Archaeological mitigation works on land at Station Road, Warboys Cambridgeshire December 2018

Report No: 19/20

Authors: Adam Douthwaite
Alex Shipley

Illustrator: Carla Ardis

Project Manager: Adam Yates
NGR: TL 309 806
Site code: ECB5548

MOLA
Kent House
30 Billing Road
Northampton
NN1 5DQ 01604 809 800
www.mola.org.uk
sparry@mola.org.uk

Archaeological mitigation works on land at Station Road, Warboys Cambridgeshire December 2018

Site code: ECB5548

Report No. 19/20

Quality control and sign off**:**

Issue No.	Date approved:	Checked by:	Verified by:	Approved by:	Reason for Issue:
1	14/03/2019	Claire Finn	Chris Chinnock	Adam Yates	Draft for client review

Authors: Adam Douthwaite BA MA

Alex Shipley BSc

Illustrator: Carla Ardis

MOLA
Kent House
30 Billing Road
Northampton
NN1 5DQ
01604 809800

www.mola.org.uk
sparry@mola.org.uk

STAFF

Project Manager:	Adam Yates BA MCIfA
Text:	Adam Douthwaite BA MA Alex Shipley BSc
Fieldwork:	Adam Douthwaite BA MA Kathrin Winzer MA
Environmental and finds processing:	Beatrice Helme BA Donna-Maria Brady BA
Illustrations:	Carla Ardis MA
Pottery:	Paul Blinkhorn BTech
Animal bones:	Sander Aerts MSc
Charred plant microfossils:	Sander Aerts MSc
Human remains:	Chris Chinnock BA MSc ACIFA
Fired clay:	Mary Ellen Crothers BA MA

OASIS REPORT FORM

PROJECT DETAILS	**OASIS No: molanort1-344378**	
Project title	Archaeological mitigation works on land at Station Road, Warboys, Cambridgeshire, December 2018	
Short description	*MOLA (Museum of London Archaeology) Northampton undertook an archaeological excavation on land a Station Road, Warboys on behalf of CgMs Heritage LTD (part of RPS group PLC) and David Wilson Homes. The excavation uncovered two pits dated to the Iron Age, a pit dated to the early medieval period and disarticulated human remains residual in post-medieval features. These human remains were found adjacent to an early to middle Saxon burial uncovered in a previous evaluation on the site. An additional six undated pits and one undated ditch which are likely to be Iron Age or early medieval in date respectively. Furrows and substantial areas of post-medieval quarrying are likely to have removed earlier features including other burials.*	
Project type	Archaeological excavation	
Previous work	Geophysical survey (Walford 2016); Desk-based assessment (Flitcroft 2017); Archaeological trial trench evaluations (Slater 2016; Chinnock 2017)	
Current land use	Arable land	
Future work	Not known	
Monument type and period	Undated ditch and pits, Iron Age pit, Saxon pit, Saxon burial medieval furrows, post-medieval/modern quarrying	
Significant finds	Human bone, pottery, animal bone	
PROJECT LOCATION		
County	Cambridgeshire	
Site address	Station Road, Warboys, Cambridgeshire	
Easting Northing	TL 309 806	
Area (sq m/ha)	0.22 ha	
Height aOD	28.5-29m aOD	
PROJECT CREATORS		
Organisation	MOLA	
Project brief originator	Andrew Thomas (Cambridgeshire Historic Environment Team)	
Project Design originator	MOLA Northampton	
Director/Supervisor	Adam Douthwaite (MOLA Northampton)	
Project Manager	Adam Yates (MOLA Northampton), Ben Barker (CgMS Heritage)	
Sponsor or funding body	David Wilson Homes	
PROJECT DATE		
Start date	26/11/2018	
End date	12/12/2018	
ARCHIVES	**Location (Accession no.)**	**Contents**
Physical	ECB5548	B+W negatives, finds
Paper		Context sheets, drawings, registers
Digital		Digital photos, report, survey
BIBLIOGRAPHY	Unpublished client report	
Title	Archaeological mitigation works on land at Station Road, Warboys, Cambridgeshire December 2018	
Serial title & volume	19/20	
Author(s)	Adam Douthwaite and Alex Shipley	
Page numbers	21 pages including text and illustrations	
Date	07/03/2019	

Contents

1 INTRODUCTION

2 OBJECTIVES

3 BACKGROUND

3.1 Location, topography and geology

3.2 Archaeological background

4 EXCAVATION METHODOLOGY

5 THE EXCAVATED EVIDENCE

5.1 General stratigraphy

5.2 The archaeological remains

6 THE FINDS

6.1 Pottery by Paul Blinkhorn

6.2 Fired clay by Mary Ellen Crothers

6.3 Animal bone by Sander Aerts

6.4 Human skeletal remains by Christopher Chinnock

7 ENVIRONMENTAL EVIDENCE by Sander Aerts

8 DISCUSSION

BIBLIOGRAPHY

Figures

Front Cover: Site before stripping, looking north-west

Fig 1: Site location and excavation area

Fig 2: Mitigation area in relation to previous trial trench evaluations

Fig 3: Selected investigated features

Back Cover: Site after stripping, looking west

Tables

Table 1: Pottery occurrence by number and weight (in g) of sherds per context by fabric type

Table 2: Number of identified animal bone fragments per context. Numbers in brackets indicate remains retrieved via environmental sampling

Table 3: Ecofacts from samples

Archaeological mitigation works

on land at Station Road, Warboys

Cambridgeshire

December 2018

Abstract

MOLA (Museum of London Archaeology) Northampton undertook an archaeological excavation on land a Station Road, Warboys on behalf of CgMs Heritage LTD (part of RPS group PLC) and David Wilson Homes. The excavation uncovered two pits dated to the Iron Age, a pit dated to the early medieval period and disarticulated human remains residual in post-medieval features. These human remains were found adjacent to an early to middle Saxon burial uncovered in a previous evaluation on the site. An additional six undated pits and one undated ditch which are likely to be Iron Age or early medieval in date respectively. Furrows and substantial areas of post-medieval quarrying are likely to have removed earlier features including other burials.

1 INTRODUCTION

MOLA (Museum of London Archaeology) was commissioned by CgMs Heritage (part of RPS Group PLC), on behalf of their client David Wilson Homes, to undertake archaeological mitigation works on land at Station Road, Warboys (NGR TL 309 806). Works were carried out in advance of residential development comprising 80 dwellings, drainage features and associated ancillary works (16/02519/OUT).

Following previous archaeological survey and evaluation, a programme (planning application number: 16/02519/OUT) of archaeological mitigation was undertaken to mitigate the effects of the development on the archaeological resource, in accordance with the National Planning Policy Framework (MHCLG 2018). The methodology for excavation was outlined in a Written Scheme of Investigation prepared by MOLA (MOLA 2018), in accordance with the requirements of the Cambridgeshire Historic Environment Team (CHET) of Cambridgeshire County Council (Thomas 2017).

2 OBJECTIVES

The main research objectives of the mitigation works were as follows (MOLA 2018, 3):

- To investigate the character and morphology of the archaeological remains predating the post-medieval features identified within the mitigation area and;
- To contribute to an understanding of Saxon mortuary practices in the region.

Based on the findings of the evaluation works, it was indicated that the potential for the site was likely to focus on the early to middle Saxon or medieval periods, though the potential for prehistoric activity had not been discounted. The remains were considered to have the potential to contribute to the following research themes, as identified from the regional research frameworks (Medlycott 2011):

- **Population studies**: Population modelling and demographics are an area for further analysis in the region. Should more than one individual be identified their potential to contribute to regional studies on population and identity using radiocarbon dating and/or oxygen isotope analysis will be explored
- **Rural landscapes**: The surviving undated features in the vicinity of the single grave may have the potential to contribute to the understanding of the utilisation of the landscape in the Saxon or medieval period (assuming corroborating dating evidence is recovered to indicate an association with the grave).

3 BACKGROUND

3.1 Location, topography and geology

The proposed residential development site comprises a total area of 3.6 ha on land on the north-eastern edge of the village of Warboys, west of Station Road (NGR: TL 309 806). The site was bounded to the north and east by residential properties and to the south and west by arable fields. The proposed mitigation area comprised a sub-rectangular area measuring 0.22ha on the southern boundary of the development site. (Fig 1).

The site was situated within a largely flat arable field, with the mitigation area lying between 28.5m and 29m aOD.

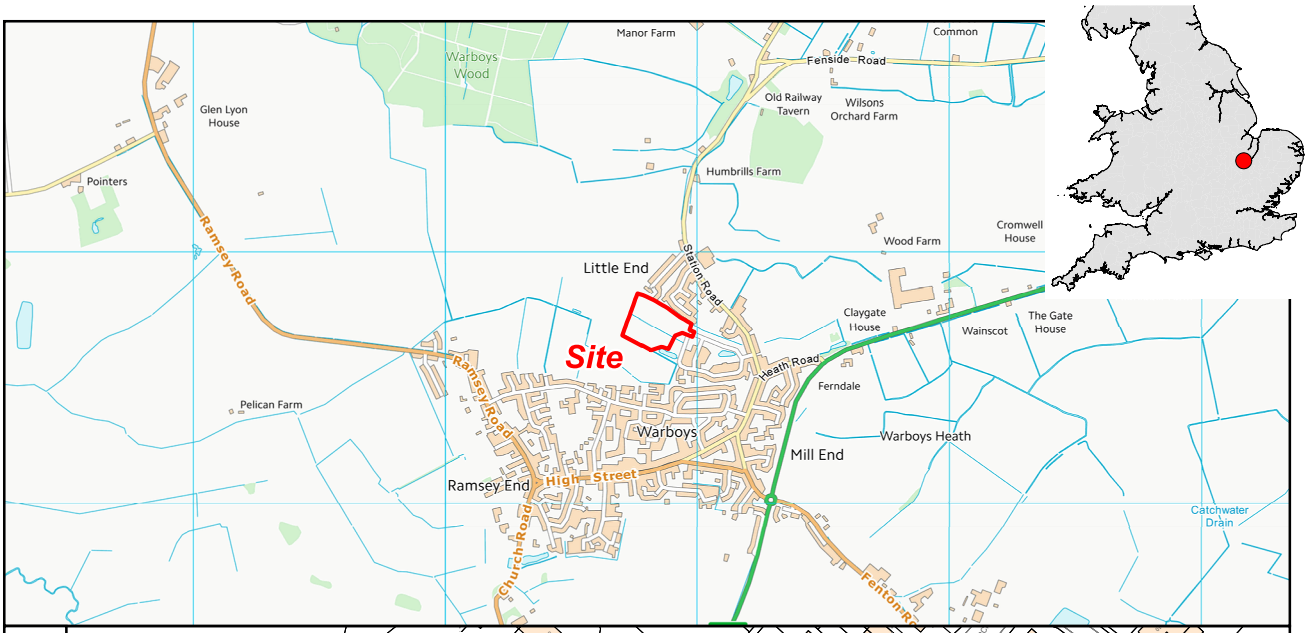
The geology of the site has been mapped as West Walton and Ampthill Clay formations, with overlying superficial Quaternary deposits of clay, silt, sand and gravel (BGS 2018).

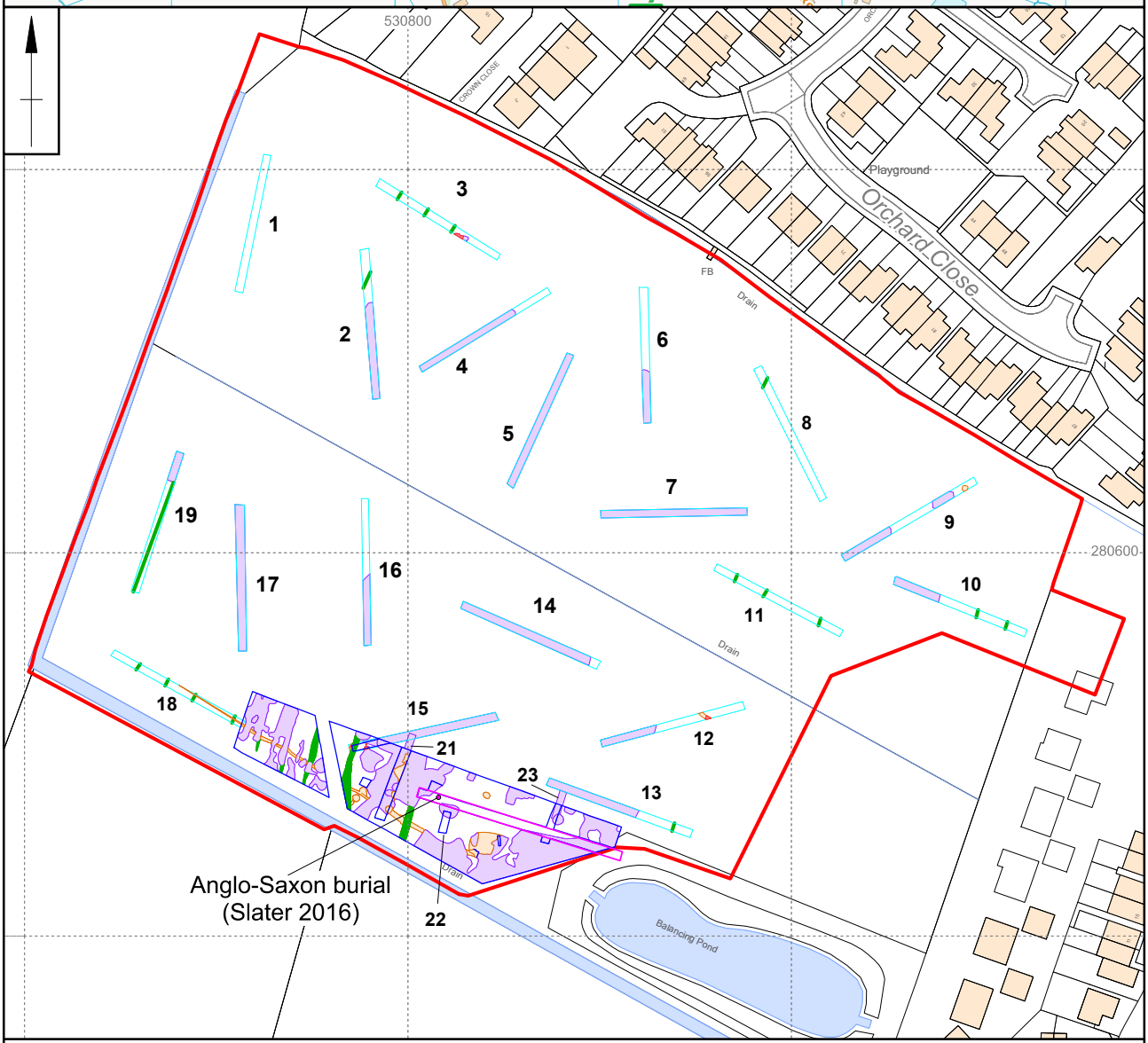
3.2 Archaeological background

Previous archaeological work on site comprised a geophysical survey (Walford 2016), two phases of trial Trench evaluation (Slater 2016; Chinnock 2017) and a Desk-Based Assessment (DBA) (Flitcroft 2017).

The geophysical survey identified a number of magnetic anomalies; a series of parallel linear anomalies across the site were identified as medieval or early post-medieval ridge and furrow. Further anomalies, many of them forming a weak and amorphous background patterning, were interpreted as part of the natural geology, although three stronger responses at the extreme western end of the survey area may be infilled pits (Walford 2016).

A trial Trench evaluation in advance of residential development directly adjacent to site was undertaken by Pre-Construct Archaeology, and comprised of sixteen Trenches (Slater 2016). Two further strip, map and sample areas for two newt ponds were also excavated. The majority of these Trenches and both ponds are located outside the current development area; however Trench 17 extended into the south-eastern corner of the current development site. Evidence of pre-medieval activity was limited to two areas; a pit containing a single pottery sherd of possible Saxon date was located in Pond 1, directly to the north-east of the mitigation area. At the western end of Trench 17, located in the centre of the mitigation area, an inhumation burial and medieval ditch were identified.





Mitigation area
Quarrying
PCA trench
Furrow
Site location
Trial trench
Feature
Section

0 100m

Scale 1:1750

Site location and mitigation area Fig 1

The inhumation was of an adult female, aged between 25 to 35 years old, who had been buried with an iron knife and a copper-alloy belt buckle. The burial was dated to the early Anglo-Saxon period (AD 410-720), with a suggestion that it fell within the later part of this period. Widespread evidence of post-medieval quarrying was identified across the evaluation area (Slater 2016).

Following this evaluation, a DBA was undertaken in advance of the development of the current site. The potential for prehistoric or Roman activity was considered to be low, as there was little evidence of previously identified activity within the study area, although an undated group of cropmarks to the north-west of the site was considered to potentially relate to one of these periods. Potential for further early Saxon activity was considered high, whats recorded in the 2016 evaluation likely. Evidence for late Saxon, medieval and post-medieval activity was shown to be concentrated to the south of site, in the historic core of the village of Warboys. The site itself remained outside of the settlement core, with identified ridge and furrow located to the south of the site, between the site and the settlement core, as well as being identified in the earlier geophysical survey. Although potential for activity from this period was high, it was likely to be of limited interest (Flitcroft 2017).

Trial Trench evaluation of the current site was undertaken by MOLA Northampton, and comprised of twenty-three Trenches. Widespread evidence of post-medieval quarrying similar to that recorded in the 2016 evaluation was identified (Chinnock 2017). However, where undisturbed natural was located, a number of features were identified, although none yielded any dating evidence. Of potential significance were two ditches, a pit and a possible post-hole identified in Trenches 15 and 18, located close to the previously recorded inhumation. Also identified in a number of the Trenches was evidence of ridge and furrow, previously identified in the geophysical survey.

4 EXCAVATION METHODOLOGY

All works were carried out in accordance with the Chartered Institute for Archaeologists *Code of Conduct* (CIfA 2014a), *Standard and Guidance for Archaeological Excavation* (CIfA 2014b), as well as regional guidelines (Gurney 2003). All works conformed to Historic England's procedural document *Management of Research Projects in the Historic Environment* (HE 2015). All site recording procedures are detailed in MOLA's in-house *Archaeological Fieldwork Manual* (MOLA 2014), which is issued to all staff. Work was undertaken in accordance to the brief and WSI (MOLA 2018) which was monitored by Ben Barker (CgMS) and Andy Thomas (CCC).

A programme of excavation was undertaken as required by the CHET. This comprised a single area covering 0.22ha, surrounding the location of the inhumation burial identified during the trial Trench evaluation in 2016 (Fig 2). The mitigation area was measured in and marked out prior to the commencement of work using Leica Captivate GPS operating to an accuracy of +/- 0.05m to Ordnance Survey National Grid. The southern-western and south-eastern boundaries were stepped in slightly from the originally designed limits due to the presence of newt fencing that could not be removed. A public right of way crossed the mitigation area from north to south. To allow for its continued use narrow corridor was left unexcavated. After consultation with the CHET, it was decided to leave this corridor.

Machine excavation was carried out under the direction of a suitably experienced archaeologist. The mitigation area was stripped using a 360° machine excavator with a toothless ditching bucket to reveal archaeological remains or, where these were absent, undisturbed natural horizons. Topsoil and subsoil were separated during stripping and stockpiled separately adjacent to the mitigation area.

All archaeological deposits and artefacts encountered during the course of excavation were fully recorded. All contexts were described on pro-forma sheets including a

detailed description, stratigraphic relationships, interpretation and a checklist of associated finds.

Excavated sections were targeted to determine stratigraphic relationships and to obtain a representative sample of larger features. Sampling levels for pre-modern features were as follows:

- **Linear features not associated with settlement**: sufficient proportion to inform interpretation, at appropriate intervals. Excavated sections were at least 1m in width.
- **Discrete features (pits and postholes)**: 50%, except where they are shown to form part of recognisable structures or contain deposits of particular value or significance, in which case they were fully excavated.

Archaeological features were plotted on an overall plan at a scale of 1:50. Sections or profiles through features and areas of complex stratigraphy were drawn at a scale of 1:10 or 1:20 as appropriate. The heights of all recorded deposits were established relative to Ordnance Datum.

A photographic record was kept of the excavation, comprising high resolution digital photographs, exceeding 12 megapixels, and monochrome negatives. All photographs, except general shots or specific shots for publication, included a north arrow and suitable photographic scales. The field data was compiled into a site archive with appropriate cross-referencing. Photographs of the overall site were taken prior to excavation and on completion of excavation.

Finds were collected from the individual deposits and appropriately packed and stored in stable conditions, by context and in accordance with recognised best practise (Watkinson and Neal 2001, Walker 1990).

Bulk environmental soil samples were taken from two securely dated sealed archaeological features. The volume of each bulk sample was 40 litres. Samples were processed at MOLA Northampton, using the flotation technique to retrieve seed, charcoal and mollusc remains. All the resultant residues were then hand sorted to retrieve bones and other finds.

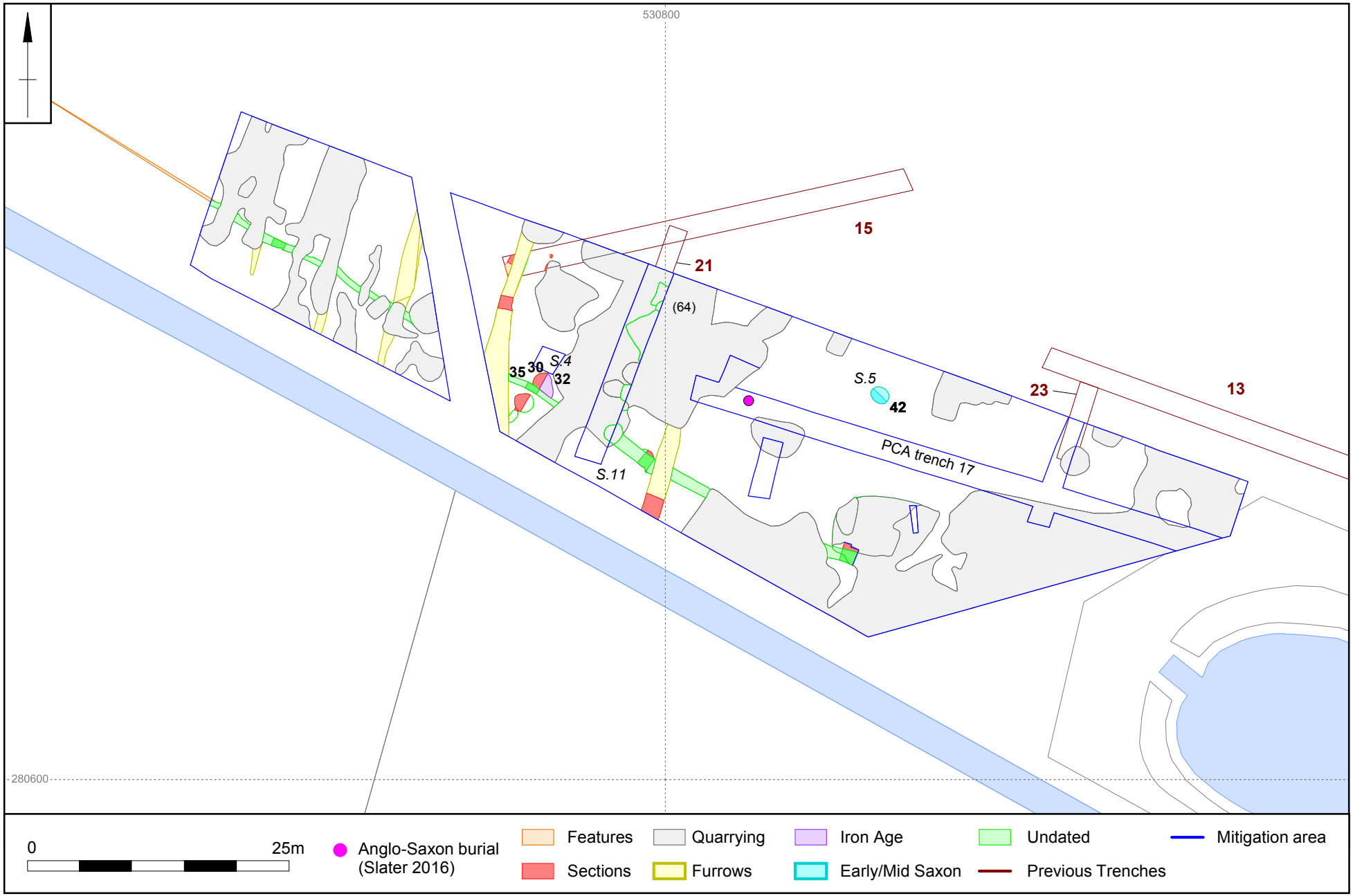
The excavated area and spoil heaps were scanned with a metal detector to ensure maximum finds retrieval. The requirements of the Treasure Act (1996) and the Treasure (Designation) Order (2002) were adhered to.

A fully integrated archive of the fieldwork results has been compiled in a manner compatible with the requirements of *Archaeological Archives* (Brown 2011) and in accordance with the guidelines of in the Historic England procedural document *MoRPHE* (HE 2015). The site archive will be stored in stable conditions pending the transfer to Cambridge Historic Environment Team under Accession ID ECB5548.

All finds have been cleaned, catalogued and prepared for storage in accordance with the guidelines contained in: *Guidelines for the Presentation of Excavation Archives for Long Term Storage* (UKIC 1983), *Standards in the Museum, Care of Archaeological Collections* (MGC 1992), *Preparation of Archaeological Archives; Selection, Retention and Dispersal of Archaeological Collections* (SMA 1993), *Standards and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials* (CIfA 2014c) and *Archaeological Archives: A Guide to best practice in creation, compilation, transfer and curation* (Brown 2011).

The final report will be registered with the Online Access to the Index of Archaeological Investigations (OASIS III) database under the OASIS ID **molanort1-344378**. The site records will be compiled into a fully cross-referenced archive under the current guidelines for the county (CCC 2017) and will be accessioned under **ECB5548.**

Scale 1:500



Mitigation area Fig 2

ECB5548

5 THE EXCAVATED EVIDENCE

5.1 General stratigraphy

The natural sub-strata comprised West Walton and Ampthill Clay formations, with overlying superficial Quaternary deposits of clay, silt, sand and gravel, which were present across the excavated area (BGS 2018). This was overlain by a friable dark brown silty clay topsoil of 0.2m depth covering a subsoil of friable mid reddish-brown sandy clay up to 0.3m deep. The deepest subsoil was located on the southern boundary of site, with depth decreasing to the north until the subsoil layer was no longer present, with the topsoil directly overlying the natural horizon on the northern boundary.

5.2 The archaeological remains

The mitigation area was located to investigate the area surrounding the Saxon inhumation burial previously identified in the 2016 evaluation (Fig 2) (Slater 2016).

Iron Age Pits

In the central southern portion of site, to the east of the public right of way, seven pit-like features were observed, two of which could be securely dated to the Iron Age. The other five are described below under 'undated pits'.

Pit [30], was circular in plan and measured 1.40m in diameter and 0.50m deep, with an irregularly sided U-shaped profile. The pit contained a series of fills, predominantly of mid to dark blue grey clay. A single sherd of Iron Age pottery was recovered from the secondary fill (26).

Pit [32] had been heavily truncated by both pit [30] and ditch [35], so only a partial profile of the base was observable. The surviving portion of the pit was 0.45m at its widest and 0.24m deep, and had an orange brown silty clay fill (Figs 2 and Fig 3, section 4). The irregularity of the sides and base suggest this may have been a re-used root bole (Fig 3).

Within the upper fill (25) of pit [30] a sherd of pottery dating to the 15th century was excavated however; this is thought to be intrusive

Saxon pit

Pit [90] was located in the north of the site and re-cut by later pit [42]. Although no dating was found it is earlier than [42] and demonstrates evidence of re-use so likely to be to a similar time period. It had a stepped profile with relatively steep sides and flattish base.The basal fill (41) was comprised of mid grey silty clay, were the result of natural infilling, probably through erosion of the upper pit edges. This was overlain by deposits of mid orange - brown sandy clay (40).

An isolated circular pit dated to the Saxon period, [42], was located in the northern part of site (Figs 2 and Fig 3, Section 5). The pit measured 1.69m wide and 0.70m deep, with a very steep sided U-shaped profile. The upper fills of mid brown - grey silty clay (38), (36) and (36) with (36) containing a small assemblage of pottery dated to the early medieval period. The same fill also contained animal bone as well as moderate levels of charcoal, and probably result from deliberate backfilling including domestic waste (Fig 4).

Saxon burials

The Saxon inhumation burial that was excavated during the 2016 evaluation was located directly east of the central quarry pit cluster. The burial was in a very shallow grave cut, 1.8m long by 0.63m wide and orientated north-west to south-east, which had

been infilled with mid greyish-brown silty clay. The burial was of an adult female and had been placed in a supine position with the head at the north-western end of the grave. Alongside the skeleton was found an iron knife, a copper-alloy belt buckle, several sherds of Saxon pottery and a collection of animal bones (Slater 2016, 19; 29-30).

Within the upper deposit of the cluster of quarry pits just to the west of the Saxon burial, a small collection of disarticulated human skeletal remains, from a single individual, and older child, were recovered. Although the remains derived out of a post-medieval/modern context, it is highly probable that they would have been part of another burial, disturbed from the same period as that described above.

Medieval furrows

Five features were observed, orientated on a north-north-east to south-south-west alignment. These were identified as the remnants of furrows, similar to those identified in both the geophysical survey and the 2017 evaluation (Walford 2016; Chinnock 2017). A sample section through furrow [6] measured 2.19m wide and 0.48m deep, with a shallow U-shaped profile. The furrows were spaced on average 5m apart, similar to the spacing noted in the 2017 evaluation (Chinnock 2017, 9).

Post-medieval/modern quarrying

Across the excavation, substantial areas of post-medieval/modern quarrying were identified. To the east of the public right of way a large pit cluster was located in the centre of the area, extending beyond the northern limit. A machine slot was cut through this area, along the line of Trench 21 from the 2017 evaluation. Within this slot, ten pits of varying size, shape and orientation were observed. A selection of these pits was fully excavated, measuring between 0.78m and 2.34m in diameter, and between 0.29 and 0.80m deep. The pits were filled with variations of dark brown and/or grey clay with animal bone recovered from the fills of pit [78] and pit [87]. Two layers of material sealed these pits; the upper deposit (64) was dark grey-brown silty clay, 0.32m deep, from which was recovered a small amount of disarticulated human skeletal remains, as well as a small amount of animal bone and two sherds of residual earlier pottery. The lower deposit (65) was dark brownish grey silty clay, 0.20m deep, with frequent stones of variable size and shape. This area would appear to also include the 'medieval ditch' that was recorded in Trench 17 of the 2016 evaluation (Slater 2016, 19).

A further large area of quarrying and disturbance bounded the southern and eastern limits of the mitigation area. Pottery recovered from the surface of the quarrying in the south-east corner was dated to the post-medieval period. Other large pits, of irregular shape, were identified as also being part of the quarrying activity. One example is located directly west of the central pit cluster described above, the north-west corner of which had been investigated in Trench 15 of the 2017 evaluation (Chinnock 2017, 9). To the west of the public right of way, further areas of quarrying disturbance were identified, although these took on a more linear appearance than the pit clusters seen to the east of the public right of way.

To the west of the central pit cluster, a north-north-east to south-south-west ditch was observed which had previously been investigated within Trench 15 of the 2017 evaluation (Chinnock 2017, 9). Further investigation identified this as a modern field drain, [49].

Undated pits

The following five pits are undated, but are likely to be either Iron Age or early medieval in date. Two of the pits described below were cut by undated ditch [35], which suggests that they share a chronological link with pits [30] and [32], which are dated to the Iron Age, and are also cut by ditch [35].

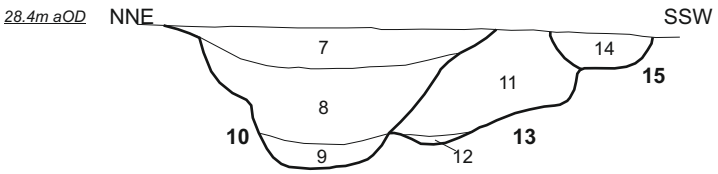
Pit [44] and [47] were two circular pits to the south of the ditch [35]. Pit [44] was 0.45m in diameter and 0.16m deep with a shallow steep sided U-shaped profile. Pit [47] was 1.96m in diameter and 0.26m deep with a broad, shallow, moderately steep sided U-shaped profile. Whilst undated, proximity to Iron Age pit [30] and similar fills suggest that they may be chronologically contemporary.

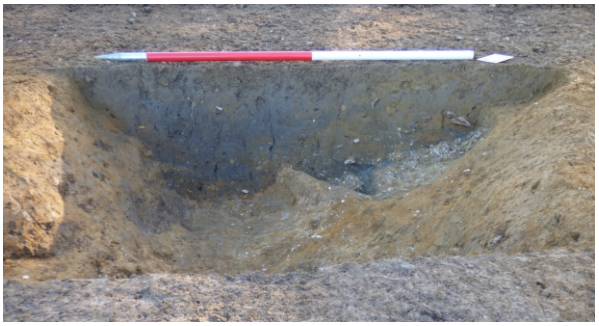
Three further pits, two cut by ditch [35], were located slightly further to the east. Pit [13] was a circular pit, 0.62m in diameter and 0.38m deep, with a steep sided U-shaped profile with a sloping base, which was cut by the ditch [35] on its northern side. Pit [15] was a shallow circular pit, 0.34m in diameter and 0.11m deep with a shallow, steep sided U-shaped profile, which truncated the upper fill of pit [13] (Fig 4). Pit [24] was a sub-circular pit, 0.51m in diameter and 0.29m deep with a steep sided U-shaped profile, which was cut on its southern side by ditch [35]. Pits [13] and [24] are both probable root boles, due to their irregular base and/or edges. All five pits contained naturally infilled blue-grey or grey-brown silty clay.

Undated ditch

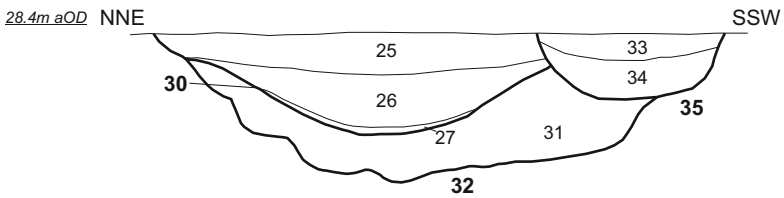
An undated ditch [35] was identified, orientated north-west to south-east. The ditch could be traced for 71m, extending from the western site limit into the quarrying disturbance in the south-eastern corner of the site, where it was totally cut away. It measured on average 1.00m wide and 0.35m deep. The ditch had also been removed, either in part or in totality, in multiple locations along its observed length by later ridge and furrow activities and quarrying activity. The ditch had also been observed in Trench 18 of the 2017 evaluation directly west of the current mitigation area. Here it was recorded as extending from the south-eastern end of the Trench for *c*12m on its north-west to south-east alignment before passing beyond the limit of the Trench (Chinnock 2017, 8).

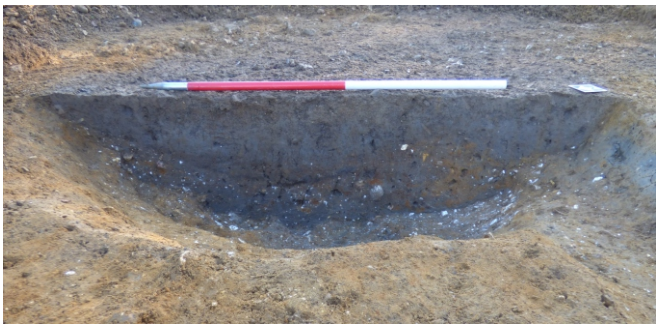
Section 2



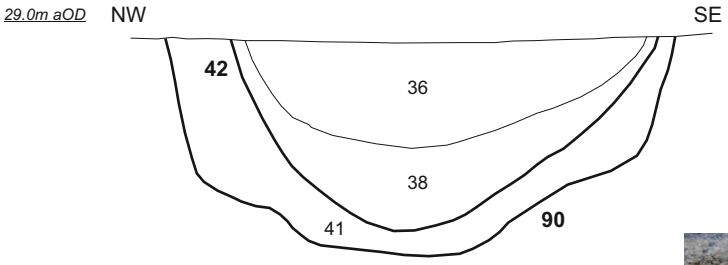


Section 4





Section 5



Scale 1:25

Sections 2, 4 and 5 Fig 3

6 THE FINDS

6.1 Pottery by Paul Blinkhorn

The pottery assemblage comprised 19 sherds with a total weight of 369g. The pottery occurrence by number and weight of sherds per context by fabric type is shown in Table 1. Each date should be regarded as a *terminus post quem*. It was mostly of early/middle Anglo-Saxon date (5th – 9th century), but sherds of Iron Age and post-medieval material were also noted, as follows:

Iron Age

Sandy fabric with moderate shell up to 4mm. 2 sherd, 50g.

The sherd from context (64) is residual, and is somewhat abraded, with most of the calcareous inclusions leached out. It is a plain bodysherd, and is most probably of mid-late Iron Age date. The apparently stratified sherd from context (26) is of a similar date.

Early/middle Anglo-Saxon

Moderate to dense ferruginous sandstone up to 1mm, rare to sparse calcareous material up to 1mm, most 0.5mm or less. 15 sherds, 250g

The sherds are all fairly fresh and large, and appear reliably stratified. The pottery from context (36) is from probably no more than four vessels, each represented by multiple sherds. The sherd from context (64) is from the rim of a small jar, with the rest of the pottery of this type from the site being plain bodysherds.

The dating of Early Anglo-Saxon hand-built pottery is mainly reliant on the presence of decorated sherds, which are largely of 5th – 6th - century date, with 7th - century pottery being largely plain (Myres 1977, 1). However, it cannot be said with certainty that an assemblage which produced only plain sherds is of 7th - century date. Usually, decorated hand-built pottery comprises just 5% or less of domestic assemblages, as was the case at Mucking, Essex (Hamerow 1993, 51). Thus, this assemblage can only be dated to the broad early/middle Anglo-Saxon period, ie 5th – 9th century.

The post-medieval pottery was recorded using the conventions of the Museum of London type-series, as follows:

Midland Purple Ware, 1450 – 1750. 1 sherd, 51g.

Post-medieval Redware, 1580 – 1900. 1 sherd, 18g.

The sherd of PMR is from the rim of a chamber-pot, while that of MPUR is from an internally glazed large bowl. Both are fairly typical products of their respective traditions.

Table 1: Pottery occurrence by number and weight (in g) of sherds per context by fabric type.

	Iron Age		Early/Middle Saxon		Midland Purple		Post-medieval redware		
Fill/Cut	**No**	**Weight**	**No**	**Weight**	**No**	**Weight**	**No**	**Weight**	**Date**
(25)/[30]	-	-	-	-	1	51	-	-	**M15thC**
(26)/[30]	1	8	-	-	-	-	-	-	**IA**
(36)/[42]	-	-	14	223	-	-	-	-	**E/MSAX**
(54)/[56]	-	-	-	-	-	-	1	18	**17thC**
(64)/[67]	1	42	1	27	-	-	-	-	**E/MSAX**
Total	**2**	**50**	**15**	**250**	**1**	**51**	**1**	**18**	**-**

6.2 Fired clay by Mary Ellen Crothers BA MA

Two fragments of fired clay weighing 5.5g were recovered from context (36). The fabric is mid orange-brown with occasional sand inclusions. There are numerous tiny air pockets which have probably resulted from organic material leaching out. The clay may have derived from a riverbank which has a naturally high organic content and could have created the homogenous fabric. Both fragments are highly abraded and cannot be identified with confidence.

The largest fragment (3.6g) however, has a pair of parallel linear impressions that may have been created through the daubing of a structure, although this is uncertain.

6.3 Animal bone by Sander Aerts

Methodology

A total of 101 animal bone fragments were recovered through hand-collection and environmental sampling. The remains were manually washed prior to analysis. Identifications took place with aid of the MOLA Northampton mammalian reference collection and Schmid (1972).

The fragments were recorded using the NISP method (number of identified specimens), implying identification was attempted on all remains with diagnostic features. Other remains were, where possible, divided into size categories: LM (large mammal, i.e. cattle and horse), MM (medium mammal, i.e. sheep/goat, pig, dog). Due to morphological similarities, sheep and goat remains have been grouped together. All taphonomy, including burning, butchering marks and gnawing have been documented.

Results

The identifications per context have been summarised in Table 2. Fourteen fragments could be identified. The assemblage comprises of common domesticates, including cattle, sheep/goat, pig and dog. No butchering marks were observed. Carnivore gnawing was present on two large mammal fragments from fills (38) and (77). Some remains of an unidentified small bird were present in fill (36).

Table 2. Number of identified animal bone fragments per context. Numbers in brackets indicate remains retrieved via environmental sampling

Context	Cut	Feature	Cattle	Sheep/Goat	Pig	Dog	LM	MM	UM	Bird
16	21	Ditch	-	-	-	-	1	-	-	-
26	30	Pit	-	-	-	-	-	2	-	-
36	42	Pit	4	1	-	1	15	-	0 (33)	0 (3)
38	42	Pit	3	-	3	-	10 (6)	1	3	-
64	67	Quarry pit?	2	-	-	-	2	-	-	-
77	78	Quarry pit?	-	-	-	-	4	-	1	-
84	87	Quarry pit	-	-	-	-	6	-	-	-

Discussion

The excavation has produced a small assemblage of animal bone, most of which derives from common domestic mammals. No butchering marks have been identified, but some carnivore gnawing was present, indicating that he bones may have been exposed for some time. The assemblage is too small to draw conclusions regarding diet and the local economy.

6.4 Human skeletal remains by Christopher Chinnock

Introduction

A small amount of disarticulated human bone was discovered during machine stripping of an area for archaeological excavation on land at Station Road, Warboys Cambridgeshire. The bones were located close to the known location of a Saxon burial identified during archaeological trial Trench evaluation of the area (Chinnock, C, 2017). The bones discussed here were within the backfill of post-Medieval quarrying activity (64) and are likely to represent the remains of a single skeleton disturbed by later agricultural activity on the site.

Preservation and completeness

The skeletal remains were assessed for overall bone preservation and scored on a three point scale from good to poor (Connell and Rauxloh 2007). The elements displayed moderate levels of preservation with limited erosion of the bone and surface details clearly visible. Despite the degree of later disturbance and breakage of the bones they were generally considered to be in good condition and thus not likely to have been moved too much from their original location.

These disarticulated and fragmentary bones represent only 0-4.9% of the skeleton. Both right and left tibiae and fibulae were represented as was the distal two thirds of the right femur.

Methods

All skeletal remains were recorded onto an Oracle 9i (v9.2.0) relational database following Museum of London methodology (Connell and Rauxloh 2007; Powers 2008). This provided a full catalogue of the bones and teeth present, estimates of age and sex, measurements of cranial and post-cranial elements and observations of no-metric traits.

Demographic Data

Whilst technically the assemblage comprised disarticulated bone, the shape, size, patina and development of the bones strongly suggest that they are from a single individual and they have been treated as such for the purposes of this analysis. Both tibiae displayed unfused epiphyses, indicating that the remains were those of a sub-adult. Due to the absence of much of the rest of the skeleton it remains difficult to refine the age at all. However, the size of the surviving long bones suggest that they are those of an older child, though no older than 15 years as evidenced by the unfused distal epiphyses of the left tibia. No estimation of sex was attempted due to the immaturity of the skeletal remains.

Discussion

Very little can be said of these remains, other than that they represent those of an older child. No pathological lesions were identified and no metrical analysis was possible. Due to their proximity to a previously identified earlyMedieval burial it is tentatively suggested that the disturbed remains discussed here are likely to be contemporary.

7 ENVIRONMENTAL EVIDENCE

Two environmental soil samples comprising of 40 litres each were available for environmental analysis. These were processed at MOLA Northampton using manual flotation. Identifications were carried out using the MOLA Northampton reference collection for cereal crops.

The excavation has produced a small assemblage of ecofacts, the identifications are summarised in table 3 Both samples contained a few poorly preserved carbonised cereal grains, either wheat (*Triticum* sp.) or barley (*Hordeum* sp.), which are associated with medium sized charcoal concentrations. These are likely part of domestic refuse. Some snail shells were observed. These include common, terrestrial europtypic taxa (*Vertigo* sp., Zonitidae spp.).

The preservation and sample size is not sufficient to draw conclusions regarding diet or the natural environment.

Table 3: Ecofacts from samples

Sample	**1**	**2**
Context	**(36)**	**(38)**
Cut	**[42]**	**[42]**
Feature	**Pit**	**Pit**
***Triticum/Hordeum* sp.**	x	x
Charred grain indet.	-	x
Snail shell	xx	x
Charcoal <2 mm	xxxx	xxx
Charcoal 2-5 mm	xxxx	xx
Charcoal 5> mm	xxxx	xx

Key: X=1-3, XX=4-20, XXX=21-50, XXXX=51+

8 DISCUSSION

Iron Age

Two pits have been securely dated to the Iron Age, but there were a further five pits that, although undated, may also date to this period. The majority of these pits show signs of rooting around their edges and/or in their base, and therefore may have originated as a series of root boles. This would suggest that the focus of any activity from this period was elsewhere; undated cropmarks suggestive of settlement or agricultural activity have been observed *c*200m to the north-west of site (Flitcroft 2017, 11).

Saxon

In the middle of the mitigation area, a human burial inhumation was excavated in 2016 (Slater 2016, 22-30). This was identified to be of an adult female. There was evidence for episodes of malnutrition in her early life, she was also seen to have had poor levels of dental hygiene, and could have suffered potentially significant localised back-pain due to a herniated nucleus pulposus in a thoracic vertebra. This, alongside the generally robust nature of the skeleton, suggested that the individual was a manual worker. (Slater 2016, 22-24; 26-30). Alongside the body were a copper-alloy belt buckle and an iron knife. The buckle was found to be similar to Marzinzik's Type II.24bii in form, and dated to the early-middle Saxon period (AD 410-720).Similar buckles, although occasionally found in 5th or 6th century burials, are more widespread in burials of the 7th and 8th centuries.

The burial itself was on a north-west to south-east alignment. It is uncertain whether the burial was pagan and/or Christian, but as the orientation of pagan and final phase Christian conversion phase burials varied, this may not be significant. By the middle Saxon period the east to west orientation of Christian burials became the norm, with the head placed at the western end of the grave so as to facilitate the dead facing east. There was no evidence for the presence of a coffin, nor did the attitude of the body suggest that the body had been wrapped in a shroud before burial (Slater 2016, 30).

Although no further *in situ* burials were located during the excavation, the presence of disturbed human skeletal remains within the backfill of the later quarrying directly to the west of the 2016 burial suggests that there was at least one further burial that had been disturbed during the quarrying activity on site. There was no evidence for further burials to the east and south in the areas of undisturbed natural. Therefore it is likely that any further burials that may have been in the area were located to the west and/or north of the burial previously excavated in 2016. As such, they will have been disturbed by the later quarrying observed both in the current excavation and also in the evaluation in 2017 (Chinnock 2017, 9).

Possibly contemporary with the burials was an isolated Saxon pit, cutting an earlier pit, found in the northern part of site. The contents would suggest that, at least at the end of its life, the pit was being used for the disposal of domestic rubbish. A further pit of a similar date was identified in Pond 1 from the 2016 evaluation, *c*85m to the north-east of the mitigation area.

Undated ditch

An undated ditch was recorded crossing the mitigation area on a north-west to south-east alignment. Although undated, it can be shown to have pre-dated the medieval ridge and furrow system, and is likely to have dated to the Iron Age or early Medieval periods. It had a somewhat sinuous nature, and was probably a small boundary. It contained small amounts of animal bone in its upper fills, which could be considered domestic rubbish. It was also observed to continue to the west of the current

excavation when it was investigated in Trench 18 of the 2017 evaluation, which unfortunately also found no dating evidence (Chinnock 2017, 8).

Medieval

The furrows observed across the excavation area are orientated to the same alignment seen in the ridge and furrow observed during the 2017 evaluation (Chinnock 2017, 9) and in the field directly to the south of mitigation area. They form part of a widespread field system on the periphery of medieval Warboys, with further evidence of ridge and furrow field systems recorded on the western and eastern periphery of the village. The core of the settlement was centred on High Street and Church Road, 500m to the south-west of site (Flitcroft 2017, 13).

Post-medieval/modern

Quarrying activity was observed across large parts of site, with a large pit cluster located in the centre of the excavation area, along with further areas of quarrying disturbance in the south-eastern corner and also to the west of Public right of way. This forms part of a more widespread area of quarrying activity that was identified in the previous evaluations, both in the areas directly to the north and east of the excavation area (Chinnock 2017, 9; Slater 2016, 32). Whilst the conclusion of the earlier evaluation was that the quarrying was part of gravel extraction connected to the construction of houses in the nearby village of Warboys, the later evaluation suggested that the quarrying may have instead been for clay extraction, as a number of former clay pits are present within the local area, connected to the brickworks located 1km to the north of site (Chinnock 2017, 9; Flitcroft 2017, Fig 4).

Based on the excavated slot through the central area of quarrying, the quarrying would appear to be more for gravel extraction, rather than for clay. The pits excavated within the machine slot were seen to cut through the gravel deposits overlying the West Walton and Ampthill Clay formations, but did not extend very far into these clays. It is possible that the pits in the south-east corner of the site are for clay extraction, as pockets of redeposited clay were seen on the surface, and the quarry pit [56] was backfilled with redeposited blue clay, suggesting that it may have served a different purpose than the pits further to the west.

Conclusion

The excavated evidence shows limited Iron Age activity consigned to a minimum of two dated pits suggesting some activity in the surrounding area that may have been destroyed or obscured by later agricultural and quarrying activities. The presence of a Saxon burial excavated in 2016 and the human remains found within the backfill (64) of a quarry pit suggests that there may have been a small burial ground in the area that, again, has been almost entirely removed by later quarrying activity so limited information can be inferred from this. Medieval ridge and furrow in the west of the site shows that the area was used for agricultural purposed before being quarried in a later period.

The archaeological evidence does not contribute to the research themes put forward in section 2 (Medlycott, 2011) owing to the scarcity of surviving datable features. The undated features in proximity of the burial located in 2016 cannot be securely used to expand on the utilization of the landscape. Ditch [35] was on a similar alignment of east to west but, overall, the feature was heavily disturbed by later quarrying activities and little can be said about function, whether it is part of an enclosure or part of a field system and whether there was any relation with the burials.

Little information informing on research aims associated with burial practice, population or density can be drawn from the results of the works.

BIBLIOGRAPHY

BGS 2018 *The British Geological Survey GeoViewer*, British Geological Survey available online at http://www.bgs.ac.uk/geoindex/home.html (last accessed 19 November 2018)

Brown, N, and Glazebrook, J, 2000 *Research and Archaeology: A Framework for the Eastern Counties 2: Research Agenda and Strategy*, East Anglian Archaeology, Occasional Paper, **8**

Brown, D H, 2011 *Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation*, Archaeological Archives Forum

CCC 2017 *Deposition of archaeological archives in Cambridgeshire*, Cambridgeshire County Council (version 2)

CIfA 2014a *Code of conduct*, Chartered Institute for Archaeologists

CIfA 2014b *Standard and guidance for archaeological excavation*, Chartered Institute for Archaeologists

CIfA 2014c *Standards and guidance for the collection, documentation, conservation and research of archaeological materials*, Chartered Institute for Archaeologists

Campbell, G, Moffett, L, and Straker, V, 2011 *Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-Excavation*, Historic England

Chinnock, C, 2017 *Archaeological trial Trench evaluation on land at Station Road, Warboys*, *Cambridgeshire,* Museum of London Archaeology report, **17/41**

Connell, B and Rauxloh, P, 2003 *A rapid method for recording human skeletal data*, Second Edition revised 2007 Powers, N (ed), Museum of London Archaeology

Flitcroft, M, 2017 *Archaeological Desk-Based Assessment: Land off Station Road, Warboys, Huntingdonshire*, CgMs Heritage

Glazebrook, J, (ed) 1997 *Research and Archaeology: A Framework for the Eastern Counties 1: Resource Assessment*, East Anglian Archaeology, Occasional Paper, **3**

Gurney, D, 2003 *Standards for Field Archaeology in the East of England*, East Anglian Archaeology Occasional Papers, **14**

Hamerow, HF, 1993 *Excavations at Mucking Volume 2: The Anglo-Saxon Settlement* English Heritage Archaeology Report **22**

HE 2015 *Management of Research Projects in the Historic Environment: The MoRPHE Project Managers Guide*, Historic England

Medlycott, M, 2011 *Research and Archaeology Revisited: a revised framework for the East of England*, East Anglian Archaeology, Occasional Paper, **24**

MGC 1992 *Standards in the Museum, Care of Archaeological Collections*, Museums and Galleries Commission

MHCLG 2018 *National Planning Policy Framework*, Ministry of Housing, Communities and Local Government

MOLA 2014 *Archaeological fieldwork manual*, MOLA Northampton

Myres, JNL, 1977, *A Corpus of Anglo-Saxon Pottery of the Pagan Period* 2 vols, Cambridge University Press

MOLA 2018 *Written Scheme of Investigation, Archaeological mitigation works on land at Station Road, Warboys, Cambridgeshire September 2018*, Museum of London Archaeology Northampton

Slater, M, 2016 *Land at Station Road, Warboys, Cambridgeshire: An Archaeological Trial Trench Evaluation*, Pre-Construct Archaeology

Schmid, E, 1972 *Atlas of animal bone,* Elsevier

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

Thomas, A, 2017 *Brief for Archaeological Investigation: Land between Old Mill Avenue and Station Road, Warboys*, Cambridgeshire Historic Environment Team

UKIC 1983 *Guidelines for the Presentation of Excavation Archives for Long Term Storage,* Guidelines, **2**, United Kingdom Institute for Conservation

Walford, J, 2016 *Archaeological geophysical survey at Station Road, Warboys, Cambridgeshire February 2016*, Museum of London Archaeology report, **16/23**

Walker, K, 1990 *Guidelines for the preparation of excavation archives for long term storage*, United Kingdom Institute for Conservation

Watkinson, D, and Neal, V, 2001 *First Aid for Finds*, United Kingdom Institute for Conservation

MOLA

14 March 2019

MOLA
Kent House
30 Billing Road
Northampton
NN1 5DQ
01604 809 800
www.mola.org.uk
sparry@mola.org.uk