

Late Saxon and Medieval Remains at Rosemary Road, Waterbeach Archaeological Excavation Report

September 2021

Client: Twenty-Nine Architecture on behalf of Dean & Dean Construction Ltd

Issue No: 2

OA Report No: 2529 NGR: TL 4977 6522



Client Name: Twenty-Nine Architecture on behalf of Dean & Dean Construction Ltd

Document Title: Late Saxon and Medieval Remains at Rosemary Road, Waterbeach

Document Type: Full Excavation Report

Report No.: 2529

Grid Reference: TL 4977 6522
Planning Reference: S/0193/19/FL
Site Code: WATROR19
Invoice Code: WATRORPX
Event No.: ECB5914

Oasis No.: oxfordar3-428198

Receiving body: Cambridgeshire County Council Stores

Accession No.: ECB5914

OA Document File Location: Y:\Cambridgeshire\WATROR19_Rosemary Road_Waterbeach\Project

Reports\Excavation report

OA Graphics File Location: Y:\Cambridgeshire\WATROR19 Rosemary Road Waterbeach\Project

Data\Graphics

Issue No:

Date: September 2021

Prepared by: Steve Graham (Project Officer) and Lawrence Billington (Post-Excavation

Project Officer)

Checked by: Louise Moan (Senior Project Manager)

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

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

Signature:

Or of

Disclaimer:

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

 OA South
 OA East
 OA North

 Janus House
 15 Trafalgar Way
 Mill 3

 Osney Mead
 Bar Hill
 Moor Lan

Osney Mead Bar Hill Moor Lane Mills
Oxford Cambridge Moor Lane
OX2 0ES CB23 8SQ Lancaster
LA1 1QD

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











Late Saxon and Medieval Remains at Rosemary Road, Waterbeach

Archaeological Excavation Report

Written by Steve Graham BA ACIfA and Lawrence Billington PhD

With contributions from Katie Anderson BA MA, Carole Fletcher HND BA (Hons) ACIfA, Hayley Foster BA MA PhD, Rachel Fosberry ACIfA, Laura James BA, Ted Levermore BA, Ian Riddler MCIfA, Denis Sami PhD, Simon Timberlake MSC PhD

Illustrations by Sara Alberigi BA

Contents

Sumr	mary	vii
Ackn	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	Fieldwork Methodology	5
3	RESULTS	. 7
3.1	Introduction and presentation of results	7
3.2	General soils and ground conditions	8
3.3	Period 1: Prehistoric and Romano-British (Fig. 6)	8
3.4	Period 2: Anglo-Saxon (Fig. 7)	10
3.5	Period 3: Medieval (c. AD 1066 to 1500) (Fig. 8)	16
3.6	Period 4: Post-medieval to modern (c. 1500 AD to present) (Fig. 9)	21
3.7	Unphased features (Fig. 10)	22
3.8	Finds and environmental summaries	23
4	DISCUSSION	27
4.1	Introduction	27
4.2	Prehistoric and Romano-British	27
4.3	Anglo-Saxon and medieval	28
4.4	Post-medieval and modern	
4.5	Conclusions and significance	35



5	PUBLICA	ATION AND ARCHIVING36
5.1		
5.2		etention and Dispersal
	.	·
APPE	NDIX A	CONTEXT INVENTORY37
APPE	NDIX B	FINDS REPORTS94
B.1	Coins	
B.2	Metalwork	95
B.3	Fuel ash slag	98
B.4	Flint	98
B.5	Jet	99
B.6	Glass	99
B.7	Romano-Brit	ish Pottery 100
B.8	Anglo-Saxon	Pottery
B.9	Late Saxon, n	nedieval and post-medieval pottery103
B.10	Worked Ston	ne
B.11	Building Stor	ne
B.12	Burnt Stone.	
B.13	Worked and	burnt clay
B.14	Ceramic build	ding material
B.15	Fired clay	
B.16	Mortar and o	oncrete
B.17	Worked bone	e and antler
B.18	Worked woo	d 122
APPE	NDIX C	ENVIRONMENTAL REPORTS
C.1	Environment	al Samples
C.2	Animal Bone	
C.3	Fish bone	
C.4	Marine shell	
APPE	NDIX D	BIBLIOGRAPHY143
APPE	NDIX E	RADIOCARBON DATING CERTIFICATE149
APPE	NDIX F	OASIS REPORT FORM151

iv



List of Figures

Fig. 1	Site location showing archaeological area
Fig. 2	Map showing locations of CHER monuments and events
Fig. 3	Site location overlain on Enclosure Map (1813) and 1st Edition OS mapping
Fig. 4	Overall phased plan with location of evaluation trenches
Fig. 5	Photogrammetric image of site with some of the major features annotated
Fig. 6	Phase plan of Period 1: Prehistoric and Roman (to AD 410)
Fig. 7	Phase plan of Period 2: Anglo-Saxon (AD 410 – 1066)
Fig. 8	Phase plan of Period 3: Medieval (1066 – 1500)
Fig. 9	Phase plan of Period 4: Post-medieval (1500 – present)
Fig. 10	Unphased features
Fig. 11a & b	Selected sections
Fig. 12	Site development
Fig. 13	Map of the southern part of Waterbeach parish prior to parliamentary
	enclosure in the early 19th century
Fig. 14.	Stone object
Fig. 15	Antler and bone objects

List of Plates

Looking west over the development area prior to excavation
Eastern half of the excavation area from the south-west
Western half of the excavation area from the south-east, with Period 2.3
pit/watering hole 800 and Period 4.1 ditch 724 in foreground
Possible Roman (Period 1) ditches 621 and 625 from the south-west, cut by
Period 3.3 medieval ditch 646 in the foreground
Period 2.2 ditch 291 and Period 2.3 ditch 309 from the south-west
Period 2.3 pit/watering hole 800 from the east, truncated by Period 4.1 ditch
724
Period 2.3, curvilinear gully 334 , looking north-west.
Period 3.2 Boundary ditch 261 from the south-east, truncating earlier ditch
267
Period 3.2 pit 458 containing possible kiln/oven material, from the west
Period 3.2 pit 396 , looking north-west
Period 3.2, quadrant through pits 522 , 524 and 526 , from the north-west
Period 4.1, animal burial 831, looking north-east

List of Tables

Table 1	Summary details of Period 2.3 ditches
Table 2	Summary of Period 3.2 ditches
Table 3	Summary of Period 3.3 ditches
Table 4	Catalogue of coins and jetton
Table 5	Number of metalwork fragments and objects by material
Table 6	Catalogue of metalwork



Table 7	Quantification of Roman pottery by fabric
Table 8	Quantification of Roman pottery by context
Table 9	Quantification of Anglo-Saxon pottery by fabric
Table 10	Catalogue of Early to Middle Saxon pottery
Table 11	Post-Roman fabrics present in the assemblage
Table 12	Post-Roman Assemblage by Ceramic Phase
Table 13	Summary of Post-Roman pottery by Ceramic Phase (see Table 12) and site
	phasing sequence
Table 14	Catalogue of post-Roman pottery
Table 15	Catalogue of worked stone
Table 16	Catalogue of building stone
Table 17	Catalogue of burnt stone
Table 18	Catalogue of worked clay
Table 19	Summary of CBM
Table 20	Summary fired clay catalogue
Table 21	Analysis of selected samples
Table 22	Assessment level summary of processed environmental samples
Table 23	Number of identifiable fragments (NISP) and minimum number of individuals
	(MNI)
Table 24	Number of identifiable fragments (NISP) from the assemblage by Period
Table 25	Summary of epiphyseal fusion for ageing
Table 26	Table of measurements (mm)
Table 27	Identifiable fragments with gnawing
Table 28	Identifiable fragments with butchery marks
Table 29	Mandible wear per stage for cattle
Table 30	Mandible wear per stage for sheep/goat
Table 31	Mandible wear per stage for pig
Table 32	Number of identified fish fragments by period
Table 33	Catalogue of fish bone



Summary

Between 22nd June and 8th August 2019, Oxford Archaeology East undertook an excavation on a small (0.13ha) plot of land within the historic core of the village of Waterbeach, Cambridgeshire (TL 4977 6522). The excavation was preceded by trial trenching which had demonstrated the presence of features relating to Late Saxon and medieval activity.

Evidence for prehistoric activity was limited to a single pit associated with a substantial quantity of unworked burnt flint and a single residual flint flake. Romano-British features were also scarce but included a probable ditched trackway and the remains of other possible boundary ditches, alongside a small number of pits. These were associated with small quantities of pottery and a single coin dated to the mid-4th century AD. Multiple Romano-British settlements/farmsteads are known from the parish and these features probably represent part of the intensively exploited agricultural landscape of the lower Cam Valley.

Although there was some evidence for Middle Saxon activity in the form of a very small quantity of residual pottery, the main phases of the site's occupation dated to the Late Saxon period through to the early 14th century AD, represented by a complex sequence of intercutting boundary and enclosure ditches accompanied by discrete features and a long-lived watering hole. These features are likely to represent 'back-plot' activity associated with domestic settlement, probably relating to properties fronting onto routeways corresponding to the historic/modern street pattern in this part of the village, immediate to the north of the parish church and Waterbeach Abbey.

Seven phases of Late Saxon to medieval activity were defined on stratigraphic grounds, the earlier of which were exclusively associated with Late Saxon and early medieval pottery, with later phases producing a more diverse range of early and high medieval wares. Associated finds assemblages were only of modest size, but notable finds included several worked bone/antler artefacts and a 12th century silver half penny. Animal bone and charred grain assemblages provide evidence for agricultural regimes typical of these periods in the region, but a small assemblage of fish bone, dominated by eel, hints at the importance of wetland resources for communities in this fen-edge parish.

There was major decline in activity at the site from the early/mid-14th century AD onwards, potentially linked to depopulation and social upheaval caused by famine and outbreaks of the Black Death. Evidence for later activity was restricted to post-medieval and modern boundary ditches and several cattle burials.

Although relatively small-scale, the Late Saxon and medieval features have produced locally significant finds assemblages, including valuable evidence for the exploitation of fenland resources. The excavation also represents one of the only substantive archaeological investigations within the historic core of Waterbeach to date and is of significance in terms of understanding the origins, development, and character of settlement in the village over this period.



Acknowledgements

Oxford Archaeology would like to thank Twenty-Nine Architecture and Dean & Dean Construction Ltd for commissioning this project. Thanks are also extended to Andy Thomas and Gemma Stewart who monitored the work on behalf of Cambridgeshire County Council for their guidance and advice.

The project was managed for Oxford Archaeology by Louise Moan. The fieldwork was directed by Steve Graham, who was supported by Yerai Francisco Benet, Lauren Carpenter, James Green, Joanna Nastaszyc, Katherine Whitehouse and Andrzej Zanko.

Steve Critchley undertook additional metal detecting of features on the site. Survey and digitising were carried out by Joanna Nastaszyc and Gareth Rees.

Thanks are also extended to the teams of OA staff that cleaned the finds and processed the environmental samples. Thanks are extended to the various specialists for their contributions and especially to Rachel Clarke for for her guidance and assistance during the post-excavation analysis.



1 INTRODUCTION

1.1 Scope of work

- 1.1.1 Between 22nd June and 8th August 2019, Oxford Archaeology East (OA East) carried out archaeological excavations at land adjacent to and at the rear of 10A Rosemary Road, Waterbeach, Cambridgeshire (TL 49778 65227; Fig. 1). The site is located within the historic core of the village, 120m to the north of the medieval church of St John the Evangelist, and 200m north of the site of Waterbeach Abbey, a Scheduled Ancient Monument. Roman and Saxon settlements are known to exist in the area, particularly to the south-west of The Old Tillage/Car Dyke; a Roman canal. The work was commissioned by Twenty-Nine Architecture in advance of a proposed residential development.
- 1.1.2 As agreed with the Senior Archaeological Officer at Cambridgeshire County Council Historic Environment Team (CHET) (Planning ref. S/0193/19/FL (permission granted with conditions), DC/16/2836 RM), an area totalling 0.13ha was investigated. This formed the core area of interest identified by a previous programme of evaluation carried out by Pre-Construct Archaeology, during the spring of 2017 (Jackson 2017), which had revealed significant remains dating from the Roman period to the 14th century AD.
- 1.1.3 Following the excavation, a Post-Excavation Assessment was carried out and reported, alongside the production of an Updated Project Design (Graham 2020). This updated the research aims of the project and identified the analytical work necessary to produce the full report on the site presented here.

1.2 Location, topography and geology

- 1.2.1 The site is located within the historic core of Waterbeach, c.120m north of the parish church. The rectangular shaped excavation area (0.13ha) was bounded on all sides by the gardens of adjacent residential properties fronting onto Rosemary Lane, St Andrews Hill, Station Road and Payton Way (Plate 1).
- 1.2.2 The site is situated on bedrock geology of Gault Formation Mudstone, with no overlying superficial deposits recorded by the British Geological Survey (http://www.bgs.ac.uk/discoveringGeology /geologyOfBritain/viewer.html accessed December 2019). It lies on a slight plateau above the River Cam valley to the east, at a height of around 6m OD.

1.3 Archaeological and historical background

1.3.1 The summary archaeological and historical background of the site presented here is based on a 1km search of the Cambridgeshire Historic Environment Record (CHER), supplemented by information from available historic maps and other documentary evidence as outlined in the Written Scheme of Investigation (WSI; Moan 2019) and in the brief for the archaeological excavation of the site prepared by CHET (Thomas 2019). Selected records are plotted on Fig. 2 and are referred to by both their HER code (CHER/MCB no.) and, where relevant, their event reference (ECB no.). The site is



- shown in relation to an extract of the 1813 enclosure map of the parish, and to 1st Edition OS mapping in Fig. 3.
- 1.3.2 Waterbeach is first recorded as *Utbeche* in 1086 and *Beche* in the 12th century. *Beche* has the broad meaning of stream or valley, and the water prefix was added to distinguish the settlement from Landbeach to the south-west. There is no obvious valley or brook in the immediate landscape and the name may derive from the Old Tillage ('Car Dyke') on the southern limit of the village (Hall 1996).

Mesolithic and Neolithic (c.10,000-2500 BC)

1.3.3 The evidence for activity within the Waterbeach area prior to the Iron Age is slight. Prehistoric finds include a Mesolithic flint axe (CHER 06352), two Neolithic polished axe heads (CHER 00343) and a further axe head (CHER 02131); all found within 1km of the site.

Iron Age and Roman (c.800BC-410AD)

- 1.3.4 Low levels of Iron Age remains have been uncovered across Waterbeach and comprise sherds of 'Belgic' pottery (CHER 05405a) recovered from beneath the bank of the Old Tillage, around 0.4km south-west of the site with further pottery sherds (CHER 11560a & 11560b) recorded from land 0.8km to the south-west. An evaluation off the High Street, c.0.6km broadly north of the site, identified a buried soil containing a small number of Late Bronze Age/Early Iron Age pottery sherds (MCB17348). A further evaluation (ECB4531) off Pembroke Avenue, c.0.8km to the north-west of the site revealed a ditch containing later Iron Age pottery (MCB20483).
- 1.3.5 A trial trench evaluation and subsequent excavation (**ECB3347**) off Pieces Lane, just 300m north-east of the current site, revealed intercutting pits of Middle Iron Age date, along with ditches, pits and two pottery kilns dating from the 1st to 2nd centuries AD (**MCB19562**).
- 1.3.6 The site is situated around 0.4km north-east of the Scheduled Monument of the Old Tillage/Car Dyke (DCB264, CHER 05405, MCB21999); a Roman canal dating from the 1st to 2nd centuries AD. Whilst only a small section of it is scheduled, it is recorded as extending for in excess of 4km past Waterbeach and Chittering. A series of archaeological works have been undertaken to define its construction and use (ECB340, ECB1491).
- 1.3.7 Archaeological works at the proposed Cambridge rowing lake site, around 0.8m to the south-west of the current site, identified a series of ditches relating to previously recorded cropmarks (CHER 11561). Burials and two pottery kilns were also uncovered on the site, containing 2nd century pottery. South of the site was a trackway still visible as a hollow-way, paddocks were attached to the trackway. Roman settlement enclosures were recorded 1.2km south-west of the Waterbeach village centre (CHER 11560), this was recorded as a very dark area with burnt stone (a possible livestock paddock). A droveway was recorded on a south-western alignment with an associated enclosure and entrance.
- 1.3.8 A number of Roman find spots are also recorded across Waterbeach and include a coin of Faustina (CHER 02296) found approximately 300m to the west of site, samian sherds



(CHER 05309a) from the grounds of Waterbeach Abbey, just 180m south of the site, and further pottery sherds to the west (CHER 05312a), south-west (CHER 09024A) and south-east (CHER 05409, 05410, 05436 & 05453) of the site.

1.3.9 Two brooches have also been recovered from around 0.8km to the north (CHER 09702) and 1km south (CHER 06353) of the site.

Anglo-Saxon (c.AD410-1066)

- 1.3.10 There are very few records pertaining to Anglo-Saxon remains across Waterbeach, and these are generally concentrated close to and within the village itself. Archaeological works during the 1920s at Waterbeach Lodge, around 0.7km to the west of the current site revealed Anglo-Saxon sunken-featured buildings (SFBs) containing pottery, worked bone, metalwork and fired clay (CHER 05312).
- 1.3.11 Further settlement-related remains have also been uncovered at the Cambridge rowing lake (CHER 09024) c.0.6km to the south-west and off Denny End (ECB402), 0.6km to the north-west of site, where an SFB and pits containing pottery and animal bone was recovered.

Medieval (c.AD1066-1500)

- 1.3.12 As with evidence from the Anglo-Saxon period, medieval activity appears to have been concentrated within the village core. On the southern side of Waterbeach village, just 150m south of the site, is the Scheduled Monument of Waterbeach Abbey (DCB352 & CHER 05309) which was founded in 1281. Excavations carried out at the abbey by Mary Cra'ster in 1963 revealed substantial mortared limestone walls, large quantities of painted plaster, building footings, pits, ditches and quantities of medieval pottery (including imported French wares, St Neots and Stamford wares).
- 1.3.13 The Grade II* Church of St John the Evangelist (**CHER 05560**) is situated just 100m to the south of the current site and has its origins in the 12th century.
- 1.3.14 Archaeological works around 300m west of the site uncovered a ditch containing 13th to 14th century pottery sherds (MCB23261). A pit dated to the 12th to 14th century (MCB17348) has also been uncovered during archaeological works off the High Street.

Post-medieval and modern (c.1500-present)

- 1.3.15 Evidence for the post-medieval period is predominantly represented by extant structures within Waterbeach itself. However, the archaeological works off Pembroke Avenue did uncover post-medieval quarry pits (MCB20483) which contained 16th to 19th century pottery.
- 1.3.16 The 1813 enclosure map of the parish shows that the site lay largely within a single plot to the south of Rosemary Road, the boundaries of which had changed little by the time of the first edition Ordnance Survey map in the late 19th century (Fig. 3).
- 1.3.17 On the northern edge of the village, around 0.9km north of the site is RAF Waterbeach (CB15155, not illustrated), a WWII barracks and airfield. It was built in 1940 and closed in 2013. A number of contemporary pillboxes (MCB16403, MCB14604, MCB16405) and public air raid shelters (MCB25297) are recorded across the village.



The 2017 evaluation

1.3.18 During 2017, a trial trench evaluation was undertaken on the current site (ECB5014, MCB23864; see Fig. 4) by Pre-Construct Archaeology (PCA). The earliest activity identified was a single pit containing Roman pottery. The majority of the archaeology uncovered dated to the Late Saxon period and comprised ditches and settlement-related features, including possible structural remains and a possible hearth/oven. Pottery dating from the 10th to 12th centuries was recovered from these features. A number of undated ditches were also identified across the site; however, these were truncated by the Late Saxon features. A small number of post-medieval pits were also identified (Jackson 2017).



2 EXCAVATION AIMS AND METHODOLOGY

2.1 Aims

2.1.1 On the basis of the results of the Post-Excavation Assessment, a set of period-specific research objectives were formulated for the project. These were presented in the Updated Project Design (Graham 2020) and are reproduced here.

Roman

What is the nature of Roman activity on the site and can it be placed within the wider context of Romano-British settlement within the vicinity?

Anglo-Saxon

What, if any, Anglo-Saxon activity was taking place at the site prior to the 9th century? What is the nature, extent and morphology of Late Anglo-Saxon activity at the site?

Saxo-Norman to medieval

Can the site contribute to an understanding of the development, form and distribution of 10th to 14th century settlement in Waterbeach and South Cambridgeshire?

Can the site contribute to an understanding of the social and economic status and organisation of the settlement between the 10th to 14th centuries?

What evidence is there for the economy of the settlement and types of activities being undertaken within it?

What reasons may underlie the change of use and/or abandonment of the site in the late medieval period?

Post-medieval

Can the excavation contribute to understanding the post-medieval development of the site and its economy?

2.2 Fieldwork Methodology

- 2.2.1 The excavation was undertaken in accordance with the Chartered Institute for Archaeologists' (2014a) *Standard and guidance for archaeological excavation*, local and national planning policies, and the WSI.
- 2.2.2 The methodology used followed that outlined in the brief (Thomas 2019) and detailed in the Written Scheme of Investigation (Moan 2019). This required that due to the site being enclosed on all sides and the requirement for it to be excavated in its entirety, the site was stripped in phases to the level of natural geology or the archaeological horizon. The western half of the site was initially stripped and investigated, with spoil being stored on the other (eastern) half of the site. When this portion of the site was deemed to have been sufficiently excavated by CHET, it was then backfilled and the other (eastern) half stripped and investigated. Finally, the access road into the site was stripped and investigated.



- 2.2.3 Machine excavation was carried out using a tracked 360° type excavator using a 2m wide flat bladed ditching bucket under constant supervision of a suitably qualified and experienced archaeologist. The spoil was removed by dumper lorries and arranged in bunds on locations at first the eastern and then western halves of the site as agreed with the planning archaeologist, and the client.
- 2.2.4 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.
- 2.2.5 Site survey was carried out using a Leica GS08 dGPS with SmartNET live correctional data feed.
- 2.2.6 All archaeological features and deposits were recorded using OA East's pro-forma sheets. Area locations, plans and sections were recorded at appropriate scales and colour and monochrome photographs were taken of all relevant features and deposits.
- 2.2.7 A total of 50 bulk samples were taken from a range of excavated features. These each totalled between 1-40L (with an overall total of 800L) and were processed by flotation at OA East's environmental processing facility at Bourn.
- 2.2.8 Site conditions were in general very good, predominantly dry and bright with the occasional light rain shower. Drainage on the site was generally good.
- 2.2.9 In two locations, the north-eastern corner of the site and the site access strip, two modern pits were identified, these contained a range of modern building debris including potential asbestos, these were accordingly fenced off and not further investigated.



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. Full details of all contexts are included in Appendix A, with finds and environmental reports presented in Appendices B and C respectively. An overall, phased, plan of the excavation is provided in Fig. 4, with detailed phase plans in Figs 6-10. A photogrammetric image of the site is given as Fig. 5 with some of the major features annotated. Selected sections are illustrated in Fig. 11 (a & b) and selected photographs are reproduced in Plates 1-12.
- 3.1.2 Throughout the text, cut numbers appear in **bold.** Where a single feature has been attributed multiple cut/intervention numbers, the feature as a whole is referred to by its lowest cut number, and the same applies to groups made up of multiple features, such as pit groups and enclosures. This feature/group number is rendered in larger type on the relevant plans.
- 3.1.3 The fills of the various features invariably consisted of brown/grey silty clays and sandy silts with moderate amounts of small gravel clasts. Given the homogeneity of many of these deposits, descriptions and references to individual fills have been kept to a minimum in the text that follows (with full details in App. A). Similarly, despite extensive bulk sampling of excavated contexts (with 50 individual samples having been processed; App. C.3), preservation of charred plant remains was generally poor, with most samples yielding only small volumes of charcoal and occasional charred cereal/weed seeds, and only the more significant results (derived from a small number of more productive samples) are referred to in this section.
- Phasing of the remains revealed by the excavation was based largely on stratigraphic 3.1.4 and spatial relationships between features, underpinned by the dating evidence provided by finds (especially pottery) and a single radiocarbon date (App. E). Although the excavated remains were represented solely by cut features, the stratigraphic sequence was relatively complex, with multiple phases of intercutting features indicative of prolonged and relatively intensive activity. It has proved difficult to provide precise date ranges for the various phases of activity identified on the basis of the stratigraphic records, due to the relatively small assemblage of pottery and very high levels of residuality and intrusion/contamination resulting from the frequent intercutting of features. A fuller discussion of these issues and of the dating and sequence of activity at the site can be found in Section 4 (Discussion), and it should be emphasised that the date ranges attached to the various periods/sub-periods here should be regarded as very tentative. Analysis of the stratigraphic records and finds has resulted in the identification of four main periods, three of which have been subdivided into multiple sub-periods:

Period 1: Prehistoric and Roman (to AD 410)

Period 2: Mid to Late Anglo-Saxon (c. AD 650 to 1066)

2.1: Middle Anglo-Saxon (c. AD 650 to 850)

2.2: Late Anglo-Saxon (c.AD 850 to 1066)



2.3: Late Anglo-Saxon (c. AD 850-1066)

Period 3: Medieval (c.AD 1066 to 1500)

- 3.1: Saxo-Noman (c.AD 1066 to 1150)
- 3.2: Early medieval (c.AD 1150 to 1250)
- 3.3: High medieval (c.AD 1250 to 1400)
- 3.4: Late medieval (c.AD 1400 to 1500)

Period 4: Post-medieval to modern (c.AD 1500 to present)

- 4.1: Post-medieval (c.AD 1500 to 1750)
- 4.2: Modern (c.AD 1750 to present)
- 3.1.5 A relatively small number of features (mostly isolated, undated, pits and postholes) remain unphased, although as discussed below, most are likely to relate to the main phases of the Late Saxon to medieval use of the site (Periods 2 and 3).

3.2 General soils and ground conditions

- 3.2.1 The natural geology across the site was made up orangey yellow sandy gravels (Plates 2 and 3). These were overlain by a mid brownish grey sandy silt subsoil measuring between 0.2 and 0.4m thick, which in turn was overlain by topsoil with an average thickness of 0.25m.
- 3.2.2 Ground conditions throughout the excavation were generally good, and the site remained dry throughout. Archaeological features, where present, were easy to identify against the underlying natural geology.

3.3 Period 1: Prehistoric and Romano-British (Fig. 6)

3.3.1 Evidence for prehistoric activity at the site was very limited: no pre-Roman pottery was recovered, and only a single residual prehistoric flint flake was collected from the fill of pit 432 (Period 3.2). A single feature, pit 389, which produced no finds other than burnt flint is, however, thought most likely to be of prehistoric date. Evidence for Romano-British activity was somewhat better represented. Although poorly dated, a pair of parallel, stratigraphically early, ditches seem likely to represent a trackway or double-ditched boundary belonging to this period, whilst other features, including the heavily truncated remains of a broad, shallow ditch, several lengths of ditches/gullies and a pair of pits were associated with small quantities of Roman pottery.

?Prehistoric pit

3.3.2 A single small circular pit was located in the eastern half of the excavation area (389); it measured 0.8m in diameter and up to 0.2m deep and was filled with a very dark silty sand, which contained relatively large quantities of heavily burnt flint (711g, 89 fragments, App. B.4). Despite its dark fill – evidently rich in charcoal – sampling produced only a small volume of poorly preserved wood charcoal.

Trackway ditches

3.3.3 A pair of parallel north-east to south-west aligned ditches (ditches **621** and **625**; Plate 4) in the western part of the site appear to have defined a narrow trackway (or perhaps



a double ditched boundary). In the narrow northern extension to the site one of these features (ditch **621**) cut across a broad shallow east to west aligned feature (**769**); measuring up to 1.9m wide but only up to 0.1m deep, this was filled by a light brown clay sand which produced no finds. Given the limited exposure of this feature it is possible that it simply represents a remnant soil horizon or natural deposit. Three small sub-circular pits were cut into the fill of this linear feature (**771**, **773** and **775**); these measured between 0.4m and 0.7m in diameter and between 0.2m and 0.4m deep. The pits produced no finds and, unlike linear feature **769**, their stratigraphic relationship to trackway Ditch 621 is unknown.

3.3.4 Ditches **621** and **625** themselves were generally spaced little more than 3m part. The westernmost ditch (ditch **621**; interventions **621**, **814**) was between 1.5 and 1.7m wide and up to 0.33m deep and contained a single fill. Ditch **625** (interventions **625** and **736**) was slightly deeper (up to 1.4m wide and 0.5m deep; Fig. 11a, Section 101) and in one of the excavated interventions contained two fills. Immediately to the east of Ditch 625 a narrow gully was exposed, parallel to the larger ditch (Ditch **623**; interventions **154**, **623** and **739**). This feature measured up to 0.6m wide and was shallow, up to 0.16m deep (Fig. 11a, Section 101). No finds of any kind were recovered from these ditches.

Boundary ditches

- 3.3.5 To the east of Ditches 621 and 625, in the central part of the site, excavation of a very dense spread of intercutting features (see Fig. 4) revealed the heavily truncated remains of a stratigraphically early feature, which seems likely to have been a broad, shallow north to south aligned linear ditch (Ditch 300). Recognised in two of the interventions excavated in this area (300 and 793), its full profile could not be established, but it probably measured close to 4m wide and was up to 0.5m deep, although it was generally much shallower. A single, relatively large sherd of coarse ware Roman pottery (61g) was recovered from one of the interventions in this feature (793, fill 795), whilst a copper alloy Roman coin (SF 3A), issued between AD 348 and 350, was collected from the surface of this feature during metal detecting.
- 3.3.6 Two short lengths of smaller ditches, both surviving only where they had escaped truncation by later features, have also been attributed to the Romano-British period. To the east of trackway Ditches 621 and 625, a 4.4m long length of a north-west to south-east aligned gully (766) was revealed, measuring up to 0.4m wide and 0.38m deep. A single sherd of Roman pottery (57g) was recovered from its fill. Close to the eastern edge of excavation was a second north-west to south-east aligned length of linear gully (219). Extending beyond the eastern edge of excavation, this feature measured 0.46 wide and 0.3m deep and produced a single sherd of 3rd or 4th century Roman pottery (11g) from its single fill.

Pits

3.3.7 Ten metres to the north of gully **219** were a pair of pits (**282** and **312**), both measured around 0.8m in diameter and were up to 0.5 and 0.3m deep respectively, with silty sand fills. Both features produced Roman pottery, two sherds (12g) from pit **282** and a single sherd (4g) from pit **312**.



3.4 Period 2: Anglo-Saxon (Fig. 7)

Period 2.1: Middle Saxon (c. AD 650-850)

- 3.4.1 A series of ditches in the eastern half of the site, potentially forming part of an open sided rectilinear enclosure have very tentatively been attributed to the Middle Saxon period. Direct dating for these features in terms of pottery or other dateable finds was entirely lacking, and their phasing rests on their place in the stratigraphic sequence: they form the earliest elements of the system of ditched enclosures and boundaries which characterised the Anglo-Saxon period on the site. In this context, it should be emphasised that these features may instead relate to an early part of the Late Saxon sequence (i.e post-dating the mid-9th century AD), but the possibility that they are of somewhat earlier date is supported by the evidence for Middle Saxon activity on the site in the form of a small quantity (five sherds, 173g) of residual Middle Saxon pottery recovered from the fills of later features.
- 3.4.2 Four separate lengths of ditch, all to some extent truncated by later features, have been attributed to this sub-period. Three of these ditches, ditch **264**, ditch **608** and ditch **746**, may have originally defined an enclosure within the south-east corner of the excavation area, extending beyond the eastern limit of excavation.
- 3.4.3 Ditch **264** (interventions **264**, **274** and **604**) extended from the eastern edge of excavation on a west-north-west to east-south-east alignment for 15m before ending in a rounded terminus. It measured up to 0.96m wide and 0.2m deep and was filled throughout by a single light to mid grey sandy silt or silty sand (Fig. 11a, Section 20). No pottery was recovered from this feature, but it did produce a small quantity (211g) of animal bone including a sheep humerus and a cattle scapula.
- 3.4.4 Ditch **608** ran parallel to the southern edge of excavation on the same alignment as ditch **264**. This ditch had been heavily truncated by later features and only one intervention was excavated across its full profile, where it was 0.4m wide and 0.16m deep, infilled with a single light yellow sandy silt, from which no finds were recovered.
- 3.4.5 To the north-west of ditch **608**, on a north to south alignment was a slightly curvilinear ditch, **746**, perhaps representing the continuation of ditch **608** but cut away at either end by later features. A single intervention at the northern end of this ditch was 0.4m wide and 0.16m deep. Again, no finds were recovered from its single fill.
- 3.4.6 Aside from these three main lengths of ditch, a short length of ditch (ditch **694**), cut away on its western side by Period 3.1 ditch **660** (see below), extended from the southern edge of ditch **608** to beyond the southern edge of excavation on a north to south alignment. Measuring at least 0.7m wide and up to 0.26m deep, it produced no finds and its precise relationship with ditch **660** was unclear, but it may have been contemporary, which would suggest the Period 2.1 ditched boundary/enclosure systems might have extended to the south of the site.



Period 2.2 Late Saxon (c. AD 850-1066)

3.4.7 The first definite phase of Late Saxon activity on the site related to a sub-rectangular enclosure in the eastern half of the site, potentially representing a remodelling/adaption of ditched boundaries originally laid out in Period 2.1.

Enclosure 291

- 3.4.8 A sub-rectangular enclosure laid out in the eastern half of the excavation area was defined by a single continuous ditch (291, interventions 291 (Fig. 11a, Section 31), 329, 408=409, 440, 451, 491, 536, 543, 661, 749, 844 and 890). Its western boundary was marked by a north-north-east to south-south-west aligned ditch length which extended southwards from the northern edge of excavation before turning to the east to form the southern boundary of the enclosure. Further east, the ditch then turned north-north-east, to almost the northern excavation edge, before turning once again eastwards to run beyond the eastern excavation limit. The enclosure formed by this ditch clearly extended further to the north but defined an area of at least 800m².
- 3.4.9 The ditch itself was a fairly substantial feature (Plate 5). Where its full profile survived it typically measured between 1.8 and 3m wide with steeply sloping sides and a concave base and was between 0.5 and 0.85m deep, filled by a sequence of up to four deposits, generally of silty clays or sandy silts (Fig 11a, Sections 31 and 43). Finds included 41 sherds (367g) of medieval pottery, mostly from the secondary or tertiary fills of the ditch. This included 28 sherds of Thetford ware and St Neots ware (Late Saxon), alongside some intrusive, later sherds including developed St Neots ware and a single (intrusive) sherd of Early Medieval Essex Micaceous Sandy ware. Animal bone was somewhat better represented, with some 5200g of bone coming from the ditch fills, including a partial cow skull from an upper fill (753) of intervention 749. Other finds included a fragment of lava quern (207g) from intervention 329. Bulk sampling of one of the secondary fills of this ditch produced a significant assemblage of charred plant remains (sample 53), a mixed assemblage of cereal grain (mostly barley with oats, wheat and a little rye) with a relatively wide range of weed seeds (App. C.1).
- 3.4.10 Two further ditch lengths exposed on the southern side of the enclosure were found to form junctions (and were probably contemporary) with the main enclosure ditch. One of these (480) was a narrow (0.65m wide and 0.13m deep) ditch aligned northwest to south-east and met ditch 291 at an oblique angle. The other (488) was aligned perpendicular to the southern side of ditch 291 and extended beyond the southern edge of excavation. This was a more substantial feature, 2.6m wide and 0.84m deep, which contained two lower fills of clay slit capped by a mid grey sandy silt. Ditch 488 produced only a small quality of animal bone (381g) whilst 480 contained a single small sherd (2g) of unidentifiable pottery.
- 3.4.11 A third ditch (213) extended on an east to west alignment from the eastern edge of enclosure 291. This measured 0.5m wide and 0.2m deep and contained some fragmentary animal bone (29g).



Internal features

3.4.12 Only a few of the features within the area of Enclosure 291 have been assigned to this phase — a single ditch, and two pits. One of the pits (465=567) was located close to the centre of the enclosure and had an elongated oval shape in plan, 4.5m long, 1.3m wide and up to 0.85m deep. It was filled with two deposits of mid to dark grey/brown silts and produced a single sherd of Thetford ware and 11 sherds of St Neots ware. The second pit (321) was exposed close to the northern edge of excavation, where it was partly truncated by Period 2.3 ditch 301 (see below). Measuring 0.73m in diameter and 0.3m deep it produced a single sherd (9g) of Thetford ware. A shorth length of north to south aligned ditch (778) was recorded on the western side of the enclosure, where it was cut by several features (ditch 288 and curvilinear feature 347, see below) assigned to Period 2.3. Measuring 0.73m wide and up to 0.3m deep, it did not produce any finds and its phasing rests on its place in the stratigraphic sequence and its similar alignment to the ditch forming the western side of Enclosure 291.

Period 2.3: Late Saxon (c. AD 850-1066)

3.4.13 The second phase of Late Saxon activity identified on the site appears to have seen Enclosure 291 fall out of use, with a large watering hole dug through the ditch defining its western side. A later set of boundary ditches was laid out across the site, although in most cases it is difficult to reconstruct the overall layout of the plots/enclosures they may have represented. Aside from the watering hole, the most distinctive elements of this phase were three curvilinear features which may have related to agricultural structures such as hayricks.

Watering hole

- 3.4.14 Located close to the centre of the site and cut through the ditch of Period 2.2 Enclosure 291, watering hole **800** was a large oval ('kidney'-shaped) feature in plan, measuring up to 8m long and 4.4 m wide, although its southern half had been heavily truncated by a post-medieval feature, ditch **724** (Period 4.1, see below). Measuring up to 1.4m deep it had gently to moderately sloping sides and a broad concave base. It was filled by a complex sequence of deposits (Fig. 11b, Sections 146 and 147; Plate 6), and whilst finds from its lower fills attest to the filling up of this feature during the Late Saxon period it clearly continued to remain as a partly open feature over the course of Period 3, with some of its secondary fills producing medieval pottery and its presence clearly influencing the layout of a later ditch attributed to Period 3.1 (see below).
- 3.4.15 The basal fills of the watering hole were waterlogged and consisted of a light grey silty sand (813), overlain by a dark grey clayey silt (812); the latter produced a piece of worked wood (SF 20; App. B.18; probably originally part of a post, but found horizontal as opposed to representing the remains of any kind of revetment structure) and two sherds (8g) of Thetford ware. These were followed by a sequence of grey sandy silts and silty sands (807-811), one of which (808) produced a single sherd of Thetford ware. Above these deposits were further fills which have been attributed to Period 3.3 (see below and Sections 146 and 147), representing later phases of infill. Aside from the pottery and wood mentioned above, finds from the lower fills were restricted to a large fragment of lava quern (490g; context 808) alongside animal bone (492g),



including amphibian (frog) bones from the lower fills and horse and cattle remains. Sampling of waterlogged fill 812 produced few preserved remains, although nettle seeds were recorded (App. C.1) and two eel bones were recovered from the coarse fraction of the sample.

Enclosure 309 and associated features

- 3.4.16 Close to the eastern edge of excavation, a substantial ditch was revealed cutting across the ditch on the eastern side of Period 2.2 Enclosure **291**. This later feature, ditch **309**, extended from the southern edge of excavation on a north-north-east to south-south-west alignment and turned to the east in the north-east corner of the site, passing beyond the eastern edge of excavation. It is likely that this ditch formed the western side of an enclosure which largely lay outside (to the east) of the site. Within the internal area of this putative enclosure, along the eastern edge of excavation were a relatively large number of poorly dated pits and postholes which may have been contemporary with its use.
- 3.4.17 Ditch **309** (interventions **302**, **309**, **330**, **535**) measured between 1.4 and 1.55m wide and up to 0.56m deep, with a simple U-shaped profile (Fig. 11a, Sections 34 and 43). Finds were scarce, only two sherds of Thetford ware and one sherd of St Neots ware were recovered from its fills (22g in total), alongside two intrusive sherds of early medieval date (10g) were recovered from intervention **330**. Just over a kilogramme of animal bone was recovered from this feature, most of which derived from the upper fill of intervention **302**, including part of a horse cranium.
- 3.4.18 A possible subdivision within the interior of the enclosure formed by ditch **309** may have been represented by a length of east to west aligned gully (**210**) that met the ditch at right angles and extended beyond the eastern edge of excavation. Measuring 0.3m wide and 0.14m deep, this feature produced two sherds (19g) of Thetford ware.
- 3.4.19 Within this area, enclosed by ditch 309, were a number of poorly dated discrete pits and postholes which have been tentatively assigned to this phase. These features include three postholes (201, 203 and 206) which may have formed part of a north to south aligned fence line or other structure. These postholes were circular in plan and measured between 0.2m and 0.3m in diameter and between 0.1m and 0.3m deep; one (206) produced a single sherd (15g) of Thetford ware. The remaining features (212, 215, 217, 221, 224, 226, 230, 239, 241 and 243) were generally somewhat larger, and most were probably pits rather than post settings. Circular to oval in plan and measuring between 0.2m and 0.85m across they were generally between 0.3 and 0.45m deep, with single fills of mid to dark brownish grey clay silts and sandy silts. Very few finds were recovered from these features, with a single small sherd of St Neots ware (3g) from pit 243 and small quantities of animal bone coming from pits 215, 221, 230 and 243. The fills of three of these pits (221, 239 and 241) were bulk sampled, but only pit 221 produced significant environmental remains, dominated by charred oat grains and weed/grassland seeds, as well as a few charred legumes (Sample 10; App. C.1) and a charred barley grain form this deposit has been radiocarbon dated to 772-793 cal AD (55.1% confidence) or 913-967 cal AD (28.5% confidence) (SUERC-100042, 1164±29 BP, App. E).



Other boundary/enclosure ditches

- 3.4.20 Immediately to the north of the east to west aligned section of Ditch **309**, in the northeast corner of the site, an east to west aligned ditch was partly exposed against the edge of excavation (**301**, **320**). This feature measured at least 0.9m wide and 0.4m deep with steeply sloping sides and a concave base and contained two fills of brownish grey sandy silt and although no finds were recovered, sampling of fill 322 of intervention **320** produced a small quantity of fish bone, including eel and herring.
- 3.4.21 Across the western two thirds of the site a further 10 lengths of linear or slightly curvilinear/sinuous ditches were revealed: ditches 455, 288, 688, 683, 671, 626, 698, 635, 760 and 857. Summary information on these features is provided below in Table 1. The ditch lengths were often short/discontinuous, and most had suffered some truncation from later features, but their layout implies the presence of multiple broadly north to south and east to west aligned boundaries across the site during this period. One of these features (ditch 635) appear to have been closely associated with one of the curvilinear gullies described below. In general, these ditches had simple Ushaped profiles and contained one or two fills with very few finds, which were essentially limited to occasional sherds of Late Saxon pottery (Thetford/St Neots ware) and small quantities of animal bone - although a complete single pointed bone pin beater (SF 1) was recovered from ditch 288. The only real exception to this was a relatively large quantity (4672g) of animal bone recovered from ditch 671, which included elements belonging to cattle, horse, dog and - uniquely for the site - domestic cat. Two bulk samples taken from the fills of ditch 635 (from interventions 645 and 734) produced relatively substantial assemblages of charred plant remains (Samples 52 and 56; App. C.1), including grain (oats, barley, wheat and rye) and weed seeds.
- 3.4.22 Two of these ditches in the western half of the site (626 and 698) formed an L-shaped arrangement perhaps forming part of a small enclosure/plot. Within the area bounded by these ditches, a sub-circular pit (702) containing the partial semi-articulated remains of a cow skeleton was found. Although it produced no dateable finds, this feature was cut on its eastern side by Period 3.4 ditch 678; this relationship and its location within the area enclosed by ditches 626 and 698 suggest it may belong to this period of activity. Measuring up to 1m in diameter and 0.4m deep it was filled by mid greyish brown silty sand, within which the semi-articulated remains of a single cow were found, including the skull, lower leg bones (radius), scapula and several vertebrae probably representing a dump of butchery waste.

Ditch	Align.	Interventions	Max width	Max depth	Pottery	Animal bone	Other finds
288	N-S	288, 495, 680, 704=714 (Fig. 11b, S. 127)	0.7 to 0.9m	0.3 to 0.5m	6 sherds (36g) Thetford ware 1 sherd (6g) St	292g	Bone pin beater (SF 1)



Ditch	Align.	Interventions	Max width	Max depth	Pottery	Animal bone	Other finds
					Neots ware		
455	E-W	455, 474	0.5 to 0.7m	0.45-0.7m	1 sherd (10g) Thetford ware	123g	
626	NW- SE	626	0.5m	0.55m	1 sherd (26g) Thetford ware		
635	NE- SW	635, 645, 734	0.8 to 1.65m	0.3 to 0.5m	1 sherd (5g) Thetford ware 1 sherd (9g) unid.	168g	
671	NW- SE	671, 741	1m	0.5m		4672g	
683	E-W	683, 875	0.8m	0.25m	1 sherd (22g) Thetford ware	342g	
688	NE- SW	688	0.8m	0.35m	1 sherd (3g) Thetford ware		
698	NE- SW	698	0.9m	0.35m			
760 857	E-W NE- SW	760 857	0.3m 0.8m	0.1m 0.25m			

Table 1. Summary details of Period 2.3 ditches

Curvilinear features

- 3.4.23 Three curvilinear features, two best described as C-shaped features in plan (**716** and **347**), and one very small ring gully (Feature **334**) were exposed across the southern half of the excavation area.
- 3.4.24 Feature **716** (interventions **716**, **718**, **720**) formed a C-shaped feature, open to the east. Its southern end ended in a regular rounded terminus (**720**) but its northern end had been cut way by post-medieval Ditch 724 (Period 4.1). Its precise dimensions are therefore unknown but is likely to have a maximum internal diameter of c. 11m. The ditch/gully itself was a relatively narrow feature, between 0.25 and 0.49m wide and up to 0.3m deep and produced no finds. The layout of this feature is mirrored by the slightly curvilinear course of ditch **635** (see above), some 3m to the west and it seems very likely that the two features were broadly contemporary.



- 3.4.25 Approximately 12m to the east of feature **716** was a second possible (reverse) C-shaped curvilinear feature. This was made of two separate curvilinear features, ditch **347** (interventions **347** and **574**) and ditch **388** (interventions **388** and **504**), which had both been partly cut away by a later ditch (Period 3.3, ditch **338**, see below) but are likely to have originally formed a single continuous feature. This would have been open to the west, with a maximum internal diameter of c. 7.5m. In the excavated interventions this feature measured 0.7m to 0.9m wide and up to 0.65m deep, with a U-shaped profile, and contained up to three fills which produced a total of nine sherds of pottery (77g), including four sherds of Thetford ware, three sherds of St Neots ware and 240g of animal bone.
- 3.4.26 Some 10m to the east of this was a small penannular ring gully, Ring gully **334** (Plate 7; interventions **334**, **336**, **374** and **581**), which formed a somewhat irregular ring with an internal diameter of just 3.3m and a 1.5m wide opening on its south-east side. Finds were restricted to a few tiny fragments of animal bone (4g) and its phasing is tentative, based essentially on this relationship to later (Period 3) features. The ditch itself measured up to 0.54m wide and 0.42m deep (in intervention **374**) but was much shallower in most of the excavated interventions (between 0.2 and 0.1m deep).
- 3.4.27 The only other features attributed to this sub-period were a pair of postholes (**248** and **280**) some 10m to the north of ring gully **334**. Spaced 2.3m apart, they were both circular in plan and measured 0.5m in diameter and 0.2-0.3m deep. One of these features (**248**) had a clear postpipe and a packing fill, and this packing produced a single sherd (7g) of Thetford ware.

3.5 Period 3: Medieval (c. AD 1066 to 1500) (Fig. 8)

Period 3.1: Saxo-Norman (c. AD 1066 to 1150)

- 3.5.1 The major features attributed to this sub-period were a pair of sinuous ditches (631 and 660) which cut across some of the earlier linear boundaries attributed to the latest phase of Anglo-Saxon activity (Period 2.3) and thus representing a significant reorganisation of the layout of boundaries/enclosures on the site. A small number of features have been attributed to this phase including two minor gullies/ditches and a number of pits, although the dating/phasing of some of these discrete feature remains very tentative.
- 3.5.2 A major north to south aligned ditch, **660**, was exposed running across the full width of the excavation area, taking a sinuous course as it deflected around the eastern side of watering hole **800**, which remained as a substantially open feature into this period (see above, Period 2.3). Forming a junction with this ditch at its northern end, and extending to the west beyond the edge of excavation, was a second sinuous ditch (**631**) and together these features may have defined the north-eastern corner of a large plot or enclosure which extended beyond the western and southern edges of excavation.
- 3.5.3 Ditch 660 (interventions 660, 697, 817, 835=837 and 882) measured between 1.3 and 0.8m wide and between 0.4 and 0.8m deep with a U-shaped profile. Where fully excavated it contained up to four fills of grey and brown clay silts or silty clays which produced seven sherds (73g) of pottery including five sherds of Thetford ware and St Neots ware. Over 1.8kg of animal bone was recovered from this feature, and alongside



- elements belonging to cattle, horse and sheep/goat, a swan humerus was recovered, as well as a relatively large quantity of amphibian (frog) bones.
- 3.5.4 Ditch **631** (interventions **631**, **673**, **690**, **865**, **880**, **886**) measured between 0.9 and 1.4m wide and between 0.35m and 0.55m deep (Fig. 11a, Section 104). Its fills produced five sherds of pottery (206g), including Thetford ware, St Neots ware and developed St Neots ware, a fragment of fired clay (38g) carrying the impression of a rod/withy and a substantial assemblage of animal bone weighing 2.2kg dominated by cattle with some horse and sheep/goat.
- 3.5.5 Immediately to the north of ditch **631** were a pair of intercutting ditches/gullies: curvilinear gully **656** and east to west aligned linear ditch **649**. Gully **656** (**656**, **869**) extended beyond the northern edge of excavation and curved to the west to run parallel with ditch **631** before being cut away by a pit (**652**). Measuring 0.45m wide and up to 0.17m deep, it produced no finds. The pit which cut the western end of this feature, **652**, was a substantial feature, oval in plan and measuring 2m long, 1.7m wide and 0.8m deep (Fig. 11b, Section 112). It contained three fills of brownish grey or grey sandy silts, the upper two of which produced just over 1kg of animal bone, which unusually for the site included a high portion of pig bones alongside cattle and sheep/goat.
- 3.5.6 Gully **649** (**649**, **884**) was also cut by a length of north-west to south-east aligned linear ditch, which formed a junction with ditch **631** at its eastern end and ended in rounded terminus to the west. Measuring up to 1.15m wide and 0.3m deep it contained a single sherd (12g) of Developed St Neots Ware.
- 3.5.7 To the north of ditch **631** and these other features, a single large pit was exposed in the northern part of the site (**781**). Sub-circular in plan, measuring 2.1m in diameter and 0.64m deep, it had steeply sloping sides and a concave base. It contained three fills, with a basal dark grey clay silt overlain by an orange clay sand, in turn sealed by a light grey clay silt. The dark basal fill produced two sherds of pottery, one sherd of Thetford ware (10g) and one of Developed St Neots ware (4g).
- 3.5.8 Other features attributed to this phase consisted of two small pits (359 and 472) found in the central part of the site. Circular to subcircular in plan and measuring between 0.4m and 0.8m in diameter and 0.17 to 0.45m deep, they contained single fills of mid grey silty sands/sandy silts. Pit 359 produced a single sherd (10g) of Developed St Neots ware and a small quantity of animal bone (10g), whilst further small fragments of animal bone (29g) were recovered from pit 472.

Period 3.2: Early medieval (c. AD 1150-1250)

3.5.9 This phase of the site's use was distinguished by the establishment of a major east to west aligned linear boundary (ditch **267** and recut **261**), running parallel with and partly exposed against the southern boundary of the site. Relatively few features within the main area of excavation have been attributed to this sub-period, but these include a number of minor gullies and ditches, suggesting further modification of the pattern of boundaries within the site, and a cluster of intercutting pits.



- 3.5.10 The earliest feature marking the east to west aligned boundary along the southern edge of excavation (267: comprising cuts 267, 447 and 637) had been heavily truncated by its later recut (261; Fig. 11b, Section 105; Plate 8), but it never appears to have been a large feature, measuring up to 0.4m wide and 0.3m deep. Its fills produced a sherd of medieval pottery (4g) dated to 1150-1450 AD and a residual sherd of Thetford ware (4g). The recut of this ditch (261: comprising cuts 261, 444, 447, 610 and 630) was much more substantial, and measured between 1.3m and 2.1m wide, with steeply sloping sides and a concave base (Fig. 11b, Section 105). Only six sherds of pottery (51g) were recovered from the various interventions excavated through this feature, which included two sherds of residual Thetford ware alongside sherds dated to the late 11th and 12th centuries AD.
- 3.5.11 In the central part of the site, several lengths of broadly north to south or east to west aligned ditches were exposed and have been attributed to this phase largely on the basis of their stratigraphic relationships. Summary information on these features and their finds is provided in Table 2. Most of these features were insubstantial and produced very few finds; the most significant feature was a north to south aligned ditch (427; Fig. 11a, Section 65) which extended from the northern edge of excavation and cut across an earlier pit (465, Period 2.2). Not only was this a relatively large feature (measuring up to 1.28m wide and 0.42m deep), it produced a significant assemblage of pottery, with 62 sherds including some residual Late Saxon material (Thetford ware and St Neots ware) and Developed St Neots Ware dated to AD 1050-1200 as well as a little fired clay (27g). Bulk sampling of the fills of these features generally produced poor results, but an assemblage of mixed grains, legumes and weed seeds was recovered from the fills of ditch 676 (intervention 676, Sample 54, App. C.1).

Ditch	Align.	Interventions	Max width	Max depth	Pottery	Animal bone	Other finds
379	N-S	379	0.55m	0.21m		327g	
381	-	381, 508	0.38m	0.24m		43g	
427	N-S	427, 468, 506, 572, 601	1.28m	0.42m	62 (546g)	509g	Antler handle
453	E-W	453	0.5m	0.22m	1 (4g)		
676	N-S	676, 706	0.72m	0.42m	5 (23g)	320g	

Table 2. Summary of Period 3.2 ditches

- 3.5.12 To the west and south of ditch **427** was a loose scatter of five small pits/postholes (**459**, **463**, **564**, **592**, **606**). Circular or sub-circular in plan, these measured between 0.25m and 0.9m in diameter and between 0.20 and 0.45m deep. Of these features, pit **459** produced a relatively substantial assemblage of 20 sherds of pottery, dominated by Developed St Neots Ware and 44g of animal bone, as well as a fragment of a horn and bone composite comb (SF10). A single sherd of Oolitic Sandy Ware, dated to AD 1100-1400, was recovered from posthole **463**, whilst posthole **564**, somewhat isolated from the other features (to the west) produced a silver half penny of Henry II (SF 5; AD 1158-1180).
- 3.5.13 To the south of these features was pit **458** (Plate 9, Fig. 11a, Section 80). This had been heavily truncated (by Period 3.4 ditch **500**) but measured at least 0.95m across and



0.31m deep. It contained three fills which displayed evidence of burning, with the uppermost layer (482) also containing fired clay probably from an oven or hearth lining. Four sherds (53g) of pottery dated from AD 1050 to 1250 were recovered from its secondary fill, along with 15 fragments of animal bone and an iron nail (SF 11). A little over 5m to the south east, another pit (396; Plate 10) was revealed; measuring 0.75m in diameter and 0.7m deep it produced half of a clay spindle-whorl (SF 8), 12 small fragments of amorphous fired clay (122g) and six sherds of pottery (dated c. AD 1050-1200), whilst environmental sampling produced a small quantity of fish bone (App. C.3).

- 3.5.14 To the east of ditch **427** was a large pit (**434/526**), into the top of which had been cut a number of smaller pits (Plate 11). Pit **434/526** measured 2.75m in diameter and was at least 0.9m deep (Fig 11a, Section 66). It was filled by a primary fill of mid grey silt sand, overlain by a mid greenish yellow silty sand which was in turn sealed by a dark grey silt sand which produced most of the finds from this feature. In total, seven sherds of pottery were recovered from this feature, with residual Thetford Ware found alongside Developed St Neots Ware. A total of 420g of animal bone was collected (including pig and sheep), and a bone needle (SF 9) was also recovered from this feature, which may date between the 9th and 12th centuries (App. B.17).
- 3.5.15 Three small pits had been cut partly through the upper fill of this large pit (432, 522 and 524). These were sub-circular in plan, measuring between 0.5m and 0.75m across and between 0.4 and 0.65m deep. One of these features (pit 432) produced a small sherd of residual Thetford Ware (2g) and a sherd (5g) of Early Medieval Shelly Ware (AD 1050-1200).

Period 3.3: High medieval (AD 1250-1400)

3.5.16 Features attributed to this phase were again dominated by ditches, attesting to further reorganisation of boundaries within the excavation area. Many of these were somewhat sinuous/curvilinear features but more regular linear ditches, invariably on broadly north to south or east to west alignments were also recorded. The east to west boundary along the southern edge of excavation (Period 3.2 Ditch 261/267) appears to have fallen out of use in this period, being cut by a sinuous north to south aligned ditch and by two of three substantial pits found in the southern half of the site.

Ditches

3.5.17 Summary information on the Period 3.3 ditches is provided in Table 3. Some of these (e.g. **340**, **357**, **401** and **684**) were relatively short lengths of ditch but more extensive boundaries were present, including linear ditches **758** and **776**, which are likely to have formed a contemporary L-shaped arrangement defining the north-west corner of an open-sided small enclosures/plot. They also included a fairly substantial curvilinear ditch (**338**) which may have been contemporary with north to south aligned ditch **325** and formed a small enclosure, open to the north.

Ditch	Align.	Interventions	Max width	Max depth	Pottery	Animal bone	Other finds
325	N-S	325, 371, 531, 553	0.9m	0.75m	31 (447g)	227g	



338	N-S to E-W	338, 354, 576, 579, 586, 615	1.1m	0.75m	15 (74g)	359g	
340	N-S	340, 345	0.8m	0.5m	26 (168g)	47g	Fired clay (3g)
357	E-W	357, 512	0.5m	0.1m	1 (4g)		
401	NE-SW	401, 403	0.9m	0.4m	1 (10g)	990g	
646	N-S	646, 650	0.5m	0.2m	9 (60g)		
684	N-S	684, 708	0.75m	0.25m		11g	
758	E-W	758, 850	0.6m	0.25m		68g	
776	N-S	776	1m	0.3m	1 (6g)		

Table 3. Summary of Period 3.3 ditches

3.5.18 Few of these ditches produced significant finds assemblages (see Table 3) although most produced some pottery and/or animal bone. The pottery included a relatively high proportion of residual Late Saxon material (Thetford and St Neots ware), found alongside sherds in a diverse range of medieval fabrics, the latest of which dated to c. AD 1200-1400. Bulk sampling of the single fill of ditch 338 (intervention 354, Sample 33) produced an assemblage of mixed grain, legumes and weed seeds (App. C.1).

Pits

- 3.5.19 The only discrete features attributed to this phase of the site's use were a series of relatively large pits. In the north-east corner of the site, cut across by post-medieval ditch **327** (Period 4.1), was an oval pit, 2.1m long and 1.5m wide with steeply sloping sides and a concave base. It contained a basal mid yellow sand, overlain by an upper fill of dark grey silt sand which produced a single sherd of medieval pottery dated to c. AD 1150-1550 and 57g of animal bone.
- 3.5.20 Strung out along the southern edge of excavation were three further pits (412, 537 and 855). All were sub-circular/oval in plan and measured between 1.8m and 3.1m across; both pits 412 and 537 were close to 1m deep, whilst pit 855 was much shallower, up to 0.2m deep. Only small quantities of material were recovered from their fills: five sherds of medieval pottery (73g) from pit 537 and one sherd (8g) and 590g of animal bone (horse and cattle) from pit 855.
- 3.5.21 As discussed above, the large watering hole originally excavated in Period 2.3 (800) appears to have remained as an open feature throughout Period 3, and its upper fills (803, 804, 823) have been attributed to Period 3.3 although they probably represent deposits which accumulated over Period 3 as a whole (Fig 11b, Sections 146 and 147). These thin deposits of mid to dark grey clay sands and clay silts produced a small quantity of medieval pottery (six sherds, 135g) including two sherds of East Anglian Redware dated to c. AD 1200-1440.

Period 3.4: Late medieval (c. AD 1400-1500)

3.5.22 Few features could be attributed to this phase – consisting essentially of three major lengths of ditch, two of which cut across Period 3.3 curvilinear ditch **338** in the central part of the site.



- 3.5.23 In the far western part of the site, a north to south ditch (678: comprising cuts 678, 700) extended beyond the northern edge of excavation for 18m before turning slightly to the west, beyond the edge of excavation. A short length of narrower ditch (628) met this ditch at right angles on its western side and may have represented a sub-division within a ditched enclosure or plot which lay largely to the north and west of the excavation area. Ditch 678 was up to 1.34m wide and 0.45m deep and was filled with a single brown silty sand from which four small sherds of pottery (21g) were recovered, dominated by residual Late Saxon wares. Adjoining ditch 628 measured 0.55m wide and 0.3m deep and was infilled with an indistinguishable fill from that of 678, which produced a single sherd of East Anglian Redware dated to c. AD 1200-1400.
- 3.5.24 Further to the east, cutting across the central part of the site, was a second north to south aligned ditch (378: comprising cuts 378, 383, 476, 493, 500, 583). This feature ran from the northern edge of excavation southwards until it met the northern edge of Period 2.2 ditch 291. It was difficult to trace the cut of this feature where it cut across the fills of this earlier ditch, but it is suspected that it turned very sharply to the east, before extending north-eastwards as ditch 405 (405, 411, 529). If this was the case, it would have formed an unusually sharply angled L-shaped or V-shaped arrangement.
- 3.5.25 These two lengths of ditch were consistently between 0.8 and 1.1m wide and between 0.25m and 0.4m deep. Just eight sherds of pottery (86g) and 185g of animal bone were recovered in total. Much of the pottery was probably residual but it included a single sherds of Stamford ware (c. 1150-1500 AD), and a sherd from a glazed vessel which may date as late as c. AD 1500.
- 3.5.26 The only other feature tentatively attributed to this period was a short curvilinear feature (366) in the north-eastern part of the site, which cut Period 3.4 pit 368, and was in turn cut on its western side by a later ditch (Period 4.1 ditch 327). Measuring 2.3 long, 0.46m wide and 0.34m deep, it produced no finds.

3.6 Period 4: Post-medieval to modern (c. 1500 AD to present) (Fig. 9)

Period 4.1: Post-medieval (c. AD 1500 to 1750)

- 3.6.1 Revealed in the narrow entrance strip at the north of the site was a large boundary ditch, **816**. This east-west aligned feature ran parallel to the modern route of Rosemary Road and was 3m wide with an excavated depth of 0.8m. The tertiary fill contained three sherds (220g) of pottery dating from AD 1430 to 1650. This feature also produced a knife blade (SF 23) of indeterminate date, potentially belonging to any period from medieval to modern and a shard of bottle glass. On the northern side of this ditch (and cut by Period 4.2 ditch **780**, see below) was a series of large intercutting (?quarry) pits (**849**, **782** and **783**), measuring up to 5m across and reaching depths of up to 0.9m. The relationship between these features and ditch **816** was unclear, and they produced no finds.
- 3.6.2 To the south, extending from the southern edge of the excavation was large ditch **724** (**724**, **799**; Fig. 11b, Sections 146 and 147), which cut into earlier (Period 2.3-3.2) pit/watering hole **800** and Period 3.2 boundary Ditch **261**. It was 4.2m wide with a



depth of 1.26m and contained 41 sherds of mixed pottery, the latest of which is 19th century or modern in date suggesting that the feature was backfilled in Period 4.2. A whetstone made of quartz schist was also recovered from this feature (SF 12) as well as 21 fragments of post-medieval brick and tile. This may have been a drainage ditch which utilised the earlier watering hole as a sump.

- 3.6.3 Cutting across the eastern half of the site on a roughly north to south alignment for 28m was drainage gully **327** (**327**, **364**, **478**, **533**, **566**). This feature was between 0.24m and 0.59m in width with a maximum depth of 0.29m and produced five sherds (101g) of pottery dating from AD 1550 to 1800.
- 3.6.4 Three large oval pits (**743**, **831** and **860**) containing animal (cattle) burials (Plate 12) were recorded across the western half of the site, all of which were clearly observed cutting though the subsoil during the machine stripping of the site. Whilst pit **743** contained eleven sherds of residual pottery dating to c. AD 1400, pit **861** contained eighteen sherds (78g) of pottery dating from AD 1550 to 1800.
- 3.6.5 Two small isolated pits (**470** and **658**) were also identified, which although undated were both seen to cut the subsoil during the soil stripping process.

Period 4.2: Modern (c.AD 1750 to Present)

- 3.6.6 The most modern archaeological features were most likely to be related to the modern housing development on Rosemary Road. Ditch **780** was noted in the narrow entrance strip to the site with an east to west alignment. Cutting into the post-medieval boundary ditch **816**, the feature contained five sherds (328g) of pottery dating from AD 1800 onwards and was excavated up to a depth of 0.8m. Alongside ditch **245**, this probably formed a sub-rectangular plot at the back of the modern housing. Ditch **245** was partially exposed in the extreme north-eastern corner of the excavation and was at least 0.76m wide and was excavated to a depth of 0.48m. It contained tip lines with modern mortar, brick fragments and nine sherds of pottery (43g) dating from AD 1770 to 1840.
- 3.6.7 Also cutting through the sub-soil was a series of postholes, group 391 (391, 560, 562, 556, 558). These five archaeologically sterile postholes between 0.06m and 0.29m in depth were on a broad north-east to south-west alignment for 6m.
- 3.6.8 At the northernmost limit of the excavation within the entrance strip was a narrow shallow gully **756** which was 0.2m wide and 0.03m deep, this gully fed into a circular narrow pit **763** (1.63m in diameter and 0.39m deep). Both features were archaeologically sterile, but both clearly cut into the subsoil and are most probably drainage or service features for the housing either side of them.

3.7 Unphased features (Fig. 10)

3.7.1 A number of features remain unphased, consisting of a small number of short lengths of ditch/gully and larger number of small pits and postholes, none of which produced dating evidence and whose stratigraphic and spatial relationship to other features



could not be determined with any confidence. This said, it seems very likely that the vast majority of these features relate to activity during the main phases of Late Saxon and early medieval activity of the site's use (Periods 2 and 3).

3.8 Finds and environmental summaries

Coins (App. B.1)

3.8.1 Two coins, a mid-4th century Roman coin and a later 12th century silver half penny, were recovered alongside a Nuremberg jetton (17th century) from surface metal-detecting and a posthole. The jetton was recovered from a unstratified context, but the Roman coin and medieval halfpenny were both recovered from the fills of features, and their dating is consistent with the phasing of the features established on stratigraphic grounds.

Metalwork (App. B.2)

3.8.2 The excavation produced a total assemblage of 12 fragments of metalwork, consisting of copper-alloy (CuA) and iron (Fe) artefacts relating to 12 objects dating from the Roman to post-medieval/modern periods. Finds were recovered from ditches, pits and surface metal-detecting. The copper-alloy finds include a buckle plate (SF 6) and a strap loop (SF 18) while the iron work consists of nails, four unidentified fragments and a poorly preserved knife handle.

Fuels ash slag (App. B.3)

3.8.3 Period 3.4 pit **368** produced five irregular fragments of non-vitrified (0.053kg) pale to mid grey ashy slag-like material. The ashy material may have come from a domestic fire or may represent crop processing residues or stubble burning.

Flint (App. B.4)

3.8.4 A single (residual) prehistoric flint flake and 711g of unworked, burnt flint was recovered during the excavation. The burnt flint derived from fill 390 of pit **389** (Period 1) and may be of prehistoric date.

Jet (App. B.5)

3.8.5 A small fragment of jet was recovered from bulk environmental sample 15 (fill 266, ditch **267**), and is likely to be from a bead or ring of probable Roman date.

Glass (App. B.6)

3.8.6 A fragment of glass (6g) was recovered from Phase 4.1 ditch **816** alongside medieval and mid-15th to early 17th century pottery.

Romano-British pottery (App. B.7)



3.8.7 A total of 24 sherds (359g) was recovered from the excavation. The pottery was predominantly small to medium sherds, with a third of the assemblage deriving from later, medieval, contexts. The pottery is mainly Mid to later Roman in date.

Anglo-Saxon pottery (App. B.8)

3.8.8 The excavation produced a total of five fragments (173g) of Middle Anglo-Saxon pottery (c. 650-875). The assemblage consists of the standard range of fabrics and forms for this period in the county. The overall condition of the assemblage is good with sherds being moderately abraded and with an average sherd weight of 34g. The pottery was recovered from the fills of five ditches and is low to moderately abraded.

Late Saxon, medieval and post-medieval pottery (App. B.9)

3.8.9 A total of 490 sherds (6402g) of post-Roman pottery was recovered. There is a moderately sized group of Late Saxon to early medieval sherds, with further early medieval and high medieval wares forming distinct groups of sherds. Few glazed wares are present, suggesting the assemblage is at the earlier end of the high medieval period and there is very little late medieval pottery present. The condition of the pottery assemblage is moderately abraded to abraded, and the average sherd weight is low to moderate at approximately 13g.

Worked, building and burnt stone (Apps B.10, B.11 and B.12)

3.8.10 The excavation produced a total of 23 pieces (4610g) of utilised stone comprising: 782g (four pieces) of worked stone, 2888g (five pieces) of building stone and 942g (fourteen pieces) of burnt stone. The worked stone was predominantly made up of worn, burnt and discarded fragments of lava quern, some of it probably Roman and re-deposited. There were only a few pieces of stone recognisable as building stone; these were recovered from early medieval ditch and posthole contexts across the excavation. The small amount of burnt stone from this site might include some residual prehistoric burnt stone.

Worked and burnt/fired clay (Apps B.13 and B.15)

- 3.8.11 A fired clay spindle-whorl was recovered from Phase 3.2 pit 396.
- 3.8.12 Seventeen fragments (222g) of fired clay were recovered from five contexts (unphased ditch **345**, Phase 2.1 ditch **407**, Phase 2.2 ditch **291** (slot **661**), Phase 3.2 pit **396** and unphased pit **465**). This assemblage comprised mostly amorphous pieces with no discernible features and a small fraction of more 'structural' pieces. Two fragments of poorly fired clay brick were also recovered from post-medieval Phase 4.1 Ditch **724**.

Ceramic building material (App. B.14)

3.8.13 A total of 33 fragments (5343g) of ceramic building material (CBM) was recovered from ten features. This assemblage comprised medieval to post-medieval brick and tile and



a small portion of undiagnostic material. The assemblage was fragmentary and moderately to severely abraded. The fragments were made in a narrow set of fabrics, typically associated with East Anglian CBM of the late medieval to early modern periods. The presence of a small number of near complete bricks suggests proximity to the parent building.

Mortar and concrete (App. B.16)

3.8.14 A small quantity of lime mortar (16 fragments) and concrete (two fragments) was recovered.

Worked bone and antler (App. B.17)

3.8.15 Four objects of antler and bone were recovered from Period 2 and 3 contexts. They form a homogeneous group that can be assigned to the Late Saxon-early medieval period, between the 9th and the 12th centuries. They include fragments of a comb, alongside a needle and a pin-beater. The single object of antler is an unfinished handle for a whittle tang implement.

Worked wood (App. B.18)

3.8.16 A single (sawn) wooden post (SF 20) was recovered at the base of Phase 2.3 watering hole/pit 800.

Environmental samples (App. C.1)

3.8.17 Fifty bulk environmental samples were taken from deposits dating from the Romano-British period through to the Saxon, medieval and post-medieval periods. The assessment of these samples indicated that preservation of plant remains was predominantly by carbonisation (burning) and was generally poor, although charred plant remains were recovered from most of the Saxon and medieval samples and are frequently of high density with cereals grains of free-threshing wheat (*Triticum aestivum*-type) and barley (*Hordeum* sp.) most frequent. The distribution of the charred material suggests that the site represents an area where these burnt remains were being disposed of, mainly in pits and ditches. The frequency of charred grain throughout the Saxon and medieval activity on this site is a reflection of the importance of cereals in the diet and are typical for sites in this region.

Animal bone (App. C.2)

3.8.18 The animal bone assemblage was of a medium size, with 36.32kg of bone from hand-collection and from environmental samples. The number of recordable fragments that could be assigned to a phase totalled 544 with 176 of those fragments retrieved from environmental samples. The species represented include cattle (*Bos taurus*), sheep/goat (*Ovis/Capra*), pig (*Sus scrofa*), horse (*Equus caballus*), dog (Canis familiaris), field vole (*Microtus agrestis*), red deer (Cervus elaphus), mouse (*Mus musculus*), rabbit (*Oryctolagus cuniculus*), shrew (*Sorex sp.*), Cat (*Felis catus*), fox



(*Vulpes vulpes*) and also amphibians, fish, birds and small rodents. Skeletal element distribution shows that all three main domesticates were probably butchered and consumed on site. The majority of the faunal material dates to the Saxon and medieval periods, with a predominance of cattle remains. In a regional context, the assemblage from Rosemary Road, is fairly typical of a predominantly Saxon and medieval assemblage in this region of Cambridgeshire.

Fish bone (App. C.3)

3.8.19 A small assemblage of fish remains was recovered, with just 18 identified bones, all of which came from the sorted residues of sieved environmental samples. The identified fish bone derives from four phases of occupation: the Late Anglo-Saxon c. AD 850-1066 (Period 2.2 and 2.3), early and high medieval - c. AD 1150 to 1400 (Period 3.2 and 3.3) and post-medieval - c.AD 1500 to 1750 (Period 4.1). Identified specimens are dominated by eel, with other freshwater species including bream/barbel and pike, alongside a small quantity of herring – the latter imported from coastal fisheries.

Marine shell (App. C.4)

3.8.20 A total of 38 shells or shell fragments weighing 0.081kg were collected by hand from ditches, pits and a posthole belonging mostly to Periods 2 and 3. The shells recovered are mostly mussel (*Mytilus edulis*) from intertidal zones, with a single oyster (*Ostrea edulis*) from estuarine and shallow coastal waters.



4 DISCUSSION

4.1 Introduction

4.1.1 The following discussion is organised chronologically (see Fig. 12 for a summary of the site's development/sequence) and considers the evidence from the site in relation to the research objectives outlined in Section 2.1 and in the context of previous archaeological investigations and documentary research relevant to the local area.

4.2 Prehistoric and Romano-British

- 4.2.1 Evidence for prehistoric activity on the site was very slight, limited to a single residual flint flake and (probably) a single pit containing a relatively large quantity of unworked burnt flint (389). The dearth of prehistoric remains may partly relate to the small scale of the excavation: evidence for extensive but low density prehistory activity elsewhere in the area of the modern village is indicated by the record of findspots of Mesolithic and Neolithic worked flint from the area (see above, Section 1.5) and by the recovery of a small quantity of Late Bronze Age/Early Iron Age pottery from a buried soil horizon investigated during trenching of a small plot of land off the High Street (Clarke 2006).
- 4.2.2 Features attributed to the Romano-British period were better represented principally by the heavily truncated remains of a shallow north to south aligned linear feature (300) and a trackway marked by a pair of north-east to south-west aligned ditches (621 and 625). The Roman-British features are not well-dated, producing very small quantities of pottery (the more diagnostic sherds dating to the mid-2nd century or later) and with a single mid-4th century coin deriving from the surface of ditch 300.
- Although clearly not relating to settlement activity, these features should be seen 4.2.3 against a background of very intensive Romano-British land use in the area. Immediately south of Waterbeach, the stretch of the Cam valley from Milton northwards is well-known as the centre of production of Horningsea Ware pottery and on the gravel terraces on the western side of the river between the modern villages of Milton, Landbeach and Waterbeach extensive cropmark complexes indicate dense Romano-British occupation and activity up to the point where the Old Tillage (Car Dyke) meets the Cam, with small-scale excavations having provided evidence for transhipment of goods, including grain, along the river and the Old Tillage (Evans et al. 2017, 23-31, 39-51, 120-122 fig. 3.1). Away from the immediate riverside zone, cropmarks of what appear to represent discrete enclosed farmsteads, joined by networks of ditched trackways, are known both to the southwest of the modern village of Waterbeach, and from further north in the parish, north of Denny Abbey (see Hall 1996, figs 66, 69), whilst trial trenching and an ongoing programme of excavation in the area of the airfield to the northwest of the village has revealed multiple areas of Romano-British settlement (Clarke 2016; Webb 2021). Within the historic core of the village itself, small-scale excavations at 12 Pieces Lane, some 300m north of the current site, revealed a complex sequence of Romano-British enclosure ditches associated with two Horningsea Ware type pottery kilns (Newton and Peachey 2012), and this clearly represents another significant area of Romano-British activity, suggesting that further foci of settlement may lie undetected within the area of the modern village.



4.2.4 In the context of this very dense pattern of Romano-British settlement, the remains at Rosemary Road are best seen as relating to field systems and routeways in what must have been intensively exploited agricultural holdings in the area and it is possible that the ditched trackway represented part of a routeway leading northwards from the line of the Old Tillage towards the area of intensive occupation/activity partly revealed at Pieces Lane.

4.3 Anglo-Saxon and medieval

Anglo-Saxon and medieval Waterbeach (Fig. 13)

- The medieval and later history of Waterbeach is well-documented, having featured in Ravensdale's detailed history of the fen edge parishes of Waterbeach, Landbeach and Cottenham (Ravensdale 1974; see also Clay 1859, and Wright and Lewis 1989, 237-248). Throughout the historic period there was a basic division in the parish between the higher, habitable ground on its western and southern sides and the very extensive area of peat fen to the east and north. Fig. 13 shows a reconstruction of land use and settlement in the southern part of the parish prior to 19th century enclosure (based on Wright and Lewis 1989, fig. 14). This shows the site situated within the historic village core, which was centred on a (now much denuded) green, surrounded by open fields on its northern, western and southern sides, with fen to the east and north. The map also highlights the location of the two manors who held land here in the medieval period, the first at Waterbeach Abbey, to the south of the village, and the second at Denny Abbey, to the north. The first of the manors, Waterbeach, was endowed to a convent of Franciscan nuns in the late 13th century, when Waterbeach Abbey was built, (although finds from excavation here hint at earlier Saxon-Norman occupation of the site, see below). The second manor, Denney, was also endowed to a religious house, with a cell of monks from Ely establishing Denny Abbey in 1160, which then passed to the Knights Templar in 1170. The Templars held the manor until their order was dissolved in 1308-10, after which it was eventually gifted to the nuns of Waterbeach Abbey in 1342. At this point the two manors were combined and the nuns were relocated to Denny Abbey, with Waterbeach Abbey abandoned - partly in the face of an increasing risk of flooding (see Wright and Lewis 1989 for a full account of the parish's manorial history).
- 4.3.2 Whilst the history and basic structure of land use in the parish during the medieval period is relatively well understood, there is very little evidence for it origins and preconquest history. Its name (first recorded as *Utbeche* in Domesday) derives from the Old English *beche*, meaning stream/brook or valley (Reaney 1943), and Hall has suggested that this is most likely to refer to the Roman canal which runs to the southern and wets of the historic village, the Old Tillage, as opposed to any natural watercourse (Hall 1996, 126). Evidence for Anglo-Saxon activity is limited to several areas of Early Saxon settlement in the southern part of the parish (see above, Section 1.5, Fig. 2; CHER 05312, CHER 09024, ECB402; Lethbridge 1927; Robinson and Guttmann 1996; Mortimer 1996), within the area of the medieval open fields to the south and west of the historic village.



Site sequence and chronology

- 4.3.3 Although the relatively complex sequence of intercutting boundary/enclosure ditches on the site has allowed a robust sequence to be established for the Anglo-Saxon/medieval periods (see Fig. 12), it has proved difficult to provide accurate and precise dating for the various phases of activity defined on stratigraphic grounds. This is largely due to the paucity of substantial pottery assemblages and the broad date ranges associated with the Late Saxon/early medieval wares, coupled by uncertainties caused by the relatively high levels of intrusive and residual material.
- In the context of the dearth of evidence for the pre-conquest (Middle to Late Saxon) history of the of the village (see above), establishing the date of the earliest phases of Anglo-Saxon/medieval activity (i.e. Period 2) is of special importance. The small number of stratigraphically early features which have been attributed to the first phase of Period 2 (Period 2.1), have been suggested to potentially date to the Middle Saxon period, prior to the mid-9th century AD, but this is highly tentative. These features were invariably heavily truncated and were virtually aceramic, collectively producing just six small sherds of Late Saxon/early medieval pottery – all of which could readily be interpreted as being intrusive. The possibility that at least some of these early features relate to Middle Saxon activity rests on the recovery of a small quantity of residual Middle Saxon pottery from other features across the site. Consisting of two sherds of Maxey Ware and three sherds from quartz tempered vessels, Sami notes the relatively large sherd size and good condition of this material (App. B.8), which may suggest it originates from settlement in the immediate vicinity of the site. The status of this material and the possibility of Middle Saxon origins for the activity at the site (and thus for occupation within the historic core of the village; cf. Lewis 2010; Wright 2015) remains obscure, but the very presence of this pottery is of significance given the previous lack of Middle Saxon material from the area.
- Leaving aside this putative phase of Middle Saxon activity, the pottery recovered from 4.3.5 Period 2 features (and Period 3.1 contexts), is overwhelmingly dominated by material which Fletcher has attributed to a broad 'Late Saxon to early medieval' ceramic phase (see App. B.9, Tables 12 and 13). In Period 2 contexts this material is overwhelmingly dominated by Thetford type wares and St Neots ware, both of which have a broad date range from the mid-9th century through to the early/mid-12th century. It is thus very difficult to determine to what extent the activity represented by the Period 2 features extended back into the Late Saxon period proper or instead related largely to a shorter period of time in the 11th century, either side of the Norman conquest. It could be argued that the recovery of occasional sherds of later pottery, notably Developed St Neots Ware (dating to c. 1050-1250 AD) from some Period 2.2 and 2.3 contexts imply a relatively late date for these phases, but given the dominance of St Neots/Thetford type wares in Period 2 features, making up almost 80% of the assemblage (by sherd count), and the clear potential for intrusive finds in the fills of these often heavily truncated features, it seem more likely that activity during this period began somewhat earlier, during the 9th or 10th century AD. This interpretation is supported by the single radiocarbon date from the site, acquired on a charred barley grain from one of the (otherwise undated) pits (pit 221) within Enclosure 309 - attributed to Period 2.3. The date returned by this sample, is imprecise – with the possibility that it



could relate to acicity from the 8th century through to the late 10th century (772—793 cal AD at 11.8% confidence, or 799-904 at 55.1% confidence, or 913-976 cal AD at 28.5% confidence; SUERC-100042, 1164±29 BP, App. E) but is sufficient to indicate that Anglo-Saxon activity at the site was takin place prior to the 11th century, and probably during the 9th century.

- 4.3.6 The chronological boundary between Periods 2 and 3 employed here which divides the sequence into pre- and post- conquest periods is somewhat arbitrary and cannot be directly supported by the ceramic dating. Indeed, the composition of the pottery from Period 3.1 is similar to that from Period 2 contexts although the proportion of 'early medieval wares' (principally Developed St Neots ware) does increase markedly in Period 3.2, suggesting that many features belonging to this sub-period date to the 12th century AD (see App. B.9, Table 13), entirely consistent with the date of the silver half penny of Henry I (SF 5; 1158-1180 AD) recovered from Period 3.2 posthole **564**.
- 4.3.7 A more pronounced change in the ceramic signature of the site corresponds with Period 3.3, when high medieval wares, previously present only in very small quantities as probably intrusive sherds, form a substantial component of the pottery. This high medieval material (including Sandy Greyware, East Anglian Redwares and South-east Fenland Medieval Calcareous Buff ware) makes up almost half of the material from Period 3.3 contexts, and there is little doubt that this sub-period, and probably those of Period 3.4, belong to the 13th and early 14th century AD. The paucity of late medieval pottery (demonstrably dating to the 14th century) and the lack of features which can convincingly be attributed to late medieval phase of activity suggest a major decline in activity on the site at this point (see below).

Site development and function

- 4.3.8 The review of the chronology of the Anglo-Saxon to medieval sequence suggests that the majority of the Period 2 and 3 features relate to activity over the course of three or four centuries between c. 900/1000-1350 AD. The entire sequence was characterised above all by the creation, maintenance and reorganisation of ditched boundaries which seem generally to have served to create small plots and enclosures the full extent of which invariably extended beyond the limits of excavation. At no point in the sequence were structural remains or quantities of finds clearly demonstrating direct domestic occupation of the site encountered, but the intensity of activity represented by the intercutting ditches and the presence of household refuse, especially pottery and animal bone, indicates that the site lay in relatively close proximity to domestic dwellings over much of this time (see below for discussion of the site in the context of the villages medieval layout and development).
- 4.3.9 These kind of 'back-plot' areas could be expected to have played host to a wide range of activities including small scale horticulture, the housing and management of livestock, refuse disposal, and processing/craft activities. Direct evidence for specific activities is, however, generally difficult to identify the finds assemblages from the site were relatively modest, and in many cases are likely to reflect refuse deriving from nearby households as opposed to relating to tasks undertaken within the area of the site itself. This is consistent with the character of the charred plant remains, which consist of mixed assemblages of grain and weed seeds likely to be derived from refuse



disposal (and with no clear evidence for on-site processing activity in the form of chaff/crop residues; see App. C.1) Potentially more revealing are the form and character of some of the features themselves; especially the watering hole (800) - belonging to Period 2.2 but probably persisting in use throughout much of Periods 2 and 3 - which suggests the provision of water for livestock. The curvilinear features assigned to Period 2.3 (334, 347/388 and 716) may also reflect agricultural activity, perhaps representing drainage gullies dug around hay ricks or similar storage facilities. Activity of a more domestic nature may be represented by the possible remains of a hearth/oven (458; Period 3.2), samples from which produced small quantities of poorly preserved cereals. The various pits found across the site, although not numerous, probably attest to other activities, probably including the small-scale extraction of gravel and sand and the disposal of refuse.

- 4.3.10 Perhaps the most striking aspect of the Late Saxon to medieval remains is the extent to which the various ditched boundaries were subject to repeated episodes of wholescale reorganisation (Fig. 12). Although these changes occurred over a considerable period of time, they do suggest a certain fluidity in the layout, use and ownership of the plots in this area over the centuries. Throughout this time, however, activity does seem to have been more intensive in the eastern half of the site, especially during Period 2 when successive small rectilinear ditched enclosures/plots (Period 2.1 Enclosure 291 and Period 2.3 Enclosure 309) appear to have been laid out, with a series of more minor boundaries to the west (Fig. 12). A major change in the organisation of the site appears to have taken place in Period 3.2 (probably in the 12th century, see above), with the layout of a major east to west aligned boundary ditch, revealed against the southern edge of excavation (261/267). This boundary shows a close correspondence to a plot boundary shown on the 1813 enclosure map and historic OS mapping (see Fig. 3), but any sense that it might represent the first iteration of a long-standing plot boundary is refuted by the manner in which it was slighted by several Period 3.3 features and, later, by the large north south aligned post-medieval ditch assigned to Period 4.1 (724).
- 4.3.11 The finds provide some insights into the character and status of the households associated with the site. The Late Saxon to medieval pottery assemblage is dominated by utilitarian, domestic forms in a typical range of fabrics for the area. Predictably, the ubiquity of Thetford type and St Neots ware in the Late Saxon and early medieval periods gives way to a greater diversity of high medieval fabrics, reflecting the import of material from the wider region – but at no point is there any indication that the pottery derived from anything other than modest, relatively low status households. Other finds hint at some of the equipment and possessions used by these Late Saxon/medieval communities, with worked bone/antler artefacts including a bone comb, antler tool handle, a bone pin beater and a bone needle - the latter two reflecting textile production/repair (also represented by a clay spindlewhorl, SF 8). Although unexceptional in terms of representing the kind of activities that would readily be anticipated as taking place in a domestic context during this period, Riddler (App. B.16) notes the rarity with which such worked bone/antler finds have been recovered from rural settlement contexts, and as such they are significant finds at a local/regional level.



Economic evidence

- 4.3.12 The evidence for the Late Saxon and medieval economy provided by the faunal assemblage and the charred plant remains are generally in keeping with that of the wider region. The faunal material from the site is typical of a rural settlement in South Cambridgeshire, in which domestic mammals were the mainstay of the food economy, with cattle and sheep/goat being the most well represented species, and wild species only minimally represented. There is a notably wide variety of taxa making up the assemblage and the element distribution of the assemblage shows a presence of both primary butchery elements and meat bearing elements. Beef seemingly formed the main element of the diet with cattle also being used for traction and to provide leather while the age distribution of sheep suggest they were utilised for wool production as well as for meat. Pigs, although represented only by a small number of specimens, would also have been of importance as a source of meat.
- 4.3.13 Charred plant remains were generally poorly preserved but the few more substantial assemblages from Periods 2 and 3 are entirely typical of the period (App. C.1), with cereal grains of free-threshing wheat (Triticum aestivum-type), barley (Hordeum sp.) oats (Avena sp.) and some rye (Secale cereale). Chaff remains representing cereal straw and threshing waste is absent suggesting that the grain was fully processed. Legumes are present mainly as peas (cf. Pisum sativum) and beans (Vicia faba). These crops were accompanied by a diverse range of other pant seeds, including wetland taxa (sedges and rushes), arable weeds and grassland plants. The habitats indicted by these remains correspond well with what is known of land-use in the parish. In particular, the arable weed seeds from most of the more productive samples from Periods 2 and 3 invariably included stinking chamomile, an indicator of heavy clay soils, consistent with the location of parts of the pre-enclosure open fields on the gault clay which outcrops in areas of the 'upland' parts of the parish, whilst the large quantity of grass seeds from some samples may relate to hay crops taken form the large areas of meadow know to have existed in the western and southern parts of the parish in postmedieval times (see Fig. 13).
- 4.3.14 Although very small, the assemblage of fish bone recovered from Anglo-Saxon and medieval contexts (25 specimens) represents important evidence for the exploitation of resources aside from livestock and arable crops (App. C.3). This material includes a small number of herring/herring family (Clupeidae) bones from Period 2.3 and 3.2 contexts (four specimens) which must reflect the import of (salted) fish from the major commercial fisheries on the East Anglian coast (see Barrett *et al.* 2004), but most of the remains were of freshwater species, especially eel, almost certainly deriving from fishing of the local rivers and watercourses. The presence of this material is consistent with documentary evidence for the importance of the parish's fisheries, with the Domesday entries for the two manors at Waterbeach recording that they provided a total of 1450 eels and 12*d.* from the tribute of fish (Ravensdale 1974, 48). These are very substantial quantities, even in comparison to other larger fen edge villages, such as the two manors at Cottenham which between them are recorded as providing 650 eels (ibid.). The importance of fenland resources is also hinted at by bones of wetland bird from Period 2 and 3 contexts, including swan, brent goose and one charadriiform



(a large order of birds associated with coastal and inland water, including many species of gulls and waders).

4.3.15 These remains provide only the more tangible traces of the economic importance of the extensive areas of fen in the parish. Ravensdale's history of the area emphasises the considerable advantages these fenland environments conferred on medieval fenedge villages such as Waterbeach, which as well having higher ground above the fen edge suitable for arable cultivation through the usual system of open fields had the benefit of unusually extensive areas of pasture and meadow, as well as rights to turbary, fishing and hunting - offering a "sound foundation of self-sufficiency...[and]...easy sustenance for those with little property" (Ravensdale 1974, 151; cf. Darby 1940). One manifestation of this is the documentary evidence for the presence of numerous smallholders in the medieval parish, who despite having little or no access to arable land were able to make a living through access to the extensive commons and to fenland resources (Ravensdale 1974; Wright and Lewis 1989, 248).

Village development

- 4.3.16 With the site appearing to attest to an area of relatively early settlement within the historic core of Waterbeach, it is important to attempt to place it within the context of the layout and development of the medieval village. To date, two divergent interpretations of the village's development have been presented, by Alison Taylor and J.R. Ravensdale respectively, although given the scarcity of archaeological and documentary evidence for the Late Saxon and early medieval periods both are necessarily speculative. Taylor has (briefly) outlined a basic sequence in which the early (Late Saxon and Saxo-Norman) core of the village is suggested to have been in the area immediately around the parish church and to the north of Waterbeach Abbey. This account suggested that the Abbey itself is likely to have been built on the site of the original manorial seat rather than a 'greenfield' site (Taylor 1998, 93-94) - a suggestion which receives some support from the recovery of quantities of Late Saxon/early medieval pottery (St Neots and Stamford Ware) during small scale excavations at the Abbey site in 1963, indicating occupation prior to the Abbey's foundation (Hurst 1966). Taylor envisaged that settlement later extended from this core area to locations around the relatively large green to the major north to south routeway through the modern village, reflecting the economic importance of this area of common pasture and perhaps the growing influence of Denny Abbey, lying some way to the north of the village.
- 4.3.17 In contrast, Ravensdale (1974, 139-142), drawing on his exhaustive examination of the documentary and cartographic evidence, saw the church and Abbey as relatively late features in the developments in the village, suggesting that the village was originally linear in form, with dwellings strung out along the north to south road which ran along the western side of the green and gave access to the open fields to the north of the village (Fig 13; a route now represented by the village high street, but which has deflected to the east due to later encroachment of settlement onto the green). In this model, it was only later, due largely to the foundation of the Waterbeach Abbey in the late 13th century and the (potentially contemporary) construction of a dock giving access to the river further east along Church Street (modern Station Road), that



settlement expanded significantly into the south-eastern part of the modern village (ibid.).

4.3.18 The relatively small-scale excavations at Rosemary Road do not provide sufficient evidence to directly support or refute either of these reconstructions of the village's early layout and development. However, the presence of significant Late Saxon and early medieval remains here, directly to the north of Church Street/Station Road, is significant and it is especially notable that the boundary and enclosure ditches of even the earlier phases of Period 2 are generally on alignments very close to the modern/historic plot boundaries, strongly suggesting they were laid out in relation to properties fronting onto routeways broadly equivalent to those of the existing/recent street pattern (see Fig. 3). This is consistent with (but by no means proves) Taylor's argument for an early core of activity in the area close to the church and putative manorial centre at the site of Waterbeach Abbey, and may suggest that Ravensdale's model underestimates the extent of earlier activity in this part of the village, pointing at the very least to the presence of an additional area of early settlement away from that which is suggested to have grown up along the road/street to the west.

Late medieval decline

- 4.3.19 As noted above, the very small quantity of diagnostically late medieval pottery from the site suggests a major decline in activity on the site by, at the latest, the mid-14th century. This of course corresponds broadly with the major depopulation and contraction of settlement in the 14th century caused by famine and outbreaks of the Black Death, the historical and archaeological evidence for which remains much discussed (e.g. Bailey 1996; Lewis 2016). Ravensdale has reviewed the available documentary evidence for population levels in Waterbeach over the medieval period and whilst he emphasises the uncertainties which attend any estimation of the demographic impact of these 'disasters', there seems little doubt that the parish did see a significant decline in population, accompanied by significant social upheaval (Ravensdale 1974, ch 5).
- 4.3.20 This should not, however, necessarily be taken to indicate an abandonment or even a contraction of settlement in this part of the village; indeed, all the indications from documentary and cartographic sources are that the south-eastern part of the modern village in proximity to the docks on Church Street/Station Road and fenland parts of the parish became of increasing importance in the later medieval and post-medieval periods, being occupied by many of the numerous small holders of the village who were dependant on access to the river and fens (Ravensdale 1974, 140-42). In this context, decline in activity at the site may relate to changes in the use/ownership of the small area covered by the site during this turbulent time as much to direct reduction in nearby settlement/activity with, for instance, the land being turned over entirely to pasture or small-scale cultivation/horticulture but this is an issue that is likely only to be resolved by further archaeological investigations in the area.

4.4 Post-medieval and modern

4.4.1 Post-medieval and modern remains were largely restricted to boundary ditches dating to the 16th century onwards, along with a series of cattle burials presumably



representing the disposal of diseased animals. Some of the ditched boundaries (Period 4.1 ditch **816** and Period 4.2 ditch **245/780**) may relate to plot boundaries shown on the enclosure map and first edition OS mapping (Fig. 3), and the enclosure map shows the site occupying a plot at the rear of properties fronting onto what is now the junction between Way Lane and Station Road.

4.5 Conclusions and significance

4.5.1 Although relatively small-scale, the excavation reported here represents one of the only substantive archaeological investigations undertaken within the historic core of Waterbeach and has revealed evidence for Late Saxon to high medieval activity which is of significance in terms of understanding the origins, development, and character of settlement in the village over this period. The finds assemblages, whilst relatively small, make a useful addition to the local record and the environmental remains provide good evidence for the distinctive 'fen-edge economy' of the parish, which combined typical medieval mixed agriculture with the exploitation of fenland resources.



5 Publication and Archiving

5.1 Publication

- 5.1.1 It is intended to publish a short article (c. 4-6,000 words) in the *Proceedings of the Cambridge Antiquarian Society*, focused on the Late Saxon and medieval remains.
- 5.1.2 This report will both supplements the published article and will be superseded by any new data and interpretations presented within it.

5.2 Archiving, Retention and Dispersal

5.2.1 The physical site archive (under Site Code WATROR19 / ECB5914) will be deposited with Cambridgeshire County Council Stores. The archive consists of two document boxes, 10 bulk find boxes, and three small finds boxes. Transfer of ownership will be obtained following approval of this report.



APPENDIX A CONTEXT INVENTORY

Conte xt	Catego	Featur	Cut	Filled	Perio d	Grou	Maste	Lengt h	Breadt h	Dept h	Colour	Fine	Coarse	Shape in Plan	Side	Break of	Base	Orientati
χι	ry	е Туре		Ву	a	р	r Numb er	п	п	n		compone nt	compone nt	Plan		Slope		on
200	fill	post hole	201		2.3	201	0	0		0.2	light grey	clay silt	rare small stones (randomly sorted)					
201	cut	post hole	201	200	2.3	201	0	0	0.22	0.2				sub- circular	steep	sharp	concav e	
202	fill	post hole	203		2.3	201	0	0		0.07	light greyish brown	clayey silt	rare small stones, random					
203	cut	post hole	203	202	2.3	201	0	0	0.2	0.07				sub- rectangul ar	moderate	sharp	concav e	
204	fill	post hole	206		2.3	201	0	0		0.08	mid greyish brown	clayey silt	rare small stones, random					
205	fill	post hole	206		2.3	201	0	0		0.3	light greyish brown	clayey silt	rare small stones, random					
206	cut	post hole	206	(204) (205)	2.3	201	0	0	0.3	0.3				sub- circular	steep	sharp	concav e	
207	fill	post hole	208		2.3	208	0	0		0.06	light grey brown	clayey silt	rare small stones, random					
208	cut	post hole	208	207	2.3	208	0	0	0.22	0.06				sub- circular	gradual	sharp	concav e	
209	fill	ditch	210		2.3	0	0	0		0.14	mid greyish brown	clayey silt	rare small stones, random					
210	cut	ditch	210	209	2.3	0	0	1	0.32	0.14				linear	steep	sharp	concav e	NW-SE
211	fill	post hole	212		2.3	208	0	0		0.15	mid greyish brown	clayey silt	rare small stones, random					
212	cut	post hole	212	211	2.3	208	0	0		0.15				sub- circular	steep	sharp	concav e	

©Oxford Archaeology Ltd 37 29 September 2021



Conte xt	Catego ry	Featur e Type	Cut	Filled By	Perio d	Grou p	Maste r Numb er	Lengt h	Breadt h	Dept h	Colour	Fine compone nt	Coarse compone nt	Shape in Plan	Side	Break of Slope	Base	Orientati on
213	cut	ditch	213	214	2.2	213	0	1	0.53	0.21				linear	steep	gradual	concav e	E-W
214	fill	ditch	213		2.2	213	0	0		0.21	mid grey	clayey silt	rare small sub-ang stones					
215	cut	post hole	215	216	2.3	208	0	0.9	0.9	0.3				circular	steep	gradual	concav e	
216	fill	post hole	215		2.3	208	0	0		0.3	dark brownis h grey	clayey silt	freq sand					
217	cut	pit	217	218	2.3	208	0	0	0.87	0.46				linear	steep	gradual	concav e	NW-SE
218	fill	pit	217		2.3	208	0	0		0.46	dark brownis h grey	clayey silt						
219	cut	gully	219	220	1	0	0	1	0.46	0.3				linear	steep	imperceptib le	concav e	NW-SE
220	fill	gully	219		1	0	0	0		0.3	mid brownis h grey	silt	fine sand freq					
221	cut	pit	221	222 223	2.3	208	0	0	0.86	0.27				circular	moderate	gentle	concav e	
222	fill	pit	221		2.3	208	0	0		0.17	dark grey	clayey silt	occ small sub-ang stones					
223	fill	pit	221		2.3	208	0	0		0.13	dark grey mottled with yellowis h brown	clayey silt	occ small sub-ang stones					
224	cut	pit	224	225	2.3	208	0	0	0.85	0.14				sub- circular	gentle	imperceptib le	concav e	
225	fill	pit	224		2.3	208	0	0		0.14	dark brownis h grey	clayey silt	fine sand					
226	cut	pit	226	227	2.3	208	0	0.94	0.9	0.28				sub- circular	steep	imperceptib le	concav e	

©Oxford Archaeology Ltd 38 29 September 2021



Conte	Catego	Featur	Cut	Filled	Perio	Grou	Maste	Lengt	Breadt	Dept	Colour	Fine	Coarse	Shape in	Side	Break of	Base	Orientati
xt	ry	е Туре		Ву	d	р	r Numb er	h	h	h		compone nt	compone nt	Plan		Slope		on
227	fill	pit	226		2.3	208	0	0		0.28	dark brownis h grey	clayey silt						
228	cut	gully	228	229	2.3	210	0	1	0.4	0.09				linear	shallow	gentle	concav e	E-W
229	fill	gully	228		2.3	210	0	0		0.09	mid grey	clayey silt						
230	cut	pit	230	231	2.3	208	0		0.48	0.25				circular	steep	gradual	concav e	
231	fill	pit	230		2.3	208	0	0		0.09	dark grey mottled with yellowis h brown	clayey silt	occ small sub-ang stones (random)					
232	fill	pit	230		2.3	208	0	0		0.18	dark grey	clayey silt	occ small stones, random					
233	cut	pit	233	234 235	0	0	0	0	0.65	0.32				circular	stepped	gradual	flat	
234	fill	pit	233		0	0	0	0		0.1	mid yellowis h brown	silty sand	small stones					
235	fill	pit	233		0	0	0	0		0.22	mid brown	silty sand	small stones, occ charcoal					
236	cut	pit	236	237 238	0	0	0	0	0.75					circular	steep	gradual	flat	
237	fill	pit	236		0	0	0	0		0.18	mid yellowis h brown	silty sand	small stones					
238	fill	pit	236		0	0	0	0		0.13	mid brown	silty sand	occ charcoal and small stones					
239	cut	post hole	239		2.3	208	0	0.9	0.84	0.47				sub- circular	steep	gradual	flat	

©Oxford Archaeology Ltd 39 29 September 2021



Conte	Catego	Featur	Cut	Filled	Perio	Grou	Maste	Lengt	Breadt	Dept	Colour	Fine	Coarse	Shape in	Side	Break of	Base	Orientati
xt	ry	е Туре		Ву	d	p	r Numb er	h	h	h		compone nt	compone nt	Plan		Slope		on
240	fill	post hole	239		2.3	208	0	0		0.41	mid brownis h grey	sandy silt	small stones					
241	cut	post hole	241	242	2.3	208	0	0.65	0.6	0.4				sub- circular	steep	impereptibl e	concav e	
242	fill	post hole	241		2.3	208	0	0		0.4	mid brownis h grey	sandy silt	small stones					
243	cut	tree throw?	243	244	2.3	208	0	1.3		0.25				sub- circular	gentle	imperceptib le		
244	fill	tree throw?	243		2.3	208	0	0		0.25	mid brownis h grey	sandy silt	small stones					
245	cut	ditch	245	246 247	4.2	245	0	1	0.76	0.48				curvilinea r	moderate	gradual	concav e	SE-NW
246	fill	ditch	245		4.2	245	0	0		0.14	dark grey mottled with yellowis h brown	clayey silt	occ small stones, random					
247	fill	ditch	245		4.2	245	0	0		0.24	dark grey	clayey silt						
248	cut	post hole	248	249 250	2.3	248	0	0	0.48	0.2				circular	steep	gradual	concav e	
249	fill	post hole	248		2.3	248	0	0		0.18	mid greyish brown	clayey silt						
250	fill	post hole	248		2.3	248	0	0		0.2	dark grey	clayey silt						
251	cut	post hole	251	252	0	0	0	0	0.24	0.23				circular	verticle	gradual	concav e	
252	fill	post hole	251		0	0	0	0		0.23	mid grey	silty sand	small stones					
253	cut	post hole	253	254	0	0	0	0	0.36	0.12				circular	steep	gradual	concav e	
254	fill	post hole	253		0	0	0	0		0.12	mid grey	silty sand	small stones					

©Oxford Archaeology Ltd 40 29 September 2021



Conte xt	Catego ry	Featur e Type	Cut	Filled By	Perio d	Grou p	Maste r Numb er	Lengt h	Breadt h	Dept h	Colour	Fine compone nt	Coarse compone nt	Shape in Plan	Side	Break of Slope	Base	Orientati on
255	cut	pit	255	256	0	0	0	0.88	0.5	0.11				sub- circular	gentle	gradual	concav e	
256	fill	pit	255		0	0	0	0		0.11	mid grey	silty sand	small stones					
257	cut	post hole	257	258	0	0	0	0	0.27	0.08				circular	gentle	gradual	concav e	
258	fill	post hole	257		0	0	0	0		0.08	mid grey	silty sand	small stones					
259	fill	ditch	261		3.2	261	0	0		0.3	mid grey brown	clayey silt	moderate freq of small to medium stones, randomly sorted					
260	fill	ditch	261		3.2	261	0	0		0.23	light greyish brown	clayey silt	rare small stones, random					
261	cut	ditch	261	260 259	3.2	261	0	1	1.3	0.58				linear	steep	sharp	concav e	N-E
262	fill	ditch	263		3.2	267	0	0		0.42	dak greyish brown	clayey silt	rare small stones, random					
263	cut	ditch	263	262	3.2	267	0	1	0.2	0.42				linear	steep	sharp	concav e	E-W
264	cut	ditch	264	265	2.1	264	264	0	0.96	0.24				linear	steep	imperceptib le	concav e	SE-NW
265	fill	ditch	264		2.1	264	264	0		0.24	light greyish brown	sandy silt	freq small stones					
266	fill	ditch	267		3.2	267	0	0		0.08	dark greyish brown	clayey silt	rare small stones, random					
267	cut	ditch	267	266	3.2	267	0	0	0.6	0.08				linear	moderate	gentle	concav e	E-W
268	cut	post hole	268	269	0	0	0	0	0.32	0.23				circular	steep	sharp	concav e	
269	fill	post hole	268		0	0	0	0		0.23	mid grey	clayey silt						

©Oxford Archaeology Ltd 41 29 September 2021



Conte	Catego	Featur	Cut	Filled	Perio	Grou	Maste	Lengt	Breadt	Dept	Colour	Fine	Coarse	Shape in	Side	Break of	Base	Orientati
xt	ry	e Type	Cut	Ву	d	р	r Numb	h	h	h	coloui	compone	compone	Plan	Side	Slope	Dusc	on
270			270	074			er		0.64	0.00							G .	
270	cut	pit	270	271	0	0	0	0	0.64	0.32				sub- circular	steep	sharp	flat	
271	fill	pit	270		0	0	0	0		0.32	mid greyish brown	clayey silt	rare small stones, random	on outur				
272	cut	post hole?	272	273	0	0	0	0	0.42	0.19				circular	moderate	gradual	concav e	
273	fill	post hole?	272		0	0	0	0	0.42	0.19	light brownis h grey	clayey silt						
274	cut	ditch	274	275	2.1	264	0	0	0.5	0.1				linear	gentle	gradual	concav e	E-W
275	fill	ditch	274		2.1	264	0	0		0.1	mid grey	silty sand	small stones					
276	cut	post hole	276	277	0	0	0	0	0.3	0.28	. ,			circular	steep	gradual	flat	
277	fill	post hole	276		0	0	0	0		0.28	mid greyish brown	silty sand	small stones					
278	cut	ditch	278	279	4.1	245	0	0						linear	verticle			NE-SW
279	fill	ditch	278		4.1	245	0	0			dark brownis h grey with mottling of light yellowis h brown	sandy silt	small stones, moderate freq					
280	cut	post hole	280	281	2.3	0	0	0	0.48	0.3				circular	steep	sharp	flat	
281	fill	post hole	280	281	2.3	0	0	0	0.48	0.3				circular	steep	sharp	flat	
282	cut	pit	282	314	1	282	0	1.5	0.82	0.52				sub- rectangul ar	verticle	gradual	flat	
283	cut	pit	283	315	0	0	0	0	0.8	0.28				circular	steep	gradual	concav e	
284	fill	pit	285		2.1	285	0	1	0.8	0.2	dark grey	sandy silt	moderate freq of					

©Oxford Archaeology Ltd 42 29 September 2021



Conte	Catego	Featur	Cut	Filled	Perio	Grou	Maste	Lengt	Breadt	Dept	Colour	Fine	Coarse	Shape in	Side	Break of	Base	Orientati
xt	ry	e Type	Cut	Ву	d	p	r Numb er	h	h	h	Coloui	compone	compone	Plan	Side	Slope	base	on
													small stones, random					
285	cut	pit	285	284	2.1	285	0	0	0.8	0.2				linear	steep	sharp	concav e	E-W
286	fill	ditch	288		2.3	288	0	0		0.3	dark brown	sandy silt	rare small stones, random					
287	fill	ditch	288		2.3	288	0	0		0.5	dark grey	sandy silt	rare small stones, random					
288	cut	ditch	288	286 287	2.3	288	0	0	0.9	0.5				linear	steep	sharp	concav e	N-S
289	cut	post hole?	289	290	0	0	0	0	1.08					circular	verticle			
290	fill	post hole?	289		0	0	0	0	1.08		dark greywit h mottled with light yellowis h brown	clayey silt	rare smalls stones					
291	cut	ditch	291	292 293 294	2.2	291	0	0	1.84	0.64				linear	steep	imperceptib le	concav e	NE-SW
292	fill	ditch	291		2.2	291	0	0	1.1	0.2	mid greyish brown	silty sands	small stones, moderate frequency					
293	fill	ditch	291		2.2	291	0	0		0.3	mid greyish brown	silty sand	small stones, moderare freq and rare charcoal					
294	fill	ditch	291		2.2	291	0	0		0.32	mid brownis h grey	silty sand	mod freq of small stones and mod					

©Oxford Archaeology Ltd 43 29 September 2021



Xt	Conte	Catago	Footur	Cut	Filled	Dorio	Grau	Masta	Longt	Droad+	Dont	Colour	Fine	Coarse	Chana in	Sido	Proak of	Base	Orientati
Number N		Catego	Featur	Cut		Perio	Grou	Maste	Lengt	Breadt	Dept	Colour			Shape in	Side	Break of	раѕе	
Part	Α.	'y	Стурс		Бу	u	P		"				-	-	Fian		Slope		Oii
295 fill ditch 296 3.3 296 0 0 0.22 light greysh brown some sorted linear moderate concav N+S e																			
295 fill ditch 296 3.3 296 0 0 0.22 light greysh brown some sorted linear moderate concav N+S e														freq of					
296 Cut gully 296 295 3.3 296 0 0 0.6 0.2																			
296 Cut gully 296 295 3.3 296 0 0 0.6 0.2	295	fill	ditch	296		3.3	296	0	0		0.22	light	sandy silt	small					
296 cut gully 296 295 3.3 296 0 0 0.6 0.2												greyish		stones,					
296 Cut gully 296 295 3.3 296 0 0 0 0.6 0.2												brown							
296 cut gully 296 295 3.3 296 0 0 0 0.6 0.2																			
297 fill ditch 300	200			206	205	2.2	20.5	•		0.0				sorted					
297 fill ditch 300 1 300 0 0 0 0 0 0 0 0	296	cut	gully	296	295	3.3	296	0	0	0.6	0.2				linear	moderate	moderate		N-S
298 fill ditch 300 1 300 0 0 0.2 light brown stones of moderate freq	207	fill	ditch	200		1	200	0	0		0.3	light	clayov cilt	small to				е	
Section Sect	237	''''	uittii	300		1	300	U	U		0.3		clayey siit						
298 fill ditch 300 1 300 0 0 0.2 light brown stones																			
298 fill ditch 300 1 300 0 0 0 0 0 0 0 0												11 61 0 7							
298 fill ditch 300 1 300 0 0 0 0.2 light brown clayer silt rare small stones clayer silt clayer silt rare small stones clayer small clayer small																			
299 fill ditch 300 1 300 0 0 0.16 dark greenish greenish grey style clay greenish grey style clay greenish grey style clay grey style concav steep sharp concav style clay grey style clay gre	298	fill	ditch	300		1	300	0	0		0.2	light	clayey silt						
300 cut ditch 300 297 1 300 0 0 1.76 0.66												brown		stones					
300 cut ditch 300 297 298 299 29	299	fill	ditch	300		1	300	0	0		0.16	dark	silty clay	rare small					
300 cut ditch 300 297 298 298 299 298 299 299 298 299 29												greenish							
298 299 298 299 298 299 298 299												grey		random					
301 cut ditch 301 304,30 2.3 301 0 0 0.9 0.4	300	cut	ditch	300		1	300	0	0	1.76	0.66				linear	steep	sharp		N-S
301 cut ditch 301 304,30 2.3 301 0 0 0.9 0.4																		е	
302 Cut ditch 302 306, 2.3 309 0 0 0.74 0.32	301	Cut	ditch	301		2.3	301	0	0	0.0	0.4				linear	steen	charn	concav	NIM/-SE
302 cut ditch 302 306, 307 2.3 309 0 0 0.74 0.32	301	cut	uiteii	301		2.5	301	O	O	0.5	0.4				iiiicai	зсеер	Silaip		NW-SE
303 cut ditch 303 308 2.3 0 0 0 0.4	302	cut	ditch	302		2.3	309	0	0	0.74	0.32				linear	steep	sharp	1	NW-SE
303 Cut ditch 303 308 2.3 0 0 0 0.4	302	- Car	a.co	502		2.0	555	· ·	ŭ	0., .	0.02					Steep	5		52
304 fill ditch 301 2.3 301 0 0 0.24 dark brown grey rare, random	303	cut	ditch	303		2.3	0	0	0		0.4				linear	steep	sharp		SE-NW
Stones, rare, random Stones, random Stones, rare, random Stones, random Stones, random Stones, random																		е	
Second	304	fill	ditch	301		2.3	301	0	0		0.24	dark	sand silt	small					
305 fill ditch 301 2.3 301 0 0 0.12 light sand silt small to medium stones, rare,rando m												brown		stones,					
305 fill ditch 301 2.3 301 0 0 0 0.12 light sand silt small to medium stones, rare, rando m m stones, rare, rando m m m m m m m m m												grey							
brown grey medium stones, rare,rando m stones, rare,rando m stones, rare, stones, rare, stones, rare, stones,								_	_										
	305	tíll	ditch	301		2.3	301	0	0		0.12		sand silt						
												grey							
306 fill ditch 302 2.3 309 0 0 0.14 light sand silt small stones,																			
brown stones,	306	fill	ditch	302		2.3	300	n	n		0 14	light	sand silt				 		
	300		aiteii	302		2.5	303	0	3		0.14		Jana Jii						
, , , , , , , , , , , , , , , , , , ,												grey		,					

©Oxford Archaeology Ltd 44 29 September 2021



Conte	Catego	Featur	Cut	Filled	Perio	Grou	Maste	Lengt	Breadt	Dept	Colour	Fine	Coarse	Shape in	Side	Break of	Base	Orientati
xt	ry	e Type	Cut	By	d	р	r	h	h	h	Coloui	compone	compone	Plan	Side	Slope	Dase	on
	•	,,,		,			Numb					nt	nt					
							er											
													rare,					
207	CILL	tr. t	202		2.2	200				0.0		1 11	random					
307	fill	ditch	302		2.3	309	0	0		0.2	dark	clay silt	small					
											grey brown		stones,					
											Drown		rare,rando m					
308	fill	ditch	303		2.3	309	0	0		0.4	dark	sand silt	small					
300		uiteii	303		2.5	303	O	J		0.4	grey	Sana Siit	stones,					
											brown		rare,					
													random					
309	cut	ditch	309	310,	2.3	309	0	0	1.4	0.52				linear	moderate	gradual	concav	SW-NE
				311													е	
310	fill	ditch	309	310,	2.3	309	0	0		0.1	mid	silt sand	small					
				344							yellow		stones,					
											brown		moderate,					
													random					
311	fill	ditch	309	311,33	2.3	309	0	0		0.42	dark	silt sand	small					
				1							brown		stones,					
											grey		rare,rando					
312	cut	pit	312	316	1	282	0	0	0.18	0.28			m	circular	steep	sharp	concav	n/a
312	cut	pit	312	310	1	202	U	U	0.16	0.28				Circulai	steep	Silarp	e	11/a
313	cut	pit	313	317,	0	0	0	0	1.8	0.78				circular	steep	sharp	concav	n/a
				318,													е	, .
				319														
314	fill	pit	282		1	282	0	0		0.52	mid	silt sand	n/a					
											green							
											yellow							
315	fill	pit	283		0	0	0	0		0.28	mid	silt sand	small					
											grey		stones,					
													rare,					
316	£:II	nit	312		1	202	•	_		0.30	marriel	oilt on a	random			 	1	
310	fill	pit	312		1	282	0	0		0.28	muid	silt sand	small					
											grey		stones, rare,					
													random					
317	fill	pit	313		0	0	0	0		0.2	dark	silt sand	small				 	
517		۲۰۰۰	313		3					0.2	grey	J.iic Juliu	stones,					
											J - 1		rare,					
													random					

©Oxford Archaeology Ltd 45 29 September 2021



Conte	Catego	Featur	Cut	Filled	Perio	Grou	Maste	Lengt	Breadt	Dept	Colour	Fine	Coarse	Shape in	Side	Break of	Base	Orientati
xt	ry	е Туре		Ву	d	p	r Numb er	h	h	h		compone nt	compone nt	Plan		Slope		on
318	fill	pit	313		0	0	0	0		0.16	bright grey yellow	sand	n/a					
319	fill	pit	313		0	0	0	0		0.5	mid grey yellow	silt sand	small stones, random, rare					
320	cut	ditch	320	322	2.3	301	0	0		0.4				linear	steep	sharp	concav e	NW-SE
321	cut	pit	321	323, 324	2.2	0	0	0	1.8	0.6				sub- circular	steep	sharp	concav e	n/a
322	fill	ditch	320		2.3	301	0	0		0.4	dark grey brown	sandy silt	small stones, rare, random					
323	fill	ditch	321		2.2	0	0	0		0.44	light grey brown	sand silt	small stones, rare, random					
324	fill	pit	321		2.2	0	0	0		0.6	dark grey brown	sand silt	small stones, rare, random					
325	cut	ditch	325	326	3.3	325	0	0	0.85	0.44				linear	steep	imperceptib le	concav e	NE-SW
326	fill		325		3.3	325	0	0		0.44	mid grey brown	silt sand	small stones, rare, random					
327	cut	gully	327	328	4.1	327	0	0	0.35	0.29				linear	steep	sharp	concav e	N-S
328	fill	gully	327		4.1	327	0	0		0.29	dark brown grey	silt sand	small stones, rare, random					
329	cut	ditch	329	332, 333, 342, 343	2.2	291	0	0	1.9	0.84				circular	steep	sharp	concav e	NE-SW

©Oxford Archaeology Ltd 46 29 September 2021



Conte	Catego	Featur	Cut	Filled	Perio	Grou	Maste	Lengt	Breadt	Dept	Colour	Fine	Coarse	Shape in	Side	Break of	Base	Orientati
xt	ry	e Type	Cut	By	d	р	r	h	h	h	Coloui	compone	compone	Plan	Side	Slope	Busc	on
							Numb er					nt	nt					
330	cut	ditch	330	331, 334	2.3	309	0	0	1.54	0.5				linear	steep	sharp	concav e	NE-SW
331	fill	ditch	330	311,33	2.3	309	0	0		0.4	light grey brown, 30% orange mottling	clay sand	small to medium stones, rare, random					
332	fill	ditch	329		2.2	291	0	0		0.44	mid grey brown	clay silt	small stones, rare, random					
333	fill	ditch	329		2.2	291	0	0		0.42	dark grey brown	clay silt	small to medium stones, rare, random					
334	cut	gully	334	335	2.3	334	0	0	0.24	0.06				curvilinea r	gentle	imperceptib le	concav e	NW-SE
335	fill	gully	334		2.3	334	0	0		0.06	light brown grey	silt sand	small stones, rare, random					
336	cut	gully	336	337	2.3	334	0	0		0.16				curvilinea r	steep	imperceptib le	concav e	NW-SE
337	fill	gully	336		2.3	334	0	0		0.16	mid brown grey	silt sand	small stones, rare, random					
338	cut	ditch	338	339	3.3	338	338	0	0.49	0.12				curvilinea r	moderate	moderate	concav e	N-S
339	fill	ditch	338		3.3	338	338	0		0.12	light blue grey	silt clay	small stones, rare, random					
340	cut	ditch	340	341	3.3	340	0	0	0.8	0.5				linear	steep	gradual	concav e	N-S
341	fill	ditch	340		3.3	340	0	0		0.5	dark grey brown	silt sand	small stones,					

©Oxford Archaeology Ltd 47 29 September 2021



Conte	Catego	Featur	Cut	Filled	Perio	Grou	Maste	Lengt	Breadt	Dept	Colour	Fine	Coarse	Shape in	Side	Break of	Base	Orientati
xt	ry	е Туре		Ву	d	р	r Numb er	h	h	h		compone nt	compone nt	Plan		Slope		on
													rare, random					
342	fill	ditch	329		2.2	291	0	0		0.12	bright red brown	sand silt loam	small stones, rare, random					
343	fill	ditch	329		2.2	291	0	0		0.08	dark grey brown	sand silt	n/a					
344	fill	ditch	330	310, 344	2.3	309	0	0		0.5	light grey	sand silt	small stones, rare, random					
345	cut	ditch	345	346	3.3	340	0	0	0.7	0.34				linear	steep	sharp	concav e	N-S
346	fill	ditch	345		3.3	340	0	0		0.34	dark grey brown	silt sand	small stones, random, rare					
347	cut	ditch	347	348, 349	2.3	347	347	0	0.89	0.45				linear	steep	sharp	concav e	SE-NW
348	fill	ditch	347		2.3	347	347	0		0.09	light yellow brown	silt clay	small stones, rare, random					
349	fill	ditch	347		2.3	347	347	0		0.36	dark grey	silt clay	small stones, rare, random					
350	cut	pit	350	351	0	0	0	1.34	0.97	0.42				sub- circular	steep	sharp	concav e	NE-SW
351	fill	pit	350		0	0	0	0		0.42	mid grey brown	silt sand	small stones, frequent, random					
352	fill	ditch	354		3.3	338	338	0		0.44	dark brown grey	clay silt	small stones, rare, random					

©Oxford Archaeology Ltd 48 29 September 2021



Conte	Catego	Featur	Cut	Filled	Perio	Grou	Maste	Lengt	Breadt	Dept	Colour	Fine	Coarse	Shape in	Side	Break of	Base	Orientati
xt	ry	е Туре		Ву	d	р	r Numb er	h	h	h		compone nt	compone	Plan		Slope		on
353	fill	ditch	354		3.3	354	338	0		0.08	dark green tgrey	clay sand	small stones, rare, random					
354	cut	ditch	354	352, 353	3.3	338	338	0	1.1	0.45				linear	steep	sharp	concav e	NW-SE
355	cut	gully	355	356	3.2	355	338	0	0.4	0.16				linear	steep	sharp	concav e	NE-SW
356	fill	gully	355		3.2	355	338	0		0.16	light grey	silt clay	small stones and chalk, rare, random					
357	cut	gulley	357	358	3.3	357	0	0	0.52	0.1				linear	gentle	gradual	concav e	E-W
358	fill	gully	357		3.3	357	0	0		0.1	mid grey	silt clay	small stones and chalk, rare, random					
359	cut	pit	359	360	3.1	0	0	0	0.42	0.17				circular	moderate	gradual	concav e	n/a
360	fill	pit	359		3.1	0	0	0		0.17	mid grey	sand silt	small stones, rare, random					
361	cut	post hole	361	362 363	0	0	0	0	0.55	0.32				sub- circular	steep	sharp	concav e	n/a
362	fill	post hole	361		0	0	0	0		0.18	light grey	sand silt	n/a					
363	fill	post hole	361		0	0	0	0		0.32	mid grey	clay silt	n/a					
364	cut	gully	364	365	4.1	327	0	0	0.3	0.25				linear	steep	gradual	concav e	N-S
365	fill	gully	364		4.1	327	0	0		0.25	mid greenish brown	silt sand	small stones, rare, random					
366	cut	ditch	366	367	3.4	0	0	0	0.46	0.34				linear	steep	gradual	concav e	N-S

©Oxford Archaeology Ltd 49 29 September 2021



Conte	Catego	Featur	Cut	Filled	Perio	Grou	Maste	Lengt	Breadt	Dept	Colour	Fine	Coarse	Shape in	Side	Break of	Base	Orientati
xt	ry	e Type	cut	Ву	d	р	r Numb er	h	h	h	Colour	compone	compone	Plan	Side	Slope	busc	on
367	fill	ditch	366		3.4	0	0	0		0.34	mid brown	silt sand	n/a					
368	cut	pit	368	369, 370	3.3	0	0	0	1.5	0.52				sub- rectangul ar	steep	gradual	uneve n	N-S
369	fill	pit	368		3.3	0	0	0		0.52	mid yellow brown	sand	n/a					
370	fill	pit	368		3.3	0	0	0		0.24	dark grey	silt sand	small stones, random, rare					
371	cut	ditch	371	372, 373	3.3	325	0	0	0.8	0.48				linear	steep	gradual	concav e	SW-NE
372	fill	ditch	371		3.3	325	0	0		0.28	mid grey brown	silt sand	small stones, moderate, random					
373	fill	ditch	371		3.3	325	0	0		0.2	dark brown grey	sand silt	small stones, frequent, random					
374	cut	gully	374	375	2.3	334	0	0	0.54	0.42				curvilinea r	steep	imperceptib le	concav e	NE-SW
375	fill	ditch	374		2.3	334	0	0		0.42	mid brown grey	silt sand	small stones, frequent, random					
376	fill	ditch	378		3.4	378	0	0		0.2	dark grey brown	clay silt	small stones, rare, random					
377	fill	ditch	378		3.4	378	0	0		0.08	light grey brown, 20% orange mottling	sand silt	small stones, rare, random					
378	cut	ditch	378	376, 377	3.4	378	0	0	1.1	0.3				linear	steep	sharp	concav e	N-S

©Oxford Archaeology Ltd 50 29 September 2021



Conte	Catego	Featur	Cut	Filled	Perio	Grou	Maste	Lengt	Breadt	Dept	Colour	Fine	Coarse	Shape in	Side	Break of	Base	Orientati
xt	ry	e Type	Cut	Ву	d	р	r Numb er	h	h	h	Colour	compone	compone	Plan	Side	Slope	busc	on
379	cut	gully	379	380	3.2	0	0	0	0.55	0.21				linear	steep	gradual	flat	N-S
380	fill	gully	379		3.2	0	0	0		0.21	mid grey	clay silt	small stones, rare, random					
381	cut	ditch	381	382	3.2	381	0	0	0.38	0.24				linear	steep	sharp	concav e	N-S
382	fill	gully	381		3.2	381	0	0		0.24	mid grey	clay silt	small stones, rare, random					
383	cut	gully	383	384	3.4	378	0	0	0.8	0.19				linear	shallow	gentle	concav e	N-S
384	fill	ditch	383		3.4	378	0	0		0.19	mid grey	clay silt	small stones and chalk, rare, random					
385	fill	ditch	388		2.3	388	347	0			mid green grey	clay silt	small stones, rare, random					
386	fill	ditch	388		2.3	388	347	0		0.06	dark grey brown	clay silt	small stones, rare, random					
387	fill	ditch	388		2.3	388	347	0		0.11	dark green grey	clay silt	small stones, rare, random					
388	cut	ditch	388	385, 386, 387	2.3	388	347	0	0.7	0.41				curvilinea r	steep	sharp	concav e	NE-SW
389	cut	pit	389	390	1	0	0	0	0.79	0.2				circular	gradual	gradual	concav e	n/a
390	fill	pit	389		1	0	0	0		0.2	dark grey	silt sand	small stones, rare, random					

©Oxford Archaeology Ltd 51 29 September 2021



Conte	Catego	Featur	Cut	Filled	Perio	Grou	Maste	Lengt	Breadt	Dept	Colour	Fine	Coarse	Shape in	Side	Break of	Base	Orientati
xt	ry	e Type	Cut	Ву	d	р	r Numb er	h	h	h	Colour	compone	compone	Plan	Side	Slope	busc	on
391	cut	post hole	391	392	4.2	391	0	0	0.41	0.29				sub- circular	steep	sharp	flat	n/a
392	fill	post hole	391		4.2	391	0	0		0.29	mid grey brown	clay silt	n/a					
393	fill	ditch	395		2.3	0	0	0		0.27	mid grey brown	clay silt	small stones. Rare, random					
394	fill	ditch	395		2.3	0	0	0		0.08	light grey brown	clay sand	small stones, rare, random					
395	cut	ditch	395	394, 393	2.3	0	0	0	0.6	0.35				linear	steep	sharp	concav e	NW-SE
396	cut	pit	396	397, 398, 399, 400	3.2	0	0	0.75	0.72	0.7				circular	steep	gradual	flat	n/a
397	fill	pit	396		3.2	0	0	0		0.06	mid grey brown	silt sand	small stones, moderate, random					
398	fill	pit	396		3.2	0	0	0		0.24	mid grey brown	silt sand	small stones, frequent, random					
399	fill	pit	396		3.2	0	0	0		0.2	mid yellow brown	silt sand	small stones, rare, random					
400	fill	pit	396		3.2	0	0	0		0.2	dark brown grey	silt sand	small stones, rare, random					
401	cut	ditch	401	402	3.3	401	0	0	0.89	0.39				linear	steep	sharp	concav e	NE-SW
402	fill	ditch	401		3.3	401	0	0		0.39	light grey brown	clay silt	small stones,					

©Oxford Archaeology Ltd 52 29 September 2021



Conte	Catego	Featur	Cut	Filled	Perio	Grou	Maste	Lengt	Breadt	Dept	Colour	Fine	Coarse	Shape in	Side	Break of	Base	Orientati
xt	ry	е Туре		Ву	d	р	r Numb er	h	h	h		compone nt	compone nt	Plan		Slope		on
													random, rare					
403	cut	ditch	403	404	3.3	401	0	0	0.69	0.39				linear	steep	sharp	concav e	NE-SW
404	fill	ditch	403		3.3	401	0	0		0.39	light grey brown	clay silt	small stones, rare, random					
405	cut	ditch	405	406	3.4	405	0	0	0.47	0.12				linear	steep	imperceptib le	concav e	NE-SW
406	fill	ditch	405		3.4	405	0	0	0.47	0.12	light grey brown	silt sand	small stones, rare, random					
407	cut	ditch	407	422, 423, 424	2.1	407	0	0		0.52				linear	steep	sharp	concav e	E-W
408	cut	ditch	408	429, 430, 431	2.1	291	0	0	2.4	1.02				linear	steep	sharp	concav e	NW-SE
409	cut	ditch	409	417, 418	2.2	291	0	0	1	0.5				linear	steep	sharp	concav e	NE-SW
410	cut	gully	410	416	2.2	291	0	0	0.4	0.09				linear	gentle	moderate	concav e	NE-SW
411	cut	ditch	411	415	3.4	405	0	0	0.7	0.16				linear	moderate	sharp	concav e	NE-SW
412	cut	pit	412	429, 430, 431	3.3	0	0	0	3.1	0.9				sub- circular	steep	sharp	concav e	n/a
413	cut	post hole	413	414	0	0	0	0	0.29	0.16				sub- circular	steep	gradual	concav e	n/a
414	fill	post hole	413		0	0	0	0		0.16	mid grey	clay silt	small stones, rare, random					
415	fill	ditch	411		3.4	405	0	0		0.14	light grey brown	sand silt	small stones, rare, random					

©Oxford Archaeology Ltd 53 29 September 2021



Conte	Catego	Featur	Cut	Filled	Perio	Grou	Maste	Lengt	Breadt	Dept	Colour	Fine	Coarse	Shape in	Side	Break of	Base	Orientati
xt	ry	e Type		Ву	d	р	r	h	h	h	Coloui	compone	compone	Plan	Side	Slope	Dusc	on
	,	,				·	Numb er					nt	nt			·		
416	fill	ditch	410		2.2	291	0	0		0.07	light	sand silt	small					
											grey		stones,					
											brown		rare,					
							_	_					random					
417	fill	ditch	409		2.2	291	0	0		0.32	mid	sand silt	small to					
											grey		medium					
											brown		stones,					
													random,					
410	fill	ما د د اد	409		2.2	291	0	0		0.14	مام ساء	-1	moderate					
418	TIII	ditch	409		2.2	291	U	0		0.14	dark	clay silt	small					
											grey brown		stones, rare,					
											DIOWII		random					
419	fill	ditch	408		2.2	291	0	0		0.44	mid	clay silt	small					
413	''''	ditteri	100		2.2	231	O	J		0.44	green	Cidy Sire	stones,					
											grey		rare,					
											8.01		random					
420	fill	ditch	408		2.2	291	0	0		0.08	mid	clay silt	small					
											green	'''	stones,					
											grey		rare,					
													random					
421	fill	ditch	408		2.2	291	0	0		0.3	mid	clay silt	small					
											green		stones,					
											grey		rare,					
													random					
422	fill	ditch	407		2.1	407	0	0		0.2	light	clay silt	small to					
											green		medium					
											grey		stones,					
													random,					
													moderate					
423	fill	ditch	407		2.1	407	0	0		0.1	dark	clay silt	small					
											grey]	stones,					
											brown		rare,					
	611						_	_					random					
424	fill	ditch	407		2.1	407	0	0		0.2	lighrt	clay silt	small					
											grey		stones,					
											brown		rare,					
425	cut	pit	425	426	0	0	0	0					random	sub-	shallow	gradual	flat	n/a
423	cut	ρit	423	420	U	U	U	U						circular	Sildilow	grauuar	ilat	11/ d
		<u> </u>	l .							l		<u> </u>	L	Circulai	L	Ļ	<u> </u>	<u>. </u>

©Oxford Archaeology Ltd 54 29 September 2021



Conte	Catego	Featur	Cut	Filled	Perio	Grou	Maste	Lengt	Breadt	Dept	Colour	Fine	Coarse	Shape in	Side	Break of	Base	Orientati
xt	ry	е Туре		Ву	d	р	r Numb er	h	h	h		compone nt	compone nt	Plan		Slope		on
426	fill	pit	425		0	0	0	0		0.15	light brown grey	sand silt	n/a					
427	cut	ditch	427	428	3.2	427	0	0	1.28	0.42				linear	gradual	moderate	concav e	NE-SW
428	fill	ditch	427		3.2	427	0	0		0.42	mid brown grey	clay silt	small stones, rare, random					
429	fill	pit	412		3.3	0	0	0		0.66	mid grey brown	clay silt	small stones, rare, random					
430	fill	pit	412		3.3	0	0	0		0.18	mid green grey	clay silt	small stones, rare, random					
431	fill	pit	412		3.3	0	0	0		0.14	dark grey brown	clay silt	small stobnes, random, rare					
432	cut	pit	432	433	3.2	432	0	0	0.77	0.64				sub- circular	steep	sharp	gradua I	N-S
433	fill	pit	432		3.2	432	0	0		0.64	dark grey	silt sand	small stones, rare, random					
434	cut	pit	434	435, 436, 437	3.2	434	0	0	2.4	0.9				sub- rectangul ar	steep	gradual	flat	E-W
435	fill	pit	434		3.2	434	0	0		0.14	mid grey	silt sand	small stones, rare, random					
436	fill	pit	434		3.2	434	0	0		0.2	mid green yellow	silt sand	n/a					
437	fill	pit	434		3.2	434	0	0		0.78	dark grey	silt sand	small stones,					

©Oxford Archaeology Ltd 55 29 September 2021



Conte	Catego	Featur	Cut	Filled	Perio	Grou	Maste	Lengt	Breadt	Dept	Colour	Fine	Coarse	Shape in	Side	Break of	Base	Orientati
xt	ry	e Type	Cut	Ву	d	р	r Numb er	h	h	h	Colour	compone	compone	Plan	Juc	Slope	busc	on
													rare, random					
438	cut	pit	438	439	3.1	0	0	0	1.3	0.16				sub- circular	moderate	imperceptib le	flat	NE-SW
439	fill	pit ?????	438		3.1	0	0	0		0.16	light brown grey	silt sand	small stones, moderate, random					
440	cut	ditch	440	441	2.2	291	0	0						curvilinea r	moderate	n/a	n/a	n/a
441	fill	dutch	440		2.2	291	0	0			mid brown grey	silt sand	small stones, rare, random					
442	cut	pit	442	443	3.1	0	0	0	0.65	0.3				linear	steep	imperceptib le	concav e	SW-NE
443	fill	pit	442		3.1	0	0	0		0.3	mid brown grey	silt sand	small stones, rare, random					
444	cut	ditch	444	445, 446	3.2	261	0	0	1.5	0.84				linear	steep	gradual	concav e	NW-SE
445	fill	ditch	444		3.2	261	0	0		0.22	dark yellow brown	silt sand	small stones, moderate, frequent					
446	fill	ditch	444		3.2	261	0	0		0.6	dark grey brown	silt sand	small stones, moderate, frequent					
447	cut	ditch	447	448, 449	3.2	261	0	0	1.5	0.84				linear	steep	gradual	flat	SE-NW
448	fill	ditch	447		3.2	261	0	0		0.34	dark grey brown	silt sand	small stones, moderate, random					
449	fill	ditch	447		3.2	261	0	0		0.3	mid grey brown	silt sand	small sotnes, moderate, random					

©Oxford Archaeology Ltd 56 29 September 2021



Conte	Catego	Featur	Cut	Filled	Perio	Grou	Maste	Lengt	Breadt	Dept	Colour	Fine	Coarse	Shape in	Side	Break of	Base	Orientati
xt	ry	е Туре		Ву	d	р	r Numb er	h	h	h		compone nt	compone nt	Plan		Slope		on
450	fill	pit	451		2.2	291	0	0		0.16	moid grey brown	sand silt	small stones, rare, random					
451	cut	pit	451	450	2.2	291	0	0	0.5	0.16				linear	moderate	sharp	concav e	NW-SE
452	fill	ditch	453		3.2	0	0	0		0.22	light grey brown	sand silt	small stones, rare, random					
453	cut	ditch	453	452	3.2	0	0	0	0.5	0.22				linear	steep	sharp	concav e	NW-SE
454	fill	ditch	455		2.3	455	0	0		0.2	mid grey brown	sand silt	small stones, rare, random					
455	cut	ditch	455	454	2.3	455	0	0	0.5	0.2				linear	steep	sharp	concav e	E-W
456	cut	pit	456	457	3.1	0	0	0						linear	steep	gradual	flat	SE-NW
457	fill	pit	456		3.1	0	0	0			dark brown grey	silt sand	small stones, moderate, random					
458	cut	pit	458	482, 498, 499	3.2	458	0	0.95	0.86	0.31				sub- rectangul ar	steep	gradual	flat	E-W
459	cut	pit	459	460, 461, 462	3.2	463	0	0	0.9	0.46				circular	steep	sharp	flat	n/a
460	fill	pit	459		3.2	463	0	0		0.11	mid brown yellow	silt sand	small stones, rare, random					
461	fill	pit	459		3.2	463	0	0		0.17	dark brown	sand silt	small stones, rare, random					

©Oxford Archaeology Ltd 57 29 September 2021



Conte	Catego	Featur	Cut	Filled	Perio	Grou	Maste	Lengt	Breadt	Dept	Colour	Fine	Coarse	Shape in	Side	Break of	Base	Orientati
xt	ry	е Туре		Ву	d	p	r Numb er	h	h	h		compone nt	compone nt	Plan		Slope		on
462	fill	pit	459		3.2	463	0	0		0.22	mid grey brown	sand silt	small stones, rare, random					
463	cut	post hole	463	464	3.3	463	0	0	0.4	0.24				circular	steep	sharp	concav e	n/a
464	fill	post hole	463		3.3	463	0	0		0.24	mid grey brown	sand silt	small stone, rare, random					
465	cut	pit	465	466, 467	2.2	465	0	0	1.32	0.85				sub- circular	steep	sharp	concav e	n/a
466	fill	pit	465		2.2	465	0	0		0.09	mid grey	silt clay	small stones, rare, random					
467	fill	pit	465		2.2	465	0	0	1.32	0.42	dark grey	clay silt	small stones, rare, random					
468	cut	ditch	468	469	3.2	427	0	0	1.16	0.36				curvilinea r	moderate	gradual	concav e	E-W
469	fill	ditch	468		3.2	427	0	0		0.36	mid grey, yellow brown mottling	clay silt	small stones, rare, random					
470	cut	pit	470	471	4.1	0	0	0	0.27	0.08	<u> </u>			sub- circular	shallow	gentle	concav e	n/a
471	fill	pit	470		4.1	0	0	0		0.08	dark grey	clay silt	small stones, rare, random					
472	cut	pit	472	473	0	0	0	0	0.8	0.38				circular	steep	gradual	concav e	n/a
473	fill	pit	472		0	0	0	0		0.38	mid grey	silt sand	small stones, rare, random					

©Oxford Archaeology Ltd 58 29 September 2021



Conte xt	Catego ry	Featur e Type	Cut	Filled By	Perio d	Grou p	Maste r	Lengt h	Breadt h	Dept h	Colour	Fine compone	Coarse compone	Shape in Plan	Side	Break of Slope	Base	Orientati on
							Numb er					nt	nt					
474	cut	ditch	474	475	2.3	455	0	0	0.71	0.44				linear	steep	sharp	flat	E-W
475	fill	ditch	474		2.3	455	0	0		0.29	mid grey brown	sand silt	small stones, rare, random					
476	cut	ditch	476	477	3.4	378	0	0	0.88	0.22				linear	steep	sharp	flat	N-S
477	fill	ditch	476		3.4	378	0	0		0.22	dark grey brown	silt sand	small stones, frequent, random					
478	cut	gully	478	479	4.1	327	0	0	0.37	0.15				linear	steep	imperceptib le	concav e	SW-NE
479	fill	gully	478		4.1	327	0	0		0.15	light brown grey	silt sand	small stones, moderate, random					
480	cut	ditch	480	481	2.2	0	0	0	0.65	0.13				linear	gentle	imperceptib le	concav e	SE-NW
481	fill	ditch	480		2.2	0	0	0	0.65	0.13	light grey brown	silt sand	small stones, rare, random					
482	fill	pit	458		3.2	458	0	0		0.07	bright grey red	fired clay	small stones, rare, random					
483	cut	pit	483	484	0	0	0	0	0.65	0.15				sub- circular	steep	imperceptib le	concav e	SW-NE
484	fill	pit	483		0	0	0	0		0.15	mid brown grey	silt sand	small stones, frequent, random					
485	fill	ditch	488		2.2	0	0	0		0.4	mid grey green	sand silt	small to medium stones, moderate, random					

©Oxford Archaeology Ltd 59 29 September 2021



Conte	Catego	Featur	Cut	Filled	Perio	Grou	Maste	Lengt	Breadt	Dept	Colour	Fine	Coarse	Shape in	Side	Break of	Base	Orientati
xt	ry	е Туре		Ву	d	р	r Numb er	h	h	h		compone nt	compone nt	Plan		Slope		on
486	fill	ditch	488		2.2	0	0	0		0.24	light grey brown	clay silt	small stones, moderate, random					
487	fill	ditch	488		2.2	0	0	0		0.18	mid grey	clay silt	small stones, rare, random					
488	cut	ditch	488	485, 486, 487	2.2	0	0	0	2.6	0.84				linear	steep	sharp	concav e	N-S
489	fill	ditch	490		3.2	261	0	0			dark grey brown	sand silt	small to medium stones, moderate, random					
490	cut	ditch	490		3.2	261	0	0						linear	steep	sharp	concav e	E-W
491	cut	ditch	491	492	2.2	291	0	0	2.17	0.36				linear	gradual	sharp	concav e	E-W
492	fill	ditch	491		2.2	291	0	0		0.36	dark grey	sand silt	small stones, rare, random					
493	cut	ditch	493	494	3.4	378	0	0	0.8	0.24				linear	steep	sharp	flat	NE-SW
494	fill	ditch	493		3.4	378	0	0		0.24	mid grey brown	sand silt	small stones, frequent, random					
495	cut	ditch	495	496, 497	2.3	288	0	0	0.7	0.54				linear	steep	imperceptib le	concav e	SW-NE
496	fill	ditch	495		2.3	288	0	0		0.1	mid yellow brown	silt sand	small stones, rare, random					
497	fill	ditch	495		2.3	288	0	0		0.45	dark brown grey	silt sand	small stones, rare, random					

©Oxford Archaeology Ltd 60 29 September 2021



Conte	Catego	Featur	Cut	Filled	Perio	Grou	Maste	Lengt	Breadt	Dept	Colour	Fine	Coarse	Shape in	Side	Break of	Base	Orientati
xt	ry	e Type		Ву	d	р	r Numb	h	h	h	00.00	compone	compone	Plan		Slope		on
							er					""						
498	fill	pit	458		3.2	458	0	0		0.18	mid red	silt sand	small					
											brown		stones,					
													rare, random					
499	fill	pit	458		3.2	458	0	0		0.12	light	silt sand	small					
											grey		stones,					
											brown		rare,					
500	cut	ditch	500	501	3.4	378	0	0		0.39			random	linear	steep	gradual	n/a	n/a
300	Cut	diteri	300	301				- C		0.55				imear	эссер	gradau	11, 4	11,4
501	fill	ditch	500		3.4	378	0	0		0.34	dark	silt sand	small					
											grey		stones,					
											brown		rare, random					
502	fill	ditch	503		2.2	291	0	0		0.06	light	sand silt	small					
											grey		stones,					
											brown		rare,					
503	cut	gully	503	502	2.2	291	0	0	0.34	0.06			random	linear	gentle	moderate	firm	n/a
303	cut	guily	303	302	2.2	291	O	U	0.54	0.00				ilileai	gentie	moderate	111111	11/ a
504	cut	ditch	504	505	2.3	388	347	0	0.68	0.08				circular	gentle	gentle	flat	n/a
505	fill	ditch	504		2.3	388	347	0		0.08	mid	silt sand	small					
											brown		stones,					
											grey		rare, random					
506	cut	ditch	506	507	3.2	0	0	0	0.26	0.27			Tanuom	linear	steep	sharp	concav	N-S
																	е	
507	fill	ditch	506		3.2	0	0	0		0.27	mid	clay silt	small					
											grey		stones,					
													rare, random					
508	cut	gully	508	509	3.2	381	0	0		0.13				linear	shallow	gentle	concav	E-W
													ļ				е	
509	fill	gully	508		3.2	381	0	0		0.13	light	clay silt	small					
											brown grey		stones, rare,					
											5.01		random				1	
510	cut	ditch	510	511	3.2	0	0	0	0.14	0.16				linear	steep	sharp	concav	N-S
																1	е	

©Oxford Archaeology Ltd 61 29 September 2021



Conte	Catego	Featur	Cut	Filled	Perio	Grou	Maste	Lengt	Breadt	Dept	Colour	Fine	Coarse	Shape in	Side	Break of	Base	Orientati
xt	ry	e Type	cut	Ву	d	р	r Numb er	h	h	h	Coloui	compone	compone	Plan	Side	Slope	Busc	on
511	fill	ditch	510		3.2	0	0	0		0.16	mid grey	clay silt	small stones, rare, random					
512	cut	ditch	512	513	3.3	357	0	0	0.42	0.13				linear	shallow	gentle	concav e	NW-SE
513	fill	gully	512		3.3	357	0	0		0.13	light brown grey	clay silt	small stones, rare, random					
514	cut	ditch	514	517, 518	1	300	0	0	1.4	0.6				linear	steep	sharp	concav e	N-S
515	cut	ditch	515	519, 520	2.3	0	0	0	1.3	0.64				linear	steep	sharp	concav e	N-S
516	cut	pit	516	521	0	0	0	0	0.8	0.44				sub- circular	steep	sharp	concav e	n/a
517	fill	ditch	515		1	300	0	0		0.5	mid green grey	sand silt	small to medium stones, moderate m random					
518	fill	ditch	514		1	300	0	0		0.14	dark green grey	clay silt	small stones, rare, random					
519	fill	ditch	515		2.3	0	0	0		0.53	dark grey brown	clay silt	small to medium stones, random, moderate					
520	fill	ditch	515		2.3	0	0	0		0.12	dark green grey	clay silt	small stones, random, rare					
521	fill	pit	516		0	0	0	0		0.44	mid grey brown	clay silt	small stones, rare, random					
522	cut	post hole	522	523	3.2	432	0	0	0.5	0.38				sub- circular	steep	gradual	concav e	N-S

©Oxford Archaeology Ltd 62 29 September 2021



Conte xt	Catego ry	Featur e Type	Cut	Filled By	Perio d	Grou p	Maste r Numb er	Lengt h	Breadt h	Dept h	Colour	Fine compone nt	Coarse compone nt	Shape in Plan	Side	Break of Slope	Base	Orientati on
523	fill	post hole	522		3.2	432	0	0		0.38	light grey	silt sand	small stones, rare, random					
524	cut	pit	524	525	3.2	432	0	0		0.52				n/a	steep	gradual	flat	n/a
525	fill	pit	524		3.2	432	0	0		0.52	mid yellow grey	silt sand	small stones, rare, random					
526	cut	pit	526	527, 528	3.2	434	0	0	2.4					square	steep	gradual	n/a	n/a
527	fill	pit	526		3.2	434	0	0			mid green yellow	silt sand	small stones, rare, random					
528	fill	pit	526		3.2	434	0	0		0.56	dark grey	silt sand	small stones, rare, random					
529	cut	ditch	529	530	3.4	405	0	0	0.32	0.37				linear	steep	sharp	flat	N-SE
530	fill	ditch	529		3.4	405	0	0		0.37	dark grey brown	sand silt	small stones, rare, random					
531	cut	ditch	531	532	3.3	325	0	0	0.84	0.35				linear	gradual	sharp	flat	N-S
532	fill	ditch	531		3.3	325	0	0		0.35	mid brown grey	sand silt	small stones, rare, random					
533	cut	ditch	533	534	4.1	327	0	0	0.59	0.22				linear	gentle	sharp	concav e	N-SW
534	fill	ditch	533		4.1	327	0	0		0.22	mid brown grey	sand silt	small stones, rare, random					
535	cut	ditch	535	545, 546	2.3	309	0	0	0.9	0.56				linear	steep	sharp	concav e	E-W

©Oxford Archaeology Ltd 63 29 September 2021



Conte xt	Catego ry	Featur e Type	Cut	Filled By	Perio d	Grou p	Maste r	Lengt h	Breadt h	Dept h	Colour	Fine compone	Coarse compone	Shape in Plan	Side	Break of Slope	Base	Orientati on
	.,	0.7,00		-,		r	Numb er					nt	nt			0.000		
536	cut	ditch	536	547, 548, 549, 550	2.2	291	0	0	1.8	0.9				linear	steep	sharp	concav e	NE-SW
537	cut	pit	537	538, 539, 540	3.3	0	0	1.81		0.99				sub- circular	steep	stepped	concav e	n/a
538	fill	pit	537		3.3	0	0	0		0.34	mid brown grey	clay silt	small stones, rare, random					
539	fill	pit	537		3.3	0	0	0		0.49	mid grey, yellow brown mottling	sand silt	small stones, rare, random					
540	fill	pit	537		3.3	0	0	0		0.38	dark grey	clay silt	n/a					
541	cut	pit	541	542	0	0	0	0		0.43				n/a	n/a	n/a	concav e	n/a
542	fill	pit	541		0	0	0	0		0.43	mid grey	clay silt	chalk, moderate, random					
543	cut	ditch	543	544	2.2	291	0	0	0.42	0.58				linear	steep	sharp	concav e	E-W
544	fill	ditch	543		2.2	291	0	0		0.58	mid greyish brown	clay silt	small stones, rare, random					
545	fill	ditch	535		2.3	309	0	0		0.54	dark grey brown	sand silt	small stones, rare, random					
546	fill	ditch	535		2.3	309	0	0		0.18	dark red brown	silt sand	n/a					
547	fill	ditch	536		2.2	291	0	0		0.04	dark brown grey	sand silt	small stones, rare, random					

©Oxford Archaeology Ltd 64 29 September 2021



Conte	Catego	Featur	Cut	Filled	Perio	Grou	Maste	Lengt	Breadt	Dept	Colour	Fine	Coarse	Shape in	Side	Break of	Base	Orientati
xt	ry	е Туре		Ву	d	р	r Numb er	h	h	h		compone nt	compone nt	Plan		Slope		on
548	fill	ditch	536		2.2	291	0	0		0.4	light grey brown	clay silt	small stones, moderate, random					
549	fill	ditch	536		2.2	291	0	0		0.06	light yellow brown	silt sand	n/a					
550	fill	ditch	536		2.2	291	0	0		0.05	dark grey brown	sand silt	n/a					
551	cut	ditch	551	552	3.2	0	0	0						linear	n/a	n/a	n/a	E-W
552	fill	ditch	551		3.2	0	0	0			mid brown grey	clay silt	small stones, rare, random					
553	cut	ditch	553	554	3.3	325	0	0	0.91	0.76				linear	steep	sharp	concav e	N-S
554	fill	ditch	553		3.3	325	0	0		0.76	dark grey	clay silt	small stones, rare, random					
555	fill	post hole	556		4.2	391	0	0		0.06	light grey brown	silt sand	small stones, rare, random					
556	cut	post hole	556	555	4.2	391	0	0	0.26	0.06				sub- circular	moderate	gentle	concav e	n/a
557	fill	post hole	558		4.2	391	0	0		0.06	light grey brown	silt sand	small stones, rare, random					
558	cut	post hole	558	557	4.2	391	0	0	0.24	0.06				sub- circular	moderate	gentle	concav e	n//a
559	fill	post hole	560		4.2	391	0	0		0.07	light grey brp light grey brown	silt sand	small stones, rare, random					

©Oxford Archaeology Ltd 65 29 September 2021



Conte xt	Catego ry	Featur e Type	Cut	Filled By	Perio d	Grou p	Maste r Numb	Lengt h	Breadt h	Dept h	Colour	Fine compone nt	Coarse compone nt	Shape in Plan	Side	Break of Slope	Base	Orientati on
560	cut	post	560	559	4.2	391	er 0	0	0.18	0.07				sub-	moderate	gentle	concav	n/a
561	fill	hole post hole	562		4.2	391	0	0		0.05	light grey brown	silt sand	small stones, rare, random	circular			е	
562	cut	post hole	562	561	4.2	391	0	0	0.3	0.05				sub- circular	moderate	gentle	concav e	n/a
563	fill	post hole	564		3.2	463	0	0		0.08	light grey brown	sand silt	small stones, rare, random					
564	cut	post hole	564		3.2	463	0	0	0.3	0.08				sub- circular	moderate	gradual	concav e	n/a
565	fill	gully	566		4.1	327	0	0		0.2	light grey brown	sand silt	small stones, rare, random					
566	cut	gully	566	565	4.1	327	0	0	0.24	0.2				linear	steep	sharp	concav e	N-S
567	cut	pit	567	568, 569	2.2	465	0	0	0.84	0.74				n/a	steep	n/a	flat	n/a
568	fill	pit	567		2.2	465	0	0		0.16	dark grey brown	sand silt	n/a					
569	fill	pit	567		2.2	465	0	0		0.21	mid brown grey	silt sand	small stones, frequent, random					
570	cut	pit	570	571	3.1	0	0	0		0.46				n/a	steep	sharp	concav e	n/a
571	fill	pit	570		3.1	0	0	0		0.46	mid grey	silt	small stones, rare, random					
572	cut	ditch	572	573	3.2	427	0	0	1.08	0.4				linear	steep	sharp	concav e	N-W
573	fill	ditch	572		3.2	427	0	0		0.4	dark grey brown	sand silt	small stones,					

©Oxford Archaeology Ltd 66 29 September 2021



Conte xt	Catego ry	Featur e Type	Cut	Filled By	Perio d	Grou p	Maste r Numb er	Lengt h	Breadt h	Dept h	Colour	Fine compone nt	Coarse compone nt	Shape in Plan	Side	Break of Slope	Base	Orientati on
													rare, random					
574	cut	ditch	574	590, 591	2.3	347	0	0	0.8	0.66				linear	steep	sharp	concav e	NE-SW
575	cut	ditch	575	588, 589	2.3	354	0	0	1.2	0.44				curvilinea r	steep	sharp	concav e	NE-SW
576	cut	ditch	576	587	3.3	338	338	0	0.6	0.16				linear	moderate	gradual	concav e	NE-SW
577	cut	gully	577	578	2.3	0	0	0	1.28	0.19				linear	gradual	gentle	concav e	E-W
578	fill	gully	577		2.3	0	0	0		0.19	mid grey	clay silt	rare, random, small stones					
579	cut	ditch	579	580	3.3	338	338	0	0.48	0.2				linear	gradual	sharp	concav e	N-S
580	fill	gully	579		3.3	338	338	0	0.48	0.2	dark grey	clay silt	small stones, rare, random					
581	cut	grave	581	582	2.3	334	0	0	0.29	0.1				curvilinea r	gradual	gentle	concav e	NE-SW
582	fill	gully	581		2.3	334	0	0		0.1	light grey	clay silt	small stones, rare, random					
583	cut	ditch	583	595	3.4	378	0	0		0.3				linear	steep	sharp	concav e	N-S
584	cut	gully	584	585	3.3	0	0	0	0.3	0.1				linear	gentle	moderate	concav e	NW-SE
585	cut	gully	585	594	3.3	355	338	0	0.3	0.12				linear	moderate	moderate	concav e	E-W
586	cut	ditch	586	598	3.3	338	0	0		0.76				linear	steep	sharp	concav e	N-S
587	fill	ditch	576		3.3	338	338	0		0.16	light grey brown	sand silt	small stones, rare, random					

©Oxford Archaeology Ltd 67 29 September 2021



Conte	Catego	Featur	Cut	Filled	Perio	Grou	Maste	Lengt	Breadt	Dept	Colour	Fine	Coarse	Shape in	Side	Break of	Base	Orientati
xt	ry	e Type	Cut	By	d	р	r	h	h	h	Coloui	compone	compone	Plan	Side	Slope	Dasc	on
	,	7,1		,			Numb er					nt	nt					
588	fill	ditch	575		2.3	354	0	0		0.3	mid	sand silt	small					
											grey		stones,					
											brown		rare,					
													random					
589	fill	ditch	575		2.3	354	0	0		0.14	dark	silt sand	n/a					
											yellow							
											brown							
590	fill	ditch	574		2.3	347	0	0		0.18	dark	clay silt	small					
											grey		stones,					
											brown		rare,					
504	CIII	tra t			2.2	247	•			0.00	11. 1 .		random					
591	fill	ditch	574		2.3	347	0	0		0.08	light	clay silt	n/a					
											grey							
503			F02	593	2.2	462	0	0.21	0.25	0.10	brown			-:				- /-
592	cut	post hole	592	593	3.3	463	0	0.31	0.25	0.19				circular	steep	gradual	concav	n/a
593	fill		592		3.3	463	0	0		0.19	dark	sand silt	n/a				е	
593	11111	post hole	592		3.3	403	U	U		0.19	grey	Sanu Siit	П/а					
594	fill	ditch	585		0	355	338	0		0.12	light	clay silt	small					
334	11111	uittii	363		U	333	336	U		0.12	grey	Clay Silt	stones,					
											Bicy		rare,					
													random					
595	fill	ditch	583		3.4	378	0	0		0.26	dark	clay silt	small					
											grey	,	stones,					
											brown		rare,					
													random					
596	fill	ditch	586		3.3	0	0	0		0.3	light	sand silt	small					
											grey		stones,					
											brown		rare,					
													random					
597	fill	ditch	586		3.3	0	0	0		0.12	light	clay sand	small					
											grey		stones,]				
											brown		rare,					
													random					
598	fill	ditch	598		3.3	338	0	0	1.72	0.28				linear	moderate			
599	cut	ditch	599	600	3.2	0	0			0.37				linear	gradual	sharp	concav	N-SE
600	fill	ditab	F00		2.2	0	0	0		0.27	mid	cil+	cmall.				е	
600	TIII	ditch	599		3.2	0	0	0		0.37	mid	silt	small]				
			l		<u> </u>						grey		stones,	L	<u> </u>	Ļ	ļ	

©Oxford Archaeology Ltd 68 29 September 2021



Conte	Catago	Featur	Cut	Filled	Perio	Grou	Maste	Longt	Breadt	Dept	Colour	Fine	Coarse	Shape in	Side	Break of	Base	Orientati
xt	Catego ry	e Type	Cut	Ву	d	p	r Numb er	Lengt h	h	h	Colour	compone	compone	Plan	Side	Slope	Баѕе	on
													rare, random					
601	cut	ditch	601	602 <i>,</i> 603	3.2	427	0	0	0.15	0.37				linear	gradual	sharp	concav e	NE-SW
602	fill	ditch	601		3.2	427	0	0		0.37	dark grey	silt	n/a					
603	fill	ditch	601		3.2	427	0	0		0.11	mid brown red	sand silt	n/a					
604	cut	ditch	604	605	2.1	264	0	0	0.65	0.19				linear	gradual	gentle	concav e	E-W
605	fill	ditch	604		2.1	264	0	0	0.68	0.19	light grey brown	sand silt	small stones, rare, random					
606	cut	post hole	606	607	3.3	463	0	0	0.34	0.23				circular	steep	sharp	concav e	n/a
607	fill	post hole	606		3.3	463	0	0		0.23	mid grey	clayey silt	smal stones, rare, random					
608	cut	ditch	608	609	2.1	0	264	0	0.38	0.16				linear	gradual	gradual	n/a	E-W
609	fill	ditch	608		2.1	0	264	0		0.16	light yellow brown	sand silt	small stones, rare, random					
610	cut	ditch	610	611, 612	3.2	261	0	0	0.61	0.4				linear	steep	sharp	n/a	SE-NW
611	fill	ditch	610		3.2	261	0	0		0.11	mid brown yellow	silt sand	small stones, rare, random					
612	fill	ditch	610		3.2	261	0	0		0.29	mid brown	sand silt	small stones, frequent, random					
613	fill	ditch	895		3.3	338	338	0		0.3	mid green grey	silt sand	small stones,					

©Oxford Archaeology Ltd 69 29 September 2021



Conte xt	Catego ry	Featur e Type	Cut	Filled By	Perio d	Grou p	Maste r Numb	Lengt h	Breadt h	Dept h	Colour	Fine compone nt	Coarse compone nt	Shape in Plan	Side	Break of Slope	Base	Orientati on
							er											
													rare, random					
614	fill	ditch	615		3.3	338	0	0		0.2	dark green grey	clay silt	small stones- rare- random					
615	cut	ditch	615	613, 614	3.3	338	0	0	1.1	0.5			- runuum	linear	steep	sharp	concav	NW-SE
616	cut	post hole	616	617	0	0	0	0	0.27	0.05				circular	gradual	gradual	concav e	n/a
617	fill	post hole	616 0		0	0	0	0		0.05	dark red brown	sand silt	n/a					
618	cut	post hole	618	619	0	0	0	0	0.2	0.09				circular	gentle	sharp	concav e	n/a
619	fill	post hole	618		0	0	0	0		0.09	mid brown	sand silt	small stones, rare, random					
620	fill	ditch	621		1	621	0	0		0.28	light grey brown	sand silt	small stones, rare, random					
621	cut	ditch	621	620	1	621	0	0	1.72	0.28				linear	moderate	moderate	concav e	NE-SW
622	fill	ditch	623		1	623	0	0		0.12	light grey brown	sand silt	small stones, rare, random					
623	cut	ditch	623	622	1	623	0	0	0.6	0.12				linear	steep	sharp	concav e	N-S
624	fill	ditch	625		1	625	0	0		0.48	light grey brown	sand silt	smal stones, rare, random					
625	cut	ditch	625	624	1	625	0	0	1.4	0.48			-	linear	steep	sharp	concav e	NE-SW
626	cut	ditch	626	627	2.3	626	0	0	0.48	0.55				linear	steep	sharp	concav e	E-W

©Oxford Archaeology Ltd 70 29 September 2021



Conte	Catego	Featur	Cut	Filled	Perio	Grou	Maste	Lengt	Breadt	Dept	Colour	Fine	Coarse	Shape in	Side	Break of	Base	Orientati
xt	ry	e Type		Ву	d	р	r	h	h	h	Coloui	compone	compone	Plan	J.ac	Slope	Dusc	on
							Numb					nt	nt					
627	fill	ditch	626		2.3	626	er 0	0		0.55	mid	silt sand	small					
											grey		stones					
													and flint,					
													rare,					
						_	_	_					random					
628	cut	ditch	628	629	3.4	0	0	0	0.55	0.29				linear	moderate	gradual	concav e	E-W
629	fill	ditch	628		3.4	0	0	0		0.29	mid	sand silt	small					
											grey		stones,					
											brown		rare,					
								_					random			.		
630	cut	ditch	630	638,	3.2	261	0	0	2.1	0.9				linear	steep	sharp	concav	E-W
				639 <i>,</i> 640													е	
631	cut	ditch	631	632	3.1	631	0	0	1.2	0.54				linear	moderate	gradual	concav	E-W
																8.22.2	е	
632	fill	ditch	631		3.1	631	0	0		0.54	light	sand clay	small					
											grey		stones,					
													rare,					
633	fill	ditch	635		2.3	635	0	0		0.14	dark	sand silt	random small				-	
033	11111	aitch	033		2.3	033	U	0		0.14	grey	Sand Siit	stones,					
											Bicy		moderate,					
													random					
634	fill	ditch	635		2.3	635	0	0		0.5	dark	sand clay	small					
											green		stones,					
											grey		rare,					
													random			<u> </u>		
635	cut	ditch	635	633, 634	2.3	635	0	0	1.66	0.52				curvilinea r	steep	sharp	concav e	NE-SW
636	fill	ditch	637		3.2	267	0	0		0.3	dark	clay silt	small					
											brown		stones,					
											grey		rare,			1		
627		der de	627	626	2.2	267		0	0.5	0.2			random	1		-1		5 14/
637	cut	ditch	637	636	3.2	267	0	0	0.5	0.3				linear	steep	sharp	concav e	E-W
638	fill	ditch	630		3.2	261	0	0		0.5	dark	sand silt	small			1	<u> </u>	
											brown		stones,					
											grey		moderate,			1		
													random]		

©Oxford Archaeology Ltd 71 29 September 2021



Conte xt	Catego ry	Featur e Type	Cut	Filled By	Perio d	Grou p	Maste r	Lengt h	Breadt h	Dept h	Colour	Fine compone	Coarse compone	Shape in Plan	Side	Break of Slope	Base	Orientati on
	.,	c . , pc		Σ,	-	P	Numb er					nt	nt			Siope		0
639	fill	ditch	630		3.2	261	0	0		0.34	dark green grey	clay silt	small stones, rare, random					
640	fill	ditch	630		3.2	261	0	0		0.05	mid grey	clay silt	n/a					
641	fill	ditch	645		2.3	635	0	0		0.3	dark grey	sand silt	small stones, rare, random					
642	fill	ditch	645		2.3	635	0	0		0.2	dark green grey	sand clay	small stones, rare, random					
643	cut	ditch	643	644	2.3	0	0	0	0.73	0.34				linear	moderate	gentle	concav e	E-W
644	fill	ditch	643		2.3	0	0	0		0.34	mid grey brown	silt sand	gravel and chalk, frequent, random					
645	cut	ditch	645	641, 642	2.3	635	0	0	1.3	0.5				curvilinea r	steep	sharp	concav e	NE-SW
646	cut	gully	646	647	3.3	646	0	0	0.4	0.19				linear	steep	sharp	concav e	NW-SE
647	fill	gully	646		3.3	646	0	0		0.19	dark grey brown	silt sand	small stones and gravel, frequent, random					
648	fill	ditch	649		3.1	649	0	0		0.3	mid grey brown	sand silt	small stones, rare, random					
649	cut	ditch	649	648	3.1	649	0	7.38	1.16	0.3				linear	steep	sharp	conave	NW-SE
650	cut	gully	650	651	3.3	646	0	0	0.5	0.21				linear	gentle	moderate	concav e	E-W

© Oxford Archaeology Ltd 72 29 September 2021



Conte	Catego	Featur	Cut	Filled	Perio	Grou	Maste	Lengt	Breadt	Dept	Colour	Fine	Coarse	Shape in	Side	Break of	Base	Orientati
xt	ry	e Type		Ву	d	р	r	h	h	h	coloui	compone	compone	Plan	Side	Slope	Dusc	on
							Numb					nt	nt					
651	fill	gully	650		3.3	646	er 0	0		0.21	dark	silt sand	small					
		8,									grey		stones,					
											brown		gravel,					
													rare,					
													random			,	,	,
652	cut	pit	652	653, 654,	3.1	0	0	0		0.8				circular	impercepti ble	n/a	n/a	n/a
				655											bie			
653	fill	pit	652		3.1	0	0	0		0.17	mid	silt sand	small					
											brown		stones,					
											grey		rare,					
													random					
654	fill	pit	652		3.1	0	0	0		0.48	mid	sand silt	small					
											grey		stones,					
													rare, random					
655	fill	pit	652		3.1	0	0	0		0.31	mid	sand silt	small					
											grey		stones,					
													rare,					
													random					
656	cut	gully	656	657	3.1	656	0	0	0.45	0.17				curvilinea r	moderate	gradual	concav e	NE-SW
657	fill	gully	656		3.1	656	0	0		0.17	mid	sand silt	small					
											grey		stones,					
													rare,					
658	out.	nost	658	659	4.1	0	0	0	0.25	0.08			random	oiroulo r	charn	charn	flat	2/2
	cut	post hole		039		0	0	0						circular	sharp	sharp	IIat	n/a
659	fill	post	658		4.1	0	0	0	0.25	0.08	dark	clay silt	small					
		hole									grey		stones,					
													rare,					
660	cut	ditch	660	667,	3.1	660	0	0	1.3	0.8			random	linear	steep	sharp	concav	NW-SE
		J. Con		668,	5.1	000			1.5	0.0					СССР	5.101 P	е	32
				669,														
				670														
661	cut	ditch	661	665, 666	2.2	291	0	0	0.72	0.8				linear	steep	sharp	concav e	NW-SE
663	cut	ditch	663	664	3.1	0	0	0		0.58				linear	steep	sharp	concav	NW-SE
																- 1 [-	е	

©Oxford Archaeology Ltd 73 29 September 2021



Conte	Catego	Featur	Cut	Filled	Perio	Grou	Maste	Lengt	Breadt	Dept	Colour	Fine	Coarse	Shape in	Side	Break of	Base	Orientati
xt	ry	e Type	Cut	Ву	d	р	r	h	h	h	Coloui	compone	compone	Plan	Side	Slope	Dusc	on
	.,	0.750		_,	-	P	Numb	••	••			nt	nt			0.000		
							er											
664	fill	ditch	663		3.1	0	0	0		0.56	dark	sand clay	small					
											green		stones,					
											grey		rare,					
													random					
665	fill	ditch	661		2.2	291	0	0		0.64	dark	clay silt	small					
											grey		stones,					
											brown		rare,					
													random					
666	fill	ditch	661		2.2	291	0	0		0.14	dark	clay silt	small					
											green		stones,					
											grey		rare,					
													random					
667	fill	ditch	660		3.1	660	0	0		0.6	dark	sand silt	small					
											brown		stones,					
											grey		rare,					
													random					
668	fill	ditch	660		3.1	660	0	0		0.2	dark	clay silt	small					
											grey		stones,					
													rare,					
													random					
669	fill	pit	660		3.1	660	0	0		0.08	dark	clay silt	small					
											grey		stones,					
													rare,					
													random					
670	fill	pit	660		3.1	660	0	0		0.08	bright	clay silt	small					
											yellow		stones,					
											brown		rare,					
													random					
671	cut	ditch	671	672	2.3	671	0	0	1.02	0.52				linear	steep	sharp	flat	NE-SW
672	fill	ditch	671		2.3	671	0	0		0.52	mid	sand silt	small					
											brown	1	stones,]				
											grey	1	rare,]				
													random					
673	cut	ditch	673	674, 675	3.1	631	0	0	1.4	0.42				curvilinea r	steep	sharp	flat	E-NW
674	fill	ditch	673		3.1	631	0	0		0.36	mid	sand	small	İ				
											brown		stones,					
											yellow		frequent,					
											,		random					
	•		1	1		l		1	1				1			•		1

©Oxford Archaeology Ltd 74 29 September 2021



Conte	Catego	Featur	Cut	Filled	Perio	Grou	Maste	Lengt	Breadt	Dept	Colour	Fine	Coarse	Shape in	Side	Break of	Base	Orientati
xt	ry	е Туре		Ву	d	р	r Numb er	h	h	h		compone nt	compone nt	Plan		Slope		on
675	fill	ditch	673		3.1	631	0	0		0.31	mid brown grey	sand silt	small stones, rare, random					
676	cut	ditch	676	677	3.2	676	0	0	0.6	0.23				linear	moderate	gradual	concav e	NE-SW
677	fill	ditch	676		3.2	676	0	0		0.23	dark grey	silt clay	small stones, rare, random					
678	cut	ditch	678	679	3.4	678	0	0	1.34	0.45				linear	moderate	moderate	concav e	SE-NW
679	fill	ditch	678		3.4	678	0	0		0.45	mid grey brown	silt sand	small stones, rare, random					
680	cut	ditch	680	681	2.3	288	0	0	0.68	0.28				linear	moderate	gradual	concav e	E-W
681	fill	ditch	680		2.3	288	0	0		0.28	dark grey	silt clay	small stones, rare, random					
682	fill	ditch	683		2.3	683	0	0		0.23	dark brown grey	clay silt	small stones, rare, random					
683	cut	ditch	683	682	2.3	683	0	0	0.8	0.23				linear	moderate	gradual	concav e	E-W
684	cut	gully	684	685	3.3	684	0	0	0.43	0.21				linear	moderate	imperceptib le	concav e	E-W
685	fill	gully	684		3.3	684	0	0		0.21	dark grey	silt clay	small stones, rare, random					
686	cut	gully	686	687	2.3	0	0	0	0.29	0.19				linear	steep	sharp	flat	N-S
687	fill	gully	686		2.3	0	0	0		0.19	mid brown grey	sand silt	n/a					

©Oxford Archaeology Ltd 75 29 September 2021



Conte xt	Catego ry	Featur e Type	Cut	Filled By	Perio d	Grou p	Maste r	Lengt h	Breadt h	Dept h	Colour	Fine compone	Coarse compone	Shape in Plan	Side	Break of Slope	Base	Orientati on
At	ı y	Стурс		Бу	u	P	Numb er					nt	nt	rian		Зюре		Oil
688	cut	ditch	688	689	2.3	0	0	0	0.79	0.36				linear	steep	sharp	concav e	SW-NE
689	fill	ditch	688		2.3	0	0	0		0.36	mid brown grey	sand silt	n/a					
690	cut	ditch	690	691, 692	3.1	631	0	0	0.88	0.36				linear	steep	sharp	flat	NW-SE
691	fill	ditch	690		3.1	631	0	0		0.12	mid red brown	silt sand	small stones, rare, random					
692	fill	ditch	690		3.1	631	0	0		0.24	dark brown grey	sand silt	small stones, rare, random					
693	fill	ditch	694		2.1	285		0		0.26	dark grey brown	clay silt	small stones, rare, random					
694	cut	ditch	694	693	2.1	0		0	0.7	0.26				curvilinea r	steep	sharp	concav e	NE-SW
695	fill	ditch	697		3.1	660	0	0		0.28	dark green grey	clay silt	small to medium stones, moderate, random					
696	fill	ditch	697		3.1	660	0	0		0.13	dark grey brown	clay silt	small stones, rare, random					
697	cut	ditch	697	695, 696	3.1	660	0	0	0.8	0.4				linear	steep	sharp	concav e	N-S
698	cut	gully	698	699	2.3	626	0	0	0.88	0.36				linear	moderate	moderate	concav e	N-S
699	fill	gully	698		2.3	626	0	0		0.36	mid grey brown	silt sand	small stones and flint, rare, random					

©Oxford Archaeology Ltd 76 29 September 2021



Conte xt	Catego ry	Featur e Type	Cut	Filled By	Perio d	Grou p	Maste r Numb er	Lengt h	Breadt h	Dept h	Colour	Fine compone nt	Coarse compone nt	Shape in Plan	Side	Break of Slope	Base	Orientati on
700	cut	ditch	700	701	3.4	678	0	0	0.86	0.29				linear	moderate	moderate	concav e	NW-SE
701	fill	pit	702		2.3	0	0	0		0.4	mid grey brown	slit sand	occasional gravel and stones					
702	cut	pit	702	701	2.3	0	0	0	0.43	0.4				circular	steep	sharp	concav e	
703	fill	ditch	700		3.4	678	0	0		0.29	dark brown	sand silt	small stones, random, rare					
704	cut	ditch	704	705	2.3	288	0	0	0.36	0.2				linear	steep	gradual	flat	E-W
705	fill	ditch	704		2.3	288	0	0		0.2	mid grey	silt clay	small stones, rare, random					
706	cut	ditch	706	707	3.2	676	0	0	0.72	0.4				linear	moderate	gradual	concav e	E-W
707	fill	ditch	706		3.2	676	0	0		0.4	dark grey	silt clay	small stones, rare, random					
708	cut	gully	708		3.3	684	0	0	0.74	0.25				linear	moderate	limpercepti ble	concav e	E-W
709	fill	gully	708		3.3	684	0	0		0.25	dark grey	silt clay	small stones, rare, random					
710	cut	gully	710	711	3.3	0	0	0		0.3				linear	moderate	gradual	n/a	NE-SW
711	fill	gully	710		3.3	0	0	0		0.3	dark grey	silt clay	small stones, rare, random					
712	cut	gully	712	713	3.3	676	0	0	0.66	0.42				linear	moderate	imperceptib le	concav e	E-W
713	fill	gully	712		3.3	676	0	0		0.42	dark grey	silt clay	small stones,					

©Oxford Archaeology Ltd 77 29 September 2021



Conte	Catogo	Featur	Cut	Filled	Perio	Grou	Maste	Longt	Breadt	Dept	Colour	Fine	Coarse	Shape in	Side	Break of	Base	Orientati
xt	Catego ry	e Type	cut	Ву	d	p	r Numb er	Lengt h	h	h	Colour	compone	compone	Plan	Side	Slope	Dase	on
													rare, random					
714	cut	gully	714	715	2.3	288	0	0	0.78	0.45				linear	moderate	imperceptib le	concav e	E-W
715	fill	gully	714		2.3	288	0	0		0.45	dark grey	silt clay	small stones, rare, random					
716	cut	gully	716	717	2.3	716	0	0	0.25	0.23				curvilinea r	steep	sharp	flat	E-W
717	fill	gully	716		2.3	716	0	0		0.23	mid yellow grey	clay silt	small stones, rare, random					
718	cut	gully	718	719	2.3	716	0	0	0.39	0.2				curvilinea r	steep	sharp	flat	SW-NE
719	fill	gully	718		2.3	716	0	0		0.3	mid yellow grey	clay silt	small stones, occasional , random					
720	cut	gully	720	721	2.3	716	0	0	0.49	0.31				curvilinea r	steep	sharp	concav e	N-S
721	fill	gully	720		2.3	716	0	0		0.31	mid yellow grey	clay silt	small stones, rare, random					
722	cut	ditch	722	723	3.1	0	0	0	0.76	0.39				linear	steep	sharp	concav e	NW-SE
723	fill	ditch	722		3.1	0	0	0		0.39	light grey brown	sand silt	small stones, rare, random					
724	cut	ditch	724	727, 728, 729, 730, 731, 732	4.1	724	0	0	4.2	1.28				linear	steep	sharp	concav e	N-S
725	cut	ditch	725	726	3.2	0	0	0	0.06	0.08				linear	moderate	sharp	concav e	SW-NE

©Oxford Archaeology Ltd 78 29 September 2021



Conte	Catego	Featur	Cut	Filled	Perio	Grou	Maste	Lengt	Breadt	Dept	Colour	Fine	Coarse	Shape in	Side	Break of	Base	Orientati
xt	ry	е Туре		Ву	d	р	r Numb er	h	h	h		compone nt	compone nt	Plan		Slope		on
726	fill	ditch	725		3.2	0	0	0		0.08	dark grey	sand silt	small stones, rare, random					
727	fill	ditch	724		4.1	724	0	0		0.7	mid grey	clay silt	small to medium stones, random, rare					
728	fill	ditch	724		4.1	724	0	0		0.72	dark green grey	clay sand	n/a					
729	fill	ditch	724		4.1	724	0	0		0.4	dark grey	clay silt	small stones, rare, random					
730	fill	ditch	724		4.1	724	0	0		0.66	dark red brown	silt sand	n/a					
731	fill	ditch	724		4.1	724	0	0		0.14	mid red brown	clay silt	small stones, rare, random					
732	fill	ditch	727		4.1	0	0	0		0.06	dark blue grey	clay silt	n/a					
733	fill	ditch	724		4.1	724	0	0		0.3	mid grey	clay silt	small stones, rare, random					
734	cut	ditch	734	735	2.3	635	0	0	0.82	0.28				linear	gradual	sharp	flat	NE-SW
735	fill	ditch	734		2.3	635	0	0		0.28	mid brown grey	sand silt	small stones, rare, random					
736	cut	ditch	736	737, 738	1	625	0	0	1.34	0.46				linear	steep	sharp	flat	NE-SW
737	fill	ditch	736		1	625	0	0		0.19	dark red grey	sand silt	small stones,					

©Oxford Archaeology Ltd 79 29 September 2021



Conte xt	Catego ry	Featur e Type	Cut	Filled By	Perio d	Grou p	Maste r Numb er	Lengt h	Breadt h	Dept h	Colour	Fine compone nt	Coarse compone nt	Shape in Plan	Side	Break of Slope	Base	Orientati on
													rare, random					
738	fill	ditch	736		1	625	0	0		0.3	mid dark grey	sand silt	small stones, rare, random					
739	cut	ditch	739	740	1	623	0	0	0.29	0.03				linear	gradual	gradual	concav e	NE-SW
740	fill	ditch	739		1	623	0	0		0.03	dark brown	sand silt	n/a					
741	cut	ditch	741	742	2.3	671	0	0						linear	gradual	gradual	concav e	SW-NE
742	fill	ditch	741		2.3	671	0	0		0.2	mid brown grey	silt	n/a					
743	cut	pit	743	745, 746	4.1	0	0	1.46	0.67	0.38				sub- circular	steep	sharp	concav e	NE-SW
744	fill	pit	743		4.1	0	0	0		0.38	mid grey brown	silt sand	small stones and gravel, rare, random					
745	fill	pit	743		4.1	0	0	0										
746	cut	ditch	746	747, 748	2.1	0		0	1.28	0.4				linear	gentle	imperceptib le	concav e	E-W
747	fill	ditch	746		2.1	0		0		0.1	mid grey	silt clay	small stones, rare, random					
748	fill	ditch	746		2.1	0		0		0.3	mid grey brown	sand silt	small stones, frequent, random					
749	cut	ditch	749	750, 751, 752, 753,	2.2	291	0	0	2	0.4				linear	moderate	gradual	concav e	E-W

©Oxford Archaeology Ltd 80 29 September 2021



Conte	Catego	Featur	Cut	Filled	Perio	Grou	Maste	Lengt	Breadt	Dept	Colour	Fine	Coarse	Shape in	Side	Break of	Base	Orientati
xt	ry	e Type	Cut	By	d	р	r	h	h	h	Coloui	compone	compone	Plan	Side	Slope	base	on
	-			-			Numb					nt	nt			-		
				75.4			er											
				754, 755														
750	fill	ditch	749	733	2.2	291	0	0		0.15	mid	silt clay	small					
											grey		stones,					
													rare,					
													random					
751	fill	ditch	749		2.2	291	0	0		0.25	mid	silt clay	small					
											brown grey		stones, frequent,					
											gicy		random					
752	fill	ditch	749		2.2	291	0	0		0.22	mid	silt clay	small					
											grey		stones,					
													chalk,					
													rare, random					
753	fill	ditch	749		2.2	291	0	0		0.26	dark	silt clay	small					
755		arteri	743		2.2	231	· ·	O		0.20	grey	Site ciay	stones,					
											,		rare,					
													random					
754	fill	ditch	749		2.2	291	0	0		0.28	v dark	silt clay	small					
											grey		stones,					
													rare, random					
756	cut	gully	756	757	4.2	0	0	0	0.2	0.03			141140111	linear	gentle	gradual	concav	NW-SE
																	е	
757	fill	gully	756		4.2	0	0	0		0.03	dark	silt clay	small					
											grey		stones,					
													rare, random					
758	cut	ditch	758	759	3.3	758	0	0	0.56	0.18			random	linear	steep	sharp	flat	E-W
															'			
759	fill	ditch	758		3.3	758	0	0		0.18	dark	clay silt	n/a					
											brown							
760	cut	ditch	760	761	2.3	0	0	0	0.31	0.09	grey		1	linear	moderate	sharp	concav	E-W
		3.00	, 55						0.01	0.00						2	е	- **
761	fill	ditch	760		2.3	0	0	0		0.09	light	silt sand	small					
											grey		stones,					
											brown		frequent,					
		l											random	<u> </u>				j

©Oxford Archaeology Ltd 81 29 September 2021



Conte	Catego	Featur	Cut	Filled	Perio	Grou	Maste	Lengt	Breadt	Dept	Colour	Fine	Coarse	Shape in	Side	Break of	Base	Orientati
xt	ry	е Туре		Ву	d	р	r Numb er	h	h	h		compone nt	compone nt	Plan		Slope		on
762	fill	pit	763		4.2	0	0	0		0.39	dark grey	clay silt	small to medium stones, rare, random					
763	cut	pit	763	762	4.2	0	0	0	1.6	0.39				circular	steep	sharp	concav e	n/a
764	fill	ditch	765		4.2	765	0	0		0.02	dark grey	clay silt	small stones, rare, random					
765	cut	ditch	765	764	4.2	765	0	0	0.65	0.02				linear	gentle	moderate	concav e	E-W
766	cut	ditch	766	767	1	0	0	0	0.4	0.38				linear	steep	sharp	concav e	NW-SE
767	fill	ditch	766		1	0	0	0		0.38	mid grey	clay silt	n/a					
768	fill	ditch	769		1	0	0	0		0.1	light brown grey	clay sand	small stones, rare, random					
769	cut	gully	769	768	1	0	0	0	0.4	0.1				linear	steep	sharp	concav e	NW-SE
770	fill	pit	771		1	0	0	0		0.4	mid red brown	sand clay	small stones, rare, random					
771	cut	pit	771	770	1	0	0	0	0.9	0.4				linear	steep	sharp	concav e	NW-SE
772	fill	gully	773		1	0	0	0		0.1	light brown grey	clay sand	small stones, rare, random					
773	cut	gully	773	772	1	0	0	0	0.4	0.1				linear	gradual	moderate	concav e	NW-SE
774	fill	pit	775		1	0	0	0		0.22	light brown grey	sand clay	small stones, rare, random					

©Oxford Archaeology Ltd 82 29 September 2021



Conte	Catego	Featur	Cut	Filled	Perio	Grou	Maste	Lengt	Breadt	Dept	Colour	Fine	Coarse	Shape in	Side	Break of	Base	Orientati
xt	ry	e Type	Cut	Ву	d	р	r Numb	h	h	h	Coloui	compone	compone	Plan	Side	Slope	Dase	on
							er											
775	cut	pit	775	774	1	0	0	0	0.7	0.22				sub- circular	steep	sharp	concav e	n/a
776	cut	ditch	776	777	3.3	776	0	0	1.04	0.32				linear	moderate	gradual	concav e	E-W
777	fill	ditch	776		3.3	776	0	0		0.32	mid brown	silt clay	small stones, rare, random					
778	cut	ditch	778	779	2.2	0	0	0	0.73	0.3				linear	moderate	imperceptib le	concav e	E-W
779	fill	ditch	778		2.2	0	0	0		0.3	mid grey	silt clay	small to medium stones, rare, random					
780	cut	ditch	780	784, 785, 786	4.2	0	0	0		0.7				linear	steep	sharp	concav e	E-W
781	cut	pit	781	787, 788, 789	3.1	0	0	0	2.1	0.64				circular	steep	sharp	concav e	n/a
782	cut	pit	782	790, 791	4.1	0	0	0		0.46				sub- circular	steep	sharp	concav e	n/a
783	cut	pit	783	792	4.1	0	0	0		0.8				n/a	n/a	n/a	concav e	n/a
784	fill	ditch	780		4.2	0	0	0		0.12	light grey	clay silt	small to medium stones, moderate, random					
785	fill	ditch	780		4.2	0	0	0		0.4	dark grey brown	clay silt	small to medium stones, rare, random					
786	fill	ditch	780		4.2	0	0	0		0.12	dark yellow brown	silt sand	small stones, rare, random					

©Oxford Archaeology Ltd 83 29 September 2021



Conte	Catego	Featur	Cut	Filled	Perio	Grou	Maste	Lengt	Breadt	Dept	Colour	Fine	Coarse	Shape in	Side	Break of	Base	Orientati
xt	ry	e Type		Ву	d	р	r	h	h	h	coloui	compone	compone	Plan	Jiac	Slope	Dusc	on
							Numb er					nt	nt					
787	fill	pit	781		3.1	0	0	0			light	clay silt	small					
											grey		stones,					
													rare,					
													random					
788	fill	pit	781		3.1	0	0	0		0.3	bright	clay sand	n/a					
											orange							
789	fill	pit	781		3.1	0	0	0		0.24	dark	clay silt	small					
											grey		stones,					
													rare,					
													random					
790	fill	pit	782		4.1	0	0	0		0.22	light	clay silt	small					
											grey		stones,					
													rare,					
	611												random					
791	fill	pit	782		4.1	0	0	0		0.26	dark	clay silt	small					
											brown		stones,					
											grey		rare,					
700	CILL		700							0.4			random					
792	fill	pit	783		4.1	0	0	0		0.4	mid	clay silt	small					
											grey		stones,					
													rare,					
793	cut	ditch	793	794,	1	300	0	0	1.32	0.52			random	linear	steep	sharp	flat	N-S
753	cut	uittii	793	795,	1	300	U	U	1.32	0.52				illicai	steep	Sharp	IIat	14-3
				796														
794	fill	ditch	793	730	1	300	0	0		0.13	dark red	silt clay	n/a					
754	1111	ditteri	755		_	300	U	J		0.13	grey	Sire ciay	11/4					
795	fill	ditch	793		1	300	0	0		0.32	mid red	clay silt	small					
, 55	••••		,,,,		_	300		ŭ		0.02	brown	o.a, o	stones,					
													rare,					
													random					
796	fill	ditch	793		1	300	0	0		0.19	dark	silt clay	n/a					
							-				grey	,	1]				
											brown							
797	cut	pit	797	798	0	0	0	0	1.26	0.93				sub-	moderate	gradual	concav	n/a
														circular			е	
798	fill	pit	797		0	0	0	0		0.93	dark	silt clay	small					
											grey		stones,]				
													rare,]				
													random					

©Oxford Archaeology Ltd 84 29 September 2021



Conte	Catego	Featur	Cut	Filled	Perio	Grou	Maste	Lengt	Breadt	Dept	Colour	Fine	Coarse	Shape in	Side	Break of	Base	Orientati
xt	ry	е Туре		Ву	d	р	r Numb er	h	h	h		compone nt	compone nt	Plan		Slope		on
799	cut	ditch	799	801, 802, 803, 804, 805, 806	4.1	724	0	0		0.8				linear	steep	sharp	concav e	N-S
800	cut	pit	800	807 to 813	2.3	0	0	0		1.4				sub- circular	steep	sharp	concav e	n/a
801	fill	ditch	799		4.1	724	0	0		0.5	dark greyish- brown	clayey-silt	s stones, moderate, random					
802	fill	ditch	799		4.1	724	0	0		0.04	dark brown	clayey-silt and peat	s stones, rare, random					
803	fill	ditch	799		4.1	724	0	0		0.14	dark grey	sandy-silt	s stones, rare, random					
804	fill	pit	800		3.3	800	0	0		0.14	dark grey	clayey-silt	s stones, rare, random					
805	fill	pit	800		3.3	724	0	0			mid grey	sandy-silt	s stones, gravel, random, rare					
806	fill	ditch	799		4.1	724	0	0		0.1	dark brown	silt and clay	s stones, rare, random					
807	fill	pit	800		2.3	0	0	0		0.34	light grey	sandy-silt	s stones, rare, random					
808	fill	pit	800		2.3	0	0	0		0.26	mottled green grey	clay sand	s stones, moderate, random					
809	fill	pit	800		2.3	0	0	0		0.16	light grey with 10% orange mottling	clay sand	s stones, gravel, random and rare					

©Oxford Archaeology Ltd 85 29 September 2021



Conte xt	Catego ry	Featur e Type	Cut	Filled By	Perio d	Grou p	Maste r Numb	Lengt h	Breadt h	Dept h	Colour	Fine compone nt	Coarse compone nt	Shape in Plan	Side	Break of Slope	Base	Orientati on
810	fill	pit	800		2.3	0	er 0	0		0.22	dark	silty clay	s stones,					
											green grey		rare, random					
811	fill	pit	800		2.3	0	0	0		0.1	bright orange	clay sand	s stones and grave, random, rare					
812	fill	pit	800		2.3	0	0	0			dark grey	clayey silt	s stones and gravel, rare, random					
813	fill	pit	800		2.3	0	0	0		0.2	light grey	silty sand	s stones and gravel, random, rare					
814	cut	ditch	814	815	1	621	0	0	1.48	0.33				linear	gentle	imperceptib le	concav e	e-w
815	fill	ditch	814		1	621	0	0		0.33	mid brownis h-grey with yellow mottling	silty-clay	occasional small sub- angular stones					
816	cut	ditch	816		4.1	816	0	0		0.8				linear	steep	sharp	concav e	e-w
817	cut	ditch	817	818	3.1	660	0	0	0.98	0.39				linear	moderate	imperceptib le	concav e	nne-ssw
818	fill	ditch	817		3.1	660	0	0		0.39	mid grey	silty-clay	occasional small sub- angular stones, rare v. small shell, occasional natural sand inculsions					

©Oxford Archaeology Ltd 86 29 September 2021



Conte	Catego	Featur	Cut	Filled	Perio	Grou	Maste	Lengt	Breadt	Dept	Colour	Fine	Coarse	Shape in	Side	Break of	Base	Orientati
xt	ry	е Туре		Ву	d	р	r Numb er	h	h	h		compone nt	compone nt	Plan		Slope		on
819	cut	pit	819	820, 821	1	300	0	2.2	1.6	0.34				rectangul ar	steep	sharp	irregul ar	nw-se
820	fill	pit	819		1	300	0	0		0.34	dark grey with yellowis h-red mottling	silty-clay	occasional small sub- angular stones					
821	fill	pit	819		1	300	0	0		0.18	light grey with reddish- yellow mottling	silty-clay	occasional small sub- angular stones					
822	fill	ditch	799		4.1	0	0	0		0.08	dark blue	clayey-silt	s stones, rare, random					
823	fill	pit	800		2.3	800	0	0		0.04	dark brown	clayey-silt	s stones, rare, random					
824	fill	ditch	825		1	0	0	0		0.4	dark brown grey	sandy clay	s stones, rare, random					
825	cut	ditch	825	824	1	0	0	0		0.4				linear	steep	sharp	concav e	n-s
826	fill	ditch	816		4.1	816	0	0		0.4	dark grey brown	clay silt	s-m stones, moderate, random					
827	fill	ditch	816		4.1	816	0	0		0.1	dark yellow- brown	silty sand	s stones and gravel, rare, random					
828	fill	ditch	816		4.1	816	0	0		0.12	dark grey	clay silt	s stones, rare, random					
829	fill	ditch	816		4.1	816	0	0		0.1	dark red brown	clayey sand	n/a					

©Oxford Archaeology Ltd 87 29 September 2021



Conte xt	Catego ry	Featur e Type	Cut	Filled By	Perio d	Grou p	Maste r Numb	Lengt h	Breadt h	Dept h	Colour	Fine compone nt	Coarse compone nt	Shape in Plan	Side	Break of Slope	Base	Orientati on
830	fill	ditch	816		4.1	816	er 0	0		0.1	mid grey	clay silt	s stones, rare,					
831	cut	pit	831	832	4.1	0	0	1.32	0.89	0.45			random	sub- circular	vertical	sharp	flat	e-w
832	fill	pit	831		4.1	0	0	0		0.45	dark brown	clayey silt	abundant small angular stones	on cana.				
833	fill	ditch	834		2.2	291	0	0		0.36	light grey	sandy silt	s stones, rare, random					
834	cut	ditch	834	833	2.2	291	0	0		0.36				linear	steep	sharp	concav e	N-S
835	cut	ditch	835	836	3.1	660	0	0	0.25	0.24				linear	moderate	n/a	n/a	nne-ssw
836	fill	ditch	835		3.1	660	0	0		0.24	dark grey	silty-clay	occasional small sub- angular stones					
837	cut	ditch	837	838	3.1	660	0	0	0.65	0.47			Stories	linear	moderate	imperceptib le	n/a	n-s
838	fill	ditch	837		3.1	660	0	0		0.47	dark grey	silty clay	occasional small sub- angular stones					
839	fill	ditch	844		2.2	291	0	0		0.2	dark grey	clay silt	s stones, rare, random					
840	fill	ditch	844		2.2	291	0	0		0.3	dark green grey	silt clay	s stones, rare, random					
841	fill	ditch	844		2.2	291	0	0		0.2	mid green grey	silt clay	s stones, rare, random					
842	fill	ditch	844		2.2	291	0	0			light green	silty clay	s stones, rare, random					

©Oxford Archaeology Ltd 88 29 September 2021



Conte	Catego	Featur	Cut	Filled	Perio	Grou	Maste	Lengt	Breadt	Dept	Colour	Fine	Coarse	Shape in	Side	Break of	Base	Orientati
xt	ry	е Туре		Ву	d	р	r Numb er	h	h	h		compone nt	compone nt	Plan		Slope		on
843	fill	ditch	844		2.2	291	0	0		0.12	light gren	sandy silt	s stones, rare, random					
844	cut	ditch	844	839 to 843	2.2	291	0	0	2	0.72				linear	steep	sharp	concav e	nnw-sse
845	fill	faunal remain s	831		4.1	0	0	0										
846	cut	gully	846	847	1	623	0	15	0.47	0.16				linear	near vertical	sharp	flat	ne-sw
847	fill	gully	846		1	623	0	0		0.16	light yellowis h brown	sandy silt	occasional angular stones					
848	fill	pit	849		4.1	0	0	0		0.4	dark brown grey	clay silt	s-m stones, random, moderate					
849	cut	pit	849	848	4.1	0	0	0		0.4				sub circular	steep	sharp	concav e	n/a
850	cut	ditch	850	851	3.3	758	0	0	0.36	0.24				linear	moderate	imperceptib le	concav e	nw-se
851	fill	ditch	850		3.3	758	0	0		0.24	dark grey with reddish- yellow mottling	silty clay	occasional small sub- angular stones					
852	cut	ditch	852	853	4.1	816	0	0	0.32	0.25				irregular	steep	n/a	n/a	nw-se
853	fill	ditch	852		4.1	816	0	0		0.25	dark brownis h grey	silty clay	occasional small sub- angular stones					
854	fill	pit	855		3.3	0	0	0		0.22	mid grey brown	clay silt	s stones, rare, random					
855	cut	pit	855	854	3.3	0	0	0	1.8	0.22				sub- circular	steep	moderate	concav e	n/a

©Oxford Archaeology Ltd 89 29 September 2021



Conte	Catego	Featur	Cut	Filled	Perio	Grou	Maste	Lengt	Breadt	Dept	Colour	Fine	Coarse	Shape in	Side	Break of	Base	Orientati
xt	ry	е Туре		Ву	d	p	r Numb er	h	h	h		compone nt	compone nt	Plan		Slope		on
856	fill	pit	857		2.3	0	0	0		0.24	mid grey brown	clay silt	s stones, rare, random					
857	cut	pit	857	856	2.3	0	0	0	0.8	0.24	mid grey brown	clay silt	s stones, rare, random					
858	fill	pit	859		natur al	0	0	0		0.2				sub- rectangul ar	steep	sharp	concav e	ne-sw
859	cut	pit	859	858	natur al	0	0	0	1.1	0.2	mid grey brown	clay silt	s stones, rare, random					
860	cut	pit	860	861, 862	4.1	0	0	1.8	0.85	0.45				rectangul ar	steep/near vertical	sharp moderate	concav e	n-s
861	fill	faunal remain s	860		4.1	0	0	0										
862	fill	pit	860		4.1	0	0	0		0.45	dark greyish brown	silty sand	occasional gravelly stones, frequent chalk clumps					
863	cut	ditch termin us	863	864	2.3	0	0	0	0.6	0.4				linear	vertical	sharp	flat	se-nw
864	fill	ditch	863		2.3	0	0	0		0.4	dark yellowis h brown	sandy silt	rare small angular stones					
865	cut	ditch	865	866	3.1	631	0	0	0.11	0.36				n/a	near vertical	sharp	flat	se-nw
866	fill	ditch	865		3.1	631	0	0		0.34	dark yellow brown	sand silt	small stones, rare, random					
867	cut	ditch	867	868	3.1	0	0	0	0.4	0.44				linear	steep	sharp	n/a	NW-SE
868	fill	ditch	867		3.1	0	0	0	_	0.44	dark brown	silt	smalls stones,					

©Oxford Archaeology Ltd 90 29 September 2021



Conte xt	Catego ry	Featur e Type	Cut	Filled By	Perio d	Grou p	Maste r Numb er	Lengt h	Breadt h	Dept h	Colour	Fine compone nt	Coarse compone nt	Shape in Plan	Side	Break of Slope	Base	Orientati on
													rare, random					
869	cut	gully	869	870	3.1	656	0	0	0.22	0.1				linear	gradual	sharp	flat	N-SW
870	fill	gully	869		3.1	656	0	0		0.1	dark brown orange	silt	n/a					
871	cut	ditch	871	872	2.3	288	0	0	0.88	0.48				linear	moderate	gradual	concav e	NNE-SSW
872	fill	ditch	871		2.3	288	0	0		0.48	dark grey	silt clay	small stones, rare, random					
873	cut	pit	873	874	0	0	0	2.02	1.06	0.96				rectangul ar	steep	n/a	n/a	NWW- SEE
874	fill	pit	873		0	0	0	0		0.96	dark grey	silt clay	small stones and chalk, frequent, random					
875	cut	ditch	875	876	2.3	683	0	0	0.7	0.22				linear	gentle	sharp	concav e	E-W
876	fill	ditch	875		2.3	683	0	0		0.22	mid brown grey	silt	small angular stones, frequent, random					
877	cut	post hole	877	878	0	0	0	0	0.32	0.07				sub- circular	gentle	gradual	flat	N_S
878	fill	post hole	877		0	0	0	0		0.07	dark grey	silt clay	small stones, occasional , random					
879	fill	ditch	880		3.1	631	0	0		0.45	light brown grey	clay silt	small stones, rare, random					
880	cut	ditch	880	879	3.1	631	0	0		0.45				linear	steep	sharp	concav e	NE-SW

©Oxford Archaeology Ltd 91 29 September 2021



Conte	Catego	Featur	Cut	Filled	Perio	Grou	Maste	Lengt	Breadt	Dept	Colour	Fine	Coarse	Shape in	Side	Break of	Base	Orientati
xt	ry	е Туре		Ву	d	р	r	h	h	h		compone	compone	Plan		Slope		on
							Numb er					nt	nt					
881	fill	ditch	882		3.1	660	0	0		0.38	mid	clay silt	small					
											grey		stones,					
											brown		rare, random					
882	cut	ditch	882	881	3.1	660	0	0		0.38			Tanaom	linear	steep	sharp	concav	NW-SE
															·		е	
883	fill	ditch	884		3.1	649	0	0		0.1	mid	sand silt	small					
											grey		stones,					
											brown		rare, random					
884	cut	ditch	884		3.1	649	0	0	0.3	0.1			Tanaom	linear	steep	sharp	concav	E-W
																	е	
885	fill	ditch	886		3.1	631	0	0		0.3	dark	clay silt	small					
											grey		stones,					
											brown		rare, random					
886	cut	ditch	886	885	3.1	631	0	0		0.3				linear	steep	sharp	concav	NE-SW
															·		е	
887	fill	ditch	890		2.2	291	0	0										
888	fill	ditch	890		2.2	291	0	0										
889	fill	ditch	890		2.2	291	0	0										
890	cut	ditch	890		2.2	291	0	0										
								_										
891	cut	post hole	891	892	0	0	0	0		0.19				circular	steep	sharp	flat	n/a
892	fill	post hole	891		0	0	0	0		0.19	dark brown	silt	n/a					
893	fill	gully	584		0	0	0	0		0.1	light	clay silt	small					
											grey		stones,					
													rare,					
004	£:II	ماند ماد	FOC		2.2			0		0.54	:	-1	random			1		
894	fill	ditch	586		3.3	0	0	0		0.54	mid grey	clay silt	small stones,					
											BICA		rare,					
				<u></u>			<u></u>						random					
895	cut	ditch	895	613	3.3	338	338	0	1.1	0.3				curvilinea	steep	sharp	concav	NE-SW
														r			е	

©Oxford Archaeology Ltd 92 29 September 2021

Late Saxon and Medieval Remains at Rosemary Road, Waterbeach

V.2

Conte	Catego	Featur	Cut	Filled	Perio	Grou	Maste	Lengt	Breadt	Dept	Colour	Fine	Coarse	Shape in	Side	Break of	Base	Orientati
xt	ry	е Туре		Ву	d	р	r	h	h	h		compone	compone	Plan		Slope		on
							Numb					nt	nt					
							er											
896	cut	ditch	896	352	3.3	338	338	0	1.1	0.44				curvilinea	steep	sharp	concav	NE-SW
														r			e	

©Oxford Archaeology Ltd 93 29 September 2021



APPENDIX B FINDS REPORTS

B.1 Coins

By Denis Sami

Introduction

- B.1.1 Two coins (one copper-alloy and one silver) and a Nuremberg jetton were recovered from surface metal-detecting and a posthole. The coins are incomplete, SF5 was intentionally cut in half and the small group of objects is overall poorly preserved and oxidised.
- B.1.2 The metalwork was examined in accordance with the OA East metalwork finds standard based on the guidance of the Historical Metallurgy Society (HMS, Datasheets 104 and 108), the Archaeometallurgy Guidelines for Best Practice (Historic England 2015) and the *Guidelines for the Storage and Display of Archaeological Metalwork* (English Heritage/Historic England 2013).
- B.1.3 The Roman Imperial Coinage volume VIII was used in the identification of coin SF3a (found on the surface of Period 1 ditch **300**), while North's 2018 English Hammered Coinage, Volume 1 was used to identify and describe coin SF 5 (found in Period 3.3 posthole **564**). Mitchiner's 1991 work on jettons from the Low Countries was accessed in the description of SF 16.

Catalogue

B.1.4 Full details of the coins and jetton are provided in Table 4.

SF no.	3a	5	16
Context	Surf.	563	Subsoil
Cut no.	300	564	-
Context type	Ditch	Posthole	-
Phase	1	3.2	-
Denomination	AE3	Half-penny	jetton
Alloy	CuA	Ag	CuA
Min Date	348	1158	1586
Max Date	350	1180	1635
Authority	Constans	Henry II	Hans Krauwinckel
Obv. description	pearl-diademed, draped and cuirassed bust right (long neck)	Crowned bust facing, with sceptre	illegible
Obv. legend	[AD. DN CONSTA-NS PF AVG]	illegible	illegible
Rev. description	radiate phoenix standing right on rocky mound	short cross and crosslets (Tealby)	Reichsapfel in angled trilobe, annulets in spandrels
Rev. legend	[FEL .TEMP.] REPA[RATIO]	illegible	?GABEN SOL MAN LOB
Weight (g)	1.11	0.56	



SF no.	3a	5	16
Diam. (mm)	17.9	13.5	24.9
Thickness (mm)	0.8	0.4	1.3

Table 4. Catalogue of coins and jetton

Discussion

B.1.5 The assemblage comprises a mid-4th century Roman coin, a later 12th century half penny and a late 16th/early 17th century jetton. The jetton was recovered from a unstratified context, but the Roman coin and medieval halfpenny were both recovered from the fills of features, and their dating is consistent with the phasing of the features established on stratigraphic grounds.

B.2 Metalwork

By Denis Sami

Introduction

B.2.1 The excavation produced an assemblage of 12 fragments of metalwork consisting of copper-alloy (CuA) and iron (Fe) artefacts relating to 12 objects dating from the Roman to post-medieval/modern periods. Finds were recovered from ditches, pits and surface metal-detecting (Tables 5 and 6).

Material	Fragment No.	Object No.
CuA	5	5
Fe	7	7
Grand Total	12	12

Table 5. Number of metalwork fragments and objects by material

Methodology

- B.2.2 The metalwork was examined in accordance with the OA East metalwork finds standard based on the guidance of the Historical Metallurgy Society (HMS, Datasheets 104 and 108), the Archaeometallurgy Guidelines for Best Practice (Historic England 2015) and the Guidelines for the Storage and Display of Archaeological Metalwork (English Heritage/Historic England 2013).
- B.2.3 The catalogue of Roman metalwork at the British Museum published by Manning (1989) is used here as main reference in the discussion and description of ironwork while Egan and Pritchard's monograph dedicated to medieval dress accessories was consulted in the identification of the copper-alloy artefacts.
- B.2.4 The metalwork assemblage was quantified using an Access database. All metal finds were counted and classified on a context-by-context basis. A summary catalogue of the Excel database is included below, organised by context number (Table 6).

Factual data

B.2.5 Six artefacts were recovered from metal-detecting the surface, four from ditches and two from pits. Most of the artefacts are incomplete, of small size and poorly preserved



- with ironwork heavily encrusted and copper-alloy fragments oxidised and covered with patina.
- B.2.6 The assemblage is chronologically mixed with finds spanning the Roman to the postmedieval/modern periods. The overall character of the metalwork consists of utilitarian artefacts or dress accessories employed in everyday activities. The identification of the artefacts is in certain cases tentative given the small size and preservation of the objects.

Copper-alloy

- B.2.7 A stud with large, circular, flat heads and a short circular cross-section pin (SF 4; unstratified) is of a kind largely used in the decoration of furniture or chests/caskets. Such objects were in use from the Roman to the post-medieval periods with little variation in the shape and forging technique. The poor preservation and oxidation of SF4 does not help to elucidate if the copper-alloy composition is Roman or medieval.
- B.2.8 Buckle plate SF 6 and strap-loop SF 18 (both unstratified) are well known medieval dress accessories dating to the period spanning 1150-1400 (Egan and Pritchard 2002). Such items were generally used to fasten cloths or shoes and are found in larger concentrations in proximity to roads, market-places or domestic spaces.
- B.2.9 Loop SF 19 (unstratified) is a very simple object consisting of a ring with circular cross-section. This typology of loop could either have been used as a finger ring or a chain loop and may be Roman or medieval/post-medieval in date (Egan and Pritchard 2002: 319, no 1590).

Iron

- B.2.10 Four small iron fragments remain unidentified (SFs 11, 14, 17 and 21).
- B.2.11 SFs 3 and 13 are parts of nails, possibly of Manning's Type 2 which are not chronologically diagnostic, spanning the Roman to the post-medieval/modern periods. Tentatively of medieval to modern date is an incomplete knife blade (SF 23, from Period 4.1 ditch 816). Straight and rectangular in cross-section with the tang extending into the blade, this is a type that is documented in the catalogue of 14th-century medieval knives edited by Cowgill *et al.* (1987: 94). However, SF 23 is so poorly preserved and encrusted that alternative chronologies cannot be excluded.

Discussion

B.2.12 This small assemblage offers very little opportunity to elaborate on the character or date of activity on the site. The poor preservation, high fragmentation and encrustation of the majority of the finds prevents a clear identification of their character and chronology. The recovered artefacts appear to be multifunctional objects which may have been associated with domestic and/or agricultural use, or for personal decoration /as dress accessories.



SF	Context	Cut	Feature	Phase	Material	Artefact	Quantity	Condition	Description	Length (mm)	Width (mm)	Thickness (mm)	Diam. (mm)	Weight (gr)	Spot date
3	346	345	ditch	3.3	Fe	nail	1	Incomplete	A tapering shaft with square cross- section and circular flat head	34	6.9	0	0	0	ROM/MOD
4	99999		surface		CuA	Stud	1	Incomplete	An incomplete circular and flat head with a central short stem with circular cross section	0	0	5.5	16	1.9	ROM/MED
6	99999		surface		CuA	Buckle plate	1	Incomplete	A rectangular plate with one hole set on each long sides. A rivet is still preserved	30	14	0.3	0	1.8	MED
7	99999		surface		CuA	unidentified	1	Incomplete	A shapeless folded sheet of metal. Two rivet holes are open through one side of the sheet	54	56	14	0	24.2	MED
11	498	458	pit	3.2	Fe	unidentified	1	Incomplete	A shapeless lump of metal heavily encrusted	61.2	20.5	0	0	0	
13	729	724	ditch	4.1	Fe	nail	1	complete	Tapering shaft with square cross- section and circular flat head	72	0	5.5	0	0	ROM/MOD
14	729	724	ditch	4.1	Fe	unidentified	1	Incomplete	A slightly curved triangular in shape shaft, possibly a tang or a fitting with sub-rectangular cross-section	73.4	22	6.1	0	0	
17	99999		surface		Fe	unidentified	1	Incomplete	A rectangular strip of iron with three short rectangular projections on each of the long sides. Possibly part of a brooch?	29.8	16.8	4.1	0	0	ROM?
18	99999		surface		CuA	Strap loop	1	Complete	A trapezoidal strap loop with internal projections	14.9	22.3	2.1	0	1.8	MED
19	99999		surface		CuA	Finger ring	1	Complete	A complete circular fingering with circular cross section. There is evidence of heavy wear on one side	0	0	1.6	21	1.3	ROM/POST MED
21	862	860	pit	4.1	Fe	unidentified	1	Incomplete	A very encrusted possible shaft of a nail	41.2	7.5	0	0	0	ROM/MOD
23	828	816	ditch	4.1	Fe	knife	1	Incomplete	A rectangular tang with rectangular cross-section extending into a straight back and stepping into the cutting edge. The tip is missing	115.1	17	6.8	0	0	MED/MOD

Table 6. Catalogue of metalwork

©Oxford Archaeology Ltd 97 29 September 2021



B.3 Fuel ash slag

By Carole Fletcher

Introduction

B.3.1 The assemblage comprises five fragments of fuel ash slag. The terminology used in the report is taken from Historic England *Archaeometallurgy Guidelines for Best Practice* 2015.

Factual data

B.3.2 Period 3.4 pit 368 produced five irregular fragments of non-vitrified (0.053kg) pale to mid grey ashy slag-like material were recovered. The material, which breaks relatively easily under slight pressure is moderately vesicular, with common carbonised material. Under x10 magnification, some of the larger particles reveal themselves to be carbonised grains and some of the vesicles may be the result of burnt out organic material. Small stones are incorporated into the largest fragment and sand is a common component of the material.

Discussion

B.3.3 The fragments of ashy material from pit 368 were recovered alongside a single sherd of medieval pottery (1150-1550). The ashy material may have come from a domestic fire or may represent crop processing residues or stubble burning, however, the small quantity of material recovered, and the fragmentary nature of the assemblage means it is of uncertain significance, beyond indicating the possibility of crop processing on site.

B.4 Flint

By Lawrence Billington

- B.4.1 A single worked flint and 711g of unworked, burnt flint was recovered during the excavation.
- B.4.2 The worked flint is a small hard hammer struck secondary flake recovered as a residual find from the fill (433) of pit **432** (Period 3.1). It is not chronologically diagnostic.
- B.4.3 A relatively large assemblage of burnt flint was recovered from a bulk sample taken from fill 390 of pit 389 (Period 1). The burnt flint is made up of heavily crazed fragments of calcined flint which appear to derive from small rounded/sub-rounded gravel cobbles /pebbles. The high degree of fragmentation of the flint (mean clast weight of 8g) is typical of material which has been subject to severe thermal shock and burnt flint of this kind is often interpreted as having been heated and then rapidly cooled in water. Extreme and thorough fragmentation of burnt flint, such as seen here, is sometimes invoked as evidence that the flint has been subject to repeated cycles of heating and cooling (e.g. Crowson 2004, 11).
- B.4.4 The size and uniform condition of the brunt flint assemblage indicates that this material was deliberately heated (as opposed to having been inadvertently caught up



in hearths or other fire settings). There are many potential uses for deliberately heated flint and stone, including in cooking, brewing, textile/hide processing and bathing (see Hodder and Barfield 1991). Accumulations of deliberately heated flint are most readily associated with prehistoric activity, and deposits of burnt flint, either as spreads or within cut features, are a feature of all periods of later prehistory in the region. However, it is notable that burnt flint filled features have been dated to the (early) Anglo-Saxon period at some sites in East Anglia (e.g. Andrews 1995; Garrow et al 2006; Caruth and Goffin 2012).

B.5 Jet

By Mary Andrews

- B.5.1 The fragment of jet was recovered from bulk environmental sample 15 (fill 266, Period 3.2 ditch **267**), no further fragments were retrieved from the sample. The fragment was cleaned and measured and compared to similar find types from the portable Antiquities Scheme catalogue (see below).
- B.5.2 The fragment measures 13mm across from the inside of the band, between a third or a quarter of the object survives, the estimated inner diameter could be between 16-18mm. Although the object is extensively damaged, the width of the outer surface can be calculated to around 5mm and the thickness between 3-4mm. While it is possible the object could still be a large but relatively thin jet bead for its size, it is more likely to be a jet ring.
- B.5.3 Similar examples recorded on the portable Antiquities Database indicate that this object is most likely to be Roman in date. (e.g. https://finds.org.uk/database/artefacts/record/id/68485 https://finds.org.uk/database/artefacts/record/id/437399)

B.6 Glass

By Carole Fletcher

Introduction and methodology

B.6.1 The assemblage comprises a single fragment of glass (0.006kg). The glass was scanned and recorded by form, colour, count and weight, and dated. The glass is fully recorded in the text. The terminology used in the report is taken from *Glass Through The Ages* (Barrington Haynes 1970), *Antique Glass Bottles Their History and Evolution* (1500-1850) (Van den Bossche 2001), *A Guide to Artifacts of Colonial America* (Hume 1969) and *The Parks Canada Glass Glossary* (Jones and Sullivan *et al* 1989).

Factual data

B.6.2 A single curved, irregular shard (0.006kg) of pale olive green glass from a utility bottle, was recovered from Period 4.1 ditch **816**. The glass is slightly cloudy, with small faults and some bubbles, and the surface feels slightly irregular, suggesting the bottle was at least in part mould blown. The glass is 2-3mm thick and is from a cylindrical bottle, very probably dating to the 18th century.



Discussion

B.6.3 The fragment of glass recovered was recovered from a post-medieval ditch alongside medieval and mid-15th to early 17th century pottery, suggesting some degree of contamination of the ditch, and is of little significance, beyond indicating the deposition of low levels of 18th century rubbish.

B.7 Romano-British Pottery

By Katie Anderson

Introduction and methodology

B.7.1 A small assemblage of Roman pottery totalling 24 sherds, weighing 359g was recovered from the excavation. All of the pottery was analysed and recorded in accordance with the Study Group for Roman Pottery guidelines (Perrin 2011). A further three sherds (30g) of Roman pottery were recovered during the evaluation and are fully reported elsewhere (K. Anderson in Jackson 2017).

The assemblage

- B.7.2 The pottery is characterised by small to medium-sized sherds, several of which were noted as being abraded, reflected in the mean weight of 15g. This in part is due to 33% of the assemblage by count (eight sherds, 127g) deriving from contexts which also contained later material, suggesting the Roman material is likely to be residual. The pottery is predominantly Mid to later Roman in date (c. AD 100-400), although several sherds could only be broadly dated Romano-British due to the size, condition and generic nature of the fabrics.
- B.7.3 A fairly limited range of vessel fabrics was identified (Table 7), with the assemblage dominated by sandy coarsewares, most of which are unsourced. The exceptions to this are four Horningsea wares (135g), three of which are body sherds from storage jars. A single Hadham oxidised ware sherd from a mortaria was also recovered from context 220, noted as being heavily abraded. One Nene Valley greyware sherd from a grooved ware dish was recovered from context 450 and a sherd from a Nene Valley whiteware lid-seated jar derived from context 485, both dating AD150-300. There are also two Nene Valley colour-coated sherds; a small sherd with an everted rim, possibly from a beaker, from context 266, and a pedestal base from a second vessel that was recovered from 767, which was possibly trimmed/modified.

Fabric Code	Fabric	No.	Wt (g)
BLKSL	Black-slipped ware (unsourced)	2	15
CSGW	Coarse sandy greyware (unsourced)	6	18
CSMGW	Coarse sandy micaceous greyware (unsourced)	1	25
CSOX	Coarse sandy oxidised ware (unsourced)	4	42
CSRDU	Coarse sandy reduced ware (unsourced)	1	4
HADOX	Hadham oxidised ware	1	11
HORNGW	Horningsea greyware	2	102
HORNOX	Horningsea Oxidised ware	2	33
NVCC	Nene Valley Colour Coated ware	2	60



Fabric Code	Fabric	No.	Wt (g)
NVGW	Nene Valley Greyware	1	7
NVWW	Nene Valley whiteware	1	37
WSOX	White-slipped oxidised sandy ware	1	5
TOTAL		24	359

Table 7. Quantification of Roman pottery by fabric

B.7.4 Roman pottery was recovered from 20 contexts, all of which contained between one and two sherds only, thus none of the contexts could be considered to represent refuse material. Rather the pottery is more likely to derive from manuring-like activities, further supported by the apparent residual nature of at least some of the material and the abraded nature of much of the assemblage.

Context	Cut	Phase	Feature Type	No.	Wt (g)	Context spot date
220	219	1	gully	1	11	AD200-400
249	248	2.3	posthole	1	2	AD50-400
266	267	3.2	ditch	2	4	AD150-400
284	285	2.1	ditch	1	25	AD70-400 with post Roman
314	282	1	pit	2	12	AD100-400
316	312	1	pit	1	4	AD50-400
322	320	2.3	ditch	1	4	AD100-400
324	321	2.2	pit	1	25	AD100-400 with post Roman
368	368	3.4	pit	1	4	AD50-400
393	395	2.3	ditch	1	13	AD100-400
424	407	2.1	ditch	1	20	AD150-400 with post Roman
450	451	2.2	pit	1	7	AD150-400
467	465	3.1	pit	1	4	AD50-400 with post Roman
469	468	3.2	ditch	2	6	AD50-400 with post Roman
485	488	2.2	ditch	1	37	AD150-400
578	577	1	gully	1	8	AD100-400
651	650	3.3	gully	1	8	AD100-400
697	697	3.1	ditch	2	47	AD100-400 with post Roman
767	766	1	ditch	1	57	AD150-400
795	793	1	ditch	1	61	AD70-400

Table 8. Quantification of Roman pottery by context

Discussion

B.7.5 Overall, the pottery demonstrates that there was limited activity in earlier to Mid to later Roman period (c. AD 100-400), although the diagnostic sherds suggest a 'peak' in the later Roman period (AD 150-400), with approximately one third of the assemblage seemingly residual. The size and condition of the assemblage suggests that although there was a presence in the Roman period, the site was not a focus for activity during this period, rather the assemblage is indicative of 'background' activity.



B.8 Anglo-Saxon Pottery

By Denis Sami

Introduction

B.8.1 Excavation produced five fragments (total 173g) of Middle Anglo-Saxon pottery (c. 650-875). The assemblage consists of the standard range of fabrics and forms for this period in the county. The overall condition of the assemblage is good with sherds being moderately abraded and with an average sherd weight of 34g.

Fabric	No. Fragment	Weight (g)
Middle-Saxon Quartz tempered(MSXQ)	3	69
Southern Maxey-type ware (RMAX)	2	104
Total	5	173

Table 9. Quantification of Anglo-Saxon pottery by fabric

Methodology

- B.8.2 The pottery was examined in accordance with the OA East pottery standard based on the guidance of the 2016 A Standard for Pottery Studies in Archaeology (SPSA) and the Medieval Pottery Research Group (MPRG) document A guide to the classification of medieval ceramic forms (MPRG 1998).
- B.8.3 Hand-made fabrics and forms of the Middle Anglo-Saxon period are described in *The Production and Distribution of Medieval Pottery in Cambridgeshire* (Spoerry 2016).
 This scheme is here used in the description and identification of sherds and provides background information on the variability of fabrics and vessel forms in the region.
- B.8.4 The Anglo-Saxon pottery assemblage was quantified using an Access database. All sherds were counted, weighed and classified on a context-by-context basis. A summary catalogue of the pottery is included below, organised by context number (Table 10).

Factual Data

- B.8.5 The pottery was recovered from the fills of five ditches (Table 10) and sherds were low to moderately abraded. The overall average sherd weigh is high to medium for rural sites (cf. 14.5g from Linton, Bartlow Road Anglo-Saxon assemblage (Sami 2019)).
- B.8.6 The assemblage is formed by quartz tempered and shelly fabrics reflecting the typical regional Middle Anglo-Saxon handmade products, showing affinities with north-east counties.
- B.8.7 The following fabrics were identified:

Early/Middle Anglo-Saxon Quartz, E/MASX(Q). Hard fired, grey to dark-grey surfaces. Moderate well sorted rounded clear grey polycrystalline quartz in a sandy prepared matrix. Rare and small igneous and rocks are visible in some fragments, as well as inclusion of calcareous material. Often with external and internal wet-hand surface finishing.



- **Maxey-type ware**, RMAX. Hard fired dark-brown surfaces and core with abundant fossil shell platelets characterised by the presence of punctate brachiopod fossils typical of the southern products.
- B.8.8 All vessels are hand-made domestic products. Quartz tempered vessel forms include jars and bowls, while Maxey-type ware includes a characteristic 'bar-lug' rim from a large bowl and a straight-sided bowl.
- B.8.9 Sherds present traces of sooting and the base of a quartz tempered vessel has thick organic residue on the internal surface suggesting a primary kitchen use of the pot.

Discussion

B.8.10 This small assemblage of pottery was recovered in very low densities as residual material in the fills of ditches attributed to Periods 2.3-3.2 (Late Saxon to medieval). Although this obviously limits their interpretative significance, the presence of this material does suggest a Middle Saxon presence at the site, and the relatively large mean sherd size may suggest this represents material deposited within the vicinity of a settlement, as opposed to representing material resulting from manuring of holdings at some distance from occupation sites, which are invariably dominated by small, heavily abraded sherds.

Context	Cut	Feature	Phase	Fabric Dsc	Dsc	Form	Quantity	Weight (g)	Residue	Pot Date	Pot Date (max)
286	288	ditch	2.3	MSXQ	base	vessel	1	46	У	650	875
311	309	ditch	2.3	RMAX	rim	vessel	1	21		650	850
349	347	ditch	2.3	RMAX	rim	Bar-lug bowl	1	83		650	850
376	378	ditch	3.4	MSXQ	wall	vessel	1	6		650	675
469	468	ditch	3.2	MSXQ	wall	vessel	1	17		650	875

Table 10. Catalogue of Early to Middle Saxon pottery

B.9 Late Saxon, medieval and post-medieval pottery

By Carole Fletcher

Introduction

B.9.1 Archaeological works produced a moderately sized hand-excavated post-Roman pottery assemblage of 490 sherds weighing 6.402kg, from across the areas excavated. Roman and Early-Middle Saxon pottery are discussed in App. B.7 and B.8. An additional 76 sherds of post-Roman pottery (751g) were recovered during the evaluation and have reported elsewhere (S. Anderson in Jackson 2017, and see below). There is a moderate Late Saxon-early medieval and distinct early medieval and high medieval groups of sherds, although few glazed wares are present, suggesting the assemblage is at the earlier end of the high medieval period. There is almost no late medieval pottery present, although some sherds of post-medieval and early modern pottery were recovered. Some of the pottery has been reworked and there is some residuality.



Methodology

- B.9.2 The Prehistoric Ceramics Research Group (PCRG), Study Group for Roman Pottery (SGRP), The Medieval Pottery Research Group (MPRG), 2016 A Standard for Pottery Studies in Archaeology and the MPRG A guide to the classification of medieval ceramic forms (MPRG 1998) act as standards.
- B.9.3 Rapid recording was carried out using OA East's in-house system, based on that previously used at the Museum of London. Fabric classification has been carried out for all previously described post-medieval types, using Cambridgeshire fabric types where possible (Spoerry 2016). The Museum of London fabric series (MoLA 2014) acts as a basis for post-1700 fabrics.
- B.9.4 All sherds have been counted, classified by fabric, weighed on a context-by-context basis and recorded in an Access database. At the point of writing the entire assemblage had only been partially phased therefore the assemblage is discussed only in broad terms. The pottery and archive are curated by OA East until formal deposition or dispersal.

Results

- B.9.5 An assemblage of 490 sherds, weighing 6.402kg, was recovered, the condition of which is moderately abraded to abraded, and the average sherd weight is low to moderate at approximately 13g.
- B.9.6 The excavation was carried out by hand and selection made through standard sampling strategies on a feature-by-feature basis. There are not expected to be any inherent biases. The bulk of the material is from stratified contexts, although much of the assemblage has undergone reworking.
- B.9.7 Post-Roman fabrics present are listed in Table 11 below.

Fabric	Fabric Code	Sherd	Weight	%
		Count	(kg)	Weight
Bourne D ware	BOND	1	0.005	0.1
Brill/Boarstall ware	BRIL	1	0.001	<0.1
Colne-type ware from Caxton and Bourn	CONCAX	2	0.028	0.4
Creamware	CREA	2	0.024	0.4
Developed St Neots-type ware	DNEOT	70	1.002	15.7
Early Medieval Essex Micaceous Sandy ware	EMEMS	2	0.007	0.1
Early Medieval Shelly ware	EMSW	1	0.005	0.1
Early Medieval wares	EMW	13	0.047	0.7
East Anglian Redwares	EAR	28	0.709	11.1
Grimston Glazed ware	GRIM	5	0.034	0.5
Huntingdonshire Early Medieval ware	HUNEMW	7	0.016	0.2
Huntingdonshire Fen Sandy ware	HUNFSW	9	0.04	0.6
Huntingdon Thetford-type ware	HTHET	1	0.02	0.3
Late Medieval Ely ware	LMEL	1	0.017	0.3
Late Slipped Kitchen wares	LSKW	2	0.01	0.2
Lyveden A type Shelly ware	LYVA	3	0.065	1.0
Medieval Ely ware	MEL	9	0.152	2.4
Medieval Sandy Greyware	MSGW	35	0.277	4.3
Medieval Sandy ware	MSW	1	0.004	0.1



Fabric	Fabric Code	Sherd	Weight	%
		Count	(kg)	Weight
Modern Redware	MODR	1	0.009	0.1
Oolitic Sandy ware	OLSW	1	0.006	0.1
Pearlware	PEARL	2	0.005	0.1
Pearlware with transfer-printed decoration	PEARL TR	1	0.002	<0.1
Post-medieval Redwares	PMR	4	0.128	2.0
Post-medieval Redwares-Country ware	PMR-Country ware	2	1.248	19.5
Refined White Earthenware with transfer- printed decoration	RFWE TR	1	0.004	0.1
Shelly wares	SHW	5	0.026	0.4
South Cambridgeshire Grog-Tempered Sandy ware	SCAGS	1	0.011	0.2
South-east Fenland Medieval Calcareous Buff ware	SEFEN	17	0.106	1.7
South-west Cambridgeshire Sandy ware	SCAMSW	1	0.02	0.3
St Neots-type ware	NEOT	48	0.37	5.8
St Neots-type ware-Developed St Neots-type ware	NEOT-DNEOT	68	0.799	12.5
Staffordshire-type Slipware	STSL	1	0.005	0.1
Stamford ware	STAM	2	0.023	0.4
Thetford-type wares	THET	115	1.045	16.3
Unprovenanced	UNID	24	0.106	1.7
Unprovenanced glazed wares	UPG	3	0.026	0.4
Total		490	6.402	

Table 11. Post-Roman fabrics present in the assemblage

- B.9.8 The assemblage comes from the surrounding counties, including Lincolnshire, Northamptonshire, and East Anglia in general. Thetford-type wares mostly from Norfolk, and St Neots and Developed St Neots wares form the bulk of the assemblage, both by count and weight. St Neots and Developed St Neots wares production is located within a wide region, including parts of Bedfordshire, Buckinghamshire and Northamptonshire. Cambridgeshire fabrics only form a small part of the assemblage, due mostly to the assemblage's early nature. No imported wares were identified. A similar range of fabrics were identified in the evaluation assemblage (Anderson 2019).
- B.9.9 The various post-Roman pottery fabrics/wares have been assigned to broad ceramic phases, as detailed in Table 12, with nomenclature and approximate dating of each phase following Spoerry (2016). A number of features produced only what might previously have been called Late Saxon fabrics, however, these fabrics continue post-1050 and are here considered Late Saxon-early medieval, although it is possible that this material is pre-conquest. Few sherds are diagnostic, some are deposited in later features and most have undergone reworking. The bulk of the ceramic assemblage is Late Saxon-early medieval, with significant early medieval and medieval assemblages. The large (by weight) early modern assemblage is almost entirely due to a single large sherd (1.004kg, ditch 799, group 724) from a large 19th century redware bowl in a continuation of the post-medieval redware tradition.



Ceramic Phase	Fabrics	Sherd	Sherd	% Weight
		Count	Wt.(kg)	
Late Saxon-Early medieval (c. AD 850/875-1200)	HTHET, NEOT, NEOT-DNEOT, STAM, THET	234	2.257	35.3
Early medieval (c. AD 1050 - 1200)	DNEOT, EMEMS, EMSW, EMW, HUNEMW, HUNFSW, SCAGS, SCAMSW	104	1.148	17.9
High medieval (c. AD 1200 - 1350)	BRIL, EAR, GRIM, LYVA, MEL, MSGW, MSW, OLSW, SEFEN, SHW, UPG	107	1.399	21.9
Late medieval (c. AD 1350 - 1500)	CONCAX, LMEL	3	0.045	0.7
Post-medieval	BOND, PMR	5	0.133	2.1
Early Modern-Modern	CREA, LSKW, MODR, PEARL, PEARL TR, PMR-Country ware, RFWE TR, STSL, UPG	13	1.314	20.5
Fabrics of uncertain date (Late Saxon-medieval)	UNID	24	0.106	1.7
Total		490	6.402	

Table 12. Post-Roman Assemblage by Ceramic Phase

- B.9.10 Table 13 summarises the quantity of pottery by ceramic phase from each of the sites stratigraphically defined phases (sub-periods). In general terms, and notwithstanding the presence of small quantities of intrusive material in earlier contexts, the occurrence of the pottery corresponds well with the stratigraphic sequence, with Late Saxon and Early medieval material dominating in Period 2 and Period 3.2 contexts, and with high medieval pottery only becoming common from Period 3.3. Relatively high levels of residuality are evidenced by the quantities of earlier pottery in Periods 3.3 and 4.1 contexts.
- B.9.11 Vessel forms present are domestic in nature and, even if the 19th century large redware bowl sherd is excluded from calculations, bowls and dishes are predominant. This is in part due to the early nature of the ceramic assemblage, which includes 49 sherds (1.066kg) from a minimum of 16 St Neots and Developed St Neots bowls or dishes. Jars are the second largest group, including Thetford-type ware vessels, with jugs only modestly represented. Sooted examples of each vessel form were recovered, suggesting their use in food preparation. No specialist vessels were recovered, and no imported wares were present.

Ceramic Phase	Quantities	Unphased	Period 2.1	Period 2.2	Period 2.3	Period 3.1	Period 3.2	Period 3.3	Period 3.4	Period 4.1	Period 4.2
Late Saxon-Early	Sherd Count		6	41	40	24	70	32	9	12	
medieval	Weight (kg)		0.052	0.335	0.347	0.424	0.664	0.293	0.085	0.057	
Early medieval	Sherd Count			12	8	1	52	17		6	8
	Weight (kg)			0.322	0.084	0.012	0.511	0.147		0.033	0.039
High medieval	Sherd Count			1	2		1	54	8	40	1
	Weight (kg)			0.055	0.016		0.004	0.55	0.055	0.702	0.017
Late medieval	Sherd Count							2		1	
	Weight (kg)							0.028		0.017	
Post-medieval	Sherd Count									5	
	Weight (kg)									0.133	



Ceramic Phase	Quantities	Unphased	Period 2.1	Period 2.2	Period 2.3	Period 3.1	Period 3.2	Period 3.3	Period 3.4	Period 4.1	Period 4.2
Early modern-	Sherd Count									10	3
modern	Weight (kg)									1.044	0.27
Uncertain Late	Sherd Count	5		2	5	1	2	7	1	1	
Sax med	Weight (kg)	0.023		0.009	0.03	0.002	0.01	0.026	0.001	0.005	

Table 13. Summary of Post-Roman pottery by Ceramic Phase (see Table 12) and site phasing sequence.

- B.9.12 The stratified post-Roman pottery was dispersed across the site, with the bulk of the assemblage recovered from ditches and gullies (353 sherds, 4.963kg) and pits (102 sherds, 1.114kg).
- B.9.13 The only single feature that produced a moderate assemblage was ditch 799 (32 sherds, 1.723kg, group 724) however this weight of pottery is the result of a single large sherd from a 19th century bowl. Other features produced only relatively small assemblages. Ditch group 724 produced 41 sherds of pottery, weighing 1.852kg. However, most of the groups produced fewer than 10 sherds and, apart from groups 724, 427 and 325, all produced less than 0.300kg of pottery.

Discussion

- B.9.14 This is a relatively small and unremarkable assemblage, but it illustrates that much of the activity at the site occurred during the Late Saxon and early medieval period, with a possible change of land use during the 14th century. The composition of the assemblage is very similar to the small assemblage of 76 sherds (751g) of post-Roman recovered during the earlier evaluation of the site (reported by S. Anderson in Jackson 2017), which was dominated by Thetford-type Ware and St Neots Ware (50 sherds in total) alongside smaller quantities of early and high medieval wares alongside some post-medieval/modern material.
- B.9.15 The paucity of purely late medieval fabrics suggests possible complete abandonment by the early 15th century. It is possible that the decline in activity has more than one cause. The establishment of the Church of St John the Evangelist in c.1160, lying 100m to the south of the site and Waterbeach Abbey, established in the late 13th century and disused by 1351 (https://en.wikipedia.org/wiki/Waterbeach_Abbey), 150m to the south of the site may both have impacted on the site's usage.
- B.9.16 Apparently, the vicarage attached to St John the Evangelist was not well endowed, in the Middle Ages having only the small tithes of the peasantry and little land (https://www.british-history.ac.uk/vch/cambs/vol9/pp257-262#p5). The plagues of the 14th century may also have caused a contraction of the settlement and a change in land usage.

Context	Cut	Phase	Group	Fabric Code	MNV	Sherd Count	Weight (kg)	Context Date
204	206	2.3	201	THET	1	1	0.015	840-1150



209 210 2.3 0 THET	Context	Cut	Phase	Group	Fabric Code	MNV	Sherd Count	Weight (kg)	Context Date
1						-			
244									
249				208	NEOT	1	1	0.003	
271 270						1			
279 278									
279 278				245		_			
284 285 2.1 285 NEOT									
285 285 2.1 285 THET						_			875-1100
286 288 2.3 288 THET									
287 288 2.3 288 THET						_			
193 91 22 291 NEOT						_			0.0 ==00
293 91									875-1100/1150
294 291 2.2 291 DNEOT 2 2 0.009 1050-1150									
294 291 2.2 291 THET						_			1050-1150
306 302 2.3 309 THET						_			1000 1100
310 309 2.3 309 THET						_			840-1150
311 309 2.3 309 UNID 1 1 0.005 315 283 0 0 UNID 1 1 0.01 320 320 2.3 301 THET 1 1 0.004 875-1100 322 320 2.3 301 NEOT 1 1 0.004 875-1100 322 320 2.3 301 UNID 0 1 0.002 324 321 2.2 0 THET 1 1 0.009 840-1150 328 327 4.1 327 MSGW 1 1 0.009 150-1800 328 327 4.1 327 PMR 1 1 0.004 331 330 2.3 309 NEOT 1 1 0.004 331 330 2.3 309 NEOT 1 1 0.004 332 329 2.2 291 DNEOT 1 1 0.003 332 329 2.2 291 DNEOT 1 1 0.001 332 329 2.2 291 NEOT 1 1 0.001 333 329 2.2 291 NEOT 1 1 0.001 333 329 2.2 291 THET 1 1 0.001 333 329 2.2 291 THET 1 1 0.003 333 339 338 3.3 338 DNEOT 1 1 0.003 339 338 3.3 338 DNEOT 2 4 0.034 341 340 3.3 340 MEL 1 1 0.003 341 340 3.3 340 MEL 1 1 0.003 341 340 3.3 340 NEOT 1 2 0.013 341 340 3.3 340 NEOT 1 0.000 150-1250 343 344 345 3.3 340 NEOT 1 2 0.013 344 330 2.3 309 HUNEMW 1 1 0.000 150-1250 346 345 3.3 340 NEOT 1 2 0.013 347 348 349 2.3 359 HUNEMW 1 1 0.004 875-1100 or 105 352 354 3.3 338 NEOT 1 1 0.004 875-1100 or 105 353 354 3.3 335 HET 1 1 0.004 875-1100 or 105 353 354 3.3 335 NEOT 1 1 0.006 1150									
315 283 0 0 0 0 UNID 1 1 1 0.01 840-1500 320 320 2.3 301 THET 1 1 1 0.003 840-1150 322 320 2.3 301 NEOT 1 1 1 0.004 875-1100 322 320 2.3 301 UNID 0 1 0.002 324 321 2.2 0 1 THET 1 1 0.009 840-1150 328 327 4.1 327 MSGW 1 1 1 0.009 1550-1800 328 327 4.1 327 NEOT-DNEOT 1 3 0.008 328 327 4.1 327 PMR 1 1 1 0.084 331 330 2.3 309 NEOT 1 1 0.015 875-1100 332 329 2.2 291 DNEOT 1 1 0.003 1050-1150 332 329 2.2 291 NEOT 1 1 0.003 1050-1150 333 329 2.2 291 NEOT 1 1 0.003 1050-1150 333 329 2.2 291 NEOT 1 1 0.003 1050-1150 333 329 2.2 291 THET 1 1 0.002 333 329 2.2 291 THET 1 1 0.005 875-1100/1150 333 329 2.2 291 NEOT 1 1 0.005 875-1100/1150 333 339 338 3.3 338 THET 1 1 0.003 331 339 320 2.2 291 THET 1 1 0.003 331 330 0.2 0.3 309 NEOT 2 4 0.034 1050-1250 (1050 331 330 330 0.3 330 NEOT 2 0.003 1050-1150 332 329 2.2 291 THET 1 1 0.003 1050-1150 333 339 340 0.000 1 1 1 0.003 1050-1150 334 340 3.3 340 NEOT 1 1 0.003 1050-1250 (1050 341 340 3.3 340 NEOT 2 0.003 1050-1250 (1050 341 340 3.3 340 NEOT 1 2 0.003 130-1350 (c.1150 341 340 3.3 340 NEOT 1 2 0.003 130-1350 (c.1150 341 340 3.3 340 NEOT 1 2 0.003 130-1350 (c.1150 344 330 2.3 309 HUNEW 1 1 0.000 130-1350 (c.1150 344 330 2.3 309 HUNEW 1 1 0.000 130-1350 (c.1150 344 330 2.3 309 HUNEW 1 1 0.000 150-1250 344 330 2.3 309 HUNEW 1 1 0.000 150-1250 344 330 2.3 309 HUNEW 1 1 0.000 150-1250 344 330 3.3 340 NEOT 1 4 0.002 344 330 2.3 309 HUNEW 1 1 0.002 150-1250 344 330 3.3 340 NEOT 1 1 0.003 150-1250 344 330 3.3 340 NEOT 1 1 0.003 150-1250 344 330 3.3 340 NEOT 1 1 0.004 875-1100 or 105 352 354 3.3 338 NEOT-DNEOT 1 1 0.004 875-1100 or 105 353 354 3.3 355 HETT 1 1 0.006 373 371 3.3 325 NEOT 0 1 1 0.006 375-1100 or 105 373 371 3.3 325 NEOT 0 1 1 0.001 150-1550 373 371 3.3 325 NEOT 0 1 1 0.001 150-1550 373 371 3.3 325 NEOT 0 1 1 0.001 150-1550 373 371 3.3 325 NEOT 0 1 1 0.001 150-1550 373 371 3.3 325 NEOT 0 1 1 0.001 150-1550 373 371 3.3 325 NEOT 0 1 1 0.001 150-1550									040 1130
320 320 2.3 301 THET						_			8/0-1500
322 320 2.3 301 NEOT 1 1 0.004 875-1100									
322 320 2.3 301 UNID 0 1 1 0.002 324 321 2.2 0 THET 1 1 0.009 840-1150 328 327 4.1 327 MSGW 1 1 1 0.009 1550-1800 328 327 4.1 327 MSGW 1 1 1 0.009 1550-1800 328 327 4.1 327 PMR 1 1 0.084 328 327 4.1 327 PMR 1 1 1 0.084 330 2.3 309 NEOT 1 1 1 0.015 875-1100 331 330 2.3 309 NEOT 1 1 1 0.015 875-1100 332 329 2.2 291 DNEOT 1 1 1 0.003 1050-1150 332 329 2.2 291 NEOT 1 1 1 0.001 329 2.2 291 THET 1 1 0.002 3333 329 2.2 291 THET 1 1 0.002 3333 329 2.2 291 THET 1 1 0.005 875-1100/1150 333 339 388 3.3 338 DNEOT 2 4 0.034 1050-1250 (1050 339) 338 3.3 338 DNEOT 2 4 0.034 1050-1250 (1050 339) 338 3.3 338 DNEOT 2 4 0.034 1050-1250 (1050 339) 338 3.3 338 DNEOT 2 2 4 0.034 1050-1250 (1050 331 340) 3.3 340 MEL 1 1 0.009 130-1350 (c.1151 341 340 3.3 340 NEOT 1 1 2 0.013 341 340 3.3 340 NEOT 1 2 0.013 341 340 3.3 340 NEOT 1 1 2 0.013 341 340 3.3 340 NEOT 1 1 2 0.013 341 340 3.3 340 NEOT 1 1 2 0.013 341 340 3.3 340 NEOT 1 1 2 0.013 341 340 3.3 340 NEOT 1 1 0.002 341 340 3.3 340 NEOT 1 1 0.002 341 341 340 3.3 340 NEOT 1 1 0.002 341 341 340 3.3 340 NEOT 1 1 0.002 341 341 340 3.3 340 NEOT 1 1 0.002 341 341 340 3.3 340 NEOT 1 1 0.002 341 341 340 3.3 340 NEOT 1 1 0.002 341 341 340 3.3 340 NEOT 1 1 0.002 341 341 340 3.3 340 NEOT 1 1 0.002 341 341 340 3.3 340 NEOT 1 1 0.002 341 341 340 3.3 340 NEOT 1 1 0.002 341 341 340 3.3 340 NEOT 1 1 0.002 341 341 340 3.3 340 NEOT 1 1 0.002 341 341 340 3.3 340 NEOT 1 1 0.002 341 341 340 3.3 340 NEOT 1 1 0.002 341 341 340 3.3 340 NEOT 1 1 0.002 341 341 340 3.3 340 NEOT 1 1 0.002 341 341 340 3.3 340 NEOT 1 1 0.002 341 341 340 3.3 340 NEOT 1 1 0.002 341 341 340 3.3 340 NEOT 1 1 0.003 1050-1250 344 330 2.3 309 HUNEMW 1 1 1 0.002 351 351 351 351 351 351 351 351 351 351									
324 321 2.2 0 THET 1 1 0.009 840-1150 328 327 4.1 327 MSGW 1 1 1 0.009 1550-1800 328 327 4.1 327 NEOT-DREOT 1 3 0.008 328 327 4.1 327 PMR 1 1 0.084 331 330 2.3 309 NEOT 1 1 0.015 875-1100 332 329 2.2 291 DNEOT 1 1 0.003 1500-1150 332 329 2.2 291 NEOT 1 1 0.003 1500-1150 332 329 2.2 291 NEOT 1 1 0.001 875-1100/1150 332 329 2.2 291 THET 1 1 0.002 333 339 2.2 291 NEOT 1 1 1 0.003 1500-1150 333 329 2.2 291 THET 1 1 0.003 1500-1150 333 329 2.2 291 NEOT 1 1 1 0.005 875-1100/1150 333 339 329 2.2 291 NEOT 1 1 1 0.005 875-1100/1150 333 339 328 3.3 338 DNEOT 2 4 0.034 1050-1250 (1050 1050 1050 1050 1050 1050 1050 1						_			012-1100
328 327 4.1 327 MSGW 1 1 1 0.009 1550-1800 328 327 4.1 327 NEOT-DNEOT 1 3 0.008 328 327 4.1 327 PMR 1 1 1 0.084 331 330 2.3 309 NEOT 1 1 1 0.015 875-1100 332 329 2.2 291 DNEOT 1 1 0.003 1050-1150 332 329 2.2 291 NEOT 1 1 0.001 332 329 2.2 291 NEOT 1 1 0.001 333 33 329 2.2 291 NEOT 1 1 0.001 333 33 339 328 3.3 338 DNEOT 2 4 0.034 1050-1250 (1050 339 338 3.3 338 DNEOT 2 4 0.034 1050-1250 (1050 339 338 3.3 338 DNEOT 2 4 0.003 1050-1250 (1050 341 340 3.3 340 MEL 1 1 0.009 130-1350 (c.1150 341 340 3.3 340 NEOT 1 2 0.013 341 340 3.3 340 NEOT 1 2 0.013 341 340 3.3 340 NEOT 1 1 0.002 341 340 3.3 340 NEOT 1 1 0.003 341 340 3.3 340 NEOT 1 1 0.002 341 342 343 343 340 NEOT 1 1 0.002 343 344 330 2.3 309 HUNEMW 1 1 0.0002 344 330 2.3 309 HONW 1 1 1 0.0002 345 345 3.3 340 NEOT-DNEOT 1 1 0.008 875-1100 or 105 352 354 3.3 338 NEOT-DNEOT 1 1 0.004 875-1100 or 105 353 354 3.3 338 NEOT-DNEOT 1 1 0.004 875-1100 or 105 353 354 3.3 355 NEOT 0 1 0.001 875-1100 or 105 370 388 33 33 SEFEN 1 1 1 0.006 1150-150 373 371 3.3 325 NEOT 0 1 0.001 10.001 373 371 3.3 325 NEOT 0 1 0.001 10.001 373 371 3.3 325 NEOT 0 1 0.001 10.001 373 371 3.3 325 NEOT 0 1 0.001 10.001 376 378 3.4 378 NEGW 1 1 1 0.004 1150-1500									940-1150
328 327 4.1 327 NEOT-DNEOT 1 3 0.008 328 327 4.1 327 PMR 1 1 1 0.008 331 330 2.3 309 NEOT 1 1 1 0.003 1050-1150 332 329 2.2 291 DNEOT 1 1 1 0.001 332 329 2.2 291 NEOT 1 1 1 0.002 333 339 22 2.2 291 NEOT 1 1 1 0.002 333 339 2.2 291 THET 1 1 1 0.002 333 329 2.2 291 THET 1 1 1 0.002 333 339 2.2 291 THET 1 1 1 0.005 875-1100/1150 333 339 329 2.2 291 THET 1 1 1 0.003 333 339 338 3.3 338 DNEOT 2 4 0.034 1050-1250 (1050) 339 338 3.3 338 DNEOT 2 4 0.034 1050-1250 (1050) 339 338 3.3 338 DNEOT 2 0 4 0.003 1050-1250 (1050) 331 341 340 3.3 340 MEL 1 1 1 0.009 130-1350 (c.1150) 341 340 3.3 340 NEOT 1 2 0.013 341 340 3.3 340 NEOT 1 2 0.013 341 340 3.3 340 NEOT 1 1 2 0.013 341 340 3.3 340 NEOT 1 1 0.002 341 340 3.3 340 SEFEN 1 1 4 0.022 341 340 3.3 340 UNID 1 1 0.002 344 330 2.3 309 EMW 1 1 1 0.003 1050-1250 344 330 2.3 309 EMW 1 1 1 0.002 344 330 2.3 309 HUNEMW 1 1 0.003 1050-1250 344 330 2.3 339 HUNEMW 1 1 0.001 1050-1250 344 330 3.3 340 NEOT 1 2 0.013 346 345 3.3 340 DNEOT 1 2 0.013 347 349 347 343 340 SEFEN 1 1 0.004 1050-1250 340 344 330 2.3 309 EMW 1 1 0.000 1050-1250 344 330 3.3 340 HUNEMW 1 1 0.000 1050-1250 344 330 3.3 340 HUNEMW 1 1 0.007 1050-1250 344 330 3.3 340 HUNEMW 1 1 0.007 1050-1250 346 345 3.3 340 HUNEMW 1 1 0.007 1050-1250 352 354 3.3 338 NEOT-DNEOT 1 3 0.004 875-1100 or 105 352 354 3.3 355 HHET 1 1 0.004 373 371 3.3 325 DNEOT 1 1 0.002 360 359 3.1 0 NEOT-DNEOT 1 1 0.002 875-1100 or 105 373 371 3.3 325 DNEOT 1 1 0.006 373 371 3.3 325 DNEOT 1 1 0.006 373 371 3.3 325 DNEOT 1 1 0.001 373 371 3.3 325 DNEOT 1 1 0.004 373 371 3.3 325 DNEOT 1 1 0.004 373 371 3.3 325 DNEOT 1 1 0.009 376 378 3.4 3.7 SMSW 1 1 0.0004 377 378 3.4 3.7 SMSW 1 1 0.0004 378 378 3.4 3.7 SMSW 1 1 0.0004 379 378 3.4 3.7 SMSW 1 1 0.0004 376 378 3.4 3.7 SMSW 1 1 0.0005						_			
328 327 4.1 327 PMR 1 1 1 0.084 331 330 2.3 309 NEOT 1 1 1 0.015 875-1100 332 329 2.2 291 DNEOT 1 1 1 0.001 332 329 2.2 291 NEOT 1 1 1 0.001 332 329 2.2 291 THET 1 1 0.002 333 329 2.2 291 THET 1 1 0.003 333 339 38 3.3 338 DNEOT 2 4 0.034 1050-1250 (1050 339 338 3.3 338 THET 1 1 0.003 341 340 3.3 340 MEL 1 1 1 0.009 130-1350 (c.1150 341 340 3.3 340 NEOT 1 2 0.015 341 340 3.3 340 NEOT 1 2 0.015 341 340 3.3 340 NEOT 1 1 0.003 341 340 3.3 340 NEOT 1 1 0.002 344 330 2.3 309 HUNEMW 1 1 0.002 344 330 2.3 309 HUNEMW 1 1 0.003 1050-1250 346 345 3.3 340 DNEOT 1 4 0.002 346 345 3.3 340 DNEOT 1 1 0.003 1050-1250 346 345 3.3 340 DNEOT 1 1 0.003 1050-1250 346 345 3.3 340 DNEOT 1 1 0.003 1050-1250 346 345 3.3 340 DNEOT 1 1 0.003 1050-1250 347 348 349 347 2.3 347 THET 1 1 0.003 1050-1250 348 349 347 2.3 347 THET 1 1 0.003 1050-1250 349 347 2.3 347 THET 1 1 0.003 1050-1250 349 347 2.3 347 THET 1 1 0.003 1050-1250 352 354 3.3 338 NEOT-DNEOT 1 1 0.004 875-1100 or 105 353 354 3.3 355 HET 1 1 0.006 373 371 3.3 325 DNEOT 1 1 0.001 875-1100 or 105 373 371 3.3 325 DNEOT 1 1 0.001 875-1100 or 105 373 371 3.3 325 DNEOT 1 1 0.006 376 378 3.4 378 MSGW 1 1 0.004 1150-1500 376 378 3.4 378 MSGW 1 1 0.004 1150-1500						_			1550-1800
331 330 2.3 309 NEOT 1 1 1 0.015 875-1100 332 329 2.2 291 DNEOT 1 1 1 0.003 1050-1150 332 329 2.2 291 THET 1 1 1 0.002 333 329 2.2 291 THET 1 1 1 0.015 875-1100/1150 333 329 2.2 291 THET 1 1 1 0.015 875-1100/1150 333 329 2.2 291 THET 1 1 0.015 875-1100/1150 333 329 2.2 291 THET 1 1 0.003 1050-1250 (1050 333 329 2.2 291 THET 1 1 0.003 1050-1250 (1050 339 338 3.3 338 DNEOT 2 4 0.034 1050-1250 (1050 339 338 3.3 338 THET 1 1 0.009 130-1350 (c.1150 341 340 3.3 340 MSGW 2 2 2 0.015 341 340 3.3 340 MSGW 2 2 2 0.015 341 340 3.3 340 NEOT 1 2 0.013 341 340 3.3 340 SEFEN 1 4 0.022 341 340 3.3 340 SEFEN 1 1 0.002 344 330 2.3 309 EMW 1 1 0.002 344 330 2.3 309 EMW 1 1 0.002 344 330 2.3 309 HUNEMW 1 1 0.007 1050-1250 346 345 3.3 340 DNEOT 1 4 0.022 346 345 3.3 340 DNEOT 1 2 0.018 1050-1250 346 345 3.3 340 DNEOT 1 1 0.008 1050-1250 346 345 3.3 340 DNEOT 1 1 0.008 1050-1250 346 345 3.3 340 DNEOT 1 1 0.008 1050-1250 346 345 3.3 340 DNEOT 1 1 0.008 1050-1250 346 345 3.3 340 DNEOT 1 1 0.008 1050-1250 347 349 347 2.3 347 THET 1 2 0.017 840-1150 352 354 3.3 338 NEOT-DNEOT 1 3 0.004 875-1100 or 105 353 354 3.3 355 UNID 1 1 0.002 875-1100 or 105 353 354 3.3 355 UNID 1 1 0.002 875-1100 or 105 363 373 371 3.3 325 DNEOT 1 1 0.008 1200-1400 373 371 3.3 325 DNEOT 1 1 0.001 875-1100 or 105 373 371 3.3 325 DNEOT 1 1 0.001 875-1100 or 105 373 371 3.3 325 DNEOT 1 1 0.001 875-1100 or 105 373 371 3.3 325 DNEOT 1 1 0.001 875-1100 or 105 373 371 3.3 325 DNEOT 1 1 0.001 875-1100 or 105 373 371 3.3 325 DNEOT 1 1 0.001 875-1100 or 105 373 371 3.3 325 DNEOT 1 1 0.001 875-1100 or 105 373 371 3.3 325 DNEOT 1 1 0.000 875-1100 or 105 373 371 3.3 325 DNEOT 1 1 0.001 875-1100 or 105 376 378 3.4 378 MSW 1 1 0.004 875-1100 or 105									
332 329 2.2 291 DNEOT 1 1 0.003 1050-1150						_			
332 329 2.2 291 NEOT 1 1 1 0.001 332 329 2.2 291 THET 1 1 1 0.002 333 329 2.2 291 THET 1 1 1 0.003 875-1100/1150 333 329 2.2 291 THET 1 1 4 0.043 339 338 3.3 338 DNEOT 2 4 0.034 1050-1250 (1050) 339 338 3.3 338 THET 1 1 1 0.003 341 340 3.3 340 MEL 1 1 1 0.009 130-1350 (c.1150) 341 340 3.3 340 MSGW 2 2 2 0.015 341 340 3.3 340 NEOT 1 2 0.013 341 340 3.3 340 NEOT 1 1 2 0.013 341 340 3.3 340 NEOT 1 1 0.002 341 340 3.3 340 UNID 1 1 0.002 344 330 2.3 309 EMW 1 1 0.000 150-1250 344 330 2.3 309 HUNEMW 1 1 0.003 1050-1250 344 330 2.3 309 HUNEMW 1 1 0.003 1050-1250 344 330 3.3 340 DNEOT 1 1 0.003 1050-1250 344 330 3.3 340 DNEOT 1 1 0.008 1050-1250 344 330 3.3 340 DNEOT 1 1 0.007 1050-1250 346 345 3.3 340 DNEOT 1 1 0.008 1050-1200 or 13 346 345 3.3 340 DNEOT 1 1 0.008 1050-1200 or 13 346 345 3.3 340 DNEOT 1 1 0.008 875-1100 or 105 352 354 3.3 338 NEOT-DNEOT 1 1 0.004 875-1100 or 105 352 354 3.3 354 UNID 1 1 0.002 360 359 3.1 0 NEOT-DNEOT 1 1 0.008 875-1100 or 105 370 368 3.3 352 DNEOT 1 1 0.004 875-1100 or 105 373 371 3.3 325 EAR 1 1 0.006 376 378 3.4 378 MSW 1 1 1 0.009 1150-1500 376 378 3.4 378 MSW 1 1 1 0.004 376 378 3.4 378 MSW 1 1 1 0.004 377 378 3.4 378 MSW 1 1 1 0.004 378 378 3.4 378 MSW 1 1 1 0.004 379 378 3.4 378 MSW 1 1 1 0.004 370 378 3.4 378 MSW 1 1 1 0.004 371 372 378 3.4 378 MSW 1 1 1 0.004 373 371 3.3 325 SHW 1 1 2 0.015						_			
332 329 2.2 291 THET						_			1050-1150
333 329 2.2 291 NEOT									
333 329 2.2 291 THET						_			
339 338 3.3 338 DNEOT 2 4 0.034 1050-1250 (1050 339 338 3.3 338 THET 1 1 1 0.003 341 340 3.3 340 MEL 1 1 1 0.009 130-1350 (c.1150 341 340 3.3 340 MSGW 2 2 2 0.015 341 340 3.3 340 NEOT 1 2 0.013 341 340 3.3 340 SEFEN 1 4 0.022 341 340 3.3 340 SEFEN 1 1 1 0.002 344 330 2.3 330 EMW 1 1 0.002 344 330 2.3 330 EMW 1 1 0.003 1050-1250 344 330 2.3 330 EMW 1 1 0.003 1050-1250 344 330 2.3 330 EMW 1 1 0.007 1050-1250 346 345 3.3 340 CONCAX 1 1 0.018 1050-1200 or 13 346 345 3.3 340 DNEOT 1 4 0.02 346 345 3.3 340 HUNEMW 1 5 0.007 349 347 2.3 347 THET 1 2 0.017 840-1150 352 354 3.3 338 NEOT-DNEOT 1 3 0.004 875-1100 or 105 353 354 3.3 354 THET 1 1 0.004 353 354 3.3 354 THET 1 1 0.002 375-1100 or 105 353 354 3.3 354 HET 1 1 0.002 375-1100 or 105 353 354 3.3 355 HET 1 1 0.002 375-1100 or 105 370 368 3.3 0 SEFEN 1 1 0.01 875-1100 or 105 370 368 3.3 325 DNEOT 1 1 0.01 875-1100 or 105 373 371 3.3 325 MSGW 1 1 0.004 373 371 3.3 325 MSGW 1 1 0.004 376 378 3.4 378 MSGW						_			875-1100/1150
339 338 3.3 338 THET						_			
341 340 3.3 340 MEL 1 1 0.009 130-1350 (c.1150) 341 340 3.3 340 MSGW 2 2 0.015 341 340 3.3 340 NEOT 1 2 0.013 341 340 3.3 340 SEFEN 1 4 0.022 341 340 3.3 340 SEFEN 1 4 0.022 341 340 3.3 340 UNID 1 1 0.002 341 340 3.3 340 UNID 1 1 0.002 344 330 2.3 309 EMW 1 1 0.003 1050-1250 344 330 2.3 309 EMW 1 1 0.007 1050-1250 344 330 2.3 309 EMW 1 1 0.007 1050-1250 346 345 3.3 <td>339</td> <td>338</td> <td></td> <td>338</td> <td>DNEOT</td> <td>2</td> <td>4</td> <td>0.034</td> <td>1050-1250 (1050-1150)</td>	339	338		338	DNEOT	2	4	0.034	1050-1250 (1050-1150)
341 340 3.3 340 MSGW 2 2 0.015 341 340 3.3 340 NEOT 1 2 0.013 341 340 3.3 340 SEFEN 1 4 0.022 341 340 3.3 340 THET 3 6 0.062 341 340 3.3 340 UNID 1 1 0.002 344 330 2.3 309 EMW 1 1 0.003 1050-1250 344 330 2.3 309 HUNEMW 1 1 0.007 1050-1250 346 345 3.3 340 DNEOT 1 4 0.02 346 345 3.3 340 DNEOT 1 4 0.02 349 347 2.3 347 THET 1 2 0.017 840-1150 352 354 3.3 338 <	339	338		338	THET	1	1	0.003	
341 340 3.3 340 NEOT 1 2 0.013 341 340 3.3 340 SEFEN 1 4 0.022 341 340 3.3 340 THET 3 6 0.062 341 340 3.3 340 UNID 1 1 0.002 344 330 2.3 309 EMW 1 1 0.003 1050-1250 344 330 2.3 309 HUNEMW 1 1 0.007 1050-1250 346 345 3.3 340 CONCAX 1 1 0.001 1050-1200 or 13 346 345 3.3 340 DNEOT 1 4 0.02 346 345 3.3 340 DNEOT 1 4 0.02 349 347 2.3 347 THET 1 2 0.017 840-1150 352 354 3.3<	341	340	3.3	340	MEL	1	1	0.009	130-1350 (c.1150)
341 340 3.3 340 SEFEN 1 4 0.022 341 340 3.3 340 THET 3 6 0.062 341 340 3.3 340 UNID 1 1 0.002 344 330 2.3 309 HUNEMW 1 1 0.007 1050-1250 346 345 3.3 340 CONCAX 1 1 0.007 1050-1250 346 345 3.3 340 CONCAX 1 1 0.018 1050-1200 or 13 346 345 3.3 340 DNEOT 1 4 0.02 346 345 3.3 340 DNEOT 1 4 0.02 346 345 3.3 340 DNEOT 1 4 0.02 349 347 2.3 347 THET 1 2 0.017 840-1150 353 354 3	341	340	3.3	340	MSGW	2	2	0.015	
341 340 3.3 340 THET 3 6 0.062 341 340 3.3 340 UNID 1 1 0.002 344 330 2.3 309 EMW 1 1 0.003 1050-1250 344 330 2.3 309 HUNEMW 1 1 0.007 1050-1250 346 345 3.3 340 CONCAX 1 1 0.018 1050-1200 or 13 346 345 3.3 340 DNEOT 1 4 0.02 346 345 3.3 340 DNEOT 1 4 0.02 349 347 2.3 347 THET 1 2 0.017 840-1150 352 354 3.3 338 NEOT-DNEOT 1 3 0.004 875-1100 or 105 353 354 3.3 354 THET 3 4 0.02 353	341	340	3.3	340	NEOT	1	2	0.013	
341 340 3.3 340 UNID 1 1 0.002 1 0.003 1050-1250 1 0.003 1050-1250 1 0.003 1050-1250 1 0.007 1050-1250 1 0.007 1050-1250 1 0.007 1050-1250 1 0.018 1050-1200 or 13 346 345 3.3 340 DNEOT 1 4 0.02 1 0.018 1050-1200 or 13 1 0.004 1 0.002 1 0.004 1 0.007 1 0.007 1 0.007 1 0.007 1 0.007 1 0.007 1 0.007 1 0.007 1 0.007 1 0.007 1 0.007 1 0.007 1 0.007 1 1 0.007 1 1 0.007 1 1 0.007 1 1 0.007 1 1 0.007 1 1 0.007 1 1 0.007 1 1	341	340	3.3	340	SEFEN	1	4	0.022	
344 330 2.3 309 EMW 1 1 0.003 1050-1250 344 330 2.3 309 HUNEMW 1 1 0.007 1050-1250 346 345 3.3 340 CONCAX 1 1 0.018 1050-1200 or 13 346 345 3.3 340 DNEOT 1 4 0.02 346 345 3.3 340 DNEOT 1 4 0.02 349 347 2.3 347 THET 1 2 0.017 840-1150 352 354 3.3 338 NEOT-DNEOT 1 3 0.004 875-1100 or 105 352 354 3.3 354 THET 1 1 0.004 875-1100 or 105 353 354 3.3 354 THET 1 1 0.02 875-1100 or 105 353 354 3.3 354 THET 3 4 0.02 353 354 3.3 354 UNID 1 <	341	340	3.3	340	THET	3	6	0.062	
344 330 2.3 309 HUNEMW 1 1 0.007 1050-1250 346 345 3.3 340 CONCAX 1 1 0.018 1050-1200 or 13 346 345 3.3 340 DNEOT 1 4 0.02 346 345 3.3 340 HUNEMW 1 5 0.007 349 347 2.3 347 THET 1 2 0.017 840-1150 352 354 3.3 338 NEOT-DNEOT 1 3 0.004 875-1100 or 105 352 354 3.3 338 THET 1 1 0.004 875-1100 or 105 353 354 3.3 354 NEOT-DNEOT 1 1 0.02 875-1100 or 105 353 354 3.3 354 UNID 1 1 0.002 353 354 3.3 354 UNID 1 0.002	341	340	3.3	340	UNID	1	1	0.002	
346 345 3.3 340 CONCAX 1 1 0.018 1050-1200 or 13 346 345 3.3 340 DNEOT 1 4 0.02 346 345 3.3 340 HUNEMW 1 5 0.007 349 347 2.3 347 THET 1 2 0.017 840-1150 352 354 3.3 338 NEOT-DNEOT 1 3 0.004 875-1100 or 105 352 354 3.3 338 THET 1 1 0.004 875-1100 or 105 353 354 3.3 354 NEOT-DNEOT 1 1 0.02 875-1100 or 105 353 354 3.3 354 THET 3 4 0.02 353 354 3.3 354 THET 3 4 0.02 353 354 3.3 354 THET 3 4 0.02									
346 345 3.3 340 DNEOT 1 4 0.02 346 345 3.3 340 HUNEMW 1 5 0.007 349 347 2.3 347 THET 1 2 0.017 840-1150 352 354 3.3 338 NEOT-DNEOT 1 3 0.004 875-1100 or 105 352 354 3.3 338 THET 1 1 0.004 353 354 3.3 354 NEOT-DNEOT 1 1 0.02 875-1100 or 105 353 354 3.3 354 THET 3 4 0.02 353 354 3.3 354 THET 3 4 0.02 353 354 3.3 354 UNID 1 1 0.002 360 359 3.1 0 NEOT-DNEOT 1 1 0.001 875-1100 or 105 370 36	344	330	2.3	309	HUNEMW	1	1	0.007	1050-1250
346 345 3.3 340 HUNEMW 1 5 0.007 349 347 2.3 347 THET 1 2 0.017 840-1150 352 354 3.3 338 NEOT-DNEOT 1 3 0.004 875-1100 or 105 352 354 3.3 334 NEOT-DNEOT 1 1 0.004 353 354 3.3 354 NEOT-DNEOT 1 1 0.02 875-1100 or 105 353 354 3.3 354 THET 3 4 0.02 353 354 3.3 354 UNID 1 1 0.002 360 359 3.1 0 NEOT-DNEOT 1 1 0.01 875-1100 or 105 370 368 3.3 0 SEFEN 1 1 0.005 1150-1550 373 371 3.3 325 EAR 1 1 0.016	346	345	3.3	340	CONCAX	1	1	0.018	1050-1200 or 1300-1400
349 347 2.3 347 THET 1 2 0.017 840-1150 352 354 3.3 338 NEOT-DNEOT 1 3 0.004 875-1100 or 105 352 354 3.3 338 THET 1 1 0.004 353 354 3.3 354 NEOT-DNEOT 1 1 0.02 875-1100 or 105 353 354 3.3 354 THET 3 4 0.02 353 354 3.3 354 UNID 1 1 0.002 353 354 3.3 354 UNID 1 1 0.002 360 359 3.1 0 NEOT-DNEOT 1 1 0.01 875-1100 or 105 370 368 3.3 0 SEFEN 1 1 0.005 1150-1550 373 371 3.3 325 DREOT 1 1 0.016 <t< td=""><td>346</td><td>345</td><td>3.3</td><td>340</td><td>DNEOT</td><td>1</td><td>4</td><td>0.02</td><td></td></t<>	346	345	3.3	340	DNEOT	1	4	0.02	
352 354 3.3 338 NEOT-DNEOT 1 3 0.004 875-1100 or 105 352 354 3.3 338 THET 1 1 0.004 353 354 3.3 354 NEOT-DNEOT 1 1 0.02 875-1100 or 105 353 354 3.3 354 THET 3 4 0.02 353 354 3.3 354 UNID 1 1 0.002 360 359 3.1 0 NEOT-DNEOT 1 1 0.01 875-1100 or 105 370 368 3.3 0 SEFEN 1 1 0.00 150-1550 373 371 3.3 325 DNEOT 1 1 0.03 1200-1400 373 371 3.3 325 EAR 1 1 0.016 373 371 3.3 325 MSGW 1 12 0.114	346	345	3.3	340	HUNEMW	1	5	0.007	
352 354 3.3 338 THET 1 1 0.004 353 354 3.3 354 NEOT-DNEOT 1 1 0.02 875-1100 or 105 353 354 3.3 354 THET 3 4 0.02 353 354 3.3 354 UNID 1 1 0.002 360 359 3.1 0 NEOT-DNEOT 1 1 0.01 875-1100 or 105 370 368 3.3 0 SEFEN 1 1 0.005 1150-1550 373 371 3.3 325 DNEOT 1 1 0.03 1200-1400 373 371 3.3 325 EAR 1 1 0.016 373 371 3.3 325 LYVA 1 1 0.006 373 371 3.3 325 MSGW 1 12 0.114 373 371	349	347	2.3	347	THET	1	2	0.017	840-1150
353 354 3.3 354 NEOT-DNEOT 1 1 0.02 875-1100 or 105 353 354 3.3 354 THET 3 4 0.02 353 354 3.3 354 UNID 1 1 0.002 360 359 3.1 0 NEOT-DNEOT 1 1 0.01 875-1100 or 105 370 368 3.3 0 SEFEN 1 1 0.005 1150-1550 373 371 3.3 325 DNEOT 1 1 0.03 1200-1400 373 371 3.3 325 EAR 1 1 0.016 373 371 3.3 325 LYVA 1 1 0.006 373 371 3.3 325 MSGW 1 12 0.114 373 371 3.3 325 NEOT 0 1 0.001 373 371	352	354	3.3	338	NEOT-DNEOT	1	3	0.004	875-1100 or 1050-1250
353 354 3.3 354 THET 3 4 0.02 353 354 3.3 354 UNID 1 1 0.002 360 359 3.1 0 NEOT-DNEOT 1 1 0.01 875-1100 or 105 370 368 3.3 0 SEFEN 1 1 0.005 1150-1550 373 371 3.3 325 DNEOT 1 1 0.03 1200-1400 373 371 3.3 325 EAR 1 1 0.016 373 371 3.3 325 LYVA 1 1 0.006 373 371 3.3 325 MSGW 1 12 0.114 373 371 3.3 325 NEOT 0 1 0.001 373 371 3.3 325 NEOT 0 1 0.001 373 371 3.3 325	352	354	3.3	338	THET	1	1	0.004	
353 354 3.3 354 UNID 1 1 0.002 360 359 3.1 0 NEOT-DNEOT 1 1 0.01 875-1100 or 105 370 368 3.3 0 SEFEN 1 1 0.005 1150-1550 373 371 3.3 325 DNEOT 1 1 0.03 1200-1400 373 371 3.3 325 EAR 1 1 0.016 373 371 3.3 325 LYVA 1 1 0.006 373 371 3.3 325 MSGW 1 12 0.114 373 371 3.3 325 NEOT 0 1 0.001 373 371 3.3 325 THET 1 1 0.001 373 371 3.3 325 THET 1 1 0.001 373 371 3.3 325	353	354	3.3	354	NEOT-DNEOT	1	1	0.02	875-1100 or 1050-1250
360 359 3.1 0 NEOT-DNEOT 1 1 0.01 875-1100 or 105 370 368 3.3 0 SEFEN 1 1 0.005 1150-1550 373 371 3.3 325 DNEOT 1 1 0.03 1200-1400 373 371 3.3 325 EAR 1 1 0.016 373 371 3.3 325 LYVA 1 1 0.006 373 371 3.3 325 MSGW 1 12 0.114 373 371 3.3 325 NEOT 0 1 0.001 373 371 3.3 325 THET 1 1 0.014 373 371 3.3 325 THET 1 1 0.001 373 371 3.3 325 THET 1 1 0.009 376 378 3.4 378	353	354	3.3	354	THET	3	4	0.02	
360 359 3.1 0 NEOT-DNEOT 1 1 0.01 875-1100 or 105 370 368 3.3 0 SEFEN 1 1 0.005 1150-1550 373 371 3.3 325 DNEOT 1 1 0.03 1200-1400 373 371 3.3 325 EAR 1 1 0.016 373 371 3.3 325 LYVA 1 1 0.006 373 371 3.3 325 MSGW 1 12 0.114 373 371 3.3 325 NEOT 0 1 0.001 373 371 3.3 325 THET 1 1 0.014 373 371 3.3 325 THET 1 1 0.001 373 371 3.3 325 THET 1 1 0.009 376 378 3.4 378	353	354		354		1	1	0.002	
370 368 3.3 0 SEFEN 1 1 0.005 1150-1550 373 371 3.3 325 DNEOT 1 1 0.03 1200-1400 373 371 3.3 325 EAR 1 1 0.016 373 371 3.3 325 LYVA 1 1 0.006 373 371 3.3 325 MSGW 1 12 0.114 373 371 3.3 325 NEOT 0 1 0.001 373 371 3.3 325 THET 1 1 0.019 376 378 3.4 378 MSGW 1 1 0.004 1150-1500 376 378 3.4 378 SHW 1 1 0.004 150-1500 382 381 3.2 381 NEOT-DNEOT 1 8 0.094 875-1100 or 105	360	359	3.1	0	NEOT-DNEOT	1	1	0.01	875-1100 or 1050-1250
373 371 3.3 325 DNEOT 1 1 0.03 1200-1400 373 371 3.3 325 EAR 1 1 0.016 373 371 3.3 325 LYVA 1 1 0.006 373 371 3.3 325 MSGW 1 12 0.114 373 371 3.3 325 NEOT 0 1 0.001 373 371 3.3 325 THET 1 1 0.019 376 378 3.4 378 MSGW 1 1 0.004 1150-1500 376 378 3.4 378 MSW 1 1 0.004 376 378 3.4 378 SHW 1 2 0.015 382 381 3.2 381 NEOT-DNEOT 1 8 0.094 875-1100 or 105	370	368	3.3	0	SEFEN	1	1	0.005	1150-1550
373 371 3.3 325 EAR 1 1 0.016 373 371 3.3 325 LYVA 1 1 0.006 373 371 3.3 325 MSGW 1 12 0.114 373 371 3.3 325 NEOT 0 1 0.001 373 371 3.3 325 THET 1 1 0.019 376 378 3.4 378 MSGW 1 1 0.004 1150-1500 376 378 3.4 378 MSW 1 1 0.004 376 378 3.4 378 SHW 1 2 0.015 382 381 3.2 381 NEOT-DNEOT 1 8 0.094 875-1100 or 105				325					
373 371 3.3 325 LYVA 1 1 0.006 373 371 3.3 325 MSGW 1 12 0.114 373 371 3.3 325 NEOT 0 1 0.001 373 371 3.3 325 THET 1 1 0.019 376 378 3.4 378 MSGW 1 1 0.004 1150-1500 376 378 3.4 378 MSW 1 1 0.004 376 378 3.4 378 SHW 1 2 0.015 382 381 3.2 381 NEOT-DNEOT 1 8 0.094 875-1100 or 105									
373 371 3.3 325 MSGW 1 12 0.114 373 371 3.3 325 NEOT 0 1 0.001 373 371 3.3 325 THET 1 1 0.019 376 378 3.4 378 MSGW 1 1 0.004 1150-1500 376 378 3.4 378 MSW 1 1 0.004 376 378 3.4 378 SHW 1 2 0.015 382 381 3.2 381 NEOT-DNEOT 1 8 0.094 875-1100 or 105									
373 371 3.3 325 NEOT 0 1 0.001 373 371 3.3 325 THET 1 1 0.019 376 378 3.4 378 MSGW 1 1 0.004 1150-1500 376 378 3.4 378 MSW 1 1 0.004 376 378 3.4 378 SHW 1 2 0.015 382 381 3.2 381 NEOT-DNEOT 1 8 0.094 875-1100 or 105									
373 371 3.3 325 THET 1 1 0.019 376 378 3.4 378 MSGW 1 1 0.004 1150-1500 376 378 3.4 378 MSW 1 1 0.004 376 378 3.4 378 SHW 1 2 0.015 382 381 3.2 381 NEOT-DNEOT 1 8 0.094 875-1100 or 105						_			
376 378 3.4 378 MSGW 1 1 0.004 1150-1500 376 378 3.4 378 MSW 1 1 0.004 376 378 3.4 378 SHW 1 2 0.015 382 381 3.2 381 NEOT-DNEOT 1 8 0.094 875-1100 or 105									
376 378 3.4 378 MSW 1 1 0.004 376 378 3.4 378 SHW 1 2 0.015 382 381 3.2 381 NEOT-DNEOT 1 8 0.094 875-1100 or 105						_			1150-1500
376 378 3.4 378 SHW 1 2 0.015 382 381 3.2 381 NEOT-DNEOT 1 8 0.094 875-1100 or 105									
382 381 3.2 381 NEOT-DNEOT 1 8 0.094 875-1100 or 105									
									975_1100 or 1050 1350
אסר ארם בייסטו אינו אינו אינו אינו אינו אינו אינו אינ									
384 383 3.4 378 STAM 1 1 0.015 1100-1500 393 395 2.3 0 THET 1 1 0.003 840-1150									



Context	Cut	Phase	Group	Fabric Code	MNV	Sherd Count	Weight (kg)	Context Date
399	396	3.2	0	NEOT-DNEOT	1	4	0.057	875-1100 Or 1050-1250
400	396	3.2	0	DNEOT	1	1	0.046	1050-1250
400	396	3.2	0	NEOT-DNEOT	0	1	0.015	1000 1200
402	401	3.3	401	UNID	1	1	0.01	840-1500
415	411	3.4	405	THET	1	1	0.029	840-1150
417	409	2.2	291	NEOT-DNEOT	1	1	0.022	875-1100 Or 1050-1250
419	408	2.2	291	EMEMS	1	1	0.002	1050-1200 (1050-1100)
419	408	2.2	291	NEOT	2	2	0.007	
419	408	2.2	291	THET	2	2	0.02	
421	408	2.2	291	NEOT	1	1	0.005	875-1100
422	407	2.1	407	NEOT-DNEOT	1	1	0.009	875-1100 or 1050-1250
423	407	2.1	407	NEOT-DNEOT	1	1	0.011	875-1100 or 1050-1250
423	407	2.1	407	THET	1	1	0.008	
424	407	2.1	407	NEOT-DNEOT	1	1	0.009	875-1100 or 1050-1250
428	427	3.2	427	NEOT	1	1	0.002	875-1100 or 1050-1250
428	427	3.2	427	NEOT-DNEOT	1	1	0.002	
428	427	3.2	427	THET	1	1	0.008	
433	432	3.2	432	EMSW	1	1	0.005	1050-1200 (1050-1150)
433	432	3.2	432	THET	0	1	0.002	
437	434	3.2	434	DNEOT	1	1	0.01	1050-1250 (1050-1150)
437	434	3.2	434	NEOT	1	1	0.005	
437	434	3.2	434	NEOT-DNEOT	1	1	0.031	
437	434	3.2	434	THET	0	2	0.005	
439	438	3.1	0	NEOT	1	1	0.003	875-1100
446	444	3.2	261	UNID	1	1	0.003	840-1500
449	447	3.2	261	THET	1	1	0.004	840-1150
450	451	2.2	291	THET	1	1	0.013	840-1150
452	453	3.2	0	DNEOT	1	1	0.004	1050-1250
454	455	2.3	455	THET	1	1	0.01	840-1150
460	459	3.2	463	NEOT	0	3	0.004	875-1100
461	459	3.2	463	DNEOT	1	16	0.196	1050-1250
461	459	3.2	463	NEOT	1	1	0.002	
464	463	3.3	463	OLSW	1	1	0.006	1100-1400
467	465	2.2	465	DNEOT	2	8	0.308	1050-1250
467	465	2.2	465	NEOT-DNEOT	0	2	0.005	
467	465	2.2	465	THET	1	1	0.013	
469	468	3.2	427	DNEOT	1	4	0.073	1050-1250 (1050-1150)
469	468	3.2	427	NEOT-DNEOT	3	8	0.044	
469	468	3.2	427	THET	4	10	0.099	
481	480	2.2	0	UNID	1	2	0.009	840-1500
489	490	3.2	261	THET	1	1	0.025	840-1150
491	491	2.2	291	THET	1	1	0.004	840-1150
498	458	3.2	458	NEOT	1	1	0.034	1050-1250 (1050-1100)
498	458	3.2	458	NEOT-DNEOT	1	1	0.015	
498	458	3.2	458	THET	1	2	0.005	
507	506	3.2	0	NEOT-DNEOT	1	1	0.006	1050-1250
507	506	3.2	0	THET	1	1	0.005	
509	508	3.2	381	NEOT-DNEOT	1	1	0.003	1050-1250
513	512	3.3	357	LYVA	1	1	0.004	1150-1400
519	515	2.3	0	DNEOT	2	4	0.054	1050-1250 (1050-1100)
519	515	2.3	0	NEOT	1	1	0.02	1050-1250 (1050-1100)
519	515	2.3	0	NEOT-DNEOT	1	1	0.006	
519	515	2.3	0	THET	1	1	0.006	075 4400 1055 1551
520	515	2.3	0	NEOT-DNEOT	1	1	0.006	875-1100 or 1050-1250
528	526	3.2	434	NEOT-DNEOT	1	1	0.008	875-1100 or 1050-1250
528	526	3.2	434	THET	1	1	0.013	1000 1500
530	529	3.4	405	UPG	1	1	0.008	1200-1500
539	537	3.3	0	DNEOT	1	1	0.034	1050-1250 (1050-1150)
539	537	3.3	0	NEOT-DNEOT	2	2	0.014	
539	537	3.3	0	THET	1	1	0.022	
539	537	3.3	0	UNID	1	1	0.003	
544	543	2.2	291	NEOT-DNEOT	1	1	0.003	875-1100 or 1050-1250
549	536	2.2	291	NEOT	1	2	0.004	875-1100 or 1050-1250
549	536	2.2	291	NEOT-DNEOT	1	4	0.023	
549	536	2.2	291	THET	1	2	0.016	



Contout	C	Dhasa	Cuarra	Fabria Coda	DANIN/	Chard Count	Maight (kg)	Contout Data
Context 550	Cut 536	Phase 2.2	Group 291	Fabric Code NEOT-DNEOT	MNV 0	Sherd Count	Weight (kg) 0.02	Context Date 875-1100 or 1050-1250
550	536	2.2	291	THET	3	3	0.02	873-1100 01 1030-1230
554	553	3.3	325	BRIL	1	1	0.001	1300-1400
554	553	3.3	325	CONCAX	1	1	0.01	1300 1100
554	553	3.3	325	EMW	1	1	0.002	
554	553	3.3	325	MEL	1	7	0.1	
554	553	3.3	325	MSGW	1	6	0.054	
554	553	3.3	325	NEOT-DNEOT	2	2	0.011	
554	553	3.3	325	SEFEN	1	2	0.025	
554	553	3.3	325	THET	1	1	0.049	
554	553	3.3	325	UNID	3	3	0.009	
569	567	2.2	465	NEOT-DNEOT	1	1	0.01	875-1100 or 1050-1250
573	572	3.2	427	DNEOT	1	15	0.126	1050-1200
573	572	3.2	427	EMW	1	10	0.037	
573	572	3.2	427	NEOT	1	6	0.068	
573	572	3.2	427	NEOT-DNEOT	2	3	0.067	
580	579	3.3	338	SEFEN	1	6	0.029	
588	575	2.3	354	NEOT-DNEOT	0	1	0.012	875-1100 or 1050-1250
588	575	2.3	354	THET	1	2	0.034	0.0 ===================================
590	574	2.3	347	DNEOT	1	1	0.008	1050-1250 (1050-1150)
590	574	2.3	347	NEOT-DNEOT	1	2	0.008	111 -100 (1000 1100)
590	574	2.3	347	THET	1	1	0.012	
590	574	2.3	347	UNID	1	1	0.004	
591	574	2.3	347	NEOT-DNEOT	0	1	0.018	875-1100 or 1050-1250
591	574	2.3	347	THET	1	1	0.01	0/3 1100 0/ 1030 1230
595	583	3.4	378	THET	1	1	0.011	840-1150
596	586	3.3	0	HTHET	1	1	0.02	840-1150
603	601	3.2	427	THET	1	3	0.02	840-1150
627	626	2.3	626	THET	1	1	0.026	840-1150
629	628	3.4	020	EAR	1	1	0.026	1200-1400
636	637	3.2	267	SEFEN	1	1	0.004	1150-1450
638	630	3.2	261	SCAGS	1	1	0.011	1100-1200
639	630	3.2	261	NEOT-DNEOT	1	1	0.001	875-1100 or 1050-1250
639	630	3.2	261	UNID	1	1	0.001	0/3 1100 0/ 1030 1230
641	645	2.3	635	UNID	1	1	0.009	840-1500
642	645	2.3	635	THET	1	1	0.005	040 1300
647	646	3.3	646	SCAMSW	1	1	0.02	1050-1150
647	646	3.3	646	THET	2	3	0.021	1050-1150
648	649	3.1	649	DNEOT	1	1	0.012	1050-1250
651	650	3.3	646	EAR	1	1	0.003	1200-1400
651	650	3.3	646	MSGW	1	1	0.003	1200 1400
651	650	3.3	646	SHW	1	1	0.003	
651	650	3.3	646	THET	2	2	0.01	
655	652	3.1	0	UNID	1	1	0.002	840-1500
664	663	3.1	0	NEOT-DNEOT	1	1	0.018	875-1100 or 1050-1250
664	663	3.1	0	THET	2	2	0.013	2.0 2200 01 1000 1200
665	661	2.2	291	NEOT	1	1	0.004	875-1100 or 1050-1250
665	661	2.2	291	NEOT-DNEOT	1	1	0.004	2.0 2200 01 1030 1230
665	661	2.2	291	THET	1	1	0.012	
669	660	3.1	660	THET	1	1	0.008	840-1150
674	673	3.1	631	NEOT	1	1	0.008	875-1100
675	673	3.1	631	NEOT	1	1	0.001	875-1100
675	673	3.1	631	THET	1	1	0.004	0/3 1100
677	676	3.2	676	DNEOT	0	1	0.004	1050-1200
677	676	3.2	676	HUNEMW	1	1	0.001	
677	676	3.2	676	NEOT	1	2	0.002	
679	678	3.4	678	NEOT	1	1	0.003	875-1100
679	678	3.4	678	THET	2	3	0.002	5,51100
679	678	3.4	678	UNID	0	1	0.018	
0/3	688	2.3	0/8	THET	1	1	0.001	840-1150
690		۷.۵	U		_	1	0.003	875-1100 or 1050-1250
689		2 1	C21	NEOT DNEOT			. ∪∪∪≺	
692	690	3.1	631	NEOT-DNEOT	1			
692 695	690 697	3.1	660	THET	1	1	0.004	840-1150
692	690							



Context	Cut	Phase	Group	Fabric Code	MNV	Sherd Count	Weight (kg)	Context Date
703	700	3.4	678	THET	2	2	0.01	
707	706	3.2	676	THET	1	1	0.011	840-1150
723	722	3.1	0	NEOT	1	5	0.067	875-1100
727	724	4.1	724	EAR	1	1	0.012	1660-1800
727	724	4.1	724	PMR	1	1	0.017	
727	724	4.1	724	STSL	1	1	0.005	
727	724	4.1	724	THET	2	2	0.014	
728	724	4.1	724	DNEOT	1	1	0.015	1200-1350
728	724	4.1	724	EAR	1	1	0.017	
728	724	4.1	724	MEL	1	1	0.043	
728	724	4.1	724	SHW	1	1	0.006	1200 1400
744	743	4.1	0	DNEOT	2	2	0.007	1200-1400
744 744	743	4.1 4.1	0	EAR	1	1	0.021	
744	743 743	4.1	0	EMW GRIM	1	1	0.005 0.004	
744	743	4.1	0	MSGW	1	3	0.004	
744	743	4.1	0	NEOT	1	1	0.004	
744	743	4.1	0	SEFEN	1	1	0.004	
777	776	3.3	776	MSGW	1	1	0.004	1150-1500
785	780	4.2	0	CREA	1	1	0.000	1800+
785	780	4.2	0	HUNFSW	1	8	0.017	_5555.
785	780	4.2	0	MODR	1	1	0.009	
785	780	4.2	0	MSGW	1	1	0.003	
785	780	4.2	0	PMR-Country ware	1	1	0.244	
789	781	3.1	0	NEOT-DNEOT	1	1	0.004	875-1100 or 1050-1250
789	781	3.1	0	THET	1	1	0.01	0,0 1100 0. 1000 1200
801	799	4.1	724	EAR	5	17	0.522	1350-1500 (1350-1400)
801	799	4.1	724	GRIM	1	1	0.007	
801	799	4.1	724	LMEL	1	1	0.017	
801	799	4.1	724	STAM	1	1	0.008	
801	799	4.1	724	UNID	1	1	0.005	
801	799	4.1	724	UPG	1	1	0.007	
803	799	4.1	724	CREA	1	1	0.007	1800+
803	799	4.1	724	LSKW	1	2	0.01	
803	799	4.1	724	PEARL TR	1	1	0.002	
803	799	4.1	724	PRM-Country ware	1	1	1.004	
803	799	4.1	724	RFWE TR	1	1	0.004	
803	799	4.1	724	THET	1	1	0.009	
804	800	3.3	800	EAR	1	1	0.017	1200-1400
805	800	3.3	724	EAR	1	1	0.073	1200-1400
805	800	3.3	724	MSGW	1	1	0.031	
808	800	2.3	0	THET	1	1	0.006	840-1150
812	800	2.3	0	THET	1	2	0.008	840-1150
818	817	3.1	660	NEOT-DNEOT	1	1	0.017	875-1100 or 1050-1250
826	816	4.1	816	BOND	1	1	0.005	1430-1650
826	816	4.1	816	EAR	1	1	0.014	
826	816	4.1	816	MSGW	1	1	0.003	
836	835	3.1	660	NEOT	1	1	0.009	875-1100
838	837	3.1	660	THET	1	1	0.005	840-1150
839	844	2.2	291	LYVA	1	1	0.055	1150-1400
854	855	3.3	0	EAR	1	1	0.008	1200-1400
856	857	2.3	0	DNEOT	1	1	0.012	1150-1450
856	857	2.3	0	MSGW	1	1	0.004	
856	857	2.3	0	SEFEN	1	1	0.012	
862	860	4.1	0	EMEMS	1	1	0.005	1550-1800
862	860	4.1	0	GRIM	1	2	0.01	
862	860	4.1	0	HUNFSW	0	1	0.001	
862	860	4.1	0	MSGW	1	4	0.007	
862	860	4.1	0	NEOT	1	4	0.014	
862	860	4.1	0	PMR	1	1	0.016	
862	860	4.1	0	SHW	0	1	0.002	
862	860	4.1	0	UPG	1	1	0.011	
	871	2.3	288	NEOT	1	1	0.006	875-1100
872 874	873	0	0	UNID	2	2	0.009	840-1500



Context	Cut	Phase	Group	Fabric Code	MNV	Sherd Count	Weight (kg)	Context Date
882	882	3.1	660	THET	1	1	0.024	840-1150
885	886	3.1	631	NEOT-DNEOT	1	1	0.175	875-1100 or 1050-1250

Table 14. Catalogue of post-Roman pottery

B.10 Worked Stone

By Simon Timberlake

Introduction and Methodology

- B.10.1 A total of 4.61kg (x 23 pieces) of utilised stone were examined from this site, of which 782g (x 4 pieces) consisted of worked stone, 2888g (x 5 pieces) of building stone and 942g (x 14 pieces) of burnt stone.
- B.10.2 The stone was identified visually using an illuminated x10 magnifying lens and compared where necessary with an archaeological reference collection. A dropper bottle containing dilute hydrochloric acid was used to confirm the presence or absence of carbonate.

Factual data

- 5.2.2 The worked stone was mostly made up of worn, burnt and discarded fragments of lava quern, some of it probably Roman and re-deposited (i.e. that from context 322, ditch **301**, Period 2.3) was determined as being such on the basis of the form of the rim kerb of the upper stone, but most of it probably being Saxon in date, including the largest piece (from context 808, pit **800**, Period 2.3) with its characteristic traces of dash peck pattern dressing decorating the un-used top of the upper stone. The sum total of lava quern was 752g, 72% of which was Saxon (early medieval) in date and 28% Roman (Table 15).
- B.10.3 One small fragment from the worn lower stone of a probable Saxon quern seems also to have been re-used along two of its edges as an opportunistic whetstone for sharpening small iron knives (i.e. the fragment from context 423, Period 2.1 ditch **407**).
- B.10.4 A small primary use whetstone (Fig. 14) made of quartz schist imported from Telemark, Norway was identified from the fill (context 729) of a post-medieval Period 4.1 ditch (724). This split fragment from a larger whetstone mullion appears to have been moderately well used along several of its sides and all of its long edges before being disposed of.



Context	Cut	Туре	Phase	SF no.	No.	Wt (g)	Dimens. (mm)	Identity	Orig. diam. quern (mm)	Wear (0-4)	Geology	Source	Period	Notes
332	329	ditch	2.2		1	207	90x65x30- 25	lava quern	300+	3	basalt lava	Mayen, Andernac, Germany	Roman?	U/S rim frag w raised kerb – burnt + redepos
423	407	ditch	2.1		1	55	45x45x10	lava quern + whetstone	340	4	basalt lava	Mayen, Andernac, Germany	Saxon?	L/S frag re-used as whetstone
729	724	ditch	4.1	12	1	30	85x25x7	whetstone		3	quartz schist	Eidsborg, Telemark, Norway	Late Sax – Med.	small split mullion frag
808	800	pit	2.3	15	1	490	125x125x 30	lava quern	360	4	basalt lava	Mayen, Andernac, Germany	Saxon?	U/S with typical peck pattern dres - burnt

Table 15. Catalogue of worked stone

Discussion

Lava quern

- B.10.5 The suggestion that there could be re-deposited Roman as well as Saxon lava quern at this site is interesting, but not wholly un-expected, given the presence here of a Roman boundary ditch and also the evidence for a commonplace re-use (or re-deposition) of Roman quern within Saxon (in particular Early Anglo-Saxon) settlement features.
- B.10.6 Lava quern was being imported into Roman Britain from the quarries on the River Rhine at Mayen near Andernach to the ports at London and Colchester from the middle of the 1st century to the end of the 3rd century AD. The example of possible Roman quern from Waterbeach would appear to come from the most common type of small hand mill such as the example illustrated in Watts, M. 2002, 324 (fig. 10) and in Green, C. 2017 (fig. 33).
- B.10.7 Saxon quern (which may likewise have been deposited within Late Saxon or Saxo-Norman features) on the other hand resembles this example from Dorestad in the Netherlands, with its thin sloping upper stone possessing a kerb-less rim and a pattern of dashed peck pattern dressing covering the entire upper surface (Watts ibid., 39 fig.14) and Pohl 2010 (p.148 fig.1)

Whetstone

B.10.8 The occurrence of 'light-grey quartz schist' whetstone became commonplace within the urban centres of England during the Late Saxon - early medieval period links such settlements with the whetstone trade from Eidsborg in Upper Telemark, Norway where there was a well-established hone quarrying industry. Whetstones were regularly traded across the North Sea from Skien to trading ports such as Ipswich on the east coast of England during the 9th – 11th centuries AD (Late Saxon-Viking period)



and over the next two hundred years (Hansen 2009). During the 13th-century AD the standard dimension of these exported blanks was approximately 50mm x 30mm x 300mm. A very large number of these Norwegian 'rag' whetstones were imported into England during the early medieval period as undressed mullions, which were then finished-off within urban workshops. As a result many of the commonly found smaller and rougher fragments may simply have been the broken or off-cut pieces resulting from the production of larger items, in this way ending up after relatively little use within typical domestic waste refuse contexts (see Ellis & Moore 1990, 280).

B.10.9 The opportunistic re-use of quern (either Roman or Early Anglo-Saxon) as whetstone is a very common phenomenon at Saxon settlement sites. Whilst this is generally associated with Early Saxon settlement (and sometimes to an extreme level as at Northstowe, Cambridgeshire (see Timberlake in Aldred & Collins forthcoming)) the continuation of this practice most likely also extends into the Late Saxon period, wherever lava and gritstone quern debris is readily available. Such re-use of these fragments to sharpen small iron knives is so characteristic of the period that it should be possible use this as dating criteria.

B.11 Building Stone

By Simon Timberlake

B.11.1 A small number of pieces of stone were recognisable as building stone; with roughly shaped or else completely un-shaped and un-mortared wall or foundation stone recovered from early medieval ditches and postholes across this site. It was sometimes difficult to be certain this stone was not redeposited, as rather similar stone types have been found used on Roman sites, and much of the stone encountered here was also burnt and weathered. Identifiable building stones include an example of local Corallian Limestone (Ampthill Clay) which may have come from Upware plus a poorly shaped lenticular tile-sized piece of Barnack Stone (from context 632, Period 3.1 ditch 631) and a roughly squared fragment from the corner of a block of possible Ketton or other oolitic freestone from the Lincolnshire Limestone. The size of these pieces suggests their use within drystone walling. The absence of burnt Collyweston Slate in this case would appear to confirm that this is a medieval rather than a Roman building stone assemblage. The grey roof slate is almost certainly a modern contaminant.

Context	Cut	Туре	Phase	Nos.	Wt (g)	Dimens. (mm)	Identity	Orig. size (mm)	Geology	Source	Period	Notes
279	278	ditch	4.1	2	5	35 + 50	roof slate	large	Ordovician slate	North Wales	modern	surface contamin
290	289	post hole	0	1	350	90x65x45	rough shaped building (wall) stone	100x120x 100 ?	oolitic Lincs. Limestone (Ketton Stone)	Ketton, S. Lincs.	Early Medieval	redepos?
332b	329	ditch	2.2	1	304	90x70x55	rough wall stone?		Lincs. Limestone?		Early Medieval?	burnt and redepos



Context	Cut	Туре	Phase	Nos.	Wt (g)	Dimens. (mm)	Identity	Orig. size (mm)	Geology	Source	Period	Notes
632	631	ditch	3.1	1	2229	220x150x 50	rough wall stone	identical	Barnack Stone (Lincs. Limestone)_	BarnackCambs.	Early Medieval	burnt + sooted

Table 16. Catalogue of building stone

B.12 Burnt Stone

By Simon Timberlake

Factual data

B.12.1 The small amount of burnt stone from this site (Table 17) might include some residual prehistoric burnt stone (for instance the cobble from context 887, Period 2.2 ditch 291), although some of this could be stone utilised for building purposes, or alternatively limestone calcined within a kiln (i.e. such as the highly burnt limestone recovered from contexts 271 (pit 270) and 286 (Period 2.3 ditch 288)). If the latter this would suggest a limekiln and the production of mortar on site. However, there is insufficient evidence here to confirm this suggestion.

Contxt	SF no.	Cut	Туре	Phase	nos pieces	shape cobble	dims (mm)	Wt (g)	Geology	Source	Degree of burning	NOTES
271		270	pit	0	3	sub- angular	20-35	30	Lincs. Limestone (oolite)	Barnack or S. Lincs.	heavy	either BS frag or from limekiln
286		288	ditch	2.3	9	sub- angular	25-45	123	limestone	Corallian, U.Jur?	heavy	either BS frag or from limekiln
804		800	pit	3.3	1	irregular	120x60x25	154	limestone	Corallian, U. Jurass (erratic?)	light	fossiliferous
887	22	291	ditch	2.2	1	round- sub- round	130x80x65	635	sandstone	glacial erratic	strong	

Table 17. Catalogue of burnt stone

B.13 Worked and burnt clay

By Simon Timberlake

Introduction

B.13.1 A total of 286g (x 3 pieces) of worked and burnt clay were examined from this site. These consisted of a fired clay spindle-whorl and two fragments of clay brick.

Factual data

B.13.2 Two fragments of hand-moulded clay brick made of riverine silt and alluvium were recovered from Period 4.1 ditch cut **724**. The ditch was post-medieval in date. Both brick fragments were of standard thickness (50mm) and may also originally have been small and perhaps around 150mm long and *c*.100mm wide. The green vitrification upon the side of one of these brick fragments had the appearance of salt slag – though no trace of this salt is now evident. There was no evidence for these bricks being



associated with salt making, the contamination perhaps being secondary and related to re-burning; the likely original use for these bricks being structural.

B.13.3 Half of a smooth flat-bottomed, domed but otherwise undecorated clay spindle-whorl recovered from a pit fill (context 400, Period 3.2 pit **396**) is most likely Saxo-Norman (early medieval) in date, although no exact parallel for this exact type was found (see PAS database). The central perforation for the stick distaff was both small and tapered (8mm on top and 5mm at its base), suggesting a short distaff and lightweight spindle. The very low density of this form-moulded clay spindle-whorl suggests that it would have functioned inefficiently compared to the much heavier clay, stone and cast lead spindle-whorls which were common during this period, yet its form and intended use are unmistakeable. This particular spindle-whorl appears to have been accidentally refired and thus is very slightly vitrified.

Context	SF no.	Nos.	Dimensions (mm)	Original dimensions (mm)	Weight (g)	Fabric type	Identity	Period	NOTES
400	8	1	32x28x12	40mm diam x 25 high	8	В	dome shaped spindlewhorl	Saxo- Norman type?	highly fired + vitrified
730		2	65x65x50 + 80x40x50	150x100x50? + 150x100x50	277	А	hand-made bricks	P Med	green vitrific. (x1)

Table 18. Catalogue of worked clay

Fabrics

Fabric A pinkish grey fine alluvial silt with minor sand and grit and common organic inclusions

Fabric B black homogenous organic clay with minor fine sand grains, heavily fired and thus partly cindery and vitrified on the surface.

B.14 Ceramic building material

By Ted Levermore

Introduction

B.14.1 Archaeological excavation work recovered 33 fragments, 5343g, of ceramic building material (CBM) from ten features. This assemblage comprised medieval to post-medieval brick and tile and a small portion of undiagnostic material (see Table 19). The assemblage was fragmentary and moderately to severely abraded. The fragments were made in a narrow set of fabrics, typically associated with East Anglian CBM of the late medieval to early modern periods. The presence of a small number of near complete bricks suggests proximity to the parent building.

Туре	Date	Count	Weight (g)
Brick	Med-Pmed	8	1559
	Pmed	13	3130
Tile	Pmed	8	620
Undiag	-	2	2
	Pmed	2	32
Total		33	5343

Table 19. Summary of CBM



Methodology

B.14.2 The assemblage was quantified by context, fabric and form and counted and weighed to the nearest whole gram. Width, length and thickness were recorded where possible. McComish (2015), Ryan (1996) and Woodforde (1976) were used as reference for identification and dating. The quantified data and fabric descriptions are presented on an Excel spreadsheet held with the site archive.

Factual data

Fabrics

- B.14.3 Seven fabrics (six groups with one subgroup, A1) were recorded within this assemblage. The fabrics recorded were all typical CBM recipes of the late medieval to early modern periods in East Anglia. The clays used were either a silty gault clay with occasional very fine sandy material and rare coarse stone or flint inclusions fired to yellow-cream with pink marbling (A and A1) or orange-brown (B) or they were made in a compact fine sandy clay i.e. with very common sandy minerals and occasional coarse grit and voids fired to dull purple-brown (C and D) or dully orange/yellow-brown (E and F). All fabrics were made in forms associated with the region.
- B.14.4 Full fabric descriptions are in the Excel spreadsheet held with the site archive.

Assemblage

B.14.5 The CBM assemblage was recovered from 10 features, many of which are part of a series of ditch groups. The assemblage is of little archaeological significance because it was recovered not *in situ* within a series of pit and ditch features. Nevertheless, it does help to date the parent structure and the contexts where the material was discarded.

Ditches

Ditch Group 407 (Period 2.1)

B.14.6 Context 422 produced a fragment of (intrusive?) post-medieval half inch flat tile (10mm, 26g). It was made in the same yellow gault clay as the bricks in this assemblage.

Ditch Group 291 (Period 2.2)

B.14.7 Ditch **291**, context 294, produced a small fragment of (intrusive) dull yellow brick with pink hued faces (Fabric A, 73g). The brick was neatly formed with regular rounded arrises. It is likely to be from a Suffolk white/Burwell yellow brick.

Ditch Group **261** (Period 3.2)

B.14.8 Context 259 produced an undiagnostic fragment of yellow CBM (Fabric A, 32g).

Ditch Group **724** (Period 4.1)

B.14.9 Contexts in this group produced 21 fragments, 4008g, of CBM. The material is a mixture of post-medieval brick and tile fragments presenting varying degrees of abrasion. Of note, context 727 produced a complete Burwell Yellow/Suffolk White brick (1½ x 4 x 9 inch). It is yellow-cream, with pink marbled core, made in a gault clay.



It was roughly formed with irregular rounded and sharp arrises, slightly concave smooth upper bed, fairly flat/smooth and sanded edges and base. A small fragment of yellow half-inch tile was also recovered (86g).

- B.14.10 Context 727 also generated several undiagnostic fragments of brick; two fragments of orange-brown silty brick (173g), two fragments of sandy dull orange-brown brick and three fragments of dull brown sandy brick (268g). These last fragments were probably part of the same brick recovered from context 731 (3 fragments, 615g). This brick was made in a dull yellow-brown fine sandy clay. The surviving fragments gave measurements of 2 inches thick and 5 inches wide. The relatively thin shape may suggest a late medieval to early post-medieval date. The original brick was fairly neatly made with irregular sub-rounded arrises, smoothed upper bed, irregular edges and rough base with sand and grass impressions.
- B.14.11 Contexts 801, 803 and 805 produced the last portion of this group's material. Contexts 801 and 803 produced three fragments (185g) of half inch flat tile, one (86g) was made in the yellow gault (10mm) and the others were in the orange-brown clay. Four brick fragments were collected from these contexts; a corner fragment (145g) of a purple-brown brick, Fabric D, that was fairly neatly formed and burnt post-breakage and a large very abraded fragment of orange-brown soft sandy brick, Fabric C, also burnt post-breakage were collected from context 801; a face fragment of a full orange-brown brick came from (803) and a larger fragment of brick in the same fabric, B, was recovered from (805).

Ditch Group **245** (Period 4.2)

B.14.12 Context 247, from Ditch **245**, produced a corner fragment (322g) of a 2 ½ inch thick post-medieval Suffolk White/Burwell Yellow type brick (Fabric A1). It was fairly neatly formed with a wire cut undulating upper bed, irregular round to sharp arrises and flat, slightly creased, edges and lower bed. Context 279 produced a very abraded fragment of undiagnostic yellow CBM (1g).

Ditch 780 (Period 4.2)

B.14.13 A fairly large fragment of a yellow gault half inch flat tile (217g) was recovered from context 785. This fragment provides a fair idea of the original form for the other yellow flat tiles described; fairly neat forming, wire cut upper bed and a fine sanded base with rare coarse stone inclusions, made to around 10mm thick. A fragment (104g) of orange-brown silty brick was also collected, it was severely abraded and offered no measurable dimensions.

Pits

Pit **224**

B.14.14 A very abraded undiagnostic scrap of CBM was recovered from context 225 (1g).

Water hole/Pit **800** (Period 2.3)

B.14.15 Context 809 from this pit produced the only piece of floor tile in this assemblage (Fabric B, 106g) and a piece of 2-inch-thick brick (Fabric C, 453g). The floor tile was 1-inch-thick and made in a dull orange-brown micaceous clay. It was neatly formed with regular rounded arrises and smooth and flattened faces. The surviving edge face may



have remnants of light greyish paint or a whitewash. The fabric is fairly soft so it is unclear if the upper bed was polished by wear. The brick was made in a dull purple-brown silty clay, neatly formed with fairly regular sharp arrises, the stretcher gave is smooth with possible wear polish and the upper bed was flat with grassy impressions. It may be late medieval to early post-medieval brick; its style is similar to estuarine East Anglian bricks.

Discussion

B.14.16 The material recovered is abraded and fragmentary. There are few archaeological conclusions to be drawn. Generally, the material was limited in fabric and form; this lack of variety suggests a singular point of use – i.e. perhaps only one building – and a narrow set of origins. It is likely the parent structure was nearby and the material was acquired from local late medieval to early modern production centres in Norfolk and east Cambridgeshire (Firman 1998).

B.15 Fired clay

By Ted Levermore

- B.15.1 Excavation work recovered 17 fragments, 222g, of fired clay from five contexts. This assemblage comprised both mostly amorphous pieces with no discernible features with a small fraction of more 'structural' pieces; the most notable has a flattened surface and wattle/rod impression in the body clay. The clays used were silty or sandy containing fine sandy minerals and rare coarse flint/stone. These fabrics were probably sourced locally and subjected to limited tempering and paste preparation. The assemblage is limited and uninformative, it is summarised in Table 20.
- B.15.2 The full catalogue and fabric descriptions are on an Excel spreadsheet with the site archive.

Context	Cut	Feature Type	Context Notes	Fragment type	Structural type	Object Class	Object Form	Abrasion	Notes	Rod Diameter	Count	Weight (g)
346	345	Ditch		а				sev			1	3
399	396	Pit		a/s	a/fs			sev	fragments of abraded fired clay some with faces. Friable and soft		12	144
422	407	Ditch	Group 407	а	fs/w			mod			1	10
467	465	Pit		а				sev	Fragments of friable sandy fired clay		2	27
665	661	Ditch	Group 291	S	fs/w	Structural	?Daub	Slight	Fragment of fired clay with an exacted smoothed face and a large rod impression parallel to the face in the body clay	15	1	38

Table 20. Summary fired clay catalogue

(a=amorphous, s=structural, fs=flattened surface, w=wattle or rod impression)



B.16 Mortar and concrete

By Ted Levermore

Introduction

- B.16.1 A small assemblage of lime mortar and concrete were recovered on the site. The mortar (16 fragments, 461g), a whitish lime mix with fine sandy inclusions, was recovered from Phase 3.2 Ditch **261**, context 259. Several fragments were fairly large (100 x 150mm) and retained lips, ridges and flattened faces all suggesting use within a brick structure. A date for this material is limited, but it is likely to have derived from the medieval or post-medieval periods and is probably intrusive in this context.
- B.16.2 The concrete, from unphased pit **313** (two fragments, 110g), is of more recent date. It was made in a mid-grey coarse sandy mix with common whitish flecks. The fabric was well mixed and fairly consistent. It also retained some ridges and flat faces suggesting use in construction.

B.17 Worked bone and antler

By Ian Riddler

Introduction

B.17.1 Four objects of antler and bone were recovered (Fig. 15). They form a homogeneous group that can be assigned to the Late Saxon-early medieval period, between the 9th and the 12th centuries. They include fragments of a comb, alongside a needle and a pin-beater. The single object of antler is an unfinished handle for a whittle tang implement. Each of the objects is briefly described here and their significance is briefly discussed.

Factual data

B.17.2 All of the objects can be identified and most of them can be placed in a specific type within their object class. Their materials are readily identifiable. There are three bone objects and one of antler. Parts of two bone connecting plates survive from a horn and bone composite comb (SF 10; Fig. 15), originally secured by two iron rivets. The comb (from Period 3.1 pit 459) included coarse teeth on one side and fine teeth on the other side. A complete bone single pointed pin-beater (SF 1; Fig. 15; from Period 2.3 ditch 288) is rectangular in section throughout and tapers to a rounded point at one end. It belongs to Ipswich type A, the most common type across the 9th to 12th century (Riddler et al forthcoming). An incomplete pig fibula needle (SF 9; Fig. 15; recovered from Period 3.2 pit 434) has fractured across the perforation at the head and probably had a rounded apex originally. It can be assigned to Ipswich type 4. The fragment of antler (Fig. 15, from context 573, Period 3.2 ditch 572) is cylindrical in form and has been perforated axially along roughly half of its length, indicating that it was intended to be a whittle tang handle, but it was never finished. Most of the perforation is now exposed and the object probably fractured during manufacture.



Possible dating

- B.17.3 Three of the four objects (the comb, the pin-beater and the needle) are common forms of the period from the 9th century to the 12th century. They cannot be closely dated, although there is some tentative evidence available for the comb and the pin-beater. The comb is secured by just two iron rivets and survives to a length of 81mm. The connecting plates may only have been around 85mm in length originally. Saw marks indicate that there were 2.5 teeth per centimetre on one side and 7-8 per centimetre on the other side. At Ipswich, these three characteristics (the length, the number of rivets and the specific tooth values) were more commonly seen on combs of 11th-to 12th-century date (Riddler *et al.* 2012, 409-11) and it is possible, therefore, that this comb is relatively late within its broad date range. The same tentative dating can be applied to the single pointed pin-beater, on the basis that within East Anglia they are much more commonly seen in contexts of that date than at an earlier period, even though they were present in Ipswich from the later part of the Middle Saxon period (Riddler *et al.* forthcoming).
- B.17.4 The unfinished antler knife handle is a rarer commodity. It can be paralleled at Ipswich, where a sequence of handles of antler and bone can be seen to extend across the Middle and Late Saxon periods, but unfinished handles have not been found at other sites (Riddler *et al.* forthcoming). The quantity of antler recovered from early medieval sites in East Anglia is relatively small, outside of Ipswich and even a single fragment is of some importance.

The Urban and Rural Divide

B.17.5 As common object types the significance of three of the objects is undoubtedly lessened, but at the same time it needs to be noted that all of them are commonly seen in urban contexts of the early medieval period, but have rarely been found in rural locations or, indeed, at any locations outside of towns. This has previously been noted for the comb type (Riddler et al. 2013, 412) and can be extended to include the pin-beater and the needle as well. For East Anglia, Late Saxon objects of antler and bone are heavily centred on Ipswich, Norwich and Thetford. At the same time, Cambridgeshire has proved to be one of very few areas where they can be located within Late Saxon contexts beyond urban environments. Waterbeach has featured previously as a significant settlement of Early Anglo-Saxon date, following the excavations of Lethbridge in the area, but not previously as an area with Late Saxon objects (Lethbridge 1927; Lethbridge and Tebbutt 1933). In terms of antler and bone objects of Late Saxon or Anglo-Norman date, these have been found in small numbers at Little Thetford, Longstanton, Papworth Everard, St Neots and Soham, amongst other sites (Riddler 2017; Mould 2015; Rajkovača 2012; Lethbridge and Tebbutt 1933; Addyman 1973, 96; Cuttler et al 2011, 138). In summary, therefore, they form an important counterbalance to the urban evidence.

Object Function

B.17.6 This contextual point is more pertinent when the function of these objects is considered. The pin-beater and the needle are objects of textile manufacture. The single pointed pin-beater is an important index of the introduction and use of the



vertical two-beam loom within Anglo-Saxon England. It is currently believed that the loom was introduced first to *wic* sites (in the late Middle Saxon period) and distributed from there to other urban environments and to rural sites, mainly in the Late Saxon period (Riddler *et al.* forthcoming). The end date for this loom type has been set around or before the Norman Conquest but its use probably continued in the countryside into the 12th century. Any addition to the corpus of these objects is therefore very welcome and each one forms an important piece of the burgeoning jigsaw. Any disparity in dating between urban and rural environments will be particularly significant: did the loom really go out of use later in the countryside than in towns? This stratified pin-beater is therefore a potentially significant addition to the corpus from the area.

- B.17.7 The double-sided horn and bone composite comb has been well-studied and situated firmly within an urban context. Indeed, this example may well have been made in Ipswich, Norwich or Thetford. It is a comb type for which there is currently no evidence of local production at all, but there are abundant waste materials from each of these towns. Is it therefore an urban object transferred to a rural location?
- B.17.8 Worked antler waste from Late Saxon England is surprising rare, as are unfinished objects, in what has been portrayed as 'perhaps the golden age of the bone and, more particularly, the antler worker' (MacGregor 1985, 48). It could now more properly be seen as a golden age for production in towns but not for the countryside, where waste and unfinished objects are conspicuously rare (Riddler 2003, 73-4). An unfinished handle is a rare commodity within this overall context.

B.18 Worked wood

By Laura James

Introduction and Methodology

- B.18.1 This document aims to assess the potential of the waterlogged wood assemblage (a single post from Period 2.3 waterhole 800) in terms of woodworking technology, woodland reconstruction, decay analysis, species identification, dendrochronology, and conservation and retention.
- B.18.2 This document has been produced in accordance with Historic England guidelines for the treatment of waterlogged wood (Brunning 2010) and recommendations made by the Society of Museum Archaeologists (1993) for the retention of waterlogged wood.
- B.18.3 Each discrete item was recorded individually using a pro forma 'wood recording sheet', based on the sheet developed by Fenland Archaeological Trust for the post-excavation recording of waterlogged wood.
- B.18.4 Every effort was made to refit broken or fragmented items. However, due to the nature of the material, the possibility remains that some discrete, yet broken items may have been processed as their constituent parts as opposed to as a whole.
- B.18.5 The metric data were measured with hand tools including rulers and tapes.



- B.18.6 The system of categorisation and interrogation developed by Taylor (1998, 2001) has been adopted within this report. Joints and fixings are described in accordance with the Museum of London archaeological site manual (Spence 1994).
- B.18.7 Items identifiable to species by morphological traits visible with a hand lens oak (*Quercus* sp.) and ash (*Fraxinus excelsior*) were noted. Other items were sub-sampled to allow later identification to taxa via microscopic identification as necessary.

Condition of Material

B.18.8 The condition scale developed by the Humber Wetlands Project (Van de Noort *et al.* 1995: table 15.1) will be used throughout this report. The condition scale is based primarily on the clarity of surface data. Material is allocated a score dependent on the types of analyses that can be carried out, given the state of preservation. The condition score reflects the possibility of a given type of analysis but does not take into account the suitability of the item for a given process.

Condition Score	Museum Conservation	Technology Analysis	Woodland Management	Dendro- chronology	Species Identification
5 Excellent	+	+	+	+	+
4 Good	-	+	+	+	+
3 Moderate	-	+/-	+	+	+
2 Poor	-	+ / -	+/-	+/-	+
1 Very Poor	-	-	-	-	+/-
0 Non-Viable	-	-	-	-	-

Factual data/Results

- B.18.9 The wood was initially visually assessed and was not able to be identified to species.
- B.18.10 SF 20 appears have been shaped and worn on one end, where it was noted that the wood had been cut with a straight edged blade which produced perpendicular striations in straight lines. These type of cut lines are mostly likely to have been made by a saw.
- B.18.11 This was the only piece of wood found within this feature which would imply the lack of revetment material and was found horizontally as though discarded.
- B.18.12 As this item shows heavy abrasion and wearing, it is thought this was above ground for a while before being deposited in the base of the pit.



APPENDIX C ENVIRONMENTAL REPORTS

C.1 Environmental Samples

By Rachel Fosberry

Introduction

- C.1.1 Fifty bulk environmental samples were taken from deposits dating from the Romano-British period through to the Saxon, medieval and post-medieval periods within the excavated areas at Rosemary Road, Waterbeach. The assessment of these samples indicated that preservation of plant remains is predominantly by carbonisation (burning) and is generally poor with obvious degradation of the charred remains which, together with a silty coating caused by the calcareous soils, lead to difficulty identifying seeds to species (Fosberry in Graham 2019). Charred plant remains were recovered from most of the Saxon and medieval samples and are frequently of high density with cereals grains of free-threshing wheat (*Triticum aestivum*-type) and barley (*Hordeum* sp.) most frequent. The distribution of the charred material suggests that the site represents an area where these burnt remains were being disposed of, mainly in pits and ditches. Samples taken during the evaluation of the site produced carbonised remains that were similarly poorly preserved (Turner in Jackson 2017). Occasional preservation by waterlogging was noted, but it would appear that lowering of the water table has resulted in differential preservation of only very robust remains.
- C.1.2 Samples from Saxon and medieval periods were selected for further study where frequent grains and/or seeds were noted during a rapid scan of the flots of all samples for the assessment. The aim of the analysis was to characterise the assemblages to determine if there were any changes in cultural preferences and cultivation techniques throughout the periods. This report focuses on the results of the analysis of six samples which were selected for detailed analysis quantification (Table 21, below), with summary, assessment level, details of all of the bulk samples appended to this report as Table 22.

Methodology

- C.1.3 The samples were processed by tank flotation using modified Sīraf-type equipment with the floating component (flot) of the samples collected in a 0.3mm nylon mesh Plant remains picked out of the dried residues were added to the flot.
- C.1.4 Identification of plant remains is with reference to the Digital Seed Atlas of the Netherlands (Cappers et al. 2006) and the authors' own reference collection. Nomenclature is according to Zohary and Hopf (2000) for cereals and Stace (2010) for other plants. Plant remains have been identified to species where possible. The identification of cereals has been based on the characteristic morphology of the grains and chaff as described by Jacomet (2006).

Quantification

C.1.5 Individual cereal grains, chaff elements and seeds have been identified according to their morphology and counted. Fragmented cereal grains have been counted if over



half of the grain has survived (embryo ends only). Items that cannot be easily quantified have been scored for abundance according to the following criteria:

+ = rare, ++ = moderate, +++ = abundant; F=fragment

Results

- C.1.6 Preservation of plant remains is predominantly by carbonisation (charring) which only occurs under certain conditions when plant material is incompletely burnt and reduced to pure carbon. It is important to note that any surviving charred remains will only represent a small proportion of the original material being burnt and the carbonised remains from this site represent material that is likely to have been collected from hearths/ovens and redeposited (possibly more than once). The preservation of the carbonised remains is variable with most of the cereal grains appearing abraded and poorly preserved. All four cereal types are present; barley (Hordeum vulgare) and wheat (Triticum sp.) predominate along with occasional grains of rye (Secale cereale) and oats (Avena sp.). The barley is considered to be the six-row variety, identified through the presence of 'twisted' grains caused by the positioning of three grains on a rachis segment (when viewed from above, two sets of three spikelets are seen as '6-row'). The two grains within the two lateral spikelets are usually twisted whereas the middle grain is straight resulting in a ratio of two twisted grains to one straight grain. Barley is a cereal that has been of economic importance since the beginning of farming in Britain and it was particularly favoured in the Saxon period for its use in brewing and for animal feed (Banham and Faith 2014, 29).
- C.1.7 The wheat grains are considered to be mainly of the free-threshing variety (*T. aestivum*-type) and some of the grains are compact and rounded which is suggestive of club wheat (*T. compactum*) which was a common variety in the medieval period. Only one chaff item of wheat was recovered and is of the free-threshing variety. Free-threshing wheat become the most frequent wheat variety in the Anglo-Saxon period, considered to be a cultural choice of incoming settlers (Moffett 2011, 350). Rye is also a crop that appears to have been a cereal variety that became popular during the later Anglo-Saxon period, particularly where soils are dry and sandy (McKerracher 2019, 94).
- C.1.8 It is not possible to distinguish between the cultivated and wild varieties of oats without the presence of the diagnostic chaff elements which only occur as a single floret base of cultivated oat within this assemblage. Wild oats are a common contaminant of cereal crops, even in the present day, as the grains are a similar size to other cereal varieties and are difficult to remove from seed corn.
- C.1.9 There is very little chaff present as evidence of the processing of whole ears of cereals. Late Saxon circular ditches may represent hayricks, but cereal processing most likely took place in designated threshing barns with the waste products being collected and used as fodder. The weed seeds are predominantly species that would have been common crop contaminants. Sedges and rushes are wetland resources would have been of great economic importance for their use in basketry, thatch as well as for fuel.
- C.1.10 Untransformed (not charred) seeds are frequent in most of the samples and may represent modern intrusions or, in the case of tough-coated seeds such as elder



(Sambucus nigra) and brambles (Rubus fructcosus agg.), it is possible that they are contemporary with the deposits sampled. Mollusc shells are also present in most of the samples and include the blind snail (Ceciloides acicula), believed to be a post-Roman introduction (Evans 1972).

Period 1: Prehistoric and Romano-British

C.1.11 Samples taken from Period 1 samples were unproductive.

Period 2: Anglo-Saxon

C.1.12 Charred plant remains are frequent in Saxon deposits, mostly as mixed cereal grains, with very little chaff, occasional legumes and weed seeds.

Period 2.2 Late Saxon (c. AD 850-1066)

C.1.13 Intervention **661** of enclosure ditch **291** was located in the centre of the excavation area and produced a charred assemblage of mixed cereal grains with barley predominating over oats and free-threshing wheat. Rye occurs only as two grains. Two of the barley grains have morphological evidence of having germinated prior to charring which may be an indicator of malting or it may represent spoiled grain. Weed seeds occur mainly as one or two specimens and include crop weeds such as stinking chamomile (Anthemis cotula), goosefoots (Chenopodium sp.) and cleavers (Galium aparine). Plants that could also be crop weeds but that have a more varied habitat that includes grassland include open docks (Rumex sp.), (Trifolium/Medicago sp.), mallows (Malva sp.), grasses (Poaceae) and eyebight/red bartsia (Euphrasia/Odontites sp.). There are also occasional seeds of wetland taxa such as sedges (Carex spp.), rushes (Juncus sp.) and spike-rush (Eleocharis sp.). Also present are seeds of henbane (Hyoscyamus niger) which is a plant which may have been used for medicinal purposes, but it is a species that commonly grows on dung heaps (Banham and Faith 2014, 43).

Period 2.3: Late Saxon (c. AD 850-1066)

C.1.14 A number of poorly dated discrete pits and postholes were located in the far east of the site in an area enclosed by ditch 309. Of the three pits sampled (pits 221, 239 and 241), pit 221 produced the most abundant assemblage that was dominated by oat grains (Avena sp.) and seeds of stinking chamomile The high number of the oats may suggest that they are the cultivated variety (A. sativa), or they may represent wild oats that were harvested with the crop. Oats were sometimes grown as a maslin crop known as 'dredge' along with spring barley (Banham and Faith 2014, 36). Barley and wheat are present in similar quantities and rye occurs as a minor component. The frequency of stinking chamomile seeds suggests that weeds were common, as would be expected in an era when weeding was done by hand. The seeds of this species are held closely within the seed head and most likely broke apart during charring. Stinking chamomile is a plant that favours heavy clay soils (Kay 1971) and is a likely contaminant of the wheat crop. Other likely crop weeds include corn gromwell (Lithospermum arvense), goosefoots (Chenopodium sp.) including fat hen (C. album), black bindweed (Fallopia convolvulus), knapweed (Centaurea sp.), knotgrasses (Polygonum spp.), wild



radish (*Raphanus raphanistrum*) and mustards/cabbages (*Brassica/Sinapis* sp.). Similar to ditch **291**, seeds of crop weeds/open grassland include docks, clover/medick, grasses including rye-grass/fescues (*Lolium/Festuca* sp.), mallows, eyebight/red bartsia along with the midden indicator, henbane. Grass seeds are notably frequent and may be indicative of grassland being mown for hay. There are also occasional seeds of wetland taxa such as sedges and rushes and a moderate number of seeds of spike-rush (*Eleocharis* sp.). Legumes are poorly preserved and are present in low numbers. Their sizes suggest that both wild species of vetch/tare (*Vicia/Lathyrus* sp.) and cultivated peas/beans (*Pisum sativum/Vicia faba*) are represented.

- C.1.15 Two samples taken from ditch 635; Sample 52 was taken from intervention 645 in the middle of the feature and Sample 56 was taken from the northern terminus of the ditch (734). This C-shaped feature mirrored a similar shaped feature (ditch 716) and may be contemporary. Both interventions produced charred plant remains which may suggest that there was a distribution of charred remains within the feature. The sample from intervention 645 produced the largest assemblage that is comprised of equal amounts of oats and barley with lesser quantities of wheat and rye. Most of the cereal grain was too poorly preserved to enable identification to species. Weed seeds are present in low numbers and mostly represent crop weeds such as stinking chamomile, goosefoots and docks. The high density of charred grain compared to the low density of weed seeds and chaff suggests that the assemblage represents the disposal of fully processed grain. The charred assemblage from the terminus of the ditch comprises a small amount of mixed grain and a single seed of Great Fen sedge (Cladium mariscus) which was a wetland plant that was commonly uses a fuel and was particularly favoured for use in bread ovens in the medieval period (Rowell 1986). There are also frequent untransformed (not charred) seeds of elderberry and bramble which are seeds that have a tough outer coat and are particularly resistant to decay.
- C.1.16 Waterhole **800** contained preserved wood, but waterlogged plant remains are limited to seeds of stinging nettle (*Urtica dioica*) only.

Period 3: medieval (c. AD 1066 to 1500)

C.1.17 The preserved plant remains from Period 3 do not appear to differ from those in the previous period. Mixed charred cereals remain frequent with little chaff, legumes and weed seeds. There are occasional indicators of cess remains in the form of a mineralised seed and occasional insect remains but there are no obvious latrine deposits.

Period 3.2: early medieval (c. AD 1150-1250)

C.1.18 Ditch 676, located in the north of the site, produced a charred assemblage of cereal grains in which barley predominates along with frequent oats and free-threshing wheat grains. Rye remains a minor component. Legumes are relatively frequent, particularly peas although the diagnostic hilum that would identify these as the cultivated variety is absent. The weed seeds in this assemblage are remarkably similar to those recovered from Period 2.3 pit 221 and include crop weeds and grassland plants, including a wetland plant element.



Period 3.3: high medieval (AD 1250-1400)

C.1.19 Curvilinear ditch **338** produced a charred assemblage from intervention **354** which was located in the southern arm of the ditch. Free-threshing wheat dominated the assemblage although barley is frequent. Oats and rye occur as minor components. Legumes are relatively frequent and weed seeds are rare but include stinking chamomile.

Period 4: post-medieval to modern

C.1.20 Samples taken from animal burials produced occasional charred plant remains that most likely reflect accidental inclusions in backfill.

Sample No.		53	10	52	56	54	33
Contest No.		665	222	641	735	677	352
Feature No.		661	221	645	734	676	354
Period		2.2	2.3	2.3	2.3	3.2	3.3
Date		SN	LS	LS	LS	EM	нм
Group		291		635	635	676	338
Feature Type		Ditch	Pit	Ditch	Ditch terminus	Ditch	Ditch
Sample volume (litres)		18	17	18	18	20	17
Flot volume (ml)		20	140	45	30	180	80
Proportion analysed (%)		100	100	100	100	100	100
Cereals:							
Avena sp. caryopsis	Oat (wild or cultivated)	12	143	44	4	66	14
Hordeum vulgare L. caryopsis	domesticated Barley grain	24	59	44	21	119	94
Hordeum vulgare L. germinated caryopsis	domesticated Barley grain	2					
Secale cereale L. caryopsis	Rye grain	2	3	8		6	9
free-threshing Triticum sp. Caryopsis	free-threshing Wheat grain	13	38	21	6	78	120
Cereal indet. (grains)		37	80	215	10	124	95
TOTAL GRAIN		90	323	332	41	393	332
estimated grain per litre soil		5	19	18.5	2.3	19.6	19.5
Chaff:							
Avena sativa L. floret base	cultivated Oat chaff			1			
Hordeum vulgare/Secale cereale L. rachis internode	Barley/rye chaff		1	1			1
Culm node							1
Legumes							
Vicia/Lathyrus sp. (<2mm)	Vetch/Tare		2			1	2
Vicia/Lathyrus/Pisum sp. (2-4mm)	Vetch/tare/pea	3	3	4		11	4
Vicia faba (4mm)	bean		3	5		6	5
Herbs							
Agrostemma githago L. seed	Corncockle						1
Anthemis cotula L. seed	Stinking Chamomile	1	162	2		13	7
Atriplex prostrata Boucher e DC./ patula L. Seed	Spear-leaved/Common Orache		2				
Avena/Bromus sp. caryopsis	Oat/brome	8					12
Brassica/Sinapis sp. seed kernel	Cabbages/Mustards kernel		16	1		1	
Lolium/Festuca spp. caryopsis	Bromes/fescues		5			2	
Centaurea sp. inner achene	Cornflower-type		1				
Chenopodium album L. seed	Fat-hen		7			3	2



Sample No.		53	10	52	56	54	33
Chenopodiaceae indet. seed	Goosefoot Family	1	15	3		7	1
Euphrasia/Odontites sp. seed	Eye-bright/Red Bartsia	2					
Fallopia convolvulus (L.) Á. Löve achene	Black-bindweed		1			2	1
Galium aparine L. nutlet	Cleavers	1				1	1
small Galium sp. [<2mm] nutlet	small-seeded Goosegrasses		2				
Hyoscyamus niger L. seed	Henbane	2	3			1	
Lapsana communis L. achene	Nipplewort						1
Lolium sp. caryopsis	Rye grass		2				
Linum perenne L. seed	Perennial flax					1	
Lithospermum arvense L. kernal	Corn Gromwell		1				
Luzula sp. seed	Wood-rushes		2				
Malva sp. Nutlet	Mallows	1	1				1
Medicago/Trifolium/Lotus sp. Seed	Medick/clover/trefoil		8				
Mentha sp. Seed	mint		3				
Euphrasia/Odontites sp. seed	Eyebright/Red Bartsia				1		
small Poaceae indet. [< 2mm]	small-seeded Grass Family		1				
caryopsis	•						
medium Poaceae indet. [3-4mm]	medium-seeded Grass Family		4			3	
large Poaceae indet. [>4mm] caryopsis	large-seeded Grass Family		76				
Polygonaceae indet. achene	Dock Family		5			2	
Polygonum aviculare L. achene	Knotgrass		3				
Ranunculus cf. acris L./repens	cf. Meadow/Creeping/Bulbous					1	
L./bulbosus L. achene	Buttercup						
Raphanus raphanistrum L. sequilla	Wild Radish seed-case segment		1				
Rumex cripus L/obtusifolius L. achene	Curled/broad-leaved dock		2	1			3
Rumex sp. achene	small-seeded Docks		11			4	
Rumex acetosella L. achene	Sheep's Sorrel					1	
Stellaria media (L.) Vill. Seed	Common Chickweed				2		
small <i>Trifolium</i> spp. (<1mm) seed	small-seeded Clovers					2	
Large Trifolium/Medicago spp. (2-3mm) seed	large-seeded Clovers/Medicks	2				8	1
Indeterminate seeds		2					
Wetland plants:							
elongate lenticular Carex spp. nut	elongate & flat-seeded Sedges	1	1			2	
medium trigonous <i>Carex</i> spp. [2-3mm] nut	medium triangular-seeded Sedges	1					
Cladium mariscus (L.) Pohl nut	Great Fen-sedge				1		
Eleocharis sp.Nut	Spike-rush	1	11			2	
Juncus sp. seed	Rushes	1	2	1			
Trees/shrubs:		1					
Corylus avellana L. shell	Hazelnut shell	1f				1f	
Crataegus monogyna Jacq. Seed	Hawthorn			1			
cf. Sorbus sp. seed	Whitebeams	1					4
Rubus fructicosa agg. seed	Brambles	++u			+++u		
Sambucus nigra L.seed	Elderberry	<u> </u>			+++u		
Other items	•						
charred insect		<u> </u>				1	
Charcoal		2	10	25	1	20	5
5.10.5001			10				

Table 21. Analysis of selected samples



Discussion

- C.1.21 The preserved plant remains from this site are predominantly carbonised and represent the burnt remains of cereal remains and other vegetation such as wetland resources and possible hay. The frequency of charred grain throughout the Saxon and medieval activity on this site are a reflection of the importance of cereals in the diet and are typical for sites in this region. Wheat and barley are staple cereals that are commonly recovered in abundance and with equal importance from archaeological sites of this period (McKerracher 2019, 98). Wheat was most commonly grown for grinding into flour to make bread, a process that was made easier through the introduction of watermills and windmills. The paucity of chaff and also of quern stones suggests that the cereals were fully processed before being brought onto the site. Barley was an important fodder crop as well as being used for brewing and also, once dehusked, for human consumption in pottage/stews.
- C.1.22 There was a period of economic transformation from the Middle Anglo-Saxon period, when cereal production increased dramatically through the innovative adoption of the use of the mouldboard plough and the spread of open-field farming, often referred to as an 'agricultural revolution' (McKerracher 2016, Hammerow et al. 2019). This increase in production led to the requirement for maintaining soil fertility, which was most likely through the application of manure, either through the spreading of midden material or through the dung of sheep put to pasture, and/or the use of nitrogenenriching leguminous crops which were used for soil improvement through crop rotation. Legumes are a valuable protein source that is particularly useful in that they can be dried for storage. They could be consumed in pottage, ground for flour and sprouted and are usually considered to be under-represented in archaeobotanical assemblages due to them being less likely to come into contact with fire than cereals which were often dried in corn driers.
- C.1.23 Consideration of the ecological tolerances/preferences of individual weed species can provide an insight of agricultural practices, such as the inference of cultivation of heavy clay soils through the presence of stinking chamomile (*Anthemis cotula*). Other taxa that have an ecological preference are wild radish (*Raphanus raphanistrum*) and sheep's sorrel (*Rumex acetosella*), which are frequently associated with acidic sands and other non-calcareous soils (Stace 2010: 446, 467). This information is of limited use in mixed cereal assemblages as it is not possible to determine which crop they are associated with. It does serve to prove that different soils have been exploited for cultivation. The presence of henbane, together with the poor preservation of the charred plant remains, may be an indication that they had accumulated in midden heaps prior to burial, particularly where assemblages also contained dietary indicators such as eggshell and animal bone.
- C.1.24 There is no conclusive evidence to indicate changes in agricultural practices throughout the Saxon and medieval period at this site. This may be due to poor preservation of the charred remains due to secondary or even tertiary deposition, and the possibility of material being reworked through repeated digging in the area should also be considered.



Sample	Context	Cut	Phase	Group	Feature type	Volume	Flot	Comments
No.						processed (L)	Volume (ml)	
10	222	221	2.3	208	Pit	17	140	Abundant mixed cereals, oats
								predominate. Abundant stinking chamomile and goosefoots
11	235	233	0	0	Pit	15	40	moderate mixed cereals
12	238	236	0	0	Pit	13	40	poor preservation
13	240	239	2.3	208	Post hole	15	15	poor preservation
14	242	241	2.3	208	Post hole	18	25	poor preservation
15	266	267	3.2	267	Ditch	18	10	poor preservation
16	271	270	0	0	Pit	18	40	Slightly cessy, Mineralised eggs-+
17	273	272	0	0	Post hole	10	20	poor preservation
18	275	274	2.1	264	Ditch	16	40	poor preservation
19	281	281	2.3	0	Post-hole	17	30	poor preservation
20	284	285	2.1	285	Ditch	20	50	Mixed cereals, poor preservation,
22	287	288	2.3	288	Ditch	17	50	mixed cereals and legumes, poor preservation
21	290	289	0	0	Post hole	19	30	frequent mixed cereals, mainly barley
23	305	301	2.3	301	Ditch	16	25	poor preservation
26	314	282	1	282	Pit	15	45	poor preservation
24	322	320	2.3	301	Ditch	18	30	poor preservation
25	324	321	2.2	0	Ditch	19	30	Mixed cereals, poor preservation,
29	333	329	2.2	291	Ditch	19	30	Mixed cereals, poor preservation,
28	335	334	2.3	334	Gully	10	10	slightly cessy, mineralised grass seed
27	341	340	3.3	340	Ditch	19	40	poor preservation
30	344	330	2.3	309	Ditch	17	10	poor preservation
31	346	345	3.3	340	Ditch	14	60	slightly cessy, mineralised grass seed
32	351	350	0	0	Pit	18	40	poor preservation. Possible rye
33	352	354	3.3	338	Ditch	17	80	Abundant grain, mainly barley. Poor preservation
34	390	389	1	0	Pit	16	20	poor preservation
35	398	396	3.2	0	Post-hole	16	70	mixed cereals, mainly oats, legumes and reed stems
36	402	401	3.3	401	Ditch terminus	17	30	poor preservation
38	427	427	3.2	427	Pit	16	40	Charred roots/stem-+, poor preservation
37	433	432	3.2	432	Pit	16	50	cessy with calcitic nodules. Possible rye
39	467	465	2.2	465	Pit	18	20	cessy with calcitic nodules, mixed cereals
40	471	470	4.1	0	Pit	8	20	poor preservation
41	482	458	3.2	458	Kiln? Hearth?	14	30	poor preservation
42	484	483	0	0	Pit	18	70	mixed cereals, mainly barley
43	487	488	2.2	0	Ditch	12	1	poor preservation
45	498	458	3.2	458	Pit	16	40	mixed cereals, mainly barley
44	499	458	3.2	458	Pit	14	30	Mixed cereals, poor preservation
46	520	515	2.3	0	Ditch	18	25	poor preservation
48	554	553	3.3	325	Pit?	18	10	poor preservation
47	563	564	3.2	463	Post hole	4	10	poor preservation
49	620	621	1	621	Ditch	18	20	poor preservation
50	624	625	1	625	Ditch	18	20	poor preservation



Sample No.	Context	Cut	Phase	Group	Feature type	Volume processed (L)	Flot Volume (ml)	Comments
51	639	630	3.2	261	Ditch	20	40	abundant untransformed elderberry seeds. Probably waterlogged
52	641	645	2.3	635	Ditch	18	45	Abundant mixed cereals and legumes. Charred roots/stem-+
53	665	661	2.2	291	Ditch	18	20	Abundant cereals, single germinated barley grain, Beet seeds
54	677	676	3.2	676	Ditch	20	180	silty flot needs refloating, may be cessy. Abundant grain, indet nut shell
55	696	697	3.1	660	Ditch	19	30	Frequent grain, indet charred fruit, poor preservation
56	735	734	2.3	635	Ditch terminus	18	30	Charred and waterlogged. Mixed cereals. Possible Sitophilus (granary weevil)
57	789	781	3.1	0	Pit	17	15	germinated wheat grain, waterlogged henbane seeds
58	812	800	2.3	0	Pit	7	20	frequent nettle seeds
59	832	831	4.1	0	Pit	18	40	charred bean, occasional grain, poor preservation

Table 22. Assessment level summary of processed environmental samples

C.2 Animal Bone

By Hayley Foster

Introduction and Methodology

- C.2.1 This report details the analysis of the animal bone recovered from Rosemary Road, Waterbeach, Cambridgeshire. The material has been divided into four principal periods of activity (with sub-phases) which date to the Roman, Saxon, medieval, through to post-medieval to modern, with the vast majority of material retrieved from Periods 2 and 3 (Saxon and medieval periods). For the purposes on analysis the data set will be amalgamated without the sub-phases due to the small sample sizes of the sub-phases.
- C.2.2 The assemblage was of a medium size, with 36.32kg of bone from hand-collection and from environmental samples. The number of recordable fragments that could be assigned to a phase totalled 544 with 176 of those fragments retrieved from environmental samples. The species represented include cattle (Bos taurus), sheep/goat (Ovis/Capra), pig (Sus scrofa), horse (Equus caballus), dog (Canis familiaris), field vole (Microtus agrestis), red deer (Cervus elaphus), mouse (Mus musculus), rabbit (Oryctolagus cuniculus), shrew (Sorex sp.), Cat (Felis catus), fox (Vulpes vulpes) and also amphibians, fish, birds and small rodents. Fish remains are discussed in a separate specialist report (App. C.3).
- C.2.3 Animal bone recovered during the evaluation, totalling 99 recordable specimens, is reported elsewhere (Reilly in Jackson 2017) this small assemblage included a similar, but more restricted, range of species to those in the larger sample recovered during



the excavation and is dominated by cattle/cattle-sized and sheep/sheep-sized elements.

- C.2.4 The method used to quantify this assemblage was based on that used for Knowth by McCormick and Murray (2007) which was modified from Albarella and Davis (1996). NISP (number of identifiable specimens) and MNI (minimum number of individuals) were calculated for all species present. MNI estimates the smallest number of animals that could be represented by the elements recovered. For the main domestic mammals, only the atlas and axis were counted for vertebrae.
- C.2.5 Identification of the faunal remains was carried out at OA East. References to Hillson (1992), Schmid (1972) and von den Driesch (1976) were used where needed for identification purposes.
- C.2.6 Two methods of ageing were implemented when analysing the mammalian bone remains. These methods include observing dental eruption and wear and epiphyseal fusion. When analysing tooth wear of sheep/goat, tooth wear stages by Payne (1973) were implemented. Tooth wear stages by Grant (1982) were implemented when assessing wear for cattle and pig. Higham (1967) mandibular wear stages (MWS) were assigned to loose mandibular M3s and mandibles with the innermost tooth still present. The Higham wear stages are used to estimate a minimum age of an individual animal. The state of epiphyseal fusion is determined by examining the metaphysis and diaphysis of a bone. Fusion was recorded according to Silver (1970) and Schmid (1972) for cattle, sheep and pig.
- C.2.7 For all identified bones, butchery marks were recorded. Butchery marks were described as chop, cut or saw marks. Burning and gnawing were noted where present.
- C.2.8 Measurements were taken according to von den Driesch (1976), using digital callipers and large bones were measured using an osteometric board. Withers' heights of cattle using Fock (1966), dog using Harcourt (1974) and sheep using Teichert (1969).

Results of Analysis

- C.2.9 The faunal assemblage is generally in a good to fair condition with moderate levels of fragmentation. Material is mainly from ditches, pits, gullies, and post-holes. There is a notably wide variety of taxa making up the assemblage. The element distribution of the assemblage shows a presence of both primary butchery elements and meat bearing elements. Most of the faunal remains came from Period 3, primarily due to the large amount of amphibian remains retrieved. The majority of cattle remains belong to three post-medieval (Period 4.2) articulated cattle skeletons (845, 861 and 745).
- C.2.10 Measurements were carried out where possible (Table 26). Five estimated wither's heights could be calculated with one for dog, two sheep and two cattle.
- C.2.11 The composition of the faunal material is comprised of cranial elements (including mandibles, maxillae, loose teeth and horn cores), extremities (including phalanges, metapodia, carpals and tarsals), making up approximately 55% of the overall NISP of the main domesticates. As meaty bones are also present in substantial amounts, it suggests that animals were slaughtered, consumed and remains buried on site.



However, it should be noted that denser bones such as metapodia, mandibles and teeth are more durable and less susceptible to taphonomic destruction. The pattern of representation exhibits a trend that larger taxa are over-represented in hand-collected recovery whereas those fragments from environmental samples show a bias toward smaller species such as amphibians.

Species	NISP	NISP%	MNI	MNI%	
Cattle	221	40.6	10	21.3	
Sheep/Goat	48	8.8	8	17.0	
Bird	42	7.7	5	10.6	
Horse	33	6.1	2	4.3	
Pig	25	4.6	5	10.6	
Dog	13	2.4	2	4.3	
Amphibian	140	25.7	6	12.8	
Field Vole	1	0.2	1	2.1	
Water Vole	2	0.4	1	2.1	
Red Deer	1	0.2	1	2.1	
Small Rodent	6	1.1	1	2.1	
(?)					
Mouse	1	0.2	1	2.1	
Rabbit	2	0.4	1	2.1	
Cat	8	1.5	1	2.1	
Shrew	1	0.2	1	2.1	
Fox	1	0.2	1	2.1	
Total	545	100.0	47	100.0	

Table 23. Number of identifiable fragments (NISP) and minimum number of individuals (MNI).

	Pe	eriod 1	Pe	eriod 2	Period 3		Period 4	
Species	NISP	NISP%	NISP	NISP%	NISP	NISP%	NISP	NISP%
Cattle	1	25.0	68	43.6	53	20.9	99	75.6
Sheep/Goat			17	10.9	28	11.1	3	2.3
Bird			8	5.1	14	5.5	20	15.3
Horse			15	9.6	14	5.5	4	3.1
Pig			4	2.6	19	7.5	2	1.5
Dog			4	2.6	7	2.8	2	1.5
Amphibian	3	75.0	29	18.6	108	42.7	1	0.8
Field Vole					1	0.4		
Water Vole								
Red Deer					1	0.4		
Small Rodent (?)			1	0.6	5	2.0		
Mouse					1	0.4		
Rabbit			2	1.3				
Cat			8	5.1				
Shrew					1	0.4		
Fox					1	0.4		
Total	4	100.0	156	100.0	253	100.0	131	100.0

Table 24. Number of identifiable fragments (NISP) from the assemblage by Period.

C.2.12 Cattle make up the highest percentage of the NISP of the domesticates in the assemblage followed by sheep/goat. The majority of cattle remains belong to three post-medieval articulated cattle skeletons (845, 861 and 745) ageing to 18-24 months, 30 months and 31-32 months at death (Period 4). Other mandible wear data for cattle indicates the presence of slightly younger animals 15-17 months and slightly older animals 32-50 months of age at death. Cattle are the dominant domestic species in all



phases and would have made up the greatest percentage of consumed meat. The three cattle burials, ABGs (animal bone groups), is likely due to culling as it doesn't seem to be associated with any likely ritual deposits. However, as the cattle were not young, surplus stock, and they weren't consumed, another possibility is they were suffering with an illness or disease.

- C.2.13 Sheep/goat are represented by 8.8% of the overall NISP. Mandible wear ageing data suggests sheep/goat are slaughtered at varying ages, from 9-10 months, 21-28 months and adulthood. The fusion data corroborated the dental data in that there is a small presence of unfused early fusing element in Periods 2 and 3, however most elements are still fused. The combination of ages suggests sheep/goat were likely exploited for primary and secondary products. Those animals that were slaughtered at the 18-36 months of age range were likely being slaughtered for meat, and those that were adults were likely kept as breeding stock or for wool. Sheep are generally broader and taller during the Saxon period in East Anglia (Holmes 2014), this data set unfortunately does not yield enough metrical data to confirm whether that is the case here at Rosemary Road.
- C.2.14 Pigs are represented by 4.6% of the NISP, with ages ranging from 2-4 months, 7-8 months, 19-21 months and 25-27 months of age at death. These age ranges would be expected with the younger animals, likely breeding stock, and the additional animals slaughtered for meat upon reaching their optimal weight. Period 2 and 3 contexts produced seven pig canines, two belonging to females and five belonging to males.
- C.2.15 Horses were minimally represented by 6.1% of the NISP, with most remains consisting of cranial elements and extremities. Loose teeth and phalanges are dense, therefore survive better in the soil. The limited fusion data for horse reveals most animals would have been adults with at least one animal from Period 2 being under 16-20 months of age at death. Horses would have been used for traction and transportation purposes.
- C.2.16 Other mammals including dog, cat, fox and red deer are minimally represented. Ditch 260 contains remains belonging to a large size dog, and a small dog femur from ditch 572 had a wither's height of 40.42cm. Carnivore gnawing by dogs was also noted on 6 occasions. One fragment of red deer antler from ditch 660, is a shed antler, yet the smaller tines appear to have been sawn off indicating the offcuts were used for craft activity.
- C.2.17 Small mammals including water vole, mouse, rabbit and shrew are present in the environmental samples.
- C.2.18 Amphibians are well represented with 25.7% of the NISP, amphibian remains are from environmental samples. Those amphibian remains that could be identified to species were frogs (*Anura Rana*). The existence of these remains suggests the presence of a water source with suitable environmental conditions close by.
- C.2.19 Birds were represented by several species in the assemblage. Of the 42 fragments identified as 'bird' 35 were identified as belonging to domestic fowl. Domestic fowl would have been exploited for meat and eggs. Other species included one fragment belonging to a goose from ditch **575** (Period 2.3), one fragment from a swan (ditch



- **660**; Period 3.1), one charadriiform (ditch **676**; Period 3.2), two fragments of brent goose (ditch **706**; Period 3.2) and two unidentifiable small bird fragments.
- C.2.20 Taphonomic processes are visible in the forms of butchery, gnawing and a case of pathology. Butchery marks with visible in the form of heavy chop marks on articulations and fine cut marks on mandibles. Gnawing marks are noted on several cattle elements with tooth marks of dogs on proximal and distal articulations. The single case of pathology is a possible fractured bird furcula from pit 470. The fragment contains a bulbous section which is a possible fracture.
- C.2.21 In the assemblage cattle are numerically predominant over sheep, with the relative sizes of cattle and sheep carcasses, beef would contribute much more to the diet of the residents than lamb or mutton.
- C.2.22 Preservation of the remains was fair with minimal weathering and surface erosion. Taphonomic processes including gnawing and butchery were noted in the assemblage. Carnivore gnawing was identified on only six fragments of animal bone. Butchery evidence was minimal, with only four examples noted.

Discussion

- C.2.23 Skeletal element distribution shows that all three main domesticates were likely butchered and consumed on site. The majority of the faunal material dates to the Saxon and medieval periods, with a predominance of cattle remains. Cattle would have provided the greatest amount of meat of any of the domesticates and slaughtered primarily for meat as the ageing data suggests. Sheep/goat became more prevelant in the medieval period as sheep husbandry became more important. Often the same flocks would be used for meat production and for milk and wool in the Early-Saxon and medieval periods (Albarella 1997). Animals slaughtered for mutton under 4 years of age and adults kept for secondary products. Pigs were slaughtered when reaching an optimum weight for consumption.
- C.2.24 In a regional context, the assemblage from Rosemary Road, is fairly typical of a predominantly Saxon and medieval assemblage in this region of Cambridgeshire. Assemblages tend to contain a wide variety of species with cattle being the dominant food source. The representation of the main domesticates in comparable percentages highlight that the settlements have a similar economy regarding husbandry practices.
- C.2.25 At Rosemary Road, domestic mammals were the mainstay of the food economy, with cattle remains being the most well represented species. The dominance of cattle in the assemblage and the increase in prevalence of sheep/goat is typical for Saxon and medieval settlement sites. Beef would have made up the most important part of the inhabitants' diet. Sheep/goat would have been a secondary species for food, however from the ageing data it can be concluded they are likely exploited for secondary products in addition to a source of meat. The assemblage does provide insight into husbandry practices and the human-animal interaction at the settlement.



Species	Fusion stage	F	Period 2	F	Period 3	Period 4		
		Unfuse d	Fusing or Fused	Unfuse d	Fusing or Fused	Unfuse d	Fusing or Fused	
Cattle	Early fusion	3	7	1	18	8	22	
	Mid fusion	4	4	1	3	15	5	
	Late fusion	4	10	2	2	23	2	
Sheep/Goa	Early fusion	1	3	1	3	0	1	
t	Mid fusion	1	2	0	3	0	0	
	Late fusion	2	1	0	1	1	0	

Table 25. Summary of epiphyseal fusion for ageing

Context	Cut	Phase	Species	Element	GL	GLI	GLm	Вр	SD	Bd	ВТ	HTC	GLP	SLC	LA/LAR	EWH (cm)
220	219	1	Cattle	Metacarpal				46.9							,	, · · /
				1												
260	261	3.2	Dog	Femur				50.5								
275	274	2.1	Sheep	Humerus	170			40.5	19.1	32	31.2	19.2				72.76
285	0	2.1	Bird	Femur				14								
			(Domestic													
			Fowl)													
306	302	2.3	Sheep/Goat	Tibia												
332	329	2.2	Cattle	Metatarsal				43.4								
				1												
332	329	2.2	Horse	Metacarpal				44.6								
				1												
352	354	3.3	Bird	Femur	82.8					22.4						
			(Domestic													
			Fowl)													
352	354	3.3	Cattle	Astragalus		58.5	54.5			36.5						
352	354	3.3	Cattle	Tibia						56.6						
372	371	3.3	Sheep/Goat	Femur				44.3								
393	395	2.3	Rabbit	Tibia				16								
399	396	3.2	Cattle	Scapula									63.2	41.5		
404	403	3.3	Cattle	Pelvis											59.7	
404	403	3.3	Cattle	Radius						57.8						
419	408	2.2	Cattle	Pelvis											52	
422	407	2.1	Bird	Humerus				18.1	9	19.4						
			(Domestic													
			Fowl)													
437	434	3.2	Pig	Radius				25.2								
437	434	3.2	Sheep/Goat	Humerus							29.2					
446	444	3.2	Cattle	Humerus			212			67.9	64.7	39				
461	459	3.1	Pig	Astragalus		36	34.2			23.9						
471	470	4.1	Bird	Coracoid	64.4											
			(Domestic Fowl)													
471	470	4.1	Bird	Femur	92.9			22.4		20.8						
4/1	470	4.1	(Domestic	remui	92.9			22.4		20.8						
			Fowl)													
471	470	4.1	Bird	Femur	92.5					20.9						
7/1	470	7.2	(Domestic	remai	32.3					20.3						
			Fowl)													
471	470	4.1	Bird	Humerus	83.4			23.6								
			(Domestic													
			Fowl)													
471	470	4.1	Bird	Carpo-	45.5			13.5		9.5						
			(Domestic	Metacarpus												
			Fowl)													
471	470	4.1	Bird	Carpo-	45.7			14.6		9.9						
			(Domestic	Metacarpus												
			Fowl)													
471	470	4.1	Bird	Radius	74.3			6.9		8.25						
			(Domestic													
4=-	4=0	4.	Fowl)					20.0								
471	470	4.1	Bird	Tibio-tarsus				28.3								
			(Domestic													
471	470	11	Fowl)	Tibio taraus	122.1			27.8								
4/1	4/0	4.1	Bird (Domestic	Tibio-tarsus	133.1			27.8								
			Fowl)													
			FUWIJ				L	L			L	L	l	L		



Context	Cut	Phase	Species	Element	GL	GLI	GLm	Вр	SD	Bd	BT	HTC	GLP	SLC	LA/LAR	EWH (cm)
471	470	4.1	Bird	Ulna	82.5			11.7		11.9						
"-			(Domestic	J	22.3	1						I		I]
			Fowl)													
474	470							22.5								
471	470	4.1	Bird	Humerus				23.6								
			(Domestic													
			Fowl)													
489	490	3.2	Horse	Metatarsal				44.4	24.7							
				1												
498	458	3.2	Bird	Femur						18.3						
			(Domestic													
			Fowl)													
498	458	3.2	Bird	Humerus						20.3						
450	450	5.2	(Domestic	Hameras						20.5						
			Fowl)													
400	450	2.2		D. II						70.0						
498	458	3.2	Horse	Radius						70.8						
519	515	2.3	Cattle	Metacarpal				49.5								
				1												
534	533	4.1	Bird	Tibio-tarsus												
			(Domestic													
			Fowl)													
569	567	2.2	Bird	Tibio-tarsus	105.8			17		11.1						
			(Domestic													
1			Fowl)				1									
569	567	2.2	Bird	Ulna	67.2	1	1	8.7	1	7.92		1		1		
303	307	2.2	(Domestic	Oilla	07.2			0.7		7.32						
1			,				1									
		~ ~	Fowl)		.=-	-			42 :	2= -	-					
573	572	3.2	Dog	Femur	170			34.5	12.1	27.7						40.42
573	572	3.2	Sheep/Goat	Humerus						28.5	26.3	16.8				
588	575	2.3	Cattle	Tibia						62.5						
588	575	2.3	Goose	Humerus						23.2						
588	575	2.3	Sheep/Goat	Tibia						24.2						
591	574	2.3	Horse	Radius						72.1						
								42.0		72.1						
632	631	3.1	Cattle	Metacarpal				43.8								
				1												
638	630	3.2	Cattle	Metatarsal				44.55								
				1												
654	652	3.1	Cattle	Radius				79.1								
665	661	2.2	Cattle	Tibia						61						
667	660	3.1	Cattle	Metacarpal				50.1								
		_		1												
672	671	2.3	Cattle	Femur						90.9						
672	671	2.3	Cattle	Metatarsal	220			46.5	25.3	52.4						119.9
0/2	671	2.5	Cattle		220			40.5	25.5	32.4						119.9
				1												
672	671	2.3	Horse	Humerus						72.7	69.6	49.7				
674	673	3.1	Cattle	Astragalus		61.7	55.7			39						
674	673	3.1	Cattle	Tibia	320					58.4						110.4
703	700	3.4	Sheep/Goat	Metatarsal	125.3			17.8	11.2	21.5						56.88
				1												
707	706	3.2	Bird (Brent	Carpo-	83.1			20.8								
1 -			Goose)	Metacarpus								1		1		
707	706	3.2	Bird (Brent	Carpo-	71.9	1		16.7	1	1		1		1	1	
,,,,	,00	3.2	Goose)	Metacarpus	, 1.3		1	10.7								
720	724	4.4				 	-	-	-	20	20.0	10		 	—	
728	724	4.1	Sheep/Goat	Humerus		ļ			<u> </u>	28	26.8	18		ļ		
730	724	4.1	Cattle	Tibia					1	55.8						
785	780	4.2	Cattle	Metacarpal	225			45.2	26	49.7						
				1			<u> </u>		<u> </u>		<u></u>					
801	799	4.1	Cattle	Metacarpal						52.4						
1				1			1									
801	799	4.1	Cattle	Metacarpal	244			45.7		52						
				1												
801	799	4.1	Cattle	Metatarsal		 		50.5	1	 		 		 		
201	133	4.1	Cattle	ivietatarsai 1				50.5								
004	700	4.4	D.			 	-	-	-	 	-	 		 	22.4	
801	799	4.1	Pig	Pelvis		 		ļ	1	 		ļ		ļ	32.1	ļ
809	800	2.3	Cattle	Metacarpal			1			59.6						
			<u> </u>	1												
818	817	3.1	Cattle	Humerus		<u> </u>	<u> </u>	<u> </u>	<u> </u>	64.4	61.8	37.1		<u> </u>		<u> </u>
818	817	3.1	Cattle	Tibia						58.4						
826	816	4.1	Cattle	Metatarsal	225			42.1	25.2	49.9						
				1								1		1		
826	816	4.1	Cattle	Radius		1		75.4	t	1		1		1	1	
	816	4.1		Radius		 		73.4	35.3	 		 		 		
826			Horse Shoon/Coot			 		20.0	33.3	 		 		 		
838	837	3.1	Sheep/Goat	Metatarsal				20.9								
<u> </u>			a	1		 				 		ļ		ļ		ļ
840	844	2.2	Sheep/Goat	Radius				28.7	<u> </u>							ļ
861	860	4.1	Cattle	Astragalus		80.3			<u> </u>							
861	860	4.1	Cattle	Astragalus		80.8	71.9			49.9						
								_								



Context	Cut	Phase	Species	Element	GL	GLI	GLm	Вр	SD	Bd	ВТ	HTC	GLP	SLC	LA/LAR	EWH (cm)
861	860	4.1	Cattle	Horn Core	230											
861	860	4.1	Cattle	Pelvis											68.2	
861	860	4.1	Cattle	Scapula									75.7	61.2		
861	860	4.1	Cattle	Scapula									75.5	61.7		
887	0	2.2	Pig	Humerus						33.6						

Table 26. Table of measurements (mm).

Context	Cut	Phase	Species	Element	Gnawing
331	330	2.3	Cattle	Metacarpal 1	Carnivore
654	652	3.1	Cattle	Humerus	Carnivore
723	722	3.1	Cattle	Astragalus	Carnivore
489	490	3.2	Horse	Metatarsal 1	Carnivore
675	673	3.1	Cattle	Metatarsal 1	Carnivore
838	837	3.1	Cattle	Metatarsal 1	Carnivore

Table 27. Identifiable fragments with gnawing.

Context	Cut	Phase	Species	Element	Butchery
785	780	4.2	Horse	Radius	Chop
469	468	3.2	Sheep/Goat	Horn Core	Chop
446	444	3.2	Cattle	Mandible	Cut
573	572	3.2	Cattle	Radius	Chop

Table 28. Identifiable fragments with butchery marks.

Cattle	15-24 mnts	30-33 mnts	40-50 mnts	Total
	6	6	2	14

Table 29. Mandible wear per stage for cattle.

Sheep	9-10 mnts	21-28 mnts	Adult	Total
	1	5	2	8

Table 30. Mandible wear per stage for sheep/goat.

Pig	2-8 mnts	19-21 mnts	25-27 mnts	Total
	2	1	2	5

Table 31. Mandible wear per stage for pig.

C.3 Fish bone

By Rebecca Nicholson

Introduction

C.3.1 A small assemblage of fish remains was recovered from the excavations at Rosemary Road, Waterbeach, Cambridgeshire. The assemblage comprises only 18 identified bones, all of which came from the sorted residues of sieved environmental samples sieved to 0.5mm (see App. C.1 for details of all sampled contexts). The identified fish bone derives from four phases of occupation: the Late Anglo-Saxon c. AD 850-1066 (Period 2.2 and 2.3), early and high medieval - c.AD 1150 to 1400 (Period 3.2 and 3.3) and post-medieval - c.AD 1500 to 1750 (Period 4.1). Sampled features that included small numbers of identified fish bones are ditches 320, 465, 635, 676 and 553 as well as pits 396 and 800 and post hole 280 (Tables 32 and 33).



Methodology

C.3.2 The bones were identified to taxon and skeletal element with the aid of the author's skeletal reference collection. Condition was recorded on a subjective scale of poor (eroded, often unidentifiable), fair, good and very good (as fresh). No bones were suitable for measurement and fish sizes were estimated by comparison with bones from fish of known length in the author's comparative collection. Full records will be available with the site archive.

The assemblage

- C.3.3 All of fish bones are from small and sometimes tiny fish, most are in fair, good or very good condition. The few bones from ditch fill 677 are in such good condition that it seems likely they are relatively modern, perhaps deposited in a bird pellet. An eel (Anguilla anguilla) vertebra from this context exhibits surface erosion characteristic of digestion which supports this interpretation. An eel vertebra from pit fill 812, associated with the use of pit 800, also appears distorted in a manner consistent with chewing, a feature often seen in assemblages from cesspits, but as this is a single bone further interpretation is not possible.
- C.3.4 Clupeid (all or mostly herring, Clupea harengus) is the only identified seafish, all examples are from small fish so sprat (Sprattus sprattus) can not be excluded. Bones from the catadromous eel are common but are again from fairly small fish, probably caught locally in the River Cam or fenland tributaries. Several vertebrae from small and tiny cyprinids are also present: one from post-hole 280 is a caudal vertebra of bream (Abramis brama) or barbel (Barbus barbus) type from a fish of c. 200mm total length. A single vertebra from a pike of under 250mm (total length) was recovered from ditch fill 467.

Significance

- C.3.5 Although a very small assemblage, at least some of which may not derive from human action, the remains have some archaeological significance. Fish was an important foodstuff by the mid-late Anglo-Saxon period, particularly for communities living close to the coast or, as in this case, riverine or fenland resources. While the evidence from fish bone assemblages is patchy, and particularly scarce from rural sites, Anglo-Saxon and medieval charters frequently mention fisheries although access to them was often carefully controlled, frequently by the church (Bond 1988, 85; Locker 2018, 42). Weirs with baskets or nets were used to trap eels and small freshwater fish and the ubiquity and value of eel fisheries in the Fens is evident in records from the Domesday Book (https://opendomesday.org/). Small freshwater fish may have been caught using these passive methods, or targeted more directly using nets or simple rods with horse-hair lines and baited hooks (Locker 2018, 42).
- C.3.6 Coastal herring fisheries are also mentioned in the Domesday Book and those of East Anglia were well established by the medieval period and salted herrings were traded widely. Clupeid bones were also recovered from medieval deposits at Fen End, Over, Cambridgeshire in a small assemblage of late Anglo-Saxon and medieval fish remains



which was, as here, predominantly composed of bones from a variety of small freshwater fish, especially eel (Nicholson in Sinclair 2021).

Species	Common name	Phase 0	Phase 2.2	Phase 2.3	Phase 3.2	Phase 3.3	Phase 4.1	Total
Anguilla anguilla	Eel		1	3	4	1		9
Clupeidae	Herring fam.			3	1		1	5
Esox lucius	Pike		1					1
Cyprinidae	Carp fam.			1	2			3
Unidentified/indeterminate		2	1		6	1	1	11
Grand Total		2	3	7	13	2	2	29

Table 32. Number of identified fish fragments by period

Cut	Context	Period	Feature type	Anguilla anguilla	Clupea harengus	Clupeidae	Cyprinidae	Esox lucius	Unid	Totals
				Eel	Herring	Herring fam.	Carp fam.	Pike		
233	235	0	pit						2	2
280	281	2.3	post hole				1			1
320	322	2.3	ditch	1		2				3
396	398	3.2	pit	2		1				3
401	402	3.3	ditch						1	1
447	449	3.2	ditch	1						1
465	467	2.2	ditch	1				1		2
553	554	3.3	ditch	1						1
635	633	2.3	ditch		1					1
661	665	2.2	ditch						1	1
676	677	3.2	ditch	1			2		6	9
800	812	2.3	pit	2						2
831	832	4.1	animal burial			1			1	2
Totals				9	1	4	3	1	11	29

Table 33. Catalogue of fish bone

C.4 Marine shell

By Carole Fletcher

Introduction and Methodology

C.4.1 A total of 38 shells or shell fragments weighing 0.081kg were collected by hand from ditches, pits and a posthole during the archaeological works. The shells recovered are mostly mussel Mytilus edulis from intertidal zones, with a single oyster Ostrea edulis from estuarine and shallow coastal waters. The shell is moderately well-preserved and does not appear to have been deliberately broken or crushed, however, some have suffered post-depositional damage.



- C.4.2 The shells were weighed and recorded by species, with right and left valves noted, when identification could be made. The minimum number of individuals (MNI) was not established, due to the small size of the assemblage from most features.
- C.4.3 The single oyster shell showed no evidence of shucking damage, in the form of a small 'V' or 'U'-shaped hole on the outer edge of the left or right valve. This damage would have been caused by a knife during the opening, or 'shucking', of the oyster, prior to its consumption.

Factual Data

- C.4.4 Shell was recovered from ditches **285**, **288**, **340**, **543**, **553**, **572**, **661**, **673**, **700** and **896**, pits **397**, **465**, **567** and **860**, and posthole **391**. Of these, no feature produced more than nine shells or fragments of shell, with a maximum weight of 0.024kg (pit **465**).
- C.4.5 The greater portion of the assemblage was recovered from ditches, although the bias is not pronounced, and the largest ditch assemblage is only seven shells or fragments of shell, weighing 0.012kg, from Period 2.2 ditch **661**. Period 3.4 ditch **700** produced the only oyster shell in the assemblage.

Discussion

C.4.6 This is too small an assemblage to draw any but the broadest conclusions, in that shellfish were reaching the site from the coastal regions, indicating trade with the wider area. The mollusca recovered from the features are few in number, representing general scattered food waste in low concentrations. None of the feature assemblages represent the remnants of even a single meal. Although not closely datable in themselves, the shells may be dated by their association with pottery or other material also recovered from the features.



APPENDIX D BIBLIOGRAPHY

- Addyman, P. V. 1973: Late Saxon Settlements in the St. Neot's Area. III: The Village or Township of St Neots, *Proceedings of the Cambridge Antiquarian Society* 64, 45-100
- 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
- Albarella, U., 1997. Size, power, wool and veal: zooarchaeological evidence for late medieval innovations. *Environment and subsistence in medieval Europe* 9, 19-31.
- Anderson, S., 2017: 'Post Roman Pottery' in *Land to the Rear of 10A Rosemary Road, Waterbeach* PCA Report No: 12862
- Bailey M. 1996. Demographic decline in late medieval England: some thoughts on recent research.

 The Economic History Review, 49: 1-19
- Ballantyne, R.M. 2004 Islands in wilderness: The changing medieval use of the East Anglian peat fens, England. *Environmental Archaeology* 9: 189–198
- Banham, D. and Faith, R. 2014 Anglo-Saxon Farms and Farming Oxford: Oxford University Press.
- Barrett, J. H., Locker, A.M. and Roberts, C.M. 2004. 'Dark Age Economics' revisited: The English fish bone evidence AD 600-1600. *Antiquity 78* (301), .618-636
- Bond, C, 1988, Monastic fisheries, pp 69-112 in M Aston (ed) *Medieval Fish, Fisheries and Fishponds in England*, Brit Arch Rep 182, Oxford
- Brown, D., 2011: *Archaeological archives. A guide to best practice in creation, transfer and curation,* 2nd edition, Archaeological Archives Forum
- Brunning, R., 2010.: Waterlogged Wood: Guidelines on the recording, sampling, conservation and curation of waterlogged wood. London, English Heritage
- 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
- Caruth, J. and Goffin, R. 2012: Land south of Hartismere High School Eye, Suffolk EYE 083 Post-Excavation Assessment Report. SCCAS Report No. 2012/067. Unpublished
- Carver, M.O.H., Donaghey, S. and Sumpter, A.B. 1978: *Riverside structures and a well in Skeldergate and Buildings in Bishophill*. York Archaeological Trust / Council for British Archaeology
- CIfA, 2014a: Standard and guidance for archaeological excavation
- CIfA, 2014b: Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives
- Clarke, G. 2016. Waterbeach Barracks and Airfield, Waterbeach, Cambridgeshire. Archaeological Evaluation. OA East Report No. 1996 (unpublished).
- Clarke, R. 2006. Prehistoric, Medieval and Post-Medieval Remains at Merton Park, to the rear of No. 30 High Street, Waterbeach: Evaluation report. CCC AFU Report Number 867
- Clay, W.K. 1859. A History of the Parish of Waterbeach in the County of Cambridge. Cambridge, Deighton, Bell and Co.
- Cowgill, J. de Neergaard, M and Griffiths N., 2000: Knifes and Scabbards, Medieval Finds from Excavations in London N1. Woodbridge, The Boydell Press



- Crowson, A., 2004: Hot rocks in the Norfolk Fens: the excavation of a burnt flint mound at Northwold, 1994-5. East Anglian Archaeology Occasional Paper 16
- Cuttler, R., Martin-Bacon, H., Nichol, K., Patrick, C., Perrin, R., Rátkai, S., Smith, M. and Williams, J., 2011: Five Sites in Cambridgeshire. Excavations at Woodhurst, Fordham, Soham, Buckden and St Neots, 1998-2002, British Archaeological Reports, British Series 528. Oxford Archaeopress
- Darby, H.C., 1940. The medieval fenland. Cambridge University Press.
- Davis, S.J., 1992: A rapid method for recording information about mammal bones from archaeological site. AML report 19/92. London: English Heritage
- Egan, G. and Pritchard, F.; 1991 [2002]: Dress Accessories 1150-1450. Woodbridge, The Boydell Press
- Ellis. and Moore., 1990: 'Hones in Medieval Winchester' in Biddle, M. *Object and Economy in Medieval Winchester*, Vols 1+2, 868-881. Clarendon Press, Oxford
- Evans, J, Macaulay, S., and Mills, P., 2017 *The Horningsea Roman Pottery Industry in Context. Volume*1: Production, Distribution and the Old Tillage, East Anglian Archaeology 162
- Evans, J. Macaulay, S. and Mills, P. 2017: Production, Distribution and the Old Tillage. *The Horningsea Roman Pottery Industry in Context*. EAA Report No 162
- Evans, J.G. 1972 Land snails in Archaeology. Academic Press
- Fock J. 1966. Metrische Untersuchungen an Metapodien einiger europäischer Rinderassen. Diss LMU, Münchnen.
- Garrow, D., Lucy, S. and Gibson, D. 2006: *Excavations at Kilverstone, Norfolk: An episodic landscape history*. East Anglian Archaeology No. 113, 170-201
- Graham, S. 2020. Land to the Rear of 10A Rosemary Road, Waterbeach. Post-Excavation Assessment and Updated Project Design. OAE Report 2375
- 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.
- Green. C., 2017: Querns and millstones in Late Iron Age and Roman London and South-East England, Chapter 8: Agriculture and Industry in SE Roman Britain. Oxbow
- Hall, D. 1996. The Fenland Project. Number 10: Cambridgeshire Survey. The Isle of Ely and Wisbech. East Anglian Archaeology Report 79.
- Hamerow, H., Bogaard, A., Charles, M., Ramsey, C., Thomas, R., Forster, E., . . . Stroud, E. 2019 Feeding Anglo-Saxon England: The bioarchaeology of an agricultural revolution. Antiquity, 93(368)
- Hansen, S.C. Juel. 2009: Whetstones from Viking Age Iceland as part of the Transatlantic trade in basic commodities PhD thesis published on the web, Sigillum University, Iceland October 2009
- Harcourt, R.A., 1974. The dog in prehistoric and early historic Britain. *Journal of archaeological science*, 1(2), pp.151-175.
- Higham, C.F.W. 1967. Stockrearing as a cultural factor in prehistoric Europe, proceedings of the prehistoric society 33, 84-106.
- Higham, C.F.W. 1967: Stockrearing as a cultural factor in prehistoric Europe, *Proceedings of the Prehistoric Society 33*, 84-106



- Hillson, S. 1992. Mammal bones and teeth: An introductory guide to methods and identification. London Institute of Archaeology: University College London.
- Hillson, S., 1992: *Mammal bones and teeth: An introductory guide to methods and identification.* (London Institute of Archaeology: University College London
- Historic England, 2006: Management of research projects in the historic environment. The MoRPHE project manager's quide
- Historic England, 2008 Management of research projects in the historic environment. PPN3: Archaeological excavation
- Hodder, M. and Barfield, L., 1991: Burnt Mounds and Hot Stone Technology. Sandwell
- Holmes, M., 2014. Does size matter? Changes in the size of animals throughout the English Saxon period (AD 450–1066). *Journal of archaeological science*, 43, 77-90.
- Hurst, J. 1966. 'Waterbeach: The Medieval pottery'. In Cratser, M.D. 'Waterbeach Abbey'. *Proceedings of the Cambridge Antiquarian Society* 59, 89-93.
- Jackson, C. 2017: Land to The Rear Of 10a Rosemary Road, Waterbeach An Archaeological Trial Trench Evaluation. PCA Report 12862 (unpublished)
- Jacomet, S. 2006: *Identification of cereal remains from archaeological sites*. 2nd edition. IPNA, Universität Basel / Published by the IPAS, Basel University
- Kay, Q.O.N. 1971 Biological Flora of the British Isles: Anthemis cotulaL. Journal of Ecology 59 623-636
- Lethbridge, T. C. 1927: An Anglo-Saxon Hut on the Car Dyke at Waterbeach, *Antiquaries Journal* 7, 141-6
- Lethbridge, T. C. and Tebbutt, C. F. 1933: Huts of the Anglo-Saxon Period, *Proceedings of the Cambridge Antiquarian Society* 33, 133-51
- Lethbridge, T.C., 1927. An Anglo-Saxon Hut on the Car Dyke, at Waterbeach. *The Antiquaries Journal* 7 (2) 141-146.
- Lewis, C. 2010. Exploring black holes: Recent investigation in currently occupied rural settlements in eastern England. In N.J. Higham and M.J. Ryan. (eds) *The Landscape Archaeology of Anglo-Saxon England* Boydell Press, 83–106
- Lewis, C., 2016. Disaster recovery: new archaeological evidence for the long-term impact of the 'calamitous' fourteenth century. *Antiquity*, *90* (351), pp.777-797.
- Locker, A, 2018 Freshwater fish in England, a social and cultural history of coarse fish from prehistory to the present day, Oxbow Books, Oxford
- MacGregor, A., 1985: Bone, Antler, Ivory and Horn. The Technology of Skeletal Materials since the Roman Period, London. Croom Helm
- Manning, W. H. 1989: Catalogue of the Romano-British Iron Tools, *Fittings and Weapons in the British Museum*. London, British Museum Publication
- McKerracher, M. 2019 Anglo-Saxon Crops and Weeds: A Case Study in Quantitative Archaeobotany Oxford: Archaeopress
- McKerracher, M. 2016 Bread and surpluses: the Anglo-Saxon 'bread wheat thesis' reconsidered, Environmental Archaeology, 21:1, 88-102
- McCormick, F. and Murray, E. 2007: *Knowth and the Zooarchaeology of early Christian Ireland*. Dublin: Royal Irish Academy



- Medlycott 2011Research and Archaeology Revisited: A Revised Framework for the East of England. East Anglian Archaeology Occasional Papers 24
- Mitchiner, M. 1991: *Jetons, Medalets and Tokens: The Low Countries and France v. 2.* South Croydon, Hawkins Publications
- Moan L. 2019: Land to the Rear of 10A Rosemary Road, Waterbeach. Written Scheme of Investigation.

 OA East. unpublished
- Mortimer, R. 1996. Excavation of a group of Anglo-Saxon features at Denny End, Waterbeach, Cambridgeshire CAU Report 164.
- Mould, Q. 2015: The Portable Finds, in S. Paul and J. Hunt, *Evolution of a Community: The Colonisation of a Clay Inland Landscape*, British Archaeological Reports, British Series, Oxford. Archaeopress, 134-140
- MPRG, 1998: A Guide to the Classification of Medieval Ceramic Forms, Medieval Pottery Research Group Occasional Paper I
- Newton, A.A.S., and Peachey, A. 2012. Romano-British Horningsea Ware Kilns at 12 Pieces Lane, Waterbeach, Cambridgeshire. *Proceedings of the Cambridge Antiquarian Society* 101,143–60.
- North, J. J. 2018: English Hammered Coinage, Volume 1, Early Anglo-Saxon to Henry III, c600-1272. London, Spink
- Payne, S. 1973: Kill off patterns in sheep and goats: the mandible from Asvan Kale, *Anatolian Studies* 23, 281-303
- Pohl, M. 2010: Quern stones and Tuff as indicators of Medieval European Trade patterns, *Papers* from the Institute of Archaeology 20, 148-153
- Prehistoric Ceramics Research Group Study Group for Roman Pottery, Medieval Pottery Research Group 2016: A Standard for Pottery Studies in Archaeology. Historic England
- Rajkovača, V. 2012: Worked Bone Objects, in R. Patten, An Iron Age and Roman Settlement at Summersfield, Papworth Everard, *Proceedings of the Cambridge Antiquarian Society* 110, 136-137
- Ravensdale, J.R. 1974. *Liable to Floods: Village Landscape on the Edge of the Fens AD 450-1850*. Cambridge, Cambridge University Press.
- Reaney, P.H. 1943. The Place-Names of Cambridgeshire and the Isle of Ely. Cambridge: University Press.
- RIC VIII: The Family of Constantine I (337–364), edited by J. P. C. Kent, London, 1981
- Riddler, I. D. and Trzaska-Nartowski, N. I. A., 2003: Late Saxon Antler Waste from Holy Rood, Southampton (SOU106), in I. Riddler, *Materials of Manufacture. The Choice of Materials in the Working of Bone and Antler in Northern and Central Europe during the First Millenium AD,* British Archaeological Reports, International Series 1193, Oxford
- Riddler, I. D., 2017: Analysis report on a single pointed pin-beater from Main Street, Little Thetford, for the Cambridge Archaeological Unit. Unpublished
- Riddler, I. D., Trzaska-Nartowski, N. I. A. and Hatton, S., forthcoming: *An Early Medieval Craft. Antler and Bone Working from Ipswich Excavations, 1974-1994*, East Anglian Archaeology, Bury St Edmunds. Suffolk County Council Heritage Section



- Riddler, I. D., Trzaska-Nartowski, N. I. A. and Soulat, J., 2012: 'Riveted Mounts' Reconsidered: Horn Composite Combs in Early Medieval Britain, Ireland and France, *Archaeological Journal* 169, 395-421
- Robinson, B. and Guttmann, E.B., 1996. An Archaeological Evaluation of the Proposed Site of the Cambridge Rowing Trust Rowing Lake at Milton and Waterbeach, Cambridgeshire. CCC AFU Report 120
- Rowell, T.A. 1986. Sedge (*Cladium mariscus*) in Cambridgeshire: its use and production since the seventeenth century. Agricultural History Review 34 (2): 140–8.
- Sami, D., 2019: 'Anglo-Saxon Pottery', in Haskins, A. and Phillips, T., Mesolithic to post-medieval activity at Bartlow Road, Linton, Cambridgeshire, OA East, Rep. 2349, pp: 96-104. Unpublished
- Sands, R., 1997. Prehistoric Woodworking: the analysis and interpretation of Bronze and Iron Age toolmarks. *Wood in Archaeology*, Volume 1. Institute of Archaeology, University College London
- 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
- Sinclair, K. 2021. *Medieval Toft Development at Fen End, Over, Cambridgeshire. Archaeological Excavation report.* OAE Report 2457.
- Society of Museum Archaeologists, 1993. Selection, Retention and Dispersal of Archaeological Collections: guidelines for use in England, Wales and Northern Ireland. 1st edition
- Spence, C., 1994 (ed.): Archaeological Site Manual. 3rd edition. Museum of London, London
- Spoerry, P., 2016: The Production of Medieval Pottery in Cambridgeshire, East Anglian Archaeology 159
- Stace, C., 2010 New Flora of the British Isles. Third edition. Cambridge University Press
- Taylor, A., 1998. Archaeology of Cambridgeshire. Volume 2: South East Cambridgeshire and the Fen Edge. Cambridgeshire County Council.
- Taylor, M., 2001: The Wood. In: Pryor, F. M. M. (ed.) *The Flag Fen Basin: Archaeology and Environment of a Fenland Landscape*. English Heritage Archaeological Reports, London, 167-228
- Teichert M. 1969. Osteometrische Untersuchungen zur Berechnung der Widerristhöhe bei frühgeschichtlichen Schweinen. Kűhn-Arch, 83: 237–292.
- Thomas, A., 2019: Land to the Rear of 10A Rosemary Road, Waterbeach. Brief for Archaeological Investigation. CCC HET. Unpublished
- Van de Noort, R., Ellis, S., Taylor, M. & Weir, D., 1995: Preservation of Archaeological sites. In: R. Van de Noort & S. Ellis (eds.) *Wetland Heritage of Holderness an archaeological survey*
- von den Driesch, A. 1976. A guide to the measurement of animal bones from archaeological sites.

 Cambridge, Massachusetts: Peabody Museum of Archaeology and Ethnology, Harvard
 University.
- Watts, M., 2002: The Archaeology of Mills and Milling, Tempus, Stroud, Glos



- Webb, R. 2021. Error! No text of specified style in document. Post-Excavation Assessment and Updated Project Design. OAE Report 2441.
- Wilson, K. and White, D. J. B., 1986: The Anatomy of Wood. London, Stobart
- Wright, A.P.M. and Lewis, C.P. (eds.). 1989. *The Victoria County History of the County of Cambridge and the Isle of Ely: Volume 9: Chesterton, Northstowe, and Papworth Hundreds*. Oxford
- Wright, D.W. 2015. Shaping Rural Settlements: The Early Medieval Legacy to the English Village, Landscapes 16 (2), 105-125
- 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 RADIOCARBON DATING CERTIFICATE



Scottish Universities Environmental Research Centre

Rankine Avenue, Scottish Enterprise Technology Park, East Kilbride, Glasgow G75 0QF, Scotland, UK
Director: Professor F M Stuart Tel: +44 (0)1355 223332 Fax: +44 (0)1355 229898 www.glasgow.ac.uk/suerc



RADIOCARBON DATING CERTIFICATE 20 September 2021

Laboratory Code SUERC-100042 (GU58570)

Submitter Rachel Fosberry

Oxford Archaeology East

15 Trafalgar Way

Bar Hill

Cambridgeshire CB23 8SQ

Site Reference ECB5914
Context Reference 222
Sample Reference 10

Material Charred plant remains : Hordeum vulgare

δ¹³C relative to VPDB -24.0 %

Radiocarbon Age BP 1164 ± 29

N.B. The above ¹⁴C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Laboratory and should be quoted as such in any reports within the scientific literature. The laboratory GU coding should also be given in parentheses after the SUERC code.

Detailed descriptions of the methods employed by the SUERC Radiocarbon Laboratory can be found in Dunbar et al. (2016) *Radiocarbon 58(1)* pp.9-23.

For any queries relating to this certificate, the laboratory can be contacted at suerc-c14lab@glasgow.ac.uk.

Conventional age and calibration age ranges calculated by :

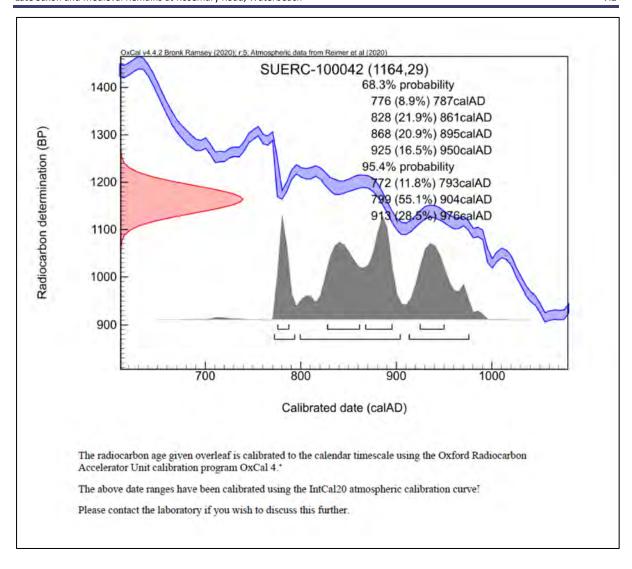
Checked and signed off by:





The University of Edinburgh is a charitable body, registered in Sootland, with registration number SC005336







APPENDIX F OASIS REPORT FORM

Pro	ject	De	tai	ls
-----	------	----	-----	----

OASIS Number oxfordar3-428198
Project Name Rosemary Road, Waterbeach

Start of Fieldwork 22/06/2019 End of Fieldwork 08/08/2019
Previous Work Yes Future Work No

Project Reference Codes

Site Code	WATROR19	Planning App. No.	S/0193/19/FL
HER Number	ECB5914	Related Numbers	

Prompt NPPF

Development Type Residential

Place in Planning Process After full determination (eg. As a condition)

Techniques used (tick all that apply)

	Aerial Photography –	Grab-sampling	Remote Operated Vehicle Survey
	interpretation		
	Aerial Photography - new	Gravity-core	Sample Trenches
\boxtimes	Area excavation	Laser Scanning	Survey/Recording of
			Fabric/Structure
	Augering	Measured Survey	Targeted Trenches
	Dendrochronological Survey	Metal Detectors	Test Pits
	Documentary Search	Phosphate Survey	Topographic Survey
	Environmental Sampling	Photogrammetric Survey	Vibro-core
	Fieldwalking	Photographic Survey	Visual Inspection (Initial Site Visit)
	Geophysical Survey	Rectified Photography	

Monument Period

Pit	Late Prehistoric (-	
	4000 to 43)	
Ditch	Roman (43 to 410)	
Pit	Roman (43 to 410)	
Ditch	Early Medieval	
	(410 to 1066)	
Pit	Early Medieval	
	(410 to 1066)	
Posthole	Early Medieval	
	(410 to 1066)	
Ditch	Medieval (1066 to	
	1540)	
Pit	Medieval (1066 to	
	1540)	
Posthole	Medieval (1066 to	
	1540)	
	Choose an item.	

Object Period

Object	renou
Coin	Roman (43 to 410)
Coin	Medieval (1066 to 1540)
Pottery	Roman (43 to 410)
Pottery	Early Medieval (410 to 1066)
Pottery	Medieval (1066 to 1540)
Pottery	Post Medieval (1540 to 1901)
Flint flake	Late Prehistoric (- 4000 to 43)
Jet object	Roman (43 to 410)
Glass	Post Medieval (1540 to 1901)
Quern stone	Early Medieval (410 to 1066)



Whetstone	Early Medieval (410 to 1066)
	· '
Clay spindlewhorl	Medieval (1066 to 1540)
Ceramic building	Post Medieval (1540 to
material	1901)
Worked bone/antler	Early Medieval (410 to
artefacts	1066)
Iron artefacts	Medieval (1066 to 1540)
Animal bone	Early Medieval (410 to
	1066)
Animal bone	Medieval (1066 to 1540)
Fish bone	Early Medieval (410 to
	1066)
Fish bone	Medieval (1066 to 1540)

Project Location

County
District
Parish
HER office
Size of Study Area
National Grid Ref

Cambridgeshire
South Cambridgeshire
Waterbeach
Cambridge
0.13ha
TL 49778 65227

Address (including Postcode)
Land to the rear of 10A Rosemary Road,
Waterheach Cambridge CR25 9NR

Project Originators

Organisation
Project Brief Originator
Project Design Originator
Project Manager
Project Supervisor

OA East
Andy Thomas (CHET)
Louise Moan (OA East)
Louise Moan (OA East)
Steve Graham (OA East)

Project Archives

Physical Archive (Finds) Digital Archive Paper Archive

Location	ID
CCC Stores	ECB5914
OA East	WATROR19
CCC Stores	ECB5914

Physical Contents	Present?	Digital files associated with Finds	Paperwork associated with Finds
Animal Bones	\boxtimes		\boxtimes
Ceramics	\boxtimes	\boxtimes	\boxtimes
Environmental	\boxtimes	\boxtimes	\boxtimes
Glass	\boxtimes	\boxtimes	
Human Remains			
Industrial			
Leather			
Metal	\boxtimes	\boxtimes	\boxtimes
Stratigraphic			

5		1
2		
oxfordard	haeolo	gy

Late Saxon and Medieval Remains at Rosemary Road, Waterbeach V.2 Survey **Textiles** Wood \boxtimes Worked Bone \boxtimes \boxtimes Worked Stone/Lithic \boxtimes \boxtimes None П Other **Digital Media Paper Media** Database **Aerial Photos** \boxtimes GIS \boxtimes **Context Sheets** \times Geophysics Correspondence \boxtimes Images (Digital photos) Diary Illustrations (Figures/Plates) XDrawing П \Box Moving Image Manuscript Spreadsheets XMap Survey XMatrices \boxtimes Microfiche Text Virtual Reality Miscellaneous Research/Notes \boxtimes Photos (negatives/prints/slides) **Plans** \boxtimes

Report

Survey

Sections

 \boxtimes

 \boxtimes

Further Comments



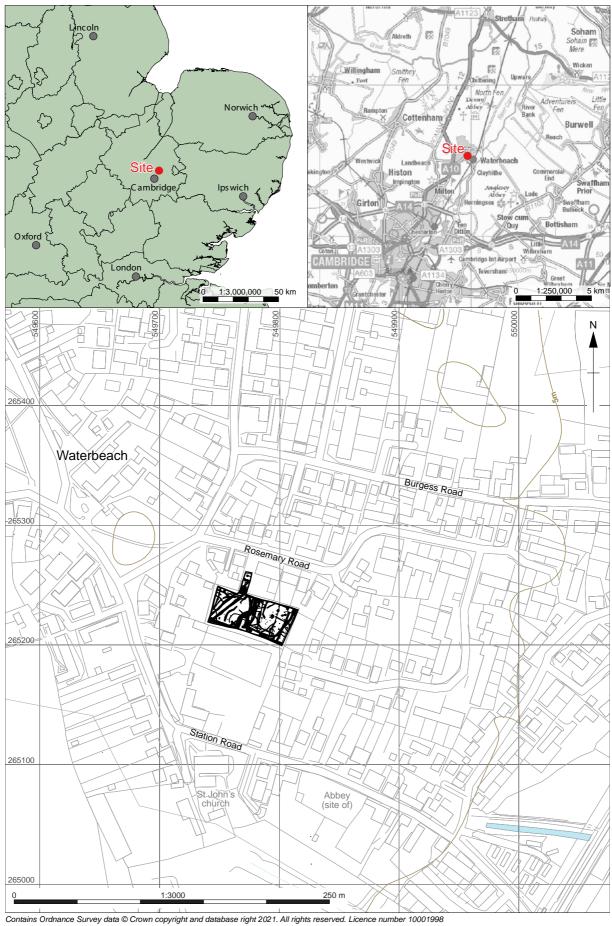


Figure 1: Site location showing archaeological area

© Oxford Archaeology East Report Number 2529



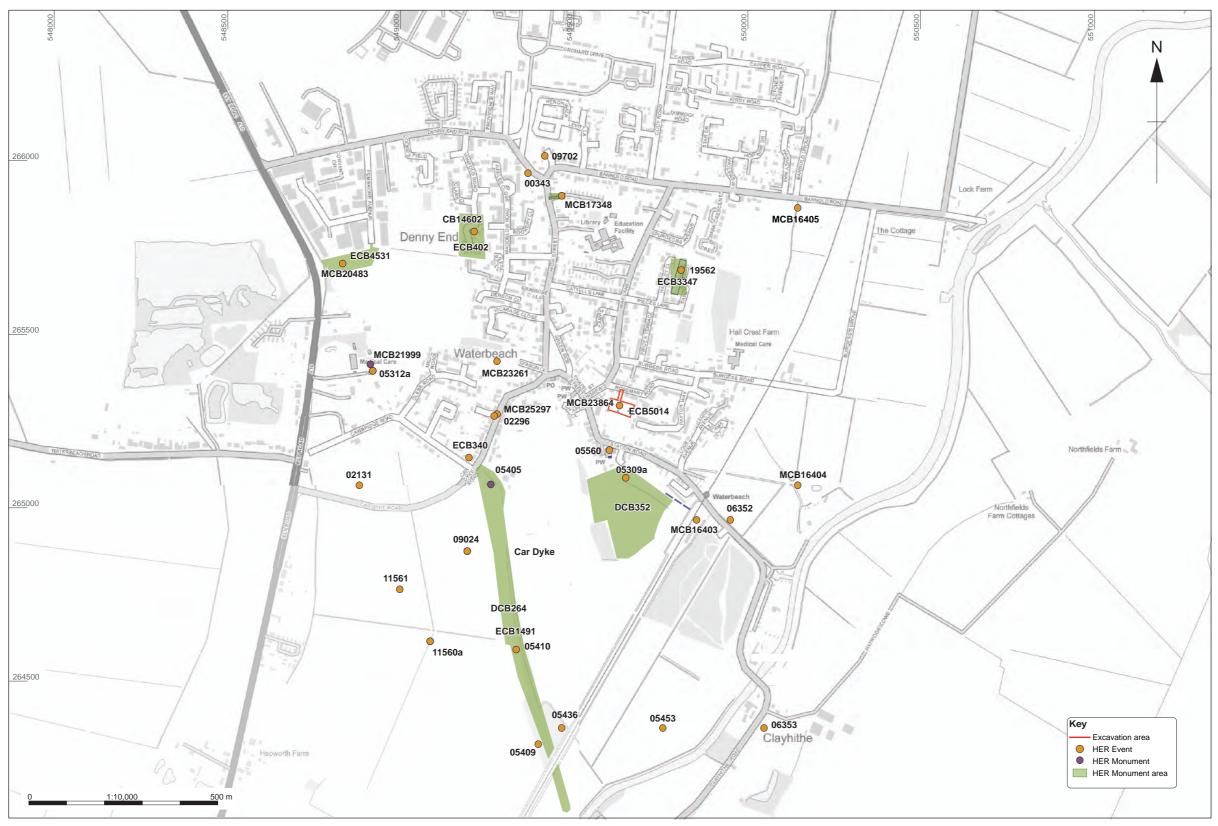


Figure 2: Map showing locations of CHER monuments and events



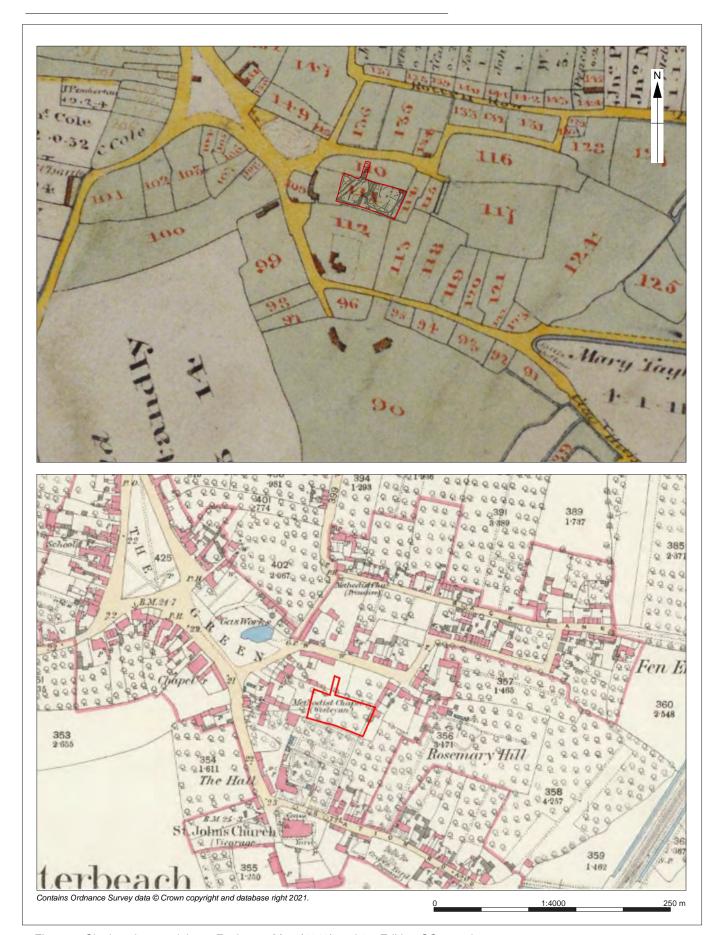


Figure 3: Site location overlain on Enclosure Map (1813) and 1st Edition OS mapping

© Oxford Archaeology East Report Number 2529



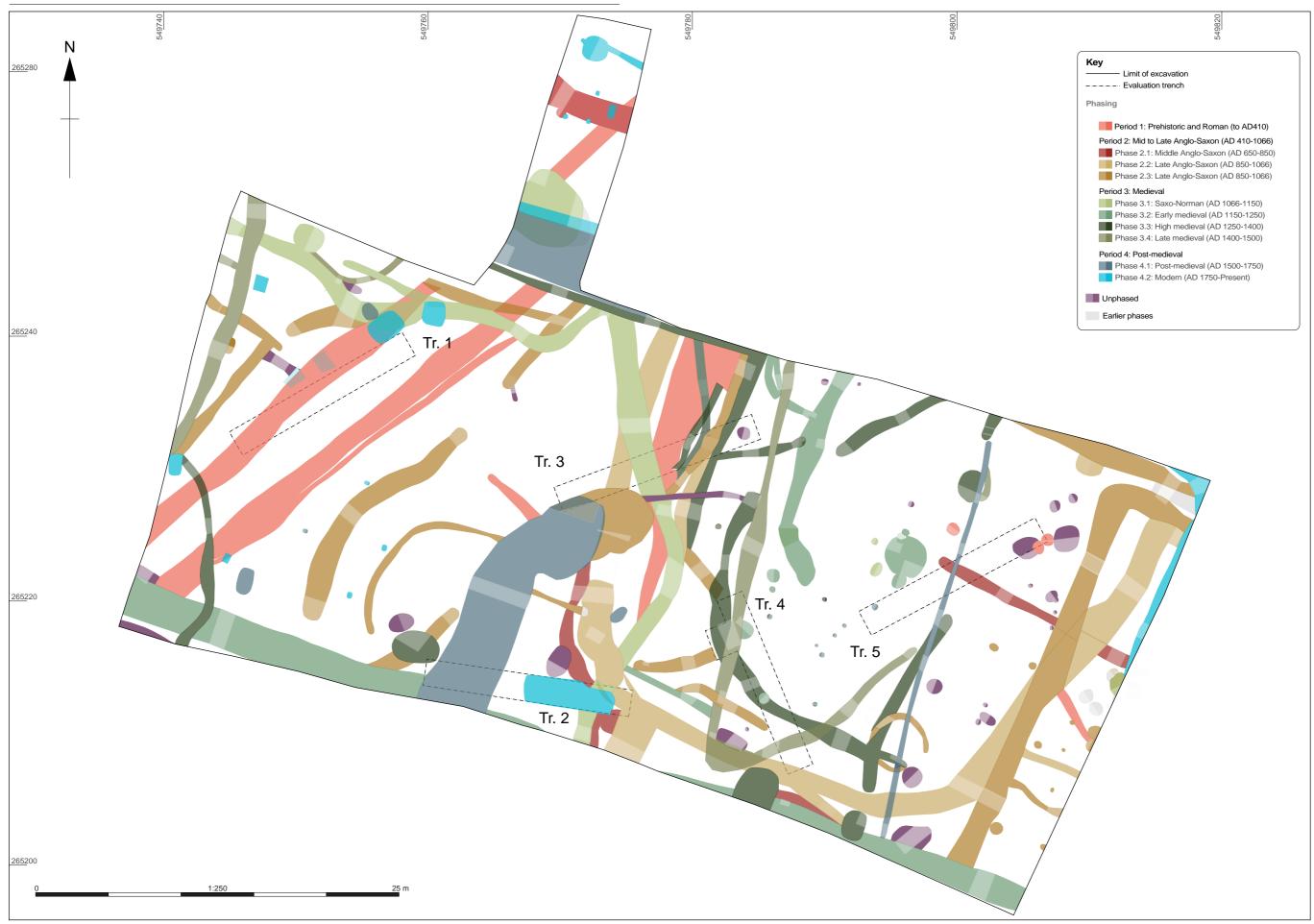


Figure 4: Overall phased plan with location of evaluation trenches







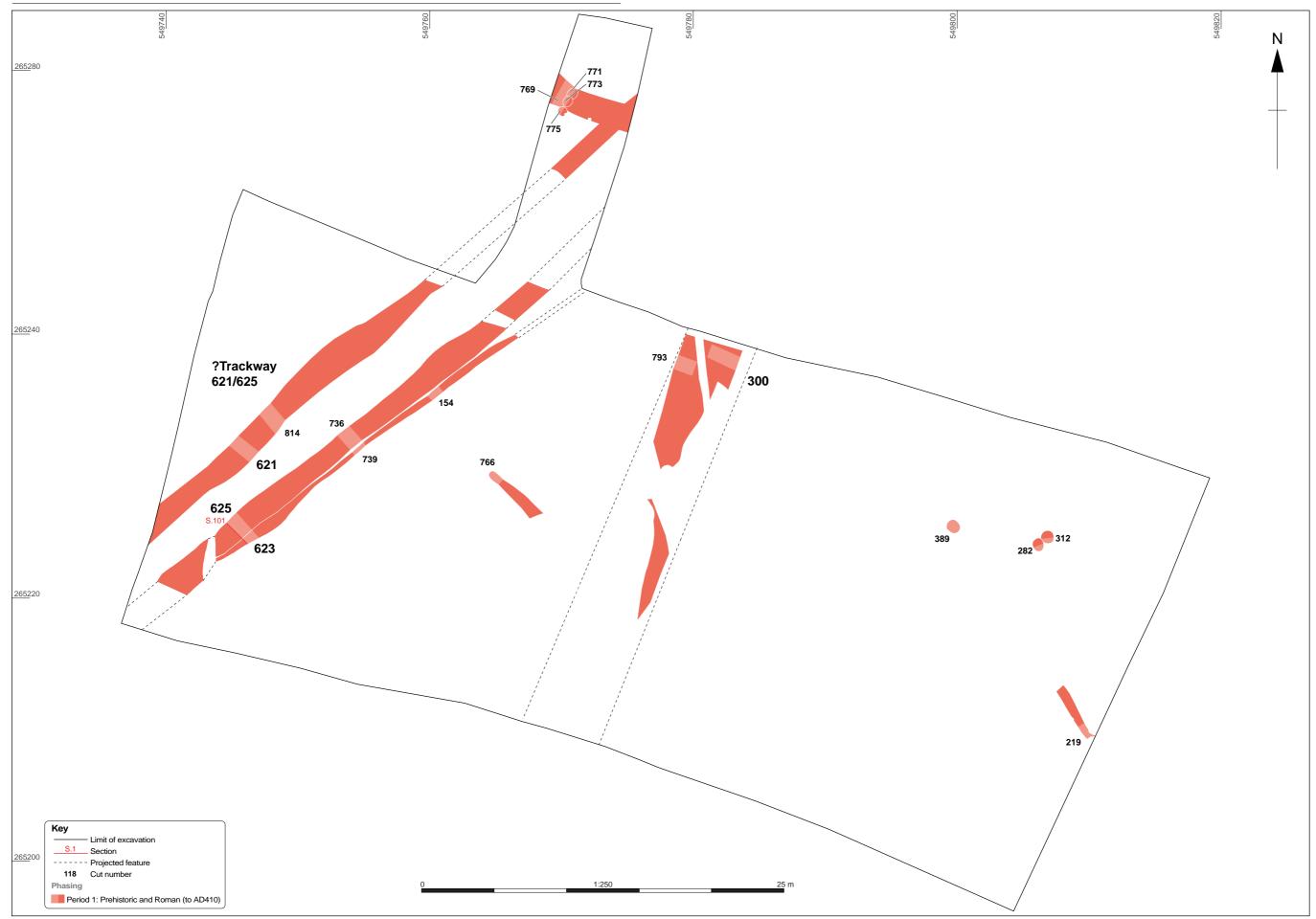


Figure 6: Phase plan of Period 1: Prehistoric and Roman (to AD410)





Figure 7: Phase plan of Period 2: Anglo Saxon (AD 410-1066)





Figure 8: Phase plan of Period 3: Medieval (AD 1066-1500)



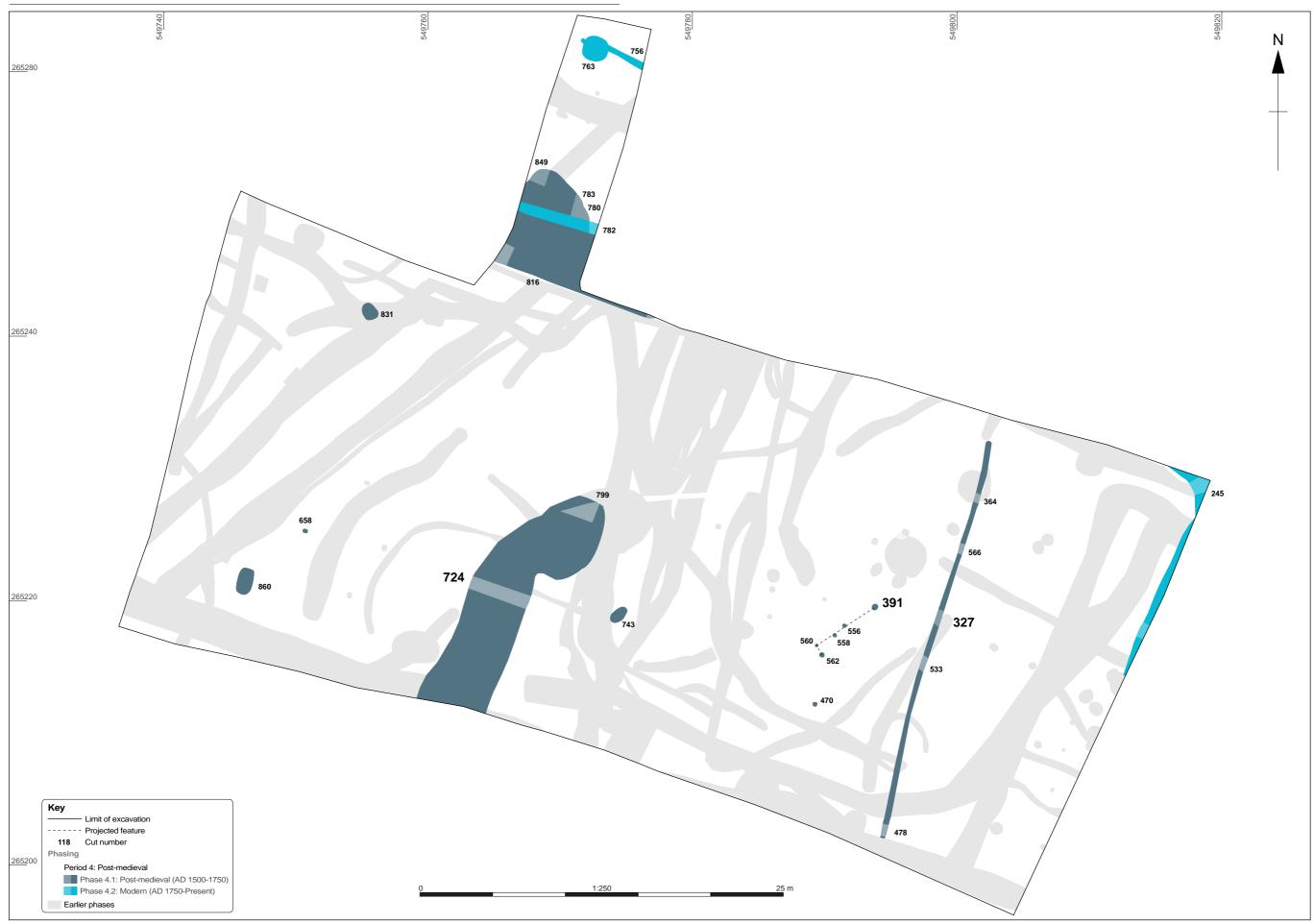


Figure 9: Phase plan of Period 4: Post-medieval (1500 - present)



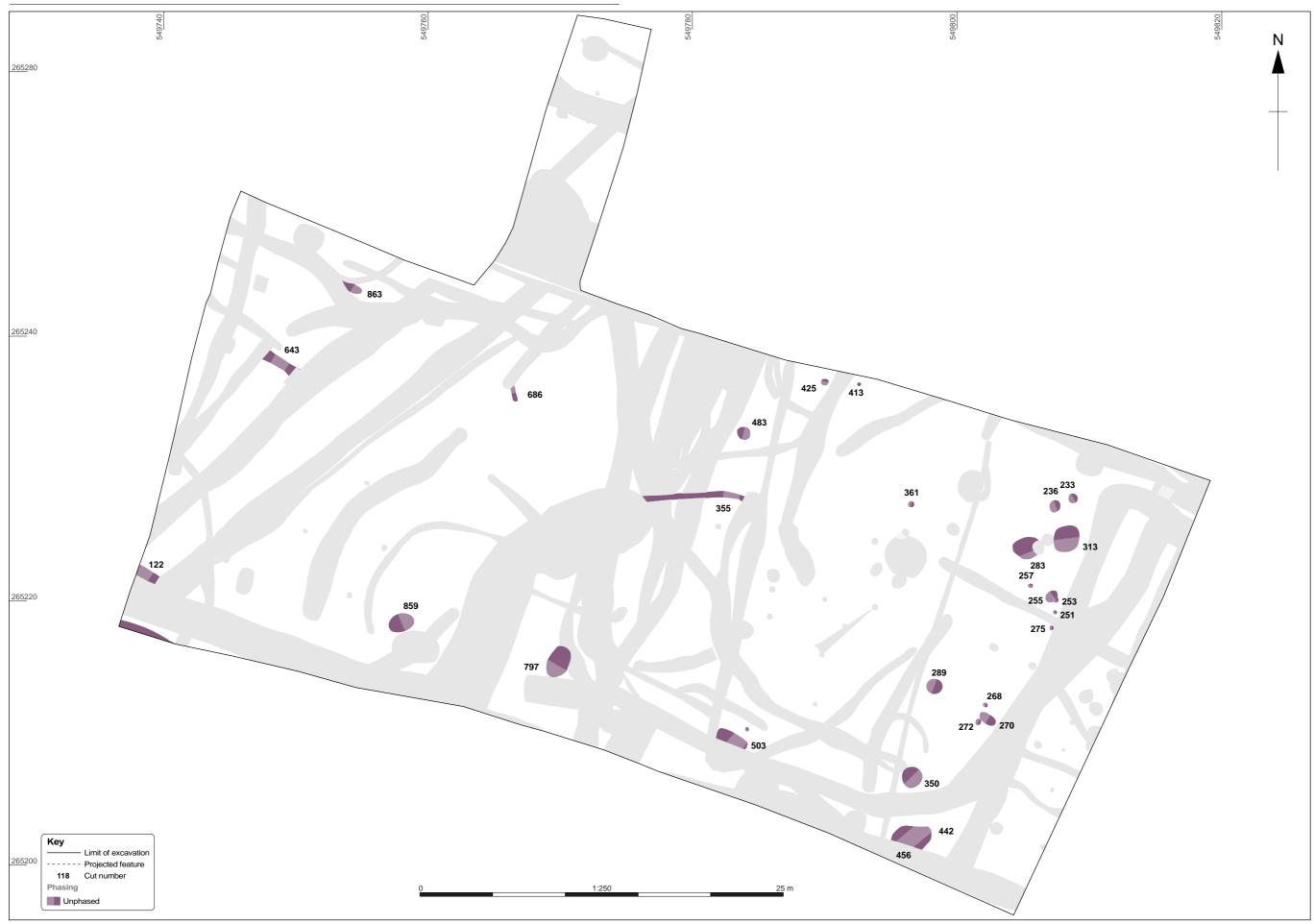


Figure 10: Unphased features



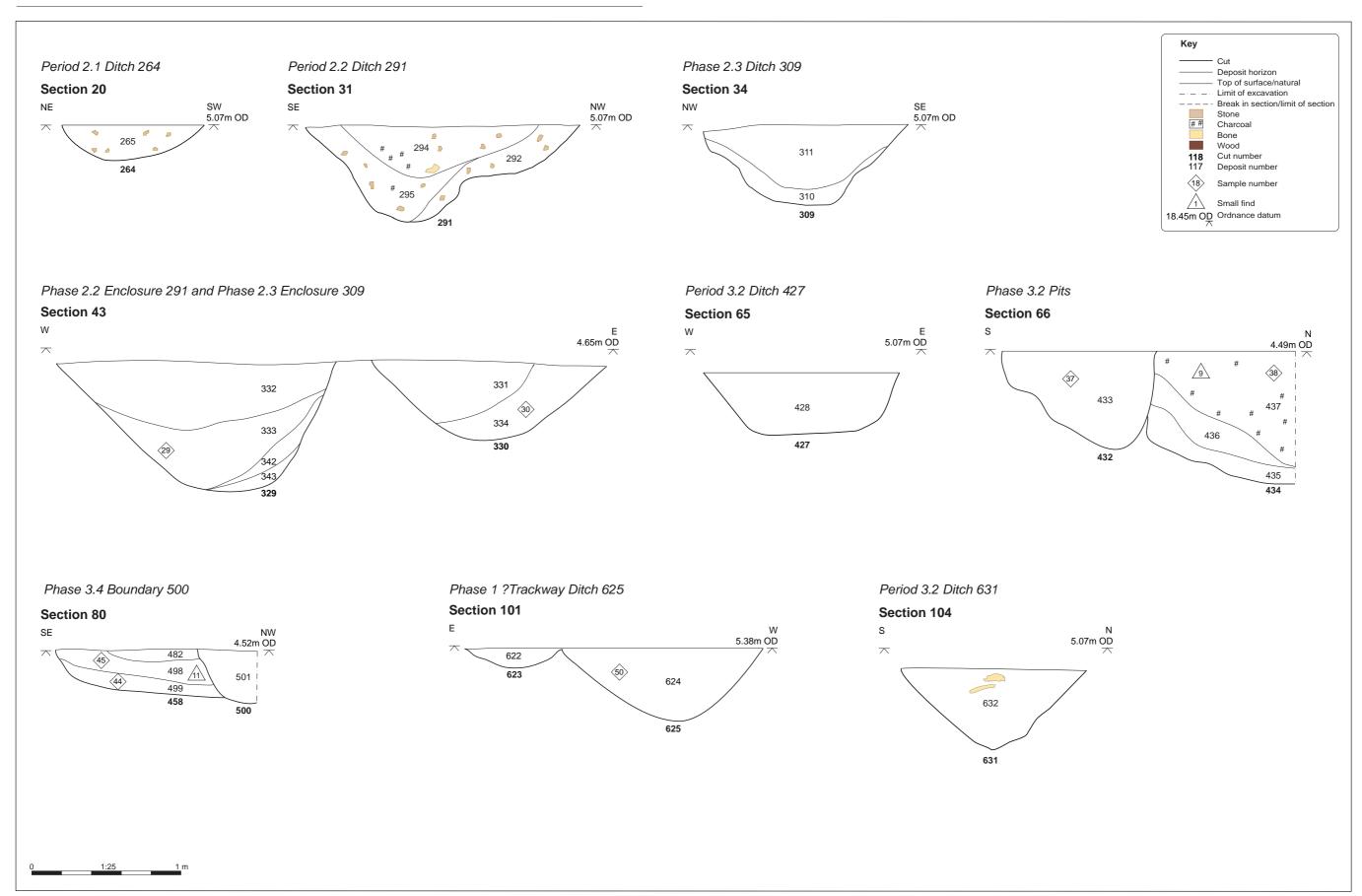


Figure 11a: Selected sections



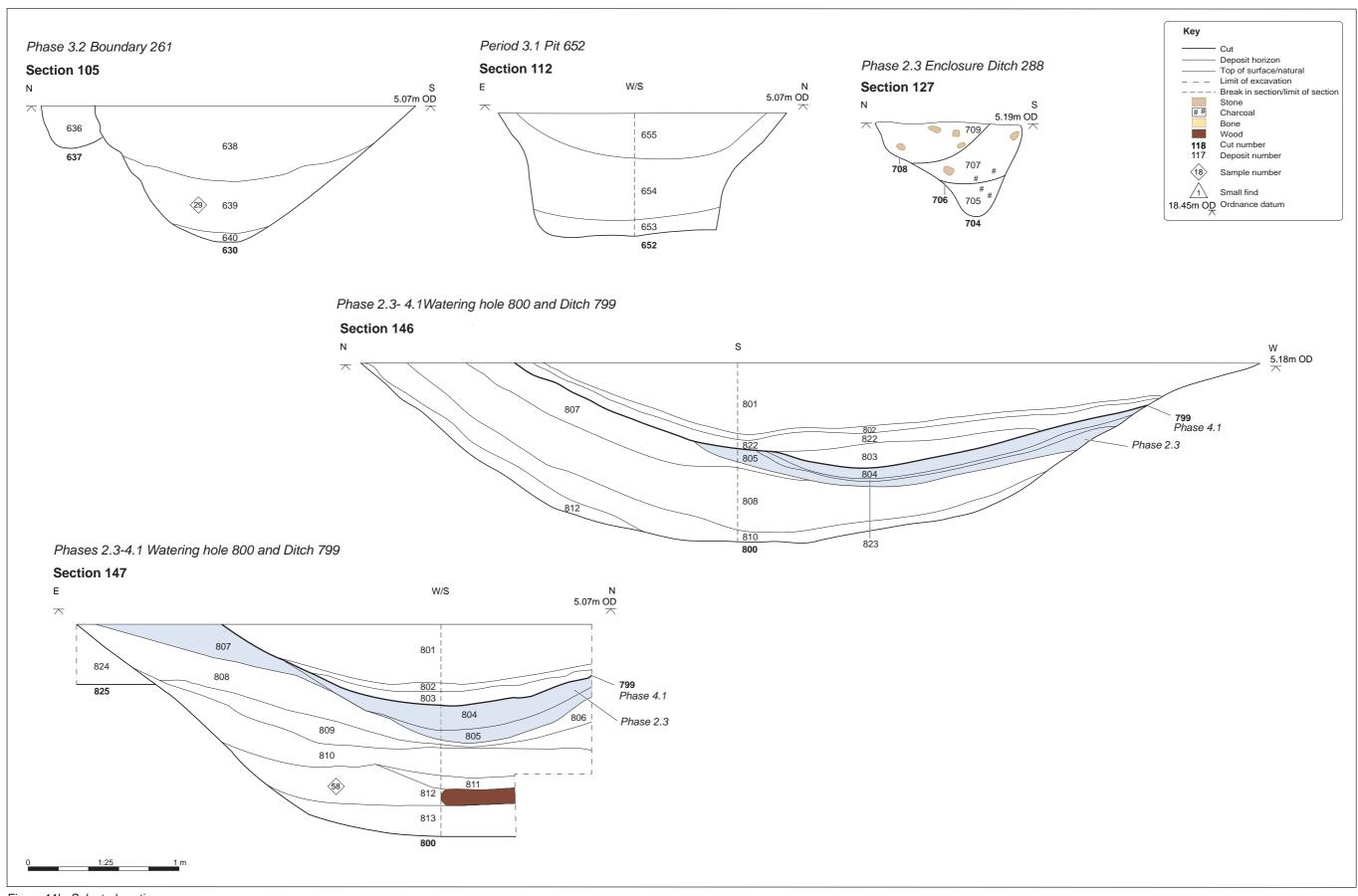


Figure 11b: Selected sections



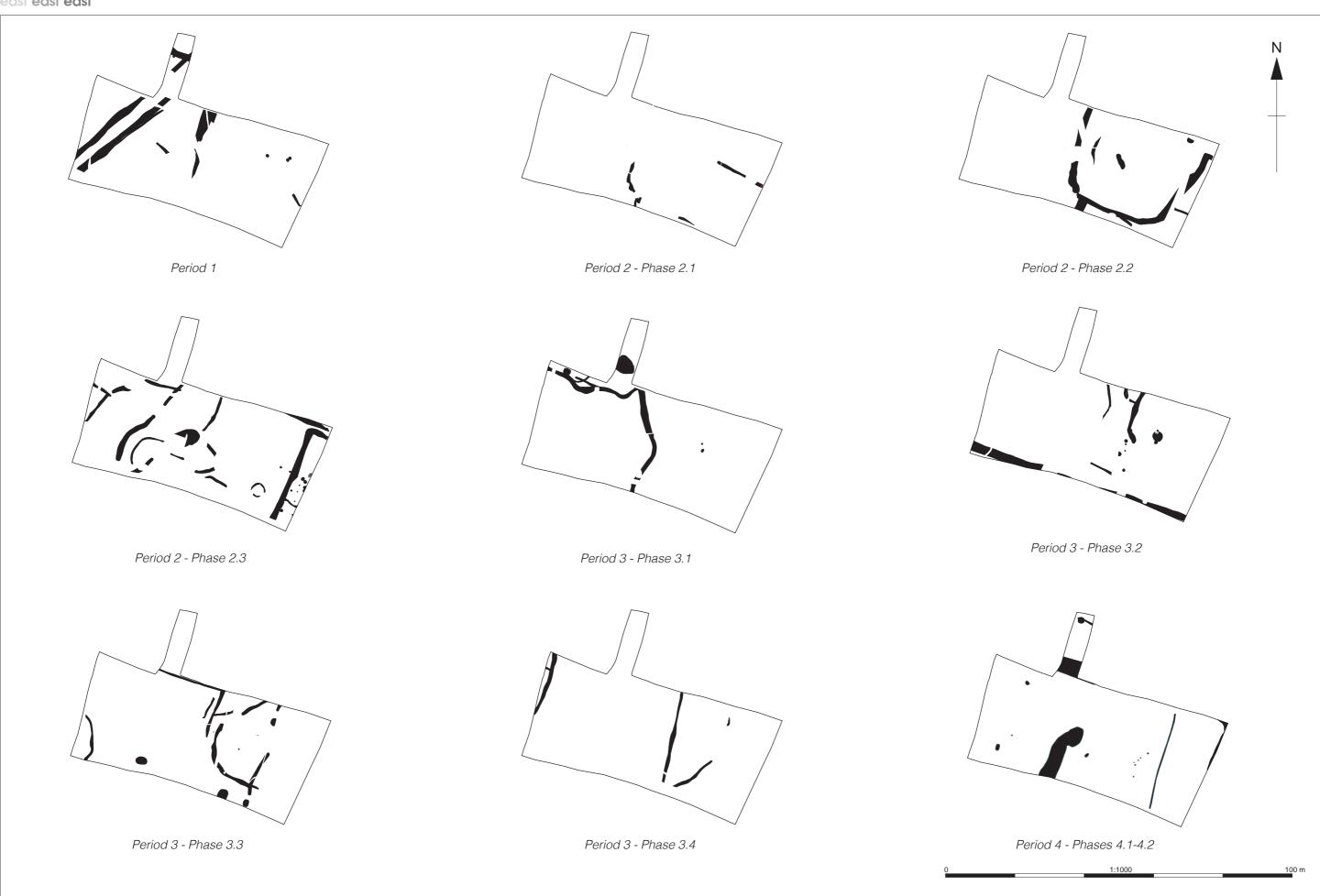


Figure 12: Site development



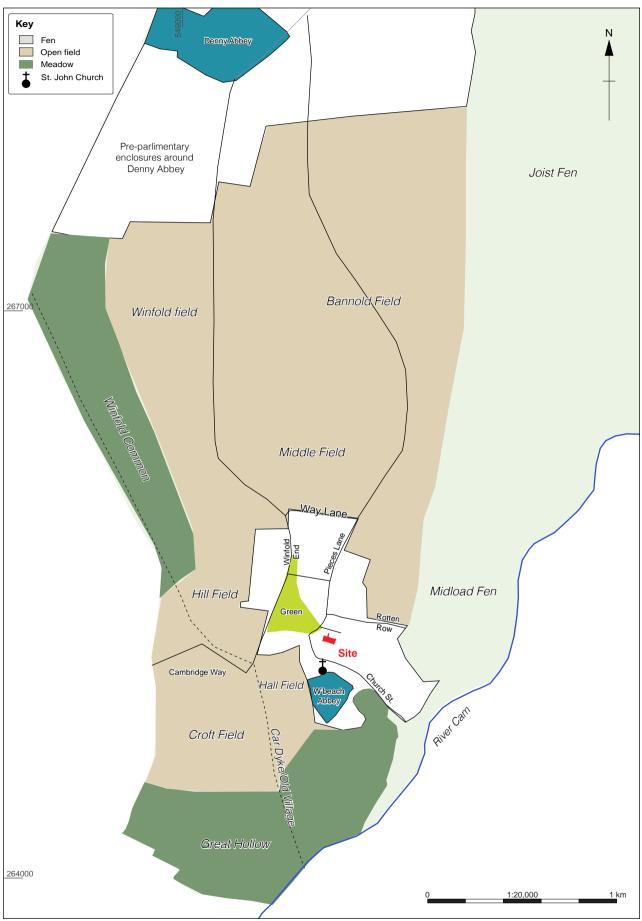


Figure 13: Map of southern part of Waterbeach parish prior to parliamentary enclosure in the early 19th century (after Wright and Lewis 1989, fig.14)





Figure 14: Stone object

© Oxford Archaeology East Report Number 2529





Figure 15: Antler and bone objects

© Oxford Archaeology East Report Number 22529





Plate 1: Looking west over the development area prior to excavation



Plate 2: Eastern half of the excavation area from the south-west.





Plate 3: Western half of excavation area from the south-east, with Phase 2.3 pit/watering hole **800** and Phase 4.1 ditch **724** in foreground



Plate 4: Possible Roman (Period 1) ditches: **621**, **623** and **625** from the south-west cut by Phase 3.3 Medieval ditch **646** in the foreground.





Plate 5: Phase 2.2 ditch 291 and Phase 2.3 ditch 309 from the south-west



Plate 6: Phase 2.3 pit/watering hole 800 from the east, truncated by Phase 4.1 ditch 724 with wooden post (SF 20) in situ





Plate 7: Period 2.3, curvilinear gully 334, looking northwest.



Plate 8: Phase 3.2 Boundary ditch 261 from the south-east, truncating earlier ditch 267





Plate 9: Phase 3.2 pit 458 containing possible kiln/oven material, from the west



Plate 10: Period 3.2, pit 396, looking northwest





Plate 11: Period 3.2, quadrant through pits 522, 524 and 526, from the north-west



Plate 12: Period 4, Animal burial 831, 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