Archaeological excavation on land adjacent to Upthorpe Road Stanton, Suffolk

Assessment and updated project design

Report No. 15/72

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NGR: TL 970 735

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SNT050

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OASIS REPORT FORM

PROJECT DETAILS	**OASIS molanort1-218397**	
Project title	Archaeological excavation on land adjacent to Upthorpe Road, Stanton, Suffolk, Assessment and updated project design	
Short description	An archaeological excavation was undertaken by MOLA Northampton between November 2013 and April 2014 on behalf of CgMs Consulting, acting on behalf of their clients Abbey Developments. The work comprised archaeological mitigation following trial trench evaluation which had identified three undated burials and a Bronze Age ditch in the south-west corner of the development area. The excavation fully revealed a Bronze Age ring ditch, an Anglo-Saxon cemetery containing 75 inhumation burials with accompanying grave goods. Two late medieval to post-medieval field boundary ditches were also uncovered.	
Project type	Excavation	
Previous work	Desk-based assessment; trial trench evaluation	
Current land use	Arable	
Future work	Unknown	
Monument type and period	Bronze Age, Saxon, post-medieval	
Significant finds	Pottery; shield boss', iron spear heads, iron knife blades, copper brooches, buckles, Roman coin, inhumation burials	
PROJECT LOCATION		
County	Suffolk	
Site address	Upthorpe Road, Stanton	
Easting Northing	TL 970 735	
Area (sq m/ha)	c 0.35 ha	
Height aOD	*c* 45m AOD	
PROJECT CREATORS		
Organisation	MOLA Northampton	
Project brief originator	Jess Tipper, Suffolk County Council	
Project Design originator	CgMs Consulting Ltd	
Director/Supervisor	Paul Clements	
Project Managers	Adam Yates (MOLA Northampton) Matthew Smith (CgMs Consulting Ltd)	
Sponsor or funding body	CgMs Consulting for Abbey Developments	
PROJECT DATE		
Start date	25/11/2013	
End date	04/03/2014	
ARCHIVES	**Location (Accession no.)**	**Contents**
Physical	SNT050	Pottery; shield boss', iron spear heads, iron knife blades, copper brooches, buckles, Roman coin, inhumation burials
Paper		Site records (1 archive box)
Digital		Client report PDF. Survey Data, Photographs
BIBLIOGRAPHY		
Title	Archaeological excavation on land adjacent to Upthorpe Road, Stanton, Suffolk, Assessment and updated project design	
Serial title & volume	MOLA Northampton Report 15/72	
Author(s)	Paul Clements	
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Contents

Tables

Figures

Archaeological excavation on land adjacent to Upthorpe Road, Stanton, Suffolk: Assessment and Updated Project Design

Abstract

An archaeological excavation was undertaken by MOLA Northampton between November 2013 and April 2014 on behalf of CgMs Consulting, acting on behalf of their clients Abbey Developments. The work comprised archaeological mitigation following trial trench evaluation which had identified three undated burials and a Bronze Age ditch in the south-west corner of the development area. The excavation fully revealed a Bronze Age ring ditch, an Anglo-Saxon cemetery containing 75 inhumation burials with accompanying grave goods. Two late medieval to post-medieval field boundary ditches were also uncovered.

1 INTRODUCTION

1.1 Background

The excavation was undertaken on behalf of CgMs Consulting for Abbey Devlopments who were granted planning consent for residential development (SE/10/1410) on land north of Upthorpe Road, Stanton, Suffolk (NGR TL 970 735, Fig 1). The works followed a previous trial trench evaluation (Brown 2011) which identified a Bronze Age ditch and undated burials in the south-west corner of the development.

In response to the evaluation Suffolk County Council required further archaeological mitigation in the form of preservation by record. The scope of these works was set out in a brief prepared by Suffolk County Council (Tipper 2011) and a WSI (NA 2011) and was undertaken in accordance with the National Planning Policy Framework (DCLG 2012)

1.2 Site location and topography and geology

The site is located on the east side of Stanton, Suffolk, between *c*38-45m above Ordnance Datum on a gentle west facing slope. It is bounded by Upthorpe Road to the south, residential properties to the west and arable fields to the north and east.

The site is underlain by Lewes Nodular chalk, Seaford Chalk and Newhaven Chalk formations (BGS 2015). The soils are recorded as slightly acid, loamy and clayey soils (Landis 2015).

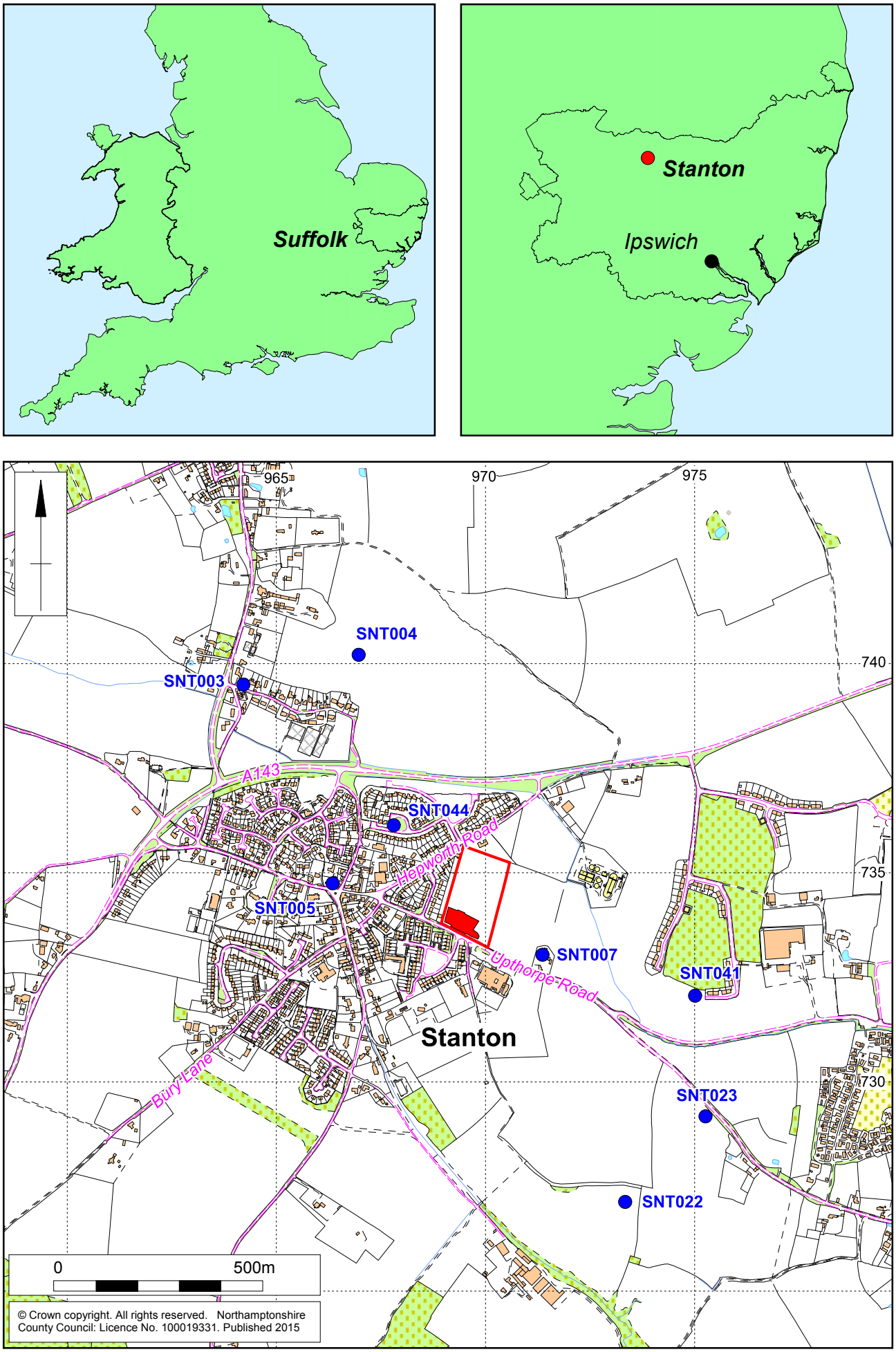
1.3 Historical and archaeological background

An archaeological desk-based assessment was undertaken by CgMs Consulting Ltd (Smith 2010) which established that no known archaeological remains were recorded within the development area. Activity was recorded from the around the locale of the development area.

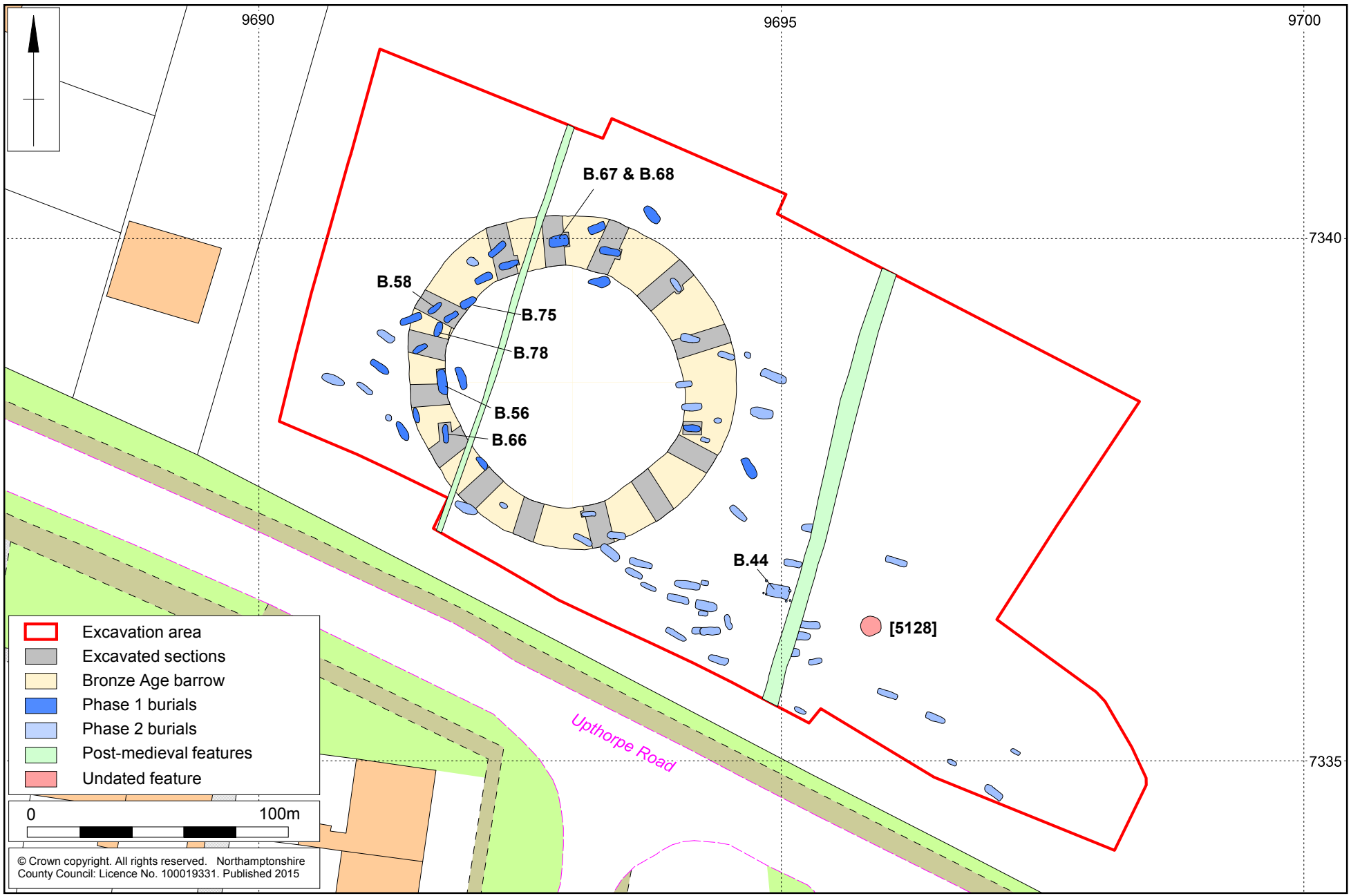
Prehistoric

Aerial photography has identified a possible ring ditch (SNT004) 500m north of the development area.

Iron Age pottery has been found within Stanton. During excavation of cottage foundation trenches pottery sherds were found at Duke Street (SNT005) to the west of the development site. Pottery was also recovered from Potters Lane (SNT022) to the south.



Scale 1:12,500 Site location, showing Historic Environment Record (HER) data Fig 1



Scale 1:500

The excavation area, showing archaeological features Fig 2

Roman
A housing development in the 1960s located and destroyed a large Roman mosaic (SNT044) 100m west of the development. Metal detecting finds from the vicinity include a coin and figurine found near High Wood (SNT041). Pottery sherds have also been found at Potters Lane (SNT022), south of the development.

Medieval
A coin of Athelstan of East Anglia was found 1km west of the development site and represents the only indication of Saxon activity.

The church of St Johns' which dates to the 14th century stands in the centre of Stanton. Outside of the development area fieldwalking surveys have identified scatters of medieval pottery to the south (SNT023). To the north-west pottery and coins have been also been found (SNT005).

The Scheduled Monument of Stanton Upthorpe Windmill (HER SNT007) (SAM Suffolk, 136) is located *c*150m east of the site. The mill was thought to have been constructed in 1751 and moved to its present site in 1820, but the English Heritage List Description suggests it is dated 1807 and was restored in *c*1939.

Previous archaeological work
A desk-based assessment of the site has been undertaken and it was also subject to a programme of trial trench evaluation in early 2011 (Brown 2011). A total of 21 trenches were excavated across the development area. The evaluation identified a ditch of possible late Bronze Age date. Human remains of two individuals were interred within the upper fill. A further undated burial was also discovered in Trench 17 (1705). The burial had been placed in an oval grave pit in a crouched position.

All features identified by the evaluation were confined to the south-western corner of the development.

1.4 Scope of mitigation works

The purpose of the archaeological works was to mitigate against the impact of the residential development on the archaeological deposits through preservation by record. A programme of open excavation was undertaken as requested by the Suffolk County Council Archaeological Advisor and followed a Written Scheme of Investigation (NA 2011) following a brief designed by Suffolk County Council (Tipper 2011).

The area of mitigation was located in the south-west corner of the development, focused on the area of Trenches 16 and 17 (Fig 1). An area measuring 60m east-west by 30m north-south was designated for open area excavation, with the provision for expanding the area to create a 10m 'buffer' from the last identified archaeological feature to ensure that all archaeological deposits were located. The area was subsequently expanded to the east and north to expose the full extent of the remains present.

1.5 Excavation methodology

The excavation area was marked out prior to the commencement of work using Leica System 1200 GPS operating to an accuracy of +/- 0.05m to Ordnance Survey National Grid.

Removal of the topsoil and other overburden was carried out by tracked 360-degree mechanical excavator, fitted with a 1.80m wide toothless ditching bucket, operating under archaeological supervision. Mechanical excavation proceeded to the natural substrate or the first significant archaeological horizon.

Following completion of hand excavated slots across the barrow ring ditch the upper fills were removed by machine to ensure full recovery of all Anglo-Saxon burials.

Deposits and features were described on pro-forma sheets to include measured and descriptive details of the context, its relationships, interpretation and a checklist of associated finds. Context sheets were cross-referenced to scale plans, section drawings and photographs. Photography was with 35mm black and white film and digital images. Sections were drawn at scale 1:10 or 1:20, as appropriate, and a hand drawn plan was produced at scale 1:50. All features, sections and plans were related to the Ordnance Survey National grid.

All works were carried out in accordance with the Chartered Institute for Archaeologists' *Code of Conduct* (CifA 2014c), *Standard and Guidance: Archaeological Excavation* (CifA 2014a). All works conformed to English Heritage procedural document *Management of Archaeological Projects 2nd edition* (1991) and Historic England's *Management of Research projects in the Historic Environment* (2015a). Site recording followed standard MOLA Northampton procedures as described in the Fieldwork Manual (MOLA 2014).

The spoil heaps, excavated areas, and all features were scanned with a metal detector to ensure maximum finds retrieval.

The excavation method followed the standards set out in the WSI (NA 2011) which in turn followed the brief provided by the Suffolk County Council Archaeological Advisor (Tipper 2011).

2 RESEARCH OBJECTIVES

The main objective of the work was to preserve the archaeological evidence contained within the site by record and attempt a reconstruction of the history and use of the site.

The more specific aims were:

- To excavate and record the archaeological remains on site in order to mitigate the impact of development;
- To obtain information on dates for the burials, either through artefactual remains and/or using scientific dating methodologies;
- To examine if there is any evidence for changes in burial practice;
- To examine the nature, date and function of other features on site;
- To retrieve information about the health and nature of the local population;
- To determine how do the burials relate to other features on site;
- To determine whether there was any interaction between funerary practices and landscape development;
- To retrieve information to reconstruct past landscapes and environment;
- To determine what was the Human impact on the landscape;
- To undertake a full programme of analysis leading to publication of the results in order disseminate them to the wider archaeological community and other interested parties;
- To allow as far as possible within the constraints of the project a programme of outreach in order to disseminate the results of the project to the local community.

Relevant research themes contained in the following documents were also considerations:

Research and archaeology: A framework for the Eastern Counties: 1 Resource Assessment (Glazebrook 1997)

Research and archaeology: A framework for the Eastern Counties: 2 Research Agenda and Strategy (Brown and Glazebrook 2000)

Regional research framework for the Eastern Region (Medlycott and Brown 2008)

Research and Archaeology Revisited: a revised framework for the east of England (Medlycott 2011) East Anglia Archaeology, Occaisional paper **24**.

3 THE EXCAVATED EVIDENCE

3.1 Summary of the chronology

Period	Key Features
Neolithic	Residual flints
Bronze Age	Round Barrow ditch, pottery sherds and flints
Iron Age	Barrow ditch upper fills, pottery
Roman	Residual pottery sherds and artefact re-use
Anglo-Saxon	Burials
Medieval and post-medieval	Field boundary ditches

Neolithic
Activity from the Neolithic period is evident from finds of residual flint. The majority of these occurred in the silting fills of the barrow ditch, possibly suggesting that this area was a focus of activity during this period.

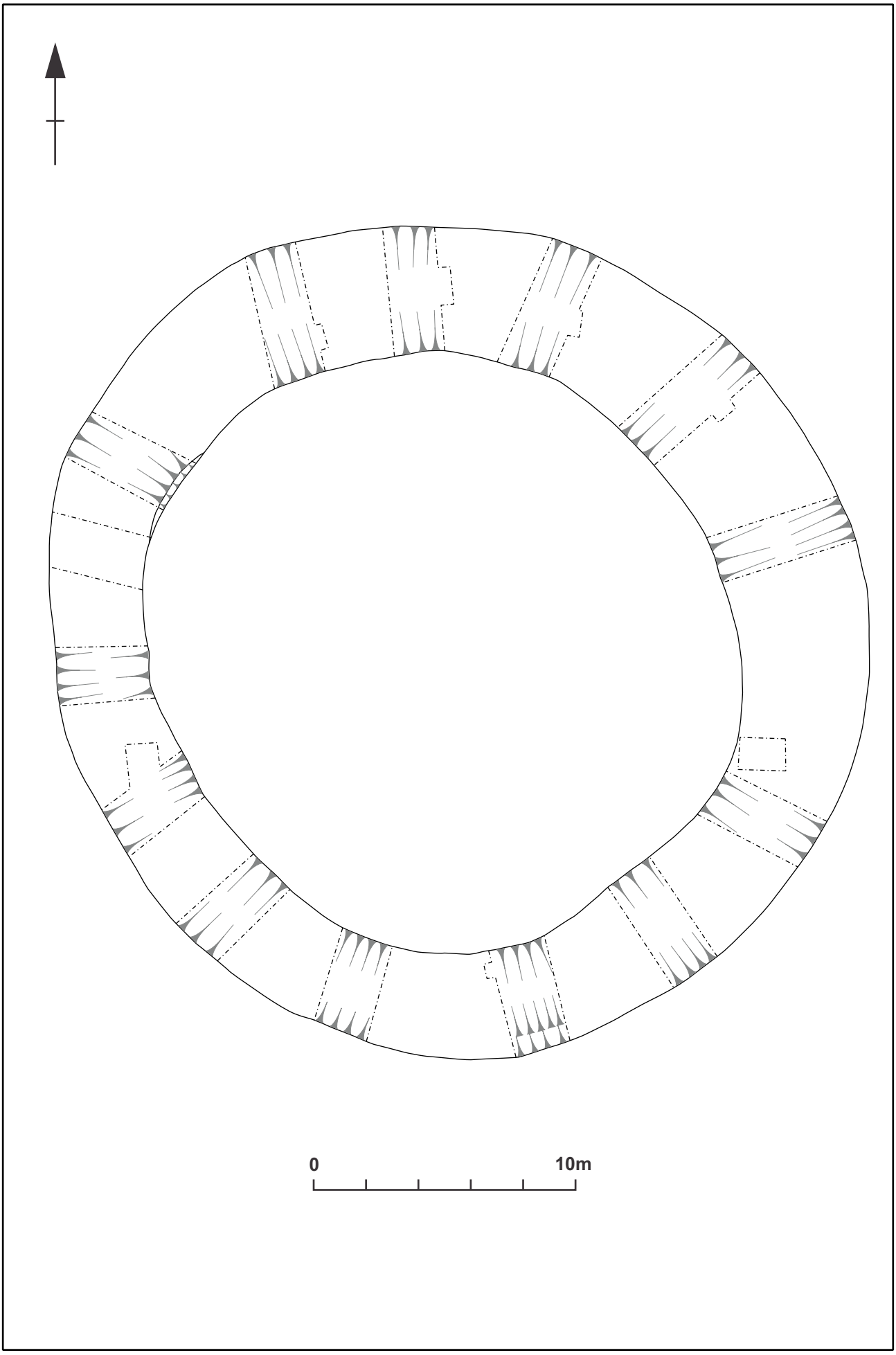
Bronze Age
The barrow ditch was located on a gentle slope facing west over a shallow valley. It was positioned downslope of the peak of hill on a false promontory when viewed from the valley (Figs 2 and 3).

The barrow ditch was circular in plan with an internal diameter of *c*25m. The ditch was up to 5.0m wide and 1.3m deep with a wide V-shaped profile where it cut through chalk, but bowl- shaped where it cut through sand. The basal fills comprised slumping deposits of the natural sands entering from both sides of the ditch. The initial slumping appears to have taken place soon after the ditch was opened with subsequent phases of slumping and silting deposits occurring periodically after.

Two sherds of broadly contemporary pottery from a domestic beaker and possibly a food vessel came from the secondary fills of the barrow ditch.

A concentration of small amphibian bones, located on the northern side of the ring ditch, overlying the silting deposits, likely represent an owl feeding site.

No surviving features were evident within the barrow ditch and no remains of any burial deposits had survived



Scale 1:200 The Bronze Age barrow ditch Fig 3

Iron Age
A layer containing hearth debris around the majority of the barrow ditch marked the start of Iron Age activity. It comprised dark grey sandy clay containing fire-cracked stone. Slight variations in colour throughout this layer indicate a succession of purposely deposited burnt materials. It was not present in the south-west of the barrow ditch and no obvious reason for this was evident through excavation. Slumping deposits of sand accrued between these deposits at the north-east and south-eastern sections of the ring ditch. Iron Age pottery was recovered from this fill as well as a fragment of a late Bronze Age sword (SF266), and a small fragment of a socketed bronze axe (SF267)

The upper fills of the barrow ditch accumulated through the middle to late Iron Age and produced pottery of this period. Residual worked flints of late Bronze Age date were also recovered. Several sherds of Roman pottery recovered from the upper fills indicate that infilling of the ring ditch continued into the Roman period.

Saxon cemetery
In the late 5th century the barrow became a focus for a Saxon cemetery. A total of 75 inhumation burials, 69 with bone and 6 with small fragments to no clear bone, were identified and two distinct burial traditions. Burials with associated grave goods are typical of 5th-6th century Saxon burials whereas burials aligned east-west with few or no grave goods are typical of later Christian-style burial traditions. Bone survival varied drastically due to the acidic sandy soils, from fragments of bone to near complete skeletons.

The burials do not intercut and the locations of the graves must have been visible on the surface. It is likely they were marked by small mounds or in some other way.

Phase 1
The first phase of use, likely dating to the 5th-6th centuries, comprises 25 burials concentrated on the western side of the barrow overlooking the valley. Defined by their associated grave goods, the majority of the burials had been interred into the backfilled barrow ditch (Fig 2).

The alignment of the burials was mixed, but in general those interred into the ring ditch had been positioned to follow its curve.

The demographic is predominantly adult with only two children aged 7-12 and one neonatal burial. The initial assessment of the bone has identified nine females, five males and eleven of undetermined sex.

Complete pottery vessels as grave goods are uncommon within the group. Burial 58, a neonatal, was buried with a small, early to middle Anglo-Saxon pottery vessel positioned next to the head with an iron ring over the chest. A second pottery vessel, also early to middle Anglo-Saxon, came from a double burial, burial B67 and B68. The pot placed on the chest of burial B68.

Small iron nails, copper fixings and brackets, and fragments of wood were recovered from a soil stain overlying Burial 56. These indicate that a possible box or bucket was positioned on the abdominal area of burial B56.

Burial B66 was the only burial with a cruciform brooch and a set of two small long brooches. Fragments of a black organic material form the remains of a cloak or shroud, partially covered the brooches.

Two prone burials, B75 and B78, lay in close proximity to each other. This type of burial is often related to ‘deviants’ or ‘outcasts’. Burial B75 was a robust adult male. The head

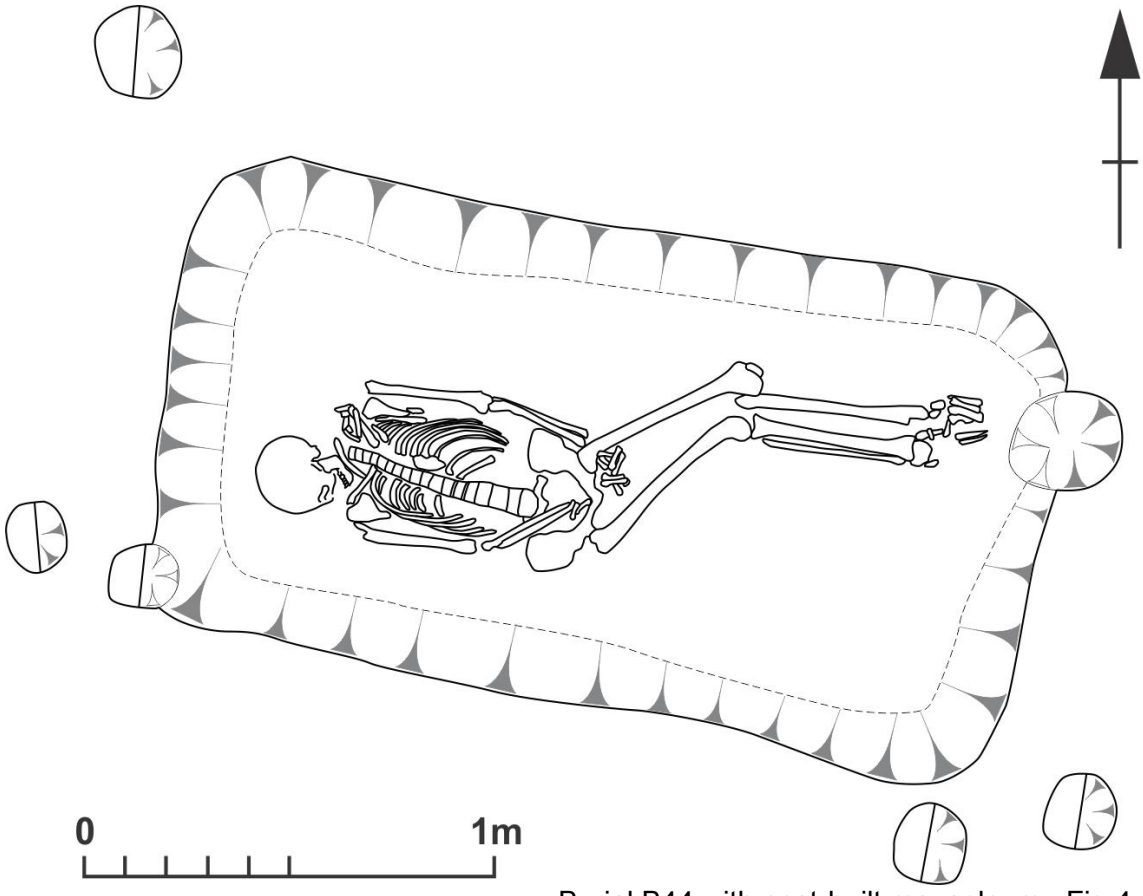
bent back in an unnatural position with the mandible flat against the base of the grave cut. By the left leg there was a rim sherd of a cooking vessel with a 'swallows' nest' lug.

The other prone burial, B78, was that of a child aged 7-12. The lower legs were bent back into a vertical position.

Phase 2
The later burials were clustered on the southern and eastern side of the barrow ditch. They are identified by their east to west alignment and the paucity of grave good assemblage (Fig 2).

The demographic is roughly an even mix of male and females, with the majority of the burials adults (35). Three infants and a neonatal burial have also been identified within this grouping.

Burial B44, an adult male, lay in a grave pit 2.10m long, 1.20m wide and 0.50m deep. Postholes were positioned near the corners of the pit, double postholes at the southern corners, which possibly supported a timber mausoleum structure (Fig 4). It is possible that burial B44 became a focal point for later burials on the eastern side of the barrow.



Burial B44 with post-built mausoleum Fig 4

Medieval to post-medieval field system
The late medieval to post-medieval field system ditches were investigated during the evaluation (Brown 2011). They appeared as two linear ditches aligned north-south, 1.50m wide and 0.50m deep (Fig 2). Pottery recovered from the fills of the ditches dates from the 12th-14th centuries to the mid 16th century.

The pit

A pit [5128] was located *c*18m east of the barrow. It was 1.00m wide and excavated to 1.40m. The total depth was established through auguring to *c*2.40m deep. A single piece of fired clay was recovered from the fill and its use remained undetermined.

4 HUMAN REMAINS by Natasha Powers

4.1 Introduction

The excavated burials are believed to represent a considerable portion of the original cemetery and the assemblage therefore contains a representative sample of the local population during the period in which the cemetery was in use. This report refers to burial numbers (B) throughout. A concordance table with context number can be found in the appendix.

During excavation it became apparent that the preservation of bone varied considerably across the site and a sampling strategy was implemented to ensure full recovery of remains. One individual, B40 lifted as a bulk environmental sample following this strategy was not available for observation at this stage.

4.2 Methods

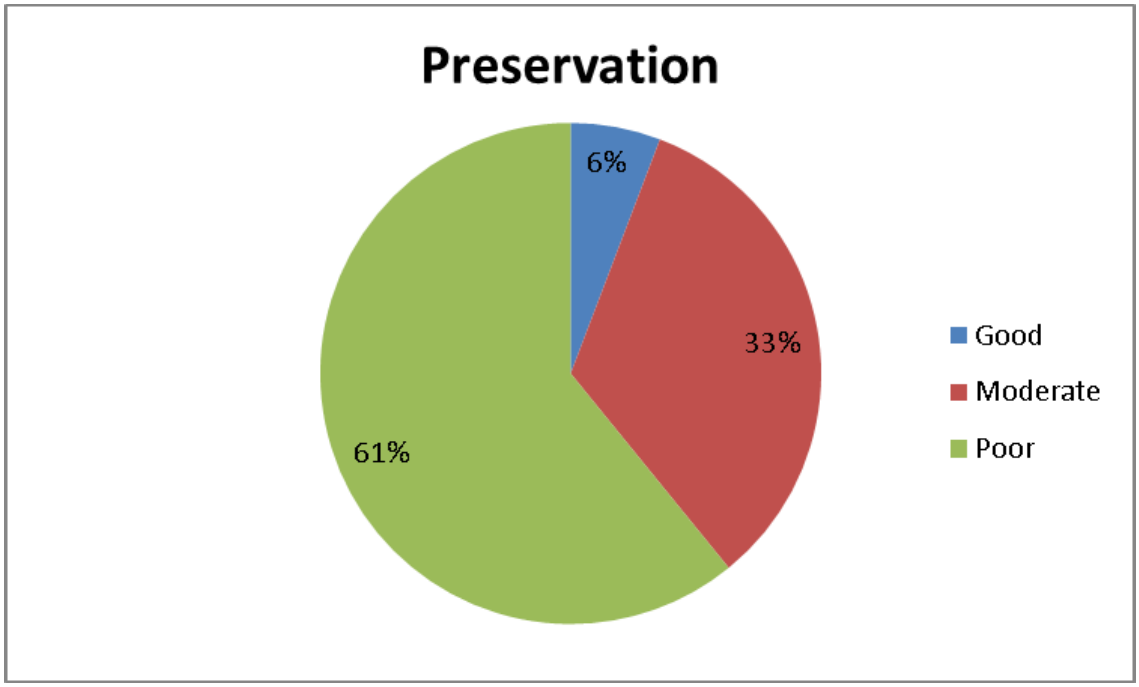
The human remains were scanned visually and data was entered into an Oracle inter-relational database. Preservation was estimated on a three-point scale (from good to poor) according to Connell and Rauxloh (2003). Percentage completeness was estimated in 5% increments (from 5-95%) based on the proportions of the skeleton as follows: skull, 20%, torso and pelvis 40%, upper limbs 20%, lower limbs 20%. Summary catalogue data were compiled and the minimum number of individuals in each context was estimated, based on the maximum number of repeated elements, taking into account age and sex if appropriate. Age was estimated as adult if all permanent teeth were erupted and/or fusion of all but the late fusing epiphyses was complete. Subadult age was estimated from the eruption of the permanent dentition (Buikstra and Ubelaker 1994) and grouped as foetal/neonatal; 1 month to six years; 7–12 years and 13–18 years. Adult sex was estimated from rapid visual assessment of the morphology of the pelvis and skull (Buikstra and Ubelaker 1994), and recorded as male, possibly male, intermediate, possible female and female. Gross pathological changes were noted and were diagnosed using relevant references as given in the text.

4.3 Results

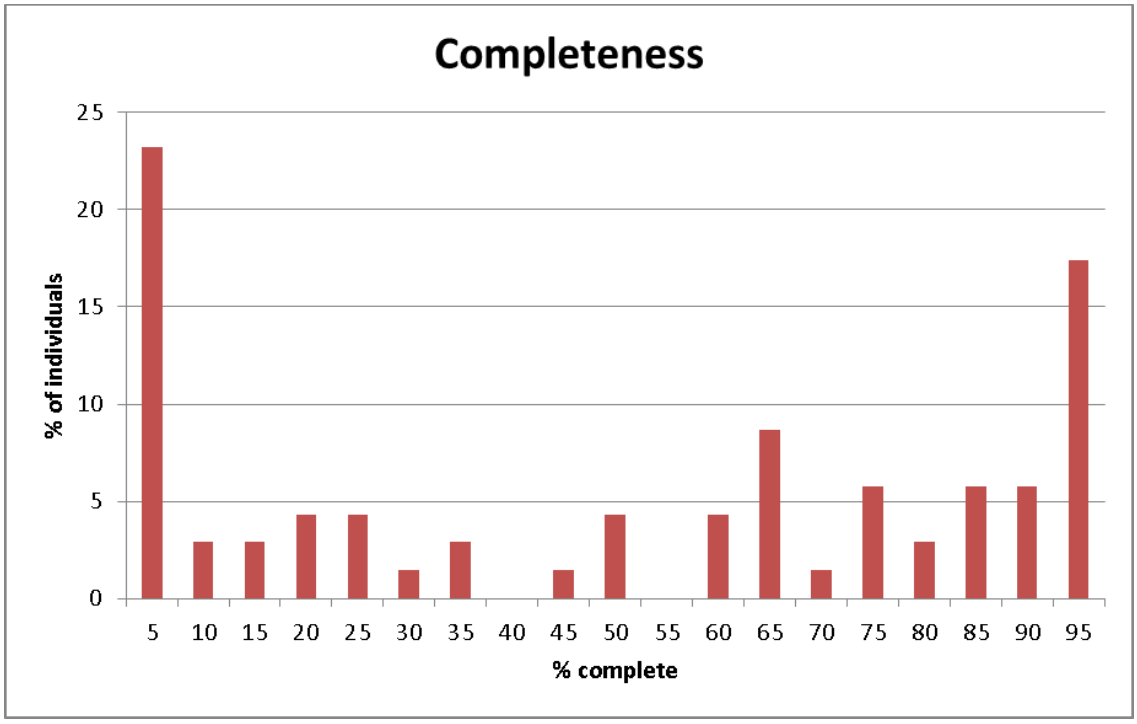
Condition and disturbance

A total of 71 contexts had been assigned burial numbers (B10–B81). Of these, B39, context [5088] was found to consist of a pig rib and cattle-sized possible humerus fragments (A Pipe pers comm). Burial B54 was also found to contain animal bone and had been removed from the assemblage prior to examination by the author. In addition, B40 consisted of a bulk environmental sample, the contents of which were not available for observation at the time of writing. Therefore, the total sample available for study was 69 burials. All contained the remains of a single individual with the exception of B60 which contained an intrusive infant metacarpal, possibly from B58, and B79 which contained an intrusive adult femoral mid-shaft.

The assemblage was generally poorly preserved with heavily eroded cortical surfaces and many fragmentary bones. Just 6% of the group were well preserved, though a third of the group were moderately well-preserved (Fig 5). The bone from B15 was so poorly preserved that its identification as part of the shaft of an adult forearm bone remains tentative. The variability in the preservation of the assemblage is also reflected in the great range of completeness seen with 23.2% of the burials containing only an estimated 5% of an individual but 17.4% containing almost complete remains (Fig 6). B49 contained an adult left great toe only and may be part of B52, whilst B38 consisted of an adult right metacarpal shaft only.



Bone preservation Fig 5



Skeleton completeness (n=69) Fig 6

B10 was very well preserved with copper-alloy staining on the upper right ribs and shoulder. Similar green stains were also noted on the left distal ulna of B11; the left ribs of B12; an unsided rib fragment from B20; the right scapula, clavicle, proximal humerus upper ribs and cervical vertebrae of B57; the clavicles, hyoid, right wrist and mandible of B60; the distal left radius of B70; the cervical vertebrae of B74 and both shoulders of B78.

4.4 Demography

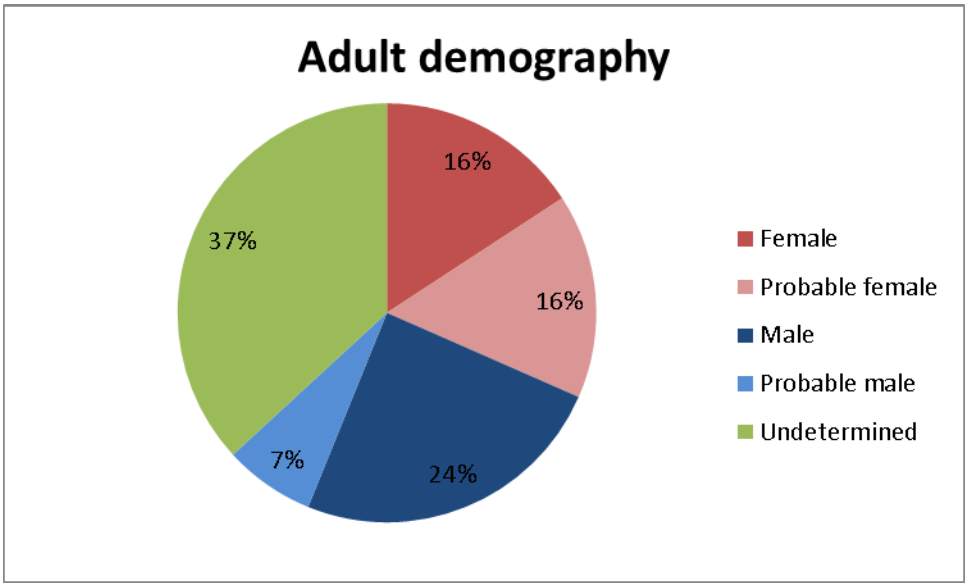
The majority of the assemblage (84.1%) had died in adulthood. Seven of the 11 subadults could be assigned a closer estimate of age at death and of those 28.8% each

had died aged 7–12 years or were perinatal and 42.9% had died aged 13–18 years. B30 contained highly eroded and fragmentary pieces of long bone shaft which could not be identified as either adult or subadult at this stage.

Table 1: Demography

	Sub adult	Female	Probable female	Probable male	Male	Undeter-mined	Total
Foetal/ neonatal	2	-	-	-	-	-	**2**
7–12 years	2	-	-	-	-	-	**2**
13–18 years	3	-	-	-	-	-	**3**
Subadult	4	-	-	-	-	-	**4**
Adult	-	9	9	4	14	21	**57**
Undetermined	-	-	-	-	-	1	**1**
Total	**11**	**9**	**9**	**4**	**14**	**22**	**69**

B18 was assessed as female as the basis of a wide sciatic notch though the skull presented with a pronounced brow ridge. Similar findings were made in B65 and it appears that in this population the pelvis may be a much more reliable indicator of biological sex than the features of the skull, and this should be considered further at analysis. The adult population was composed of 18 females and 18 males, a ratio of 1:1, although 21 adults were insufficiently complete or well-preserved to enable an estimate of sex to be undertaken at this stage.



Adult sex estimates Fig 7

The skeletal features of four adults indicated that they were young when they died (robust male B31; female B35; male B51 and male B72) whilst B55 was that of a male who had died in later adolescence.

4.5 Pathology

Dental disease

Forty-five individuals (39 adults and six subadults) had observable dentitions (Table 2). Of those, the mandible of male B52 was edentulous, suggesting that he was an older adult. Female B74 had severe dental wear. The only hypoplastic anomalies noted were pits in the mandibular molars of adult female B29.

Table 2: Summary of dental pathology

	Observable dentitions	Caries	Ante-mortem tooth loss	Calculus	Enamel hypoplasia	Perio-dontitis	Periapical abscess
Sub adult	6	1	1	1	0	0	0
Adult	39	8	11	10	1	6	2
Total	**45**	**9**	**12**	**11**	**1**	**6**	**2**

Congenital end developmental disorders
Two minor developmental anomalies were noted. B35, a young adult female, displayed spina bifida occulta, with complete failure of union of the posterior sacrum in the midline. B63, an adult male, presented with an additional rib facet on the right clavicle suggesting a shift of the cervicothoracic border (Barnes 1994, 100–104).

Infectious disease
Adult male B17 and probable female B61 had evidence of inflammation of the periosteum of the left tibia, related to non-specific infection or trauma (2/69: 2.9%). The changes in B61 had healed, whereas B17 had been suffering from the condition at the time of their death.

Of particular significance in the assemblage was the number of individuals with advanced infectious changes indicative of tuberculosis. The changes were most advanced in adult male B44 who displayed a single, large, erosive and proliferative lesion between the first and second lumbar vertebrae, with a large sinus draining to the left side. B21, an adult female had typical scooped erosive lesions on the neck of a right mid rib, with porosity and remodelling. Erosive changes to the left auricular surface of B18, and adult female, were also suggestive of tuberculosis; however, observation was compromised by the poor preservation of this element. Advanced changes were also seen in the lumbar spine of B75. Although the erosive changes had the characteristics which would be expected of destruction resulting from tuberculosis, with a typical scooped pattern and sclerotic bars of bone between, there was also significant proliferative change and as such a differential diagnosis of haematogenous osteomyelitis is given at this stage.

Trauma
Four adults displayed evidence of traumatic injury (4/57: 7.0%). Probable male B11 had suffered a fracture of the superior, anterior apophyseal ring of the second lumbar vertebra with a teardrop-shaped step indicating healing of the injury. Such an injury usually results from hyperflexion (Maat and Mastwijk 2000).

The cranial vault of male B63 was heavily eroded and poorly preserved but it could be seen that there was a healed sharp-force injury to the right frontal (forehead), probably the result of an assault with a bladed weapon.

Female B74 had suffered a soft tissue injury, with a bump of new bone on the distal left femur indicating the presence of an ossified haematoma, the result of deep bruising.

Most significant were a suite of fractures which affected B26, an adult male. He had suffered a slipped capital epiphyses in the left femur and presented with multiple healed rib fractures on the left side. The midshaft of the left ulna also appeared to have a callus indicating the presence of a healed fracture, though this requires radiographic confirmation. Given the location of these injuries, it is possible that they result from a single incident which occurred prior to the fusion of the proximal femoral epiphyses, in later adolescence (Schaefer *et al* 2009, 276).

Joint disease
Nine adults had suffered from spinal joint disease (9/57: 15.8%). Five displayed changes associated with intervertebral disc disease, five had Schmorl's nodes resulting from disc herniation, three had osteophyte formation, three had osteoarthritic changes (most were focused in the cervical spine) and fusion was seen in the mid thoracic spine of male B25.

Male B27 had extra spinal joint disease with osteoarthritic changes affecting the right sterno-clavicular joint (1/57 adults: 1.8%).

A possible case of gout was seen in the right first metatarsal of male B26 with small erosive lesions adjacent to the distal articular surface (1/57 adults: 1.8%).

Metabolic and nutritional disorders
The proximal tibiae of subadult B33 were bowed in an anterior directions, possibly indicating that they had been suffering from rickets (the result of vitamin D deficiency) when they died (Brickley and Ives 2008, 97).

Severe cribra orbitalia affected the orbits of adult male B72 and indicate that he had suffered from iron deficiency anaemia as the result of injury, dietary deficiency, underlying pathological conditions such as neoplastic disease, or a parasitic infection (Roberts and Manchester 1995, 166).

Circulatory disease
Adult male B51 had possible Scheuermann's disease, an osteochondrosis of the spine (Roberts and Manchester 1995, 87), whilst B26 had a slipped capital epiphyses, mentioned above, a condition which is thought to have an underlying circulatory aetiology (Aufderheide and Rodríguez-Martín 1998, 90).

Table 3: Summary of osteological data

Burial No.	Context	Condition	% Complete	Skull	Dentition	Torso	Pelvis	Legs	Feet	Arms	Hands	Age	Sex	Mni	Comments
10	5004	Poor	50	0	1	1	0	2	0	2	2	Adult	Probable female	1	Cu alloy staining upper R ribs and shoulder (well preserved), SN,OP
11	5007	Moderate	95	1	1	1	0	2	2	2	2	Adult	Probable male	1	Cu stain left distal ulna. cortex v eroded. anterior apophyseal ring fracture with teardrop shape step l2
12	5010	Poor	20	0	0	1	0	2	2	1	0	Adult	Undetermined	1	Cortex severely eroded highly fragmentary. 3 L ribs with Cu alloy staining well preserved
13	5013	Poor	65	1	1	1	1	2	2	2	2	Adult	Female	1	
14	5023	Poor	15	1	1	0	0	1	0	0	0	Adult	Undetermined	1	AM tooth loss
15	5022	Poor	5	0	0	0	0	0	0	1	0	Adult	Undetermined	1	Probably forearm but V fragmentary and poorly preserved
16	5028	Poor	5	0	0	0	0	0	0	1	0	Adult	Undetermined	1	
17	5031	Moderate	85	1	1	1	1	2	2	2	1	Adult	Male	1	Calculus. plaque of active new bone on distal L tibia and possible new bone on midshaft

Burial No.	Context	Condition	% Complete	Skull	Dentition	Torso	Pelvis	Legs	Feet	Arms	Hands	Age	Sex	Mni	Comments
18	5019	Poor	45	1	1	0	1	2	0	2	0	Adult	Female	1	V pronounced brow ridge but wide sciatic notch. caries, am tooth loss. erosive changes to left auricular surface (and possibly to right) compromised by post-mortem erosion of cortex but remodelling seen on left
19	5034	Poor	75	0	1	1	1	2	2	2	0	Adult	Probable male	1	
20	5345	Moderate	85	1	1	1	1	2	2	2	2	7–12 yrs	-	1	Cu stain rib shaft fragment
21	5346	Poor	35	0	0	1	1	0	2	0	1	Adult	Female	1	IVD, ?tb R mid rib scooped lesion by neck with porosity and remodelling
22	5041	Poor	5	0	0	0	0	2	0	1	0	Adult	Undetermined	1	Very fragmentary and eroded bone
23	US	Poor	10	0	0	0	0	2	0	0	0	Subadult	-	1	
24	5047	Poor	5	1	1	1	1	2	1	2	0	Adult	Probable female	1	Caries, AM tooth loss
25	5016	Poor	75	1	0	1	1	2	2	2	2	Adult	Male	1	IVD, cervical OA, apophyseal OA, fusion (mid t vert?)

Burial No.	Context	Condition	% Complete	Skull	Dentition	Torso	Pelvis	Legs	Feet	Arms	Hands	Age	Sex	Mni	Comments
26	5049	Good	95	2	1	1	1	2	2	2	2	Adult	Male	1	Calculus. healed midshaft fracture L ulna (needs radiography). slipped capital epiphyses L femur. ?gout R MT1 - para-articular erosive lesions. multiple healed fractures l ribs. SN, OP
27	5053	Moderate	95	0	1	0	0	0	0	0	0	Adult	Male	1	Severe and patchy erosion of cortex. Caries, AM tooth loss, calculus, periodontal disease. r sterno-clavicular OA, SN, IVD
28	5056	Moderate	65	1	1	1	1	2	2	2	2	Adult	Female	1	fragmentary, calculus, periodontal disease, IVD, S1
29	5058	Moderate	95	1	1	1	1	2	2	2	2	Adult	Female	1	Hypoplastic pits in mandibular molars
30	5062	Poor	5	0	0	0	0	0	0	0	0	Adult	Undetermined	1	v eroded and unidentifiable long bone fragments - could be subadult or adult
31	5063	Moderate	95	1	1	1	1	2	2	2	2	Adult	Male	1	young adult (clavicles fusing). v robust. SN
32	5066	Moderate	80	1	1	1	1	2	2	2	2	13–18 yrs	-	1	
33	5070	Moderate	85	1	1	1	1	2	0	2	0	Foetal/neonatal	-	1	anterior bowing of proximal tibiae. ?rickets

Burial No.	Context	Condition	% Complete	Skull	Dentition	Torso	Pelvis	Legs	Feet	Arms	Hands	Age	Sex	Mni	Comments
34	5073	Poor	5	1	1	0	0	2	2	1	0	Adult	Probable female	1	
35	5076	Good	75	1	1	1	1	2	2	2	2	Adult	Female	1	young adult, calculus, sbo (complete)
36	5081	Poor	10	0	0	0	0	2	2	0	0	Adult	Undetermined	1	
37	5083	Poor	65	0	0	1	1	2	0	2	0	Adult	Undetermined	1	
38	5086	Moderate	5	0	0	0	0	0	0	0	1	Adult	Undetermined	1	R MC shaft only
39	5088	-	-	-	-	-	-	-	-	-	-	-	-	-	animal bone only
40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	sample awaiting processing
41	5093	Poor	5	1	0	0	0	0	0	0	0	Adult	Undetermined	1	cranial vault only, probable adult
42	5098	Poor	5	0	0	0	0	2	0	0	0	Adult	Undetermined	1	lower legs only
43	5342	Poor	5	0	0	0	0	1	0	0	0	Adult	Undetermined	1	adult L femoral shaft and small skull fragment from subsoil context 5001
44	5103	Moderate	90	1	1	1	1	2	2	2	2	Adult	Male	1	probable TB with single large lesion between L1 and L2 draining to left side
45	5131	Poor	5	0	0	0	0	1	0	0	0	Subadult	-	1	probable subadult femur from subsoil context 5001
46	5105	Poor	25	0	0	0	1	2	2	0	0	Adult	Undetermined	1	legs only
47	5107	Poor	5	1	1	1	1	2	2	2	2	Adult	Male	1	caries, AM tooth loss
48	5122	Poor	50	1	1	1	1	2	1	2	0	Adult	Male	1	
49	5126	Moderate	5	0	0	0	0	0	1	0	0	Adult	Undetermined	1	left great toe only. possibly part of B52
50	5133	Poor	85	1	1	1	1	2	2	2	2	Adult	Male	1	

Burial No.	Context	Condition	% Complete	Skull	Dentition	Torso	Pelvis	Legs	Feet	Arms	Hands	Age	Sex	Mni	Comments
51	5143	Good	95	2	1	1	1	2	2	2	2	Adult	Male	1	young adult, calculus, SN - probably related to scheuermanns disease
52	5104	Moderate	95	1	1	1	1	2	2	2	0	Adult	Male	1	AM tooth loss - edentulous mandible. SN, OP cervical OA
53	5150	Poor	25	1	1	1	0	2	2	1	0	Adult	Undetermined	1	
54	??	-	-	-	-	-	-	-	-	-	-	-	-	-	Animal bone only
55	5160	Moderate	95	2	1	1	1	2	2	2	2	13–18 yrs	-	1	Distal femora unfused. M3s erupting. male in v late teens
56	5170	Poor	20	0	0	0	0	2	2	1	0	Adult	Undetermined	1	
57	5190	Moderate	70	1	1	1	1	2	2	2	2	Adult	Female	1	Cu stain R scapula, clavicle, prox humerus, upper ribs and cervical vert, calculus
58	5192	Poor	5	1	0	1	0	0	0	0	0	Foetal/neonatal	-	1	
59	5196	Good	95	1	1	1	1	2	2	2	2	Adult	Probable male	1	
60	5199	Poor	90	1	1	1	1	2	2	2	2	Adult	Probable female	2	V eroded cortex. Cu alloy stain clavicles, hyoid, R wrist, mand. INT anbn. INT infant mc bu58?
61	5208	Moderate	65	1	1	1	1	2	2	2	2	Adult	Probable female	1	AM tooth loss. healed periostitis left anterior tibia
62	5211	Poor	25	1	1	1	0	2	0	1	0	Adult	Undetermined	1	

Burial No.	Context	Condition	% Complete	Skull	Dentition	Torso	Pelvis	Legs	Feet	Arms	Hands	Age	Sex	Mni	Comments
63	5214	Moderate	90	1	1	1	1	2	2	2	2	Adult	Male	1	Caries, AM tooth loss, periodontal disease. healed sharp force injury to R frontal - heavily eroded. IVD additional rib facet on R clavicle. deep pachyonian depressions
64	5250	Poor	65	1	1	1	1	2	1	2	0	Adult	Probable female	1	calculus
65	5253	Poor	60	1	1	1	1	2	2	2	0	Adult	Female	1	v pronounced brow ridge but v female pelvis, calculus
66	5256	Poor	30	1	1	0	0	2	2	0	0	Adult	Undetermined	1	
67	5259	Poor	60	1	1	0	0	2	2	2	2	Adult	Undetermined	1	
68	5261	Poor	50	1	1	0	0	2	0	1	0	Adult	Undetermined	1	
69	5309	Poor	5	1	1	0	0	0	0	0	0	Adult	Undetermined	1	
70	5307	Poor	65	1	0	0	1	2	2	2	0	Adult	Probable female	1	Cu stain distal left radius
71	5310	Poor	35	1	1	0	0	1	0	2	0	Adult	Probable male	1	skull very distorted pm
72	5313	Moderate	95	2	1	1	1	2	2	2	2	Adult	Male	1	young adult. caries. severe cribra orbitialia (bilateral)
73	5315	Poor	5	1	0	0	0	0	0	0	0	Subadult	-	1	

Burial No.	Context	Condition	% Complete	Skull	Dentition	Torso	Pelvis	Legs	Feet	Arms	Hands	Age	Sex	Mni	Comments
74	5317	Poor	90	1	1	1	1	2	2	2	2	Adult	Female	1	severe dental wear. cu stains cervical vertebrae. caries, am tooth loss, periodontal disease, abscess. ossified heamatoma distal left femur
75	5320	Moderate	95	2	1	1	1	2	2	2	2	Adult	Male	1	very robust hand phalanges, am tooth loss, periodontal disease, abscess. probable TB lumbar spine. diff diag of heamatogenous osteomyelitis. v proliferative. sacralistation s1
76	5323	Moderate	60	1	1	1	1	2	2	2	0	Adult	Probable female	1	caries, AM tooth loss, calculus, periodontal disease
77	5326	Poor	75	0	0	1	1	2	2	2	2	Adult	Probable female	1	
78	5329	Moderate	80	1	1	1	1	2	0	2	1	7–12 yrs	-	1	Cu alloy staining both shoulders. caries
79	5331	Moderate	15	0	0	1	1	1	0	0	0	Subadult	-	2	Int adult femoral midshaft
80	5337	Poor	20	0	0	0	1	2	0	0	0	Adult	Undetermined	1	
81	5340	Moderate	95	1	1	1	1	2	2	2	2	13–18 yrs	-	1	AM tooth loss, calculus

5 FINDS

5.1 **Flint** by Yvonne Wolframm-Murray

In total 124 pieces of worked flint were recovered as residual finds from later features, the subsoil or topsoil. The assemblage comprises 104 flakes, 17 blades, one core, one core rejuvenation flake, one side scraper, and 10.9g of debitage was recovered from flotation samples. A summary of the assemblage is provided in Table 4.

Table 4: Summary of worked flint

Type		No
Flake	Whole	78
	Broken	25
	Burnt	1
Blade	Whole	14
	Broken	3
	Burnt	-
Core		1
Scraper, side		1
Debitage		(10.9g)
Core rejuvenation flake		1
Total		**124**

Raw material and condition

The majority of the raw material comprises vitreous flints ranging from light to dark grey and brown colours. The quality of the raw material is good to moderate. Flaws and inclusions in the raw material affected the quality of the flint, with occasional thermal flaws. The flint has a thin/medium, weathered or abraded cortex, usually a light to mid brown colour. The bulk of the material has cortex present on the dorsal surfaces. The raw material is most likely to be derived from local gravels.

The condition of the worked flint is good with artefacts showing post-depositional edge damage consisting of occasional to moderate amounts of nicks to the edges. Patination is present on third of the assemblage; half is a thick white discolouration of the surface of the flint. The remainder displays varying degrees of a light grey-blue to white discolouration. One burnt worked flint was noted, probably accidental in nature, which displays thermal fracturing and discoloured cortex.

Assemblage composition

Cores
One core was recovered of poor quality raw material with removals from multiple striking platforms.

Flakes and blades
The assemblage is dominated by un-retouched waste flakes, blades and debitage. This comprises 104 flakes, of which 25 were broken and one burnt, and 17 blades, of which three were broken. It was not uncommon for the flakes to have cortical striking platforms and several squat flakes are also present in the assemblage. There are occasional soft hammer-struck blades, often patinated. From environmental sample processing a total of 10.9g of debitage was recovered.

Tools
One side scraper is present in the assemblage manufactured on a flake with abrupt retouch on one lateral edge.

Discussion

The technological characteristics of the assemblage indicate principally a late Neolithic/early Bronze Age to mid Bronze Age date with a small early to middle Neolithic component. The flint was recovered from the fills of the round barrow ring ditch, including Bronze Age fills and later Saxon fills with incorporated Bronze Age finds. The flint was also recovered from the fills of the Saxon graves.

The earlier Neolithic component was mainly recovered as residual finds from fill (5177), the initial silting of the base in the ring. This is a possible indication of an earlier use of the wider landscape.

The high percentage of flakes to blades is typical of a Neolithic/Bronze Age assemblage. The cortical striking platforms, squat flakes and poor quality manufacture and raw material use is indicative of the Bronze Age. The side scraper and the multiplatform core of poor quality raw material is Bronze Age in date. The material became incorporated during the deliberate backfilling of the mound material during the Saxon period.

Burnt flint

The environmental samples produced 84 pieces of natural burnt flint totalling 199g. The material was recovered from the fills of Burials 40 and 41 and from the ring ditch fill (5222).

5.2 The prehistoric pottery by Andy Chapman

A total of 65 sherds, weighing 506g, of hand-built prehistoric pottery was recovered from the secondary and upper/final fills of the ring ditch, with a further 29 sherds, weighing 229g, coming from the fills of six Anglo-Saxon graves.

The small group of certain or probable early Bronze Age date are from the secondary fills of the ring ditch, with a single sherd residual in a grave fill (Burial 5099) (Table 5). Material of the probable early to middle Iron Age date comes from the secondary and upper fills of the ring ditch and from the fills of further graves (Burials 5249, 5252, 5258, 5322 and 5329).

There are some diagnostic sherds but much of the material comprises small body sherds, and this is reflected in the average sherd weight of only 8.6g.

Fabrics

Fabric 1: hard, contains sparse sub-rounded quartz up to 0.5mm, rare shell fragments up to 2mm. 4 sherds, 115g

Fabric 2: hard and well fired, contains sparse to dense angular white flint up to 2mm, rare fine quartz. 78 sherds, 550g

Fabric 3: a soft fabric with a grey core and pale buff to pale orange surfaces, containing sparse larger mineral inclusions. Occurs as an early Bronze Age highly decorated Food Vessel and some plain body sherds. 3 sherds, 70g

Table 5: Quantification of prehistoric pottery

Fill/cut		Fabric 1		Fabric 2		Fabric 3		Date
		No	Wt (g)	No	Wt (g)	No	Wt (g)	
Graves	**Burial**							
5099/5100	B42	1	69	-	-	1	10	IA/EBA
5249/5251	B64	-	-	2	14	-	-	IA
5252/5254	B65	-	-	1	1	-	-	IA?
5258/5262	B67	-	-	12	118	-	-	MIA
5322/5324	B76	-	-	2	16	-	-	IA
5329/5330	B78	-	-	1	1	-	-	IA?
Sub-total		**1**	**69**	**18**	**150**	**1**	**10**	**29/229g**
Ring ditch	**Location**							
5156/5157	sec/upper	-	-	5	24	-	-	IA
5162/5268	final fill	-	-	2	8	-	-	IA
5163/5168	dark fill	-	-	2	8	-	-	IA
5164/5168	secondary	2	33	7	23	-	-	E-MIA
5173/5180	final fill	-	-	8	45	-	-	EIA?
5174/5180	upper	-	-	1	3	-	-	IA
5176/5180	secondary	-	-			1	54	EBA
5217/5223	secondary	-	-	4	83	-	-	MIA
5222/5223	dark fill	-	-	4	19	-	-	EIA?
5230/5239	dark fill	-	-	3	6	-	-	IA?
5231/5239	secondary	-	-	2	12	-	-	IA
5240/5248	upper	-	-	10	114	-	-	MIA
5264/5269	upper	-	-	1	5	-	-	IA
5266/5269	secondary	-	-	5	12	-	-	EIA?
5272/5276	secondary	1	13			1	6	IA-BA
5290/5294	upper	-	-	4	15	-	-	EIA?
5291/5294	secondary			2	23	-	-	EBA
Sub-total		**3**	**46**	**60**	**400**	**2**	**60**	**65/506g**
Total		**4**	**115**	**78**	**550**	**3**	**70**	**84/735g**

Key: EBA=early Bronze Age; EIA=early Iron Age; E-MIA=early to early-middle Iron Age; IA=Iron Age; MIA=middle Iron Age

Bronze Age pottery

There are two sherds with clear diagnostic features that can be securely dated to the early Bronze Age. The secondary fill (5291) of ring ditch section [5294] produced a body sherd with a grey core and inner surface and red outer surface decorated with small but deeply incised oval depressions, aligned vertically. These have the characteristics of fingertip decoration, including slight nail impressions, but at only 7-8mm long by 4mm wide the finger making these impressions would have been small, most likely a child (Fig 8). This sherd is probably from a domestic Beaker of the early Bronze Age (Bamford 1982).

Sherd of early Bronze Age domestic Beaker (Scale 10mm) Fig 8

The secondary fill (5176) of ring ditch section [5180] produced a large (but fragmented) body sherd probably from a food vessel of the early Bronze Age, with an applied cordon above parallel and converging lines of bold twisted cord decoration perhaps forming pendant triangles below the cordon. There is also a single line of twisted cord decoration at the base of the cordon. The fabric is soft with a grey core and pale buff to orange surfaces (Fig 9). There are plain body sherds in a similar fabric and surface colour from the fill (5099) of grave 5100 (Burial 42) and from the secondary fill (5272) of ring ditch section [5276].

Sherd of probable early Bronze Age food vessel (Scale 10mm) Fig 9

Iron Age pottery

There is a small group of sherds from a small shouldered bowl, from the final fill (5173) of ring ditch section [5180], with a dark grey core and inner surface and a dark red-

brown outer surface. There is a further sherd from a similar, but slightly better finished vessel, with a light brown outer surface with shallow horizontal fingernail impressions on the shoulder (Fig 10). These vessels seem most likely to date to the early Iron Age, although too little survives for the forms to be fully defined.

Early Iron Age body sherd with horizontal fingernail impressions Fig 10

The upper fill (5290) of ring ditch section [5294] contained a rim sherd from a small thin-walled, well-made rounded bowl, with a simple upright rounded rim, which seems most likely to date to the early to early-middle Iron Age (perhaps the 6th to 5th centuries BC)

From the secondary fill (5164) of ring ditch section [5168] there is a thick-walled rim sherd, up to 12mm thick, grey with a light brown outer surface. It has a simple upright rounded rim, with the top decorated with two lines of oblique fingernail incisions (Fig 11). A perforation 20mm below the rim and 4mm in diameter had been bored through before the clay had fully dried, leaving a prominent raised rim on the inside and a low rim on the outside. This vessel seems most likely to date to the early or early-middle Iron Age.

Decorated rim from perforated vessel of the early to early-middle Iron Age
(Scale 10mm) Fig 11

A small group of body sherds from the upper fill (5240) of ring ditch section [5248] are from a single vessel containing dense angular flint, with a grey core and inner surface and a brown to light grey outer surface. The body sherds are decorated with vertical scored lines, which indicate that this is a scored ware vessel of the middle Iron Age (Fig 12).

Scored ware vessel of the middle Iron Age (Scale 10mm) Fig 12

5.3 Roman pottery by Tora Hylton

Ten sherds with a combined weight of 184g were recovered. The pottery was recorded by context and broad fabric group, and quantified by sherd count and weight (Table 6). The entire assemblage was recovered from stratified deposits, six sherds from the upper fills of a ring ditch [5202, 5230, 5240] and three residual sherds from burial deposits, Burials 11 [5006], 52 [5139] and 65 [5252].

Table 6: Quantification of Roman pottery

Context	**5006 Burial 11**		**5139 Burial 52**		**5202 ring ditch**		**5230 ring ditch**		**5240 ring ditch**		**5252 Burial 65**	
Fabric	**No**	**Wgt (g)**	**No**	**Wgt (g)**	**No**	**Wgt (g)**	**No**	**Wgt (g)**	**No**	**Wgt (g)**	**No**	**Wgt (g)**
Greyware	1	1	1	2	1	5	1	2	5	28	1	4
Shelly ware	-	-	-	-	1	146	-	-	-	-	-	-
Total	1	1	1	2	2	151	1	2	5	28	1	4

With the exception of one body sherd of shell-gritted ware from a large storage jar, the entire collection comprises small abraded greyware sherds in a soft sandy fabric with micaceous inclusions. This small assemblage comprises few recognisable forms, but there are three tiny rim sherds from necked jars and a two body sherds ornamented with vertical burnished lines. A date in the 2nd century AD is suggested.

5.4 Saxon pottery by Paul Blinkhorn

ES1: Early/Middle Saxon Fine Sandy, *c.*AD450-850. Dense sub-rounded quartz up to 0.5mm, rare sub-angular granite up to 2mm, occasional angular white flint up to 1mm. 6 sherds, 1214g.

SNW: St Neots Ware, *c.*AD900-1100 (Denham 1985). Fabric moderate to dense finely crushed fossil shell, with varying quantities of quartz and/or ironstone. Usually purplish-black, black or grey, with fairly fine, dense inclusions. Main forms small jars with sagging bases and bowls, although a few lamps are known. 1 sherd, 6g,

The pottery occurrence by number and weight of sherds per context by fabric type is shown in Table 7. Each date should be regarded as a *terminus post quem*. The Anglo-Saxon pottery is fairly typical of that from other sites in the Bury St Edmunds area (eg. West 1988, fig 79).

Table 7: Quantification of Saxon pottery

	ES1		SNW		
Fill/cut/Burial no	**No**	**Wt (g)**	**No**	**Wt (g)**	**Date**
5009/grave 5011/ B12	1	32	-	-	E/MS
5010/grave 5011/ B12	1	187	-	-	E/MS
5184/ditch 5187	1	8	-	-	E/MS
5194/grave 5196/B59	1	592	-	-	E/MS
5260/grave 5262/B68	1	159	-	-	E/MS
5319/grave 5321/B75	1	236	-	-	E/MS
5339/grave 5341/B81	-	-	1	6	LSAX
Total	**6**	**1214**	**1**	**6**	

Anglo-Saxon

The Anglo-Saxon assemblage included two complete vessels and large sherds from two other pots, as follows:

Accessory Vessel, SF193, context 5194, Burial 58

Complete vessel from a grave. The pot is quite small, with a rim diameter of *c*90mm, and is 105mm high. There are two small holes in the side of the pot near the base, which may be evidence of the ritual 'killing' of the pot, a phenomenon which has been noted in early Saxon funerary pottery from elsewhere (eg. Leahy 2007), but the vessel has numerous cracks running down the same side, and so the holes may be the result of damage due to the pressure of the overlying soil.

The vessel has a black fabric with a smooth and slightly burnished outer surface.

Accessory Vessel, SF242, context 5263, Burial 68

Near-complete vessel from a grave. The pot is very small, with a rim diameter of *c*75mm, and is 60mm high. The vessel is in poor condition, with much of the base and one side heavily spalled, and a large chip missing from the rim, but all the damage appears to pre-date the deposition of the pot in the grave.

Sherds, contexts 5009 and 5010, Burial 12

The two sherds are probably from the same vessel. That from 5009 is from the body, while the other, from 5010, is part of the base. It is probable that the sherds were deliberately placed in the grave as a symbolic representation of a complete, a well-known phenomenon in burials of the period (eg. Hirst 1985). Both sherds are a uniform black colour, with the bodysherds burnished on the outer surface.

Sherd, SF252, context 5319, Burial 75

Sherd from the rim of a vessel with a 'swallow's nest' lug. Such vessels are rare but well-attested find on sites of the early Anglo-Saxon period (eg Blinkhorn 2007). They are thought to be specialist cooking vessels, with the lug designed to protect the suspension mechanism from the heat of the fire. This vessel appears to have had such

a use, as there is sooting below the lug and on the outer rim. The sherd has a dark grey fabric, with a dark purplish-brown outer surface.

Chronology

It has been shown that in East Anglia, hand-built pottery appears to have virtually ceased to have been made and used around the time of the introduction of Ipswich Ware around AD720 (Blinkhorn 2012). This combined with the fact that Anglo-Saxon inhumations were rarely furnished by the end of the seventh century means that the pottery is all very likely to date to some time in the fifth – seventh centuries.

5.5 Other finds by Tora Hylton

Introduction

The excavations at Stanton, Suffolk produced finds spanning the late Bronze Age through to the post-medieval period. The majority of the finds are Anglo-Saxon in date and were retrieved from the inhumation cemetery. It is assumed that the bodies were laid in earth graves and dressed as for life. Artefacts were found in 35 of the graves and these comprise a range of dress accessories, items for personal adornment, together with a collection of tools and weapons which typologically date to the late 5th and 6th centuries. The assemblage also includes amber beads and cowries, suggesting access to trade routes, and a small group of reused Roman artefacts which may have held some sort of amuletic significance for the individuals. The assemblage may be compared to other Anglo-Saxon cemetery sites in the East Anglian region, but particularly Morning Thorpe, Suffolk, 23 miles to the north-east of Stanton. The details of the finds from the burials are tabulated in Tables 9, 10, and 11.

Quantity of material

There are a total of 229 individual or group recorded small finds, a small number of which represent multiple accessions. All common materials are well represented; there are no objects of gold and only one silver artefact (Table 8). The site produced no waterlogged deposits, but a large number of the artefacts provide evidence of textiles, leather and wood in the form of mineral preserved organic remains surviving in corrosion deposits.

Table 8: Other finds by material type

Material	Number of objects
Amber	19
Copper alloy	66
Glass	61
Iron	80
Shell	1
Silver	1
Stone	1

Data collection
All finds were recorded manually on site, following MOLA Northampton guidelines. The majority of finds were recovered during hand excavation, while a small number were located by a metal detector. Finds were also recovered from soil samples during the sieving process. The position of all the finds recovered from burial deposits was recorded by drawn record and backed up by three-dimensional co-ordinates. During the excavations two large soil blocks were excavated and removed by conservators from MOLA London. These were transferred to London to be x-radiographed and excavated in laboratory conditions.

All the small finds have been packaged according to UKIC standards and on completion of the fieldwork they were sent to the conservation laboratory at MOLA London for assessment and X-ray. All the artefacts were X-radiographed and this not only provided a permanent record, but it aided identification and revealed technical details not previously visible. The shield bosses were cleaned and stabilised. All the sensitive finds have been packaged in air tight plastic containers with silica gel to maintain a low humidity and reduce deterioration.

All the small finds have been entered on to a computerised database (ACCESS) and form a catalogue comprising, material type and object identifications, descriptions, together with stratigraphic information. No detailed research for British parallels has been undertaken, there has been minimal research on local/regional parallels, therefore any dates may be subject to modification in the event of further work.

Provenance
With the exception of two unstratified artefacts, all the finds were recovered from stratified deposits. The majority of the finds, approximately 219, were recovered from burials while a further eight finds were located within deposits relating to fills of the Bronze Age ring ditch (5156, 5222) and a post-medieval ditch (5038, 5039).

Bronze Age finds
A bronze sword fragment from a Ewart Park Type sword (*c* 900 – 600 BC) was recovered from a dark layer (5222) within the barrow ditch. The fragment represents the upper section of the blade and comprises the base of the hilt and shoulders. The shoulders are V-shaped and there are four rivet holes, two each side, for attaching the hilt. A fragment of a socketed bronze axe was recovered from the same deposit.

Roman finds
Four of the copper alloy artefacts recovered from the Saxon burials stylistically date to the Roman period. They include an early 4th-century coin (see below), a lock pin/bell-shaped stud, a miniature votive axe and a figurine of a bird surmounted on a perforated shaft with socketed terminal. These objects may have used as amulets.

The coin has been commented on by Ian Meadows as follows:
The coin, 26mm diameter, recovered from burial B20 is a Follis of Maximianus. This coin bears the bust of the Emperor Laureate and cuirassed on the obverse with the legend DNMAXIMIANOPFSAVG partially legible. The reverse portrays a standing Genius holding a patera in the right hand and a cornucopia resting on the left shoulder with the legend GENIO POP ROM around and the mint mark PLN in the exergue indicating London. The die axis is 7.

Both the obverse and reverse are not highly raised which may reflect wear and several scored scratches are present across the figure of the Genius which may be deliberate since similar striae are not present on any other part of the coin. The production of this coin dates to the period 306-8. RIC 90.

Condition

Amber
Amber beads were recovered from burial deposits. Most display signs of a greyish opaque weathering crust to varying extents, but all appear to be stable.

Copper alloy
All the copper alloy objects have been examined by a conservator to determine any immediate conservation requirements. A small number of these artefacts required repacking but in general most are in a stable condition. All the copper alloy objects were x-radiographed and this revealed manufacturing and decorative details which had not previously been visible beneath the corrosion deposits. Mineral preserved organics survive within the corrosion deposits on many of the artefacts. These include; wood within a rim mount, evidence of textiles surviving on the surfaces of brooches and buckles/buckle-plates, and leather surviving between buckle-plates. In addition, the remains of a cord which had been tied round a Roman lock pin/bell-shaped mount appears to have survived more or less intact.

Glass
Glass beads were recovered from burial deposits. Some display signs of minor weathering but all appear to be stable.

Iron
All iron objects were initially examined by a conservator to determine any immediate conservation requirements. The shield bosses were particularly fragile and all required cleaning, stabilization and repacking. All the iron objects were x-radiographed and this revealed technical details not previously visible beneath sometimes extensive corrosion deposits. Mineral preserved organics survive within the corrosion deposits on many of the artefacts. These include wood associated with shield bosses/ underside of studs, within the sockets of spears and around the shanks of nails. Textile impressions were also noted within ferrous corrosion deposits on shield bosses, on iron pins associated with copper alloy brooches, on suspension rings and at the base of large pins with coiled heads. In addition, mineral preserved organics were observed on the tangs of knives and sometimes their blades and on the underside of buckles.

Shell
Two cowry shells were recovered from a single deposit. They require a little cleaning but are stable and have been x-rayed.

Silver
The remains of one or possibly two silver rings were recovered. Although fragmentary, they are stable.

Saxon finds
The majority of the Saxon artefacts were recovered from 35 of the inhumation burials (Table 9). The range of finds includes items that would have been worn as part of everyday dress (brooches, wrist clasps, belt fittings, beads,?amulets) and personal equipment including tools and weaponry (knives, shears, spindle-whorl, axe-hammer, shield bosses, spears). The assemblage is dominated by knives and buckles, the former occurring in 24 of the graves.

The artefacts form a collection which can be compared to assemblages recovered from other Saxon cemetery sites in the East Anglian region. Initial basic research comparing the finds types represented with general typologies (Swanton 1973, Leeds 1945,

Dickinson and Harke 1992), suggests that the burials date predominantly from the late 5th to late 6th centuries. However, some burials may also possibly extend into the 7th century if Dickinson's later date is accepted for Swanton's type C1 spear-heads (see Hirst 1985, 91).

Material categories

Amber

There are 19 amber beads. Generally they are roughly shaped, ranging from wedge-shaped to globular. They occurred in four of the graves and up to 10 examples were recovered in a single deposit; in all cases they were combined with varying numbers of glass beads. One example provides evidence for re-working after it had been damaged.

Copper alloy

There are 66 copper alloy objects and of that number 60 artefacts were recovered from burial deposits. The assemblage is dominated by items for personal adornment and they include 18 brooches, 19 buckle and belt/strap fittings and *c* five wrist clasps. The brooches are represented by four main types; annular brooches (13 examples), equal-arm brooches (two examples), small-long brooches (two examples) and a cruciform brooch (one example). Twelve brooches were recovered in pairs, three as singles and finally three brooches comprising two small-long brooches and a cruciform brooch were recovered as a group. There are 16 copper alloy buckles, including six with plates attached. Four burials were furnished with the full complement of buckle/plate and strap-end. Other items associated with dress include wrist four clasps and a lace chape.

Items for personal use are represented by a single pair of tweezers. Other copper alloy objects include a small number of miscellaneous objects, including a chain, rings possibly for suspension, sheet fragments and studs.

The assemblage also includes four objects of Roman date; some of these may have had amuletic significance for the owner. They include a small pendant in the form of a votive axe, a lock- pin/bell-shaped mount with the remains of the suspension cord still attached, a figurine of a bird surmounted on a perforated shaft with socketed terminal and a Roman coin.

Glass

There are 59 glass beads, these are generally examples of wound spiral beads in forms ranging from annular through to cylindrical and globular. Some examples are degraded. Both monochrome and polychrome examples are represented, the former by a range of colours (including red, green, blue, greenish-blue and possibly white), and the latter by imitation 'traffic light' beads. Glass beads occur in seven graves and the quantity ranges from one to eleven from a single deposit. In four graves they were combined with amber beads.

Iron

Eighty individual or group recorded iron objects were recovered. Of those 76 artefacts were from burials and a further four from other features, the latter include a Saxon knife and a selection of nails. A broad range of artefacts is represented. These include a small group of dress accessories which compliment the copper alloy examples. They include seven buckles and two large pins with distinctive coiled heads. Objects presumably for domestic use include a large key and a possible strike-a- light/purse bar. In addition a pair of shears was recovered, together with a spindle whorl. In total 24 knives were recovered, each one from a different burial with a range of forms and sizes represented.

Of particular interest is the presence of an axe-hammer. It comprises a forged crescent-shaped axe with a hammer-like extension to the head. It would have been hafted on to a

handle of wood. Such objects are not common and further research will be required. Other items associated with weaponry include four complete spear heads representing Swanton Types H2 (three examples) and C1 (one example) and five shield bosses representing Dickinson and Härke Group 1.1 (two examples) and Group 2 (three examples), see Table 11. Two burials (B12, B77) contained shield boss fittings in the form of studs and grips, but no actual shield boss was recovered, perhaps suggesting that later soil disturbances ensured that the shield boss did not survive.

A brief visual scan of the iron finds indicate that many of the objects including the shield bosses, the sockets of spears, knives and buckles preserve evidence for mineral preserved organics in the form of wood and textiles.

Shell
Two complete cowries were recovered from a single grave deposit. Their large size suggests that they may represent examples of *Cypraea Pantrina* , but accurate identification will be required, since this type of mollusc originates from the Red Sea in the Middle East. Cowry shells are known from Anglo-Saxon burials but their presence is not common.

Silver
There are two tapered circular-sectioned fragments of silver wire. The remains of a coiled wire is present on one of the pieces, suggesting that the wire was bent into shape by hand and the ends wound tight around the ring itself. Dimensions indicate that both fragments represent different rings, presumably from a necklace.

Stone
A single conical limestone spindle whorl was recovered.

Post-medieval finds
Post-medieval finds comprise part of a copper alloy shoe buckle dating to *c.*1720-1790.

Table 9: Finds recovered by burial

SF No	Context/ Burial (B)	Finds	Comments
100	5003/B19	Cu brooch	Annular brooch (pair to SF 101)
101		Cu brooch	Annular brooch (pair to SF 100)
102		Fe knife	-
103		Cu fitting	Rim mount
118	5007/B11	Fe spear	Swanton Type H2
119		Fe knife	-
120		Fe strike-a-light/purse bar	-
121		Cu buckle	-
104	5010/B12	Fe axe hammer	-
105		Fe shield boss grip	-
106		Fe shield boss stud	-
107		Fe shield boss stud	-
108		Fe shield boss stud	-
109		Cu buckle/plate	-
110		Cu strap-end	-
111		Cu tweezers	-
112		Fe knife	-
113		Pottery	Sherds
114	5013/B13	Cu brooch	Annular brooch (pair to SF 115)
115		Cu brooch	Annular brooch (pair to SF 114)
116		Fe knife	-
117		Fe rod fragment	-
161		Fe rod fragment	-

SF No	Context/ Burial (B)	Finds	Comments
123	5028/B16	Fe rivet	-
275	5031/B17	Fe nail	-
277		Flint	-
124	5019/B18	Fe knife	-
125		Cu buckle/plate	-
122	5034/B19	Fe nail/strip	-
126		Cu bird/finial, armlet	Roman
127		Fe ring	-
128		Fe knife	-
129		Shell – cowry shell x 2	-
130		Spindle whorl	-
131		Fe shears	-
274	5033	Fe rod	-
135	5036/B20	Cu coin	Roman - Follis of Maximianus AD 306-8
136		Fe knife	-
137		Fe buckle	-
138		Cu belt fittings	-
139		Flint flake	-
140	5041/B22	Fe shield boss	Dickinson and Härke Group 1.1
141	5040	Fe shield boss stud	-
142		Fe knife	-
143		Fe buckle	-
162		Fe collar	-
144	5049/B26	Fe knife	-
145		Cu buckle	-
146	B32	Fe nail	-
147		Cu fitting (chain)	-
148	5093/B41	Ag ring	-
149		Glass bead x 1	-
319 - 325		Glass bead x 7	-
352 - 354		Glass bead x 3	-
150	5098/B42	Pottery	-
153	5103/B44	Fe knife	-
154		Fe buckle	-
155 - 160	5101	Flints	-
151	5107/B47	Cu buckle	-
152		Fe knife	-
163	3132/B50	Fe knife	-
164		Cu buckle	-
170	5170/B56	Fe shield boss	Dickinson and Härke Group 2
171		Fe spear	Swanton Type H2
172		Fe pin	-
173		Fe knife	-
174	5172	?box/container	-
175		Cu sheet fragment	-
176		Cu sheet fragment	-
177		Cu strap-end	-
178		Fe nail	-
179		Cu buckle	-
180		Fe stud?	-
181		Cu object	-
182		Fe nail	-

SF No	Context/ Burial (B)	Finds	Comments
276		Cu buckle plate	-
283	5170	Fe nail	-
189	5190/B57	Cu brooch	Annular brooch (pair to SF 190)
190	5188	Cu brooch	Annular brooch (pair to SF 189)
191		Fe ring?	-
192		Cu votive axe	Roman
193		Pottery	Accessory vessel
196		Glass bead	-
194	5192/B58	Fe object?	-
195		Fe rod/pin	-
197	5195/B59	Fe shield boss	Dickinson and Härke Group 1.1
198		Cu buckle/plate/strap-end	-
199		Fe knife	-
200	5199/B60	Cu pin	-
201		Cu fitting	-
202		Glass bead	-
203		Cu brooch	Annular brooch
204		Cu wrist clasps	-
205		Fe key	-
268		Cu buckle/plate	-
269		Fe blade	-
278		Cu buckle-plate/strap-end	-
301 - 306		Glass beads x 6	-
208	5207/B61	Fe knife	-
209		Cu buckle	-
210	5210/B62	Fe knife	-
211		Cu ring	-
212		Cu brooch	Annular brooch
213	5214/B63	Fe shield boss	Dickinson and Härke Group 1.1
214		Fe buckle	-
215		Fe spear	Swanton Type C1
216		Fe knife	-
217		Fe pin	-
222	5252/B65	Amber bead	-
223		Cu brooch	Equal-arm brooch (pair to 224)
224		Cu brooch	Equal-arm brooch (pair to 223)
225		Cu wrist clasp	-
226		Cu wrist clasp	-
227		Cu wrist clasp (frags)	-
228		Cu ring	-
229		Fe nail	-
337 - 351		Glass and amber beads x 16	Amber x 8, glass x 8
230	5255/B66	Cu brooch	Small-long brooch, Leed's Type Trefoil Group A
231		Cu brooch	Small-long brooch, Leed's Type Trefoil Group A
232		Cu brooch	Cruciform brooch, Aberg's group IV
233		Glass bead	-
234		Fe ring	-
235		Fe knife	-
236		Fe fragment	-
285 - 300		Glass and amber beads x 16	Amber x 2, glass x 14

SF No	Context/ Burial (B)	Finds	Comments
237	5258/B67	Fe spear	Swanton Type H2
238		Fe knife	-
239		Fe shield boss	Dickinson and Härke Group 2
240		Fe buckle	-
241		Cu loop	-
242	5256/B68	Pottery	Accessory vessel
243	5307/B70	Fe knife	-
244		Cu buckle/plate	-
245	5310/B71	Fe knife	-
246		Cu buckle/plate	-
247	5316/B74	Fe knife	-
248	5317	Cu brooch	Annular brooch
249		Cu buckle	-
250		Glass bead	-
326 - 336		Glass and amber beads x 11	Amber x 1, glass x 10
251	5319/B75	Fe knife	-
252		Pottery	Sherds
253	5323/B76	Amber bead	-
254		Cu brooch	Annular brooch (pair to SF 255)
255		Cu brooch	Annular brooch (pair to SF 254)
256		Fe knife	-
257		Cu lock pin/cord	Roman lock pin
270		Fe ring	-
271		Cu strip	-
272		Fe looped spike/pin	-
284		Glass bead	-
307 - 318		Glass and amber beads x 12	Amber x 4, glass x 8
258	5325/B77	Cu sheet	-
259		Cu buckle plate	-
260		Fe knife	-
261		Fe shield boss - grip	-
262		Fe buckle	-
263		Fe buckle	-
273	5323	Cu rivets	-
264	5329/B78	Cu brooch	Annular brooch (pair to SF 265)
265		Cu brooch	Annular brooch (pair to SF 264)
279	5333/B82	Fe nail	-

Table 10: Grave goods by type and burial

Artefact type/Burial No	B10	B11	B12	B13	B16	B17	B18	B19
Dress Accessories								
Beads – glass	-	-	-	-	-	-	-	-
Beads – amber	-	-	-	-	-	-	-	-
Belt fittings	-	-	-	-	-	-	-	-
Brooch - annular	2	-	-	2	-	-	-	-
Brooch- other	-	-	-	-	-	-	-	-
Buckle	-	1	-	-	-	-	-	-
Buckle - Fe	-	-	-	-	-	-	-	-
Buckle/buckle plate	-	-	1	-	-	-	1	-
Buckle plate	-	-	-	-	-	-	-	-
Buckle/plate/strap-end	-	-	-	-	-	-	-	-
Buckle/strap-end	-	-	-	-	-	-	-	-
Lace chape	-	-	-	-	-	-	-	1
Pin	-	-	-	-	-	-	-	-
Pin/ looped spike - Fe	-	-	-	-	-	-	-	-
Ring – Ag	-	-	-	-	-	-	-	-
Strap-end	-	-	1	-	-	-	-	-
Wrist clasp	-	-	-	-	-	-	-	-
Tools								
Axe hammer	-	-	1	-	-	-	-	-
Blade	-	-	-	-	-	-	-	-
Knife	1	1	1	1	-	-	1	1
Shears	-	-	-	-	-	-	-	1
Spindlewhorl	-	-	-	-	-	-	-	1
Tweezers			1					
Weaponry								
Shield boss	-	-	-	-	-	-	-	-
Shield boss – stud/disc	-	-	3	-	-	-	-	-
Shield boss – grip	-	-	1	-	-	-	-	-
Spear	-	1	-	-	-	-	-	-
Other Items								
?Box/container	-	-	-	-	-	-	-	-
Cowry shell x 2	-	-	-	-	-	-	-	2
Fitting - Cu	1	-	-	-	-	-	-	-
Key	-	-	-	-	-	-	-	-
Nail	-	-	-	-	-	1	-	-
Misc Fe	-	-	-	2	1	-	-	2
Misc Cu	-	-	-	-	-	-	-	-
Ring - Cu	-	-	-	-	-	-	-	-
Ring - Fe	-	-	-	-	-	-	-	1
Sheet - Cu	-	-	-	-	-	-	-	-
Strike-a-light/pursebar		1	-	-	-	-	-	-
Studs	-	-	-	-	-	-	-	-
Roman finds – bird/finial	-	-	-	-	-	-	-	1
Roman finds – coin	-	-	-	-	-	-	-	-
Roman finds – votive axe	-	-	-	-	-	-	-	-
Roman finds – lock pin	-	-	-	-	-	-	-	-

Artefact type/Burial No	B20	B22	B26	B32	B41	B44	B47	B50	B56
Dress Accessories									
Beads – glass	-	-	-	-	11	-	-	-	-
Beads – amber	-	-	-	-	-	-	-	-	-
Belt fittings	1	-	-	-	-	-	-	-	-
Brooch - annular	-	-	-	-	-	-	-	-	-
Brooch - other	-	-	-	-	-	-	-	-	-
Buckle - Cu	-	-	1	-	-	-	1	1	1
Buckle - Fe	1	1	-	-	-	1	-	-	-
Buckle/buckle plate	-	-	-	-	-	-	-	-	-
Buckle plate	-	-	-	-	-	-	-	-	1
Buckle/plate/strap-end	-	-	-	-	-	-	-	-	-
Buckle/strap-end	-	-	-	-	-	-	-	-	-
Lace chape	-	-	-	-	-	-	-	-	-
Pin - Cu	-	-	-	-	-	-	-	-	-
Pin/ looped spike - Fe	-	-	-	-	-	-	-	-	1
Ring - Ag	-	-	-	-	1	-	-	-	-
Strap-end	-	-	-	-	-	-	-	-	1
Wrist clasp	-	-	-	-	-	-	-	-	-
Tools									
Axe hammer	-	-	-	-	-	-	-	-	-
Blade	-	-	-	-	-	-	-	-	-
Knife	1	1	1	-	-	1	1	1	1
Shears	-	-	-	-	-	-	-	-	-
Spindle whorl	-	-	-	-	-	-	-	-	-
Tweezers	-	-	-	-	-	-	-	-	-
Weaponry									
Shield boss	-	1	-	-	-	-	-	-	1
Shield boss – stud/disc	-	1	-	-	-	-	-	-	-
Shield boss – grip	-	-	-	-	-	-	-	-	-
Spear	-	-	-	-	-	-	-	-	1
Other Items									
?Box/container	-	-	-	-	-	-	-	-	1
Cowry shell x 2	-	-	-	-	-	-	-	-	-
Fitting - Cu	-	-	-	1	-	-	-	-	-
Key	-	-	-		-	-	-	-	
Nail	-	-	-	1	-	-	-	-	3
Misc Fe	-	1	-	-	-	-	-	-	
Misc Cu	-	-	-	-	-	-	-	-	1
Ring - Cu	-	-	-	-	-	-	-	-	-
Ring Fe	-	-	-	-	-	-	-	-	-
Sheet - Cu	-	-	-	-	-	-	-	-	2
Strike-a-light/pursebar	-	-	-	-	-	-	-	-	-
Studs	-	-	-	-	-	-	-	-	1
Roman finds – bird/finial	-	-	-	-	-	-	-	-	-
Roman finds – coin	1	-	-	-	-	-	-	-	-
Roman finds – votive axe	-	-	-	-	-	-	-	-	-
Roman finds – lock pin	-	-	-	-	-	-	-	-	-

Artefact type/ Burial No	B57	B58	B59	B60	B61	B62	B63	B65	B66
Dress Accessories									
Beads – glass	1	-	-	7	-	-	-	8	15
Beads – amber	-	-	-	-	-	-	-	9	2
Belt fittings	-	-	-	-	-	-	-	-	-
Brooch - annular	2	-	-	1	-	1	-	-	-
Brooch - other	-	-	-	-	-	-	-	2	3
Buckle - Cu	-	-	-	-	1	-	-	-	-
Buckle - Fe	-	-	-	-	-	-	1	-	-
Buckle/buckle plate	-	-	-	1	-	-		-	-
Buckle plate	-	-	-	-	-	-	-	-	-
Buckle/plate/strap-end	-	-	1	1	-	-	-	-	-
Buckle/strap-end	-	-	-	-	-	-	-	-	-
Lace chape	-	-	-	-	-	-	-	-	-
Pin	-	-	-	1	-	-	-	-	-
Pin/ looped spike - Fe	-	-	-	-	-	-	1	-	-
Ring - Ag	-	-	-	-	-	-	-	-	-
Strap-end	-	-	-	-	-	-	-	-	-
Wrist clasp	-	-	-	2	-	-	-	3	-
Tools									
Axe hammer	-	-	-	-	-	-	-	-	-
Blade	-	-	-	1	-	-	-	-	-
Knife	-	-	1	-	1	1	1	-	1
Shears	-	-	-	-	-	-	-	-	-
Spindlewhorl	-	-	-	-	-	-	-	-	-
Tweezers	-	-	-	-	-	-	-	-	-
Weaponry									
Shield boss	-	-	1	-	-	-	1	-	-
Shield boss – stud/disc	-	-	-	-	-	-	-	-	-
Shield boss – grip	-	-	-	-	-	-	-	-	-
Spear	-	-	-	-	-	-	1	-	-
Other Items									
?Box/container	-	-	-	-	-	-	-	-	-
Cowry shell x 2	-	-	-	-	-	-	-	-	-
Fitting - Cu	-	-	-	1	-	-	-	-	-
Key		-	-	1	-	-	-	-	-
Nail	-	-	-	-	-	-	-	1	-
Misc Fe	-	2	-	-	-	-	-	-	1
Misc Cu	-	-	-	-	-	-	-	-	-
Ring - Cu	-	-	-	-	-	1	-	1	-
Ring - Fe	1	-	-	-	-	-	-	-	1
Sheet - Cu	-	-	-	-	-	-	-	-	-
Strike-a-light/pursebar	-	-	-	-	-	-	-	-	-
Studs	-	-	-	-	-	-	-	-	-
Roman finds – bird/finial	-	-	-	-	-	-	-	-	-
Roman finds – coin	-	-	-	-	-	-	-	-	-
Roman finds – votive axe	1	-	-	-	-	-	-	-	-
Roman finds – lock pin	-	-	-	-	-	-	-	-	-

Artefact type/ Burial No	B67	B70	B71	B74	B75	B76	B77	B78	B82
Dress Accessories									
Beads – glass	-	-	-	11	-	9	-	-	-
Beads – amber	-	-	-	1	-	5	-	-	-
Belt fittings	-	-	-	-	-	-	-	-	-
Brooch - annular	-	-	-	1	-	2	-	2	-
Brooch - other	-	-	-	-	-	-	-	-	-
Buckle - Cu	-	-	-	1	-	-	-	-	-
Buckle - Fe	1	-	-	-	-	-	2	-	-
Buckle/buckle plate		1	1	-	-	-	-	-	-
Buckle plate	-	-	-	-	-	-	1	-	-
Buckle/plate/strap-end	-	-	-	-	-	-	-	-	-
Buckle/strap-end	-	-	-	-	-	-	-	-	-
Lace chape	-	-	-	-	-	-	-	-	-
Pin - Cu	-	-	-	-	-	-	-	-	-
Pin/ looped spike - Fe	-	-	-	-	-	1	-	-	-
Ring - Ag	-	-	-	-	-	-	-	-	-
Strap-end	-	-	-	-	-	-	-	-	-
Wrist clasp	-	-	-	-	-	-	-	-	-
Tools		-	-	-	-	-	-	-	-
Axe hammer	-	-	-	-	-	-	-	-	-
Blade	-	-	-	-	-	-	-	-	-
Knife	1	1	1	1	1	1	1	-	-
Shears	-	-	-	-	-	-	-	-	-
Spindlewhorl	-	-	-	-	-	-	-	-	-
Tweezers	-	-	-	-	-	-	-	-	-
Weaponry									
Shield boss	1	-	-	-	-	-	-	-	-
Shield boss – stud/disc	-	-	-	-	-	-	-	-	-
Shield boss – grip	-	-	-	-	-	-	1	-	-
Spear	1	-	-	-	-	-	-	-	-
Other Items									
?Box/container	-	-	-	-	-	-	-	-	-
Cowry shell x 2	-	-	-	-	-	-	-	-	-
Fitting - Cu	-	-	-	-	-	-	-	-	-
Key	-	-	-	-	-	-	-	-	-
Nail	-	-	-	-	-	-	-	-	1
Misc Fe	-	-	-	-	-	-	-	-	-
Misc Cu	1	-	-	-	-	1	1	-	-
Ring - Cu	-	-	-	-	-	-	-	-	-
Ring - Fe	-	-	-	-	-	1	-	-	-
Sheet - Cu	-	-	-	-	-		1	-	-
Strike-a-light/purse bar	-	-	-	-	-	-	-	-	-
Studs	-	-	-	-	-	-	-	-	-
Roman finds – bird/finial	-	-	-	-	-	-	-	-	-
Roman finds – coin	-	-	-	-	-	-	-	-	-
Roman finds – votive axe	-	-	-	-	-	-	-	-	-
Roman finds – lock pin	-	-	-	-	-	1	-	-	-

Table 11: Shield boss characteristics

BOSS	SF 140	SF 170	SF 197
Apex type	missing	Disc head (dia:19mm)	Disc head (dia 18.5mm)
Cone shape	Convex – Group 2	Straight – Group 1.1	Convex – Group 2
Wall height	*c* 25mm	*c* 15mm	*c* 20mm
Flange width	*c* 25mm	*c* 25mm	*c* 21mm
Dia of boss	*c* 158mm	*c* 170mm	*c* 170mm
Height	*c* 70mm	*c* 80mm	*c* 72mm
Carination	yes	yes	yes
Stud dia	N/A (cu on 2 rivets)	N/A	*c* 16mm
MPO	??	Textile on boss	wood
Grip Type	1a1 (short grip with expanded terminals)	1a2 (short grip with straight sides)	1b (short grip, flanged with straight sides)
Length	c154mm	*c* 145mm	*c* 161mm
Width	*c* 27-50mm	*c* 30mm	*c* 26mm
MPO	Textile/wood	Textile/wood	??

BOSS	SF 213	SF 239
Apex type	Disc head (dia: 17mm)	Disc head (dia: 44mm)
Cone shape	Convex- Group 2	Straight – Group 1.1
Wall height	*c* 22mm	*c* 20mm
Flange width	21mm	*c* 25-30mm
Dia of boss	145mm	*c* 155mm
Height	71mm	*c* 85mm
Carination	Yes (shallow)	yes
Stud dia	*c* 17mm (x 4 rivets)	*c* 22mm (x-ray)
MPO	wood	wood
Grip Type	1a1 (short grip with expanded terminals)	1b (short grip, flanged with bifurcated terminals)
Length	*c* 130mm	*c* 170mm
Width	*c* 18-35mm	*c* 30mm
MPO	wood	wood

6 THE ENVIRONMENTAL EVIDENCE

6.1 **Animal bone** by Adam Reid

Introduction

A total of 665g of animal bone was hand collected from 21 different contexts during the course of excavation and a further 780g of material was recovered from four wet-sieved samples. This material was assessed to determine the level of preservation, the taxa present and to inform on the potential for further work.

All material was washed prior to analysis. Identifiable bones were noted, and were examined for signs of butchery and the state of epiphyseal fusion. Identifications took place with the aid of the MOLA Northampton reference collection and Hillson (1992) and France (2009) were also consulted. Specimens that could not be positively identified were attributed, where possible, to categories including Large Mammal (Cattle, Horse) and Medium Mammal (Sheep/Goat, Pig, Large Dog). Historic Englands *Heritage Guidelines for Best Practice for Animal Bones and Archaeology* (2015b) were followed, where possible.

Identification and quantification

The fragmented nature of the assemblage made identifications difficult and a presentation of the results can be seen below (Tables 12 and 13). Positive identifications were made for 31 of the hand collected specimens; 14% of the total assemblage. 38% of the hand collected material was recovered from grave fills, with the other 62% recovered from ditch fills. None of the remains recovered from the grave fills were articulated and there appears to be nothing to suggest that they were deposited deliberately.

None of the material recovered via sieving was clearly identifiable but may warrant further investigation. The majority of the sieved material (collective weight of 780g) was recovered from context (5332) and appears to contain a relatively large proportion of amphibian remains.

Table 12: The hand collected material

Fill/cut type	Cattle *Bos*	Sheep/ goat *Ovicaprid*	Pig *Sus*	Dog *Canis*	Micro-fauna	Med Mam'l	Large Mam'l	Indet	Total
5064/5065 G	-	-	-	-	-	-	-	1	**1**
5139/5141 G	-	-	-	-	1	-	-	-	**1**
5156/5157 G	1	1	-	-	-	10	9	27	**48**
5163/5168 D	-	-	-	-	-	-	-	2	**2**
5184/5187 D	-	-	-	-	-	2	-	-	**2**
5188/5189 G	-	-	2	-	-	-	-	-	**2**
5199/5200 G	-	1	-	-	-	-	-	-	**1**
5202/5205 D	-	-	-	2	-	8	-	14	**24**
5206/5205 D	1	-	1	-	-	2	4	8	**16**
5217/5223 D	-	-	1	-	-	1	-	4	**6**
5222/5223 D	-	3	-	-	-	1	-	10	**14**
5229/5239 D	-	-	-	-	-	8	1	14	**23**
5230/5239 D	-	-	1	-	-	6	9	-	**16**
5258/5262 G	-	-	-	2	-	2	1	-	**5**
5259/5262 G	-	-	-	-	-	1	-	-	**1**
5271/5276 D	-	-	1	1	-	2	-	-	**4**
5272/5276 D	-	3	-	1	-	1	-	-	**5**
5291/5294 D	-	-	3	-	-	8	2	3	**16**
5292/5294 D	1	-	-	-	-	-	8	3	**12**
5312/5314 G	-	1	-	-	-	-	-	-	**1**
5319/5321 G	-	4	-	-	-	7	-	13	**24**
Total	**3**	**13**	**9**	**6**	**1**	**59**	**34**	**99**	**224**

G=grave; D=ditch

Table 13: The material recovered through wet-sieving

Fill/cut type	Micro-fauna	Amphibian	Indet.	Total
5089/5090 B39	3	-	1	**4**
5175/5180 Ring ditch	1	-	-	**1**
5222/5223 Ditch	7	1	6	**14**
5332/5215 Ring ditch	+	+	+	**-**
Total	**11**	**1**	**7**	**19**

Preservation and taphonomy

The state of preservation of the material was moderate to poor, with moderate surface abrasion and a high degree of fragmentation. No clear evidence of butchery or carnivore gnawing was noted on any of the specimens.

Conclusions

The highly fragmented nature of the assemblage resulted in a limited number of identifications, so the faunal evidence adds little to the interpretation of the site. The main domestic taxa appear to have been utilised at the site, and the material appears to derive from domestic waste, with no suggestions of industrial activity. The presence of well-preserved identifiable material from several of the excavated features indicates the possibility for future faunal analysis.

6.2 Plant macrofossils and charcoal by Val Fryer

Introduction and method statement

Samples for the retrieval of the plant macrofossil assemblages were taken from fills within the ring ditch and from a number of the grave fills, and a total of fourteen were submitted for assessment.

The samples were bulk floated by MOLA Northampton and the flots were collected in a 300 micron mesh sieve. The dried flots were scanned under a binocular microscope at magnifications up to x 16 and the plant macrofossils and other remains noted are listed in Table 14. Nomenclature within the table follows Stace (2010). All plant remains were charred. Modern roots, seeds, arthropod remains and moss fronds were also recorded along with numerous mollusc shells, with specimens of the burrowing snail Cecilioides acicula being predominant. As most shells were extremely well preserved, it was considered most likely that all were intrusive within the features from which the samples were taken. In most instances, shells of open country species were common, although it was noted that the assemblage from context [5217] (sample 161) contained a higher density of woodland/shade loving molluscs including specimens of Clausilia sp., Discus rotundatus, Ena sp. and Pomatius elegans.

Results

All fourteen assemblages are very small and sparse, with charred plant remains being particularly scarce. Cereals grains, including possible specimens of barley (Hordeum sp.), rye (Secale cereale) and wheat (Triticum sp.), are recorded, but all are very poorly preserved and most occur as single specimens within an assemblage. Seeds are even more scarce, with only four (namely two large grass (Poaceae) fruits, a dock (Rumex sp.) seed and a possible sedge (Carex sp.) nutlet) being recorded. Tree/shrub macrofossils include a small fragment of hazel (Corylus avellana) nutshell, hawthorn (Crataegus sp.) fruit stones, a fragmentary sloe (Prunus spinosa) fruit stone and two elderberry (Sambucus nigra) 'pips'. Charcoal/charred wood fragments are present at a low to moderate density throughout, but other plant macrofossils occur infrequently.

Other remains are also scarce, and it is thought most likely that most (including the black porous and tarry residues and the small pieces of coal) are intrusive within the feature fills. Such contaminants, which are most likely derived from either night soil or the use of steam ploughs during the early modern era, are generally introduced via the bioturbation of the deposits, particularly by root penetration or small mammal burrowing. Occasional ferrous globules and flakes of hammer scale are also recorded, but again, it is unclear whether these are contemporary or later contaminants.

Table 14: *Charred plant macrofossils and other remains*

Sample No.	**147**	**151**	**152**	**179**	**128**	**129**	**130**	**140**	**145**	**154**	**118**	**131**	**158**	**161**
Context No.	**5156**	**5175**	**5177**	**5222**	**5088**	**5091**	**5094**	**5129**	**5149**	**5192**	**5061**	**5096**	**5204**	**5217**
Feature No.	**5157**	**5180**	**5180**	**5223**	**5082**	**5092**	**5095**	**5130**	**5151**	**5193**	**5062**	**5097**	**5205**	**5223**
Burial No.					**B39**	**B40**	**B41**	**B84**	**B53**	**B58**	**B30**	**B83**		
Feature type	**R.Ditch**	**R.Ditch**	**R.Ditch**	**R.Ditch**	**Burial**	**Burial**	**Burial**	**Burial**	**Burial**	**Burial**	**Burial**	**Burial**	**R Ditch**	**R Ditch**
Date	**?BA**	**?BA**	**?BA**	**?BA**	**Sax**	**Sax**	**Sax**	**Sax**	**Sax**	**Sax**	**?**	**?**	**?**	**?**
Cereals														
Hordeum sp. (grains)	-	-	x	-	-	-	-	-	-	-	-	xcffg	-	x
Secale cereale L. (grain)	-	-	-	-	-	-	-	-	-	-	-	-	xcf	-
Triticum sp. (grain)	-	-	-	x				-	-	-	-	-	-	-
Cereal indet. (grains)	-	xcffg	-	-	-	xcffg	xcffg	-	-	-	-	xcffg	-	-
Herbs														
Large Poaceae indet.	-	-	-	-	-	x	-	-	-	-	-	x	-	-
Rumex sp.	-	-	-	-	-	-	-	-	-	xcf	-	-	-	-
Wetland plants														
Carex sp.	-	xcf	-	-	-	-	-	-	-	-	-	-	-	-
Tree/shrub macrofossils														
Corylus avellana L.	-	-	-	-	-	x	-	-	-	-	-	-	-	-
Crataegus sp.	-	-	-	x	-	-	-	-	-	-	-	-	-	-
Prunus spinosa L.	-	-	-	xfg	-	-	-	-	-	-	-	-	-	-
Sambucus nigra L.	-	x	-	x	-	-	-	-	-	-	-	-	-	-
Other plant macrofossils														
Charcoal <2mm	xx	xxx	xx	xx	xx	x	xx	x	x	xx	x	xx	x	x
Charcoal >2mm	x	xx	x	xx	x	x	x	-	-	x	x	x	-	x
Charcoal >5mm	x	x	-	x	x	-	x	-	x	x	-	x	-	-
Charcoal >10mm	-	-	-	x	-	-	-	-	-	x	-		-	-

Sample No.	147	151	152	179	128	129	130	140	145	154	118	131	158	161
Context No.	**5156**	**5175**	**5177**	**5222**	**5088**	**5091**	**5094**	**5129**	**5149**	**5192**	**5061**	**5096**	**5204**	**5217**
Feature No.	**5157**	**5180**	**5180**	**5223**	**5082**	**5092**	**5095**	**5130**	**5151**	**5193**	**5062**	**5097**	**5205**	**5223**
Burial No.					**B39**	**B40**	**B41**	**B84**	**B53**	**B58**	**B30**	**B83**		
Feature type	**R.Ditch**	**R.Ditch**	**R.Ditch**	**R.Ditch**	**Burial**	**Burial**	**Burial**	**Burial**	**Burial**	**Burial**	**Burial**	**Burial**	**R Ditch**	**R Ditch**
Date	**?BA**	**?BA**	**?BA**	**?BA**	**Sax**	**Sax**	**Sax**	**Sax**	**Sax**	**Sax**	**?**	**?**	**?**	**?**
Charred root/stem	-	x	x	x	-	x	x	-	x	-	-	-	x	-
Indet. capitula frag.	-	-	-	-	-	-	x	-	-	-	-	-	-	-
Indet. fruit stone/nutshell frags.	-	-	-	x	-	-		-	-	-	-	-	-	-
Indet. seeds	x	-	x	-	x	-	x	-	-	-	-	x	-	-
Other remains														
Black porous 'cokey' material	-	x	x	-	xx	x	xx	x	-	x	x	xx	x	x
Black tarry material	x	x	x	-	xx	x	x	-	-	-	-	x	x	
Bone	-	-	-	-		-	-	-	-	-	x	-	-	-
Burnt/fired clay	-	-	-	-	x	-	-	-	-	-	-	-	-	-
Ferrous globules	-	x	-	-	x	-	x	-	-	-	-	-	-	-
Ferrous hammer scale	-	-	-	-	x	-	-	x	-	-	-	-	-	-
Small coal frags.	-	x	x	-	xx	x	xxx	x	-	-	x	x		x
Small mammal/amphibian bones	-	-	-	-	xpmc	-	-	-	-	-	-	-	-	-
Vitreous material	-	-	-	-		-	x	-	-	-	-	-	-	-
Sample volume (litres)														
Volume of flot (litres)	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**
% flot sorted	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Key to Table

x = 1 – 10 specimens xx = 11 – 50 specimens xxx = 51 – 100 specimens
cf = compare fg = fragment pmc = possible modern contaminant
R.Ditch = ring ditch BA = Bronze Age Sax = Saxon

7 SUMMARY OF POTENTIAL AND RECOMMENDATIONS FOR FUTURE WORK

7.1 Archaeological features

Site evidence
The information from the site will add a little to the wider corpus of knowledge regarding the Bronze Age, but in particular it will provide a substantial body of data relating to Saxon funerary practices, and the chronology and development of cemeteries in the early Saxon period, as well as indirectly relating to settlement and population studies for this period across the wider East Anglian region.

Bronze Age barrow
Initial conclusions drawn from stratigraphic relationships and finds evidence have indicated the sequence of activity associated to this monument relating to its construction and subsequent silting of the barrow ditch. A full stratigraphic account will be prepared incorporating the finds and environmental evidence to provide a full narrative description of the monument and its subsequent use.

Research into contemporary sites in the locale and will help place the site within its landscape context. Of particular interest may be how it relates to the topography of the surrounding area and what if any indivisibility there may have been with other contemporary sites.

Roman
No Roman features were identified within the area of mitigation, but Roman pottery was recovered from the upper fills of the barrow ditch and also from several grave fills. Grave goods associated with some of the burials appear to originate from the Roman period.

The presence of Roman material in Saxon burials is interesting in that it implies that Roman artefacts were still regarded as items of value or 'heirlooms' into the Saxon period, potentially by a population not immediately native to the area. Comparisons with similar assemblages may prove illuminating.

Saxon Cemetery
Two phases of burial tradition have been identified at assessment and the stratigraphy in relation to the ring ditch has been examined. However, following full analysis of the grave goods and the completion of the programme of radiocarbon dating, it will be necessary to review all available evidence to provide the final phasing and chronology for the origin, growth and abandonment of the cemetery, and a full site narrative for the nature of the burial traditions and changes through time.

It is anticipated that this study will include the following themes:

- The arrangement of the cemetery, and changes through time;
- The cemetery population demographic, and changes through time;
- Distribution of burials by age and sex, and changes through time:
- Prone/Deviant burials;
- Burial of neonatals and infants;
- Mausoleum structures;
- Position of grave goods;
- Change in burial tradition.

The report will include a discussion of the cemetery within its broader context. This will draw upon relevant comparisons from East Anglia and beyond. Many local cemeteries are known such as Buttermarket, Ipswich; Kenninghall, Breckland, and London Hill, Thetford. Several examples of timber built mausoleum structures are known, including one from a middle Saxon cemetery at Great Houghton, Northamptonshire.

7.2 Human remains by Natasha Powers

Despite the limitations of the assemblage resulting from the high proportion of poorly preserved remains, osteological analysis of the Stanton population provides an excellent opportunity to better understand the lifestyle, composition of and risks to a rural Saxon community.

The group is sufficiently well preserved to enable detailed demographic reconstruction and metric and/or non-metric analyses will be possible for a large proportion of the burials.

This provides the potential for correlating grave goods and burial practices with biological sex and age and with spatial distribution within the cemetery. For example, B20 (a 7–12 year old child) and B21 (an adult female with tuberculosis) were interred in a double grave and the reasons for such a practice should be further examined. The presence of perinatal individuals provides the potential for the examination of infant mortality and obstetric health. The initial demographic observations suggest that, whilst diseases associated with ageing are seen, a proportion of the adults were young when they died. Further examination of the population will determine whether the age structure conforms to that expected of a 'normal' population and reflected at contemporary sites elsewhere. However, it should be cautioned that the high number of adults who could not be assigned a sex estimate due to poor preservation and the incomplete nature of many of the burials will compromise both population demographics and the ability to establish patterns of significance within the palaeopathological and spatial datasets.

Antemortem tooth loss in a subadult is an unusual finding in populations before the post-medieval period and suggests that the dental health of this individual and of the population group as a whole requires further investigation.

The possible case of rickets is also unusual in populations of this date and a firm diagnosis with radiographic confirmation will enable more definite conclusions to be drawn about the implications for child health and infant rearing practices in this group.

The high rate of tuberculosis in this group is particularly significant and intriguing. At 5.6% (4/71) the population prevalence is considerably higher than that seen in any of the early medieval sites examined by Roberts and Cox (2003, 184) and significantly greater than the 0.9% (18/2056) cited by them for the period as a whole. The high rate may be an indication of this group having been particularly closely involved in animal husbandry, or a reflection of confined living conditions, though the latter would seem unlikely given the rural location. Further study of this group therefore has the potential to provide information on lifestyle and subsistence practices.

Contact and conflict have been identified as key osteological research themes for the period and have been suggested to be indicated by the presence of injuries in populations of this date (Roberts and Cox 2003, 168). The possible sharp force weapon injury in the forehead of Bu23 and the possible causes of the multiple injuries suffered by Bu26 should be further examined with this in mind.

Population studies have been identified as a major research topic for the region with life expectancy and 'ethnic origin' mentioned as particular areas of interest (Wade 2000). Establishing the duration of use of the cemetery at Stanton will help in determining the contribution that the site can make towards addressing these points, but nonetheless, the sample is of sufficient size and interest to enable these questions to be investigated.

Although bone survival was somewhat compromised, the presence of a large number of dentitions means that there is good potential for the group to enable the examination of diet and migration through analyses, a question which should be further examined particularly in light of the paleopathological evidence for tuberculosis.

Selective radiocarbon dating to complement the dating information obtained from artefact analysis and potentially identify phases within the cemetery should also be considered as it would also further increase the potential of the group. Recent work carried out by Alex Bayliss of English Heritage has suggested that a number of 6th and 7th-century Saxon sites may date to several decades earlier than previously thought (D Bowsher pers comm) and examination of Stanton may therefore be of particular value.

7.3 Flint

No further work is recommended. A report on the flint will be included in the final report

7.4 The prehistoric pottery

This small and fragmented assemblage has little further potential to add to the understanding of the chronology of the site, and no further analysis is necessary. The full pottery report with photographs of selected sherds will be included in the final report.

7.5 Saxon pottery

No further work on the form of the pottery is required but provisions will be made for illustrations of the complete pottery vessels, SF193 and SF242, and the 'Swallows Nest' lugged rim sherd. The full pottery report will be included in the final report.

7.6 **Other finds** by Tora Hylton

The assemblage appears to be typical for the East Anglian region, and the range of finds may be compared to those from other cemetery sites like Morning Thorpe and Westgarth Gardens. However, there are a small number of interesting artefacts which, although examples are known, are not common. These include the axe-hammer and the cowry shells.

A basic visual assessment of the finds has confirmed that a significant number of the artefacts retain evidence of organic materials preserved by contact with iron or copper alloy corrosion products - mineral preserved organics (MPO). Well preserved textiles were noted on the surface of shield bosses and grips, on copper alloy annular brooches and their iron pins, iron suspension rings and at the base of the shanks of large pins with coiled heads. Of interest is the presence of a Roman copper alloy lock-pin/bell-shaped mount which still retains the remnants of a cord that had been tied around. In addition, MPO's were observed on the tangs and sometimes the blades of knives and on the underside of buckles. Traces of wood grain are also evident on a number of objects. A substantial amount of wood survives on the underside of the shield boss flanges and their associated rivets and grips. On one flange, the wood survives to a depth of c 7mm presumably providing detail of the depth of the shield board. Wood also survives within the sockets of spears and around the shanks of nails.

In more general terms, the assemblage adds to the extensive corpus of excavated burial sites in East Anglia. Regional studies such as Penn and Brugmann (2007) and national studies such as Hines and Bayliss (2013) have shown the potential of detailed artefact and site comparisons, with grave good analysis contributing to establishing both chronology and an understanding burial practice and social structure. The assemblage from Stanton can, in this light, be seen as of regional importance and the information obtained, in conjunction with other published cemetery sites, will contribute to the current knowledge of Anglo-Saxon society in the region as well as adding to our wider knowledge of artefact types and distributions.

The potential of the artefact assemblage largely derives from the grave goods accompanying the burials and no further analysis work is proposed for the prehistoric and post-medieval finds. With regards to specific artefacts and artefact types, further analysis and reporting is proposed as follows:

- Since there is extensive evidence for the survival of organic remains, it is essential that the entire assemblage is examined by a specialist in Mineral Preserved Organics and that all the evidence for MPOs is identified and recorded. This may include the identification of wood (species) and textiles etc;
- The shield bosses have been x-rayed (from the top) but an additional view detailing the cross-section/profile view of the shield bosses would be helpful, not only for the long term record but also reveal/confirm typological features and manufacturing details;
- Cowry shells are known from Anglo-Saxon burials but they are not common finds. Accurate identification of the two complete cowries (species) will provide evidence of their original provenance and trade etc. and also inform future specialists;
- Compare dating of spears, shield bosses and brooches etc and compare to other published examples and typologies.

More generally, the grave-goods have the potential for contributing to wider discussions of the site and its place in the Anglo-Saxon landscape. To this end, the following analyses of the grave goods would be of use:

- Study of the spatial distribution of the grave goods to determine if there is any significance in the position of individual finds types and compare with assemblages from other cemetery sites;
- Study of burial practice which may indicate changes in ritual and possibly belief;
- Study/compare range of finds types with sex of burial;
- Compare and contrast specific finds by burial.

7.7 Animal bone

Further analysis needs to be undertaken on the collection of small amphibian bones within the barrow ditch to identify what animals are included and to confirm if this is an owl feeding platform.

It needs to be established if the animal bones recovered from the grave fills represent pieces of meat that were purposely placed within the grave or if they are accidental inclusions.

7.8 Plant macrofossils and charcoal by Val Fryer

In summary, plant macrofossils are particularly scarce within the studied assemblages and, as a result, it is impossible to state with any certainty how significant the few which are recorded may or may not be. In addition, it would appear that the deposits have been subjected to significant post-depositional disturbance, resulting in an unknown

degree of residuality and/or intrusivity. Notwithstanding this, given the funerary nature of the site, there does not appear to be any evidence for the deliberate inclusion of plant materials alongside the bodies of the deceased, and it is, perhaps, most likely that the charred macrofossils which are recorded are largely derived from scattered or wind dispersed refuse, much of which was accidentally incorporated within the feature fills. Perhaps not unsurprisingly, there is little to suggest that there was any significant domestic activity occurring within the near vicinity of either the Bronze Age barrow or the Saxon cemetery.

As none of the assemblages contain a sufficient density of material for quantification (i.e. 100+ specimens), no further analysis of this material is recommended. However, a summary of this assessment should be included within any publication of data from the site.

7.9 Radiocarbon dating

The initial selection of six burials has been chosen to examine the chronology of the two phases of use and to provide absolute dating for the pottery and find types.

Fill/cut	Burial	Provisional date
5053/5054	Burial 27	Mid-late Saxon
5103/5104	Burial 44	Mid-late Saxon
5190/5189	Burial 57	Early-mid Saxon
5256/5257	Burial 66	c 6th century
5261/5262	Burial 68	Early-mid Saxon
5340/5341	Burial 81	Mid-late Saxon

7.10 Stable isotope analysis

An initial set of samples from both phases of the cemetery can be used for stable isotope analysis in an attempt to identify the geographical origins of the population of the cemetery and also to inform about the diet of the local population. Further more comprehensive isotope analysis of the cemetery population may be possible as part of combined research between MOLA and a research institution.

8 REVISION OF RESEARCH OBJECTIVES

8.1 General objectives

To excavate and record the archaeological remains on site in order to mitigate the impact of development and to preserve the archaeological evidence contained within the site by record and attempt a reconstruction of the history and use of the site.

The archaeological works have succeeded in the recording of all archaeological remains on site. The excavation has enabled the chronology and use of the site to be established, from the construction of the Bronze Age Round Barrow, to its re-use in the Saxon period and later medieval to post-medieval field systems.

Grave goods associated with some of the burials are of Roman origin. Further to this residual sherds of pottery have been recovered from grave fills. It is yet uncertain how these reflect continuity from the Roman period into the Saxon, but further analysis of the artefacts and scientific dating will enable a fuller understanding.

8.2 Specific objectives

To obtain information on dates for the burials, either through artefactual remains and/or using scientific dating methodologies

Associated grave goods recovered from the graves have enabled general dates to be attained for the burials. Proposed scientific dating will produce closer date ranges and better phasing of the cemetery.

To examine if there is any evidence for changes in burial practice

The excavations have identified two different burial practices, primarily indicated by those with grave goods and those without. Full analysis of human remains and grave goods will help to answer this aim.

To examine the nature, date and function of other features on site

Pit [5128] was located *c* 18m to the east of the barrow ditch. A sherd of indeterminate pottery was recovered from the fill. Its function remains uncertain. Other features related to post-medieval land divisions.

To retrieve information about the health and nature of the local population

The human bone analysis has provided basic information about the health of the local population, notably the high percentage of tuberculosis. Further detailed analysis will be undertaken as part of the final report.

To determine how do the burials relate to other features on site

The excavations have shown that the Bronze Age Barrow was used as a focus for the Saxon burials. How they relate to pit [5128] is uncertain and further analysis is needed to identify how they relate.

To determine whether there was any interaction between funerary practices and landscape development and to retrieve information to reconstruct past landscapes and environment

Only funerary related features were present within the excavated area and the processed environmental samples showed no potential for full analysis. Accordingly the site has a low potential to further address this research aim.

To determine what was the Human impact on the landscape

The fills of the ring ditch indicate that there was an internal mound. It is known that the construction of the ring ditch created enough material to create a substantial barrow mound within the ring ditch, clearly being visible from a distance. Although the ditch was finally infilled in the Roman period, the mound survived as a landscape feature into the Anglo-Saxon period acting as a later focus for funerary activity. The site has the potential to add to the corpus of evidence showing the ongoing and long lasting influence of such features on subsequent land use and landscape development.

To undertake a full programme of analysis leading to publication of the results in order disseminate them to the wider archaeological community and other interested parties

The assessment works already undertaken and the proposed programme of further works will enable full analysis. The results of the works will be published as a MOLA Monograph.

To allow as far as possible within the constraints of the project a programme of outreach in order to disseminate the results of the project to the local community

Following the completion of the excavation a talk was given to Blackbourne Middle School. Further outreach programmes should be explored upon the completion of future works.

8.3 Updated research objectives

Further research objectives have been identified following the assessment of the results of the excavation that were not envisaged before the start of the archaeological works. All have been related to the revised framework for the east of England (Medlycott 2011)

Roman to Anglo-Saxon transition
The inclusion of Roman finds within the Saxon graves may provide potential for further research into the transitional period of the two cultures.

Settlement distribution
The cemetery placed in its broader landscape by looking at its relation to other known Saxon find spots and sites, through analysis of the distribution of artefacts and known sites recorded by the Portable Antiquities Scheme and the Suffolk HER can help in the research objective of establishing settlement distribution, densities and cultural links.

Population studies
The use of radiocarbon dating and isotope analysis on the human bone, will date and plot population movement, and should be explored. This has been detailed above in section 4.4.

Considering the following objectives will also add to the broader topic of understanding the population:

- What is the detailed demographic structure of the cemetery population?
- What can the human remains tell us about the diet and lifestyle of the population of Stanton?
- How does the stature of adults and growth of children compare with that of other middle Saxon groups?
- Is there any osteological evidence to support the presence of family groups within the cemetery?
- Can a relationship between B20 and B21, in terms of family group or shared cause of death, be established?

- How does age at death and biological sex relate to the inclusion of grave goods and to variations in burial practices?
- What is the spatial distribution of males, females and subadults within the cemetery?
- What is the significance of the antemortem tooth loss seen in subadult B81?
- Was B33 suffering from vitamin D deficiency at the time of their death and what does this tell us about the health of children in this population?
- What do the rates of joint disease tell us about the age at death and levels of activity in the population?
- What explanation can be found for the apparently high rate of tuberculosis?
- What can stable isotope analysis tell us about the diet and geographic origins of the group?
- What mechanisms are likely to have caused the injuries seen in the assemblage and can the possible weapon injury suffered by B63 be further characterised?

Ritual and religion

The adoption of Christianity in the Saxon period is a topic that still requires further research. The two phases of burial tradition seen at Stanton can add to the specific reseach question; *how does the introduction of Christianity show in the burials?*

Find studies

Radiocarbon dating of bone with associated pottery vessels will help with the revision of ceramic and finds typologies and will help address the conflict between scientific dating and received pottery and finds dates.

Stanton has the potential to support the *Early Anglo-Saxon Chronology Project* (Alex Bayliss, English Heritage). Radiocarbon dates combined with the grave assemblages, will add to the understanding of Anglo-Saxon artefact chronologies.

9 RESOURCES AND PROGRAMME

9.1 Work completed

All work on the consolidation of the site archive, artefactual and ecofactual processing, basic site phasing, the assessment evaluation of finds and ecofacts, preparation of assessment reports and updated project design have been completed.

9.2 Future work

In order to fulfil the potential of the archaeological features and the artefactual and ecofactual assemblages set out in section 7, a programme of future works will be undertaken. This will maximise the potential of the archaeological resource to fulfil the research objectives set out in section 8, and will lead to the production of a final report that will form the basis of the publication.

9.3 Programme

Task	Description	Personnel
1	Introduction	P Clements
2	Structural site narrative	P Clements
3	Human remains	MOLA
4	Illustrations	MOLA Northampton drawing office
5	Animal remains	TBC
6	C14 dating	Beta Analytic
7	Isotope analysis (tbc)	TBC
8	Integration of specialist reports	P Clements
9	Report digest and discussion	P Clements/A Yates
10	Editing/Proof reading	A Chapman/P Chapman/A Yates
11	Preparation of research archive	T Anastasiadou-Leigh
12	Management	A Yates

Table 14: Post-excavation analysis programme

Task/ month	1	2	3	4	5	6	7	8	9	10	11	12
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												

10 REPORTING PUBLICATION AND ARCHIVE

10.1 Reporting

A full site report will be prepared by MOLA Northampton which will form the basis of a publication, This will be submitted to the Historic Environment Record and deposited with the Archaeological Data Service (ADS). Provision will be made for publication as a monograph (MOLA series) for wider dissemination.

The proposed structure of the report is as follows:

1 INTRODUCTION

2 BACKGROUND
- 2.1 Location and topography
- 2.2 Geology
- 2.3 Historical and archaeological background
- 2.4 Stanton in the wider Anglo-Saxon landscape
- 2.5 Early Anglo-Saxon cemeteries of East Anglia
- 2.6 Later Anglo-Saxon cemeteries
- 2.7 Christianity in Anglo-Saxon East Anglia

3 OBJECTIVES, METHODOLOGY AND SUMMARY OF SITE CHRONOLOGY
- 3.1 Objectives and methodology
- 3.2 Summary of site chronology

4 BRONZE AGE BARROW
- 4.1 The Bronze Age Barrow
- 4.2 The worked flint by Yvonne Wolframm-Murray
- 4.3 The prehistoric pottery by Andy Chapman
- 4.4 Metal Objects by Tora Hylton
- 4.5 Charred plant remains by Val Fryer

5 THE SAXON CEMETERY
- 5.1 Cemetery structure
- 5.2 The early Saxon burials
- 5.3 The later Saxon burials
- 5.4 The human bone

6 THE SAXON FINDS
- 6.1 The Saxon pottery by Paul Blinkhorn
- 6.2 Weapons by Tora Hylton
- 6.3 Dress fittings by Tora Hylton
- 6.4 Textile remains tbc

9 DISCUSSION

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APPENDIX:
Gazetteer of burials

Each section will be accompanied by appropriate illustrations. The introductory sections will include figures showing the location of the site and its topographic and geological context.

Within the narrative text illustrations will include overall phase plans, detailed drawings of individual burials, photographs and finds illustrations. The discussion will include

figures showing the archaeological context of the works in relation to other archaeological investigations discussed in the text and other figures as necessary.

10.2 Archive

A microfilm copy of the site archive and the site narrative will be made to RCHME standards and submitted to the National Archaeological Record.

The archive will comprise all written, drawn and photographic records, and all material finds and processed sample residues recovered from the trial trench evaluation and excavation phases. All records and finds generated by the excavation will be compiled in a structured archive in accordance with the guidelines of Appendix 3 in the English Heritage procedural document, Management of Archaeological Projects (EH 1991) and MoRPHE (HE 2015a). Site details will be entered onto the OASIS online database.

10.3 Excavation records archive

Type	Quantity
Plans	14
Sections	71
Contexts	347
Burial sheets	75
Monochrome negative	11 x 36 exposure films
Digital photographs	612

10.4 The finds archive

Type	Quantity
Bronze Age pottery	85
Iron Age pottery	
Roman Pottery	10
Saxon pottery	7
Worked flint	124
Small finds	255

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