

Highwood Quarry, Little Easton, Essex Archaeological Excavation Report

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Prepared by: Tom Collie (Project Officer)

Checked by: Matt Brudenell (Senior Project Manager)

Edited by: Graeme Clarke (Post-Excavation Project Officer)

Approved for Issue by: Elizabeth Popescu (Head of Post-excavation and Publications)

Signature:

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OA South OA East Janus House 15 Trafalgar Way Osney Mead Bar Hill Oxford Cambridge OX2 0ES **CB23 8SQ**

t. +44 (0)1865 263 800 t. +44 (0)1223 850 500 t. +44 (0)1524 880 250

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











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OA North

Moor Lane

Lancaster LA1 10D

Moor Lane Mills

Mill 3

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Highwood Quarry, Little Easton, Essex

Archaeological Excavation Report

Written by Tom Collie MA MCIfA

With contributions from Laurence Billington MA PhD, Matthew Brudenell BA PhD, Carlotta Marchetto MA PCIfA, Zoe Ui Choileain MA MSc BABAO and Martha Craven BA PCIfA

Illustrations by David Brown BA

Contents

Sumr	mary	vii
Ackno	owledgements	viii
1	INTRODUCTION	1
1.1	Scope of work	1
1.2	Location, topography and geology	1
1.3	Archaeological and historical background	1
2	EXCAVATION AIMS AND METHODOLOGY	5
2.1	Aims	5
2.2	Site Specific Research Objectives	5
2.3	Regional Research Aims	5
2.4	Fieldwork Methodology	5
3	RESULTS	7
3.1	Introduction and presentation of results	7
3.2	General soils and ground conditions	7
3.3	Overview of results	7
3.4	Phase 1: Middle Iron Age (c.350-100/50BC)	8
3.5	Phase 2: Late Iron Age (c.100/50BC-AD50)	11
3.6	Finds and environmental summary	11
4	DISCUSSION	14
4.1	Introduction	14
4.2	Residual Neolithic and Bronze Age flintwork	14
4.3	Middle Iron Age remains	14
4.4	Late Iron Age remains	15
4.5	Medieval park development	16
4.6	Significance	16
5	PUBLICATION AND ARCHIVING	17

Highwo	od Quarry, Little I	Easton, Essex	Final
5.1	Publication		17
5.2	Archiving, ret	ention and dispersal	17
APPE	NDIX A	CONTEXT INVENTORY	18
APPE	NDIX B	FINDS REPORTS	21
B.1	Metalwork		21
B.2	Flint		21
B.3	Iron Age Pott	ery	22
B.4	Fired clay		27
APPE	NDIX C	ENVIRONMENTAL REPORTS	29
C.1	Faunal remai	ns	29
C.2	Environment	al Remains	32
APPE	NDIX D	BIBLIOGRAPHY	35
APPE	NDIX E	OASIS REPORT FORM	38

Final



List of Figures

Highwood Quarry, Little Easton, Essex

ig. 1	Site location map
ig. 2	HER entries within 1.5km of site location
ig. 3	Excavation location map with previous excavation results from 2007
ig. 4	Phased archaeology complete with samples
ig. 5	Sections
ig. 6	Overview of Iron Age sites excavated west of Great Dunmow

Appendix B.3 Figure

Fig. B.3.1 Middle Iron Age pottery

List of Plates

Plate 1	Ditches 572 and 575 looking north
Plate 2	Ditches 520 and 522 looking southeast
Plate 3	Ring ditch 565 looking south southeast
Plate 4	Ring gully 510 looking south southeast
Plate 5	Ring gully 524 looking east
Plate 6	Ring gully 555 looking west
Plate 7	Pits 546 and 549 looking northeast



Summary

Between the 31st August and 25th September 2020, OA East conducted an archaeological evaluation of land at Highwood Quarry, Little Easton, Essex. This was remediation work to inform the Planning Authority, ECCPS, on the archaeological character of the land at the quarry which was marked for mineral extraction.

A small sub-rectangular area was excavated revealing two phases of Iron Age archaeological remains. The first phase uncovered two Iron Age roundhouse ring gullies, which respected the alignment of a co-axial ditch system. These were surrounded by outlying pits. The second archaeological phase was represented by two overlying and parallel running northwest/southeast linear features. One small modern pit was located at the eastern side of the excavation area. Pottery recovered from Phase 1 was exclusively dated to the Middle Iron Age period with Phase 2 pottery dated to between the Late Iron Age and Early Romano-British period.

The site is a significant addition to the groups of previously investigated Iron Age settlement remains excavated at Highwood Quarry and to the west of Great Dunmow which demonstrate the presence of shifting foci of domestic activity across this period within this locality.



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The project was managed for OA East by Matt Brudenell. The fieldwork was directed by Tom Collie, who was supported by Ed Worsely and Rose Britton. T. Thanks are also extended to the teams of OA staff that cleaned and packaged the finds under the management of Natasha Dodwell, processed the environmental remains under the supervision of Rachel Fosberry, and prepared the archive under the direction of Katherine Hamilton. Thanks are also extended to the various specialists and the editor for their contributions.



1 INTRODUCTION

1.1 Scope of work

- 1.1.1 Between the 31st August and 25th September 2020, Oxford Archaeology East (OA East) carried out excavations at Highwood Quarry, Little Easton, Essex (NGR TL 6008 2268; Fig. 1). Andrew Josephs Associates commissioned and funded this archaeological work on behalf of SRC Aggregates in respect to a proposed extension to the quarry site (Planning Application: ESS/65/06/58, Condition 58). This excavation was undertaken in accordance with an approved Written Scheme of Investigation (WSI) prepared by OA East (Brudenell 2020), the preparation of which was informed by a Brief issued by Richard Havis of Essex County Council Place Services (ECCPS (formerly Historic Environment Management Team); Havis 2008).
- 1.1.2 The 0.35ha excavation area follows on from previous phases of trial trench and excavation work at Highwood Quarry by the Essex County Council Archaeological Field Unit, specifically excavation Area 4 detailed in the Brief (ECC/AFU; Hickling 2001; Robertson 2007; Miciak 2012; Site Code LEEA1). This area also corresponds with Area 1 of the 2007 evaluation which encompassed Trenches 149 and 159 (Robertson 2007). These previous works revealed a concentration of Early Iron Age gullies, ditches and pits which yielded a range of artefacts consistent with settlement activity of the period. The current excavation encompassed these remains.
- 1.1.3 The site archive is currently held by OA East and will be deposited with Saffron Walden Museum under the Accession No. SAFWM: 2021.9 in due course.

1.2 Location, topography and geology

- 1.2.1 Highwood Quarry lies to the north of Stortford Road, c.900m from the junction of the A120 and the B1256 in Little Easton. It is situated on the edge of High Wood and occupies part of the former Little Easton Airfield on the Easton Estate. The excavation area is located to the east of the existing quarry works on agricultural land north of one of the former airfield's concrete tracks. Concrete access roads lay to the north and south of the site with grassland extending to the east and west. A very large mature oak tree (c.100-200 years of age) was situated a short distance beyond the western excavation limit.
- 1.2.2 The bedrock geology of the area is mapped as London Clay overlain by superficial glacial till/Diamicton of the Lowerstoft Formation. The 2007 evaluation of the site revealed subsoil to vary between pale yellow-brown chalky clay to orange brown clay, capped by dark grey brown clay loam topsoil, totalling c.0.2-0.4m thick.

1.3 Archaeological and historical background

1.3.1 The archaeological and historical background of the site is based on a 1.5km search of the Essex Historic Environment Record (EHER) supplemented by information from the Brief (Havis 2008), previous archaeological work carried out on the site by ECC/AFU (Hickling 2001; Robertson 2007; Miciak 2012) and along the route of the A120



carriageway by Oxford Wessex Archaeology (Timby et al. 2007). Pertinent records are shown on Figure 2.

Prehistoric

- 1.3.2 The quarry site is located 1.9km southwest of the River Chelmer and 450m northeast of a tributary of the River Roding. Prehistoric settlement is well attested in the vicinity of these water courses. Evidence for prehistoric activity has previously been excavated at the quarry site (Hickling 2001; Robertson 2007; Miciak 2012). Flintwork, including an arrowhead dating from the Mesolithic/Neolithic and earlier Bronze Age periods was recovered (EHER 19543 and EHER 46482). A Neolithic chisel has also been found (EHER 1378). The assemblage attests to a background presence of later prehistoric activity in the local landscape.
- 1.3.3 The evaluation of Area 4 of Highwood Quarry revealed traces of sustained occupation in the form of pits, gullies and ditches dated to the Early Iron Age and produced finds including pottery, animal bone and fired clay. The 2012 excavations at Hanwood Quarry (c.700m west of the site) uncovered Late Iron Age ditches in Areas 2 and 3 which produced large quantities of pottery indicative of nearby settlement, some of which consisted of pre-conquest continental imports, to suggest the site having been of high status (Miciak 2012; Site Code LEEA1).
- 1.3.4 Archaeological excavations along the A120 corridor to the south of the site found a Late Bronze Age site comprising field boundaries, droveway ditches, pits, postholes and a dispersed group of unurned cremation burials (EHER 45259) with a quarry pit of the period found further east (EHER 45260). A field walking project on the same road corridor recovered prehistoric burnt and struck flint flakes (EHER 14481).

Roman-British

- 1.3.5 Evidence for Romano-British settlement is present south of the site. A Late Iron Age and Roman farmstead was excavated at the junction of the A120 and B1256 at Strood Hall (EHER 19455). Features consisted of plough truncated cut features which included ditches along with a lesser number of gullies and pits. These features represented simple domestic and agricultural structures with associated yards, paddocks and infields.
- 1.3.6 To the west of the Highwood Quarry, finds and features associated with a probable Roman farmstead/villa complex and road were revealed during work on the Cambridge to Matching Green Pipeline (EHCR 9140, not illustrated). A geophysical survey conducted nearby the quarry site revealed enclosures, pits and other anomalies of potentially Roman date. A hoard of coins, denarii of Postumus, Gallienus, Tetricus and Victorinus (dated 259-273AD), was found on Lord Maynard's Estate at the northern end of the quarry site (EHER 1369).
- 1.3.7 The Roman road of Stane Street passes south of the quarry site and is described in the EHER as almost certainly representing a Roman reconstruction and metalling of an earlier trackway (EHER 4698).



Medieval

- 1.3.8 Several EHER listings within the study area belonged to the medieval period. Little and Great Easton are mentioned as a settlement in Domesday in the Hundred of Dunmow. It had a recorded population of 86 households in 1086, which put it in the largest 20% of recorded settlements. Little Easton manor (EHERs 1213-14) was listed in Domesday as having belonged to William de Warenne and Geoffrey de Mandeville. There is a moat to the south east of the present house which may be remains of a defensive earthwork, bailey or ringwork around the church and former manor. Cropmarks associated with Little Easton manor are also described by EHER 46571.
- 1.3.9 Highwood Quarry lies within the original extent of the landscaped grounds of Little Easton Lodge, an Elizabethan Manor dating from 1594 (EHER 9139, not illustrated). The grounds were managed woodland from the 12th century and probable formed part of the estate at its founding in the 14th century. By 1565 a Deer Park had been established and the first lodge built. The park was landscaped during the 16th century with further alterations over the following centuries. Several buildings associated with the park are identified on the 1st edition Ordnance Survey maps. Several of these buildings lay within the footprint of the present quarry site with others demolished during the construction of the former airfield (see below).
- 1.3.10 The first phase of archaeological trial trenching work at the quarry in 2001 revealed pits with 13th century pottery in Trench 32, together with other possible medieval and post-medieval features in Trenches 26 (EHER 19543-4). The subsequent excavation of Areas 2 and 3 in 2011 (Miciak 2012) revealed parts of an 11th to 12th century ditched enclosure system together with a small number of contemporary pits and linear boundaries. These features are thought to have been associated with medieval settlement at Stone Hall to the southwest (EHER 4643 and 37964), a 14th century timber framed house.
- 1.3.11 Other heritage assets listed by the EHER in the study area include the Church of St Mary the Virgin (EHERs 1215-16 and 37979), the nave of which was built in the early 12th century. The chancel was rebuilt and a south chapel added c.1230. The south chapel was rebuilt and the west tower added in the late 15th century. Reused Roman brick was noted in the flint stone dressing of its construction.

Post-medieval

1.3.12 Post-medieval heritage assets listed by the EHER consist of existing buildings congregating around the church and manor of Little Easton. These buildings include: a timber framed barn dating from the 16th century (EHER 37978); Easton Manor itself (EHER 37835) comprised of 17th and 19th century timber framed buildings; a 17th century timber framed lodge house (EHER 37980); 18th century outbuildings (EHER 37976); an 18th century stocks and whipping post added to the garden of Easton Lodge (EHER 1218); an 18th century timber framed stable range (EHER 37977); a 19th century almshouse built by the Countess of Warwick (EHER 37984); and a 19th century vestry and organ chamber added to the church (EHER 1217). Two undated rectangular fishponds (EHER 14066) close to Little Easton Manor itself, which undoubtedly were constructed in and around the same time period and associated with it.



1.3.13 Further afield, a timber framed 17th century house named The Old Library (EHER 37834) is located approximately 600m to the east of the church on Park Road.

Modern

1.3.14 Modern heritage assets were all associated with World War II. A brick and concrete pillbox (type fw3/22; EHER 10476) was located south of Park Road. Parkland of the Eastern Lodge Estate was requisitioned for the construction of RAF Great Dunmow airfield in 1942 (EHER 14070). This was used by both the Royal Air Force and United States Army Air Forces primarily as a bomber airfield which became operational in 1943. The airfield included runways, an administrative site, technical areas and bomb stores. The airfield was closed in 1948 and was de-requisitioned in 1956. In the 1960s parts of the runways and aircraft dispersal loops were removed and much of the site returned to agricultural use.

Undated heritage assets

1.3.15 A small number of undated cropmarks are listed by the EHER in the study area which may be of interest. A small number of these are located north of Ravens Farm which include a ring ditch and a faint, broad linear feature, aligned northwest to southeast, that possibly represents the course of a former road (EHER 1360). Other undated cropmarks are listed as EHERs 14075, 14080-1, 14390 and 18293.



2 EXCAVATION AIMS AND METHODOLOGY

2.1 Aims

- 2.1.1 The original aims of the project were set out in the Brief (Havis 2008) and Written Scheme of Investigation (Brudenell 2020). The main aims of this excavation were:
- 2.1.2 To preserve by record the archaeological evidence contained within the footprint of the development area, prior to damage by development, and investigate the origins, date, development, phasing, spatial organisation, character, function, status, and significance of the remains revealed, and place these in their local, regional and national archaeological context.

2.2 Site Specific Research Objectives

- 2.2.1 The archaeological Brief identified four site specific aims for excavation within Highwood Quarry (Havis 2008), of which the first three are pertinent to Area 4 which encompasses the current excavation area, and were as follows:
 - i. to define the nature and longevity of the settlement in the area;
 - ii. to establish the nature of occupation of this area in comparison to the other sites in the area; and
 - iii. to identify and interpret any features relating to the park development.

2.3 Regional Research Aims

2.3.1 The site specific objectives were drawn from, and will contribute to, the goals of Regional Research Frameworks relevant to this area:

Research and Archaeology: A Framework for the Eastern counties: 1. Resource Assessment (Glazebrook 1997, East Anglian Archaeology Occasional Papers 3);

Research and Archaeology: A Framework for the Eastern counties: 2. Research Agenda and Strategy (Brown & Glazebrook 2000, East Anglian Archaeology Occasional Papers 8);

Research and Archaeology Revisited: A Revised Framework for the East of England (Medlycott 2011, East Anglian Archaeology Occasional Papers 24); and

Brudenell, M. (2018). Late Bronze Age to Middle Iron Age, c. 1150-100 BC. East Anglian Research Framework Review (summary paper for discussion). http://eaareports.org.uk/algao-east/regional-research-framework-review/

2.4 Fieldwork Methodology

- 2.4.1 The methodology used followed that detailed in the WSI (Brudenell 2020) which required that approximately 0.35ha in total be machine stripped to the level of natural geology or the archaeological horizon.
- 2.4.2 The excavation targeted 'Area 1' of the 2007 ECC/AFU evaluation (Robertson 2007). The proposed area was decreased in size at the north-western corner due to the presence of a quarry access road that was still in use.



- 2.4.3 The area was set out using a Leica survey-grade GPS fitted with "smartnet" technology with an accuracy of 5mm horizontal and 10mm vertical. Before trenching began, the excavation area was scanned by a qualified and experienced operator using a CAT that had a valid calibration certificate.
- 2.4.4 All trenches were excavated by a mechanical excavator to the depth of the geological horizon, or to the upper interface of archaeological features or deposits, whichever was encountered first. A toothless ditching bucket with a bucket width of 2m was used to excavate the trenches.
- 2.4.5 Topsoil, subsoil, and archaeological deposits were kept separate during excavation, to allow for sequential backfilling in the future.
- 2.4.6 The top of the first archaeological deposit was cleared by machine and then cleaned off by hand. Any archaeological deposits present were then excavated by context to the level of the geological horizon where safe to do so.
- 2.4.7 Spoil, exposed surfaces and features were scanned with a metal detector. All metaldetected and hand-collected finds were retained for inspection, other than those which were obviously modern.
- 2.4.8 All archaeological features and deposits were recorded using OA'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.
- 2.4.9 Samples were taken where deemed appropriate by the archaeologist and in line with current OA East sampling strategies.



3 RESULTS

3.1 Introduction and presentation of results

- 3.1.1 The results of the excavation are presented below and include a stratigraphic description of the archaeological remains. Details of all contexts are included in Appendix A, Table 1, with finds and environmental reports presented in Appendices B and C respectively.
- 3.1.2 An excavation plan showing all cut numbers and groupings of features alongside the previous evaluation excavation is presented as Figure 3. A phased excavation plan with grouping of features is presented as Figure 4. Selected sections are included as Figure 5. Photographs of a selection of features are indicated in Plates 1-7.
- 3.1.3 Two periods of activity have been identified:

Phase 1: Middle Iron Age (c.350-100/50BC)

Phase 2: Late Iron Age (c.100/50BC-AD50)

3.1.4 A single pit was encountered in the eastern part of the excavation which was filled with recently discarded iron metal waste. As this clearly modern feature does not contribute to the suite of research aims set out in Section 2 it will not be discussed further. Occasional pieces of metal and small patches of dark gravel within the subsoil were possibly a result of the former use of the site as a World War II airfield. No evidence for above or below ground structures or discarded ordinance associated with RAF Great Dunmow were found during the excavation.

3.2 General soils and ground conditions

- 3.2.1 The natural geology consisted of hard light brown grey clay with abundant small fragments of chalk throughout as well as occasional small patches of mid orange grey clay. It was overlain by subsoil consisted of dark orange brown firm silty clay. Subsoil was significantly deeper at the southern end of site and measured up to 0.95m thick in the south-eastern and south-western corners of the excavation. Subsoil became progressively shallower towards the north to a thickness of 0.25m at the northern end of the excavation. The subsoil was overlain by topsoil (between 0.25-0.35m in thickness) consisting dark grey brown clay loam.
- 3.2.2 Ground conditions throughout the excavation were generally good and remained dry. Archaeological features, where present, were easy to identify against the underlying natural geology.

3.3 Overview of results

3.3.1 Archaeological features could be broadly characterised and divided into two Iron Age phases. The Phase 1 features included a coaxial ditch system aligned broadly north-south and east-west and the circuits of two roundhouse drip gullies. A small number of pits were also present which belonged to this period. The Phase 2 features included two ditches which extended across the excavation area and truncated Phase 1 features on northwest-southeast alignments. A description of the features attributed to each of these archaeological phases is provided below.



3.4 Phase 1: Middle Iron Age (c.350-100/50BC)

Ditches (Figs 3 and 4)

Ditch 569

- 3.4.1 The dominant boundary of Ditch 569 traversed the full extent of the excavation on a north-north-west to south-southeast alignment (Fig. 5, Sections 34 and 45; Plate 1). It was investigated by eight interventions (565, 569, 575, 593, 595, 600, 603 and 609). Slot 600 revealed the ditch at its largest extent at 2.42m wide by 1.32m deep. This ditch narrowed and decreased in depth as it progressed northwards to measure a minimum of 0.9m wide at slot 595 and 0.37m deep at slot 565.
- 3.4.2 The ditch was filled by between one and five unremarkable firm orange brown silty clay deposits (566, 570-1, 576-80, 596-7, 601-2 and 610-12 respectively). The basal fill 576 excavated in slot **575** yielded eight small highly abraded fragments (10g) of fired clay. The fills also produced a quantity of Middle Iron Age (MIA) pottery comprising: four sherds from fills 576 and 578 of slot **575**; eight sherds from fill of slot **593**; one sherd from fill 601 of slot **600**; and two sherds from fill 612 of slot **609**. Faunal remains were recovered from fill 569 (16 fragments of unidentified large mammal), fill 576 (five fragments of cattle and horse bone), fill 596 (bovine mandible bone fragment with tooth) and fill 601 (one mammal long bone fragment). Environmental samples of these fills produced a small amount of charcoal from slot **575** as well as ostracod and land mollusc shell from slot **565**. The deposits which contained domestic refuse were interpreted as representing small episodes of waste dumped into the ditch.
- 3.4.3 A 4.8m-long ditch spur (comprising cuts **585** and **587**) also extended east from the main ditch alignment towards the northern end of the excavation. This was filled with the same grey brown silty clay as the main ditch. No datable archaeological remains were recovered.

Ditches 520 and 598

- 3.4.4 A further linear feature (Ditch 520) lay on a parallel alignment c.22m to the west of Ditch 569. This 15m long ditch bounded the western edge of Roundhouse 506. It was investigated by three interventions (slots **520**, **563** and **565**) which revealed it to have ranged between 0.94-1.36m in width and 0.2-0.37m in depth (Fig. 5, Sections 10 and 31; Plates 2 and 3). It was filled with firm yellow brown silty clay (521 and 566) from which no datable archaeological finds were recovered. It was truncated by Phase 2 Ditch 500 at its northern end.
- 3.4.5 A short linear ditch (598) also lay immediately west of Ditch 569 that measured 0.86m wide by 0.26m deep and was filled by dark brown silty clay which produced no artefacts.

Ditches 504 and 589

3.4.6 Ditches 504 and 589 extended west from Ditch 569 on perpendicular (west-south-west to east-north-east) alignments and continued westwards beyond the excavation limit.



Ditch 504

- 3.4.7 To the south, Ditch 504 was investigated by three interventions, slots **504**, **530** and **583**. It ranged between 0.85–1.78m in width and 0.44-0.62m in depth (Fig. 5, Sections 2 and 14). Its fill (505, 531 and 584 respectively) consisted of firm grey brown silty clay which did not produce any artefacts. Environmental samples of the fill recovered a small amount of charcoal, land mollusc shell and an untransformed elder seed.
- 3.4.8 A 5.72m-long ditch spur (**561**) extended north-westward from Ditch 504. Two irregular flint waste flakes were recovered from its dark grey brown firm silty clay fill (562). An equine tooth was also recovered. The flint may have derived from the Early Bronze Age period as a residual item but is more likely to be of Iron Age origin.

Ditch 589

3.4.9 To the north of Ditch 504 lay similarly aligned Ditch 589 (Fig. 5, Section 40). Although its eastern extent was crossed and truncated by Ditch 569, both the similarity of their fills and their perpendicular alignments strongly suggests they were broadly contemporary features. Ditch 589 was investigated by slots **589** and **591** and measured 1.12m wide by 0.4m deep. It was filled with firm mid grey brown silty clay which did not produce any datable artefacts.

Roundhouses (Figs 3 and 4)

3.4.10 There were two roundhouses discovered on the site. Roundhouse 506 was located immediately north of Roundhouse 532. In plan, they appeared to respect the alignment of the coaxial field system formed by Ditch 569 and Ditches 504 & 589.

Roundhouse 506

3.4.11 Roundhouse 506 was formed collectively by curvilinear – roof drip gully - features **506**, **512**, and **516**. These outlined a circular structure which measured approximately 15m in diameter. The roundhouse gullies were investigated by 10 slots (**506**, **508**, **510**, **512**, **514**, **516**, **518**, **522**, **524** and **526**). These drip gullies measured between 0.4-0.8m in width and 0.08–0.28m in depth and were filled with firm dark brown silty clay (Fig. 5, Sections 5, 10, 11 and 12; Plates 2, 4 and 5). Finds recovered from these fills included 55 fragments of possible fired clay daub or oven-lining from fill 509, 45 sherds of MIA pottery (see App. Fig. B.3.1, **V.2** and **V.3**) and eight fragments of cattle and goat/sheep bone. The environmental samples of the fills produced a small quantity of charcoal. It is notable that a 5.35m gap existed between intervention slots **510** and **512** to indicate the possible location of the entranceway into the roundhouse.

Roundhouse 532

3.4.12 Roundhouse 532 was formed by the circuit of a single penannular ditch that became increasingly shallow to the west. This feature had previously been partially uncovered by the 2007 evaluation Area 1 (Robertson 2007). The ditches circuit encompassed a 12.3m diameter area and was investigated by nine slots (532, 534, 536, 538, 540, 551, 553, 555 and 557). The ditch measured between 0.4-0.77m in width and 0.08–0.23m in depth and was filled with firm orange brown silty clay (Fig. 5, Sections 16, 19 and 26; Plate 6). Finds recovered from these interventions included an Iron Age flint flake from the fill of slot 532, 40 sherds of MIA pottery (see App. Fig. B.3.1, V.8) and seven



fragments of cattle bone. An environmental sample of the fill of slot **551** produced a small quantity of charcoal.

3.4.13 A 4m-long ditch spur (**559**) extended to the north of the gully which measured 0.61m wide and 0.26m deep and was filled by firm mid grey brown silty clay. Finds recovered from its fill included five fragments of fired clay that possibly belonged to a single Iron Age loomweight. In addition, 60 sherds of MIA pottery and seven fragments of cattle and sheep bone were also recovered.

Pits and postholes (Figs 3 and 4)

- 3.4.14 There were four pits and one posthole attributed to the Middle Iron Age period. A subcircular posthole (**567**) was uncovered in the north-eastern part of the excavation area. This isolated feature measured between 0.37-0.42m in diameter by 0.11m deep and was filled with firm dark brown grey silty clay (568) which produced no datable artefacts.
- 3.4.15 Two adjacent sub-circular pits (**546** and **549**) were revealed in the northern part of the excavation (Plate 7). Pit **546** was the larger feature which measured between 0.7-0.98m in diameter by 0.2m deep and contained two fills. The primary fill (548) was firm dark brown black silty clay that contained small fragments of charcoal. The upper fill (547) consisted of firm mid yellow orange silty clay. The appearance of these fills was suggestive of waste burnt material, although examination of the natural clay surrounding the cut showed no evidence of *in situ* burning.
- 3.4.16 Immediately to the east of pit **546**, pit **549** measured between 0.5-0.67m in diameter and 0.15m deep. It was filled with firm dark brown silty clay with fragments of charcoal (550). Similar to pit **546**, although the pit was filled by burnt waste material, there was no signs of any scorched or burnt natural clay surrounding the feature to suggest *in situ* burning.
- 3.4.17 Pit **581** was located towards in the southern part of the excavation between Ditch 569 and the roundhouses. This small circular feature measured 0.56m in diameter and 0.17m deep (Fig. 5, Section 35). It was filled with mid grey brown silty clay (582). The pit appeared to have been excavated for the disposal of animal bone waste, as the fill contained 47 fragments of sheep/goat bone. Small traces of mollusc shell were also recovered from a bulk environmental sample of the fill.
- 3.4.18 A larger pit (**572**) lay immediately to the west of Ditch 569 and was truncated by it (Fig. 5, Section 34; Plate 1). It probably represented a depression in the ground surface into which surface water had pooled from the ditch when it overflowed. It was filled by two homogenous deposits of orange brown clay (573 and 574). The upper fill (574) produced two sherds of MIA pottery and two fragments of horse and cattle bone.



3.5 Phase 2: Late Iron Age (c.100/50BC-AD50)

Ditch and gully (Figs 3 and 4)

Ditch 500

3.5.1 Ditch 500 traversed the entire width of the excavation area on a northwest to southeast alignment, where it truncated Phase 1 Ditches 504, 520, 569 and Roundhouse 506, and continued beyond its eastern and western limits. Three interventions (slots **500**, **502** and **528**) were excavated into this boundary alignment which measured between 1.3–1.5m in width and 0.22–0.29m in depth (Fig. 5, Sections 2 and 13). It was filled with firm mid orange brown silty clay that produced six sherds of MIA and Late Iron Age/Early Romano-British pottery and a fragment of burnt clay along with four residual flint flakes of probable Bronze Age origin. Environmental samples taken from the ditch fill yielded only a small mollusc shell from slot **528**.

Gully 542

3.5.2 At the northern end of the excavation area a small gully (**542**) was uncovered on a parallel alignment to Ditch 500 that also extended beyond the excavation limit. It measured 0.43m wide by 0.14m deep and was investigated by two interventions (**542** and **544**; Fig. 5, Section 21). The dark brown silty clay fill contained no datable archaeological finds, however, small cereal grains were recovered from the environmental sample taken of the fill of slot **544**.

3.6 Finds and environmental summary

3.6.1 The finds recovered from the excavated area consisted of: prehistoric worked flint spanning the Neolithic to Iron Age periods; Middle and Late Iron Age/Early Romano-British pottery; a possible Iron Age fired clay loomweight; and amorphous fragments of fired clay. Environmental remains consisted of animal bone fragments, occasional small quantities of charcoal and an elderberry seed. The single iron nail recovered from Roundhouse 532 which is probably an intrusive item of more recent date.

Metalwork (Appendix B.1)

3.6.2 A single iron nail was recovered from the fill of intervention **557** of Roundhouse 532 which is probably an intrusive item of more recent date.

Flint (Appendix B.2)

3.6.3 A small assemblage of nine struck flint and two pieces (39g) of unworked burnt flint were recovered during the excavation. This does not include any strongly diagnostic forms with most of the material probably representing residual material of Neolithic/Bronze Age date incorporated into the fills of later features. The well-struck pieces of Neolithic or Early Bronze Age origin were excavated from slots excavated into Phase 1 Ditch 504 (561) and Phase 2 Ditch 500 (528). It is possible that some of the other flake removals from feature fills could be broadly contemporary with the Iron Age occupation of the site, including the broad hard hammer struck flake from the fill of roof drip gully of Phase 1 Roundhouse 532, which is notable for its very fresh condition.



Iron Age pottery (Appendix B.3)

- 3.6.4 An assemblage totalling 223 sherds (1759g) of Iron Age pottery was recovered from the excavation. The pottery was recovered from a total of 25 contexts relating to 24 cut features/labelled interventions. With the exception of three Late Iron Age/Early Roman sherds (54g), all of the Iron Age pottery is in the handmade Middle Iron Agetype tradition (c.350-100/50BC). The majority of the sherds derived from Phase 1 features (ditches and gullies). Only four sherds (18g) derive from Phase 2 contexts.
- 3.6.5 The assemblage contains sherds in a range of fabrics, all broadly typical of pottery groups dating to the Middle Iron Age in Essex in a mix of sandy wares with inclusions of mica. Based on the total number of different rims and bases identified, the Middle Iron Age is estimated to contain a minimum of 12 different vessels associated with everyday cooking and serving pots. The scarcity of Late Iron Age/Early Roman pottery from the site could suggest that the settlement went out of use before the mid 1st century BC. Only three sherds (54g) of non-diagnostic Late Iron Age/Early Roman pottery were recovered from the fill (503) of Phase 2 Ditch 500 (slot 502).

Fired clay (Appendix B.4)

3.6.6 A small assemblage of 69 fragments of undiagnostic fired clay (282g) was recovered from the excavation which derived from the fills of Phase 1 Ditch 569 (575), Roundhouse 506 (508) and Roundhouse 532 (555) and Phase 2 Ditch 500 (502). The fired clay is made in two similar fabrics, both of which contain poorly sorted chalk inclusions and sand. The clays could have been obtained from surrounding geological deposits at the site. The fragments from Roundhouse 532 may be part of a single triangular loomweight, although too little of this object survives to be certain. Likewise, the material from Roundhouse 506 probably represents daub or oven-lining but has no surviving wattle impressions to support this suggestion. The material is fairly typical of that recovered from later Iron Age sites in the region.

Faunal remains (Appendix C.1)

3.6.7 A total of 96 recordable fragments of animal bone were recovered during the excavation which are identifiable to cattle, horse and sheep/goat. Unidentifiable bone fragments were categorised as large or medium mammal. The bulk of the assemblage was primarily from ditches and roundhouse drip gullies. Pit **581** contained the complete skeleton of an adult sheep. These specimens primarily represent domestic waste. The limited fusion data suggests a practice of using cattle not just for meat but for secondary products. Pigs and sheep/goat were slaughtered early for meat. Due to the small size of the assemblage no further conclusions can be reached regarding the butchery or dietary practices of the inhabitants of this settlement.

Environmental samples (Appendix C.2)

3.6.8 A total of 15 bulk samples were taken from excavated features on the site. The botanical material was extremely sparse and plant remains were preserved through the processes of carbonisation and waterlogging. The majority of the samples contain small to moderate quantities of relatively well-preserved molluscs (snails). Carbonised



cereal grains were present in two of the samples but only as single specimens or fragments. The fragmented cereal grain was too poorly preserved to be identified but the single cereal grain recovered from Phase 2 gully slot **544** was identified as wheat (*Triticum* sp.). Several samples contain small quantities of untransformed elder (Sambucus nigra) and brambles (*Rubus* sp.). These may be contemporary with the features as these seeds have a tough outer coating which is particularly resistant to decay. The small quantity of plant remains recovered from these samples is not indicative of deliberate deposition and is likely to represent a background scatter of refuse from activity in the area. Unfortunately, little else can be inferred about the history of the site or its surrounding environs due to the low density and diversity of plant taxa.

Final



4 DISCUSSION

4.1 Introduction

- 4.1.1 The excavation fulfilled its objectives both confirming and recording the presence of archaeological features and expanding the knowledge of those already found in Area 1 of the 2007 excavations. The archaeological remains can be separated into two phases of activity.
- 4.1.2 Phase 1 was represented by two roundhouse drip gullies which respected an associated coaxial ditch system. The small pottery assemblage recovered from these features dated this settlement activity to the Middle Iron Age period. A small number of outlying pits contained the remains of domestic waste such as animal bone with burnt pit fills also attributed to this period. Phase 2 comprised parallel ditch and gully alignments that overlay and truncated the Phase 1 features. These boundaries demonstrate this settlement's probable abandonment by the middle of the 1st century BC by a later system of land division in the local landscape. The Phase 2 ditches produced pottery sherds dated to the Late Iron Age/Early Roman period to support this conclusion.
- 4.1.3 This roundhouses, pits and boundary ditches with their associated assemblages of pottery, flintwork, fired clay and animal bone waste are synonymous with small-scale rural Middle and Late Iron Age settlement. The results of this excavation are therefore consistent with archaeological remains found previously at Highwood Quarry (Fig. 6 nos 2 and 3) and in the surrounding area such as along the A120 road corridor (Fig. 6, no. 4; see Sections 1.3.2-4). No features were discovered that were associated with the previous use of the site as parkland.

4.2 Residual Neolithic and Bronze Age flintwork

4.2.1 A small assemblage of residual Neolithic and Bronze Age flintwork was reworked into Phase 1 and 2 feature fills such as the well-struck pieces of Neolithic or Early Bronze Age origin from Phase 1 Ditch 504 and Phase 2 Ditch 500 is likely to have derived from low level later prehistoric occupation activity in the vicinity of the site and should be viewed within the context of other Neolithic and Bronze age flintwork findspots in the quarry site and surrounding area and the Bronze Age settlement remains previously found along the A120 road corridor to the south (see Sections 1.3.2-4).

4.3 Middle Iron Age remains

Layout of features

4.3.1 Overall, the layout of roundhouses and the ditches is typical of a rural farmstead setting of the period. This farmstead appears to have extended beyond the northern, western and southern excavation limits. Roundhouse 506 may have had an entranceway on its northern side due to the large gap (between interventions **510** and **512**) which interrupted the north-eastern portion of the drip gully circuit. The ditches that bound the north and the eastern sides of these dwellings would have provided drainage for this part of the settlement as well as boundaries to aid the exclusion of wandering livestock. The presence of a small quantity of ostracods, rushes and wood



fragments in the fill of Ditch 520 is indicative of its probable function as a drainage channel (App. C.2.13). Ditch 569 narrowed and decreased in depth as it progressed northwards across the site as the ground gently rose in elevation.

Domestic activity

4.3.2 The Phase 1 roundhouses along with the coaxial ditched field system were dated to the Middle Iron Age period by a domestic pottery assemblage of cooking and serving vessels. The pottery was recovered almost entirely from the roundhouse drip gully features. The few associated pits and their faunal remains located nearby suggests the burying of waste associated with domestic activity. This assertion is supported by the assemblages of fired clay recovered from feature fills of which one probably represents a fragmented loomweight associated with cloth production. All of the cattle and sheep/goat bone, as well as the horse bone, represent domestic animals kept for their meat and secondary products such a dairy, wool, hide, horncore, etc. Small volumes of charcoal were recovered from soil samples taken of the fills of both pits and the roundhouse gullies. A single cereal grain from the fill of Phase 2 gully slot **544** was identified as wheat (*Triticum* sp.) to provide only tentative evidence for the crops processed by the settlement's inhabitants.

The remains in context

4.3.3 These farmstead remains are consistent with the other archaeological features previously found at Highwood Quarry and in its surrounding area. The 2001, 2007 and 2012 archaeological investigations attest to the wider presence of settlement spanning the Iron Age period. During the evaluation in 2007, a gully was revealed which yielding Early Iron Age pottery (Fig. 6, no. 3; see Section 1.3.3; Robertson 2007). The 2012 excavations in the western part of the quarry site, where Iron Age ditches found in Areas 2 and 3 yielded large amounts of pottery; enough to indicate the presence of nearby settlement (Fig. 6, no. 2; see Section 1.3.3; Miciak 2012). Some of this material included pre-conquest continental imports, suggestive of a site of highstatus. This pottery was, however, dated to the later Iron Age period. The present investigation in the eastern part of the quarry site is therefore important in confirming a Middle Iron Age presence on the quarry site to complement these earlier findings. Within the wider landscape, previous excavations on the A120 road corridor uncovered unenclosed Middle iron Age settlement at Highwood Farm, c.1.5km south of the site, which was subsequently partly overlain by a small Late Iron Age enclosure (Fig. 6, no. 4; Powell 2007, Site 11). Part of an enclosed Middle Iron Age settlement has also been excavated c.1.5km southeast of the site at Great Dunmow (Fig. 6, no. 5; Lavender 1997).

4.4 Late Iron Age remains

4.4.1 Phase 2 was represented by the two parallel boundaries of Ditch 500 and Gully 542 which truncated the abandoned Phase 1 farmstead remains. Three sherds of Late Iron Age/Early Romano-British pottery was recovered from Ditch 500 (slot **502**). The paucity of finds from these presumably Late Iron Age field boundaries indicates settlement activity had shifted away from this site by the middle of the 1st century BC. The establishment of these boundaries on a differing alignment to the Phase 1 coaxial



field system strongly suggests a reorganisation of the local landscape had occurred around this time.

4.4.2 In broad terms both phases of Iron Age activity are consistent with previously discovered archaeological remains of the period at the quarry site. Rural Iron Age settlements and associated finds are attested to by the wider listings of findspots and sites in the EHER. This Middle Iron Age farmstead would probably have lain within a patchwork of further settlement farms that extended between the River Chelmer and River Roding. It has been postulated this landscape was served by a trackway which was only later reconstructed as Stane Street during the Romano-British period, which passes approximately 1.5km to the south of the site (Fig. 6). Therefore, this locality may have ideally suited rural settlement with local access to early track and/or riverine transport links as well as an easily accessible water supply.

4.5 Medieval park development

4.5.1 No features were revealed or artefacts found which relate to the development of the medieval parkland which formerly encompassed Highwood Quarry.

4.6 Significance

4.6.1 The excavation area expanded upon the previous evaluation and excavation work carried out at Highwood Quarry to fully describe and interpret the nature of the archaeological remains previously discovered by the 2007 evaluation of the site. Part of a Middle Iron Age farmstead was revealed which was probably abandoned by the mid 1st century BC when its remains were truncated by a Late Iron Age boundary ditch. The site is a significant addition to the groups of previously investigated Iron Age settlement remains excavated at Highwood Quarry and to the west of Great Dunmow which demonstrate the presence of shifting foci of domestic activity across this period within this locality.



5 PUBLICATION AND ARCHIVING

5.1 Publication

5.1.1 It is anticipated that the Iron Age remains excavated during this investigation will be published as a short note in the *Transactions of the Essex Society for Archaeology and History*. The note will be submitted by the end of 2021.

5.2 Archiving, retention and dispersal

5.2.1 The site archive is currently held by OA East and will be deposited with Saffron Walden Museum under Accession No. SAFWM: 2021.9 in 2021. The archive will comprise a total of two bulk finds boxes and one paperwork box. The museum will also receive a copy of the digital archive held by OA East.



APPENDIX A CONTEXT INVENTORY

Context	Cut	Category	Feature Type	Breadth	Depth	Filled By	Colour	Compaction	Fine component
500		cut	ditch	1.3	0.22	501		•	
501	500	fill	ditch fill	1.3	0.22		mid orange brown	hard	silty clay
502		cut	ditch	2.44	0.29	503			
503	502	fill	ditch fill	2.44	0.29		mid orange grey	hard	silty clay
504		cut	ditch	1.78	0.44	505			
505	504	fill	ditch fill	1.78	0.44		mid grey brown	hard	silty clay
506	FOC	cut fill	drip gully	0.4	0.16	507	dark red brown	la a stal	a:14 al a
507	506	TIII	gully fill roundhouse	0.4	0.16		dark red brown	hard	silty clay
508		cut	drip gully	0.45	0.16	509			
509	508	fill	drip gully fill	0.45	0.16		dark red brown	hard	silty clay
510		cut	roundhouse drip gully	0.4	0.16	511			
511	510	fill	drip gully fill	0.4	0.16		dark red brown	hard	silty clay
512		cut	roundhouse drip gully	0.4	0.08	513			
513	512	fill	drip gully	0.4	0.08		mid yellow brown	compact	silty clay
514		cut	roundhouse drip gully	0.6	0.18	515			
515	514	fill	drip gully fill	0.6	0.18		mid yellow brown	hard	silty clay
516		cut	roundhouse drip gully	0.4	0.1	517			
517	516	fill	drip gully fill	0.4	0.1		mid yellow brown	hard	silty clay
518		cut	roundhouse drip gully	0.5	0.22				
519	518	fill	drip gully fill	0.5	0.22		mid yellow brown	hard	silty clay
520		cut	ditch	1.36	0.2	521			
521	520	fill	ditch fill	1.36	0.2		mid yellow brown	hard	silty clay
522		cut	roundhouse drip gully	0.6	0.28	523			
523	522	fill	drip gully fill	0.6	0.28		mid yellow brown	hard	silty clay
524		cut	roundhouse drip gully	0.8	0.16	525			
525	524	fill	drip gully fill	0.8	0.16		mid yellow brown	hard	silty clay
526		cut	roundhouse drip gully	0.6	0.08	527			
527	526	fill	drip gully fill	0.6	0.08		mid yellow brown	hard	silty clay
528		cut	ditch	1.5	0.28	529			
529	528	fill	ditch fill	1.5	0.28		mid orange brown	hard	silty clay
530	_	cut	ditch	1	0.51	531			
531	530	fill	ditch fill	1	0.51		mid grey brown	hard	silty clay
532		cut	roundhouse drip gully	0.54	0.08	533			
533	532	fill	drip gully fill	0.54	0.08		light orange brown	firm	clay
534		cut	roundhouse drip gully	0.47	0.1	535			

Highwood Quarry, Little Easton, Essex

Final

Context	Cut	Category	Feature Type	Breadth	Depth	Filled By	Colour	Compaction	Fine component
535	534	fill	drip gully fill	0.47	0.1	,			
536		cut	roundhouse ring gully	0.48	0.16	537			
537	536	fill	drip gully fill	0.48	0.16		light orange brown	hard	clay
538		cut	roundhouse ring gully	0.46	0.19	539			
539	538	fill	drip gully fill	0.46	0.19		light orange brown	firm	clay
540		cut	roundhouse drip gully	0.43	0.22	541			
541	540	fill	drip gully fill	0.43	0.22		mid orange brown	firm	clay
542		cut	gully	0.4	0.14	543			
543	542	fill	gully fill	0.4	0.14		dark brown	hard	silty clay
544		cut	gully	0.43	0.1	545			
545	544	fill	gully fill	0.43	0.1		dark brown	hard	silty clay
546		cut	pit	0.7	0.2	547, 548			
547	546	fill	pit fill	0.5	0.09		mid yellow orange	firm	silty clay
548	546	fill	pit fill	0.7	0.2		dark brown black	hard	silty clay
549		cut	pit	0.5	0.15	550			
550	549	fill	pit fill	0.5	0.15		dark brown black	hard	silty clay
551		cut	roundhouse ring gully	0.6	0.23	552			
552	551	fill	drip gully fill	0.6	0.23		mid grey brown	firm	silty clay
553		cut	roundhouse drip gully	0.77	0.14	554			
554	553	fill	drip gully fill	0.77	0.14		light grey brown	hard	silty clay
555		cut	ditch	0.61	0.26	556			
556	555	fill	ditch fill	0.61	0.26		mid grey brown	hard	silty clay
557		cut	ditch	0.7	0.3	558			
558	557	fill	ditch fill	0.7	0.3		dark grey brown	firm	silty clay
559		cut	roundhouse drip gully	0.4	0.19	560			
560	559	fill	drip gully fill	0.4	0.19		mid grey brown	hard	silty clay
561		cut	ditch	0.9	0.4	562			
562	561	fill	ditch fill	0.9	0.4		dark grey brown	hard	silty clay
563		cut	ditch	1.12	0.36	564			
564	563	fill	ditch	1.12	0.36		mid yellow brown	firm	silty clay
565		cut	ditch	0.94	0.37	566			
566	565	fill	ditch fill	0.94	0.37		dark grey brown	firm	silty clay
567		cut	post hole	0.37	0.11	568			
568	567	fill	posthole fill	0.37	0.11		dark brown grey	firm	silty clay
569		cut	ditch	2.1	0.68	570, 571			
570	569	fill	ditch fill	2.1	0.6		mid grey orange	hard	silty clay
571	569	fill	ditch fill	0.7	0.1	F72	mid grey orange	hard	silty clay
572		cut	pit	3.6	0.76	573	Palat anama		
573	572	fill	pit fill	1.4	0.38		light orange brown	firm	clay
574	572	fill	pit fill	3.7	0.4	_	light yellow brown	firm	silty clay
575		cut	ditch	2.2	1.02	576, 577, 578, 579, 580			
576	575	fill	ditch	1.12	0.3		mid orange brown	firm	silty clay
577	575	fill	ditch fill	1.36	0.18		mid orange brown	firm	silty clay

Highwood Quarry, Little Easton, Essex

Final

Context	Cut	Category	Feature Type	Breadth	Depth	Filled By	Colour	Compaction	Fine component
578	575	fill	ditch fill	1.22	0.1	-	dark red brown	firm	silty clay
579	575	fill	ditch fill	1.66	0.28		mid orange brown		silty clay
580	575	fill	ditch	2.4	0.3		mid orange brown	firm	silty clay
581		cut	pit	0.54	0.17	582			
582	581	fill	pit fill	0.54	0.17		mid grey brown	hard	silty clay
583		cut	ditch	0.85	0.62	584			
584	583	fill	ditch fill	0.85	0.62		dark grey brown	hard	silty clay
585		cut	ditch	1.1	0.2	586			
586	585	fill	ditch	1.1	0.2		mid yellow brown	firm	silty clay
587		cut	ditch	1.4	0.22	588			
588	587	fill	ditch fill	1.4	0.22		mid yellow brown	firm	silty clay
589		cut	ditch	1.12	0.4	590			
590	589	fill	ditch fill	1.12	0.4		mid grey brown	firm	silty clay
591		cut	ditch	0.74	0.44	592			
592	591	fill	ditch	0.74	0.44		mid grey brown	firm	silt clay
593		cut	ditch	1.25	0.55	594			
594	593	fill	ditch	1.25	0.55		dark grey brown	firm	silty clay
595		cut	ditch	0.9	0.6	596, 597			
596	595	fill	ditch	0.66	0.3		mid orange brown	firm	silty clay
597	595	fill	ditch	0.9	0.3		mid red brown	firm	clay silt
598		cut	ditch	0.83	0.26	599			
599	598	fill	ditch fill	0.83	0.26		dark brown	hard	silty clay
600		cut	ditch	2.42	1.32	601, 602			
601	600	600	ditch	2.44	0.5		dark brown	hard	silty clay
602	600	fill	ditch fill	1.6	0.87		mid orange brown	hard	silty clay
603		cut	ditch	5.1	1.4	604, 605, 606, 607, 608			
604	603	fill	ditch	2.42	0.3		mid orange brown	firm	silty clay
605	603	fill	ditch	2.62	0.28		mid orange brown	firm	silty lay
606	603	fill	ditch fill	1.9	0.1		dark red brown	soft	silty clay
607	603	fill	ditch fill	4.24	0.4		mid orange brown	firm	silty clay
608	603	fill	ditch fill	5.14	0.4		mid red brown	firm	silty clay
609		cut	ditch	1.9	1.1	610, 611, 612			
610	609	fill	ditch fill	0.84	0.2		mid grey brown	firm	clay
611	609	fill	ditch fill	1.5	0.48		dark grey brown	firm	clay silt
612	609	fill	ditch fill	2	0.43		mid re brown	firm	silt clay

Table 1: Context inventory



APPENDIX B FINDS REPORTS

B.1 Metalwork

By Tom Collie

Factual data

B.1.1 A small undiagnostic and undatable iron nail recovered from the fill (558) of Phase 1 Roundhouse 532 intervention **557** was probably intrusive. Iron nails have been found on archaeological sites from the later prehistoric period and as such this nail was considered undiagnostic and undatable. In this case, although having originated from a feature associated with a Middle Iron Age roundhouse, this nail was probably an intrusive artefact of more recent date.

B.2 Flint

By Lawrence Billington

Introduction and Methodology

B.2.1 A small assemblage of nine struck flint and two pieces (39g) of unworked burnt flint were recovered during the excavation (Table 2). The assemblage derived exclusively from the fills of cut features and came from four individual contexts.

Typology, technology and dating

B.2.2 The worked flint is made up exclusively of simple, flake-based, unretouched removals (eight flakes and a single piece of irregular shatter). None of this appears to derive from blade-based technologies of the kind that characterize Mesolithic and Early Neolithic industries, but some of the flakes are well-struck, regular pieces which seem likely to be of Neolithic or Early Bronze Age date (including individual examples form ditch **561** (Phase 1 Ditch 504) and **528** (Phase 2 Ditch 500)). It is possible that some of the other removals could be broadly contemporary with the Iron Age occupation of the site, including a broad hard hammer struck flake from the fill of drip gully **532** (Phase 1 Roundhouse 532), which is in very fresh condition.

Discussion

B.2.3 This very small assemblage of flint does not include any strongly diagnostic forms, and most of the material probably represents residual material of Neolithic/Bronze Age date inadvertently incorporated into the fills of later features. There is a possibility that some of this material was produced and used during the Iron Age phases of the site's use but, if so, any flint use appears to have been on a very minor scale. In terms of its size and character the assemblage is similar to the small quantities of flint recovered during earlier phases of work at the quarry (e.g. Martingell and Blowers 2007; Miciak 2012, 19) and suggests fairly low level of early prehistoric (Mesolithic-Early Bronze Age) in the area.



Context	Cut	Group	Phase	Context type	flake	irregular	unworked
						waste	burnt (wt.)
503	502	Ditch 500	2	ditch fill	4		1 (9g)
529	528	Ditch 500	2	ditch fill	1		1 (30g)
533	532	Roundhouse 532	1	drip gully fill	1		
562	561	Ditch 504	1	ditch fill	2	1	
Totals	Totals						2 (39g)

Table 2: Quantification of the flint by context

B.3 Iron Age Pottery

By Carlotta Marchetto

Introduction

B.3.1 An assemblage totaling 223 sherds (1759g) of Iron Age pottery was recovered from the excavation, displaying a mean sherd weight (MSW) of 7.9g. The evaluation produced 1252 sherds (7641g) of prehistoric pottery (Lavender 2007). The pottery was recovered from a total of 25 contexts relating to 24 cut features/labelled interventions (Tables 3 and 4). With the exception of three Late Iron Age/Early Roman sherds (54g), all the Iron Age pottery in the handmade Middle Iron Age-type tradition (c.350-50BC).

				No			
Context	Cut	Feature	Group name	sherds	Wt (g)	Date	Phase
501	500	ditch	Ditch 500	1	4	MIA	2
503	502	ditch	Ditch 500	1	49	LIA/ER	2
503	502	ditch	Ditch 500	2	5	LIA/ER	2
503	502	ditch	Ditch 500	2	10	MIA	2
507	506	gully	Roundhouse 506	4	9	MIA	2
509	508	gully	Roundhouse 506	2	11	MIA	1
511	510	gully	Roundhouse 506	6	31	MIA	1
519	518	gully	Roundhouse 506	6	93	MIA	1
525	524	gully	Roundhouse 506	2	7	MIA	1
527	526	gully	Roundhouse 506	25	334	MIA	1
529	528	ditch	Ditch 500	1	4	MIA	2
533	532	gully	Roundhouse 532	1	1	MIA	1
535	534	gully	Roundhouse 532	5	19	MIA	1
539	538	gully	Roundhouse 532	6	34	MIA	1
541	540	gully	Roundhouse 532	26	225	MIA	1
552	551	gully	Roundhouse 532	2	15	MIA	2
556	555	ditch	Roundhouse 532	42	298	MIA	1
558	557	ditch	Roundhouse 532	4	39	MIA	1
560	559	gully	Roundhouse 532	56	421	MIA	1
574	572	pit	-	2	10	MIA	1
576	575	ditch	Ditch 569	3	22	MIA	1
578	575	ditch	Ditch 569	1	11	MIA	1
594	593	ditch	Ditch 569	8	48	MIA	1
599	598	ditch	-	3	5	MIA	1



Context	Cut	Feature	Group name	No sherds	Wt (g)	Date	Phase
601	600	ditch	Ditch 569	1	1	MIA	1
607	603	ditch	Ditch 569	9	44	MIA	1
612	609	ditch	Ditch 569	2	9	MIA	1
Total				223	1759		

Table 3: Pottery quantification by context

Period	No. sherds	Wt. (g)	% of assemblage (by wt.)
Middle Iron Age	220	1705	97
Late Iron Age/Early Roman	3	54	3
TOTAL	223	1759	100

Table 4: Quantification of pottery by period

- B.3.2 The pottery is in a moderate/stable condition, and the assemblage contains a range of partial vessel profiles. Small sherds (<4cm in size) dominate, but most are relatively 'fresh' and unabraded. Dating is therefore largely based on the character of the fabrics and their comparison with material from larger published assemblages from the region.
- B.3.3 This report provides a fully quantified description of the material by period, and a discussion of its date and affinity.

Methodology

- B.3.4 All the pottery has been fully recorded following the recommendations laid out by the Prehistoric Ceramic Research Group (2011). After a full inspection of the assemblage, fabric groups were devised on the basis of dominant inclusion types, their density and modal size. Sherds from all contexts were counted, weighed (to the nearest whole gram) and assigned to a fabric group. Sherd type was recorded, along with technology (wheel-made or handmade), evidence for surface treatment, decoration, and the presence of soot and/or residue. Rim and base forms were described using a codified system recorded in the catalogue and were assigned vessel numbers.
- B.3.5 Where possible, rim and base diameters were measured, and surviving percentages noted. In cases where a sherd or groups of refitting sherds retained portions of the rim and shoulder, the vessel was also categorised by form. The Middle Iron Age-type forms were codified using the series developed by JD Hill (Hill and Horne 2003, 174; Hill and Braddock 2006, 155-156).
- B.3.6 All pottery was subject to sherd size analysis. Sherds less than 4cm in diameter were classified as 'small' (193 sherds; 87%); sherds measuring 4-8cm were classified as 'medium' (28 sherds; 12%), and sherds over 8cm in diameter will be classified as 'large' (2 sherds; 1%). The quantified data is presented on an Excel data sheet held with the project archive.



Fabrics Series

Sandy fabrics

- Q1: Moderate to common sand. Sherds may contain rare linear voids from burnt out organic matter or rare small to medium angular flint (mainly 1-2 mm in size).
- QM1: Moderate to common sand and common fine mica. Sherds may contain rare linear voids from burnt out organic matter or rare coarse angular flint (mainly 2-4 mm in size).
- QG1: Moderate to common sand and moderate medium to coarse grog.
- QG2: Moderate to common sand and fine grog.

Middle Iron Age Pottery

B.3.7 The assemblage comprises 220 sherds of pottery (1705g) with a MSW of 7.7g. The pottery derives from 25 contexts relating to 24 features/labelled interventions. These comprise 12 ditches and 12 gullies. All the gullies are associated with two roundhouses and contain 141 sherds (1200g). The majority of the sherds derive from Phase 1 features (ditches and gullies). Only four sherds (18g) derive from Phase 2 contexts.

Assemblage characteristics

B.3.8 The assemblage contains sherds in a range of fabrics, all broadly typical of pottery groups dating to the Middle Iron Age in Essex. They include a mix of sandy wares with inclusions of mica (Table 5). The majority of the sherds are in sandy ware fabric with mica inclusions (90%). Sherds with just sand account for only 10% of the material.

Fabric Type	Fabric Group	No./Wt. (g) sherds	% fabric by Wt.	No./Wt. (g) burnished	% fabric burnished	MNV	MNV burnished
Q1	Sand	23/113	6.6	-	-	1	-
QM1	Sand and Mica	197/1592	93.3	31/285	14	11	1
TOTAL		220/1705	99.9	31/285	14	12	-

Table 5: Quantification of Middle Iron Age pottery by fabric. MNV= minimum number of vessels calculated as the total number of different rims and bases identified (five rims, three bases and four partial vessel profile)

- B.3.9 Based on the total number of different rims and bases identified, the Middle Iron Age assemblage is estimated to contain a minimum of 12 different vessels: five different rims, three different bases and four partial vessel profiles.
- B.3.10 Most vessels have simple flat-topped or externally thickened rims. A total of four vessels are sufficiently intact to assign to form (33% of vessels). This includes 13 sherds (319g), representing 6% of the Middle Iron Age assemblage by sherd count or 19% by weight (Table 6). The majority of vessels are slack-shouldered jars/bowls (Hill Form A; App. Fig. B.3.1, V.3 and V.8) and one constricted necked vessel is present (Hill Form B; App. Fig. B.3.1, V.2). The form assigned vessels occur in sand and mica fabric.



B.3.11 Measurable vessel rims (three in total) have a range of dimeters from a minimum of 14 cm to a maximum of 28 cm and belong to small to medium-sized pots. Vessels of these sizes are likely to have been everyday cooking and serving pots, although any of them retains traces of carbonised residue. In general, however, residues are very rare in the assemblage, with only two sherds with residue recorded (10g).

Form	Description	MNV	No./wt. (g) sherds	Rim diameter range (cm)
Α	Slack shouldered jars with a short upright neck	2	7/226	14-28
В	Constricted necked	1	6/93	24
TOTAL		3	13/319	14-28

Table 6: Quantification of Middle Iron Age vessel forms

B.3.12 Decoration is present on eight sherds (94g) relating to maximum of three vessels (Table 7). Applications include fingertip and nail treatments on the rim-top of vessels, with three of the 12 vessels rims in the assemblage decorated. Scoring is the only other type of 'decoration', with two sherds (28g) displaying scoring characteristic of the East Midlands Scored Ware tradition (Elsdon 1992).

Decoration	Vessel zone	No./Wt. (g) sherds	No. vessels	Vessel forms, & rim-diameters (cm)
Fingertip and fingernail	Rim-top	4/59	2	Form A, 14cm
Fingernail impressions	Rim-top	2/7	1	-
Scored	Body	2/28	-	-
TOTAL	-	8/94	3	-

Table 7: Quantification of Middle Iron Age decoration

Key groups

B.3.13 The Middle Iron Age ditches yielding pottery contained small assemblages of material weighing less than 300g. Only ditch **555** yielded a larger assemblage of 42 sherds (298g). These constitute a key group and contains four of the 12 different vessels represented in the Middle Iron Age assemblage, with one form assigned vessel. An assemblage of 141 sherds (1200g) derived from roundhouses. The group contains four different vessels with two form assigned vessels. One vessel from the roundhouse comprises a medium-large size jar (Hill Form A).

Late Iron Age/Early Roman Pottery

B.3.14 Only three sherds (54g) of Late Iron Age-Early Roman pottery were recovered from the excavation. The pottery derived from one context (503) relating to one ditch.

Assemblage characteristics

B.3.15 The pottery was characterized by sand and grog tempered sherds. The material comprises only handmade wares. The assemblage includes a single shoulder sherd and a body sherd from a jar. The assemblage does not contain diagnostic sherds.



Discussion

- B.3.16 The pottery dates to the Middle and Late Iron Age/Early Roman, though the vast majority is of handmade Middle Iron Age-type, which ranges between c.350-50BC. The scarcity of Late Iron Age/Early Roman pottery from the site could suggest that the settlement went out of use before the mid 1st century BC.
- B.3.17 The Middle Iron Age assemblage comprise sandy ware sherds characterized by a limited range of mainly plain, jar and bowl forms typical of ceramic repertoires of the mid 4th to 1st century BC in Essex. The settlement and the pottery can be paralleled across the region. A similar example could be the unenclosed Middle iron Age settlement at Highwood Farm (Site 11) subsequently partly overlain by a small Late Iron Age enclosure and the settlement at Grange Lane, Site 49 (Powell 2007). Both these pottery assemblages are domestic in character, reflecting relatively low status settlements with a predominantly agricultural character (Powell 2007). The assemblage can also be paralleled with the pottery from the excavations at Stansted Airport (Brown 2004). The assemblages comprise a very small number of scored sherds (1% by count) and reflect the geographic position of the site on the periphery of the main Scored Ware-zone distribution (Elsdon 1992).
- B.3.18 During the evaluation in 2007, a gully yielding Early Iron Age pottery was identified in Trench 159. This earlier feature is cut by the gully of the roundhouse located south so it is possible that it is part of a previous intervention (Lavender 2007). The pottery assemblage from the excavation did not show any Early Iron Age characteristics so the material from the evaluation could belong to an earlier phase of the settlement.

Illustration catalogue

V.2: jar/bowl, form B, fabric QM1. Phase 1 Roundhouse 506 (gully 518), context 519

V.3: Class I Jar, form A, fabric QM1. Phase 1 Roundhouse 506 (gully 526), context 527

V.8: jar/bowl, form A, fabric QM1. Fingertip and fingernail decoration on the rim top. Phase 1 Roundhouse 532 (gully **555**), context 556



B.4 Fired clay

By Matt Brudenell

Introduction and Methodology

- B.4.1 A total of 69 fragments of fired clay (282g) was recovered from the excavation. The material derived from the fills of Phase 1 Ditch 569 (575), Roundhouse 506 (508) and Roundhouse 532 (555) and Phase 2 Ditch 500 (502) (Table 8). The assemblage comprises a group of small, mainly undiagnostic fragments, many with flat exterior surfaces. There are also a few pieces from gully 555 with rounded corners, which may be from a loom weight.
- B.4.2 All the fired clay has been counted, weighed, catalogued, and assigned to basic fabric groups (following PCRG guidelines 2011). The quantified data is presented on an Excel data sheet held with the site archive.

Phase	Group (cut)	Context	No. fragments	Weight (g)
2	Ditch 500 (502)	503	1	2
1	Roundhouse 506 (508)	509	55	220
1	Roundhouse 532 (555)	556	5	50
1	Ditch 569 (575)	576	8	10
	TOTAL	-	69	282

Table 8: Quantification of fired clay by type

Assemblage composition

B.4.3 The fired clay is made in two similar fabrics, both of which contain poorly sorted chalk inclusions and sand (Table 9). The clays could have been obtained from surrounding geological deposits at the site. Fabric CHFEQ1 – distinguished by the presence of ferruginous inclusions – was found exclusively in roundhouse drip gully **555**. The fragments in this fabric may have belonged to a loomweight and include two pieces (30g) with rounded corners.

Fabric	No. fragments	Weight (g)	% of assemblage (by wt. (g))
CHQ1	64	232	82.3
CHQFE1	5	50	17.7
TOTAL	69	282	100.0

Table 9: Quantification of fired clay by fabric

Fabric series

 CHQ1: Moderate to common coarse and very coarse rounded chalk (1-8mm) and spare to moderate sand



 CHFEQ1: Moderate to common coarse and very coarse rounded chalk (1-8mm), spare to moderate sand, and rare coarse ferruginous inclusions

Phase 1 Roundhouse 506

B.4.4 Context (509) yielded the largest assemblage of fired clay with 55 fragments (220g) recovered, all in fabric CHQ1. The group includes 31 amorphous fragments (72g), 23 pieces with flat exterior surfaces (136g) and one piece with a squared corner (12g). Some of the pieces with flat surfaces have subtle ridges, probably from wiped finger marks. The material is undiagnostic but is likely to be daub or pieces of oven lining.

Phase 1 Roundhouse 532

B.4.5 Context (556) yielded five pieces of fired clay (50g), all in fabric CHFEQ1. The group includes two amorphous pieces (4g), a fragment with a flat exterior surface, and two fragments with rounded corners. The material probably derives from the same object and is possibly part of a loomweight.

Phase 1 Ditch 569

B.4.6 Context (576) yielded eight, small, highly abraded, miscellaneous fragments of fired clay (10g), all in fabric CHQ1.

Phase 2 Ditch 500

B.4.7 Context 503 yielded a single small, abraded and undiagnostic piece of fired clay in fabric CHQ1 (2g).

Discussion

B.4.8 The assemblage of fired clay is small and largely undiagnostic. The fragments from Roundhouse 532 may be part of a single triangular loomweight, though too little survives to be certain. Likewise, the material from drip gully intervention **508** of Roundhouse 506 is probably daub or oven-lining, but has no surviving wattle impressions. Overall, the material is fairly typical of that recovered from later Iron Age sites in the region.

Recommendations

B.4.9 The material is not worthy of illustration, publication, or any further work. The material should be retained as part of the project archive.



APPENDIX C ENVIRONMENTAL REPORTS

C.1 Faunal remains

By Zoe Ui Choileain

Introduction

- C.1.1 Excavations at the site uncovered a total of 96 recordable fragments of animal bone. Of these 68 fragments were identifiable to species; cattle, horse and sheep/goat. The remaining material was categorized as large or medium mammal and is recorded in Table 11.
- C.1.2 This assemblage dates in its entirety to the Middle Iron Age. Only hand collected material has been recorded. The bulk of the assemblage is primarily from ditches and drip-gully slots. Phase 1 pit **581** contained the complete skeleton of an adult sheep.
- C.1.3 The method used to quantify this assemblage was a modified version of that devised by Albarella and Davis (1996). Identification of all bone was attempted but only those that could be clearly narrowed to species were used for NISP (Number of identifiable species) and MNI (minimum number of individuals) counts. Both epiphyses and shaft fragments were identified where possible. Fragmented elements are not counted multiple times which narrows down the assemblage and produces more accurate NISP and MNI results. MNI (minimum number of individuals) was calculated for all species present. MNI estimates the smallest number of animals that could be represented by the elements recovered. Identification of the faunal remains was carried out at Oxford Archaeology East. References to Hillson (1992), Schmid (1972) were used where needed for identification purposes.
- C.1.4 The surface condition of the bone was assessed using the 0-5 scale devised by McKinley where 0 represents no erosion and 5 represents the total erosion of the surface bone (2004, 16, fig. 6).
- C.1.5 For all identifiable bone butchery marks, burning and gnawing were recorded where observed. Tooth wear was recorded using Grant (1982) and fusion data is based on Silver (1970) and Reitz and wing (2004).

Results of Analysis

- C.1.6 The surface condition of the bone is variable however the main bulk represents a 1-2 on the McKinley scale (2004, 16, fig. 6), meaning that erosion is patchy but more extensive in some cases.
- C.1.7 Three species were identified; cattle, horse and sheep/goat (Table 10). Unfortunately, the small size of the assemblage does mean that any interpretation on prevalence would be greatly biased. The dominance of sheep/goat is highly biased by the presence of the complete sheep skeleton in Phase 1 pit 581. A full summary of the number of identifiable specimens (NISP) and minimum of individuals (MNI) per taxon are presented in the tables below.



Taxon	NISP	NISP%	MNI	MNI%
cattle (Bos taurus)	17	24.64	1	25
Horse (Equus callabus)	3	4.35	1	25
sheep/goat (Ovis/Capra)	49	71.01	2	50
Totals	69	100	4	100

Table 10: Number of identifiable specimens (NISP) and Minimum number of individuals (MNI)

- C.1.8 Fusion data is recordable from the animal skeleton from Phase 1 pit **581** and from four cattle specimens and a horse tibia. These are presented in Table 12. Tooth wear data was present in three specimens and is presented in Table 13.
- C.1.9 A single cattle humerus from Phase 1 pit **572** has a small chop mark on the proximal part of the shaft.

Discussion

C.1.10 Primarily these specimens represent domestic waste. The limited fusion data suggests a practice of using cattle not just for meat but for secondary products. Pigs and sheep/goat were slaughtered early for meat consumption. Due to the small size of the assemblage few other conclusions can be reached as regards the butchery or dietary practices of this population.

Cut	Cxt.	Group	Туре	Period	Taxon	Element	Count	Erosion
		R/house						
506	507	506	Drip Gully	1	Cattle	Metapodial	1	1
		R/house			Medium			
508	509	506	Drip Gully	1	mammal	Vertebra	1	1
		R/house						
510	511	506	Drip Gully	1	Cattle	Femur	1	1
		R/house						
510	511	506	Drip Gully	1	Sheep/Goat	Scapula	1	1
		R/house				Loose max		
510	511	506	Drip Gully	1	Sheep/Goat	cheek tooth	3	1
		R/house						
518	519	506	Drip Gully	1	Large mammal	Rib	1	1
		R/house			Medium			
532	533	532	Drip Gully	1	mammal	Long bone	2	2
		R/house				_		
536	537	532	Drip Gully	1	Large mammal	Vertebra	1	2
		R/house						
551	552	532	Drip Gully	1	Cattle	Metapodial	1	1
		R/house				Loose mand	_	
555	556	532	Ditch	1	Cattle	cheek tooth	3	2
l		R/house						
555	556	532	Ditch	1	Sheep/Goat	Metapodial	1	2
		R/house	- · · ·					
555	556	532	Ditch	1	Cattle	Metapodial	1	2
		R/house				Loose mand	_	
557	558	532	Ditch	1	Cattle	cheek tooth	1	2
1		R/house						
557	558	532	Ditch	1	Large mammal	Radius	1	1
		R/house	- · · ·					
559	560	532	Ditch	1	Large mammal	Long bone	3	2



Cut	Cxt.	Group	Туре	Period	Taxon	Element	Count	Erosion
Cut	CAC.	Ditch 504	.,,,,	1 01100	TUXOTI	Loose mand	Count	2.05.011
561	562	51011 50 1	Ditch	1	Horse	cheek tooth	1	1
	562	Ditch 520	2.00.1		Medium	oncen tooth		
563	564	51011 320	Ditch		mammal	Long bone	1	2
569	570	Ditch 569	Ditch	1	Large mammal	Long bone	16	
572	574	-	Pit	1	horse	Tibia	1	1
572	574	-	Pit	1	Cattle	Humerus	1	2
575	576	Ditch 569	Ditch	1	horse	Femur	1	1
575	576	Ditch 569	Ditch	1	Cattle	Scapula	1	1
575	576	Ditch 569	Ditch	1	Cattle	Scapula	1	1
575	576	Ditch 569	Ditch	1	Cattle	Pelvis	1	1
575	576	Ditch 569	Ditch	1	Cattle	Pelvis	1	1
581	582	-	Pit	1	Sheep/Goat	Pelvis	1	1
581	582	-	Pit	1	Sheep/Goat	Ulna	1	1
581	582	-	Pit	1	Sheep/Goat	Astragalus	1	1
581	582	_	Pit	1	Sheep/Goat	Astragalus	1	1
581	582	-	Pit	1	Sheep/Goat	Calcaneus	1	1
581	582	_	Pit	1	Sheep/Goat	Calcaneus	1	1
581	582	-	Pit	1	Sheep/Goat	PH1	3	1
581	582	-	Pit	1	Sheep/Goat	PH2	2	1
581	582	-	Pit	1	Sheep/Goat	Tibia	1	1
		-			оттор, от т	Loose maxillary		
581	582		Pit	1	Sheep/Goat	row	8	2
581	582	-	Pit	1	Sheep/Goat	Mandible	1	1
581	582	_	Pit	1	Sheep/Goat	Mandible	1	1
581	582	-	Pit	1	Sheep/Goat	Pelvis	1	1
581	582	-	Pit	1	Sheep/Goat	Metatarsus	1	1
581	582	-	Pit	1	Sheep/Goat	PH3	1	1
581	582	-	Pit	1	Sheep/Goat	Scapula	1	1
581	582	-	Pit	1	Sheep/Goat	Horncore	1	1
581	582	-	Pit	1	Sheep/Goat	Maxilla	1	1
		-	-			Loose max		
581	582		Pit	1	Cattle	cheek tooth	3	1
581	582	-	Pit	1	Sheep/Goat	Tibia	1	1
581	582	-	Pit	1	Sheep/Goat	Tibia	1	1
581	582	-	Pit	1	Sheep/Goat	Femur	1	1
581	582	-	Pit	1	Sheep/Goat	Femur	1	1
581	582	-	Pit	1	Sheep/Goat	Radius	1	1
581	582	-	Pit	1	Sheep/Goat	Radius	1	1
581	582	-	Pit	1	Sheep/Goat	Humerus	1	1
581	582	-	Pit	1	Sheep/Goat	Humerus	1	1
581	582	-	Pit	1	Sheep/Goat	Scapula	1	1
581	582	-	Pit	1	Sheep/Goat	Metacarpus	1	1
581	582	-	Pit	1	Sheep/Goat	Metacarpus	1	1
581	582	-	Pit	1	Sheep/Goat	Metatarsus	1	1
581	582	-	Pit	1	Sheep/Goat	Metatarsus	1	1
581	582	-	Pit	1	Sheep/Goat	Radius	1	1
581	582	-	Pit	1	Sheep/Goat	Humerus	1	1
581	582	-	Pit	1	Sheep/Goat	Pelvis	1	1
		Ditch 569			1,	Loose mand		
595	596		Ditch	1	Cattle	cheek tooth	1	1
600	601	Ditch 569	Ditch	1	Large mammal	Long bone	1	2
Total							96	

Table 11: Catalogue of bone by context



Context	Element	Taxon	ProximalFus	DistalFus	Side	(Age in months)
511	Femur	Cattle	Fused	Fused	Unsided	42-48
574	Tibia	horse	Absent	Fused	Left	17-24
574	Humerus	Cattle	Absent	Fused	Left	18 to 24
576	Femur	horse	Fused	Absent	Left	24-36
582	Femur	Sheep/goat	Fused	Fused	Left	36 - 42

Table 12: Fusion data for all Taxa

Context	Element	Taxon	Side	Age in months
596	Loose mand cheek tooth	Cattle	Unsided	40 - 50
582	Mandible	Sheep/Goat	Left	32 - 33
582	Mandible	Sheep/Goat	Right	32 - 33

Table 13: Tooth wear data for all species

C.2 Environmental Remains

By Martha Craven

Introduction

C.2.1 A total of 15 bulk samples were taken from features excavated at the site. The samples were taken from a variety of features that are thought to date from the Middle to Late Iron Age. The samples were processed to determine whether plant remains and other environmental indicators such as molluscs are present, their mode of preservation and what they can tell us about aspects such as diet, economy, industry and trade.

Methodology

- C.2.2 The samples were soaked in a solution of sodium carbonate for 24hrs prior to processing to break down the heavy clay matrix. Each sample was processed by tank flotation using modified Sīraf-type equipment for the recovery of preserved plant remains, dating evidence and any other artefactual evidence that might be present. The floating component (flot) of the samples was collected in a 0.3mm nylon mesh and the residue was washed through 10mm, 5mm, 2mm and a 0.5mm sieve.
- C.2.3 A magnet was dragged through each residue fraction for the recovery of magnetic residues prior to sorting for artefacts. Any artefacts present were noted and reintegrated with the hand-excavated finds.
- C.2.4 The dried flots were subsequently sorted using a binocular microscope at magnifications up to x 60 and an abbreviated list of the recorded remains are presented in Table 14.
- C.2.5 Identification of plant remains is with reference to the Digital Seed Atlas of the Netherlands (Cappers *et al.* 2006) and OAE's reference collection. Nomenclature is according to Zohary and Hopf (2000) for cereals and Stace (2010) for other plants. The identification of cereals has been based on the characteristic morphology of the grains and chaff as described by Jacomet (2006).



Quantification

C.2.6 For the purpose of this assessment, items such as cereal grains have been scanned and recorded qualitatively according to the following categories:

C.2.7 Items that cannot be easily quantified such as molluscs have been scored for abundance

Results

- C.2.8 The botanical material from this site is extremely sparse. The plant remains are preserved through the processes of carbonization and waterlogging.
- C.2.9 Carbonised cereal grains were present in two of the samples but only as single specimens or fragments. The fragmented cereal grain was too poorly preserved to be identified but the single cereal grain in Sample 14, fill 545 of Phase 2 gully **544**, was identified as wheat (*Triticum* sp.). The samples contain quite variable quantities of charcoal. The largest quantity of charcoal, 20ml, was recovered from Sample 18, fill 552 of drip/ring gully **551** (Phase 1 Roundhouse 532).
- C.2.10 Sample 19, fill 566 of Phase 1 Ditch 520 (slot **565**), contains a small quantity of ostracods, waterlogged seeds of rushes (*Juncus* sp.) and possible waterlogged wood fragments.
- C.2.11 Several samples contain small quantities of untransformed elder (Sambucus nigra) and brambles (*Rubus* sp.). These may be contemporary to the features as these seeds have a tough outer coating which is particularly resistant to decay.
- C.2.12 The majority of the samples contain small to moderate quantities of relatively well-preserved molluscs.

Sample No.	Context No.	Cut No.	Feature Type	Volume Processed	Flot Volume (ml)	Cereals	Wetland/A quatic plants	Tree/Shrub Macrofossil	Ostracods	Molluscs	Charcoal Volume	Small Bones	Large Mammal Bones
10	529	528	Ditch	8	<1	0	0	0	0	+	0	0	0
11	507	506	Roundhouse Ring Gully	8	5	0	0	#U	0	+f	5	0	0
12	513	512	Roundhouse Ring Gully	8	5	0	0	0	0	0	0	0	0
13	531	530	Ditch	8	1	0	0	#U	0	++	<1	0	0
14	545	544	Gully	8	5	#	0	0	0	0	0	0	0
15	548	546	Pit	8	<1	0	0	0	0	0	<1	0	0
16	550	549	Pit	8	10	0	0	0	0	0	<1	0	0
17	533	532	Roundhouse Ring Gully	6	10	0	0	0	0	0	0	0	0
18	552	551	Roundhouse Ring Gully	8	10	#f	0	0	0	0	20	0	0



Sample No.	Context No.	Cut No.	Feature Type	Volume Processed	Flot Volume (ml)	Cereals	Wetland/A quatic plants	Tree/Shrub Macrofossil	Ostracods	Molluscs	Charcoal Volume	Small Bones	Large Mammal Bones
19	566	565	Ditch	14	10	0	# w/l	#U	+	+++	<1	+	0
20	570	569	Ditch	8	10	0	0	0	0	+	0	0	0
21	576	575	Ditch	8	5	0	0	0	0	+	2	0	0
22	578	575	Ditch	8	5	0	0	0	0	+	12	0	0
23	582	581	Pit	8	10	0	0	0	0	+	0	0	##
24	604	603	Ditch	8	5	0	0	0	0	+	1	0	0

Table 13: Environmental samples from Little Easton Quarry

Discussion

C.2.13 The small quantity of plant remains recovered from these samples is not indicative of deliberate deposition and is likely to represent a background scatter of refuse from activity in the area. It is possible that the moderate quantity of charcoal recovered from ring/drip gully slot **551** may be associated with the occupation of Roundhouse 532. The presence of a small quantity of ostracods, rushes and wood fragments in Ditch 520 (slot **565**) suggest that this feature was at some point waterlogged. Unfortunately, little else can be inferred about the history of the site or its surrounding environs due to the low density and diversity of plant taxa.



APPENDIX D BIBLIOGRAPHY

Albarella, U. and Davis, S.J. 1996. 'Mammals and birds from Launceston Castle, Cornwall: decline in status and the rise of agriculture', Circaea 12 (1), 1-156

Brown, N. 2004. 'Late Bronze Age, Early and Middle Iron Age pottery', in Havis, R., and Brooks, H., Excavations at Stansted Airport, 1986-91, Volume 1: Prehistoric and Romano-British, E. Anglian Archaeol. 104, 39-54

Brudenell, M. 2020. Written Scheme of Investigation for an excavation at Highwood Quarry, Little Easton, Essex; Oxford Archaeology; Unpublished

Cappers, R.T.J, Bekker R.M, and Jans, J.E.A. 2006. Digital Seed Atlas of the Netherlands Groningen Archaeological Studies 4, Barkhuis Publishing, Eelde, The Netherlands. www.seedatlas.nl

Elsdon, S. 1992. 'East Midlands Scored Ware', Transactions of the Leicestershire Archaeological and Historical Society 66, 83-91

Grant, A. 1982. 'The use of tooth wear as a guide to the age of domestic ungulates', in B. Wilson, C. Grigson and S. Payne (eds.), Ageing and sexing animal bones from archaeological sites, 91-108. (British Archaeological Reports British Series 109). Oxford: BAR

Havis, R. 2008. Brief for archaeological excavation on a gravel extraction site and haul road at Little Easton Airfield. Essex County Council Historic Environment Management Team (now the ECCPS)

Hickling, S.A. 2001. Little Easton Airfield, Mineral Extraction Site, Essex – archaeological evaluation; ECC FAU report 630

Hill, J.D. and Braddock, P. 2006. 'The Iron Age pottery', in Evans, C. and Hodder, I., (eds), Marshland communities and cultural landscapes. The Haddenham Project Volume 2, Cambridge, McDonald Institute for Archaeological Research, 152-194

Hill, J.D. and Horne, L. 2003. 'Iron Age and Early Roman pottery', in Evans, C., Power and Island Communities: Excavations at the Wardy Hill Ringwork, Coveney, Ely, E. Anglian Archaeol. 103, 145-84

Hillson, S. 1992. Mammal Bones and Teeth: An Introductory Guide to Methods and Identification. London Institute of Archaeology: University College London

Jacomet, S. 2006. Identification of cereal remains from archaeological sites. (2nd edition, 2006) IPNA, Universität Basel / Published by the IPAS, Basel University

Lavender, N. 2007. 'Prehistoric Pottery', in Robertson, A., Little Easton Airfield, Little Easton Essex, Archaeological Evaluation, Essex County Council Field Archaeological Unit, 13-14



Lavender, N.J. 1997. Middle Iron Age and Romano-British settlement at Great Dunmow: excavations at Buildings Farm 1993. *Essex Archaeology & History* 28: 47-92

Martingell, H. and Blowers, T. 2007. Worked and burnt flints. In A. Robertson, Little Easton Airfield, Little Easton, Essex. Archaeological Evaluation by Trial trenching. Essex County Council Field Archaeology Unit, Report 1751, 15

McCormick, F. and Murray E. 2007. Knowth and the Zooarchaeology of Early Christian Ireland. Dublin: Royal Irish Academy

McKinley, J. I. 2004. Compiling a Skeletal Inventory: disarticulated and co-mingled remains in (eds) Brickley, M. and McKinley, J.I. Guidelines to the Standards for Recording Human Remains IFA Paper No. 7

Miciak, L. 2012. Archaeological Areas 2 & 3. Little Easton Quarry, Great Dunmow, Essex. Archaeological Excavation. Essex County Council Field Archaeology unit, Report 1987

PCRG. 2011. The Study of Later Prehistoric Pottery: General Policies and Guidelines for Analysis and Publication. Oxford: Prehistoric Ceramics Research Group Occasional Papers 1 and 2 (fourth edition)

Powell, A. 2007. 'The first settlers: Prehistoric activities', in Timby, J., Brown, R., Biddulph, E., Hardy, A., Powell, A., A Slice of Rural Essex, Oxford Wessex Archaeology, Monograph No.1, 13-80

Prehistoric Ceramic Research Group 2011. The Study of Prehistoric Pottery: General Policies and Guidelines for Analysis and Publication. PCRG Occ. Paper 1 & 2

Reitz, E.J. and Wing, E.S. 2004. Zooarchaeology. Cambridge University Press

Robertson, A. 2007. Little Easton Airfield, Little Easton, Essex. Archaeological Evaluation by Trial Trenching. Essex County Council Archaeological Field Unit Report 1751

Schmid, E. 1972. Atlas of Animal Bones for Prehistorians, Archaeologists and Quaternary Geologists. Amsterdam-London-New York: Elsevier Publishing Company

Silver, I.A. 1970. The Ageing of Domestic Animals. In D.R. Brothwell and E.S Higgs (eds), Science in Archaeology: A Survey of Progress and Research, pp.283-302. New York: Prager Publishing

Stace, C.2010. New Flora of the British Isles. Third edition. Cambridge University Press

Timby, J, Brown, R, Biddulph, E, Hardy, A and Powell, A. 2007. A Slice of Rural Essex. Archaeological discoveries from the A120 between Stansted Airport and Braintree. Oxford Wessex Archaeology Monograph 1



Zohary, D., Hopf, M. 2000. Domestication of Plants in the Old World – The origin and spread of cultivated plants in West Asia, Europe, and the. Nile Valley. 3rd edition. Oxford University Press



APPENDIX E	OAS	IS R	EPORT FORM	M			
Project Details							
OASIS Number	oxforda	r3-40	0472				
Project Name	Highwo	od Qı	ıarry, Little Ea	ston, Essex	– an ar	chaeological excavation	
			••	<u> </u>		3	
Start of Fieldwork	31.08.2	0		End of Field	dwork	25.09.20	
Previous Work	yes	yes		Future Wo	rk	unknown	
				1			
Project Reference	Codes						
Site Code	LEHQ20)		Planning A	op. No.	ESS/65/06/UTT	
HER Number				Related Numbers			
	-						
Prompt		NPPF	=				
Development Type	9	Mineral extraction (quarry)					
Place in Planning P	rocess	After	full determina	ation (eg. As	a condit	ion)	
Techniques used (•	at ap	ply)				
☐ Aerial Photograp interpretation	hy –	\boxtimes	Open-area exca	vation		Salvage Record	
☐ Aerial Photograp	hy - new		Part Excavation			Systematic Field Walking	
☐ Field Observation	1		Part Survey			Systematic Metal Detector Survey	
☐ Full Excavation			Recorded Obser			Test-pit Survey	
☐ Full Survey			Remote Operate Survey	ed Vehicle		Watching Brief	
☐ Geophysical Surv	rey		Salvage Excavat	ion			
Monument	Perio	od		Object		Period	

Monument	Period
ditch	Middle Iron Age (-
	400 to - 100)
pit	Iron Age (- 800 to
	43)
ditch	Uncertain

Object	Periou
pottery	Iron Age (- 800 to 43)
flint	Iron Age (- 800 to 43)

Project Location

County	Essex
District	Uttlesford
Parish	Little Easton
HER office	Essex
Size of Study Area	3.5ha
National Grid Ref	TL 6008 2268

Address (including Postcode)

Preferred site K Little Easton Airfield Land off A120 Little Easton Quarry Little Easton

Project Originators

Organisation	Oxford Archaeology East
Project Brief Originator	Andrew Josephs Associates (SRC Aggregates)
Project Design Originator	Matt Brudenell
Project Manager	Matt Brudenell
Project Supervisor	Tom Collie



Project Archives

Physical Archive (Finds) Digital Archive Paper Archive

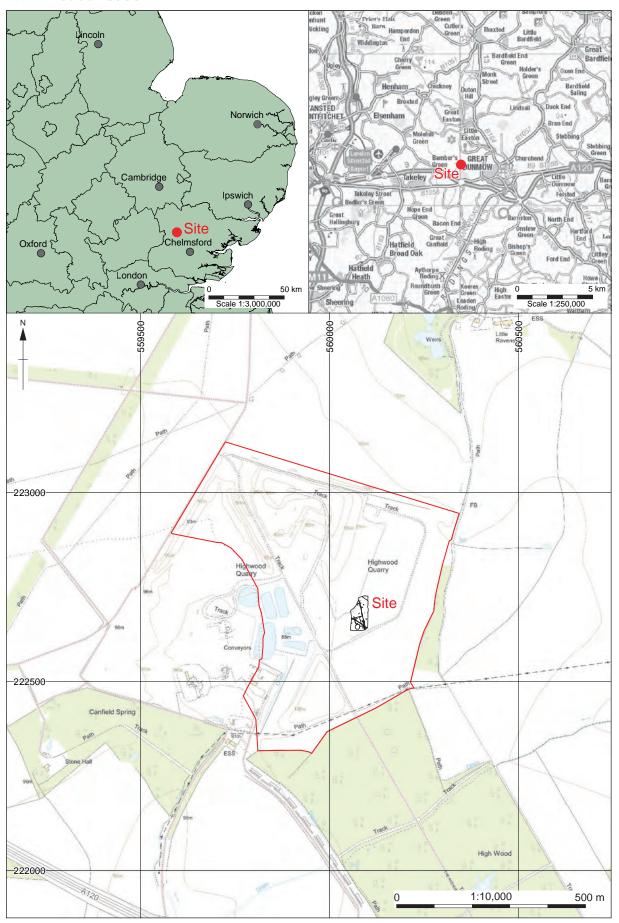
Location	ID

Saffron Walden Museum	SAFWM: 2021.9
OA East	XEXLEQ20 / LEHQ20
Saffron Walden Museum	SAFWM: 2021.9

Physical Contents	Present?		Digital files associated with Finds	Paperwork associated w	rith
Animal Bones	\boxtimes		\boxtimes	\boxtimes	
Ceramics	\boxtimes		\boxtimes	\boxtimes	
Environmental	\boxtimes		\boxtimes	\boxtimes	
Glass					
Human Remains					
Industrial					
Leather					
Metal	\boxtimes		\boxtimes	\boxtimes	
Stratigraphic			\boxtimes	\boxtimes	
Survey			\boxtimes	\boxtimes	
Textiles					
Wood					
Worked Bone					
Worked Stone/Lithic	\boxtimes		\boxtimes	\boxtimes	
None					
Other					
Digital Media			Paper Media		
Database		\boxtimes	Aerial Photos		
GIS		\boxtimes	Context Sheets		\boxtimes
Geophysics		\boxtimes	Correspondence		\boxtimes
Images (Digital photos)		\boxtimes	Diary		
Illustrations (Figures/Plat	tes)	\boxtimes	Drawing		\boxtimes
Moving Image			Manuscript		
Spreadsheets		\boxtimes	Мар		\boxtimes
Survey		\boxtimes	Matrices		
Text		\boxtimes	Microfiche		
Virtual Reality			Miscellaneous		
			Research/Notes		
			Photos (negatives/prints	/slides)	
			Plans		\boxtimes
			Report		\boxtimes
			Sections		\boxtimes
			Survey		\boxtimes

Further Comments





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Figure 1: Site location





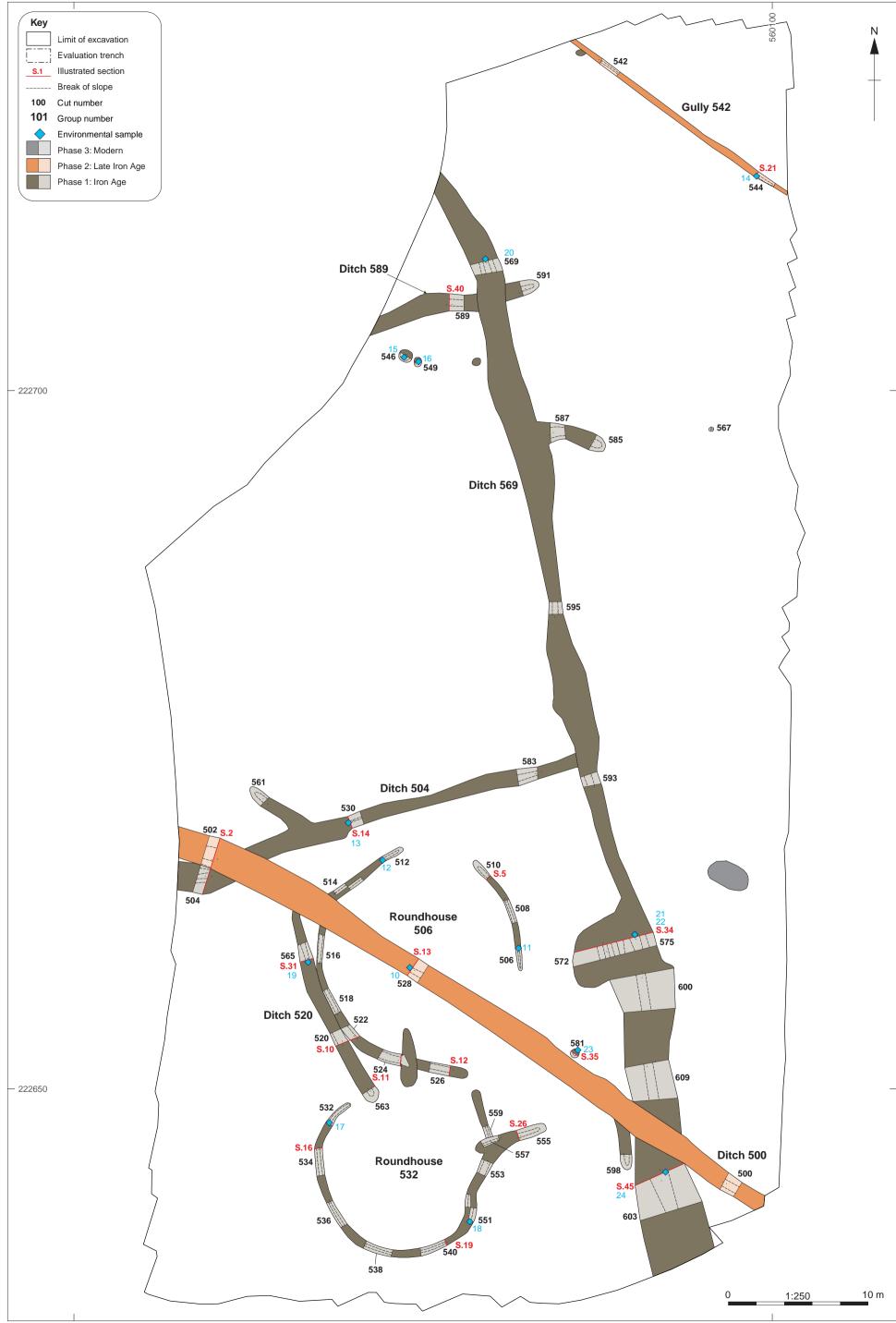
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Figure 3: Excavation location map with previous excavation results from 2007







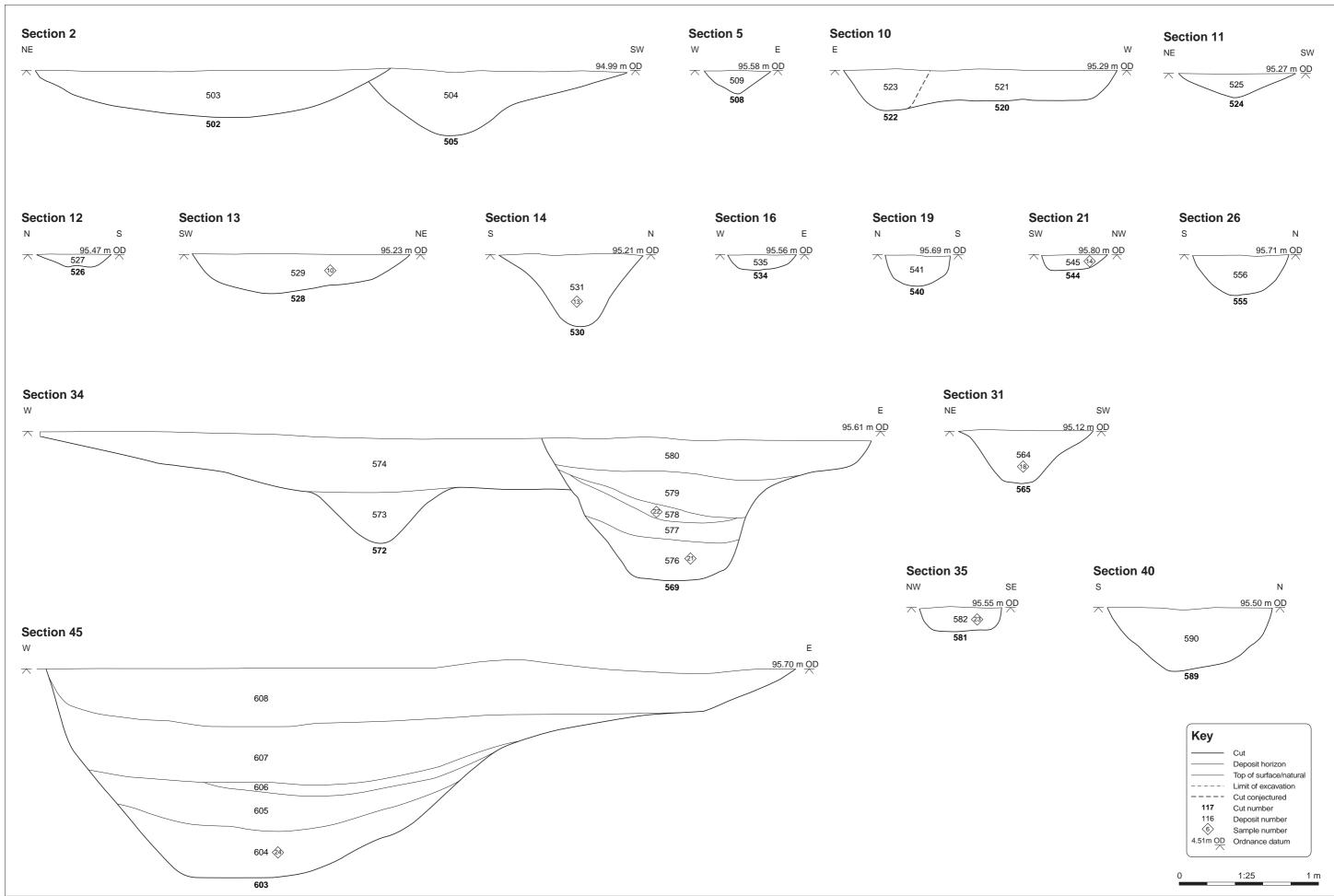


Figure 5: Sections

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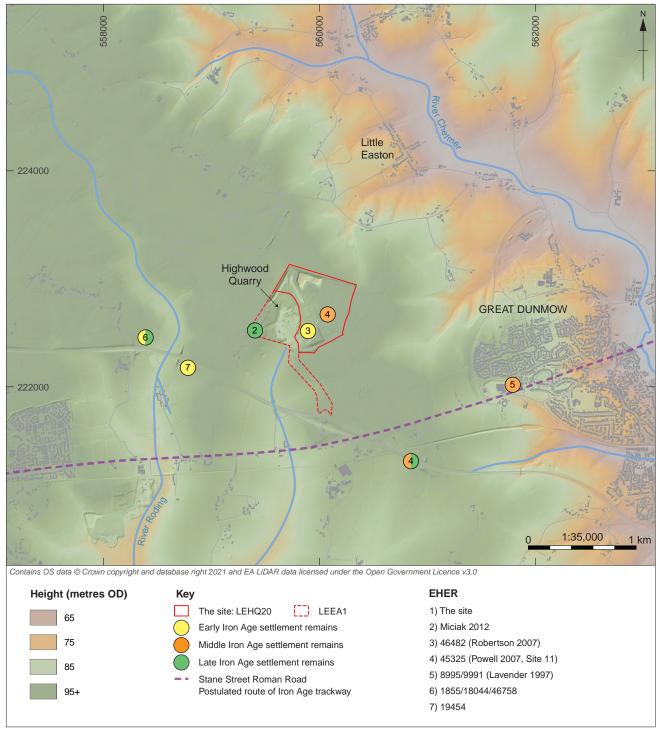


Figure 6: Overview of Iron Age sites excavated west of Great Dunmow





Plate 1: Ditches 572 and 575 looking north



Plate 2: Ditches 520 and 522 looking southeast





Plate 3: Ring ditch 565 looking south southeast



Plate 4: Ring gully 510 looking south southeast





Plate 5: Ring gully **524** looking east



Plate 6: Ring gully **555** looking west





Plate 7: Pits 546 and 549 looking northeast





Head Office/Registered Office/ OA South

Janus House Osney Mead Oxford OX20ES

t:+44(0)1865 263800

f: +44 (0)1865 793496

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

OA North

Mill 3 MoorLane LancasterLA11QD

t: +44(0)1524 541000

f: +44(0)1524 848606

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

OAEast

15 Trafalgar Way Bar Hill Cambridgeshire CB238SQ

t:+44(0)1223 850500

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



Director: Gill Hey, BA PhD FSA MCIfA Oxford Archaeology Ltd is a Private Limited Company, N^o: 1618597 and a Registered Charity, N^o: 285627