Prehistoric, Anglo-Saxon and Post-Medieval remains on land at Hazel End, Bishops Stortford, Hertfordshire



Archaeological Evaluation Report



May 2013

**Client: Countryside Properties Ltd** 

OA East Report No: 1410
OASIS No: oxfordar3-135370
NGR: TL 549448 223186



# Prehistoric, Anglo-Saxon and Post-Medieval remains on land at Hazel End, Bishops Stortford, Hertfordshire

Archaeological Evaluation

By Taleyna Fletcher BA MIfA

With contributions by Matt Brudenell MA, Rachel Fosberry HNC AifA, Anthony Haskins BA and Dr Paul Spoerry

Editor: Chris Thatcher BA

Illustrator: Séverine Bézie BA MA

Report Date: May 2013

© Oxford Archaeology East Page 1 of 47 Report Number 1410



Report Number: 1410

Site Name: Land at Hazel End, Bishops Stortford, Hertfordshire

HER Event No: n/a

Date of Works: 20th August – 7th September 2012

Client Name: Countryside Properties Ltd

Client Ref: Land at Hazel End, Bishops Stortford, Hertfordshire

Planning Ref: n/a

Grid Ref: TL 549448 223186

Site Code: XHTHAZ12

Finance Code: XHTHAZ12

Receiving Body: North Hertfordshire Museums Service

Accession No: XHTHAZ12

Prepared by: Taleyna Fletcher
Position: Project Officer
Date: May 2013

Checked by: Richard Mortimer
Position: Project Manager
Date: May 2013

Signed:

#### Disclaimer

This document has been prepared for the titled project or named part thereof and should not be relied upon or used for any other project without an independent check being carried out as to its suitability and prior written authority of Oxford Archaeology being obtained. Oxford Archaeology accepts no responsibility or liability for the consequences of this document being used for a purpose other than the purposes for which it was commissioned. Any person/party using or relying on the document for such other purposes agrees and will by such use or reliance be taken to confirm their agreement to indemnify Oxford Archaeology for all loss or damage resulting therefrom. Oxford Archaeology accepts no responsibility or liability for this document to any party other than the person/party by whom it was commissioned.

hadlelin

#### Oxford Archaeology East,

15 Trafalgar Way, Bar Hill, Cambridge, CB23 8SQ

t: 01223 850500

f: 01223 850599

e: oaeast@thehumanjourney.net

w: http://thehumanjourney.net/oaeast

© Oxford Archaeology East 2012

Oxford Archaeology Limited is a Registered Charity No: 285627



#### **Table of Contents**

S	ummary		7
1	Introduc	tion	8
	1.1	Location and scope of work	8
	1.2	Geology and topography	8
	1.3	Acknowledgements	8
2	Archaeo	logical and Historical Background	9
	2.1	The Historic Environment Record (HER) including Archaeological Investigations	9
	2.2	Cartographic Evidence	. 11
	2.3	Aerial Photographic Surveys, Cropmarks and Earthworks	.11
	2.4	Geophysical Survey	.12
3	Aims an	d Methodology	.14
	3.1	Aims	.14
	3.2	Methodology	14
4	Results.		.15
	4.1	Introduction	.15
	4.2	Trench Descriptions	.16
	4.3	Finds Summary	.28
	4.4	Environmental Summary	.28
5	Discussi	on and Conclusions	.28
	5.1	Discussion	.28
	5.2	Conclusions	.30
Α	ppendix A	A. Finds Reports	.31
	A.1	Prehistoric Pottery	.31
	A.2	Anglo-Saxon Pottery	.35
	A.3	Lithics Assessment	37
Α	ppendix I	3. Environmental Remains	.39
Α	ppendix (	C. Radiocarbon Dating Certificate	.42



Appendix D. Bibliography	44
Websites Consulted	45
Appendix E. OASIS Report Form	46



### **List of Figures**

Figure 1	Site location with trenches (black) and development area (red)
Figure 2	Site location with HER entries (green), listed buildings (blue) and archaeological events (purple)
Figure 3	Plans of Trenches 1, 5, 13, 14, 17 and 17a with selected sections
Figure 4	Plans of Trenches 11, 12 and 12b with selected sections
Figure 5	Plans of Trenches 19, 20, 22, 28, 29 and 30 with selected sections
Figure 6	Plans of Trenches 34, 36, 37, 38, 39 and 41
Figure 7	Plan of trenches within area of concentrated archaeology, showing suggested continuation of ditches

List of Plate	es es
Plate 1	Trench 1
Plate 2	Ditch 04, Trench 1
Plate 3	Trench 4
Plate 4	Trench 5
Plate 5	Trench 6
Plate 6	Trench 7
Plate 7	South-west facing section, Trench 7
Plate 8	Trench 10
Plate 9	Pre-excavation shot of ring ditch, Trench 11
Plate 10	Ring ditch 44, Trench 11
Plate 11	Trench 12b
Plate 12	Ring ditch 68, Trench 12b
Plate 13	Trench 15
Plate 14	Storage pit 98, Trench 20
Plate 15	Ditch 16, Trench 22
Plate 16	Ditch 14, Trench 22
Plate 17	Trench 25
Plate 18	Trench 26
Plate 19	Trench 28
Plate 20	Storage pit <b>119</b> , Trench 28
Plate 21	Pit 52, Trench 38
Plate 22	Sample of Saxon pottery sherds recovered from Context 27, Trench 41

#### **List of Tables**

Table 1: Trench Summary

Report Number 1410



Table A1: Prehistoric pottery assemblage quantification and spot dating by context

Table A2: Prehistoric pottery assemblage quantification by fabric

Table A3 : Angle-Saxon pottery

Table A4: flint quantification totals

Table B1. Environmental Sampling Results

© Oxford Archaeology East Page 6 of 47 Report Number 1410



#### Summary

Between 30th August and 7th September 2012 Oxford Archaeology East conducted an archaeological evaluation on 36ha of arable land at Hazel End Road on the outskirts of Bishops Stortford, Hertfordshire. Prior to evaluation a desk-based assessment, geophysical and aerial survey were carried out on behalf of the client.

The evaluation consisted of 41 machine excavated trenches across two areas. Most trenches measured between 50m and 100m in length, all orientated roughly northeast to south-west and north-west to south-east. There were 36 trenches investigated on land on the west side of Hazel End Road and 4 trenches on the east.

Trenching on the west side of Hazel End Road revealed evidence of Neolithic flint working from residual worked flints recovered from features across the site, an Early Bronze Age boundary marker with ring ditch and central post, Late Bronze Age/Early Iron Age ditches, fenceline and storage pits, an undated trackway and Post-Medieval quarrying. On the east side, a significant 6th-7th century pottery assemblage from a shallow feature in one trench indicates the possible presence of nearby settlement.

© Oxford Archaeology East Page 7 of 47 Report Number 1410



#### 1 Introduction

#### 1.1 Location and scope of work

- 1.1.1 An archaeological evaluation was conducted on land at Hazel End on the north side of the town of Bishops Stortford (TL 549448 223186; Figure 1). The development area, referred to from here on as "the site" lies approximately 2km from the historic core and 0.5km from the edge of the urban expansion (Figure 1). The site comprises two main areas divided by Hazelend Road; 19.5 hectares on the west of the road and 6.3 hectares on the east (TL 549448 223186). The site is close to the county boundary with Essex and bound to the immediate north by the A120 and to the east by the route of the mainline railway which leads onto Stansted.
- 1.1.2 At the time of the investigation, the crop had just been removed. This allowed for unrestricted access and positioning of trenches.
- 1.1.3 This archaeological evaluation was undertaken to inform an environmental statement for development. A specification for the work was prepared by OAEast (Fletcher 2012) submitted to Allison Tinniswood of Hertfordshire County Council's Historic Environment Team for approval prior to the start of the works.
- 1.1.4 The site archive is currently held by OA East and will be deposited with the appropriate county stores in due course.

#### 1.2 Geology and topography

- 1.2.1 The underlying geology comprises Lewes Nodular Chalk Formation and Seaford Chalk Formation (www.http://mapapps.bgs.ac.uk). The overlying soils are loamy, freely draining and slightly acid but base-rich. The soils are highly fertile and support rich pasture and deciduous woodland (www.landis.org.uk/soilscapes).
- 1.2.2 The highest point of the site lies at around 82.3mOD on the far north-western side where there appears to be a slight ridge or plateau. The site topography then falls away gently towards the south-east where the lowest point is at around 59mOD.

#### 1.3 Acknowledgements

1.3.1 The author would like to thank Countryside Properties Ltd. who commissioned and funded the archaeological evaluation. The site was excavated by the author, assisted by James Fairbairn (supervisor), Michael Webster, Rob Wiseman, Stephen Porter and Louise Bush. Thanks are also expressed to Severine Bezie (illustrations), Matt Brudenell and Dr Paul Spoerry (pottery identification) Anthony Haskins (Lithics) and Rachel Fosberry (environmental analysis). The project was managed by Richard Mortimer, the author carried out all site survey and Allison Tinniswood and Kate Batt of Hertfordshire County Council's Historic Environment Team monitored the work.

© Oxford Archaeology East Page 8 of 47 Report Number 1410



#### 2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

Much of the following section has been reproduced from the Desk Based Assessment for the site carried out prior to the evaluation (Fletcher 2012). this should be consulted in conjunction with this report for a more detailed development of the site in the post-medieval period.

## 2.1 The Historic Environment Record (HER) including Archaeological Investigations

2.1.1 A 1km search of the archaeological and historical record around the site was carried out by Hertfordshire Historic Environment Record (HHER). The HHER is a computerised database of all listed and other historic buildings and all known archaeological sites, historic parks and gardens and other historic landscape features in the county, plotted onto linked digital mapping and often supplemented by photographs, drawings and substantial written accounts. The search was carried out by staff at the HHER and all records falling within 1km radius of the site were provided in descriptive form with corresponding datasets supplied as shapefiles to provide the exact geographic location of each record (Figure 2). As the site also falls close to the boundary with Essex, the Essex Historic Environment Records online database was also consulted (www.heritagegateway.org.uk).

There are no HER entries within the site, although there are a number of records in the vicinity, ranging from cropmarks to listed buildings and historic parklands. Figure 2 shows the location of the returned records, colour coded by type (listed buildings blue, monuments green and events purple; NB: prefix letters MHT have been omitted from this figure).

#### **Prehistoric**

2.1.2 There have been relatively few prehistoric finds within close proximity of the site. The only record retrieved from the HER search was the discovery of a Palaeolithic hand axe (MHT1091) in the 19th century. The Acheulian flint hand axe was reportedly found close to the River Stort, although the precise location is unknown.

#### Iron Age and Roman

- 2.1.3 A group of cremations was found in 1961 (MHT512), to the south of the site, close to Stansted Road. The cremation group comprised four pots, one with a lead base.
- 2.1.4 Evidence of Roman activity also derives from a number of find spots including a gold ring and pottery found south-west of Parsonage Mill Farm (MHT1360), pottery recovered during river dredging at Townsmead in 1971 (MHT2141) and a bracelet and coins found during the 1960s at Glasscocks Brickyard (MHT2142). Other reported finds include a coin of Antoninus Pius found to the south-west of The Grange (MHT2143) and a collection of Roman finds including samian pottery, tile (both tegula and flue) and kiln waste fragments all collected by J L Glasscock from his brickfield site at Collins Cross, Stansted Road (MHT2234).

© Oxford Archaeology East Page 9 of 47 Report Number 1410



#### Saxon and medieval

- 2.1.5 There are no records relating to Saxon occupation or activity within 1km of the site.
- 2.1.6 The only evidence of medieval activity comes from finds within the collection of J L Glasscock from his brickfield site at Stansted Road (MHT2234). These include pottery sherds, possibly 14th century, from cooking pots, handles and bowls.

#### Post-medieval

- 2.1.7 Post-medieval finds and structures comprise most of the records within the search.
- 2.1.8 Structures include a brick-built arched road bridge over the River Stort (MHT5143) and a railway bridge with brick piers and iron girder over the river north of Cannon Mills Lane (MHT5637). Another record relates to a milestone located on Stansted Road (MHT11591). It was positioned on a route from London to Newmarket and Cambridge before the route was diverted from the "old" Rye Street course to run through Hockerill and northward to Stansted.
- 2.1.9 There are three listed buildings within the search area. Parsonage Mill (LB160899) is a watermill of which the 16th century and later mill house survives. The two-storey timber-framed mill house dates to the early 16th and early 17th century century with 19th and 20th century additions.
- 2.1.10 Several records of brickfields, brick kiln sites and quarries were returned during the search indicating the extraction of the local mineral resource for building materials. Brickgrounds were identified at Foxdells Farm (MHT6858) from the 1838 tithe award and earthworks are visible east of the farm showing the extent of the clay pits. Another brickfield site has been identified from the 1896 Ordnance Survey Map at Rye Street (MHT6860), now under a modern housing estate. Glasscocks brickworks at Stansted Road (MHT6862) comprised three brick kiln fields and a brick ground, all identified from the 1838 tithe and 1898 Second Edition Ordnance Survey map. To the north of the site, on the western side of Hazelend Road a gravel pit (MHT6861) has also been identified from the 1898 Edition Ordnance Survey Map..

#### Modern

- 2.1.11 A post-medieval and 20th century chalk pit, lime works and possible chalk mine was located on Farnham Road (MHT15482). Named on current mapping as the Old Lime Works it comprises a building by the road with an extensive disused quarry behind. It was evidently re-opened in the 20th century. It is possible that this is the Rye Street chalk mine, reported by HM Inspector of Mines as owned by Joseph Day. In 1904-06 it only had one employee who worked below ground and by 1907 it also had six employees above ground.
- 2.1.12 There is a World War Two spigot mortar base located on Rye Street (MHT6947), half embedded in a bank, south of a small bridge over a stream. There is also a record of a World War Two pillbox on Cannons Mill Lane (MHT6947).

#### Undated

2.1.13 A series of undated water meadow drains have been identified from 1946 RAF Aerial photographs; MHT10229 is located to the immediate south of the site and MHT10230 located much further south which, when in use occupied the whole area north of the



- river between Rye Street and the railway line. These are in areas marked "Liable to Floods" on the later 19th century maps.
- 2.1.14 Aerial surveys carried out in 2002 have identified cropmarks of field boundaries and linear features located in part of the search area which falls within Essex (19637 and 19638). The field boundaries are also visible on the First Edition Ordnance Survey map. For this desk-based assessment an additional survey was carried out, the results of which are summarised in Section 2.8 and presented in full in Appendix A.
- 2.1.15 The only record of recent archaeological investigation was an evaluation undertaken in 2001 comprising eight trenches at 16-22 Lea Grove, south-east of the site, within the now residential part of Bishops Stortford. This record came from a search of the National Monument Records Excavation Database (www.heritagegateway.org.uk). The trenches were excavated in advance of a proposed residential development, recording no significant archaeological activity

#### 2.2 Cartographic Evidence

2.2.1 Historic maps showing the current site and spanning the period 1722 to the early 20th century were examined at Hertfordshire Archive and Local Studies (HALS). These on the whole show little change on the site for the past c. 400 years other than changes of internal field boundaries within the site and a "race course" on the eastern part of the site shown on the 1921 Ordnance Survey Map. This is fully described in the Desk Based Assessment (Fletcher 2012)

#### 2.3 Aerial Photographic Surveys, Cropmarks and Earthworks

- 2.3.1 An aerial photographic survey was commissioned by OA East to be carried out by Chris Cox of Airphoto Services. This section provides a summary of the results, the full report including figures is presented in the Desk Based Assessment (Fletcher 2012).
  - Summary of Results: Area west of Hazelend Road
- 2.3.2 The former boundaries and the former wood have left traces in the subsoil which cause the appearance of marks in crops over their former positions. These features were best seen on the colour photographs displayed at Google Earth timeline 2007.
- 2.3.3 A persistently visible area of differently-toned crop is clearly visible on most of the aerial photographs consulted for this assessment, to the immediate south of the A120. Photographs taken in different years show varied features in this area. At first sight, it would possibly be identified as an in-filled construction borrow pit or compound relating to the recent addition of the A120, but some photographs suggest that it may possibly be a buried archaeological feature or possibly an eroded enclosure.
- 2.3.4 Photograph number MAL 800/31 77 which was taken in October 1980 shows some detail within this area, and some possible ditches defining it. There are also some variations within the depth of the soil in the area which show as darker marks in crops. This feature carries possible archaeological significance, but cannot be more clearly defined from the available aerial photographs.
- 2.3.5 Timeline 2007 at Google Earth shows an area of possible pits as very faint anomalies in the crop towards the south of this area. Striations in the field may be the result of a modern agricultural process, but could equally be the very heavily eroded remains of medieval ridge and furrow.

© Oxford Archaeology East Page 11 of 47 Report Number 1410



#### Summary of Results: Area east of Hazelend Road

2.3.6 Timeline 2007 at Google Earth shows some extensive areas of anomalies in the vegetation within the site, which had otherwise shown no features of note in previous years. These have been indicated as an area of possible pits, and a very tiny feature which may be a buried ditch. Their origin is unknown. There are some extant remains of water-meadows and drains to the immediate south and outside of the site.

#### 2.4 Geophysical Survey

- 2.4.1 A geophysical survey was carried out by Bartlett Clark Consultancy, Specialists in Archaeogeophysics. The survey has detected magnetic features and activity from various sources, but many of the findings may relate to recent or non-archaeological ground disturbances (Bartlett 2012).
  - Summary of Results: Area west of Hazelend Road
- 2.4.2 The stronger magnetic disturbances in the fields west of the road are found mainly (as is often the case) near past and present field boundaries. There has perhaps been infilling of a former ditch to each end of the surviving line of trees in the north east corner of the field. This would give rise to the disturbances.
- 2.4.3 The areas of magnetic activity to the north of the site are slightly more difficult to categorise. There is a possible area of deeper soil identified on the aerial photographic survey which include strong individual magnetic anomalies of a kind which could indicate the presence of burnt debris. The disturbances may be rather more localised than would be expected at brick making sites of the kind recorded elsewhere in the vicinity, and the activity perhaps therefore represents infilling rather than an industrial site.
- 2.4.4 The findings close to the northern boundary of the site include large single magnetic anomalies, together with some nearby silted pits, but there are no surrounding background disturbances as would be expected at an industrial site. The magnetic anomalies are also located on former field boundaries (as copied from the 1921 map). They probably therefore represent disturbances in former field corners and entrances. This may be the case also for the magnetic anomalies across the site. The boundaries themselves, other than at these locations, have not generally been detected. Former hedges would give rise only to insubstantial subsurface disturbances, which are likely to have been eroded by modern cultivation. It is often the case that former hedges are not detected in surveys. The same could apply to tree holes within the former triangular wooded area in the centre of the site, which has not been detected.
- 2.4.5 One further conspicuous finding is an irregular curving-ditch-like feature across the centre of the site. This lies across the slope, and could perhaps indicate an accumulation of sediment at a break in the slope, or could perhaps be a naturally silted former channel. It appears to divide at the south of the field, where a second such feature seems to define part of an enclosure, although its significance is unclear.
- 2.4.6 One finding remains which could perhaps be of archaeological interest. This is a circular feature within a possible larger but incomplete enclosure. This could be a prehistoric hut circle within an enclosure, but it is isolated, and there are no other nearby findings to suggest a concentration of archaeological features.

Summary of Results: Area east of Hazelend Road

© Oxford Archaeology East Page 12 of 47 Report Number 1410



- 2.4.7 The most conspicuous magnetic activity is seen in the fields to the east of Hazelend Road, where there are three areas of dense magnetic anomalies near to the road. Magnetic variations of this kind would be consistent with the presence of former quarry pits in-filled with imported debris. The activity lies within an area of former pits as indicated on the AP interpretation.
- 2.4.8 Other findings to the east of Hazelend Road are limited to some possible scattered silted pits. There is a small cluster of such features in the south east corner, but they do not form a clearly significant or interpretable plan, and there are no associated ditches or enclosures to suggest this is an archaeological site. Disturbances on the eastern edge of the survey could indicate a pipe along the eastern boundary. These findings are unlikely to relate to the former race course shown on maps from 1921 and earlier. There is intermittent magnetic interference from a north-south power line which crosses the site.

© Oxford Archaeology East Page 13 of 47 Report Number 1410



#### 3 AIMS AND METHODOLOGY

#### 3.1 Aims

3.1.1 The objective of this evaluation was to determine as far as reasonably possible the presence/absence, location, nature, extent, date, quality, condition and significance of any surviving archaeological deposits within the development area.

#### 3.2 Methodology

- 3.2.1 Forty-one trenches were excavated between 25m and 100m in length, all on an approximate north-east to south-west and north-west to south-east orientation (Figure 1).
- 3.2.2 Machine excavation was carried out under constant archaeological supervision with a tracked 360° excavator using a 2m wide toothless ditching bucket. Topsoil and subsoil were stored separately and re-instated during back-filling at the end of the evaluation.
- 3.2.3 A Leica GPS 1200 system was used by the author to lay out the trenches using ordnance survey co-ordinates, according to a pre-arranged trench plan which was approved by Hertfordshire's Historic Environment Team prior to the start of the work.
- 3.2.4 All archaeological features and deposits were recorded using OA East's *pro-forma* sheets. Trench locations, plans and sections were recorded at appropriate scales and colour and monochrome photographs were taken of all relevant features and deposits supplemented by digital photographs using an Olympus M760 7.1mega pixel camera.
- 3.2.5 Twelve environmental samples were collected from a representative cross section of feature types and locations.
- 3.2.6 Site conditions were good with almost constant sunshine and only a little rain. Dry conditions preceding the evaluation and during the works meant the ground was firm and no water was encountered in any of the trenches.

© Oxford Archaeology East Page 14 of 47 Report Number 1410



#### 4 RESULTS

#### 4.1 Introduction

4.1.1 Results are presented in the following sections, numerically by trench. Basic trench information is summarised in Table 1 and a full context list can be found in Appendix A.

Trench No.	Length (m)	Topsoil max depth (m)	Subsoil max depth (m)	Summary
1	50	0.2	0.6	Small ditch <b>04</b>
2	50	0.3	0.5	No archaeology present
3	50	0.33	0.33	No archaeology present
4	50	0.31	0.28	No archaeology present
5	100	0.44	0.34	Pit <b>64</b> , ditch <b>62</b>
6	25	0.25	n/a	No archaeology present. Post-medieval quarry
7	100	0.4	n/a	No archaeology present Post-medieval quarry
8	50	0.35	0.4	No archaeology present
9	50	0.39	n/a	No archaeology present Post-medieval quarry
10	100	0.4	n/a	No archaeology present Post-medieval quarry
11	100	0.25	0.44	Ditch <b>20</b> , <b>30</b> , <b>32</b> , <b>22</b> , <b>36</b> , <b>38</b> , Ring ditch <b>44</b> Pit <b>24</b> , <b>34</b> Layer 39, Post hole <b>67</b> , <b>59</b>
12	20	0.2	0.5	Ditch 26
12b	30			Ring ditch 68, Pit 129, ditch 127
13	50	0.3	0.1	Ditch 81, 83, Pit 85, 2 natural features
14	50	0.3	0.2	Ditch <b>91</b> , <b>89</b>
15	50	0.35	0.25	No archaeology present Post-medieval quarry
16	50	0.32	n/a	No archaeology present Post-medieval quarry
17	50	0.35	0.1	Ditch 106/110, 108, Pit 112
17a	10	0.33	0.12	Continuation of ditch 108
18	50	0.3	0.2	No archaeology present
19	100	0.24	0.17	Postholes <b>77</b> , <b>79, 46</b>
20	50	0.22	0.24	Pits <b>98</b> , <b>48</b> , Posthole <b>101</b>
21	100	0.32 0.2 N		No archaeology present
22	100			Ditches <b>06</b> , <b>10</b> , <b>14</b> , <b>16</b> , <b>18</b> Pits <b>08</b> , <b>12</b>
23	50			No archaeology present
24	100			No archaeology present

© Oxford Archaeology East Page 15 of 47 Report Number 1410



Trench No.	Length (m)	Topsoil max depth (m)	Subsoil max depth (m)	Summary
25	50	0.3	0.1	No archaeology present
26	100	0.35	0.4	No archaeology present
27	50	0.36	0.25	No archaeology present
28	100	0.32	0.26	Pit 119, 121
29	50	0.3	0.4	Pit /ditch terminus 88
30	50	0.3	0.6	Ditch 102, 113
31	100	0.32	0.4	No archaeology present
32	50			No archaeology present
33	100	0.3	0.4	No archaeology present
34	100	0.25	0.25	Ditch <b>124</b>
35	50			No archaeology present
36	50	0.3	0.3	No archaeology present
37	50	0.2	0.4	Natural feature / tree bole 122
38	25	0.3	0.3	Pit 52
39	50			Ditch 54
40	50			No archaeology present
41	50	0.3		Pit / ditch terminus <b>28</b>

Table 1: Trench Summary

#### 4.2 Trench Descriptions

Figure 1 shows the location of all trenches, Figures 3-6 provide detailed trench plans and selected sections. Figure 7 shows the suggested continuation of some of the features in the area of the site where more archaeological remains were encountered/ Features are described in the following sections within each trench from north to south.

#### Land west of Hazel End Road

#### Trench 1

- 4.2.1 This trench measured 50m in length and was orientated north-east to south-west (Plate 1. This trench contained a single ditch (Figure 3).
  - Ditch **04** was linear in plan, orientated approximately north-west to south-east and continuing beyond the trench edges. It measured 0.40m wide and 0.30m deep with steep sloping edges and a concave base (Figure 3, Section 1) (Plate 2). It contained a single fill. Fill 03 was a reddish brown silty, sandy clay with occasional small stone inclusions. No datable finds were retrieved from this deposit.

© Oxford Archaeology East Page 16 of 47 Report Number 1410



4.2.2 Trench 2 measured 50m in length and was orientated north-west to south-east. There were no archaeological features in this trench.

#### Trench 3

4.2.3 Trench 3 measured 100m in length and was orientated north-east to south-west There were no archaeological features in this trench.

#### Trench 4

4.2.4 Trench 4 measured 50m in length and was orientated north-west to south-east. There were no archaeological features in this trench (Plate 3).

#### Trench 5

- 4.2.5 Trench 5 measured 100m in length and was orientated north-west to south-east (Plate 4). This trench contained a ditch (62) and a pit (64) (Figure 3)
  - Pit 64 was circular in plan, continuing beyond the trench on the south-west side. It measured 2.40m wide and 0.40m deep with steep sloping edges. The base was not reached in this investigative section. It contained a single fill. Fill 65 was a mid-orangish brown silty sandy with occasional small stone inclusions. No datable finds were retrieved from this deposit.
  - Ditch 62 was linear in plan, orientated approximately north-east to south-west. It continues beyond the trench edge to the south-west and terminates to the north-east. It measured 0.8m wide and 0.20m deep with moderate sloping edges and a concave base. It contained a single fill. Fill 63 was a reddish brown silty, sandy clay with occasional small stone inclusions. No datable finds were retrieved from this deposit.

#### Trench 6

4.2.6 Trench 6 measured 25m in length and was orientated north-west to south-east. There were no archaeological features in this trench (Plate 5). This trench was excavated to the level where re-deposited chalk was encountered directly beneath the topsoil. The position of this trench corresponds with disturbance noted in the geophysical survey and has been interpreted as a large quarry pit. Post-medieval finds recovered during excavation were noted and discarded. This feature was also recorded in Trenches 7 and 9.

#### Trench 7

4.2.7 Trench 7 measured 100m in length and was orientated north-east to south-west. There were no archaeological features in this trench (Plate 6). This trench was excavated to the level where re-deposited chalk was encountered directly beneath the topsoil at the eastern end and natural gravels at the western end. The position of this trench corresponds with disturbance noted in the geophysical survey and has been interpreted as a large quarry pit. Post-medieval finds recovered during excavation were noted and discarded. The edge of this quarry pit was noted in plan and section approximately 40m from the eastern end of the trench (Plate 7). This feature was also recorded in Trenches 6 and 9.



4.2.8 Trench 8 measured 50m in length and was orientated north-east to south-west. There were no archaeological features in this trench.

#### Trench 9

4.2.9 Trench 9 measured 50m in length and was orientated north-west to south-east. This trench was excavated to the level where re-deposited chalk was encountered directly beneath the topsoil at the north-western end and natural gravels at the south-eastern end. The position of this trench corresponds with disturbance noted in the geophysical survey and has been interpreted as a large quarry pit. Post-medieval finds recovered during excavation were noted and discarded. The edge of this quarry pit was noted in plan and section approximately 20m from the northern end of the trench. This feature was also recorded in Trenches 6 and 7.

#### Trench 10

4.2.10 Trench 10 measured 100m in length and was orientated north-east to south-west. This trench was excavated to the level where re-deposited chalk was encountered directly beneath the topsoil at the north-eastern end and natural gravels at the south-western end. The position of this trench corresponds with disturbance noted in the geophysical survey and has been interpreted as a large quarry pit. Post-medieval finds recovered during excavation were noted and discarded. The edge of this quarry pit was noted in plan and section approximately halfway along the trench (Plate 8). This feature was also recorded in Trenches 15 and 16.

#### Trench 11

- 4.2.11 This trench measured 100m in length and was orientated north-west to south-east. It contained six ditches, three and a ring-ditch with central post (Figure 4) (Plate 9). Two additional trenches were investigated (Trenches 12 and 12b) in order to understand more about the ring ditch and to investigate any possible associated features as identified on the geophysical survey:
  - Ditch 20 was linear in plan, orientated approximately east west and continued beyond the trench edges It measured 0.48m wide and 0.21m deep with steep sloping edges and a rounded base. It contained a single fill. Fill 19 was a mid brown sandy silt with occasional small flint stone inclusions. No datable finds were retrieved from this deposit.
  - Ditch 30 was linear in plan, orientated approximately north-east to south-west and continued beyond the trench edges It measured 1.30m wide and 0.28m deep with steep sloping edges and a flat base. It contained a single fill. Fill 29 was a dark orangish brown sandy silt with occasional small flint stone inclusions. This deposit contained a single sherd of Late Bronze Age or Earliest Iron Age pottery (c. 1100-600 BC) and five stuck flints including a core, two blades and two flakes.
  - Ditch 32 was linear in plan, orientated approximately north-west to south-east and continued beyond the trench edge to the north-west and terminating to the south-east It measured 0.44m wide and 0.18m deep with steep sloping edges and a concave base. It contained a single fill. Fill 31 was a mid grey-brown sandy silt with occasional small flint stone inclusions. This deposit contained two sherd of Late Bronze Age or Earliest Iron Age pottery (c. 1100-600 BC)

© Oxford Archaeology East Page 18 of 47 Report Number 1410



- Ditch 22 was linear in plan, orientated approximately east west and continued beyond the trench edges. It measured 1.0m wide and 0.24m deep with moderate sloping edges and a rounded base. It contained a single fill. Fill 21 was a dark brown sandy silt with occasional small flint stone and charcoal inclusions. No datable finds were retrieved from this deposit.
- Pit 24 was not fully revealed in plan and continued beyond the south-western trench edge. It measured 2.53m wide and 0.28m deep with moderate sloping edges and a rounded base. It contained a single fill. Fill 23 was a mid-dark brown sandy silt with occasional small flint stone and charcoal inclusions. No datable finds were retrieved from this deposit.
- Pit **34** was sub-circular in plan. It measured 0.78m long, 0.45mwide and 0.14m deep with gradual sloping edges and an irregular, undulating base. It contained a single fill. Fill 33 was a mid-greyish brown sandy silt with occasional small flint stone inclusions. No datable finds were retrieved from this deposit.
- Ditch 36 was curvilinear in plan, measuring 3.20m in length and continuing beyond the trench edge to the south-western. It was 0.50m wide and 0.28m deep with very steep sloping edges and a rounded base. It contained a single fill. Fill 35 was a dark greyish brown silty sand with occasional small flint stone inclusions. A flint core, blade and a burnt flint were recovered from this deposit. This ditch truncated ditch 38.
- Ditch 38 was linear in plan, orientated approximately east west and continued beyond the trench edge to the north-east and truncated by ditch 36 to the south-west. It measured .0.64m wide and 0.22m deep with very steep sloping edges and a flat base. It contained a single fill. Fill 37 was a dark greyish brown sandy silt with occasional small flint stone inclusions. No datable finds were retrieved from this deposit. This ditch was identified on the geophysical survey and continues in Trench 12 (26). It is thought to be associated with the ring ditch.
  - Ring ditch **44** / **68** was circular in plan with an internal diameter of approximately 4.50m. The ditch was investigated in two slots; **44** in Trench 11 and **68** in Trench 12b. There was a central post-type feature (57 / 59) and an up-cast bank recorded in the trench edge (39).
- Ditch 44 was curvilinear in plan and measured 2.0m wide and 0.70m deep with steep sloping edges and a concave base (Figure 4, Section 27) (Plate 10). It contained four fills. Primary fill 43 was a dark orangish brown sandy silt with a maximum thickness of 0.10m containing occasional small flint stone inclusions. No datable finds were retrieved from this deposit. Secondary fill 42 was a light greyish brown sandy silt with a maximum thickness of 0.26m and containing a frequent large flint nodule inclusions. This deposit contained a single sherd of Neolithic pottery and a flint flake. The environmental sample taken from this deposit contained a large amount of charcoal (Appendix B) which was carbon dated to between 1669 and 1521BC (Appendix C). Fill 41 is a dark grey-brown sandy silt with a maximum thickness of 0.12m and included occasional small flint stoned. There were no datable finds recovered from this fill. A flint core and flake were recovered from this deposit. Upper fill 40 was a light greyish brown sandy silt measuring 0.24m in thickness (max) and contained occasional small flint stone inclusions and a flint blade.
- Posthole 59 was circular in plan, measuring 0.30m wide and 0.12m deep. It had steep sloping edges and a flat base. It contained a single fill. Fill 58 was a mid greyish brown sandy silt with occasional small stone inclusions. Two broken flint blades and a retouched arrowhead were recovered from this deposit.
- Layer / Bank deposit 39 was a mid greyish brown sandy silt with a maximum thickness of 0.28m and containing frequent flint stone inclusions (Figure 4, Section 27). This layer is thought to be the up-cast bank created during the original construction of the ring ditch. Eleven worked flints including six flakes and two blades were recovered from this deposit.

© Oxford Archaeology East Page 19 of 47 Report Number 1410



- Posthole 67 was circular in plan, measuring 0.30m wide and 0.10m deep. It had steep sloping edges and a flat base. It contained one fill. Fill 66 was a orangish brown sandy silt with occasional small flint stone inclusions. A single flint blade was retrieved from this deposit.
- An unexcavated ditch was recorded in plan which is considered to be a continuation of ditch 18 in Trench 22. This would create a parallel ditch with that recorded running through Trench 17 and may represent a trackway.

- 4.2.12 Trench 12 measured 20m in length and was orientated north-east to south-west. The position of this trench was determined by the presence of a feature identified on the geophysics survey, thought to be associated with the ring ditch in Trench 11 (38). this trench contained a single ditch (Figure 4).
  - Ditch 26 was linear in plan, orientated approximately north-west to south-east and continuing beyond the trench edges (Figure 4, Section 9). It had steep sloping edges and a concave base and contained a single fill. Fill 25 was a mid-dark brown silty sand with occasional small flint stone inclusions. A single flint core was recovered from this deposit.

#### Trench 12b

- 4.2.13 Trench 12b was added as an addition to the initial trench location design with the intention of revealing more of the ring ditch in order to record its full diameter and any other internal features. This trench measured 30m in length and was orientated northeast to south-west and contained the continuation of the ring ditch recorded in Trench 11, a pit and a ditch (Plate 11).
  - Ring ditch 44 / 68 was circular in plan with an internal diameter of approximately 4.50m. The ditch was investigated in two slots; 44 in Trench 11 and 68 in Trench 12b. There was a central post-type feature (57 / 59) and an up-cast bank recorded in the trench edge (39).
  - Ditch 68 was curvilinear in plan and measured 0.9m wide and 0.50m deep with steep sloping edges and a rounded base (Figure 4, Section 25) (Plate 12). It contained six fills. Primary fill 69 was a dark orangish brown sandy silt with a maximum thickness of 0.20m containing occasional small flint stone inclusions. No datable finds were retrieved from this deposit. Secondary fill 70 was a dark orangish brown sandy silt with a maximum thickness of 0.05m and containing a frequent small gravel and flint stone inclusions. No datable finds were retrieved from this deposit. Fill 70 was a dark orangish-brown sandy silt with a maximum thickness of 0.05m and included occasional small flint stoned. There were no datable finds recovered from this fill. Above fill 70 was 71; a mid greyish brown sandy silt measuring 0.10m in thickness and had no obvious inclusions. No datable finds were retrieved from this deposit. Fill 72 was a light orangish brown sandy silt with a maximum thickness of 0.10m and no obvious inclusions. There were no datable finds retrieved from this deposit. Fill 73 was a mid-orangish brown sandy silt with a maximum thickness of 0.05m and contained frequent small flint and gravel stone inclusions. There were no datable finds retrieved from this deposit. Upper-most fill 74 was a dark orangish brown sandy silt with a maximum thickness of 0.15m and contained occasional flint and gravel stones. There were no datable finds retrieved from this deposit.
  - Pit 129 was circular in plan measuring 0.40m wide and 0.10m deep with steep sloping edges and a concave base. It contained a single fill. Fill 128 was a mid-orangish brown silty sand with occasional small to medium sized stone inclusions. No datable finds were retrieved from this deposit.

© Oxford Archaeology East Page 20 of 47 Report Number 1410



Ditch 127 was linear in plan and orientated north-west to south-east, terminating to the south-east and continuing beyond the trench edge to the north-east. It measured 0.15m wide and 0.08m deep with steep sloping edges and a concave base. This ditch contained a single fill. Fill 126 was a reddish brown sandy silt with occasional small to medium sized flint stone inclusions. No datable finds were retrieved from this deposit.

#### Trench 13

- 4.2.14 Trench 13 measured 50m in length and was orientated north-east to south-west. This trench contained two ditches and a pit (Figure 3):
  - Ditch 81 was linear in plan, orientated north-east to south-west, continuing beyond the end of the trench to the north-east and terminating to the south-west. It measured 0.60m wide and 0.18m deep with gradual sloping edges and a wide, flat base. It contained a single fill. Fill 80 was a light reddish brown sandy silt with occasional flint stone inclusions. Two flint flakes were retrieved from this deposit and the environmental sample taken contained a large amount of charcoal.
  - Ditch 83 was linear in plan, orientated north-west to south-east, continuing beyond the trench edge to the south-east and terminating to the north-west. It measured 0.50m wide and 0.28m deep with steep sloping edges and a narrow, flat base. It contained a single fill. Fill 82 was a mid reddish brown sandy silt with occasional flint stone inclusions. Two flint flakes were retrieved from this deposit.
  - Pit 85 was an irregular shape in plan, continuing beyond the trench edge. It measured 2.20m in length, 0.75m wide and 0.20m deep with gradual sloping edges and a flat base. This pit contained a single fill. Fill 84 was a mid reddish brown sandy silt with frequent flint stone inclusions. This deposit contained a single sherd of Late Bronze Age or Earliest Iron Age pottery (c.1100-600 BC).

#### Trench 14

- 4.2.15 Trench 14 measured 50m in length and was orientated to north-west to south-east. It contained two ditches (Figure 3).
  - Ditch 89 was linear in plan, orientated north-west to south-east, continuing beyond the trench edges. It measured 1.3m wide and 0.30m deep with gradual sloping edges and a concave base. It contained a single fill. Fill 90 was a mid orangish brown sandy silt with occasional flint stone inclusions. Fragments of post-medieval tile were from this deposit as well as a flint flake.
  - Ditch 91 was linear in plan, orientated north-east to south-west, continuing beyond the trench edges. It measured 0.60m wide and 0.25m deep with gradual sloping edges and a narrow, rounded base. It contained two fills. Fill 99 was a mid greyish brown sandy silt with a maximum thickness of 0.25m and containing frequent rounded flint stone inclusions. A single flint flake was recovered from this deposit.. Fill 92 was a mid orangish brown sandy silt with a maximum thickness of 0.20m and containing no obvious inclusions. There were no datable finds recovered from this deposit.

#### Trench 15

4.2.16 Trench 15 measured 50m in length and was orientated north-west to south-east. There were no archaeological features in this trench (Plate 13). This trench was excavated to the level where re-deposited chalk was encountered directly beneath the topsoil at the southern end and natural gravels at the northern end. The position of this trench corresponds with disturbance noted in the geophysical survey and has been interpreted

© Oxford Archaeology East Page 21 of 47 Report Number 1410



as a large quarry pit. Post-medieval finds recovered during excavation were noted and discarded. The edge of this quarry pit was noted in plan and section approximately 20m from the northern end of the trench (Plate 13). This feature was also recorded in Trenches 10 and 16.

#### Trench 16

4.2.17 Trench 16 measured 50m in length and was orientated north-east to south-west. There were no archaeological features in this trench. This trench was excavated to the level where re-deposited chalk was encountered directly beneath the topsoil at the north-eastern end and natural gravels at the south-western end. The position of this trench corresponds with disturbance noted in the geophysical survey and has been interpreted as a large quarry pit. Post-medieval finds recovered during excavation were noted and discarded. The edge of this quarry pit was noted in plan and section approximately 7m from the south-western end of the trench. This feature was also recorded in Trenches 10 and 15.

#### Trench 17

- 4.2.18 Trench 17 measured 50m in length and was orientated north-east to south-west. This trench contained two ditches and a pit (Figure 3).
  - Ditch 106 / 110 was linear in plan, orientated north-east to south-west and ran the full length of the trench (Figure 3). It was investigated in two slots (106 and 110). It measured 0.60-0.80m wide and 0.18-0.20m deep with gradual sloping edges and a narrow, rounded base (Figure 3, Section 37). It contained a single fill. Fill 105/109 was a mid greyish brown sandy silt with a maximum thickness of 0.18-0.20m and containing frequent rounded flint stone inclusions, particularly concentrated at the base of the cut. There were no datable finds recovered from this deposit. This ditch was truncated by ditch 108.
  - Ditch 108 was linear in plan, orientated north-west to south-east, continuing beyond the trench edges. It measured 0.70m wide and 0.20m deep with steep sloping edges and a rounded base. This ditch contained a single fill. Fill 107 was a mid greyish brown sandy silt with occasional small flint stone inclusions. There were no datable finds retrieved from this deposit.
  - Pit 112 was circular in plan, measuring 0.50m wide and 0.10m deep with gradual sloping edges and an uneven base. It contained a single fill. Fill 111 was a mid grey brown silty sand with occasional small to medium sized stones. No datable finds were retrieved from this deposit.

#### Trench 17a

4.2.19 Trench 17a measured 5.50m in length and was orientated north-west to south-east (Figure 3). This trench was investigated as an extension to Trench 17 in order to establish if there was a parallel ditch to **106/110** to create a track way. The only feature present was the continuation of ditch **108**.

#### Trench 18

4.2.20 Trench 18 measured 50m in length and was orientated north-west to south-east. There were no archaeological features in this trench.

© Oxford Archaeology East Page 22 of 47 Report Number 1410



- 4.2.21 Trench 19 measured 100m in length and was orientated north-west to south-east (Figure 5). This trench contained a line of three postholes on a north-west to south-eastern alignment.
  - Posthole 77 was circular in plan, measuring 0.30m wide and at least 0.50m deep (it was not possible to reach the base of this feature). It had steep, almost vertical sloping edges and contained a single fill. Fill 76 was a dark, blackish brown silty sand with frequent small flint stone inclusions. No datable finds were retrieved from this deposit. The environmental sample taken from this deposit contained large amounts of charcoal (Appendix B).
  - Posthole 79 was circular in plan, measuring 0.40m wide and 0.15m deep It had gradual sloping edges and a concave base. It contained a single fill. Fill 78 was a dark, blackish brown silty sand with frequent small flint stone inclusions. This deposit contained three sherds of Late Bronze Age or Earliest Iron Age pottery (c. 1100-600 BC).
  - Posthole 46 was circular in plan, measuring 0.36m wide and 0.30m deep It had moderately steep sloping edges and a rounded base. It contained a single fill. Fill 45 was a mid orangish brown silty sand with frequent small flint stone inclusions. Two large stones were removed during initial machining which may have been packing stones. No datable finds were retrieved from this deposit.

#### Trench 20

- 4.2.22 Trench 20 measured 50m in length and was orientated north-east to south-west (Figure 5). This trench contained two pits and a posthole. Pits **48** and **98** yield two of the three largest assemblages from the evaluation.
  - Storage Pit 98 was not fully revealed in plan, continuing beyond the trench edge towards the north-west (Figure 5). It measured 1.60m wide and 0.80m deep with vertical edges and a flat base (Figure 5, Section 36) (Plate 14). It contained five fills. Primary fill 97 was a mid orangish brown silty sand with moderate inclusions of stones and chalk fragments and a maximum thickness of 0.22m. No datable finds were retrieved from this deposit. Secondary fill 96 was a mid brown silty sand with frequent small stones, flints and rare charcoal inclusions. It had a maximum thickness of 0.46m and contained five sherds of BA-IA transition or Earliest IA pottery (c. 850-600 BC). Fill 95 was a dark brownish grey silty sand with occasional flint stone inclusions. It had a maximum thickness of 0.50m and contained 26 sherds of BA-IA transition or Earliest IA pottery (c. 850-600 BC) and a flint core and flake. The environmental sample taken from this deposit contained several wheat and cereal grains and a large amount of charcoal (Appendix B). Fill 94 was a mid grey brown silty sand with frequent small stone inclusions and flints. It had a maximum thickness of 0.16m and contained 10 sherds of BA-IA transition or Earliest IA pottery (c. 850-600 BC). Upper fill 93 was a light yellowish brown silty sand with frequent large fragments of chalk and a maximum thickness of 0.44m.
  - Pit 48 was circular in plan, measuring 0.50m wide and 0.19m deep with steep sloping edges and a concave base. It contained a single fill. Fill 47 was a mid-grey brown silty sand with frequent stone inclusions and rare charcoal inclusions. This pit contained 18 sherds of BA-IA transition or Earliest IA pottery (c. 850-600 BC) and a single flint flake.
  - Posthole 101 was circular in plan, measuring 0.25m wide and 0.05m deep with gentle sloping edges and a concave base. It contained a single fill. Fill 100 was a mid brownish grey silty sand with moderate stone inclusions. This deposit contained a single sherd of Late Bronze Age or Earliest Iron Age pottery (c. 1100-600 BC).

© Oxford Archaeology East Page 23 of 47 Report Number 1410



4.2.23 Trench 21 measured 100m in length and was orientated north-east to south-west. There were no archaeological features in this trench.

#### Trench 22

- 4.2.24 Trench 22 measured 100m in length and was orientated north-west to south-east. This trench contained five ditches and two pits
  - Ditch 18 was linear in plan, orientated north-east to south-west, continuing beyond the trench edges. It lines up with an unexcavated ditch in Trench 11. It measured 0.88m wide and 0.24m deep with moderate sloping edges and a rounded base. This ditch contained a single fill. Fill 17 was a mid greyish brown sandy silt with occasional small flint stone inclusions. There were no datable finds retrieved from this deposit.
  - Ditch 16 was curvilinear in plan, orientated, continuing beyond the trench edge to the south and terminating to the north-west. It measured 0.68m wide and 0.14m deep with steep sloping edges and a wide, flat base (Plate 15). This ditch contained a single fill. Fill 15 was a mid greyish brown sandy silt with occasional small flint stone inclusions. There were no datable finds retrieved from this deposit.
  - Ditch 14 was linear in plan, orientated north-east to south-west, continuing beyond the trench edges. It measured 1.10m wide and 0.38m deep with steep sloping edges and a narrow rounded base (Plate 16). This ditch contained a single fill. Fill 13 was a mid greyish brown sandy silt with occasional small flint stone inclusions. There were no datable finds retrieved from this deposit.
  - Pit **12** was sub-circular in plan, measuring 1.15m long, 0.80m wide and 0.20m deep with irregular sloping edges and a concave base. It contained a single fill. Fill 11 was a middark brown silty sand with frequent flint stone inclusions. There were no datable finds retrieved from this deposit.
  - Ditch 10 was linear in plan, orientated east to west, continuing beyond the trench edge to the east and terminating to the west. It measured 0.46m wide and 0.22m deep with steep sloping edges and a narrow rounded base. This ditch contained a single fill. Fill 09 was a pale brown sandy silt with occasional small flint stone inclusions. There were no datable finds retrieved from this deposit.
  - Pit 08 was not fully revealed in plan, continuing beyond the trench edge to the southwest, measuring 1.46m wide and 034m deep. It had moderate sloping edges, a concave base and contained a single fill. Fill 07 was a mid-greyish brown silty sand with occasional flint stone inclusions. There were no datable finds retrieved from this deposit.
  - Ditch 06 was linear in plan, orientated north to south, continuing beyond the trench edges. It measured 0.74m wide and 0.16m deep with gradual sloping edges and a concave base. This ditch contained a single fill. Fill 05 was a mid brown sandy silt with frequent small flint stone inclusions. There were no datable finds retrieved from this deposit.

#### Trench 23

4.2.25 Trench 23 measured 50m in length and was orientated north-west to south-east. There were no archaeological features in this trench.

© Oxford Archaeology East Page 24 of 47 Report Number 1410



4.2.26 Trench 24 measured 100m in length and was orientated north-east to south-west. There were no archaeological features in this trench.

#### Trench 25

4.2.27 Trench 25 measured 50m in length and was orientated north-east to south-west. There were no archaeological features in this trench (Plate 17).

#### Trench 26

4.2.28 Trench 26 measured 100m in length and was orientated north-east to south-west. There were no archaeological features in this trench (Plate 18).

#### Trench 27

4.2.29 Trench 27 measured 50m in length and was orientated north-west to south-east. There were no archaeological features in this trench.

#### Trench 28

- 4.2.30 Trench 28 measured 100m in length and was orientated north-west to south-east (Figure 5). This trench contained two pits (Plate 19).
  - Pit 121 was not fully revealed in plan, continuing beyond the trench edge to the southwest (Figure 5). It measured 1.37m long, 0.56m wide and 0.44m deep with gradual sloping edges and a slightly concave base. It contained a single fill. Fill 120 was a mid greyish brown silty sand with rare small stone inclusions. There were no finds recovered from this deposit.
  - Storage Pit 119 was not fully revealed in plan, continuing beyond the trench edge to the north-east (Figure 5, Section 41). It measured 1.32m wide and 1.10m deep with vertical sloping edges and a flat base (Plate 20). It contained a single fill. Fill 118 was a mid greyish brown silty sand with frequent stone inclusions and contained 15 sherds of BA-IA transition or Earliest IA pottery (c. 850-600 BC) as well as a flint core and three flakes. The environmental sample taken from this deposit contained a large amount of charcoal (Appendix B).

#### Trench 29

- 4.2.31 Trench 29 measured 50m in length and was orientated north-east to south-west (Figure 5). This trench contained a single pit/ditch terminus.
  - Pit/ditch terminus **88** was not fully revealed in plan, but appeared to be oval, continuing beyond the trench edge to the south-east (Figure 5). It measured 1.9m long, 1.5m wide and 0.45m deep with gradual sloping edges and a slightly concave base. It contained two fills. Primary fill 87 was a mid yellowish brown silty sand with rare small stone inclusions and charcoal flecks. It had a maximum thickness of 0.33m and contained a broken flint blade. The environmental sample taken from this deposit contained a small amount of charcoal. Upper fill 86 was a dark greyish brown clayey silt with occasional charcoal flecks and a maximum thickness of 0.12m there were no datable finds recovered from this deposit. The environmental sample taken from this deposit contained a large amount of charcoal.

© Oxford Archaeology East Page 25 of 47 Report Number 1410



- 4.2.32 Trench 30 measured 50m in length and was orientated north-west to south-east (Figure 5). This trench contained two ditches.
  - Ditch **102** was linear in plan, terminating to the south and continuing beyond the top of the trench to the north. It measured 0.60m wide and 0.30m deep with moderate sloping edges and a concave base. It contained two fills. Primary fill 103 was a dark brown silty sand with frequent stone inclusions and a maximum thickness of 0.15m. A single flint blade was recovered from this deposit. Upper fill 104 was a mid reddish brown sandy silt with rare stone inclusions and charcoal flecks. It had a maximum thickness of 0.15m and did not contain any datable finds. The environmental sample taken from this deposit contained a large amount of charcoal (Appendix B).
  - Ditch 113 was linear in plan, orientated north-east to south-west and continuing beyond the trench edges (Figure 5). It measured 0.80m wide and 0.30m deep with steep sloping edges and a concave base. It contained two fills. Primary fill 114 was a mid yellowish brown sandy silt with rare small stone inclusions It had a maximum thickness of 0.10m and did not contain any datable finds. Upper fill 115 was a dark orangish brown sandy silt with occasional small stone inclusions and a maximum thickness of 0.30m A broken flint flake was recovered from this deposit.

#### Trench 31

4.2.1 Trench 31 measured 100m in length and was orientated north-east to south-west. There were no archaeological features in this trench.

#### Trench 32

4.2.2 Trench 32 measured 50m in length and was orientated north-east to south-west. There were no archaeological features in this trench.

#### Trench 33

4.2.3 Trench 33 measured 100m in length and was orientated north-west to south-east. There were no archaeological features in this trench.

#### Trench 34

- 4.2.4 Trench 34 measured 100m in length and was orientated north-west to south-east (Figure 6). This trench contained a single post-medieval ditch.
  - Ditch 124 was linear in plan, orientated north-north-west to south-south-east and continuing beyond the trench edges (Figure 6). It measured 0.80m wide and 0.25m deep with moderately sloping edges and a concave base. It contained a single fill. Fill 125 was a dark orangish brown sandy silt with occasional small stone inclusions. Finds retrieved include fragments of post-medieval brick/tile.

#### Trench 35

4.2.5 Trench 35 measured 50m in length and was orientated north-west to south-east. There were no archaeological features in this trench.

© Oxford Archaeology East Page 26 of 47 Report Number 1410



4.2.6 Trench 36 measured 50m in length and was orientated north-west to south-east. There were no archaeological features in this trench. Some disturbance, thought to be tyre tracks was noted at the level of the natural gravels. It appears that this part of the site had all of the topsoil stripped and was disturbed possibly when the A120 was constructed to the immediate north during the late 20th century. In this trench the gravels had been extremely well compacted.

#### Trench 37

4.2.7 Trench 37 measured 50m in length and was orientated north-east to south-west (Figure 6). This trench contained a natural feature, **122**, considered to be a tree bole. A single flint flake was recovered from the fill of this feature (123).

#### Land east of Hazel End Road

#### Trench 38

- 4.2.8 Trench 38 measured 25m in length and was orientated north-west to south-east (Figure 6). This trench contained a single pit.
  - Pit 52 was irregular in plan, continuing beyond the trench edges. It measured 2.10m in length, 1.8m wide and 0.60m deep with gentle sloping edges and a flat base (Plate 21). It contained two fills. Primary fill 51 was a mid reddish brown sandy silt with moderate small stone inclusions. It had a maximum thickness of 0.60 and did not contain any datable finds. Upper fill 50 was a dark reddish brown sandy silt with moderate small stone inclusions. It had a maximum thickness of 0.60 and did not contain any datable finds.

#### Trench 39

- 4.2.9 Trench 39 measured 50m in length and was orientated north-west to south-east (Figure 6). This trench contained a single ditch.
  - Ditch 54 was linear in plan, orientated north-east to south-west and continuing beyond the trench edges. It measured 1.0m wide and 0.20m deep with steep sloping edges and a flat base. It contained a single fill. Fill 53 was a dark reddish brown silty sand with frequent small stone inclusions. No datable finds were retrieved from this deposit.

#### Trench 40

4.2.10 Trench 40 measured 50m in length and was orientated north-north-east to south-southwest. There were no archaeological features in this trench.

#### Trench 41

- 4.2.11 Trench 41 measured 50m in length and was orientated north-west to south-east (Figure 6). This trench contained a single pit / ditch terminus.
  - Pit / Ditch 28 was not fully revealed in plan, continuing beyond the trench edge to the south-west (Figure 6). It measured 0.60m wide and 0.10m deep with very gradual sloping

© Oxford Archaeology East Page 27 of 47 Report Number 1410



edges and a concave base. It contained a single fill. Fill 27 was a firm mid reddish brown silty sand with frequent gravel and rounded stone inclusions. Finds from this deposit included 42 sherds of Anglo-Saxon pottery (6th-7th century) (Plate 22) (Appendix A2), a single sherd of Late Bronze Age or Earliest Iron Age pottery (c. 1100-600 BC), a flint blade and flake and two iron nails. The environmental sample taken from this deposit contained small quantities of wheat and charcoal (Appendix B).

#### 4.3 Finds Summary

- 4.3.1 A total of 128 sherds of mostly Prehistoric and Anglo-Saxon pottery, weighing 1.155kg, was recovered from 13 contexts during the evaluation (Appendix A1 and A2). The pottery was in moderate condition, with only a few sherds showing signs of heavy abrasion and the surfaces of sherds generally being well preserved.
- 4.3.2 No faunal remains were encountered during the evaluation.
- 4.3.3 A total of eighty-six flints were recovered from twenty five contexts. The majority of these contexts contained a small number of struck lithics.

#### 4.4 Environmental Summary

- 4.4.1 Twelve bulk samples were taken from features in order to assess the quality of preservation of plant remains and their archaeobotanical potential. Features sampled include pits, post holes and ditches (Appendix B).
- 4.4.2 The samples have produced a small assemblage of cereal grains and charcoal. Spelt is the main type of wheat grown in the later Iron Age and Roman period as is seen on most sites of this date in East Anglia (Moulins & Murphy 1997, Greig 1981).
- 4.4.3 The assessment has shown that there is limited potential for the recovery of charred plant remains. If further excavations are planned for this area, it is recommended that a schedule for targeted environmental sampling should be appended to the updated project design.

#### 5 DISCUSSION AND CONCLUSIONS

#### 5.1 Discussion

#### **Neolithic Flint-working**

- 5.1.1 Several flints were recovered from features across the site including pits, ditches and natural features. An assemblage of 68 worked and burnt lithics were recovered from and are believed to be mostly residual.
- 5.1.2 The flint assemblage is considered to be Early Neolithic in date (Appendix B) and as no other associated features of contemporary date were encountered, it is likely that the evidence indicates isolated pockets of flint working as the naturally occurring flint across the site is an ideal resource.
- 5.1.3 The single sherd of Neolithic pottery recovered from the ring ditch in Trench 11 may indicate some settlement activity close to the site, however no securely dated features were encountered during this stage of investigation.

© Oxford Archaeology East Page 28 of 47 Report Number 1410



#### Early Bronze Age boundary marker

- 5.1.4 Activity from this period was located in Trench 11, 12 and 12b, positioned on a ridge at the highest point of the site at around 82mOD. A ring ditch with an internal diameter of approximately 5m was recorded with a central post and possible bank which was noted in the trench section. A single sherd of Neolithic pottery was recovered from this feature which also contained a significant quantity of charcoal. This charcoal as carbon dated and to between 1669 and 1521BC (Appendix C).
- 5.1.5 The position of this feature, on the highest part of the site may be significant in its interpretation. An evaluation was being carried out by Wessex Archaeology on another site approximately 800m to the west where another similar ring ditch with slightly larger diameter was also recorded (Paul Gajos pers. Comm). It could be suggested, that these features are markers on a boundary, interestingly approximately 200m to the south of the present county boundary between Essex and Hertfordshire.

#### Late Bronze Age - Early Iron Age storage pits and ditches

- 5.1.6 Archaeology from this period is represented by storage pits, small ditches and a line of postholes. As with the Early Bronze Age remains, the features were mostly encountered on the highest parts of the site.
- 5.1.7 Two large pits which may have been used for storage were recorded in Trenches 20 and 28. Both were deep (in one the base could not be safely reached), with vertical edges. Two of the largest pottery assemblages came from these pits which display characteristics more commonly associated with the later Decorated ware phase (Barrett 1980). These are therefore likely date to the period of the Bronze Age-Iron Age transition or the Earliest Iron Age proper, c. 850-600 BC (Needham 2007; Brudenell 2012) (Appendix A1). The single assemblage of possible crop processing waste from one of these pits (98) is indicative of small-scale processing carried out on site during this period. The inclusion of a moderate density of charred cereal grains could be interpreted as separate deposits of grain that have been accidentally burnt.
- 5.1.8 A line of postholes on a north-west to south-east alignment were recorded in Trench 19. Too far apart to be part of a building, these postholes may be remnants of a boundary or fenceline.
- 5.1.9 Other features from this period include small ditches, pits and postholes in Trenches 11, 13, 19, 20 and 28 which indicates surviving archaeology from this period located on the ridge and extending towards the south-western area of the site.

#### Anglo-Saxon Activity on east side of Hazel End Road

- 5.1.10 The only evidence of Saxon activity recorded on the site comes from a shallow feature in Trench 41 which may be a ditch terminus, pit or remnants of a surface. This feature yielded 40 sherds of pottery which is considered to be late 6th to 7th century in date (Plate 22).
- 5.1.11 Although this was the only Saxon feature noted, the high pottery content may indicate settlement-related activity in the vicinity. The location of this trench, close to the river makes it a probable location for settlement near-by.

© Oxford Archaeology East Page 29 of 47 Report Number 1410



#### **Post-Medieval Quarrying**

- 5.1.12 A large area of what is believed to be post-medieval quarrying was encountered in the northern part of the site, close to the A120 road which bounds the site to the north (Figure 1). The edges of what appear to be two large quarry pits were recorded in Trenches 6, 7, 9, 10, 15 and 16. These areas of disturbance were also identified in the geophysical survey. The edges of one pit was encountered in Trenches 6, 7 and 9 and the second pit in Trenches 15, 10 and 16. Both pits were approximately 50m wide, the depth was not established.
- 5.1.13 These features were most likely quarry pits for the extraction of chalk and postmedieval ceramic building material recovered during machining indicates their backfill date.

#### Undated trackway (?)

5.1.14 Parallel ditches recorded in Trenches 17, 22 and 11 have been interpreted as a possible trackway (Figure 7). Positioned on a ridge, this trackway was orientated northeast to south-west and although no dating evidence was retrieved, it may be contemporary with the Late Bronze Age-Early Iron Age activity recorded on this part of the site. A single sherd of unstratified Late Bronze Age or Earliest Iron Age pottery, (c. 1100-600 BC) was recovered during machining.

#### 5.2 Conclusions

5.2.1 The evaluation at Hazel End Road has been successful in achieving the project aims: to determine as far as reasonably possible the presence/absence, location, nature, extent, date, quality, condition and significance of any surviving archaeological deposits within the development area. It has identified surviving archaeological evidence for activity on the site from the Neolithic through to the Anglo-Saxon periods.

© Oxford Archaeology East Page 30 of 47 Report Number 1410



#### APPENDIX A. FINDS REPORTS

#### A.1 Prehistoric Pottery

By Matt Brudenell

#### Introduction

- A.1.1 The excavations at Hazel End yielded an assemblage of 86 sherds (599g) of handmade prehistoric pottery, with a mean sherd weight (MSW) of 7.0g. The pottery was recovered from 12 contexts relating to ten features (pits, postholes and ditches), with two further un-stratified finds, including part of a spindle whorl from Trench 37 (Table A1).
- A.1.2 With the exception of a single plain sherd of probable Neolithic pottery from ditch 44, all the material can be broadly dated to the Late Bronze Age and/or Earliest Iron Age, c. 1100-600 BC. This dating is largely based on the character of the fabrics and the presence of a few diagnostic feature sherds. Although all this pottery belongs to the Post-Deverel Rimbury ceramic tradition (PDR), the three largest feature assemblages from pit 20, 98 and 119 display characteristics more commonly associated with the later Decorated ware phase (Barrett 1980). These are therefore likely date to the period of the Bronze Age-Iron Age transition or the Earliest Iron Age proper, c. 850-600 BC (Needham 2007; Brudenell 2012).
- A.1.3 This report provides a summary of the assemblage. The ceramics have been fully recorded following the recommendations laid out by the Prehistoric Ceramics Research Group (PCRG 1997). Sherds weighing less than 1g were recorded as crumbs (2g in total), and were excluded from the analysis which follows.

Context	Trench no.	Cut no.	Feature type	No/wt. (g) sherds	Spot date
27	41	28	Pit	1/9	LBA or Earliest IA, c. 1100-600 BC
29	11	30	Pit	1/4	LBA or Earliest IA, c. 1100-600 BC
31	11	32	Ditch	2/3	LBA or Earliest IA, c. 1100-600 BC
42	11	44	Ditch	1/5	Neolithic
47	20	48	Pit	18/259	BA-IA transition or Earliest IA, c. 850-600 BC
78	19	79	Posthole	3/25	LBA or Earliest IA, c. 1100-600 BC
84	13	85	Pit	1/2	LBA or Earliest IA, c. 1100-600 BC
94	20	98	Storage pit	10/47	BA-IA transition or Earliest IA, c. 850-600 BC
95	20	98	Storage pit	26/155	BA-IA transition or Earliest IA, c. 850-600 BC
96	20	98	Storage pit	5/15	BA-IA transition or Earliest IA, c. 850-600 BC
100	20	101	Posthole	1/12	LBA or Earliest IA, c. 1100-600 BC
118	28	119	Storage pit	15/45	BA-IA transition or Earliest IA, c. 850-600 BC
Un-strat.	17	-	-	1/5	LBA or Earliest IA, c. 1100-600 BC
Un-strat.	37	-	-	1/13 (spindle whorl)	LBA or Earliest IA, c. 1100-600 BC
TOTAL	-	-	-	86/599	-

© Oxford Archaeology East Page 31 of 47 Report Number 1410



Table A1: Prehistoric pottery assemblage quantification and spot dating by context

#### Assemblage characteristics

The assemblages was characterised by sherds in flint (F) and flint-and-sand (FQ) A.1.4 tempered fabrics (Table A2). The latter dominated, accounting for 93% of the pottery by weight; prominent amongst which was the coarseware fabric FQ1. Both groups of fabrics are typical of Late Bronze Age and Earliest Iron Age PDR assemblages in eastern England (Brudenell 2012), although there is a tendency for flint-and-sand to dominate in the period during and immediately after the Bronze Age-Iron Age transition. This could suggest that most of the pottery is in fact of Earliest Iron Age origin (c. 800-600), though in most instances this is hard to corroborate, given the majority of feature assemblages contained fewer than five sherds. Diagnostic sherds were in fact very rare. Indeed, based on the total number of different rims and bases recovered, the assemblage is estimated to include a minimum of just six vessels (four different rims and two different bases) - three of which could be assigned to form. These comprised the partial profile of a large bipartite coarseware jar with fingertip decoration on the interior of the neck (c. 32cm in diameter; one sherd, 166g); the partial profile of a small coarseware jar with a pronounced shoulder and a concave neck (c. 12cm in diameter; six sherds, 11g), and the partial profile of a burnished round-bodied fineware bowl (c. 14cm in diameter; one sherd, 4q). These and all the other feature sherds derived from the three largest assemblages from pit 20, 98 and 119. Other notable finds amongst them included a fingertip decorated neck cordon from pit 98 (one sherd, 3g) and a plain burnished neck cordon from a fineware vessel in pit 48 (two sherds, 27g).

Fabric	Group	No./(wt.) sherds	% of fabric (by wt.)	No./wt. sherds burnishe d	% of fabric burnished (by wt.)	MNV	MNV burnish ed
F1	Flint	9/38	6.3	-	-	-	-
F2	Flint	1/2	0.3	-	-	-	-
FQ1	Flint and sand	29/381	63.6	-	-	2	-
FQ2	Flint and sand	21/73	12.2	2/16	21.9	2	-
FQ3	Flint and sand	13/56	9.3	1/5	8.9	1	1
FQ4	Flint and sand	13/49	8.2	10/45	91.8	1	1
TOTA L	-	86/599	99.9	13/66	11.0	6	2

Table A2: Prehistoric pottery assemblage quantification by fabric. MNV = minimum number of vessels calculated as the total number of different rims and bases identified.

Fabric series

© Oxford Archaeology East Page 32 of 47 Report Number 1410



Burnt flint tempered fabrics

F1: Moderate to common coarse flint (mainly 2-4mm) F2: Moderate to common medium flint (mainly 1-2mm)

Burnt flint and sand tempered fabrics

FQ1: Moderate to common coarse flint (mainly 2-4mm) in a sandy clay matrix FQ2: Moderate to common medium flint (mainly 1-2mm) in a sandy clay matrix

FQ3: Moderate to common medium flint (mainly 1-2mm) in a sandy micaceous clay matrix

FQ4: Sparse to common fine flint (<1.5mm) in a sandy clay matrix

#### Feature assemblage overview by trench

Trench 11 (ditch 30, ditch 32 and 44): Four plain sherds (12g, in fabrics F1 and FQ3) were recovered from features in Trench 11. The only notable piece is a possible Neolithic sherd from ditch 44, which had very coarse white burnt flint inclusions, visually distinct from those characterising the rest of the PDR wares.

Trench 13 (pit 85): One plain sherd (2g) in fabric F1.

Trench 17: One plain un-stratified sherd (5g) in fabric FQ3.

Trench 41 (pit 28) One plain body sherds (9g), in fabric F1.

Trench 19 (posthole 79): Three plain body sherds (25g), in fabrics F1, FQ2 and FQ3.

Trench 20 (pit 48, 98 and posthole 101): Pit 48 and 98 yield two of the three largest assemblages from the excavation. Pit 48 contained 18 sherds (259g), all in flint-and-sand tempered fabrics (FQ1, FQ3-4). This included the partial profile of a large bipartite jar with fingertip impression on the neck interior, and the rim or a fineware vessel with a plain burnished cordon on the neck. The character of the fabrics and decoration suggest at the assemblage dates between c. 850-600 BC. A similar date range is suggested for the material from pit 98. This yielded 41 sherds (217g) in a range of fabrics (F1, FQ1-2, FQ4). Most were plain body sherds, though a fragment of a fingertip decorated neck cordon was recovered. Posthole 101 yielded one plain body sherd (12g) in fabric FQ2.

Trench 29 (pit 119): 15 sherds (45g) in flint and flint-and-sand tempered fabrics (F1, FQ2-3). The pit yielded the partial profile of a round-bodied bowl, and a small pronounced shoulder jar with concave neck. The forms are typical of both the terminal Bronze Age and Earliest Iron Age, and so a date between c. 850-600 BC is tentatively suggested.

Trench 37: Un-stratified fragment of a bi-conical spindle whorl in fabric FQ1 (13g; diameter 3.4cm; hole diameter 0.6cm). The forms and fabric is typical of the Late Bronze Age and Early Iron Age.

#### Discussion



A.1.5 With the exception of the one possible Neolithic sherd from ditch 44, all the prehistoric pottery recovered from Hazel End belongs to the PDR tradition of the Late Bronze Age and Earliest Iron Age. Closer dating of assemblages within this tradition can be difficult, especially when dealing with small groups of pottery (Brudenell 2011). That being that said, the character of the forms and decoration on pottery from pits 20, 98 and 119 suggest these groups probably belong to Bronze Age-Iron Age transition, or the Earliest Iron Age proper, c. 850-600 BC. The reaming sherds are more difficult to date, give the lack of diagnostic pieces, and so carry a broader dating bracket of c. 1100-600 BC.

© Oxford Archaeology East Page 34 of 47 Report Number 1410



#### A.2 Anglo-Saxon Pottery

By Dr Paul Spoerry

#### Introduction

A.2.1 Evaluations at Hazel End produced one context (27; from Trench 41) containing an Anglo-Saxon pottery assemblage (all hand-made).

#### Results

- A.2.2 The majority of the pottery is quartz-sand tempered (40 sherds), with just two sherds exhibiting vegetable temper. The quartz-tempered pottery includes four fabrics, the majority being two slightly micaceous types, one characterised by rounded, and one by angular, quartz grains. The former is mostly used for thin-walled vessels, whilst the latter are mostly much thicker-walled. All fabrics have dark colouration when reduced, suggesting a high organic content.
- A.2.3 Only four vessels are identifiable, two bowls in the darker, minority fabrics, and two jars in the more common fabrics. Other than some light burnishing/wiping, there are no further surface treatments or decorational/technological traits evident.

#### **Discussion**

- A.2.4 This pottery falls squarely in the local tradition seen in neighbouring Essex, of early to middle Saxon hand-made pottery being dominated by quartz sand tempered and vegetable tempered fabrics. It has been argued that fabric composition in Saxon pottery in Essex was much more variable earlier, but a tradition based on quartz sand and vegetable tempers strengthened during the 6th to 7th centuries, before the arrival of Ipswich wares in the 8th century (Cunningham 1982, 360; Hamerow 1993, 22-59). Unfortunately good, recent data to verify this assertion is not yet available. Publications including that for Rivenhall (Drury 1993, 77) provide some support. Evidence from sites in eastern Hertfordshire is, however, lacking.
- A.2.5 The forms in this assemblage are not diagnostic of period, other than being, perhaps, all globular, which might preclude a very early date. The lack of decoration, might also suggest a date after the 6th century.
- A.2.6 A later 6th or 7th century date is most likely for this group.

No Sherds Weight (g)		Fabric	Form & technology		
1	6	Abundant medium angular quartz. black matrix.	Bowl rim. Simple, slightly out-turned and external bead.		
1	7	Occasional medium, rounded quartz. Black matrix.	Bowl rim. Simple, upright. Internally burnished		
2	15	Common vegetable temper (chaff).	Body sherds.		

© Oxford Archaeology East Page 35 of 47 Report Number 1410



		Black matrix.	Some wiping/burnish externally.
13	80	Common v fine mica (sparkle). Occasional, medium, rounded quartz. Mostly dark grey-black, some with midbrown external surface.	BS – assorted vessels, mostly thin-walled. One neck from jar.
25	448	Mostly moderate to common coarse, angular white or clear quartz. Occasional very fine mica (sparkles). Mostly dark grey-black with mid-brown external surface.	Various thick-walled vessels.  1 x simple jar rim, slightly out-turned above neck. Thick base angles. Base with carbonised residue.

Table A3 : Angle-Saxon pottery

© Oxford Archaeology East Page 36 of 47 Report Number 1410



## A.3 Lithics Assessment

By Anthony Haskins

#### Introduction

A.3.1 An assemblage of 68 worked and burnt lithics were submitted for assessment from the site of Hazel End at Bishops Stortford

## Methodology

A.3.2 The material was rapidly assessed for typological and chronological indicators based on a simple classification system (Table A4).

### Quantification

A.3.3 The material was spread in small quantities across twenty five contexts. The majority of these contexts contained a small number of struck lithics. Contexts 2 and 39 contained the largest numbers with thirteen and eleven lithics respectively.

#### Results

- A.3.4 The majority of the flint within the assemblage is a mid grey-blue slightly patinated material with the occasional light blue-grey material. The material is generally formed of good quality flint but the angular shatter recovered suggests that at least some of the material was flawed.
- A.3.5 The cortex was a greyish white chalky material of varying thickness and is likely to have been derived from glacial deposition. The similarity of the flint to locally available flint suggests that the majority of the material was sourced on or near the site.
- A.3.6 The abraded nature of the material would suggest that it is primarily residual and the contexts it has been recovered from are likely to of a later date.
- A.3.7 The core technology was based around structured core working, removing successive blades and narrow flakes by well controlled soft hammer blows and indirect percussion. The core rejuvenation flake recovered has remnants of a well trimmed platform, combined with the core trimming flakes, it would suggest that the cores were well maintained with structured reduction strategies.
- A.3.8 The material was primarily formed from blades and narrow flakes with occasional larger flakes and a single retouched piece. The fragment of oblique arrowhead was on a light blueish grey flint with invasive retouch applied along the left lateral edge on both the ventral and dorsal surface.

#### **Discussion**

- A.3.9 The recovered assemblage contained a large number of narrow flakes and blades. The identifiable core technology suggests that the production was aimed at making flakes and blades.
- A.3.10 The assemblage base on this and the recovered oblique arrowhead fragment is likely to be of Early Neolithic date.

© Oxford Archaeology East Page 37 of 47 Report Number 1410



CONTEXT NO.			Totals	2	25	27	29	35	39	40	41	42	47	58	69	80	82	84	87	90	95	99	103	115	118	123	99999
TYPE	SUB TYPE	CLASSIFICATION																									
core technology	core																										
		core fragment	2				1																		1		
		core trimming	5	1	1			1			1										1						
flakes (>50mm)	secondary		3	1									1			1											
	tertiary		1								1																
	broken		2				1																	1			
flakes (>25mm <50mm)	secondary		16	1		1	1		6			1				1	1								3	1	
	tertiary		4	1																1		1					1
	broken		1	1																							
flakes (>10mm <25mm)	tertiary		1														1										
blades (all sizes)	secondary		2							1					1												
	tertiary		11	6		1			2												1		1				
	broken		11	2			2	1						2					1								3
chunks/angular shatter (>	•50mm)		4						2						1			1									
chunks/angular shatter (<	<50mm)		1						1																		
retouched tools		oblique arrowhea	1											1													
burnt flint (all types)			20					1															19				
Natural			1												1												
		Totals	86	13	1	2	5	3	11	1	2	1	1	3	3	2	2	1	1	1	2	1	20	1	4	1	4

Table A4: flint quantification totals

© Oxford Archaeology Page 38 of 47 Report 1410



## APPENDIX B. ENVIRONMENTAL REMAINS

By Rachel Fosberry

#### Introduction

B.1.1 Twelve bulk samples were taken from features within the excavated areas of the site in order to assess the quality of preservation of plant remains and their archaeobotanical potential. Features sampled include pits, post holes and ditches.

## Methodology

B.1.2 The total volume (up to sixteen litres) of each of the samples was processed by tank flotation for the recovery of charred plant remains, dating evidence and any other artefactual evidence that might be present. The flot was collected in a 0.3mm nylon mesh and the residue was washed through a 0.5mm sieve. Both flot and residue were allowed to air dry. The dried residue was passed through 5mm and 2mm sieves and a magnet was dragged through each resulting fraction prior to sorting for artefacts. Any artefacts present were noted and reintegrated with the hand-excavated finds. The flot was examined under a binocular microscope and the presence of any plant remains or other artefacts are noted on Table B1. Identification of plant remains is with reference to the Digital Seed Atlas of the Netherlands and the authors' own reference collection.

#### Quantification

B.1.3 For the purpose of this initial assessment, items such as seeds, cereal grains and small animal bones have been scanned and recorded qualitatively according to the following categories

```
# = 1-10, ## = 11-50, ### = 51+ specimens #### = 100+ specimens
```

Items that cannot be easily quantified such as charcoal, magnetic residues and fragmented bone have been scored for abundance

```
+ = rare, ++ = moderate, +++ = abundant
```

## Results

- B.1.4 The results are shown in Table B1.
- B.1.5 Preservation is by carbonization (charring) in which the plant remains have been burnt in a reducing atmosphere (such as in ovens/hearths). Sample 4 (fill 76 of post hole 77) and Sample 11 (fill 42 of ditch 44) are both rich in wood charcoal. Only Sample 1 (fill 27 of ditch 28) and Sample 9 (fill 95 of storage pit 98) contain charred plant remains in the form of a single charred cereal grain in Sample 1 and occasional charred cereals in Sample 9. Preservation of the grains is poor although the morphology of a few of the grains in Sample 9 allow identification of wheat (*Triticum* sp.) including spelt wheat (*T. spelta*) and diagnostic chaff elements of spelt glume bases are also present.

© Oxford Archaeology East Page 39 of 47 Report Number 1410



Sample No.		1	2	3	4	5	6	7	8	9	10	11	12
Context No.		27	60	56	76	75	86	87	80	95	104	42	118
Feature No.		28	61	57	77	68	88	88	81	98	102	44	119
Feature type		Ditch	Pit	Ditch	Pit	Ditch	Pit/ditch	Pit/ditch	Gully	Storage pit	Ditch	Ditch	Pit
Cereals													
Triticum sp. grain	wheat	#								#			
Triticum/Hordeum sp.grain	Wheat/bar ley									#			
Triticum spelta grain	Spelt wheat									#			
Triticum spelta glume base										#			
Cereal indet. grain										##			
Other plant macrofossils													
Charcoal <2mm		+			+++	++	+++	+	+	+++	+++	+++	+
Charcoal >2mm<10mm		+			+++	+	++			++	++	+++	+
Charcoal >10mm					++	+	+			+	+	++	
Volume of flot (millilitres)		1	1	5	30	10	15	1	2	15	30	50	30
Pottery										#			

Table B1. Environmental Sampling Results

## Discussion

B.1.6 The samples from Hazel End, Bishops Stortford have produced a small assemblage of cereal grains and charcoal. Spelt is the main type of wheat grown in the later Iron Age and Roman period as is seen on most sites of this date in East Anglia (Moulins & Murphy 1997, Greig 1981). Spelt is a hulled wheat in which the grain is tightly enclosed in spikelets. Spikelets of wheat are broken off of the cereal ear during the first stages of crop processing (threshing, winnowing and sieving) and are a convenient form in which to transport and store the wheat until it is required (Stevens, 2003). The second stage of crop processing involved parching and/or pounding the spikelet to release the grain. Parching of the spikelets often resulted in some of the grain becoming accidentally charred in the process and produces chaff elements including glume bases. The single assemblage of possible crop processing waste from Sample 9 is indicative of small-scale processing was carried out on site during this period. The inclusion of a moderate density of charred cereal grains could be interpreted as separate deposits of grain that have been accidentally burnt.

#### Conclusion

B.1.7 The assessment of environmental samples from Hazel End has shown that there is limited potential for the recovery of charred plant remains. If further excavations are planned for this area, it is recommended that a schedule for targeted environmental sampling should be appended to the updated project design. By extensive sampling it is possible that the nature of cereal waste and weed assemblages is likely to provide an

© Oxford Archaeology East Page 40 of 47 Report Number 1410



insight into to utilisation of local plant resources, agricultural activity and economic evidence from this period.

© Oxford Archaeology East Page 41 of 47 Report Number 1410



## Appendix C. Radiocarbon Dating Certificate



## Scottish Universities Environmental Research Centre

Director: Professor R M Ellam

Rankline Avenue, Sootlish Enterprise Technology Park, East Kilbride, Glasgow G75 0QF, Scotland, UK Tel: +44 (0)1355 223332 Fax: +44 (0)1355 229898 www.glasgow.ac.uk/suerc

#### RADIOCARBON DATING CERTIFICATE

08 October 2012

Laboratory Code SUERC-42262 (GU28583)

Submitter Rachel Fosberry

Oxford Archaeology East

15 Trafalgar Way

Bar Hill

Cambs. CB23 8SQ

Site Reference XHT HAZ 12

Context Reference 42 Sample Reference 11

Material Charcoal: -

õ¹³C relative to VPDB -28.1 ‰

Radiocarbon Age BP 3314 ± 26

N.B. The above <sup>14</sup>C age is quoted in conventional years BP (before 1950 AD). The error, which is expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standards, background standards and the random machine error.

The calibrated age ranges are determined using the University of Oxford Radiocarbon Accelerator Unit calibration program OxCal 4.1 (Bronk Ramsey 2009). Terrestrial samples are calibrated using the IntCal09 curve while marine samples are calibrated using the Marine09 curve.

Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to the Radiocarbon Laboratory should also quote the GU coding given in parentheses after the SUERC code. The contact details for the laboratory are email <a href="mailto:g.cook@suerc.gla.ac.uk">g.cook@suerc.gla.ac.uk</a> or Telephone 01355 270136 direct line.

Conventional age and calibration age ranges calculated by :- Date :-

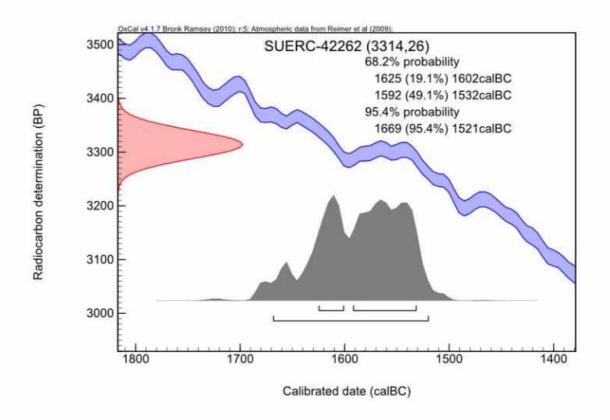
Checked and signed off by :- Date :-







## **Calibration Plot**



© Oxford Archaeology East Page 43 of 47 Report Number 1410



# APPENDIX D. BIBLIOGRAPHY

Barrett, J.	1980	The pottery of the later Bronze Age in lowland England. <i>Proceedings of the Prehistoric Society</i> 46, 297-319.
Bartlett, A.D.H	2012	Land at Hazel End, Bishop's Stortford, Hertfordshire: Report on Archaeological Geophysical Survey
Brudenell, M.	2011	Late Bronze Age and Early Iron Age pottery in Norfolk - A review. In J Davies (ed.), <i>The Iron</i> <i>Age in Northern East Anglia: New Work in the</i> <i>Land of the Iceni</i> , 11-24. Oxford: British Archaeology Reports, British Series 549
Brudenell, M.	2012	Pots, Practice and Society: an investigation of pattern and variability in the Post-Deverel Rimbury ceramic tradition of East Anglia. Unpublished doctoral thesis, University of York
		R.T.J. Cappers, R.M. Bekker and J.E.A. Jans, 2006, Digital Seed Atlas of the Netherlands Groningen Archaeological Studies 4, Barkhuis Publishing, Eelde, The Netherlands. www.seedatlas.nl
Cunningham, C. M	1982	Medieval and post-medieval pottery, in Drury, P.J., Aspects of the Origins and Development of Colchester Castle', <i>Archaeol J.</i> 139, 302-419.
Fletcher, T.	2012	Land at Hazel End, Bishops Stortford, Hertfordshire: Desk-Based Assessment
Fletcher, T.	2012	Specification for Archaeological Evaluation : Land at Hazel End, Bishops Stortford, Hertfordshire
Greig, J	1991	The British Isles, pp 299-332, in: Van Zeist, Wasylikowa and Behre (eds), <i>Progress in Old World Palaeoethnobotany</i> , Rotterdam
Hamerow, H	1993	Excavations at Mucking, Vol. 2: The Anglo- Saxon Settlement. English Heritage
Hillman, G. C.	1981	Archaeological Report 21, London.  Reconstructing crop husbandry practices from charred remains of crops. In R. Mercer (ed.)  Farming practice in British prehistory, 123- 162. Edinburgh, Edinburgh University Press.



Moulins, de, D., and Murphy P.,	2001	Review of plant macrofossils from sites in the East of England and the East and West Midlands. Draft report, English Heritage
Needham, S.P.	2007	800 BC, The Great Divide. In C. Haselgrove and R. Pope (eds), <i>The Earlier Iron Age in Britain and the near continent</i> , 39-63 Oxford: Oxbow
Prehistoric Ceramics Research Group (PCRG)	1997	The Study of Later Prehistoric Pottery: General Policies and Guidelines for Analysis and Publication. Oxford: Prehistoric Ceramics Research Group occasional Papers 1 and 2 (second edition)
Rodwell, W. J.	1993	The early Anglo-Saxon Pottery in W. J. Rodwell and K.A. Rodwell, <i>Rivenhall: Investigations of a Villa, church and village</i> 1950-1977, CBA Research report No. 80. 73-78.
Stace, C.,	1997	New Flora of the British Isles. Second edition. Cambridge University Press
Stevens, C. J.	2003	An investigation of consumption and production models for prehistoric and Roman Britain, Environmental Archaeology, 8, 2003, 61-76

Websites Consulted www.http://mapapps.bgs.ac.uk www.landis.org.uk/soilscapes www.heritagegateway.org.uk

© Oxford Archaeology East Page 45 of 47 Report Number 1410



# APPENDIX E. OASIS REPORT FORM

Project Det	ails											
OASIS Num	nber	oxford	dar3-13537	0								
Project Nan	ne [	Archae	eological Ev	valuation on La	nd at Hazel	End, Bi	shops Stor	ford, H	Herts			
Project Date	es (field	lwork)	Start	20-08-2012			Finish	07-09	9-201	2		
Previous W	ork (by	OA E	ast)	Yes			Future	Work	Unl	known		
Project Refe	erence	Code	es									-
Site Code	XHTHA	Z12			Planning	g App.	No.	r	n/a			
HER No.	n/a				Related	HER/	OASIS N	o. r	n/a			
Type of Pro	iect/Te	chnia	ues Use	d	l							
Prompt	,			Local Planning	g Authority -	- PPS 5						
Developmen	nt Type	Ru	ıral Resider	ntial	-							
Please sel	oct all	toch	niaues	neoq.								
			-						_			
Aerial Photo			etation	∐ Grab-Sa						ote Operated Vehic	cle Surve	;y
Aerial Photo		- new		Gravity-C						le Trenches	- l: /O4	4
Annotated S	Sketch			Laser Sc	_					ey/Recording Of Fa	adric/Stru	icture
☐ Augering					d Survey					eted Trenches		
Dendrochro	_		у	Metal De				_	Test F			
Documenta				_ `	te Survey			_		graphic Survey		
Environmer		oling		_	mmetric Su			_	√ibro-		0:1- \/:-	
Fieldwalkin	_				phic Survey			Ш,	visua	I Inspection (Initial	Site vis	π)
Geophysica	al Survey			☐ Rectified	Photograph	ny						
List feature typ	es using	the N	MR Mon	nds & Their ument Type ve periods. If no	e Thesau	<b>Irus</b> an	-			g the MDA Obj	ect typ	е
Monument			Period		(	Object			1	Period		
Ditch			Bronze A	ge -2.5k to -70	0	Pottery	,			Bronze Age -2.5	to -700	
Ditch			Early Me	dieval 410 to 1	066	Lithics				Neolithic -4k to -2	2k	
Pit			Bronze A	ge -2.5k to -70	0	Pottery	,			Iron Age -800 to	43	
Project Lo	ocatio	n										
County	Hertfor	rdshire			S	Site Ad	dress (in	cludir	ng po	ostcode if poss	sible)	
District	East H	lertfords	shire				t Hazel End s Stortford	l,				
Parish	Bishop	s Storti	ford				CM232FN					
HER	Hertfor	rdshire										
Study Area	25.8ha				N	Nationa	al Grid Re	efere	nce	TI 549429 223°	195	



## **Project Originators**

Organisation	OA EAST
Project Brief Originator	Hertfordshirte Historic Environment Unit
Project Design Originator	Taleyna Fletcher
Project Manager	Richard Mortimer
Supervisor	Taleyna Fletcher

## **Project Archives**

Physical Archive	Digital Archive	Paper Archive
Herts Museum Service	OA East Offices, Bar Hill	Herts Museaum Service
XHTHAZ12	XHTHAZ12	XHTHAZ12

## **Archive Contents/Media**

	Physical Contents	Digital Contents	Paper Contents
Animal Bones			
Ceramics	×	×	×
Environmental	×	×	×
Glass			
Human Bones			
Industrial			
Leather			
Metal			
Stratigraphic			
Survey		×	×
Textiles			
Wood			
Worked Bone			
Worked Stone/Lithic	×	×	×
None			
Other			

Digital Media	Paper Media
Database	Aerial Photos
<b>⋉</b> GIS	Context Sheet
Geophysics	▼ Correspondence
X Images	Diary
▼ Illustrations	▼ Drawing
☐ Moving Image	Manuscript
Spreadsheets	□ Мар
<b>▼</b> Survey	Matrices
<b>▼</b> Text	Microfilm
☐ Virtual Reality	☐ Misc.
	▼ Research/Notes
	▼ Photos
	▼ Plans
	▼ Report
	▼ Sections
	Survey

Notes:

© Oxford Archaeology East Page 47 of 47 Report Number 1410



Limit of Excavation
Deposit - Conjectured
Sondages/Machine Strip
Intrusion/Truncation
Illustrated Section S.14
Archaeological Feature
Archaeological Deposit
Excavated Slot
Natural Feature
Root
Charcoal
Stone
Cut Number 118
Deposit Number 118
Sample Number 200
Sections
Limit of Excavation
Cut -
Cut Conjectured
Deposit Horizon
Deposit Horizon Conjectured
Intrusion/Truncation
Top Surface/Top of Natural
Break in Section/ Limit of Section Drawing
Cut Number 117
Deposit Number 117
Ordnance Datum $\frac{18.45 \text{m OD}}{7}$
Stone

Convention Key

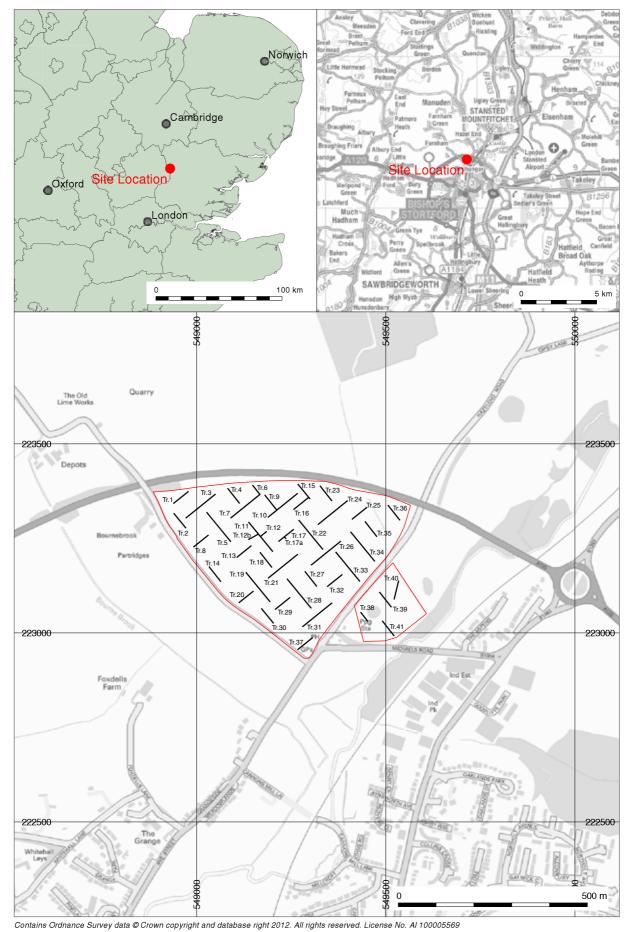


Figure 1: Site location with trenches (black) and development area outlined (red)



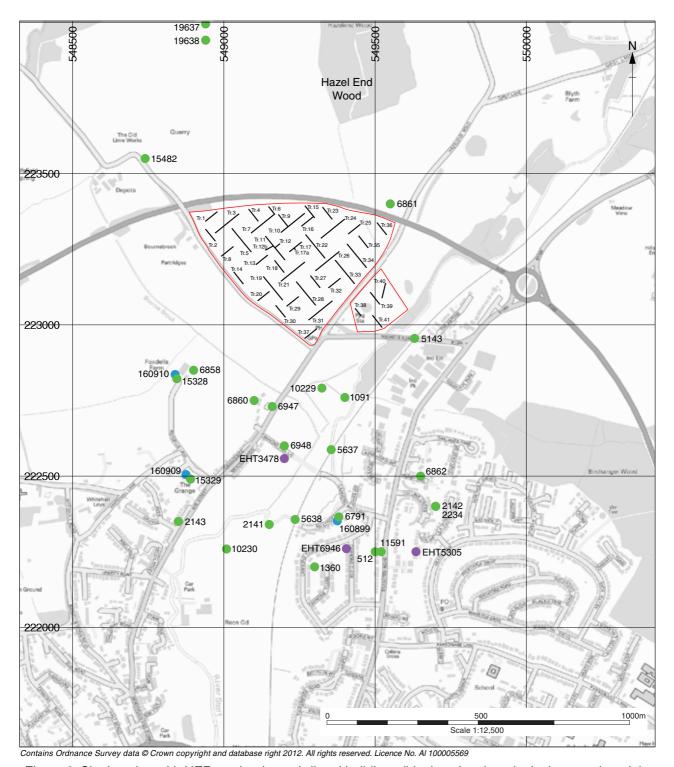


Figure 2: Site location with HER entries (green), listed buildings (blue) and archaeological events (purple).



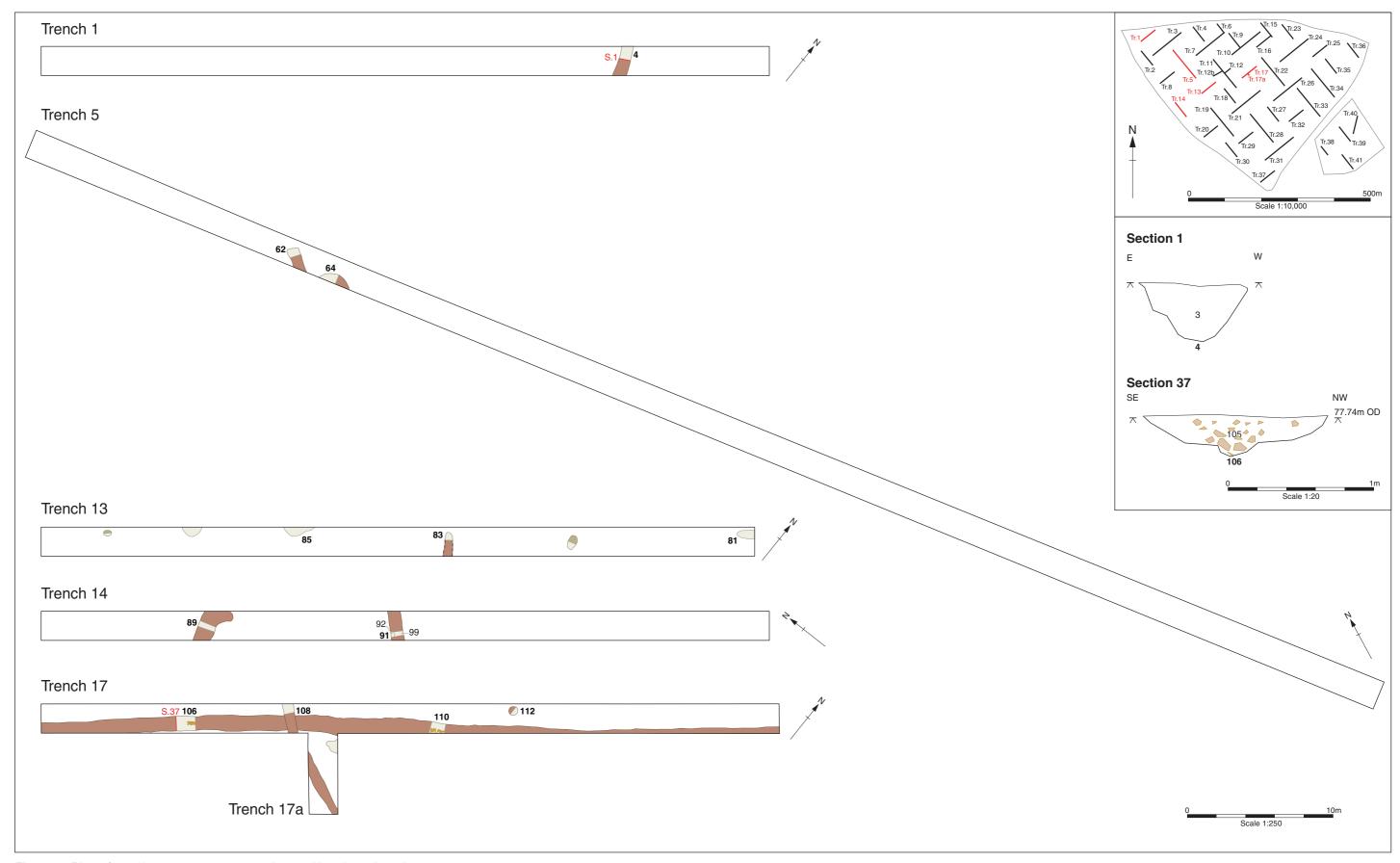


Figure 3: Plan of trenches 1, 5, 13, 14, 17 and 17a with selected sections



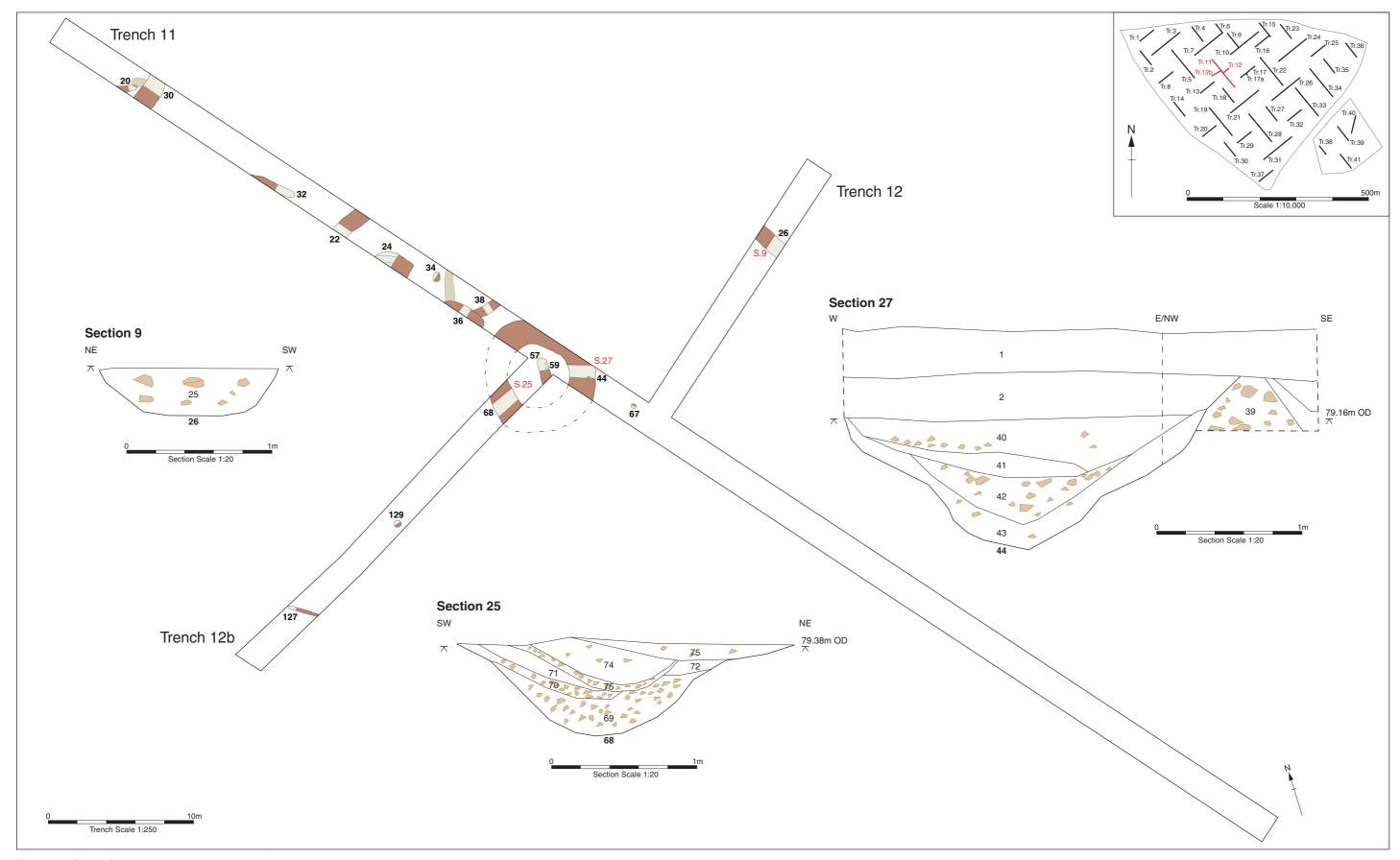


Figure 4: Plan of trenches 11, 12 and 12b with selected sections



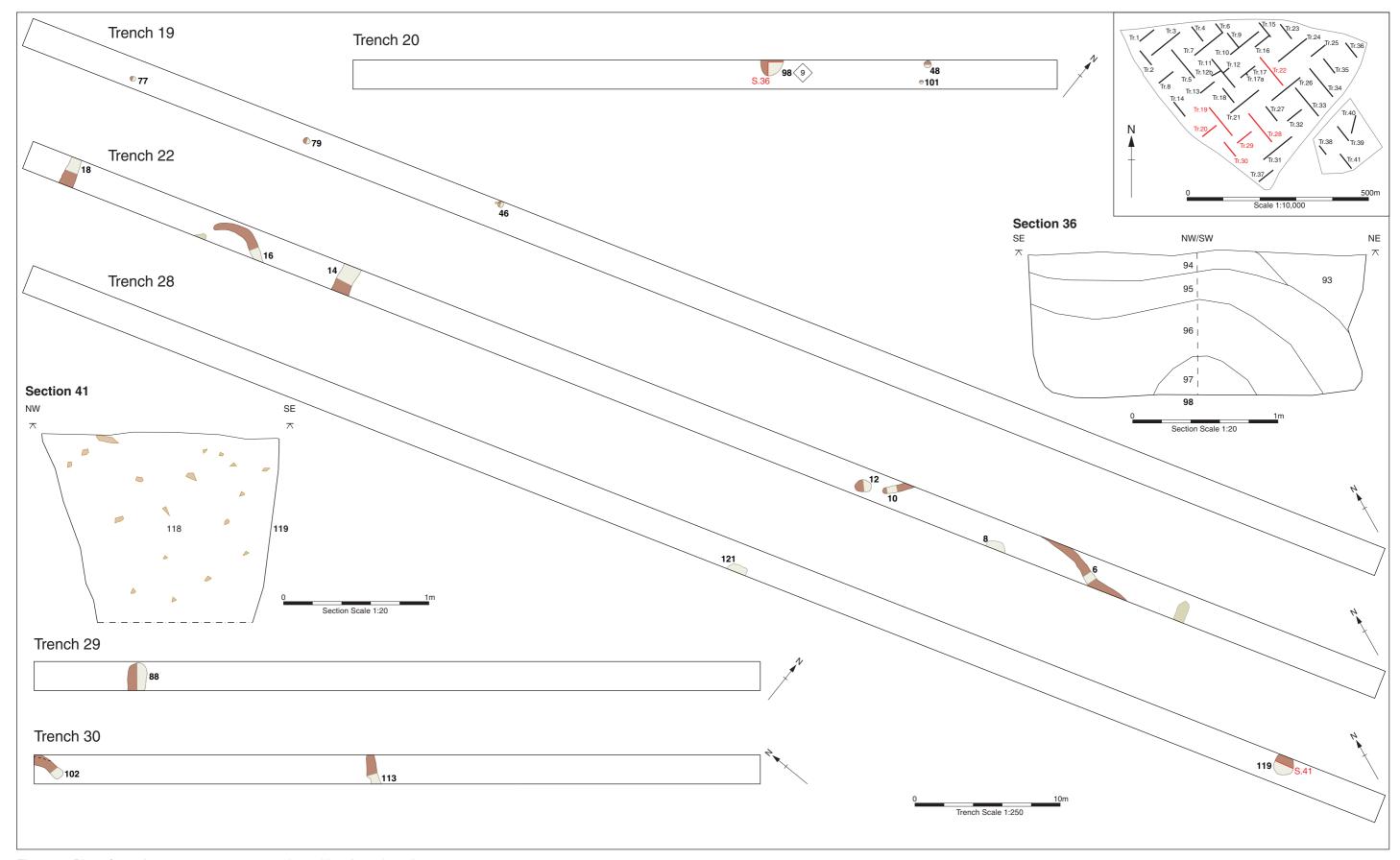


Figure 5: Plan of trenches 19, 20, 22, 28, 29 and 30 with selected sections



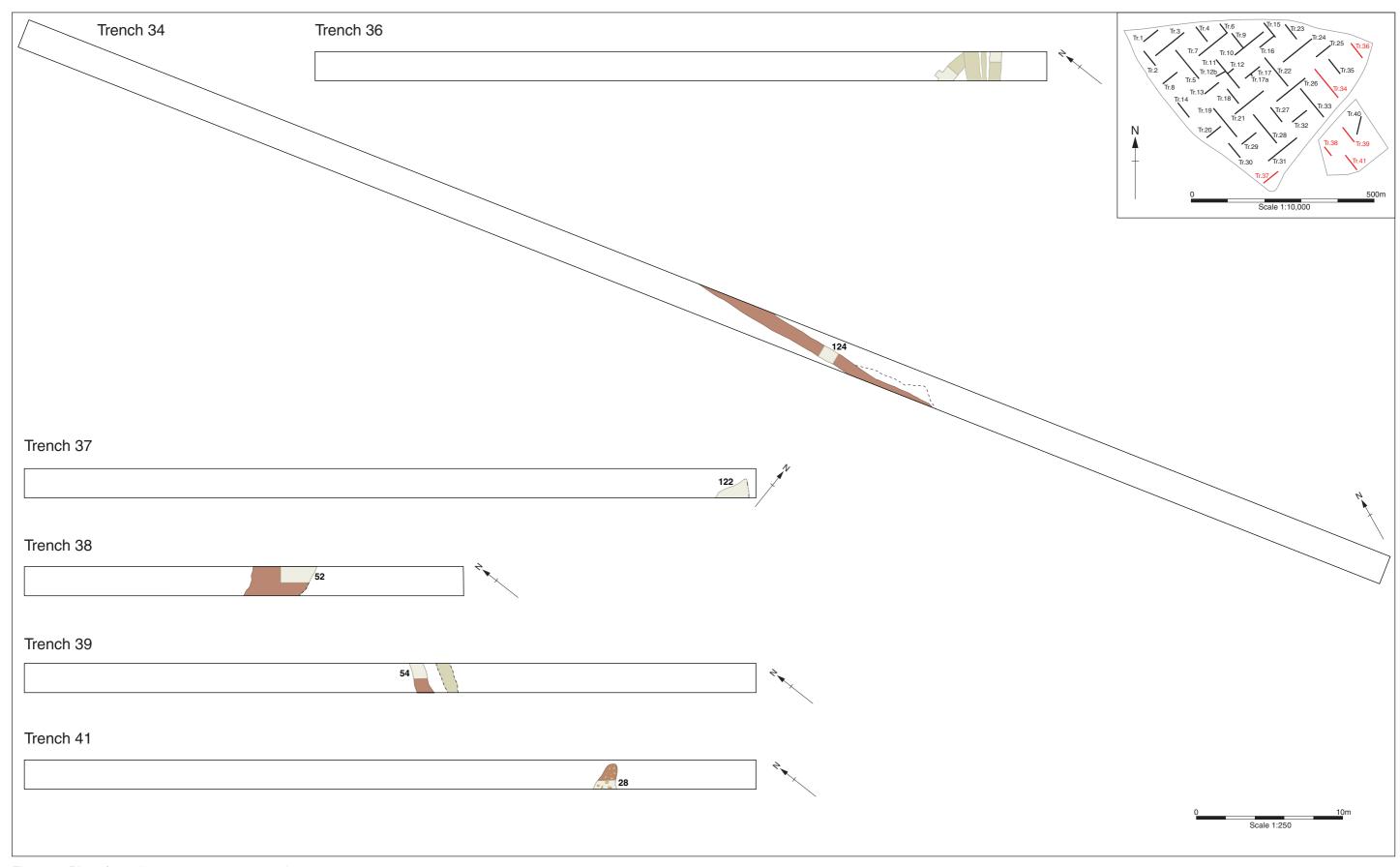


Figure 6: Plan of trenches 34, 36, 37, 38, 39 and 41



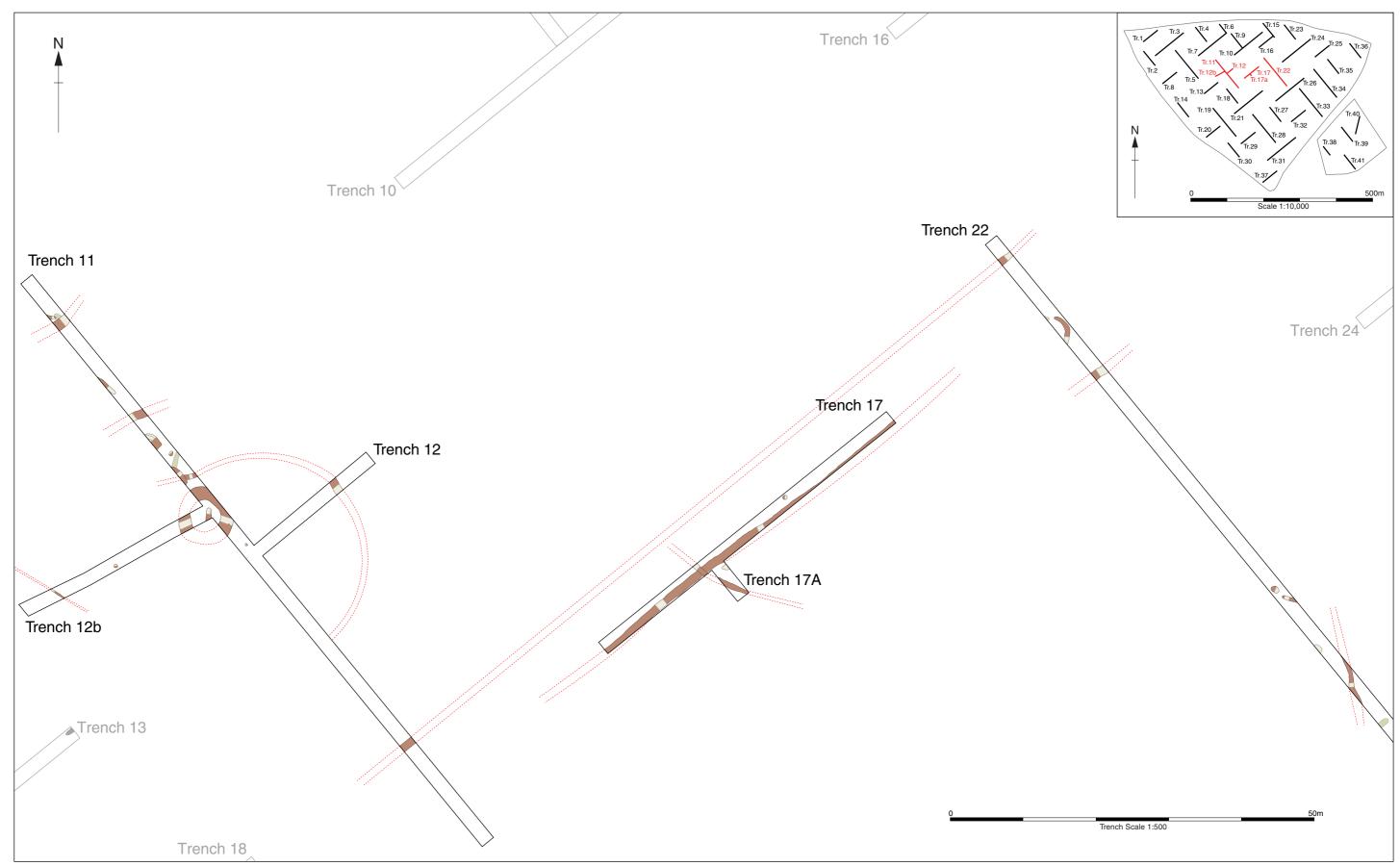


Figure 7: Plan of trenches within area of concentrated archaeology, showing suggested continuation of ditches





Plate 1: Trench 1



Plate 3: Trench 4



Plate 2: Ditch 04, Trench 1



Plate 4: Trench 5





Plate 5: Trench 6



Plate 7: South-west facing section, Trench 7



Plate 6: Trench 7



Plate 8: Trench 10





Plate 9: Pre-excavation shot of ring ditch, Trench 11



Plate 10: Ring ditch 44, Trench 11



Plate 11: Trench 12b



Plate 12: Ring ditch 68, Trench 12b





Plate 13: Trench 15



Plate 14: Storage pit 98, Trench 20



Plate 15: Ditch 16, Trench 22



Plate 16: Ditch 14, Trench 22





Plate 17: Trench 25



Plate 19: Trench 28



Plate 18: Trench 26



Plate 20: Storage pit 119, Trench 28









Plate 22: Sample of Saxon pottery sherds recovered from Context 27, Trench 41



## Head Office/Registered Office/ OA South

Janus House Osney Mead Oxford OX2 0ES

t: +44(0)1865 263800 f: +44(0)1865 793496

e:info@oxfordarchaeology.com w:http://oxfordarchaeology.com

## **OA North**

Mill 3 Moor Lane Lancaster LA11GF

t:+44(0)1524 541000 f:+44(0)1524 848606 e:oanorth@oxfordarchaeology.com w:http://oxfordarchaeology.com

## **OA East**

15 Trafalgar Way Bar Hill Cambridgeshire CB23 8SQ

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



**Director:** Gill Hey, BA PhD FSA MIFA Oxford Archaeology Ltd is a Private Limited Company, N<sup>O</sup>: 1618597 and a Registered Charity, N<sup>O</sup>: 285627