

Archaeological evaluation at Land at Northwick Road Worcester

Worcestershire Archaeology
for Orion Heritage Limited

June 2020



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LAND AT NORTHWICK ROAD WORCESTER WORCESTERSHIRE

Archaeological evaluation report



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SITE INFORMATION

Site name: Land at Northwick Road, Worcester

Local planning authority: Wychavon District Council

Planning reference: 20/00234/OUT

Central NGR: SO 83990 58290

Commissioning client: Orion Heritage Limited

Client project reference: PN 2433/2

WA project number: P5809

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Evaluation of land at Northwick Road, Worcestershire

By Jem Brewer

With contributions by Rob Hedge

Illustrations by Laura Templeton

Summary

An archaeological evaluation was undertaken at land off Northwick Road, Worcester (NGR SO 83990 58290). It was commissioned by Orion Heritage Limited on behalf of Northwick Development Limited, prior to the construction of an 80 bedroom care home. A planning application has been submitted to Wychavon District Council (application reference: 20/00234/OUT).

The site is located on the north-western edge of Worcester, immediately to the west of Northwick Road and just under 400m to the east of the River Severn. Four trenches were opened in a non-gridded array, a total area of 146 m² over the total site area of 0.77 ha.

Archaeological remains were identified in two trenches, consisting of fourteen closely spaced, east to west aligned, elongated pits which may form two parallel lines. These pits contained post-medieval material, likely to be 17th century, along with degraded bone. The most complete of these fragments have been identified from photographs as possible human bone.

One piece of prehistoric worked flint and a single sherd of Roman pottery were also retrieved though were residual in these contexts.

Report

1 Introduction

1.1 Background to the project

An archaeological evaluation was undertaken by Worcestershire Archaeology (WA) in May 2020 at land off Northwick Road, Worcester, Worcestershire (NGR SO 83990 58290), comprising four 25m long evaluation trenches. The project was commissioned by Orion Heritage Limited on behalf of Northwick Developments Limited, prior to the construction of an 80 bedroom care home. A planning application has been submitted to Wychavon District Council (application reference 20/00234/OUT).

The archaeological advisor to the local planning authority, Aidan Smyth, considered that the proposed development has the potential to impact upon possible heritage assets.

No brief was provided but pre-application discussions were held Aidan Smyth. These discussions and a desk-based assessment (HER reference WSM72817) informed the production of a Written scheme of investigation (WSI), prepared by Orion Heritage Limited (WSM 72818).

The evaluation conforms to the industry guidelines and standards set out by the Chartered Institute for Archaeologists in *Standard and guidance: for archaeological field evaluation* (CIfA 2014) and the *Guidelines for archaeological work in Worcester* (Worcester City Council 2016)

1.2 Site location, topography and geology

The site is located on the north-western edge of Worcester. It comprises grazing pasture of 0.77 ha. and is bounded by 20th century residential developments to the south, Northwick Road to the east, Common Hill House to the north and further pasture to the west.

At the southern end of the site is a pond and watercourse which runs west to the River Severn, c. 390m from the site. The site is situated on sloping ground, rising gradually to the north and the east, from 16.06m AOD in the southwestern corner to 22.41m AOD in the north-eastern corner. The site lies partly on the edge of a terrace above the shallow valley of the River Severn.

The underlying geology comprises bedrock of Sidmouth Mudstone formation overlain by superficial deposits of Power House Terrace Deposits (River Severn) – Sand and Gravel for the majority of the site, and Alluvium – Clay, Silt, Sand and Gravels at the southernmost part of the site (BGS 2020).

2 Archaeological and historical background

2.1 Introduction

An archaeological desk-based assessment (DBA) of the site was undertaken by Orion Heritage Limited. The findings presented in the DBA are summarised below.

2.2 Palaeolithic to Neolithic

The site is in a favourable position on gravel terraces in proximity to the river. The gravel terraces (Power House Terrace Deposits WSM 56943) and alluvial deposits (WSN 02233) on site have been identified as having potential for Palaeolithic remains (Daffern and Russell 2014).

The Historic Environment Record (HER) includes records for a potential Early Neolithic barrow in nearby North Claines which is suggested by field name evidence (Barrow Cop, Barrow Cop Orchard, Barrow Cop Field, WSM 99779).

2.3 Bronze Age / Iron Age

The HER records the find of a Bronze Age flat axe at Fernhill Heath (WSM 11973). Although the HER polygon for this record includes this site, this find is an unstratified metal detecting find whose exact location is not in the public domain. Potential Late Bronze Age to late Iron Age enclosure cropmarks have been identified by aerial photography on the western bank of the River Severn at Hallow (WSM07898 and WSM07899).

In addition, the HER shows an Iron Age torc within the area of the potential barrow noted above (WSM 00747). There is also conjectural evidence, based on fieldnames, for an early Iron Age to Post medieval hillfort enclosure at Camp Close, c. 195m north of the study site (WSM29983).

2.4 Roman

Aerial photography recorded cropmarks of a ditched enclosure and pits to the south of Bevere Manor (WSM 07892; c. 750m north of the study site). These enclosures are associated with a findspot of two Roman brooches, a bronze buckle and a small unidentified coin. The HER also records that there is anecdotal evidence for additional archaeological remains comprising a ring ditch and battlefield; this is unsubstantiated.

Fieldname evidence for "Stone Croft" recorded on the 1843 tithe map has been taken as conjectural evidence for a Roman settlement (WSM 29978). However, the HER records that this field name may suggest archaeological activity or may equally reflect stony soil within the field.

2.5 Saxon/Early medieval

The Domesday Survey records that the principal manor of the parish, which would have included the study site, belonged to the Bishop of Worcester. A rabbit warren suggested by fieldname evidence (Coney Green) is recorded by the HER to the southeast of the study site (WCM 99109).

It is noted that the site of a Saxon chapel is recorded on the western bank of the River Severn at Hallow (WSM 00305), along with late 11th century to 18th century earthworks and ridge and furrow (WSM12202 – WSM 12206).

Part of a 9th century Saxon strap end is recorded as an unstratified metal detecting find for North Claines Parish (WSM 39791); the HER polygon includes the study site.

2.6 Medieval

At the time of the Domesday Survey of 1086, the great manor of Northwick and Whistones (also known in the medieval period as the Manor of Northwick and Wistan and later as Claines and Whitstons; WCM 91039), which formed the principal manor in the parish, consisted of twenty-five hides of which the Bishop of Worcester held three and a half hides in demesne. It is not known at what date the bishopric had acquired the estate, which also included several houses in Worcester itself and saltpans at Droitwich. The bishops' manor house and residence at Northwick (located c. 310m to the southeast of the study site) had fallen out of use before the reformation. It was a moated site with a park, and by the reign of Elizabeth I the manor house was "in ruins".

Much of the western part of Claines parish, which is bordered by the River Severn, was marshy ground and the bishop's estate here may have been prone to flooding.

The southern part of the study site contains a pond which is recorded by the HER as representing Northwick fishpond 4 (WCM 91051). The pond represents a lower pool, part of a series of fishponds (WCM 91047) which are recorded as part of the Bishop of Worcester's medieval manor in the Domesday Survey (WCM 91039) and which are mapped from the 19th century onwards. The HER also records that fishpond 4 may represent the site of a medieval mill which is mentioned in early property deeds for the manor of Northwick; this is not proven.

2.7 Post-medieval and modern

There are no HER records for the periods relating to the study site itself. An earthwork, representing the southern bank of Bishop's Great Pool fishpond is noted to the southeast of the study site, representing the boundary between Leabank Drive and Linley Close (WCM 101811).

The site formed part of the Common Hill House property from the mid-19th century until the 20th century. Originally recorded as land held by the Bishop of Worcester, the land passed through various hands until the early 20th century. The 1940s National Farm Survey showed the site was not classed as farmland.

The DBA suggests that the pond and watercourse have undergone some remodelling in the 20th century, and that the remains of the site were used initially for orchard planting and then subsequently for animal grazing.

3 Project aims

The principal aims of the archaeological investigation are to:

- Determine the presence or absence of archaeological remains;
- Determine the character, extent, date, complexity, integrity, state of preservation and quality of any archaeological remains present, therefore ensuring their preservation by record; and
- To provide robust baseline information to inform the scoping of a mitigation strategy should this be required.

4 Project methodology

Fieldwork was undertaken between 18 and 20 May 2020, in line with the WSI.

Four trenches, amounting to 146m² in area, were non-gridded and excavated over the 0.77 a ha site, representing a sample of 1.9%. The location of the trenches is indicated in Figure 1.

Deposits considered not to be significant were removed under constant archaeological supervision using a JCB 3CX type wheeled excavator, employing a toothless bucket. Subsequent excavation was undertaken by hand. 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 GNSS device with an accuracy limit set at <0.04m. On completion of excavation, trenches were reinstated by replacing the excavated material.

All fieldwork records were checked and cross-referenced. Analysis was undertaken through a combination of structural and artefactual 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 at Worcestershire County Museum.

5 Archaeological results

5.1 Introduction

The features recorded in the trenches are shown in Figures 2 and 3 and Plates 1-5. The trench and context inventory is presented in Appendix 1.

5.2 Trench descriptions

5.2.1 Natural deposits across the site

The natural deposits in trenches 1-3 consisted of soft or friable sand which lay between 0.67 and 0.86m below ground surface. The natural deposits in Trench 4 consisted of a mix of gravel and clayey sand and were of a more brownish red colour and were 0.5m below ground surface

5.2.2 Trench 1

Trench 1 was the most southerly of the trenches excavated, but despite its proximity to the medieval fishpond noted above (WCM 91051) contained no discernible archaeological features. Subsoil in this trench, 101, contained medieval pottery and building material, whilst the topsoil, 100, contained a mix of medieval and post-medieval roof tiles.

5.2.3 Trench 2

Trench 2 contained two archaeological features (Plate 1; Figure 2), which appear to be on a parallel alignment to those in Trench 3. These grave-like features have been identified as being most likely of a post-medieval date.

The first feature, 203, was only partially within the trench, and was 1.26m long and 0.27m deep. However, the cut of this feature was identified in the trench wall to a height of 0.09m, giving a total depth of 0.36m. The fill of this feature, 204, contained lime flecks, particularly concentrated in the lower, indented area in the northern part of the cut.

The second feature, 205, was also only partially within the trench, and was 1.28m long, and 0.34m deep.

5.2.4 Trench 3

Trench 3 contained 12 archaeological features (Plate 2; Figure 3), which were east to west aligned, and appear to run parallel to those in Trench 2. Slots were excavated in two of these grave-like features, one at an eastern end and one at a western end to increase the chance of finding teeth, which survive better than bone in the acidic matrix of sands.

The first of these, 303, was 0.90m wide, 0.35m deep, and 1.01m long within the trench. The fill of this feature, 304, contained a bone identified as possibly human, together with other burnt bone fragments and lime (Plates 3 and 4).

The second excavated feature, 305, was 0.90m wide, 0.44m deep and 0.99m long within the trench, (Plate 5). The single fill of this feature, 306, contained chalk and degraded bone fragments, identified as animal bone.

These excavated features have been identified as being most likely of a post-medieval date.

5.2.5 Trench 4

Trench 4 contained no archaeological features.

6 Artefact assessment by Rob Hedge

6.1 Introduction

The artefact report conforms to standards and guidance issued by the Chartered Institute for Archaeologists (CIfA 2014), as well as further guidance on pottery analysis, archive creation and museum deposition created by various pottery study groups (PCRG/SGRP/MPRG 2016), the Archaeological Archives Forum (AAF 2011), and the Society of Museum Archaeologists (SMA 1993).

6.2 Aims

This analysis aimed to identify, sort, spot date, and quantify all artefacts and describe the range of artefacts present. The information has been used to provide a preliminary analysis of the significance of the artefacts.

6.3 Methodology

6.3.1 Recovery policy

Artefacts were recovered according to standard Worcestershire Archaeology practice (WA 2012).

All artefacts collected in the field were recovered by hand.

6.3.2 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, with tables generated using Microsoft Excel.

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).

Classification of worked flint follows conventions outlined in Ballin (2000), Inizan *et al* (1999), and Butler (2005); the material was catalogued according to type and dated where possible. Visible retouch, edge-damage, cortex, raw material characteristics and quality, burning, and breakage were noted.

Where possible, the results from analysis of this assemblage have been compared to assemblages from other local and regional sites.

6.3.3 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.

6.4 Results

6.4.1 Quantification

The results are summarised in Tables 1 and 2.

The assemblage totalled 57 finds weighing 1.1kg (Table 1). Finds came from six stratified contexts. One piece of prehistoric worked flint and a single sherd of Roman pottery were residual; the remainder of the assemblage dated from the 13th to the 18th centuries AD. The majority of the assemblage was in relatively poor condition: abraded potsherds and fragments of building material were typical of refuse incorporated into agricultural soils during the 2nd millennium AD.

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

period	material	object type	count	weight (g)
Mesolithic/early Neolithic	flint	notch	1	1
Roman	ceramic	pot	1	2
medieval	ceramic	pot	2	19
		roof tile	4	97
late med/early post-med	ceramic	roof tile	2	395
medieval/post- medieval	ceramic	brick/tile	7	59
		roof tile	4	122
	iron	iron object	1	18
		nail	1	5
post- medieval	ceramic	clay pipe	3	6
		pot	1	78
		roof tile	3	112
	glass	vessel	1	55
		window glass	2	1
undated	bone	bone	1	1
		burnt bone	2	1
	animal bone	animal bone	17	50
	slag	fuel ash slag	1	3
	?lime	lime	2	31
	chalk	chalk	1	51
Totals			57	1107

Table 1: Quantification of site assemblage

period	fabric code	fabric common name	count	weight (g)
Romano-British	12	Severn Valley ware	1	2
medieval	56	Malvernian unglazed ware	1	15
medieval	64.1	Worcester-type sandy glazed ware	1	4
Post- medieval	78	Post- medieval red ware	1	78
Totals			4	99

Table 2: Quantification of pottery assemblage

6.4.2 Summary of artefacts by period

Prehistoric

A single piece of worked flint was residual within Trench 2. It is a secondary, soft-hammer-struck hinged flake of translucent light grey pebble flint, on which the proximal end of the right lateral margin has been backed, and the proximal end of the left lateral margin retouched to form a notch. Notched flakes are common throughout prehistory, but the finely executed retouch is most consistent with a Mesolithic or early Neolithic date.

Roman

One very small residual sherd of Roman Severn Valley Ware (fabric 12) was present in Trench 2.

Medieval

A small quantity of residual abraded medieval pottery (fabrics 56 and 64.1) and roof tile (fabrics 2a and 2b) were present across the site

Post-medieval

A single sherd of redware (fabric 78) was recovered from fill 206 of feature 205: a large, open form with blistered internal glaze, in a poorly mixed fabric, it is part of a long-lived tradition spanning the 17th and 18th centuries. However, blistering of the glaze is more commonly observed on 17th century vessels. Late-15th century to 17th century flat roof tile in fabric 2c was present, along with small quantities of fabric 5.

A small quantity of plain clay pipe stems was recovered from the fills of features 205, 303, and 305. Although a small sample, bore widths of around 7/64" suggest a 17th or early 18th century date.

Other domestic refuse included small quantities of window and vessel glass.

Undated

Features 203 and 303 also contained small quantities of white crystalline material resembling lime; feature 305 contained a lump of chalk. These calcareous materials are not naturally occurring on the site, and are most commonly introduced through agricultural, construction, or burial practices.

Other material that could not be readily dated included small quantities of burnt bone, unburnt animal bone, and fuel ash slag.

6.4.3 Context dating

context	material	object type	count	weight (g)	start date	end date	TPQ date range
100	ceramic	roof tile	2	54	1200	1500	AD 1600 - 1800
			1	95	1467	1700	
			1	39	1600	1800	
101	ceramic	brick/tile	2	2	1200	1800	AD 1200 - 1800
		pot	1	15	1200	1300	
204	ceramic	brick/tile	1	2	1200	1800	AD 1200 - 1800
		pot	1	2	43	400	
	iron	nail	1	5	1200	1800	
	?lime	lime	1	1			
206	bone	bone	1	1			AD 1600 - 1800
	ceramic	brick/tile	2	12	1200	1800	
		clay pipe	1	1	1600	1700	
		pot	1	4	1200	1400	
			1	78	1600	1800	
		roof tile	2	61	1200	1800	
			2	73	1600	1800	
	glass	window glass	2	1	1600	1800	
	iron	iron object	1	18	1200	1800	
	slag	fuel ash slag	1	3			
304	bone	burnt bone	2	1			AD 1600 - 1700
	ceramic	brick/tile	2	43	1200	1800	

context	material	object type	count	weight (g)	start date	end date	TPQ date range
		clay pipe	1	2	1600	1700	
		roof tile	2	43	1200	1500	
			1	39	1200	1700	
	glass	vessel	1	55	1600	1750	
	?lime	lime	1	30			
306	animal bone		17	50			AD 1600 - 1750
	ceramic	clay pipe	1	3	1600	1750	
		roof tile	1	22	1200	1800	
			1	300	1467	1700	
	chalk	chalk	1	51			

Table 3: Summary of context dating based on artefacts

6.5 Discussion

Although little prehistoric worked flint is recorded from the immediate area, the Northwick Manor Community Heritage Project analysed a small surface scatter of Mesolithic flint recovered in 1982 to the east of Bevere Island, around 1km to the north (WSM38559, Mora-Ottomano undated). The single piece recovered here is likely to be broadly contemporary and reflect movement of mobile groups of people along the river valley in early prehistory.

The single sherd of Roman pottery is likely to represent a sparse background scatter related to nearby rural settlement such as that at Bevere manor (WSM07892).

Residual medieval pottery and roof tile likewise reflects the incorporation of domestic waste into local soils through agricultural activities such as manuring.

The four features to yield dating evidence are most likely to be post-medieval. Refining the date further is difficult. The clay pipe stems are most consistent with a 17th century date. There is a notable absence of the domestic whitewares that tend to be incorporated into local soils from the second half of the 18th century, which suggests that the features are likely to have been infilled prior to AD 1750. The single sherd of post-medieval pottery is unfortunately not particularly diagnostic, though is perhaps most likely to be 17th century. Roof tile appears mostly to be of earlier types dating from the 13th to the 17th century, although a small quantity of fabric 5 tile was present within 204; this occurs throughout the post-medieval period but becomes more common in the 18th century (Griffin 2008).

On balance, the features are thought most likely to have a *terminus post quem* in the 17th century, although a date in the first half of the 18th century cannot be excluded on available evidence.

One unusual element is the presence within several of the features of chalk and a crystalline substance likely to be related to lime. It is possible that they may be related to agricultural use of lime as a fertiliser. However, it should be noted that lime was often used in post-medieval burials during epidemics where contagion was feared (Harding 1993), in order to prevent putrefaction and odour. Bone survival within the features was very poor, but it seems unlikely that this is related to the presence of lime: in the short term, lime has been observed to slow the rate of decay (Schotsmans *et al* 2012), and generally bone preservation is enhanced in calcareous soils (Historic England 2016, 5).

6.6 Significance

Overall, the artefactual remains are of local significance. The prehistoric flint is of intrinsic interest as it contributes to our understanding of early prehistoric activity along the banks of the Severn. The

Roman and medieval artefacts are residual, and therefore of negligible significance. The significance of the post- medieval material lies only in its capacity to date the features present on the site.

6.7 Recommendations

6.7.1 Further analysis

No further analysis is required, though the artefacts could usefully be incorporated into quantifications resulting from any further investigations on the site.

6.7.2 Discard/retention

As the sole dating evidence for previously unrecorded archaeological activity on the site, the artefacts should be retained, although the final decision rests with Museums Worcestershire.

7 Environmental evidence

Environmental sampling was undertaken according to standard Worcestershire Archaeology practice (WA 2012). In the event no deposits were identified which were suitable for environmental analysis.

7.1 Bone

During excavation of context 303, whilst most bone fragments were very degraded, some larger bone fragments were seen (Plate 4). Photographs were sent to an osteologist for comment. A licence to excavate human remains was not obtained due to time constraints, and as human bone was not expected, one was not obtained beforehand. However, based on photographs forwarded to them, the osteologist was able to say that this was possibly a human ulna shaft fragment (G Western, *pers comm.*)

8 Discussion

The findings of this evaluation suggest that during the prehistoric, Roman and medieval periods, the proposed development site was not a focus of settlement or concentrated agricultural activity. Finds from these periods are thought to indicate transitory activities, to be peripheral to settlement activity elsewhere or to have been the result of agricultural manuring. Despite the nearby medieval fishpond noted above, the evaluation has identified nothing that would suggest that associated features extend further into the site.

Of most interest are the clusters of features in trenches 2 and 3, which are east to west aligned, closely spaced, contain line or chalk, and in some cases degraded bone fragments. The linear nature of the features suggests that these features were dug up against a hedge line.

The exact function of these features is unclear, given the uncertainty in the identification of possible human bone. It has been suggested that these features could represent bedding trenches for orchard activity, but there are no indications of an orchard at the study site in the 1751-1753 Doharty map for the manor of Claines (Figure 7, DBA). The 1843 tithe map for Claines (Figure 9, DBA) shows these features to partially fall within plot 708, a garden probably used for growing food for the kitchen at Common Hill House (Section 3.30, DBA). This suggested that these features might have been beds associated with a kitchen garden. However, a likely *terminus post quem* date of 17th century for the features suggest that these features were filled before either kitchen garden or orchard activities commenced.

Common Hill House itself is a Grade II listed building. The text of the listing describes it as a late 17th century house, rebuilt in the 19th century (British Listed Buildings, 2020). If these features were graves, they might possibly be a family plot associated with Common Hill House. However, it seems unlikely that a family plot would be forgotten to the extent that it would form part of a kitchen garden within 150 years. A more likely explanation, in the absence of a definitive identification of human

bone, might be that the features represent a series of rubbish pits associated with the 17th century house.

It is necessary to consider whether these features pre-date Common Hill House. As noted in Section 6 above, these features contained chalk and lime which has been associated with burials where contagion was feared. It has been suggested that Bevere Island, just over a kilometre to the north, was used as a 'retreat of the inhabitants of Worcester, during the plague of 1637' (Wilson, 1872). Retreating to the island itself might have been required because the plague had reached the parish of Claines. The hasty burial of plague victims could explain both the lack of grave furniture and the lack of a permanent record of their grave site.

A further possibility for these features as graves, given the 17th century date, is that they are associated with the battle of Worcester in 1651. Although the battle was centred further south, with its northernmost extent being Pitchcroft, some 1.5km away, it is possible that these features are graves of casualties of a local skirmish. The Royalist army had arrived in Worcester on 20 August 1651, following their defeat in Scotland and retreat south, but the main Parliamentary forces did not arrive until 29 August (English Heritage, 1995). The arrival of the Parliamentary forces might have triggered several skirmishes as they sought to cut off lines of retreat. Alternatively given the time between the Royalist forces arriving and the battle of Worcester on 3rd September, these features might represent the graves of Royalist soldiers who were injured prior to arriving at Worcester but who subsequently died before the battle of Worcester itself.

At present, based on the findings of the evaluation it is impossible to reach a definitive conclusion in respect of the function of these features.

9 Significance

The sandy geology of the site appears to have been detrimental to the preservation of bone within the archaeological features identified. Had preservation been better, this site might have had potential to contribute to an understanding of disease and death within the post medieval period, a research theme identified for the region by Belford (2011, 219). The DBA does not identify any similar findings within the HER records for the local area. These suggest that the features may be of local significance.

10 Conclusions

The evaluation of this site consisted of 4 trenches amounting to 146m² was undertaken in May 2020. The evaluation has identified a group of narrowly spaced, east to west aligned features, which appear to be in two parallel rows, and appear likely to be of a 17 century date

The methods adopted allow a high degree of confidence that the aims of the project have been achieved. Conditions were suitable in all the trenches to identify the presence or absence of archaeological features. It is considered that the nature, density and distribution of archaeological features provides an accurate characterisation of the development site.

11 Project personnel

The fieldwork was led by Andrew Mann, MCIfA, assisted by Jem Brewer, PCIfA.

The project was managed by Tom Vaughan, MCIfA. The report was produced and collated by Jem Brewer. Specialist contributions and individual sections of the report are attributed to the relevant authors throughout the text.

12 Acknowledgements

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13 Bibliography

AAF, 2011 *Archaeological archives: a guide to the best practice in the creation, compilation, transfer and curation*. Archaeological Archives Forum

Ballin, T, 2000 Classification and description of lithic artefacts: a discussion of the basic lithic terminology, *Lithics*, [online] **21**, 9–15. Available at: <http://journal.lithics.org/index.php/lithics/article/viewFile/490/475> Accessed: XX Month Year

Belford, P, 2011 The archaeology of everything' – grappling with post-medieval, industrial and contemporary archaeology, in S Watt (ed), *The Archaeology of the West Midlands: a framework for research*, Oxford: Oxbow Books, 211–236

Butler, C, 2005 *Prehistoric flintwork*. Stroud: Tempus

Bryant, V, 2004 medieval and early post- medieval pottery, in H Dalwood & R Edwards, *Excavations at Deansway, Worcester, 1988-89: Romano-British small town to late medieval city*. York: CBA Research Report, **139**, 281–339

BGS, 2020 Geology of Britain viewer. Available: <http://mapapps.bgs.ac.uk/geologyofbritain/home.html> Accessed: 10 June 2020

British Listed Buildings, 2020. Available: <https://britishlistedbuildings.co.uk/101350167-common-hill-house-north-claines> Accessed: 10 June 2020

CIfA, 2014 *Standard and guidance: for archaeological field evaluation*. Reading: Chartered Institute for Archaeologists

CIfA, 2014 *Standard and guidance: for collection, documentation, conservation and research of archaeological materials*. Reading: Chartered Institute for Archaeologists

English Heritage 1995 English Heritage Battlefield Report: Worcester 1651. Available at: <https://historicengland.org.uk/content/docs/listing/battlefields/worcester/> Accessed: 19 June 2020

Griffin, L, 2008, Ceramic building material, in D Miller et al, Archaeological investigations at Church Lane, Hallow, Worcestershire, *Trans Worcestershire Archaeol Soc 3 ser*, **21**, 107–48

Harding, V, 1993 Burial of the plague dead in early modern London, J A I Champion (ed) *Epidemic disease in London*, Centre for Metropolitan History Working Papers Series **1**, 53–64

Historic England 2016, *Preserving archaeological remains. Appendix 2 - Preservation assessment techniques*. Swindon. Historic England.

Hurst, J D, & Rees, H, 1992 Pottery fabrics; a multi-period series for the County of Hereford and Worcester, in S G Woodiwiss (ed), *Iron Age and Roman salt production and the medieval town of Droitwich*. York: CBA Research Report **81**, 200–209

Inizan, M, Féblot-Augustins, J, Reduron-Ballinger, M, Roche, H, & Tixier, J, 1999 *Technology and terminology of knapped stone*. Nanterre: Cercle de Recherches et d'Études Préhistoriques

Mora-Ottomano, A, undated *Lithic analysis from Bevere, Worcestershire (WSM 38559)*, Northwick Manor Community Heritage Project Research Report, available at:

http://wyac.org.uk/downloads/lithic_assemblage_from_bevere.pdf Accessed 09/06/2020

PCRG/SGRP/MPRG, 2016 *A standard for pottery studies in archaeology*. Prehistoric Ceramics Research Group, Study Group for Roman Pottery, medieval Pottery Research Group

Schotsmans, E M J, Denton, J, Dekeirsschieter, J, Ivaneanu, T, Leentjes, S, Janaway, R C, & Wilson, A S, 2012 Effects of hydrated lime and quicklime on the decay of buried human remains using pig cadavers as human body analogues, *Forensic Science International*, Vol **217**, 50-59,

<https://doi.org/10.1016/j.forsciint.2011.09.025>.

SMA, 1993 *Selection, retention and dispersal of archaeological collections*. Society of Museum Archaeologists

WA, 2012 *Manual of service practice, recording manual*, Worcestershire Archaeology Unpubl report **1842**. Worcestershire County Council

WAAS 2017 Worcestershire Ceramics Online Database. Available:

<https://www.worcestershireceramics.org/>. Accessed: 09/06/2020

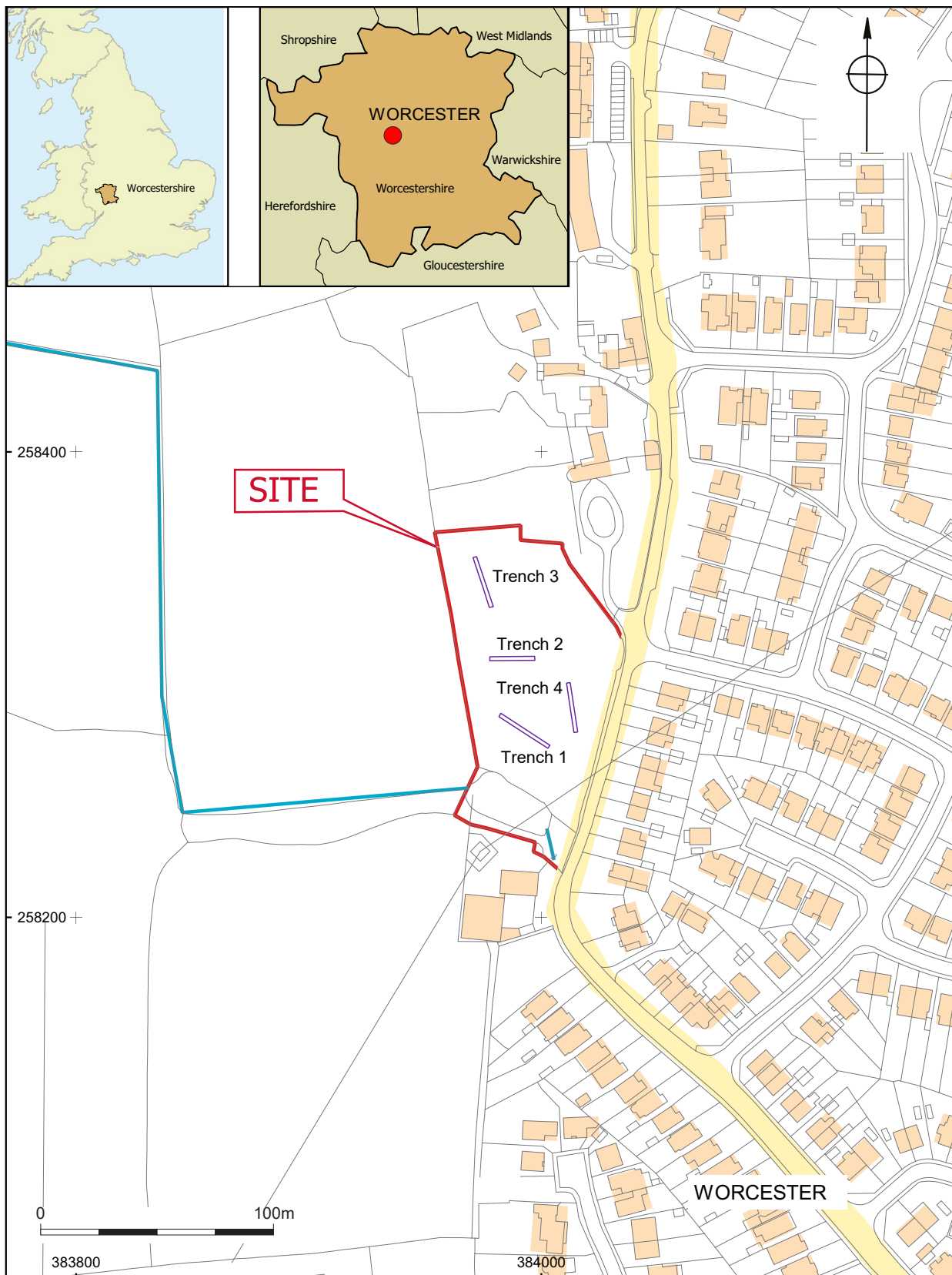
Wilson, J M, 1870 *The Imperial Gazetteer of England and Wales*, A. Fullarton

WCC 2010 (amended March 2016) Standards and guidelines for archaeological projects in Worcestershire, Planning Advisory Section, Worcestershire Archive and Archaeology Service Unpubl report **604**. Worcestershire County Council

Worcester City Council 2007 *Archaeology and the Historic Environment*, Supplementary Planning Document, Local Development Framework. Worcester City Council

Worcester City Council 2016 *Guidelines for archaeological work in Worcester*. Worcester City Council

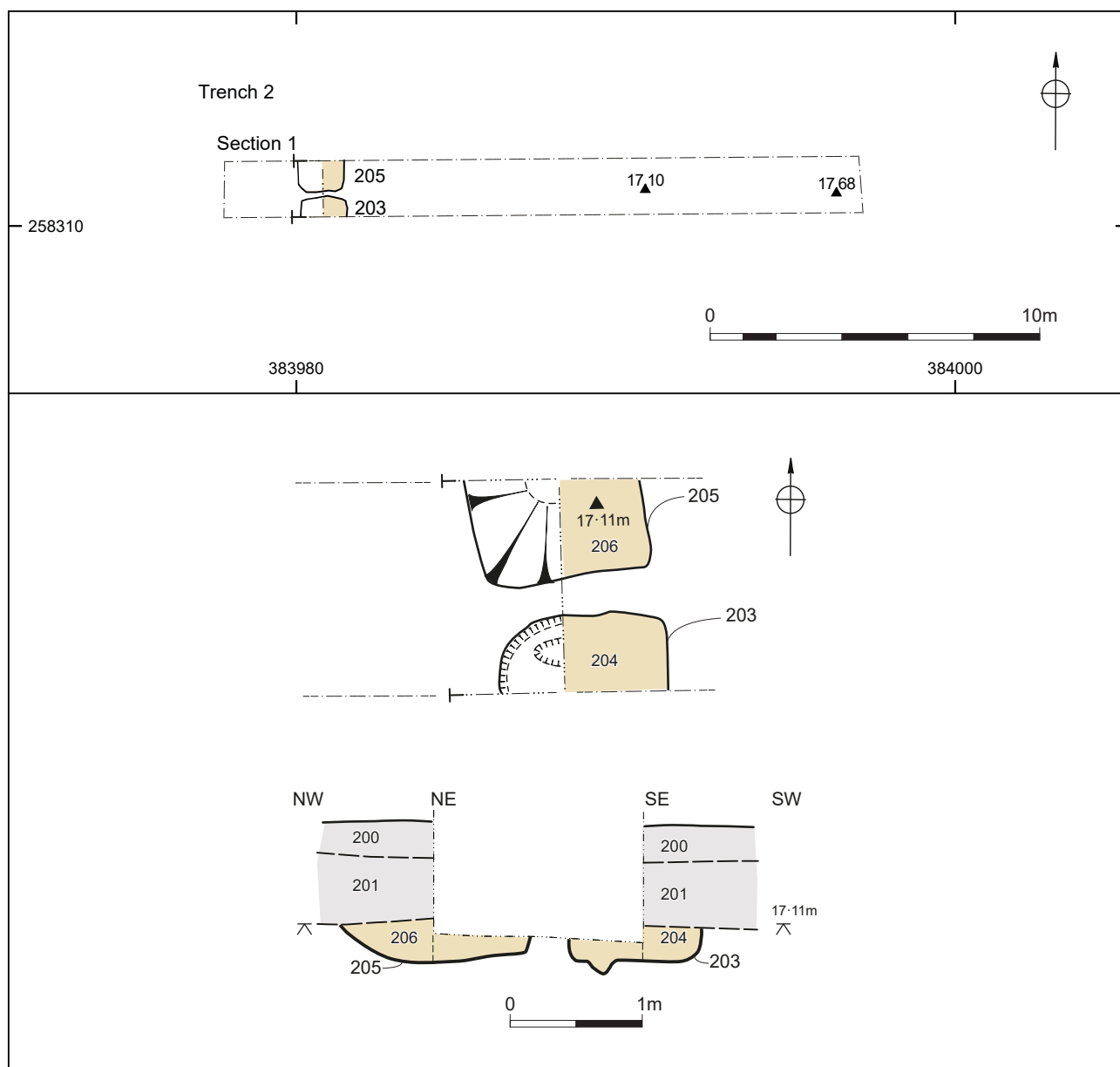
Figures



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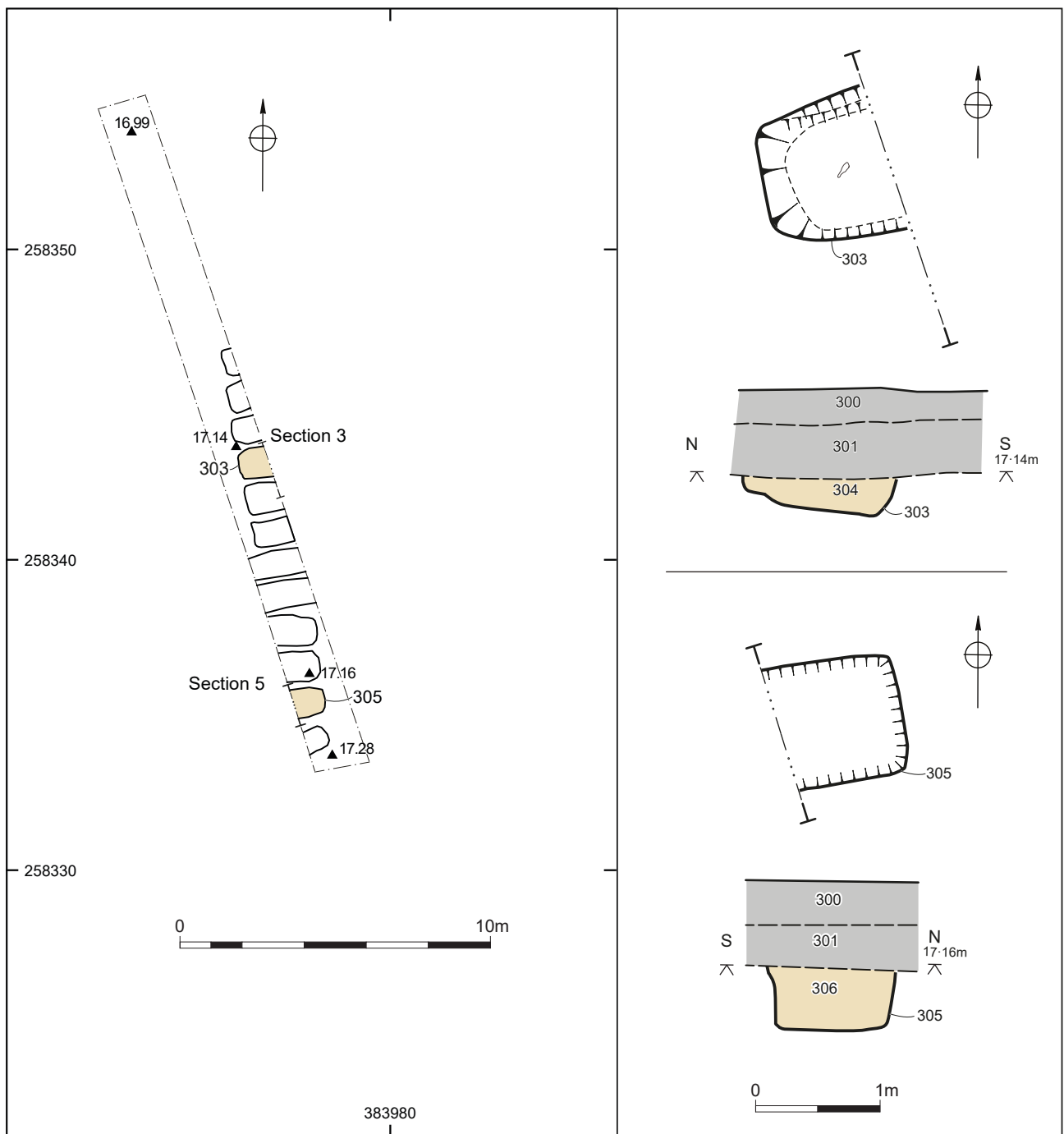
Location of the site

Figure 1



Trench 2: Plans and section, Graves 203 and 205

Figure 2



Trench 3 plan: plan and section of graves 303 and 305

Figure 3

Plates



Plate 1: Tr 2, features 203 and 205, facing east, 2 x 1m scales



Plate 2: Tr 3, grave-like features, facing north, 2 x 1m scales



Plate 3: Tr 3, 'grave-like' feature 303, facing east, 1m



Plate 4: Tr 3, close-up of possible human remains within feature 303, facing east, 0.05m



Plate 5: Tr 3, 'grave-like' feature 305, facing west, 1m

Appendix 1: Trench descriptions

Trench 1

Length: 25

Width: 1.6

Orientation: North-west to south-east

Context summary:

Context	Feature	Context	Description	Height/ depth	Deposit description
100	Topsoil	Layer	Turf mat covering very thin layer topsoil. Contained frequent roots, rare charcoal flecks, rare small to medium sub rounded pebbles, very rare fragments of CBM.	0.19	Friable greyish brown silty sand
101	Subsoil	Layer	Contains occasional to frequent small / medium sub rounded pebbles, rare medium sub angular stones, 1 piece earthenware pot slightly abraded and 1 small fragment of possible pot.	0.48	Moderately Compact orangey brown sandy silt
102	Natural	Layer	Contains patches of mid brownish red sandy clay, very rare sub angular small stones, rare flakes of manganese especially in the clay patches.	0.25m	Friable orangey brown sand

Trench 2

Length: 20

Width: 1.6

Orientation: East to west

Context summary:

Context	Feature	Context	Description	Height/ depth	Deposit description
200	Topsoil	Layer	Contained frequent roots, occasional small sub rounded and sub angular stones, occasional charcoal flecks.	0.25	Friable greyish brown sandy silt
201	Subsoil	Layer	Occasional medium sub rounded and sub angular stones <80mm, very rare large cobbles >120mm, rare charcoal flecks	0.56	Moderately Compact orangey brown sandy silt
202	Natural	Layer	Contains rare [arches of mid brownish red clay, rare flecks of manganese	0.22+	Soft orangey brown sand
203	Grave	Cut	L: 1.26m, W: N/K. (Potential true depth, from base of the indent to the top of the layer in section would be 0.36m). Top BOS --sharp, sides - straight initially to concave at base BOS, base BOS - rounded	0.27	
204	Grave	Fill	L: 1.26m, W: N/K. Contained occasional charcoal flakes / flecks and 1 piece of large 'vitrified' charcoal. Rare sub rounded gravels. Rare fragments of pot / ceramic. Concentration of white specks and tiny fragments of possible bone in indented area in base	0.27	Moderately Compact brown sandy silt
205	Grave	Cut	W: N/K, L: 1.28. Cut of sub rectangular feature, top BOS - gentle to western edge, sharp to south. Base - sloping slightly down to the NE corner of the slot. Base BOS - imperceptible to west, rounded to south.	0.34m	
206	Grave	Fill	Contained occasional to rare small sub angular and sub rounded gravels. Rare pieces of pot, occasional charcoal flakes and flecks.	0.34	Moderately Compact brown sandy silt

Trench 3

Length: 23

Width: 1.6

Orientation: North-west to south-east

Context summary:

Context	Feature	Context	Description	Height/ depth	Deposit description
300	Topsoil	Layer	Contained frequent rooting, occasional small sub rounded and sub angular stones <30mm. Occasional charcoal flecks, 1 piece of possible post- medieval tile?	0.16	Friable greyish brown sandy silt
301	Subsoil	Layer	Contained rare medium sized sub rounded pebbles <60mm. Rare charcoal	0.70	Soft orangey brown sandy silt
302	Natural	Layer	Contained very rare small sub angular stones, very rare manganese flecks. - Natural	0.02+	Soft orangey brown sand
303	Grave	Cut	W: 0.90, L: 1.01m. Western end of E-W aligned cut. Straight sided, rounded corners, vertical sides, flat base, frequent root damage. Unknown function - is either a post-med grave with no bone (due to acidic soil) or is a bedding trench for the orchard?	0.35	
304	Grave	Fill	W: 0.90m, L:1.01m. Contained frequent charcoal flecks, occasional CBM, occasional roots. Grave backfill?	0.35	Friable brown silty sand
305	Grave	Cut	W: 0.90m, L: 0.99m. Straight sided cut with round corners, vertical sides, flat base. Grave, post med in date, without any bone (due to acidic sand) or a bedding trench for the orchard - but very close together if the latter.	0.44	
306	Grave	Fill	W: 0.90m, L: 0.99m. Contained frequent charcoal flecks and lumps, occasional small rounded stones, occasional CBM. Fill of grave or bedding trench [305].	0.44	Friable brown silty sand

Trench 4

Length: 22

Width: 1.6

Orientation: North to south

Context summary:

Context	Feature	Context	Description	Height/ depth	Deposit description
400	Topsoil	Layer	Turf mat on a thin layer of topsoil. Contained occasional small sub rounded and sub angular gravels <20mm, rare sub rounded medium pebbles <50mm, occasional charcoal flecks	0.17	Friable greyish brown sandy silt
401	Subsoil	Layer	Contained abundant small to medium <50mm, sub rounded and sub angular gravels with rare charcoal flecks.	0.33	Soft pinky brown sandy silt
402	Natural	Layer	Contained abundant small to medium sub angular and sub rounded gravels <50mm, with patches of pinkish brown clay with patches of sub rounded stones 50-100mm.	0.17 +	Soft brownish red clayey sand

Appendix 2: Summary of project archive (WSM72818)

TYPE	DETAILS*
Artefacts and Environmental	Animal bones, Ceramics, Glass, Human bones, Industrial, Worked Stone/lithics, other
Paper	Context sheet, Correspondence, Diary (Field progress form), Drawing, Matrices, Photograph, Plan, Report, Section, Survey
Digital	Database, GIS, Images raster/digital photography, Survey, Text

**OASIS terminology*

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 at Worcestershire County Museum.

Appendix 3: Summary of data for HER

period	material	object type	count	weight (g)	start date	end date	specialist report?	key assemblage?
Mesolithic/early Neolithic	flint	notch	1	1	-10000	-3000	Y	N
Roman	ceramic	pot	1	2	43	400	Y	N
medieval	ceramic	pot	1	15	1200	1300	Y	N
medieval	ceramic	pot	1	4	1200	1400	Y	N
medieval	ceramic	roof tile	4	97	1200	1500	Y	N
late med/early post-med	ceramic	roof tile	2	395	1467	1700	Y	N
medieval/post-medieval	ceramic	brick/tile	7	59	1200	1800	Y	N
medieval/post-medieval	ceramic	roof tile	1	39	1200	1700	Y	N
medieval/post-medieval	ceramic	roof tile	3	83	1200	1800	Y	N
medieval/post-medieval	iron	iron object	1	18	1200	1800	Y	N
medieval/post-medieval	iron	nail	1	5	1200	1800	Y	N
post- medieval	ceramic	clay pipe	2	3	1600	1700	Y	N
post- medieval	ceramic	clay pipe	1	3	1600	1750	Y	N
post- medieval	ceramic	pot	1	78	1600	1800	Y	N
post- medieval	ceramic	roof tile	3	112	1600	1800	Y	N
post- medieval	glass	vessel	1	55	1600	1750	Y	N
post- medieval	glass	window glass	2	1	1600	1800	Y	N
undated	animal bone	animal bone	17	50			N	N
undated	bone	bone	1	1			N	N
undated	bone	burnt bone	2	1			N	N
undated	slag	fuel ash slag	1	3			N	N
undated	chalk	chalk	1	51			N	N
undated	?lime	lime	2	31			N	N