
# Oakley Grove (Phase 2), Harbury Lane, Bishop's Tachbrook, Warwickshire

## Archaeological Excavation Report

**August 2017**

**Client: Prospect Archaeology on behalf of A.C. Lloyd Homes Ltd**

Issue No: 1
NGR: SP 3131 6246

oxfordarchaeology
southsouthsouth

| | |
|---|---|
| Client Name: | Prospect Archaeology on behalf of A.C. Lloyd Home Ltd |
| Document Title: | Oakley Grove (Phase 2), Harbury Lane, Bishop's Tachbrook, Warwickshire |
| Document Type: | Excavation Report |
| Report No.: | 1 |
| Grid Reference: | SP 3131 6246 |
| Site Code: | BTOEX |
| Invoice Code: | BTO16 |
| Receiving Body: | Warwickshire Museum |
| Accession No.: | T/1636 |
| OA Document File Location: | X\Projects\I\Leamington_Oakley Grove_BTOEX\Report |
| OA Graphics File Location: | N\B_invoice codes_BTOEX\PDFs |
| Issue No: | 1 |
| Date: | 22/8/2017 |
| Prepared by: | Alex Davies (Project Officer) |
| Checked by: | Richard Brown (Project Manager) |
| Edited by: | Leo Webley (Head of Post-Excavation) |
| Approved for Issue by: | David Score (Head of Fieldwork) |
| Signature: | |

.....



**OA South**
Janus House
Osney Mead
Oxford
OX2 0ES

t. +44 (0)1865 263 800

**OA East**
15 Trafalgar Way
Bar Hill
Cambridge
CB23 8SG

t. +44 (0)1223 850 500

**OA North**
Mill 3
Moor Lane Mills
Moor Lane
Lancaster
LA1 1QD
t. +44 (0)1524 880 250

e. info@oxfordarch.co.uk
w. oxfordarchaeology.com
Oxford Archaeology is a registered Charity: No. 285627

# Oakley Grove (Phase 2), Harbury Lane, Bishop's Tachbrook, Warwickshire

## *Archaeological Excavation Report*

*Written by Alex Davies and Richard Brown*

*With contributions from Lisa Brown, Sharon Cook, Michael Donnelly, Denise Druce, Lynne Keys and Ruth Shaffrey, and illustrations by Anne Kilgour, Benjamin Brown and Charles Rousseaux*

## Contents

List of Figures ..... v

List of Plates ..... v

Summary ..... vii

1 INTRODUCTION ..... 1

1.1 Scope of work ..... 1

1.2 Location, topography and geology ..... 1

1.3 Archaeological and historical background ..... 1

1.4 Results of the evaluation ..... 2

2 EXCAVATION AIMS AND METHODOLOGY ..... 3

2.1 Aims ..... 3

2.2 Methodology ..... 3

3 RESULTS ..... 5

3.1 Introduction and presentation of results ..... 5

3.2 General soils and ground conditions ..... 5

3.3 General distribution of archaeological deposits ..... 5

3.4 Area 1 *(Fig. 4)* ..... 5

3.5 Area 2 *(Fig. 4)* ..... 5

3.6 Area 3 *(Fig. 4)* ..... 6

3.7 Area 4 *(Fig. 5)* ..... 6

3.8 Area 5 *(Fig. 5)* ..... 7

3.9 Area 6 *(Fig. 6)* ..... 7

3.10 Area 7 *(Fig. 6)* ..... 8

3.11 Areas 8 and 9 ..... 8

3.12 Trenches 94-99 ..... 8

4 DISCUSSION ..... 9
4.1 Reliability of field investigation ..... 9
4.2 Excavation objectives and results ..... 9
4.3 Interpretation and discussion ..... 9
APPENDIX A TRENCH DESCRIPTIONS AND CONTEXT INVENTORY ..... 12
APPENDIX B FINDS REPORTS ..... 23
B.1 Pottery ..... 23
B.2 Flint ..... 25
B.3 Stone ..... 26
B.4 Slag ..... 27
APPENDIX C ENVIRONMENTAL REPORTS ..... 28
C.1 Charred plant remains ..... 28
C.2 Charcoal ..... 32
APPENDIX D BIBLIOGRAPHY ..... 36
APPENDIX E SITE SUMMARY DETAILS ..... 39

## List of Figures


| | |
|---|---|
| Fig. 1 | Site location |
| Fig. 2 | Investigation plan showing evaluation and SMS areas |
| Fig. 3 | Plan of excavated areas |
| Fig. 4 | Plan of Area 1, 2 and 3 |
| Fig. 5 | Plan of Areas 4 and 5 |
| Fig. 6 | Plan of Area 6, 7 and 9 |
| Fig. 7 | Sections 3000, 4005, 4010, 4015, 4016, 7012 and 7013 |


## List of Plates


| | |
|---|---|
| Plate 1 | Area 2, Ditch 2025, looking north-east |
| Plate 2 | Area 3, Pit 3003, looking west |
| Plate 3 | Area 4, Pit 4007, looking north-east |
| Plate 4 | Area 4, Pit 4020 and Ditch 100 (cut 4018), looking east |
| Plate 5 | Area 4, Pit 4013, looking north-east |
| Plate 6 | Area 4, Pit 4034, looking east |
| Plate 7 | Area 4, Pit 4042, looking north-west |
| Plate 8 | Area 4, Pit 4044, looking south |
| Plate 9 | Area 4, Pit 4052 and Ditch 100 (cut 4054), looking west |
| Plate 10 | Area 5, Trackway 101, looking north-east |
| Plate 11 | Area 6, Pits 6022 and 6024, looking south-east |
| Plate 12 | Area 6, Pits 6039 and 6041, looking north |
| Plate 13 | Area 7, Trackway 101, looking north-east |

# Summary

Oxford Archaeology was commissioned by Prospect Archaeology on behalf of A.C. Lloyd Homes Ltd to undertake an archaeological excavation on land at Oakley Grove (Phase 2), Harbury Lane, Bishop's Tachbrook, Warwickshire. This comprised the excavation of nine areas, totalling *c* 8840m$^2$. In addition, a further six evaluation trenches were opened.

Prehistoric activity was restricted to a cluster of pits and a ditch in Area 4 dated to the middle-late Iron Age on the basis of associated pottery. Environmental samples from these features produced a useful assemblage of charred plant remains and charcoal, especially as the region is noted for a lack of analysed later prehistoric archaeobotanical remains.

Earlier activity in the area was suggested by the discovery of an early Bronze Age barbed-and-tanged arrowhead and two late Mesolithic/early Neolithic bladelets found in an Iron Age pit. No further Bronze Age activity was discovered, despite the presence of an urned early or middle Bronze Age cremation deposit found during the evaluation. The earlier evaluation also discovered two early to middle Saxon pits. No further evidence of this date was uncovered during the present excavation.

A trackway and a number of linear ditches probably relating to field divisions were discovered. The majority did not produce associated artefacts, although most conform to the prevailing orientation of the modern field system. Other features include a number of undated postholes and pits as well as numerous tree-throw holes.

# 1 INTRODUCTION

## 1.1 Scope of work

1.1.1 Oxford Archaeology (OA) was commissioned by Prospect Archaeology on behalf of A.C. Lloyd Homes Ltd to undertake an archaeological excavation on land at Oakley Grove (Phase 2), Harbury Lane, Bishop's Tachbrook, Warwickshire.

1.1.2 The work was undertaken as a condition of Planning Permission (planning ref. W/15/0851) requiring the implementation of a mitigation strategy outlined in a written scheme of archaeological investigation.

1.1.3 Discussions with the Planning Archaeologist at Warwickshire County Council, informed by the results of an archaeological evaluation by MOLA (MOLA Northampton 2016), resulted in a mitigation strategy detailed in the written scheme of investigation produced by Prospect Archaeology (Prospect Archaeology 2016). This document outlines how OA implemented the specified requirements of the project.

1.1.4 The fieldwork was undertaken by Oxford Archaeology in December 2016 and January 2017.

## 1.2 Location, topography and geology

1.2.1 The site is located at Grove Farm on the southern edge of Royal Leamington Spa in the parish of Bishop's Tachbrook (SP 3131 6246). It encompasses parts of three arable fields which are bounded to the east by further fields and the B4087 Oakley Wood Road, and to the south by the Tach Brook. Further fields are also located to the north, leading to Harbury Lane, and a disused sewage treatment plant stands immediately to the west of the site. The residential development area will occupy the northern triangle of the area, lying between the Phase 1 Oakley Grove development to the north-east and the disused sewage treatment plant to the north-west. To the south and east, the remaining areas of the field are allocated for a new Tachbrook Country Park.

1.2.2 The site is on a relatively high plateau at *c* 70m OD. A small tributary valley is found to the east which drains southwards into the Tach Brook. The brook itself flows west along the southern edge of the country park area at *c* 55m OD.

1.2.3 The solid geology of the area is mapped as predominantly Mercia Mudstone, although one small outcrop of dolomitic siltstone is also present. These are capped by river terrace gravels in the north-west of the area and by Thrussington member diamicton, fringed by Wolston gravels, in the east. A narrow band of alluvium lies alongside the stream which defines the southern boundary of the site (BGS 2017).

## 1.3 Archaeological and historical background

1.3.1 The archaeological and historical background of the site is discussed in the desk-based assessment and will not be repeated in detail here, except to note the relevant archaeological features within the area immediately adjacent to the site.

1.3.2 Four minor archaeological features have recorded within the boundaries of the site. The Warwickshire Historic Environment Record (HER) lists a cropmark of a possible trackway close to the western edge of the site (MWA 4564). Two small quarry or marl pits are located close to Grove Farm (MWA 4583-4), and the Historic England 'Pastscape' database notes the discovery of a scatter of Roman pottery in the western part of the site (record no. 335634).

1.3.3 The shrunken medieval village of Tachbrook Mallory (MWA 712) is located immediately to the east of the site. Two Grade II listed building are associated, the 16th-century Tachbrook Mallory House ('the Grove'), and the partial remains of the medieval chapel of St James. The first edition Ordnance Survey map shows that in the late 19th century a number of buildings and small orchards stood along the western side of the road, just within the site.

## 1.4 Results of the evaluation

1.4.1 An evaluation of the site was undertaken by MOLA during July and August 2016 (MOLA Northampton 2016). Ninety-three trenches were excavated uncovering a feature containing an urned cremation deposit of probable early to middle Bronze Age date (evaluation trench 48, excavation Area 6). A circular pit containing a large quantity of charcoal and a small amount of late Bronze Age to early Iron Age pottery was found (evaluation trench 45, excavation Area 3), as well as two intercutting pits containing pottery dated to the early to middle Saxon period (evaluation trench 52, excavation Area 6). The remains of medieval or post-medieval ridge and furrow cultivation were noted, alongside three post-medieval quarry pits, and a number of undated ditches including two that run parallel and appear to correlate with a previously known cropmark.

# 2 EXCAVATION AIMS AND METHODOLOGY

## 2.1 Aims

2.1.1 The aim of the archaeological investigation was to preserve by record significant archaeological remains that will be disturbed or destroyed by the proposed development. The results of the evaluation indicated the presence of archaeological remains within the site and were used in defining the following specific objectives:

i. To understand the nature and extents of early Bronze Age to Iron Age activity;
ii. To understand the nature and extent of Saxon activity;
iii. To understand the broad historic development of the site and its environment.

## 2.2 Methodology

2.2.1 The methodology followed that set out in the WSI.

2.2.2 Topsoil and overburden were removed by a 360° mechanical excavator using a toothless ditching bucket under continuous archaeological supervision. Mechanical excavation ceased at undisturbed natural deposits. No archaeologically significant horizons were encountered above the natural. Once the initial areas were stripped of topsoil all archaeological features encountered were plotted. Where significant archaeological remains were found, stripping of the mitigation areas continued until no further significant or related features were revealed within 10m of the previous remains, or it was agreed with the Planning Archaeologist that no further significant information could be expected.

2.2.3 A minimum of 20% of the length of linear features were sampled. Special deposits within ditches were not encountered, so specific extensive excavation to further define the nature of localised dumping of material was not undertaken. Junctions of linear features were excavated to determine stratigraphic relationships, and all terminals were excavated.

2.2.4 Discrete features such as pits and postholes were initially half-sectioned. If significant artefactual or environment material was found, the features were fully excavated.

2.2.5 Neither specialised areas of activity nor structural remains that were clearly part of buildings were uncovered. No burials or industrial features were encountered that would have required more extensive excavation and recording.

2.2.6 All areas were initially mapped digitally. During more detailed recording individual excavated features or sections were recorded on permatrace with the most appropriate scale chosen. Features were planned at a scale of 1:20, and sections drawn at either 1:10 or 1:20.

2.2.7 Photographs were taken using 35mm monochrome prints and supplemented by digital imagery.

2.2.8 Nine areas were opened totalling *c* 8840m$^2$. In addition, a further six evaluation trenches were opened.

# 3 RESULTS

## 3.1 Introduction and presentation of results

3.1.1 The results of the excavation are presented below, and include a stratigraphic description of the areas which contained archaeological remains. The full details of all trenches with dimensions and depths of all deposits form the content of Appendix A. Full finds and environmental reports can be found in Appendices B and C.

3.1.2 Context numbers reflect the area numbers unless otherwise stated, e.g. pit 1002 is a feature within Area 1, while ditch 3004 is a feature within Area 3.

## 3.2 General soils and ground conditions

3.2.1 The soil sequence between all trenches was fairly uniform. The variable superficial geology of silty sand, gravel and clay was overlain by an agriculturally derived subsoil, which in turn was overlain by topsoil/ploughsoil.

3.2.2 Ground conditions throughout the evaluation were generally good. Archaeological features, where present, were easy to identify against the underlying natural geology.

## 3.3 General distribution of archaeological deposits

3.3.1 Archaeological features were present in Areas 1-7.

## 3.4 Area 1 *(Fig. 4)*

3.4.1 Area 1 measured 20x20m and exposed two parallel linear drains, 1003, a tree-throw hole, 1004, a possible posthole, 1006 and a pit, 1008.

3.4.2 Linear drains 1003 were lined with ceramic slabs comprising flat bases and sides with a domed top. These ceramic slabs were the only material culture uncovered from the area. The drains were found crossing the entirety of the exposed area on a NW-SE alignment. The drains were not exposed in any other excavated area. The southern-most drain follows the same line as a field boundary marked on the 1889 OS map, 20m to the north-west.

3.4.3 Pit 1008 was only partially exposed in the stripped area. It measured at least 3.70x 2.00m, was 0.10m deep and contained a single fill, 1009.

## 3.5 Area 2 *(Fig. 4)*

3.5.1 Area 2 comprised an area measuring 20x20m with a 6x6m extension to the south. A single sherd of Roman pottery and a small quantity of undiagnostic slag was the only material culture that was discovered.

3.5.2 To the north of the area, up to six postholes forming an L-shape were uncovered, 2003, 2005, 2007, 2009, 2011 and 2013. This possibly formed the corner of an undated rectangular structure at least 9x11m.

3.5.3 Another posthole, 2019, was cut by probable hedge line 2017=2021. The hedge corresponds with a field boundary shown on the 1889 OS map.

3.5.4 Ditches 2025 and 2027 were found at the southern area of the trench (Plate 1). They probably comprised two linears meeting at a right-angle, although they may have been curvilinear in form. If the ditches are linear, they conform to the orientation of the modern field system. Ditch 2027 produced a sherd of Roman greyware that is not closely dateable and 103g of undiagnostic slag, possibly suggesting a Roman date. Alternatively, the sherd could be residual.

3.5.5 The only other features exposed consisted of four tree-throw holes, two of which were excavated.

## 3.6 Area 3 *(Fig. 4)*

3.6.1 Area 3 measured 20x20m and produced only a single feature. No artefacts were recovered.

3.6.2 Pit 3003 was 0.84x0.71m wide and 0.13m deep (Fig. 7; Plate 2). Three fills were observed, the middle fill, 3005, comprising a deposition of burnt material. This pit was partially excavated in the evaluation (as pit 4506) and six sherds of pottery were recovered. These were dated from the late Bronze Age to early Iron Age (MOLA Northampton 2016, 11, 22) on the basis of comparison to fabrics from Whitchurch in the Stour valley, south-east Warwickshire (Brudenell 2011). During the excavation, an environmental sample taken from the middle fill contained a large quantity of grain, predominantly barley but also wheat. The almost complete absence of chaff and seeds of arable weeds within the flot indicates that this sample comprises the probably accidental destruction of cleaned grain, ready for processing. At least some of the wheat appears to be emmer (*Triticum dicoccum*), but the lack of identifiable spikelet forks and glume bases and the poor condition of the majority of grains makes it impossible to be certain if there is a mix of spelt and emmer. A sample was also taken from the middle fill of the pit during the evaluation, again producing quite high numbers of charred grains of barley (*Hordeum vulgare*) and wheat (*Triticum* spp.: MOLA Northampton 2016, 27). There are few analysed later prehistoric plant assemblages in the West Midlands, making the deposit in pit 3003 of regional significance.

## 3.7 Area 4 *(Fig. 5)*

3.7.1 Area 4 contained the greatest quantity of archaeology, producing all of the artefactual remains excluding the sherd of Roman greyware in Area 2. The area measured approximately 30x30m.

3.7.2 All of the pottery in Area 4, comprising 102 sherds weighing 421g, can be dated to the middle or late Iron Age. Few distinctive sherds were found among the assemblage, although the four broad sandy fabrics are comparable to those from other nearby Iron Age assemblages. All of the pottery, excluding a single sherd from the subsoil, came from three pits, 4020, 4044 and 4052.

3.7.3 Seven pits were uncovered in Area 4 (Fig. 7; Plates 3-9). While only three contained artefactual material, it is likely that they all date to the Iron Age. The smallest pit, 4042, was 0.58x0.30m wide and 0.15m deep. The largest pit, 4044, was 2.58x1.26m wide and 0.55m deep. A total of 32 fragments of heat-shattered quartzite cobbles

weighing 1549g were recovered from six pit fills. These provide evidence for heating water, presumably relating to cooking.

3.7.4 Pit 4044 contained eight fills, including three lenses of charcoal (4047, 4049 and 4051) interspersed with layers of silty sand (Fig. 7; Plate 8). The charcoal lenses were respectively 0.03m, 0.02m and 0.06m thick. These contained blackthorn-type, hawthorn-type, oak and alder/hazel charcoal, indicating wood fuel used from hand-collected twigs/branches, perhaps from woodland edge, scrub, or hedgerow environments. Twenty-seven sherds weighing 83g were recovered from middle and upper fills of the pit. Middle fill 4048 also produced a possible sandstone pounder and a complete barbed-and-tanged arrowhead of early Bronze Age date. The same fill also produced an awl of late Mesolithic or early Neolithic date, and upper fill 4058 contained a bladelet of a similar date. It is likely that the earlier flint objects in the Iron Age pit resulted from accidental redeposition. However, the inclusion of a highly distinctly fine and complete barbed and tanged arrowhead alongside other flint objects from a different period might suggest the intentional collection and deposition of these objects in the Iron Age.

3.7.5 Clumps of clay were found around the upper edges of pit 4013 (Plate 5). This clay appeared to be different to the local mid-orange-red clay from the site, and the pit may have been used to store imported clay.

3.7.6 Ditch 100 was between 1.00-2.41m wide and 0.10-0.21m deep (Fig. 7; Plates 4 and 9). The entirety of the ditch was exposed in the excavated area, and was 20.04m long. The ditch cut pit 4020 and was cut by pit 4052. Both of these pits contained Iron Age pottery, and the ditch has been phased to the Iron Age. No artefactual material was recovered.

3.7.7 Two postholes were found in Area 4, 4005 and 4029. Posthole 4005 cut ditch 100, and it is possible both date to the Iron Age. Neither form any clear structure, and neither produced any material culture.

3.7.8 Numerous tree-throw holes were also exposed in Area 4.

## 3.8 Area 5 *(Fig. 5)*

3.8.1 Area 5 measured approximately 20x20m and contained four postholes. These were all found within an area measuring 3x1m. It is likely that they are of the same unknown date, although the postholes do not form any clear structure. No artefactual material was discovered.

3.8.2 A number of tree-throw holes and animal burrows were also uncovered in Area 5. Two of each were excavated.

## 3.9 Area 6 *(Fig. 6)*

3.9.1 Area 6 measured 33x70m and contained four ditches, seven pits, a posthole, a tree-throw hole and a probable natural feature. The area was devoid of material culture.

3.9.2 The four ditches comprised double-ditched trackway or boundary 101. One of the terminals for each of the ditches was uncovered, forming an entrance (Plate 10). In the entrance area two layers of silty clay were found, 6011 and 6043. Although these

appeared to be natural spreads, the location of these at the entrance of the trackway suggests a relationship between the ditches and the layers of silty clay. The spreads may have been the upper fills of a large feature, possibly a quarry pit. Posthole 6030 was located within the trackway, although it is uncertain if it is related to the two ditches.

3.9.3 The extrapolated line of the trackway meets with a modern field boundary 50m to the south-west of the excavated area. The excavated trackway may be part of an earlier field system, with the field boundary to the south-west being a surviving element of this. The double-ditched trackway was also excavated in Area 7 to the north-east.

3.9.4 Seven pits were uncovered in Area 6 (Plates 11 and 12). The smallest, 6028, had a diameter of 0.70m, and was 0.13m deep. The largest, 6039, was 2.1x1.4m wide and 0.36m deep. A smaller pit, 6014, was cut into 6039. Pit 6024 was also cut by pit 6022.

3.9.5 Linear feature 6013=6015 appears to have been a natural water channel.

## 3.10 Area 7 *(Fig. 6)*

3.10.1 Area 7 measured 45x55-80m and was located 15m to the north-east of Area 6. The double-ditched trackway/boundary exposed in Area 6 was also uncovered in this area, alongside three further ditches, two postholes, a plough furrow, a modern hedge-line, and numerous tree-throws. No artefactual material was recovered.

3.10.2 The ditches comprising the probable trackway were 1.30-1.67m wide and 0.31-0.53m deep (Fig. 7; Plate 13). These were exposed across the entirety of the excavated area on a NE-SW alignment running in straight, parallel lines. No terminals were found. The ditches were also found in Area 6 to the south-west.

3.10.3 A modern linear feature, possibly a hedge line, cuts trackway 101 at a perpendicular angle. There is a 9m gap before the hedge line is continued by 7039. Three other ditches, 7019=7021, 7037 and 7023=7025, might also be related to field boundaries; alternatively, they might belong to another, unknown, period of activity.

3.10.4 Two postholes, 7017 and 7043, were excavated. These do not form part of any clear structure.

3.10.5 Plough furrow 7015 was orientated E-W. This does not follow the prevailing alignment of the modern fields.

## 3.11 Areas 8 and 9

3.11.1 Area 8 and 9 both measured 20x20m. No archaeological remains were found in either of the areas.

## 3.12 Trenches 94-99

3.12.1 Six additional evaluation trenches were opened. Trench 94 measured 45x2m, and Trenches 95-99 measured 50x2m. These were excavated to try and establish the nature of a number of undated ditches discovered in the evaluation, although no archaeological features were exposed.

# 4 DISCUSSION

## 4.1 Reliability of field investigation

4.1.1 The ground and weather conditions during the excavation were generally good with little perceivable impact upon the results.

## 4.2 Excavation objectives and results

4.2.1 The objectives of the excavation were to understand and characterise the nature of the Bronze Age, Iron Age and Saxon activity as indicated by the evaluation.

4.2.2 Despite the apparently promising evaluation, very few archaeological features were uncovered during the present excavation. Nothing of certain Bronze Age or Saxon date was discovered to further define the activity discovered during the evaluation. Area 6 explored the area within which archaeological features of both periods were found in the evaluation. It therefore appears that Bronze Age and Saxon activity on the site was limited and ephemeral.

4.2.3 A number of Iron Age pits and a ditch were found in Area 4. Area 5 and trenches 95-98 were positioned near this area and should have uncovered further Iron Age evidence if activity extended significantly beyond the boundaries of Area 4. As Iron Age features were not found in either Area 5 or the evaluation trenches, it is likely that the extent and character of the Iron Age activity has been largely defined.

## 4.3 Interpretation and discussion

4.3.1 The archaeological features uncovered during the excavation can be placed into four groups. The first group comprises the single late Bronze Age to early Iron Age pit in Area 3; the second group is composed of the middle or late Iron Age pits and a ditch; the third includes field boundary features of probable post-medieval date; and the fourth group comprises the remaining undated pits, postholes and ditches.

*Late Bronze Age to early Iron Age pit 3003*

4.3.2 A single pit has been phased to the late Bronze Age to early Iron Age. No further related features were discovered in the 20x20m trench opened around the pit. Given the lack of related features interpretation is difficult, although the environmental sample from the pit provides some information. This contained wheat (*Triticum* sp.), including some fragments of emmer (*Triticum dicoccum*), as well as barley (*Hordeum vulgare*). The material comprised clean grain ready for processing, suggesting that grain was stored and/or processed in the surrounding area. This in turn suggests that a settlement existed in the proximity of the pit, although the complete lack of related features discovered during either the evaluation or excavation suggests this must have been small and/or short lived.

*Iron Age features in Area 4*

4.3.3 Three pits in Area 4 contained pottery dating to the middle or late Iron Age. It is likely that all of the archaeological features in Area 4 including the ditch and remaining undated pits and postholes date to the middle or late Iron Age. Clusters of pits are

common on Iron Age settlements in the region (Palmer 2010; 2017, 53-9). These are often interpreted as storage features or used to deposit refuse, although frequently the purpose of such pits is unclear. Even after allowing for some truncation, the majority of the pits at Oakley Grove were probably too shallow to store grain (Reynolds 1979; see discussion by Lambrick 2010, 274-7). Pit 4013 contained clumps of clay around its upper edges, and may have been used to store clay.

4.3.4 Pit sizes compare well to middle-late Iron Age examples found at Marsh Farm Quarry further down the Avon valley (Palmer 2010, 9-16). Little obvious refuse was found to positively indicate use for disposal, though pits 4020, 4034 and 4044 all had layers of burnt or charred material within them, representing either the deliberate disposal of waste from hearths or fires or the accidental incorporation of material from nearby activity. Little later prehistoric archaeobotanical evidence exists in the region, and the samples from these pits are therefore particularly informative.

4.3.5 Iron Age pits are sometimes used for the purposeful deposition of objects and material that does not fall under the category of refuse disposal (Hill 1995). One of these 'special deposits' may have been identified at Oakley Grove. Pit 4044 has been dated to the Iron Age due to the presence of pottery, although a complete, fine barbed-and-tanged arrowhead and two late Mesolithic or early Neolithic flint objects were also found in the pit. There are a number of instances of the apparent purposeful collection and deposition of already ancient objects in the Iron Age (Davies 2016, 151-9, 200-6, 448). One example is the discovery of two Mesolithic adzes found together on the floor of a pit containing early Iron Age pottery at Manor Farm Buildings, Old Malden, London (Jon Cotton *pers. comm.*). Alternatively, the earlier flint artefacts in Iron Age pit 4044 may have been incorporated accidentally.

4.3.6 Other probable Iron Age features in Area 4 include a ditch of unknown purpose, and two postholes that do not form a clear structure. Together, the features form a limited area of Iron Age activity, possibly a short-lived settlement, although no houses were discovered.

*Field boundaries and trackway*

4.3.7 Field boundary ditches or hedge-lines were found in Areas 2, 6 and 7, and land drains found in Area 1. One of the two ditches in Area 2 directly corresponds to a modern field boundary, and the other ditch, 2025=2027, appears to be spatially related to the same system. The ditch contained a single sherd of Roman pottery. This is probably residual, and no other Roman material culture was discovered.

4.3.8 A double-ditched parallel trackway or boundary was found crossing Areas 6 and 7. In Warwickshire, double-ditched trackways of earliest Iron Age and middle-late Iron Age date are known at Wasperton and Ling Hall Quarry respectively (Palmer 2017, 50, fig. 5.5), and similar Roman examples are known from the lower Arrow valley (Palmer 2000; 2010). The complete lack of artefactual material from Oakley Grove precludes certain phasing. However, along with the other field boundary features it is likely that the trackway dates to the post-medieval period as the line of the trackway meets a modern field boundary on the same alignment 50m to the south-west. The straight and regular nature of the ditches would also be unusual if the feature is prehistoric.

It is possible that the trackway is the remains of an earlier field system, and the orientation of this system continues to the present.

*Undated pits, postholes and tree-throw holes*

4.3.9 A small number of undated pits and postholes were uncovered in Area 1-7. None of these appear to form any coherent structure.

4.3.10 A large number of tree-throw holes were found across the site, although no dating evidence was recorded to give an indication of when the area was woodland.

# APPENDIX A TRENCH DESCRIPTIONS AND CONTEXT INVENTORY

| Area 1 | | | | | | |
|---|---|---|---|---|---|---|
| **General description** | | | | | | |
| Area contains 2 linear land drains, 1 pit, 1 possible posthole and 1 excavated tree-throw hole.<br>Topsoil and subsoil overlying natural geology of sand and gravel in north, and clay in south. | | | | | **Shape** | Square |
| | | | | | **Size ($m^2$)** | 410 |
| | | | | | **Avg. depth (m)** | 0.55 |
| **Context No.** | **Type** | **Width (m)** | **Depth (m)** | **Description** | **Finds** | **Date** |
| 1000 | Layer | - | 0.31 | Topsoil/ploughsoil | - | - |
| 1001 | Layer | - | 0.23 | Subsoil. | - | - |
| 1002 | Layer | - | - | Natural. Highly variable | - | - |
| 1003 | Land drains | - | - | Three land drains that run from the north-west to south-east across Area 1. | - | Post-medieval |
| 1004 | Cut | 2.02x 0.64 | 0.21 | Tree-throw hole | - | - |
| 1005 | Fill | - | 0.21 | Fill of three-throw | - | - |
| 1006 | Cut | 0.23 | 0.16 | Posthole/natural cut | - | - |
| 1007 | Fill | - | 0.16 | Fill of posthole | - | - |
| 1008 | Cut | 3.70x 2.00 | 0.10 | Pit | - | - |
| 1009 | Fill | - | 0.10 | Fill of pit | - | - |

| Area 2 | | | | | | |
|---|---|---|---|---|---|---|
| **General description** | | | | | | |
| Area contains 6 postholes possibly making the corner of a rectangular structure, 1 hedge line, 1 ditch, and 3 excavated three-throws.<br>Topsoil and subsoil overlying natural geology of silty sand and clay. | | | | | **Shape** | Irregular |
| | | | | | **Size ($m^2$)** | 460 |
| | | | | | **Avg. depth (m)** | |
| **Context No.** | **Type** | **Width (m)** | **Depth (m)** | **Description** | **Finds** | **Date** |
| 2000 | Layer | - | | Topsoil/ploughsoil | - | - |
| 2001 | Layer | - | | Subsoil | - | - |
| 2002 | Layer | - | - | Natural | - | - |
| 2003 | Cut | 0.78x 0.24 | 0.11 | Three-throw | - | - |
| 2004 | Fill | - | 0.11 | Fill of three-throw | - | - |
| 2005 | Cut | 0.50x 0.44 | 0.20 | Posthole | - | - |
| 2006 | Fill | - | 0.20 | Fill of posthole | - | - |
| 2007 | Cut | 0.54x 0.36 | 0.24 | Posthole | - | - |
| 2008 | Fill | - | 0.24 | Posthole fill | - | - |

| | | | | | | |
|---|---|---|---|---|---|---|
| 2009 | Cut | 0.57x 0.38 | 0.24 | Posthole | - | - |
| 2010 | Fill | - | 0.24 | Fill of posthole | - | - |
| 2011 | Cut | 0.80x 0.80 | 0.30 | Posthole | - | - |
| 2012 | Fill | - | 0.30 | Fill of posthole | - | - |
| 2013 | Cut | 1.1x 1.1 | 0.40 | Posthole | - | - |
| 2014 | Fill | - | 0.40 | Fill of posthole | - | - |
| 2015 | Cut | 2.3x 2.3 | 0.18 | Tree-throw hole | - | - |
| 2016 | Fill | - | 0.18 | Fill of tree-throw hole | - | - |
| 2017 | Cut | 1.10 | 0.22 | Hedge line | - | Post-medieval |
| 2018 | Fill | - | 0.22 | Fill of hedge line | - | Post-medieval |
| 2019 | Cut | 0.30x 0.30 | 0.30 | Posthole | - | - |
| 2020 | Fill | - | 0.30 | Fill of posthole | - | - |
| 2021 | Cut | 1.1 | 0.24 | Hedge line | - | Post-medieval |
| 2022 | Fill | - | 0.24 | Fill of hedge line | - | Post-medieval |
| 2023 | Cut | 3.0x 2.30 | 0.14 | Tree-throw hole | - | - |
| 2024 | Fill | - | 0.14 | Fill of three-throw | - | - |
| 2025 | Cut | 0.96m | 0.32 | Ditch | - | Post-medieval |
| 2026 | Fill | - | 0.32 | Fill of ditch | - | Post-medieval |
| 2027 | Cut | 0.54 | 0.16 | Ditch | - | Post-medieval |
| 2028 | Fill | - | 0.16 | Fill of ditch | Pottery, Slag | Post-medieval |

| **Area 3** | | | | | | |
|---|---|---|---|---|---|---|
| **General description** | | | | | | |
| Area contains 1 pit.<br>Topsoil and subsoil overlying natural geology of silty sand and clay. | | | | | **Shape** | Square |
| | | | | | **Size ($m^2$)** | 400 |
| | | | | | **Avg. depth (m)** | 0.50 |
| **Context No.** | **Type** | **Width (m)** | **Depth (m)** | **Description** | **Finds** | **Date** |
| 3000 | Layer | - | 0.30 | Topsoil/ploughsoil | - | - |
| 3001 | Layer | - | 0.20 | Subsoil | - | - |
| 3002 | Layer | - | - | Natural | - | - |
| 3003 | Cut | 0.84x 0.71 | 0.13 | Pit. Feature partially excavated during evaluation. | No finds from OA excavation, but 6 sherds | Late Bronze Age-Early |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | | | from evaluation | Iron Age |
| 3004 | Fill | - | 0.08 | Upper fill of pit | - | Late Bronze Age-Early Iron Age |
| 3005 | Fill | - | 0.09 | Middle fill of pit | - | Late Bronze Age-Early Iron Age |
| 3006 | Fill | - | 0.11 | Basal fill of pit | - | Late Bronze Age-Early Iron Age |

| **Area 4** | | | | | | |
|---|---|---|---|---|---|---|
| **General description** | | | | | | |
| Area contains a ditch, 2 postholes, 7 pits and numerous tree-throw holes.<br>Topsoil and subsoil overlying natural geology of silty sand and clay. | | | | | **Shape** | Irregular |
| | | | | | **Size ($m^2$)** | 950 |
| | | | | | **Avg. depth (m)** | 0.75 |
| **Context No.** | **Type** | **Width (m)** | **Depth (m)** | **Description** | **Finds** | **Date** |
| 4000 | Layer | - | 0.28 | Topsoil/ploughsoil | - | - |
| 4001 | Layer | - | 0.48 | Subsoil | - | - |
| 4002 | Layer | - | - | Natural | - | - |
| 4003 | Cut | 1.26x 1.29 | 0.19 | Ditch terminus | - | Iron Age |
| 4004 | Fill | - | 0.19 | Fill of ditch | - | Iron Age |
| 4005 | Cut | 0.25x 0.24 | 0.38 | Posthole | - | - |
| 4006 | Fill | - | 0.38 | Fill of posthole | - | - |
| 4007 | Cut | 1.60x 1.38 | 0.39 | Pit | - | Iron Age |
| 4008 | Fill | - | 0.39 | Basal fill of pit | - | Iron Age |
| 4009 | Fill | - | 0.32 | Upper fill of pit | - | Iron Age |
| 4010 | Cut | 2.38x 1.08 | 0.10 | Tree-throw hole | - | - |
| 4011 | Fill | - | 0.10 | Fill of tree-throw hole | - | - |
| 4012 | Fill | - | 0.09 | Basal fill of pit. Clumps of clay on edges of pit | - | Iron Age |
| 4013 | Cut | 0.82x 0.48 | 0.09 | Pit | - | Iron Age |
| 4014 | Fill | - | 0.04 | Upper fill of pit | - | Iron Age |
| 4015 | Fill | 0.51x 0.31 | 0.22 | Fill of posthole | - | - |
| 4016 | Cut | 1.30-1.69 | 0.15 | Ditch | - | Iron Age |
| 4017 | Fill | - | 0.15 | Fill of ditch | - | Iron Age |

| | | | | | | |
|---|---|---|---|---|---|---|
| 4018 | Cut | 2.41 | 0.21 | Ditch | - | Iron Age |
| 4019 | Fill | - | 0.21 | Fill of ditch | - | Iron Age |
| 4020 | Cut | 2.02x 1.22 | 0.63 | Pit | Pottery | Iron Age |
| 4021 | Fill | - | 0.04 | Basal fill of pit | Pottery | Iron Age |
| 4022 | Fill | - | 0.10 | Lower fill of pit | - | Iron Age |
| 4023 | Fill | - | 0.27 | Middle fill of pit | Pottery | Iron Age |
| 4024 | Fill | - | 0.18 | Middle fill of pit | - | Iron Age |
| 4025 | Fill | - | 0.06 | Middle fill of pit. Charcoal rich | - | Iron Age |
| 4026 | Fill | - | 0.36 | Upper fill of pit | Pottery | Iron Age |
| 4027 | Fill | - | 0.02 | Upper fill of pit | - | Iron Age |
| 4028 | Fill | - | 0.03 | Upper fill of pit | Pottery | Iron Age |
| 4029 | Cut | 0.51x 0.31 | 0.22 | Posthole | - | - |
| 4030 | Cut | 0.90x 0.32 | 0.28 | Tree-throw hole | - | - |
| 4031 | Fill | - | 0.28 | Fill of tree-throw hole | - | - |
| 4032 | Cut | 0.62x 0.40 | 0.12 | Tree-throw hole | - | - |
| 4033 | Fill | - | 0.12 | Fill of tree-throw hole | - | - |
| 4034 | Cut | 2.08x 1.88 | 0.51 | Pit | - | Iron Age |
| 4035 | Fill | - | 0.20 | Basal fill of pit | - | Iron Age |
| 4036 | Fill | - | 0.05-0.09 | Middle fill of pit. Debris from burning | - | Iron Age |
| 4037 | Fill | - | 0.18-0.27 | Upper fill of pit | - | Iron Age |
| 4038 | Cut | 2.35x 0.91 | 0.42 | Tree-throw hole | - | - |
| 4039 | Fill | - | 0.42 | Fill of tree-throw hole | - | - |
| 4040 | Cut | 1.68x 0.90 | 0.31 | Tree-throw hole | - | - |
| 4041 | Fill | - | 0.31 | Fill of tree-throw hole | - | - |
| 4042 | Cut | 0.58x 0.30 | 0.15 | Pit | - | Iron Age |
| 4043 | Fill | - | 0.15 | Fill of pit | - | Iron Age |
| 4044 | Cut | 2.58x 1.26 | 0.55 | Pit | Pottery, arrowhead, flint awl and bladelet | Iron Age |
| 4045 | Fill | - | 0.21 | Basal fill of pit | - | Iron Age |
| 4046 | Fill | - | 0.26 | Middle fill of pit | - | Iron Age |
| 4047 | Fill | - | 0.03 | Middle fill of pit. Rich charcoal lens | Pottery | Iron Age |
| 4048 | Fill | - | 0.20 | Middle fill of pit | Barbed-and-tanged arrowhead, flint bladelets | Iron Age |
| 4049 | Fill | - | 0.02 | Middle fill of pit. Rich | - | Iron Age |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | | charcoal lens | | |
| 4050 | Fill | - | 0.15 | Middle fill of pit | - | Iron Age |
| 4051 | Fill | - | 0.06 | Upper fill of pit. Rich charcoal lens | Pottery | Iron Age |
| 4052 | Cut | 1.25x 1.14 | 0.24 | Pit | - | Iron Age |
| 4053 | Fill | - | 0.24 | Fill of pit | - | Iron Age |
| 4054 | Cut | 1.01 | 0.10 | Ditch | - | Iron Age |
| 4055 | Fill | - | 0.10 | Fill of ditch | - | Iron Age |
| 4056 | Cut | 1.32x 0.94 | 0.52 | Tree-throw hole | - | - |
| 4057 | Fill | - | 0.52 | Fill of tree-throw hole | - | - |
| 4058 | Fill | - | 0.17 | Upper fill of pit | Pottery, flint, stone | Iron Age |
| 4059 | Cut | 1.21 | 0.12 | Ditch terminus | - | Iron Age |
| 4060 | Fill | - | 0.12 | Fill of ditch | - | Iron Age |
| 4061 | Cut | 2.15 | 0.21 | Fill of ditch | - | Iron Age |
| 4062 | Fill | - | 0.21 | Fill of ditch | - | Iron Age |
| 4063 | Cut | 2.77x 1.00 | 0.37 | Tree-throw hole | - | - |
| 4064 | Fill | - | 0.37 | Fill of tree-throw hole | - | - |

| **Area 5** | | | | | | |
|---|---|---|---|---|---|---|
| **General description** | | | | | | |
| Area contains 4 postholes, 2 excavated animal burrows and 2 excavated tree-throw holes. Topsoil and subsoil overlying natural geology of silty sand and clay. | | | | | **Shape** | Square |
| | | | | | **Size ($m^2$)** | 415 |
| | | | | | **Avg. depth (m)** | 0.75 |
| **Context No.** | **Type** | **Width (m)** | **Depth (m)** | **Description** | **Finds** | **Date** |
| 5000 | Layer | - | 0.26 | Topsoil/ploughsoil | - | - |
| 5001 | Layer | - | 0.48 | Subsoil | - | - |
| 5002 | Layer | - | - | Natural | - | - |
| 5003 | Cut | 1.91x 1.88 | 0.29 | Tree-throw hole | - | - |
| 5004 | Fill | - | 0.29 | Fill of tree-throw hole | - | - |
| 5005 | Cut | 1.33x 1.02 | 0.12 | Tree-throw hole | - | - |
| 5006 | Fill | - | 0.12 | Fill of tree-throw hole | - | - |
| 5007 | Cut | 0.76x 0.9 | 0.24 | Animal burrow | - | - |
| 5008 | Fill | - | 0.12 | Basal fill of burrow | - | - |
| 5009 | Fill | - | 0.21 | Upper fill of burrow | - | - |
| 5010 | Cut | 0.6x 0.54 | 0.28 | Animal burrow | - | - |
| 5011 | Fill | - | 0.28 | Fill of burrow | - | - |
| 5012 | Fill | - | 0.17 | Fill of tree-throw hole | - | - |
| 5013 | Cut | 1.26x 0.8 | 0.17 | Tree-throw hole | - | - |

| | | | | | | |
|---|---|---|---|---|---|---|
| 5014 | Fill | - | 0.22 | Fill of tree-throw hole | - | - |
| 5015 | Cut | 1.68x 1.4 | 0.22 | Tree-throw hole | - | - |
| 5016 | Fill | - | 0.11 | Fill of tree-throw hole | - | - |
| 5017 | Cut | 0.80x 0.36 | 0.11 | Tree-throw hole | - | - |
| 5018 | Cut | 0.28x 0.21 | 0.21 | Posthole | - | - |
| 5019 | Fill | - | 0.21 | Fill of posthole | - | - |
| 5020 | Cut | 0.28x 0.20 | 0.10 | Posthole | - | - |
| 5021 | Fill | - | 0.10 | Fill of posthole | - | - |
| 5022 | Cut | 0.23x 0.18 | 0.06 | Posthole | - | - |
| 5023 | Fill | - | 0.06 | Fill of posthole | - | - |
| 5024 | Cut | 0.31x 0.30 | 0.10 | Posthole | - | - |
| 5025 | Fill | - | 0.10 | Fill of posthole | - | - |

| **Area 6** | | | | | | |
|---|---|---|---|---|---|---|
| **General description** | | | | | | |
| Area contains 4 ditches comprising a possible double-ditched trackway or boundary with an entrance. A spread of silty clay is located at this entrance. Also 7 pits, 1 posthole and 1 excavated tree-throw hole.<br>Topsoil and subsoil overlying natural highly variable geology of silty sand, silty clay and silty sandy gravel | | | | | **Shape** | Rectangular |
| | | | | | **Size ($m^2$)** | 2330 |
| | | | | | **Avg. depth (m)** | 0.50 |
| **Context No.** | **Type** | **Width (m)** | **Depth (m)** | **Description** | **Finds** | **Date** |
| 6000 | Layer | - | 0.32 | Topsoil | - | - |
| 6001 | Layer | - | 0.19 | Subsoil | - | - |
| 6002 | Layer | - | - | Natural | - | - |
| 6003 | Cut | 0.86 | 0.19 | Ditch terminus | - | - |
| 6004 | Fill | - | 0.19 | Fill of ditch | - | - |
| 6005 | Cut | 0.38 | 0.18 | Ditch terminus | - | - |
| 6006 | Fill | - | 0.18 | Fill of ditch | - | - |
| 6007 | Cut | 0.76 | 0.18 | Ditch terminus | - | - |
| 6008 | Fill | - | 0.18 | Fill of ditch | - | - |
| 6009 | Cut | 1.39 | 0.33 | Ditch terminus | - | - |
| 6010 | Fill | - | 0.33 | Basal fill of ditch | - | - |
| 6011 | Layer | | 0.3 | Silty clay spread possible fill of feature as ditches avoid interacting with it | - | - |
| 6012 | Fill | - | 0.09 | Upper fill of ditch | - | - |
| 6013 | Cut | 4.00 | 0.25 | Probable natural feature, possibly water channels | - | - |
| 6014 | Fill | - | 0.35 | Basal fill of probable natural feature | - | - |
| 6015 | Cut | 1.1 | 0.40 | Probable natural feature, | - | - |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | | possibly water channels | | |
| 6016 | Fill | - | 0.40 | Fill of probable natural feature | - | - |
| 6017 | Cut | 1.02 | 0.32 | Ditch | - | - |
| 6018 | Fill | - | 0.08 | Upper fill of ditch | - | - |
| 6019 | Fill | - | 0.22 | Basal fill of ditch | - | - |
| 6020 | Cut | 0.61 | 0.19 | Ditch | - | - |
| 6021 | Fill | - | 0.12 | Fill of ditch | - | - |
| 6022 | Cut | 1.2x 1.8 | 0.15 | Pit | - | - |
| 6023 | Fill | - | 0.15 | Fill of pit | - | - |
| 6024 | Cut | 0.9x 1.1 | 0.32 | Pit | - | - |
| 6025 | Fill | - | 0.12 | Basal fill of pit | - | - |
| 6026 | Fill | - | 0.06 | Upper fill of pit | - | - |
| 6027 | Fill | - | 0.3 | Fill of pit | - | - |
| 6028 | Cut | 0.7x 0.7 | 0.13 | Pit | - | - |
| 6029 | Fill | - | 0.13 | Fill of pit | - | - |
| 6030 | Cut | 0.5x 0.4 | 0.12 | Posthole | - | - |
| 6031 | Fill | - | 0.12 | Basal fill of posthole | - | - |
| 6032 | Fill | - | 0.06 | Upper fill of posthole | - | - |
| 6033 | Cut | 0.96 | 0.16 | Pit | - | - |
| 6034 | Fill | - | 0.96 | Fill of pit | - | - |
| 6035 | Cut | 1.45 | 0.22 | Tree-throw hole | - | - |
| 6036 | Fill | - | 0.22 | Fill of tree-throw hole | - | - |
| 6037 | Cut | 0.42 | 0.11 | Pit | - | - |
| 6038 | Fill | - | 0.09 | Fill of pit | - | - |
| 6039 | Cut | 2.1x 1.4 | 0.36 | Pit | - | - |
| 6040 | Fill | - | 0.36 | Fill of pit | - | - |
| 6041 | Cut | 0.9x 0.35 | 0.18 | Pit | - | - |
| 6042 | Fill | - | 0.18 | Fill of pit | - | - |
| 6043 | Layer | | 0.55 | Silty clay spread possible fill of feature as ditches avoid interacting with it | - | - |

**Area 7**

| **General description** | | |
|---|---|---|
| Area contains two parallel linear ditches cut by modern hedge-line. Also 3 further ditches, 2 postholes, a plough furrow and 5 excavated tree-throw holes.<br>Topsoil and subsoil overlying natural geology of silty sand and clay. | **Shape** | Irregular |
| | **Size ($m^2$)** | 3055 |
| | **Avg. depth (m)** | |

| **Context No.** | **Type** | **Width (m)** | **Depth (m)** | **Description** | **Finds** | **Date** |
|---|---|---|---|---|---|---|
| 7000 | Layer | - | | Topsoil/ploughsoil | - | - |

| | | | | | | |
|---|---|---|---|---|---|---|
| 7001 | Layer | - | | Subsoil | - | - |
| 7002 | Layer | - | - | Natural | - | - |
| 7003 | Cut | 1.54x 0.74 | 0.19 | Tree-throw hole | - | - |
| 7004 | Fill | - | 0.19 | Fill of tree-throw hole | - | - |
| 7005 | Cut | 1.55x 0.80 | 0.14 | Tree-throw hole | - | - |
| 7006 | Fill | - | 0.14 | Fill of tree-throw hole | - | - |
| 7007 | Cut | 0.85x 1.45 | 0.11 | Tree-throw hole or variation in geology | - | - |
| 7008 | Fill | - | 0.85 | Fill of probable tree-throw hole | - | - |
| 7009 | Cut | 1.07x 2.03 | 0.24 | Tree-throw hole | - | - |
| 7010 | Fill | - | 0.24 | Fill of tree-throw hole | - | - |
| 7011 | Cut | 0.24 | 0.66 | Modern gully/trench | - | - |
| 7012 | Fill | - | 0.66 | Fill of modern gully/trench | - | - |
| 7013 | Cut | 0.31 | 0.10 | Modern gully/trench | - | - |
| 7014 | Fill | - | 0.10 | Fill of modern gully/trench | - | - |
| 7015 | Cut | 3.3 | 0.4 | Plough furrow | - | - |
| 7016 | Fill | - | 3.3 | Fill of plough furrow | - | - |
| 7017 | Cut | 0.62x 0.74 | 0.20 | Posthole | - | - |
| 7018 | Fill | - | 0.20 | Fill of posthole | - | - |
| 7019 | Cut | 0.71 | 0.10 | Ditch | - | - |
| 7020 | Fill | - | 0.10 | Fill of ditch | - | - |
| 7021 | Cut | 0.64 | 0.10 | Ditch terminus | - | - |
| 7022 | Fill | - | 0.10 | Fill of ditch | - | - |
| 7023 | Cut | 1.40 | 0.30 | Ditch | - | - |
| 7024 | Fill | - | 0.30 | Fill of ditch | - | - |
| 7025 | Cut | 1.30 | 0.12 | Ditch | - | - |
| 7026 | Fill | - | 0.12 | Fill of ditch | - | - |
| 7027 | Cut | 1.40 | 0.41 | Ditch | - | - |
| 7028 | Fill | - | 0.15 | Basal fill of ditch | - | - |
| 7029 | Fill | - | 0.13 | Middle fill of ditch | - | - |
| 7030 | Fill | - | 0.16 | Upper fill of ditch | - | - |
| 7031 | Cut | 1.55 | 0.52 | Ditch | - | - |
| 7032 | Fill | - | 0.20 | Basal fill of ditch | - | - |
| 7033 | Fill | - | 0.19 | Middle fill of ditch | - | - |
| 7034 | Fill | - | 0.18 | Middle fill of ditch | - | - |
| 7035 | Fill | - | 0.12 | Upper fill of ditch | - | - |
| 7036 | Fill | - | 0.10 | Fill of posthole | - | - |
| 7037 | Cut | 1.00 | 0.20 | Ditch | - | - |
| 7038 | Fill | 1.00 | 0.20 | Fill of ditch | - | - |
| 7039 | Cut | 1.10 | 0.20 | Ditch | - | - |
| 7040 | Fill | - | 0.20 | Fill of ditch | - | - |
| 7041 | Cut | 0.80x 1.12 | 0.30 | Tree-throw hole | - | - |

| | | | | | | |
|---|---|---|---|---|---|---|
| 7042 | Fill | - | 0.30 | Fill of tree-throw hole | - | - |
| 7043 | Cut | 0.30x 0.30 | 0.10 | Posthole | - | - |
| 7044 | Fill | - | 0.10 | Fill of posthole | - | - |
| 7045 | Cut | 0.43 | 0.08 | Hedge-line terminus | - | Modern |
| 7046 | Fill | - | 0.08 | Fill of hedge-line | - | Modern |
| 7047 | Cut | 1.30 | 0.31 | Ditch | - | - |
| 7048 | Fill | - | 0.11 | Basal fill of ditch | - | - |
| 7049 | Fill | - | 0.21 | Upper fill of ditch | - | - |
| 7050 | Cut | 1.67 | 0.53 | Ditch | - | - |
| 7051 | Fill | - | 0.19 | Basal fill of ditch | - | - |
| 7052 | Fill | - | 0.10 | Lower fill of ditch | - | - |
| 7053 | Fill | - | 0.23 | Middle fill of ditch | - | - |
| 7054 | Fill | - | 0.26 | Upper fill of ditch | - | - |

| **Area 8** | | |
|---|---|---|
| **General description** | | |
| Area devoid of archaeology.<br>Topsoil and subsoil overlying natural geology of silty sand and clay. | **Shape** | Square |
| | **Size ($m^2$)** | 410 |
| | **Avg. depth (m)** | |

| **Area 9** | | | | | | |
|---|---|---|---|---|---|---|
| **General description** | | | | | | |
| Area devoid of archaeology.<br>Topsoil and subsoil overlying natural geology of silty sand with clay patches. | | | | | **Shape** | Square |
| | | | | | **Size ($m^2$)** | 410 |
| | | | | | **Avg. depth (m)** | 0.55 |
| **Context No.** | **Type** | **Width (m)** | **Depth (m)** | **Description** | **Finds** | **Date** |
| 9000 | Layer | - | 0.25 | Topsoil/ploughsoil | - | - |
| 9001 | Layer | - | 0.30 | Subsoil | - | - |
| 9002 | Layer | - | - | Natural | - | - |
| 9003 | Cut | 0.56x 0.50 | 0.10 | Natural feature | - | - |
| 9004 | Fill | - | 0.10 | Fill of natural feature | - | - |
| 9005 | Cut | 0.46x 0.42 | 0.18 | Natural feature | - | - |
| 9006 | Fill | - | 0.18 | Fill of natural feature | - | - |

| **Trench 94** | | | | | | |
|---|---|---|---|---|---|---|
| **General description** | | | | | **Orientation** | NW/SE |
| Trench devoid of archaeology.<br>Topsoil and subsoil overlying natural geology of clayey silty sand. | | | | | **Length (m)** | 44.5 |
| | | | | | **Width (m)** | 2 |
| | | | | | **Avg. depth (m)** | 0.50 |
| **Context No.** | **Type** | **Width (m)** | **Depth (m)** | **Description** | **Finds** | **Date** |
| 9400 | Layer | - | 0.15 | Topsoil/ploughsoil | - | - |
| 9401 | Layer | - | 0.35 | Subsoil | - | - |
| 9402 | Layer | - | - | Natural | - | - |

| Trench 95 | | | | | | |
|---|---|---|---|---|---|---|
| **General description** | | | | | **Orientation** | NW/SE |
| Trench devoid of archaeology.<br>Topsoil and subsoil overlying natural geology of clayey silty sand. | | | | | **Length (m)** | 50 |
| | | | | | **Width (m)** | 2 |
| | | | | | **Avg. depth (m)** | |
| **Context No.** | **Type** | **Width (m)** | **Depth (m)** | **Description** | **Finds** | **Date** |
| 9500 | Layer | - | | Topsoil/ploughsoil | - | - |
| 9501 | Layer | - | | Subsoil | - | - |
| 9502 | Layer | - | | Natural | - | - |
| 9503 | Cut | 1.00 | 0.15 | Hedge line | - | - |
| 9504 | Fill | - | 0.15 | Fill of hedge line | - | - |

| Trench 96 | | | | | | |
|---|---|---|---|---|---|---|
| **General description** | | | | | **Orientation** | NE/SW |
| Trench a devoid of archaeology.<br>Topsoil and subsoil overlying natural geology of silty sand with clay patches. | | | | | **Length (m)** | 50 |
| | | | | | **Width (m)** | 2 |
| | | | | | **Avg. depth (m)** | 0.55 |
| **Context No.** | **Type** | **Width (m)** | **Depth (m)** | **Description** | **Finds** | **Date** |
| 9600 | Layer | - | 0.25 | Topsoil/ploughsoil | - | - |
| 9001 | Layer | - | 0.32 | Subsoil | - | - |
| 9002 | Layer | - | - | Natural | - | - |

| Trench 97 | | | | | | |
|---|---|---|---|---|---|---|
| **General description** | | | | | **Orientation** | NE/SW |
| Trench a devoid of archaeology.<br>Topsoil and subsoil overlying natural geology of silty sand with clay patches. | | | | | **Length (m)** | 50 |
| | | | | | **Width (m)** | 2 |
| | | | | | **Avg. depth (m)** | 0.55 |
| **Context No.** | **Type** | **Width (m)** | **Depth (m)** | **Description** | **Finds** | **Date** |
| 9700 | Layer | - | 0.25 | Topsoil/ploughsoil | - | - |
| 9001 | Layer | - | 0.31 | Subsoil | - | - |
| 9002 | Layer | - | - | Natural | - | - |

| Trench 98 | | | | | | |
|---|---|---|---|---|---|---|
| **General description** | | | | | **Orientation** | NE/SW |
| Trench devoid of archaeology. 1 unexcavated tree-throw hole exposed.<br>Topsoil and subsoil overlying natural geology of silty sand with clay patches. | | | | | **Length (m)** | 50 |
| | | | | | **Width (m)** | 2 |
| | | | | | **Avg. depth (m)** | 0.65 |
| **Context No.** | **Type** | **Width (m)** | **Depth (m)** | **Description** | **Finds** | **Date** |

| | | | | | | |
|---|---|---|---|---|---|---|
| 9800 | Layer | - | 0.20-0.26 | Topsoil/ploughsoil | - | - |
| 9801 | Layer | - | 0.36-0.50 | Subsoil | - | - |
| 9802 | Layer | - | - | Natural | - | - |

| **Trench 99** | | | | | | |
|---|---|---|---|---|---|---|
| **General description** | | | | | **Orientation** | E/W |
| Trench devoid of archaeology. 1 tree-throw hole excavated. Topsoil and subsoil overlying natural geology of silty sand with clay patches. | | | | | **Length (m)** | 50 |
| | | | | | **Width (m)** | 2 |
| | | | | | **Avg. depth (m)** | 0.55 |
| **Context No.** | **Type** | **Width (m)** | **Depth (m)** | **Description** | **Finds** | **Date** |
| 9900 | Layer | - | 0.25 | Topsoil/ploughsoil | - | - |
| 9901 | Layer | - | 0.30 | Subsoil | - | - |
| 9902 | Cut | - | 0.15 | Tree-throw hole | - | - |
| 9903 | Fill | - | 0.15 | Fill of tree-throw hole | - | - |
| 9904 | Layer | - | - | Natural | - | - |

# APPENDIX B FINDS REPORTS

## B.1 Pottery

*By Lisa Brown*

B.1.1 A total of 103 sherds of pottery weighing 437g was recovered (Table 1). Of this group, a single sherd (16g) from ditch 2027 in Area 2 is Roman – a greyware body sherd that is not closely dateable. The remainder of the assemblage, all of which came from the fills of three pits (4020, 4044 and 4052), is almost certainly of middle or late Iron Age date (400 BC – AD 43).

B.1.2 Four broad Iron Age fabrics were identified with the use of a binocular microscope and a hand lens at 10x and 20x magnification. Q1 (2 sherds/21g) is a distinctive highly micaceous sandy fabric with small pieces of quartzite; Q2 (11 sherds/80g) is a slightly micaceous black sandy ware with small organic voids (generally well-finished); Q3 (1 sherd, 3g) is an orange sandy ware with of powdery red ferrous inclusions; C1 (87 sherds/315g) is the most common fabric, a lightly sanded fabric with angular vesicules indicating leached calcareous rock. The sherds have a corky appearance due to the comprehensive leaching. Sixteen sherds weighing 6g are too small to classify. The micaceous wares may have a Malvernian origin, and the calcareous pottery may have incorporated carboniferous limestone temper from sources that outcrop close to Leamington.

B.1.3 Pit 4020 produced 28 sherds (112g); pit 4044 also 28 sherds (83g); pit 4052 contained 21 sherds (59g). The collection is essentially made up of highly fragmented body sherds, with an average sherd weight of 4g. The only identifiable vessel forms are a slack-shouldered small jar or bowl with upstanding rim and a fragment of an everted rim. All of the pottery, apart from the Roman sherd, is handmade and appears to be utilitarian and domestic in function, suggesting low-status, rural occupation. Pottery of similar character has been recovered from other sites in Warwickshire, including Marsh Farm Quarry (Hancocks 2010).

*Table 1: Pottery*

| Ctx | Cut | Feature type | Form | Fabric | Rim | Body | Base | NOSH | Wt (g) | Abrasion factor | Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2028 | 2027 | Ditch | | RoQ1 | | 1 | | 1 | 16 | 2 | Roman greyware |
| 4001 | | Subsoil | | | | 1 | | 1 | 14 | 2 | Highly micaceous quartz sand and small rare quartzite |
| 4021 | 4020 | Pit | | ? | | 5 | | 5 | 2 | 3 | Crumbs |
| 4021 | 4020 | Pit | everted rim of ?bowl | Q2 | 1 | 2 | | 3 | 15 | 2 | Slightly micaceous black sandy clay, rare organic voids |
| 4021 | 4020 | Pit | | Q1 | | 1 | | 1 | 7 | 3 | |
| 4021 | 4020 | Pit | simple flat base | C1 | | 10 | 1 | 11 | 86 | 3 | Angular calcareous voids, possibly carboniferous limestone |
| 4023 | 4020 | Pit | | Q2 | | 3 | | 3 | 20 | 2 | |
| 4023 | 4020 | Pit | | C1 | | 3 | | 3 | 4 | 3 | Crumbs |
| 4026 | 4020 | Pit | | Q2 | | 2 | | 2 | 11 | 2 | Sherds join |
| 4026 | 4020 | Pit | slack shouldered bowl/jar, upright rim | C1 | 1 | 3 | 1 | 5 | 61 | 3 | |
| 4028 | 4020 | Pit | | C1 | | 18 | | 18 | 56 | 3 | |
| 4028 | 4020 | Pit | | Q3 | | 1 | | 1 | 3 | 3 | Oxidised sandy clay with red ferrous lumps |
| 4047 | 4044 | Pit | | C1 | | 1 | | 1 | 6 | 2 | |
| 4047 | 4044 | Pit | | Q2 | | 1 | | 1 | 26 | 2 | |
| 4051 | 4044 | Pit | | C1 | | 1 | | 1 | 4 | 3 | |
| 4051 | 4044 | Pit | | Q3 | | 1 | | 1 | 2 | 3 | |
| 4051 | 4044 | Pit | | Q2 | | 1 | | 1 | 3 | 3 | |
| 4053 | 4052 | Pit | | ? | | 11 | | 11 | 4 | 3 | Crumbs |
| 4053 | 4052 | Pit | | C1 | | 3 | | 3 | 21 | 3 | |
| 4053 | 4052 | Pit | | C1 | | 7 | | 7 | 34 | 3 | |
| 4058 | 4044 | Pit | | C1 | | 20 | | 20 | 32 | 3 | |
| 4058 | 4044 | Pit | | Q2 | | 1 | | 1 | 5 | 3 | |
| 4058 | 4044 | Pit | | C1 | | 2 | | 2 | 5 | 3 | |

## B.2 Flint

*By Michael Donnelly*

B.2.1 A very small assemblage of seven struck pieces and one piece of burnt unworked flint (12g) was recovered (Table 2). The assemblage consists of three flakes, two bladelets and two tools. One of the tools is a fine barbed-and-tanged arrowhead of early Bronze Age date while the second is an awl or micro-awl on a narrow bladelet of early prehistoric date. Oddly, both tools originated from the same fill (4048) of pit 4044.

B.2.2 The barbed-and-tanged arrowhead is a quite fine example with near all over invasive retouch and is complete. The sub-type is a bit ambiguous as one barb is rounded and the other is squared off but the piece would appear to be either a Conygar Hill (BF) or Kilmarnock (CF) example (Green 1980). There is a tendency to view the finer examples as funerary objects and the more basic ones as functional tools. While this may hold true for populations in general, individual artefacts can easily contradict this trend. Here, it is likely that this quite fine arrowhead was lost accidentally, during hunting, or, less likely during conflict.

B.2.3 Pit fill 4048 also yielded the awl. This was formed on a narrow bladelet with quite heavy edge damage. This tool is very likely to be much earlier in date than the arrowhead and is probably late Mesolithic to early Neolithic in date. Pit 4044, fill 4058 also yielded a bladelet as well as the single fragment of burnt flint recovered. The bladelets most likely entered the pit as residual finds, with the edge damage on the awl supporting this view as it was most likely in circulation in disturbed soil horizons for far longer than the arrowhead before being deposited into pit 4044.

B.2.4 Another bladelet was also recovered from pit 4052 (fill 4053) indicating that there was more activity during early prehistory than the stray loss of a single tool. The quantity of early forms recovered was still very slight and it may simply reflect very low levels of activity during prehistory, perhaps even several unrelated events. However, pits 4044 and 4052 lie close together and it is possible that some early prehistoric foci existed here during the Mesolithic or early Neolithic.

### *Methodology*

B.2.5 The artefacts were catalogued according to OA South's standard system of broad artefact/debitage type (Anderson-Whymark 2013; Bradley 1999), general condition noted and dating was attempted where possible. The assemblage was catalogued directly onto an Open Office spreadsheet. During the assessment additional information on condition (rolled, abraded, fresh and degree of cortication), and state of the artefact (burnt, broken, or visibly utilised) was also recorded. Retouched pieces were classified according to standard morphological descriptions (e.g. Bamford 1985, 72-77; Bradley 1999; Healy 1988, 48-9). Technological attribute analysis was initially undertaken and included the recording of butt and termination type (Inizan *et al.* 1999), flake type (Harding 1990), hammer mode (Onhuma and Bergman 1982), and the presence of platform edge abrasion.

*Table 2: Worked flint*

| Context | Type | Sub-type | Notes | Date |
|---|---|---|---|---|
| 4001 | flake | distal trimming | proximal segment | |
| 4026 | flake | side trimming | edge damage ventral right side, scaler dispersed | |
| 4048 | barbed-and-tanged arrowhead | Conygar Hill BF | borderline between Conygar and Kilmarnock sub types, quite fine invasive retouch, complete artefact, casual/hunting loss | Early Bronze Age |
| 4048 | awl | inner bladelet | possible micro-awl? Distal terminus worked to form slight point, heavily edge damaged | EPH |
| 4053 | bladelet | inner | | EPH |
| 4055 | flake | side trimming | small thin flake | |
| 4058 | bladelet | inner | distal segment | EPH |
| 4058 | burnt unworked | | 12g | |

## B.3 Stone

*By Ruth Shaffrey*

B.3.1 A total of 35 pieces of stone were retained (Table 3). The vast majority are fragments of heat-shattered quartzite cobbles. One fragment appears to have some percussion marks and may have been used as a pounder (4048), although it is rather a soft sandstone and it is not clear what it might have been used to process. The heat-shattered stones are clear evidence of heating and presumably relate to cooking.

B.3.2 Only the potential pounder needs to be retained. The other stone can be discarded.

*Table 3: Stone*

| Context | Weight (g) | No | Notes |
|---|---|---|---|
| 4053 | 847 | 5 | Heat-shattered quartzite cobbles |
| 4028 | 169 | 1 | Heat-shattered quartzite cobble |
| 4036 | 355 | 15 | Heat-shattered quartzite cobbles |
| 4051 | 76 | 4 | Heat-shattered quartzite cobbles |
| 4047 | 3 | 3 | Tiny fragments of heat-shattered stones |
| 4047 | 99 | 4 | Heat-shattered quartzite cobbles |
| 4048 | 357 | 1 | Possible utilised quartzitic sandstone cobble, with some potential percussion marks |
| 4048 | 493 | 1 | Unworked |
| 4053 | 2503 | 1 | Large cobble, unworked (but naturally squared) |

## B.4 Slag

*By Lynne Keys*

A.1.1 A very small quantity of slag (105g) was recovered by hand on site and from two soil samples processed after excavation. For this report it was examined by eye and tested with a magnet. The material was categorised on the basis of morphology and colour. Quantification data and details are given in Table 4 in which weight is shown in grams.

A.1.2 The slag fragments are undiagnostic; they cannot be assigned to smelting or smithing either because they are fragmentary as a result of being broken up during deposition, re-deposition or excavation.

A.1.3 The two fragments from samples <4> and <5> are glassy black. They could have been produced during iron making or iron smithing but are equally likely to be waste from any number of other high-temperature activities.

*Table 4: Slag*

| Context | Weight (g) | Identification | Comment |
|---|---|---|---|
| 2028 | 103 | Undiagnostic | |
| 4051 <5> | 1 | Undiagnostic | > 10mm. Black, glassy-matte |
| 4058 <4> | 1 | Undiagnostic | 10-4mm. Black, glassy-matte |

# APPENDIX C ENVIRONMENTAL REPORTS

## C.1 Charred plant remains

*By Sharon Cook*

### *Introduction*

C.1.1 Eight bulk samples were processed. The majority of these contained very little charred material apart from wood charcoal, and consequently this report includes only material from samples 3 and 5. The charcoal is reported separately below. Sample 3, containing abundant charred grain, was taken from middle fill 3005 of late Bronze Age to early Iron Age pit 3003, while sample 5 originated from upper fill 4051 of middle to late Iron Age pit 4052.

C.1.2 It must be noted at this point that unfortunately due to an operator error, it seems likely that there was some mixing of material from sample 6, middle fill 4049 of Iron Age pit 4044, with sample 3. Since all other samples from pit 4044 contain only charcoal, while the fills of pit 3005 were known to be rich in cereal grain, it is considered very likely that the grain does in fact come from sample 3 and for this reason analysis was undertaken. This error is unfortunate since the timing of the transition from a largely emmer based cultivation to a largely spelt based economy is considered to be a research priority in the West Midlands, and there are few sites with definite cereal identifications dating to the Bronze Age (Pearson 2002).

### *Method*

C.1.3 The samples were processed at Oxford Archaeology using a modified Siraf-type water flotation machine. The flots were collected in a 250µm mesh and heavy residues in a 500µm mesh. The residue fractions were sorted by eye while the flot material was sorted using a low power (x10) binocular microscope to extract cereal grains and chaff, smaller seeds and other quantifiable remains. Identifications were carried out using standard morphological criteria for the cereals (e.g. Jacomet 2006), and by comparison with modern reference material. Assistance with identifications was provided by Denise Druce. Classification and nomenclature of plant material follows Stace (2010).

C.1.4 Due to the large size of the flots, one quarter of sample 5 and one eighth of sample 3 were sorted. A riffle sample splitter (van der Veen and Fieller 1982) was used to obtain representative flot fractions.

### *Results and Interpretation*

C.1.5 Table 5 lists the taxa identified from each sample.

C.1.6 Sample 5 produced a very small quantity of charred grain, the majority of which was unidentifiable due to fragmentation. Of the wild seeds noted, it would seem likely that the *Veronica hederifolia* is modern in origin and intrusive within the deposit.

C.1.7 Sample 3, by contrast, produced a large quantity of grain comprising both wheat (*Triticum* sp.) and barley (*Hordeum vulgare*). While barley dominates the assemblage, the wheat component is not insignificant. Identifiable chaff was absent, limiting the opportunity to distinguish between the glume wheats, since identification based on grain morphology is problematic (Jacomet 1986).

C.1.8 The almost complete absence of chaff and seeds of arable weeds within the flot indicates that this sample comprises cleaned grain, ready for processing. The lack of obviously spoiled grain (only two sprouted embryos in the analysed fraction) make it unlikely that the charring was a consequence of an attempt to destroy a contaminated or damaged crop, so it seems likely that the material represents the accidental destruction of stored material, or perhaps less likely, a cooking accident. Morphological characteristics (length/height ratios and hump-backed shape: Jacomet 2006) suggests that at least some of the wheat is emmer (*Triticum dicoccum*), but the lack of identifiable spikelet forks and glume bases and the poor condition of the majority of grains makes it impossible to be certain if there is a mix of spelt and emmer or if emmer is the primary, or only, wheat crop. At least some of the barley grains bear scars indicative of hulled rather than naked barley (Druce *pers. comm.*), which is the principal type of barley cultivated at this time.

### *Discussion and Conclusions*

C.1.9 A small number of soil samples were taken during the evaluation stage (Stewart 2016) one of which, sample 2 from fill 4505, came from the same feature as sample 3 above. The flot from this evaluation sample was also rich in wheat and barley grain, with occasional wild seeds also present. Hulled barley and emmer wheat are common crops during the Bronze Age with emmer gradually being replaced by spelt during the Iron Age. Relatively few sites in Warwickshire, and in fact in the West Midlands, have produced analysed charred plant assemblages dating from the middle Bronze Age to the early Iron Age, and where assemblages have been studied it has, as here, often not been possible to distinguish between emmer and spelt wheat because of poor preservation (Pearson 2002). Where identification has been possible, emmer wheat was identified as the principle wheat crop at the middle Bronze Age site at Kemerton, Worcestershire (Pearson 1998) and spelt the main wheat crop at Salford Priors, Warwickshire (Moffett 1999). Emmer has been the wheat most frequently identified at late Bronze Age/early Iron Age sites in the East Midlands region, with spelt not found on many sites of this date, although both spelt and barley were recovered from late Bronze Age/early Iron Age features at Covert Farm, Crick, Northamptonshire (Monckton 2001). Abundant charred cereal remains, predominantly composed of emmer or spelt wheat and barley grains, with occasional weed seeds and spelt wheat chaff (glume bases) were recovered from a middle-late Iron Age pit fill at Marsh Farm Quarry, Warwickshire (Pearson 2010).

C.1.10 The material observed within these analysed flots demonstrates the cultivation of both glume wheat and barley, probably in the local area, during the late Bronze Age to early Iron Age. The deposit in sample 3 is unlikely to be the result of pre-consumption crop processing due to the relative rarity of waste material such as

cereal chaff, straw fragments and larger wild seeds. While two sprouted embryos were observed this is far less than would be expected if the grain had been intentionally sprouted for malting or for use as seed grain, and is likely to be the result of background spoilage.

C.1.11 The scarcity of charred plant remains within the features of middle to late Iron Age date make it difficult to compare the crop regimes of the different periods. The grain observed within sample 5 was in poor condition and other samples of this date includes very few, or no, cereal grains.

*Table 5: Charred Plant Remains* **denotes number of fragments*

| **Sample No** | | **3** | **5** |
|---|---|---|---|
| **Context No** | | 3005 | 4051 |
| **Feature** | | 3003 | 4052 |
| **Description** | | Middle fill of pit | Upper fill of pit |
| **Date** | | LBA/EIA | M-LIA |
| **Processed soil volume (L)** | | 25 | 40 |
| **Flot Volume (ml)** | | 300 | 250 |
| **Cereal grain** | | | |
| *cf. Triticum dicoccum* | emmer wheat | 15 | |
| *Triticum sp.* | wheat | 86 | 1 |
| *Hordeum sp.* | barley | 183 | |
| Cerealia | indet. Cereal | 300+ | 4* |
| **Chaff** | | | |
| *Triticum dicoccum/spelta* | emmer/spelt glume base | 2 | |
| *Triticum dicoccum* | emmer spikelet fork | 1 | |
| Cerealia | detatched embryo (broken) | 13 | |
| Cerealia | detatched embryo (sprouted) | 2 | |
| **Wild species** | | | |
| *Vicia/Lathyrus <2mm* | vetch/vetchling/tare, etc | | 1 |
| *cf Hypericum* sp. | st john's-worts | 1 | |
| *cf Brassica* sp. | Cabbages | 4 | |
| *Spergula arvensis* | corn spurrey | 1 | |
| *Chenopodium sp.* | goosefoot | 6# | |
| *cf Galium* | bedstraw | | 1* |
| *Veronica hederifolia* | ivy-leaved speedwell | 1# | 2# |
| *Tripleurospermum sp.* | mayweed | 6 | |
| *cf Tripleurospermum sp.* | mayweed | 6 | |
| *Carex* sp. | sedges | | 2 |
| <2mm Poaceae undiff. | grass seed (small) | 1 | |
| *Arrhenatherum elatius* | False oat grass culm node | 1 | |
| **Other** | | | |
| Indet. | seed/fruit | 3 | 6 |

## C.2 Charcoal

*By Denise Druce*

### *Introduction*

C.2.1 Six charcoal-rich bulk samples were selected in order to assess their potential to inform wood selection and fuel use at the site. The six samples came from four pits, which were assigned to middle/late Iron Age activity based on pottery evidence. As well as abundant charcoal, the six pit fills also contained fragments of heat-shattered quartzite cobbles, which is often characteristic of deposits associated with cooking and, more specifically, heating water. An assessment showed that the components of the charcoal assemblages from all six of the pit fills were broadly similar, which lends support to the interpretation that they represent broadly contemporary periods of deposition/dumping. Given the potential significance of these features, and the fact that little charcoal work has been carried out from sites in the county (Murphy 2001) further analysis was carried on one of the pit fills, 4051, in order to confirm wood species types and diversity.

### *Methodology*

C.2.2 The bulk samples, ranging in size from 25 to 40 litres, were processed using a modified Siraf flotation machine, where flots were retained in a 0.25mm mesh sieve, and the residue on a 0.5mm mesh. Both the flots and residue were air-dried, the latter being rapidly scanned for botanical and faunal remains and small artefacts. The flots (and any charcoal extracted from the residues) were sieved, and initially scanned using a Leica MZ6 binocular microscope at up to x20 magnification in order to assess charcoal preservation and its potential for further analysis. Charcoal caught on the 2mm sieve was considered identifiable and quantified.

C.2.3 Initially, *c* 20 fragments from each sample were randomly extracted, fractured and examined in transverse section in order to assess taxa type and diversity. Following this, a single sample was selected for full analysis, which followed standard methods where *c* 100 fragments of charcoal >4mm in size were initially sorted into groups based on the features visible in transverse section at up to x40 magnification Representative fragments of each group were then fractured to reveal both radial and tangential sections, which were examined under a Meiji incident-light microscope at up to x400 magnification. Identifications were made with reference to Hather (2000) and modern reference material. Characteristics, such as possession of tyloses in hardwoods, any insect or fungal damage, or radial cracking were also noted as an aid to wood maturity, and condition prior to charring.

C.2.4 Any plant material other than charcoal was also noted, and provisionally identified where possible. Other material, such as modern roots/seeds, coal/heat-affected vesicular material (havm), small artefacts, or daub/hardened clay were also quantified as an aid to identifying possible contamination or interpretation of the deposit. Quantification is based on a score of 1 to 4 where 1 = rare (1 - 5 items), 2 = present (6 - 25), 3 = common (26 - 100), 4 = abundant (>100 items). The results were recorded on an assessment pro-forma, which will be kept with the site archive.

### Results

C.2.5 The results of the charcoal assessment and analysis are presented in Table 6, which provides a summary of the charcoal types observed in each of the samples during the assessment, alongside an actual count for charcoal types recorded in 4051, a secondary fill forming a discrete dumped deposit within pit 4044.

C.2.6 The taxonomic level of identification varied according to the observed genera/family and/or the state of preservation. In many cases the fragments could only be taken to an approximate level of identification as some of the key diagnostic features that are needed to distinguish the species were not observed. For example, differentiating alder (*Alnus glutinosa*) and hazel (*Corylus avellana*) is often difficult if the material is impregnated with sediment. In other cases, the level of identification was limited due to the similarities of species within a family or genus (eg Maloideae, which includes hawthorn, apple, whitebeam, and rowan, referred to as hawthorn-type in text). Tentative identifications of blackthorn-type (*Prunus* sp.) to species level (ie *Prunus avium* (wild cherry) or *Prunus spinosa* (blackthorn)) were based on ray width and height. In general, the preservation was good, the fragments categorised as indeterminate coming from distorted/knotty wood, or bark.

C.2.7 The six fills contained remarkably similar charcoal assemblages, comprising varying proportions of blackthorn-type, hawthorn-type, oak (*Quercus* sp.) and alder/hazel charcoal. Several of the fills (4028, 4036, 4058 and 4051) were dominated by small round wood fragments, which, in analysed fill 4051, was primarily made up of blackthorn-type, including probable blackthorn and wild cherry. A few of the blackthorn-type and oak fragments in both this and other samples exhibited radial cracks, which may tentatively indicate it coming from green wood (Théry-Parisot and Henry 2012). Conversely, many of the observed fragments also exhibited insect damage, which may imply the collection of old fallen wood.

C.2.8 Other charred material was relatively sparse, and, consistent with the single fill, 4051, analysed from pit 4044 (see CPR section), comprised of rare to frequent (less than 25) cereal grains/cereal grain fragments, and rare weed seeds, including common chickweed (*Stellaria media*), bedstraw (*Galium* sp.), and cf speedwell (*Veronica* sp.). Other charred plant remains observed during assessment of the charcoal included small grass (Poaceae) culm fragments, and a single spelt wheat (*Triticum spelta*) glume base, a variety of wheat which becomes more common during the middle Iron Age in other areas of Britain (Greig 1991). The material is likely to represent casual losses from domestic activity, which found its way in with the charcoal.

### Discussion

C.2.9 The charcoal evidence from the middle/late Iron Age pits indicates that the wood fuel used during the possible domestic activities at the site comprised primarily small round wood fragments, possibly from a mixed source of green (freshly cut?) and old, insect damaged, wood. The remarkable similarity of the assemblages from all of the pits supports the interpretation that they represent broadly contemporary periods of deposition/dumping. Although a lack of hard wood is a limiting factor in the

identification of mature wood, the lack of observed mature oak, and the dominance of oak sapwood and small round wood of all identified taxa suggests that the material may represent branch wood, rather than trunk wood or timber offcuts. The fragmented nature of much of the round wood meant there was limited potential for investigating woodland management, such as coppicing. However, the nature of the assemblages is very much consistent with hand-collected twigs/branches, perhaps from woodland edge, scrub, or hedgerow environments.

C.2.10 If it is assumed that the West Midlands witnessed a similar intensity of agriculture and land division as evidenced in the East Midlands (Monckton 2006), then the significance of species such as blackthorn and hawthorn as having a long tradition in being used for hedging (Edlin 1949) should not be overlooked. Indeed, similar charcoal assemblages recovered from a middle Iron Age site in Hinckley, Leicestershire, were interpreted as originating from possible hedges, used for stock-proofing areas of the settlement (Gale 2004). Clippings, or natural windfall, from such environments may have supplied the settlement at Oakley Grove with adequate material for domestic activities, such as for heating water and cooking, with more mature, better quality wood perhaps being retained for other purposes.

*Table 6: Assessment and analysis results of the charcoal. Quantifications are based on a scale of 1 to 4 where 1 = >6 items, 2 = 6-25, 3 = 26-100, and 4 = >100 items*

| Sample Number | Context Number | Feature | Date | Volume Processed (L) | Flot size (ml) | Charcoal <2mm | Charcoal >2mm | Charcoal > 4mm | Comments | Charcoal counts | Charred Crop | Charred Chaff | Charred Weed Seeds | Other charred remains | Modern contamination | Hardened clay/Daub | Other finds |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 4028 | Pit 4020 (upper fill) | M/LIA | 40 | 50 | 4 | 4 | 3 | Mixed charcoal assemblage with *Prunus* round wood, *Alnus/Corylus*, and *Quercus* sapwood with radial cracks. | - | 1 | 1 | | Indeterminate cereal grain fragment. *Triticum spelta* glume base. | 2 | 1 | 1 fragments of heat shattered quartzite cobbles. 2 fragments of M/LIA pot. |
| 2 | 4036 | Pit 4034 (Middle fill-a discrete dumped? deposit) | M/LIA | 25 | 400 | 4 | 4 | 4 | Mixed charcoal assemblage with *Prunus*, *Alnus/Corylus*, Maloideae, *Quercus*, and unknown. Lots of small roundwood. Quercus sapwood with small radial cracks or insect damage. | - | 2 | | | *Triticum*, including glumed variety, and indeterminate cereal grains. Small culm fragments. | 1 | 1 | 15 fragments of heat shattered quartzite cobbles |
| 4 | 4058 | Pit 4044 (uppermost fill) | M/LIA | 40 | 60 | 4 | 4 | 3 | Mixed charcoal assemblage dominated by *Prunus* round wood, with a little Maloideae, *Quercus* and *Alnus/Corylus*. Round wood comprises small stems, less than 5mm in diameter. | - | 1 | | 1 | Rare *Triticum* and indeterminate cereals grains. *Stellaria media* and small *Galium* sp. Small culm fragments. | 2 | 1 | EPH bladelet (probably residual) and burnt unworked flint. 3 fragments of M/LIA pot. |
| 5 | 4051 | Pit 4044 (discrete dumped? deposit sealed by 4058) | M/LIA | 40 | 250 | 4 | 4 | 3 | Mixed charcoal assemblage dominated by *Prunus* roundwood, with a little Maloideae, cf *Quercus*, *Alnus/Corylus*, and unknown. A few *Prunus* sp fragments with radial cracks or insect damage. Very similar to 4058. | 25% of >4mm flot: 69 *Prunus* spp roundwood fragments, including *Prunus spinosa* and *P. avium*, 11 Maloideae, 10 *Quercus*, 1 *Alnus/Corylus*, and 1 unknown fragment. Frequent indeterminate fragments comprising knarled wood or bark. | 1 | | 2 | See Charred plant remains report. | 2 | | 4 fragments of heat shattered quartzite cobbles. 3 fragments of M/LIA pot. |
| 7 | 4047 | Pit 4044 (lowermost discreet dumped? deposit in this pit) | M/LIA | 35 | 80 | 4 | 4 | 3 | Mixed charcoal assemblage including *Quercus*, *Alnus/Corylus*, *Prunus* and Maloideae and unknown. Lots of the *Quercus* with radial cracks or insect damage. | - | 2 | | 1 | Rare *Triticum* and indeterminate cereal grains. cf charred *Veronica* seed. | 2 | 1 | 4 fragments of heat shattered quartzite cobbles and 3 tiny fragments of heat shattered stones. |
| 8 | 4053 | Pit 4052 | M/LIA | 32 | 130 | 4 | 4 | 3 | Mixed charcoal assemblage including *Quercus* (heartwood and sapwood), *Alnus/Corylus*, *Prunus*, Maloideae and unknown. Very similar to 4047. | - | 1 | | | Indeterminate cereal grain. | 2 | 1 | 5 fragments of heat shattered quartzite cobbles and 1 large unworked cobble. EPH bladelet (probably residual). 3 fragments of M/LIA pot. |

## APPENDIX D BIBLIOGRAPHY

Bamford, H, 1985 *Briar Hill: excavation 1974-1978*, Northampton: Northampton Development Corporation. Archaeological monograph **3**

BGS, 2017 British Geological Survey, http://mapapps.bgs.ac.uk/geologyofbritain/home.html

Bradley, P, 1999 The worked flint, in *Excavations at Barrow Hills, Radley, Oxfordshire* (eds A Barclay and C Halpin), Thames Valley Landscapes Monograph **11**, 211-27, Oxford

Brudenell, M, 2011, Bronze Age and Iron Age pottery, in *The excavations at Whitchurch 2006-2009. An interim report* (K Waddington and N Sharples), Cardiff Studies in Archaeology Specialist Report **31**, 47-51, Cardiff

Davies, A, 2016 *Social organisation in the Upper and Middle Thames Valley from the late Bronze Age to the middle Iron Age*, Cardiff University unpublished PhD thesis

Edlin, H L, 1949 *Woodland crafts in Britain*, London

Gale, R, 2004 Charcoal and waterlogged wood, in Iron Age and Romano-British enclosures at Coventry Road, Hinckley, Leicestershire (P Chapman), *Trans. Leicestershire Archaeol. Hist. Soc*. **78**, 72-6

Green, H S, 1980 *The flint arrowheads of the British Isles*, BAR Brit Ser **75**, Oxford

Greig, J, 1991 The British Isles, in *Progress in Old World palaeoethnobotany* (eds W Van Zeist, K Wasylikowa and K E Behre), 299-332, Rotterdam

Hancocks, A, 2010 Pottery, in *Iron Age and Romano-British settlement at Marsh Farm Quarry, Salford Priors: Further excavations in the Warwickshire Arrow Valley (1991-2000)* (S C Palmer), Warwickshire County Council, unpubl report 0435

Harding, P, 1990 The worked flint, in *The Stonehenge environs project*, (ed J C Richards), London

Hather, J, 2009 *The identification of Northern European woods: a guide for archaeologists and conservators*, Walnut Creek, California

Healy, F, 1988 *The Anglo-Saxon cemetery at Spong Hill, North Elmham, Part VI: Occupation during the seventh to second Millennia BC*, East Anglian Archaeological Reports **38**

Inizan, M-L, Reduron-Ballinger, M, Roche, H and Tixier, J, 1999 *Technology and terminology of knapped stone*, Cercle de Recherches et d'Etudes Préhistoriques, CNRS, Nanterre

Jacomet, S, 2006 *Identification of cereal remains from archaeological sites* (2nd edition, trans. by James Greig), Basel, Archaeobotany Laboratory, IPAS, Basel University

Lambrick, G, 2010 *The Thames through time: The archaeology of the gravel terraces of the Upper and Middle Thames. The Thames Valley in late prehistory: 1500 BC-AD 50*, Thames Valley Landscapes Monograph **29**, Oxford

MOLA Northampton, 2016 *Archaeological trial trench evaluation on land at Oakley Grove, Harbury Lane, Phase 2. Royal Leamington Spa, Warwickshire, July-August 2016*, unpubl report 16/175.

Monckton, A, 2006 Environmental archaeology in the East Midlands, in *Archaeology of the East Midlands. The archaeological resource assessment and research agenda* (ed. WJ Cooper), Leicester Archaeology Monograph **13**, 259-86, Leicester

Monkton, A, 2001 (2003 web version) An Archaeological Resource Assessment and Research Agenda for Environmental Archaeology in the East Midlands, Chapter 11 in East Midlands Archaeological Research Framework: Resource Assessment and Research Agenda for Environmental Archaeology, http://www2.le.ac.uk/services/ulas/images/east-mid-research-framework/emidenv.pdf

Murphy, P, 2001 *Review of wood and macroscopic charcoal from archaeological sites in the West and East Midlands regions and the east of England*, Centre for Archaeology Report 23/2001, Portsmouth

Northamptonshire Archaeology, 2000 *Excavation of an Iron Age settlement at Coton Park, Rugby, Warwickshire, 1998: Interim Report*, Northamptonshire County Council.

Onhuma, K and Bergman, C A, 1982 Experimental studies in the determination of flake mode, *Bulletin of the Institute of Archaeology, London* **19**, 161-71

Palmer, S C, 2000 Archaeological excavations in the Arrow Valley, Warwickshire, *Birmingham and Warwickshire Archaeological Society Transactions* **103**, 1-231

Palmer, S C, 2010 *Iron Age and Romano-British Settlement at Marsh Farm Quarry, Salford Priors: Further Excavations in the Warwickshire Arrow Valley (1991-2000),* Warwickshire County Council, unpub report 0435.

Palmer, S C, 2017 Any more old iron age? An archaeological resource assessment for the middle Bronze Age to Iron Age in Warwickshire and Solihull, in *Westward on the High-Hilled Plains. The later prehistory of the West Midlands* (ed. D Hurst), 37-69, Oxford

Palmer, S C, nd. *An archaeological resource assessment for the middle Bronze Age to Iron Age in Warwickshire and Solihull*. West Midlands Regional Research Framework for Archaeology, Seminar 2.

Pearson, E, 2010 Charred plant remains, in *Iron Age and Romano-British settlement at Marsh Farm Quarry, Salford Priors: Further excavations in the Warwickshire Arrow Valley 1991-2000* (S C Palmer), 46, Warwickshire Co. Council unpublished report 0435

Pearson, L, 2002 Cows, beans and view: Landscape and farming of the West Midlands in later prehistory, West Midlands Regional Research Framework: Birmingham

Prospect Archaeology, 2010 *Land at Oakley Grove, Harbury Lane, Phase 2, Royal Leamington Spa, Warwickshire. Written Scheme of Investigation – Archaeological Excavation (Mitigation Strategy),* unpub report ACL09-01

Reynolds, P J, 1979 *Iron-Age farm: the Butser experiment*, London

Saville, A, 1980 On the measurement of struck flakes and flake tools, *Lithics* **1**, 16-20

Stace, C, 2010 *New flora of the British Isles*, 3rd Edition. Cambridge: CUP

Stewart, K, 2016 The environmental material, in *Archaeological trial trench evaluation on land at Oakley Grove, Harbury Lane, Phase 2. Royal Leamington Spa, Warwickshire, July-August 2016* (MOLA Northampton 2016), unpubl report 16/175

Théry-Parisot, I, and Henry, A, 2012 Seasoned or green? Radial cracks analysis as a method of identifying the use of green wood as fuel in archaeological charcoal, *J Archaeol Sci* **39**, 381-388

van der Veen, M, and Fieller, N, 1982 Sampling seeds, *J Archaeol Sci* **9**, 287–98

# APPENDIX E SITE SUMMARY DETAILS

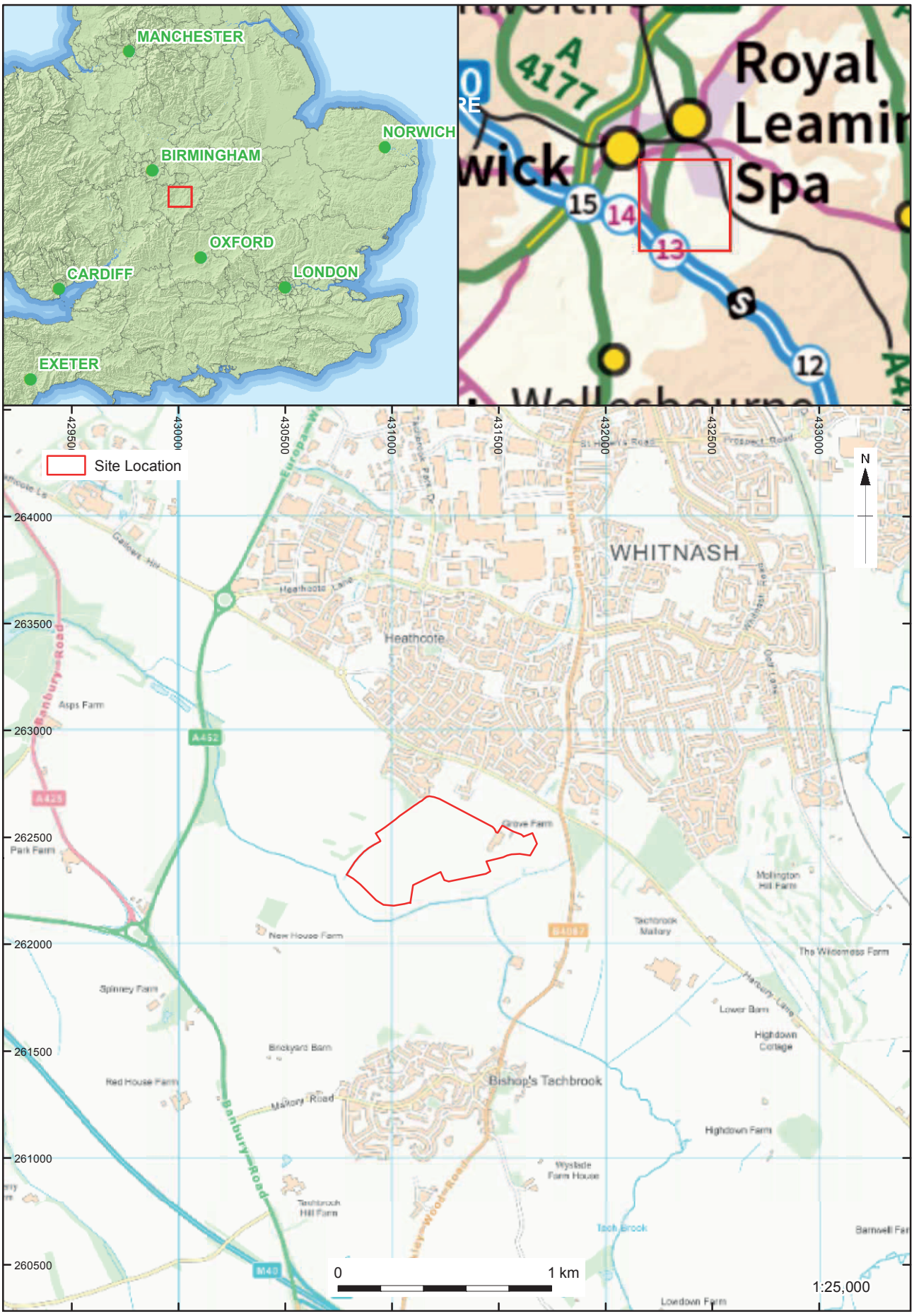
**Site name:** Oakley Grove, Bishop's Tachbrook
**Site code:** BTOEX
**Grid reference** SP 3131 6246
**Type:** Excavation
**Date and duration:** December 2016-January 2017
**Summary of results:** Oxford Archaeology was commissioned by Prospect Archaeology on behalf of A.C. Lloyd Homes Ltd to undertake an archaeological excavation on land at Oakley Grove (Phase 2), Harbury Lane, Bishop's Tachbrook, Warwickshire. This comprised the excavation of nine areas, totalling *c* 8840m$^2$. In addition, a further six evaluation trenches were opened.

Prehistoric activity was restricted to a cluster of pits and a ditch in Area 4 dated to the middle-late Iron Age on the basis of associated pottery. Environmental samples from these features produced useful assemblages of charred plant remains and charcoal, especially as the region is noted for a lack of analysed later prehistoric archaeobotanical remains.

Earlier activity in the area was suggested by the discovery of an early Bronze Age barbed-and-tanged arrowhead and two late Mesolithic/early Neolithic bladelets found in an Iron Age pit. No further Bronze Age activity was discovered, despite the presence of an urned early or middle Bronze Age cremation deposit found during the evaluation. The earlier evaluation also discovered two early to middle Saxon pits. No further evidence of this date was uncovered during the present excavation.

A trackway and a number of linear ditches probably relating to field divisions were discovered. The majority have no associated artefacts, although most to conform to the prevailing orientation of the modern field system. Other features include a number of undated postholes and pits as well as numerous tree-throw holes.

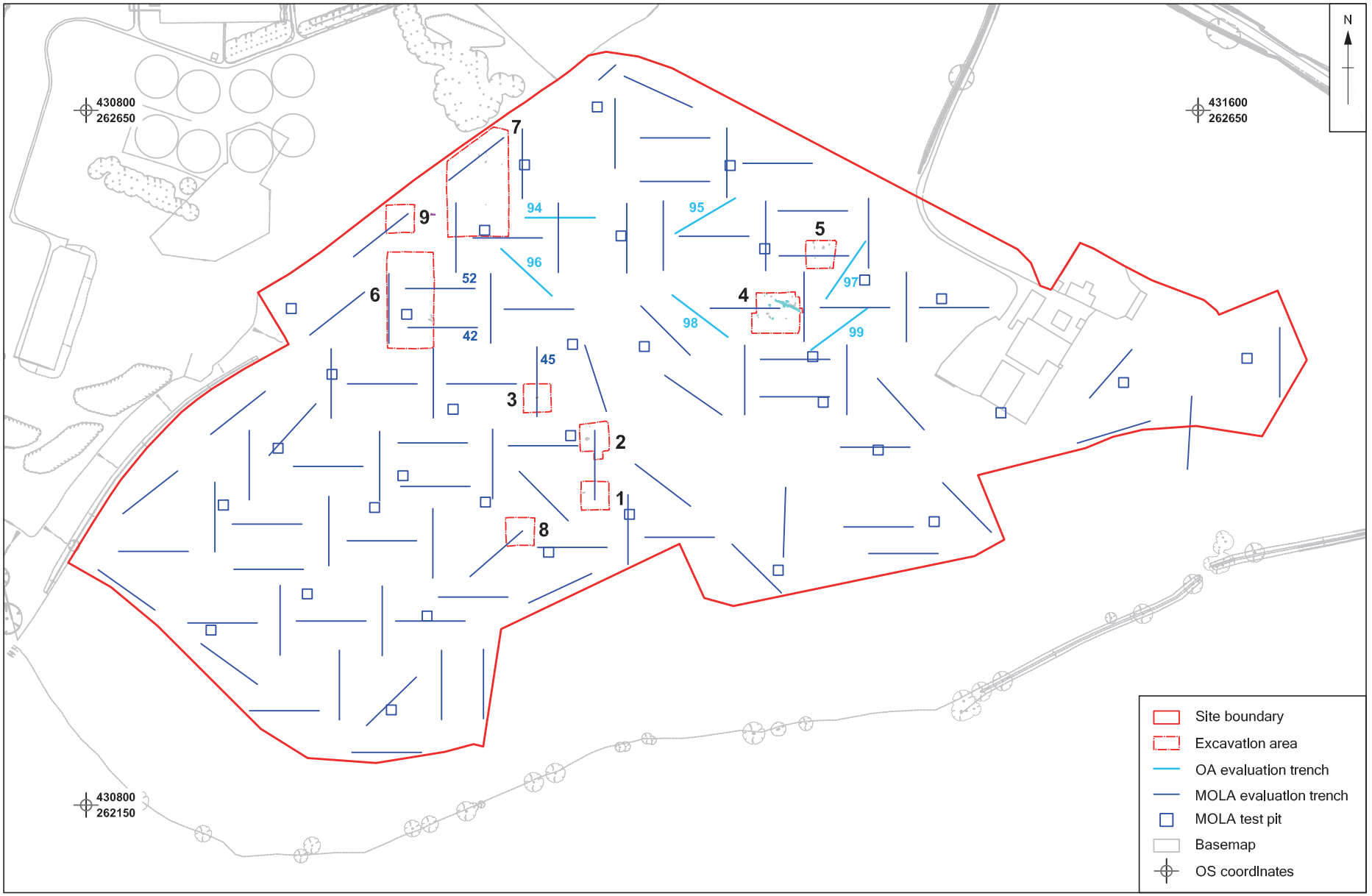
**Area of Site** 22.8 ha
**Location of archive:** The archive is currently held at OA, Janus House, Osney Mead, Oxford, OX2 0ES, and will be deposited with Warwickshire Museum in due course, under the following accession number: T/1636.




Contains OS data © Crown Copyright and database right 2017

Figure 1: Site location

\\10.0.10.86\Projects\ILeamington_Oakley Grove_BTOEX\010Geomatics\03 GIS Projects\Figure1.mxd*benjamin.brown*28/03/2017






0 200 m

Scale at A4 1:4000

Figure 2: Investigation plan showing evaluation and SMS areas

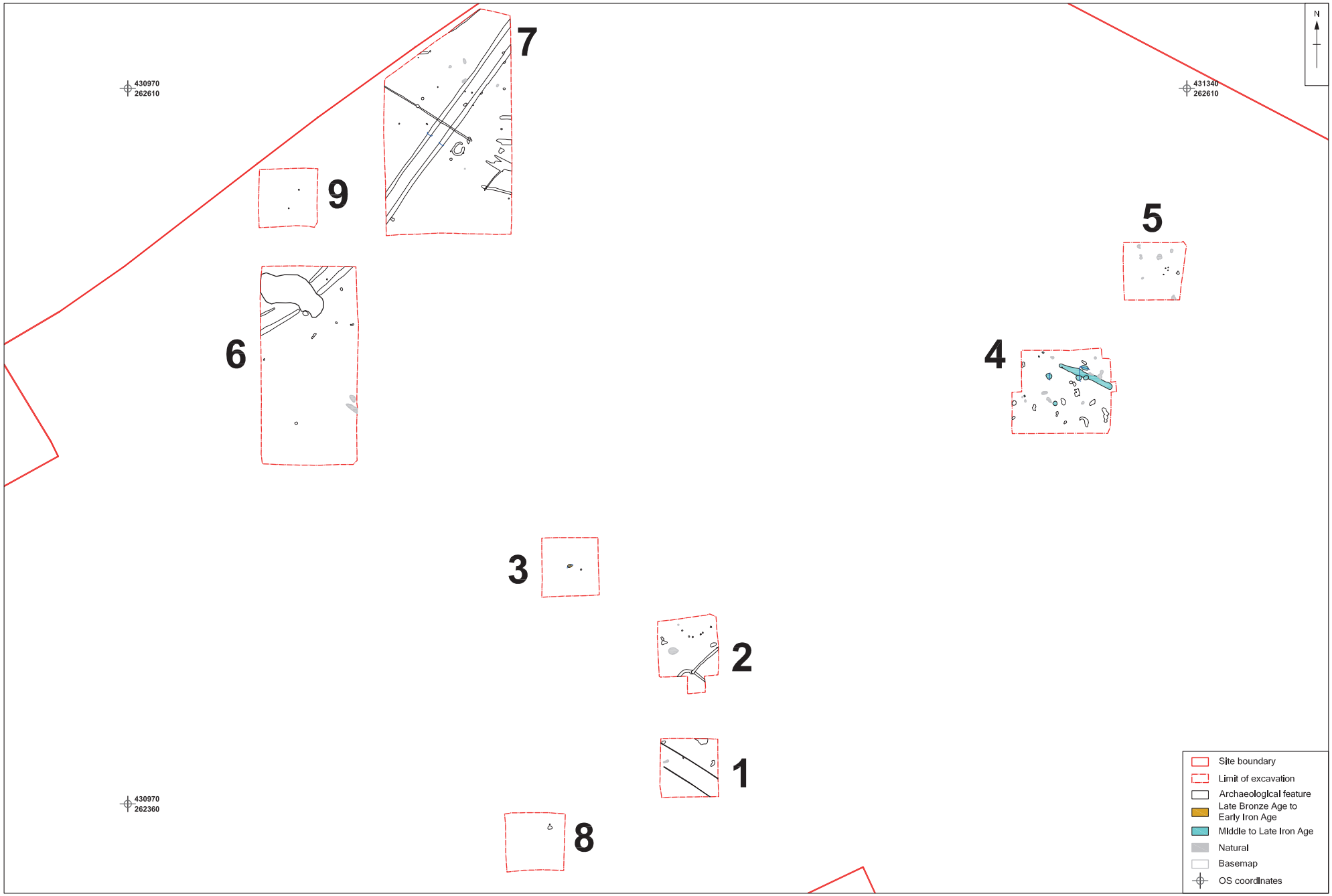







Figure 3: Plan of excavated areas

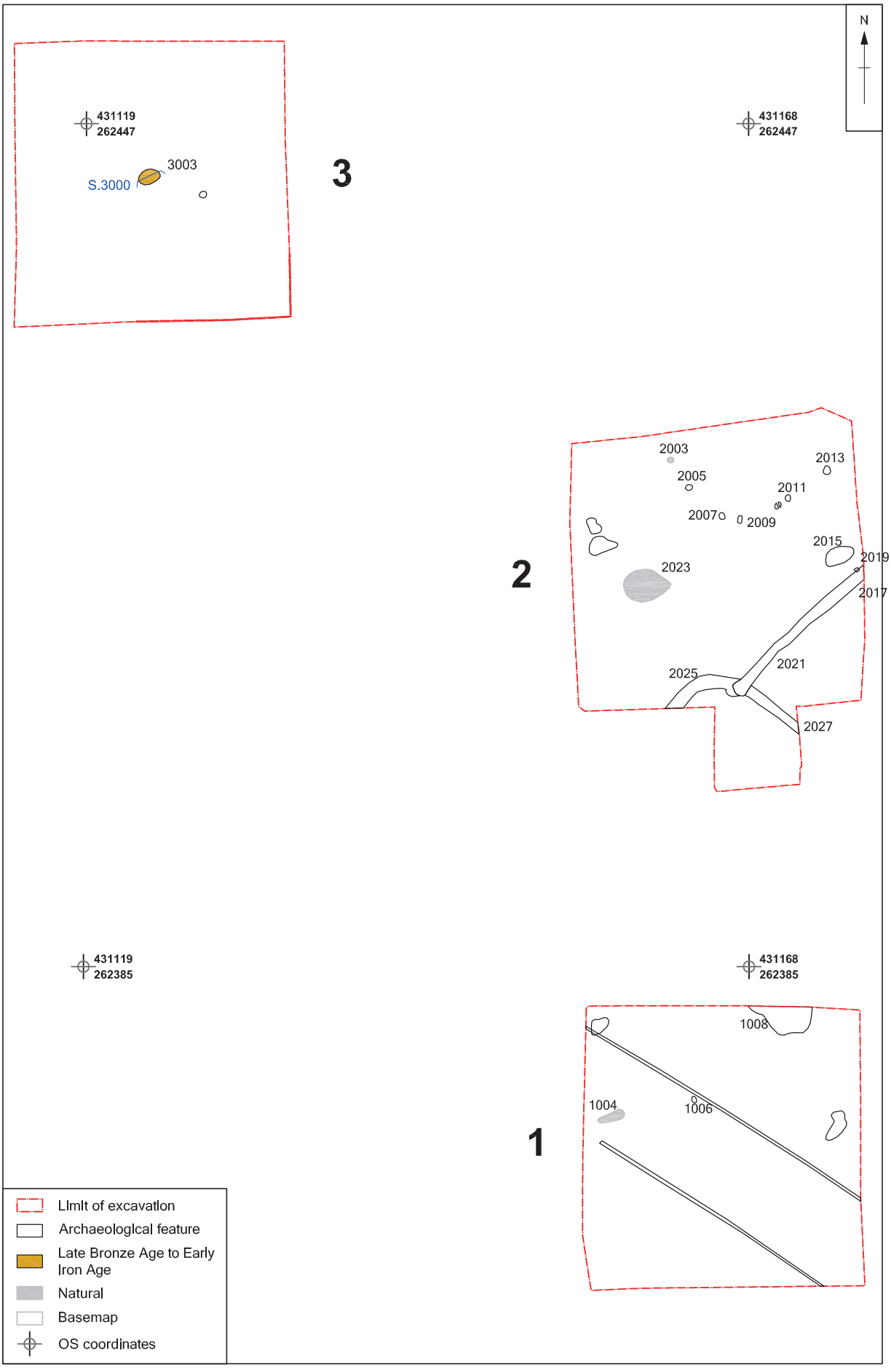





Figure 4: Plan of Areas 1, 2 and 3

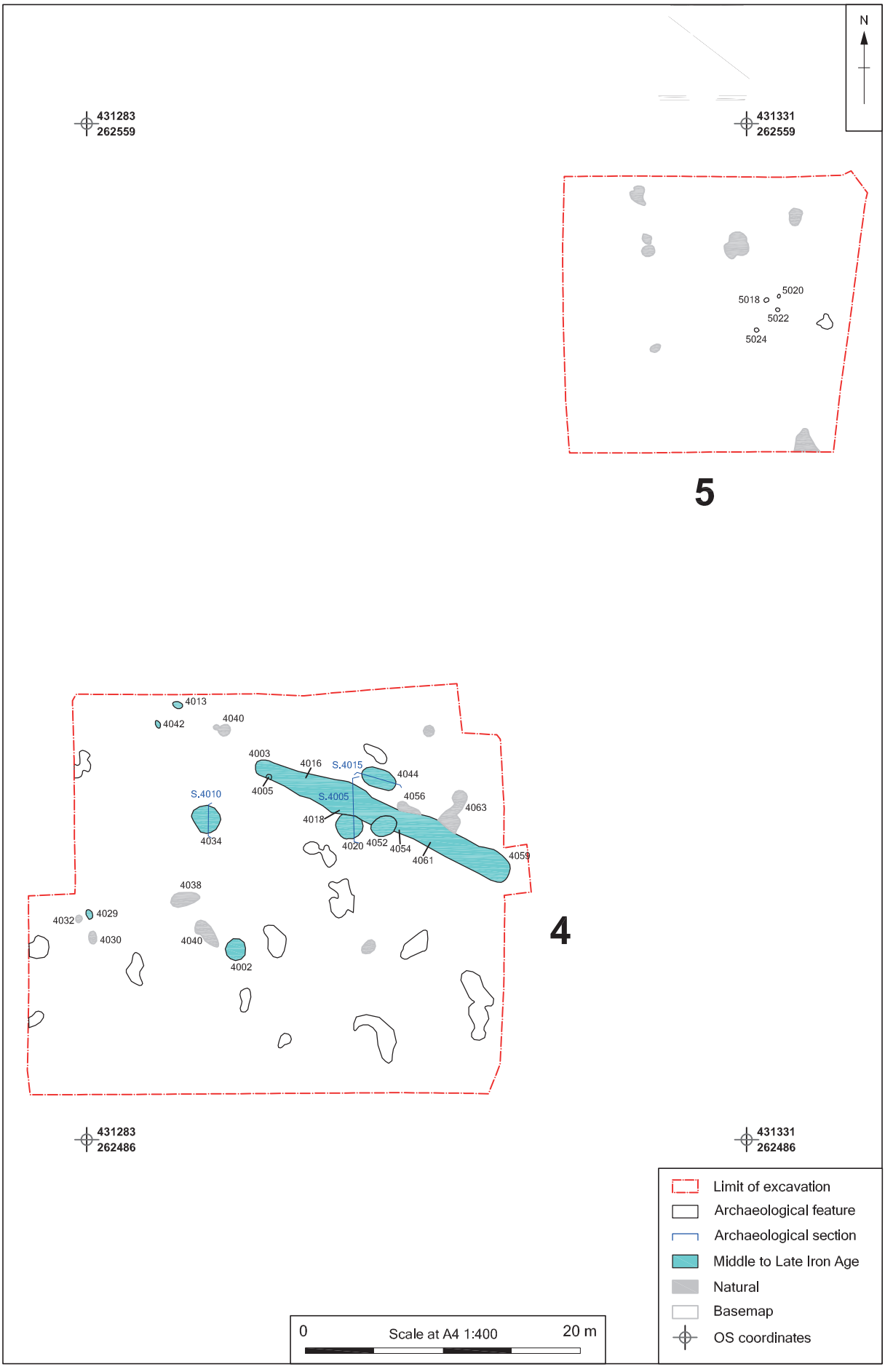





Figure 5: Plan of Areas 4 and 5

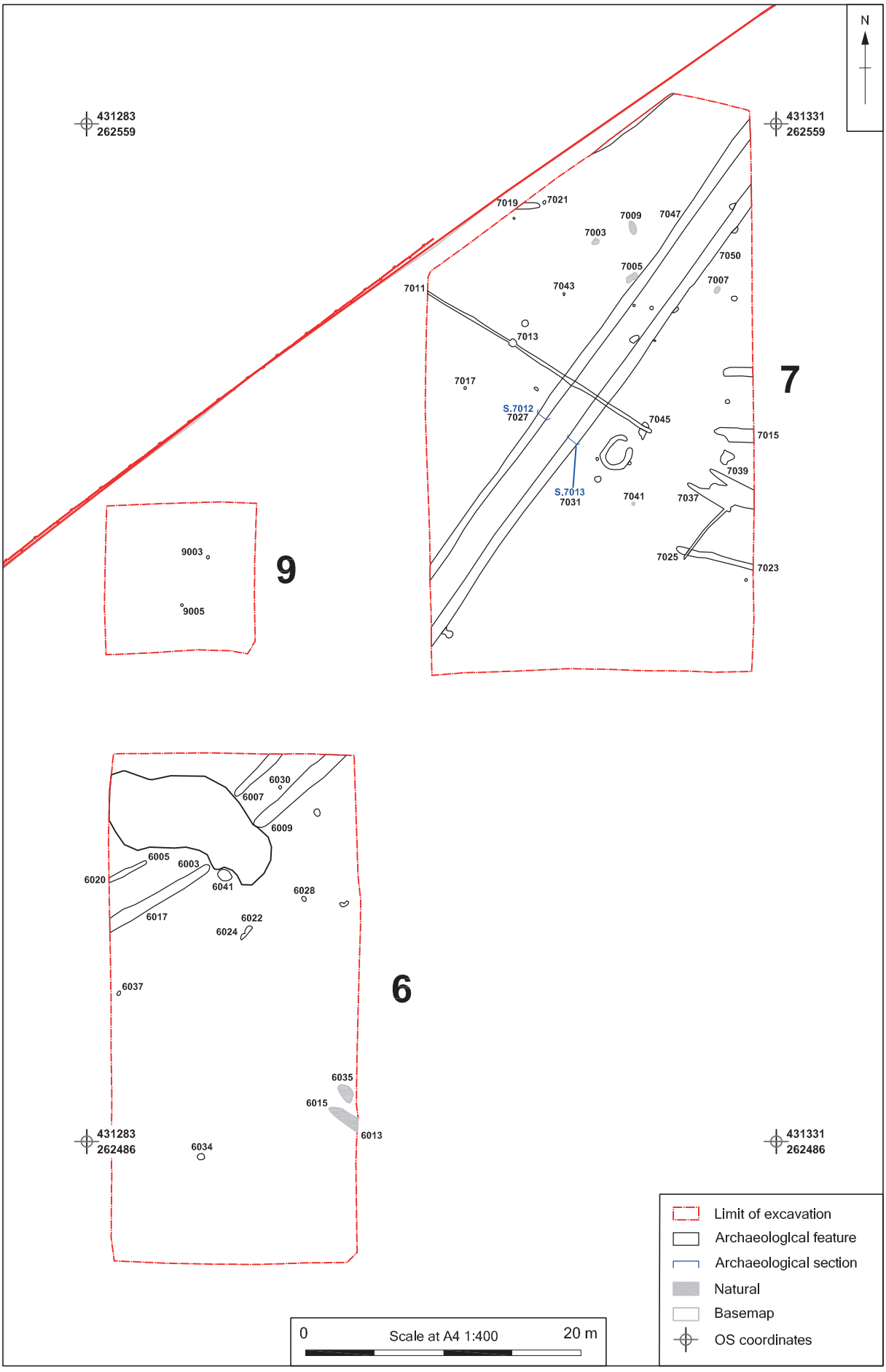





Figure 6: Plan of Areas 6, 7 and 9

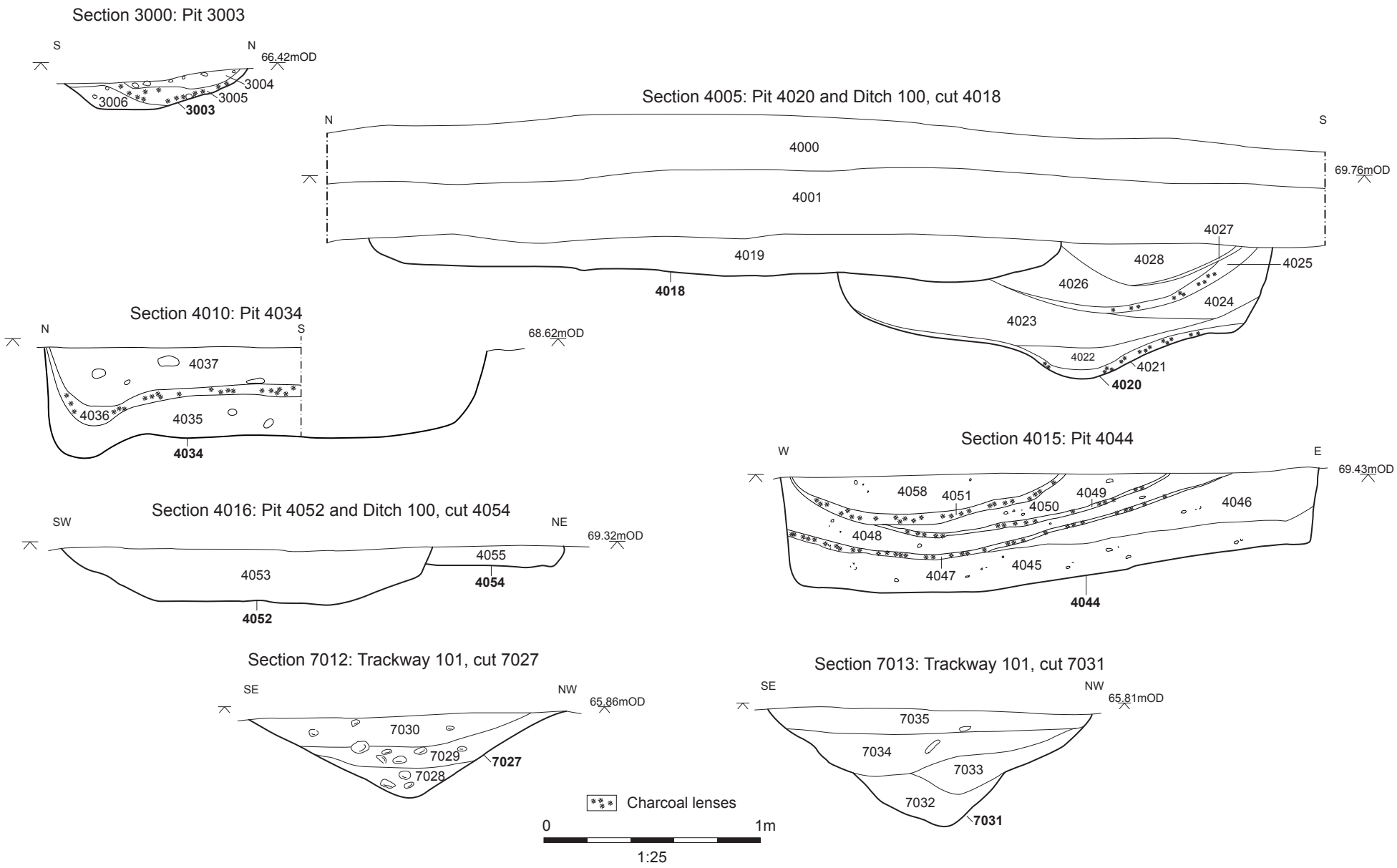



Figure 7: Sections 3000, 4005, 4010, 4015, 4016, 7012 and 7013

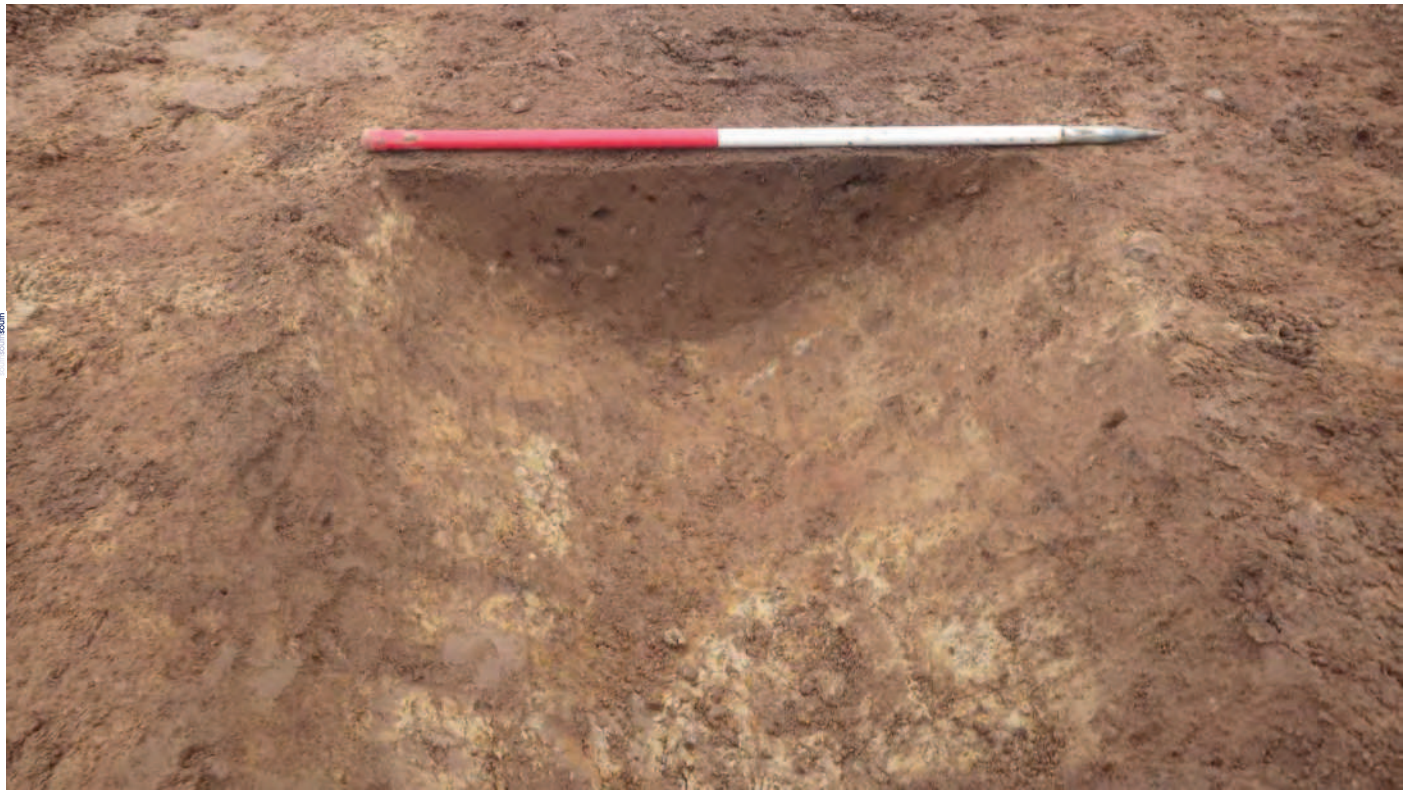


Plate 1: Area 2, Ditch 2025, looking north-east

Plate 2: Area 3, Pit 3003, looking west

Plate 3: Area 4, Pit 4007, looking north-east

Plate 4: Area 4, Pit 4020 and Ditch 100 (cut 4018), looking east

Plate 5: Area 4, Pit 4013, looking north-east

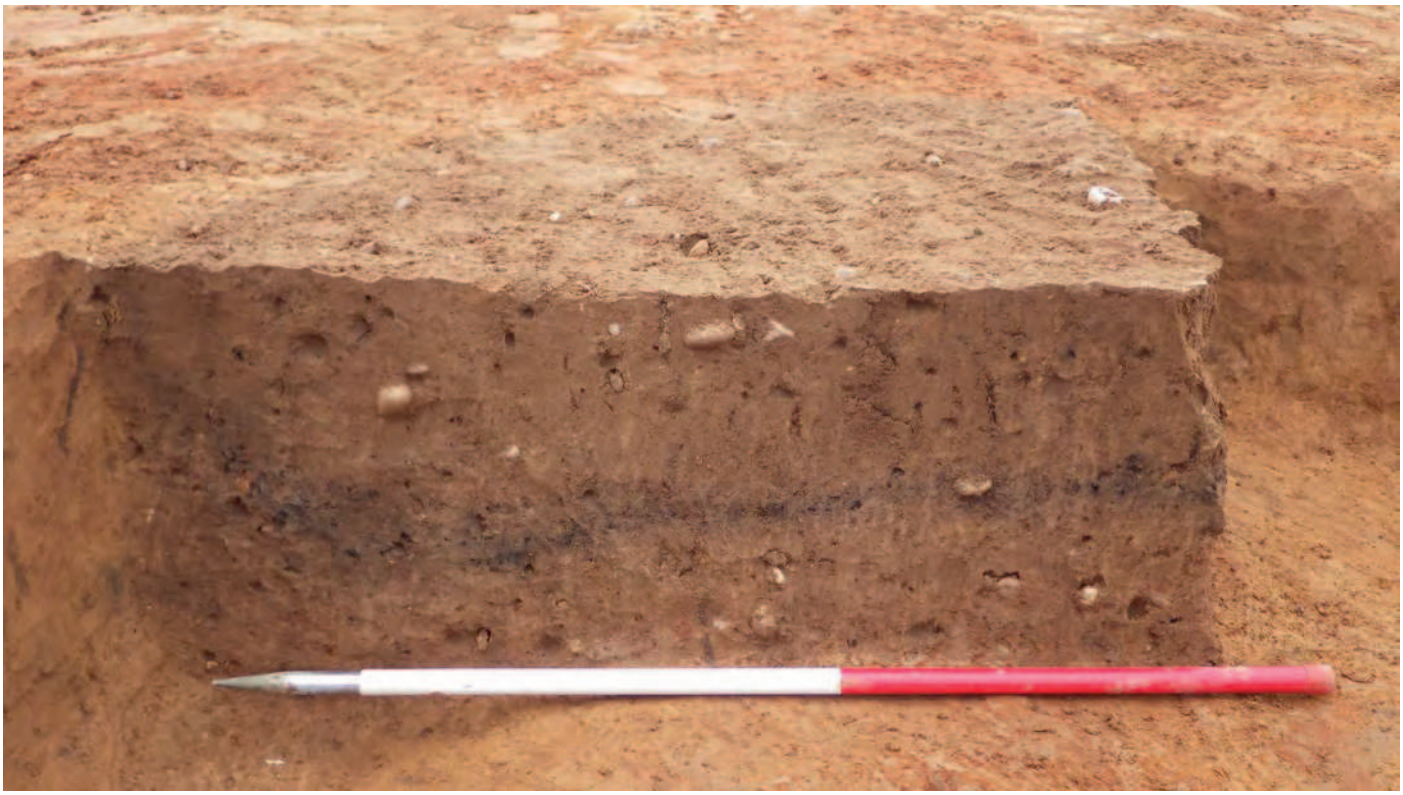


Plate 6: Area 4, Pit 4034, looking east

Plate 7: Area 4, Pit 4042, looking north-west

Plate 8: Area 4, Pit 4044, looking south

Plate 9: Area 4, Pit 4052 and Ditch 100 (cut 4054), looking west

Plate 10: Area 5, Trackway 101, looking north-east

Plate 11: Area 6, Pits 6022 and 6024, looking south-east

Plate 12: Area 6, Pits 6039 and 6041, looking north

Plate 13: Area 7, Trackway 101, looking north-east

oxfordarchaeology


**Head Office/Registered Office/ OA South**

Janus House
Osney Mead
Oxford OX2 0ES

t: +44 (0) 1865 263 800
f: +44 (0) 1865 793 496
e: info@oxfordarchaeology.com
w: http://oxfordarchaeology.com

**OA North**

Mill 3
Moor Lane
Lancaster LA1 1QD

t: +44 (0) 1524 541 000
f: +44 (0) 1524 848 606
e: oanorth@oxfordarchaeology.com
w: http://oxfordarchaeology.com

**OA East**

15 Trafalgar Way
Bar Hill
Cambridgeshire
CB23 8SQ

t: +44 (0) 1223 850500
e: oaeast@oxfordarchaeology.com
w: http://oxfordarchaeology.com