

Archaeological excavation at land north of Taylor's Lane Worcester

Worcestershire Archaeology
for RPS Group

July 2019



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LAND NORTH OF TAYLOR'S LANE WORCESTER WORCESTERSHIRE

Archaeological excavation report



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SITE INFORMATION

Site name: Land north of Taylor's Lane, Worcester
Site code: WSM71516
Local planning authority: Malvern Hills District Council
Planning reference: 13/01617/OUT
Central NGR: SO 8593 5166
Commissioning client: CgMs Heritage
WA project number: P5549
WA report number: 2697
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Archaeological excavation at land north of Taylor's Lane, Worcester

By Richard Bradley

With contributions by Laura Griffin and Elizabeth Pearson

Illustrations by Carolyn Hunt

Summary

An archaeological excavation was undertaken at land north of Taylors Lane, Worcester (NGR SO 8593 5166). It was commissioned by RPS Group on behalf of their client, St Modwen Properties PLC, in advance of a proposed mixed use development. Planning permission has been granted subject to conditions including a programme of archaeological works.

This was completed in two areas either side of a hedged boundary at the edge of a larger development site, located around 200m south of the A4440 Broomhall Way southern link road and bounded by Taylor's Lane to the immediate south. Previous geophysical survey and archaeological watching brief has taken place across the wider area but did not identify any significant archaeological remains; however, more recent archaeological evaluation of the site revealed features of interest in two trenches towards the southern limit of the development site.

The excavation expanded upon the findings of two evaluation trenches and, although only a limited number of additional archaeological features were revealed, the majority of these were dated to the medieval and later. They appeared to be related to agricultural and small-scale craft or industrial working, with a focus of activity in the 13th to 14th century. Whilst apparently of relatively low-status in general, this broadly dispersed area of activity can be considered as a small-scale craft/industrial hinterland site linked to the presence of a moated complex at Upper Broomhall Farm, located immediately south of Taylor's Lane.

Report

1 Introduction

1.1 Background to the project

An archaeological excavation was undertaken by Worcestershire Archaeology (WA) from 4th March to 15th March 2019 at land north of Taylors Lane, Worcester (NGR SO 8593 5166; Figure 1). It was commissioned by RPS Group on behalf of St Modwen Properties PLC, in advance of a proposed mixed use development. Planning permission has been granted by Malvern Hills District Council, subject to conditions including a programme of archaeological works (planning reference 13/01617/OUT).

The excavation comprised two areas either side of a hedged boundary (Figure 2; Plate 1), located at the southern edge of a larger development site of four large fields covering approximately 16.5ha in total. The overall site has previously been subject to geophysical survey (Roseveare and Roseveare 2011) and two phases of geotechnical works during which archaeological watching briefs took place, carried out by Worcestershire Archaeology (Arnold 2018a; Arnold 2018b). The geophysical survey highlighted orchard bank earthworks and ridge and furrow across the site. No significant archaeological remains were located in the watching brief. Likewise, during an archaeological evaluation of the site undertaken in 2018, the majority of trenches did not contain any significant archaeological features (Brewer 2018; WSM70852). In the south of the site, however, archaeological features of more interest were revealed (specifically in evaluation Trench 7 and 9). Here, a small oval pit contained small fragments of possible prehistoric Malvernian pottery, as well as large pieces of charred oak. Similar charcoal, as well as fired clay and glass slag, was retrieved from a further pit: the charcoal was radiocarbon dated as Saxon to medieval in origin. Also in this area, a small ditch included a fragment of Malvernian oven plate dating to the 2nd to 4th century AD.

As a result, the Archaeological Advisor to Malvern Hills District Council (Aidan Smyth) considered that the proposed development had the potential to impact upon heritage assets. Liaison between CgMs Heritage and the Archaeological Advisor established that two areas of archaeological excavation around the trenches containing the pits and ditches would be appropriate further mitigation of the site prior to development.

No specific brief for the project was prepared but the project conforms to a model brief previously provided by Worcestershire County Council (WCC). A Written Scheme of Investigation (WSI) was prepared by Worcestershire Archaeology (WA 2019) and approved by the Curator. The excavation conforms to the *Standards and guidelines for archaeological projects in Worcestershire* (WCC 2010) and the industry guidelines and standards set out by the Chartered Institute for Archaeologists in *Standard and guidance: for archaeological excavation* (ClfA 2014a).

1.2 Site location, topography and geology

The site is located approximately 3km south of the historic core of Worcester, and 200m south of the A4440 Broomhall Way southern link road. It is bounded by Taylor's Lane to the south. The excavation areas were located in a part of the site that has a gradual slope, from around 25.5m to 24m AOD (Above Ordnance Datum). The surrounding land was recently in use for pasture, but in earlier periods included orchards and hop fields.

The underlying geology comprises mudstone of the Sidmouth Mudstone Formation, formed in the Triassic period. No superficial deposits are recorded (BGS 2019).

2 Archaeological and historical background

2.1 Introduction

The archaeological background to the site has previously been detailed in an archaeological desk-based assessment (DBA), undertaken by EDP (Lewis 2012), and an Environmental Impact Statement. The findings presented in those documents are summarised at length in the site evaluation report (Brewer 2018) and are, therefore, only briefly repeated below.

2.2 Prehistoric

Prehistoric activity in the area includes a Mesolithic hunting camp at Bath Road c.500m north-west of the overall development site (WCM99192). Later prehistoric occupation continued through the late Iron Age and into the Roman period, with a small to medium sized rural settlement identified during excavation (WCM98628). A further site located c.500m to the south-east (WSM46204) shows a similar pattern of activity from the late Iron Age to Roman period.

2.3 Roman

The Roman road from Worcester to Gloucester (WSM30539; WCM96406) is aligned north to south c.100m west of the development site. Although a geophysical investigation (WSM47593) identified two parallel ditches on the same alignment, some areas of the road may have been destroyed as only partial survival was indicated.

A known area of occupation site has been identified c.750m to the east (WSM10176), which appears to have been occupied from the second century through to the third or early fourth century. The site also provided evidence of industrial activity.

2.4 Medieval and post medieval

Upper Broomhall Farm, immediately to the south, may have medieval origins, although the extant buildings are of post-medieval date (WSM38087): an earlier moat does, however, partially survive (WSM02130). An associated deserted settlement has been postulated to the east and south-east (WSM32555), although recent archaeological evaluation has not found any evidence of this (Walsh 2019; WSM71017). Ridge and furrow identified within the site area (WSM39129), and to the south of the farmstead (WSM39130), are closely associated with Upper Broomhall Farm, and testify to the longevity of farming at this location. There is some speculation, however, that the asset to the south of the farm may not be composed of features relating to medieval agriculture and could relate to the planting of an orchard in the 1920s to 1930s.

The first skirmish of the English Civil War took place on September 23rd 1642 at the site of Powick Bridge c.1 km to the north-west of the site. A small Parliamentarian force failed in its attempt to raid a Royalist caravan. Worcester eventually saw the English Civil War come full circle with the final battle taking place in 1651 to the north/north-west of the site, on the north side of Broomhall Way (WCM00249). This is now a Registered Battlefield. The area of the battlefield immediately to the north of the site has already been developed. Other evidence associated with the battle is recorded at the sites of important river crossings (WCM91135; WCM91136).

2.5 Undated

There are two undated assets recorded in the vicinity, an enclosure east of Middle Broomhall Farm (WSM01367), and an enclosure and associated ridge and furrow north of Lower Broomhall Farm (WSM10227).

3 Project aims

The aims and scope of the project were to locate and sample archaeological deposits and record their nature, extent and date, thereby preserving these assets by record and mitigating the effects of the proposed development.

4 Project methodology

As noted above, a Written Scheme of Investigation (WSI) was prepared by Worcestershire Archaeology (WA 2019). The Worcestershire Archaeology project number is P5549 and the Worcestershire HER event reference is WSM71516.

Fieldwork was undertaken between 4th and 15th March 2019, largely in inclement weather. This affected the efficiency and the practicalities of excavation: the site remained partially flooded and the presence of an overflowing pond adjacent to the site and the gradual downslope to the north exacerbated the problem, despite attempts to pump the water away. Nevertheless, two areas (defined as West Area and East Area) were opened; these covered just over 3000m² either side of a field boundary targeted on, and expanding upon, evaluation Trench 7 and Trench 9 (Figure 2). During the course of excavation, the West Area was reduced to about half of its intended size, both due to the logistical difficulties and the limited amount of archaeology encountered. This alteration in methodology was agreed in consultation with CgMs Heritage and the Archaeological Advisor to Malvern Hills District Council.

Deposits considered not to be significant were removed under constant archaeological supervision using a 360° tracked excavator employing a toothless bucket. Metal detecting was undertaken across all spoil during removal. Subsequent excavation was undertaken using hand tools. Clean surfaces were inspected and selected deposits were excavated to retrieve artefactual material and environmental samples, as well as to determine their nature. Deposits were recorded according to standard Worcestershire Archaeology practice (WA 2012) and trench and feature locations were surveyed using a differential GPS with an accuracy limit set at <0.04m.

All fieldwork records were checked and cross-referenced. Analysis was undertaken through a combination of structural, artefactual and environmental evidence, allied to the information derived from other sources.

The project archive is currently held at the offices of Worcestershire Archaeology. Subject to the agreement of the landowner it is anticipated that it will be deposited with Museums Worcestershire.

5 Archaeological results

5.1 Introduction

The features recorded across the excavation areas are shown in Figures 3-8 and Plates 1-7.

Although the areas were allocated independent number sequences during site work for ease of location, some features cross between them. Therefore, the entirety of the site is considered as a whole, rather than as separate areas, for the purposes of the site phasing presented below.

Due to a lack of artefacts or stratigraphic relationships, a few features remain unphased but are considered most likely to be of medieval or post-medieval date due to the nature of the surrounding archaeology.

5.2 Site phasing

5.2.1 Natural deposits across the site

The natural substrate was consistent across the entirety of the site, comprising firm pinkish red clay with areas of blueish-grey and yellow-brown mottling (Plate 1). This was generally encountered between 0.35m and 0.60m below the current ground surface.

5.2.2 Phase 1: Roman

No features could be securely phased as Roman, but pottery of 3rd to 4th century date was present in two features, suggesting at least some level of limited later Roman activity in the wider area. Two small sherds were residual in a medieval boundary ditch [40007] crossing the site (see below): these

were found in close proximity to where a piece of Malvernian oven plate had been recovered during the evaluation stage.

A further small abraded fragment of Roman pottery was found in the upper fill of an irregular hollow [40017]. Although this was the only pottery found, the feature is considered to be medieval in date based on the environmental remains (see below), so it is most likely that the pottery was residual in this context.

5.2.3 Phase 2: medieval

Overall, there were only a small number of features on the site, most of which were found to be medieval and later in date. Despite the limited nature of this archaeology, three pieces of medieval roof tile and 110 sherds of medieval pottery were recovered, although these were often highly abraded and fragmented.

Crossing the site, running broadly west to east but with a slight bend to head north-east, was a small boundary ditch up to 1.60m wide and 0.44m in depth [30006; 30010; 40007; 40019]: this had previously been recorded during the evaluation in Trench 9 [9005] (Figure 5; Plate 2). In addition to residual Roman material (see above), as well as animal bone and 13th to 16th century roof tile, the ditch contained numerous fragments of 13th to mid-14th century pottery (particularly fill 30009). For part of the southern side of the ditch, bedded onto the natural, was a 10m long rough spread of stones forming a shallow layer a maximum of 0.10m deep (30011), possibly an area of hard standing or consolidation along the edge. This layer contained late-11th to mid-14th century medieval pottery.

In the western area of the site, just to the north of the ditch, was a well-defined but shallow sub-oval pit 1.34m long and 0.25m in depth [30004] (Figure 7; Plate 3). The homogenous silty clay fill (30003) included burnt stone, cobbles, fired clay, charcoal, bone and a large amount of 13th to early 14th century pottery, all suggestive of a deliberate dump of waste.

Elsewhere, further north-east, a large irregular hollow 3m by 2m in size but only 0.23m deep contained numerous uneven fills: this was thought to be a tree throw or, alternatively, perhaps a shallow working hollow [40017] (Plate 4). Some of the fills included burnt material and heat-cracked stone alongside grains of free-threshing wheat (40010; 40011), environmental evidence that is consistent with a Saxon or medieval date despite the presence of a single abraded fragment of Roman pottery (see above). There is the possibility that this burnt material is derived from the same source as that found in a highly-fired pit [9007], found 10m to the east in evaluation Trench 9 (Plate 8), which was thought to be a charcoal-based pit kiln or oven and was radiocarbon dated to the Saxon or medieval period (though based on a sample of oak charcoal; see Brewer 2018 and Section 8 below).

Perhaps reflecting this potential evidence for small-scale craft or industrial working was a large piece of smithing hearth base thought to be medieval in date, although this was likely residual in post-medieval silty layer (30008). Three pieces of slag were also recovered from the subsoil in the eastern part of the site.

5.2.4 Phase 3: post-medieval

At the northern edge of the site, running south-west to north-east in a slightly sinuous but broadly linear spread, was an uneven and thin layer (0.04m thick) of cobbles within a brown silty matrix, partially embedded into the underlying natural (30005; Figure 8; Plate 5). This continued to become an area of greyish-brown silt with fewer cobbles (30008). Finds included post-medieval CBM and 17th to 18th century pottery, as well as the (probably) residual hearth base. This spread was located between a modern pond and an access gate through the fields, probably acting as hard standing or as a firm trackway in an otherwise very wet area.

5.2.5 Phase 4: post-medieval to modern

Close to the western edge of the site area was a drainage ditch, 1.49m wide and 0.45m deep with a rounded profile, running downslope and aligned north to south [30016]. The lower fill contained fragmentary animal bone; the upper had a mix of fragmentary medieval and modern pottery, as well as a ceramic land drain (Plate 6). This was also identified in evaluation Trench 7 as ditch [7005].

The silty clay subsoil and topsoil layers across the site included 17th to 20th century pottery, glass and metalwork, reflecting soil formation and agricultural land use in the post-medieval to modern period.

5.2.6 undated

A very shallow (0.09m deep) and diffuse linear feature [30013] ran broadly north to south and nearly parallel to ditch [30016] in the western part of the site; this remains undated but is most likely to be a ploughed out post-medieval or modern drainage ditch. An undated shallow and thin L-shaped gully, up to 0.20m in depth, was visible in the north of the eastern area [40009; probably continued into evaluation trench as 9003]. This may also have been used for drainage, though the right-angled shape could indicate some limited enclosing function, perhaps denoting a paddock or plot boundary (Figure 6).

Also in the eastern part of the site, and located south of the medieval boundary ditch crossing the area, was an undated sub-oval pit 0.12m in depth [40004] (Plate 7). The single dark clayey fill appeared to contain burnt material including charcoal, perhaps associating it with the same activity as that evidenced with the burnt material in pit [9007] and hollow [40017] to the north, although this is not certain.

6 Artefactual evidence by Laura Griffin

6.1 Methodology

The finds work reported here conforms to the following guidance: for finds work by ClfA (2014b), for pottery analysis by PCRG/SGRP/MPRG (2016), for archive creation by AAF (2011), and for museum deposition by SMA (1993).

6.1.1 Recovery policy

Recovery of artefacts was undertaken according to standard Worcestershire Archaeology practice (WA 2012; appendix 2).

6.1.2 Method of analysis

All hand-retrieved finds were examined. They were identified, quantified and dated to period. A *terminus post quem* date was produced for each stratified context. This date was used for determining the broad date of phases defined for the site. All information was recorded on a Microsoft Access 2007 database.

The pottery was examined under x20 magnification and referenced as appropriate by fabric type and form according to the fabric reference series maintained by Worcestershire Archaeology (Hurst and Rees 1992; WAAS 2017). Where possible forms were categorised and dated using the appropriate published typology for the specific fabric type.

6.1.3 Discard policy

Artefacts from topsoil and subsoil and unstratified contexts will normally be noted but not retained, unless they are of intrinsic interest (e.g. worked flint or flint debitage, featured pottery sherds, and other potential 'registered artefacts'). Large assemblages of post-medieval or modern material, unless there is some special reason to retain (such as local production), may be noted and not retained, or, if appropriate, a representative sample will be retained. Discard of finds from post-medieval and earlier

deposits will only be instituted with reference to museum collection policy and/or with agreement of the local museum.

6.2 Artefact analysis

The assemblage totalled 180 finds weighing 2.994kg (see Table 1). Finds came from twelve stratified contexts and could be dated from the Roman period onwards. Using pottery as an index of artefact condition this was generally poor, with sherds from most areas of the site displaying high levels of surface abrasion. This was reflected in a low average sherd size of 4.9g, indicating either post-depositional disturbance of features or that material was left on the ground surface for some time before becoming incorporated into site deposits.

period	material class	material subtype	object specific type	count	weight(g)
Roman	ceramic		pot	3	9
medieval	ceramic		pot	110	532
medieval	ceramic		roof tile(flat)	3	89
medieval	ceramic		cbm	2	2
medieval	slag	slag(Fe)	smithing slag (hearth bottom)	1	1464
medieval	slag	slag(Fe)		3	179
post-medieval	ceramic		pot	5	48
post-medieval	ceramic		roof tile(flat)	2	49
post-medieval	ceramic		cbm	4	9
post-medieval	metal	copper alloy	buckle	1	6
post-medieval	metal	copper alloy	button	2	3
post-medieval	ceramic		pipe	1	3
modern	ceramic		pot	8	40
modern	ceramic		pipe	2	10
modern	glass		vessel	2	39
modern	metal	copper alloy	coin	3	11
modern	metal	silver	coin	1	2
modern	metal	copper alloy	?brooch	2	3
undated	metal	copper alloy	sheet	2	2
undated	metal	copper alloy	object	1	70
undated	metal	?pewter	sheet	2	17
undated	metal	lead	sheet	1	38

undated	metal	iron	horseshoe	1	31
undated	metal	iron	nails	12	83
undated	metal	iron	object	3	185
undated	metal	iron	tool/machinery	1	51
undated	metal	lead	sheet	1	6
undated	slag	clinker		1	13

Table 1: Quantification of the finds assemblage

6.2.1 Summary of artefacts by period

The discussion below is a summary of the finds and their associated location or contexts by period. Where possible, dates have been allocated, and the importance of individual finds commented upon as necessary.

Roman

Roman material consisted of three sherds of pottery. Two were residual in the upper fill of a medieval ditch (fill 40005), both of which could be dated 3rd-4th century, including the rim from an oxidised Severn Valley ware pulley-rimmed jar (*cf.* Webster 1976, no.10; fabric 12) and a small fragment of Oxfordshire colour-coated ware (fabric 29). The remaining sherd from a hollow (fill 40010) was also of oxidised Severn Valley ware.

Medieval

Pottery

Pottery of medieval date comprised 110 sherds, forming the bulk of the overall finds assemblage (Tables 1 and 2). Most could be date to the 13th or 14th century. Preservation was poor with the majority of sherds small in size and having a high level of surface abrasion, as reflected by a notably low average sherd weight of just 4.8g. The fact that most of these were retrieved from pit and ditch fills would suggest that they had probably been left on the site surface following discard, prior to deposition. Furthermore, it could also indicate that potentially the *terminus post quem* of these features is actually slightly later than the dates implied by the pottery.

The assemblage was typical of a rural assemblage from this period, with a relatively narrow range of forms and fabrics identified dominated by locally produced wares (see Table 2). In total, 93% of the medieval assemblage was of unglazed Worcester-type ware (fabric 55), unglazed Malvernian ware (fabric 56) and oxidised glazed Malvernian ware (fabric 69). All of these fabric types have been described, dated and discussed at length by Hurst and Rees (Upwich, Droitwich; 1992), and Bryant (Deansway, Worcester; 2004). Non-local sherds included six sherds from a single southern white ware vessel (fabric 70.2), one of Newbury ware B (fabric 157.2; pit fill 30003) and one small fragment of unidentified fabric type (fabric 99). The presence of Newbury ware B is of particular note due to its relative rarity in assemblages from Worcestershire, with only a handful of sherds previously identified from a 12th-13th century site at Earl's Court Farm, Worcester (see Griffin 2016, 68).

The range of forms identified was also narrow, with cooking pots dominating the group, supplemented by a small number of glazed ware forms. The most diagnostic of these was a cylindrical-necked baluster jug of 13th-14th century date in Southern white ware (fabric 70.2; subsoil layer 30001).

Roof tile

All three pieces of medieval roof tile were of Malvernian fabric, unglazed and dated to the 13th-16th century. Similar to the pottery assemblage, these were relatively small and abraded fragments. Two very small undiagnostic fragments of ceramic building material were also thought to be of medieval date.

Post-medieval

A small group of ten finds were post-medieval in date, from the 17th century onwards. All came from soil layers, the majority from topsoil and subsoil (layers 30001; 40000; 40001). These included five sherds of pottery (Table 2), one of which could be identified as coming from a pie-crust rimmed baking dish with inlaid slip decoration dated mid-17th to 18th century (fabric 91; topsoil layer 40000). A further two sherds thought to be from a black-glazed flared cup of 17th century date were retrieved from the subsoil (fabric 78; subsoil layer 40001). Other finds included a clay pipe stem and four fragments of ceramic building material.

Metal detecting of the site discovered four finds from this period, comprising two copper alloy looped buttons and a small circular double-loop frame copper alloy buckle.

Modern

As with the post-medieval material, the majority of modern finds came from topsoil and subsoil layers (contexts 40000 and 40001). The only exception was a single fragment of china from the upper fill of a ditch containing a modern land drain (fill 30014).

Pottery consisted of commonly identified fabric types such as transfer decorated modern china (fabric 85), porcelain (fabric 83), late stoneware (fabric 81.4) and creamware (fabric 84). The latter included two fragments with a distinctive moulded pineapple design glazed in green and yellow, which could be dated 1759-1775, found in topsoil and subsoil (layers 40000; 40001).

Other finds included two fragments of bottle glass, one being a sheared top bottle neck of 19th-20th century date. In addition, two fragments of a decorative clay pipe bowl in the form of a hand holding a bouquet of flowers was typical of the Victorian period.

Modern metalwork consisted of four coins and fragments of a possible brooch. The coins included a George II halfpenny, a George VI halfpenny and a Victoria halfpenny, all in copper alloy. A silver shilling from early in the reign of Victoria, dated 1838, was also identified. The brooch fragments appeared to represent a horseshoe and had traces of gilding on the back. This could not be closely dated but was thought to be Victorian.

Undated

It was not possible to date a small group of finds due to a lack of diagnostic features, as well as residuality. The most significant of these was part of a smithing hearth bottom. Although retrieved from a layer dating to the 17th-18th century by associated finds (layer 30008), it is highly likely that this find related to medieval activity on the site. Three further pieces of undiagnostic slag were also identified.

Remaining finds of unknown date consisted primarily of metal objects from the topsoil and subsoil, including nails, a small horseshoe and other pieces too highly corroded to be identified. Perhaps the most distinctive were two pieces of thin pewter sheet, possibly from a metal vessel, and a rectangular piece of lead sheet of unknown function with five rivet holes. Where surviving, these rivets appeared to be iron.

period	fabric number	fabric common name	total	weight (g)
Roman	12	Severn Valley ware	2	8
Roman	29	Oxfordshire red/brown colour-coated ware	1	1
medieval	55	Worcester-type sandy unglazed ware	69	243
medieval	56	Malvernian unglazed ware	31	239
medieval	70.2	Southern white ware, Border ware	6	31

medieval	99	Miscellaneous medieval wares	1	4
medieval	157.2	Newbury ware B	1	4
medieval	69	Oxidized glazed Malvernian ware	2	11
post-medieval	78	Post-medieval red ware	4	22
post-medieval	91	Post-medieval buff ware	1	26
modern	81.4	Miscellaneous late stoneware	1	15
modern	83	Porcelain	1	2
modern	84	Creamware	2	2
modern	85	Modern china	4	21

Table 2: Quantification of the pottery by fabric type

context	material class	material subtype	object specific type	count	weight(g)	start date	end date	finds tpq
30001	ceramic		pot	1	10	L13C	14C	late post-medieval
30001	ceramic		pot	6	31	L13C	14C	
30001	ceramic		pot	1	7	13C	M14C	
30001	ceramic		roof tile(flat)	1	24	18C	19C	
30001	ceramic		roof tile(flat)	1	25	16C	18C	
30001	ceramic		roof tile(flat)	1	34	13C	16C	
30003	ceramic		cbm	2	2			13-14C
30003	ceramic		pot	21	78	L11C	M14C	
30003	ceramic		pot	31	239	E13C	E14C	
30003	ceramic		pot	1	4	L12C	L14C	
30005	ceramic		cbm	3	2			post-medieval
30008	ceramic		cbm	1	7			17-18C
30008	ceramic		pot	1	1	17C	18C	
30008	slag	slag(Fe)	smithing slag (hearth bottom)	1	1464			
30009	ceramic		pot	31	124	13C	M14C	13-M14C
30011	ceramic		pot	14	28	L11C	M14C	M14C
30014	ceramic		pot	2	6	L11C	M14C	

30014	ceramic		pot	1	1	L19C	20C	L19-20C
40000	ceramic		pipe	1	3			
40000	ceramic		pot	1	15	19C	M20C	
40000	ceramic		pot	1	1	M18C	L18C	
40000	ceramic		pot	3	20	19C	20C	
40000	ceramic		pot	1	26	M17C	18C	
40000	ceramic		roof tile(flat)	1	33	13C	16C	
40000	glass		vessel	2	39	19C	E20C	
40000	metal	cu alloy	button	1	1		18C	
40000	metal	cu alloy	coin	1	3		M18C	
40000	metal	iron	horseshoe	1	31			
40000	metal	iron	nails	7	50			
40000	metal	iron	object	1	53			
40000	metal	iron	tool/machinery	1	51			
40001	ceramic		pipe	2	10	M19C	L19C	
40001	ceramic		pot	1	11	L17C	18C	
40001	ceramic		pot	2	10	M17C	L17C	
40001	ceramic		pot	1	2	L18C	20C	
40001	ceramic		pot	1	1	M18C	L18C	
40001	ceramic		pot	1	4			
40001	metal	?pewter	sheet	2	17			
40001	metal	cu alloy	buckle	1	6	16C	18C	
40001	metal	cu alloy	button	1	2		18C	
40001	metal	cu alloy	coin	1	4		M19C	
40001	metal	cu alloy	coin	1	4	1937	1952	
40001	metal	cu alloy	object	1	70			
40001	metal	cu alloy	sheet	2	3			
40001	metal	cu alloy	sheet	2	2			
40001	metal	iron	nails	5	33			

40001	metal	iron	object	2	132			
40001	metal	lead	sheet	1	6			
40001	metal	lead	sheet	1	38			
40001	metal	silver	coin	1	2	1838		
40001	slag	clinker		1	13			
40001	slag	slag(Fe)		3	179			
40005	ceramic		pot	1	6	3C	4C	13-15C
40005	ceramic		pot	1	1	3C	4C	
40005	ceramic		pot	1	1	13C	15C	
40010	ceramic		pot	1	2	M1C	4C	Roman
40018	ceramic		roof tile(flat)	1	22	13C	16C	medieval

Table 3: Summary of context dating based on artefacts

7 Environmental evidence by Elizabeth Pearson

Environmental sampling was undertaken according to standard Worcestershire Archaeology practice (WA 2012). The environmental project conforms to guidance by ClfA (2014a) on archaeological excavation and further guidance by English Heritage (2011) and the Association for Environmental Archaeology (1995).

7.1 Methods and processing

A total of seven samples (each between 8 to 40 litres) from evaluation Trench 7 and 9 and the excavation stage were taken from medieval pits and an irregular hollow, a possible tree throw (Table 4). Samples from both the evaluation and excavation stages were assessed together, but no further quantification of material was recommended due to the low quantities and low significance. The results of assessment scanning are summarised below as, nevertheless, they are useful for broadly characterising the site.

The samples were processed by flotation using a Siraf tank. The flots were collected on a 300µm sieve and the residue retained on a 1mm mesh. This allows for the recovery of items such as small animal bones, molluscs and seeds. The residues were scanned by eye and the abundance of each category of environmental remains estimated. A magnet was also used to test for the presence of hammerscale. The flots were scanned using a low power MEIJI stereo light microscope and plant remains identified using modern reference collections maintained by Worcestershire Archaeology, and a seed identification manual (Cappers *et al* 2012). Nomenclature for the plant remains follows the *New Flora of the British Isles, 3rd edition* (Stace 2010).

Animal bone was quantified according to weight (g) and count and tabulated by context.

Charcoal was examined under a low power MEIJI stereo light microscope in order to determine the presence of oak and non-oak charcoal.

context	sample	feature type	fill of	period	sample volume (L)	volume processed (L)
Evaluation						
7007	1	pit	7006	uncertain	10	10
9009	5	pit	9007	Saxon/medieval	20	10
Excavation						
30003	4	pit	30004	medieval	20	20
30003	5	pit	30004	medieval	20	20
40003	1	pit	40004	undated	20	20
40010	2	hollow	40017	medieval	40	40
40011	3	hollow	40017	medieval	8	8

Table 4: List of bulk samples from evaluation and excavation

7.1.1 Discard policy

Remaining sample material and scanned residues will be discarded after a period of three months following submission of this report unless there is a specific request to retain them.

7.2 Results

7.2.1 Animal bone and oyster shell

A small assemblage of animal bone and oyster shell (99g, 60+ fragments; Table 5) was hand-collected during fieldwork. As this was a very small assemblage of poorly preserved bone, consisting of mainly split large domestic mammal limb shaft fragments, no further work was carried out on this material.

context	material class	material subtype	count	weight (g)	feature type	period
30003	bone	animal bone	3	9	pit	medieval
30005	bone	animal bone	2	3	layer	post-medieval
30009	bone	animal bone	1	14	ditch	medieval

30015	bone	animal bone	50+	18	ditch	post-medieval/modern
40000		oyster	2	28	topsoil	post-medieval/modern
40001		oyster	2	27	subsoil	post-medieval/modern
Totals			60	99		

Table 5: Hand-collected animal bone and oyster shell

7.2.2 Charcoal and plant macrofossils

The overall results are summarised in Tables 6 and 7. As noted above, samples from evaluation Trench 7 and Trench 9 and the excavation stage were considered as a group to give a useful characterisation of the site as a whole. As the material from the excavation samples was so limited, this section summarises the findings mainly from the evaluation trenches, particularly pit [9007] (see Pearson 2018a).

Unusually large fragments of heartwood oak were recovered from both two pits [7006 and 9007] found during the evaluation (fills 7007 and 9009), with charcoal of smaller size and quantity being recorded from pits [30004, 40004 and 40017] identified nearby during the excavation stage. In both evaluation pits [7006 and 9007], assessment showed that the growth rings of the oak were uniformly very narrow with a pronounced ring-porous growth pattern. This may reflect crowded growing conditions, perhaps in coppiced woodland, rather than environmental factors such as drought or a late spring. The similarity in the charcoal suggests that the pits are contemporary, and that they relate to industrial activity which required a concentrated charcoal fuel.

Assessment of excavation samples demonstrated a low level of charred cereal crop waste across the site. Free-threshing wheat (*Triticum* sp free-threshing) and hulled barley (*Hordeum vulgare*) were in use. A possible oat (cf *Avena* sp) grain may derive from a cultivated crop, but identification was uncertain. Occasional charred seeds are assumed to be weeds growing in cereal crops.

context	sample	large mammal	charcoal	charred plant	uncharred plant	artefacts
Evaluation						
7007	1		abt			occ fired clay
9009	5		abt			abt fired clay, occ glass slag(?)
Excavation						
30003	4	occ	occ	occ	occ*	occ fired clay, ash(?), hearth stone (?), heat-cracked stone
30003	5	occ	occ			occ ash (?), fired clay, heat-affected stone
40003	1	occ	occ		abt*	
40010	2	occ	mod	occ	abt*	occ fired clay, heat-cracked stone

40011	3		mod	occ	abt*	occ fired clay, heat-cracked stone
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Table 6: Summary of environmental samples; occ = occasional, mod = moderate, abt = abundant, * = probably modern and intrusive

context	sample	preservation type	species detail	category remains	quantity/diversity
<i>Evaluation</i>					
7007	1	ch	<i>Quercus robur/petraea</i> wood	misc	+++/low
9009	5	ch	<i>Quercus robur/petraea</i> wood	misc	+++/low
<i>Excavation</i>					
30003	4	unch*	unidentified root fragments (herbaceous)	misc	+/low
30003	4	ch	<i>Triticum</i> sp (free-threshing) grain, <i>Triticum</i> sp grain	grain	+/low
30003	5	unch*	unidentified root fragments (herbaceous)	misc	+++/low
30003	5	ch	<i>Triticum</i> sp (free-threshing) grain	grain	+/low
40003	1	unch*	unidentified root fragments (herbaceous), unidentified wood fragments	misc	+++/low
40010	2	unch*	<i>Rumex maritimus</i> (perianth), unidentified root fragments (herbaceous)	large mammal	+++/low
40010	2	unch*	<i>Triticum</i> sp (free-threshing) grain, Cereal sp indet grain, cf <i>Avena</i> sp grain, <i>Vicia/Lathyrus</i> sp, Poaceae sp indet grain (small), unidentified seed	grain	+/low
40011	3	unch*	unidentified root fragments (herbaceous)	misc	++/low
40011	3	ch	<i>Triticum</i> sp (free-threshing) grain, <i>Hordeum vulgare</i> tail grain (hulled), Cereal sp indet grain, cf <i>Avena</i> sp grain, <i>Rumex acetosella</i> , <i>Bromus</i> sp grain, Poaceae sp indet grain	grain	++/low
40011	3	ch	unidentified wood fragments	misc	+/low

Table 7: Plant remains from bulk samples

Key:

preservation	quantity
ch = charred	+ = 1 - 10
unch* = uncharred	++ = 11- 50
	+++ = 51 - 100

8 Radiocarbon dating by Elizabeth Pearson

8.1 Methodological note

At the evaluation stage of the project (see Pearson 2018b), a single radiocarbon date was returned in an attempt to resolve the uncertain date of a pit in Trench 9. Charcoal was selected from the fill (9009); however, only oak charcoal was available, material not normally considered suitable for radiocarbon dating because oak is a long-lived tree (on average around 200 years, but occasionally over 1000 years). The long lifespan can result in a large old wood effect but was considered acceptable in this instance due to the general uncertainty of dating for the site at this stage of work.

The dating and results section is presented again here in this report both due to relevance in relation to the surrounding features and for ease of accessibility.

8.2 Calibration

The result from oak charcoal is a conventional radiocarbon age (Stuiver and Polach 1977) and is listed in Table 8. The calibrated date range for the sample was calculated using the maximum intercept method (Stuiver and Reimer 1986), and quoted with end points rounded outwards to ten years. The probability distribution of the calibrated date, calculated using the probability method (Stuiver and Reimer 1993). It was calculated using OxCal v4.2 and the current internationally-agreed atmospheric calibration dataset for the northern hemisphere, IntCal13 (Reimer *et al* 2013).

8.3 Results

Considering the potential for an old wood effect from the oak, a wide date range has to be considered. If the average lifespan of 200 years for oak is taken in to account for an old wood effect, the date could range from around 680 cal AD to around 1090 cal AD, covering a late Saxon to early medieval date. If a rare lifespan of 1000 years is taken into account, the charcoal could date from 680 cal AD at the earliest and around 1890 cal AD at the latest. Overall, the radiocarbon date effectively rules out the likelihood of the feature dating from before c 680 cal AD but provides little additional detail. It does, however, add support to the pottery dating for the site, suggesting a medieval focus of activity and indicating that the small amount of prehistoric and Roman material from both the evaluation and excavation stages is likely to be residual.

laboratory code	context number	material	$\delta^{13}\text{C}$ (‰)	conventional age	OxCal calibrated age (95.4% probability or 2 sigma)
Beta-512499	Eval 9009	Charcoal (oak)	-24.8 ‰	1230 +/- 30 BP	cal AD 680 - 890

Table 8: Radiocarbon dating results

9 Discussion and conclusions

The excavation expanded upon the findings of two evaluation trenches and, although only a limited number of additional archaeological features were revealed, the majority of these have been identified as medieval and later in date. They appeared to be related to agricultural and small-scale craft or industrial working. A background scatter of small and abraded Roman finds residual in a medieval boundary ditch also suggested at least some level of Roman activity in the wider area, perhaps associated with the nearby route of the Worcester to Gloucester Roman road.

The securely dated medieval features were thinly spread, but all located in and around the boundary ditch crossing the area. It is possible that this defined a plot of land or demarcated the edge of a wetter and less accessible area. The placement marked the edge of a natural downslope: to the south of the ditch the ground was very boggy and markedly more waterlogged than to the north. Medieval roof tile was recovered, and one part of the ditch in the western area of the site produced a substantial cluster of finds, closely associated with a well-defined sub-oval pit that also contained a

notable assemblage of 13th to 14th century pottery. Alongside a stony layer on the edge of the ditch, this small group of features produced nearly all of the medieval material from the site, suggesting a discrete dump of waste. This probably came from close by, although no obvious occupation-related or structural features were defined on the site and the condition of this material did indicate that it may have been middened on the ground surface following discard, prior to deposition.

This could perhaps be connected to the presence of small-scale craft or industrial working on site. Elsewhere, north of the boundary ditch, there was a large piece of smithing hearth base recovered, as well as burnt material identified in a shallow hollow, located close to highly-fired material in a pit found at the evaluation stage and radiocarbon dated to the Saxon or medieval period (thought to be from a pit kiln or oven). The charcoal from the site, particularly the large pieces recovered from this pit within evaluation Trench 9, suggests that there was deliberate selection of wood for concentrated charcoal fuel. It was dominated by oak, which burns well and at a high temperature (see Taylor 1981, 52-3), and a pronounced ring-porous growth pattern indicates that coppiced wood was used. In the vicinity, an undated L-shaped gully, as well as an undated small pit to the south of the boundary ditch, could potentially form part of the same area of activity, but without secure dating evidence or stratigraphic relationships this remains unresolved.

Whilst apparently of relatively low-status in general, this broadly dispersed area of 13th to 14th century land use, when considered alongside the artefactual evidence, can be viewed as a small-scale craft/industrial hinterland site linked to the presence of a moated complex at Upper Broomhall Farm, located immediately south of Taylor's Lane. Although this is now only represented by post-medieval buildings it is known to have medieval origins, reportedly in the ownership of Tewkesbury Abbey in the 15th and 16th century, and probably earlier (HER record WSM02130). This association may be particularly relevant as a sherd of the non-local, imported pottery found on site (Newbury ware B), rare in Worcestershire assemblages, has previously been identified in the vicinity of a moated manorial site at Earl's Court Farm, west of Worcester (Newbury Ware A and B; Griffin 2016, 68), and on a site close to Kempsey, a further location of an ecclesiastical manor to the south of Worcester (Newbury Ware A; Griffin and Hedge 2015, 10–11).

Overall, the artefactual evidence from the excavation suggests a focus of activity in the 13th to 14th century, with the broad radiocarbon date of Saxon to medieval from the oak charcoal recovered at the evaluation stage neither refining this further or contradicting the pottery dates. Compared to other rural medieval sites around Worcester, this dating is slightly later than the main period of medieval activity at Earl's Court Farm (twelfth to early thirteenth century; Vaughan and Jones 2016) but comparable to that seen at Hallow, to the north-west (13th to 15th century; Miller *et al.* 2004). In common with the general pattern in the county of abandonment of medieval farmsteads and hamlets between the 14th to 16th centuries, the site seems to lack evidence for activity after the 14th century, reverting to cultivation and purely agricultural land use. This period saw great social and economic upheaval associated with conflict, famine, political instability and plagues, leading to subsequent changing ownership of lands and desertion of settlements (Hunt 2011, 174-179). Overlying late medieval/post-medieval furrows and orchard bank earthworks extant across parts of the wider site suggest that earlier activity had long been absent by the point at which these were formed. It is also possible that some of the later plough disturbance had removed more diffuse or ephemeral features associated with the medieval phase. This agricultural land use was reflected in the spread of post-medieval finds across the subsoil and topsoil, as well as the drainage ditch and the cobble spread which probably acted as hard standing or as a firm trackway.

Rural medieval activity is still largely underrepresented in the archaeological record across the west midlands, particularly in Worcestershire, with few investigated sites and many others poorly defined in spatial terms (Hunt 2011, 174–179). Settlements with excavated early medieval or medieval buildings within the county are known only at Fladbury (Peacock 1967), Hallow (Miller *et al.* 2004), and Earl's Court (Vaughan and Jones 2016). Investigation of the land surrounding manorial sites is even less explored (Hunt 2011, 196–198). This site, therefore, albeit only at a very small-scale and lacking any

obvious occupation, at least represents an uncommon example of features within a rural medieval landscape occupying the hinterland of a manorial complex.

10 Project personnel

The fieldwork was led by Richard Bradley (MCIfA), assisted by Jem Brewer (PCIfA) and Beth Williams.

The project was managed by Tom Rogers (MCIfA). The report was produced and collated by Richard Bradley, with specialist contributions from Laura Griffin (ACIfA) and Elizabeth Pearson (ACIfA). Illustrations were prepared by Carolyn Hunt (MCIfA).

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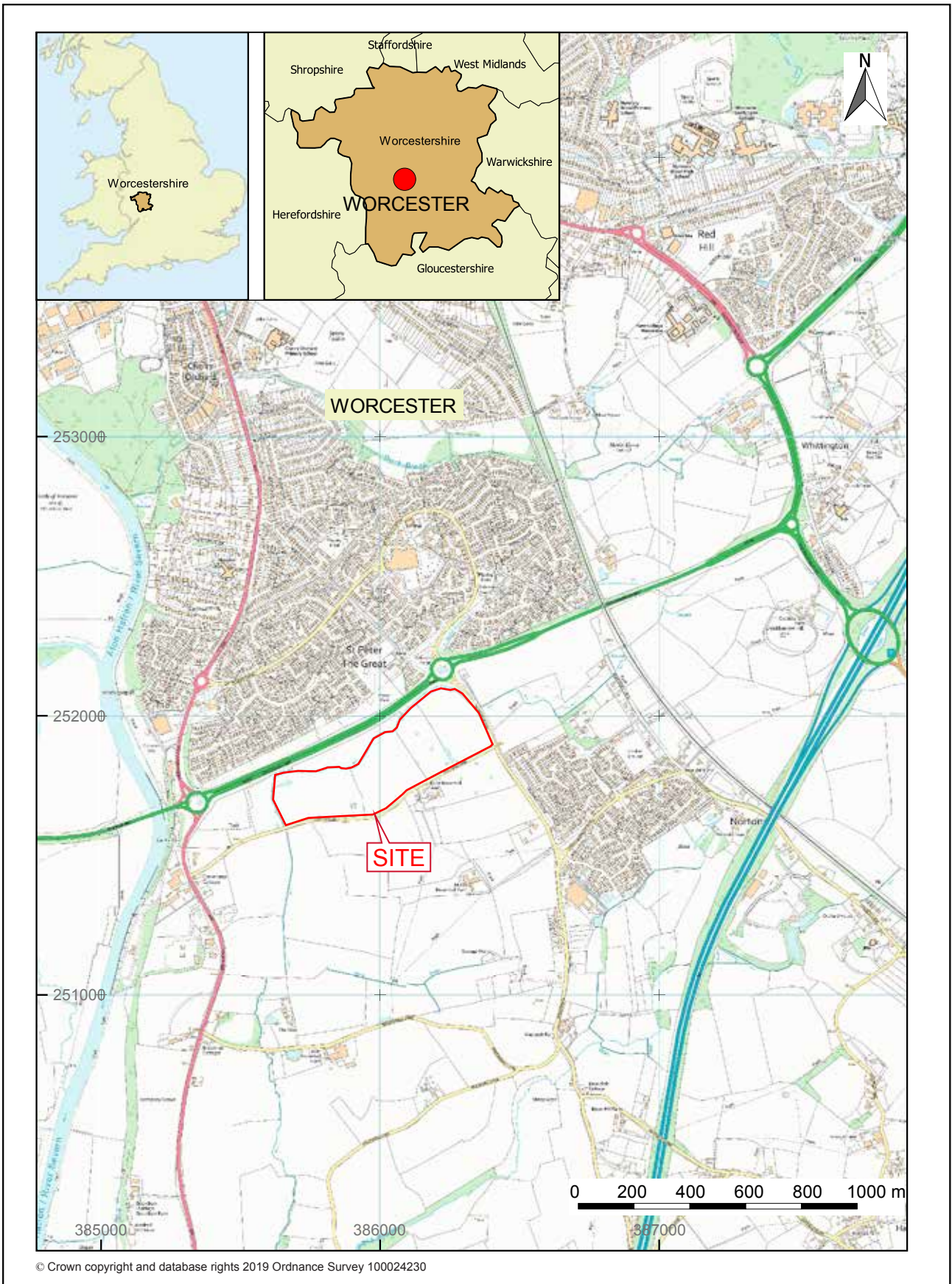
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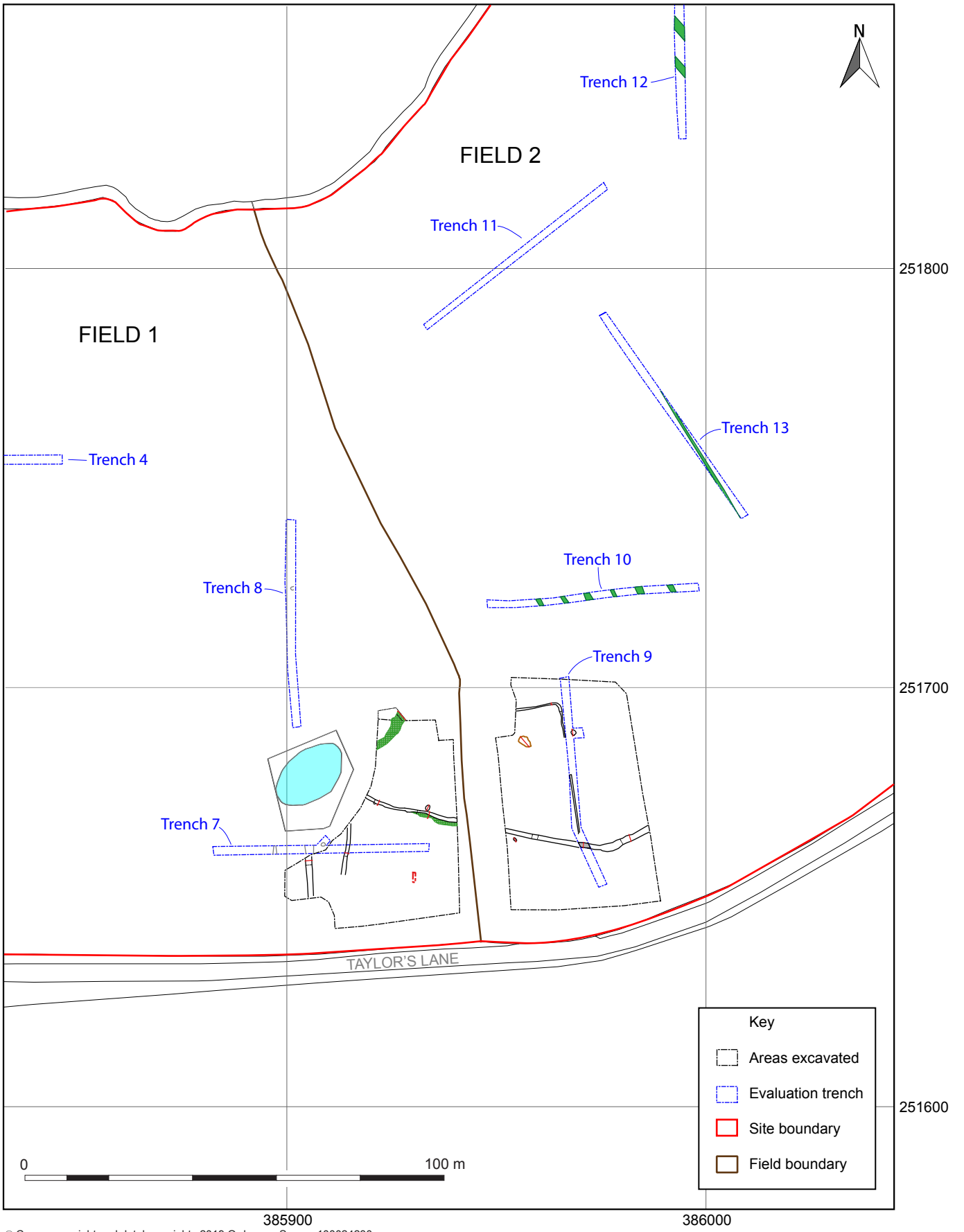
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Figures



Location of the site

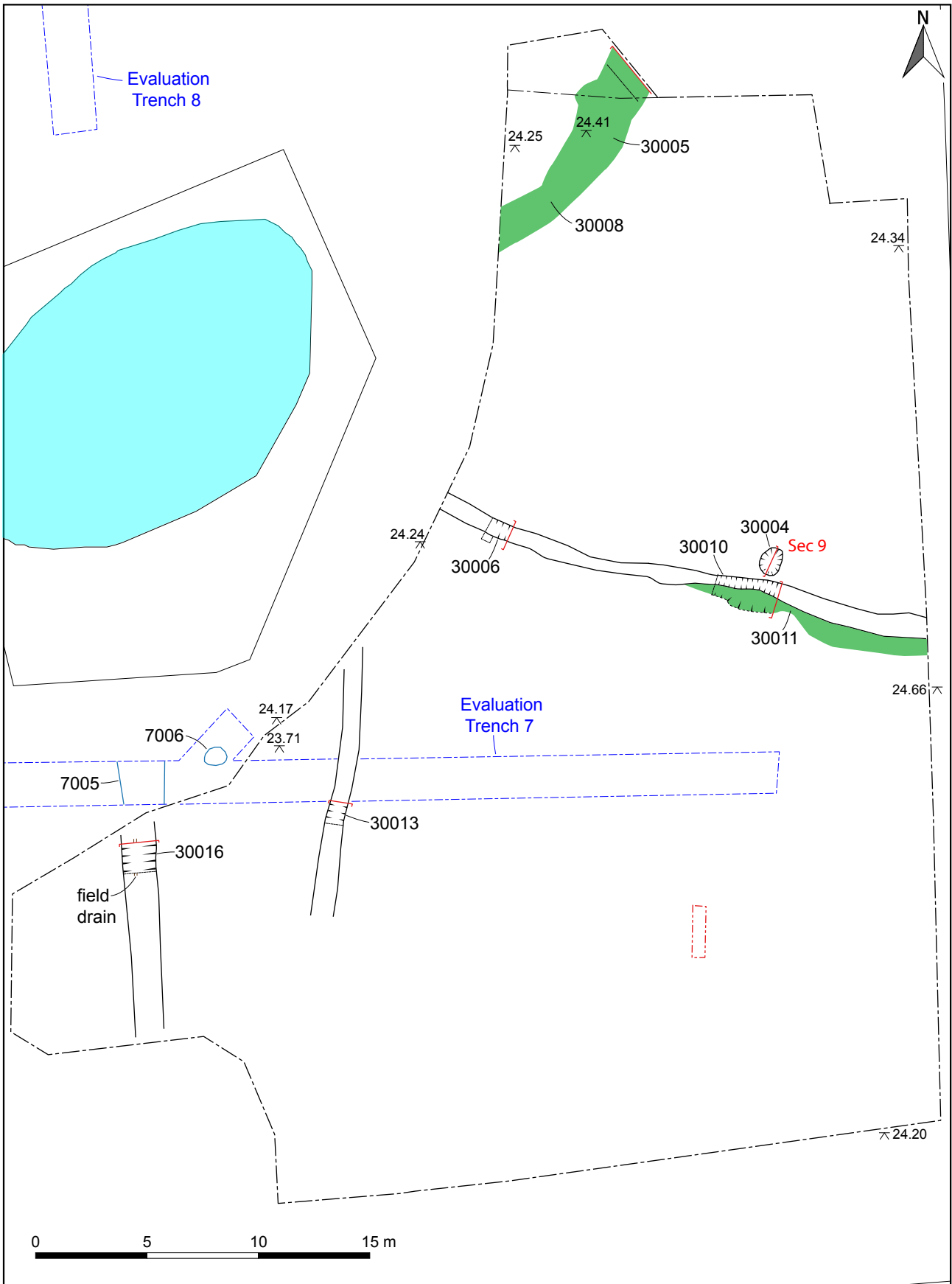
Figure 1



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Trench location plan

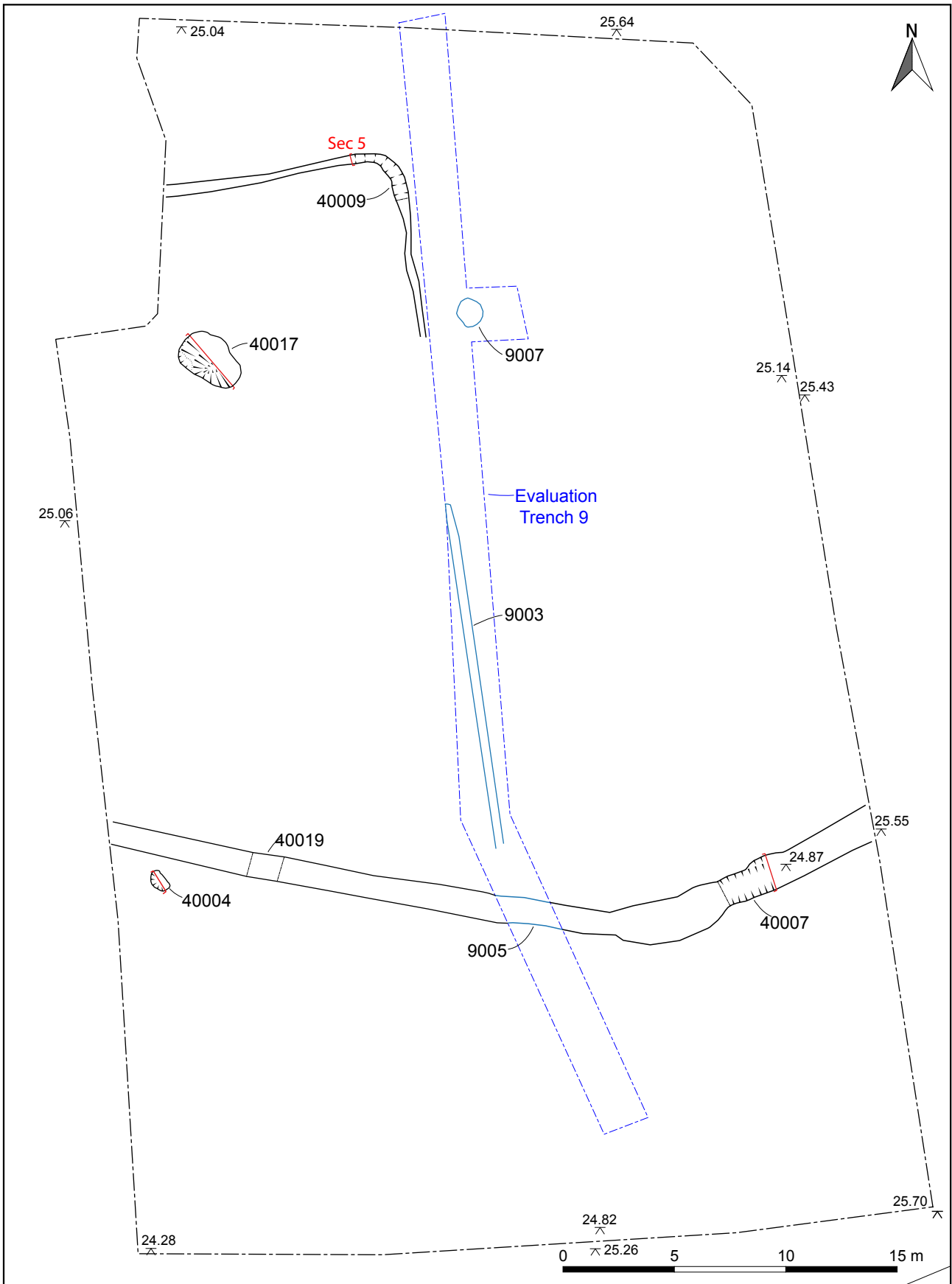
Figure 2



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Western Area

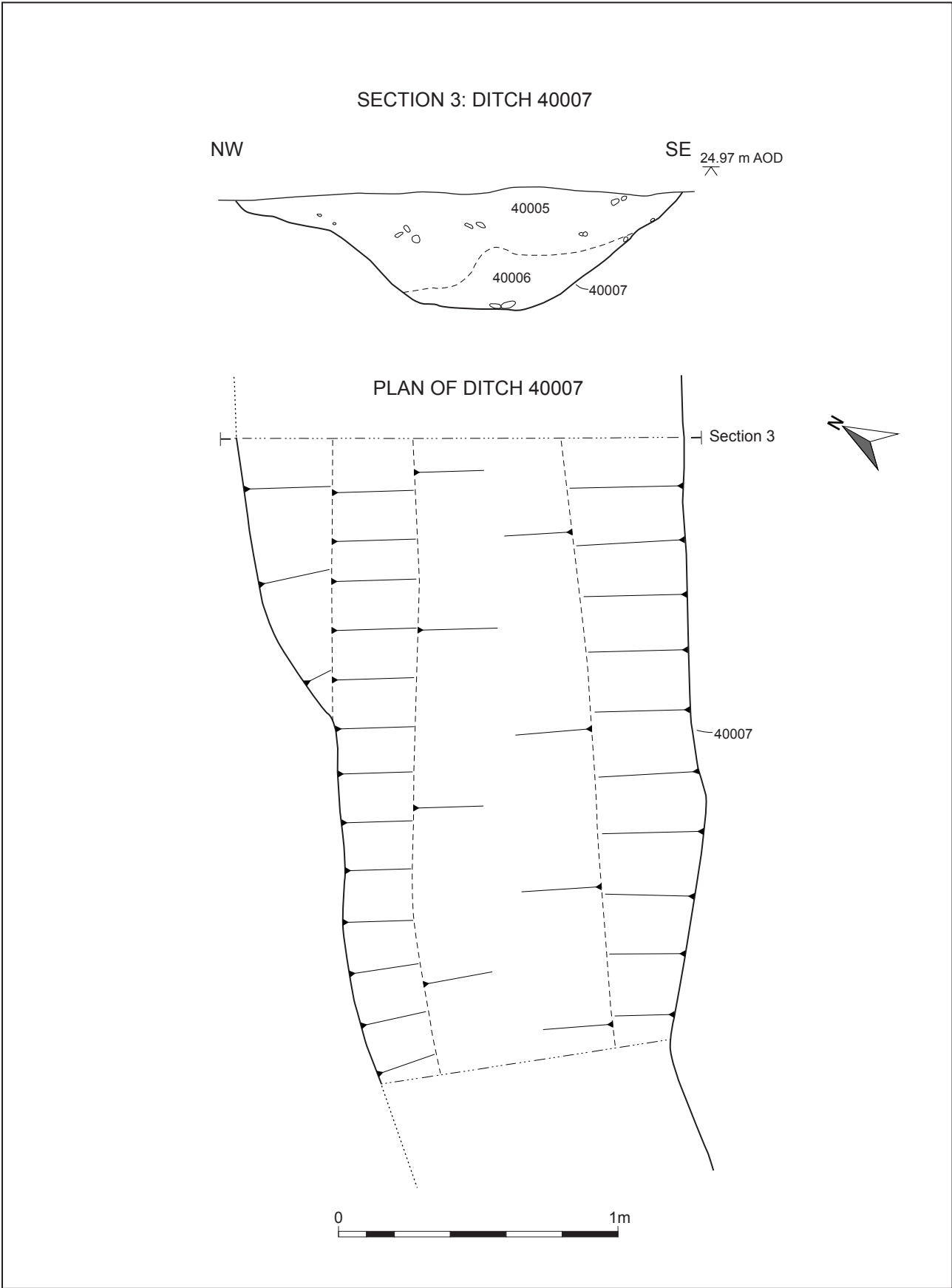
Figure 3



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Eastern Area

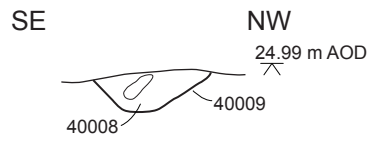
Figure 4



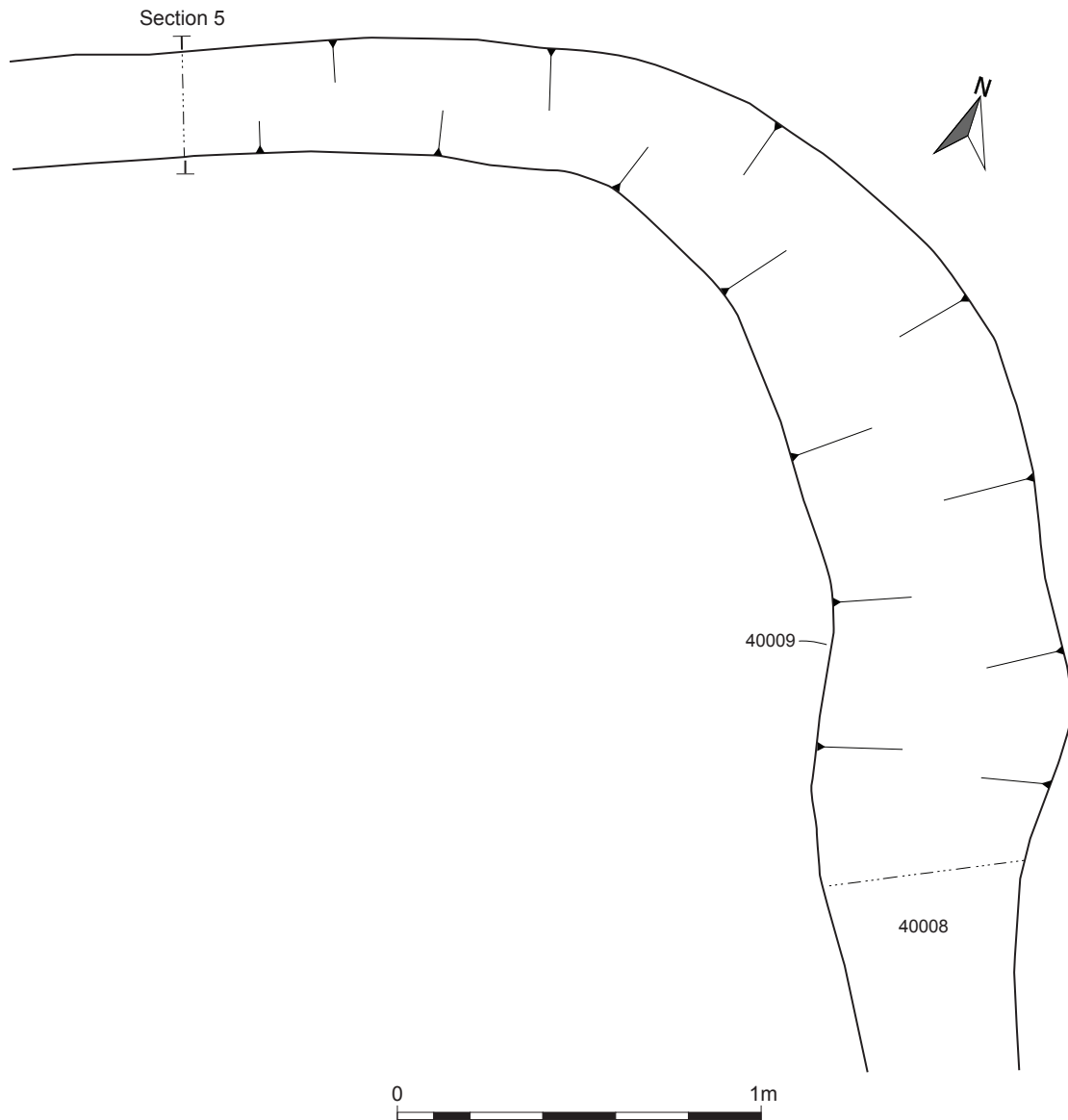
Ditch 40007: plan and section

Figure 5

SECTION 5: GULLY 40009



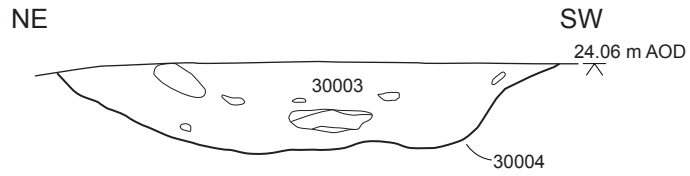
PLAN OF NORTH EAST CORNER OF GULLY 40009



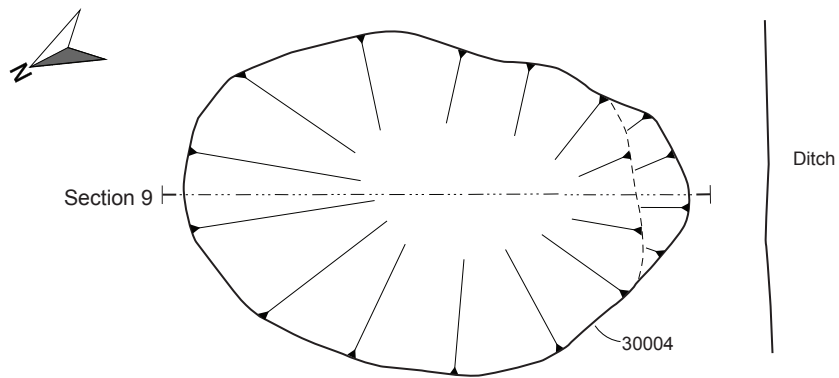
Gully 40009: plan and section

Figure 6

SECTION 9: PIT 30004



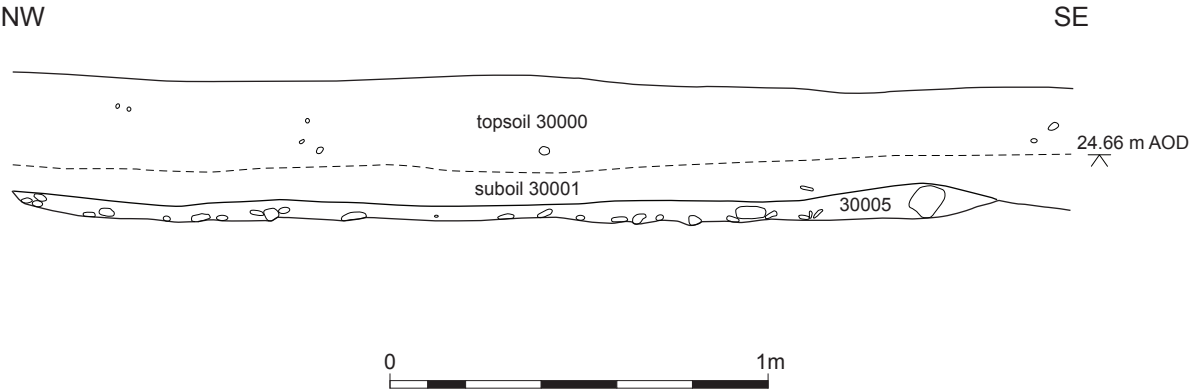
PLAN OF PIT 30004



Pit 30004: plan and section

Figure 7

SECTION 11: COBBLES 30005



Cobbles 30005: section

Figure 8

Plates



Plate 1: General view of the eastern part of site during excavation, facing south



Plate 2: Medieval boundary ditch [40007], facing NE, 1m scale



Plate 3: Medieval pit [30004], facing SE, 1m scale

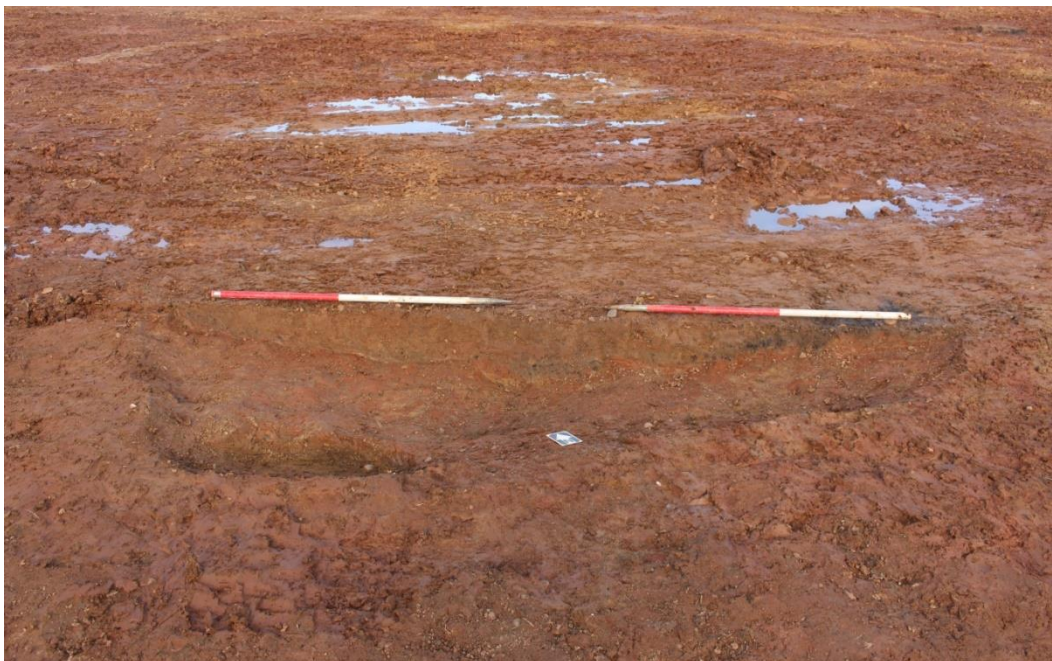


Plate 4: Irregular hollow with burnt material at south-eastern edge [40017], facing NE, 1m scales



Plate 5: Thin spread of cobbles [30005] below topsoil and subsoil, facing NE, 1m scales



Plate 6: Drainage ditch with land drain [30016], facing N, 1m scale



Plate 7: Undated shallow pit [40004], facing NE, 0.5m scale



Plate 8: Pit [9007] in section, evaluation Trench 9, facing E, 1m scale

Appendix 1: Summary of project archive (WSM71516)

TYPE	DETAILS*
Artefacts and Environmental	Animal bones, Ceramics, Environmental, Glass, Industrial
Paper	Diary (Field progress form), Drawings, Report
Digital	Database, GIS, Images raster/digital photography, Survey, Text

*OASIS terminology

Appendix 2: Summary of data for Worcestershire HER

WSM71516 (event HER number)

P5549

Artefacts

period	material class	material subtype	object specific type	start date	end date	count	weight (g)	specialist report?	key assemblage?
Roman	ceramic		pot			1	1	Y	N
Roman	ceramic		pot	3C	4C	1	6	Y	N
Roman	ceramic		pot	M1C	4C	1	2	Y	N
medieval	ceramic		cbm			2	2	Y	N
medieval	ceramic		pot			1	4	Y	Y
medieval	ceramic		pot	13C	15C	1	1	Y	Y
medieval	ceramic		pot	13C	M14C	32	131	Y	Y
medieval	ceramic		pot	E13C	E14C	31	239	Y	Y
medieval	ceramic		pot	L11C	M14C	37	112	Y	Y
medieval	ceramic		pot	L12C	L14C	1	4	Y	Y
medieval	ceramic		pot	L13C	14C	7	41	Y	Y
medieval	ceramic		roof tile(flat)	13C	16C	3	89	Y	N
medieval	slag	slag(Fe)				3	179	N	N
medieval	slag	slag(Fe)	smithing slag(hearth bottom)			1	1464	N	N
post-medieval	ceramic		cbm			4	9	N	N
post-medieval	ceramic		pipe			1	3	N	N
post-medieval	ceramic		pot	17C	18C	1	1	Y	N
post-medieval	ceramic		pot	L17C	18C	1	11	Y	N
post-	ceramic		pot	M17C	18C	1	26	Y	N

medieval									
post-medieval	ceramic		pot	M17C	L17C	2	10	Y	N
post-medieval	ceramic		roof tile(flat)			1	25	N	N
post-medieval	metal	copper alloy	buckle			1	6	N	N
post-medieval	metal	copper alloy	button			2	3	N	N
post-med/modern	ceramic		roof tile(flat)			1	24	N	N
modern	ceramic		pipe	19C		2	10	N	N
modern	ceramic		pot	19C	20C	3	20	N	N
modern	ceramic		pot	19C	M20C	1	15	N	N
modern	ceramic		pot	L18C	20C	1	2	N	N
modern	ceramic		pot	L19C	20C	1	1	N	N
modern	ceramic		pot	M18C	L18C	2	2	N	N
modern	glass		vessel	19C	E20C	2	39	N	N
modern	metal	copper alloy	coin		M18C	1	3	N	N
modern	metal	copper alloy	coin		M19C	1	4	N	N
modern	metal	copper alloy	coin	1937	1952	1	4	N	N
modern	metal	silver	coin	1838		1	2	N	N
undated	metal	copper alloy	sheet			2	2	N	N
undated	metal	lead	sheet			1	38	N	N
undated	metal	iron	horseshoe			1	31	N	N
undated	metal	iron	nails			12	83	N	N
undated	metal	copper alloy	object			1	70	N	N
undated	metal	iron	object			3	185	N	N

undated	metal	?pewter	sheet			2	17	N	N
undated	metal	copper alloy	sheet			2	3	N	N
undated	metal	lead	sheet			1	6	N	N
undated	metal	iron	tool/machinery			1	51	N	N
undated	slag	clinker				1	13	N	N