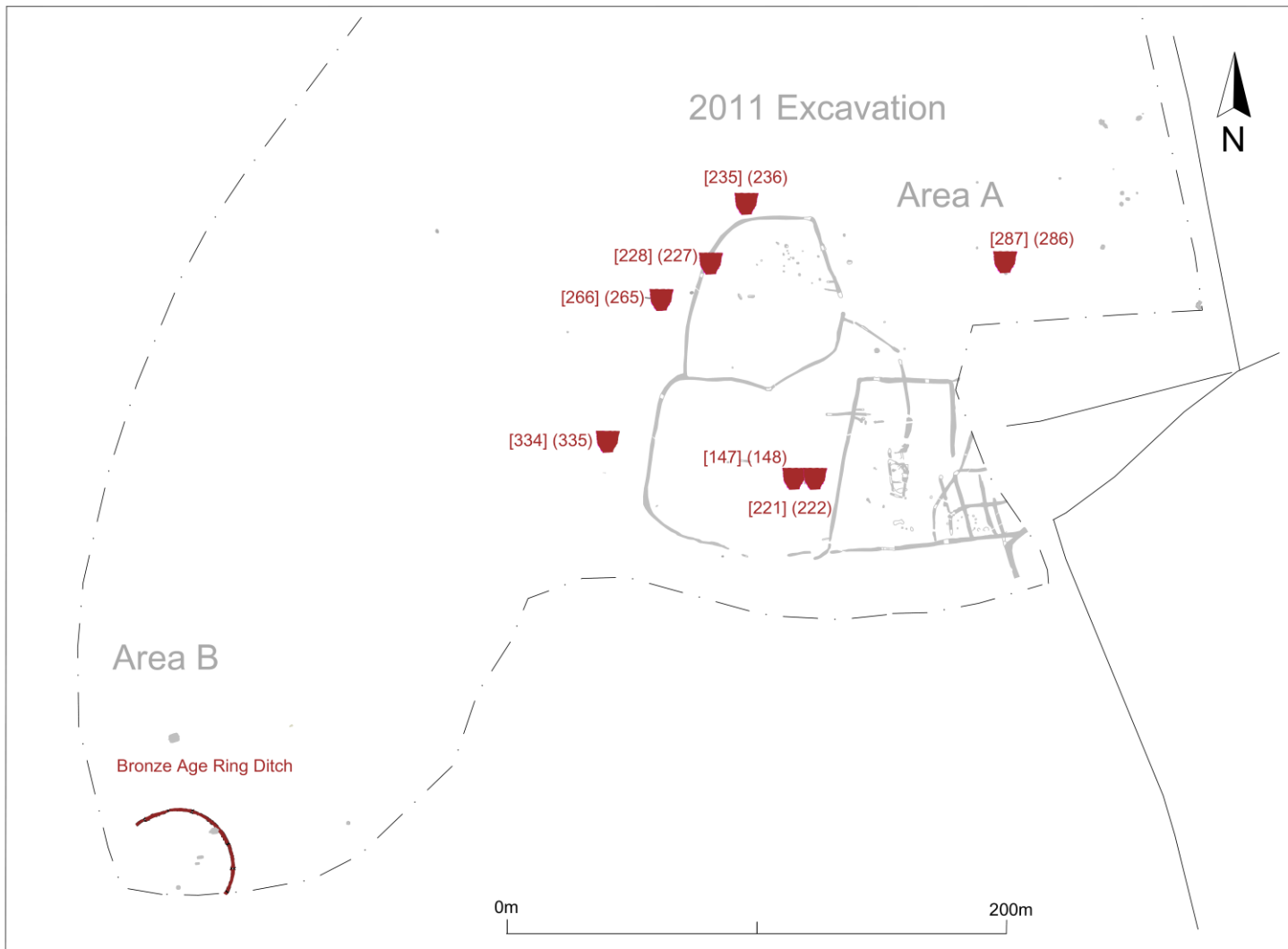


Figure 7 Location plan of Bronze Age features

*Cremation [147] (148); Funerary deposits [221], (222); [287] (286); [334] (335); [228] (227); [235] (236); [266], (265).*

Seven dispersed funerary deposits were located within Area A. Unfortunately only one of seven funerary deposits [235] (236) contained cremated bone. However, all of the deposits had been severely truncated and only the base of the urns had survived, which would suggest that post-depositional processes were to blame for the absence of the cremated remains. Some cremated bone present in later Iron Age features suggests the disturbance of the Bronze Age deposits.

### ***Cremation [147] (148)*** (Figure 8)

This pit feature [147] appears to represent the disturbed remains of a cremation burial that was perhaps contained within an urn that was either inverted or lying on its side. The feature was a circular pit with steep sides sloping into a flat base. The pit measured 0.80m long,

0.60m wide and 0.18m deep. It contained cremated bone, fire cracked pebbles, charcoal, and an ash deposit perhaps representing part of a funerary pyre deposit that was contained within the vessel. The dispersed cremated bone and funerary pyre deposit was found both overlying and below the pottery sherds that represented the remains of a beaker vessel. The vessel comprised an incomplete Rusticated Beaker with only parts of the rim, upper and lower neck and upper belly of vessel remaining. Both the lower part of body and base were missing which suggests that the vessel may have been inverted on at least placed on its side. The Rusticated Beaker is similar in proportions with long-neck and zoned decoration to another beaker found at Asfordby (Cooper 2012, 11-13, fig.11), which had an associated radiocarbon dating of 2210-2030. This agrees broadly with the date range of 2200-1900 BC given for similar long-necked beakers with zoned decoration (Needham 2005, 195).



Figure 8 Cremation with Beaker [147] (148)

***Funerary deposit [221], (222)*** (Figure 9)

This feature appears to be the remnants of a possible funerary pyre pit located immediately to the east of [147]. It was circular in plan, with steep sloping sides and a flat base and measured 0.60m in diameter and had a depth of 0.22m. It contained a number of fire cracked pebbles mixed with charcoal ashy material suggesting a funerary pyre deposit that had been directly placed into a pit. The pit contained flint that may be part of the funerary deposit. This feature also contained a small group of 14 fragmentary and heavily abraded sherds from a rusticated vessel, which given the proximity of [147], is probably the same beaker with broken, sherds from (148) having been disturbed and re-incorporated into (222) probably by ploughing spreading it in the direction of pyre pit [221] (222).





Figure 9 Funerary Pyre deposit [221], (222)

***Funerary deposit [287] (286)*** (Figure 10)

Although this feature was heavily truncated and disturbed like the all the other potential cremation burials it did contain a more complete pottery vessel. The feature comprised a sub-circular or oval shaped pit that had very steep or vertical sides breaking sharply into a flat base. This feature measured 0.65m long, 0.55m wide and 0.15m deep and was located *c.* 70m north-west of [147]. In addition to the substantially complete but highly fragmentary vessel were four sherds from two other vessels; one rusticated and one with linear toothed comb decoration, all appearing slightly abraded and perhaps residual in this context (See below p. 48 Fig 35). Mixed with the pottery were a number of fire cracked pebbles but with little charcoal or ash. The fire cracked pebbles are perhaps the remnants of a funerary pyre deposit or cremation.



Figure 10. Funerary deposit [287] (286)

***Funerary Deposit [334] (335)*** (Figure 11)

This deposit contained parts of two Beakers. The first is represented by a single flat base sherd (80mm diameter) in a fine sand-tempered fabric with a single horizontal line of toothed comb decoration, 20mm up the body. The second (eight sherds/36g) comprised three joining sherds from the concave profile of the vessel, decorated with four horizontal lines of toothed comb impressions, with two lines above at an oblique angle, perhaps part of a zone of lozenge decoration. The remaining five sherds belonged to a separate bevelled rim (100mm diameter) with a convex profile beneath but appearing to taper and straighten to become concave lower down.



Figure 11 Funerary Deposit [334], (335)

The heavily truncated pit was circular in plan with a mix of steep east and west sides and gradual sloping north and south sides. The base was flat and the feature measured 0.72m in diameter and was 0.11m deep. It was located c. 75m west-north-west of [147] and contained charcoal, ash and fire cracked pebbles that were either separate funerary pyre deposits that had been placed in the pit or were originally part of the contents within the two vessels and were later disturbed and re-deposited within the pit. The funerary deposit also contained a flint barbed and tanged arrowhead and flint knapping debris.

***Funerary Pyre deposit [228] (227) with possible Collared Urn*** (Figure 12)

This feature was an elongated oval shaped pit with gradually sloping sides and a flat base. The pit measured 1.05m long, 0.75m wide and 0.26m deep and like all the other features was heavily truncated. The pit contained a charcoal ashy deposit that may be part of funerary deposit and contained a single sherd from a possible Collared Urn. It was single thick-bodied and undecorated body sherd that formed a vessel with a girth of at least 200mm. It was not closely datable but possibly of Middle or Late Bronze Age date. This was either the remnants of Collared Urn burial that had been placed in the pit or was possibly residual.



Figure 12 Funerary Pyre deposit [228], (227)

***Cremation Burial [235] (236) with Collard Urn*** (Figure 13)

This pit appeared to represent another truncated cremation burial. The pit was oval with fairly steep sides and a flat base. The feature measured 0.52m long, 0.43m wide and 0.21m deep. The fill contained the sherds of a single Collard Urn vessel in a grog-tempered fabric with a short collar and a campanulate internal rim (Below p. 57; Figure 37).



Figure 13 Cremation Burial [235] (236) with Collard Urn

The vessel is paralleled most closely by an example from Coneygre Farm, Nottinghamshire, close to the River Trent (Allen *et al.* 1987, 199. fig.10.53). The vessel appeared to have been disturbed and had collapsed in antiquity then suffered some truncation. The base of the vessel was found at the bottom of the feature and the rim and body sherds were found over the base which would suggest perhaps that the urn was placed in an upright position. A deposit of cremated bone and charcoal was found overlying the base of the Collard Urn. The pottery was sealed under a mid grey brown sandy-silt mixed with occasional fire cracked pebbles that may be remnants of a funerary pyre deposit. Nearly all of the cremated bone (236) weighed less than 2grams, but had been thoroughly burned and was entirely calcined. The cremated bone from the burial consisted entirely of axial fragments and where identifiable included rib fragments (below p. 69).

***Cremation Burial [266], (265)*** (Figure 14)

A truncated elongated oval pit with very steep sides and flat base was located south-west of [228]. It measured 1.20m long, 0.70m wide and 0.21m deep and contained four joining sherds from the flat base of a vessel in a grog-tempered fabric. Another thin body sherd, possibly from the same vessel was recovered and the proportions suggest this is from a collared urn which may have been placed in an upright position. The potential burial contained no cremated bone and very little charcoal was present, but it did contain a few fire cracked pebbles that hint at perhaps the remnants of a funerary pyre deposit.



Figure 14 Cremation Burial [266], (265)

**Late Iron Age – Early Roman Transitional Settlement** (Figure 15)

***Late Iron Age North Enclosure*** (Figure 16)

*Ditch [198], (199) (200)*

*[06] (05)*

*[251] (252) (253)*

[14] (13)  
[173] (174) (175)  
[21], (20)

A large sub-rectangular enclosure with an easterly-orientated entrance-way, internal structures and associated features was located towards the centre of the extraction area in Area A. This enclosure appears to coincide with a potential enclosure identified during the geophysical survey (Figure 3; Austrums and Biggs 2010, 8). Immediately to the south of this a second enclosure boundary had been added as a possible extension and there were numerous small pits and other internal features within the north enclosure. The activity can be dated to the mid to late 1st century AD suggesting a Late Iron Age to Early Roman Transitional settlement.

A sub-rectangular shaped ditch was located towards the centre of the area. The ditch ran for a total length of 108m, with a 5.7m gap on the east corner, and enclosed an area of c. 3000m<sup>2</sup>. The ditch was c.1.45m wide, although it was much wider at the entrance (1.80m), and narrower along the western side (c.1.25). The depth of the ditch showed only slight variations of between 0.38m to 0.45m along its length. The differing depths appear to represent levels of truncation, and the natural ground level does not slope significantly in either direction.

The ditch was sampled by five sections – each between 1.00m and 1.50m in width - along the length of the ditch [06], [14], [21], at the corners, [198], [251], and at the entrance [173]. Its form did not alter along the course of the ditch, and it had a primary cut with steep 45 degree sloping sides and a broad flat base. The primary fills in the base (175), (199), (153) consisted of pale orange silty deposits which were likely to have been formed by wash from the natural sands and gravels. These primary silty deposits were present along the length of the ditch. The ditch was perhaps later re-cut with more gradual sloping sides throughout, and a roundish base. Overlying these were a series of secondary deposits, (174), (200) and (252), consisting of more generic grey-brown clay-silts, with low levels of organic residues and containing Late Iron Age pottery sherds.

Pottery or other material artefacts were only recovered from excavated sections at the entrance to the enclosure, [173], (174). The pottery sherds recovered from the ditch were in a Late Iron Age or ‘transitional’ ‘Belgic’-style fabrics of mid-1st century AD date.

### ***Internal features*** (Figure17)

*Stock control linear ditch*  
[274] (275) [263] (264)

*Fence line*  
[16] (15) [18] (17)  
[139] (140) (141), [142] (143), [243] (244), [259] (260), [270] (271), [277] (276), [279] (278)

*Clay Lined Pit*  
[245], (247), (246)

*Charcoal filled pits*

[261] (262) (430)

[239] (240) (429)

[272] (273) (428)

[11] (10) (12)

[237] (238)

#### *Linear Beam-slots*

[229] (230) [231] (232) [233] (234)

A number of possible contemporary features were located within the northern half of the enclosure, mostly close to the entrance. A linear group of oval post-holes [16], [18], [139], [142], [243], [259] [270], [277], [279] running west to east in the northern half of the enclosure may be possible structural remains of a fence line or corral. Another set of shallow truncated oval charcoal filled pits or post-holes [11], [237], [239], [261] [272], located just to the north of the fence line suggest more potential structural remains. Two parallel linear beam slots [274] and [263] located just to the north of the entrance indicated a rectangular structure. These two linear features were running west to east and had steep sloping sides and flat bases and were perhaps structures connected with stock control.

Close to these structures a small clay lined circular pit [245] was observed and may have been a trough feature. Towards the western side a group of three short linear beam-slots between 2m and 3m long [229], [231] and [233] were located. All three had steep vertical sides and flat bases.

The greater proportion of the assemblage pottery found within enclosure is of 'transitional' or 'Belgic'-style fabrics and forms of mid-1st century date

#### **External features** (Figure 17)

*Clay lined pit* [205] fill (206) (207)

*Small pit* [195] (197)

#### *Hearth Features*

[128] (129) (130), [181] (180)

A large oval pit [147] was located to the east of the entrance of enclosure. The pit measured c. 2.1m x 1.6m x 0.45m deep with steep sides and a flat base and was filled with a two deposits containing small quantities of pottery, burnt pebbles and charcoal (Figure 10). Towards the north of the large pit was a small clay lined pit [205], with steep sides and flat base profile (1.06m long, 0.80m wide, c. 0.2m deep). This trough type feature was similar to the internal clay lined feature [245].

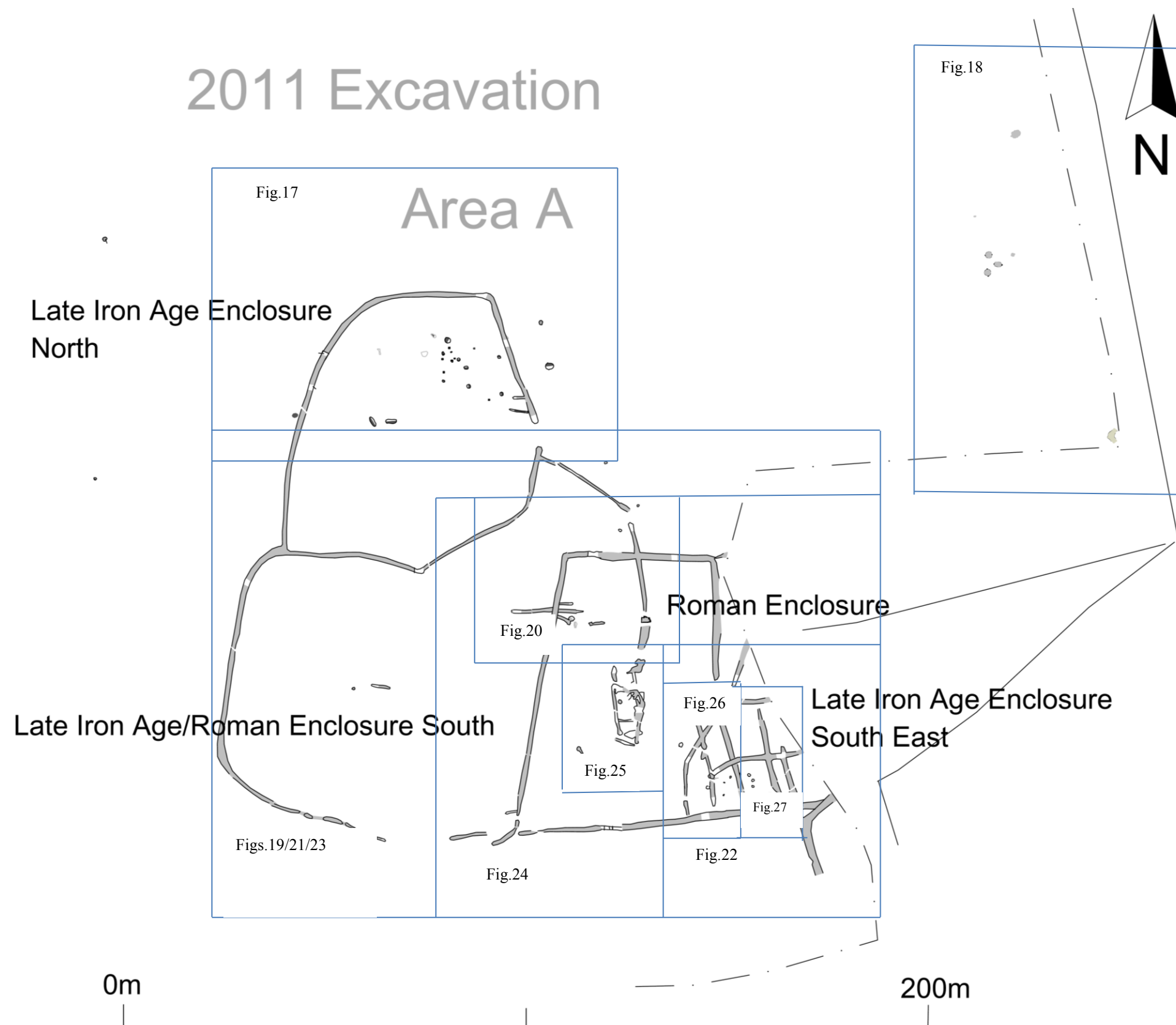


Figure 15 Area A Iron Age and Roman Enclosures with locations of Figs 17-27.



# Area A



## Late Iron Age Enclosure North

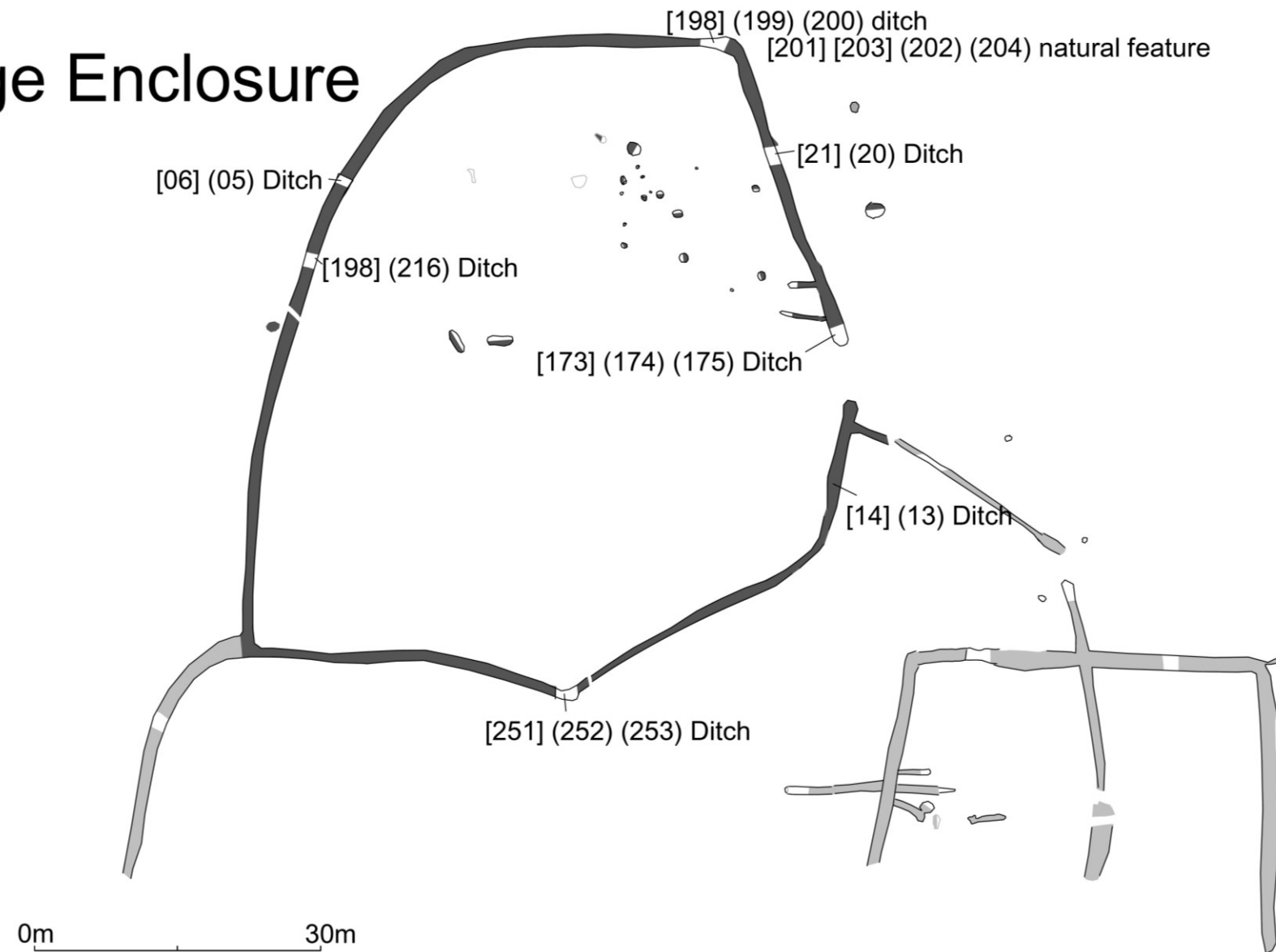


Figure 16 Late Iron Age northern enclosure

***Dispersed external features located to the east of Iron Age enclosures*** (Figure 18)

*Charcoal filled Hearth feature [194] (192) (193)*

*Pit Feature [191] (190)*

*Charcoal filled Hearth Feature  
[146] (145)*

*Large Storage pit  
[250] (254) (255) (256) (257)*

*Large Storage pits [153] (154) [304] (307)  
Truncated pit [155] (157)*

In addition to the Iron Age enclosure a dispersed scatter of features was located 100m to the east outside the northern Iron Age enclosure ditch.

Amongst the group was a large sub-rectangular/sub-oval pit with steep sloping sides of 60 to 80 degrees and a slightly concave base. The feature measured 2.00m, 1.40m and was 0.90m deep and contained a number of fills. The lower fills comprised orange brown silty-sand and gravel that were mixed with small to medium size sub rounded and rounded pebbles and occasional charcoal flecks. The upper fills comprised dark grey brown silty-sand mixed with fewer small to medium sized stones. They contained more charcoal flecks and frequent fire cracked pebbles. The pit contained Iron Age pottery sherds.

# Late Iron Age Northern Enclosure

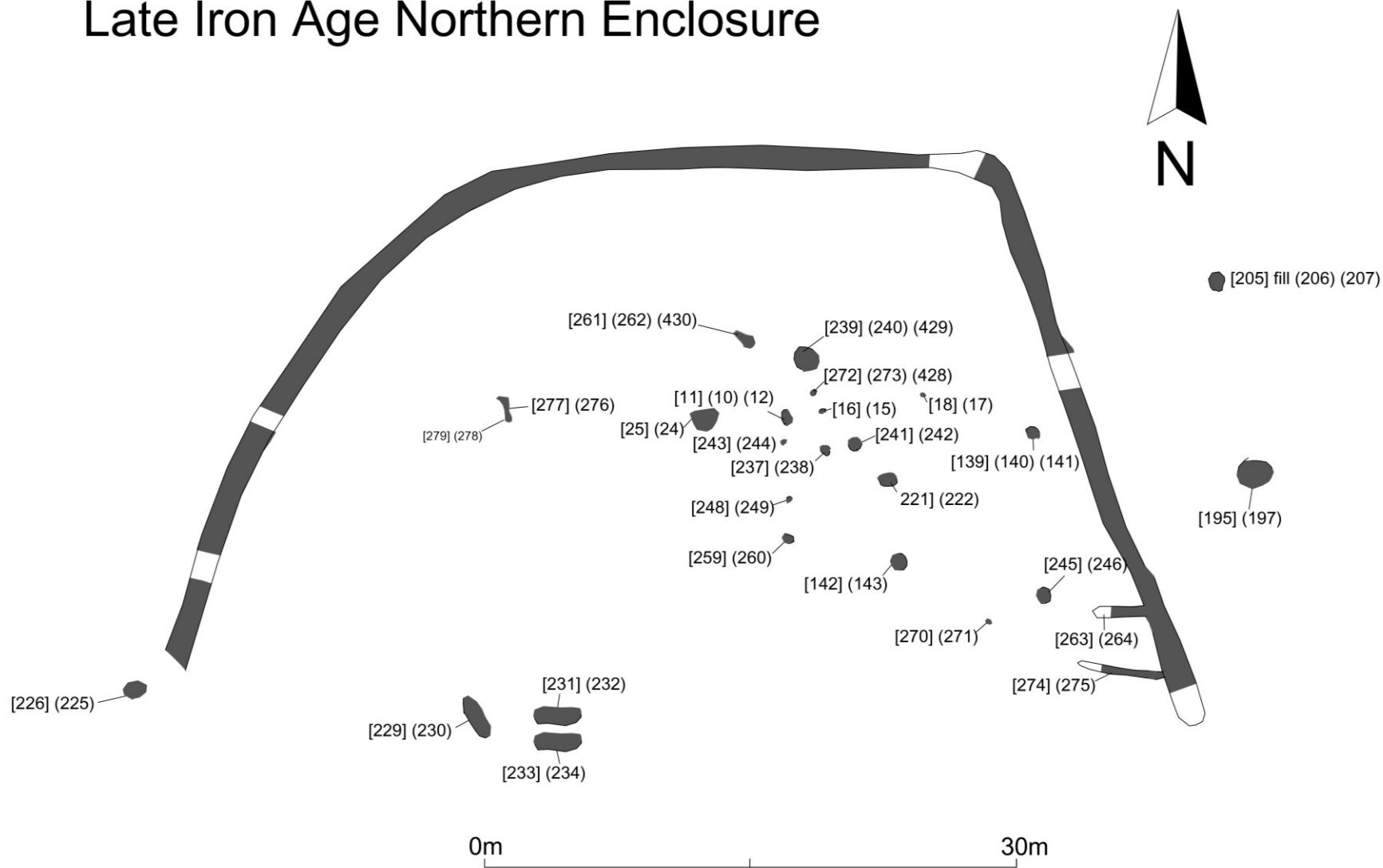


Figure 17 Northern enclosure internal and external features

Located to the south of this pit were a further two pits and a post-hole. The largest pit was sub-circular [153] with sides becoming more shallow and sloping towards the north side and more steep on the south side with a 45 degree incline. The feature measured 1.40m in diameter and 0.45m in depth and contained a single fill (154) consisting of abundant fire cracked pebbles mixed with some grey silt and charcoal. The second pit [155] was sub-rectangular with rounded corners with steep sloping sides (70 to 90 degrees) and a relatively flat base. The pit measured 1.56m long, 1.00m wide and 0.30m deep and contained two fills. The primary fill (156) consisted of light brown grey silty-sand mixed with frequent fragments of charcoal and cremated bone. The upper fill (157) comprised mid orange brown silty-sand mixed with 10% rounded/sub-rounded pebbles and 1% charcoal. A single post-hole [158] (159) was located close to these pits and may have been associated with them. A corner of another potential Iron Age enclosure ditch [290] (291) was identified close to this group of features.

***Dispersed external features located to the west and north of Iron Age enclosures***

*Hearth Feature [128] (129) (130)*

*Hearth Feature [181] (180)*

*Charcoal filled Pit [194] (192) (193)*

*Pit [191] (190)*

*Charcoal Filled Pit [146] (145)*

A widely dispersed spread of isolated hearth features or charcoal filled pits were p on the west and north sides of the northern enclosure. No datable finds were associated with these features so their period could not be discerned. However in character they were similar to features within the Northern enclosure which would suggest they are perhaps of Iron Age date.

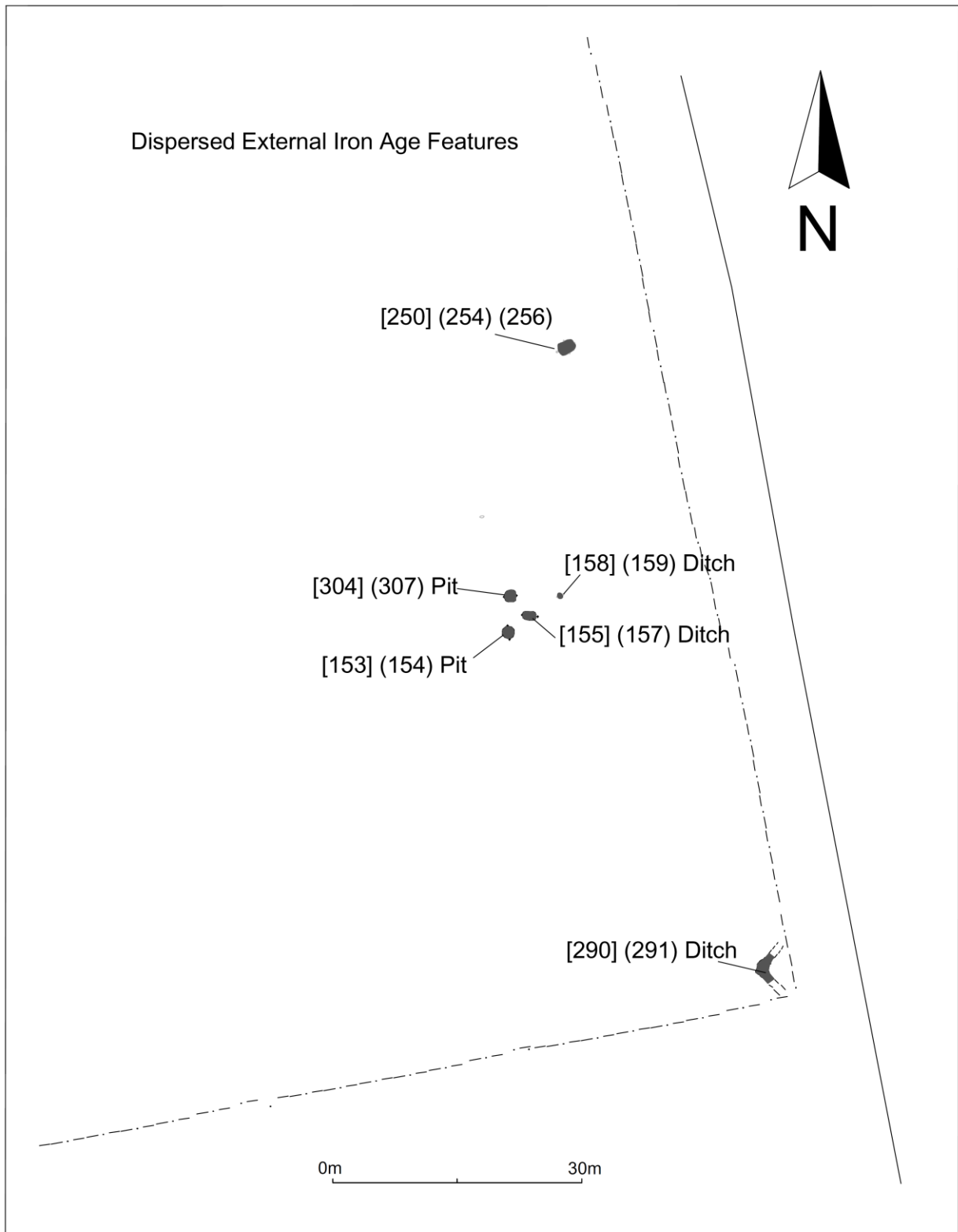


Figure 18 Dispersed External Iron Age features located to the east of the Northern Iron Age enclosure

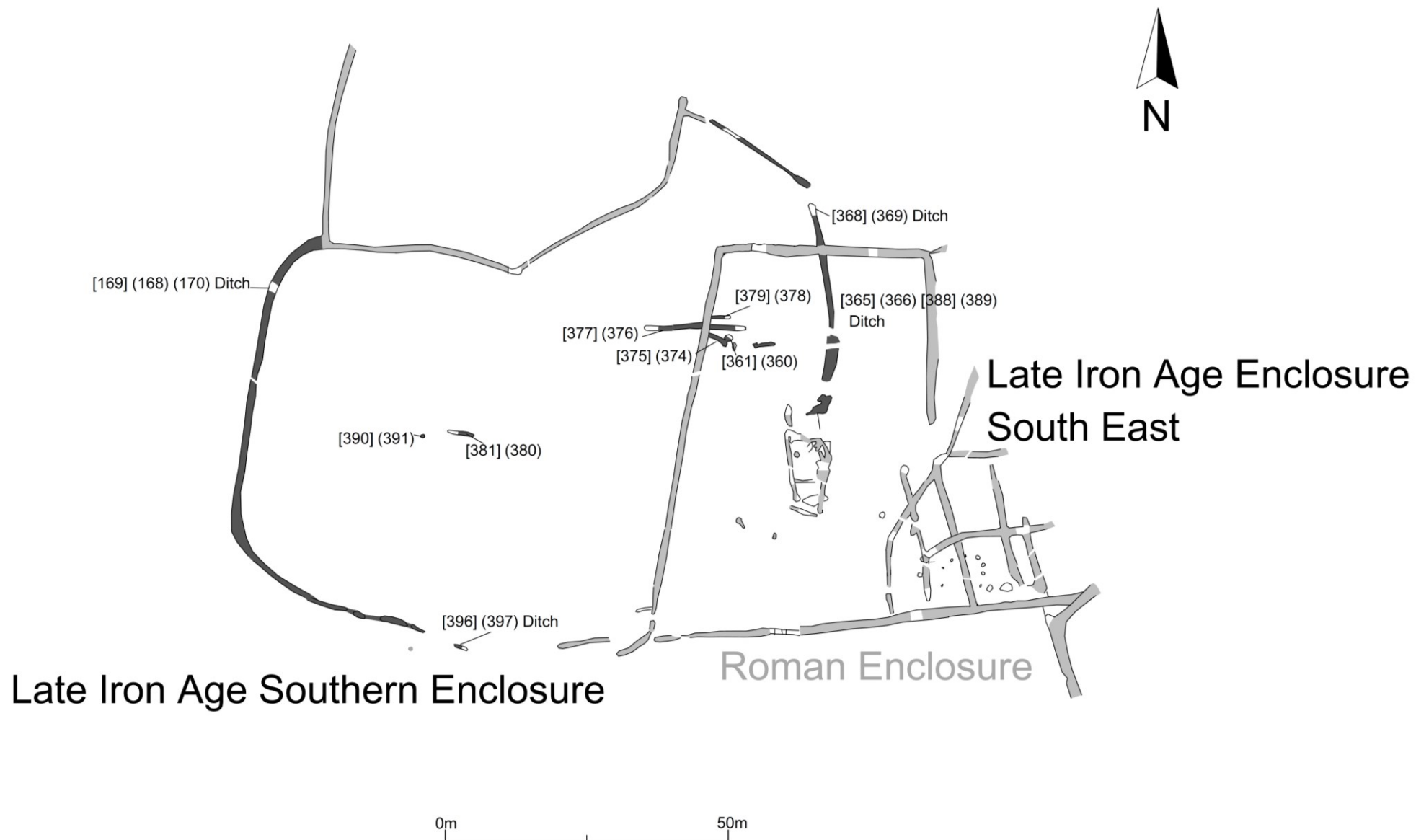


Figure 19 Late Iron Age southern enclosure

## **Southern Iron Age Enclosure**

### ***Southern Enclosure Ditch***

*[169] (168) (170); [365] (366); [368] (369); [388] (389); [396] (397)*

A large sub-rectangular-shaped ditch enclosure appears to have been added to the south as an extension to the northern enclosure. The three sided ditch ran for a total length of 240m, with a 50m gap on the south-east corner, and enclosed an area of approximately 4000m<sup>2</sup>. The ditch was *c.*1.25m wide, although it was narrower at the entrance (1.16m), and along the south side very narrow (*c.*0.50). The depth of the ditch had slight variation of between 0.32m to 0.09m along its length. The differing depths appear to represent levels of truncation, and the natural ground level did slope significantly in a southerly direction.

The ditch was sampled by three sections – each between 1.00m and 1.50m in width - along the western length of the ditch [169], at the southern side [396], and at the entrance [368]. Its form did not alter along the course of the ditch, and it had a primary cut being formed by moderately sloping sides and a broad rounded base. The primary fills, (170), (369), (389), (397), present along the length of the ditch consisted of pale yellow silty deposits probably formed by wash from the natural sands and gravels. The ditch was perhaps later re-cut with a more gradual sloping sides form throughout, with a roundish base. Overlying these were a series of secondary deposits (168), consisting of more generic pale orange-brown clay-silts, with low levels of organic residues. A small assemblage of Roman pottery sherds was present within ditch fills (366) (369) which were dated to early 2nd century. A fragment of Roman glass was also present in (369) [368] the fill of ditch terminus. The fragment (Sf125) was from a long handle with a central rib in light green glass from a conical jug with a long neck. The glass dates from the last quarter of the 1st century to the third quarter of the 2nd century. A sample (135) was taken from (366) [365]), which had sparse remains: a single wheat grain and a few seeds - probably representing a scatter of food preparation waste that accumulated in the open pit or ditch. This would suggest perhaps that the Late Iron Age or Transitional Southern Enclosure ditch was still open and re-used and incorporated into the Roman phase of enclosures ditches.

### ***Internal Structures***

*Post-holes [138] (137), [361] (360), [373] (372)*

*Linear Beam Slot [177] (178) [377] (376)*

*[379] (378)*

*[375] (374)*

*[423] (424)*

### ***Other Internal features***

*Beam Slot [381] (380) [400] (401)*

*Post-hole [390] (391)*

*Clay lined pit [218] (219) (220)*

### ***External Feature***

*Post-hole [398] (399)*

Potential structural evidence was located towards the north-east corner of the southern Iron Age enclosure (Figure 20). It consisted of parallel west to east aligned features including a long west to east slot (*c.* 15m) at the centre side [377], with two smaller slots [375] 5m x 0.3m x 0.25m to 5m long and [379] 4m x 0.3m x 0.25m both cut to the west by a later Roman ditch. A group of three post-holes was located on the east side. The beam-slots varied in width from 0.40m to 0.60m and depth of up to 0.40m. They had *c.* 45 degree sloping sides with a flat base and contained a single deposit of mid brown silty-sand. Another shorter beam-slot was located 4m to the east and measured 3.50m long, 0.60 wide and 0.26mm deep [423]. The feature had gradually sloping sides with a relatively flat base and contained mid dark brown grey silty-sand fill that was mixed with 20% small to large rounded and sub-rounded pebbles. The potential beam-slots and post-hole could all be part of a structure or perhaps fence lines for stock control.

Further potential structural evidence was present in the centre of the southern Iron Age enclosure and consisted of two elements – a single possible beam slot [381] and post-hole [390] (Figure 21). The beam-slot, was orientated-west to east and measured 4.75m long, between 0.40m and 0.70m wide and 0.35m deep. It had broadly 45 degree sloping sides with a flat base and contained a single deposit of mid brown silty-sand (380). A clay lined pit [218] was found close to this group of features which may have formed a building or was part of fence structure.



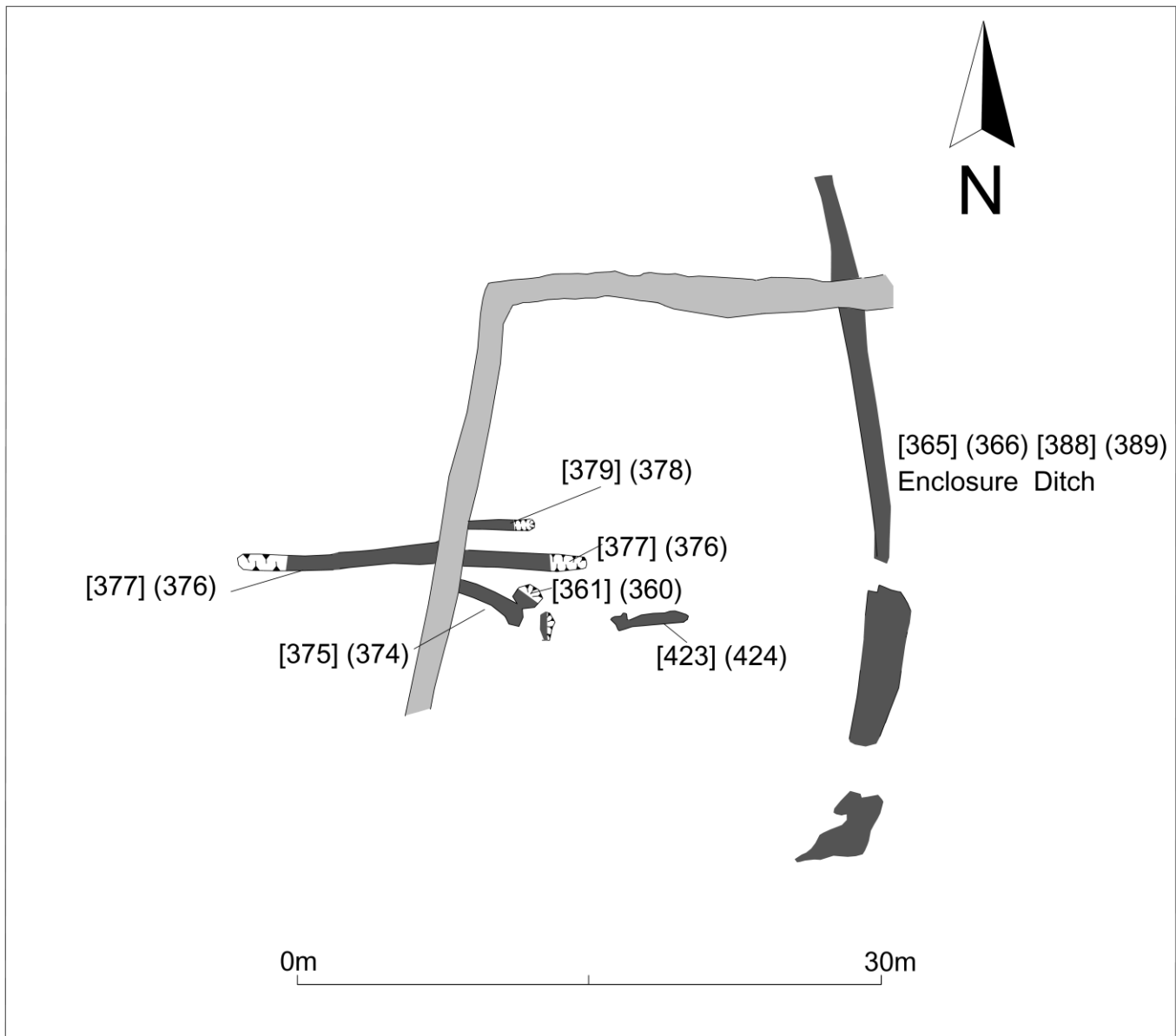


Figure 20 Internal features within the southern enclosure

#### Late Iron Age Enclosure to the South-East

Part of large enclosure with internal structures and associated features was located towards the south-west corner of the excavation area. The enclosure was also located immediately to the south-west of the other two enclosures. As with the northern enclosures the activity can be dated to the mid to late 1st century AD forming part of the Late Iron Age to Early Roman Transitional settlement.

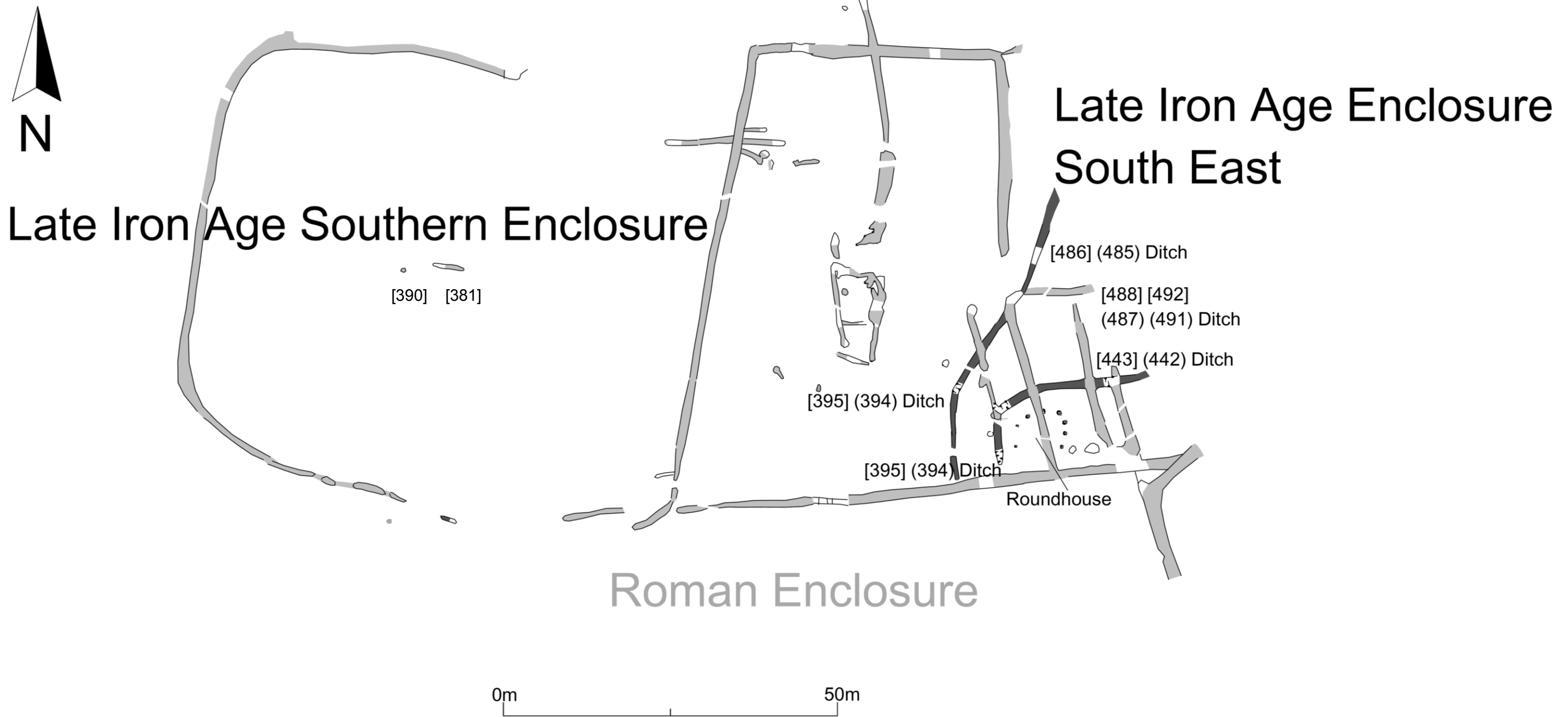


Figure 21 Late Iron Age enclosure to the south-east

### ***Enclosure Ditch***

[395] (394) [486] (485)  
[488] [492] (487) (491)

Part of a curvilinear ditch was exposed and ran for a total length of 47m. The ditch was sampled by three sections – each between 1m and 1.5m in width - along the length of the ditch [395], [486]= [488] and [492]. The ditch did vary in width between *c.* 0.45m and 1.6m. Its form also altered along the course of the ditch, and it had a northern cut being formed by broadly steep 45 degree sloping sides and a broad rounded base. The southern end tended to be a narrow cut with a 45 degree slope to a narrow rounded base. The fills, (394), (485), (487) and (491), consisted of brown sandy-silt mixed with occasional fire cracked pebbles and charcoal flecks. Mid to late Late Iron Age pottery sherds were present within the ditches.

### ***Internal ditch***

[309] (308) [317] (316) [319] (318) [342] (340) [338] (337) [443] (442)

The enclosure appeared to have an internal curvilinear ditch which ran for a total exposed length of 30m. The ditch was sampled by three sections, each between 1m and 10m in width, [309] [317] [319] [342] [338] and [443]. The ditch varied in width between *c.* 0.45m and 1.6m, its form also altering along the course of the ditch. The northern cut was formed by a steep *c.* 45 degree sloping sides and a broad rounded base. The southern end was a narrow cut with a *c.* 45 degree slope with a narrow rounded base. The fills, (308), (316), (318), (340), (337) and (442), comprised brown sandy-silt mixed with occasional fire cracked pebbles and charcoal flecks.

### ***Roundhouse Structure***

Post-holes [408] (407), [410] (409), [412] (411), [414] (413), [416] (415), [418] (417), [422] (421)

A small roundhouse was found located towards the west side of this internal enclosure ditch. It consisted of a circular group of oval post-holes [408], [410], [412], [414], [416], [418], [422] (*c.* 6.7m in diameter). There was little occupation debris within the post-holes, although there was some charcoal present and one [410] (409) did contain Iron Age pottery.

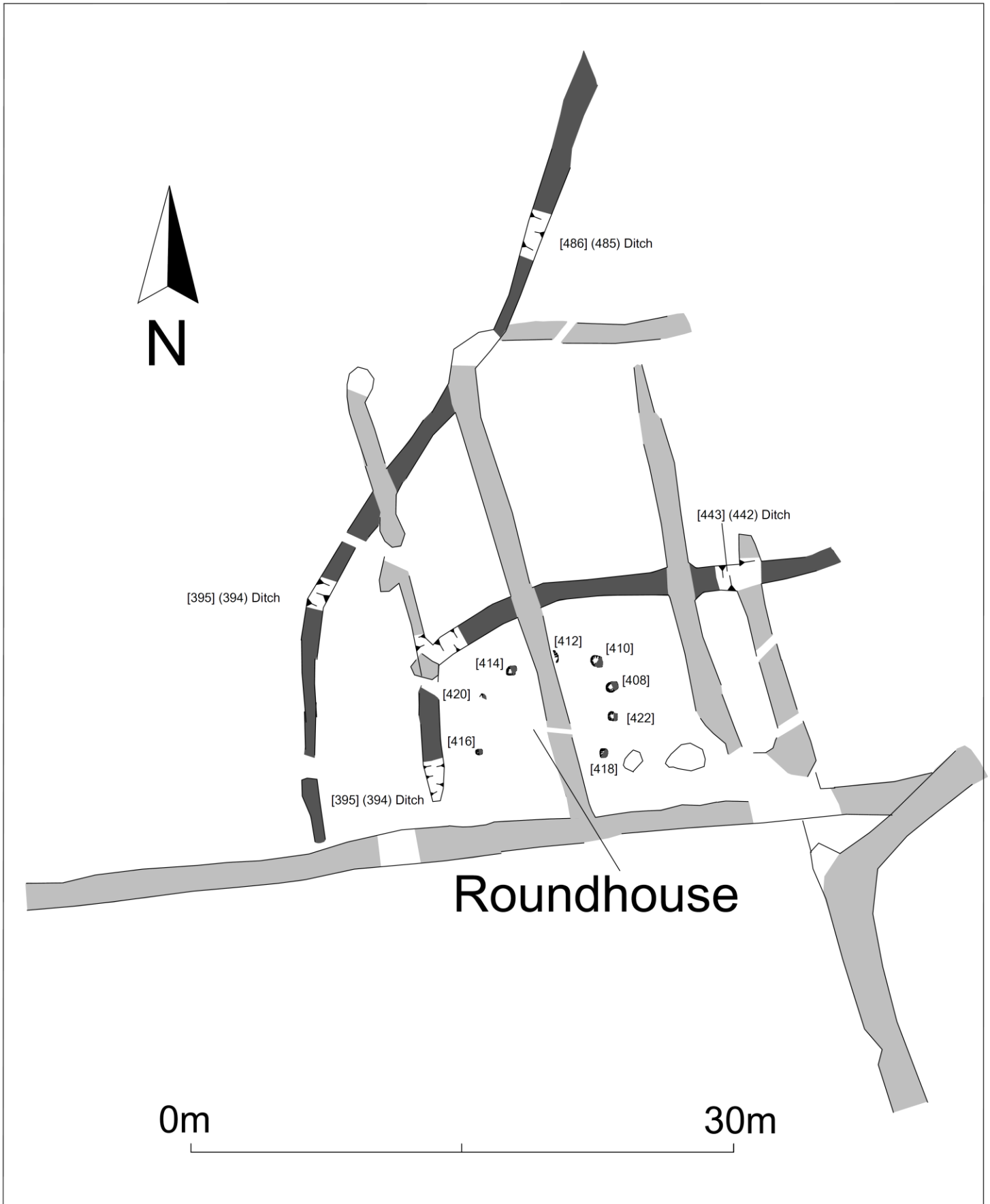


Figure 22 Roundhouse structure

## **Roman Settlement Late 1st to Mid 2nd century**

A large rectangular enclosure with an easterly-orientated entrance-way, and internal structures and associated features was located in the south-east corner of the extraction area. The enclosure was located immediately to the south-east of the earlier northern and southern Iron Age enclosures. The activity appears to perhaps respect the northern and southern enclosures but cut across the Iron Age enclosures ditches located in the south-east corner. The enclosure can be dated to the late 1st to mid-2nd century AD and an interpretation of the dating is discussed below.

### ***Enclosure Ditch***

[124] (125) [133] (134) [171] (172)  
[176] (184) (187) (188)  
[299] (298)

Four sides of a rectangular-shaped ditch were located in the south-east corner of the stripped area. The ditch ran for a total length of 230m, with a 6m gap on the eastern side, and enclosed an area of *c.* 3400m<sup>2</sup> although the ditches appear to continue eastwards beyond the limit of the excavated area. It was up to *c.*2.25m wide, although it was much narrower along the north side at *c.*1.7m while its depth varied little along its length, being at its deepest (0.55m) on the north side, while along the eastern side it was *c.*0.22m deep. The shallow ditch depths may represent greater levels of truncation.

The ditch was sampled by six sections, each 1m in width, [124], [133], [171], [176], [299], and, at the entrance, [490]. The complexity of the fills suggests several re-cut phases to the ditch, a primary cut being broadly ‘U’ shaped with steep sides and wide flat base. Its form did not alter along the course of the ditch except at the entrance [490] where there were gradual, concave, sides that broke sharply into flat base.

The primary fills consisted of thin silty deposits, present along the length of the ditch probably formed by wash from the natural sands and gravels. The ditch may have been re-cut, with a more concave form throughout, with a flattish base. The lower deposits within this cut again consisted of thin silty deposits overlain by a series of dumped deposits, which were more frequent and complex along the southern-length of the ditch. Elsewhere the deposits were more straightforward, consisting of more generic grey-brown clay-silts, with low levels of organic residues

Pottery and other material artefacts were recovered from excavated sections across the ditches. Much of the assemblage recovered comprised fully Romanised fabrics, which falls into the later 1st and 2nd century date range and two stratified groups, from (125) [124] and (134) [133], contain enough diagnostic material to be fairly confident of their dating and help to define the end of Roman occupation on the site. Context (125) contained a group of grey ware necked jars with beaded rims, alongside an early ‘bead and flange’ mortarium with quartz and flint grits, characteristic of Mancetter-Hartshill products in the first half of the 2nd century.

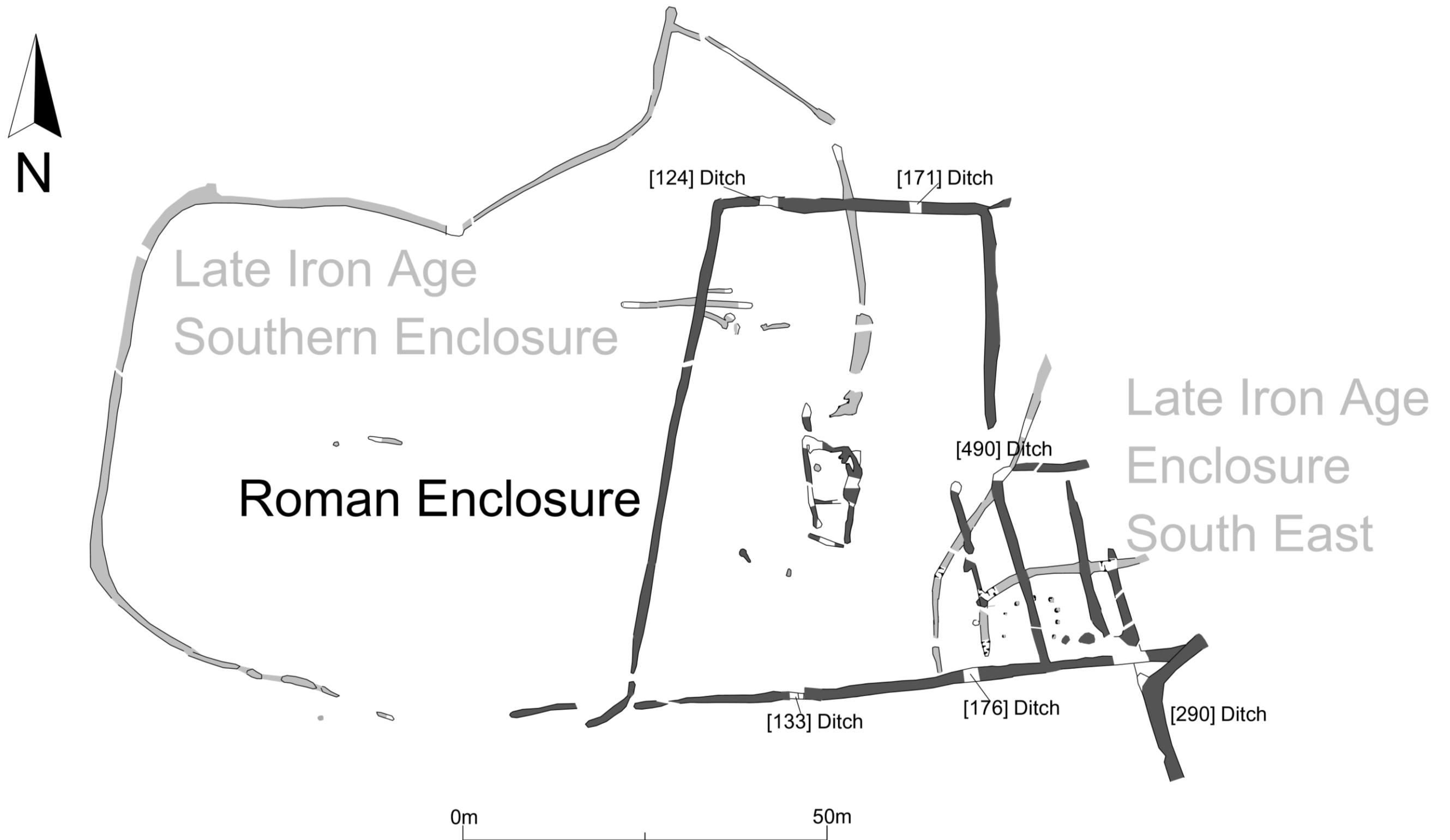


Figure 23 Roman enclosure

### ***Internal Features***

Within the enclosure a series of beam-slots, post-holes, and other related features were located towards the centre and south-east corner of the enclosure (Fig. 24).

#### ***Structure 1*** (Figure 25)

*Beam slot* [403] (402) [441] (438) (440)

*Beam slot* [331] (330) (336) [333] (332)

*Beam slot* [328] (329)

*Beam slot* [383] (382) [403] (402) (426)

*Beam Slot*[436] (435)

*Beam slot* [381] (380) (404)

*Post hole* [363] (362)

*Beam slot* [387] (386)

### ***External Features***

*Kiln/Corn Dryer*

[300] (301) (315)

*Post hole* [292] (293)

*Drainage ditch gully*

[365] (366) [388] (389)

[368] (369)

Structure 1 consisted of beam-slots and post-holes forming a broadly rectangular structure. These consisted of two long beam-slots on the west and east sides, [331], [333], [403], [441], three smaller beam-slots on the north and south sides and across the centre [328], [383], [403], [436] [381], a further potential beam-slot on the north side [387] and a post-hole [363] centrally-placed on the east side of the structure.

Feature [441], a linear gully or beam-slot, was orientated north-west to south-east and was 11.24m in length, while its width varied from 0.45m to 0.50m. It had broadly concave sides with a rounded base and contained two deposits. The southern butt-end [403] appears to widen into an oval shape measuring 1.5m wide and was possibly a post-hole. The feature contained (439) a mid-grey silty-sand mixed with abundant fine medium and course pebbles and occasional larger stones. Below (439) was fill (440) a dark grey and light brown sandy-silt and sand. The fill has a slightly organic content and is also mixed with the occasional small to medium size pebble. The fills contained pottery sherds dated to the early or mid 2nd century. On the east side was a more irregular beam-slot [331] and [333] which measured approximately 12.5m long and typically had 45 degree sloping sides breaking into a rounded base. The feature measured 1.00m wide and was 0.32m deep. The fill of shallow slot comprised mid grey silty-sand mixed with small to medium size pebbles and contained Roman pottery dating to the 2nd century

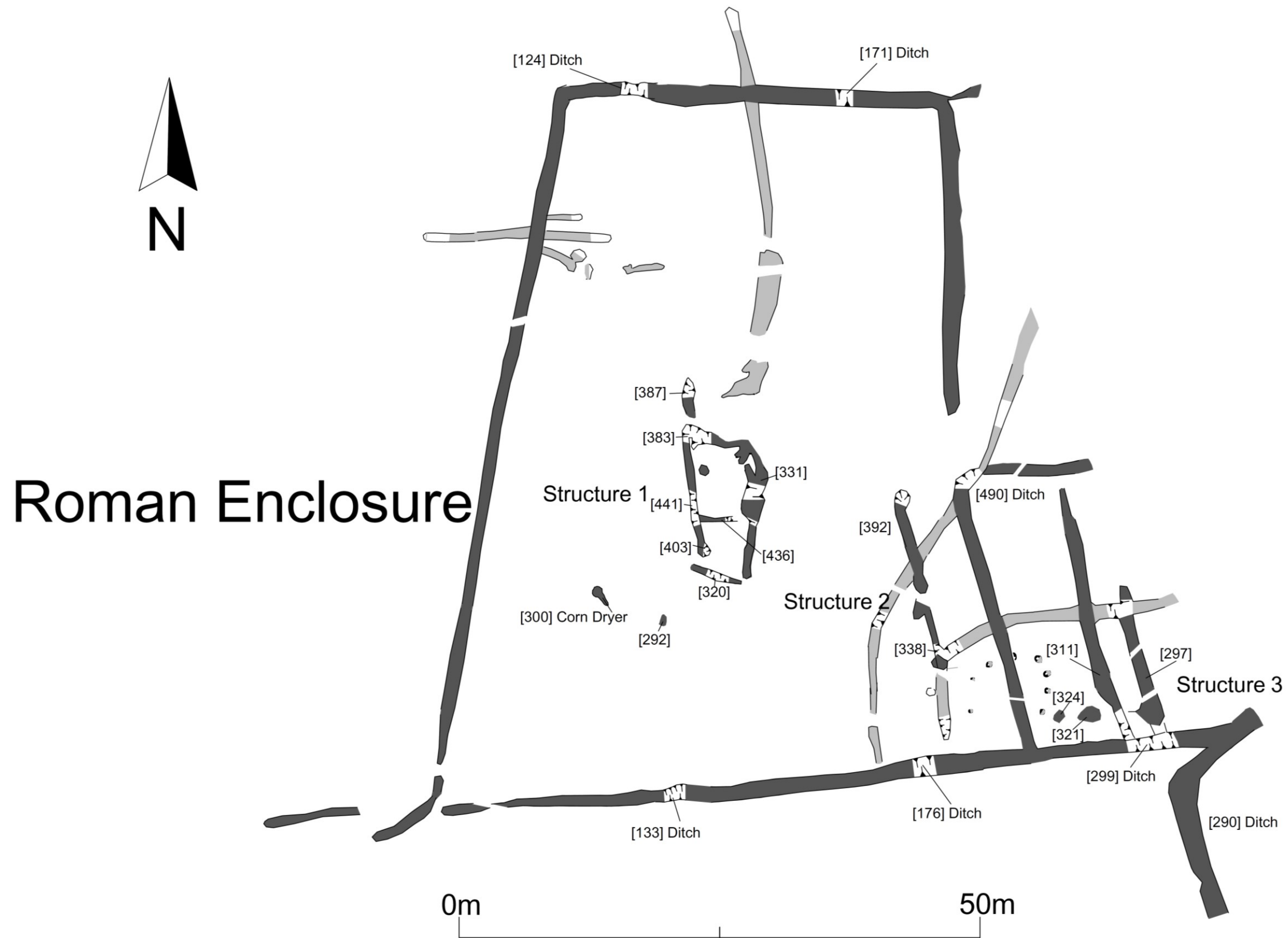


Figure 24 Features within the Roman enclosure



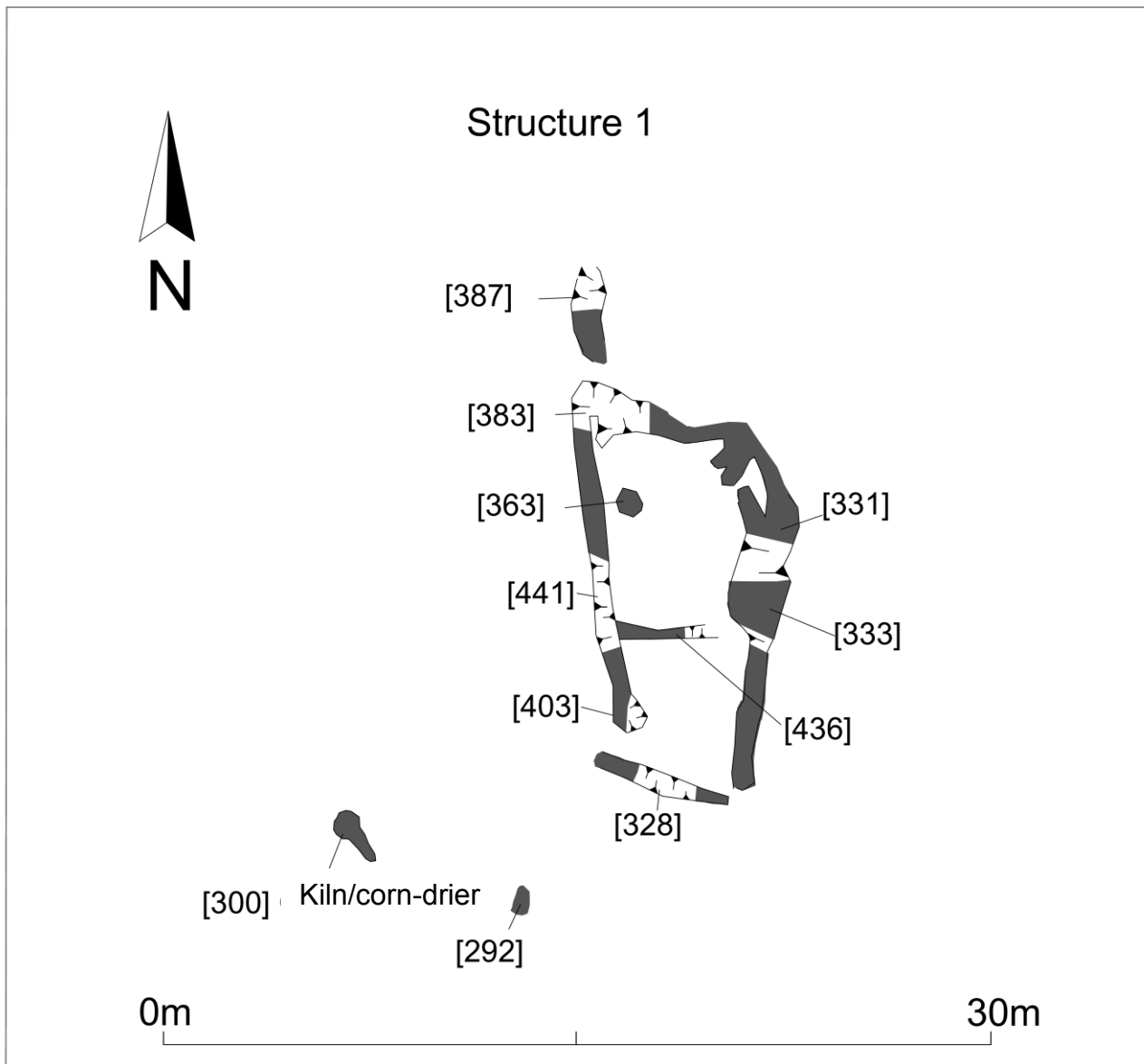


Figure 25 Roman Structure 1

At the north and south sides and at the centre south-eastern end further small west to east linear slots, [328] [383] [403] [436] [381] adjoined to [331] and [441]. All three features measured approximately, 5m long, 0.40m wide, and 0.14m deep, and had sharp – almost vertical – sides and rounded bases. They contained single deposits comprising mid red brown silty-sand mixed with 20% to 40% small pebbles and also contained numerous fire cracked pebbles.

Centrally on the east side placed between the three groups of beam-slots described above was a sub-circular post-hole [363], measuring 0.58m long, 0.50m wide and 0.15m deep. It was filled with a mid grey brown silty-sand mixed with frequent Roman tile fragments (71), probably representing packing.

A further short north - south aligned beam slot [387] located on the north side completes the structural form of Structure 1. The beam-slot measured 2.26m in length, 0.80m wide and had depth 0.25m. It was a truncated short linear feature with shallow concave sides and base and contained a mid brown silt-sand mixed with common small to medium size rounded pebbles and occasional charcoal flecks.

These groups of features could be representing fences lines or gullies. However, given the orientation of all seven groups of features, each probably relate to one another. Also the structural nature of the features (appearing more like beam-slots rather than drainage gullies), indicates that Structure 1 probably represents a single rectangular building measuring *c.*17m by *c.*5m with a centrally placed post-hole. The various irregular beam-slots on east side suggesting re-cuts could indicate continued usage and repair of the structure(s).

Approximately 8m directly to the south-west a potential kiln/corn-drier feature was located. The feature was 'key hole' shaped [300] and [302], measuring 2.25 by 0.94m wide with a fire pit to the north. This was a sub-circular shaped cut having steeply sloping sides with a flat base, which sloped towards a flue [302] on the south-side. The pit measured 1.15m long, 0.94m wide and 0.23m deep with a linear shaped flue with very steep sides and a flat base which measured 1.10m long, 0.44m wide and 0.17m deep. Within the fire pit at the northern end of the corn dryer a fill (301) was found overlying a clay lining (315). The fill comprised grey brown silty-sand mixed with 2%-5% random size sub-rounded pebbles. It also contained charcoal lenses (2%-5%) and lumps red clay (5%). The backfill of the flue (303) comprised light grey brown silty-sand mixed with 50% charcoal flecks that includes a 2mm thick lens of charcoal found at the base. The fill also contained 2% flecks/lumps of fired clay and 5% random size and shaped pebbles. Samples 132 from (301), [300] and 133 from (303), [302]) indicated that charcoal was abundant with a small number of goosefoot (*Chenopodium* spp.) seeds also present. From the samples the feature is unlikely to have been used as a corn drier as one would have expected grain and/or chaff to be present. A small post-hole [292] may have been associated with the feature.

On the north side of the structure a curvilinear drainage ditch, [365] [368] and [388], was located running northwards. The ditch measured 36m long and the width varied from 1.16m to 1.45m with a maximum depth of 0.32m. The fills typically comprised dark yellow brown silty-sand mixed with 5% well sorted rounded pebbles. The ditch contained Roman pottery dating to the early 2nd century. A fragment of Roman glass was present in (369) the fill of the ditch terminus [368]. The fragment (Sf125) was from a long handle with a central rib in light green glass from a conical jug with a long neck. The glass dates from the last quarter of the 1st century to the third quarter of the 2nd century.

## **Structure 2** (Figure 26)

*Beam-Slot features* [392] (393)  
[297] (296)  
[490] (489) [494] (493)

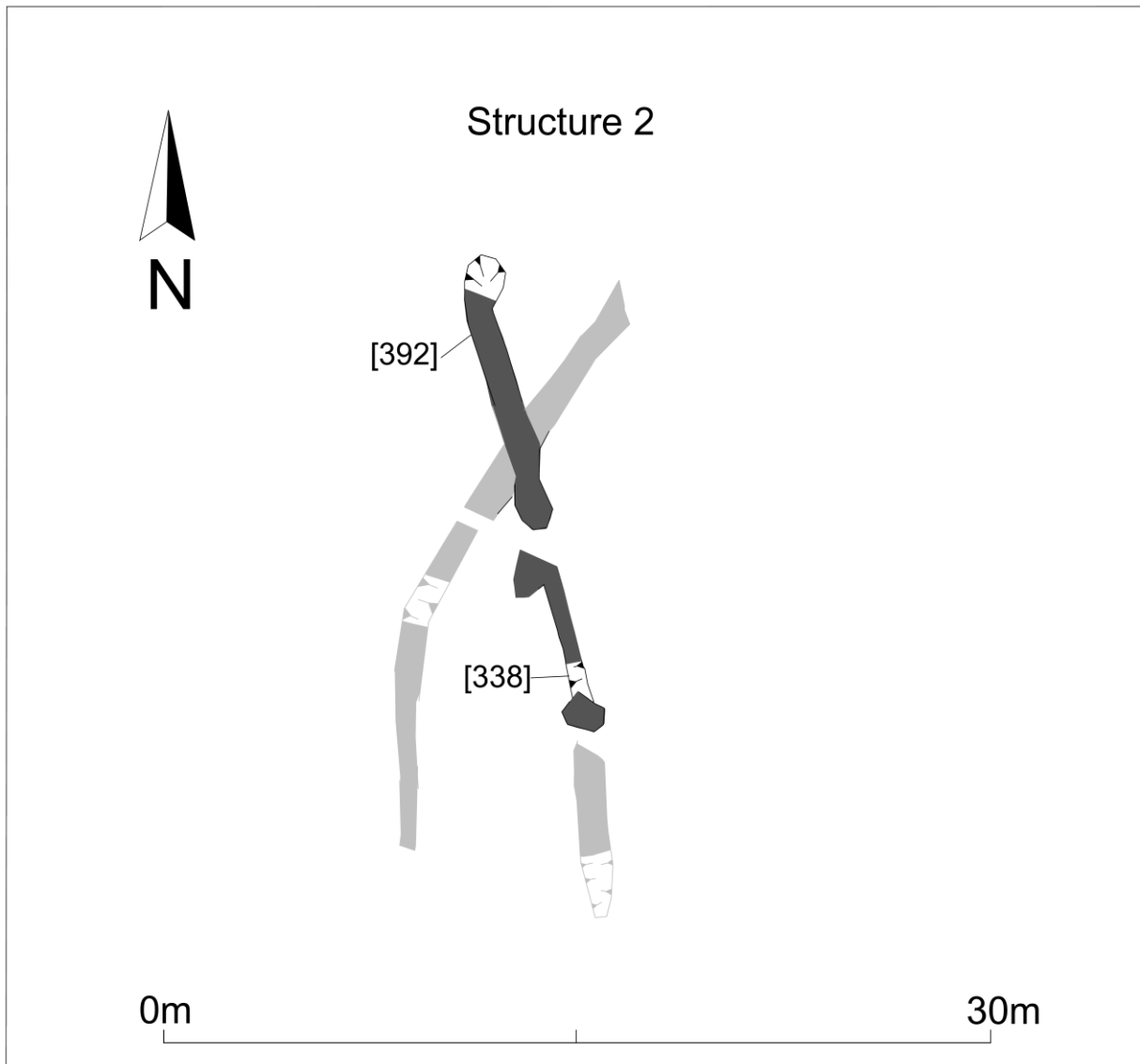


Figure 26 Roman Structure 2

Structure 2, located 12m west of the structure, consisted of a north to south aligned beam-slot [338] and [392] with possible post-holes attached at the northern and southern ends. This possible beam-slot was very similar in shape and size to the beam slot [403] and [441] found on the west side of Structure 1.

Feature [338], a linear gully or beam-slot, was orientated north-west to south-east and was 7m in length, while its width varied from 0.45m to 0.50m. It had broadly very steep sides with a rounded base. The southern butt-end appears to widen into an oval shape measuring 1.50m wide and was a potential post-hole. The feature contained a single fill (337) comprising a light grey silt-sand mixed with occasional rounded pebbles. The linear northern half of the beam-slot [392] measured approximately 10m long measured 1m wide and 0.24m deep. The feature was generally linear in shape with irregular 30 degree sloping sides breaking into a narrow concave base. Again the northern end of the feature appears to have possible post-hole attached. It had widened into sub-circular shape measuring 1.4m.

Again these groups of features could be representing fences line structures of some kind or gullies for stock control.

**Structure 3** (Figure 27)

*Beam-slot features*

[297] (296) [311] (310)

*External Features*

*Large pit* [321] (347) (354) (Figure 24)

*Pit* [324] (325)

Structure 3 consisted of parallel beam-slots [311], and [297] and may have been for a similar function as Structure 2.

Feature [311], a linear gully or beam-slot, was orientated north-west to south-east and was 21.8m in length, while its width varied from 0.50m to 0.58m. It had broadly 45 degree sloping sides with a flat base and contained a single deposit of mid brown silty-sand (310). The shorter parallel beam slot was located 4m to the east and measured 13m long, 0.58m wide and 0.10m deep. The feature had gradually sloping sides with a fairly flat base and contained mid dark brown grey silty-sand fill that was mixed with 20% small to large rounded and sub-rounded pebbles.

Approximately 2m to the south-west of Structure 3 a quarry pit [321] was located, sub-circular in plan with steep concave sides breaking gradually into concave base. A possible post-hole [323] cut into the base on the west side. The pit measured 2.06m long, 1.8m wide and 0.5m. Within the pit were various tip deposits comprising either of light yellow brown fine silt-sand mixed with 1% sub-angular small stones or mid brown grey silt and very fine sand. The Roman pottery sherds found associated with these deposits were generally dated to the late 1st to early 2nd century. A small post-hole [324] was located close to the pit on the west side.

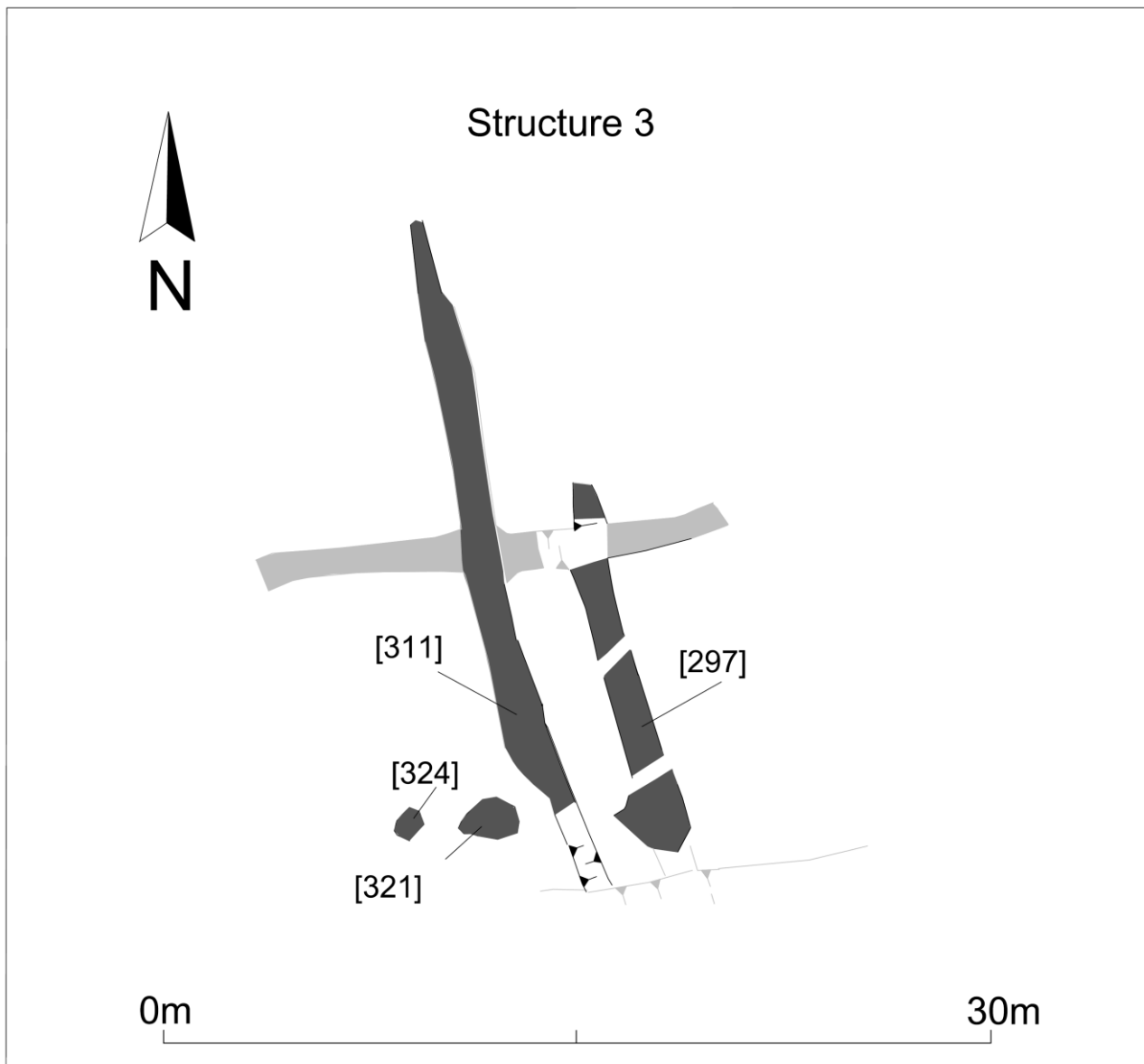


Figure 27 Roman Structure 3

### The Early Anglo-Saxon period

#### *Area A*

#### *Possible Graves*

[162], (163)

[166], (167)

[289], (288)

#### *Associated Features/Deposits*

[022], (023) Loom weight

[164], (165) Loom weights  
[280], (281) Anglo-Saxon Pottery

Saxon Pit [102], (103) (105)  
[106], (107)

Excavations within Area A revealed a group of three features that are believed to be part of an inhumation cemetery of early Anglo-Saxon date. Due to the acidity of the surrounding soils no trace of human remains survived, however metal objects fragments of metalwork along with other finds were found within specific locations of all potential graves [162], [166] and [289]. The metalwork included a spear, knife, a fragmented metal object and a bucket handle. In areas close to this small cemetery, was a scatter of pits containing loom weights.

### **Grave 1 [162] (163)**

This feature comprises a roughly north-west to south-east orientated shallow pit [162], that had an unusual pentagonal shape. The five shallow sides had slopes generally varying from steep 80 degrees to regular 45 degree sides breaking gradually into a flat base that had a gentle undulation. The dimensions of the cut are approximately 2.0m by 1.72m. The fill comprised greyish brown or orange brown silty-sand mixed with small pebbles, charcoal flecks and fire cracked pebbles. The feature contained two fragments of pottery, an iron bucket handle (SF 100) and an iron blade (SF 102). The bucket handle was found close to surface and was lying relatively flat. The blade was again close to the surface but angled down. The size and unusual shaped feature suggests that could have contained one or possibly two inhumations with grave goods placed in one corner of the grave. Alternatively although no cut was discernible it is possible that a second grave to the west cut another oriented north-west to south-east.

### **Grave 2 [166]**

Grave 2 was located directly to the south-east of Grave 1. The sub-rectangular feature was wide, orientated approximately north-west to south-east, 1.86m long by 0.96m maximum width. The feature had steep generally straight sides with a 60 to 80 degree slope that break sharply into a flat base. The feature contained dark greyish brown silty-sand mixed with charcoal flecks and fire cracked pebbles. Contained within the fill were six sherds of Anglo Saxon pottery and a complete iron spearhead with slim socket. The socket was placed in the south-west corner of the feature. The inclusion of a spearhead within this shallow rectangular feature and position suggests perhaps another grave perhaps a male burial, while its location at southern end of the grave implies that the head was to the south. Given the width of this potential grave it is possible that two individuals were interred in this cut.

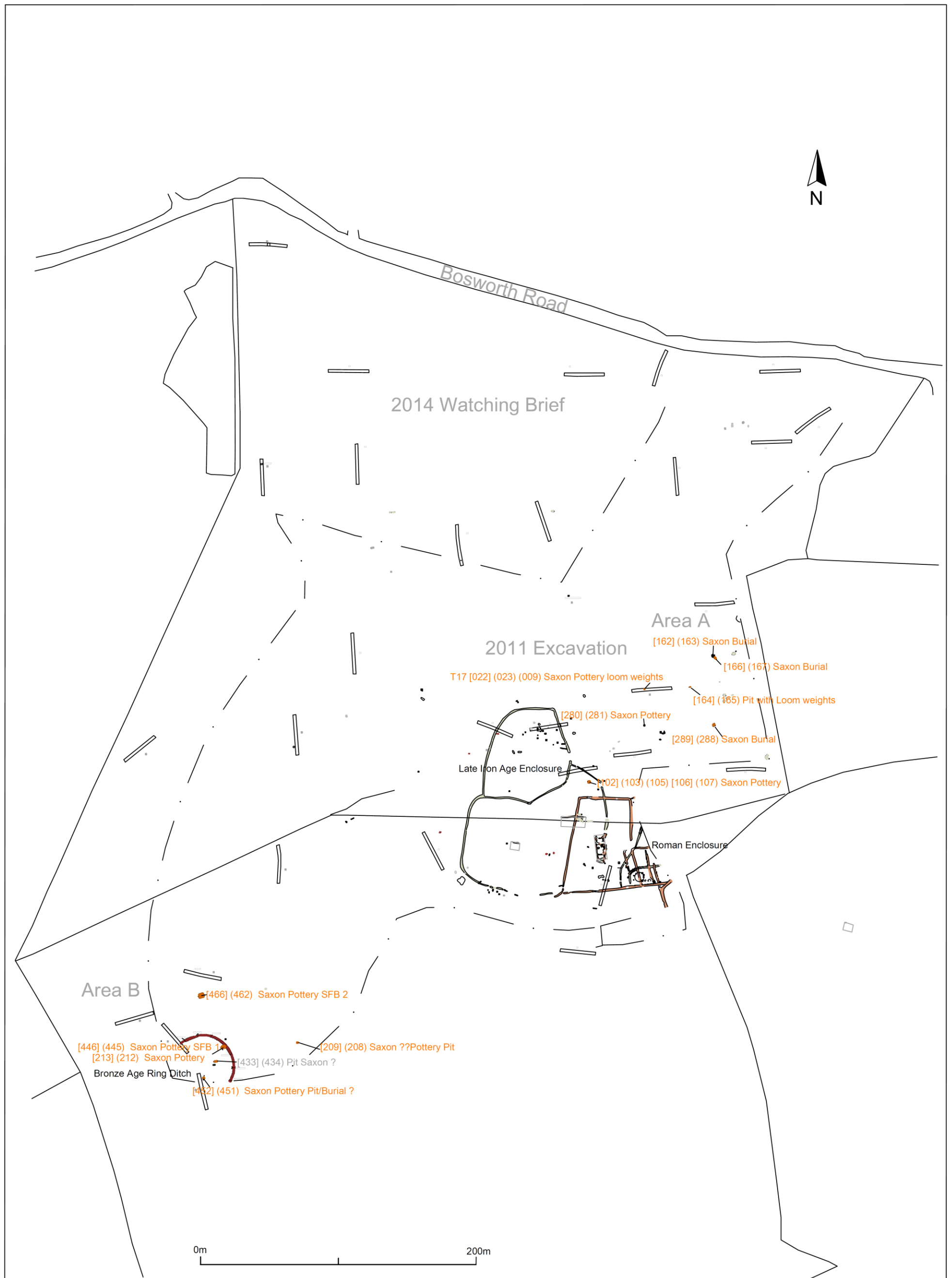


Figure 28 Saxon features within Area A and B

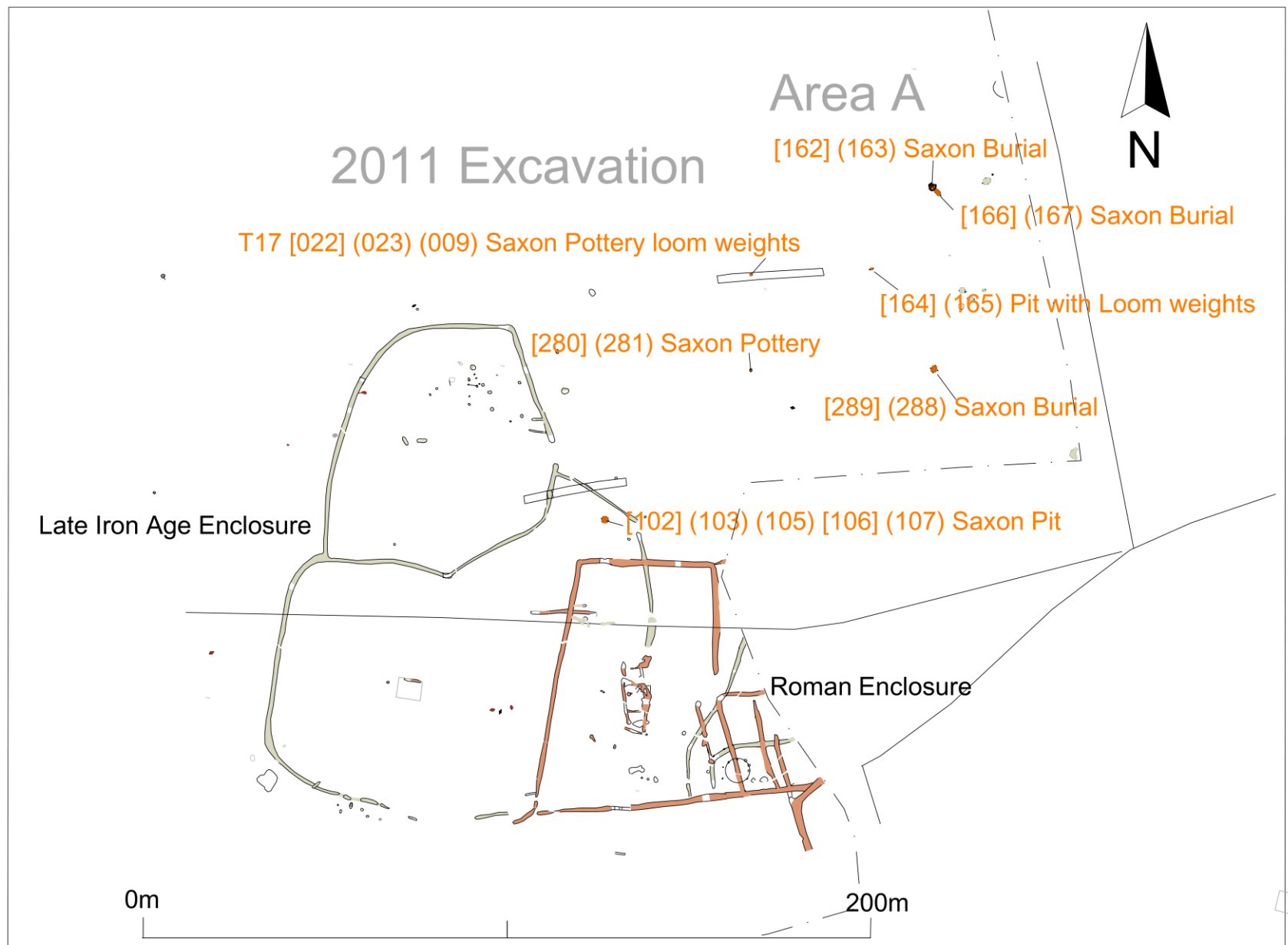


Figure 29 Area A Saxon Features



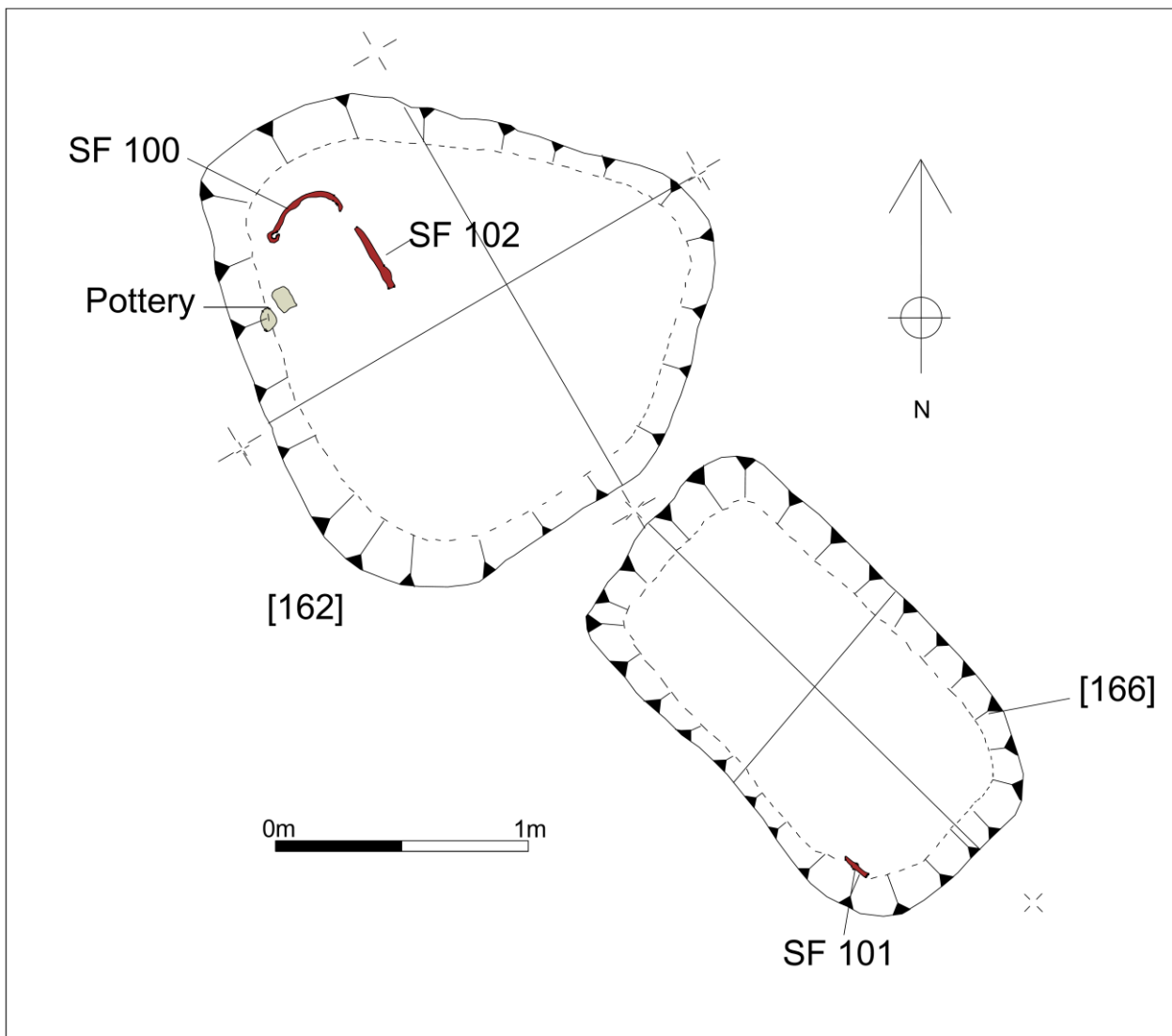


Figure 30 Possible Saxon Graves 1 [162] and 2 [166]

### Grave 3 [289]

Located 45m to the south-west was another possible grave feature. The feature was sub rectangular with rounded corners and steep near vertical sides with a flat base. The feature contained greyish brown sandy-silt mixed with occasional charcoal flecks, fire cracked pebbles and Anglo-Saxon pottery sherds. The feature also contained iron object (SF106) that can be identified as a knife. The rectangular feature was orientated north to south and the metal find was centrally placed towards the southern end of the feature while an Early Saxon globular jar was placed in the south-west corner. The position of the finds were suggest burial goods placed round a inhumation with items perhaps placed near the head. Again given the overall width of this potential grave it is possible that two individuals were also interred in this cut.

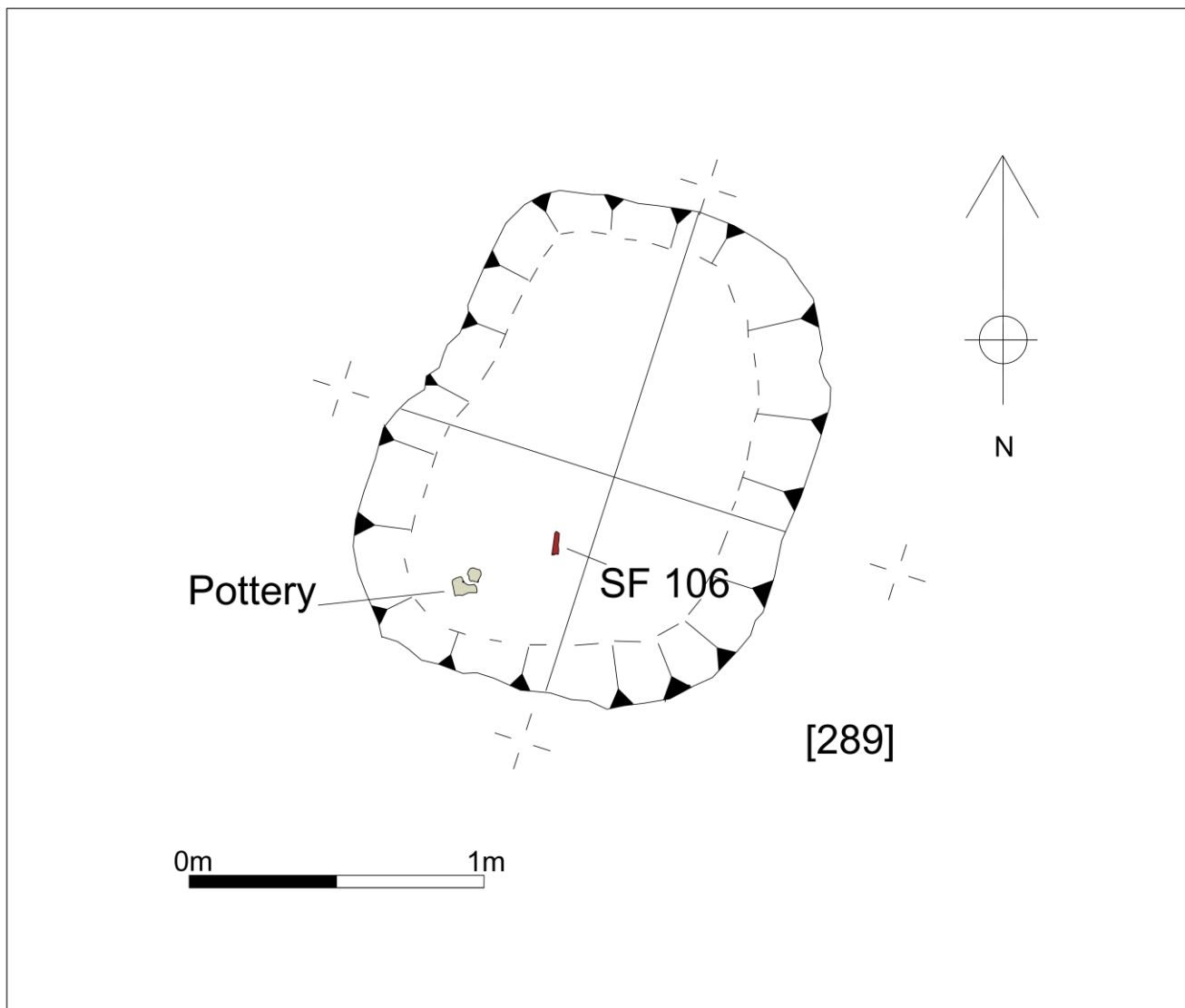


Figure 31 Potential Grave 3 [289]

### Other Anglo-Saxon Features in Area A

#### *Loom weight pits [022] [164]*

Within area Area A two small pits containing loom weights were located close to potential grave cuts [162] and [166]. Both these pits were of uncertain function but may have been associated with the possible graves.

#### *Pit or Sunken-featured Building (SFB) [102], (103) (105), [106], (107)*

A very large pit or Sunken-featured Building (SFB) [102] was oval-shaped measuring 1.7m long, 1.6m wide and had a depth of 0.30m. Its long axis was orientated approximately north-east to south-west. The cut contained multiple fills (103) (105) [106], (107) with pottery dated to *c.*AD450-700 and charcoal. A group of stake-holes were found located off-centre within the base of the pit. If a sunken featured building it would be comparatively small.



Figure 32 Anglo-Saxon pit [22] with loomweights

### **Anglo-Saxon features in Area B**

#### *Sunken Featured Buildings*

*SFB [213], (212) = [446] (445)*

#### *Associated Features*

*Fire Pit or Trough [433], (434) (444)*

*Pit [452], (451)*

*Pit [209], (208)*

SFB [213] was sub-rectangular measuring 3.30m long, 2.60m wide and up to 0.28m deep. Its long axis was orientated approximately north-east to south-west. The cut contained a single fill (212) within which were pottery sherds dated *c.*AD450-700. On the north-east to south-west axis two large post-holes were located on the outside. Stake-holes and post-holes were also located on its northern side [468], [470], [472] and [502] that are perhaps remnants of a wattle wall for the structure.

Three other potential Saxon features were located close to SFB [213]. This group included a trough type feature which had rounded butt ends steep shallow sides with a flat base with some undulations. The feature measured 2.40 long, 1.00m wide and 0.20m deep. The primary fill comprised a charcoal rich deposit at the base (444) and overlying was second fill

(434) that consisted of mid-yellow silt-sand and loam mixed with large angular stones and small pebbles. The other two features comprised of two small shallow circular pits [209] and [452].

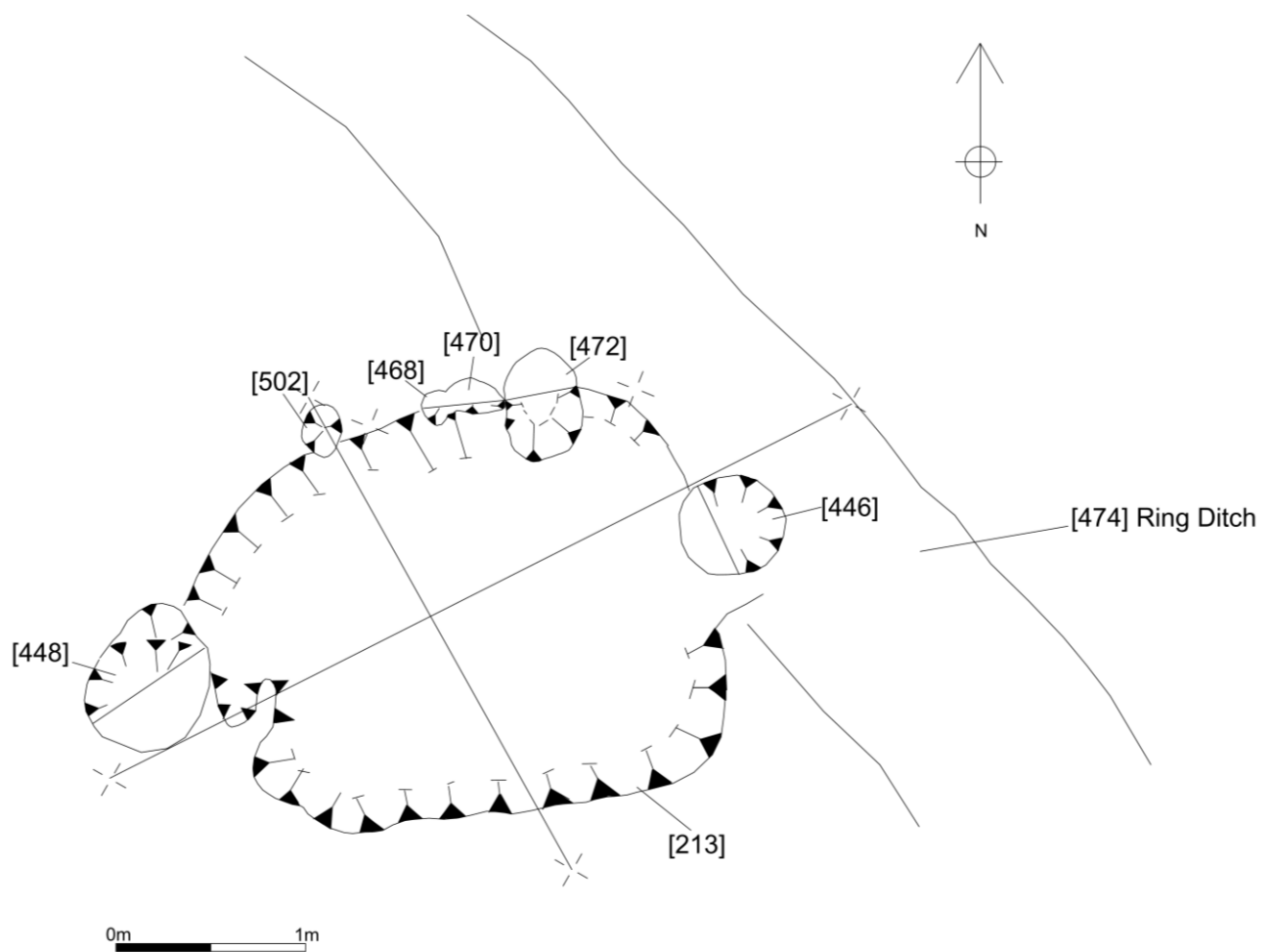


Figure 33 Plan of SFB [213]

## **SFB 2**

[215], [466] (214) (462)

SFB [215] was a rectangular cut measuring 3.80m long, 3.10m wide and up to 0.45m deep. Its long axis was orientated approximately north-south. The cut contained a single fill (462) and a post-hole was located at the centre of the northern short end. There was also a possible post-hole or pad featured located in the north-east corner. This is a comparatively larger SFB than SFB [213]. The pottery finds from this feature were dated *c.*AD450-700.

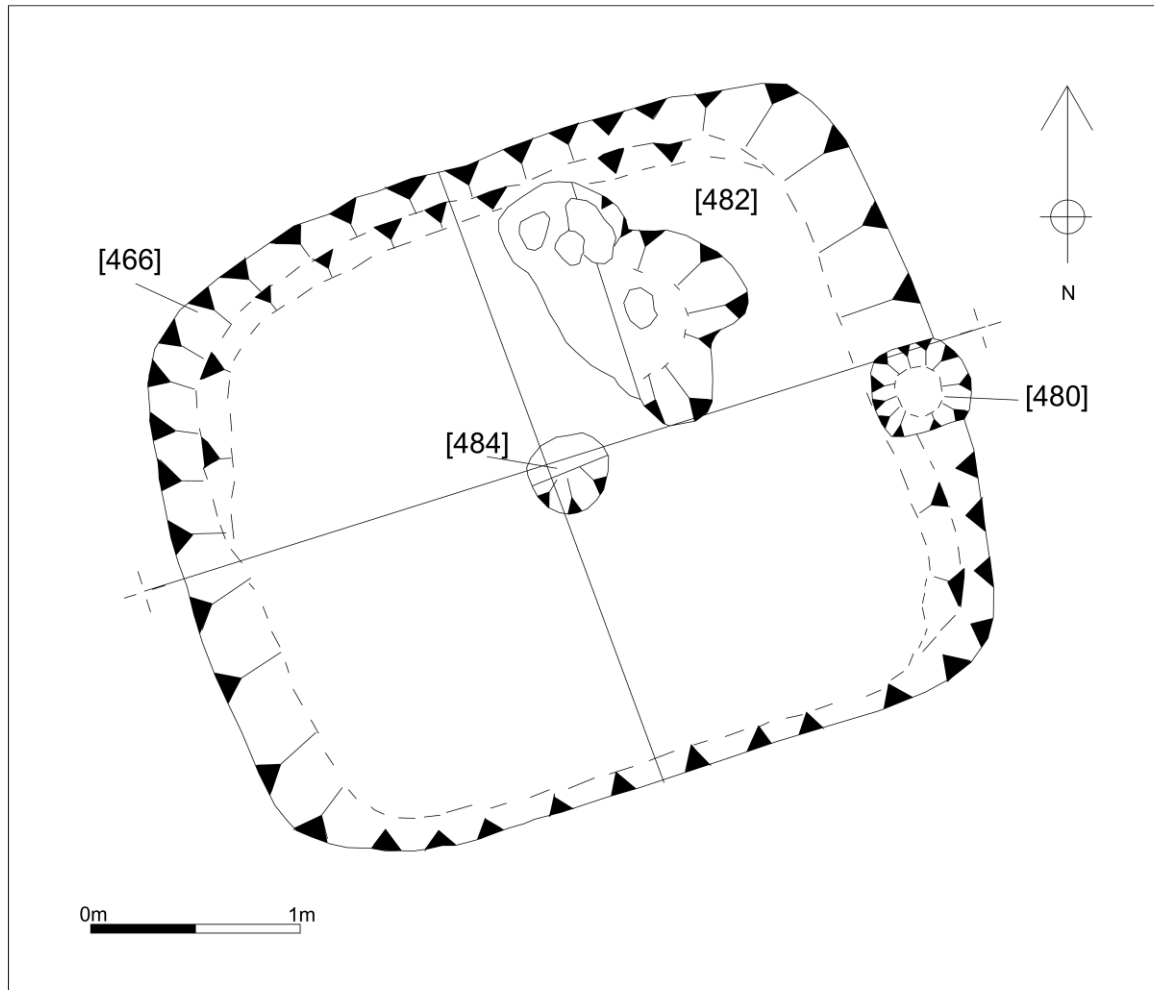


Figure 34 Plan of SFB [466]

***Dispersed Saxon Features in the north-western extent of the extraction area***

*Post-holes [505] (504), [507] (506), [509] (508)*

*Charcoal filled [511] (501)*

Archaeologically controlled topsoil strip for a new extension was undertaken in the north-west corner of the extraction area (Fig 4). This revealed an isolated group of three post-holes [505], [507] and [509]. All were broadly oval and measured between 0.25m and 0.35m in diameter with a depth of between 0.06m and 0.22m deep. They contained greyish brown sandy-silt fills mixed with pebbles and occasional charcoal flecks. Early Anglo Saxon pottery was present associated with post-hole [505] (504). Approximately 100m to the east a sub-rectangular charcoal filled pit was located [511]. The pit had steep vertical sides and a flat base and measured 1.40m long, 0.80m wide and 0.18m deep. The fill (510) comprised dark greyish sand silt mixed with abundant fire crack pebbles and charcoal flecks.

## Prehistoric, Roman and Early Anglo-Saxon Pottery

*Nicholas J. Cooper*

### Beaker and Early Bronze Age Pottery from the Cremation Deposits

A total of 462 sherds of Beaker and Early Bronze Age pottery weighing 4.247kg was recovered during the excavations, the vast majority (428 sherds, 4.045kg) belonging to five vessels of Early Bronze Age date from individual cremation deposits (147) [148] (three vessels), (235) [236] and (286) [287]. Smaller groups, or individual sherds, derived from the same, or other, contexts. The material was classified using the Leicestershire Prehistoric Pottery Fabric Series (Marsden 2011, 62) and quantified by sherd count and weight, with rim diameters measured where possible. The full record is presented below (Table 1).

Table 1 Beaker and Early Bronze Age Pottery from Cadeby

Kirby Mallory Cadeby Quarry XA69.2011 Early Bronze Age Pottery								
Context	Cut	Fabric	Form	Rim/Base	Decoration	Sherds	Weight	Diam
147	148	S1/Grog	Beaker (Vessel 1)	Bevelled rim	rusticated	32	280	215
147	148	S1/Grog	Beaker (Vessel 2)	Bevelled rim	rusticated	69	490	180
147	148	S1/Grog	Misc (Vessel 3)		corrugated	8	85	
222	221	S1/Grog	?Beaker		rusticated	15	40	
227	228	R1	misc			1	18	
235	236	Grog	Collared Urn (Vess 5)	bell-shaped	herringbone	142	1815	320
265	266	Grog	Urn	base		5	40	
286	287	Grog	Beaker (Vessel 4)	corrugated	incised	177	1375	260
286	287	Q1 fine	Beaker		incised	3	30	
286	287	Q1 fine	Beaker		fingernail	1	18	
335	334	Q1 fine	Beaker	Flat base	toothed	1	20	80
335	334	Q1 qzit	Beaker	Bevelled rim	toothed	8	36	100
<b>Total</b>						<b>462</b>	<b>4247</b>	

### *Beaker Pottery*

[147], (148)

This deposit contained the partial remains of three vessels, all manufactured in the same grog-tempered fabric with a small amount of fossil shell, which has leached out. All three vessels have oxidised external surfaces and margins and grey cores, internal margins and surfaces. Vessel 1 is a rusticated Beaker with vertically and horizontally zoned decoration (Fig.35.1), and has a flat, slightly bevelled rim, which is slightly in-turned with a cordon below. Above the cordon is a zone of two rows of vertical pinches, with intermittent burnished sections, presumably alternating around the circumference. Below the rib, down to the waist, the neck is decorated with vertical columns of lightly-executed pinches or stab marks, with undecorated zones between. Below the waist, the profile is defined by a band of three horizontal rows of pinches, which appear to be continuous around the circumference of the vessel. There is no clear parallel for this kind of zoning on rusticated Beakers.

Vessel 2 (Fig.35.2) is a rusticated Beaker with finger pinch (thumb and forefinger) decoration all over its surface. The rim is flat and slightly bevelled. The neck is almost vertical and the junction of the waist and the belly is defined by a rib which is free of decoration. The rest of the profile, comprising the lower neck, waist and upper part of belly, defined by cordon, is decorated with rows of pinches. The lower part of the belly and base are missing. A similar all-over rusticated beaker was recently excavated at Asfordby (Cooper 2012, 11-13, fig.11), with the same associated radiocarbon dating of 2210-2030, as the vessel cited below in relation to the material from (335). This agrees broadly with the date range of 2200-1900 cal BC given for similar long-necked beakers with zoned decoration (Needham 2005, 195).

The use of cordons to define zones of rusticated decoration running in different directions on long-necked Beakers is paralleled on a number of vessels in the Clarke Corpus, for example ones from Milton and Chippenham in Cambridgeshire, and Harston in Leicestershire (Clarke 1970, 390-391, nos.906, 911 and 907), with double cordons or multiple ridging occurring on two vessels from Castleshaw, Yorkshire, and others from Somersham, Cambs., and Hallsford, Essex (Clarke 1970, 401, nos.975-6 and 411, nos. 1048-1049).

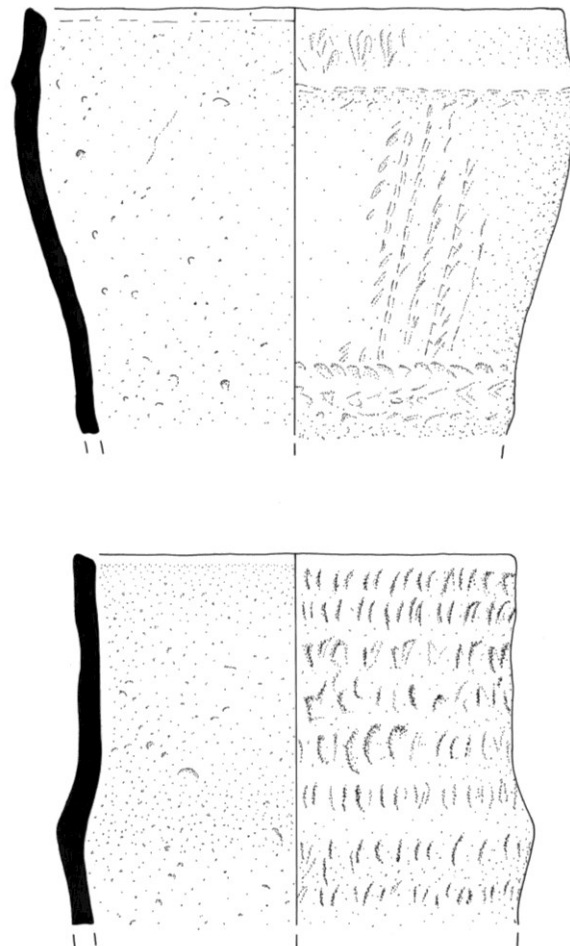


Fig.35 Vessels 1 and 2 Rusticated Beakers from [147] (148) Scale 1:3

Vessel 3 would appear to be an open vessel with four ribbed horizontal cordons down the surviving portion, although the identification is tentative. The smoothing of the internal

surface would support the contention that it is open. There is a possible parallel from Willow Farm Castle Donington (M. Hawkes pers.comm.).

[221], (222)

This feature contained a small group of 14 fragmentary and heavily abraded sherds from a rusticated vessel, which given the proximity of [147], is probably the same Beaker. Only two sherds are well-enough preserved to be fairly confident of this assertion, indicating that once broken, sherds from (148) became disturbed and re-incorporated into (222).

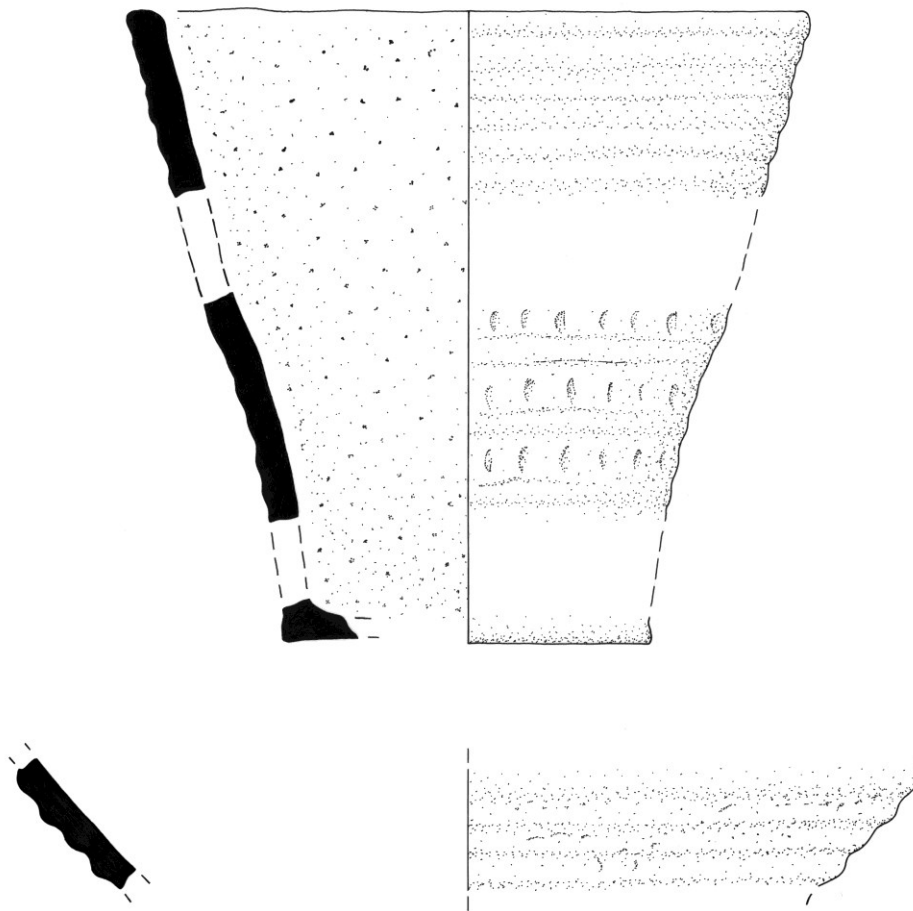


Figure 36 Vessel 4 and 3 Beaker form [287] (286) and open vessel form [147] (148) Scale 1:3

[334] (335)

[287], *Fill* (286)

This deposit contained one substantially complete but highly fragmentary vessel (177 sherds/1375g), together with four sherds from two other vessels; one rusticated and one with



linear toothed comb decoration, all appearing slightly abraded and perhaps residual in this context. The largely complete vessel (Vessel 4) was manufactured in a grog-tempered fabric with some shell content, and has a rim diameter of 260mm (based on 60% preservation). The rim is beaded and the profile appears to taper evenly to a partly preserved flat base with an estimated diameter of 140mm. The external surface is smoothed and the beading of the rim is echoed in a series of horizontal cordons evenly spaced down the profile and separated by single rows of shallow, vertical finger nail pinches. The thick body and beaded rim are paralleled on another rusticated Beaker with a single girth cordon from Dalton, Northumberland (Clarke 1970, 410, no.1044).

This deposit contained parts of two Beakers. The first is represented by a single flat base sherd (20g; 80mm diameter) in a fine sand-tempered fabric (Q1) with a single horizontal line of toothed comb decoration, 20mm up the body. The second (eight sherds/36g) comprised three joining sherds from the concave profile of the vessel, decorated with four horizontal lines of toothed comb impressions, with two lines above at an oblique angle, perhaps part of a zone of lozenge decoration. The remaining five sherds belonged to a separate bevelled rim (100mm diameter) with a convex profile beneath but appearing to taper and straighten to become concave lower down. Any decoration has been obscured by encrusted deposits on the external surface. The fabric (Q1) is tempered with angular fragments of rock up to 4mm, comprising clusters of quartz crystals (probably quartzite), and the decoration is paralleled on a more complete Beaker from Asfordby, with an associated radiocarbon dating of 2210-2030 (Cooper 2012, 13-19, fig.12 no.4 ), and two more fragments from Barrow 2 at Cossington (Allen 2008, 28-29, fig.32 nos.1-2).

### ***Collared Urn*** *[235], (236)*

This deposit contained a single Collared Urn (Vessel 5) in a grog-tempered fabric with a short collar and a campanulate internal rim (320mm in diameter) with two concave internal steps. Internally and externally the collar is decorated with herring bone formed from oblique tapering stab marks, as is the external neck. The rest of the body appears to be undecorated and the profile tapers to a flat base of 110mm in diameter. The vessel is paralleled most closely by an example from Coneygre Farm, Nottinghamshire, close to the River Trent (Allen *et al.* 1987, 199. fig.10.53).



Fig.37 Vessel 5 Collared Urn from [235] (236) Scale 1:3

[266], (265)

Four joining sherds from a flat base in a grog-tempered fabric and one other thin body sherd (total 40g), possibly from higher up the same vessel were recovered. Proportions suggest this is from a collared urn.

[228], (227)

Single thick-bodied and undecorated body sherd (18g) in a granodiorite-tempered fabric (R1) with large plates of biotite mica, form a vessel with a girth of at least 200mm. Not closely datable but possibly of Middle or Late Bronze Age date.

## Late Iron Age and Early Roman Pottery

### *Introduction*

A total of 564 sherds of Late Iron Age and Early Roman pottery weighing 7.534kg was recovered from a wide range of contexts across the site. It was decided to treat the material as a single assemblage as the occupation clearly spanned the Late Iron Age into the Conquest period and continued probably until the end of the 2nd century. The average sherd weight of 13g, although fairly high for a rural settlement, is coupled with a high degree of abrasion of much of the material.

### *Methodology*

The Iron Age pottery, which belongs to the East Midland Scored Ware tradition (Elsdon 1992a, fig.2), was classified using the Leicestershire Prehistoric Pottery Fabric Series (Marsden 2011, 62). The Roman material was classified using the Leicestershire Roman pottery form and fabric series (Pollard 1994, 110-114) and quantified by sherd count and weight. The full record is held in archive as an MS Excel spreadsheet, and summarised by fabric below (Table 2).

### *Analysis by Fabric, Form and Decoration*

#### *Iron Age*

A total of 92 sherds (1.312kg) of the assemblage belong to the East Midland Scored Ware tradition (Elsdon 1992a, fig. 2) and, given the high proportion of sherds with scored decoration, and the occurrence of transitional Iron Age forms and fabrics similar to those from the latest phases at Enderby (Elsdon 1992b, fig.29 Phase 5.3A) from other contexts, would argue for a Late Iron Age date overall for this material. The full record is presented below (Table 2)

Table 2 Full record of the Iron Age pottery

Kirby Mallory Cadeby Quarry XA69.2011 Iron Age Pottery								
Context	Cut	Fabric	Form	Type	Rim?	Dec	Sherds	Weight
246	245	Q1	jar	base		scored	6	95
291	290	Q1	jar	base		scored	1	25
230	229	Q1 fine	jar		upright	scored	4	27
157	155	Q1/SW	misc				1	10
210	211	Q1fine	jar	Elsdon9	plain	scored	2	85
256	250	R1	jar	misc		scored	1	7
307	304	R1	misc				2	15
380	381	R1	jar			scored	13	290
394	395	R1	jar			scored	1	45
405	406	R1	jar		upright	scored	40	470
485	486	R1	misc				1	3
264	263	S1	jar	misc			4	20
254	250	S2	jar	Elsdon9	upright	scored	16	220
<b>Total</b>							<b>92</b>	<b>1312</b>

The fabrics represented in the assemblage are predominantly granite-tempered (fabric R1) or quartz tempered (fabric Q1), as would be expected in this part of the county and there is a small amount in shell-tempered fabrics (S1 and S2) also, which may represent transitional material dating to around the Conquest, when shell tempered wares become more common.

### *Transitional and Early Roman*

The greater proportion of the assemblage (472 sherds/ 6.222kg) is of ‘transitional’ or Roman date, including ‘Belgic’-style fabrics (GT, SW and CG) and forms of mid-1st century date, which are relatively unusual on rural sites in Leicestershire. A summary of the assemblage quantified by fabric is presented below (Table 3). The assemblage is dominated by locally-produced early Roman grey wares (43% by sherd count), early shell-tempered wares (14.5%) and ‘Belgic’-style fabrics (8.5%); the contribution of white and white slipped wares (17%) being exaggerated by the fragmentary survival of a single white slipped flagon (3% by weight). Other locally made fabrics include the oxidised wares (7.5%) probably deriving from the nearby Mancetter-Hartshill kilns, from where also come the three mortaria (4%) in the assemblage. Of interest, is the occurrence of two 2nd-century BB1 cooking pots (134) and (382) and three instances of copies of BB1 forms in a grey ware almost indistinguishable from BB1 (GW1), which must be due to the proximity of the site to the line of the Fosse Way, the main route for transport of BB1 into Leicester and the Midlands. The handle from a Dressel 20 olive oil amphora from South Spain (184) and abraded single sherds from a dish and cup of Form 33 in Central Gaulish samian ware from (336) are the only imported vessels; the amphora probably representing secondary usage (as a water carrier) after it was originally emptied in the Leicester, rather than consumption of olive oil on the site. They testify to the likelihood that most pottery was probably obtained locally by the occupants of the site, from itinerant traders and potters, rather than by journeying into markets in Leicester.

Table 3: Quantified fabric summary of Roman pottery

<b>Quantitative Summary of Roman Pottery</b>			
<b>Fabric</b>	<b>Sherds</b>	<b>Weight</b>	<b>%sherds</b>
Amphora	6	445	1
Samian	2	10	0.5
Mortaria	20	1590	4
White/slip	81	178	17
Oxidised	35	468	7.5
BB1	18	129	4
Grey ware	203	2094	43
Shelly	68	1004	14.5
Belgic-type	39	304	8.5
<b>Total</b>	<b>472</b>	<b>6222</b>	<b>100</b>

The earliest material comprises sherds from two ‘Belgic’ cordoned jars in fine grog-tempered fabrics from (246) [245] and (275) [274], the former also containing a scored ware jar base, and the latter, a transitional sandy ware (SW) jar, all probably dating to the immediate pre-Conquest period or slightly later. Other contexts with ‘Belgic’ material were (174), (197), (232) and (401). Other contemporary material comprised ‘transitional’, handmade shell-tempered neckless jars (Fabrics S1/CG1A) with beaded rims, not dissimilar to the channel-

rimmed (lid-seated) jars which were becoming ubiquitous across Northamptonshire in the first half of the 1st-century AD. As mentioned above, these vessels have parallels with jars from the Phase 5 groups at Enderby, dating to the 1st century AD including two examples from (230) (Elsdon 1992b, fig.29 Phase 5.1A no. 79), and three examples from (360), (424) and (426) (fig.29 Phase 5.3A no.91).

Much of the assemblage comprising fully Romanised fabrics, falls into the later 1st and 2nd century date range and two stratified groups, from (125) [124] and (134) [133], contain enough diagnostic material to be fairly confident of their dating and help to define the end of Roman occupation on the site. Context (125) contained a group of grey ware necked jars with beaded rims, alongside an early 'bead and flange' mortarium (bead below the height of the flange) with quartz and flint grits, characteristic of Mancetter-Hartshill products in the first half of the 2nd century. The rim is partially stamped, with the letters [M.E] legible. Context (134) also dates to the middle or possibly the second half of the 2nd century as it contained a BB1 jar and two mortaria. The first mortarium was a small, almost complete but very worn, bead and flange type, again with the bead below the flange, manufactured in a sandy fabric with red trituration grits, and probably a Mancetter-Hartshill product of the first half of the 2nd century. The second example had a damaged bead and flanged rim in the more typical pipeclay fabric of the industry (MO4) and probably dates to the second half of the 2nd century. The group also contained a grey ware bowl copying samian Form 38, with a flange halfway down the body, which should also date to the second half of the 2nd century.

Overall, there is nothing in the Roman assemblage that needs to date after *c.*200 at the latest and the likelihood is that occupation ends during the middle or later decades of the 2nd century.

## **Early Anglo-Saxon Pottery**

### ***Introduction***

A total of 165 sherds (2.091kg) of Early Anglo-Saxon pottery, dated *c.*AD450-700, was recovered from 15 contexts across the site.

### ***Methodology***

The assemblage was analysed by fabric and form and quantified by sherd count, and weight, with rim diameter, girth, decoration and surface treatment also being recorded. Fabrics have been analysed using low power microscopy (x20) and identified in accordance with the series developed by Blinkhorn for the two currently published assemblages from the City at Causeway Lane and Bonner's Lane (Blinkhorn 1999 and 2004), but simplified following unpublished petrological thin-section work undertaken by David Williams on the material from Causeway Lane and The Shires (Little Lane and St Peter's Lane). The fabric series, as used on the assemblages from the Highcross, Leicester sites, identifies four major fabrics based on the opening materials used: SX1 Quartz with variant SX2 fine quartz sand, SX3 Granite and SX4 Quartz and shell.

### ***Analysis***

The complete record is presented below (Table 4)

Table 4 The Early Anglo-Saxon Pottery

Kirby Mallory Cadeby Quarry XA69.2011 Anglo-Saxon Pottery									
Context	Cut	Fabric	Form	Type	Rim	Decoration	Sherds	Weight	Diam
105	10 2	SX3Gra	misc				1	2	
107	10 6	SX3Gra	misc				12	30	
107	10 6	SX1Qu	jar	globular	upright		22	310	120
154	15 3	SX3Gra	misc				1	35	
163	16 2	SX1Qu	jar	globular	upright		2	22	120
163	16 2	SX1Qu	jar	globular	upright		1	12	
167	16 6	SX3Gra	misc			Incis lines	3	30	
167	16 6	SX3Gra	misc				3	24	
208	20 9	SX1Qu	misc				5	30	
212	21 3	SX1Qu	jar	globular	upright		22	555	200
212	21 3	SX3Gra	jar	globular	flaring		1	20	200
212	21 3	SX3Gra	jar	globular	upright		2	20	200
212	21 3	SX3Gra	jar	large			3	152	>350gi
212	21 3	SX3Gra	misc			perforated	3	35	
214	21 5	SX1Qu	jar	globular	upright		1	11	160
281	28 0	SX3Gra	misc			extsmooth	17	104	
281	28 0	SX1Qu	jar	globular	upright		2	46	160
288	28 9	SX3Gra	jar	globular		horiz incis	12	125	115gi
424	42 3	SX4Qu S	jar	globular	flaring		1	5	
424	42 3	SX3Gra	misc				24	145	
445	44 6	SX3Gra	misc				2	3	
451	45 2	SX1Qu	jar	globular	plainflat	intsmooth	3	25	140

451	45 2	SX3Gra	misc				2	13	
451	45 2	SX4Qu S	jar	globular	upright		1	4	
462	46 6	SX1Qu	misc				9	215	
462	46 6	SX1Qu	urn			stamped	1	3	
462	46 6	SX3Gra	misc				4	65	
504		SX3Gra	jar		flaring		5	50	
<b>Total</b>							<b>165</b>	<b>2091</b>	

The assemblage comprises a range of globular jars with upright or flaring rims manufactured either in a dense quartz-tempered fabric (SX1) or the more open, granite-tempered, fabric (SX3) with a single example of SX4 (quartz and shell). The fact that all three fabrics occur together in (451) and the first two in most other contexts together, indicates that they are broadly contemporary but represent slightly varying source materials, centring on the Charnwood Forest area, the distinctive plates of biotite mica characteristic of granodiorite quarries around Mountsorrel (Williams and Vince 1997). A general observation from the sites analysed in the City and across the County is that quartz-tempered fabrics are more common in the City and granite-tempered are more common in the County, for example at Cossington (close to Mountsorrel) (Cooper 2008, 94), although this might be skewed by the relatively small sample from the city sites (255 sherds). Here at Cadeby, the division is more even, and may simply reflect a similar distance from each source.

The diameter of vessel rims generally varied between 120mm and 200mm but in one instance an unusually large jar with a girth of at least 350mm was recovered from (212). Formal decoration is limited to a single sherd with two 'circular closed ended cross' or 'hot cross bun' stamps belonging to Briscoe's Category A 4a ii (1981, 5) from an urn recovered from (462) and probably dating to the 6th century. This is one of the more common stamp types and is represented on a number of cremation urns from the Thurmaston cemetery (Williams 1983, fig.83.35 and 8). Otherwise, there are examples of incised line decoration from (167) and (288) and the use of internal and external smoothing of surfaces. Of interest was the occurrence of a perforated sherd from the neck of a vessel with three pre-firing holes of 7mm diameter set close together, presumably to enable suspension over a fire.

## The Worked Stone

*Lynden Cooper and Rebecca L. Hearne*

Forty worked flint pieces were recovered 36 of which were from the Neolithic - Bronze Age funerary contexts. The majority of these were all examples of flake technology debitage in the form of struck flakes with technological features of later prehistoric date.

Of note is a barbed and tanged arrowhead from (335) associated with sherds of two Rusticated Beakers of late 3rd early 2nd millenium BC date. The barbed and tanged arrowhead is one of Green's more elaborate types (Green Low Type 3) and is of classic Early Bronze Age form. A plano-convex knife is also likely to be of a similar date.

A worked stone assemblage comprising four pieces including a handstone, a rotary quern base, and two possible saddle querns, were retrieved from securely dated contexts. These are summarised in Table 5.

*Table 5 The Worked Stone*

1. Lithics

Context	SF	Description	Comment
Unstrat		2ry flake	
Unstrat		2ry bladelet	
148		Natural x 2	
149		3ry flake	
149		Flake frag	
150		2ry blade	
207		Blade frag	
222		Retouched flake	
222		2ry flake x 4	
222		Core fragment	
222		Flake frag	
222		3ry flake x 3	
222		Natural	
222		Chert? Frag	uncertain if worked
225		2ry flake	
286	108	Plano-convex knife	Wolds flint
286	109	Natural	
286	110	Flake frag	Calcined
326		Core	Crude, small
335	117	Arrowhead, barbed and tanged	Green Low type 3, 32x29x3mm, broken tang
335	118	2ry flake	
335	119	Core on flake	
335	120	Flake frag	
335	121	Shatter	
335	122	Core frag	Calcined
335	124	2ry flake	
335	126	Natural	
335	127	3ry flake	
335	128	Chip	
335	129	Chip	
335	130	Flake frag	
335	131	Shatter	
335	132	Shatter	
335	134	Shatter	
335	135	Core	
335	136	2ry flake	
335	137	Core	
335	139	Shatter	
335	142	2ry flake	
335	144	Natural	
335	146	Core	



## 2. Handstone and querns

SF#	Con	Cut	Lithology	Object type	State	Comments	Original diameter (mm)	Width (mm)	Depth (mm)
	154	153	Quartzite	Possible handstone	Complete	A possible handstone made on a burnt cobble. One face slightly smoothed and concave.		100	70
103	137	138	Quartz gritstone	Rotary base	Broken	A rotary quern base preserving a central spindle hole/socket which penetrates c. 20 mm. Grinding surface worn smooth and at an angle of 15-20° from horizontal. Underside roughly dressed and pecked. Roughly circular in plan.	280		160
104	232	231	Quartzite	Possible saddle base	Broken	Burnt possible saddle quern base. Upper face smooth and underside flat. Sub-rectangular in shape. Made on a fine sandstone or quartzite boulder.		280	160
116	313	304	Quartzite	Saddle base	Broken	Part of a saddle quern base made on a quartzite boulder. Grinding surface worn smooth. Underside roughly flat. Rounded end dressed and preserved where quern unbroken.		170	80

A single incomplete rotary quern base (**SF103**) was retrieved. The stone is roughly circular in plan with a smoothed upper grinding face at an angle of 15-20° from horizontal. It preserves a central spindle socket which penetrates to a depth of 20 mm. Its underside is convex and roughly dressed. It is made on a medium to coarse grey-white quartz gritstone possibly deriving from the Triassic sedimentary units or superficial clays which cover the immediate area. The stone is characteristic of later prehistoric rotary querns (Curwen 1937, 1941).

The possible saddle querns are of Iron Age type, i.e. relatively small in size and roughly dressed or shaped in comparison to the wide, flat or saucer-shaped examples from the Neolithic or Bronze Age. One of the stones (**SF104**) is burned. The possible handstone is a medium-sized cobble displaying evidence of burning, and with one face slightly smoothed and concave.

The handstone and saddle querns are made on quartzite cobbles/boulders available in the local superficial glaciofluvial deposits.

All the stones were recovered from contexts interpreted as Iron Age, which corresponds with the quern types represented here. The rotary quern (**SF103**) was retrieved from a post hole where it was possibly used as packing, the burnt saddle base (**SF104**) from a beam-slot cut, saddle base (**SF116**) from a large storage or fire pit, with which was associated another large fire pit or hearth from which the handstone was also recovered. Thus, the latter two stones were likely re-used as pot-boilers or may have been burned as part of a more symbolic

depositional process (Hill 1995). The re-use of querns as packing material is well-documented (Marsden 1998, Taylor et al 2012, Hearne 2014) and may indicate the stones' value during their use-lives, or their specific association with the buildings they are eventually deposited within.

## **Glass Objects**

*Nicholas J. Cooper*

### **Vessel Glass**

Sf125 (369) [368] Fill of Roman ditch terminus. Fragment from a long handle with a central rib in light green glass from a conical jug with a long neck which dates from the last quarter of the 1<sup>st</sup> century to the third quarter of the 2<sup>nd</sup> century (Price and Cottam 1998, 155-7, fig.68). Given the paucity of other small finds from the site this is a rather remarkable find.

### **Objects of Personal Adornment**

(445) [446], from sample 141. Plain short bead in dark green opaque glass (Crummy 1983, fig.34). Length: 3mm, diameter 7mm. Most common in the later Roman period.

## **Loom weights and fired clay**

*Nicholas J. Cooper*

### **Introduction**

In addition to the group of 12 Anglo-Saxon annular loom weights retrieved from Pit (9) [22] during the evaluation and previously reported on (and detailed below), four further annular weights were recovered during the excavation, three from (165) [164] and one from (462) [466]. The friable remains of part of another loom weight possibly of triangular form, and therefore Iron Age or Early Roman in date, was recovered from another Anglo-Saxon context (163) [162].

### **Description**

All of the weights were produced in a poorly-prepared, fine sandy clay with angular pebble impurities and voids produced by the burning out of organic filler such as straw during a minimal bonfire firing which produced an oxidised orange external surface and a consistently dark grey core produced by the lack of combustion of carbonaceous content out of the clay.

### **Pit (9) [22]**

The fragmentary remains of at least 12 complete weights (total weight 3.3kg) of variable, but broadly similar, dimensions were recovered. One complete, but fragmentary, example measured 100mm in diameter, with a central perforation of 40mm and a ring thickness of 30mm (weight 250g).

**Pit (165) [164]**

One complete example (265g), with a 100mm diameter and a circular perforation of 40mm, together with two fragmentary examples (580g).

**Upper fill (462) [466] of SFB [215]**

Fragments (150g) of a single example.

**(163) [162]**

Fragments (550g) from a possibly triangular loom weight with perforations through the corners. Too friable to be certain of the form and date.

**Fired clay or burnt daub**

A small assemblage of amorphous fragments of fired clay, probably from wattle and daub structures which have been burnt was recovered from the following contexts

Table 6 Loom weights and fired clay

Context	Cut	Description	Weight
103	102	Saxon pit/ sfb upper fill	30
105	102	Saxon pit/ sfb Primary fill	70
107	106	Saxon post hole/ sfb	50
111	110		10
163		Metal bucket handle/blade sfb? Fire crack pebble	50
165		Fill contained Saxon Loom weights	
167	166	Fill with spear head	210
288	289	Fill shallow pit Pottery and a metal find sfb??	5
341		Fill ditch gulley	10
404			30
424		Fill of beamslot gulley	100
445		Fill of sfb post hole east	10

**Discussion**

Annular or ‘doughnut’-shaped loom weights were hung from a warp-weighted loom of the kind used during the Early and Middle Anglo-Saxon period (Leahy 2003, 66 and figs.33 and

36). They are common finds from the floors of Early Anglo-Saxon sunken featured buildings at sites such as West Stow, Suffolk, which has led to their interpretation as weaving sheds, although the numbers of weights found (often less than ten) is insufficient for a single loom, as experiments suggest that at least 28 weights are required to tension the warp for every metre width of cloth produced (Leahy 2003, 68).

## **Iron Objects**

*Nicholas J. Cooper*

A total of seven iron objects was recovered, four of which are associated with a possible burial of Early Anglo-Saxon date on the eastern side of the site.

Sf100 (163) [162]. Iron rod. Length of rod, curving gently. One end with a suspension loop, and the other end broken but curving, perhaps to form a second suspension loop. Length: 400mm, width: 10-15mm. Possibly a handle of a vessel such as a bucket but rather shallow curve for this and would make the vessel about 320mm wide.

Sf102 (163) [162] Iron blade. Narrow blade, in two joining pieces, tapering to a point. Length: 275mm, width: 25mm.

Sf101 (167) [166]. Iron Spearhead. A short, leaf-shaped blade with a short, open-seamed socket, the widest part of which is missing. Length: 120mm, length of blade: 70mm, width of blade: 25mm. Most closely matches small examples of Swanton's Series C leaf-shaped blades (Swanton 1974, 8, fig.2, C1).

Sf106 (288) [289]. Curved iron strip. Broken transversely at one end and appearing to swell and then taper to a rounded point at the other. Length: 80mm, width: 20mm.

Sf143 (366) [365]. Roman iron nail of Manning's (1985) Type 1B with round, flat head and tapering square-sectioned shaft. Length: 100mm.

Sf148 (459) [460] (Intrusive in) Bronze Age ditch fill cut by SFB [213]. Fe nail shaft fragment. Length: 102mm.

(438). Roman iron nail of Manning's (1985) Type 1B with round, flat head and tapering square-sectioned shaft. Length: 67mm.

## **The charred plant remains**

*Rachel Small*

### ***Introduction***

Excavation was carried out at Cadeby Quarry Extension, Kirkby Mallory in 2011 and two areas were uncovered. Area A contained archaeological features that were located towards the east and south-east including Bronze Age cremation urns, Iron Age enclosures, Roman

enclosures and a Saxon settlement. Area B contained a Bronze Age Ring ditch and another Saxon settlement located in the south-west corner of the trench. The report presents the analysis of the charred plant remains recovered from environmental samples taken during excavation. Charred plant remains, which may include cereal grains, chaff, weed seeds and other remains, provide evidence for past food production, consumption, agricultural practises and environment.

### ***Previous environmental work***

A series of archaeological works have been carried out in the area prior to this excavation. Two of the investigations included environmental sampling and shall be referred to in this report. A brief description follows.

An excavation was carried out at Cadeby Quarry in 2009 and revealed evidence for an early/mid-1st century AD settlement. Ten environmental samples were taken on site from features including a ditch, gullies, pits and a possible kiln, and all of the samples were processed (Monckton 2010).

An evaluation at Cadeby Quarry extension was undertaken in 2011. There was evidence for an Iron Age/Roman enclosure and an early to mid Anglo Saxon pit. Seven soils samples were taken and five were processed (Radini 2011).

### ***Method***

On site environmental samples were selected on a judgmental basis; generally they were taken from discrete dateable contexts which were believed to have good potential (e.g. charcoal was visible). In total 48 samples were taken; all were dry (that is none of them were waterlogged) and most were silty-sand based.

The decision was made to assess a selection of the samples; eighteen were selected that were considered to be the most meaningful to the interpretation of the site. No Bronze Age samples were processed; one from the late Iron Age/transitional period; three samples from the Roman period (late 1<sup>st</sup> to mid-2<sup>nd</sup> century); and fourteen from the Anglo-Saxon period. For the latter period, samples came from both areas.

One part of each sample was processed by wet sieving and this was carried out in a York tank using a 0.5mm mesh with flotation into a 0.3mm mesh sieve. The flotation fractions (flots) were transferred into plastic boxes and left to air dry; they were then sorted for plant remains using a x10-40 stereo microscope. The residues were air dried and the fractions over 4mm sorted for all finds. Artefacts, such as animal bone, were passed to the appropriate specialist.

The charred plant remains were identified by comparison to modern reference material available at ULAS and plant names follow Stace (1991). Identifications were noted and an estimate of quantity is given in the tables below. Regarding quantification; for grains only the embryo or embryo scar was counted, and for chaff each glume base was counted as one. The weed seeds were counted as one, even when broken, with the exception of large weed seeds fragments when they clearly represented parts of the same seed.

### ***Results***

It is firstly important to consider taphonomy - the environmental conditions affecting the preservation of remains. Modern roots, uncharred seeds and worm egg capsules were present in samples but in low numbers suggesting a level of disturbance to the contexts.

Charred plant remains, weeds, seeds and grains, were absent in samples or present in very low numbers. Charcoal (over 2mm in size) was present in much larger quantities. Remains were poorly preserved; they were broken and abraded with mud conglomerations and grains were distorted from being burnt at high temperatures. These factors made it difficult to identify species. The assemblage will now be discussed by phase.

### *Late Iron Age/transitional*

Sample 104 (140)[139] was from the red clay lining of a trough that was thought to form part of a fence line. No charred plant remains were present and charcoal was rare.

### *Roman late 1st to mid-2nd century*

Samples 132 (301) [300] and 133 (303) [302] were fills from a corn dryer/kiln. Charcoal was abundant in them and a small number of goosefoot (*Chenopodium* spp.) seeds were present (table 1). Sample 135 (366)[365] was a fill from a shallow pit thought to have acted as a stock control division. A wheat grain was present and a few seeds; chickweed (*Stellaria media* L.) was identified, a common weed of cultivated land (Jones et al 2004).

Table 7: Approximate numbers of charred plant remains present in Roman samples. Key: + rare; ++ common; +++ abundant.

Sample No.	Context No.	Cut No.	Description	Area	Sample Vol. Litres.	Flot volume mls.	% scanned	Charcoal	Charred grain	Charred chaff	Charred weed seeds	Total	Items per litre	Comments
132	301	300	Fill of corn drier/kiln flue	A	8	8	100	+++			5	5	0.63	Goosefoots.
133	303	302	Fill of corn drier/kiln fire pit	A	6	15	100	+++			2	2	0.33	Goosefoot and indeterminate.
135	366	365	Shallow pit fill. Stock control divisions.	A	8	2	100	+	1		5	6	0.75	Wheat grain. Chickweed and four indeterminate. Many modern goosefoot seeds.

### *Anglo-Saxon*

Three (21.4%) of the Anglo-Saxon samples did not contain any charred plant remains (table 2). Grain was present in ten (71.4%); chaff in four (28.6%); and seeds in nine (64.3%). Charcoal was abundant in six samples four of which were pit fills associated with an inhumation [166].

When present grains were low in number. Barley (*Hordeum vulgare* L.) and wheat grains were identified; some of the wheat grains, for example in sample 101 (103)[102], were potentially glume wheat (*Triticum diccocum/spelta* L.). The barley grains were of a hulled

form and some were twisted indicating that six-row barley was present (twisted grains are from the fertile lateral floret of six-row barley).

A small number of glume wheat bases were identified and it was possible to identify spelt wheat (*Triticum spelta* L.). The glume bases were present in samples 120 (224)[166] and 129 (288)[289] both of which came from pit fills associated with inhumations. Two straw culm nodes were present; they were also from pit fills associated with inhumations - samples 119 (167)[166] and 118 (223)[166].

Weeds of arable crops and wastelands were identified such as black bindweed (*Polygonum convolvulus* L.). Cleavers (*Galium aparine* L.) were present and are associated with autumn sown crops and sedges (*Carex* spp.) suggesting moist field conditions. Grassland species, such as clover (*Trifolium* spp.), were also identified (Jones et al 2004).

Table 8: Approximate number of charred plant remains present in Anglo-Saxon samples. Key: + rare; ++ common; +++ abundant.

Sample No.	Context No.	Cut No.	Description	Area	Sample Vol. Litres.	Flot volume mls.	% scanned	Charcoal	Charred grain	Charred chaff	Charred weed seeds	Total	Items per litre	Comments
100	105	102	Base fill of pit.	A	8	200	100	+++	1			1		Cereal grain.
101	103	102	Top fill of pit.	A	9	30	100	++	5		4	9	1	Grain: two barley, glume wheat? and two cereal. Goosefoots.
102	111	110	Stake hole fill.	?	0.5	15	100	++				0	0	Bucket floated.
118	223	166	Rectangular pit fill. Inhumation.	A	8	110	100	+++	4	1	18	23	2.88	Grain: barley, wheat, and two cereals. A straw culm node. Weeds: four goosefoots, two docks, cleaver, four knotgrasses, large grass seed and six indeterminate.
119	167	166	Rectangular pit fill. Inhumation.	A	8	70	100	+++	1	1	9	11	1.38	Wheat grain. A straw culm node. Three goosefoots, large grass seed and five indeterminate.
120	224	166	Rectangular pit fill. Inhumation.	A	8	20	100	++	3	2	7	12	1.5	Three cereal grains. Chaff: spelt and a wheat glume base. Weeds: black bindweed, two large grass seeds, small grass seed, goosefoot, and two indeterminate.
121	224	166	Rectangular pit fill. Inhumation.	A	7	30	100	+++	2		8	10	1.43	Two cereal grains. Weeds: black bindweed, goosefoot, two sedges, clover, two large grass seeds, and indeterminate seed.

123	223	166	Rectangular pit fill. Inhumation.	A	8	250	25	+++	1		1	2	1	Cereal grain. Seed casing.
129	288	289	Shallow sub-rectangular pit. Possible inhumation.	A	8	10	100	++	1	2	9	12	1.50	Twisted barley grain. Spelt and a wheat glume base. Five goosefoots and four indeterminate.
139	434	433	Upper fill of fire pit feature.	B	10	140	100	+++			1	1	0.1	A large grass seed.
140	444	433	Lower fill of fire pit feature.	B	0.2 5	50	100	++				0	0	
145	451	452	Fill of truncated pit.	B	7	20	100	++				0	0	
146	464	466	Fill at the base of SFB.	B	7	10	100	++	1		2	3	0.43	Cereal grain. Goosefoots.
147	462	466	Upper fill of SFB.	B	8	4	100	+	1			1	0.13	Cereal grain.

### Discussion

There were insufficient plant remains, even if the remaining parts of each sample were sieved, for a detailed analysis of the proportions of cereal grains, chaff and weeds seeds which requires a minimum of 50 items (Van der Veen 2007). However, comments about the assemblage can still be made.

#### *Late Iron Age/transitional*

The one sample processed from the 2011 excavation contained no remains. However, for context on this period we can look to the 2009 excavation (Monkton 2010). For the assemblage the density of remains was low, a scatter of charred cereal grains, chaff and weed seeds were present. The main cereals consumed were spelt and barley, a possible bread wheat type grain (*Triticum aestivum* s.l.) was identified and emmer chaff (*Triticum diccocom* L.). The presence of hazel nutshell (*Corylus avellana* L.) suggests the exploitation of wild resources. The remains were interpreted as food preparation waste. The site compared to others in the region, such as Enderby and Kirby Muxloe, which also had less than 5 items per litre. These sites are thought to have a bias towards pastoral, rather than arable, farming.

#### *Roman late 1st to mid-2nd century*

It seems most likely that the Roman samples, 132 (301)[300] and 133 (303)[302], were from a kiln rather than a corn drier because charcoal was abundant and only goosefoots were present. If it was a corn drier one would expect large quantities of grain and/or chaff, similar to the proportions found at Norfolk Street, Leicester and Hibaldstow, Lincolnshire, for example (Van der Veen 1989).

Sample 135 (366)[365] which had sparse remains, a single wheat grain and a few seeds, probably represents a scatter of food preparation waste that accumulated in the open pit.

#### *Anglo-Saxon*



Generally, bread wheat (*Triticum aestivum/turgidum* L.) is regarded as the staple crop in the Anglo-Saxon period and spelt wheat for the Iron Age/Roman period. The shift is thought to reflect a change in dietary preference and agricultural technique – bread wheat is less labour intensive (Moffett 2011). Spelt wheat glume bases were found in two Anglo-Saxon samples, 120 (224)[166] and 129 (288)[289], and it was suggested that some of the wheat grains may be glume wheat. As this does not fit the norm, it could represent re-deposited Roman material but the pottery records suggest a secure context.

To date, there has been no convincing evidence from the East Midlands for the continued cultivation of spelt wheat in the Anglo-Saxon period (Monckton 2006) and this would be the first example. There is some evidence for continuity of production in East Anglia and Essex. For example, spelt has been found in the early Saxon contexts at Springfield Lyons, West Stow and Mucking. Spelt, with some emmer, was also identified in late Saxon samples from Springfield Lyons (Murphy 1994).

There is the possibility that spelt wheat persisted into Anglo-Saxon times as a contaminate of other crops; indicating continued use of the same arable fields. However, if the land went out of use and was only later brought back into cultivation using new seed corn, this seems unlikely (Murphy 1994). Therefore spelt wheat may have continued to have been cultivated locally on a small scale in the post-Roman period. Use of spelt wheat may have marked wider cultural differences between groups of people, perhaps reflecting their origins and more research to test this hypothesis is needed (Moffett 2011).

The sparse grains, chaff and weed seeds present in the Anglo-Saxon samples seem to represent a scatter of food preparation waste that has become incorporated into a variety of features across both areas of the site.

Looking at the samples from the inhumation fills more closely, similar assemblages have been found at Springfield Lyons early Saxon cemetery. Murphy (1994) suggests they may be chance inclusions but perhaps intentional as Whitelock (1952: 25) mentions the pagan Saxon practise of burning grain after a death ‘for the health of the living and the house’. In the 2011 evaluation at Cadeby Quarry Extension a pit fill (15) associated with a cremation was analysed and several grass stems and tubers of onion couch grass (*Arrhenatherum elatius* L.) were identified. These are commonly found in prehistoric cremation contexts and may have been used as tinder for starting the fire along with chaff (Radini 2011).

### ***Conclusion***

Excavation was carried out at Cadeby Quarry Extension, Kirby Mallory and environmental samples were taken. Eighteen were processed; this included samples from the Late Iron Age/transitional period; late 1st to mid-2nd century; and Anglo-Saxon period. The charred plant remains from the samples were analysed to provide evidence for past food production, consumption, agricultural practises and environment. The remains, grains, chaff and weed seeds, were very low in number and interpreted as a scatters of food preparation waste. This fell in line with the results from previous investigations at the site. Cadeby Quarry is of regional importance as it is the first to contain spelt wheat chaff in a ‘secure’ Anglo-Saxon context.

## **Osteological Analysis**

*Katie Keefe and Malin Holst*

### **Summary**

York Osteoarchaeology Ltd was commissioned by University of Leicester Archaeological Services (ULAS) to carry out the osteological analysis of fifteen cremated bone assemblages recovered from Cadeby Quarry Extension, On Land to the South Bosworth Road, Kirkby Mallory, Leicestershire (NGR SK 4337 0922).

The earliest of the cremated human bone assemblages was recovered from within a decorated collard urn, which had been placed in a pit, to the north of an Iron Age enclosure ditch. The urned burial appears to have formed part of a small dispersed Bronze Age cremation cemetery, however, post-depositional changes meant that human bone was only recovered from one of the Bronze Age burials. The bone represented less than 2% of the expected quantity from modern cremations and survived in good condition, but is unlikely to be a true representation of the quantity of bone originally deposited.

Five deposits of cremated bone were Iron Age in date, however, only one of these may in fact be a genuine burial, the others being recovered from deposits of domestic refuse. The majority of bone from this period survived in moderate condition, however, the largest burial survived in excellent condition. The cremated bone assemblages from the Iron Age represented between 0.01% and 11.9% of the amount expected from a modern cremation. One of the Iron Age cremation burials had not been sufficiently burnt and did not achieve complete calcination of the bone.

Five cremated bone deposits believed to date to the Anglo-Saxon period were recovered from large features across the excavated site and do not appear to have been the primary deposits within any of them. It is possible that the bone recovered from these deposits was accidentally included rather than intentionally deposited. The bone represented between 0.02% and 3% of the amount expected from a modern cremation.

A further three cremated bone assemblages were of unknown date and were located within Area A. The bone recovered represented between 0.01% and 1% of the amount expected from a modern cremation.

Context (424) was examined and this was not in fact bone and as such has not been considered further during the analysis.

The majority of the cremated bone assemblages were located within Area A and may hint at the prolonged use of a site by a group of individuals. Osteological analysis found that all of the burials contained the remains of adults, and in each case the remains of a single individual were identified.

### ***Introduction***

In September 2015 York Osteoarchaeology Ltd was commissioned by ULAS to carry out the osteological analysis of fifteen assemblages of cremated human bone. The skeletal remains

were recovered during 2011 under controlled topsoil stripping at excavations at Cadeby Quarry, Kirkby Mallory, Leicestershire (NGR SK 4337 0922) prior to a quarry extension. Archaeological remains included a Bronze Age ring ditch and funerary activity, Iron Age and Roman enclosures, and two areas of Anglo-Saxon settlement (Higgins 2015).

Table 9 Summary of cremated bone assemblages

Fill No	Cut No	Feature Type	Period	Artefacts and Inclusions	Bone Colour	Preservation	Weight (g)	Percentage of Expected Quantity of Bone
10 & 12	11	Pit	Iron Age	-	White	Excellent	193.9	11.9%
105	102	Pit/Sunken floor building upper fill	Saxon	-	White	Moderate	2.4	0.15%
141	139	Upper fill of trough	Iron Age?	-	White	Moderate	1.5	0.09%
163	162	Pit/Sunken floor building fill	Saxon	-	White	Good	3.3	0.2%
167	166	Pit/Sunken floor building fill	Saxon	-	White	Moderate	0.9	0.06%
197	195	Upper fill of domestic pit	Iron Age?	-	White (not identifiable as human)	Moderate	0.2	0.01%
236	235	Pit	Bronze Age	Collard Urn	White	Good	1.9	0.1%
238	237	Unknown	Unknown	-	White	Good	15.9	1.0%
240	239	Unknown	Unknown	-	White	Moderate	3.6	0.2%
254	250	Upper fill of storage pit	Iron Age	-	White	Good	0.4	0.02%
256	250	Fill of storage pit	Iron Age	-	White, inner surfaces black and blueish grey	Moderate	6.0	0.4%
275	274	Fill of gulley	Unknown	-	White (not identifiable as human)	Good	0.2	0.01%
451	452	Fill of truncated pit	Saxon?	-	White (not identifiable as human)	Good	0.4	0.02%
462	466	Upper fill of Sunken floor building	Saxon	-	White	Moderate	4.3	0.3%
424	-	Not bone	-	-	-	-	-	-

The earliest cremated bone assemblage (Context 236) was recovered from a Bronze Age urn, which was the most northerly of seven Bronze Age funerary urns. The urn was located to the north of a late Iron Age enclosure ditch, and was the only vessel to contain any cremated

remains. All of the cremation urns appeared to have been heavily truncated by post-depositional changes.

Five cremation burials were dated to the Iron Age, all of which were located in Area A. Three of the assemblages were recovered from Iron Age pits [195] and [250], which were located on the external side of the northern Late Iron Age enclosure, while two were located within domestic features [11] and [139] in the north eastern side of the enclosure (Table 9).

Three of the five cremated bone deposits believed to be Anglo-Saxon were located in Area A. Two of these were located to the northeast of the northern Late Iron Age enclosure. Features [162] and [166] were interpreted as possible burials (bone had not survived). Finds within the features were interpreted as possible grave goods, with [162] containing a bucket handle, a blade and pottery sherds, all of which were contained within the northwest corner of the feature, and [166] contained an iron spearhead. A further small cremated bone assemblage (105) was recovered from the backfill of a large Anglo-Saxon pit [102]. The pit was also located in Area A, directly north of the Roman enclosure and south of the northern boundary ditch of the southern Late Iron Age enclosure. Finally, two cremated bone assemblages (451) and (462) were recovered from small features within Area B [452] and [466], which were located to the south of a Bronze Age ring ditch.

The remaining three cremated bone deposits were of unknown date and were located within Area A. Two deposits, Contexts (238) and (240) were recovered from charcoal filled pits [237] and [239] and the third (275) was recovered from a gully [274].

### ***Aims and Objectives***

The skeletal assessment aimed to determine age and sex, as well as any manifestations of disease from which the individuals may have suffered. Additionally, information was sought regarding the cremation techniques.

### ***Methodology***

The cremated bone was sieved through a stack of sieves, with 10mm, 5mm and 2mm mesh sizes. The bone recovered from each sieve was weighed and sorted into identifiable and non-identifiable bone. The identifiable bone was divided into five categories: skull, axial (excluding the skull), upper limb, lower limb and long bone (unidentifiable as to the limb). All identifiable groups of bone were weighed and described in detail.

### ***Osteological Analysis***

Osteological analysis is concerned with the determination of the demographic profile of the assemblage based on the assessment of sex, age and non-metric traits. This information is essential in order to determine the prevalence of disease types and age-related changes. It is also crucial for identifying gender dimorphism in occupation, lifestyle and diet, as well as the role of different age groups in society.

### ***Preservation***

Skeletal preservation depends upon a number of factors, including the age and sex of the individual as well as the size, shape and robusticity of the bone. Burial environment, post-depositional disturbance and treatment following excavation can also have a considerable

impact on bone condition. Preservation of human remains is assessed subjectively, depending on the severity of bone surface erosion and post-mortem breaks, but disregarding completeness.

Preservation was assessed using a grading system of five categories: very poor, poor, moderate, good and excellent. Excellent preservation implied no bone erosion and very few or no post-depositional breaks, whereas very poor preservation indicated complete or almost complete loss of the bone surface due to erosion and severe fragmentation.

#### *Bronze Age*

The Bronze Age cremated bone survived in a good condition. The Bronze Age cremated bone had evidently suffered from post-depositional alteration and it is likely that its condition suffered as a result.

#### *Iron Age*

The majority of Iron Age cremated bone assemblages were in moderate condition, however, bone from one of the Iron Age burials [11] was in an excellent condition.

#### *Anglo-Saxon*

Two of the Anglo-Saxon cremated assemblages were in good condition and the remaining three were in moderate condition.

#### *Unknown Date*

Two of the cremated bone assemblages of unknown date were in moderate condition, and the third was in good condition.

#### *Overall*

Seven of the burials were in a moderate state of preservation, exhibiting a powdery surface texture with rounded edges. Six of the burials were in a good condition, with the retention of surface detail and sharper margins to the bone fragments. There were no clear trends in the preservation of the cremated bone between the periods. Surprisingly, the Bronze Age urned burial (236) was not the best preserved, suggesting that the inclusion of a burial within an urn did not contribute to better preservation of the cremated remains. Instead, it is possible that post-burning processes, such as raking of the pyre while the bone was still hot, had a greater affect on the bone preservation.

Moderate warping and bone cracking, which occurs commonly during the cremation process, was evident in all of the cremated bone assemblages from all periods. The fragment size of cremated bone is frequently attributed to post-cremation processes. This is because skeletal elements retrieved from modern crematoria tend to be comparatively large before being ground down for scattering or deposition in the urn. Bone is also prone to fragmentation if it is moved while still hot (McKinley 1994, 340).

#### *Bronze Age*

Nearly all of the bone from the Bronze Age cremated bone (236) was derived from the 5mm sieve. The cremated bone weighed less than 2grams, but had been thoroughly burned and was entirely calcined (Table 10).

Table 10 Summary of cremated bone fragment size

Context	10mm (g)	10mm (%)	5mm (g)	5mm (%)	2mm (g)	2mm (%)	Residue	Weight (g)
10 & 12	106.7	55.0	71.5	36.9	12.5	6.4	-	193.9
105	1.0	41.7	0.9	37.5	0.5	20.8	-	2.4
141	1.5	100	0.0	0.0	0.0	0.0	-	1.5
163	1.6	48.5	1.5	45.5	0.2	6.1	-	3.3
167	0.0	0.0	0.9	100	0.0	0.0	-	0.9
197	0.0	0.0	0.2	100	0.0	0.0	-	0.2
236	0.0	0.0	1.6	84.2	0.2	10.5	-	1.9
238	2.8	17.6	9.1	57.2	3.7	23.3	-	15.9
240	0.0	0.0	3.0	83.3	0.6	16.7	-	3.6
254	0.0	0.0	0.4	100	0.0	0.0	-	0.4
256	5.2	86.7	0.8	13.3	0.0	0.0	-	6.0
275	0.0	0.0	0.2	100	0.0	0.0	-	0.2
451	0.0	0.0	0.4	100	0.0	0.0	-	0.4
462	4.3	100	0.0	0.0	0.0	0.0	-	4.3
424	-	-	-	-	-	-	-	-

### *Iron Age*

The majority of the bone from the Iron Age contexts contained bone fragments that were 10mm in size or larger (see Table 10). The cremated bone assemblages from the Iron Age ranged in weight from 193.9 to 0.2g, with a mean weight of 40.4g. All but one of the bone assemblages had been thoroughly burned, the inner surfaces of burial (256) were blueish grey to black.

### *Anglo-Saxon*

Three of the five of the Anglo-Saxon cremated bone assemblages contained bone fragments that were 10mm in size or larger and the remaining two consisted largely of fragments derived from the 5mm sieve. The assemblages from the Anglo-Saxon period ranged in weight from 4.3g to 0.4g, with a mean weight of 2.26g, all consisting of less than 0.5% of the expected quantity of bone from a modern cremation. All of the cremated bone had been thoroughly burnt and was entirely calcined.

### *Unknown Date*

The majority of cremated bone from all three of the assemblages of unknown date was derived from the 5mm sieve and ranged in weight from 15.9g to 0.2g, with a mean weight of 6.6g. All of the cremated bone had been thoroughly burned and was entirely calcined.

### *Overall*

Just under half of the burials (43%) contained bone fragments that were 10mm in size or larger (Table 2). However, in the remaining burials (57%), the greatest proportion of the

bone was derived from the 5mm sieve. This supports the view that the bone from these burials was subject to disturbance while they were still hot.

The quantity of cremated bone recovered per burial varied from 0.2g to 193.9g (see Table 11). The amount of bone retrieved from all of the burials weighed significantly less than the average bone weight produced by modern crematoria, which tends to range from 1000.5g to 2422.5g with a mean of 1625.9g (McKinley 1993). Wahl (1982, 25) found that archaeologically recovered remains of cremated adults tend to weigh less (between 250g and 2500g) as a result of the commonly practiced custom of selecting only some of the cremated bone from the pyre for inclusion in the burial, thereby representing a symbolic, or token, interment. The greatest proportion and the least amount of bone recovered were both from Iron Age burials. Overall the greatest proportion of bone represented in the cremated bone assemblages derived from the Iron Age.

The cremated bone was very well burnt, causing the complete loss of the organic portion of the bone and producing a white colour in all but one of the assemblages (see Table 1), only one of the Iron Age burials (256) was not completely calcined. According to McKinley (1989), the body requires a minimum temperature of 500° Celsius over seven to eight hours to achieve complete calcination of the bone. The cremated bone from (256) had blueish grey to black internal surfaces suggesting that the bone had either not reached sufficient temperatures, or been allowed to burn for long enough, alternatively the pyre may not have been well constructed and prevented adequate air flow for optimal burning.

### *Bronze Age*

It was possible to identify 100% of the cremated bone from the Bronze Age burial, which consisted entirely of axial fragments. Identifiable fragments included rib fragments (Table 11).

Table 11 Summary of identifiable elements in the cremation burials

Context No	Skull (g)	Skull (%)	Axial (g)	Axial (%)	UL (g)	UL (%)	LL (g)	LL (%)	UIL (g)	UIL (%)	Total ID (g)	Total ID (%)	Total UID (g)	Total UID (%)
10 & 12	19.6	10.3	5.7	3.0	42.3	22.2	66.4	34.8	47.1	24.7	181.1	95.0	9.6	5.0
105	0.0	0.0	0.6	25.0	0.2	8.3	1.0	41.7	0.4	16.7	2.2	91.7	0.2	8.3
141	0.0	0.0	1.5	100	0.0	0.0	0.0	0.0	0.0	0.0	1.5	100	0.0	0.0
163	2.0	60.6	0.0	0.0	0.0	0.0	0.4	12.1	0.6	18.2	3.0	90.9	0.3	9.1
167	0.2	22.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2	22.2	0.4	44.4	0.5	55.6
197	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	100
236	0.0	0.0	1.6	100	0.0	0.0	0.0	0.0	0.0	0.0	1.6	100	0.0	0.0
238	0.5	4.2	4.4	37.0	0.4	3.4	5.4	45.4	1.2	10.1	11.9	74.8	4.0	25.2
240	0.7	19.4	0.4	11.1	0.0	0.0	0.0	0.0	2.5	69.4	3.6	100	0.0	0.0
254	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	100	0.4	100	0.0	0.0
256	0.0	0.0	3.5	71.4	0.0	0.0	1.4	28.6	0.0	0.0	4.9	100	0.0	0.0
275	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	100
451	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	100
462	0.0	0.0	1.2	27.9	0.0	0.0	0.0	0.0	3.1	72.1	4.3	100	0.0	0.0
424	-	-	-	-	-	-	-	-	-	-	-	-	-	-

### *Iron Age*

Between 95% and 0% of the bone from the Iron Age contexts could be identified. One of the contexts (197) contained no identifiable fragments at all, and could not be positively identified as human (see Tables 9 and 11). The majority of identifiable fragments were from the lower limb and axial skeleton and included recognisable fragments of thoracic and lumbar articular facets, rib fragments, distal foot phalanx (bones in the toes), and femoral and tibia shaft fragments.

### *Anglo-Saxon*

It was possible to identify between 0% and 100% of the bone from the Anglo-Saxon contexts. One of the burials (451) contained no identifiable fragments at all and could not be positively identified as human (see Tables 10 and 12). The majority of identifiable fragments consisted of lower limb fragments, unidentifiable long bone fragments and skull vault fragments and includes generic vault fragments and sutural vault fragments.

### *Unknown Date*

Between 0% and 100% 0% of the bone from the Iron Age could be identified. One of the burials (275) contained no identifiable fragments and was not possible to positively identify as human. The majority of identifiable fragments derived from the lower limb, axial skeleton and unidentified long bone fragments and included recognisable fragments of thoracic articular facets, rib fragments, and femoral and tibia shaft fragments.

### *Overall*

Because of the limited fragmentation of the bone elements, it was possible to identify skeletal elements in eleven of the fourteen burials (78.6%; Table 3), the remaining three burials were so incomplete it was not possible to positively identify the bone as human. Of the eleven burials that contained identifiable human bone, between 44% and 100% of the bone from each burial could be identified (Table 3).

The majority of identifiable bones were either from the lower limb, the axial skeleton, or unidentified long bone shaft fragments and included recognisable fragments of thoracic and lumbar articular facets, rib fragments, distal foot phalanx (bones in the toes), and femoral and tibia shaft fragments. It is surprising that skull fragments were only the most abundant skeletal element recognised in the Anglo-Saxon cremated bone assemblage (163), since the cranial vault is very distinctive and easily recognisable, even when severely fragmented, it often forms a large proportion of identified bone fragments in cremated remains (McKinley 1994). Bones representing all parts of the body were found, including small hand phalanges (bones in the fingers), and identifiable bones from the arms and skull. However, unspecified long bone fragments also formed a significant proportion of identifiable remains. In general, the size of the cremated bone assemblages represented during all periods were so small that trends could not be identified reliably.

### *Minimum Number Of Individuals*

A count of the ‘minimum number of individuals’ (MNI) recovered from a cemetery is carried out as standard procedure during osteological assessments of inhumations in order to establish how many individuals were represented by the articulated and disarticulated human



bones (without taking the archaeologically defined graves into account). The MNI is calculated by counting all long bone ends, as well as other larger skeletal elements, such as the hip joints and cranial elements.

It is not possible to calculate the MNI for cremation burials, because only a token selection of bone from the pyre tends to be buried. Double burials can be identified only if skeletal elements are duplicated, or if skeletons of different ages are represented in one burial.

Double burials were not identified in the cremated assemblages.

### *Assessment of Age*

Age was determined using standard ageing techniques, as specified in Scheuer and Black (2000a; 2000b) and Cox (2000). Age estimation relies on the presence of the pelvis and uses different stages of bone development and degeneration in order to calculate the age of an individual. Age is split into a number of categories, from foetus (up to 40 weeks in *utero*), neonate (around the time of birth), infant (newborn to one year), juvenile (1-12 years), adolescent (13-17 years), young adult (ya; 18-25 years), young middle adult (yma; 26-35 years), old middle adult (oma; 36-45 years), mature adult (ma; 46+) to adult (an individual whose age could not be determined more accurately as over the age of seventeen).

Because none of the criteria normally used for age determination were represented in any of the burials, age determination was based on less reliable criteria.

The bone robusticity and dental development suggested that all of the individuals from the eleven burials containing identifiable human bone from the Bronze Age to the Anglo-Saxon period were at least sixteen years old, but may have been considerably older.

The Iron Age context [11] contained a fragment of auricular surface that exhibited marginal lipping, which usually occurs in individuals 35 years or older (Lovejoy *et al.* 1985; Meindl and Lovejoy 1989).

### *Sex Determination*

Sex determination is usually carried out using standard osteological techniques, such as those described by Mays and Cox (2000). Assessment of sex in both males and females relies on the preservation of the skull and the pelvis and can only be carried out once sexual characteristics have developed, during late puberty and early adulthood.

None of the burials contained any diagnostic skeletal elements indicative of sex.

### *Metric Analysis*

Cremated bone shrinks at an inconsistent rate (up to 15%) during the cremation process and it was therefore not possible to measure any of the bones from these burials.

### *Non-Metric Traits*

Non-metric traits are additional sutures, facets, bony processes, canals and foramina, which occur in a minority of skeletons and are believed to suggest hereditary affiliation between

skeletons (Saunders 1989). The origins of non-metric traits have been extensively discussed in the osteological literature and it is now thought that while most non-metric traits have genetic origins, some can be produced by factors such as mechanical stress (Kennedy 1989) or environment (Trinkhaus 1978).

Non-metric traits were not observed in any of the individuals.

### ***Pathological And Dental Analysis***

The analysis of skeletal and dental manifestations of disease can provide a vital insight into the health and diet of past populations, as well as their living conditions and occupations. In this case, manifestations of disease were not observed amongst any of the cremated remains.

### ***Funerary Ritual***

Excavations at Cadeby Quarry, Kirkby Mallory, Leicestershire, uncovered a Bronze Age ring ditch and funerary activity, Iron Age and Roman enclosures, and two areas of Anglo-Saxon settlement. The cremated bone assemblages were spread across the site, but were in the general vicinity of Late Iron Age and Roman enclosures and a Bronze Age ring ditch. The majority of the cremated bone assemblages were within Area A and may hint at the prolonged use of a site.

#### ***Bronze Age***

It is interesting that only one of seven funerary urns contained cremated bone. However, all of the deposits had been severely truncated and only the base of the urns had survived, which would suggest that post-depositional processes were to blame for the paucity of the cremated remains from the Bronze Age. The burial (236) was located to the north of a late Iron Age enclosure ditch in area A, and was the most northerly of all the funerary urns, which were distributed widely throughout the area. Based on the surviving fragments of the urn it appeared to have been placed in an upright position. Of the other six vessels, two appear to have been interred upright, one was possibly inverted or placed on its side and the position of the remaining three could not be discerned. A Bronze Age ring ditch was located to the south-west, in Area B, but did not appear to be the focus of the funerary activity during the period. The vessel that contained Cremation Burial (236) was a collared urn in a grog-tempered fabric with a short collar and a campanulate internal rim. The vessel's collar was decorated with a herring bone pattern, formed from oblique tapering stab marks on both the internal and external surfaces and the body of the urn was undecorated (Cooper 2015). The vessel was most closely paralleled by an example from Conegre Farm, Nottinghamshire, (Allen *et al.* 1987, 199, fig.10.53).

Bronze Age urned cremation burials are common across England, such as an inverted collared urn burial that was located 20m to the south of a Bronze Age barrow at Bell Hill, Stourton, Leeds (Holst 2007a). A very similar burial was found at Melton Water Treatment Works, East Yorkshire, where the cremated bone and pyre deposits had been placed in an inverted collared urn (Holst 2004). At Clinton Lane, Kenilworth, Warwickshire a cremation was placed in a Bronze Age urn, within a small isolated pit (Keefe and Holst 2013a). The burial was located in an area where previously little else had been found and did not appear to

form part of a cemetery. Investigation of the surrounding area failed to identify any funerary monument, such as a barrow, although it may have been ploughed out. At Eye Kettleby in Leicestershire, an early to middle Bronze Age cemetery was excavated (Finn 2011). Other collared urns in Leicestershire have been found at Market Bosworth, Market Harborough and Sproxton (Longworth 1984, 126) and numerous other Bronze Age burials have been listed by Clay (1999).

As previously mentioned, the paucity of cremated material recovered from the urn is probably the result of post-depositional activity rather than intentional selection of a token amount of bone. An Early Bronze Age burial at Cross Farm, Stanbury, West Yorkshire (Holst 2007b) is thought to date to 2,000 to 1,500 BC. In the base of the inverted collared urn was a stone battle axe, probably placed in the urn before the bone. Two copper alloy objects, perhaps ear rings, a bone pin and bone belt-hook, as well as a 'pygmy cup' were also recovered from the urn, together with 2,689.1g of human bone and two fragments of animal bone. Two supplementary vessels were found in the pit beside the collared urn. At Stanbury, it was clear that the whole individual had been recovered from the pyre for burial and in fact, it was possible to reconstruct the whole skeleton (*ibid*). Similarly at Mitchell Laithes Farm, Dewsbury (Holst 2008), a large quantity of cremated human bone was recovered from four Bronze Age burials, representing between 37% to the 93% of the amount of bone expected from a modern cremation.

Two further urned Bronze Age burials were recovered from within pits in the centre of a hengiform round barrow at Rossington, South Yorkshire. Both burials appeared to consist of a single individual, and were probably both adults at the time of their death. One weighed above the average expected from modern cremations, while the other weighed considerably less and was perhaps selectively collected (Keefe and Holst 2013b).

According to McKinley (1997, 137) widely varying quantities of human bone have been recovered from cremation burials dating to the Bronze Age; in the 4,000 cremation burials of undisturbed adults analysed by McKinley, the amount of bone has varied between 57 and 2,200g. No associations as to the quantity of bone and the age and sex of the individual buried have been ascertained (*ibid*). 'To date, however, only one apparent pattern in the weight of bone in a burial has been evident and that is with relation to "primary" Bronze Age barrow burials. Of the 18 such burials so far examined by the writer [McKinley], all *consistently* produced weights of bone of between 902.3g and 2747g with an average of 1525.7g.' (*ibid*, 142).

### *Iron Age*

The only cremated bone assemblage from Cadeby Quarry to contain a significant quantity of bone dated to the Iron Age came from Context [11]. All five cremations from Iron Age contexts were located in Area A. Three of the assemblages were recovered from Iron Age pits, which were located on the external side of the northern Late Iron Age enclosure, while the other two were located in small domestic features on the north-eastern side of the enclosure. The inclusion of cremated bone in what appear to be deposits of domestic refuse is probably fortuitous rather than intentional deposition and it is possible that only feature [11] was a genuine cremation burial.

Iron Age cremation burials are relatively rare, the predominant burial rite during the period being inhumation and the majority of cremation burials dating to this period have been found

in southeast England. However, this is likely to be a bias because of a lack of AMS dating of cremation burials and many burials lacking artefacts are simply thought to date to the Bronze Age. Iron Age cremation burials have been recovered from excavations at Hinnton, Cambridgeshire (Hill *et al.* 1999). At Bar Pasture Farm near Thorney, Peterborough, three burials were also located within a domestic setting, located in the proximity of an Iron Age Smithy. All three of the burials were unurned, two were found in the basal fill of small pits, while the third was recovered from the bottom fill of a ditch (Keefe and Holst 2013c). The quantity of bone recovered from the burials varied considerably, from 0.4g to 133.4g. All three burials were very well cremated and appeared to contain the remains of a single individual. Unurned Iron Age cremation burials were excavated at Stanground, Peterborough (Caffell and Holst 2012) and from the Thorpe Mandeville to Greatworth pipeline in Northamptonshire (Keefe 2010).

### *Anglo-Saxon*

Three of the five cremated bone deposits believed to be Anglo-Saxon were located in Area A. Two of these were located to the north-east of the northern Late Iron Age enclosure. These features were interpreted as possible burials (the bones of which had not survived) and finds within the features were interpreted as possible grave goods. Feature [162] contained a bucket handle, a blade and pottery sherds, all of which were contained within the northwest corner of the feature, and [166] contained an iron spearhead. A further small cremated bone assemblage (105) was recovered from the backfill of a large Anglo-Saxon pit [102]. The pit was also located in Area A, directly north of the Roman enclosure and south of the northern boundary ditch of the southern Late Iron Age enclosure. Finally, two cremated bone assemblages (451) and (462) were recovered from small features within Area B [452] and [466], which were situated to the south of a Bronze Age ring ditch. All of the Anglo-Saxon cremation assemblages comprised less than 0.5% of the expected quantity of bone from a modern cremation and it seems likely that in all cases the inclusion of the bone within the deposits was probably unintended.

### *Unknown Date*

Three cremated bone deposits were of unknown date, all of which were located within Area A. Two of these (238) and (240) were recovered from charcoal filled pits [237] and [239], and the third (275) was recovered from a gully [274]. AMS dating would be of necessary to establish the date of the cremated remains in order to place them within their wider historical context.

## ***Discussion and Summary***

The excavations produced cremated bone from contexts dating from the Bronze Age to the Anglo-Saxon period. What appeared to be a heavily truncated dispersed Bronze Age cremation cemetery was identified, but did not appear to be closely associated with any contemporary funerary or ritual structures.

The five cremated bone assemblages dating to the Iron Age appear to have been located within a domestic setting, although possibly at its periphery. The largest quantity of bone from any of the cremations was recovered from an Iron Age context, although this still only constituted a little over 10% of the expected quantity of bone. One of the Iron Age cremated

assemblages was the only one to have been insufficiently burned and may suggest that the cremation process had not been perfected in this case. It is likely that the cremated bone from the Iron Age contexts may have been residual deriving from disturbance of the small Bronze Age cremation cemetery.

The cremated bone recovered from the Anglo-Saxon contexts was tiny and may not represent intentional burials at all; instead their inclusion within the deposits could have been the result of natural agency or disturbance of earlier deposits. Indeed, it is probably only a result of the post excavation sample processing strategy that the cremated bone was identified at all.

## **Discussion (with Patrick Clay)**

### ***Bronze Age***

The excavations in Area B revealed a large ring ditch [496] [512], with evidence of later Saxon re-use in the form of pits and a sunken featured building located inside or close to monument. Ring ditches are usually the only surviving evidence of former round barrows (burial mounds) which have been plough eroded. They are the most abundant form of later Neolithic-earlier Bronze Age monument, numbering over 800 in the East Midlands (Clay 2006, 80). Many of these features form parts of cemetery groups and monument complexes and although in this case there was no evidence of other ring ditches present in the area examined, although there was group burials found 200m to the east within excavation Area A (see below). Even with hindsight a re-examination of the greyscale plots of the Area B working area showed no evidence for the ring ditch from the geophysical survey (See Fig 3; Austrum and Biggs 2010, Fig. 4). This may be due to the absence of magnetically enhanced material within the fill of the ring ditch.

The ring ditch had suffered from significant degrees of plough erosion and the samples taken from various fills failed to provide sufficient material for environmental or carbon-14 dating evidence. There were no ceramic finds recovered from any of these fills so accurate dating becomes problematic. However a Bronze Age can be postulated for the ring ditch feature which may have originally surrounded a small barrow. Within the ring ditch there was no evidence of successive burials inserted from the ground surface or being placed within any potential mound through to the natural substratum.

A dispersed group of pits containing Bronze Age pottery, charcoal and in some cases cremated bone was present in Area A. This had been truncated and may resemble disturbed cremation burials and /or funerary deposits associated with Rusticated beakers and Collared urns. The presence of cremated bone in Iron Age and Anglo –Saxon deposits recovered from sieving is likely to have been as a result of this post-depositional disturbance. The Rusticated Beaker from [147] is similar in proportions with long-neck and zoned decoration to another beaker found at Asfordby (Cooper 2012 11-13, fig.11), which had associated radiocarbon dating of 2210-2030. This agrees broadly with the date range of 2200-1900 BC given for similar long-necked beakers with zoned decoration (Needham 2005, 195). At Eye Kettleby, an early to middle Bronze Age cemetery was excavated (Finn 2011). Other collared urns in Leicestershire have been found at Market Bosworth, Market Harborough and Sproxton (Longworth 1984, 126) and numerous other Bronze Age burials have been listed by Clay (1999).

### ***Iron Age - Roman***

The Iron Age - Roman settlement dates quite tightly (from pottery evidence) to the early to mid-1st century AD, a culturally transitional period where new cultural practices were introduced by the incoming 'Roman' populations. Around this time Leicester had become an important tribal centre, and possibly an *oppidum* (or similar) defended with earthwork banks and ditches extending for 10-20ha (Clay 1985). The rural settlement at Kirkby Mallory lies 16km west of Leicester, c.2km north of a minor Roman road that ran from Leicester (*Ratae Corieltavorum*) to Mancetter (*Manduessedum*). Rural settlements in this transitional period are not well understood (Taylor 2006, 157), and so the excavation results at Kirkby Mallory have added some new information on rural settlement patterns. The settlement appears to have originated in the late Iron Age and continued to develop into the Roman period with a succession of enclosures, the sub-circular earlier enclosures being replaced by a more angular enclosure in the roman period.

The Late Iron Age settlement is associated with a small post-built round house to the south-east of the enclosure complex (Figure 22). Roundhouses are the most common building form of the Iron Age (Speed 2010), although post-built or beam-slot structures of Iron Age date are known from various sites across Britain (Moore 2003). They served a variety of functions some domestic and non-domestic, and often a combination of the two (*ibid*, 55).

Structure 1 within the Roman phase enclosure at Kirkby Mallory shows evidence of beam slot construction (Figure 26), the slots being used to house timber beams, into which timber uprights would be inserted. Structure 1 may be interpreted as a domestic structures. A fragment of hearth bottom slag was recovered from the backfill of a gully of Structure 1, indicating that small-scale iron working may have been taking place in the vicinity. The more ephemeral Structures 2 and 3 may have served as be livestock enclosures such as cattle byres (see Moore 2003, 53) in view of the orientation of the beam-slots to the enclosure entrance these could have been used to herd animals as a form of stock control. A further similar structure was located close to the linear ditch [46], and in the southern-part of the field. Within the gullies of all these structures were burnt daub fragments – probably used in building construction.

Similar structures are known from Rearsby Bypass (Clarke & Beamish 2008,17, 25). One structure consisted of a pair of linear beam-slots c.5m long and between 4.3m – 5.8m apart (the structures at Kirkby Mallory are twice this size). At one end of the beam-slot was a post-hole, much like the examples seen at Kirkby Mallory. The structures are also dated to the 1st century A.D. by Belgic-style pottery of transitional Iron Age/ Roman date (*ibid*: 25). The parallel beam-slots seen close to the long linear ditch [46], and in the southern area of the field compare well to the Rearsby examples.

A mixed economy is indicated by the presence of querns although as the plant remains from the Iron Age and Roman features were very low in density this may suggest that the emphasis was on pastoralism. Unfortunately in view of the poor bone survival evidence for animal husbandry is lacking however the enclosures are likely to have been used for stock control.

Trade links are indicated by the presence of mortaria from the nearby Mancetter-Hartshill kilns and black-burnished ware cooking pots which will have been transported to Leicester and the Midlands from the south-west along the Fosse Way. The handle from a Dressel 20

olive oil amphora from Southern Spain and abraded single sherds from a dish and cup of Central Gaulish samian ware are the only imported vessels and these may have reached the site through secondary usage perhaps via Leicester with most pottery obtained locally from itinerant traders and potters, rather than by journeying into markets in Leicester. On the basis of the pottery the likelihood is that occupation ends during the middle or later decades of the 2nd century.

### ***Anglo-Saxon***

Settlement activity from the early Anglo-Saxon period was located in Area B to the south-west (cutting the ring ditch) comprising sunken featured buildings (Tipper 2004). These are often found associated with settlement of the 5th-6th century but are not common in the East Midlands. Isolated examples have been located on various sites in Leicestershire for example Willow Farm, Castle Donington (Coward and Ripper 1998) while the most extensive settlement examined is at Eye Kettleby where numerous sunken featured buildings were located (Finn 1998; 1999). Sixteen loomweights were located from the evaluation and excavation in a small pit. Annular or ‘doughnut’-shaped loom weights were hung from a warp-weighted loom of the kind used during the Early and Middle Anglo-Saxon period (Leahy 2003, 66 and figs.33 and 36). Loom weights are evidence for weaving and are often found in structures (Sunken Featured Buildings) or pits (Tipper 2004, 165). The appearance of Anglo-Saxon activity close to Kirkby Mallory is particularly significant because there were previously no known sites from the Anglo-Saxon period within the vicinity of the development site recorded in the Historic Environment Record (Speed 2009, 22). While the village of Kirkby Mallory was an established settlement at the time of the Domesday Book in 1086 (see above), the evidence located here hints at much earlier origins. The association between settlement and cemetery evidence is known from various sites in the region including Empingham (Liddle *et al* 2000), Wigston Magna (Liddle and Middleton 1994) and Wanlip (Liddle 1980).

Early Anglo-Saxon features identified in Area A associated with metalwork are most likely graves where the acidity of the soil has meant the skeletal remains have not survived. A similar situation has been found at Cossington where barrows were a focus for the location of Anglo-Saxon burials albeit again with no bone surviving (Thomas 2008). Dating from the iron objects and pottery is difficult but a 6th – 7th century dates is likely. Association between Anglo-Saxon burials and earlier funerary monuments is relatively common. In the East Midlands most evidence comes from the Peak District where several barrows investigations in the 19th century located Anglo-Saxon remains (Bateman 1861; Vince 2006). This may reflect the Anglo-Saxon communities’ knowledge of the use of earlier funerary monuments or possibly symbolising their taking over the landscape by appropriating perceived ancestral graves (Semple 1998; Williams 1997).

Of note is the width of Graves 1 and 3 and it is suggested that they may have each held two bodies. Wide Anglo-Saxon graves are known notably those containing ‘bed-burials’. While these are usually high status female burials a male bed burial is recorded from Brushfield, Derbyshire with weapons of 7th century date (Bateman 1861, 20). However in the absence of further evidence in the form of bed fittings this interpretation is unlikely.

The presence of spelt in Anglo-Saxon contexts is potentially significant although it may have been residual. Spelt wheat may have continued to have been cultivated locally on a small

scale in the post-Roman period. Use of spelt wheat may have marked wider cultural differences between groups of people, perhaps reflecting their origins (Moffett 2011).

### **Conclusion**

The excavation at Kirkby Mallory has located evidence from the Bronze Age, Iron Age, Roman and Anglo-Saxon periods. The re-use of the area may indicate knowledge of the area by different communities and suggests that barrows associated with the ring ditch may have been visible at least until the Anglo-Saxon period. Modern ploughing has severely eroded the soft silt-sand subsoils on the site reducing the survival of the archaeological deposits.

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## Appendix 1 Oasis

<b>INFORMATION REQUIRED</b>	<b>EXAMPLE</b>
Project Name	Extension to Cadeby Quarry, on Land to the South of Bosworth Road, Kirkby Mallory, Leicestershire
Project Type	Excavation
Project Manager	Patrick Clay
Project Supervisor	Tim Higgins
Previous/Future work	Evaluation
Current Land Use	Agriculture
Development Type	Quarry
Reason for Investigation	
Position in the Planning Process	As a condition
Site Co ordinates	
Start/end dates of field work	
Archive Recipient	
<b>Study Area *</b>	21 hectares

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