Stamford West
Lincolnshire

Archaeological Excavation

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wessexarchaeology

Stamford West, Lincolnshire

Archaeological Excavation

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* I = Internal Draft; E = External Draft; F = Final

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of the dates two distributions have been plotted, one in outline which is the result produced by the independent calibration of the radiocarbon measurement and a solid one which is based on the chronological information provided by the model. The large square brackets down the left-hand side of the diagram, along with the OxCal keywords, define the overall model exactly.

Chart 8: Probability distribution for the parameter ‘Span’ taken from the model. Format is the same as Chart 7

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Summary

Wessex Archaeology was commissioned by CgMs Consulting to undertake a programme of archaeological excavation on land at Exeter Down, Stamford, Lincolnshire, NGR 501000, 307100. The excavation was required to comply with a condition (No. 7) attached to planning permission for a mixed-use development (planning application ref. S12/0864). The excavation was preceded by an archaeological desk-based assessment, fieldwalking, geophysical survey and trial trenching, which indicated the presence of archaeological remains of Iron Age date on the site.

Two separate excavation areas were opened up. Within Area 1, the remains comprised a sequence of three roundhouses, the latest of which was set within a enclosure defined by a ditch and probable internal bank. Bayesian analysis of radiocarbon dates indicates the occupation of the site had started by the 5th century BC and lasted for about two centuries, ending by the early 2nd century BC, ie, this was an Early to Middle Iron Age settlement. The pottery evidence is not at odds with this chronology. By the Late Iron Age, occupation appears to have ceased, and an arrangement of field boundary ditches suggests a purely agricultural use for the land instead.

Area 2 contained two small iron smelting furnaces and a cluster of pits. Ceramic evidence and, to a lesser extent, technological aspects of the iron smelting remains, suggest that the furnaces were in use during the Early to Middle Iron Age, and represent localised small-scale iron production. The site lies on a large belt of iron-rich geology, known as the Jurassic Ironstones. Evidence of ironworking is known from the vicinity of the site, but the remains found at Stamford West appear to be a notably early manifestation of the technology. Despite their early date, the furnaces were operated in a very efficient way with a good amount of iron being extracted during smelting. A general absence of smithing residues suggests this process occurred elsewhere. Although the furnaces were poorly preserved, their morphology suggests they were of the bowl type; if correct this would be of some significance for the understanding of the development of ironworking technology.

A regionally typical range of Early to Middle Iron Age pottery was retrieved from the site. The assemblage contains diagnostic Early Iron Age material as well as Scored ware (diagnostic of a Middle Iron Age or later date in the East Midlands). The majority of the pottery was recovered from the enclosure ditch, with very little from the roundhouse ring gullies or associated pits/postholes.

The animal bone assemblage was large and reasonably well-preserved. The remains indicate an unusually even proportion of cattle and sheep when compared with regional norms. There is no indication of specialist cattle husbandry geared towards a single product, with cattle seemingly managed for milk, manure and probably traction instead. The profile of the sheep remains also suggests an emphasis on secondary products (eg, wool and milk), within an agricultural regime also involving arable production.

Charred plant matter associated with the settlement contained a small number of cereal remains, including barley and emmer or spelt wheat. Weed seed species indicate grassland, field margins/hedgerows, waste ground and arable in the wider environment. Charcoal suggests wood from hedgerows or scrub was used for firewood, with evidence for oak and hazel woodland nearby.

It is recommended that the project archive resulting from the excavation be deposited with The Collection, Lincoln. The museum has agreed in principle to accept the project archive on completion of the project (under the accession code LCNCC: 2014-91). Deposition of any finds with the Museum will only be carried out with the full agreement of the landowner.

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Acknowledgements

The archaeological evaluation was commissioned by CgMs Consulting. The assistance of Paul Gajos and Paul Clark is gratefully acknowledged in this regard. Thanks are extended to Jenny Young of the Heritage Trust of Lincolnshire, archaeological advisors to South Kesteven District Council, who provided curatorial support and guidance.

Fieldwork was directed by Sam Fairhead, and carried out by Callum Bruce, Jonathan Buttery, Emma Carter, Alex Cassels, Eleanor Caxton Mayer, Hannah Holbrook, Michael Keech, Gabrielle Kinney, Jonathan Landless, Andy Reid and Matthew Tooke. The aerial photographs (cover, pl. 1 & 3) were taken by Adam Stanford of Aerial-Cam.

Archaeometallurgical residues were analysed by Roderick Mackenzie; Lorrain Higbee analysed the animal bone, and the pottery was analysed by Ian Rowlandson. Other finds were assessed by Lorraine Mepham. The charred plant remains were assessed and analysed by Sarah F. Wyles, and the charcoal samples by Dana Challinor. The radiocarbon dates were analysed by Alistair Barclay.

This report was written and compiled by Phil Weston and Patrick Daniel, with illustrations by Alix Sperr and Charlotte Bentley (pottery).

The project was managed for Wessex Archaeology by Chris Swales (fieldwork) and Andrea Burgess (post-excavation).

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1 INTRODUCTION

1.1 Project background

1.1.1 Wessex Archaeology was commissioned by CgMs Consulting to undertake a programme of archaeological works on land at Exeter Down, Stamford, Lincolnshire, NGR 501000, 307100 (TF010071). The works were required to comply with a condition (No. 7) attached to planning permission for the mixed-use development of the site (planning application ref. S12/0864). The decision to grant planning consent was informed by an Environmental Statement and the results of previous archaeological surveys including desk-based assessment, fieldwalking, geophysical survey and trial trenching.

1.1.2 Following discussions between CgMs and the Archaeological Advisor to South Kesteven District Council a mitigation strategy was agreed. CgMs Consulting produced a Written Scheme of Investigation (WSI) outlining how the requirements of the work would be met (CgMs 2014). The WSI was approved by the curator prior to mitigation commencing.

1.2 Site location and topography

1.2.1 The site comprises an irregular area approximately 28.3 ha, centred on NGR 501093, 307012, and located approximately 1.7 km west of the town of Stamford and approximately 19 km north-west of the city of Peterborough (Fig. 1). It is bounded to the west by the A1, to the north by Empingham Road, to the east by a housing estate and to the south by Tinwell Road.

1.2.2 At the time of excavation, the site comprised a large arable field which had been subdivided by a recently planted tree belt.

1.2.3 The archaeological strip, map and sample excavations were undertaken in two separate areas within the site (Areas 1 and 2). The southern area, Area 1, comprised an irregular area measuring 0.83 ha. Area 2 was located approximately 80 m to the north; it was broadly rectangular, occupied 1.57 ha, and lay adjacent to Empingham Road.

1.2.4 The site lies on a predominantly flat area of land at approximately 66 m above Ordnance Datum (aOD) which slopes away at its southern edge to approximately 53 m aOD towards the River Welland. Both excavation areas lie on relatively flat land at approximately 66 m aOD.

1.2.5 The underlying solid geology of the site is split. The Lower Lincolnshire Limestone member is present in the northern and north-western sections along with a small portion of the southern section, while the remainder of the site is occupied by the Upper Lincolnshire Limestone member (Fig. 2). There are no superficial deposits recorded within the site although bands of alluvium, head and river terrace deposits are present beyond its southern boundary around the River Welland.

1.2.6 The surrounding landscape of the site can be characterised as an area of high ground defined by the courses of the Rivers Welland and Gwash (Figs 3 and 4). The site overlooks the upper reaches of the Welland valley, the river running approximately 500 m from the southern boundary of the site and flowing to a confluence with the Gwash approximately 3.5 km to the east, on the eastern side of Stamford. The rivers create a roughly rectangular area of higher ground with the site lying close to its southern extremity. Within this rectangular area, the solid geology is dominated by Limestone deposits with some small sections of Mudstone and Sandstone. Superficial deposits are limited to the river valleys. The rectangular area generally lies at more than 50 m aOD with the highest point of the local landscape located to the west of the development area, at approximately 90 m.

2 ARCHAEOLOGICAL BACKGROUND

2.1 Introduction

2.1.1 The archaeological background, including the results of the previous evaluations by trial trenching and geophysical survey (Fig. 5), is summarised in Chapter 12 of the Environmental Statement (Archaeology and Cultural Heritage) and the WSI (Broadway Malyan Planning 2012; CgMs 2014). The evidence obtained from the investigations undertaken to inform the environmental statement indicated the presence of:

- Early to Middle Iron Age iron smelting, likely to be of restricted extent;
- Middle to Late Iron Age ditched enclosure with internal features including possible structural remains;
- a second unlocated and undated phase of iron smelting identified from widespread surface finds;
- Iron Age/Romano-British ditches probably representing land boundaries; and
- modern features.

2.1.2 In addition, the assessment of environmental samples suggested open grassland at the site in the Early to Middle Iron Age, with woodland at least nearby to supply the smelting process. In the later Iron Age and Roman periods, samples from the southern part of the site contained evidence of both grassland and woodland environments, indicating a probable progression from the former to the latter but possibly a mixed environment.

2.1.3 A geophysical survey undertaken in May 2014 indicated the presence of further land divisions and possible enclosures and structures in the northern part of the site, near to the previously identified iron smelting activity (Fig. 5).

3 METHODOLOGY

3.1 Aims and objectives

3.1.1 The aims of the programme of archaeological works were to record and advance understanding of the significance of any archaeological remains within the site.

3.1.2 The aims were to be realised through the achievement of the following specific objectives:

- to establish the spatial extent of the archaeological remains in the proposed investigation areas;

- to recover information relating to the nature and function of past human activity represented by the surviving archaeological remains;
- to interpret the nature of human activity at the site and to place the site within its local, regional and national context as appropriate;
- to assess site formation processes and the effects that these may have had on the survival and integrity of the archaeological features and deposits;
- to produce a site archive for deposition with an appropriate museum and to provide information for the local HER to ensure the long-term survival of the excavated data.

3.2 Fieldwork methodology

3.2.1 The WSI was prepared by CgMs following consultation with the Senior Historic Environment Officer for the Heritage Trust of Lincolnshire, who acts as archaeological advisor to South Kesteven District Council.

3.2.2 Two areas measuring approximately 1.6 ha and 0.8 ha were investigated; these targeted the identified areas of archaeological activity.

3.2.3 The work was carried out in accordance with the approved WSI (CgMs 2014) and Wessex Archaeology and industry standards and guidelines (CIfA 2014a; 2014b). Fieldwork occurred between 21 July and 16 October 2014.

3.2.4 Areas to be excavated were scanned in advance using a Cable Avoidance Tool to check for uncharted services.

3.2.5 Topsoil deposits were removed using a 360˚ mechanical excavator fitted with a toothless ditching bucket, working under the continuous direct supervision of a suitably experienced archaeologist. Topsoil was removed in a series of level spits down to the level of the upper archaeological horizon, or the level of the natural geology, whichever was reached first. Topsoil was stored away from the excavation areas.

3.2.6 The exposed surfaces were hand-cleaned where necessary to clarify the extent of revealed archaeological remains. Where archaeological features and deposits were encountered, cleaning and excavation was carried out by hand. All features were investigated in order to establish their date, nature, extent and condition.

3.3 Monitoring

3.3.1 Fieldwork was monitored for South Kesteven District Council by Jenny Young, the Senior Historic Environment Officer for the Heritage Trust of Lincolnshire.

3.4 Recording

3.4.1 All archaeological features and deposits encountered were recorded using Wessex Archaeology *pro forma* recording sheets and a continuous unique numbering system.

3.4.2 Hand-drawn plans at a scale of 1:20 were made of all interventions. Section drawings were made at a scale of 1:10 or 1:20 as appropriate. Excavated areas were located by means of an RTK GPS system and tied in to the OS grid with a tolerance of better than ±100 mm. All deposits had spot heights recorded in relation to Ordnance Datum, correct to two decimal places.

3.5 Specialist strategies

Artefact

3.5.1 Finds were treated in accordance with the relevant guidance (UKIC 2001; MGC 1992; English Heritage 2005; 2006).

Environmental

3.5.2 Bulk environmental soil samples for plant macro-fossils, small animal and fish bones and other small artefacts were taken from appropriate well-sealed and dated/datable archaeological deposits. The collection and processing of environmental samples was undertaken in accordance with Historic England guidelines (English Heritage 2007; 2008; 2011).

4 ARCHAEOLOGICAL RESULTS

4.1 Introduction

4.1.1 The excavation revealed archaeological remains that represented four phases of human activity on site (Fig. 6). The remains were phased through ceramic dating evidence, stratigraphic relationships and a series of radiocarbon dates:

- Phase 1: unenclosed Early Iron Age settlement consisting of a roundhouse (ring gully 1) identified in Area 1;
- Phase 2: Early Iron Age construction of a second roundhouse (ring gully 2 and its encircling ring of postholes) within the footprint of the previous structure;
- Phase 3: Early to Middle Iron Age construction and occupation of a third roundhouse (ring gully 3) and associated enclosure (ditch 10) and recut (ditch 11) in Area 1. Forty-one pit features, two postholes, two gullies, a ditch and two metalworking furnaces in Area 2, and;
- Phase 4: Middle to Late Iron Age post-occupational agricultural remains (ditches 100 and 200; four pits).

4.1.2 Where radiocarbon dates are cited below in italics this indicates that they are the posterior density estimates derived from Bayesian analysis (see section 6.3).

4.1.3 The date ranges of sub-divisions of the Iron Age used in this report are the same as those presented in the updated regional research agenda (Knight *et al.* 2012, 58), namely:

- Early Iron Age: *c*. 800–450 BC;
- Middle Iron Age: *c.* 450–100 BC;
- Late Iron Age: *c.* 100 BC–AD 50.

4.2 Phase 1

4.2.1 Phase 1 was represented by the earliest roundhouse. The remains consisted of a ring gully, a possible truncated posthole and an external pit. The ring gully may have been accompanied by an external circuit of elongated postholes, although little evidence of this could be discerned and no datable artefacts were recovered.

Ring gully 1

4.2.2 Ring gully 1 was slightly subcircular in plan, had a typical external diameter of 14.5 m and enclosed an area of approximately 157 m² (Fig. 7 and 8; Pl. 1). Two breaks in the gully were recorded, with one facing south-east and the other facing west-south-west. The gully terminals defining the western break were reasonably abrupt and well-defined, suggesting that they represent an original, narrow (*c.* 1 m-wide) entrance rather than being a product of plough truncation. The terminals which defined the eastern break had been removed by the superimposition of ring gully 2, and so it was not possible to determine how closely the excavated evidence reflects the original layout in this half of the roundhouse. Given the narrowness of the western break and the typical eastward orientation of roundhouses (Pope 2003, 175), it is presumed that the principal entrance into ring gully 1 was on its eastern side.

4.2.3 Hand excavation of the ring gully revealed it had a steep-sided 'U'-shaped profile and varied in width between 0.2 m and 0.6 m and in depth between 0.21 m and 0.34 m (Fig. 11.1 and 11.2). A single fill consisting of a mid-yellowish brown, sandy clay with frequent angular limestone fragments was encountered in each of the hand-dug sections. Ring gully 1 was cut by the later phase 2 ring gully 2 (Fig. 11.3; Pl. 2).

4.2.4 The finds assemblage recovered from ring gully 1 consists of a few fragments of pottery and metalworking debris. Seven sherds of broadly Iron Age pottery were recovered from section 1145 whilst a single sherd of presumably intrusive Late Iron Age pottery was found in section 1165. The metalworking debris consists of iron ore and undiagnostic, possible furnace slag recovered from section 1145.

Feature 1149

4.2.5 Feature 1149 was located outside ring gully 1 to the south-west (Fig. 8). It had been heavily truncated by phase 2 ring gully 2, and so its original form and function are unknown, although it may originally have formed part of a now-largely erased setting of elongated postholes surrounding ring gully 1 (discussed below). Due to its stratigraphic relationship with ring gully 2, it has been included in phase 1. The remnants of the feature measured 0.60 m x 0.23 m x 0.27 m deep and contained a single, sterile fill consisting of light brown, silty sand with frequent limestone fragments (Fig. 11.1).

Postholes 1079, 1103 and 1290

4.2.6 Three elongated postholes lay in the area between ring gullies 1 and 2: 1079, 1103 and 1290. It is not possible to attribute these to any particular phase of roundhouse construction, but they may conceivably have been associated with ring gully 1, and performed a similar function to the circular post setting which served ring gully 2 (discussed below). Feature 1149 may have accompanied these three postholes.

Pit 1075

4.2.7 Pit 1075 (1.22 m by 0.96 m x 0.71 m deep) was located outside ring ditch 1 to the south-east and was dated to phase 1 on the basis of finds evidence (Fig. 8). It contained a series of silty sand fills, the lowest of which, 1076, contained a sherd from a vessel with a rounded or carinated shoulder and decorated with a row of stabbed fingernail decoration, typical of Early Iron Age jars from Fengate (see Rowlandson, below).

4.3 Phase 2

4.3.1 Phase 2 was represented by a second roundhouse. Traces of the structure comprised ring gully 2, an arrangement of four postholes located at its entrance, a ring of postholes encircling the ring gully, and two other postholes.

Ring gully 2

4.3.2 Ring gully 2 was slightly subcircular in plan, had a typical external diameter of 16.5 m and enclosed an area of approximately 186 m² (Fig. 7 and 8, Pl. 3). Ring gully 2 had one entrance to the south-east mirroring the entrance to ring gully 1. Hand excavation of the ring gully revealed it had a steep-sided, 'U'-shaped profile and varied in width between 0.30 m and 0.65 m and in depth between 0.30 m and 0.47 m (Fig. 11.1–3). A single fill consisting of a mid-greyish brown, sandy clay with frequent angular limestone fragments was encountered in each of the hand-dug sections. Ring gully 2 was cut by phase 3 enclosure ditch 10 (Pl. 3).

4.3.3 The finds assemblage recovered from ring gully 2 consists of pottery, metalworking debris and animal bone. Overall, six sherds of broadly Iron Age pottery were recovered from sections 1147 and 1204 whilst a varied assemblage of metalworking debris consisting of iron ore, roasted iron ore, iron furnace slag, fuel ash slag and undiagnostic slag was recovered from four sections. The animal bone assemblage consists of elements of pig and sheep/goat.

Postholes 1167, 1170, 1254 and 1261

4.3.4 Postholes 1167 and 1170 were located at the southern terminus of ring ditch 2 whilst postholes 1254 and 1261 were at the northern terminus (Fig. 8). The features likely held posts that formed or framed the entrance to the roundhouse.

4.3.5 The excavation of posthole 1167 (1.48 m x 0.94 m x 0.48m deep) identified a sub-oval feature with steep, flat sides and a flat base. It contained backfill deposit 1168 that included packing stones and a quern fragment around a *c.* 0.60m-diameter postpipe, 1169 (Fig. 12.4, Pl. 4). Fill 1168 consisted of limestone blocks (200 mm–300 mm) and smaller stone fragments within a mid-greyish brown, sandy clay matrix, which produced broadly Iron Age pottery and sheep/goat bone. Postpipe 1169 consisted of sterile, dark-greyish brown, silty clay with very occasional small limestone fragments.

4.3.6 Posthole 1170 (1.40 m x 0.75 m x 0.45 m deep) cut posthole 1167, probably representing a remodelling of the entranceway. Posthole 1170 was subrectangular in plan with moderately steep, slightly concave sides (Fig. 12.4). Its fill, 1171, consisted of a mid-greyish brown sandy clay, which produced Mid–Late Iron Age pottery, fragments of pig skull and fuel ash slag.

4.3.7 On the northern side of the entranceway, posthole 1254 (1.50 m x 1.12 m x 0.59 m deep) was subrectangular in plan with steep, slightly concave sides and a flat base (Fig. 12.5). It contained backfill deposit 1258 and postpipe 1255, which measured at least 0.50 m in diameter. Fill 1258 consisted of limestone blocks (0.20–0.30 m) and smaller stone fragments within a dark greyish brown, sandy clay matrix. Finds recovered comprised broadly Iron Age pottery, sheep/goat bone and fuel ash slag. Postpipe 1255 consisted of a dark greyish brown, sandy clay that contained broadly Iron Age pottery, sheep/goat bone and fuel ash slag.

4.3.8 Posthole 1261 (0.88 m x 0.70 m x 0.48 m deep) cut posthole 1254, again probably representing a renewal of the entrance's structural timbers. Posthole 1261 was subrectangular in plan with moderately steep sides and a tapered base (Fig. 12.5). It contained the sterile fill 1262, which consisted of a mid-greyish brown sandy silt with occasional limestone fragments.

4.3.9 The evidence from the entranceway postholes suggests that the posts within them would have have measured approximately 0.50–0.60 m in diameter, representing the remains of a very substantial and extremely solid entranceway.

Postholes 1196 and 1211

4.3.10 Postholes 1196 (0.80 m x 0.36 m x 0.21 m deep) and 1211 (0.72 m x 0.56 m x 0.28 m deep) were located within ring gully 2 to the north-north-east (Fig. 8). Posthole 1211 was cut through ring gully 1. The postholes were located adjacent to each other and were recorded as containing the same upper fill (1197) with 1196 containing a basal deposit (1198). Fill 1197 consisted of a sterile, dark greyish brown sandy silt with gravel whilst fill 1198 was a sterile, light yellow sand with common gravel.

Circular post setting

4.3.11 Ring gully 2 was encircled by at least 19 postholes, although several more are likely to have been destroyed by enclosure ditch 10 to the north-west (Fig. 8, Pl. 1 and 3). The postholes were generally sub-oval in plan with their longer axis running approximately parallel to the ring gully. There was a break in the south-eastern portion of the arrangement, respecting the entrance to the roundhouse. The postholes varied between 0.61 m and 1.34 m in length, 0.45 m and 0.9 m in width and between 0.10 m and 0.37 m in depth. However, the majority of the features were skewed towards the higher end of the range with typical dimensions of 1.10 m x 0.70 m x 0.30 m deep (Fig. 12.6–9; Fig. 20.62).

4.3.12 The postholes contained either one or two fills consisting of variously grey/brown/yellow deposits of silty sand with limestone fragments. The finds assemblage from the postholes is very small reflecting the short period of time the features would have been open. A single sherd of broadly Iron Age pottery was recovered from posthole 1032 as was a mandible and astragalus from a cow. A sheep/goat phalanx was recovered from posthole 1067 whilst a piece of iron ore came from posthole 1265.

4.3.13 Posthole 1067, the westernmost of the southern arc, contained a sheep/goat phalanx radiocarbon dated to *510–370 cal BC* (SUERC-61684; 2359±34 BP).

4.3.14 The postholes within this group were closely concentric to ring gully 2, whereas they were a little offset from the footprint of ring gully 1. It is for this reason that they are thought to be associated with ring gully 2 rather than the earlier hut circle.

4.4 Phase 1/2

4.4.1 A total of 20 features were recorded within the area enclosed by both ring gullies 1 and 2 (Fig. 8, Pl. 1 and 3). Within the group are 18 postholes, a shallow pit/scrape and a short section of gully. What little dating evidence was retrieved from these features was inconclusive and so it has not been possible to determine which of the roundhouses they were associated with, and so they could not be assigned to either phase 1 or 2.

4.4.2 Two sub-groups may be discerned: a central cluster of subcircular postholes, and an external ring of more elongated features.

The postholes

4.4.3 The postholes were subcircular or sub-oval in plan and varied between 0.40 m and 0.92 in length, between 0.18 m and 0.70 m in width and between 0.07 m and 0.31 m in depth (Fig. 13.10–13). The features had either concave or flat bases with steep, occasionally concave sides. The postholes contained either one of two fill deposits consisting of a mid–dark greyish brown, silty sand with occasional gravel and small limestone fragments.

4.4.4 The finds assemblage consists of broadly Iron Age pottery from postholes 1105 and 1128, iron furnace slag from posthole 1128, iron ore from postholes 1107 and 1121, fuel ash slag from 1119, and possible fuel ash slag and a partial pig tibia from posthole 1200. Only the latter posthole formed part of the external ring of more elongated features. The overall scarcity of settlement-related debris from these features could show they had a structural function (ie, they contained load-bearing timbers which prevented the ingress of detritus arising from the roundhouses' occupation).

Pit/scrape 1124

4.4.5 Pit/scrape 1124 (0.80 m x 0.68 m x 0.08m deep) was irregular in plan with shallow concave sides and an irregular base. It may have been the highly truncated remains of a posthole but is thought more likely to represent a working hollow or kneeling spot.

Gully 1186/89

4.4.6 Gully 1186/89 (1.48 m x 0.30 m x 0.28 m deep) was located to the west. It had steep, slightly concave sides and a flat base. It contained a single fill (1187/90), which consisted of a dark yellowish brown, silty sand with regular coarse gravel and fragments of iron ore. Its location appears to respect the western break in ring gully 1; if so, it would be associated with the first phase of roundhouse construction.

4.5 Phase 3

4.5.1 The archaeological remains attributed to phase 3 were located in both Areas 1 and 2. The remains in Area 1 consisted of the third roundhouse (comprising ring gully 3 and associated postholes and other features) and enclosure ditch 10, whilst the Area 2 remains (lying some 220m to the north) consisted of two furnaces, three ditches, two postholes and forty-one pits.

Area 1: ring gully 3

4.5.2 Ring gully 3 was circular in plan, had a typical external diameter of 14.5 m and enclosed an area of approximately 144 m² (Fig. 8, Pl. 1 and 3). Hand excavation of the ring gully revealed it had a steep-sided, 'U'-shaped profile and varied in width between 0.26 m and 0.64 m and in depth between 0.1 m and 0.23 m (Fig. 12.5 and 14.18–21). A single fill consisting of a mid-greyish brown, sandy clay with frequent angular limestone fragments was encountered in each of the hand-dug sections. Ring gully 3 cut postholes 1170 and 1261, which had formed part of the entrance to roundhouses 1 and 2.

4.5.3 The finds assemblage from ring gully 3 consisted of fragments of animal bone and metalworking debris. Skeletal elements of sheep/goat were retrieved from sections 1126, 1134 and 1136, whilst iron ore, roasted iron ore, furnace slag and undiagnostic slag were variously recovered from sections 1113, 1126, 1134, 1136, 1151 (not illustrated) and 1174.

4.5.4 A sheep/goat mandible was recovered from fill 1023 of slot 1022 dug across the ring gully at its southern terminus and radiocarbon dated to *390–210 cal BC* (SUERC-61685; 2229±34 BP). Sherds of broadly Iron Age pottery were recovered from the same deposit.

4.5.5 Posthole 1013 was located at the southern terminus of ring gully 3 whilst posthole 1191 was located at the northern terminus. The features likely held posts forming the entrance to the structure. In profile, posthole 1013 (1.13 m x 1.05 m x 0.72 m deep) had steep, slightly irregular sides and a slightly concave base (Fig. 14.21). It contained two silty sand fills. Posthole 1191 (1.45 m x 1.3 m x 0.67 m deep) had steep, flattish sides and a concave base in profile (Fig. 14.20). It contained a single fill (1193) consisting of a silty sand with frequent limestone fragments, which produced broadly Iron Age pottery.

Area 1: internal features

4.5.6 Fifteen features were identified internal to ring gully 3 (Fig. 8), with the majority seemingly focusing on the central area. The features consisted of postholes and a pit.

4.5.7 The postholes were generally subcircular in plan with steep sided, 'U'-shaped profiles (Fig. 14.14–17). They varied between 0.30 m and 0.92 m in length, between 0.25 m and 0.74 m in width, and 0.13 m and 0.59 m in depth. With the exception of features 1050 and 1138, which contained two fills, the postholes contained a single mid–dark greyish brown silty sand.

4.5.8 The finds assemblage from the postholes consists of pottery, animal bone and metalworking debris. Broadly Iron Age pottery was recovered from postholes 1050, 1063 and 1087, whilst posthole 1138 contained Mid–Late Iron Age sherds. Bone from sheep/goats, pigs and cattle was variously recovered from postholes 1040, 1048, 1050 and 1063, whilst undiagnostic slag, iron ore and roasted iron ore, were identified in postholes 1048, 1050, 1061, 1063, 1087, 1109 and 1138.

4.5.9 The final feature within ring gully 3 was pit 1073. Pit 1073 (1.91 m x 1.70 m x 0.40 m deep) was subcircular in plan with moderate, slightly concave sides and a concave base forming a shallow 'U'-shaped profile. It contained a single fill (1074), which consisted of a mid-brown silty sand with frequent limestone fragments. Undiagnostic slag and iron ore were recovered from the deposit.

Area 1: the enclosure ditch

4.5.10 During phase 3 an enclosure, defined by a ditch and probable bank, was constructed around the settlement. The enclosure was rectangular in plan with its long axis aligned north-west to south-east, similar to the roundhouse entrances (Fig. 7). The enclosure had internal dimensions of 72 m by 44.5 m enclosing an area of 3078 m².

4.5.11 A bank of upcast presumably accompanied the ditch, but no *in situ* remnants of this were apparent. Photographs of the ditch sections show slight but consistent evidence of the bank having been located on the inner lip of the ditch: within the excavated sondages, faint tip-lines of stones are visible originating from the inner lip, and flaring out towards the base of the ditch (eg, Pl. 6). This positioning, with the bank located on the inside of the enclosure, is that to be expected had defensive considerations been paramount in its design.

4.5.12 The original construction and later recutting of the enclosure ditch were consistently visible, allowing the identification of two sub-phase within phase 3:

- Phase 3a: original construction of enclosure (ditch 10);
- Phase 3b: later recutting of enclosure (ditch 11).

Phase 3a: enclosure ditch 10

4.5.13 The enclosure was originally defined by ditch 10. The ditch was segmented to the south-east providing three points of access into the enclosure. Ditch 10 varied between 1.75 m and 3.4 m in width and between 0.95 m and 1.28 m in depth (Pl. 5 and 6). It had moderately steep sides and a generally flat base. Hand-excavated sections revealed the ditch contained between two and four silty, sandy fills either derived from the slumping in of the sides and/or associated bank or the natural silting up process (Fig. 15.21a–24 and 16.25–27).

4.5.14 The finds assemblage from enclosure ditch 10 is substantial with pottery, animal bone and metalworking debris recovered from almost all excavated contexts. The pottery indicates an Early–Middle Iron Age date for the ditch, although Late Bronze Age/Early Iron Age material was included in the assemblage suggesting that earlier midden material had been incorporated in the backfill. The animal bone indicates the exploitation predominantly of cattle, followed by sheep then pigs. A few fragments of horse and dog bone were also noted. The metalworking debris consisted of iron ore, roasted iron ore and fuel ash slag.

Phase 3b: enclosure ditch recut 11

4.5.15 Enclosure recut ditch 11 was apparent in all excavated sections (Fig. 15.21a–24 and 16.25–27). It was observed cutting in to the upper deposits filling enclosure ditch 10 with the exception of the north-west corner of the enclosure where it was cut into the underlying natural geology along its north-west to south-east aligned portion (Pl. 17). It varied between 0.85 m and 3.2 m in width and between 0.42 m and 0.81 m in depth. In the majority of sections, it had a shallow 'U'-shaped profile with concave sides and a concave base. Between one and three silty, sandy fills were encountered in each of the sections, derived from either the slumping in of the sides and/or associated bank material or the natural silting up process.

4.5.16 The finds assemblage from enclosure ditch 11 is again substantial, with pottery, animal bone and metalworking debris almost ubiquitous. The pottery assemblage contains Early Iron Age forms, but a range of Middle Iron Age Scored ware vessels and Middle to Late Iron Age necked jars indicate a later date for the feature, corresponding with the stratigraphy. Similar to enclosure ditch 10, the animal bone is dominated by cattle followed by sheep and pigs whilst the metalworking debris consists of iron ore, roasted iron ore and smelting slag.

4.5.17 Three radiocarbon dates were obtained from animal bone found within the enclosure ditch recut 11. The Bayesian model of the site sequence suggests the ditch was recut at some point during *465-280 cal BC (at 95% probability)* and possibly during *410 to 340 cal BC (at 68% probability)* (see section 6.3) ie, around the Early to Middle Iron Age transition.

Area 2: furnaces

4.5.18 The plough-damaged remains of two furnaces were identified in Area 2 (Fig. 10). Furnace 2074 was almost circular in plan with a diameter of 0.63 m. It had a shallow, 'U'-shaped profile and attained a maximum depth of 0.14 m (Fig. 18.51, Plate 7). Its basal fill (2071) consisted of a clay lining baked to a pinkish red by the firing of the furnace. Above 2071 was 2073, which was a firm, but brittle, dark grey deposit that may have been the remains of the collapsed-in walls of the furnace. Above this was the upper fill, 2072, a dark grey-to-black clayey silt, which contained furnace run slag.

4.5.19 Furnace 2079 (0.51 m x 0.42 m x 0.18 m deep) was oval in plan and had a shallow, 'U'-shaped profile (Fig. 18.52, Plate 8). Its basal fill was a light brown clay lining, baked pinkish red in places by the firing of the furnace. Above this was fill 2081, a dark grey, clayey silt, which also contained furnace run slag.

4.5.20 No datable artefacts were recovered from the furnaces. During the excavation, Dr Catherine Barnett (University of Reading) advised that the furnace deposits were not suitable for archaeo-magnetic dating.

Area 2: pits

4.5.21 Forty-one pits were identified in Area 2 (Fig. 10). The pits were subcircular in plan and varied in diameter between 0.90 m and 2.5 m. Depth ranged between 0.18 m and 1.30 m,

with over half of the group being between 0.40 m deep and 0.80 m deep. Approximately 25% of the pits had a moderately steep-sided 'U'-shaped profile (eg, pit 2034: Pl. 9) whilst the rest had steep, almost vertical sides and a flat base (eg, pit 2020: Pl. 10). Pottery recovered from the features indicates they were in use during the Middle Iron Age, likely contemporary with the recutting of the enclosure ditch in Area 1. The fact that none of the pits intercut, with each seemingly dug mindful of the position of the others, suggests the group as a whole is broadly contemporary.

4.5.22 Twenty-four of the pits, particularly those close to the furnaces, were found to contain metalworking debris consistent with the smelting of iron. This, along with the finds of slag and ore from Area 1, suggests that metal production on-site was taking place in the Middle Iron Age.

4.5.23 The composition of the bone assemblage from the pits is broadly consistent with that recovered from the enclosure ditch in Area 1, but with sheep being predominant over cattle. Of particular note were pits 2006 and 2086, which contained a large fragment of human skull (Plate 11) and the articulated remains of a dog (Plate 12), respectively. The pits were likely dug to extract clay and then used for rubbish disposal, with the detritus presumed to have originated from with the roundhouse settlement, located approximately 230 m to the south.

Area 2: ditches

4.5.24 The highly truncated remains of three ditches (ditches 12–14) were identified in Area 2. A 55 m long section of ditch 12 was revealed, which entered the site from the north-west and continued to the south-east before terminating close to the southern limit of the pit cluster (Fig. 9). It varied between 0.88 m and 1.40 m in width, between 0.25 m and 0.40 m in depth and exhibited a 'U'-shaped profile with moderately steep sides and a concave base (Fig. Sections 19.54 and 19.58). No pottery was recovered from its sandy clay fill but cattle, sheep and horse bone and metalworking debris consistent with the assemblage from the pits suggests the ditch was open when the pits were in use.

4.5.25 Ditch 12 appears to from the southern boundary to the pit cluster, which focuses at its terminus; overall the layout suggests the pits were dug respecting the ditch, which would therefore be the earlier element.

4.5.26 Ditch 13 was located immediately to the south-west of ditch 12. Only a 9 m long section of the feature survived, which was 0.72 m in width, 0.16 m in depth and had shallow, 'U'-shaped profile. Slag and iron ore was recovered from its sandy clay fill suggesting that it, ditch 12 and the pits were contemporaneous.

4.5.27 Ditch 14 entered the site from the north-east and continued south-west for 28 m before terminating. It was 1.75 m in width, 0.80 m in depth and had a flat-bottomed 'U'-shaped profile (Fig. 18.42), found to contain a mid-brown, silty clay fill (2076). The ditch had been recut (2077), with this latter phase of the ditch infilled with limestone blocks in a mid-brown silty clay matrix. No finds were recovered from either iteration of the ditch.

4.5.28 Ditches 12 and 14 appeared to be set out at right angles, thereby defining the south-western corner of a field, the full extent of which lay beyond the limits of excavation. The furnaces and great majority of the pits within Area 2 were contained within the area enclosed by ditches 12 and 14, again suggesting the group as a whole was contemporaneous.

Area 2: postholes

4.5.29 Posthole 2032 (0.55 m x 0.50 m x 0.42 m deep) was located between ditches 12 and 13 (Fig. 10). It was subcircular in plan and had straight, vertical sides and a flat base (Fig. 17.34; Pl. 13). Its single, sterile fill (2033) consisted of limestone packing stones in a mixed deposit of a bluish clay and a dark, greyish brown sandy clay.

4.5.30 Posthole 2126 (0.78 m x 0.78 m x 0.24 m deep) was located towards the south-eastern limit of Area 2, over 45 m away from the main concentration of pits and ditches to the north-west (Fig. 9). It was circular in plan with steep, concave sides and a concave base. Its single, sterile fill (2127) consisted of fire-affected limestone blocks in a yellowish brown silty clay.

4.6 Phase 4

4.6.1 The phase 4 remains consisted of two ditches and three pits. These are thought to post-date settlement of the enclosure and the ditches in particular appear to reflect a shift in land use towards a purely agricultural regime.

4.6.2 Ditch 100 entered Area 1 from the south-east and continued north-west for 30 m before bifurcating (Fig. 7). The southern fork continued on its original alignment for 10 m before terminating just inside the south-eastern entrance to the enclosure. The northern fork turned to the north-east, respecting the enclosure, and ran for 55m before turning through 90˚ to head north-west. The south-east to north-west aligned section of ditch 100 continued for 100 m before again turning through 90˚ to the south-west and exiting the site after a further 6 m. Ditch 100 varied between 0.28 m and 0.83 m in width and between 0.17 m and 0.62 m in depth (Fig. 20.59, 20.61 and 21.65). Its profile was also variable ranging from a moderately steep sided ‘U’-shape to a vertical sided, flat based cut.

4.6.3 A single mid- to dark yellowish brown, sandy clay fill was encountered in each intervention. Broadly Iron Age pottery was found in section 1325, whilst Middle to Late Iron fabrics were retrieved from section 1342. The small assemblage of animal bone is in accord with that of previous phases, consisting of the remains of sheep/goat, cattle and horse.

4.6.4 Ditch 200 entered Area 1 from the south-east and continued north-west for approximately 20 m, where it broke for 1.5 m, before continuing to its intersection with the north-east corner of the enclosure ditch. Ditch 200 was observed to cut ditch 100 (Fig. 20.63) and the original cut of the enclosure ditch (11) (Fig. 15.24). It varied in width between 1.5 m and 1.8 m, between 0.33 m and 0.67 m in depth and had moderately steep, irregular sides and an irregular base (Fig. 20.64).

4.6.5 A single dark brown, sand clay fill was recorded in each of the interventions dug across ditch 200. The feature supplied a small assemblage of animal bone and pottery. The bone is similar to that from elsewhere on the site, with sheep/goat, cattle and horse represented. The pottery is of Middle to Late Iron Age date.

4.6.6 Ditch 200 was somewhat diffuse in plan just east of its junction with ditch 100, and had a segmented appearance when excavated. This may be due to ground disturbance (excavation records note a tree throw at this point), or may reveal the ditch was not originally dug to a single uniform depth. This area potentially represents the point at which individual segments of the ditch met, and were joined up.

4.6.7 Pits 1375, 1379 and 1387 were set out on a north-east to south-west alignment and were located external to the south-eastern side of the Area 1 enclosure (Fig. 7). All three cut

phase 4 ditch 100, and so may post-date this phase. However, given their spatial concordance with the phase 4 boundary and their artefactual assemblages (see below) they have been included within phase 4.

4.6.8 Pit 1375 (2.08 m x 1.94 m x 0.60 m deep) was subcircular in plan with steep, slightly concave sides and a flat base (Fig. 21.65). Its single fill (1376) consisted of a light brownish grey sand with frequent limestone fragments. Animal bone recovered from the pit consisted of elements of pig and sheet/goat and the mandible of a horse.

4.6.9 Pit 1379 (1.70 m x 1.70 m x 0.50 m deep) was circular in plan with moderately steep, concave sides and a concave base. Its single fill (1380) consisted of a light brownish grey silty sand with frequent limestone fragments. The finds assemblage from the feature consisted of a few fragments of undiagnostic mammal bone.

4.6.10 Pit 1387 (2.15 m x 2.04 m x 1.18 m deep) was subcircular in plan with flat, almost vertical sides and a flat base (Fig. 21.66). Five fills were recorded in the pit, the basal of which (1388) consisted of a light brown sandy silt with occasional limestone fragments. Finds from 1388 comprised broadly Iron Age pottery and bones of cattle and horse. The second fill (1390) was a sterile light brown sandy silt with occasional limestone fragments. The third fill (1389) consisted of a light brownish grey sandy silt with very common limestone fragments. Finds from the deposit consisted of horse and cattle bone. The fourth fill (1391) was a sterile light brown sandy silt with occasional limestone fragments. The fifth and final fill (1392) was a mid-brownish grey sandy silt with moderate limestone fragments. Finds from the deposit consisted of Middle to Late Iron Age pottery, animal bone including elements of sheep/goat, cattle, horse and dog and an iron furnace smelting bottom containing unreduced iron ore.

4.7 Unphased features

4.7.1 Ten discrete features were identified within Area 1 which could not be phased or could only be given a broadly Iron Age date (Fig. 7).

4.7.2 Pit 1242 (0.89 m x 0.70 m x 0.13 m deep) was located within the Area 1 enclosure, just to the south of ring gullies 1 and 2. It was subcircular in plan and had moderately steep, concave sides and an irregular base. Its single, sterile fill (1243) consisted of a dark brown sandy clay with limestone fragments.

4.7.3 Pit 1162 (1.64 m x 1.40 m x 0.95 m+ deep) was also located to the south of the roundhouses. It was subcircular in plan with steep, flattish sides. Two fills were recorded, the lower of which (1163) consisted of a sterile, light yellowish brown silty sand with abundant limestone fragments. The upper deposit (1164) was a light, yellowish brown silty sand with common limestone fragments, which contained roasted iron ore.

4.7.4 Pit 1115 (0.48 m x 0.38 m x 0.28 m deep) was cut through the southern portion of ring gully 3 (Fig. 8). It was sub-oval in plan and had steep, slightly concave sides and a flat base. Its single fill (1116) was a mid-yellowish brown silty with frequent limestone fragments. The finds assemblage comprised broadly Iron Age pottery, sheep/goat bone and iron ore.

4.7.5 Pit 1283 (0.8 m x 0.8 m x 0.5 m deep) was cut into the fill (1284) of enclosure recut ditch 11 along the segmented south-eastern side of the enclosure (Fig. 7, Section 16.25). It was circular in plan with almost vertical, flat sides and a flat base. The feature appeared to have been lined with a 0.05 m thick layer of light greyish blue clay (1282), possibly to contain fluid. The fill of the feature (1281) consisted of abundant burnt limestone blocks in

a mid–dark brown sandy silt matrix, which contained broadly Iron Age pottery and a fragment of a saddle quern.

4.7.6 Pit 1362 (1.0 m x 1.0 m x 0.24 m deep) was located just inside the south-eastern entrance to the enclosure in Area 1 (Fig. 7). Two fills were recorded, the basal of which (1363) was mid-yellowish brown silty sand, found to contain a fragment of sheep skull. The upper fill (1364) was a dark reddish brown sandy clay, which contained broadly Iron Age pottery and sheep bone.

4.7.7 Pit 1369 (0.59 m x 0.31 m x 0.09 m) was located 13 m south-east of the entrance to ring gully 3, within the centre of the main settlement enclosure. It was circular in plan and had moderately steep, concave sides and a flat base. Its basal fill (1370) consisted of a light greyish blue clay, whilst the upper fill (1371) was a light brown sandy clay with rare limestone fragments. No finds were recovered.

4.7.8 Pit 1244 (0.70 m x 0.65 m x 0.15 m) was located a short way to the east of ring gully 3. It was subcircular in plan with steep, flat sides and a flat base. Its single fill (1245) was a mid-grey-brown sand silt, which contained broadly Iron Age pottery.

4.7.9 A little further east lay pit 1234 (0.95 m x 0.88 m x 0.20 m deep). It was subcircular in plan with flat, near vertical sides and a flat base. Its single fill (1235) was a mid-greyish brown sandy clay, which contained roasted iron ore.

4.7.10 A sequence of three intercutting pits (1393, 1395 and 1397) was located close to the north-western limit of Area 1, between the enclosure ditch and ditch 100. The earliest feature was pit 1397. The feature measured 3.30 m x 2.70 m x 0.48 m deep and was irregular in plan with moderately steep, concave sides and a concave base. Its single fill (1398) was a light brownish grey sandy silt, which contained broadly Iron Age pottery, roasted iron ore and cattle and pig bone. It was cut by pit 1395 (1.44 m x 1.42 m x 0.70 m deep), which was circular in plan, with steep, flat sides and a flat base. Its single fill (1396) was a dark grey sandy silt. Finds from pit 1395 consisted of possible Early to Middle Iron Age pottery and a substantial assemblage of animal bone including elements of cattle, pig and sheep/goat. Pit 1395 was cut in turn by pit 1393. This feature was 1.88 m x 1.30 m x 0.25 m deep, and was sub-oval in plan with moderately steep, concave sides and an irregular base. Its single fill (1394) consisted of a light brownish grey sand silt. Finds from the deposit comprised broadly Iron Age pottery, cattle bone and a short section of iron rod with an expanded end of unknown function.

4.8 Post-medieval features

4.8.1 A series of irregular, amorphous waterworn linear features (2064, 2066, 2104, 2118, 2120 and 2123; Fig. 18.43) were located at the south-eastern limit of Area 2. Upon excavation, they appeared to be largely natural watercourses that, based on the recovery of pottery and clay pipe, dated to the post-medieval period.

5 ARTEFACTUAL EVIDENCE

5.1 Introduction

5.1.1 The excavation produced a fairly substantial finds assemblage, predominantly comprising Iron Age pottery, metalworking debris and animal bone. Counts and weights are given for each category in the table below.

Table 1: Finds quantification

Material	Quantification	Weight (g)
Pottery	1443	17,930
Animal bone	3587	48,700
Slag	2027	123,815
Flint	4	20
Fired clay	7	552
Stone	3	3,796
Human bone	1	70
Clay pipe	1	1
Ceramic building material	1	70

5.2 Pottery

by Ian Rowlandson

Introduction

5.2.1 A typical range of Early to Middle Iron Age pottery was retrieved during the excavation. It appears highly likely that the settlement was active from the Early Iron Age onwards, and that the inhabitants witnessed the advent of the Scored ware tradition (diagnostic of Middle Iron Age or later date in the East Midlands), and continued to use this style of pottery until the abandonment of the settlement. There was little diagnostic material that could suggest with any certainty that the settlement continued until the end of the Iron Age, with the pottery broadly supporting the picture given by the radiocarbon dating results. Scored ware has been considered by one authority to continue in use into the 1st century AD in some parts of the East Midlands (Knight 2002, 134); it is therefore possible, on the evidence of the ceramic chronology, that activity did continue on the site after the beginning of the 2nd century BC.

5.2.2 Very little pottery was deposited within the structural features associated with the series of roundhouses, which is interesting from a taphonomic perspective, but does hinder the dating of these features. The freshest pottery retrieved was from the group of pits in Area 2, where some of the material was more chronologically distinctive. However, many of these assemblages are small and it is uncertain as to how much of the pottery in the earlier Iron Age tradition in these features was contemporary with their backfilling.

5.2.3 The majority of the assemblage derives from the two phases of the enclosure ditch; this includes pottery of both Early and Middle Iron Age traditions. It is however possible that some of the stylistically earlier material spent some time in middens before it became amalgamated with the Middle Iron Age pottery deposited in the enclosure ditch. A comparison of the proportion of vessels showing signs of abrasion by sherd count showed 15.46% of the pottery from the phase 3a enclosure ditch was abraded, 29.87% of the pottery from the phase 3b enclosure ditch and 12.8% from the Area 2 phase 3 pits. This imbalance suggests a higher proportion of residual pottery within the primary enclosure and subsequent re-cut boundary than the groups from the pits. The phase 3a enclosure mean sherd weight of 14.04g in contrast to the 10.71g from enclosure 3b would also appear to support the observation of a greater proportion of re-deposited pottery in the phase 3b enclosure ditch than in the fill of the primary ditch.

5.2.4 Given the possibility that the site remained occupied during the period when tastes in ceramics changed, it is likely that pottery of both styles may have been in contemporary use for a short period.

Methodology

5.2.5 The ceramics totalled 1,443 sherds, weighing 17.930 kg, RE (Rim Equivalent) 5.86. An archive has been produced to comply with the requirements of the Study Group for Roman Pottery (Darling 2004). It uses the codes and system developed by the City of Lincoln Archaeological Unit and those used by the author for the south of the county (Darling and Precious 2014; Davies 1995; Precious 2001; Rowlandson 2014; 2015) augmented by the codes for vessel attributes established by Knight (1998). Please note that 'grog' has been used to denote both grog and meta-sediment inclusions such as mudstones as thin-section work has not been undertaken on these fabrics to confirm identification (Leary 2001). The dates provided represent only the pottery: the main text of the report and other specialist contributions should be consulted to ascertain the overall date attributed to each context. It is recommended that this pottery should be deposited with the relevant local museum along with the rest of the archive.

5.2.6 Key groups have been discussed with catalogue entries within the text followed by a more general discussion. 'D' numbers listed at the end of the catalogue represent the vessel reference marked on the bags during recording. A full set of tabulated data including a description by context, fabric and form code descriptions and a quantified list of fabrics is presented in Appendix 2.

Spatial and stratigraphic distribution of pottery

Phase 1

5.2.7 The pottery of the 1st millennium BC can often be challenging as fabrics present on sites are dominated by locally produced wares (Willis 2002; Knight 2002). In this part of Lincolnshire and the lower Welland valley, sites are dominated by fossil shell-gritted wares and it is often the case that featureless handmade body sherds provide little chronological resolution as, broadly speaking, fabrics appear to have been similar for much of the later prehistoric period (Knight 2004, 37–40; Cleal 2001, 42).

5.2.8 The groups associated with ring gully 1 contain little diagnostic material. The most diagnostic of the two vessels that could be securely attributed to ring gully 1 was a small rim sherd from context 1166. This sherd had a flattened lip expanded externally and internally (Fig 22.1) and was the most significant sherd present. Broadly similar examples were retrieved from Fiskerton (Elsdon and Knight 2004, fig. 5.2.7), Padholme Road, Fengate, Cambs. (Elsdon 1996a, D5b), Longthorpe, Cambs. (Wild 1987, fig. 32.13–4), Werrington, Cambs. (Rollo 1988, fig. 25. 5) Examples of similar rims amongst Cunliffe's Ivinghoe-Sandy group were considered to date to the 8th to 6th century BC (2009, fig. A:7. 16) with decorated examples coming from the Late Bronze Age site at Washingborough (Allen 2009, fig. 4.8.125). A jar with a similar rim was also retrieved from Breedon, Leicestershire (Kenyon 1950, fig. 5.8) and a Scored ware jar from Whitwell, Leicestershire which may have been contemporary with a highly burnished Late Iron Age vessel (Elsdon 1992, fig. 1. 6 and p86; Todd 1981, fig. 12.1) so the dating of this small rim fragment is not certain.

5.2.9 Context 1146 contained fragments from a jar with an ovoid profile and a pinched out base; such base forms cannot be used to refine the dating given their presence amongst assemblages throughout the 1st millennium BC. Willis (2002) has pointed out the problems with typological dating and, with only small fragments from fairly simple vessels attributed to this phase, it is difficult to provide a sound date based on the ceramics alone.

5.2.10 When the range of radiocarbon dates taken for the site have been considered with the site sequence a commencement of activity on the site by the 5th century BC has been favoured (see section 6.3 below) which could fit with the pottery retrieved from ring gully 1.

Fig 22.1: IASH1, J, A handmade jar rim, discussed above, phase 1, feature 1165, fill 1166, D14

Phase 2

5.2.11 Thirteen handmade sherds (0.087 kg, RE0.00) were retrieved from the second roundhouse. In the absence of any diagnostic sherds, they could only be broadly dated to the Iron Age. Radiocarbon dating of an animal bone from a posthole associated with the second roundhouse (see section 6.3 below) would suggest a date range of most probably between the 6th to 4th centuries BC (*510–370 cal BC*[1]; 2359±34 BP; SUERC-61684).

Phase 3

Ring gully 3 and associated deposits

5.2.12 Thirty sherds (0.304kg, RE0.00) were retrieved from ring gully 3 and associated deposits. The majority shows signs of abrasion. The pottery from this group could be dated to the Iron Age with a date range of *390–210 cal BC* (2229±34 BP; SUERC-61685) provided by a radiocarbon date from context 1023, a fill of ring gully 3 (see section 6.3 below). The majority of sherds have shell-gritted fabrics; one vessel has a plain base (context 1137). A number of the sherds have more poorly mixed shell-gritted fabric, most notably a sherd from a vessel with a rounded or carinated shoulder and decorated with a row of stabbed fingernail decoration from pit 1075. This decorative style appears on Early Iron Age carinated jars from Fengate (Hawkes 1943, fig. 3. F2) and Gretton, Northamptonshire (Jackson and Knight 1985, fig. 7.34) and is the only diagnostic sherd from this group. Sherds from a further vessel from pits 1078 and 1170 had signs of external finger wiping. An Early Iron Age date for the majority of the pottery from this assemblage appears most likely. No diagnostic Scored ware sherds were present in this group although it is possible that some of the fine shell-gritted sherds could be dated to Middle to Late Iron Age.

Phase 3a enclosure ditch 10

Ninety-seven sherds (1.362 kg, RE0.53) were retrieved from the phase 3a enclosure. A few of the fills contained exclusively Early Iron Age types with no Scored ware present (contexts 1229 and 1337), but the general picture was one of Early–Middle Iron Age types alongside Scored ware types. Out of approximately 54 vessels represented in the assemblage, a maximum of four vessels showed evidence for Scored ware surface treatment (7.41%).

The majority of the Scored ware sherds from this ditch are very small and make up only 2.72% of the assemblage by weight. This was a lower proportion of Scored ware than from the subsequent phase of the enclosure ditch (9.11% by vessel and 23.32% by weight). If the pottery from the phase 3a enclosure is compared with the material from the Area 2 phase 3 pits, there is a much lower proportion of Scored ware from the first phase of the enclosure (Scored ware within the Area 2 phase 3 pits represented 18% by vessel count, 54.84% by weight). The lower level of pottery in the Scored ware tradition from enclosure ditch 10 and a significant number of earlier Iron Age forms including jars with multiple channelled rims (below) suggests a higher proportion of pottery from the Early Iron Age was present in this group. This may be due to the incorporation of earlier midden material within the first backfilling of the enclosure or it might represent a period when pots of both traditions were in use by the inhabitants of the site. The illustrated material is discussed in more detail in the catalogue below.

[1] Radiocarbon dates are cited in the text in italics are the posterior density estimate derived from Bayesian analysis (see section 6.3)

IASH9, JIR (not illustrated). A jar or bowl with a flattened lip pinched out externally and internally with internal horizontal wipe marks. This vessel can be broadly paralleled with examples from Fiskerton (Elsdon and Knight 2003, fig. 5.2.7) and Market Deeping (Knight 2010, fig. 141. 95). Phase 3a, feature 1214, fill 1216, D04

Fig 22.3: IASH7, JFISK, A large jar, broadly similar examples from Billingborough, Lincolnshire and Wandlebury Ringwork, Cambridgeshire (Webley 2005, fig. 3. 16). Phase 3a, feature 1335, fill 1337, D06

Fig 22.4: IASH7, JBEV, A shell-gritted jar, similar vessels appear in Gretton Group 1 (Knight 1984, fig. 15.3) and pre-Phase 1 Werrington, Cambs. (Rollo 1988, fig. 25. 23). Phase 3a, feature 1335, fill 1337, D05

Fig 22.5 IASH7, JB, A jar with a fingertip decorated rim, Phase 3a, Feature 1188, Fill 1182, D30

Fig 22.6 IASH7, JB, A jar with a slash decorated rim, Phase 3a, Feature 1188, Fill 1182, D15

Phase 3b enclosure ditch 11

5.2.13 Six hundred and seventy-three sherds (7.208 kg, RE2.71) were retrieved from the enclosure recut. This was the largest individual assemblage and represents pottery of Early and Middle Iron Age date. The radiocarbon dates from this phase appear to suggest the possibility of a date in the 4th century BC (see section 6.3 below) and the range of pottery is not at odds with this chronology. Undoubtedly, this group represents the final deposition of a range of pottery that had been used on the site throughout the Iron Age occupation. It was noticeable that the pottery from the enclosure ditches was not in as fresh condition as the vessels from the pits, suggesting that there was a greater proportion of residual pottery within the ditches (enclosure ditch 10: 10.67 g ASW, enclosure ditch 11: 11.12 g ASW; in contrast to the Area 2 phase 3 pits: 23.13 g).

5.2.14 The pottery from the enclosure recut appears to include pottery of two stylistic periods. They include examples of rounded shouldered vessels with stabbed decoration typical of Early Iron Age assemblages and jars with carinated profiles; a jar with an internally projected lip (Fig. 22.8) and a possible example of a multi channel rimmed jar similar to examples from Fiskerton. There is also a range of Scored ware Middle Iron Age vessels jars and necked jars found in Middle to Late Iron Age assemblages. The key illustrated vessels are described further in the catalogue below.

Fig 22.7: IASH1, JUP, Broadly similar jars occur amongst the pre-Phase 1 pottery at Werrington, Cambs. (Rollo 1988, fig. 25. 23) although jars with similar slack profiles appear to have continued in use, often with scored decoration. Phase 3b, feature 1178, fill 1159, D03

Fig 22.8: IASH8, JB, A jar with an inturned rim, probably from the early phase of occupation on the site. An example of a broadly similar vessel was illustrated from the Early Iron Age group from Gretton (Jackson and Knight 1985, fig. 6. 23) and Billingborough (Cleal 2001, fig. 27. 90, in a Middle–Late Iron Age phase). Phase 3b, feature 1218, fill 1219, D13

Fig 22.9: IASH7, A jar with a slightly shouldered profile. Phase 3b, feature 1218, fill 1219, D12

Fig 22.10: IASH3, J, A jar rim with a slightly expanded and flattened tip, examples of rims such as this were illustrated from Wandlebury (Hartley 1957, fig. 8. 42). Phase 3b, feature 1218, fill 1219, D11

Fig 22.11 IASA2, JNK, A sand gritted necked jar or bowl with burnished external surfaces, similar earlier Iron Age examples are published from Gretton, Northants. (Jackson and Knight 1985, fig. 9 .94). Phase 3b, feature 1218, fill 1220, D21

Fig 22.12 IASH3, JB, A large jar. Phase 3b, feature 1218, fill 1219, D19

Fig 22.13 IASH8, J, A jar flanged externally and internally with a grooved rim top. Similar vessels include examples from Billingborough (Cleal 2001, Fig. 26.74; Elsdon 1996a, C.2a. 521) and early Iron Age Group 1 at Gretton, Northants. (Knight 1984, Fig. 15. 9). Phase 3a, feature 1221, fill 1223, D27

Fig 22.14: IASH7, JUP, A handmade vessel with a tall rounded rim. Similar examples published from Werrington pre-Phase 1 deposits (Rollo 1988, fig. 25. 26). Phase 3b, feature 1232, fill 1233, D01

Fig 22.15: IASH7, JUP, A similar jar with a fingernail-slashed rim was published from a pre-Phase 1 feature at Werrington, Cambs. (Rollo 1988, fig. 25.12). Phase 3b, feature 1232, fill 1233, D02

Fig 22.16 IASH7, JBUP, A jar or bowl with an upright rim, similar to examples from Gretton (Knight 1984, Fig. 16.16) and Fengate (Hawkes 1943, Fig. 2. B1). Phase 3b, feature 1240, fill 1241, D22

Fig 22.17 IASH4, JEV, Rim and basal sherds from a Scored ware jar with a pinched out base. Not illustrated as only small rim fragment survived, Phase 3b, feature 1240, fill 1241, D18

Fig 22.18 IASH7, JB, The rim from a large jar or carinated bowl, Phase 3b, feature 1384, fill 1386, D24

Fig 22.19 IASH7, JBR, An example of a jar with a rounded rim, a similar example is published from Longthorpe, Cambs. (Wild 1987, fig. 32. 26 & 33-4). Phase 3b, feature 1384, fill 1386, D26

Fig 22.20 IASH7, J, A jar with finger tipped decoration, Phase 3b, feature 1399, fill 1402, D16

Fig 22.21: IASH4, JBNK, A fragment from a necked bowl. Phase 3b, feature 1399, fill 1402, D17

Phase 4: ditches 100 and 200

5.2.15 Thirty-seven sherds (0.304kg, RE0.32) were retrieved from ditches 100 and 200. The forms present included a bead rimmed jar, Scored ware, and a grog-gritted jar with a pinched out base. A Middle to Late Iron Age date would be appropriate for this small assemblage.

Fig 22.22 IASH7, JEV, A jar, similar examples have been illustrated from Washingborough. This vessel is probably of an earlier Iron Age. Phase 4, feature 200, ditch 1273, fill 1274, D07

Area 1 unphased and unstratified material

5.2.16 Forty-two sherds (0.550 kg, RE0.14) were retrieved from these groups. A similar range of earlier Iron Age vessels was present, including a jar with a multi-channelled rim similar to examples from Fiskerton and an example of a jar with an internal projection (as Fig. 22.8); also present were further sherds from Scored ware jars.

Fig 22.23: IASH7, J, A jar with a squared-off rim. Unphased, feature 1395, fill 1396, D25

Area 2 phase 3 pits

5.2.17 Three hundred and thirty-three sherds (4.234 kg, RE1.21) were retrieved from the cluster of phase 3 pits in Area 2. The groups contain a range of shell-gritted wares including Scored ware (31.84% of the group by vessel count) and small quantities of fine burnished late La Tène type vessels. The range of dates from these features varies but it appears that there was a higher proportion of Scored ware type pottery of Middle to Late Iron Age date amongst this group than the enclosure ditches.

Pit 2004

5.2.18 A good fresh medium sized group including fragments from a globular jar in a fine burnished shell-gritted fabric; a large comb or fine scored storage jar and a number of Scored ware sherds were also present. A Middle to Late Iron Age date has been favoured on the basis of the Scored ware (IASH4).

Fig 22.24 IASH3, J, A large jar with scored or combed surfaces and a slashed rim, similar to an example dated to the Middle to Late Iron Age from Billingborough (Cleal 2001, fig. 26. 80), phase 3, feature 2004, fill 2005, D23

Pit 2006

5.2.19 Ninety-one sherds (1.275 kg, RE0.52) were retrieved, including a range of Scored ware jars with rounded everted and externally bevelled rims, and flat and pinched out base types. A globular externally burnished jar with a footring base had internal carbonised deposits. A small number of vessels from this group may date to the earlier Iron Age including a jar with finger nail decoration and slag inclusions within the fabric. The group is probably dated to sometime from the 4th century BC onwards.

Fig 22.25 IASH4, J, A burnished vessel with a footring. Examples of Iron Age vessels with footrings are most common amongst Late Iron Age assemblages but other earlier Iron Age examples are known. Fine ware burnished vessels with footrings are known from Wandlebury ringwork (Hartley 1957, fig. 7.16), Fengate (Knight 1984, fig. 11.10) and other examples from Cunliffe's 'Chinnor-Wandlebury' type group considered to date to the 5th to 3rd century BC (Cunliffe 2009, fig. A:12. 25, Knight 1984, Form 2) with examples also present at Weekley in Ceramic Period 1 (Jackson and Dix 1987, fig. 30.30) and an example from the Ancaster Quarry site (May 1976, fig. 69.7) It is possible that this vessel may fit with an Early–Middle or Middle Iron Age date but without the upper half of the vessel the date is not certain. Phase 3, feature 2006, fill 2007, D09

Fig 22.26 IASL1, J, A shell and slag-gritted jar with a slashed rim similar to an example from Wandlebury Ringwork, Cambridgeshire (Webley 2005, fig. 3.13). Phase 3, feature 2006, fill 2007, D10

Fig 22.27 IASH7, JEB, A Scored ware jar similar to an example from Werrington, Cambridgeshire from Phase 1 considered to date to sometime from the 2nd century BC until the Roman conquest (Rollo 1988, Fig. 28. 89). Phase 3, feature 2006, fill 2007, D08

Pit 2008

5.2.20 Eight sherds (0.171kg, RE0.00) of shell-gritted pottery were retrieved from pit 2008 including sherds with Scored ware surface treatment and a plain base. A Middle to Late Iron Age date is favoured for this group.

Pit 2011

5.2.21 Twenty-three sherds (0.336kg, RE0.10) were retrieved from pit 2011. The sherds present were all handmade shell-gritted types including fragments from five vessels with Scored ware decoration, a jar with a fingertip decorated rim (Fig 22.28) and a necked jar with an everted rim in the medium shell-gritted fabric (IASH9). A Middle or perhaps Late Iron Age date could be attributed to this group.

Fig 22.28 IASH7, J, A shell gritted jar with a flattened rim with fingertip decoration, numerous examples of vessels with similar decoration are known from Middle Iron Age assemblages including Scored ware. Phase 3, feature 2011, fill 2012, D20

Pit 2013

5.2.22 A single body sherd from a Scored ware jar (55g) was retrieved from this feature.

Pit 2015

5.2.23 Fifty-seven sherds (1.025kg, RE0.24) were retrieved from this feature; eight vessels had Scored ware surface treatment and vessels were either globular or ovoid with examples of plain and pinched out bases present. Rim forms included two everted types (including Fig 22.29) and an example with an externally bevelled rim. These sherds are best dated to the Middle to perhaps Late Iron Age.

Fig 22.29 IASH4, JEV, A Scored ware jar with a slashed rim trip similar to an example from Aslockton, Nottinghamshire (Elsdon 1996a, B.7.2). Phase 3, feature 2015, fill 2017, D29

Pit 2018

5.2.24 Three shell-gritted sherds (0.073kg, RE0.00) were retrieved including fragments from a large jar and another with possible traces of scoring.

Pit 2020

5.2.25 Eleven sherds (0.081kg, RE0.03) were retrieved including sherds of Scored ware and a fragment from a necked jar or bowl in a burnished fine shell-gritted fabric. A Middle–Late Iron Age date for this group appears likely.

Pit 2022

5.2.26 Twenty-three sherds (0.132kg, RE0.00) were retrieved including fragments from shell-gritted Scored ware jars.

Pit 2024

5.2.27 Five sherds (0.022kg, RE0.00) of shell-gritted pottery including a Scored ware vessel were retrieved from this feature.

Pit 2029

5.2.28 Twenty sherds (0.078kg, RE0.00) including Scored ware were retrieved from this feature.

Pit 2038

5.2.29 Seven sherds (0.099kg, RE0.00) including some from a globular Scored ware jar with a sparse coarse lattice style decoration were retrieved.

Pit 2040

5.2.30 Three shell-gritted sherds (0.023kg, RE0.00) including a vessel with a pinched out base were retrieved from this feature.

Pit 2048

5.2.31 A single flint gritted sherd, probably of Bronze Age date, was retrieved from this pit.

Pit 2057

5.2.32 Four sherds (0.055kg, RE0.00) including a fragment from a jar with a pinched out base were retrieved from this feature.

Pit 2059

5.2.33 Six shell-gritted sherds (0.039kg, RE0.00) including a fragment from a pinched out base were retrieved from this feature.

Pit 2062

5.2.34 Sixteen sherds (0.172kg, RE0.15) were retrieved from this pit including fragments from Scored ware jars and a necked jar or bowl in the fine burnished shell-gritted fabric IASH4.

Pit 2086

5.2.35 A single sherd in a fine burnished shell-gritted ware (IASH4) possibly of Late Iron Age date was retrieved from this feature.

Pit 2092

5.2.36 A single featureless shell-gritted body sherd was retrieved from this feature.

Pit 2106

5.2.37 Eight sherds (0.217kg, RE0.00) from two handmade shell-gritted Scored ware vessels were retrieved from this feature. Both vessels had pinched out bases.

Pit 2108

5.2.38 Thirty-six sherds (0.793kg, RE0.20) were retrieved including five vessels with Scored ware surface treatment, a jar with a slack shoulder (Fig 22.30) and a rim from a necked jar or bowl with an everted rim.

Fig 22.30 IASH7, J, A shell-gritted jar with a slack shoulder. Phase 3, feature 2108, fill 2109, D28

Area 2 other features and deposits

5.2.39 Forty-five sherds (1.534 kg, RE0.25) were retrieved from layer 2001 and gully 2064. Shell-gritted Scored ware sherds were retrieved from both features with a further example of a channel rimmed jar from gully 2064.

Vessel fabrics

Manufacture and firing

5.2.40 The assemblage was all handmade and probably clamp- or bonfire-fired. The coarser fabrics varied in firing colours, from oxidised orange browns to black, with many vessels

showing patchy surface colours suggestive of irregular levels of oxygen present during firing. The coarser fabrics were typically used for the production of the larger jars. The finer fabrics were more commonly used for necked jars and were more consistently fired to a black surface colour (IASA2, IASH4 and IASH9). This is typical of the pattern observed amongst other Iron Age assemblages from Lincolnshire (eg, Rowlandson 2014).

Production and distribution

5.2.41 The vast majority of pottery from the site contains fossil shell, either introduced as filler or as a result of potters selecting fossiliferous clays or marls (see Appendix 2). The fossil shell strengthened the vessel during manufacture and firing, and subsequently made the vessels durable when used for cooking over an open fire. It appears likely that the shell gritted sherds from this site were either manufactured utilising the Jurassic strata available nearby or similar deposits that stretch from North Lincolnshire to Harrold, Bedfordshire (Elsdon 1996b; Vince 2004; 2007a; 2007b). A local source for the majority of the pottery present is likely but cannot be proven. Fossil shell-gritted wares are the commonest amongst the assemblage and this fits with much of the pottery from the Sleaford, Ancaster, South Witham and Grantham areas (Elsdon 1997; May 1976; Nicholson 2006). The shell-gritted fabrics range from examples with little quartz sand present (IASH1), examples with some fine quartz (IASH2), through to examples with common quartz (IASH2, IASH6). The variation in quartz present may be due to the differing parent materials available to the potters or a tempering choice to make stiffer, more durable clay to manufacture some of the vessels. A proportion of the shell-gritted vessels present have grog or clay pellet inclusions in the fabric (IASH3, IASH8), with many of these vessels having Scored ware surface treatment, similar to examples recorded by this author from near Grantham (Rowlandson 2014).

5.2.42 Where the fossil shell inclusions have survived well, it is possible to recognise punctate brachiopod on approximately a quarter of the pottery from the site (23.86% by sherd count and 29.62% by weight); this material has been recorded as fabric IASH7. The calcareous gritted fabrics from this site have all been examined macroscopically and under x20 magnification to recognise the fossil punctate brachiopod shells, diagnostic of the products of some of the southern Lincolnshire and South Midlands shell-gritted fabrics. Known in much of the literature as bryzoans, these distinctive shells ought to be considered as punctate brachiopod shells of the Terebratulida order and occur in Jurassic deposits. It is known that these distinctive fossils were utilised by potters at Maxey and St. Neots, (both Cambridgeshire), and Harrold, Bedfordshire (Dr A. Vince pers. com.; Vince 2004; 2007a; 2007b). These shell fragments also occur in some of the Romano-British shell-gritted fabrics found in southern Lincolnshire and are present in pottery made from Jurassic clays including areas near Maxey and St. Neots. A small number of sherds from a single jar with calcareous oolitic inclusions were recorded (IAOOL1, phase 3b, context 1332). Fabrics of this type are common in southern Lincolnshire.

5.2.43 A small proportion of the pottery is predominantly quartz sand-gritted (IASA2, IASA3) and a similarly small proportion also contains some rare fossil shell (IASA4). These fabrics were mainly used to produce thin-walled vessels including examples of necked jars in the IASA2 fabric. These fabrics are rare, with a total of 14 sherds attributed to these fabrics.

5.2.44 A single vessel has slag inclusions (Fig. 22.26) suggesting it was produced in the same area as metalworking occurred. Vessels with such fabrics are not common in Lincolnshire. No examples of non-soluble rock-gritted wares, such as those produced using igneous rocks that outcrop in Leicestershire, were retrieved. This is perhaps unsurprising given that such wares are very rare in Lincolnshire with only one vessel known to the author from Hungerton near Grantham (Rowlandson 2014).

Vessel forms

Rim forms

5.2.45 The most common rim forms present are simple everted rims or rounded types. The Middle Iron Age jars including Scored ware types typically had these simple rim forms. A range of the more unusual Early Iron Age forms are also present including multi-channelled rims similar to examples from Gretton, Northants or Fiskerton, channel-rimmed types and examples of internally flanged rims (Fig. 22.8). These types are less common but indicative of an Early Iron Age date. They are present throughout the phase 3, 3a and 3b assemblage; few rims were retrieved from the small groups from phase 1 and 2. A full quantification by phase is presented within the tabulated data.

Body forms

5.2.46 The majority of the vessels present have simple ovoid or globular body shapes, especially the Middle Iron Age vessels, including those with Scored ware surface treatment. More sharply angled profiles, such as carinated or round shouldered forms, are present in phase 1 or 2 and phase 3b; these shapes are diagnostic of earlier Iron Age material. A range of necked jars or bowls was also recorded from phases 3, 3a and 3b. The majority of the pottery was retrieved from the later features, and much of it appears redeposited. Unsurprisingly, the distribution of these types against the stratigraphy does not show any clear patterns. A full quantification by phase is presented within the tabulated data.

Base forms

5.2.47 Bases present were mostly plain flat or pinched out types. A few examples of vessels with footring bases were also retrieved. As all of the basal fragments were retrieved from phases 3–4 no distinctive patterns of distribution were evident. A full quantification by phase is presented within the tabulated data.

Surface treatment

5.2.48 A small number of sherds exhibited signs of the stabbed decoration along the shoulder seen on some Iron Age vessels, but the majority of slashing and fingertip decoration was applied to the rim. These included a possible Early Iron Age example (Fig. 22.26 cf. Webley 2005, fig. 3. 13) along with similar slashes and finger tipped impressions along the flattered rims of a number of the Scored ware jars (eg, Figs 22.29 and 22.30), typical of similar jars from Cambridgeshire and the East Midlands (Elsdon 1996a). A small number of sherds showed signs of external burnishing, although this was mostly restricted to thin-walled vessels in the finer fabrics. Scored ware is discussed in more detail below.

Scored ware

5.2.49 Scored ware surface treatment occurs amongst many assemblages from the East Midlands and has been extensively discussed by a number of authors (eg, Knight 1992; 2002; 2010; Elsdon 1992). It is uncertain whether it was purely a decorative motif, or whether it had more symbolic connotations (Knight 2010, 261–2). The majority of the scored decoration evident was deeply scratched with no obvious pattern evident (eg, Fig. 22.29), but one vessel from phase 3 had an evenly scored diagonal lattice (pit 2038, Knight 2010, fig. 138. 41). The Scored ware technique has traditionally been dated to the Middle Iron Age, but this has been extended to the Middle to Late Iron Age on the basis of a recent survey of the evidence (Knight 2002). A date range of 4th to late 2nd/ 1st century BC was proposed for Twywell (Jackson and Dix 1973, 73; Harding 1975) and Knight has suggested that it may have continued into the 1st century AD in some parts of the East Midlands (2002, 134). The examples from this site appear likely to be from the earlier part of this date range given the scientific dates and the absence of Late La Tène III style vessels from the overall assemblage. A significant proportion of the pottery shows signs of

Scored ware surface treatment (20.03% by sherd count). Unsurprisingly this was higher than a number of contemporary sites from Northamptonshire, where the technique was not as commonly used, and figures of 4–6% by sherd count have been noted (Jackson and Blinkhorn 2001, 60; Rowlandson 2016) with Jackson and Dix suggesting 'an average of 25% for [Northamptonshire]' (1987, 73). Very high levels of Scored ware are often encountered on sites from South Lincolnshire such as the Middle–Late Iron Age site at Hungerton, which had 52.87% by sherd count (Rowlandson 2014). The slightly lower rate of Scored ware evident on the pottery from the site probably relates to the presence of a proportion of 'pre-Scored ware' earlier Iron Age pottery. As such, the proportion of Scored ware from the site would appear to be broadly in line with other Iron Age groups from Lincolnshire.

Vessel residues

5.2.50 Carbonised deposits were noted on eighteen vessels, with the majority retrieved from enclosure ditches (phases 3a and 3b). A vessel (Fig. 22.25) from pit 2006 also has internal carbonised deposits. Internal attrition is evident on two unstratified vessels and seven vessels have obvious leached shell inclusions on their internal surfaces, suggesting they had contained something acidic. A jar (Fig. 22.16) from the phase 3b enclosure ditch has signs of white mineralised deposits internally, suggesting it had been used for boiling calcareous water or urine.

Secondary working of vessels

5.2.51 No evidence for secondary working was noted on the sherds from this assemblage.

Typological affinities and dating

Bronze Age

5.2.52 Limited quantities of potentially 2nd-millennium BC pottery were retrieved, with the most convincing candidate being an abraded handmade sherd with irregularly fired buff fabric gritted with common medium flint inclusions (phase 3, pit 2048). Two small sherds from two cylindrical vessels with poorly mixed shell and quartz-gritted fabrics and oxidised external and black internal surfaces were probably also of Bronze Age date (phase 3a enclosure fill 1326 and phase 3b enclosure fill 1180). There may have been a small quantity of shell-gritted pottery of Bronze Age date that remained unrecognised amongst the handmade shell-gritted Iron Age pottery present but this appears unlikely. On this basis it is difficult to suggest significant activity on the site in the 2nd millennium BC.

Early Iron Age

5.2.53 The Early Iron Age radiocarbon date from the second roundhouse would fit with the limited quantity of pottery from phases 1 and 2. It is perhaps unsurprising that there was little pottery retrieved from the earliest features on the site, as Early Iron Age pottery is rarer in Lincolnshire than that of the Middle to Late Iron Age. The majority of the significant Early Iron Age assemblages from the East Midlands derive from Northamptonshire or Cambridgeshire (Knight and Howard 2004, 86; Knight 2002, 1984). Where assemblages have been recorded from Lincolnshire, the finds have typically been from riverine environments, pits or surface finds (Elsdon 1996b, fig. 19.54.638; Didsbury 1992; Elsdon 1996a, C1, C2a–b, C3a–b, C4, C5 C.4, D2; Cleal 2001; Knight 2004; Elsdon and Knight 2004; Knight 2010, 264–5). Knight and Howard have also noted a similar pattern of Early Iron Age find spots in the Trent Valley (2004, 86–7). Brudenell has also noted the difficulty of recognising Early Iron Age pottery with a dependence upon finding distinctive fine ware or decorated forms to isolate pottery of this period from other pottery from the first millennium BC. He also noted a strong bias towards deposition in pits amongst the material he studied from Cambridgeshire (2008).

5.2.54 Pottery that can be stylistically attributed to the Early Iron Age from the site was mostly found in pits and the enclosure ditches. The Early Iron Age style pottery was mostly found stratified with Scored wares. It is possible that a proportion of the material retrieved from the enclosure ditch represents pottery that was in use during the settlement's unenclosed phases. The stylistically earlier material may have been dumped around the first and second roundhouses, perhaps in middens, and then subsequently included in the material that filled the enclosure ditches.

Earlier La Tène

5.2.55 As Willis has observed greater amounts of pottery are retrieved from later phases of Iron Age sites (2002, 18). This may be due to the production of more durable ceramics, but also the increasing manifestations of ditch digging and structured deposition providing a greater chance of ceramic waste being preserved (Pollard 2002, 22–4; Hill 1995). This assemblage is no different, with the majority of the pottery retrieved from phase 3 deposits. As discussed above, Scored ware is a key indicator for this period and significant quantities are present amongst the assemblage. The sequence of radiocarbon dates would appear to suggest continued activity on the site into the Middle Iron Age when the enclosure ditch appears to have been established. The presence of Scored ware Iron Age pottery amongst the assemblage within this feature would fit with this dating and suggest that the change in pottery style and the advent of enclosure boundaries on the site may have happened at the same time. A change towards enclosed settlement at this time has been recognised in the East Midlands, often on the basis of the ceramic evidence, and elsewhere in Britain (Knight and Howard 2004, 87–99). The majority of the pottery of this period consists of simple globular or ovoid jars, many with Scored ware surface treatment with a similar range of vessels from sites at Castle Quarry (near Ancaster) and Hungerton (Rowlandson 2009; 2014; May 1976). The scientific dating and the site sequence raise the possibility of continued occupation, and would suggest that the Scored ware is some of the earliest from the region. This site will offer a good point of comparison with other groups recovered in the future that can also be scientifically dated.

Late La Tène

5.2.56 Whilst it is possible that some of the Scored ware and some of the smaller fragments of from fine shell-gritted jars and bowls may represent some Late Iron Age activity, the radiocarbon results suggest a limited period of activity not continuing beyond the beginning of the 2nd century BC. It is noticeable that the key indicators of the Late La Tène III period (Knight 2002; Elsdon 1997) are not evident amongst this assemblage and there is little amongst the ceramic assemblage that can exclusively be dated to the 1st century AD. On this basis it appears likely that by the end of the Iron Age the site was largely abandoned.

Romano-British

5.2.57 Two sherds from a single shell-gritted sherd weighing 5 g (SHEL, phase 4, ditch 200) were retrieved. These may be Late Iron Age in date, or derive from a Romano-British Bourne-type shell-gritted vessel.

5.3 Metalwork and slag

by Rod Mackenzie

Introduction

5.3.1 The archaeological fieldwork carried out at the site found significant evidence of iron production dating from the Middle Iron Age. A site visit by the author [Dr Roderick

Mackenzie] during the excavation confirmed the presence of two possible iron smelting furnaces and significant quantities of smelting slag and iron ore.

5.3.2 All residues that were thought to relate to metal production were collected during the excavation, and the complete assemblage has been assessed and quantified by type of residue; the results of the assessment are shown in Appendix 3.

5.3.3 The assessment of the assemblage identified material whose analysis could add to knowledge of activities at the site, and potentially increase existing knowledge of pre-industrial ironmaking both locally and nationally. As part of the project, some samples of iron ore, smelting slag and iron objects have been scientifically analysed. Given the scope of the project, analysis has been limited to a relatively small number of samples, and it has been carried out with three specific aims: firstly, to investigate whether the iron objects found had been manufactured using iron smelted at the site; secondly, to determine whether a hollow cone shaped ferrous metal object was made from iron or steel, as this could potentially aid the interpretation of the object; finally, the aim of analysing the samples of iron ore has been to determine whether more than one ore type was present on the site.

5.3.4 A short overview of pre-industrial ironmaking has been included to provide context for the assemblage. This is followed by an overview of the assemblage, before moving on to a description and interpretation of the metallurgical analysis of selected samples.

'Pre-industrial' ironmaking

5.3.5 The purpose of the following section is to provide a basic overview of the iron production methods and furnaces that were being used in the period that the site was occupied.

5.3.6 Archaeological evidence suggests that during the Iron Age to Romano-British period in Britain, iron was smelted from ore using either covered bowl-type furnaces (Crew *et al.* 2008), or vertical shaft-type furnaces known as bloomery furnaces (Dungworth 2014; Schrüfer-Kolb 2004, 8).

5.3.7 Typically, intact furnace superstructures do not survive archaeologically, and often the only remains left are the base of furnaces, which are very susceptible to damage by ploughing. Although this makes it difficult to be certain about the exact morphology or height of furnace superstructures, it is sometimes possible to differentiate between bowl type furnaces and smaller shaft type furnaces. It is worth noting that the heights of the Iron Age to Romano-British bloomery furnaces mentioned below are estimates based on fragmentary remains and ethnographic parallels. The morphology of the furnace bases at the site suggests that both were relatively small shaft type, or possibly small bowl-type furnaces.

5.3.8 Archaeological evidence from smelting sites around England and Wales suggests that the clay walls of the furnaces were typically over 0.2 m thick and the internal diameter of the furnace at their bases ranged between 0.3 m to over 1 m (Bayley *et al.* 2001, 10). Iron Age shaft-type furnaces are thought to have consisted of a vertical clay tube (or 'shaft') of around 0.7 m to 1.5 m in height. The general principles of how iron was produced in the furnace are given below; Tylecote (1986, 128–31) provides more detail on the physical chemistry of iron smelting in shaft type furnaces.

5.3.9 The furnaces used charcoal as fuel, as this is cleaner and has the potential to burn hotter than wood. Archaeological evidence and smelting reconstructions suggest that iron ore was pre-roasted before smelting. The main purpose of pre-roasting ore is to drive off its

water content and leave the iron oxide within the ore in a state that is easier to convert to metallic iron.

5.3.10 A fire would be lit inside the base of the furnace and then successive layers of charcoal and pre-roasted ore added. Hand-powered (later water-powered) bellows were typically used to provide a strong air draft to raise the temperature of the furnace to the 1100° C to 1500° C range; the temperature would be estimated using changes seen in the colour of flames in the furnace.

5.3.11 During smelting, the reducing atmosphere in parts of the furnace would convert the iron oxides to metallic iron and, under gravity, small droplets of iron would migrate towards the lower part of the furnace, where it would coalesce into a semi-molten rough viscous blob of iron, known as a 'bloom'. When it was removed from the furnace, the bloom would contain a high volume of entrapped slag and it required forging to consolidate the iron into a solid bar or billet of metal. At forging temperatures, the entrapped slag would be in a molten or semi-molten state, and would be squeezed out of the iron as it was forged. The repeated cycles of forging involved in the manufacture of a finished object would typically improve the quality of the iron by reducing the volume of slag present in it; however, although forging could substantially reduce the volume of slag in the iron, small amounts would remain entrapped within the microstructure of the finished object.

5.3.12 To date, archaeological evidence suggests that shaft furnaces in Britain fall into two broad categories: non-tapping and tapping. In the former, the slag by-product of the smelting was too viscous to flow freely (ie, be tapped) out of the furnace, so it had to be raked and dragged out of the base of furnace, or left to accumulate and solidify in a pit below the main furnace body. In the latter, the slag was less viscous and could be tapped off and drained into a pit adjacent to the furnace. In contrast to non-tapping furnaces, tapping furnaces produced high volumes of distinctive tap-slag (Paynter 2007, 202). Although archaeological evidence shows that there were clear differences in furnace designs and slag types produced, the inherently variable nature of pre-industrial iron smelting means that there is a considerable cross-over in the morphology of slag produced by different furnace types. One of the most abundant 'cross-over' slag types is what has been termed run slag. This type of slag appears to have reached a viscosity where it was able to flow down through the contents of the furnace during smelting, although it does not appear to have become liquid enough to be tapped from the furnace. The appearance of run slags suggest that it either cooled *in-situ* within the furnace, or had been poked and raked out of the furnace whilst still plastic.

5.3.13 As mentioned above, small amounts of residual slag from the smelting process are also typically found entrapped within the iron objects produced by shaft and bowl type furnaces. By comparing the slag inclusions in finished iron objects against a database of smelting slags from different regions, it may be possible to provenance iron objects (Paynter 2006; Blakelock *et al.* 2009).

Major pre-industrial ironmaking sites in the Stamford area

5.3.14 The site lies on a large geological belt of iron-rich deposits that runs northwards through the South and East Midlands to the north-east of England; this geological formation is known as the Jurassic Ironstones.

5.3.15 The site lies at the north of an area now known as Rockingham Forest. A survey of pre-industrial iron industry in the area indicated extensive activity during the Late Iron Age to Roman-British period (Bellamy *et al*. 2000; Crew 2011; Schrüfer-Kolb 2004), and there are several significant sites within approximately 25 km of the site. However, the furnaces found at the site appear to be amongst the earliest securely dated examples in the area.

5.3.16 Some of the most significant and relevant ironmaking sites in the local area are: Collyweston (OS Grid ref. SK 992 006), where evidence of Late Iron Age–Romano-British ironmaking and working was found during successive phases of archaeological fieldwork; Wakerley (OS Grid ref. SP 940 983) where two furnaces associated with an Iron Age–Romano-British settlement were excavated in 1972 (Schrüfer-Kolb 2004, 164), and a furnace base and spread of smelting slag were identified during a fieldwalking survey in 2004. At Laxton (OS Grid ref. SP 968 971), five large furnaces dating from the late 1st and 2nd century AD were found, together with a cluster of smaller furnaces from the 4th century AD; some of the furnaces appear to have been repeatedly rebuilt and it is possible that the furnaces were in almost continuous operation for around 80 years (Crew *et al*. 2008, 9). Another comparatively large-scale smelting site has been excavated at Priors Hall, near Corby, which lies approximately 25 km to the south-west of the site. Iron production at Priors Hall is thought to date from the Late Iron Age to 2nd century AD, and the range of furnaces found and large quantity of slag found (approximately 575 kg) suggests a similar scale of iron production to the site at Laxton.

5.3.17 One of the furnaces at the nearby Romano-British settlement at Great Casterton (OS Grid Ref. TF 000 095) was originally interpreted as a bowl-type smelting furnace, but it is now recognised as more likely to be an ore roasting hearth (Schrüfer-Kolb 2004, 152); a smelting furnace was reported to the west of the Great Casterton site (OS Grid ref. TF 004 093).

Overview of the assemblage

5.3.18 The assemblage has been subdivided into seven basic categories of slag and residue according to their morphology. Appendix 3 shows the amount in each category by context.

5.3.19 The most abundant types of material in the assemblage are iron smelting slag (858 pieces weighing approximately 60 kg) and iron ore (887 pieces, 54 kg), whereas only three pieces (1.2 kg) appear to be more characteristic of iron smithing. The smelting slag is predominantly composed of fragments of slag types that appear to have either formed and remained in, or been manually removed from the furnace, rather than tapped.

5.3.20 As well as the metalliferous slag and ore, there are 76 fragments of fuel ash slag (0.4 kg) and 46 fragments of fired clay (5.2 kg) that possibly originated from the clay lining of hearths or furnaces. The fuel ash slag appears to be wood- rather than coal-derived, suggesting that it may be a by-product of the charcoal-fired furnaces at the site, although it could relate to ore roasting or domestic cooking and heating fires.

Methodology

5.3.21 Four fragments of slag, two fragments of iron ore, and three metal artefacts were selected for further analysis; all of the fragments and artefacts were recovered from secure archaeological contexts dating from the Middle Iron Age (Table 2). One sample of *in situ* furnace 'run slag' was analysed from the fill of each of the two furnaces. The other samples of slag were chosen as representative examples of the other smelting slag morphologies found at the site. These comprise one sample of run slag found in phase 3 pit 2006 (fill 2007) and one sample from a lump of furnace slag with limestone inclusions, which was recovered from phase 3 pit 2034 (fill 2035).

Table 2: Smelting slag, iron ore and metal specimens

Specimen	Context	Phase	Type
1	2072 (furnace 2074)	3 (MIA)	Run slag
2	2081 (furnace 2079)	3 (MIA)	Run slag

3	2035 (pit 2034)	3 (MIA)	Furnace slag (possible 'furnace bottom')
4	2007 (pit 2006)	3 (MIA)	Run slag
5	1062 (posthole 1061)	3 (MIA)	Iron ore
6	1220 (encl. ditch slot 1218)	3b (M-LIA); *360–200 cal BC*	Iron ore
7	1062 (posthole 1061)	3 (MIA)	Nail
8	1241 (encl. ditch slot 1240)	3b (M-LIA)	Nail
9	1258 (posthole 1254)	2 (MIA)	Conical object

5.3.22 To investigate whether some of the iron artefacts found at the site were made from iron smelted at the site, the chemistry of slag inclusions within the metal objects was been compared to samples of smelting slag found at the site. The method used was that developed by Blakelock *et al*. (2009), in which ratios of various elemental compounds of the two slag types are compared.

5.3.23 The metal items selected for analysis included two nails approximately 40 mm in length: Object Numbers (ON) 1 and 4 from contexts 1062 and 1241. Context 1062 was the fill of a posthole (1061) lying within the area enclosed by ring gully 3; context 1241 was a fill of enclosure ditch 11. Both deposits have been allocated to phase 3, ie, the Middle Iron Age. These contexts date from the same period as most of the slag samples.

5.3.24 The conical object (ON 5) from context 1258 (fill of posthole 1254 at the entrance to ring gully 2) was also selected for analysis. Another posthole associated with ring gully 2 returned a radiocarbon date of *510–370 cal BC*. The function of this object is not known, although its shape led the author to hypothesise whether it was the head of a projectile, or part of a partially manufactured spearhead. The main aim of the analysis was to determine whether the point of object had been deliberately hardened, as this could aid its interpretation; a secondary aim of the analysis was to try to confirm whether the object was manufactured using iron that was smelted at the site.

5.3.25 Metallurgical analysis of pieces of slag or metal artefacts requires small specimens of the objects to be removed. In the case of the fragments of slag and nails, the removal of specimens was not an issue. However, the unusual morphology and heavily corroded condition of the conical object meant that it was only possible to remove one very small (2 mm x 1.5 mm) specimen from the pointed tip.

5.3.26 Unfortunately, due to its corroded nature, the specimen from the conical object became detached from its resin mount and was destroyed during sample preparation. The fragility of the conical object meant that it was not possible to remove another specimen without causing significant damage to the object, so no further specimens were removed.

5.3.27 The two specimens of iron ore were analysed to explore whether more than type of iron ore was present at the site.

5.3.28 Crew *et al.* (2008) mention the presence of Northants Sand Ironstone and Ironstone Junction Band iron ore in the area around Laxton, and the morphology of some of the ore found at this site suggests that two ore types are possibly present. Two specimens of weathered iron ore typical of each type recovered during the excavation were selected for analysis.

5.3.29 Specimens from the samples of 'bulk' slag were removed by a combination of fracturing and diamond-blade cold-disc cutting. The specimens from the metal artefacts were removed using a fine-bladed hacksaw. The specimens of slag and metal were then mounted in cold-setting resin, before being ground and polished in the conventional

manner (Vander Voort 1999), with the final stages of polishing carried out using 1 µm diamond paste.

5.3.30 The polished specimens were examined using reflected light microscopy, before being carbon coated for further examination and analysis using an analytical Scanning Electron Microscope with Energy Dispersive Spectrometer (SEM-EDS).

5.3.31 Images of the microstructure of the specimens were recorded as back-scattered images (BEI); in this type of image, the various shades of grey recorded are based upon the mean atomic mass of the components present. Components with a high atomic mass, such as iron, appear brighter than those with a lower atomic mass.

5.3.32 The bulk composition of each specimen was determined by taking the average of three scans of areas approximately 650 by 400 microns. Spot analyses were also carried out to aid identification of individual phases, or analyse small spots of metal within the slag matrix. Due to the size of the slag inclusions within the metal specimens, smaller area scans were used to analyse them.

5.3.33 The specimens of iron ore were relatively soft, porous and friable which meant that they were not ideally suited to preparation for SEM-EDS, so they were analysed using X-ray diffraction, as this is a relatively fast and cost effective technique for differentiating between ore types.

Results

Run slag specimens

5.3.34 The three pieces of run slag analysed all share the solidified viscous flow-like morphology which is characteristic of this slag type. The fresh fracture surfaces of the pieces reveal a dense, dark graphite-grey surface, with a relatively low abundance of randomly distributed fine (<1 mm) vesicles.

5.3.35 The results of the SEM-EDS analysis show that the general composition of all specimens approximates that of fayalite (Fe_2SiO_4). The microstructures of all four specimens are predominantly composed of three mineral phases, primarily laths of fayalite (Fe_2SiO_4) within an interstitial glassy matrix, iron oxide in the form of dendritic wüstite (FeO) is also present in most specimens. Other phases present in relatively small amounts include hercynite ($FeAl_2O_4$) and kirschsteinite ($CaFeSi_2O_6$).

5.3.36 The microstructure of specimen 1 (2072) has a very low abundance of dendritic wüstite, and this can be seen in Plate 14.

5.3.37 Specimen 2 (2081) has more dendritic wüstite present than specimen 1, but the dendrites are relatively thinly dispersed in localised areas within the specimen. Occasional small spots of metallic iron (typically <40 microns in size) are present in the microstructure, and spot analysis revealed that these are composed of almost 100% iron.

5.3.38 Specimen 4 (2007) has larger more blocky laths of fayalite than specimen 1 and 2, and some hercynite. There is a very low abundance of dendritic wüstite in the specimen.

Furnace slag specimen

5.3.39 The fracture surface of specimen 3 reveals that the texture of the slag is more varied than the run slag specimens, the most obvious difference being the larger number of vesicles in the fracture surface. The predominant phase in the microstructure of the specimen 3 is

fayalite. Wüstite dendrites are also present in the microstructure and these are more abundant and evenly distributed than in specimens 1, 2 and 4.

5.3.40 The results of the SEM-EDS area analyses are shown in Table 3. Photomicrographs of the microstructures of each specimen are presented in Plates 14–15 and 18–21.

Table 3: Results of SEM-EDS analysis of slag specimens

		MgO	Al2O3	SiO2	P2O5	K2O	CaO	TiO2	MnO	FeO
Specimen 1	area1	-	6.54	28.44	-	0.96	3.98	1.02	0.68	58.39
	area 2	0.18	5.37	28.74	0.19	0.87	3.37	0.70	0.65	59.92
	Average	**0.09**	**5.96**	**28.59**	**0.10**	**0.92**	**3.68**	**0.86**	**0.67**	**59.16**
	Std Dev	0.13	0.83	0.21	0.13	0.06	0.43	0.23	0.02	1.08
Specimen 2	area 1	0.29	6.94	29.00	0.34	1.27	4.95	0.67	1.21	55.34
	area 2	0.40	6.94	28.69	0.47	1.28	4.75	0.40	0.87	56.21
	area 3	0.33	7.34	30.34	0.17	1.14	4.99	0.87	0.89	53.93
	Average	**0.34**	**7.07**	**29.34**	**0.33**	**1.23**	**4.90**	**0.65**	**0.99**	**55.16**
	Std Dev	0.06	0.23	0.88	0.15	0.08	0.13	0.24	0.19	1.15
Specimen 3	area 1	0.54	8.47	35.03	0.27	0.80	3.98	0.72	-	50.19
	area 2	0.48	8.37	32.90	-	1.09	4.58	0.63	0.73	51.22
	area 3	0.66	8.75	30.14	0.24	0.78	4.02	0.70	0.73	53.97
	Average	**0.56**	**8.53**	**32.69**	**0.17**	**0.89**	**4.19**	**0.68**	**0.49**	**51.79**
	Std Dev	0.09	0.20	2.45	0.15	0.17	0.34	0.05	0.42	1.95
Specimen 4	area 1	0.37	9.18	38.21	0.55	0.75	4.66	0.88	-	45.41
	area 2	0.28	8.57	40.71	0.19	0.60	4.36	0.78	0.60	43.91
	area 3	0.42	9.36	39.70	0.07	0.80	4.91	0.80		43.94
	Average	**0.36**	**9.04**	**39.54**	**0.27**	**0.72**	**4.64**	**0.82**	**0.30**	**44.42**
	Std Dev	0.07	0.41	1.26	0.25	0.10	0.28	0.05	0.42	0.86

5.3.41 The microstructure and chemical composition of the run slag specimens (1, 2 and 4) are generally very similar, and within the expected range typically seen in bloomery furnace run slags. The comparatively low levels of the mineral phase wüstite suggests that the furnaces were being operated in a very efficient way to reduce the amount of free iron being lost into the slag, and extract the maximum amount of useable iron from the ore.

5.3.42 The appearance of the fragment of slag that specimen 3 was removed from suggested that it may have collected within the base of a furnace before cooling and solidifying. The microstructure of specimen 3 suggests that the slag has cooled at a slower rate than the run slag specimens, which is what might be expected in a slag that has been left to cool *in situ* within the base of a furnace. Although there is more free iron in specimen 3, it is still comparatively low for a pre-industrial furnace slag.

5.3.43 The similarities in the microstructure of the slag specimens is reflected in their chemical composition, which suggests that, if the specimens are from different smelting events, the same (or very similar) ore and fuel sources were being used for each smelting campaign.

Metal specimens

5.3.44 The unetched surface of specimen 7 shows a relatively high overall abundance of slag inclusions within the metal (see Plate 15). The slag inclusions are generally in the form of

stringers that are orientated along the length of the nail, and the inclusions predominantly consist of wüstite and fayalite.

5.3.45 Etching revealed that the microstructure of the metal of specimen 7 consists of grains of ferrite with little obvious signs of carbon or phosphorus. The microstructure of specimen 8 appears to consist of ferrite with possible degenerated pearlite. Exploratory hardness testing of both specimens suggests that the carbon content of the iron of specimen 7 is less than 0.1wt% and is possibly around 0.2–0.3wt% in specimen 8.

5.3.46 The results of the SEM-EDS analyses of slag inclusions are shown in Table 4. Photomicrographs of the microstructures are presented at the rear of the report (Pl. 14–15; 18–21).

Table 4: Results of SEM-EDS analysis of slag inclusions in the nails

		MgO	Al_2O_3	SiO_2	P_2O_5	SO_3	K_2O	CaO	MnO	FeO
Specimen 7	slag inclusion			4.46	4.26	0.85			1.96	88.47
Specimen 8	slag inclusion	1.71	3.32	24.19	0.42	1.00	0.35	1.45		67.56

5.3.47 A study by Blakelock *et al.* (2009) determined that the composition of slag inclusions within iron objects was closely related to the smelting slag from the iron used to produce them. Six ratios were identified in the study, which could be used to assist in provenancing iron artefacts. These ratios were applied to the results of the SEM-EDS analysis and are shown in Table 5.

Table 5: Results of applying the six key ratios identified by Blakelock *et al*. (2009) to slag and slag inclusions in the nails.

Slag	MgO/K_2O	SiO_2/MnO	$Al_2O_3/SiO2$	Al_2O_3/MgO	Al_2O_3/K_2O	Al_3CaO
Specimen 1 average	0.10	42.99	0.21	66.17	6.51	1.62
Specimen 2 average	0.28	29.64	0.24	20.80	5.75	1.44
Specimen 3 average	0.63	67.17	0.26	15.23	9.58	2.03
Specimen 4 average	0.50	131.80	0.23	25.34	12.61	1.95
Slag inclusions in nails						
Specimen 7		2.28				
Specimen 8	4.89		0.14	1.94	9.49	2.29

5.3.48 The ratios of the compounds in the slag are relatively consistent, though there is some variation as would be expected from differences in production. However, the ratios in the slag inclusions in the metals are different, which would imply that the nails were not made from iron produced at the site.

5.3.49 The slag inclusions in the nails also contains sulphur, which was not detected in the specimens of smelting slag analysed.

5.3.50 The application of the ratios identified by Blakelock *et al.* (2009) implies that the nails were not produced using iron produced at the site. The presence of sulphur in the slag inclusions could indicate that coal was used as fuel during smithing stages of manufacture. However, it is worth noting that no fragments of coal were present in the assemblage, and there are no coal deposits shown on British Geological Survey maps of the area.

5.3.51 The presence of iron nails that were not made from iron produced on site is perhaps not that unusual, as they may have been part of a wooden artefact that was brought onto the

site from elsewhere. Although the object that the nails were a component of may have decayed or been destroyed, there is the possibility that the nails had been collected and/or kept for reuse or melting in the furnace; the recycling of scraps of iron in pre-industrial smelting is mentioned by Condron (1997, 4).

Ore specimens

5.3.52 Initial qualitative analysis of the ore specimens revealed that they contain the same mineral phases, though in different ratios. The minerals identified in the specimens were Lepidocrocite, Goethite and Silica.

5.3.53 The predominant iron ore in the area of the site is Northants Sand Ironstone, which contains three main iron ore minerals; chamosite, siderite and goethite (Dixon 1979, 34). The two iron oxide minerals (lepidocrocite and goethite) identified in the ore samples are common weathering products found in siderite, pyrite, magnetite, glauconite and iron silicate ores (Poole and Sims 2016, 735).

5.3.54 Due to the limited number of specimens analysed and the degree and variable nature of weathering of the ore, it is has not possible to determine whether two types of ore were present on the site.

Discussion

5.3.55 During a site visit whilst fieldwork was underway, the author noticed a significant background spread of what appeared to be fragments of weathered ironstone. Iron ore does outcrop in the immediate surrounding area (Dixon 1979, 34; English Heritage 2011) and British Geological Survey maps show ironstone deposits within 1 km of the site. Given the close proximity of ore deposits and the relatively small scale of iron production that appears to have been carried out at the site, it seems likely that the ore would have been sourced locally.

5.3.56 The distribution of ore across the site, and degree of truncation of the two furnaces gives the impression that the remains may have been disturbed by ploughing.

5.3.57 Although the furnaces appear to have been truncated, what was left of their bases is suggestive of shaft-type or small bowl-type furnaces. The absence of features resembling slag tapping channels suggests that the furnaces were of the non-tapping variety, and the slag assemblage is commensurate with this. What is unusual regarding the furnaces is that their bases were relatively shallow bowl-shaped depressions or pits, rather than the bell-shaped slag collecting pits that appear to be a feature of other small-diameter non-tapping furnaces found in the area (Schrüfer-Kolb 2004, 8, 29 and 128; Hall 2006, 11–18). The presence of bowl furnaces in Britain is currently thought unlikely, although Dungworth (2014) presents a compelling counter-argument.

5.3.58 When taken as a whole, the archaeological evidence of smelting at the site is suggestive of relatively localised small-scale iron production, particularly when compared to the nearby 1st–2nd century AD smelting sites at Laxton (Crew *et al*. 2008) and Priors Hall (Hall 2006). Given the smaller scale of production at the current site, it is perhaps unusual that very little evidence of iron smithing was recovered during fieldwork. It is possible that the iron produced by the furnaces was being smithed in an area just outside the excavated area; however, it is interesting to note that Condron (1997, 5 and 10) suggests that the expertise needed to forge and smith iron may have led to the use of specialised smithing centres in the area. This raises the possibility that blooms of iron from the furnaces were taken to an entirely different location for smithing.

Conclusion

5.3.59 The evidence of iron production found at the site is interesting as it is one of the earliest securely dated smelting sites excavated in the area, if not the earliest. The furnace remains also appear to be an unusual form, which may be of a type whose presence in England is still a matter of debate (Dungworth 2014). The almost complete absence of diagnostic smithing slag or residues suggests that the primary smithing of the iron blooms from the furnaces was carried out beyond the excavated area.

5.3.60 The excavation does not appear to have produced evidence for ore roasting or preparation at the site. The absence of indicators of ore roasting could be because the area where it was carried out lay beyond the site boundary, or possibly because ore roasting occurred on such a relatively small scale and intermittent basis that the evidence for it has not survived.

5.3.61 The analysis has revealed that the nails recovered from the site are unlikely to have been produced there; their presence may be incidental, or they may have been deliberately collected and kept as raw material for smelting. It was not possible to determine whether any of the other iron artefacts found were made using iron produced at the site.

5.3.62 From a research perspective, the slag assemblage recovered from the site is important, as it appears to be amongst the earliest dated smelting evidence found in the area. The material recovered from the site has the potential for more detailed research into local iron smelting technology.

5.4 Animal bone

by Lorrain Higbee

5.4.1 The assemblage comprises 5,279 fragments (or c. 48.7 kg) of animal bone, once conjoins are taken into account this figure falls to 3,587 fragments (Table 6). Most (95%) of this material was recovered by hand during the normal course of excavation, and the rest was retrieved from the sieved residues of 11 bulk soil samples.

Animal bone was recovered from Phases 1 to 4. The first part of the occupation sequence (phases 1 to 2) dates to the Early Iron Age, while phase 3 dates to the Early to Middle Iron Age, and phase 4 to the Middle to Late Iron Age.

Table 6: Number of identified animal bones present (or NISP) by phase

Species	Phases 1 and 2	Phase 3	Phase 4	Unph.	Total
cattle	7	375	12	22	416
sheep/goat	13	299	18	17	347
pig	5	78	3	5	91
horse	-	53	3	7	63
dog	-	32	1	3	36
fox	-	4	-	-	4
red deer	-	2	-	-	2
roe deer	-	1	-	-	1
woodpigeon	-	2	-	-	2
Total identified	**25**	**846**	**37**	**54**	**962**
large mammal	-	12	-	1	13
medium mammal	1	7	-	-	8

small mammal	3	-	-	-	3
mammal	187	2234	79	101	2601
Total unidentified	**191**	**2253**	**79**	**102**	**2625**
Overall total	**216**	**3099**	**116**	**156**	**3587**

Methods

5.4.2 The following information was recorded for each identifiable fragment: species; element; anatomical zone (after Serjeantson 1996, 195–200; Cohen and Serjeantson 1996, 110–12); anatomical position; fusion state (after O'Connor 1989; Silver 1969); tooth eruption/wear (after Grant 1982; Halstead 1985; Hambleton 1999; Payne 1973); butchery marks (after Lauwerier 1988; Sykes 2007); metrical data (after von den Driesch 1976; Payne and Bull 1988); gnawing; burning; surface condition; pathology (after Vann and Thomas 2006) and non-metric traits. This information was directly recorded into a relational database (in MS Access) and cross-referenced with relevant contextual information.

5.4.3 Quantification methods applied to the assemblage include the number of identified specimens (NISP), minimum number of elements (MNE), minimum number of individuals (MNI), and meat weight estimates (MWE; after Boessneck *et al.* 1971 and following Bourdillon and Coy 1980; Bond and O'Connor 1999; and Dobney *et al.* 2007). The following live weight values were used for this purpose: 275 kg for cattle, 37.5 kg for sheep and 85 kg for pig.

Results

Preservation condition

5.4.4 Bone preservation varies from good to poor. The well-preserved fragments have intact cortical surfaces on which fine cut marks are clear and easily observed, and the poorly preserved fragments have exfoliated cortical surfaces and abraded edges indicating exposure to physical and chemical weathering as a result of having been reworked and redeposited. Indeed, most of the poorly preserved fragments are from features that are late in the sequence of occupation, such as the phase 3 enclosure ditch, and were recovered from the same individual contexts as well-preserved fragments, a strong indication that the poorly preserved fragments are residual.

5.4.5 There is limited direct evidence that the assemblage has been biased significantly by the scavenging habit of carnivores, indeed gnaw marks were present on only 7% of fragments.

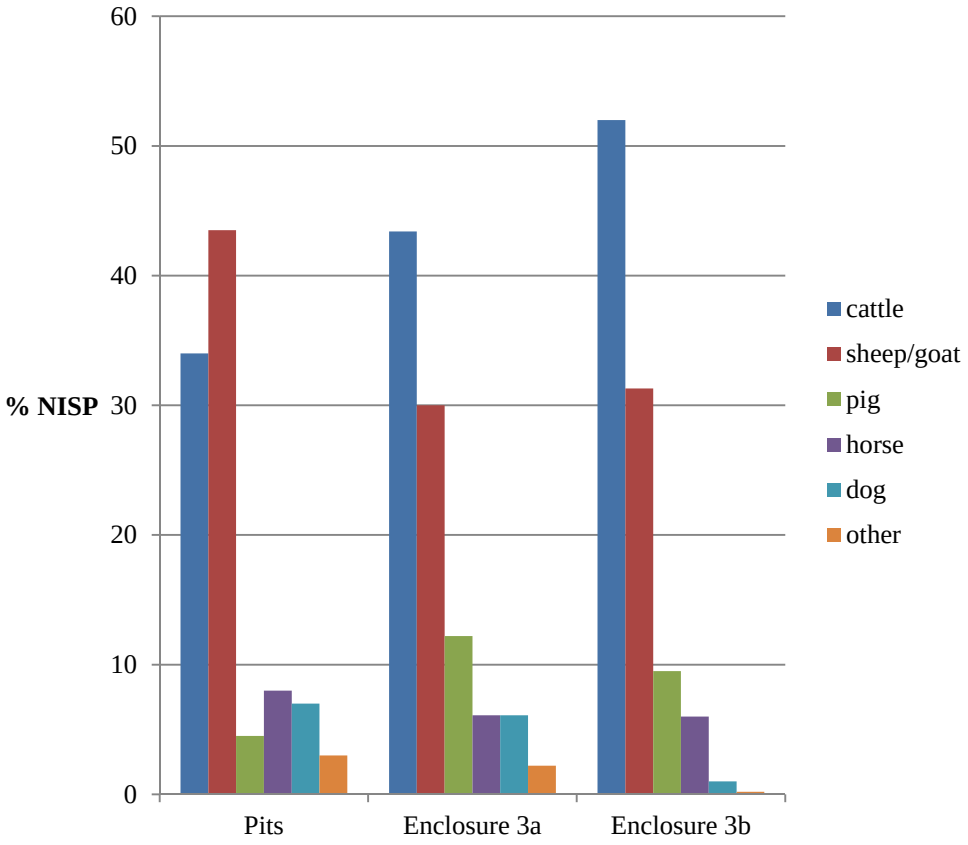
Composition and distribution

5.4.6 Only a small proportion (26%) of the 3587 fragments recovered from the site are identifiable to species and skeletal element (Table 6). Bones from livestock species dominate the assemblage, accounting for 89% NISP. Less common species include horse, dog, fox, red deer, roe deer and woodpigeon.

5.4.7 Most (89%) of the animal bone came from features assigned to phase 3, notably the enclosure ditch in Area 1 (61%), particularly the later recut (phase 3b). A further 23% of the phase 3 assemblage came from various pits located in Areas 1 and 2, and the third roundhouse, also in Area 1. Very little bone came from features assigned to phases 1, 2 and 4.

5.4.8 There is a clear and obvious difference between the pit and enclosure ditch assemblages (Chart 1). Sheep bones dominate the pit assemblage accounting for 44% NISP, while cattle bones dominate the assemblage from the enclosure ditches, accounting for between 43% (phase 3a) and 52% (phases 3b) NISP. The enclosure ditch assemblage also includes relatively more pig bones than the pit assemblage, however there is little difference in the distribution of bones from horses, dogs or other species between the two main feature types.

Chart 1: Distribution of animal bones from main phase 3 feature types



Livestock

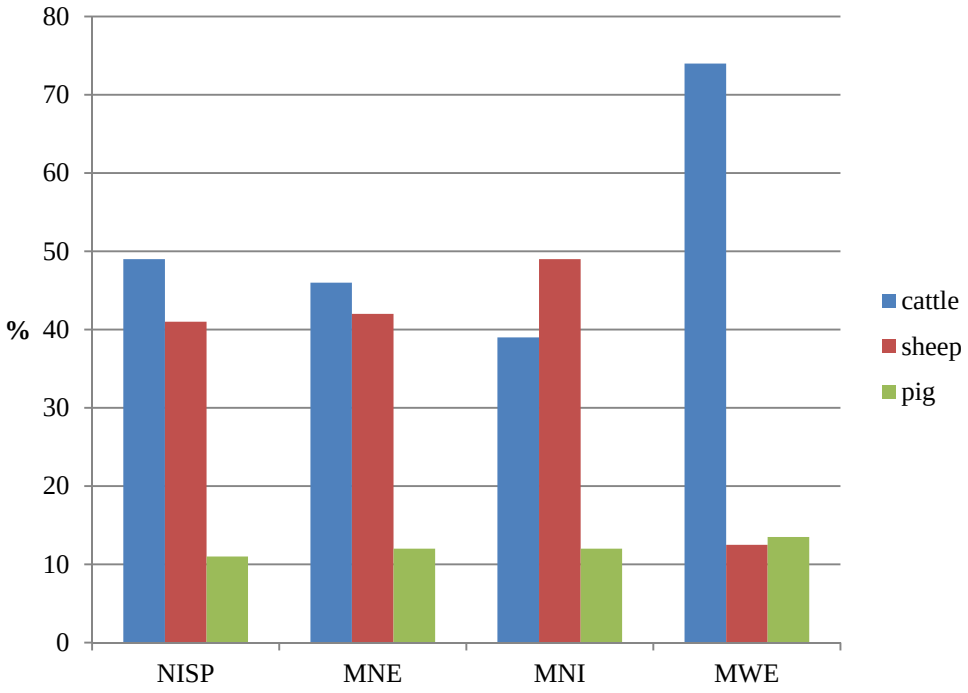
Relative importance

5.4.9 The assemblage meets the minimum sample size required for an accurate assessment of the relative importance of livestock species (ie, cattle + sheep + pig). The minimum criteria are considered to be a NISP count of at least 300 and a MNI count of at least 30 (Hambleton 1999, 39–40). This assemblage has a NISP count of 752 and a MNI count of 51.

5.4.10 In terms of the relative importance of livestock species, both NISP and MNE indicate that the economy of the site was one based on cattle- and sheep-farming (Chart 2). Cattle were marginally more important than sheep, at 49% NISP and 46% MNE, compared to 41% NISP and 42% MNE for sheep. The MNI result, however, indicates that there were more sheep (49%) than cattle (39%), and this is because, although there are fewer sheep bones overall, the range of body parts is less diverse than for cattle, hence the MNI count is higher. Regardless of this discrepancy, it is clear that cattle provided most (74%) of the animal-based protein consumed at the site during the Iron Age. Pigs were of minor

importance and account for just 11–14% of livestock, depending on the quantification method used.

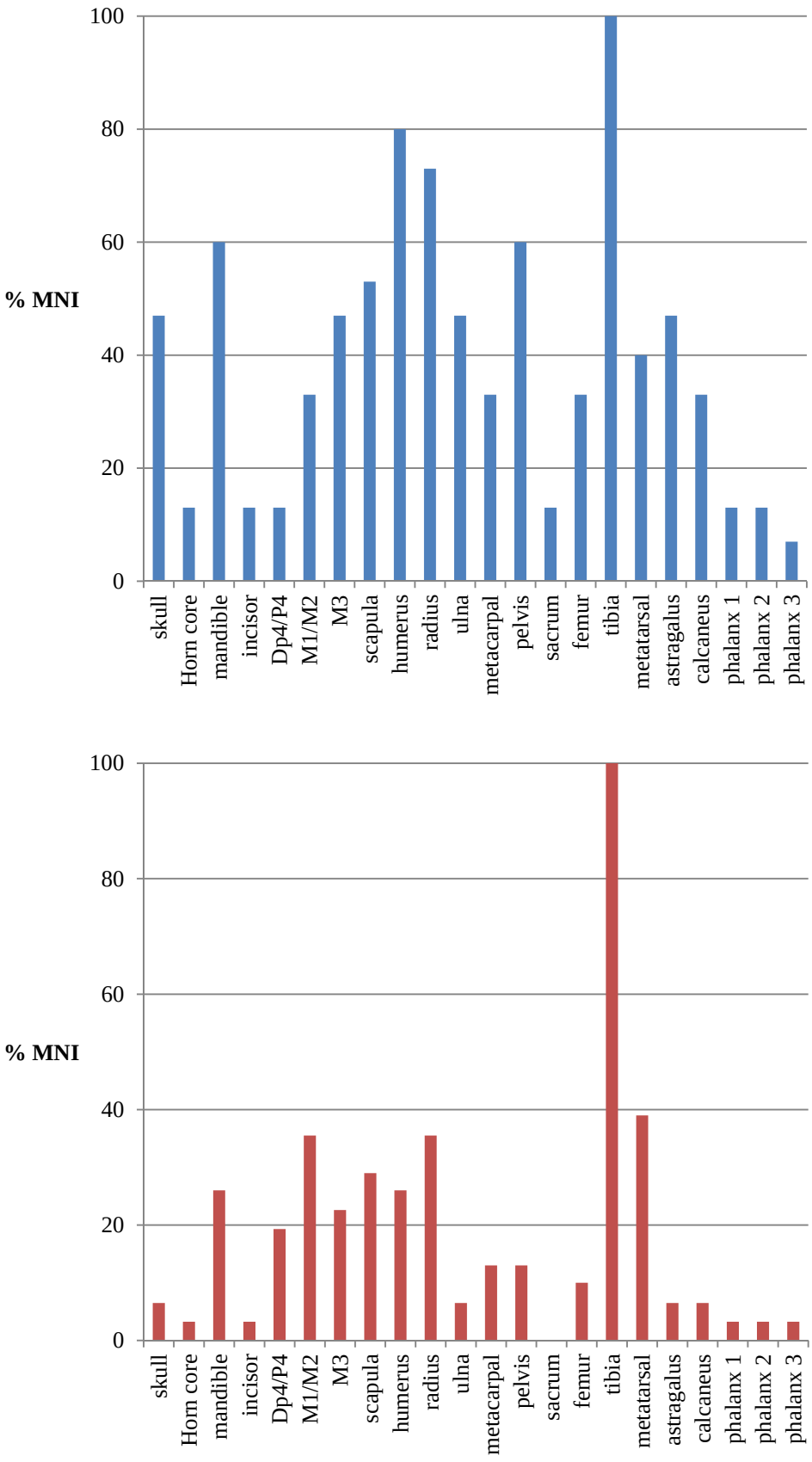
Chart 2: Relative importance of livestock species by NISP, MNE, MNI and MWE



Body parts

5.4.11 Most parts of the beef and mutton carcass are present in the assemblage. However the relative abundance of the different elements suggests that livestock were slaughtered and butchered on-site, most probably for local domestic consumption. The skeletal element information for cattle and sheep is shown in Chart 3. The tibia is the most common element for both main livestock species. Other common cattle bones include the mandible, humerus, radius and pelvis. Most sheep bones are grossly under-represented relative to the tibia, however, this is likely to be a product of small sample size, as well as the effects of fragmentation and retrieval bias.

Chart 3: Cattle (blue) and sheep (red) skeletal element representation shown as % MNI in relation to the most common element



5.4.12 The skeletal element information for pig is limited by the small sample size but seems to indicate that whole carcasses are present. Cranial elements are common and based on the size and morphology of canine teeth it would seem that boars outnumber sows by a ratio of 2:1. The other common elements are all from the forequarters, and this could indicate a preference for shoulder joints of pork.

Slaughter patterns

5.4.13 Epiphyseal fusion data indicates that the majority of cattle were culled between three to five years of age. This pattern is largely confirmed by the information from analysis of tooth eruption and wear. Six of the eight mandibles (or 75%) are from adult animals (MWS G after Halstead 1985), and the others are from a calf aged eight–eighteen months (MWS C) and an old adult (MWS H). The age information suggests that cattle were primarily managed for secondary products such as milk, manure and probably traction.

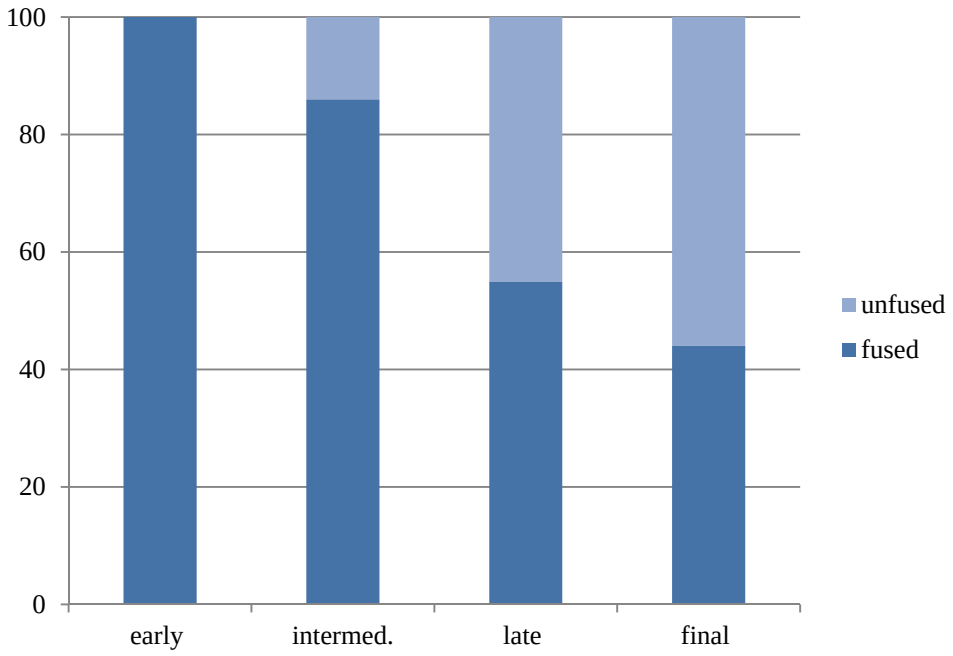
5.4.14 The fusion data for sheep indicates that only a small percentage were culled in their first year of life, or early in their second year, and the majority at between 1½ to 3 years of age, indeed less than 20% survived beyond 4 years (Chart 4). The sample of 20 complete mandibles (Chart 5) largely confirms mortality patterns suggested by the fusion data; however, it also indicates a much higher kill-off rate amongst yearlings (35%; MWS C after Payne 1973). Closer examination of the tooth wear data for mandibles in this age group (following Jones 2006, 177, fig. 17) indicates that 57% of the lambs in this age category were between 6–9 months and a further 29% were between 5–8 months (Jones' sub-divisions C3/4 and C5). The other mandible is from a lamb aged 3–5 months (MWS C1/2). Assuming a spring birth, these lambs were probably slaughtered for meat sometime between autumn and the start of winter. The tooth wear data also indicates that 55% of sheep were culled between the ages of 1–3 years (MWS D and E) and that the older sheep survived until at least 6 years of age (MWS F and G). Overall, the mortality profile suggests that sheep were intensively managed for meat however it is likely that secondary products were also of some significance and this point is further discussed below.

5.4.15 Age information for pigs is quite limited but indicates that they were slaughtered young, generally before 2 years of age. Six of the seven complete pig mandibles recovered from the site are from animals aged between 14–21 months (MWS D after Hambleton 1999). The other mandible is from a younger animal aged 7–14 months (MWS C). Pigs do not provide any secondary products; they also reach full body weight at a faster rate than other livestock and have large litters, therefore in most farming regimes they are generally slaughtered for meat before 2 years of age.

Butchery

5.4.16 Butchery marks were observed on 28% of cattle bones, but only a small number of sheep and pig bones. Chop marks are common and were recorded at major joints and the mid-shaft region of long bones. A small number of post-cranial bones, typically the tibia and metatarsal, had been split axially to get at the marrow-fat within. Knife cuts resulting from skinning were evident on skulls, mandibles and foot bones, while the cut marks noted on some ankle bones resulted from disarticulation of the foot during primary butchery. Cut marks were also noted on a few scapulae blades, typically on the medial side and cervical margin. The evidence is consistent with filleting meat off-the-bone and similar evidence is usually associated with cured shoulder joints of beef (Dobney *et al.* 1996, 26-7).

Chart 4: Epiphyseal fusion of post-cranial cattle (blue) and sheep (red). Fusion categories after O'Connor (1989). Fused and fusing epiphyses are amalgamated. Only unfused diaphyses, not epiphyses are counted



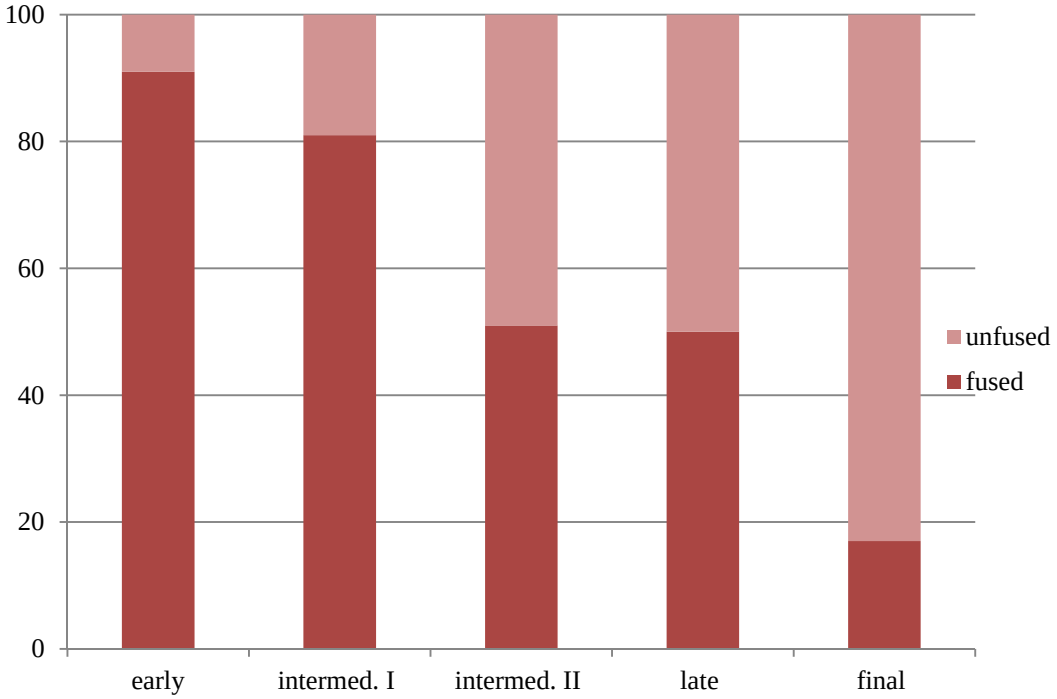
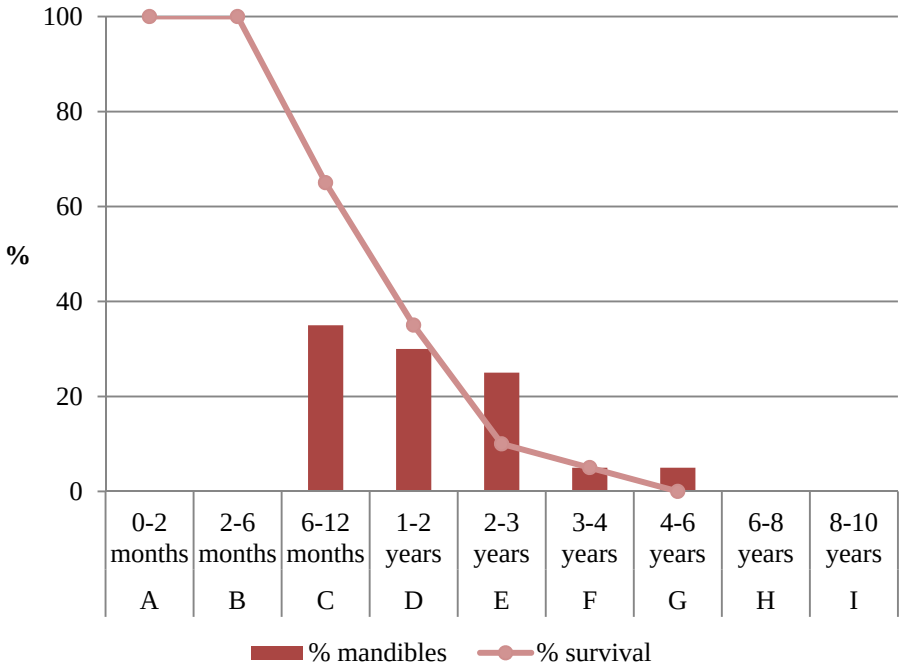


Chart 5: Mortality profile for sheep based on mandibles retaining 2+ teeth with recordable wear (N = 20). Age categories after Payne 1973



Size and shape

5.4.17 The sample of biometric data is too small for detailed analysis. Summary descriptive statistics for the most common measurements (10+ records) are presented in Table 7. The standard deviation and coefficient of variance for each of these measurements indicate slight variations around the mean values but little more than would be expected within a normal population.

Table 7: Summary descriptive statistics for common (10+ records) cattle bone measurements

Element	Measurement	N	Min.	Max.	M	SD	CV
astragulas	Bd	12	34	42.1	37.5	2.07	5.52
third molar	W	10	13	16.7	14.7	1.25	8.5
third molar	L	10	32.9	36.8	35.1	1.13	3.21
tibia	Bd	17	50.7	59.5	54.9	2.39	4.17

N = number, Min. = minimum, Max. = maximum, M = mean, SD = standard deviation and CV = coefficient of variance.

Other domestic mammals

5.4.18 Horse bones account for approximately 7% NISP. The disarticulated remains are from a minimum of at least three animals, two adults and one juvenile. Most parts of the carcass are present in the assemblage; the most common elements are loose teeth and metapodials. In terms of spatial distribution, most of the horse bones came from the phase 3b enclosure, in particular slots 1384 and 1399 near the entranceway. Butchery marks were noted on 14% of horse bones, including skinning marks on a mandible and metapodial, and chop marks on several post-cranial bones including two bones that had been slit axially for marrow. Overall, the evidence suggests that horse carcasses were fully utilised for their hides, and also for meat and marrow.

5.4.19 Dog bones account for 4% NISP and the majority (53%) are from pits, in particular 2086 in Area 2 which contained the cranium, vertebral column and the forequarters from a small, gracile animal. The majority (30%) of the rest of the dog bones came from the phase 3a enclosure, in particular slot 1287 near the entranceway. The partial remains recovered from this location are those of a medium-sized male animal (based on the presence of the baculum or os penis).

Wild mammals

5.4.20 Four fox bones were identified from the phase 3a enclosure ditch (slot 1287). The remains are from at least two separate animals as indicated by the presence of two left mandibles.

5.4.21 Both red and roe deer bones were identified. The red deer remains include a skull fragment from phase 3 pit 2022 and a piece of antler from pit 2034. The roe deer bone, a near complete humerus, is from the phase 3b enclosure (slot 1178).

Birds

5.4.22 Two woodpigeon bones were identified from phase 3 pit 2004. Both bones are from the right wing (radius and carpometacarpus).

Discussion and conclusions

5.4.23 The small samples of data from the earliest and final phases of activity are insufficient to provide any detailed information about the livestock economy of the site during the Early Iron Age and during the Middle to Late Iron Age. The sample of data from phase 3 is however sufficiently large and informative, and has provided a valuable insight into the nature of the animal husbandry regime in this area of Lincolnshire during the Early to Middle Iron Age.

5.4.24 The NISP percentages for livestock were plotted against published data from a range of other Iron Age sites in Lincolnshire and the surrounding counties (Chart 6). This indicates that there is considerable variation in the relative importance of livestock species between sites at the regional level. Of the 20 sites included in the survey, the majority (50%) have high sheep bone frequencies (>50% NISP). This group includes the open settlements at Dragonby and Outgang Road in Lincolnshire (Harman 1996; Albarella 1997). A further 25% of sites have high cattle bones frequencies (>50% NISP) and these include the enclosed settlement at Billingborough in Lincolnshire (Iles 2001). The remaining sites have near equal frequencies of cattle and sheep bones.

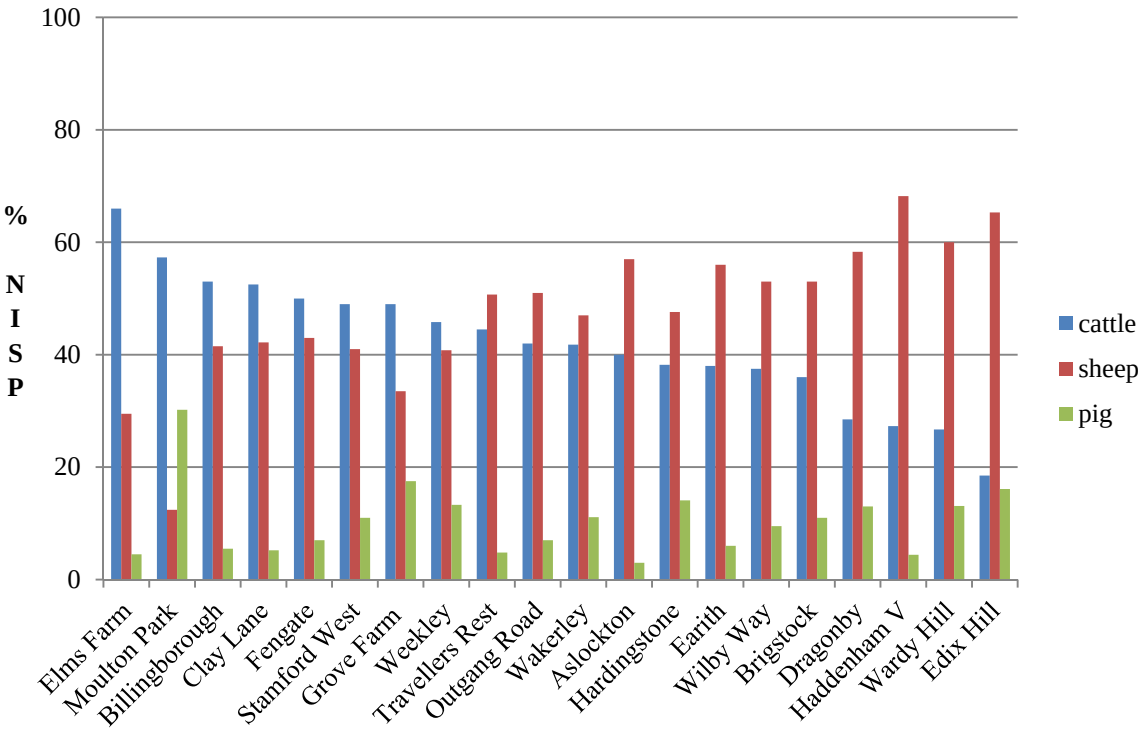
5.4.25 Stamford West, which has a cattle bone frequency of 49% and a sheep bone frequency of 41%, falls into the small group of sites that show only marginal differences in species proportions. The closest parallels are with the settlement sites at Fengate in Cambridgeshire (Biddick 1984) and Clay Lane in Northamptonshire (Jones *et al.* 1985). The relative importance of pig is low at most sites in the region, generally less than 10% NISP, and this probably indicates much of the landscape had already been opened up to arable farming and to provide pasture for cattle and sheep grazing.

5.4.26 The available age information for cattle is quite limited but suggests that at this site during the Early to Middle Iron Age, the herd was primarily managed for secondary products such as milk, manure and probably traction. The sample of data is small and regionally there is no indication of specialist husbandry strategies geared towards a single product (Hambleton 1999, 82).

5.4.27 The mortality profile for sheep shows a peak of slaughter amongst yearlings (MWS C after Payne 1973), in particular those aged between 5–8 months and 6–9 months (MWS C3/4

and C5 after Jones 2006). Lambing generally takes place between March and April, but this can vary significantly between breeds and even extend into May (*ibid*., 156–7). The evidence from mandibles indicates that these lambs were culled during the autumn, a strategy designed to ease pressure on the provision of winter fodder by reducing the size of the flock before any loss of condition over the winter months (see Jewell *et al.* 1974). Similar mortality patterns have been noted at other Iron Age sites in the region (see Hambleton 1999, 73–4) and the strategy is thought to complement arable farming practices (*ibid.*, 70). High rates of mortality at MWS C also reflect a combined husbandry strategy geared towards secondary products (eg, wool and milk) rather than meat (Serjeantson 2006, 220). Under this strategy, ewes are milked over the winter months at the expense of ram lambs which are selectively culled for meat during the autumn. Milk in its processed form (ie, as butter and cheese), provides more food in relation to the amount of available pasture than rearing sheep for meat and is generally considered the most suitable strategy in areas where there the availability of grazing is restricted, perhaps due to seasonal conditions such as waterlogging.

Chart 6: Relative importance of livestock species at Iron Age sites in Lincolnshire and the surrounding counties by (NISP). Sites ordered by percentage cattle



5.5 Other finds

by Lorraine Mepham

5.5.1 A large (70 g) fragment of adult human skull was recovered from phase 3 pit 2006 (Pl. 11).

5.5.2 A shank from a bone pin or needle was recovered from phase 3a enclosure ditch 10, section 1326.

5.5.3 One fragment of Romano-British brick or tile was recovered from the phase 3b enclosure recut ditch 11, section 1330.

5.5.4 The fired clay (seven fragments; 552 g) consists of abraded and largely undiagnostic fragments; the four pieces from phase 3 pit 2068 have traces of metallic residues, and are likely to be associated with the other evidence for on-site metalworking (see below). Other fragments are less distinctive, and could derive from hearth linings or from upstanding structures.

5.5.5 A single fragment of clay tobacco pipe was recovered from watercourse (2066).

5.5.6 The worked flint consists of two waste flakes and one core fragment; there is also one piece possibly from a crested blade or core rejuvenation tablet (phase 3a enclosure 1381). Apart from the latter piece, possibly of Neolithic date, none of this small group is chronologically distinctive.

5.5.7 One large fragment with one flattish, smooth surface is likely to represent part of a saddle quern (phase 4 pit 1283; Fig. 16.25), and two smaller fragments from phase 3a enclosure 1287 are likely also to be quern fragments, although too small to determine the form.

6 ENVIRONMENTAL EVIDENCE

6.1 Charred plant remains

by Sarah F. Wyles

Introduction and methodology

6.1.1 A series of fourteen bulk samples were taken from pits, ditches and roundhouses of phase 1 to phase 4 date in Area 1; a further ten samples came from phase 3 pits and ditches and furnaces in Area 2. These samples were processed for the recovery of charred plant remains, wood charcoal and metalworking debris. As a result of the assessment, a selection of the sample from phase 3 pit 2008 (Pl. 16) in Area 2 was selected for further analysis.

6.1.2 The bulk samples for charred remains were processed by standard flotation methods; the flot retained on a 0.5 mm mesh, residues fractionated into 5.6 mm, 2 mm, 1 mm and 0.5 mm fractions. The coarse fractions (>5.6 mm) were sorted for artefacts and ecofacts, weighed and discarded.

6.1.3 At the analysis stage, all identifiable charred plant macrofossils were extracted from the flot, together with the residues. Identification was undertaken using stereo incident light microscope at magnifications of up to x40 using a Leica MS5 microscope, following the nomenclature of Stace (1997) for wild species and the traditional nomenclature as provided by Zohary and Hopf (2000, tables 3 and 5), for cereals and with reference to modern reference collections where appropriate, quantified and the results tabulated in Table 8.

The assemblage

6.1.4 The rich charred plant assemblage recovered from pit 2008 was dominated by weed seeds, which represented 95% of the assemblage. The relatively small number of cereal remains included barley (*Hordeum vulgare*) grain fragments and hulled wheat, emmer or spelt (*Triticum dicoccum/spelta*), grain, spikelet fork and glume base fragments. A number of the glume base fragments were identifiable as being those of spelt wheat (*Triticum spelta*). These would be compatible with an Iron Age date and are comparable with the

cereal remains from other Iron Age deposits in the area such as at Humberstone (Pelling 2000).

Table 8: Charred plant remains from pit 2008

Feature type		**Pit**
Cut		**2008**
Context		**2010**
Sample		21
Vol (l)		2
Flot size		40
% roots		5
Cereals	**Common name**	
Hordeum vulgare L. *sl* (grain)	barley	5
Triticum spelta L. (glume bases)	spelt wheat	3
Triticum dicoccum/spelta (grain)	emmer/spelt wheat	3
Triticum dicoccum/spelta (spikelet fork)	emmer/spelt wheat	2
Triticum dicoccum/spelta (glume bases)	emmer/spelt wheat	13
Cereal indet. (grains)	cereal	8
Cereal frag. (est. whole grains)	cereal	5
Other species		
Papaver argemone/dubium	prickly/long-headed poppy	2
Corylus avellana L. (fragments)	hazelnut	12 (1 ml)
Chenopodiaceae	goosefoot family	20
Chenopodium sp.	goosefoot	28
Atriplex sp. L.	oraches	5
Stellaria sp. L.	stitchwort	3
Persicaria lapathifolia/maculosa (L.) Gray/Gray	pale persicaria/redshank	2
Polygonum aviculare L.	knotgrass	135
Fallopia convolvulus (L.) À. Löve	black-bindweed	3
Rumex sp. L.	docks	20
Brassica sp. L.	brassica	3
Prunus spinosa/ Crataegus monogyna (thorns/twigs)	sloe/hawthorn type thorns	5
Vicia L./*Lathyrus* sp. L.	vetch/wild pea	28
Medicago/Trifolium sp. L.	medick/clover	14
Conium maculatum L.	hemlock	1
Apium sp.	marshwort	cf. 2
Stachys arvensis L	field woundwort	4
Odontites vernus	red bartsia	2
Galium sp. L.	bedstraw	810
Galium cf. mollugo	hedge bedstraw	10
Galium aparine L.	cleavers	200
Anthemis cotula L. (seeds)	stinking mayweed	3
Tripleurospermum inodorum (L.) Sch. Bip.	scentless mayweed	3
Poaceae culm node	grass	3
Lolium/Festuca sp.	rye-grass/fescue	23
Poa/Phleum sp. L.	meadow grass/cat's-tails	26
Avena sp. L. (grain)	oat grain	2
Avena sp. L. (awn)	oat awn	2
Avena L./*Bromus* L. sp.	oat/brome grass	6
Bromus sp. L.	brome grass	2
Bud		3

6.1.5 The weed seed species are generally those typical of grassland, field margins/hedgerows, waste ground and arable environments. The assemblage is heavily dominated by seeds of bed straw (*Galium* sp.), including those of cleavers (*Galium aparine*) and possible hedge-bedstraw (*Galium mollugo*), representing 72% of the assemblage. There was also a relatively high number of seeds of knotgrass (*Polygonum aviculare*). The weed seeds were predominantly small or immediate in size. A number of the weed species within this assemblage and seen within the assessment of the other samples favour light drier calcareous soils such as corn gromwell (*Lithospermum arvensis*), while others are more typical of heavier clay soils such as stinking mayweed (*Anthemis cotula*). Stinking mayweed is generally thought to be indicative of the increased cultivation of the heavier clay soils during the Saxon and medieval periods. It has been recorded from Romano-British deposits nearby at West Deeping (Murphy 1998). The presence of a seed of hemlock (*Conium maculatum*) is noteworthy as this species is more typical of deposits of Late Iron Age and Romano-British date and may have arrived in England as a grain contaminant during this period (Godwin 1984).

6.1.6 The assemblage may represent the burning of waste material from the fine sieving after the threshing, winnowing and coarse sieving process (Hillman 1981; 1984) of a badly infested crop, prior to its storage. Although bedstraw can be used as bedding material, large numbers of stem fragments as well as the seeds would be expected if the assemblage comprised the burning of such material.

6.2 Charcoal

by Dana Challinor

Introduction and methodology

6.2.1 Although 24 samples were processed for charred plant and wood charcoal remains, only four produced enough charcoal to merit analysis. All came from features of Iron Age date, with three phases represented (phases 2, 3b and 3). The settlement-related nature of the features (enclosure ditch, pit and posthole) suggest that the assemblages largely derived from domestic fuel debris, although there is a possibility that some structural remains may be represented in the sample from the posthole associated with the second roundhouse.

6.2.2 Charcoal >2 mm in transverse section was considered for identification with a sample of 50 fragments (of variable size) randomly selected for identification. The charcoal was fractured and sorted into groups based on the anatomical features observed in transverse section at X7 to X45 magnification. Representative fragments from each group were then selected for further examination using a Meiji incident-light microscope at up to X400 magnification. Identifications were made with reference to Schweingruber (1990), Hather (2000) and modern reference material. Classification and nomenclature follow Stace (1997). Identifications are provided to the highest taxonomic level possible according to the native British flora, ie, where there is only a single native species, this is named, but where there are several native species, the genus or subfamily is given. Observations on maturity and character of the wood were recorded where visible.

Results

6.2.3 The charcoal was variable in preservation; sample 1 produced an abundant assemblage of large, well-preserved fragments with clear pore structure, but the charcoal from the other samples was in notably poorer condition: small, distorted and friable. The assemblages from samples 8 and 20 were more diverse in character than the other two, but the small fragment size meant that achieving secure identifications became increasingly unreliable after approximately 40 fragments. Some fragments exhibiting high levels of vitrification were recorded in all samples.

6.2.4 A total of 200 fragments were examined, from which only 4 taxa were positively identified: *Quercus* sp. (oak), *Corylus avellana* (hazel), Maloideae (hawthorn, apple, pear, whitebeams etc.) and *Acer campestre* (field maple). Much of the wood derived from mature trunkwood or large branchwood, with little or no evidence for ring curvature. The exception was the Maloideae charcoal in both samples 8 and 20, which was predominately from roundwood, with some small twigs. The single hazel fragment was also a very small piece of roundwood.

Table 9: qqResults of the charcoal analysis (by fragment count)

	Area	1	1	1	2
	Period	EIA	E-MIA	E-MIA	E-MIA
	Phase	2	3b	3b	3
	Group	Ring gully 2	Enclosure ditch	Enclosure ditch	
	Feature Type	Post hole	Ditch	Ditch	Pit
	Feature	1254	1384	1399	2006
	Context	1255	1386	1402	2007
	Sample	1	8	14	20
Quercus sp.	oak	50**s**	15	50hs	12r
Corylus avellana L.	hazel				1r
Maloideae	hawthorn group		14**r**		29**r**
Acer campestre L.	field maple		9		
Indeterminate	diffuse porous		4		
Indeterminate			8 (2b)		8
Total		50	50	50	50

Key: h=heartwood; s=sapwood, r=roundwood; b=bark; **bold** indicates dominant characteristic

Discussion

6.2.5 Two of the Early to Middle Iron Age assemblages (from enclosure ditch 1384 and pit 2006) were comparable in the range of taxa present and the dominance of small-diameter roundwood. This is consistent with the collection of branches (and/or dead wood) from local wood sources, especially hedgerows or scrub type habitats. Neither sample was rich in charcoal but this may be due to depositional processes or because the fire(s) had burnt effectively to ash. Both samples also contained some cereal remains and hazelnut shells (in pit 2006), likewise in low quantities, but enough to suggest a food preparation association. Firewood for domestic type fires in the Iron Age was commonly drawn from a mix of oak woodland, with understorey or hedgerow trees such as hawthorn, apple, hazel and blackthorn (eg, Oakham: Challinor 2010).

6.2.6 In contrast, the assemblages from the posthole thought to form part of the entrance to the second roundhouse (seemingly Early Iron Age in date) and the later, Early to Middle Iron Age, phase of the enclosure ditch (1399) were both composed, apparently exclusively, of oak. The latter contained both heartwood and sapwood fragments and may represent a deliberate deposit, perhaps a single or specific event, but the charcoal preservation was too patchy to provide further insight. The sample from posthole 1254, of the second roundhouse, was different in the large quantity of charcoal and the nature of the comminution of oak fragments. It can be difficult to determine the maturity of such material, but no tyloses were positively observed, indicating that sapwood was represented (possibly exclusively). The fragments in this deposit were so similar that they must have derived from the same event.

6.3 Scientific dating

by Alistair Barclay

6.3.1 In total five radiocarbon dates were obtained from the Scottish Universities Environmental Research Centre (Table 10). They have been calculated using the calibration curve of Reimer *et al.* (2013) and the computer program OxCal (v4.2.4) (Bronk Ramsey and Lee 2013) and cited in the text at 95% confidence and quoted in the form recommended by Mook (1986), with the end points rounded outwards to 10 years. The ranges in plain type in the radiocarbon tables have been calculated according to the maximum intercept method (Stuiver and Reimer 1986). All other ranges are derived from the probability method (Stuiver and Reimer 1993). Date estimates derived from the model are cited in the text in italics with parameters rounded out by five years.

Methods and aims

6.3.2 The aims of the radiocarbon programme were to clarify the date of various features in the absence of closely datable artefactual assemblages. In the case of the Stamford settlement a Bayesian approach has been adopted for the interpretation of the chronology (Bayliss *et al.* 2007). Although the simple calibrated dates are accurate estimates of the dates of the samples, it is the dates of the archaeological events, which are represented by those samples, which are of interest. In the case of Stamford, it is the chronology of the associated activity that is under consideration, not just the dates of individual samples. The OxCal program provides the methodology to combine the dates to produce realistic estimates.

6.3.3 Specific aims were:

- to date the construction and use of the roundhouse sequence (phases 1–3) and the associated enclosure (phase 3a and 3b);
- to calculate whether this settlement activity was overall relatively short (within a few generations eg, a century) or much longer (250 to 500 years);
- to provide accurate dates for the use of Scored ware.

6.3.4 Sample selection (animal bone) was made by Lorrain Higbee. Where possible only articulating animal bone and/or bone in fresh condition with no signs of weathering and/or gnawing were selected for dating (see Table 10).

Results

6.3.5 Two samples were dated from the sequence of three roundhouses, a sheep/goat phalanx from the fill of one of the postholes encircling ring gully 2 (SUERC-61684: *510-370 cal BC at 95% probability*) and one of a pair of sheep/goat mandibles, a possible placed deposited within ring gully 3 itself (SUERC-61685: *390-210 cal BC at 95% probability*). No suitable sample material was recovered from ring gully 1, although this house is interpreted as being replaced by ring gully 2 – noting that the positioning of ring gully 2 outside the footprint of ring gully 1 could suggest that the two were relatively close in date (within either a single generation or a lifetime of one another). The backs of ring gullies 1 and 2 were cut away by the enclosure ditch indicating that the latter was certainly later in date and possibly associated with the repositioned roundhouse represented by ring gully 3. No suitable sample material was found on the base of the enclosure ditch, with the only articulating bone coming from the fills of the phase 3b shallower recut (SUERC-61769, 61689 and 61690).

Table 10: Radiocarbon dates. The *posterior density estimates* derive from the models defined in Chart 7

Lab ref.	Context	Material	Date BP	$\delta^{13}C$	$\delta^{15}N$	C: N	95% confidence	*Posterior density estimate*
SUERC -61769	Enclosure ditch 11, slot 1221, fill 1223	Animal bone, cattle 1st phalanx	2153±34	-22.1	8.3	3.2	360–90 cal BC	*360–150 cal BC*
SUERC -61684	Posthole 1067, fill 1068 (p/o circuit encircling ring gully 2)	Animal bone, sheep/goat 1st phalanx	2359±34	-21.7‰	6.5	3.3	520–380 cal BC	*510–370 cal BC*
SUERC -61685	Ring gully 3, slot 1022, fill 1023	Animal bone, sheep/goat mandible	2229±34	-21.3‰	5.0	3.3	400–190 cal BC	*390–210 cal BC*
SUERC -61689	Enclosure ditch 11, slot 1218, fill 1217	Animal bone, sheep/goat mandible	2204±34	-21.5‰	6.4	3.3	390–170 cal BC	*390–240 cal BC*
SUERC -61690	Enclosure ditch 11, slot 1218, fill 1220	Animal bone, pig radius	2232±34	-21.4‰	5.4	3.3	400–190 cal BC	*360–200 cal BC*

6.3.6 The overall model (Chart 7) incorporating the outlined stratigraphy and the radiocarbon dates has good overall agreement (Amodel 105) despite the limited number of samples. The model is also affected by the bimodal nature of the calibration curve between 350 and 200 cal BC. However, despite these limitations the radiocarbon dating does bring a better understanding and a degree of precision to the formal chronology of the site and its associated Scored ware pottery.

6.3.7 The model indicates that the phase 2 settlement probably began at some point during 490 to 395 cal BC (*at 68% probability: Chart 7 Boundary Start phases 2 and 3*). The whole settlement (phases 2 to 3) was in use for between *40 to 315 years (at 95% probability)* and possibly *85 to 240 years (at 68% probability: median of 176 years)* (*Chart 8: modelled as 'Span Settlement use'*). The recutting of the enclosure ditch (phase 3b) occurred at some point during *465-280 cal BC (at 95% probability)* and possibly during 410 to 340 cal BC *(at 68% probability) (Chart 7 and Table 10 modelled using 'Date' Recutting 3b)*.

6.3.8 In summary, the site appears to have started by the 5th century BC and possibly slightly earlier and have been in existence for about two centuries from what would be considered the end of the Early Iron Age and for the earliest part of the Middle Iron Age – ending either before or by the early 2nd century BC. Although not precisely radiocarbon dated it is possible that the sequence of roundhouses spanned a similar period of time, with implications that each house on average could have been in use for a period that extended over one generation and nearer to two or three (eg, 75 years).

Chart 7: Probability distributions for the dates from the enclosure and houses. Each distribution represents the relative probability that an event occurred at a particular time. For each of the dates two distributions have been plotted, one in outline which is the result produced by the independent calibration of the radiocarbon measurement and a solid one which is based on the chronological information provided by the model. The large square brackets down the left-hand side of the diagram, along with the OxCal keywords, define the overall model exactly.

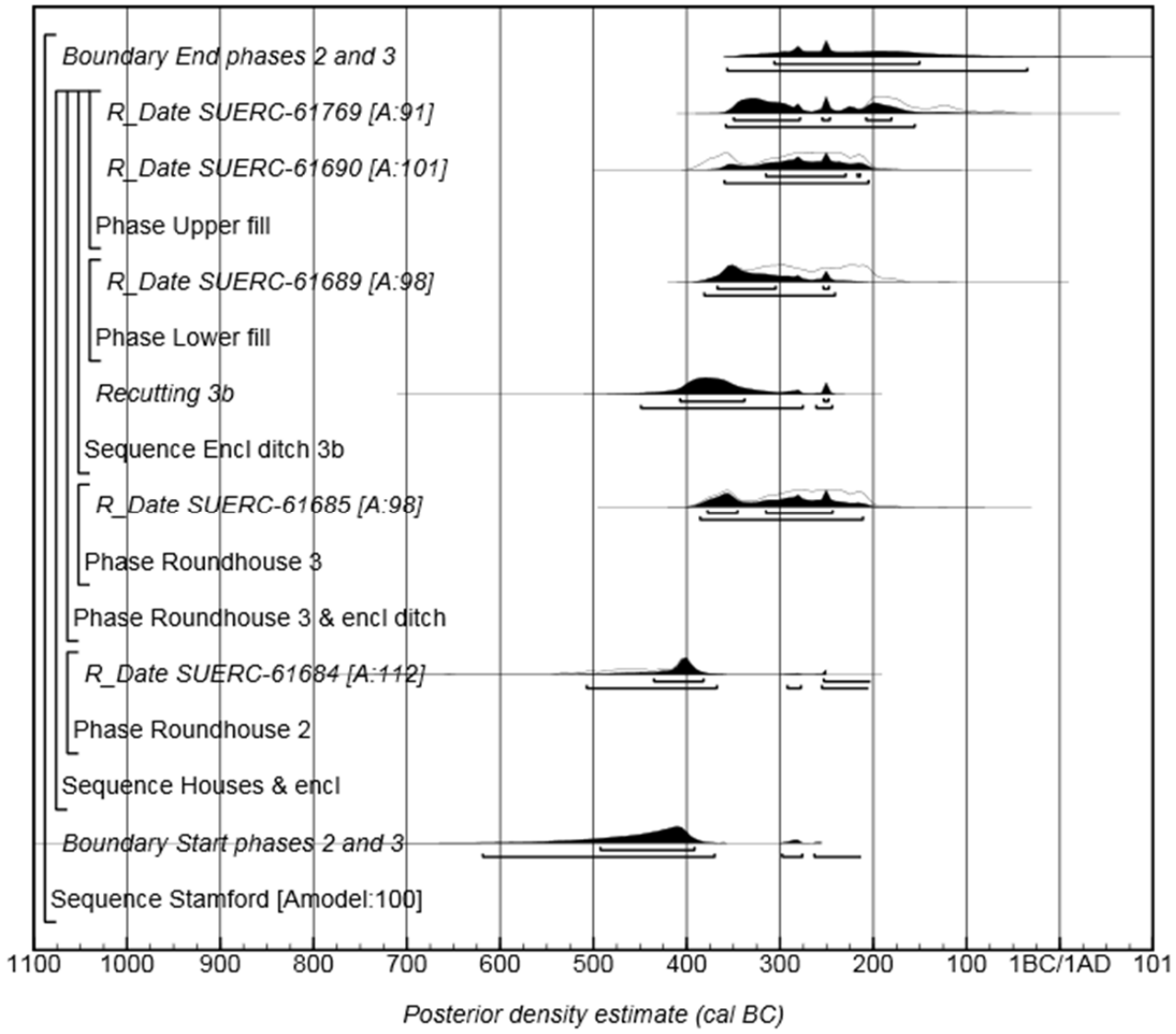
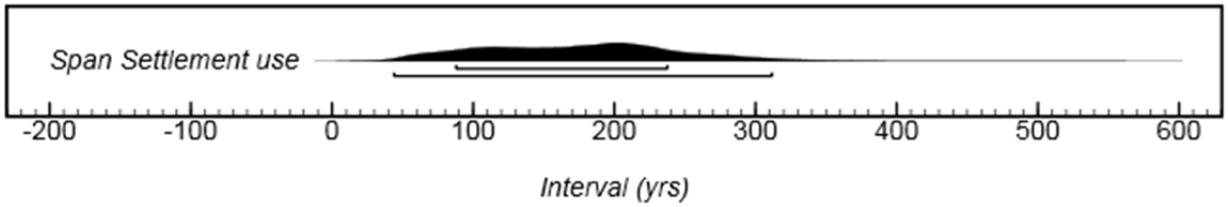


Chart 8: Probability distribution for the parameter 'Span' taken from the model. Format is the same as Chart 7.



7 DISCUSSION

7.1 Site chronology

7.1.1 The earliest identifiable human activity on site dates to the Neolithic as shown by flint finds. The flints, however, are residual in later contexts and, therefore, can only be taken as evidence of low-level prehistoric activity on site, perhaps related to seasonal exploitation of local resources.

7.1.2 The site may also have been exploited during the Late Bronze Age/Early Iron Age as indicated by the presence of pottery of this date in the basal fill of the Early to Middle Iron Age enclosure ditch 10, section 1326.

7.1.3 The archaeological remains that represent occupation and settlement of site date to the Early Iron Age and on into the Middle Iron Age. The archaeological remains have been split in to four phases based on artefactual, stratigraphic and scientific dating evidence.

Phase 1: Early Iron Age

7.1.4 During the Early Iron Age the first roundhouse (ring gully 1) was constructed and was then replaced by the second (ring gully 2 and associated structural postholes) in phase 2. A radiocarbon date of *510–370 cal BC* (SUERC-61684; 2359±34 BP) has been attributed to the ring gully 2 roundhouse, indicating an earlier date range for its predecessor. The remains of both roundhouses were truncated by the Early to Middle Iron Age enclosure ditch 10, and so it appears that the settlement was initially unenclosed. Enclosure ditch 10 may, however, have potentially destroyed evidence of a more ephemeral enclosure, as seen further to the north at Swillington Common (Howell 2001, 57) and South Elmsall (Grassam 2010), where small settlements enclosed by palisades were radiocarbon dated to the Middle and Early Iron Age respectively.

7.1.5 Evidence of Early Iron Age open settlements has been found scattered across the region (Knight 2007) whereas the construction of enclosures and field systems was already taking place elsewhere in the region during the later Bronze Age; particularly on the Derbyshire gritstone moors (Barnatt 1987) and the Lincolnshire fen edge (Yates 2007). Evidently there is significant intra-regional variability in the nature of settlement structure and it is possible the variability reflects patterns of seasonal and/or permanent settlement. Likewise, open settlement may have been associated with a particular process as seen to the south at Great Oakley, Northamptonshire, where two small structures were thought to be associated with nearby iron smelting (Jackson 1982). There is an obvious parallel to be drawn here with Stamford West where evidence of metal production is widespread and although the identified furnaces have been attributed to phase 3, the presence of metalworking debris within elements of roundhouses 1 and 2 suggests earlier production, either within the excavated furnaces or, more probably, elsewhere.

Phase 2: Early Iron Age

7.1.6 Ring gully 2 replaced ring gully 1 within the Early Iron Age. There is no evidence of *in situ* burning within any of the features internal to the roundhouses nor are there deposits of charcoal in ring gully 1, suggesting this roundhouse was not destroyed by fire. It appears more likely, therefore, that the structure was intentionally demolished with the rebuilding taking place in almost the same location. It has been suggested that rebuilds of this nature took place following the decomposition of major structural elements or after periods of abandonment (Pope 2003). Equally, ethnographic studies indicate the rebuilding of a structure may be the result of changes in the household or wider community. For example, when a new household is created by marriage (Brück 1999) or when more space is required to house adult offspring or extended family members (Cameron 1991).

7.1.7 The outer ring of postholes encircling ring gully 2 is a regionally unusual feature: parallels are concentrated in Wessex (Reynolds 1993; Cunliffe 1995) with other examples occasionally encountered elsewhere (eg, West Brandon, County Durham: Jobey 1962; Bancroft, Buckinghamshire: Williams and Zeepvat 1994). An example is known within closer proximity, at Holme Dyke, Nottinghamshire (50 km to the north-west of Stamford), where a roundhouse defined by two phases of ring gully (11 m and 12 m in diameter), and by an outer ring of large postholes was excavated (Knight and Elliott 2008, 172, fig. 11).

7.1.8 In the case of Stamford West, the outer postholes may have served to accommodate upright timbers supporting a ring beam upon which the roof rafters rested (eg, Williams and Zeepvat 1994, fig 20) or the ends of the rafters themselves. Alternatively, the holes may have held posts supporting wattle and daub fencing. Such fencing may have formed a windbreak around the structure and prevented livestock from grazing on its roof (Pope 2003).

7.1.9 Ring gully 1 may also have been surrounded by an outer circle of postholes, but sufficient evidence to confirm this was not available, with the remains potentially having been largely erased by the subsequent roundhouse.

7.1.10 The discrete features within roundhouses 1 and 2 contained a pottery assemblage that dated them comfortably to the Early Iron Age; however, in lieu of a more tightly dated ceramic chronology or stratigraphic relationships it was not possible to assign them to either phase 1 or 2.

7.1.11 It is thought that large roundhouses of sophisticated, multivallate design are phenomena of the Late Bronze Age and Early Iron Age (Williams and Zeepvat 1994, 31 and citations therein). Although ring gully 2 is not well dated, the ceramic evidence and radiocarbon date of *510–370 cal BC* (SUERC-61684; 2359±34 BP) from the outer post ring do position its lifespan within the earlier part of the Iron Age, in accordance with the general chronology for such structures.

Phases 3a and 3b: Early to Middle Iron Age

7.1.12 Phase 3a saw the construction of the ring gully 3 and its associated enclosure in Area 1. Phase 3b consisted of enclosure ditch 11, which recut enclosure ditch 10. Metal production and pitting for clay extraction in Area 2 has been attributed to phase 3 in general.

7.1.13 An Early to Middle Iron Age radiocarbon date of *390–210 cal BC* (SUERC-61685; 2229±34 BP) was obtained on animal bone within ring gully 3, tallying with the stratigraphic evidence identifying this as the later structure. The precise duration of any hiatus between the occupation of the ring gully 2 and 3 is unknown. However, it is possible that some elements of the second roundhouse survived and were visible to those who constructed ring gully 3, as the latter structure appears very carefully placed, blocking the entrance to the former building. The placement of ring gully 3 may have held symbolic significance, perhaps representing an act of both closure and renewal, which heralded the reoccupation of the site.

7.1.14 Notably, ring gully 3 was not accompanied by an encircling arrangement of postholes, marking not only a break with the earlier arrangement, but also a new conformity to more regionally typical methods of construction.

7.1.15 The construction of enclosure ditch 10, and its probable internal bank, enclosed the settlement for the first time. The switch to an enclosed settlement may have reflected an intensification of animal husbandry, with a concomitant need to protect and manage

livestock, as well as keep them separate from crops and living areas. A growing population requiring the intensification of arable and pastoral production probably resulted in claims of tenure on the landscape manifest as defined enclosures. Enclosures would therefore have fulfilled social as well as agricultural functions, probably augmenting the group identity of those who constructed, maintained, and lived within their bounds (Knight and Howard 2004, 90–3; Chadwick 2010, 319–20). This enclosure was defined by a substantial ditch seemingly accompanied by an internal bank, suggesting that the enclosure was designed to offer protection from the outside, particularly if the bank had supported a timber palisade. This may reflect growing hostility between different social groups in the Early to Middle Iron Age.

7.1.16 The enclosure had three distinct entrance points along its south-eastern side, and with no sign of ditch 10 at its north-west corner (Plate 17), likely originally had a fourth entrance at this point also. An opening at this location would have afforded direct access from the settlement area to the clay pits and iron production site in Area 2. This entrance appears to have been removed when enclosure ditch 10 was replaced by the more continuous enclosure ditch 11.

7.1.17 The enclosed area formed a fairly regular rectangle in plan, and occupied some 0.3 ha. The form is typical for central/eastern England. Within the Trent Valley the vast majority of enclosures occupy less than 0.5 ha (Knight and Howard 2004, 95), whilst a study of around 180 enclosures within South Yorkshire and north Nottinghamshire found that 66% were less than 0.4 ha in area (Riley 1980 apud Chadwick 2010, 240).

Metalworking

7.1.18 Although no dates were obtained from the furnaces, finds of pottery alongside ironworking debris from the pits surrounding the features, and the presence of such debris from deposits associated with the roundhouses, confirm that iron production occurred whilst the settlement was in use ie, probably within the Early to Middle Iron Age (*5th to 3rd centuries cal BC)*. Although dispersed patterns of iron production are known from the Welland valley during the Romano-British period and earlier (Mackenzie above; Taylor 2006, 152) the furnaces on this site appear to be a notably early manifestation of the technology.

7.1.19 The most abundant types of materials in the assemblage appear to be non-tapping iron smelting slag and iron ore, with only three pieces appearing more characteristic of iron smithing. There was no evidence for ore roasting or preparation at the site. Given the close proximity of ore deposits and the relatively small scale of iron production, it seems likely that the ore was sourced locally, although it was not possible to confirm this from analysis of the collected samples.

7.1.20 Analysis of the slag and iron did, however, confirm that the furnaces were being operated in a very efficient way (relative to the early date of the site), with little free iron being lost into the slag and a good amount of useable iron being extracted from the ore instead. The implication is that the furnaces were not operated by people experimenting with the process, but that a good level of expertise already existed locally by the *5th to 3rd centuries cal BC*. There was very little evidence of smithing within the metalworking debris and soil samples, indicating that this was carried out elsewhere, perhaps at an entirely different location. The site possibly existed as a specialist smelting facility. The furnaces were relatively shallow bowl-shaped pits, rather than the bell-shaped depressions more commonly associated with small-diameter non-tapping furnaces in the area. Bowl-type furnaces are thought to have been less common, but this seems to have been the type in operation here.

7.1.21 Smelting was carried out at some remove from the settlement (approximately 250 m to the north). Although the furnaces may have been sited in this way for reasons of safety – signifying an ancient awareness of the high temperatures involved and the flammable nature of roundhouses – it more likely reflects the availability of the clay needed to construct the furnace superstructures, as evinced by the clay extraction pits dug around, but not into, the furnaces. The stripped ground surface near the furnaces lay at around 65.70 m aOD; the roundhouses were a little higher, approximately 66.30 m aOD. It does not seem likely therefore that the furnaces were located on an exposed and windy spot, deliberately chosen to provide strong airflow to create a hot fire. Neither do the furnaces seem to have been located close to the river, which might imply that ores were transported to the site by an overland route instead. However, it would be unwise to impose an overly functionalist interpretation on the arrangement of the remains, as other social or symbolic factors may have affected decision-making here in the past. For example, the finds of a large human skull fragment and a dog burial from two of the pits dug within the ironmaking area might indicate that such a novel and transformative process, of likely high social and economic importance, was bound up with the ceremonial world of the site's former inhabitants.

Phase 4: Middle to Late Iron Age: abandonment of the settlement

7.1.22 Although the artefactual dating evidence is sparse, the arrangement of the site's features in plan and stratigraphic relationships suggest that the phase 3b enclosure was succeeded by first ditch 100, and then ditch 200.

7.1.23 To judge by how ditch 100 snakes around the enclosure, however, it is clear that those who dug ditch 100 were mindful of the former existence of the settlement, with the enclosure presumably visible in the landscape, either as an earthwork, as worn and trampled ground or as a vegetation mark. The contrasting finds profiles of, on the one hand, the phase 3b enclosure ditch and, on the other, ditches 100 and 200, suggest they became infilled at different times, and probably by different processes. This would further argue against their lifespans being contemporary. As suggested above, the large quantities of finds recovered from the phase 3b enclosure ditch suggest deliberate backfilling using midden material, perhaps to level up the ditch in order to facilitate agriculture. Ditch 100 was designed to circumvent the site of the former enclosed settlement, suggesting that it was a place treated differently in the past, perhaps set aside for, say, grazing, or marked out as somehow 'tainted' land, and best avoided.

7.2 Site economy

7.2.1 Although the site's inhabitants during the Early to Middle Iron Age appear to have held a good degree of specialist knowledge regarding iron production, the activity appears to have been a small-scale bye-employment, with the site firmly embedded in the agricultural economy.

7.2.2 Convergent evidence indicates mixed subsistence agriculture overall, with an emphasis on livestock (cattle and sheep/goat, with some pig). Although cereal remains were present within the charred plant remains, they were present in only small numbers. Cultivars include barley (*Hordeum vulgare*) and spelt wheat (*Triticum spelta*), which conforms to expectations for the region and period. The weed seed species also include types that would flourish within arable environments. To this evidence for cereal cultivation can be added the fragments of saddle quern recovered from the site. The best example came from pit 1283, dug into the recut of the enclosure ditch at an entrance point; two other smaller examples came from the enclosure ditch itself. These are likely to have had a role in cereal processing, although may have been used to grind other substances.

7.2.3 Although the animal bone assemblage lacks chronological resolution, with little information relating to the livestock economy during the earliest phases of occupation, overall trends are clearer from later in the settlement's lifespan. The economy of the site was one based on cattle- and sheep-farming, with livestock slaughtered and butchered on-site.

7.2.4 The animal bones reveal the meat diet of the settlement's occupants was dominated by beef, with smaller quantities of mutton. Pork and venison were of minor importance. Horse carcasses were also fully utilised for their hides, meat and marrow.

7.2.5 Cattle were primarily managed for secondary products such as milk, manure and probably traction. Sheep were intensively managed for meat although it is likely that secondary products (eg, wool and milk) were also of some significance.

7.2.6 The animal bone assemblage shows that cattle and sheep were of overall equal importance to the local livelihood. This is relatively unusual within the region, with sites more often showing an emphasis for one or another species. Interestingly, one of the closest comparators for Stamford West in terms of equal proportions of cattle and sheep is the site at Fengate (Biddick 1984). Situated much closer to the wetlands, it might be thought that the economy there would favour cattle rather than sheep, which are less tolerant of damp conditions.

7.2.7 The lower Welland valley, particularly near the Fen-edge, contains much evidence of widespread and regimented enclosure dating to the later Bronze Age (Yates 2007, 85–87). No such remains were recorded at the current site, although it could be argued that this is due is to its relatively small size. If, however, such an absence of Bronze Age enclosure reflects original circumstances, then it would appear that that this part of the Welland valley was used in a different way during the period. A sense has perhaps been gained of how far up the valley 'land pressure and control' (*op. cit.* 87) extended during the Bronze Age. It may be that technological developments regarding the production of iron encouraged activity further upstream, perhaps even leading to a shift in the power centres within the valley and wider region, although this would be a matter for wider regional synthesis.

7.3 Conclusions

7.3.1 The excavations at Stamford West have largely succeeded in meeting their aims and objectives. The fieldwork has built on the previous phases of investigation, and the archaeological component of the site is now well understood. Two principal foci of archaeological remains were identified and investigated. Although slight traces of earlier and later activity were evident, the heyday of the site clearly coincided with the Early and Middle Iron Age. During this period, a small roundhouse settlement, at first seemingly open, but later enclosed, was constructed and occupied.

7.3.2 The inhabitants of the site appear to have been subsistence farmers practising mixed, non-specialised agriculture. Situated in the upper Welland valley on a small bluff overlooking the river, the settlement site seems to have been selected to provide access to riverine resources and those of the higher, drier ground, with the great Fen wetlands lying just a short journey downstream. The local landscape appears to have been largely cleared for agriculture, although woodland resources were also available. Agricultural production was supplemented by the small-scale smelting of local ores to produce iron. Smithing may have occurred just off the site, or the site may have been a specialist smelting establishment, with iron blooms transported elsewhere for further processing. Other than the evidence of iron smelting, which appears notably early, the site largely

conforms to regional norms. The pottery assemblage in particular shows that the inhabitants upheld a wider cultural identity.

7.3.3 By the latter part of the 1st millennium BC, the settlement had been abandoned, with the land seemingly used for agriculture instead. No evidence was recorded as to why, or in what manner, the site was abandoned. Possible reasons may be invoked, ranging from exhaustion of local soils, through a shift in wider patterns of landholding, to some malign event that drove the occupants away. The excavated remains offer no resolution to this matter, however.

7.3.4 The coherence of the form of the settlement in plan suggests a reasonable level of preservation, but the shallowness of the excavated features and the absence of any occupation spreads or working surfaces suggest that the site had been affected by plough truncation. Calcareous soil conditions allowed reasonable preservation of the bone assemblage, but in the absence of any anoxic deposits the majority of the site's organic component has been lost, to the detriment of its archaeological significance. Overall, the site has provided useful information on the nature of settlement and resource exploitation in the area of Stamford during the Early and Middle Iron Age. The excavated data are relevant to published research aims, with the evidence of early iron smelting seemingly the most significant finding.

8 STORAGE AND CURATION

8.1 Museum

8.1.1 It is recommended that the project archive resulting from the excavation be deposited with The Collection Museum, Lincoln. The Museum has agreed in principle to accept the project archive on completion of the project, (under the accession code LCNCC: 2014-91). Deposition of any finds with the Museum will only be carried out with the full agreement of the landowner.

8.2 Preparation of archive

8.2.1 The complete site archive, which will include paper records, photographic records, graphics, artefacts, ecofacts and digital data, will be prepared following the standard conditions for the acceptance of excavated archaeological material by The Collection Museum, Lincoln, and in general following nationally recommended guidelines (SMA 1995; CIfA 2014c; Brown 2011; ADS 2013).

8.2.2 All archive elements will be marked with the LCNCC: 2014-91, and a full index will be prepared. The physical archive comprises the following:

- Approximately fifteen cardboard boxes or airtight plastic boxes of artefacts and ecofacts, ordered by material type
- four files/document cases of paper records & A3/A4 graphics

8.3 Publication

8.3.1 A summary of the results of the archaeological investigations at Stamford West will be submitted for publication in *Lincolnshire History and Archaeology*, the annual journal of the Society for Lincolnshire History and Archaeology. Given the character of the remains, a short note will also be prepared for inclusion within a forthcoming issue of *Historical Metallurgy*, the journal of the Historical Metallurgy Society.

8.4 Discard policy

8.4.1 Wessex Archaeology follows the guidelines set out in Selection, Retention and Dispersal (SMA 1993), which allows for the discard of selected artefact and ecofact categories which are not considered to warrant any future analysis. Any discard of artefacts will be fully documented in the project archive.

8.4.2 The discard of environmental remains and samples follows nationally recommended guidelines (SMA 1993; 1995; English Heritage 2011).

8.5 Security copy

8.5.1 In line with current best practice (eg, Brown 2011), on completion of the project a security copy of the written records will be prepared, in the form of a digital PDF/A file. PDF/A is an ISO-standardised version of the Portable Document Format (PDF) designed for the digital preservation of electronic documents through omission of features ill-suited to long-term archiving.

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10 APPENDICES

10.1 Appendix 1: Context summary

Context	Fill of	Description	Interpretation	P/O Group
1001	-	greyish brown silty sand	Topsoil	-
1002	-	stony pale brown silty sand	Natural	-
1003	-	sub-oval	Posthole	roundhouse 2
1004	1003	greyish brown silty sand	Fill	roundhouse 2
1005	1003	yellowish brown silty sand	Fill	roundhouse 2
1006	-	sub-oval	Posthole	roundhouse 2
1007	1006	greyish brown silty sand	Fill	roundhouse 2
1008	1006	yellowish brown silty sand	Fill	roundhouse 2
1009	-	sub-oval	Posthole	roundhouse 2
1010	1009	greyish brown silty sand	Fill	roundhouse 2
1011	-	circular	Posthole	roundhouse 2
1012	1011	greyish brown silty sand	Fill	roundhouse 2
1013	-	Entrance posthole, phase 3 roundhouse circular	Posthole	roundhouse 3
1014	1013	greyish brown sandy clay	Fill	roundhouse 3
1015	-	sub-oval	Posthole	roundhouse 2
1016	1015	greyish brown sandy clay	Fill	roundhouse 2
1017	-	sub-oval	Posthole	roundhouse 2
1018	1017	greyish brown sandy clay	Fill	roundhouse 2
1019	-	sub -oval	Posthole	roundhouse 2
1020	1019	greyish brown sandy clay	Fill	roundhouse 2
1021	1013	greyish brown sandy clay	Fill	roundhouse 3
1022	-	curvilinear Ring gully, phase 3 roundhouse	Ring Gully	roundhouse 3
1023	1022	greyish brown sandy clay	Fill	roundhouse 3
1024	-	sub-oval	Posthole	roundhouse 2
1025	1024	greyish brown silty sand	Fill	roundhouse 2
1026	1024	yellowish brown silty sand	Fill	roundhouse 2
1027	-	sub-oval	Posthole	roundhouse 2
1028	1027	greyish brown	Fill	roundhouse 2
1029	-	Internal posthole, phase 3 roundhouse oval	Posthole	roundhouse 3
1030	1029	greyish brown sandy clay	Fill	roundhouse 3
1031	1029	greyish brown sandy clay	Fill	roundhouse 3
1032	-	External posthole, phase 2 roundhouse sub-oval	Posthole	roundhouse 2

Context	Fill of	Description	Interpretation	P/O Group
1033	1032	greyish brown sandy clay	Fill	roundhouse 2
1034	1032	yellowish brown sandy clay	Fill	roundhouse 2
1035	-	sub-oval	Posthole	roundhouse 2
1036	1035	yellowish brown sandy clay	Fill	roundhouse 2
1037	-	sub-oval	Posthole	roundhouse 2
1038	1037	greyish brown sandy clay	Fill	roundhouse 2
1039	1037	yellowish brown sandy clay	Fill	roundhouse 2
1040	-	Internal posthole, phase 3 roundhouse subcircular	Posthole	roundhouse 3
1041	1040	brown silt loam	Fill	roundhouse 3
1042	-	sub-oval	Posthole	roundhouse 2
1043	1042	yellowish brown sandy clay	Fill	roundhouse 2
1044	1042	grey brown silt	Fill	roundhouse 2
1045	-	External posthole, phase 2 roundhouse sub-oval	Posthole	roundhouse 3
1046	1045	yellowish brown sandy clay	Fill	roundhouse 3
1047	1045	greyish brown silty clay	Fill	roundhouse 3
1048	-	Internal posthole, phase 3 roundhouse subcircular	Posthole	roundhouse 3
1049	1048	brown sandy loam	Fill	roundhouse 3
1050	-	Internal posthole, phase 3 roundhouse subcircular	Posthole	roundhouse 3
1051	1050	brown loamy sand	Fill	roundhouse 3
1052	1050	brown loamy sand	Fill	roundhouse 3
1053	-	sub-oval	Posthole	roundhouse 2
1054	1053	greyish brown sandy clay	Fill	roundhouse 2
1055	-	sub-oval	Posthole	roundhouse 2
1056	1055	greyish brown sandy clay	Fill	roundhouse 2
1057	1055	yellowish brown sandy clay	Fill	roundhouse 2
1058	-	sub-oval	Posthole	roundhouse 2
1059	1058	greyish brown sandy clay	Fill	roundhouse 2
1060	1058	yellowish brown sandy clay	Fill	roundhouse 2
1061	-	Internal posthole, phase 3 roundhouse subcircular	Posthole	roundhouse 3
1062	1061	brown loamy sand	Fill	roundhouse 3
1063	-	Original label probably 1063 - Internal feature, phase 3 roundhouse sub-circular	Posthole	roundhouse 3
1064	1063	brown loamy sand	Fill	roundhouse 3
1065	-	sub-oval	Posthole	roundhouse 2
1066	1065	greyish brown sandy clay	Fill	roundhouse 2
1067	-	External posthole, phase 2 roundhouse sub-oval		roundhouse 2

Context	Fill of	Description	Interpretation	P/O Group
1068	1067	greyish brown sandy clay	Fill	roundhouse 2
1069	-	sub-oval	Posthole	roundhouse 2
1070	1069	greyish brown sandy clay	Fill	roundhouse 2
1071	-	circular	Posthole	roundhouse 2
1072	1071	greyish brown sandy clay	Fill	roundhouse 2
1073	-	Pit inside phase 3 roundhouse, but phase unclear, fill differs from other internal features	Pit	roundhouse 3
1074	1073	brown loamy sand	Fill	roundhouse 3
1075	-	Within phase 3 roundhouse but pottery suggests earlier and assoc with roundhouses 1 or 2	Pit	roundhouse 3
1076	1075	brown loamy sand	Fill	roundhouse 3
1077	1075	grey clay	Fill	roundhouse 3
1078	1075	brown silt loam	Fill	roundhouse 3
1079	-	subcircular	Posthole	4
1080	1079	brown gritty sand	Fill	4
1081	-	circular	Posthole	4
1082	1081	greyish brown sandy clay	Fill	4
1083	-	circular	Posthole	4
1084	1083	greyish brown sandy clay	Fill	4
1085	-	Internal posthole, phase 3 roundhouse	Stakehole	roundhouse 3
1086	1085	greyish brown humic sand	Fill	roundhouse 3
1087	-	Internal posthole, phase 3 roundhouse subcircular	Posthole	roundhouse 3
1088	1087	yellowish brown humic sand	Fill	roundhouse 3
1089	-	circular	Posthole	4
1090	1089	greyish brown sandy clay	Fill	4
1091	-	Internal posthole, phase 3 roundhouse circular	Posthole	roundhouse 3
1092	1091	brownish grey loamy sand	Fill	roundhouse 3
1093	1091	yellowish brown loamy sand	Fill	roundhouse 3
1094	-	subcircular	Posthole	4
1095	1094	greyish brown sandy clay	Fill	4
1096	-	Internal posthole, phase 3 roundhouse subcircular		roundhouse 3
1097	1096	brown loamy sand	Fill	roundhouse 3
1098	-	subcircular	Posthole	roundhouse 3
1099	1098	dark brown loamy sand	Fill	roundhouse 3
1100	-	circular	Posthole	4
1101	1100	greyish brown sandy clay	Fill	4
1102	1100	yellowish brow sandy clay	Fill	4
1103	-	subcircular	Posthole	4
1104	1103	light brown silty sand	Fill	4
1105	-	Internal posthole, phase 1 or 2 roundhouse circular	Posthole	4
1106	1105	greyish brown sandy clay	Fill	4
1107	-	Internal posthole, phase 1 or 2 roundhouse circular	Posthole	4
1108	1107	greyish brown sandy clay	Fill	4
1109	-	Internal posthole, phase 3 roundhouse subcircular	Posthole	roundhouse 3
1110	1109	brownish grey loamy sand	Fill	roundhouse 3
1111	-	circular	Posthole	4
1112	1111	greyish black silty sand	Fill	4

Context	Fill of	Description	Interpretation	P/O Group
1113	-	Ring gully, phase 3 roundhouse curvilinear	Ring Gully	roundhouse 3
1114	1113	greyish brown loamy sand	Fill	roundhouse 3
1115	-	Pit cutting phase 3 ring gully sub oval	Pit	-
1116	1115	yellowish brown loamy sand	Fill	-
1117	-	subcircular	Posthole	4
1118	1117	greyish brown humic sand	Fill	4
1119	-	Internal posthole, phase 1 or 2 roundhouse subcircular	Posthole	4
1120	1119	brownish grey loamy sand	Fill	4
1121	-	Internal posthole, phase 1 or 2 roundhouse subcircular	Posthole	4
1122	1121	brownish grey loamy sand	Fill	4
1123	1111	greyish brown sand	Fill	4
1124	-		Posthole	4
1125	1124	brownish grey humic sand	Fill	4
1126	-	curvilinear	Ring Gully	roundhouse 3
1127	1126	yellowish brown loamy sand	Fill	roundhouse 3
1128	-	Internal posthole, phase 1 or 2 roundhouse circular	Posthole	4
1129	1128	greyish brown humic sand	Fill	4
1130	-	Ring gully, phase 2 roundhouse	Ring Gully	roundhouse 2
1131	1130	greyish brown sandy clay	Fill	roundhouse 2
1132	-		Ring Gully	roundhouse 1
1133	1132	yellowish brown sandy clay	Fill	roundhouse 1
1134	-	Ring gully, phase 3 roundhouse curvilinear	Ring Gully	roundhouse 3
1135	1134	greyish brown	Fill	roundhouse 3
1136	-	Ring gully, phase 3 roundhouse curvilinear	Ring Gully	roundhouse 3
1137	1136	yellowish brown	Fill	roundhouse 3
1138	-	Internal pit, phase 3 roundhouse subcircular	Pit	roundhouse 3
1139	1138	grey with yellowish brown patches sandy clay	Fill	roundhouse 3
1140	1138	yellowish brown loamy sand	Fill	roundhouse 3
1141	-		Ring Gully	roundhouse 1
1142	1141	greyish brown sandy clay	Fill	roundhouse 1
1143	-		Ring Gully	roundhouse 1
1144	1143	yellowish brown sandy clay	Fill	roundhouse 1
1145	-	Ring gully, phase 1 roundhouse curvilinear	Ring Gully	roundhouse 1
1146	1145	light brown silty sand	Fill	roundhouse 1
1147	-	Ring gully, phase 2 roundhouse curvilinear	Ring Gully	roundhouse 2
1148	1147	brownish grey silty sand	Fill	roundhouse 2
1149	-	External posthole, phase 1 roundhouse subcircular		roundhouse 1
1150	1149	light brown silty sand	Fill	roundhouse 1
1151	-	Ring gully, phase 3 roundhouse	Ring Gully	roundhouse 3
1152	1151	brownish grey loamy sand	Fill	roundhouse 3
1153	-	sub-oval	Posthole	4
1154	1153	greyish brown sandy clay	Fill	4

Context	Fill of	Description	Interpretation	P/O Group
1155	-	Enclosure ditch linear	Ditch	10
1156	1155	whiteish yellow stones	Fill	10
1157	1155	light brown silty sand	Fill	10
1158	1155	brownish yellow sand	Fill	10
1159	1178	blackish brown loamy sand	Fill	11
1160	-	oval	Posthole	4
1161	1160	light brown silty sand	Fill	4
1162	-	Pit outside roundhouses, inside enclosure, phase unclear subcircular	Pit	-
1163	1162	yellowish brown silt loam	Fill	-
1164	1162	yellowish brown silt loam	Fill	-
1165	-	Ring gully, phase 1 roundhouse	Ring Gully	roundhouse 1
1166	1165	greyish brown sandy clay	Fill	roundhouse 1
1167	-	Door-posthole (southern), phase 2 roundhouse	Post-pit	roundhouse 2
1168	1167	greyish brown sandy clay	Fill	roundhouse 2
1169	1167	greyish brown silty clay	Fill	roundhouse 2
1170	-	Pit, unclear phase but probably related to entrance of phase 1 or 2 roundhouse sub-oval	Post-pit	roundhouse 2
1171	1170	greyish brown sandy clay	Fill	roundhouse 2
1172	-		Ring Gully	roundhouse 3
1173	1172	greyish brown sandy clay	Fill	roundhouse 3
1174	-	Ring gully, phase 3 roundhouse curvilinear		roundhouse 3
1175	1174	mid brown loamy sand	Fill	roundhouse 3
1176	-	subcircular	Posthole	-
1177	1176	yellowish brown loamy sand	Fill	-
1178	-	Re-cut of enclosure ditch linear	Ditch	11
1179	1178	orangey brown silty sand	Fill	11
1180	1181	greyish brown clay silt	Fill	11
1181	-	Re-cut of enclosure ditch linear	Ditch	11
1182	1188	reddish brown silty sand	Fill	10
1183	1188	greyish brown silty sand	Fill	10
1184	1188	yellowish brown silty sand	Fill	10
1185	1188	greyish brown clay silt	Fill	10
1186	-	gully segment - 1189 same as 1186 sub-oval	Pit	4
1187	1186	yellowish brown loamy sand	Fill	4
1188	-	Enclosure ditch linear	Ditch	10
1189	-	gully segment - 1189 same as 1186 sub-oval	Pit	4
1190	1189	yellowish brown loamy sand	Fill	4
1191	-	posthole at entrance of roundhouse - 1192 same as 1193? Irregular	Post-pit	roundhouse 3
1192	1191	yellowish brown loamy sand	Fill	roundhouse 3
1193	1191	greyish brown loamy sand	Fill	roundhouse 3
1194	-	boundary linear poss. Drainage	Gully	100
1195	1194	yellowish brown loamy sand	Fill	100
1196	-	oval	Posthole	4
1197	1196	greyish black sandy silt	Fill	4
1198	1196	light yellow sand	Fill	4
1199	1210	light brown silty sand	Fill	roundhouse 1
1200	-	posthole sub-oval	Posthole	4
1201	1200	reddish brown silt loam	Fill	4
1202	-	ring gully curvilinear	Ring Gully	roundhouse 1
1203	1202	yellowish brown loamy sand	Fill	roundhouse 1
1204	-	ring gully curvilinear squareish shape in section	Ring Gully	roundhouse 2
1205	1204	yellowish brown loamy sand	Fill	roundhouse

Context	Fill of	Description	Interpretation	P/O Group
				2
1206	-	ring gully curvilinear	Ring Gully	roundhouse 2
1207	1206	reddish brown sandy clay	Fill	roundhouse 2
1208	-	poss. Boundary linear	Ditch	100
1209	1208	light brown clay loam	Fill	100
1210	-	curvilinear	Ring Gully	roundhouse 1
1212	-	terminus curvilinear	Ring Gully	roundhouse 1
1213	1212	dark brown sandy clay	Fill	roundhouse 1
1214	-	Enclosure ditch linear	Ditch	10
1215	1214	sample 6 orangey brown sand	Fill	10
1216	1214	orangey brown sand	Fill	10
1217	1218	greyish brown sandy silt	Fill	11
1218	-	enclosure ditch linear	Ditch	11
1219	1218	brownish grey sandy silt	Fill	11
1220	1218	sample 5 greyish black sandy silt	Fill	11
1221	-	enclosure ditch linear	Ditch	11
1222	1221	mid brown silty sand	Fill	11
1223	1221	greyish black sandy silt	Fill	11
1224	-	terminus	Gully	roundhouse 1
1225	1224	dark brown sandy clay	Fill	roundhouse 1
1226	-	same as 1228	Cut	10
1227	1226	same as 1231	Fill	10
1228	-	linear	Ditch	10
1229	1228	yellowish brown loamy sand	Fill	10
1230	1228	yellowish brown loamy sand	Fill	10
1231	1228	yellowish brown loamy sand	Fill	10
1232	-	irregular u-shaped section linear	Ditch	11
1233	1232	yellowish brown loamy sand	Fill	11
1234	-	pit in enclosure ditch south - strat unclear	Pit	-
1235	1234	greyish brown sandy clay	Fill	-
1236	-	Enclosure ditch linear	Ditch	10
1237	1236	light brown sandy clay	Fill	10
1238	1236	yellowish brown silty sand	Fill	10
1239	1236	yellowish brown silty sand	Fill	10
1240	-	enclosure ditch linear	Ditch	11
1241	1240	greyish brown silty sand	Fill	11
1242	-	to south of roundhouse circular	Pit	-
1243	1242	dark brown sandy clay	Fill	-
1244	-	within enclosure poss clay lining	Pit	-
1245	1244	greyish brown sandy clay	Fill	-
1246	-	E-W orientation linear terminus	Ditch	200
1247	1246	reddish brown sandy clay	Fill	200
1248	-		Ring Gully	-
1248	-		Ring Gully	roundhouse 1
1249	1248	greyish brown sandy clay	Fill	roundhouse 1
1250	-	subcircular	Post-pit	roundhouse 2
1251	1250	greyish brown sandy clay	Fill	roundhouse 2
1252	-		Ring Gully	roundhouse 2
1253	1252	greyish brown sandy clay	Fill	roundhouse 2
1254	-	posthole at entrance subcircular	Post-pit	roundhouse 2
1255	1254	greyish brown sandy clay	Fill	roundhouse 2
1256	1250	brownish yellow sand	Fill	roundhouse 2
1257	1250	greyish brown sandy clay	Fill	roundhouse

Context	Fill of	Description	Interpretation	P/O Group
				2
1258	1254	greyish brown sandy clay	Fill	roundhouse 2
1259	-	terminus running E-W	Ditch	200
1260	1259	dark brown sandy clay	Fill	200
1261	-	at entrance of roundhouse 2 sub-oval	Posthole	roundhouse 2
1262	1261	greyish brown sandy clay	Fill	roundhouse 2
1263	-	Assoc with large postholes at entrance to roundhouse 2	Gully	roundhouse 2
1264	1263	reddish brown sandy clay	Fill	roundhouse 2
1265	-	posthole sub- oval	Posthole	roundhouse 2
1266	1265	dark grey sandy silt	Fill	roundhouse 2
1269	-	posthole oval	Posthole	roundhouse 2
1270	1269	greyish brown sandy silt , orange patches	Fill	roundhouse 2
1271	-	tree throw on line of ditch 200	Tree throw	-
1272	1271	tree throw fill greyish brown sandy clay	Fill	-
1273	-	terminus running E-W	Ditch	200
1274	1273	reddish brown sandy clay	Fill	200
1275	-	same as 1272	Tree throw	-
1276	1275	greyish brown sandy clay	Fill	-
1277	-		Ring Gully	roundhouse 3
1278	1277	greyish brown sandy clay	Fill	roundhouse 3
1279	-	circular	Posthole	4
1280	1279	greyish brown sandy clay	Fill	4
1281	1283	dark brown sandy silt	Fill	-
1282	1283	greyish blue clay	Fill	-
1283	-	clay-lined pit at enclosure entrance circular	Pit	-
1284	1323	dark brown sandy silt	Fill	11
1285	1287	brownish yellow silty sand	Fill	10
1286	1287	greyish yellow silty sand	Fill	10
1287	-	terminal NE-SW alignment enclosure ditch	Ditch	10
1288	-	circular	Posthole	4
1289	1288	greyish brown sandy clay	Fill	4
1290	-	circular	Posthole	4
1291	1290	greyish brown sandy clay	Fill	4
1292	-	probable waterworn gully - not on plan - finds likely transported by water - treat as unstrat?	Gully	-
1293	1292	probable waterworn gully - not on plan - finds likely transported by water - treat as unstrat? Greyish brown sandy clay	Fill	-
1294	-	probable waterworn gully - not on plan - finds likely transported by water - treat as unstrat?	Gully	-
1295	1294	probable waterworn gully - not on plan - finds likely transported by water - treat as unstrat? Greyish brown sandy clay	Fill	-
1296	-	shrub bowl	Natural Feature	-
1297	1296	greyish brown sandy clay	Fill	-
1298	-	shrub bowl	Natural Feature	-
1299	1298	reddish brown sand	Fill	-
1300	-	enclosure ditch terminus running NW-SE	Ditch	10
1301	1300	yellowish brown loamy sand	Fill	10
1302	1300	yellowish brown loamy sand	Fill	10
1303	1300	yellowish brown loamy sand	Fill	10
1304	-	terminus enclosure ditch running NW-SE	Ditch	11
1305	1304	yellowish brown sandy loam	Fill	11
1306	-		Ring Gully	roundhouse 2
1307	1306	greyish brown silty sand	Fill	roundhouse 2
1308	-	enclosure ditch running N-S	Ditch	10

Context	Fill of	Description	Interpretation	P/O Group
1309	1308	mid brown silty sand	Fill	10
1310	1311	brownish grey silty sand	Fill	11
1311	-	N-S running section of enclosure ditch	Ditch	11
1312	1311	dark grey sandy silt	Fill	11
1313	-	probable waterworn gully - not on plan - finds likely transported by water - treat as unstrat?	Natural Feature	-
1314	1313	probable waterworn gully - not on plan - finds likely transported by water - treat as unstrat? Reddish brown sandy clay	Fill	-
1315	-	probable waterworn gully - not on plan - finds likely transported by water - treat as unstrat?	Natural Feature	-
1316	1315	reddish brown sandy clay probable waterworn gully - not on plan - finds likely transported by water - treat as unstrat?	Fill	-
1317	-	probable waterworn gully - not on plan - finds likely transported by water - treat as unstrat?	Natural Feature	-
1318	1317	probable waterworn gully - not on plan - finds likely transported by water - treat as unstrat? Reddish brown sandy clay	Fill	-
1319	1308	greyish brown silty sand	Fill	10
1320	1287	light yellow sand	Fill	10
1321	-	probable waterworn gully - not on plan - finds likely transported by water - treat as unstrat?	Natural Feature	100
1322	1321	probable waterworn gully - not on plan - finds likely transported by water - treat as unstrat? Reddish brown sandy clay	Fill	100
1323	-	Shallow concave recut	Ditch recut	11
1324	-	probable waterworn gully - not on plan - finds likely transported by water - treat as unstrat?	Natural Feature	100
1325	1324	probable waterworn gully - not on plan - finds likely transported by water - treat as unstrat? Reddish brown sandy clay	Fill	100
1326	-	enclosure ditch section E-W running	Ditch	10
1327	1326	mid brown silty clay	Fill	10
1328	1326	Small Find 6 pin or needle shank. Yellowish brown silty clay	Fill	10
1329	1326	Not in IR's spot dating table	Fill	10
1330	-	E-W running section of Enclosure ditch	Ditch	11
1331	1330	yellowish brown sandy clay	Fill	11
1332	1330	greyish brown silty clay	Fill	11
1333	-	probable waterworn gully - not on plan - finds likely transported by water - treat as unstrat?	Natural Feature	-
1334	1333	probable waterworn gully - not on plan - finds likely transported by water - treat as unstrat? Reddish brown sandy clay	Fill	-
1335	-	enclosure ditch section W-E running	Ditch	10
1336	1335	yellow brown sandy loam	Fill	10
1337	1335	yellow brown sandy loam	Fill	10
1338	1335	yellow brown loamy sand	Fill	10
1339	-	W-E running section possible recut	Ditch	11
1340	1339	whiteish brown sandy loam	Fill	11
1341	1339	yellowish brown loamy sand	Fill	11
1342	-	was labelled as 1342 - waterchannels at corner of enclosure - post-date enclosure	Natural Feature	100
1343	-	E-W gully, concave profile	Gully	100
1344	1342	waterchannels at corner of enclosure - post-date enclosure yellowish brown loamy sand		100
1345	-	not on plan gully running N-S	Ditch	100
1346	1345	yellowish brown sandy clay	Fill	100
1347	1345	greyish brown sandy clay	Fill	100
1348	-	E-W, irregular profile	Ditch	200
1349	1348	reddish brown sandy clay	Fill	200
1350	-	cuts enclosure - no strat with recut. Appears associated with ditch 200 running NE-SW	Ditch	200
1351	1350	brownish grey sandy silt	Fill	200
1352	-	terminus running E-W	Ditch	10
1353	1352	brownish yellow sand	Fill	10
1354	1352	yellowish brown silty sand	Fill	10
1355	1352	yellowish brown gravel	Fill	10
1356	-	terminus running E-W	Ditch	11
1357	1356	greyish brown sandy silt	Fill	11
1358	1356	dark grey sandy silt	Fill	11
1359	-	N-S running gully	Ditch	100
1360	1359	yellowish brown silty sand	Fill	100
1361	1359	greyish brown sandy clay	Fill	100
1362	-	circular	Posthole	-

Context	Fill of	Description	Interpretation	P/O Group
1363	1362	yellowish brown silty sand	Fill	-
1364	1362	reddish brown sandy clay	Fill	-
1365	-	gully terminus running N-S	Ditch	100
1366	1365	reddish brown sandy clay	Fill	100
1367	-	not located on plan	Posthole	-
1368	1367	greyish brown sandy clay	Fill	-
1369	-	centre of enclosure circular clay lined	Posthole	-
1370	1369	greyish blue clay	Fill	-
1371	1369	light brown sandy clay	Fill	-
1375	-	near enclosure entrance circular	Pit	-
1376	1375	brownish grey sand inc horse mandible	Fill	-
1377	-	N-S running gully	Ditch	100
1378	1377	light brown sand	Fill	100
1379	-	near enclosure entrance	Pit	-
1380	1379	brownish grey silty sand	Fill	-
1381	-	terminus of enclosure in south corner	Ditch	10
1382	1381	yellowish brown loamy sand	Fill	10
1383	1381	yellowish brown silt loam	Fill	10
1384	-	terminus of ditch recut	Ditch	11
1385	1384	yellowish brown sandy loam	Fill	11
1386	1384	brownish grey silt loam sample 8	Fill	11
1387	-	lies between terminals of enclosure	Pit	-
1388	1387	light brown sandy silt sample 10	Fill	-
1389	1387	brownish grey sandy silt	Fill	-
1390	1387	light brown sandy silt	Fill	-
1391	1387	light brown sandy silt	Fill	-
1392	1387	brownish grey sandy silt	Fill	-
1393	-	limestone extraction pit?	Pit	-
1394	1393	brownish grey sandy silt	Fill	-
1395	-	limestone extraction pit?	Pit	-
1396	1395	dark grey sandy silt	Fill	-
1397	-	limestone extraction pit?		-
1398	1397	brownish grey sandy silt	Fill	-
1399	-	enclosure ditch recut	Ditch	11
1400	1399	mid brown sandy silt	Fill	11
1401	1399	mid grey sandy silt	Fill	11
1402	1399	dark grey sandy silt	Fill	11
2001	-	greyish brown silty clay	topsoil	-
2002	-	orange brown silty clay	Subsoil	-
2003	-	yellowish brown sandy clay	Natural	-
2004	-	subcircular	Pit	-
2005	2004	greyish brown silty clay	Fill	-
2006	-	subcircular	Pit	-
2007	2006	greyish brown silty clay sample 20	Fill	-
2008	-	subcircular	Pit	-
2009	2008	greyish brown silty clay	Fill	-
2010	2008	greyish brown silty clay	Fill	-
2011	-	subcircular	Pit	-
2012	2011	greyish brown silty clay	Fill	-
2013	-	circular	Pit	-
2014	2013	greyish brown silty clay	Fill	-
2015	-	circular	Pit	-
2016	2015	greyish brown sandy clay	Fill	-
2017	2015	greyish brown sandy clay	Fill	-
2018	-	subcircular	Pit	-
2019	2018	greyish brown silty clay	Fill	-
2020	-	circular	Pit	-
2021	2020	greyish brown sandy clay	Fill	-
2022	-	circular	Pit	-
2023	2022	brownish grey sandy clay	Fill	-
2024	-	circular	Pit	-
2025	2024	greyish brown sandy clay	Fill	-
2026	-	subcircular	Pit	-
2027	2026	oranges brown silty clay	Fill	-
2028	-	circular	Pit	-
2029	2028	greyish brown sandy clay	Fill	-
2030	-	subcircular	Pit	-
2031	2030	mid brown silty clay	Fill	-

Context	Fill of	Description	Interpretation	P/O Group
2032	-	circular	Posthole	-
2033	2032	greyish brown sandy clay with blueish clay	Fill	-
2034	-	subcircular	Pit	-
2035	2034	mid brown silty clay	Fill	-
2036	-	circular	Pit	-
2037	2036	greyish brown sandy clay	Fill	-
2038	-	subcircular	Pit	-
2039	2038	mid brown silty clay	Fill	-
2040	-	circular	Pit	-
2041	2040	greyish brown sandy clay	Fill	-
2042	-	subcircular	Pit	-
2043	2042	mid brown silty clay	Fill	-
2044	-	subcircular	Pit	-
2045	2044	mid brown silty clay	Fill	-
2046	-	subcircular	Pit	-
2047	2046	mid brown silty clay	Fill	-
2048	-	circular	Pit	-
2049	2048	greyish brown sandy clay	Fill	-
2050	-	subcircular	Pit	-
2051	2050	mid brown silty clay	Fill	-
2052	2050	oranges brown silty clay	Fill	-
2053	-	circular	Pit	-
2054	2053	greyish brown silty clay	Fill	-
2055	-	circular	Pit	-
2056	2055	greyish brown sandy clay	Fill	-
2057	-	circular	Pit	-
2058	2057	greyish brown sandy clay sample 22	Fill	-
2059	-	subcircular	Pit	-
2060	2059	upper fill orangey brown silty clay	Fill	-
2061	2059	lower fill greyish brown silty clay	Fill	-
2062	-	circular	Pit	-
2063	2062	reddish brown sandy clay	Fill	-
2064	-	probable watercourse E-W running linear	Natural Feature	-
2065	2064	sole fill of probable watercourse greyish brown sandy silt	Fill	-
2066	-	E-W running linear	Ditch	-
2067	2066	plain stem frag greyish brown sandy silt	Fill	-
2068	-	subcircular	Pit	-
2069	2068	lower fill mid orange sandy clay	Fill	-
2070	2068	burnt, unworked; 2 sarsen-type; 2 ferruginous; 2 retained as sample upper fill mid orange sandy clay	Fill	-
2071	2074	clay lining of furnace red clay sample 15	Fill	-
2072	2074	greyish black clayey silt sample 16	Fill	-
2073	2074	dark grey industrial residue concreted	Fill	-
2074	-	circular furnace	Kiln	-
2075	-	NE-SW running ditch poss drainage ditch	Ditch	-
2076	2075	mid brown silty clay	Fill	-
2077	-	NE-SW running ditch possibly drainage	Ditch	-
2078	2077	mid brown silty clay	Fill	-
2079	-	Circular furnace	Kiln	-
2080	2079	red sandy clay furnace lining	Fill	-
2081	2079	grey black clayey silt	Fill	-
2082	-	circular	Pit	-
2083	2082	greyish brown silty clay sole fill	Fill	-
2084	-	sub circular	Cut	-
2085	2084	greyish brown silty clay sole fill	Fill	-
2086	-	subcircular	Pit	-
2087	2086	mid brown silty clay partial dog skeleton. Sole fill	Fill	-
2088	-	subcircular	Pit	-
2089	2088	mid brown silty clay sole fill	Fill	-
2090	-	circular	Pit	-
2091	2090	greyish brown clayey silt sole fill	Fill	-
2092	-	circular	Pit	-
2093	2092	mid brown silty clay sole fill	Fill	-
2094	-	subcircular	Pit	-
2095	2094	mid brown silty clay sole fill	Fill	-
2096	-	circular possibly already 1/2 sectioned in eval	Pit	-
2097	2096	mixed possibly already 1/2 sectioned in eval	Fill	-

Context	Fill of	Description	Interpretation	P/O Group
2098	-	E-W running ditch poss. Drainage	Ditch	-
2099	2098	mid brown silty clay sole fill	Fill	-
2100	-	NW-SE running possibly drainage	Ditch	-
2101	2100	mid brown clay loam sole fill	Fill	-
2102	-	NW-SE running possible water channel	Ditch	-
2103	2102	mid brown clay loam sole fill	Fill	-
2104	-	probable natural watercourse	Gully	-
2105	2104	mid brown silty clay sole fill	Fill	-
2106	-	subcircular	Natural Feature	-
2107	2106	greyish brown silty clay sole fill cut by ditch 2104	Fill	-
2108	-	irregular large shallow feature	Natural Feature	-
2109	2108	greyish brown silty clay sole fill of large shallow feature	Fill	-
2110	-	circular possible clay extraction	Pit	-
2111	2110	mid brown silty clay	Fill	-
2112	-	subcircular possibly clay extraction	Pit	-
2113	2112	mid brown silty clay	Fill	-
2114	-	subcircular poss clay extraction	Pit	-
2115	2114	reddish brown clay loam sole fill	Fill	-
2116	-	subcircular possibly clay extraction	Pit	-
2117	2116	mid brown silty clay	Fill	-
2118	-	shallow irregular, probable watercourse	Gully	-
2119	2118	sole fill, dark grey clayey silt	Fill	-
2121	2123	mid grey clay silt	Fill	-
2123	-	sole fill, probable watercourse	Natural Feature	-
2125	2123	sole fill, brownish grey clay silt	Fill	-
2126	-	circular	Posthole	-
2127	2126	yellowish brown silt loam	Fill	-

10.2 Appendix 2: Pottery tables

DATING SUMMARY								
Stratigraphic unit	F No	Group	Context	Spot date	Comments	Sherd	Weight	Total RE %
1	1145	Roundhouse 1	1146	IA	Fragments from a single shell-gritted jar with an ovoid profile and a pinched out base.	7	16	0
1	1165	Roundhouse 1	1166	LIA	A fragment from a large shell-gritted jar with a rim expanded internally.	1	39	5
10	1188	Enclosure	1182	EMIA?	A medium sized group including large jars with splayed finger tipped rims and no Scored Ware.	41	808	20
10	1214	Enclosure	1216	EIA?	A small group including a fragment from a shell-gritted jar with an inturned rim pinched out internally and externally with wipe marks on the inner surfaces.	11	149	7
10	1228	Enclosure	1229	EIA?	A single sherd from a shell-gritted jar with an internal rim with a flattened top pinched out internally with a fingernail slashed top.	1	6	5
10	1236	Enclosure	1238	MLIA	A small group of shell-gritted sherds including fragments from a flat base and a vessel with Scored ware decoration	5	57	0
10	1236	Enclosure	1239	IA	A single shell-gritted sherd.	3	16	0
10	1287	Enclosure	1285	IA	A small group of handmade shell-gritted sherds.	7	17	0
10	1300	Enclosure	1303	MLIA	A shell-gritted sherd from a Scored ware jar.	1	12	0
10	1308	Enclosure	1309	IA	A small group of handmade shell-gritted sherds.	3	34	0
10	1326	Enclosure	1327	IA	Sherds of shell-gritted handmade pottery.	2	22	0
10	1326	Enclosure	1328	LBA/EIA	A small group including fragments possibly from a cylinder shaped jar in a poorly mixed shell and quartz-gritted fabric that suggests a date at the beginning of the Iron Age.	3	25	0
10	1335	Enclosure	1337	EMIA	A small group including a squat bowl with an ellipsoidal profile and an everted rim and a jar with a multi channelled rim similar to examples from Gretton, Northants and Fiskerton, Lincs.. This group can be placed in the early to middle Iron Age.	5	95	16
10	1335	Enclosure	1338	MIA	Two shell-gritted vessels were retrieved from this group: a sherd of Scored ware and a vessel with a flattened rim expanded internally and externally that suggests a date in the first half of the 1st Millennium BC.	5	66	5
10	1352	Enclosure	1355	IA	A shell-gritted jar from a large jar or bowl.	3	32	0
10	1381	Enclosure	1382	IA	Scraps of shell-gritted pottery.	6	14	0
10	1381	Enclosure	1383	IA	A single shell-gritted sherd.	1	9	0
100	1324	Gully	1325	IA	Small shell-gritted scraps of handmade pottery	6	8	0
100	1342	Gully	1344	MLIA	A small group of shell-gritted sherds including Scored ware and jar or bowl with a bead rim.	6	89	2
11	1178	Enclosure (recut)	1159	MLIA	A small group of handmade shell-gritted pottery including a jar with an upright rounded rim and a vessel with a flat base with scored decoration.	10	138	5
11	1178	Enclosure (recut)	1179	IA	A small group of shell-gritted handmade sherds including a jar with a pinched out irregular bead rim.	9	44	4
11	1181	Enclosure (recut)	1180	EIA	A small group including a shell-gritted jar with a rounded shoulded decorated with a row of fingertip impressions, a shell-gritted bowl with an ellipsoidal form and a shed from a poorly mixed shell and quartz-gritted jar perhaps of late Bronze Age date. Also present was a basal fragment from a shell-gritted jar with an internal carbonised residue that might be used for C14 dating.	12	248	0
11	1214	Enclosure	1217	EIA	A small group including a sherd from a shell-gritted jar with a flattened rim pinched out internally and externally.	5	96	4
11	1218	Enclosure (recut)	1219	EIA-EMIA?	A fresh medium sized group including no Scored ware but a slack shouldered jar, a jar with a internal flanged rim and a jar with a tall upright rim expanded internally and externally.	34	821	29

DATING SUMMARY								
Stratigraphic unit	F No	Group	Context	Spot date	Comments	Sherd	Weight	Total RE %
11	1218	Enclosure (recut)	1220	MLIA/EIA	A group including fragments from a fine burnished bowl and a large jar with a flattened top much of the pottery from this group dates to the early to mid Iron Age. A proportion of Scored ware was present suggests deposition in the middle Iron Age.	113	1259	45
11	1221	Enclosure	1223	EIA	A fresh medium sized group with no Scored ware including a jar with a rim with broad internal and external projections, a jar with a notched rim and a neat fine base.	20	334	8
11	1232	Enclosure (recut)	1233	IA	A small group of shell-gritted sherds including fragments from two jars with upright rounded everted rims one decorated with fingernail slashes along the top of the rim tip.	17	195	17
11	1240	Enclosure (recut)	1241	MIA	A medium sized group containing Scored ware and a fragment from a jar with a slight shoulder that may be of earlier date.	71	579	24
11	1304	Enclosure (recut)	1305	MLIA	A small group including a shell-gritted sherd from a Scored ware jar.	2	25	0
11	1311	Enclosure (recut)	1310	EMIA?	A small group including sherds of sand-gritted and shell-gritted handmade pottery. No distinctive forms were evident.	4	53	0
11	1311	Enclosure (recut)	1312	EMIA	A group including a vessel with finger tipped decoration and a globular or ellipsoidal form but few other diagnostic fragments and no Scored ware.	47	691	22
11	1323	Enclosure	1284	MLIA	A group containing Scored war fragments.	31	250	2
11	1330	Enclosure	1332	MLIA	A good medium sized group of Scored ware types including vessels with everted rims and flattened tops some with fingertip decorated rim tops. The absence of any decorated Late La Tené III type fine wares would support a middle Iron Age date for this group.	80	612	36
11	1356	Enclosure (recut)	1357	MLIA	A small group of shell-gritted sherds including fragments from a globular Scored ware jar.	6	92	0
11	1356	Enclosure (recut)	1358	MLIA	A small group including Scored ware and a fine burnished globular shell-gritted vessel with an applied footring.	21	272	0
11	1384	Enclosure (recut)	1385	IA	A small group of shell-gritted sherds.	24	167	0
11	1384	Enclosure (recut)	1386	MLIA	A medium sized group of small fragments of handmade shell-gritted jars. Scored ware decoration was present and the fine burnished shell-gritted sherds from this group may suggest a later Iron Age date.	86	699	53
11	1399	Enclosure (recut)	1401	MLIA	A small group including a Scored ware jar with a rounded lip slightly expanded externally.	6	78	2
11	1399	Enclosure (recut)	1402	LIA	A group containing fragments from a fine burnished necked jar or bowl, a large jar with a finger tipped rim top and Scored ware.	75	555	20
2	1130	Roundhouse 2	1131	IA	A single handmade shell-gritted sherd.	2	5	0
2	1147	Roundhouse 2	1148	IA	Fragments from a single shell-gritted jar with an ovoid profile and a pinched out base.	3	23	0
2	1170	Roundhouse 2	1171	MLIA	A small group of shell-gritted wares including a fragment from a handmade jar with a wiped external surface.	4	40	0
2	1204	Roundhouse 2	1205	IA	A single grog-gritted handmade sherd.	3	4	0
2	1254	Roundhouse 2	1258	IA	A single shell-gritted sherd from a jar with an ovoid profile.	1	15	0
200	1259	Ditch 200	1260	IA+	A small group of shell-gritted sherds. One may possibly be of Roman date.	3	11	0
200	1273	Ditch 200	1274	MLIA	A small group including fragments from two ovoid jars with everted rims, one with Scored ware decoration.	22	196	30
3	1022	Roundhouse 3	1023	IA	A single handmade shell-gritted bodysherd.	2	8	0
3	1032	Roundhouse 2	1033	IA	A single handmade shell-gritted bodysherd.	1	12	0
3	1050	Roundhouse 3	1052	IA	A single handmade shell-gritted bodysherd.	1	4	0

DATING SUMMARY								
Stratigraphic unit	F No	Group	Context	Spot date	Comments	Sherd	Weight	Total RE %
3	1063	Roundhouse 3	1064	IA	Fragments from a single handmade shell-gritted vessel.	5	16	0
3	1075	Roundhouse 3	1076	LBIA-EIA	A small group including fragments from a shell-gritted jar with a band of finger stabbed decoration along the gently carinated shoulder. This vessel appears similar to a Late Bronze Age- Early Iron Age examples from Gretton, Northants. (eg. Jackson 1974, Fig. 17.1).	6	35	0
3	1078	Roundhouse 3	1078	IA	A small group of shell-gritted sherds including fine shell-gritted sherds.	6	42	0
3	1087	Roundhouse 3	1088	IA	A single handmade shell-gritted sherd.	1	4	0
3	1136	Roundhouse 3	1137	IA	A small group of shell-gritted sherds including a fragment from a flat, plain base.	2	40	0
3	1138	Roundhouse 3	1140	MLIA	Fragments from a single shell-gritted jar with an ovoid profile and a pinched out base.	5	141	0
3	1191	Roundhouse 3	1193	IA	A single thin walled handmade shell gritted sherd.	1	2	0
4	1105	Roundhouse 1/2	1106	IA	A single handmade shell-gritted sherd.	3	6	0
4	1128	Roundhouse 1/2	1129	IA	A single handmade shell-gritted sherd.	1	3	0
Area 2 pits	2004	Pit	2005	LIA?	A good fresh medium sized group including fragments from a globular jar in a fine burnished shell-gritted fabric and a large comb or fine scored storage jar. A late Iron Age date is favoured due to the almost total absence of Scored ware sherds.	54	581	17
Area 2 pits	2006	Pit	2007	MLIA	A medium sized group including a range of Scored ware jars with rounded everted and externally bevelled rims and flat and pinched out base types. A globular externally burnished jar with a footring base had internal carbonised deposits that may be suitable for C14 dating. A small number of vessels from this group may date to the earlier Iron Age including a jar with finger nail decoration and slag inclusions within the fabric.	91	1275	52
Area 2 pits	2008	Pit	2009	IA	A single shell-gritted sherd.	1	16	0
Area 2 pits	2008	Pit	2010	MLIA	A small group of shell-gritted sherds including Scored ware and a vessel with a pinched out base.	7	155	0
Area 2 pits	2011	Pit	2012	MLIA	A small group including shell-gritted Scored ware sherds.	23	336	10
Area 2 pits	2013	Pit	2014	MLIA	A small group including a fragment from a Scored ware jar.	1	55	0
Area 2 pits	2015	Pit	2016	MLIA	A small group including Scored ware jars including one example with an everted rim and a basal fragment.	10	199	2
Area 2 pits	2015	Pit	2017	MIA/MILA?	A good fresh medium sized group containing Scored ware including a jar with a slashed rim.	47	826	22
Area 2 pits	2018	Pit	2019	IA	A small group of shell-gritted wares including a fragment for a very large storage jar type vessel.	3	73	0
Area 2 pits	2020	Pit	2021	LIA	A small group including sherds of Scored ware and a fragment from a necked jar or bowl in a burnished fine shell-gritted fabric.	11	81	3
Area 2 pits	2022	Pit	2023	MLIA	A small group including fragments from shell-gritted Scored ware jars.	23	132	0
Area 2 pits	2024	Pit	2025	MLIA	A small group including sherds of Scored ware.	5	22	0
Area 2 pits	2029	Pit	2029	MLIA	A small group including sherds of Scored ware.	20	78	0
Area 2 pits	2038	Pit	2039	MLIA	A small group including sherds of Scored ware with a sparse coarse lattice style decoration.	7	99	0
Area 2 pits	2040	Pit	2041	IA	A small group of shell-gritted wares including a vessel with a pinched out base.	3	23	0
Area 2 pits	2048	Pit	2049	BA	A single flint-gritted sherd.	1	17	0
Area 2 pits	2057	Pit	2058	IA	A small group including a vessel with a pinched out base.	4	55	0
Area 2 pits	2059	Pit	2060	IA	A small group including a vessel with a pinched out base.	4	33	0
Area 2 pits	2059	Pit	2061	IA	A single shell-gritted sherd.	2	6	0

DATING SUMMARY								
Stratigraphic unit	F No	Group	Context	Spot date	Comments	Sherd	Weight	Total RE %
Area 2 pits	2062	Pit	2063	LIA	A small group including fragments from Scored ware jars and a necked jar or bowl in the fine burnished shell-gritted fabric IASH4.	16	172	15
unphased	1115	Pit	1116	IA	A single handmade shell-gritted sherd.	1	19	0
unphased	1244	Pit	1245	IA	A single shell-gritted sherd from a jar with an oviod profile.	1	6	0
unphased	1283	Pit	1281	IA	A basal fragment from a handmade jar with a pinched out base.	1	23	0
unphased	1294	Gully	1295	IA	A small shell-gritted sherd, probably from a jar.	1	5	0
unphased	1333	Gully	1334	IA	Shell-gritted scraps from a handmade vessel.	8	18	0
unphased	1362	Pit	1364	IA	A single shell-gritted sherd.	1	4	0
unphased	1387	Pit	1388	IA	A single sherd from a burnished shell-gritted bowl.	1	6	0
unphased	1387	Pit	1392	MLIA	A small group of shell-gritted sherds including Scored ware.	5	38	0
unphased	1393	Pit	1394	IA	A single shell-gritted sherd.	1	7	0
unphased	1395	Pit	1396	EMIA?	A small fresh group including no Scored ware but jars with multi channelled splayed rims and a possible fragment from a carinated jar.	17	379	14
unphased	1397	Pit	1398	IA	A small group of shell-gritted sherds.	5	45	0
unphased	2064	Gully	2065	MIA	A small group including sherds of from Scored ware jars and a further vessel with a multi channelled rim similar to examples from sites near South Witham and Grantham.	22	435	12
unphased	2086	Pit	2087	IA	A single sherd in a fine burnished shell-gritted ware (IASH4) possibly of late Iron Age date.	1	8	0
unphased	2092	Pit	2093	IA	A single shell-gritted sherd.	3	6	0
unphased	2106	Pit	2107	MLIA	Sherds from two Scored ware jars with pinched out bases.	8	217	0
unphased	2108	Pit	2109	MIA	A fresh medium sized group containing only Scored ware jars	36	793	20
unstrat	2001	Topsoil	2001	MLIA	A small group including a large proportion of two Scored ware jars one with a flattened rim slightly expanded internally, a globular profile and a flat base.	23	1099	13

FABRIC SUMMARY							
Fabric code	Fabric group	Fabric details	Sherd	Sherd %	Weight (g)	Weight %	Total RE %
IASA2	Reduced	Iron Age Sandy: Site Fabric 2- Abundant moderate quartz- includes late Iron Age fine wares	1	0.07%	13	0.07%	2
IASA3	Reduced	Iron Age Sandy: Site Fabric 3- Fine quartz sand-gritted fabric	1	0.07%	1	0.01%	0
IASA4	Reduced	Iron Age Sandy: Site Fabric 4- Fine Quartz sparse moderate and sparse medium shell- gritted	11	0.79%	119	0.68%	0
IAOOL1	Calcareous	Iron Age oolitic gritted fine wares. Common to abundant ooliths, fossil shell and limestone- late Iron Age-?early Roman fine wares	4	0.29%	25	0.14%	0
IASH1	Calcareous	Iron Age Shell Gritted: Site Fabric 1- Common to abundant coarse shell	420	30.00%	4840	27.62%	94
IASH2	Calcareous	Iron Age Shell Gritted: Site Fabric 2- as IASH1 with fine quartz	19	1.36%	189	1.08%	22
IASH3	Calcareous	Iron Age Shell Gritted; Site Fabric 3- as IASH1 with moderate medium clay pellets/grog	241	17.21%	3148	17.97%	61
IASH4	Calcareous	Iron Age Shell Gritted; Site Fabric 4- fine shell-gritted wares includes Late Iron Age types	150	10.71%	1421	8.11%	86
IASH5	Calcareous	Iron Age Shell Gritted; Site Fabric 5- Sparse coarse shell with moderate coarse grog/clay pellets	65	4.64%	786	4.49%	0
IASH6	Calcareous	Iron Age Shell Gritted: Site Fabric 6- Sparse shell and common quartz grits	10	0.71%	166	0.95%	0
IASH7	Calcareous	Iron Age Shell Gritted: Site Fabric 7- Abundant coarse to fine shell with rare Punctate Brachiopod fossil shell	334	23.86%	5189	29.62%	211
IASH8	Calcareous	Iron Age Shell Gritted: Site Fabric 8- Common fine shell and moderate medium grog, burnished	8	0.57%	198	1.13%	18
IASH9	Calcareous	Iron Age Shell Gritted: Site Fabric 9- moderate medium, well sorted	108	7.71%	1116	6.37%	47
SHCM/QUSM	Shell	Shell common medium and quartz sparse medium	2	0.14%	29	0.17%	0
SHEL	Calcareous	Miscellaneous undifferentiated shell-tempered	2	0.14%	5	0.03%	0
FLCM	Flint	Flint - common, medium	1	0.07%	17	0.10%	0
IAGROG1	Grog	Iron Age grog gritted wares- Site fabric 1	21	1.50%	231	1.32%	0
IASL1	Handmade	Iron Age Slag-gritted ware 1	2	0.14%	28	0.16%	7

FORM SUMMARY							
Form	Form Type	Form Description	Sherd	Sherd %	Weight (g)	Weight %	Total RE %
-	Unknown	Form uncertain	637	45.50%	4275	24.40%	11
B	Bowl	Unclassified form	4	0.29%	52	0.30%	0
B?	Bowl	Unclassified form	1	0.07%	3	0.02%	0
CLSD	Closed	Form	31	2.21%	239	1.36%	0
J	Jar	Unclassified form	257	18.36%	4080	23.29%	125
J?	Jar	Unclassified form	10	0.71%	103	0.59%	0
JB	Jar/Bowl	Unclassified form	102	7.29%	1327	7.57%	36
JBBR	Jar/Bowl	Bead rim	1	0.07%	11	0.06%	2
JBEV	Jar/Bowl	Everted rim	1	0.07%	39	0.22%	12
JBKNK	Jar/Beaker	Necked	1	0.07%	2	0.01%	6
JBL	Jar/Bowl	Large	19	1.36%	265	1.51%	0
JBNK	Jar/Bowl	Necked	12	0.86%	86	0.49%	27
JBR	Jar	Bead rimmed	3	0.21%	36	0.21%	15
JBUP	Jar/bowl	Upright rim	2	0.14%	41	0.23%	13
JCAR	Jar	Carinated	1	0.07%	11	0.06%	0
JEB	Jar	External bevel	13	0.93%	387	2.21%	32
JEV	Jar	Everted rim	62	4.43%	674	3.85%	136
JEV?	Jar	Everted rim	1	0.07%	7	0.04%	0
JFISK	Jar	Fiskerton type tall everted jar (Elsdon 1996a C5)	4	0.29%	94	0.54%	16
JFT	Jar	Flat-topped rim	1	0.07%	33	0.19%	7
JH	Jar	Handled	1	0.07%	16	0.09%	0

FORM SUMMARY							
Form	Form Type	Form Description	Sherd	Sherd %	Weight (g)	Weight %	Total RE %
JIR	Jar	Inturned rim	31	2.21%	1218	6.95%	40
JL	Jar	Large	139	9.93%	3740	21.35%	0
JNK	Jar	Necked	58	4.14%	561	3.20%	43
JS	Jar	Storage	3	0.21%	107	0.61%	0
JUP	Jar	Upright rim	4	0.29%	79	0.45%	22
LBIF	Lid	Bifurcated rim	1	0.07%	35	0.20%	5

RIM TYPE																							
		Roundhouse 1		Roundhouse 2		Roundhouse 3		Enclosure 10		Enclosure 11		Roundhouse Phase 4		Area 2 pits		Gully 100		Ditch 200		Other		Total	
Rim	Form description	Sherd	Weight (g)	Sherd	Weight (g)	Sherd	Weight (g)	Sherd	Weight (g)	Sherd	Weight (g)	Sherd	Weight (g)	Sherd	Weight (g)	Sherd	Weight (g)	Sherd	Weight (g)	Sherd	Weight (g)	Sherd	Weight (g)
-	No rim	7	16	86	125	30	304	46	86	569	5795	4	9	307	4008	11	86	3	11	59	878	1157	13106
BEAD	Beaded									10	42											10	42
EB	Externally Bevelled							1	73	2	27			14	393					1	14	18	507
EVR	Everted Rounded							1	39	46	558			49	530			22	196			119	1336
FD	Flattened Direct									7	71											7	71
FEE	Flattened lip, rim expanded externally													1	107							1	107
FEEI	Flattened lip, rim expanded both ext/int							4	60	4	61			1	38							9	159
FEI	Flattened lip, rim expanded internally																			22	1081	22	1081
FLEI	Flanged both ext/int									2	79									2	55	3	86
FLI	Flanged Internally																					1	48
FPE	Flattened lip, pinched out externally							1	44													1	44
FPEI	Flattened lip, pinched out both ext/int							1	23	4	99											5	97
FPI	Flattened lip, pinched out internally							1	6	4	124											6	155
FRE	Flattened lip, rim rounded externally									5	101			1	30							6	131
GRL	Groove located centrally on lip									1	35											1	35
MCF	Multiple internal channel, faceted at lip																			3	56	3	56
MIC	Multiple Internal Channel							1	38													1	38
RD	Rounded Direct									12	129			8	152							21	286
RDA	Rounded Direct, internal angle at base of rim															1	11					1	11
REEI	Rounded lip, rim expanded both ext/int	1	39																			1	39
REI	Rounded lip, rim slightly expanded externally									1	26											1	26
RRE	Rounded lip as RD, outer edge more gently rounded							1	11	1	16											2	27
U	Unknown			1	1					5	45											6	46
	TOTAL	**8**	**55**	**13**	**87**	**30**	**304**	**97**	**1362**	**673**	**7208**	**4**	**9**	**381**	**5258**	**12**	**97**	**25**	**207**	**87**	**2084**	**1402**	**17534**

BODY TYPE																							
		Roundhouse 1		Roundhouse 2		Roundhouse 3		Enclosure 10		Enclosure 11		Roundhouse Phase 4		Area 2 pits		Gully 100		Ditch 200		Other		Total	
Rim	Form description	Sherd	Weight (g)	Sherd	Weight (g)	Sherd	Weight (g)	Sherd	Weight (g)	Sherd	Weight (g)	Sherd	Weight (g)	Sherd	Weight (g)	Sherd	Weight (g)	Sherd	Weight (g)	Sherd	Weight (g)	Sherd	Weight (g)
-	No body fragments			1	1	1	23	12	183	49	859			21	414			2	5	11	372	100	1920
CAR	Carinated									1	11											2	22
CYL?	Cylinder							1	11													1	11
ELL	Ellipsoid							1	39	1	10											2	49
GLOB	Globular									47	957			16	898					29	1295	95	3213
GLOB/OV	Ovoid or globular							9	145	39	798			11	318							70	1419
NB	Necked bowl									5	51											5	51
NJ	Necked jar									6	47			33	288							41	350
NJ/NB	Necked jar or bowl													7	35							7	35
OV	Ovoid			1	15	5	141			7	142			25	774			22	196	1	18	61	1286
OV/CYL	Ovoid or cylinder									1	18											1	18
OV/GLOB	Ovoid or globular									9	151			2	63	1	7					12	221
RS	Round-shouldered							1	26	9	126											10	152
RS/CAR	Round-shouldered or carinated					3	22															3	22
U	Unknown	8	55	11	71	21	118	73	918	499	4038	4	9	266	2468	11	90	1	6	46	399	1022	8921
	TOTAL	**8**	**55**	**13**	**87**			**97**	**1362**	**673**	**7208**	**4**	**9**	**381**	**5258**	**12**	**97**	**25**	**207**	**87**	**2084**	**1402**	**17534**

BASE TYPE																							
		Roundhouse 1		Roundhouse 2		Roundhouse 3		Enclosure 10		Enclosure 11		Roundhouse Phase 4		Area 2 pits		Gully 100		Ditch 200		Other		Total	
Rim	Form description	Sherd	Weight (g)	Sherd	Weight (g)	Sherd	Weight (g)	Sherd	Weight (g)	Sherd	Weight (g)	Sherd	Weight (g)	Sherd	Weight (g)	Sherd	Weight (g)	Sherd	Weight (g)	Sherd	Weight (g)	Sherd	Weight (g)
-	No base fragments	8	55	13	87	24	140	80	933	591	5655	4	9	290	3695	12	97	25	207	59	733	1215	12775
FLP	Flat, pinched out					5	141	14	380	29	544			36	681					1	23	86	1805
FLT	Flat, plain					1	23	2	37	14	262			44	680					27	1328	91	2389
FTR	Footring									15	201			3	99							18	300
U	Uncertain							1	12	24	546			8	103							33	661
	TOTAL	**8**	**55**	**13**	**87**	**30**	**304**	**97**	**1362**	**673**	**7208**	**4**	**9**	**381**	**5258**	**12**	**97**	**25**	**207**	**87**	**2084**	**1402**	**17534**

SHERD ARCHIVE																
Context	Fabric	Rim	Body	Base	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve	Pub	Sample
1023	IASH7	-	U	-	HM	1			BS; IRF		2	8	0	0		
1033	IASH9	-	U	-	HM	1			BS; OX/R/OX		1	12	0	0		
1052	IASH1	-	U	-	HM	1	ABR		BS; R		1	4	0	0		
1064	IASH1	-	U	-	HM	1			BS; IRF; SCRAPS		5	16	0	0		
1076	IASH1	-	RS/CAR	-	HM; STI	1			BS; R; POORLY MIXED; FINGERNAIL STABS NEAR ?CARINATION/SHOULDER; EARLY IA ?LATE BA		3	22	0	0		
1076	IASH3	-	U	-	HM	1	ABR		BS; OX/R		3	13	0	0		
1078	IASH1	-	U	-	HM	1	ABR		BS; IRF		1	11	0	0		
1078	IASH1	-	U	-	HM	1	ABR		BS; IRF		2	8	0	0		
1078	IASH1	-	U	-	HM	1	ABR		BS; IRF		1	4	0	0		
1078	IASH3	-	U	-	HM	1	ABR		BS; IRF; POORLY MIXED FABRIC		1	15	0	0		
1078	IASH4	-	U	-	HM	1	ABR		BS; IRF; SHLDR; LIGHT SCORING?		1	4	0	0		

SHERD ARCHIVE																
Context	Fabric	Rim	Body	Base	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve	Pub	Sample
1088	IASH1	-	U	-	HM	1	VAB		BS; IRF		1	4	0	0		
1106	IASH1	-	U	-	HM	1	VAB		BS; R; SCRAPS		3	6	0	0		
1116	IASH7	-	U	-	HM	1			BS; IRF		1	19	0	0		
1129	IASH9	-	U	-	HM	1	VAB		BS; R		1	3	0	0		
1131	IASH1	-	U	-	HM	1	VAB		BS; R; SCRAPS		2	5	0	0		
1137	IASH1	-	-	FLT	HM	1	VAB		BS; OX/R/OX		1	23	0	0		
1137	IASH9	-	U	-	HM	1			BS; R		1	17	0	0		
1140	IASH1	-	OV	FLP	HM	1			BASE; IRF		5	141	0	0		
1146	IASH9	-	U	-	HM	1			BASE; IRF		7	16	0	0		
1148	IASH1	-	U	-	HM	1			BS; OX/R		3	23	0	0		
1159	IASH1	RD	OV/GLOB	-	HM	1		D03	RIM; R		1	45	19	5	7	
1159	IASH1	-	U	FLT	HM; SCR	1	VAB		BS; IRF		4	12	0	0		
1159	IASH1	-	U	-	HM	1	ABR		BS; OX/R		2	31	0	0		
1159	IASH3	-	U	-	HM	1			BS; IRF		2	38	0	0		
1159	IASH7	-	U	-	HM	1			BS; IRF; THIN WALLED		1	12	0	0		
1166	IASH1	REEI	U	-	HM	1		D14	RIM; OX; EXAMPLES RANGE FROM LBA-LIA?		1	39	44	5	1	

SHERD ARCHIVE																
Context	Fabric	Rim	Body	Base	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve	Pub	Sample
1168	IASH1	-	-	U	HM	1			BASE; IRF; LARGE THICK BASE		2	58	0	0		
1168	IASH4	RD	-	-	HM	1	ABR		RIM; R		1	5	12	7		
1168	IASH4	-	ELL	-	HM; B EXT; B INT	1			BS; R; HIGHLY BURNISHED INT SUGGESTS OPEN FORM PERHAPS 'S' SHAPED BOWL OR SQUAT BEAD RIM TYPE		1	18	0	0		
1168	IASH4	-	U	-	HM; B EXT	1	BURNT		BS; R; ?SAME VESSEL AS LARGER ELL FRAG		1	3	0	0		
1171	IASA3	U	-	-	HM?	1			RIM; R		1	1	0	0		
1171	IASH1	-	U	-	HM; FM EXT	1			BS; OX/R/OX		3	39	0	0		
1179	IASH1	-	U	-	HM	1	CARBON DEP EXT		BS; R; POSS LARGE NECKED JAR		6	28	0	0		

SHERD ARCHIVE																
Context	Fabric	Rim	Body	Base	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve	Pub	Sample
1179	IASH1	FRE	U	-	HM	1			RIM; SLIGHTLY PINCHED OUT IRREGULAR 'BEAD'		1	9	24	4		
1179	IASH9	-	U	-	HM	1			BS; IRF		2	7	0	0		
1180	IASH1	-	RS?	-	HM; FT	1	CARBON DEP EXT		BS; R; CARINATION; FINGERTIP DECORATION ON CARINATED SHOULDER AS ELSDON 1996A, D.5A NO.16 & 21 AT FENGATE; LATE BA EARLY IA		6	53	0	0		
1180	IASH1	-	U	-	HM	1			BS; IRF		1	20	0	0		
1180	IASH4	-	ELL	-	HM; B EXT	1			BS; R; ROUNDED ELLIPSOIDAL SQUAT BOWL; EARLY IA-MID IA; CF ELSDON 1996A D.5C FENGATE (RIGHT SIDE 2ND FROM BOTTOM)		1	10	0	0		

SHERD ARCHIVE																
Context	Fabric	Rim	Body	Base	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve	Pub	Sample
1180	IASH9	-	U	FLT	HM	1	CARBON DEP INT	C14?	BASE; OX/R; CRUMBLY BLACK CARBONISED INT DEPOSIT WHICH COULD BE USED FOR A C14 RESIDUE DATE		3	147	0	0		
1180	SHCM/QUSM	-	OV/CYL	-	HM; B EXT	1			BS; OX/R (BLACK); POORLY MIXED FABRIC & FIRING APPEAR TO SUGGEST A BRONZE AGE DATE		1	18	0	0		
1182	IAGROG1	-	U	-	HM	1			BS; R		6	47	0	0		
1182	IAGROG1	-	RS	-	HM	1			BS; IRF		1	26	0	0		
1182	IASH1	RRE	U	-	HM	1			RIM; IRF		1	11	20	4		
1182	IASH1	-	GLOB/OV	FLP	HM	1			BASE; R		1	28	0	0		
1182	IASH1	-	U	-	HM	1	ABR		BS; IRF		2	41	0	0		
1182	IASH1	-	U	-	HM	1	ABR		BS; OX/R		1	22	0	0		

SHERD ARCHIVE																
Context	Fabric	Rim	Body	Base	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve	Pub	Sample
1182	IASH1	-	U	-	HM	1			BS;R		1	9	0	0		
1182	IASH3	-	GLOB/OV	FLP	HM	1			BS; IRF		7	134	0	0		
1182	IASH3	-	U	-	HM	1			BS; IRF		1	29	0	0		
1182	IASH3	-	U	FLP	HM; FT	1			BS; R; FINGERTIP SHOULDER?		6	218	0	0		
1182	IASH4	-	U	-	HM	1			BS; R		1	6	0	0		
1182	IASH7	-	U	-	HM	1			BS; IRF		2	32	0	0		
1182	IASH7	-	U	-	HM	1	CARBON DEP INT		BS; IRF		7	78	0	0		
1182	IASH7	FPE	-	-	HM; FT	1		D30	RIM; IRF; LARGE CARINATED BOWL; FINGER TIPPED RIM; ROLLO 1988 FIG. 25.9		1	44	26	6	5	
1182	IASH7	EB	-	-	HM; FS	1		D15	RIM; IRF; WIPED VERTICAL FINGER MARKS & SLASHED RIM TIP		1	73	33	10	6	
1182	IASH7	-	U	-	HM	1			BS; IRF		2	10	0	0		
1193	IASA4	-	U	-	HM	1	ABR		BS; R; THIN WALLED		1	2	0	0		

SHERD ARCHIVE																
Context	Fabric	Rim	Body	Base	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve	Pub	Sample
1205	IAGROG1	-	U	-	HM	1			BS; IRF		3	4	0	0		
1216	IASH1	-	U	-	HM	1			BS; R; WIPED INT		2	29	0	0		
1216	IASH1	-	U	-	HM	1			BS; IRF		1	19	0	0		
1216	IASH1	-	-	U	HM	1			BASE FRAG; R		1	12	0	0		
1216	IASH1	-	U	-	HM	1			BS; IRF		2	13	0	0		
1216	IASH1	-	U	-	HM; SCR	1			BS; IRF		1	13	0	0		
1216	IASH9	-	U	-	HM; FN	1			BS; IRF; FINGERNAIL MARKS ON BS EXT		1	8	0	0		
1216	IASH9	-	U	-	HM	1			BS; IRF		1	14	0	0		
1216	IASH9	-	U	-	HM	1	CARBON DEP INT		BS; IRF		1	18	0	0		
1216	IASH9	FPEI	OV/GLOB ?	-	HM; FS	1		D04	RIM; IRF; WIPE MARKS ON INT SURFACE		1	23	32	7	2	
1217	IASH7	-	U	-	HM	1			BS; R		1	11	0	0		
1217	IASH9	FPIE	-	-	HM	1			RIM; OX/R; SLIGHTLY TAPERING TO ?OVOID PROFILE; ? EARLY IA		1	25	30	4		
1217	IASH9	-	U	-	HM	1	LEACHED SHELL INT		BS; R		3	60	0	0		

SHERD ARCHIVE																
Context	Fabric	Rim	Body	Base	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve	Pub	Sample
1219	IASH3	FPEI	-	-	HM	1		D11	RIM; R; WIPED INT; ELSDON & KNIGHT 2004, FIG. 5.2.6		3	74	28	16	10	
1219	IASH4	-	U	-	HM	1			BS; R		1	9	0	0		
1219	IASH5	-	GLOB/OV	-	HM	1			BS; IRF; POORLY FINISHED INT; THICK WALLED		1	77	0	0		
1219	IASH5	-	U	-	HM	1	ABR		BS; IRF		2	11	0	0		
1219	IASH7	-	-	-	HM	1	CARBON DEP EXT	D12	RIM; R; WIPED INT & EXT; FAINT CARBON DEP EXT; ROLLO 1988 FIG. 26.39-? RESID & GRETTON KNIGHT 1984, FIG. 13.9 EARLY IA		1	34	20	6	9	
1219	IASH7	-	U	-	HM	1			BS; IRF		4	95	0	0		
1219	IASH7	-	GLOB/OV	U	HM; SCR	1			BS; IRF		21	473	0	0		

SHERD ARCHIVE																
Context	Fabric	Rim	Body	Base	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve	Pub	Sample
1219	IASH8	FLI	-	-	HM	1		D13	RIM; KNIGHT 1984 FIG. 13.23, FIG. 15.7 GRETTON GROUP 1		1	48	34	7	8	
1220	IASA2	EVR	NJ	-	HM; B EXT	1		D21	RIM; R; EARLY MID IRON AGE TYPE SEE GRETTON NORTHANTS JACKSON AND KNIGHT 1985 FIG. 9.94		1	13	14	2	11	
1220	IASH1	GRL	U	-	HM	1			RIM; R; LARGE LID OR COVER; UNFINISHED INTERNAL SURFACE; ALSO MEANS POSSIBLY VESSEL IS FROM FISKERTON TYPE JAR		1	35	30	5		

SHERD ARCHIVE																
Context	Fabric	Rim	Body	Base	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve	Pub	Sample
1220	IASH1	-	U	-	HM	1			BS; OX		1	21	0	0		
1220	IASH1	-	-	FLP	HM	1			BASE; OX		1	36	0	0		
1220	IASH1	-	GLOB/OV	-	HM	1	CARBON DEP INT		BS; IRF		2	16	0	0		
1220	IASH1	-	GLOB	-	HM; SCR	1	VAB		BS		1	50	0	0		
1220	IASH1	-	CAR	-	HM	1	ABR		BS; IRF		1	11	0	0		
1220	IASH1	-	U	-	HM	31			BS; IRF		31	223	0	0		
1220	IASH1	-	U	-	HM; SCR	1			BS; IRF		1	8	0	0		
1220	IASH1	-	U	-	HM	4			BS; IRF		4	27	0	0		
1220	IASH1	-	U	-	HM	12	ABR		BS; IRF		12	43	0	0		
1220	IASH1	-	U	-	HM	1			HANDLE; R		1	16	0	0		
1220	IASH3	-	-	FLT	HM	1			BS; IRF		1	19	0	0		
1220	IASH3	-	-	FLT	HM	1			BS; IRF		1	31	0	0		
1220	IASH3	-	GLOB/OV	-	HM	1			BS SHLDR; IRF		2	35	0	0		
1220	IASH3	-	U	-	HM	8			BS; IRF		8	149	0	0		
1220	IASH3	-	U	-	HM	5			BS; IRF		5	57	0	0		

SHERD ARCHIVE																
Context	Fabric	Rim	Body	Base	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve	Pub	Sample
1220	IASH3	FPI	-	-	HM	1		D19	RIM; OXID PALE ORANGE; PERHAPS BROADLY AS FISKERTON TYPES ROUGHER EXT SURFACE; DIAM?		4	124	30	3	12	
1220	IASH4	RD	GLOB	-	HM	1			RIM SHLDR; R		1	8	11	3		
1220	IASH4	RD	NJ	-	HM	1			RIM; R		1	2	10	6		
1220	IASH4	-	U	-	HM	2			BS; IRF		2	24	0	0		
1220	IASH6	-	U	-	HM	3			BS; IRF		3	25	0	0		
1220	IASH6	FEEI	GLOB/OV	-	HM; FN	1			RIM SHLDR; IRF; NAIL SLASHED RIM		4	61	0	0		
1220	IASH7	-	U	-	HM	9			BS; IRF		9	78	0	0		
1220	IASH7	FRE	-	-	HM	1			RIM; OX		1	15	30	7		
1220	IASH7	-	U	-	HM	3			BS SCRAPS		3	17	0	0		
1220	IASH7	-	GLOB/OV	-	HM	1			BS; IRF		5	62	0	0		
1220	IASH7	FRE	-	-	HM	1	VAB		RIM; IRF		1	7	0	2		
1220	IASH9	FD	GLOB	-	HM	1			RIM; R		1	5	12	6		

SHERD ARCHIVE																
Context	Fabric	Rim	Body	Base	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve	Pub	Sample
1220	IASH9	-	-	FLT	HM	1			BASE; R		1	9	0	0		
1220	IASH9	EVR	-	-	HM	1			RIM; R		1	2	12	5		
1220	IASH9	-	U	-	HM	1			BS; OX		1	26	0	0		
1220	IASH9	EVR	-	-	HM	1			RIM; OX		1	4	14	6		
1223	IASH1	U	-	-	HM	1	INT RED DEPOSIT; CRACKING		BS; OX; CRUCIBLE?		1	4	0	0		
1223	IASH1	-	U	-	HM	4			BS; IRF		4	42	0	0		
1223	IASH1	-	-	U	HM	1			BS; IRF		1	12	0	0		
1223	IASH1	U	U	-	HM; FN	1			RIM; IRF; SLASHED RIM TIP ON VESSEL OF UNCERTAIN FORM		4	41	0	2		
1223	IASH3	-	GLOB	-	HM	1			BS; IRF		4	150	0	0		
1223	IASH7	-	-	FLP	HM	1			BS; IRF; FINE WALLED NEAT POTTING		2	25	0	0		
1223	IASH7	-	U	-	HM	1			BS; IRF		1	6	0	0		

SHERD ARCHIVE															
Context	Fabric	Rim	Body	Base	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve	Pub	Sample
1223	IASH8	FLEI	-	-		1		D27	RIM; OX/R/OX; AS CLEAL 2001 FIG. 26.74; ELSDON 1996a, C.2a.521; EARLY IA; GROUP 1 GRETTON KNIGHT 1984 FIG 15.9; UNDECORATED RIM PARALLEL FOR CUNLIFFE'S LONG WITTENHAM, OXON (CUNLIFFE 2009, FIG. A: 11.8)		1	31	24	6	13	
1223	IASH9	-	U	-	HM	1			BS; IRF		2	23	0	0		
1229	IASH1	FPI	U	-	HM; FN	1			RIM; R; FINGERNAIL SLASHED RIM TOP		1	6	16	5		
1233	IASH1	-	U	-	HM	4	ABR		BS; IRF		4	26	0	0		
1233	IASH7	-	U	-	HM	1			BS; IRF		1	16	0	0		

SHERD ARCHIVE																
Context	Fabric	Rim	Body	Base	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve	Pub	Sample
1233	IASH7	-	U	-	HM	1	ABR		BS; IRF		1	14	0	0		
1233	IASH7	-	U	-	HM	1	LEACHED SHELL INT; WHITE DEP INT		BS; IRF		2	21	0	0		
1233	IASH7	-	OV/GLOB	-	HM	1			BS; OX/R/OX; NEAR NECK		1	8	0	0		
1233	IASH7	RD	U	-	HM	1		D01	RIM; R		1	12	15	12	14	
1233	IASH7	-	U	-	HM	4			BS; IRF		4	53	0	0		
1233	IASH7	-	OV/GLOB	-	HM	1	LEACHED SHELL INT		BS; IRF		1	23	0	0		
1233	IASH7	RD	OV/GLOB	-	HM; FN	1		D02	RIM; R; FINGERNAIL SLASHED RIM TOP		2	22	20	5	15	
1238	IASH1	-	-	FLT	HM	1			BASE; OX/R		2	37	0	0		
1238	IASH1	-	U	-	HM; SCR	1	ABR; CARBON DEP INT		BS; IRF		1	6	0	0		
1238	IASH9	-	U	-	HM	2			BS; IRF		2	14	0	0		
1239	IASH3	-	U	-	HM	1			BS; R; FLAKES		3	16	0	0		

SHERD ARCHIVE																
Context	Fabric	Rim	Body	Base	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve	Pub	Sample
1241	IASH3	-	U	-	HM	44			BS; IRF; UNCERTAIN VESSEL COUNT MAY BE FEWER BUT TOO CRUMBLY!		44	174	0	0		

SHERD ARCHIVE																
Context	Fabric	Rim	Body	Base	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve	Pub	Sample
1241	IASH3	EVR	OV	-	HM	1	CARBON DEP INT		RIM; R; SOME VEG WIPE MARKS INTERNAL; THIS FORM HAS A TALL NECK/OVOID SHOULDER FORM. IT CAN BE PARALLELED TO NECKED FORMS SUCH AS IN CUNLIFFE'S LONG WITTENHAM-ALLEN'S PIT GROUP EG FIG A:11 .5 (FLARED EVERTED RIM, 5-3AD)		7	142	14	3		

SHERD ARCHIVE																
Context	Fabric	Rim	Body	Base	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve	Pub	Sample
1241	IASH4	EVR	GLOB?	FLP	HM; SCR	1		D18	RIM; IRF MOSTLY REDUCED; ?DIA		11	168	0	2	17	
1241	IASH7	EVR	-	-	HM	1			RIM; R; SCRAP		1	2	14	4		
1241	IASH7	EVR	-	-	HM	1			RIM; R; SCRAP		1	3	18	4		
1241	IASH7	-	U	-	HM	5			BS; IRF		5	49	0	0		
1241	IASH7	EVR	-	-	HM	1			RIM; R; SCRAP		1	5	14	5		
1241	IASH7	EVR	RS	-	HM	1	WHITE DEP INT	D22	RIM; R		1	36	22	6	16	
1245	IASH4	-	U	-	HM	1			BS; IRF; RARE PB SHELL		1	6	0	0		
1255	IASH1	-	OV	-	HM	1			BS; OX	1258 ?	1	55	0	0		
1258	IASH1	-	OV	-	HM	1			BS; OX	1255 ?	1	15	0	0		
1260	IASH4	-	U	-	HM	1			BS; R; THIN WALLED		1	6	0	0		
1260	SHEL	-	-	-		1	VAB		BS; GREY FABRIC POSS BOURNE/GREATHAM TYPE ROMAN SHERD		2	5	0	0		

SHERD ARCHIVE																
Context	Fabric	Rim	Body	Base	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve	Pub	Sample
1274	IASH2	EVR	OV?	-	HM; SCR	1	ABR		RIM; IRF; THIN WALLED; RIM SHAPE AS D07		16	114	12	22		
1274	IASH7	EVR	OV	-	HM	1		D07	RIM; R; FLATTENED RIM TOP		6	82	12	8	22	
1281	IAGROG1	-	-	FLP	HM; FT	1			BASE; FINGERTIP/PRESSED NEAR BASE; SMOOTH EXT SURFACES; MODERATE GROG/CP; SPARSE MODERATE QUARTZ ROUNDED		1	23	0	0		
1284	IAGROG1	-	U	FLP	HM; SCR	1			BASE; OX/R		5	32	0	0		
1284	IASH1	-	U	-	HM; SCR	1			BS; IRF		1	70	0	0		
1284	IASH3	-	GLOB/OV	-	HM	1			BS SHLDR; R		1	11	0	0		
1284	IASH7	-	U	-	HM; SCR	1			BS; IRF		1	17	0	0		
1284	IASH7	-	U	-	HM	1	ABR		BS; IRF; FINE		3	20	0	0		

SHERD ARCHIVE																
Context	Fabric	Rim	Body	Base	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve	Pub	Sample
1284	IASH7	FD	-	-	HM	1			RIM; IRF		3	34	0	2		
1284	IASH7	-	U	-	HM	17			BS; IRF		17	66	0	0		
1285	IASH1	-	-	-	HM	1	ABR		BS; R; SCRAPS		3	8	0	0		
1285	IASH1	-	-	-	HM	1	VAB		BS; OX		3	3	0	0		
1285	IASH3	-	-	-	HM	1	ABR		BS; OX		1	6	0	0		
1295	IASH1	-	U	-	HM	1			BS IRF; PROBABLY FROM NECKED OR EVERTED JAR NEAR RIM		1	5	0	0		
1303	IASH1	-	U	-	HM; SCR	1			BS; R		1	12	0	0		
1305	IASH7	-	U	-	HM	1			BS; IRF; BURNISHED SURFACE		1	19	0	0		
1305	IASH9	-	U	-	HM; SCR	1	ABR		BS; IRF		1	6	0	0		
1309	IASA4	-	U	-	HM	1	ABR		BS; OX/R		1	7	0	0		
1309	IASH1	-	U	-	HM	1	ABR		BS; OX		1	9	0	0		
1309	IASH9	-	U	-	HM	1			BS; OX/R		1	18	0	0		
1310	IASA4	-	U	-	HM; B EXT	1		FTS	BS; R; QUSM/SHSM		1	18	0	0		
1310	IASA4	-	U	-	HM	1	ABR	FTS	BS; R		1	4	0	0		

SHERD ARCHIVE																
Context	Fabric	Rim	Body	Base	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve	Pub	Sample
1310	IASH9	-	U	-	HM	1		FTS	BS; R; WELL SORTED; MID IA?		1	16	0	0		
1310	IASH9	-	U	-	HM	1		FTS	BS; OX/R		1	15	0	0		
1312	IASH1	-	U	-	HM	7			BS; IRF		7	47	0	0		
1312	IASH1	-	RS	-	HM; STAB	1			BS; R; STAB SHLDR; EARLIER IA		1	18	0	0		
1312	IASH1	FD	-	-	HM	1			RIM SCRAP; R		1	5	14	4		
1312	IASH1	EB	-	-	HM	1			RIM; R		1	24	30	7		
1312	IASH3	-	GLOB	-	HM	1			BS; IRF		3	186	0	0		
1312	IASH3	-	U	-	HM	4			BS; IRF		4	58	0	0		
1312	IASH7	-	-	FLP	HM	1			BS; IRF; THIN WALLED		1	17	0	0		
1312	IASH7	-	U	-	HM	22			BS; IRF		22	290	0	0		
1312	IASH7	-	U	-	HM	4			BS SCRAPS; IRF		4	21	0	0		
1312	IASH9	-	-	FLT	HM	1			BS; IRF		1	10	0	0		
1312	IASH9	EVR	-	-	HM	1			RIM; R		1	5	18	4		
1312	IASH9	FD	GLOB	-	HM	1			RIM; R		1	10	12	7		
1325	IASH9	-	U	-	HM	1	ABR		BS; OX/R; SCRAPS		6	8	0	0		
1327	IASH9	-	U	-	HM	1			BS; IRF		2	22	0	0		

SHERD ARCHIVE																
Context	Fabric	Rim	Body	Base	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve	Pub	Sample
1328	IASH8	-	U	-	HM	1		FTS	BS; BURNISHED SURFACES; R; BASE OR CARINATION?		2	14	0	0		
1328	SHCM/QUSM	-	CYL?	-	HM	1		FTS	BS; OX/R (BLACK); POORLY MIXED FABRIC & FIRING APPEAR TO SUGGEST A BRONZE AGE DATE		1	11	0	0		
1332	IAOOL1	-	U	-	HM	1			BS; R		4	25	0	0		
1332	IASH1	-	U	-	HM	2			BS; IRF		2	20	0	0		
1332	IASH1	-	U	-	HM	1			BS; IRF; NEAR RIM		1	10	0	0		
1332	IASH1	-	U	-	HM; SCR	1	VAB		BS; IRF; SCRAP		1	2	0	0		
1332	IASH1	EB	-	-	HM	1			RIM; IRF; THIN RIM		1	3	16	3		
1332	IASH3	FRE	GLOB/EV	-	HM; FT	1			RIM; R; FINGERTIPPED FLAT RIM		1	33	24	7		

SHERD ARCHIVE																
Context	Fabric	Rim	Body	Base	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve	Pub	Sample
1332	IASH3	-	U	-	HM; SCR	1	CARBON DEP INT		BS; IRF		10	64	0	0		
1332	IASH3	EVR	OV/GLOB	-	HM; SCR	1			RIM; IRF		2	16	20	7		
1332	IASH3	EVR	-	-	HM	1			RIM		1	3	10	7		
1332	IASH3	-	U	-	HM	1	ABR		BS; IRF		1	5	0	0		
1332	IASH3	-	U	-	HM	1	ABR		BS; IRF		2	16	0	0		
1332	IASH3	-	U	-	HM; SCR	2	ABR		BS; IRF		2	13	0	0		
1332	IASH3	-	GLOB	-	HM; SCR	1			BS SHLDR; IRF		7	106	0	0		
1332	IASH3	-	U	-	HM; SCR	4			BS; IRF		4	50	0	0		
1332	IASH3	-	U	-	HM; SCR	1			BS; IRF		2	18	0	0		
1332	IASH3	-	U	-	HM	18	ABR		BS; IRF; SCRAPS		18	37	0	0		
1332	IASH7	-	U	-	HM	1	ABR		BS; IRF		1	8	0	0		
1332	IASH7	-	U	-	HM	2	ABR		BS; IRF		2	27	0	0		
1332	IASH7	-	U	-	HM	1	ABR		BS; R		1	9	0	0		
1332	IASH7	EVR	OV/GLOB	-	HM; SCR	1			RIM; IRF		2	37	22	12		
1332	IASH9	-	U	-	HM	1	ABR		BS; IRF		1	6	0	0		
1332	IASH9	-	U	-	HM; SCR	1	CARBON DEP INT		BS; IRF		3	27	0	0		
1332	IASH9	-	U	-	HM	3			BS; IRF		3	22	0	0		
1332	IASH9	-	U	-	HM	2	ABR		BS; IRF		2	14	0	0		
1332	IASH9	-	U	-	HM	1	ABR		BS FLAKE		1	2	0	0		
1332	IASH9	-	U	-	HM; SCR	1	ABR		BS; IRF		1	6	0	0		
1332	IASH9	-	U	-	HM; SCR	1	ABR		BS; IRF		4	33	0	0		

SHERD ARCHIVE																
Context	Fabric	Rim	Body	Base	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve	Pub	Sample
1334	IASH1	-	U	-	HM	1			BS; IRF; SCRAPS		8	18	0	0		
1337	IASA4	-	U	-	HM	1			BS; OX/R		3	18	0	0		
1337	IASH7	EVR	ELL	-	HM; B EXT	1		D05	RIM; ?MIDDLE IA BOWL FORM		1	39	16	12	4	
1337	IASH7	MIC	U	-	HM	1	VAB	D06	RIM; ONE OR MORE CHANNELS		1	38	30	4	3	
1338	IASH7	-	U	-	HM; SCR	1			BS; IRF		1	6	0	0		
1338	IASH7	FEEI	U	-	HM	1			RIM; OX/R; ?FIRST HALF OF 1ST MA BC		4	60	22	5		
1344	IASH1	-	OV/GLOB	-	HM	1			BS; R; THIN WALLED HIGH SHOULDER		1	7	0	0		
1344	IASH1	-	U	-	HM; SCR	1			BS; IRF; THICK WALLED VESSEL		1	32	0	0		
1344	IASH1	-	U	-	HM; SCR	1	ABR		BS; IRF; THICK WALLED VESSEL		1	23	0	0		
1344	IASH4	-	U	-	HM	1			BS; R		1	5	0	0		
1344	IASH9	RDA	U	-	HM	1			RIM; IRF		1	11	0	2		
1344	IASH9	-	U	-	HM	1	ABR		BS; IRF		1	11	0	0		

SHERD ARCHIVE																
Context	Fabric	Rim	Body	Base	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve	Pub	Sample
1355	IASH4	-	U	-	HM	1			BS; IRF; THICKER WALL THAN USUAL EXAMPLES		3	32	0	0		
1357	IASA4	-	U	-	HM	1			BS; R		1	11	0	0		
1357	IASH1	-	U	-	HM	1	VAB		BS; R		1	3	0	0		
1357	IASH3	-	GLOB	-	HM; SCR	1			BS; R		2	57	0	0		
1357	IASH7	-	U	-	HM; SCR	1			BS; OX/R		2	21	0	0		
1358	IASH1	-	U	-	HM; SCR	3	ABR		BS; IRF		3	29	0	0		
1358	IASH1	-	U	-	HM; SCR	1			BS; OX		2	21	0	0		
1358	IASH3	-	U	-	HM; SCR	1	ABR		BS; IRF		1	21	0	0		
1358	IASH4	-	GLOB	FTR	HM; B EXT	1			BASE; R		15	201	0	0		
1364	IASH3	-	U	-	HM	1	VAB		BS		1	4	0	0		
1382	IASH1	-	U	-	HM	6			BS; IRF; SCRAPS		6	14	0	0		
1383	IASH7	-	U	-	HM	1			BS; IRF; LARGE FRAGMENTS OF GROG 2 CM UNUSUAL		1	9	0	0		
1385	IASA4	-	-	U	HM	1			BASE; OX/R		1	48	0	0		

SHERD ARCHIVE																
Context	Fabric	Rim	Body	Base	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve	Pub	Sample
1385	IASH1	-	U	-	HM	1	ABR; CARBON DEP INT		BS; IRF; THIN WALLED; POORLY MIXED		23	119	0	0		
1386	IASH1	-	U	FLT	HM; SCR	1	ABR		BS; IRF		2	19	0	0		
1386	IASH1	RD	-	-	HM	1	VAB		RIM; R; SCRAP		1	4	0	2		
1386	IASH1	EVR	-	-	HM	1	VAB		RIM; R		1	4	0	2		
1386	IASH1	EVR	-	-	HM	1	ABR		RIM; R		1	4	16	4		
1386	IASH1	-	-	-	HM	2	ABR; CARBON DEP		BS; R		2	12	0	0		
1386	IASH1	-	U	-	HM	5	ABR		BS; R; SCRAPS		5	14	0	0		
1386	IASH1	RD	NJ	-	HM	1	ABR		RIM; R; ?DIAM		1	6	0	2		
1386	IASH1	RD	NJ	-	HM	1	ABR		RIM; R; ?DIAM		1	7	0	2		
1386	IASH1	-	U	-	HM	1	VAB		BS; VESSEL?		1	7	0	0		
1386	IASH1	-	U	-	HM	1	ABR		BS; R		2	11	0	0		
1386	IASH1	-	U	-	HM	20	ABR		BS; R		20	57	0	0		
1386	IASH1	-	RS	-	HM	1			BS; R; SHLDR		1	19	0	0		
1386	IASH1	RD	NJ	-	HM	1			RIM; R; UNBURNISHED ROUGH SURFACES		1	14	18	5		

SHERD ARCHIVE																
Context	Fabric	Rim	Body	Base	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve	Pub	Sample
1386	IASH1	-	U	FLT	HM; SCR	1			BASE; R		1	15	0	0		
1386	IASH1	-	U	-	HM; SCR	1			BS; R		1	24	0	0		
1386	IASH3	-	U	-	HM; SCR	1	ABR		BS; R		3	9	0	0		
1386	IASH4	-	U	-	HM	1			BS; R; MLIA		1	9	0	0		8
1386	IASH4	-	U	-	HM	4	ABR		BS; R		4	20	0	0		
1386	IASH4	RD	NJ	-	HM	1			RIM; R; SCRAP		1	5	14	8		
1386	IASH4	-	U	-	HM	1	ABR		BS; R		1	6	0	0		
1386	IASH4	EVR	U	-	HM	1			RIM; R		2	13	14	10		
1386	IASH4	-	U	-	HM	1	ABR		BS; R		1	7	0	0		
1386	IASH4	EVR	U	-	HM	1			RIM; R		4	29	16	5		
1386	IASH4	-	U	-	HM	1	ABR		BS		1	4	0	0		
1386	IASH4	-	U	-	HM	1	ABR		BS; R		2	7	0	0		
1386	IASH7	-	U	FLP	HM; SCR	1			BS; OX/R; LEECHED SHELL INT		5	144	0	0		
1386	IASH7	RRE	GLOB?	-	HM; B EXT	1		D26	RIM; IRF		1	16	18	7	19	
1386	IASH7	-	U	-	HM	1			BS; OX/R		1	9	0	0		
1386	IASH7	-	U	-	HM	1	ABR		BS; OXID		1	23	0	0		
1386	IASH7	BEAD	U	-	HM	1	ABR		RIM; R; SCRAP		10	42	0	0		
1386	IASH7	EVR	-	-	HM	1		D24	RIM; R; ?ANOTHER CARINATED EIA BOWL?		1	18	20	6	18	

SHERD ARCHIVE																
Context	Fabric	Rim	Body	Base	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve	Pub	Sample
1386	IASH7	-	U	-	HM	1			BS; R; MLIA		2	13	0	0		8
1386	IASH8	-	-	FLP	HM	1	ABR		BASE; R		1	79	0	0		
1386	IASH8	-	U	-	HM	1	ABR		BS; R		1	8	0	0		
1386	IASH9	-	U	-	HM; SCR	1			BS; IRF; MLIA		1	6	0	0		8
1386	IASH9	-	U	-	HM	1	CARBON DEP		BS; OX/R		1	15	0	0		
1388	IASH4	-	U	-	HM; B EXT; B INT	1			BS; R; SOME SPARSE GROG/CLAY PELLETS; RARE QU SPARSE FINE SHELL		1	6	0	0		
1392	IASH3	-	U	-	HM; SCR	1			BS; R		1	15	0	0		
1392	IASH7	-	U	-	HM	1	VAB		BS; IRF; SCRAPS		4	23	0	0		
1394	IASH1	-	U	-	HM	1	ABR		BS; IRF		1	7	0	0		
1396	IASH1	EB	-	-	HM	1			RIM; IRF; EITHER FLARED RIM OR APPLIED FOOTRING BASE		1	14	18	6		

SHERD ARCHIVE																
Context	Fabric	Rim	Body	Base	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve	Pub	Sample
1396	IASH7	FLEI	U	-	HM	1	ABR		RIM; IRF; BROADLY SIMILAR TO CUNLIFFE'S LONG WITTENHAM-ALLEN'S PIT GROUP FIG A:11 .8; WITH EXTENDED FLANGE INTERNALLY		2	55	22	4		
1396	IASH7	-	-	-		1		D25	RIM; IRF		1	32	20	4	23	
1396	IASH7	-	GLOB	-	HM	1	ATTRITION INT		BS; IRF		5	179	0	0		
1396	IASH7	-	GLOB	-	HM	1			BS; IRF		2	35	0	0		
1396	IASH7	-	U	-	HM	6			BS; IRF		6	64	0	0		
1398	IASH1	-	U	-	HM	2	ABR		BS; IRF		2	9	0	0		
1398	IASH1	-	U	-	HM	1	CARBON DEP INT		BS; IRF		1	14	0	0		
1398	IASH7	-	U	-	HM	1	VAB		BS; IRF		1	10	0	0		
1398	IASH9	-	U	-	HM	1			BS		1	12	0	0		
1401	IASH1	-	U	-	HM	1			BS; IRF		1	24	0	0		
1401	IASH1	RIE	GLOB/OV	-	HM; SCR	1			RIM; OX/R/OX; CRACKING TO RIM		1	26	0	2		

SHERD ARCHIVE																
Context	Fabric	Rim	Body	Base	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve	Pub	Sample
1401	IASH1	-	U	-	HM; SCR	1			BS; IRF		1	2	0	0		
1401	IASH9	-	U	-	HM; B	1			BS; R		1	11	0	0		
1401	IASH9	-	U	-	HM	1			BS; IRF		2	15	0	0		
1402	IAGROG1	-	U	-	HM	1	ABR		BS; IRF		1	10	0	0		
1402	IAGROG1	-	U	-	HM	1			BS; R		1	5	0	0		
1402	IAGROG1	-	U	-	HM	1			BS; R		2	33	0	0		
1402	IASH1	-	U	-	HM	27	ABR		BS; IRF		27	116	0	0		
1402	IASH1	-	U	-	HM	13	ABR		BS; IRF		13	54	0	0		
1402	IASH1	EVR	-	-	HM	1			RIM; R		1	3	0	2		
1402	IASH3	-	-	U	HM	1			BS; IRF		1	13	0	0		
1402	IASH3	-	U	-	HM	4			BS; IRF		4	20	0	0		
1402	IASH3	-	U	-	HM; SCR	1			BS; IRF		1	10	0	0		
1402	IASH3	-	U	-	HM	2			BS; IRF		2	26	0	0		
1402	IASH3	FD	-	-	HM	1			RIM; OX/R/OX		1	17	0	2		
1402	IASH3	-	U	FLP	HM	1			BASE; IRF		2	34	0	0		
1402	IASH3	-	-	FLP	HM	1			BASE; IRF		1	9	0	0		
1402	IASH4	-	U	-	HM	7			BS; IRF		7	44	0	0		

SHERD ARCHIVE															
Context	Fabric	Rim	Body	Base	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve	Pub	Sample
1402	IASH4	EVR	NB	-	HM; B EXT	1		D17	RIM; IRF; MODERATE TO FINE SHELL; SPARSE GROG UP TO 3MM; PATCH BLACK TO RED FIRING		5	51	20	7	21	
1402	IASH7	FRE	-	-	HM; FT	1		D16	RIM; R; ELSDON 1996a, C.6 PHASE 1 TOP LEFT		1	37	32	7	20	
1402	IASH7	-	U	-	HM; SCR	4			BS; IRF		4	69	0	0		
1402	IASH7	RD	GLOB/OV	-	HM	1			RIM; R		1	4	0	2		
2001	IASH1	FEI	GLOB	FLT	HM	1	ATTRITION INT		RIM BODY BASE; LARGE PROPORTION OF A SCORED WARE JAR; NOT POSSIBLE TO RECONSTRUCT PROFILE WITH CERTAINTY		22	1081	38	13		

SHERD ARCHIVE																
Context	Fabric	Rim	Body	Base	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve	Pub	Sample
2001	IASH2	-	OV	-	HM; SCR	1			BS SHLDR; R; DEEP SCORING		1	18	0	0		
2005	IASH1	-	U	-	HM; SCR	1	VAB		BS; OX/R; SCRAP		1	4	0	0		
2005	IASH1	-	U	-	HM	1	ABR		BS; OX		1	9	0	0		
2005	IASH3	-	U	-	HM; SCR	1	CARBON DEP		BS; OX/R; SCRAP		1	4	0	0		
2005	IASH3	-	U	-	HM; SCR	1			BS SCRAPS		3	4	0	0		
2005	IASH3	FEE	GLOB	-	HM; SCR; FS	1		D23	RIM; SCORED BODY; FINGER SLASHED RIM		1	107	30	7	24	
2005	IASH3	-	U	-	HM; SCR	1			BS; IRF		4	58	0	0		
2005	IASH4	EVR	NJ	FLT		1			RIM BASE; R; FULL FORM UNCLEAR BUT LARGE PROPORTION OF LATE LA TENE III JAR		32	282	18	5		
2005	IASH4	-	U	-	HM	3	ABR		BS; R; SCRAPS		3	7	0	0		
2005	IASH4	-	U	-	HM	1			BS; R; LIA		3	8	0	0		

SHERD ARCHIVE																
Context	Fabric	Rim	Body	Base	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve	Pub	Sample
2005	IASH6	-	U	FLP	HM	1			BASE		2	68	0	0		
2005	IASH6	-	U	-	HM; SCR	1			BS; IRF		1	12	0	0		
2005	IASH8	-	U	-		1	ABR		BS		1	14	0	0		
2005	IASH8	EB	NJ/NB	-	HM; FS	1			RIM; R; NEAT WITH SLASHED RIM TIP		1	4	16	5		
2007	IASH1	-	U	-	HM; SCR	1			BS; IRF		1	10	0	0		
2007	IASH1	-	U	-	HM; SCR	1			BS; R		1	11	0	0		
2007	IASH1	-	U	FLP	HM; SCR	1			BASE; R		2	16	0	0		
2007	IASH1	-	U	-	HM	7			BS; IRF		7	27	0	0		
2007	IASH3	-	U	-	HM; SCR	1			BS; IRF		1	7	0	0		
2007	IASH3	-	U	-	HM	17			BS; IRF		17	168	0	0		
2007	IASH3	-	U	-	HM; SCR	1			BS; OX/R		1	37	0	0		
2007	IASH3	-	U	-	HM	1	ABR		BS; OX/R		1	17	0	0		
2007	IASH3	-	U	-	HM	2			BS; IRF		2	33	0	0		
2007	IASH3	-	OV/GLOB	FLP	HM	1			BASE; IRF		2	63	0	0		
2007	IASH3	-	U	-	HM; SCR	1	ABR		BS; IRF		1	31	0	0		
2007	IASH3	-	-	FLP	HM	1			BASE; R		1	5	0	0		
2007	IASH3	-	-	U	HM	1	VAB		BS; IRF; POORLY MIXED ?EARLY FABRIC		1	27	0	0		
2007	IASH3	-	U	FLP	HM	1			BASE; OX/R		3	21	0	0		

SHERD ARCHIVE																
Context	Fabric	Rim	Body	Base	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve	Pub	Sample
2007	IASH3	-	U	-	HM; SCR	1	ABR		BS; R		1	17	0	0		
2007	IASH3	-	-	U	HM	1			BASE; IRF		1	18	0	0		
2007	IASH4	-	U	-	HM	6			BS; R		6	19	0	0		
2007	IASH4	-	GLOB	FTR	HM; B EXT	1	CARBON DEP INT; LEACHED INT	D09	BASE; R		3	99	0	0	25	
2007	IASH4	-	U	-	HM	1			BS; R		1	6	0	0		
2007	IASH4	-	U	-	HM	1			BS; R		1	5	0	0		
2007	IASH7	-	U	U	HM	1			BS; R		6	58	0	0		
2007	IASH7	-	-	FLP	HM	1			BS; R; NEATLY MADE; THIN 7-8 MM LOWER WALL; MLIA		1	84	0	0		20
2007	IASH7	-	U	-	HM	1			BS; NEAR NECK OF RIM; MLIA		1	32	0	0		20
2007	IASH7	-	U	-	HM; SCR	1			BS; R		1	4	0	0		
2007	IASH7	EB	OV	FLT	HM; SCR	1		D08	RIM TO LOWER WALL AND BASE; R; SLIGHT SHOULDER		10	323	16	20	27	
2007	IASH7	EVR	U	-	HM; SCR	1			RIM; R		1	11	16	7		

SHERD ARCHIVE																
Context	Fabric	Rim	Body	Base	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve	Pub	Sample
2007	IASH7	-	U	-	HM	1			BS; IRF		1	19	0	0		
2007	IASH7	EVR	-	-	HM	1			RIM; R		1	3	14	5		
2007	IASH7	EVR	NJ	-	HM; B EXT	1			RIM; R		1	6	14	3		
2007	IASH7	-	U	-	HM	8			BS; IRF; SCRAPS		8	11	0	0		
2007	IASH7	EVR	-	-	HM	1			RIM; R		2	21	14	10		
2007	IASH9	-	U	-	HM; SCR	1	ABR		BS; IRF		2	38	0	0		
2007	IASL1	-	U	-	HM; FT	1			BS; R; ?CARINATION		1	5	0	0		
2007	IASL1	EVR	OV?	-	HM; FS; FN	1		D10	RIM SHLDR; OX; FABRIC AS IASH7 WITH ADDITION OF COMMON FINE TO MODERATE SLAG; FINGERNAIL SLASHED/CABLED RIM WITH FINGERNAIL DECORATION BELOW RIM		1	23	14	7	26	

SHERD ARCHIVE																
Context	Fabric	Rim	Body	Base	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve	Pub	Sample
2009	IASH9	-	U	-	HM	1			BS; IRF		1	16	0	0		
2010	IASH4	-	U	FLP	HM	1	LEACHED SHELL INT		BASE; R		1	23	0	0		
2010	IASH9	-	U	-	HM; SCR	1			BS; R		5	40	0	0		
2010	IASH9	-	OV?	-	HM; SCR	1			BS; R		1	92	0	0		
2012	IASH1	-	U	-	HM; SCR	1			BS; IRF		1	9	0	0		
2012	IASH1	-	U	FLP	HM	1			BASE; IRF		10	52	0	0		
2012	IASH3	-	U	-	HM	1			BS; IRF		1	8	0	0		
2012	IASH7	-	U	-	HM; SCR	1			BS; IRF		1	11	0	0		
2012	IASH7	-	U	-	HM; SCR	1			BS; IRF		4	76	0	0		
2012	IASH7	-	U	-	HM; SCR	1			BS; R		3	25	0	0		
2012	IASH7	FRE	-	-	HM; FT	1		D20	RIM; R; FINGER TIPPED RIM		1	30	28	6	28	
2012	IASH7	-	GLOB	-	HM; SCR	1			BS; IRF		1	113	0	0		
2012	IASH9	EVR	-	-	HM	1			RIM; R		1	12	14	4		
2014	IASH7	-	GLOB/OV	-	HM; SCR	1	LEACHED SHELL INT		BS; IRF		1	55	0	0		
2016	IASH3	-	OV	FLT	HM; SCR	1			BASE; IRF		2	75	0	0		
2016	IASH3	-	U	-	HM	1			BS; IRF		1	23	0	0		
2016	IASH3	-	U	-	HM; SCR	2	ABR		BS; IRF		2	15	0	0		
2016	IASH3	-	U	-	HM; SCR	1			BS; IRF		2	15	0	0		
2016	IASH4	-	U	-	HM; B EXT	1			BS; R		1	10	0	0		
2016	IASH7	-	OV	-	HM; SCR	1			BS; IRF		1	39	0	0		

SHERD ARCHIVE																
Context	Fabric	Rim	Body	Base	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve	Pub	Sample
2016	IASH9	EVR	OV	-	HM; SCR	1			RIM; IRF		1	22	0	2		
2017	IASH1	-	-	FLP	HM	1			BASE; IRF		2	20	0	0		
2017	IASH1	EB	-	-	HM	1			RIM; IRF		1	5	16	4		
2017	IASH4	EVR	OV	-	HM; SC; FS	1		D29	RIM SHLDR; R; AS ASLOCKTON; SLASHED RIM		7	139	14	18	29	
2017	IASH7	-	GLOB	-	HM; SCR	7			BS; IRF		7	526	0	0		
2017	IASH7	-	U	-	HM	23			BS; IRF		23	67	0	0		
2017	IASH7	-	U	-	HM; SCR	1			BS; IRF		7	69	0	0		
2019	IASH1	-	U	-	HM	1			BS; IRF; VERY LARGE VESSEL		1	49	0	0		
2019	IASH7	-	U	-	HM	1			BS; IRF; POSS TRACES OF SCORING		1	19	0	0		
2019	IASH7	-	U	-	HM	1			BS; R		1	5	0	0		
2021	IASH4	-	U	-	HM; B EXT	1			BS; R; THIN WALLED		2	27	0	0		
2021	IASH4	-	U	-	HM; B EXT	1			BS; R		2	7	0	0		
2021	IASH4	EVR	NJ/NB	-	HM; B EXT	1			BS; R		1	3	10	3		
2021	IASH4	-	U	-	HM	1			BS; R		1	1	0	0		

SHERD ARCHIVE																
Context	Fabric	Rim	Body	Base	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve	Pub	Sample
2021	IASH9	-	U	-	HM	1			BS; R		1	8	0	0		
2021	IASH9	-	U	-	HM	2			BS; IRF		2	7	0	0		
2021	IASH9	-	U	-	HM; SCR	1			BS; IRF		1	17	0	0		
2021	IASH9	-	U	-	HM; SCR	1			BS; R		1	11	0	0		
2023	IASH1	-	U	-	HM	2			BS; IRF; SCRAPS		2	11	0	0		
2023	IASH1	-	U	-	HM; SCR	1			BS; IRF; SCRAPS		3	9	0	0		
2023	IASH1	-	U	-	HM; SCR	1			BS; IRF		1	12	0	0		
2023	IASH1	-	U	-	HM	1			BS; IRF; SCRAPS		2	12	0	0		
2023	IASH1	-	U	-	HM; SCR	1			BS; IRF		1	24	0	0		
2023	IASH1	-	U	-	HM; SCR	1			BS; R; SCRAPS		7	19	0	0		
2023	IASH1	-	U	-	HM	1	LEACHED SHELL INT		BS FLAKE		1	14	0	0		
2023	IASH1	-	U	-	HM; SCR	1			BS; R		3	16	0	0		
2023	IASH4	-	U	-	HM	1			BS; IRF		3	15	0	0		
2025	IASH1	-	U	-	HM; SCR	1	ABR		BS; IRF		3	11	0	0		
2025	IASH4	-	U	-	HM	1	ABR		BS; R		2	11	0	0		
2029	IASA4	-	U	-	HM	1			BS; R		1	3	0	0		
2029	IASH1	-	U	-	HM; SCR	1			BS; OX/R		11	53	0	0		
2029	IASH9	-	U	-	HM	1			BS; IRF		5	16	0	0		
2029	IASH9	-	U	-	HM; SCR	1			BS; OX/R		3	6	0	0		

SHERD ARCHIVE																
Context	Fabric	Rim	Body	Base	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve	Pub	Sample
2035	IASH5	-	GLOB/OV	FLP	HM; SCR	1			BS; IRF; FRAGMENTS AND CRUMBS		62	698	0	0		
2039	IASH7	-	GLOB	-	HM; SCR?/LAT	1			BS; R; SPARSE SCORING OR LATTICE APPEARS LIKELY MID IA OR LATER		4	53	0	0		
2039	IASH7	-	U	-	HM; FM	1			BS; IRF		1	26	0	0		
2039	IASH7	-	U	-	HM	1			BS; R; THICK WALL		2	20	0	0		
2041	IASH3	-	U	-	HM	1	ABR		BS; OX/R		1	6	0	0		
2041	IASH3	-	U	FLP	HM	1	ABR		BASE; R		1	5	0	0		
2041	IASH3	-	U	-	HM	1	ABR		BS; OX/R		1	12	0	0		
2049	FLCM	-	U	-	HM	1	VAB		BS; IRF; PALE BUFF COLOUR; ?EARLIER PREHISTORIC/BRONZE AGE		1	17	0	0		
2058	IAGROG1	-	U	FLP	HM	1			BASE; VEG MARKS? ON BASE		1	51	0	0		

SHERD ARCHIVE																
Context	Fabric	Rim	Body	Base	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve	Pub	Sample
2058	IASH7	-	U	-	HM	1	VAB		BS; IRF; SCRAPS		3	4	0	0		
2060	IASH1	-	U	FLP	HM	1	ABR		BS		1	19	0	0		
2060	IASH7	-	U	-	HM	1			BS; OX/R		1	5	0	0		
2060	IASH7	-	U	-	HM	1			BS; R; THIN WALLED		2	9	0	0		
2061	IASH7	-	U	-	HM	1	ABR		BS; IRF		2	6	0	0		
2063	IASH3	EB	OV	-	HM; SCR	1			RIM; IRF		2	61	12	9		
2063	IASH3	-	U	-	HM; SCR	1			BS; IRF		2	15	0	0		
2063	IASH4	-	U	-	HM	1			BS		1	11	0	0		
2063	IASH4	-	U	-	HM	2			BS; IRF		2	12	0	0		
2063	IASH4	-	NJ/NB	-	HM	1			RIM; IRF		4	20	20	6		
2063	IASH7	-	U	-	HM	1			BS; IRF		1	7	0	0		
2063	IASH7	-	U	-	HM	2	ABR		BS; IRF		2	39	0	0		
2063	IASH9	-	U	-	HM	2			BS; R		2	7	0	0		
2065	IASH1	-	-	FLT	HM; SCR	1			BASE; OX/R		5	247	0	0		
2065	IASH1	-	U	-	HM	1			BS; R		2	10	0	0		
2065	IASH7	-	U	-	HM; SCR	1			BS; R		2	45	0	0		

SHERD ARCHIVE																
Context	Fabric	Rim	Body	Base	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve	Pub	Sample
2065	IASH7	MCF	-	-	HM; INC	1		D?	RIM; R; CR EXAMPLES FROM QUARRY NEAR GRANTHAM AND SOUTH WITHAM (CLEAL 2000 FIG.25.65)		3	56	34	12		
2065	IASH9	-	U	-	HM	10			BS; IRF		10	77	0	0		
2087	IASA4	-	GLOB/OV	-	HM	1			BS; R		1	8	0	0		
2093	IASH3	-	U	-	HM	1	ABR		BS; IRF		3	6	0	0		
2107	IASH2	-	GLOB/OV	FLP	HM; SCR	1			BASE; IRF		2	57	0	0		
2107	IASH7	-	GLOB/OV	FLP	HM; SCR	1	LEACHED SHELL INT		BASE; IRF		6	160	0	0		
2109	IASH1	-	U	-	HM; SCR	2	ABR		BS; IRF		2	273	0	0		
2109	IASH1	-	U	-	HM; SCR	11	ABR		BS; IRF		11	158	0	0		
2109	IASH1	FEEI	GLOB/OV	-	HM	1			RIM; IRF		1	38	34	6		
2109	IASH1	-	-	FLP	HM; SCR	1			BASE; IRF		1	37	0	0		
2109	IASH1	-	U	-	HM	7			BS; IRF		7	58	0	0		
2109	IASH1	-	U	-	HM; SCR	1	ABR		BS; IRF		1	10	0	0		
2109	IASH3	-	U	-	HM; SCR	1	ABR		BS; IRF		1	15	0	0		
2109	IASH4	EVR	NJ/NB	-	HM	1			RIM; R		1	8	22	6		

SHERD ARCHIVE																
Context	Fabric	Rim	Body	Base	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve	Pub	Sample
2109	IASH7	RD	-	-		1		D28	RIM SHLDR; R; SLACK WITH SLIGHT SHOULDER; MONUMENT 97 ROLLO 2001, FIG. 32.7 UNSLASHED RIM		8	152	16	8	30	
2109	IASH7	-	U	-	HM	1			BS; IRF		3	44	0	0		
L1237	IASH9	-	U	-	HM	1			BS; IRF		2	13	0	0		

10.3 Appendix 3: Metalworking residue table

Context	Date	box no	Undiagnostic Slag		Iron Smelting slag		Iron Smithing slag		Fuel Ash Slag		Hearth Lining/Fired Clay		Iron Ore		Other		Description	Comments
			No	Wt(g)	No	Wt(g)	No	Wt(g)	No	Wt(g)	No	Wt(g)	No	Wt(g)	No	Wt(g)		
1031	IA - P3	1 of 3											1	14			iron ore	
1041	IA-P3	1 of 3											11	390			iron ore	
1049	IA-P3	1 of 3	1	14													undiagnostic slag	
1052	IA-P3	1 of 3											26	800			iron ore	if context is good retain for archive
1052	IA-P3	1 of 3											6	105			iron ore (possibly roasted)	if context is good retain for archive
1062	IA-P3	1 of 3											12	345			partly reduced ore	if context is good retain for archive
1063 - should be 1064	IA-P3	1 of 3											18	342			possible roasted ore with a pale grey outer surface	
1064	IA-P3	1 of 3											12	150			iron ore	
1064	IA-P3	1 of 3													1	5	limestone	
1074	Unphased	1 of 3	5	125													undiagnostic slag	
1074	Unphased	1 of 3											14	2190			iron ore	if context is good retain for archive
1076	LBA-EIA	1 of 3											1	10			undiagnositic slag	
1078	IA - P1/2	1 of 3													12	85	natural stone	

Context	Date	box no	Undiagnostic Slag		Iron Smelting slag		Iron Smithing slag		Fuel Ash Slag		Hearth Lining/Fired Clay		Iron Ore		Other		Description	Comments
1078	IA - P1/2	1 of 3											18	375			iron ore	
1078	IA - P1/2	1 of 3													1	5	limestone	
1088	IA-P3	1 of 3											1	2			iron ore	
1108	IA-P1/2	1 of 3											1	12			iron ore	
1110	IA-P3	1 of 3											4	24			iron ore	
1114	IA-P3	1 of 3	1	10													undiagnositic slag	
1116	IA - P4	1 of 3											4	240			iron ore	
1120	IA-P1/2	1 of 3							2	32							fuel ash slag	
1122	IA-P1/2	1 of 3											9	68			iron ore	
1127	IA-P3	1 of 3											6	84			iron ore	
1129	IA-P1/2	1 of 3											1	24			iron furnace slag	if context is good retain for archive
1131	IA-P2	1 of 3							5	30							possible fuel ash slag	
1131	IA-P2	1 of 3	1	2													undiagnostic slag	
1135	IA-P3	1 of 3											7	130			iron ore, one piece is roasted	
1135	IA-P3	1 of 3			2	115											possible iron furnace slags with partially reduced ore	if context is good retain for archive

Context	Date	box no	Undiagnostic Slag		Iron Smelting slag		Iron Smithing slag		Fuel Ash Slag		Hearth Lining/Fired Clay		Iron Ore		Other		Description	Comments
1137	IA-P3	1 of 3											31	980			iron ore	
1137	IA-P3	sample 2	12	135													undiagnostic/probable furnace slags	
1137	IA-P3	sample 2											2	135			possible roasted iron ore	
1139	IA-P3	1 of 3											4	32			iron ore	
1140	IA-P3/4	1 of 3											6	412			iron ore	
1146	IA-P1	1 of 3											13	223			iron ore	if context is good retain for archive
1146	IA-P1	sample 3	11	160													undiagnostic/probable furnace slags	
1148	IA-P2	1 of 3							23	80							fuel ash slag	
1148	IA-P2	1 of 3	3	85													undiagnostic slag like residue	
1148	IA-P2	1 of 3											2	30			iron ore	
1148	IA-P2	1 of 3													1	10	iron ore	
1148	IA-P2	sample 4											11	215			undiagnostic slag, possible furnace slag	
1148	IA-P2	sample 4							3	15							fuel ash slag	
1148	IA-P2	sample 4											17	370			iron ore, 3 pieces roasted	
1152	IA-P3	1 of 3	6	84													undiagnostic slag	

Context	Date	box no	Undiagnostic Slag		Iron Smelting slag		Iron Smithing slag		Fuel Ash Slag		Hearth Lining/Fired Clay		Iron Ore		Other		Description	Comments
1159	IA-P3b	1 of 3											9	830			partially roasted and unroasted iron ore	if context is good retain for archive
1164													67	6635			iron ore (possibly roasted)	
1171	M-LIA P1/2	1 of 3							4	4							fuel ash slag	
1175	IA-P3	1 of 3											11	325			iron ore	
1179	IA-P3b	1 of 3											6	215			iron ore	
1179	IA-P3b	1 of 3													1	3	limestone	
1180	IA-P3b	1 of 3			1	85											slag contains partially reduced ore	if context is good retain for archive
1180	IA-P3b	1 of 3											1	1260			large piece of roasted ore	photographed
1182	IA-P3a	1 of 3											11	585			iron ore, one piece is roasted	
1187	IA-P1	1 of 3											9	100			iron ore	
1190	IA-P1	1 of 3											8	235			iron ore	
1193	IA-P3	1 of 3	1	20													undiagnostic/possible iron smelting slag	
1193	IA-P3	1 of 3											40	2050			iron ore	
1201	IA-P2	1 of 3	3	45													undiagnostic slag	
1201	IA-P2	1 of 3													1	115	natural sandstone	

Context	Date	box no	Undiagnostic Slag		Iron Smelting slag		Iron Smithing slag		Fuel Ash Slag		Hearth Lining/Fired Clay		Iron Ore		Other		Description	Comments
1201	IA-P2	1 of 3							1	4							possible fuel ash slag	
1201	IA-P2	1 of 3													1	2	fragment of burnt bone	
1201	IA-P2	sample 11											6	35			roasted iron ore	
1203	IA-P1	1 of 3											10	345			weathered and/or roasted iron ore	
1203	IA-P1	1 of 3									1	10					fired clay, could be from furnace or structural	if context is good retain for archive
1203	IA-P1	1 of 3	4	50													undiagnostic/possible iron smelting slag	
1205	IA-P2	2 of 3											54	2290			undiagnostic slag containing some pieces of unreduced ore	if context is good retain for archive
1205	IA-P2	2 of 3							4	25							fuel ash slag	
1207	IA-P2	2 of 3							6	50							fuel ash slag	
1209	IA-P3b/4	2 of 3											35	1150			iron ore, possibly roasted	
1209	IA-P3b/4	2 of 3							1	3							fuel ash slag	
1213	IA-P1	2 of 3							7	20							fuel ash slag	
1215	IA-P3a	sample 6											18	95			iron ore	
1216	IA-P3a	2 of 3											1	23			iron ore	
1216	IA-P3a	2 of 3							3	21							fuel ash slag	

Context	Date	box no	Undiagnostic Slag		Iron Smelting slag		Iron Smithing slag		Fuel Ash Slag		Hearth Lining/Fired Clay		Iron Ore		Other		Description	Comments
1220	IA-P3b	2 of 3											17	2280			iron ore, some possibly roasted. Five fragments appear to have originally been one piece but as edges are abraded it is not freshly broken	if context is good retain for archive *** analysis
1220	IA-P3b	2 of 3													1	7	possible roasted limestone	
1220	IA-P3b	sample 5											9	240			undiagnostic/probable furnace slags	
1220	IA-P3b	sample 5							1	2							fuel ash slag	
1223	IA-P3a	2 of 3											1	10			iron ore	
1223	IA-P3a	2 of 3							4	25							fuel ash slag	
1233	IA-P3a	2 of 3											1	985			iron ore, possibly roasted and/or weathered	if context is good retain for archive *** analysis
1235	Unphased	2 of 3											4	80			roasted iron ore	
1241	IA-P3b	2 of 3													4	290	natural sandstone	
1241	IA-P3b	2 of 3											3	380			probable roasted iron ore	if context is good retain for archive
1247	IA-Ph3b/4	sample 7											59	715			iron ore, two pieces roasted	
1255	IA-Ph3b/4	2 of 3							2	4							fuel ash slag	
1258	IA-P2	2 of 3							5	25							fuel ash slag	
1266	IA-PH2/3	2 of 3	1	15									2	40			iron ore	if context is good retain for archive

Context	Date	box no	Undiagnostic Slag		Iron Smelting slag		Iron Smithing slag		Fuel Ash Slag		Hearth Lining/Fired Clay		Iron Ore		Other		Description	Comments
1270	IA-P1/2	sample 13											5	60			iron ore	
1270	IA-P1/2												2	180			iron ore, possibly roasted and/or weathered	retain for archive if context is good
1301	IA-P3a	2 of 3											7	1680			iron ore, some roasted.	if context is good retain for archive
1302	IA-P3a	2 of 3											1	215			iron ore, possibly roasted and/or weathered	
1309	IA-P3a	2 of 3											3	120			iron ore	
1309	IA-P3a	2 of 3							1	5							fuel ash slag	
1310	IA-P3b	2 of 3	1	235													undiagnostic residue, possibly smelting slag	
1310	IA-P3b	2 of 3											3	355			iron ore	
1310	IA-P3b	2 of 3							4	20							fuel ash slag, one piece highly vescular	
1312	IA-P3b	2 of 3											3	65			iron ore	
1382	IA-P3a	sample 9											11	145			iron ore	
1383	IA-P3a	sample 9											22	670			iron ore, possibly roasted and/or weathered	
1382	IA-P3a	sample 9			1	5											fuel ash slag	
1383	IA-P3a	2 of 3											2	160			iron ore	
1386	Poss MIA?	sample 8											23	1055			iron ore, four pieces possibly roasted	

Context	Date	box no	Undiagnostic Slag		Iron Smelting slag		Iron Smithing slag		Fuel Ash Slag		Hearth Lining/Fired Clay		Iron Ore		Other		Description	Comments
1386	IA-P3a	sample 8									1	20					fired clay, possibly furnace lining	if context is good retain for archive
1388	IA - P3b	sample 10											8	145			iron ore	
1392	M-LIA - P3b	2 of 3			6	1280											iron furnace smelting bottom containing pieces of unreduced ore	if context is good retain for archive
1392	M-LIA - P3b	2 of 3											6	1270			iron ore	
1398	unphased	2 of 3											3	690			roasted iron ore, may have originally been one piece.	
1402	IA-Ph3b	sample 14											4	60			iron ore	
1402													10	7180			possible roasted iron ore	photographed
1402													1	3840			unusally shaped piece of iron ore (nodular ore?)	
1402					3	40											smelting run slag	
1402					1	65											smelting/furnace slag	
2007	M-LIA - P3	2 of 3			1	82											furnace run slags	if context is good retain for archive
2027	Ph3	2 of 3			13	960											furnace run slags	if context is good retain for archive
2027	Ph3	2 of 3			3	990											furnace slag	if context is good retain for archive
2031	Ph3	2 of 3			6	730											furnace run slags	if context is good retain for archive

Context	Date	box no	Undiagnostic Slag		Iron Smelting slag		Iron Smithing slag		Fuel Ash Slag		Hearth Lining/Fired Clay		Iron Ore		Other		Description	Comments
2035	Ph3	2 of 3			6	3580											possible iron furnace bottom slags, at least 3 appear to have limestone inclusions in them	if context is good retain for archive *** analysis
2035	Ph3	2 of 3			1	175											furnace run slags	if context is good retain for archive
2039	MLIA - P3	3 of 3			2	150											smelting/furnace slag	if context is good retain for archive
2039	MLIA - P3	3 of 3			2	115											furnace run slags	if context is good retain for archive
2041	IA - P3	3 of 3			7	1930											smelting/furnace slag	if context is good retain for archive
2043	IA - P3	3 of 3	3	25													undiagnostic slag or possible fuel ash slag	
2045	P3	3 of 3			1	15											furnace run slag	if context is good retain for archive
2049											3	820					slagged furnace lining	
2049					87	5710											smelting run slag	
2049					79	8000											smelting slag	
2049													14	955			iron ore	
2049			27	540													undiagnostic slag	
2051	P3	3 of 3	2	95													probable furnace slags	
2051	P3	3 of 3			1	105											furnace run slags	if context is good retain for archive

Context	Date	box no	Undiagnostic Slag		Iron Smelting slag		Iron Smithing slag		Fuel Ash Slag		Hearth Lining/Fired Clay		Iron Ore		Other		Description	Comments
2052							1	800									plano convex slag, possible smithing hearth bottom	retain for archive if context is good
2052					29	757											smelting run slag	retain for archive if context is good
2052					30	4680											smelting slag	retain for archive if context is good
2052			9	495													undiagnostic pourous slag, possilby smelting	retain for archive if context is good
2052											4	1390					slagged furnace lining	retain for archive if context is good
2052													2	1830			originally one piece of unroasted iron ore	retain for archive if context is good
2054	P3	3 of 3			4	205											furnace slags	
2056	P3	3 of 3											1	25			iron ore	
2056	P3	3 of 3			7	60											furnace run slag	
2056	P3	3 of 3			10	775											probable furnace slags	
2058	IA - P3	sample 22			62	4480											smelting slag	if context is good retain for archive
2058	IA - P3	sample 22			155	5525											furnace run slags	if context is good retain for archive
2058											18	1690					possible slagged furnace lining	
2058													30	180			iron ore	

Context	Date	box no	Undiagnostic Slag		Iron Smelting slag		Iron Smithing slag		Fuel Ash Slag		Hearth Lining/Fired Clay		Iron Ore		Other		Description	Comments
2058					26	370											furnace slag	
2060	IA - P3	3 of 3			2	70											furrnace run slags	
2060	IA - P3	3 of 3	4	90													undiagnostic/probable iron production slags	
2060	IA - P3	3 of 3									1	10					slagged hearth/furnace lining	if context is good retain for archive
2060	IA - P3	3 of 3					2	390									fragment of possible smithing hearth bottom	If context is good retain 2060 for site archive
2063					131	4720											smelting run slag	
2063													35	1280			iron ore	
2063											18	1260					slagged hearth/furnace lining	
2063					112	8720											smelting slag	
2070	P3	3 of 3													12	75	compacted orange sand	if context is good retain for archive
2072	P3?	3 of 3			1	65											furnace run slag	if context is good retain for archive
2073		sample 17													1	450	bag of damp sandy soil with possible fragments of trodden floor surface	
2073		sample 17											1	14			fragment of possible roasted and/or weathered ore	
2081	P3	3 of 3			6	280											furnace run slag	

Context	Date	box no	Undiagnostic Slag		Iron Smelting slag		Iron Smithing slag		Fuel Ash Slag		Hearth Lining/Fired Clay		Iron Ore		Other		Description	Comments
2083	P3	3 of 3			3	595											furnace slag	
2083	P3	3 of 3			4	160											furnace run slag	if context is good retain for archive
2087	IA - P3	3 of 3			7	310											furnace slag	2087 could form a subsample for museum curation depending on the context
2087	IA - P3	3 of 3			11	760											furnace run slags	if context is good retain for archive
2087	IA - P3	3 of 3	2	35													undiagnostic slag with traces of vitrified clay	
2087	IA - P3	3 of 3													4	85	honeycomb, highly vesicular, probable furnace slag or fuel ash slag	if context is good retain for archive
2091	P3	3 of 3			12	1130											furnace slag	if context is good retain for archive
2091	P3	3 of 3			4	540											furnace run slags	
2093	IA - P3	3 of 3			3	405											furnace slag	
2093	IA - P3	3 of 3											3	210			iron ore	
2095	P3	3 of 3			3	170											furnace run slag	If context of 2095 is good retain as subsample for archive
2095	P3	3 of 3											11	740			iron ore	

Context	Date	box no	Undiagnostic Slag		Iron Smelting slag		Iron Smithing slag		Fuel Ash Slag		Hearth Lining/Fired Clay		Iron Ore		Other		Description	Comments
2095	P3	3 of 3			3	220											possible furnace slag	
2099	P3	3 of 3	2	60													undiagnostic/probable iron production slags	
2099	P3	sample 23											8	140			iron ore	
2101	P3	3 of 3											17	1550			iron ore	
2101	P3	3 of 3			1	115											possible furnace slag	if context is good retain for archive
2103	P3	3 of 3	1	30													undiagnostic slag	
2103	P3	3 of 3											1	35			iron ore	
2113	P3	3 of 3			9	295											furnace slag	if context is good retain for archive
2113	P3	sample 24											18	105			undiagnostic/probable furnace slags	
2115	P3	3 of 3	17	340													undiagnostic/probable furnace slags	retain for archive if context is good
2115	P3	3 of 3											12	140			possible roasted and/or weathered iron ore	retain for archive if context is good
			117	**2,690**	**858**	**59,539**	**3**	**1,190**	**76**	**365**	**46**	**5,200**	**887**	**53,699**	**40**	**1,132**		

10.4 Appendix 4: OASIS form

OASIS ID: wessexar1-271360

Project details

Project name	Stamford West, Lincolnshire
Short description of the project	Wessex Archaeology undertook a programme of archaeological excavation on land at Exeter Down, Stamford, Lincolnshire, prior to a mixed-use development. Two separate excavation areas were opened up. Within Area 1, the remains comprised a sequence of three roundhouses, the latest of which was set within a ditched enclosure. Ceramic and radiocarbon dating evidence indicate the settlement was occupied during the Early and Middle Iron Age. By the Late Iron Age, occupation appears to have ceased, and an arrangement of field boundary ditches suggests a purely agricultural use for the land instead. Area 2 contained two small iron smelting furnaces and a cluster of pits. Evidence suggests that the furnaces date to the Early to Middle Iron Age, and represent localised small-scale iron production. Evidence of ironworking is known from the vicinity of the Site, but the remains found at Stamford West appear to be a notably early manifestation of the technology. A general absence of diagnostic smithing slag and residues suggest this process occurred elsewhere. Although the furnaces were poorly preserved, their morphology suggests they were of the bowl type; if correct this would be of some significance for the understanding of the development of ironworking technology. Animal bone from the settlement indicates an unusually even proportion of cattle and sheep when compared with regional norms. The overall picture is of have been mixed and non-specialised agriculture. Environmental remains suggest cereal cultivation and grassland, field margins/hedgerows, waste ground, arable and oak and hazel woodland in the wider environment.
Project dates	Start: 21-07-2014 End: 16-10-2014
Previous/future work	Yes / No
Any associated project reference codes	104280 - Contracting Unit No.
Any associated project reference codes	S12/0864 - Planning Application No.
Type of project	Recording project
Current Land use	Cultivated Land 3 - Operations to a depth more than 0.25m
Monument type	ROUND HOUSE Early Iron Age
Monument type	ROUND HOUSE Middle Iron Age
Monument type	ENCLOSED HUT CIRCLE SETTLEMENT Middle Iron Age
Monument type	METAL PRODUCTION FURNACE Middle Iron Age
Monument type	DITCH Late Iron Age
Monument type	PIT Middle Iron Age
Significant Finds	SLAG Middle Iron Age
Significant Finds	POT Early Iron Age
Significant Finds	POT Middle Iron Age

Significant Finds	ANIMAL BONE Iron Age
Investigation type	"Full excavation","Open-area excavation"
Prompt	Direction from Local Planning Authority - PPS

Project location

Country	England
Site location	LINCOLNSHIRE SOUTH KESTEVEN STAMFORD Stamford West
Postcode	PE9 2RS
Study area	2 Hectares
Site coordinates	TF 0100 0710 52.651858376 -0.506809364421 52 39 06 N 000 30 24 W Point
Height OD / Depth	Min: 63m Max: 67m

Project creators

Name of Organisation	Wessex Archaeology
Project brief originator	with advice from County Archaeologist
Project design originator	CgMs Consulting
Project director/manager	Chris Swales
Project supervisor	Sam Fairhead
Type of sponsor/funding body	Developer
Name of sponsor/funding body	Taylor Wimpey

Project archives

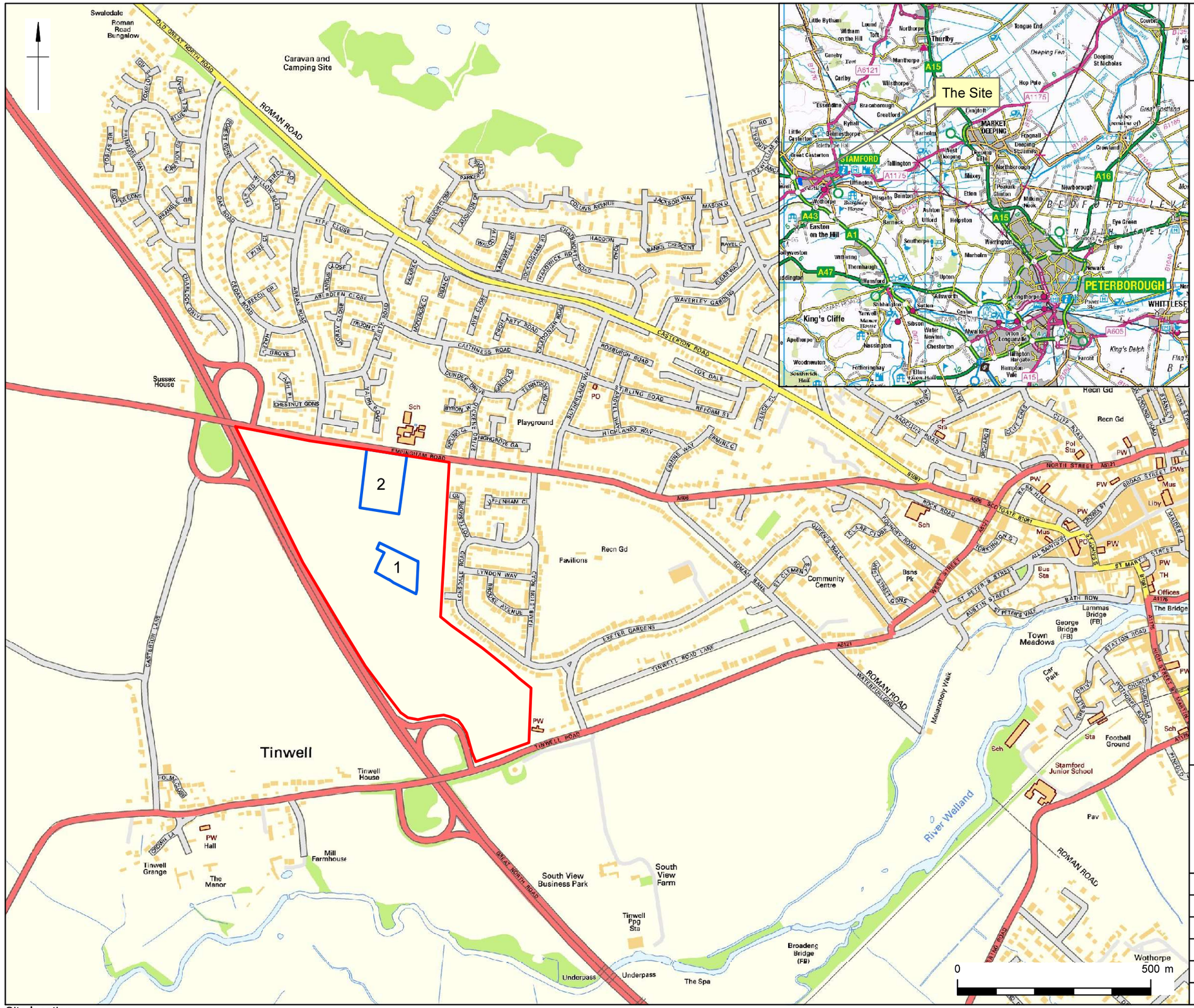
Physical Archive recipient	The Collection (Lincolnshire)
Physical Archive ID	LCNCC:2014.91
Physical Contents	"Animal Bones","Ceramics","Industrial"
Digital Archive recipient	The Collection (Lincolnshire)
Digital Archive ID	LCNCC:2014.91
Digital Contents	"Animal Bones","Ceramics","Industrial","Stratigraphic","Survey"
Digital Media available	"Images raster / digital photography","Spreadsheets","Survey","Text"
Paper Archive recipient	The Collection (Lincolnshire)
Paper Archive ID	LCNCC:2014.91
Paper Contents	"Stratigraphic"

Paper Media available	"Context sheet","Drawing","Photograph","Plan","Report","Section"

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	Stamford West
Author(s)/Editor(s)	Weston, P
Other bibliographic details	104281
Date	2017
Issuer or publisher	Wessex Archaeology
Place of issue or publication	Sheffield
Description	c. 150 page comb-bound report with colour plates and figures.

Entered by	Patrick Daniel (p.daniel@wessexarch.co.uk)
Entered on	15 December 2016



Site

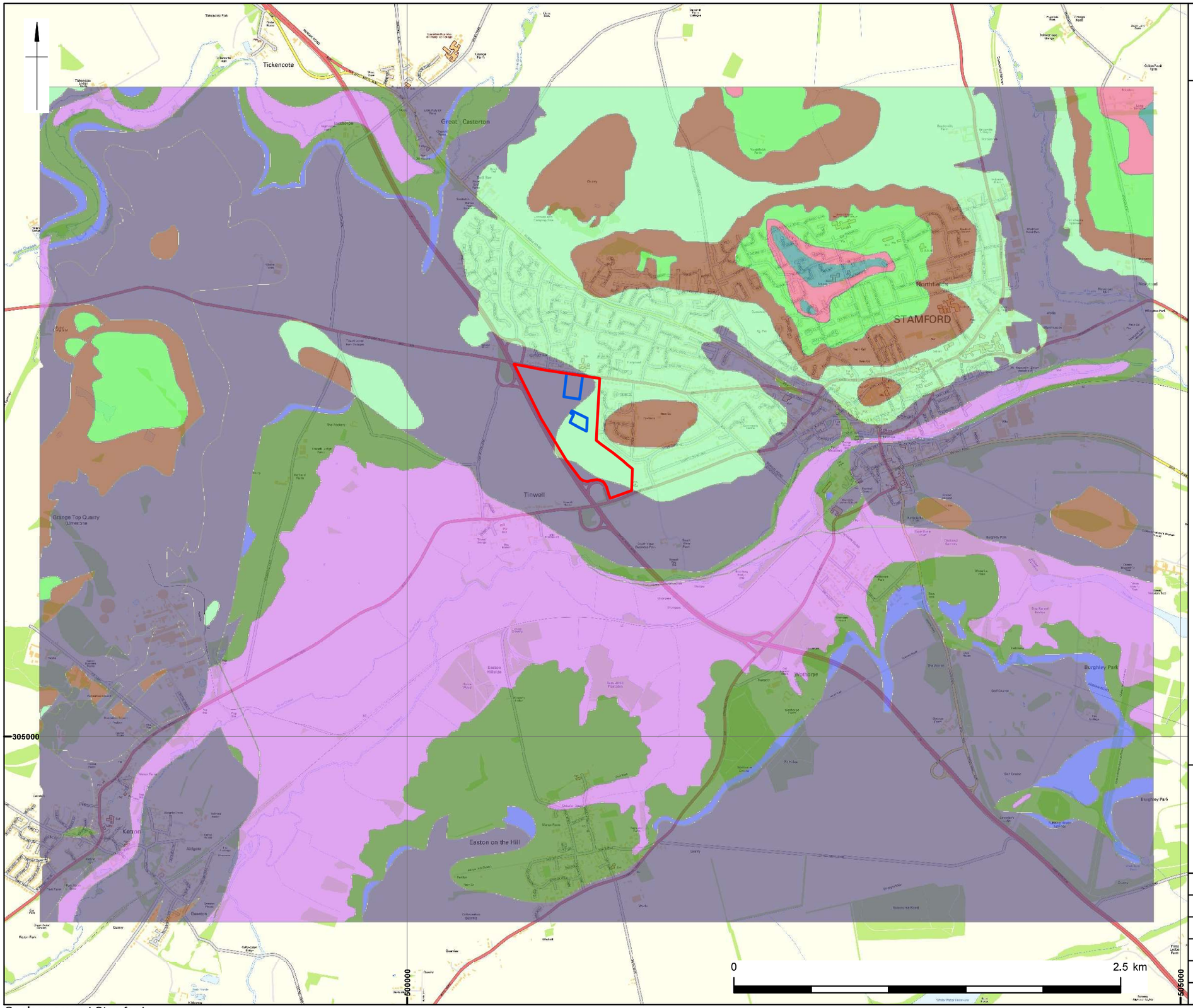
Excavated Areas

Date:	15/12/2016
Revision Number:	0
Scale:	1:10,000 at A3
Illustrator:	AR/ND
Path:	Y:\Projects\104281\Graphics Office

\Rep figs\ECR\2016_12_19\GIS\FigsMXD

Site location

Figure 1



Site

Excavated Areas

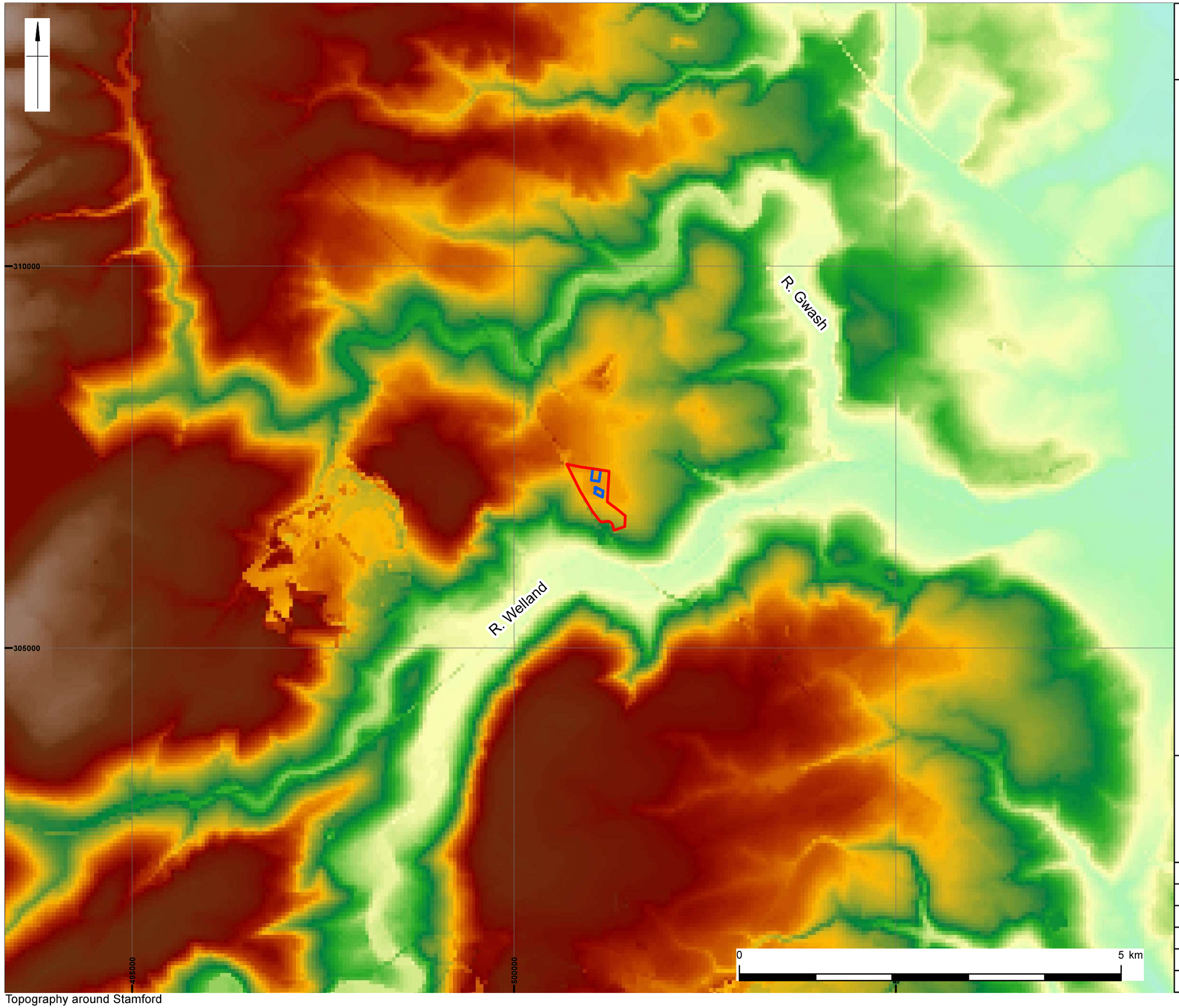
Bedrock

- BLISWORTH CLAY FORMATION - MUDSTONE
- BLISWORTH LIMESTONE FORMATION - LIMESTONE
- CORNBRASH FORMATION - LIMESTONE
- GRANTHAM FORMATION - SANDSTONE, SILTSTONE AND MUDSTONE
- LOWER LINCOLNSHIRE LIMESTONE MEMBER
- LOWER LINCOLNSHIRE LIMESTONE MEMBER - LIMESTONE
- NORTHAMPTON SAND FORMATION - IRONSTONE, OOIDAL
- RUTLAND FORMATION - ARGILLACEOUS ROCKS WITH SUBORDINATE SANDSTONE AND LIMESTONE
- UPPER LINCOLNSHIRE LIMESTONE MEMBER - LIMESTONE
- WHITBY MUDSTONE FORMATION - MUDSTONE

Date:	15/12/2016
Revision Number:	0
Scale:	1:25,000 at A3
Illustrator:	AR/ND
Path:	Y:\Projects\104281\Graphics
Office\Rep figs\ECR\2016_12_19\GIS\FigsMXD	

Geology around Stamford

Figure 2



Site

Excavated Areas

Topography

High : 141.8m

Low : 6.7m

Date:	15/12/2016
Revision Number:	0
Scale:	1:50,000 at A3
Illustrator:	AR/ND
Path:	Y:\Projects\104281\Graphics Office\Rep figs\ECR\2016_12_19\GIS\FigsMXD

Topography around Stamford

Figure 3

Site

Excavated Areas

Date:	15/12/2016
Revision Number:	0
Scale:	1:20,000 at A3
Illustrator:	AR/ND
Path:	Y:\Projects\104281\Graphics
	Office\Rep figs\ECR\2016_12_19\GIS\FigsMXD

Stamford LiDAR Hillshade

Figure 4

Cropmark shown on NLAP photograph
Cropmark shown on NMP plot
County, municipal and parish boundary from OS 1:10560 map of 1889

Composite plot of cropmarks derived from all photographs inspected

2011 Geophysical survey results

Magnotometer survey area
Positive anomaly
Agricultural
Geological
Ferrous response
Magnetic disturbance

2
3
4
5
6
7

2013 Evaluation trenches

1 Magnotometer survey area

2014 Geophysical survey results

Magnotometer survey area
Positive anomaly
Geological
Ferrous response
Magnetic disturbance
Trend

Site boundary
Archaeological feature

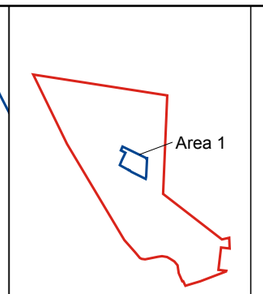
0 50 m

Date:	03/03/2017	Revision Number:	0
Scale:	All windows - 1: 2500 @ A3	Illustrator:	APS/ND
Path:	Y:\Projects\104281\Graphics Office\Rep figs\ECR\2016_12_19		

Previous geophysical survey and excavation data

Figure 5

Phase 1: Early Iron Age



Phase 2: Early Iron Age

Phase 3: Early to Middle Iron Age

Phase 4: Middle to Late Iron Age

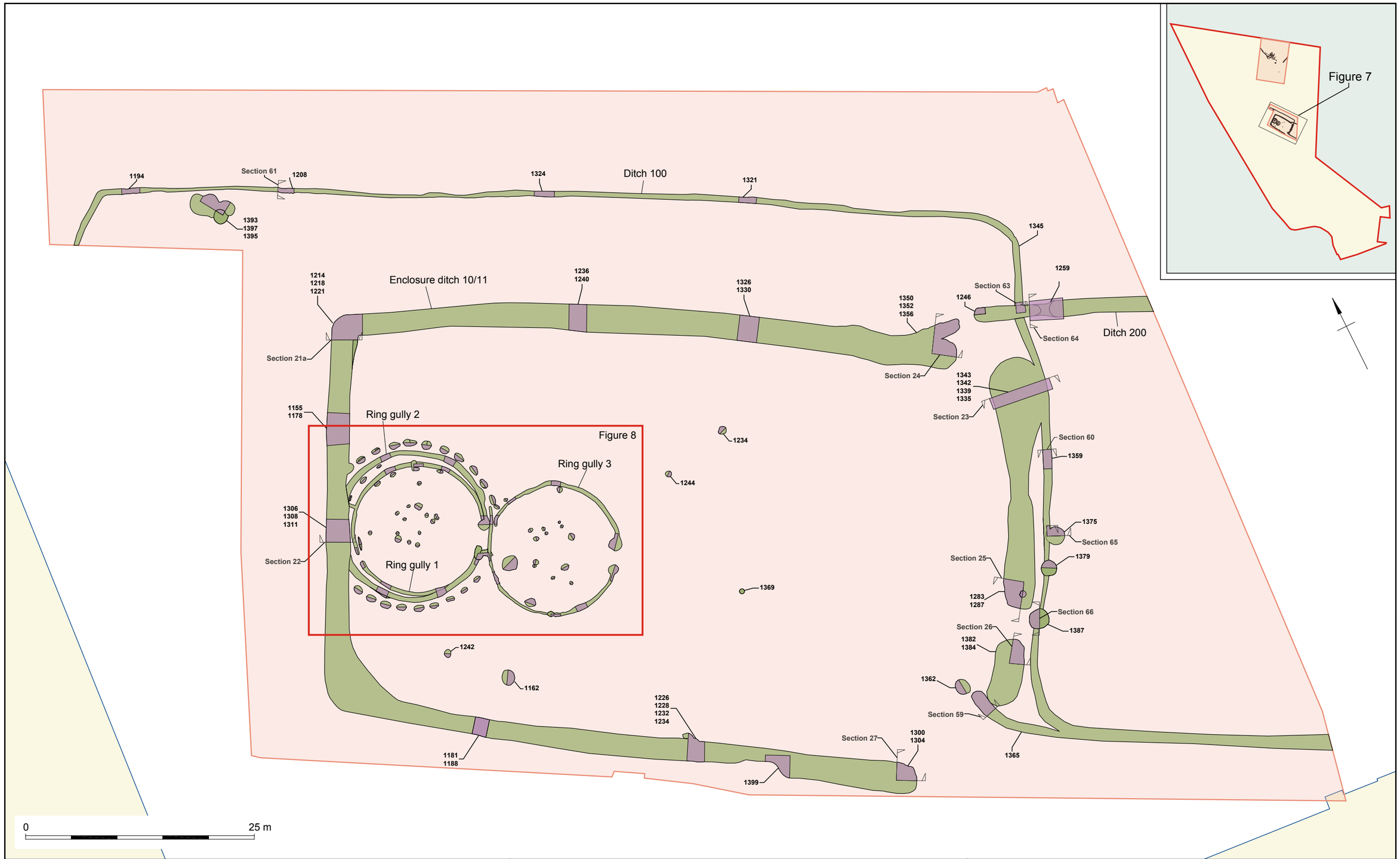
Coordinate system:
OSGB36 (OSTN15/OSGM15)

0 50 m

Date:	07/03/2017	Revision Number:	0
Scale:	1:800 @ A3	Illustrator:	ND/ APS
Path:	Y:\PROJECTS\104281 Sheffield project\Graphics_Office\Rep figs\ECR\2016_12_19		

Phase plans of Iron Age settlement in Area 1

Figure 6



Excavation area
Archaeological feature
Excavated slot

Date:	03/03/2017	Revision Number:	0
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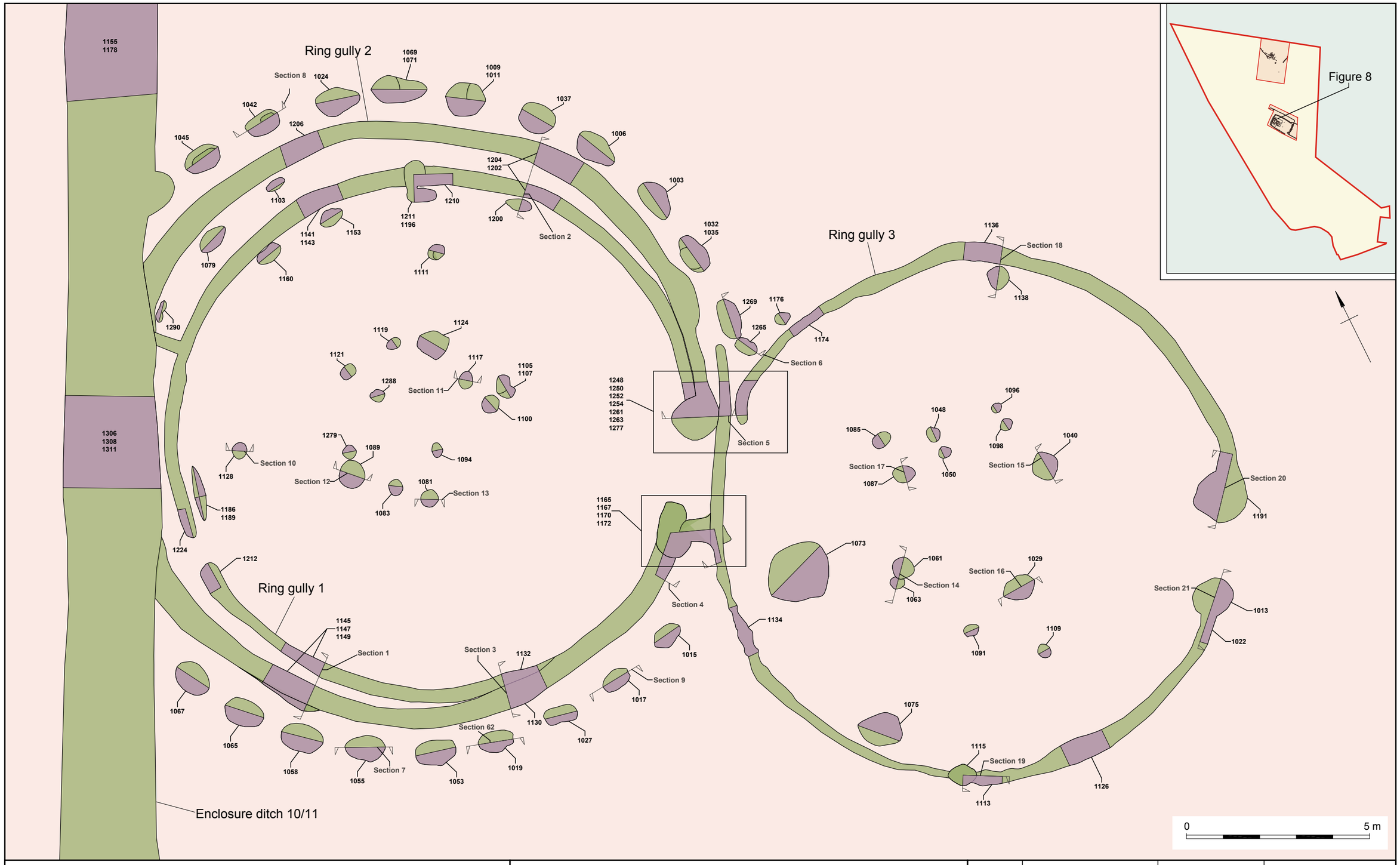
Path:	Y:\Projects\104281\Graphics Office\Rep figs\ECR\2016_12_19		

Plan of Area 1

Figure 7



0 5 m

Excavation area
Excavated slot
Archaeological feature

Date:	07/03/2017	Revision Number:	0
Scale:	Main graphic - 1: 100 @ A3	Illustrator:	APS/ND
Path:	Y:\PROJECTS\104281 Sheffield project\Graphics_Office\Rep figs\ECR\2016_12_19		

Plan of roundhouses in Area 1

Figure 8

Figure 9

Figure 10

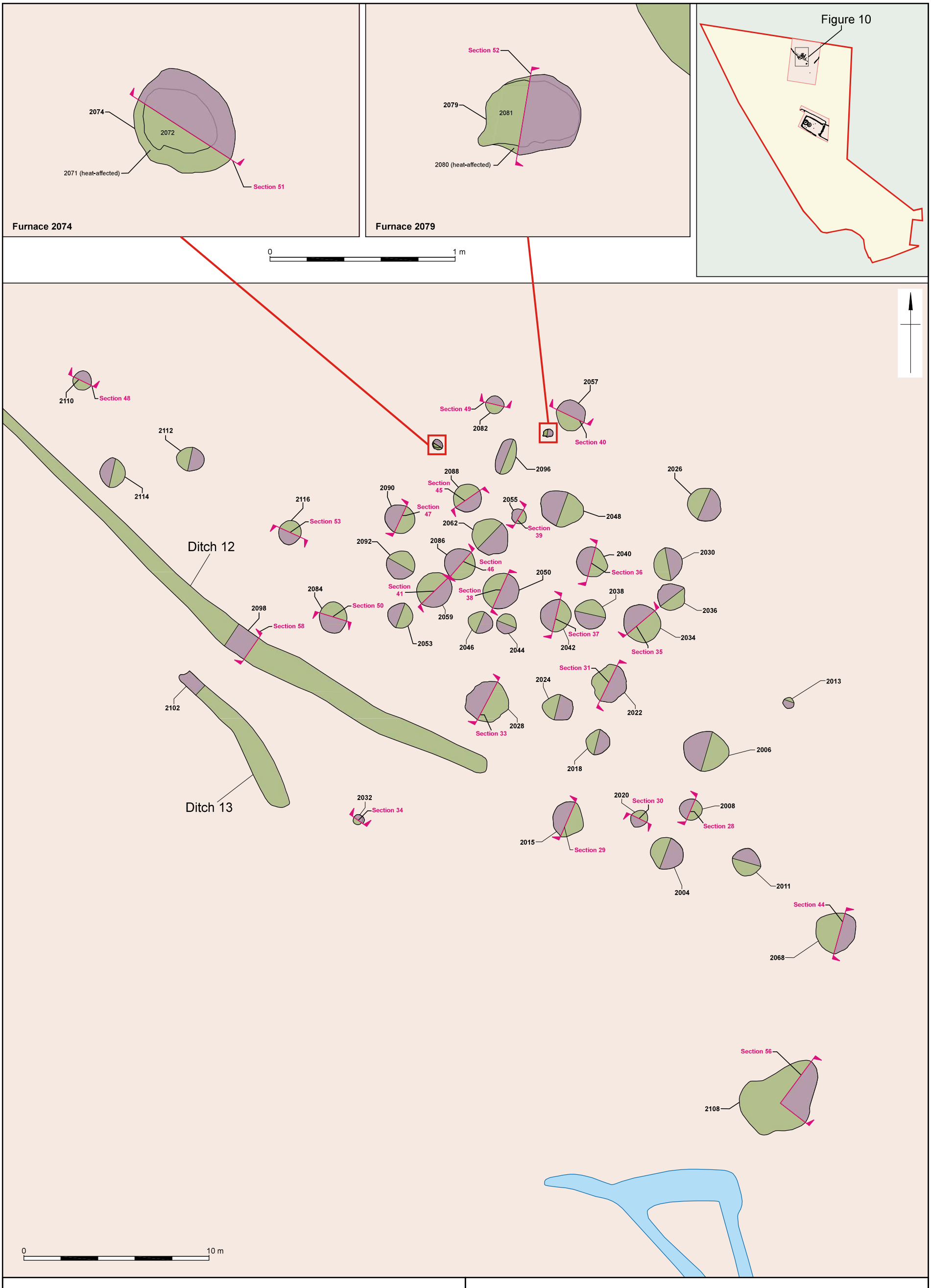
Section 54
2100
2094
Ditch 12
Ditch 13
2077
2075
Section 42
Ditch 14
2106
2104
Section 57
2118
2120
2123
Section 43
2066
2064
2126
Section 55
0 1 m
0 10 m

Excavation area
Archaeological feature
Excavated slot
Fluvial channels

Date:	16/12/2016	Revision Number:	0
Scale:	Main graphic - 1: 500 @ A3 Inset - 1: 25 @ A3	Illustrator:	APS/ND
Path:	Y:\Projects\104281\Graphics Office\Rep figs\ECR\2016_12_19		

Plan of Area 2

Figure 9



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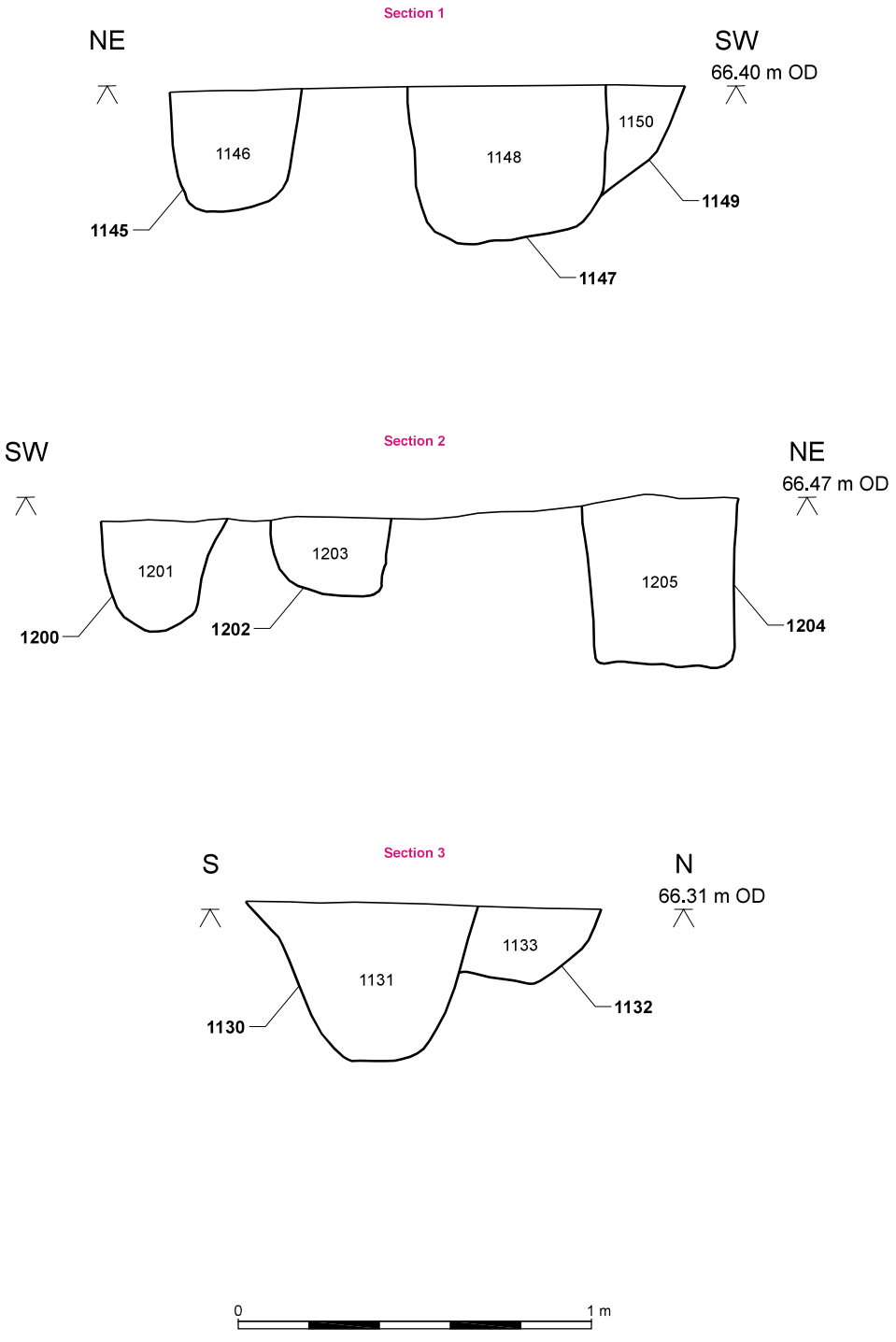
Scale:	Main graphic - 1: 200 @ A3 Insets - 1: 20 @ A3	Illustrator:	APS/ND
Path:	Y:\Projects\104281\Graphics Office\Rep figs\ECR\2016_12_19		

Plan of furnaces and pits in Area 2

Figure 10



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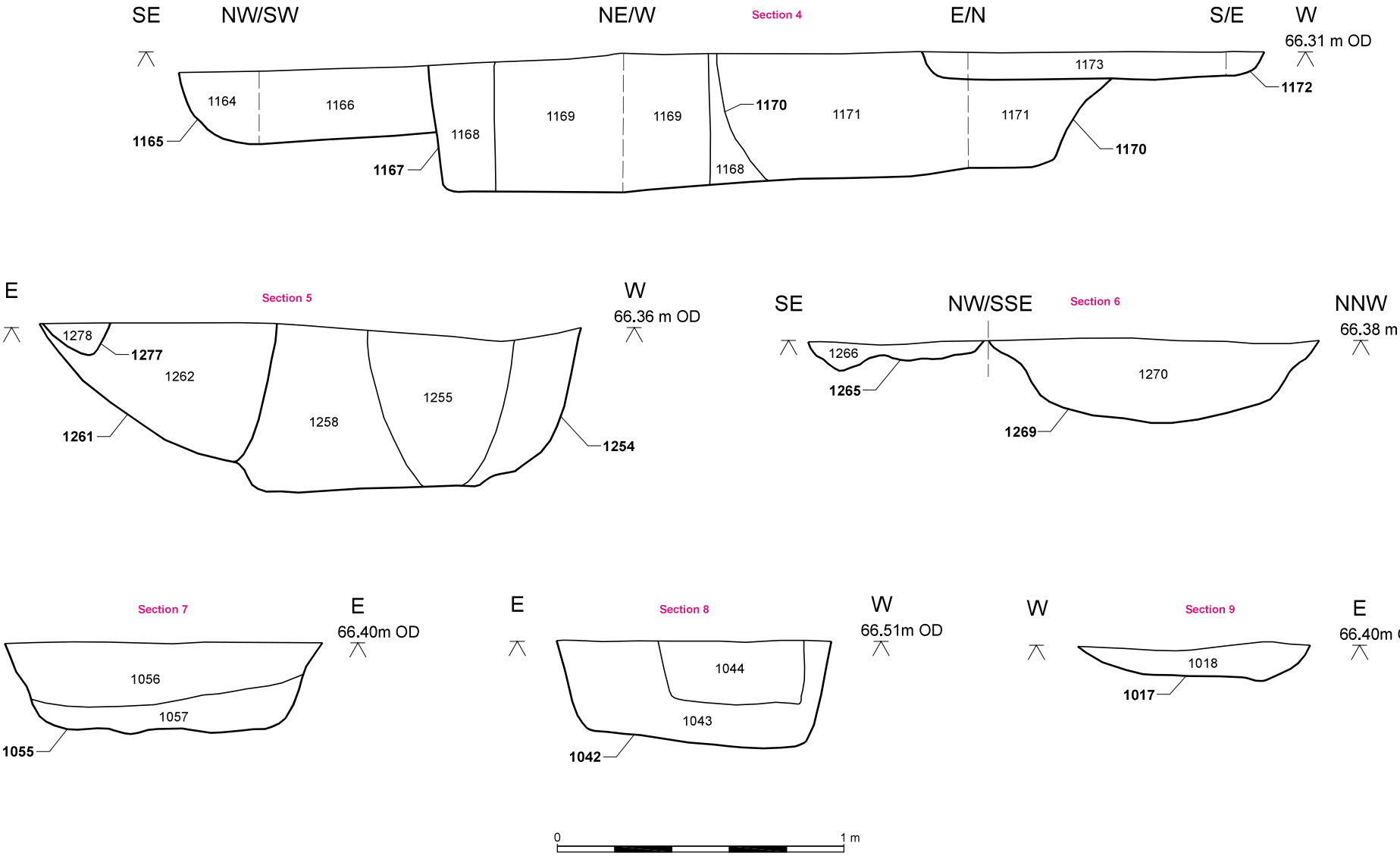
Path:	Y:\Projects\104281\Graphics Office\Rep figs\ECR\2016_12_19		

Sections across ring gullies 1 and 2

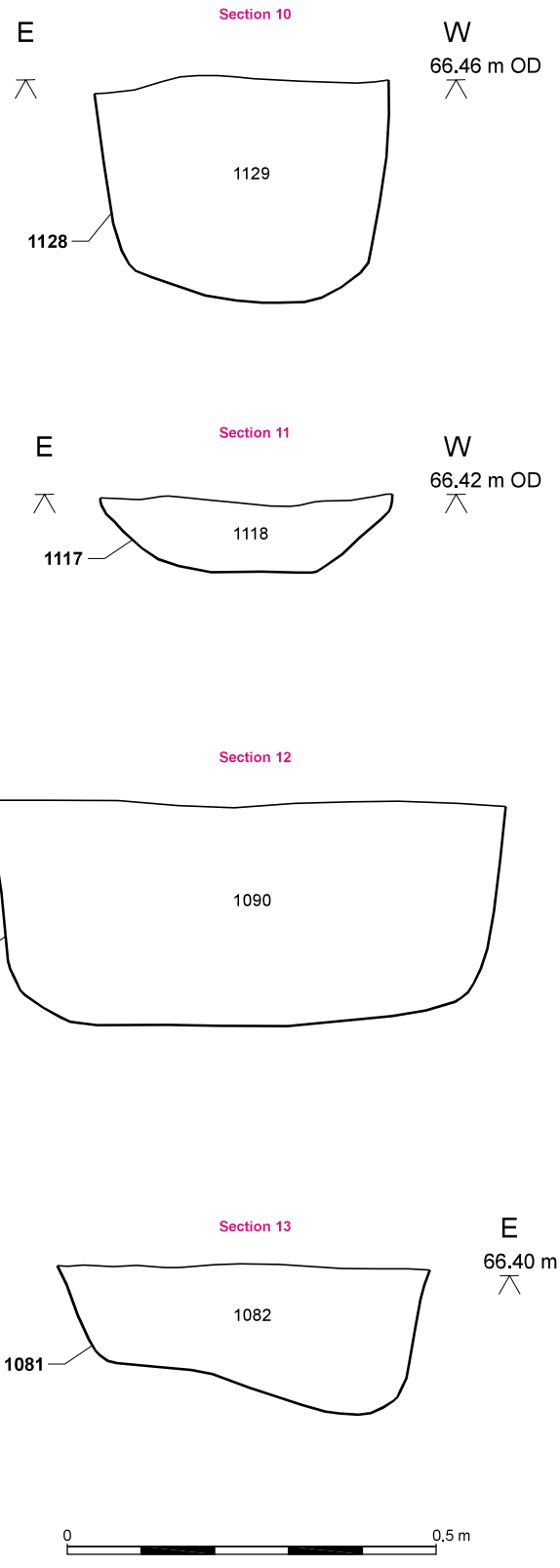
Figure 11



Date:	16/12/2016	Revision Number:	0
Scale:	All sections - 1: 20 @ A4	Illustrator:	APS/ND
Path:	Y:\Projects\104281\Graphics Office\Rep figs\ECR\2016_12_19		

Sections across ring gully 2 and associated features

Figure 12



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Scale:	All sections - 1: 10 @ A4	Illustrator:	APS
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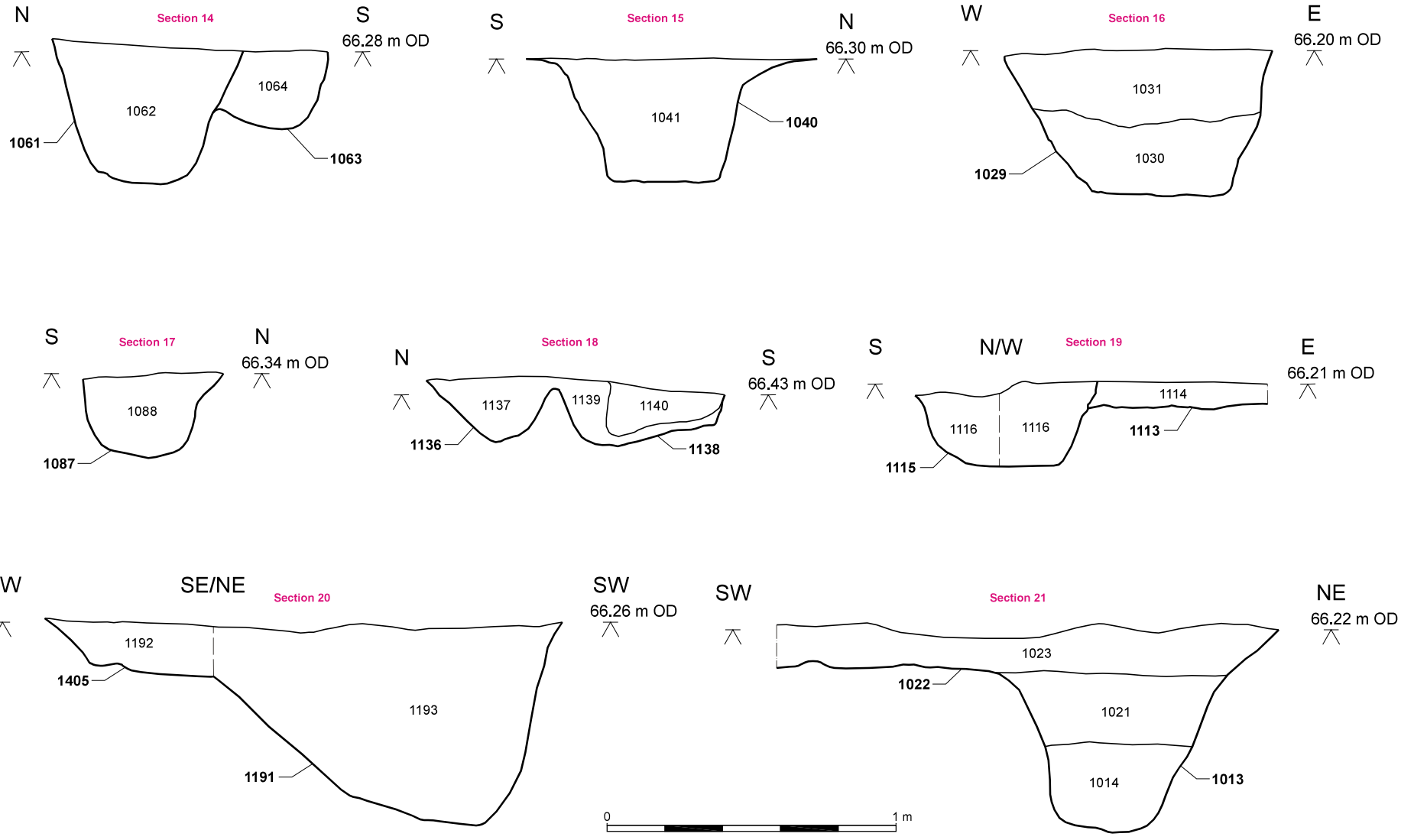
Phase 1/2 sections, group 4

Figure 13



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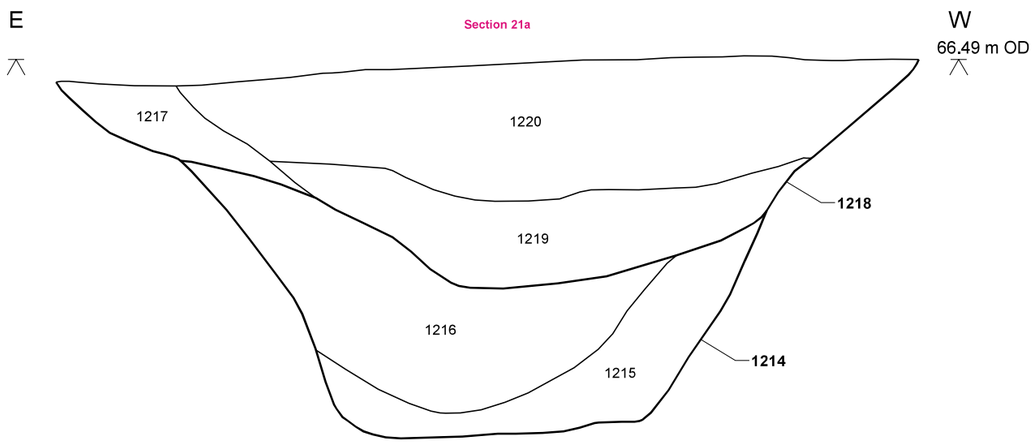
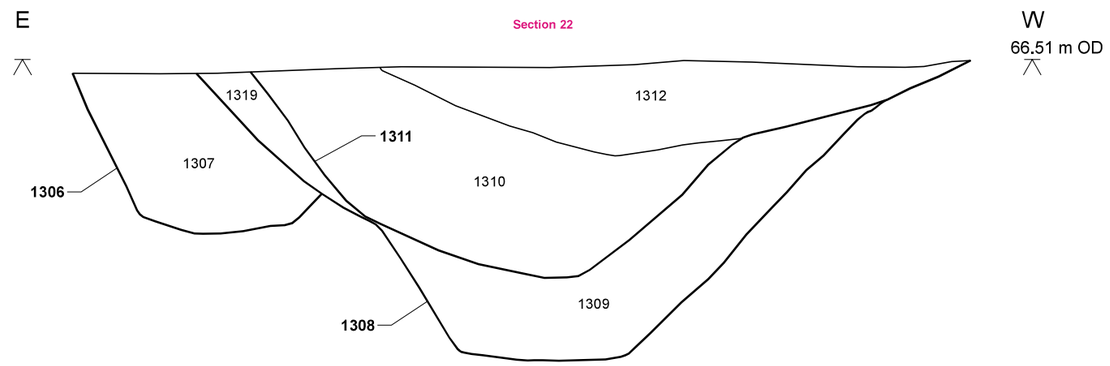
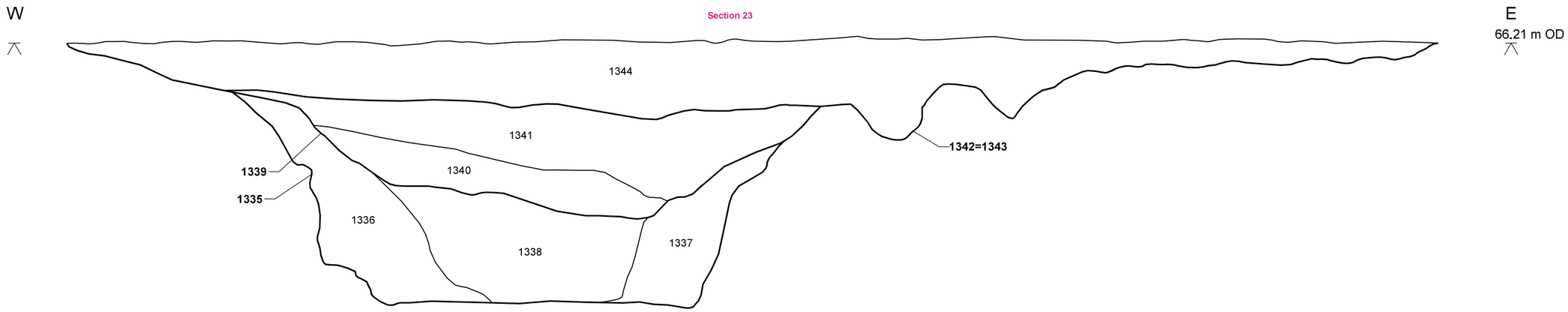
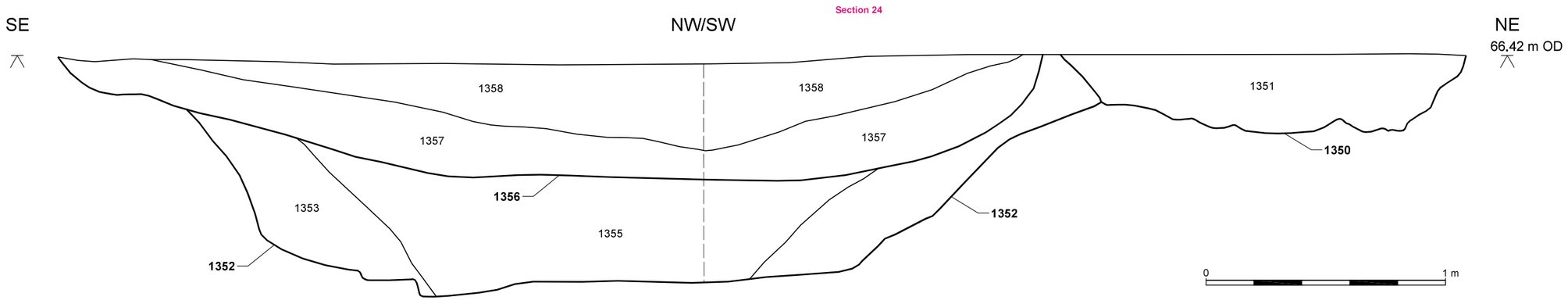
Phase 3, sections across ring gully 3 and associated features

Figure 14









Date:	01/12/2016	Revision Number:	0
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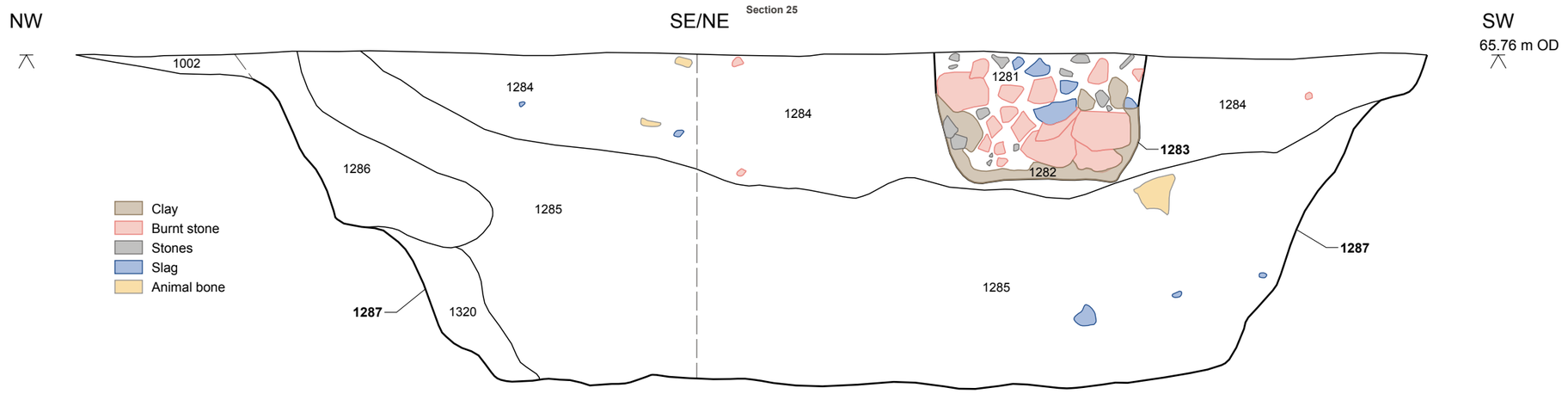
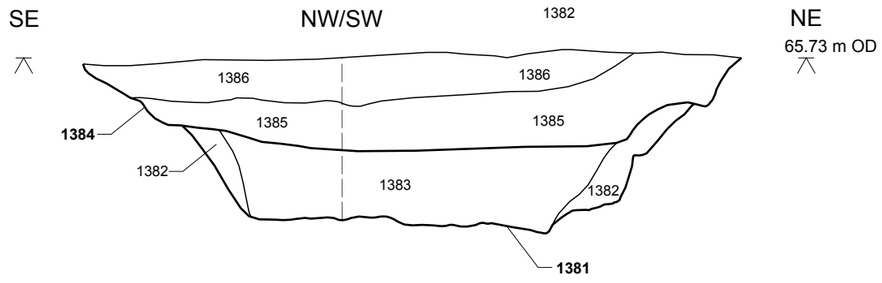
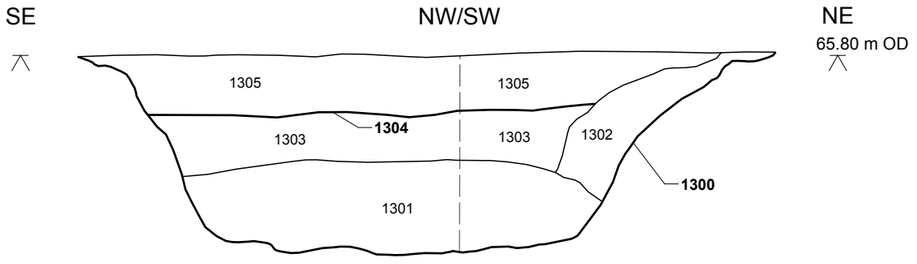
Path:	Y:\Projects\104281\Graphics Office\Rep figs\ECR\2016_12_19		

Phase 3, sections across enclosure ditch 10 and 11

Figure 15







Date:	07/03/2017	Revision Number:	0
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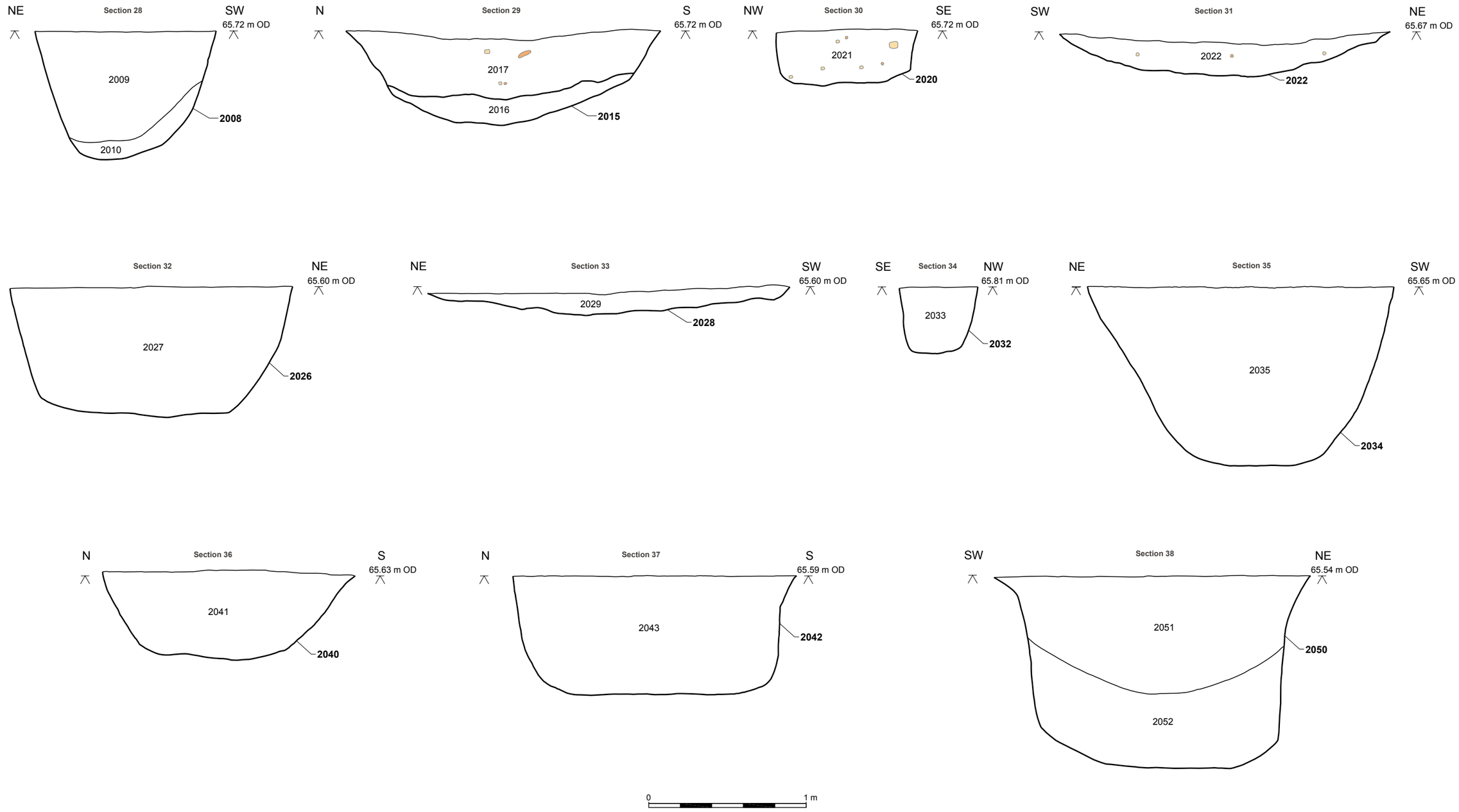
Phase 3, sections across enclosure ditch 10 and 11

Figure 16



Pottery
Animal bone

Date:	07/03/2017	Revision Number:	0
Scale:	All sections - 1: 25 @ A3	Illustrator:	APS
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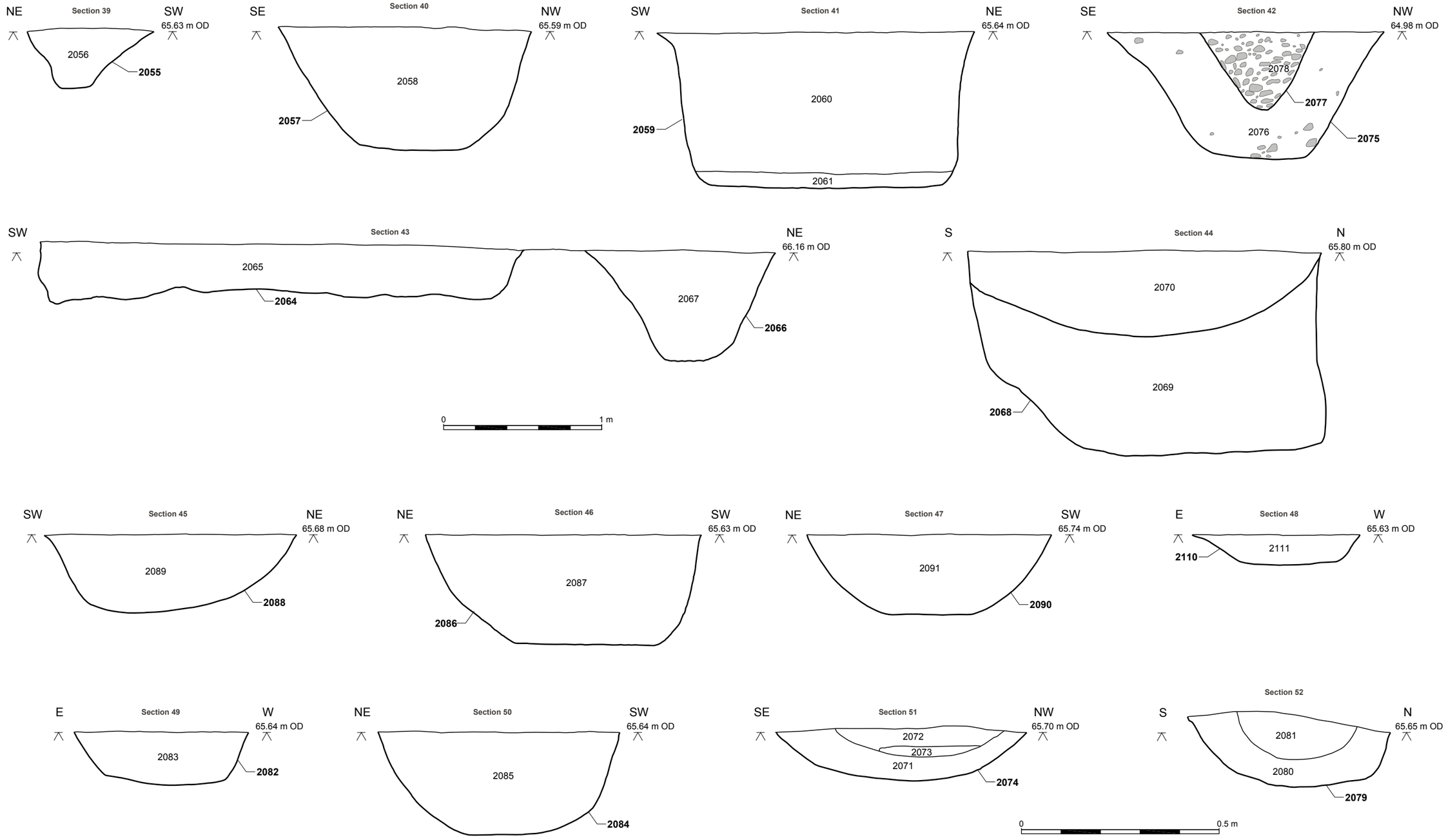
Phase 3a/b, sections of Area 2 pits

Figure 17



Stones

Date:	07/03/2017	Revision Number:	0
Scale:	Sections 39-50 1: 25 Sections 51 and 52 - 1: 10 @ A3	Illustrator:	APS
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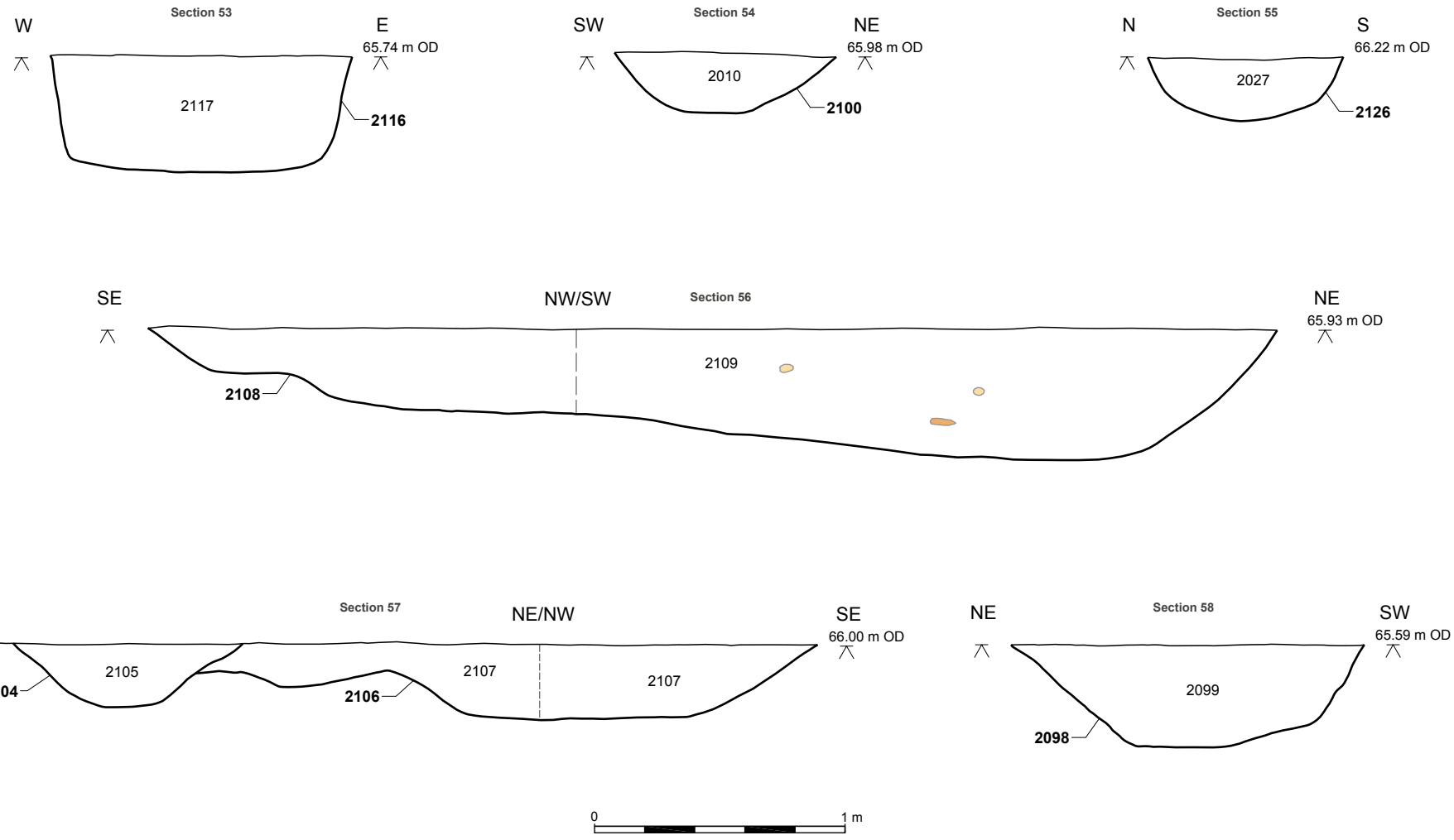
Phase 3a/b, sections of Area 2 pits

Figure 18

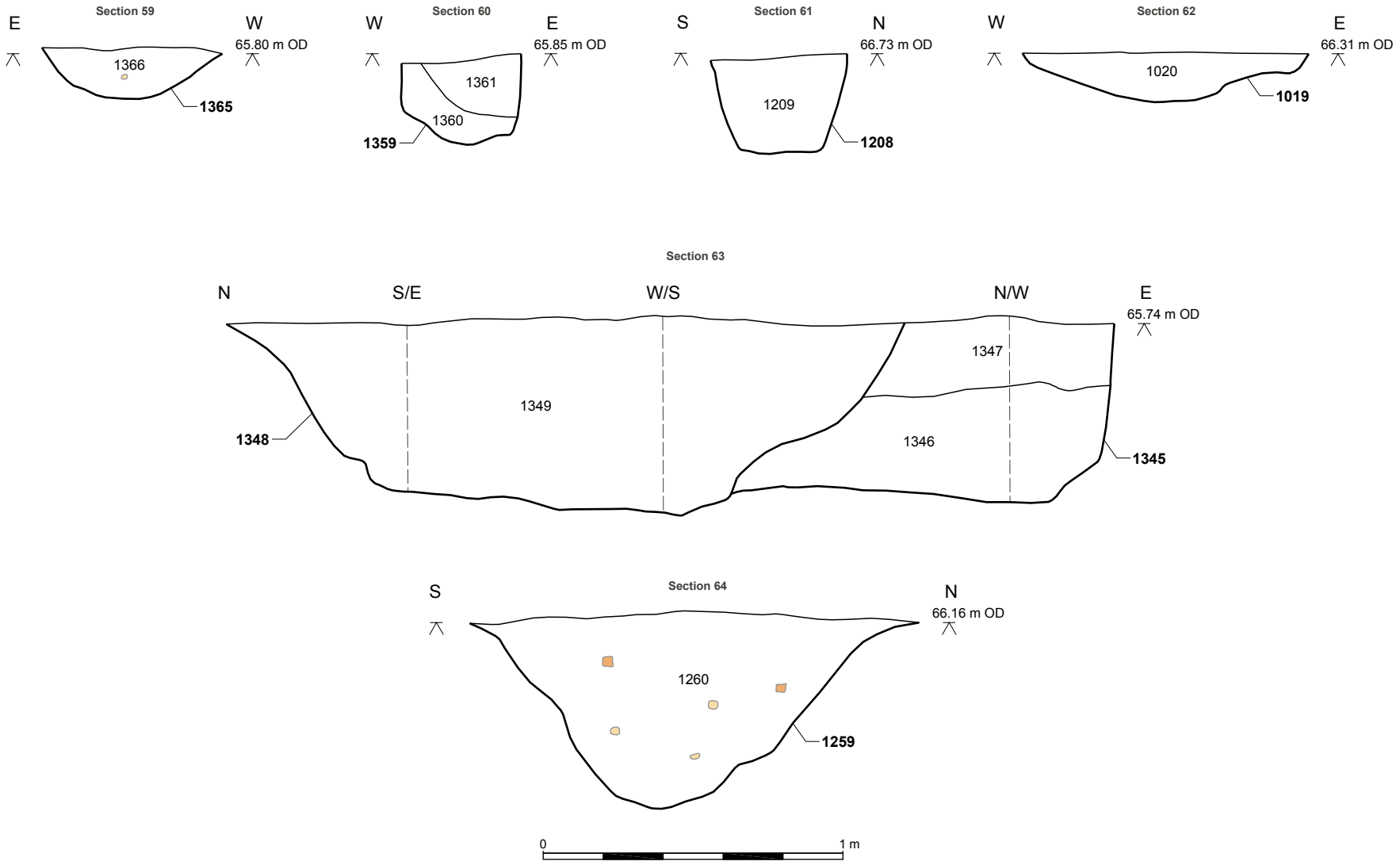


Pottery
Animal bone

Date:	07/12/2016	Revision Number:	0
Scale:	All sections - 1: 25 @ A4	Illustrator:	APS
Path:	Y:\PROJECTS\104281 Sheffield project\GO\Rep figs\ECR\2016_12_19		

Phase 3a/b, sections of Area 2 pits and ditches

Figure 19



Pottery
Animal bone

Date:	03/03/2017	Revision Number:	0
Scale:	All sections - 1: 20 @ A4	Illustrator:	APS/ND
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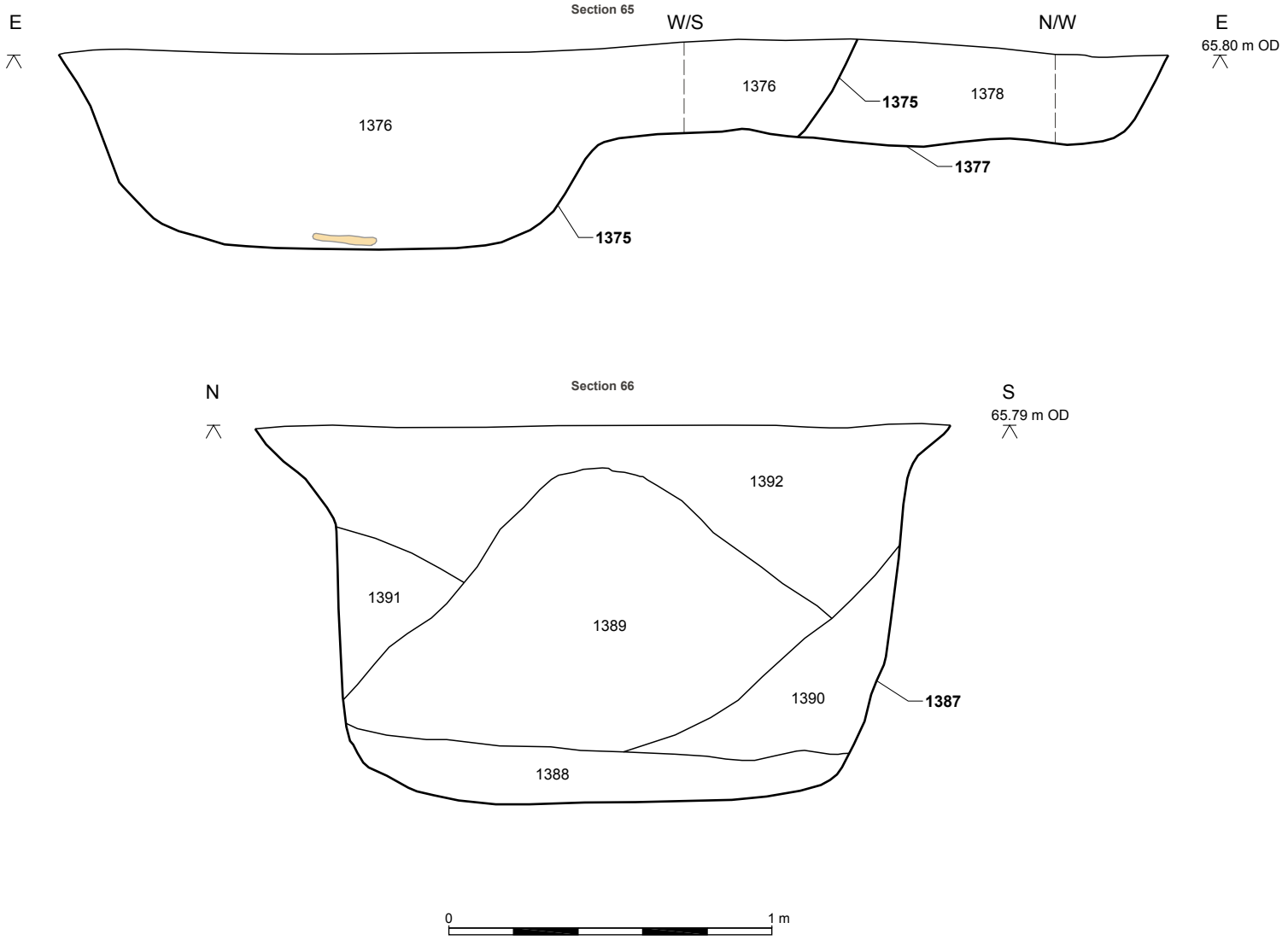
Phase 4, Area 1 sections

Figure 20



Animal bone

Date:	03/03/2017	Revision Number:	0
Scale:	Both sections - 1: 20 @ A4	Illustrator:	APS/ND
Path:	Y:\Projects\104281\Graphics Office\Rep figs\ECR\2016_12_19		

Sections of discrete features

Figure 21

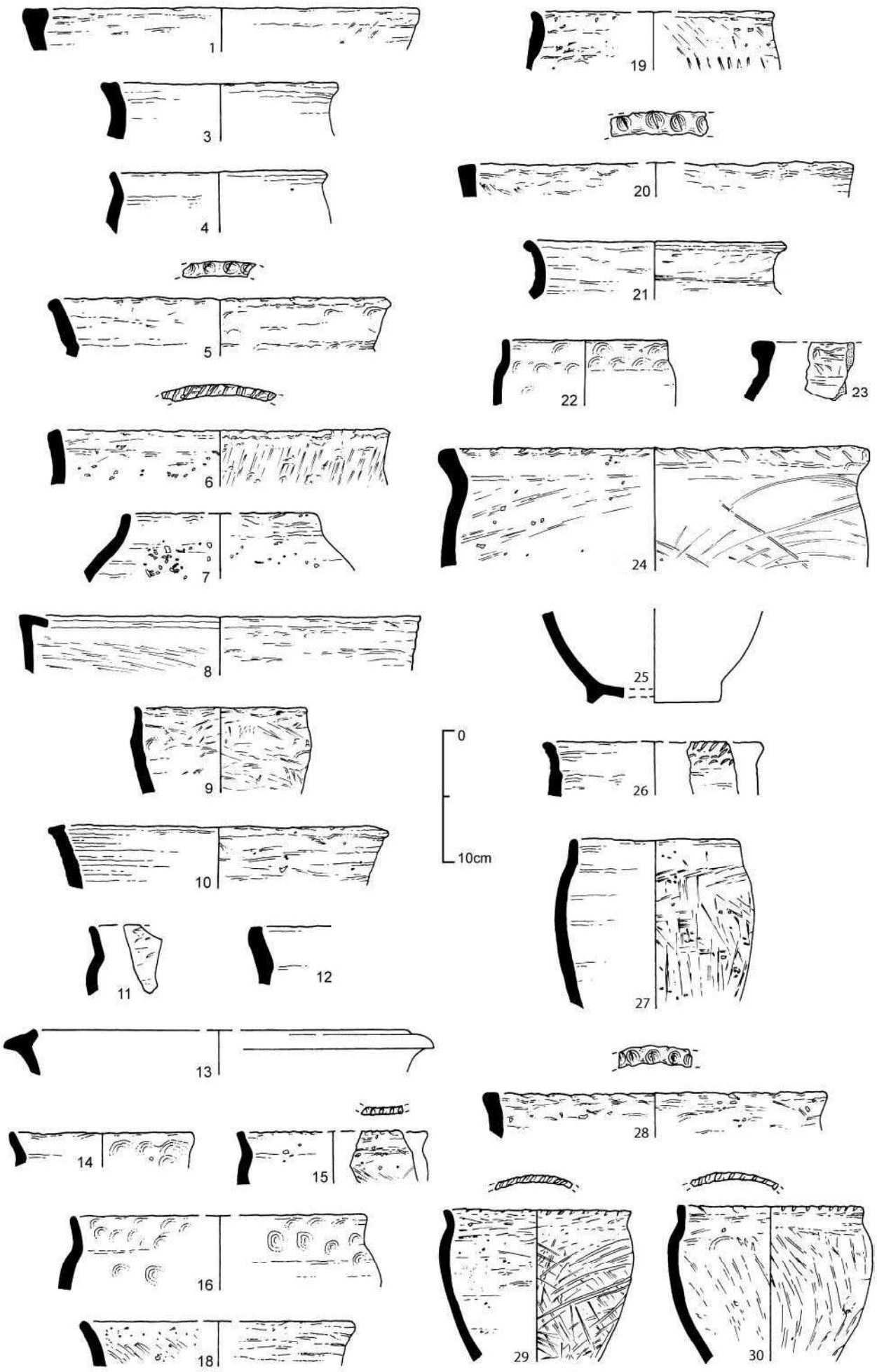


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Plate 1: Vertical view of Area 1

Plate 2: East facing section of gullies 1130 and 1132

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Plate 3: Area 1 Roundhouses, facing east

Plate 4: South facing section of post-pit 1167

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Plate 5: Excavating ditch 1155, facing south-east

Plate 6: North-east facing section of ditch 1155

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Plate 7: Near vertical view of furnace 2074

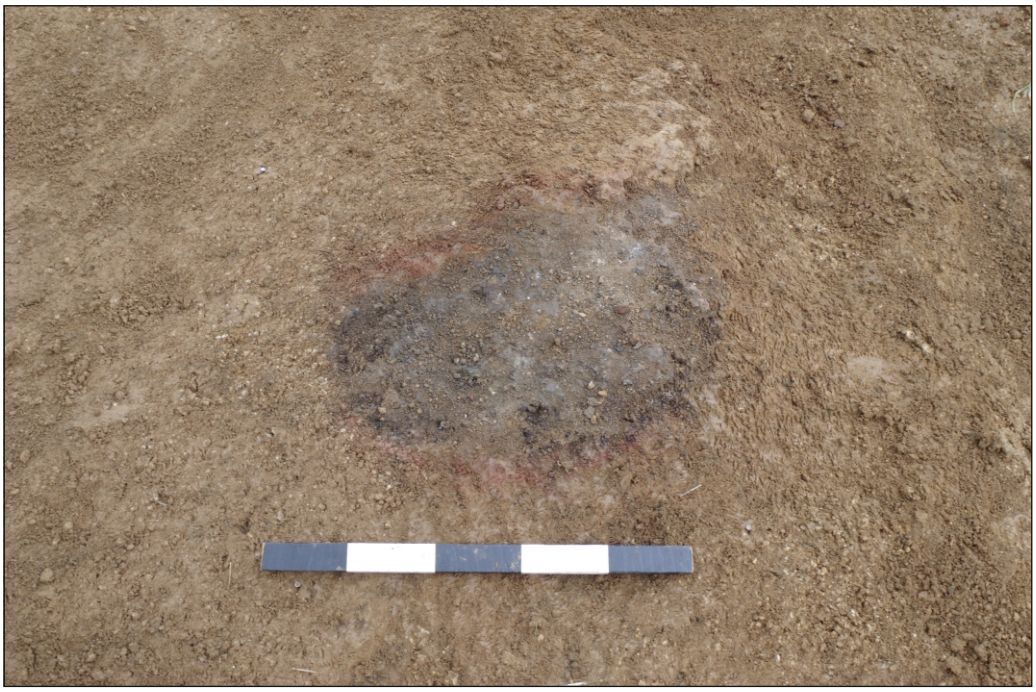

Plate 8: Near vertical view of furnace 2079

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Plate 9: North-west facing section of pit 2034

Plate 10: South-west facing section of pit 2020

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Plate 11: Human bone in pit 2006, facing south-east

Plate 12: Vertical view of dog skeleton in pit 2086

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Plate 13: South-west facing section of posthole 2032

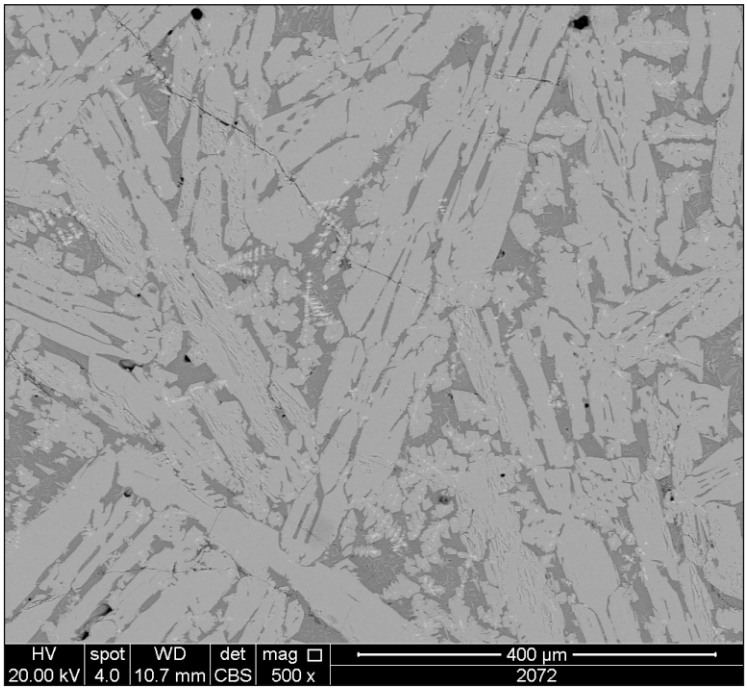

Plate 14: Specimen 1 [2072] Fayalite laths

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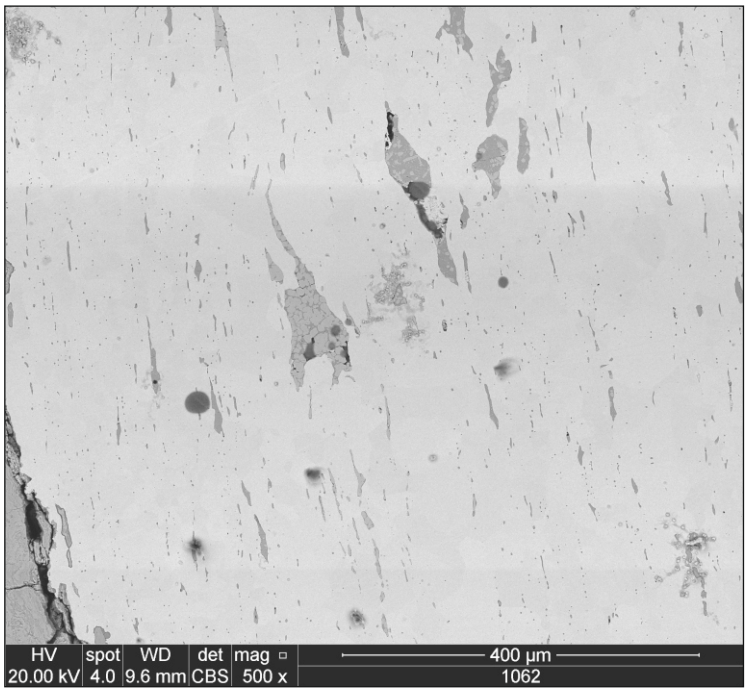

Plate 15: Slag inclusions within iron nail from [1062]

Plate 16: North-west facing section of pit 2008

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Plate 17: North-west corner of enclosure, facing south-east

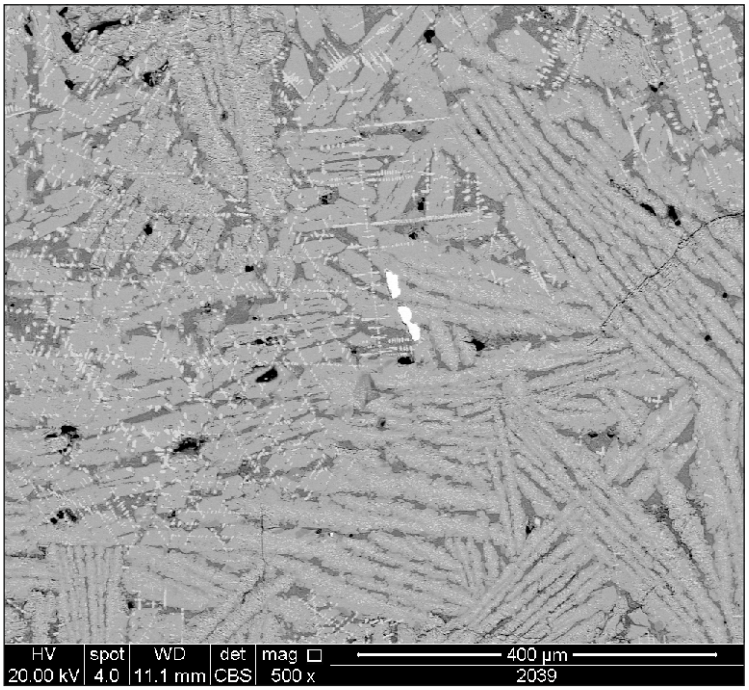

Plate 18: Specimen 2 [2081] Fayalite laths, wüstite dendrites and metallic iron

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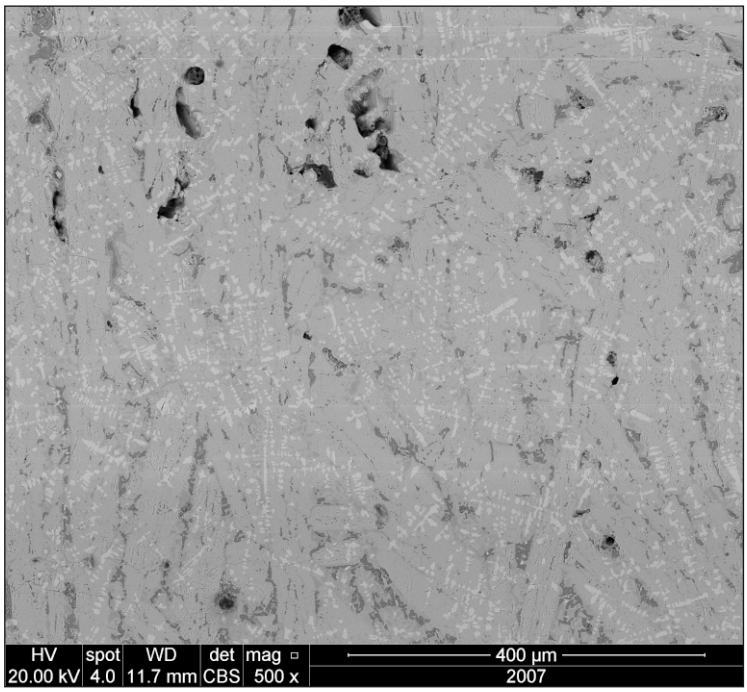

Plate 19: Specimen 3 [2035] Fayalite and wüstite dendrites

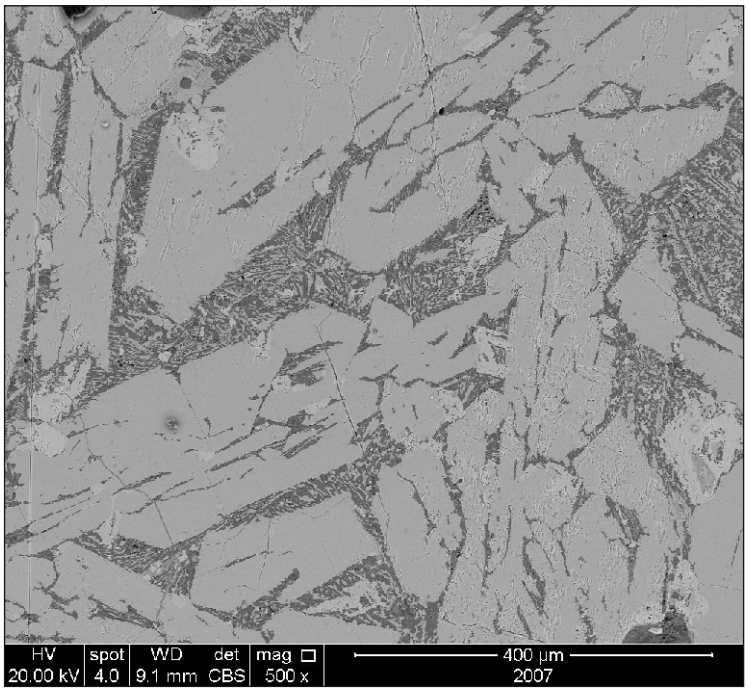

Plate 20: Specimen 4 [2007] Fayalite

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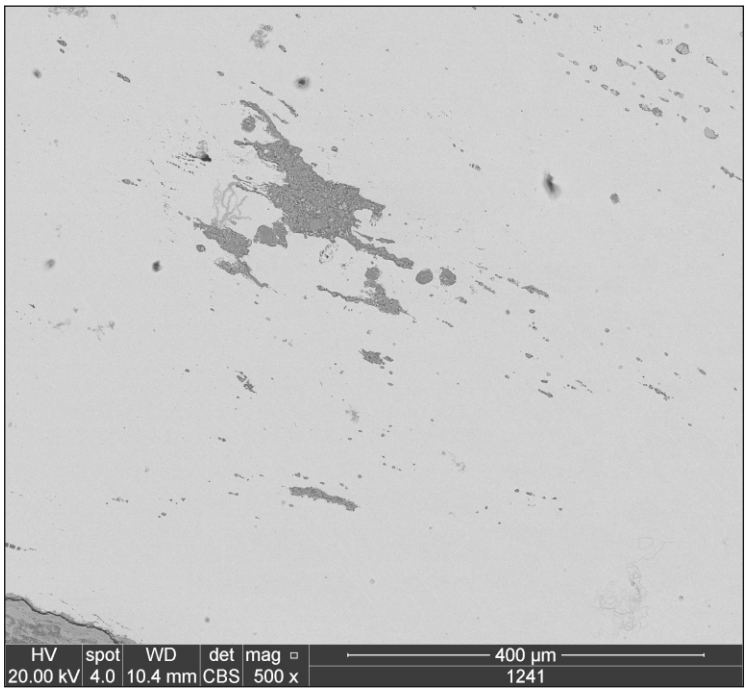

Plate 21: Specimen 8 Slag inclusions within iron nail from [1241]

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