



**Iron Age and Romano-British settlement
at the Papworth Hospital car park
Papworth Everard
Cambridgeshire**

Report No. 14/60

Accession No: ECB3084

Authors: Yvonne Wolfram-Murray, Simon Carlyle and Paul Kajewski

Illustrators: Amir Bassir, James Ladocha
and Andy Chapman



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CBiol FRGS MIPSS
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and Andy Chapman

OASIS REPORT FORM

PROJECT DETAILS		OASIS No: molanort 1-173602	
Project name	Papworth Everard, Papworth Hospital car park, Cambridgeshire		
Short description	<p>Between November 2008 and January 2009, Northamptonshire Archaeology (now MOLA) excavated part of a middle/late Iron Age and Romano-British settlement at Papworth Everard. The work, which was commissioned by RPS Planning and Development on behalf of the Varrier Jones Foundation, was carried out prior to the construction of a car park to serve the adjacent Papworth Hospital. The earliest artefact is a Neolithic polished flint axe. Settlement probably commenced in the middle/late Iron Age (2nd-1st centuries BC), but the focus of settlement lay to the south, as only the northern corner of a ditched enclosure lay within the excavated area. This enclosure remained in use into the early Roman period, but by the later 1st century AD there was a new and more extensive system of boundary ditches and small sub-enclosures, which were modified over time. The coarse ware pottery indicates that this was a small rural farmstead, although a kiln plate may indicate short-lived pottery manufacturing. In the late Roman period the existing boundaries were replaced by a new ditch system, perhaps the corner of a large enclosure lying largely beyond the excavated area. The settlement was abandoned in the 4th century AD. Cropmark evidence and other nearby excavations indicate that the excavated area lay towards the northern end of an extensive area of Iron Age and Roman rural settlement. Pottery from the final fills of the late enclosure ditch broadly date to the 5th to 9th centuries AD, indicating nearby activity during the early/middle Saxon period. There were also furrows of a former ridge and furrow field system, which was levelled in the 19th-20th centuries.</p>		
Project type	Excavation (Accession No ECB 3084)		
Site status	-		
Previous work	DBA (Slatcher 2007), Trial trench evaluation (Upson-Smith 2008) UPD (Carlyle and Kajewski 2009)		
Current land use	Arable		
Future work	None		
Site type/ period	Late Iron Age and Romano-British rural settlement		
Significant finds	Neolithic polished flint axe; Iron Age, Roman and Anglo-Saxon pottery; Roman coins and bronze brooches		
PROJECT LOCATION			
County	Cambridgeshire		
Site address	Farm Lane, off Stirling Way, Papworth Everard, Cambridgeshire		
Study area	0.7ha		
OS Easting & Northing	TL 2921 26275		
Height aOD	52.5-50.8m		
PROJECT CREATORS			
Organisation	Northamptonshire Archaeology (now MOLA Northampton)		
Project brief originator	Cambridgeshire County Council		
Project Design originator	Dan Slatcher, RPS Planning and Development		
Supervisor	Paul Kajewski (NA)		
Project Manager	Simon Carlyle (NA), Dan Slatcher (RPS)		
Sponsor or funding body	Varrier Jones Foundation		
PROJECT DATE			
Start & end dates	November 2008-January 2009		
ARCHIVES	Location	Content	
Physical	MOLA Northampton store	Pottery, animal bone, other finds	
Paper	MOLA Northampton store	21 drawing sheets; 5 B/W films; 180 colour slides; 4 archive boxes	
Digital		Photographs	
BIBLIOGRAPHY			
Title	Iron Age and Romano-British settlement at the Papworth Hospital car park, Papworth Everard, Cambridgeshire		
Serial title & volume	14/60		
Author(s)	Yvonne Wolfram-Murray, Simon Carlyle and Paul Kajewski		
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Iron Age and Romano-British settlement at the Papworth Hospital car park Papworth Everard, Cambridgeshire

Abstract

Between November 2008 and January 2009, Northamptonshire Archaeology (now MOLA) excavated part of a middle/late Iron Age and Romano-British settlement at Papworth Everard. The work, which was commissioned by RPS Planning and Development on behalf of the Varrier Jones Foundation, was carried out prior to the construction of a car park to serve the adjacent Papworth Hospital. The earliest artefact is a Neolithic polished flint axe. Settlement probably commenced in the middle/late Iron Age (2nd-1st centuries BC), but the focus of settlement lay to the south, as only the northern corner of a ditched enclosure lay within the excavated area. This enclosure remained in use into the early Roman period, but by the later 1st century AD there was a new and more extensive system of boundary ditches and small sub-enclosures, which were modified over time. The coarse ware pottery indicates that this was a small rural farmstead, although a kiln plate may indicate short-lived pottery manufacturing. In the late Roman period the existing boundaries were replaced by a new ditch system, perhaps the corner of a large enclosure lying largely beyond the excavated area. The settlement was abandoned in the 4th century AD. Cropmark evidence and other nearby excavations indicate that the excavated area lay towards the northern end of an extensive area of Iron Age and Romano-British rural settlement. Pottery from the final fills of the late enclosure ditch broadly date to the 5th to 9th centuries AD, indicating nearby activity during the early/middle Saxon period. There were also furrows of a former ridge and furrow field system, which was levelled in the 19th-20th centuries.

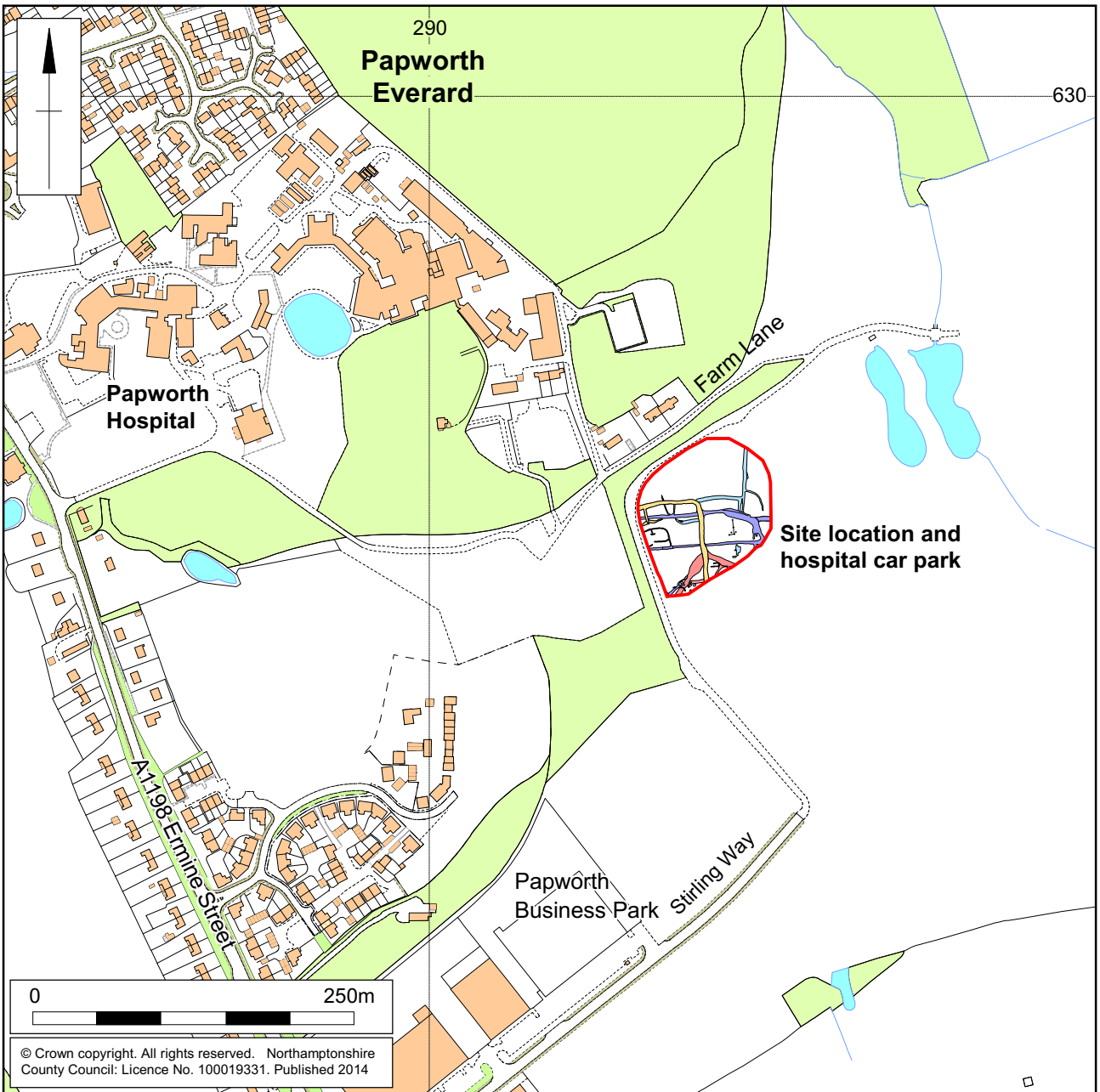
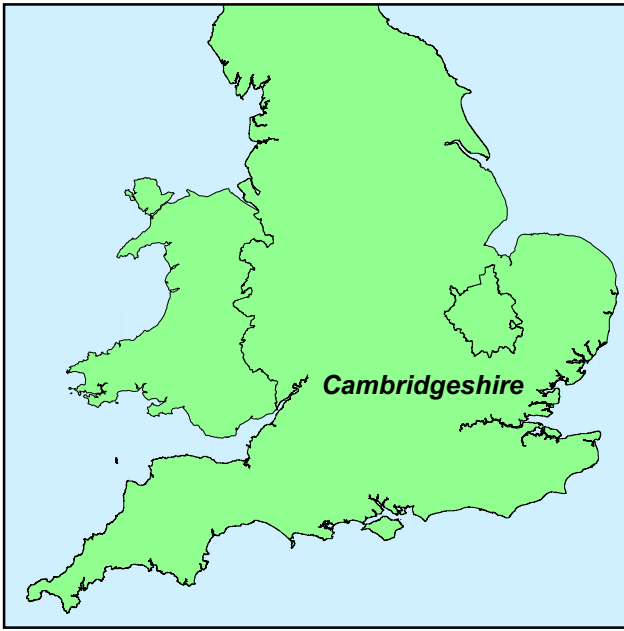
1 INTRODUCTION

1.1 Project background

Between November 2008 and January 2009, Northamptonshire Archaeology (now MOLA) carried out the excavation of part of a middle/late Iron Age and Romano-British settlement at Papworth Everard, Cambridgeshire (NGR TL 2921 6275; Fig 1). The work, which was carried out prior to the construction of a car park to serve the adjacent Papworth Hospital, was commissioned by RPS Planning and Development (RPS) on behalf of the Varrier Jones Foundation.

The archaeological investigation was requested by Cambridgeshire Authority Planning and Countryside Advice (CAPCA), archaeological advisors to the local planning authority, and was attached as a condition of planning consent by South Cambridgeshire District Council (planning ref: S/1214/07/F).

The scope of works was based on a desk-based assessment prepared by RPS (Slatcher 2007) and the findings of previous archaeological evaluations (Kenney 1999; Fisher 2006; Upson-Smith 2008), which had identified the remains of Iron Age and Romano-British settlement within the area of the proposed car park and in the surrounding area.



Scale 1:5000

Site location Fig 1

The mitigation strategy was set out in the Archaeological Project Design issued by RPS (Slatcher 2008). An assessment report and updated project design (Carlyle and Kajewski 2009) was prepared in accordance with the English Heritage Procedural documents *Management of Archaeological Projects 2, Appendix 3* (EH 1991) and relevant sections of *Management of Research Projects in the Historic Environment* (EH 2006).

The final report has been compiled by Yvonne Wolfram-Murray, following the proposals set out in the assessment report and UPD, with copyediting by Andy Chapman and Pat Chapman. The archive will be deposited under accession number ECB 3084, the site code was PAP08.

1.2 Research objectives

The main objective of the archaeological excavation was to contribute to an understanding of the buried archaeological resource within the development area.

The specific aims of the project were to identify, date and characterise archaeological features, as far as possible, using the techniques outlined below (Slatcher 2008).

Original research objectives

The project objectives, as outlined in the project design prepared by RPS (Slatcher 2008), were to:

- determine the presence or otherwise of buried remains of archaeological interest within the development area and to define further the extent of those features already identified;
- understand further the character, form, function and date of prehistoric, Romano-British and later activities indicated in this area by the archaeological remains on the site;
- preserve by record any significant archaeological remains within the development area and to attempt a reconstruction of the history and use of the site;
- elucidate evidence for the character of the Roman period settlement, such as land use, agriculture, use and exploitation of the surroundings and any changes through time;
- contribute to an understanding of the environmental history of the surrounding area.

Revised research objectives

The assessment demonstrated that the excavation had produced sufficient evidence to broadly address the original research objectives, as outlined above. The major exceptions were the environmental objectives, as assessment of the soil samples showed limited potential due to the small size of the assemblages.

Three principal phases of settlement have been identified, dating from the middle/late Iron Age through to the 4th century AD. The use of radiocarbon dating to determine the date of initial settlement has been discounted due to recognised problems in calibrating Iron Age dates, and on the basis that the pottery chronology provides the closest dating available.

An assessment of the broader context of the excavated area has been achieved through re-examination of the cropmark evidence and the evidence from other nearby investigations.

Following assessment, the original generic research objectives were focussed onto specific aspects of Iron Age and Romano-British social, cultural and economic activity associated with the recovered settlement remains. However, it should be borne in mind that the major part of both the Iron Age and Romano-British settlements have not been investigated, and parts examined by the earlier evaluation were heavily truncated by modern activity (Fisher 2006). Understanding the function of the site and its relationship with its agricultural hinterland is therefore limited. Nonetheless, there is still scope to examine the role of the settlement in the local Iron Age and Romano-British agricultural system.

With reference to regional research frameworks (Brown and Glazebrook 2000; Gurney 2002), the revised research objectives as listed in the UPD were as follows:

- The settlement will be set in the context of the local and regional middle/late Iron Age and Romano-British rural landscape and attempts will be made to understand the function of the site in terms of its economic base and its organisational structure. This will be assisted by the further analysis of the artefactual evidence. The Cambridgeshire HER was consulted to assist in this task;
- The settlement at Papworth Everard will be compared with other type-sites in the region to contribute to an understanding of how they operate within the middle/late Iron Age and Romano-British agricultural system;
- As only part of the site has been excavated, the plots of cropmarks shown on aerial photographs, combined with information from the trial trench evaluations, will be used to produce an overall plan of the settlement to assist in the interpretation of how the settlement may have functioned and developed over time. The limitations of the cropmark evidence will be considered and taken into account;
- Using the site records and further analysis of the pottery, the phasing of the settlement will be refined to determine how it developed over time. An attempt will be made to determine the period of its initial construction and to identify subsequent additions and alterations.

1.3 Topography and geology

The excavation was located to the south of Farm Lane, which skirts the southern boundary of the Papworth Hospital site, and to the north of Papworth Business Park (Stirling Way). Roman *Ermine Street*, the modern-day A1198, passes c 0.4km to the west (Fig 1). The site was situated in the north-west corner of a large arable field, on the south-western side of a small, shallow valley, the head of which lies c 1km to the south-east. The ground slopes gently to the north-east, from approximately 52.5m aOD at the western edge of the site to 50.8m aOD at the eastern site boundary. At the base of the slope, c150m east of the site, are two balancing ponds, fed by a small stream.

The excavation comprised a sub-square area of 0.7ha, extending 95m north-west to south-east, by up to 110m (Fig 1). The excavated area takes in the greater part of the car park development site, which is not separately depicted.

The underlying solid geology comprises Upper Jurassic formations of Ampthill Clay, Kimmeridge Clay and Corallian limestone, overlain by drift deposits of glacial till (<http://www.bgs.ac.uk/GeolIndex/index.htm>). The overlying soils belong to the Hanslope Soil Association (411d), comprising slowly permeable calcareous clayey soils (SSEW 1983).

1.4 Archaeological and historical background

A review of existing archaeological information within a 1km radius of the site was prepared by RPS (Slatcher 2007) in a desk-based assessment of the site's archaeological potential. The following is a summary of the Historic Environment Record (HER) sites in the study area, relevant to the archaeology reported on here (HER numbers in brackets) (Fig 2).

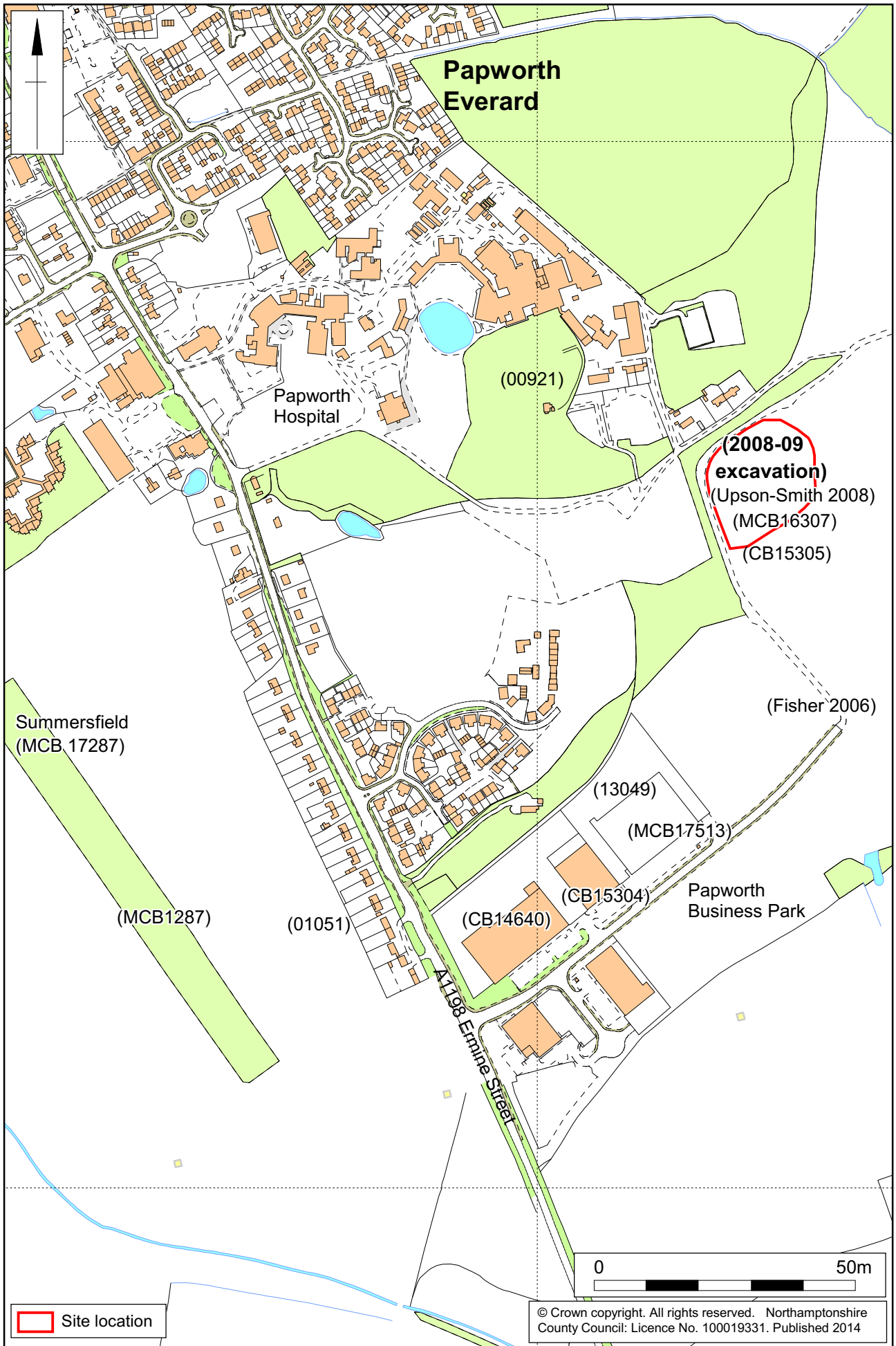
To the west of Ermine Street, at Summersfield, a Bronze Age pit and associated gullies (MCB17287) were investigated prior to development. Late Bronze Age/early Iron Age activity was encountered in the south-west corner of Papworth Business Park (CB14640; Kenney 1999), and a fragment of a Bronze Age rapier was recovered from the topsoil at the eastern end of the business park (Fisher 2006).

The archaeological remains investigated by the current project form part of an extensive area of Iron Age and Romano-British settlement that extends to the south and west along a low ridge, at c 53m aOD, overlooking a small stream to the east. Examination of cropmarks shown on aerial photographs (Cox 1996), supported by archaeological excavation ahead of development of Papworth Business Park (Kenney 1999; Fisher 2006; Newton 2008) has revealed a complex of fields, small enclosures, fence lines and ring ditches, linked by driveways, which are characteristic of settlement associated with a small farming community (13049; CB15304; CB 15305; MCB 16307; MCB16491; MCB17350; MCB17452; MCB17513). In 2008, cropmarks in the area designated for the hospital car park were investigated and it was established that they were related to a Romano-British agricultural settlement (Upson-Smith 2008).

In the 1st century AD, a major road (Ermine Street) was built to link the Roman fort at Godmanchester (*Durovigium*), c 10km to the north-west of Papworth Everard, with Braughing, Hertfordshire, to the south. The road passes close to the settlement, approximately 400m to the west. Roman activity has also been identified at Summersfield, to the west of Ermine Street (MCB17287).

Evidence for Anglo-Saxon activity in the general area is sparse, although early/middle Anglo-Saxon pottery was recovered from the current excavation. The first documentary evidence for Papworth dates to 1012. In the Domesday Book (1086) it is listed as belonging to Count Alan, Lord of Richmond, and the estate remained in the honour of Richmond until the 17th century. Papworth derives its name from the Old English *Pappas Field* and the suffix 'Everard' is named after the 12th-century lord of the manor, Evrard de Beche.

The core of the medieval village of Papworth appears to have focused on the church of St Peter, to the west of Ermine Street. The current excavation site lay in an area of open fields to the east of the village, and this was confirmed in excavation by the presence of furrows of the former ridge and furrow field system. A circular moated site, probably of medieval origin but possibly later, is located c 200m north-west of the development area, in the grounds of the hospital (SAM 33284; 00921). To the west of Ermine Street, a similar though smaller feature is recorded in the HER as a windmill tump (1051).



Location of nearby archaeological sites
(with HER numbers and Bibliographic references)

Fig 2

1.5 Excavation strategy

The excavation area was marked out using Leica System 1200 GPS surveying equipment, to the co-ordinates provided by RPS. The area was stripped under archaeological supervision using a 360° tracked mechanical excavator fitted with a toothless ditching bucket. The topsoil and subsoil were removed in separate operations and stored in temporary bunds. In selected areas, the 360° excavator was used to excavate sections into the large enclosure ditch at the southern end of the site and to clean the surface to clarify and confirm the continuation and relationships of larger ditches and smaller gullies.

Once the areas had been opened and the archaeological surface cleaned sufficiently to enhance the features, a grid was established and a digital base plan was produced using GPS, with the grid and site datum related to the Ordnance Survey National Grid and Datum. The general site plan was hand drawn at a scale of 1:100.

Discrete features were sectioned, and fully excavated if they contained deposits or artefacts or environmental assemblages of particular value. Intersections were investigated to establish stratigraphic relationships. Representative sections of linear and curvilinear features were also sampled away from intersections. Sections were drawn at a scale of 1:10 or 1:20, as appropriate.

Artefacts and ecofacts were collected by hand and retained, receiving appropriate care prior to removal from site (Watkinson and Neal 1998). Unstratified animal bones and modern material were not collected. The excavated area and spoil heaps were scanned with a metal detector to ensure maximum finds retrieval. Significant finds (small finds) were recorded individually and the details entered on an Access database. A basic catalogue has been compiled, comprising material type and object identifications, together with stratigraphic information. All finds have been boxed by material type.

Soil samples of between 20 and 40 litres (volume dependant on deposit size) were taken for flotation from dateable contexts with a potential for the recovery of charcoal and carbonised plant remains. Specialist environmental advice was provided by Dr Helen Keeley.

A photographic record of the project was maintained using 35mm black and white negative and colour transparency film, supplemented with digital images. All records were compiled during fieldwork into a comprehensive and fully cross-referenced site archive.

The project was overseen by RPS, acting on behalf of The Varrier Jones Foundation. RPS was responsible for liaison with the curatorial authority, Cambridgeshire Authority Planning and Countryside Advice (CAPCA), who monitored the works to ensure that the project were undertaken to a satisfactory standard. All works were conducted in accordance with the Institute for Archaeologists' (IfA) *Standards and Guidance for Archaeological Excavation* (1995, revised 2008) and *Code of Conduct* (1985, revised 2008). In addition, all works complied with the guidelines detailed in *Standards for Field Archaeology in the East of England* (Gurney 2002).

2 SUMMARY OF CHRONOLOGY

Four main phases of settlement have been identified, together with residual activity dating to the Neolithic, and also early/middle Anglo-Saxon activity (Table 1). The archaeological remains were generally well-preserved, although ploughing had caused significant truncation in places, particularly at the southern end of the site (Fig 3). Ground conditions during excavation were also variable, with the clays retaining standing water on parts of the site, and even snow and ice (see Fig 9).

Table 1: Summary of site chronology

Period	Features
Neolithic to Bronze Age	Neolithic polished flint axe Residual worked flint
Middle/Late Iron Age (2nd-1st centuries BC)	Settlement and Enclosure (E1)?
Late Iron Age/early Roman (early to late 1st century AD)	Enclosure (E1)
Earlier Roman (late 1st – early 3rd century)	Boundary System (BS1) & (BS2) Enclosure (E2) Boundary System (BS2) Ditch [810] Enclosure (E3)
Later Roman (later 3rd-mid 4th centuries)	Enclosure (E4) Posthole Group (PG1)
Early/middle Anglo-Saxon	Pottery
Medieval/post-medieval	Ridge and furrow field system



General view of site with work in progress, looking north Fig 3

2.1 Site summary

A Neolithic polished flint axe, the earliest artefact recovered from the excavation, was found near the base of an Iron Age ditch.

Settlement commenced in the middle/late Iron Age, perhaps as early as the 2nd century BC, with continuous occupation extending into the mid-4th century AD (Fig 7).

The focus of the middle/late Iron Age settlement lies to the south with just the northern corner of an enclosure lying within the excavated area (Fig 7, E1). A group of smaller gullies and pits within this area produced significant quantities of pottery and bone dated to the middle/late Iron Age, probably 2nd-1st centuries BC, perhaps suggesting an early phase of unenclosed settlement. However, while the later fills of the enclosing ditch (E1) date to the early/mid 1st century AD, spanning the transition from the late Iron Age to the early Roman period, this material is dating the disuse of the enclosure. The enclosure ditch had also been re-cut, so it is possible that the earliest enclosure ditch may have been contemporary with the excavated features encompassed by it.

In the later 1st century AD, a new system of rectilinear boundary ditches was established, with this system undergoing modifications through the 2nd and 3rd centuries AD (BS1 & BS2). In an early form, a curving ditch formed a small corner enclosure (E2) probably to hold livestock, while later variations of the boundary system included a square sub-enclosure (E3), to the west.

In the late Roman period this boundary system was replaced by a new ditch system (E4), perhaps the corner of an enclosure extending to the south and west. There was no surviving structural evidence for domestic dwellings within the excavated area, but this is generally the case with small rural settlements, and the quantity of pottery, animal bone and other finds does indicate that there was domestic occupation within this area.

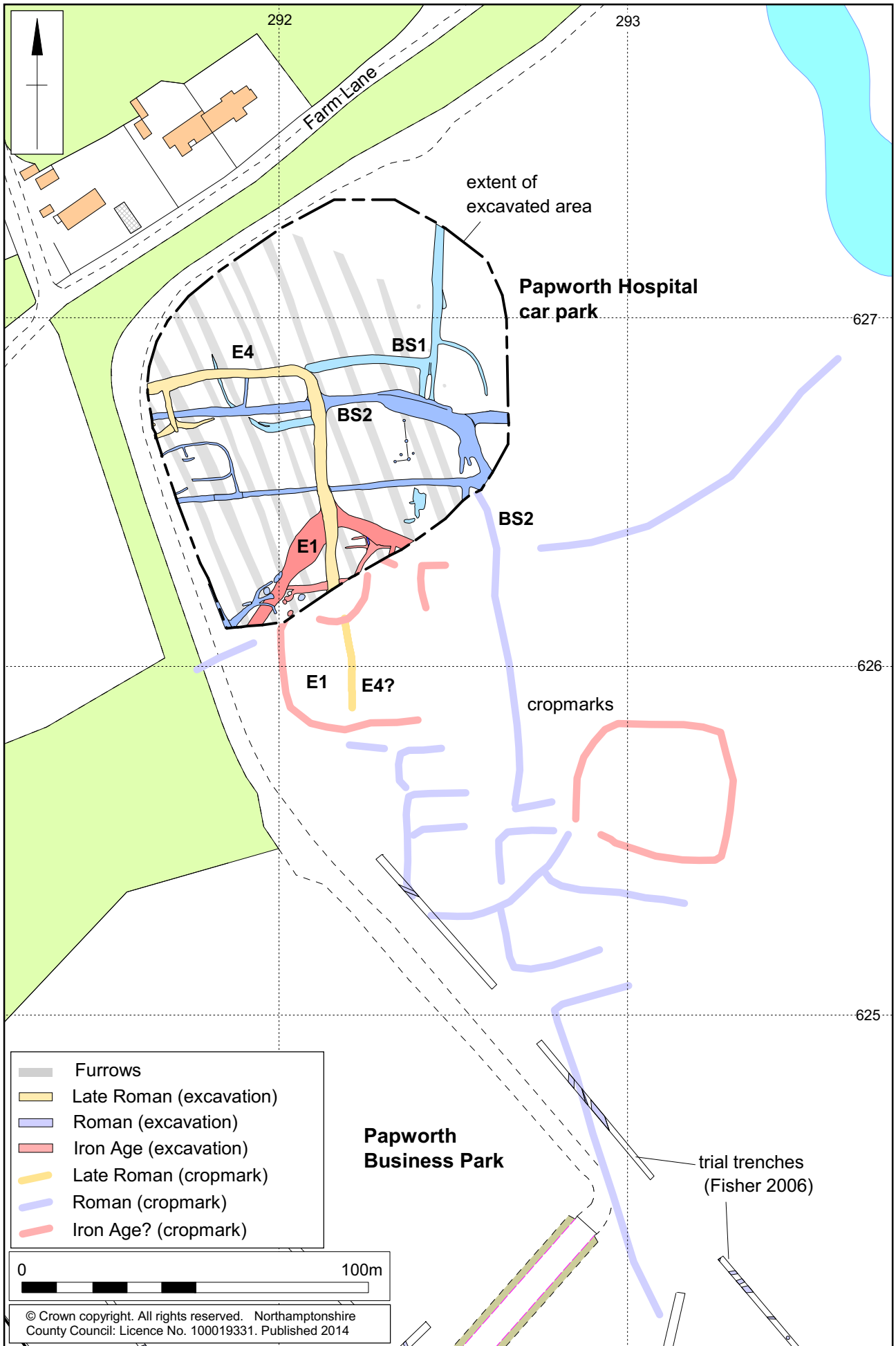
There was also a little early/middle Saxon pottery in the final fill of the 4th-century enclosure ditch, indicating activity and perhaps settlement nearby.

Medieval or post-medieval furrows, which appear to have been levelled in the 19th or 20th centuries, extended across the site from north to south. The remains of a modern fence line, marked by a line of pits, extended down the eastern side of the site. Modern land drains and mole-plough scars were also encountered.

2.2 General stratigraphy

The natural substrate was glacial till (Boulder Clay). At the surface it occurred as light to mid orange-yellow clay and contained occasional sub-angular to rounded chalk and angular flint pebbles. At a depth of c 0.4m below the surface of the natural substrate the colour of the till changed to mid greyish-blue, due to reducing conditions, and the quantity of chalk pebbles increased. In places there were patches of gritty, fine angular gravel in a silty clay matrix. Drainage of surface water was extremely poor (see Figs 3 & 6).

The subsoil, which sealed the archaeological remains, was intermittent and varied in thickness, 0.1-0.5m, where present. It comprised mid brown silty clay with moderate pebbles. The topsoil was 0.3m thick across the entire excavation area and consisted of mid to dark brownish-grey slightly clayey silt.



Scale 1:1500

Excavated area and nearby cropmarks Fig 4

3 PREHISTORIC

3.1 Prehistoric activity

Evidence of earlier utilisation of the landscape was found in the form of a complete Neolithic polished flint axe, found in the primary fill of an Iron Age ditch, and a few worked flints, perhaps late Neolithic/early Bronze Age in date, also found as residual finds from other Iron Age and Roman contexts.

It may be speculated that the complete stone axe had been found and perhaps retained as a curio or talisman. The belief that worked flint, fossils and other regularly shaped stones were the products of thunderbolts has been widespread in the past, and is a superstition that may even survive in some places today. At the late Saxon church at Furnells manor, Raunds, Northamptonshire, two barbed and tanged arrowheads, most likely recovered from an early Bronze Age burial, had been deposited against the plaster face of the chancel wall behind the clergy bench, perhaps to protect the discover and disturber of the ancient burial (Boddington 1996, 21, fig 20).

3.2 Worked flint by Yvonne Wolfram-Murray

A complete polished flint axe, characteristic of the Neolithic, was recovered in excellent condition as a residual find from an Iron Age ditch [1014]. The axe was manufactured from an opaque brownish-grey granular flint, and measures 126mm long, 51mm wide and up to 29mm thick, with both faces flattened longitudinally, perhaps to aid hafting (Fig 5). Post-depositional edge damage is relatively minimal and one side exhibits slight patination. The axe had been utilised in antiquity, with small removals concentrated on one side of the cutting edge.



Neolithic polished flint axe (Scale 1:2) Fig 5

The four other pieces of worked flint, comprising four flakes (two broken), were recovered as residual finds from Iron Age and Roman contexts. In general the condition of the artefacts was good with little post-depositional edge damage. One piece of flint showed some slight patination and there were no burnt pieces. The raw material of three pieces was vitreous flint of a light to mid greyish-brown colour. There were two pieces of opaque flint of a mid grey brownish-grey colour, including the polished stone axe). Cortex or a heavy white patina was present on the dorsal surfaces of the flakes.

4 IRON AGE AND ROMANO-BRITISH SETTLEMENT

4.1 Middle/Late Iron Age settlement (2nd-1st centuries BC)

The earliest ditches and pits lay near the southern limit of excavation, encompassed by ditch enclosure (E1), as either an early phase of open settlement or within an early version of the enclosure (E1), although the pottery from its later fills is slightly later in date (Fig 7).

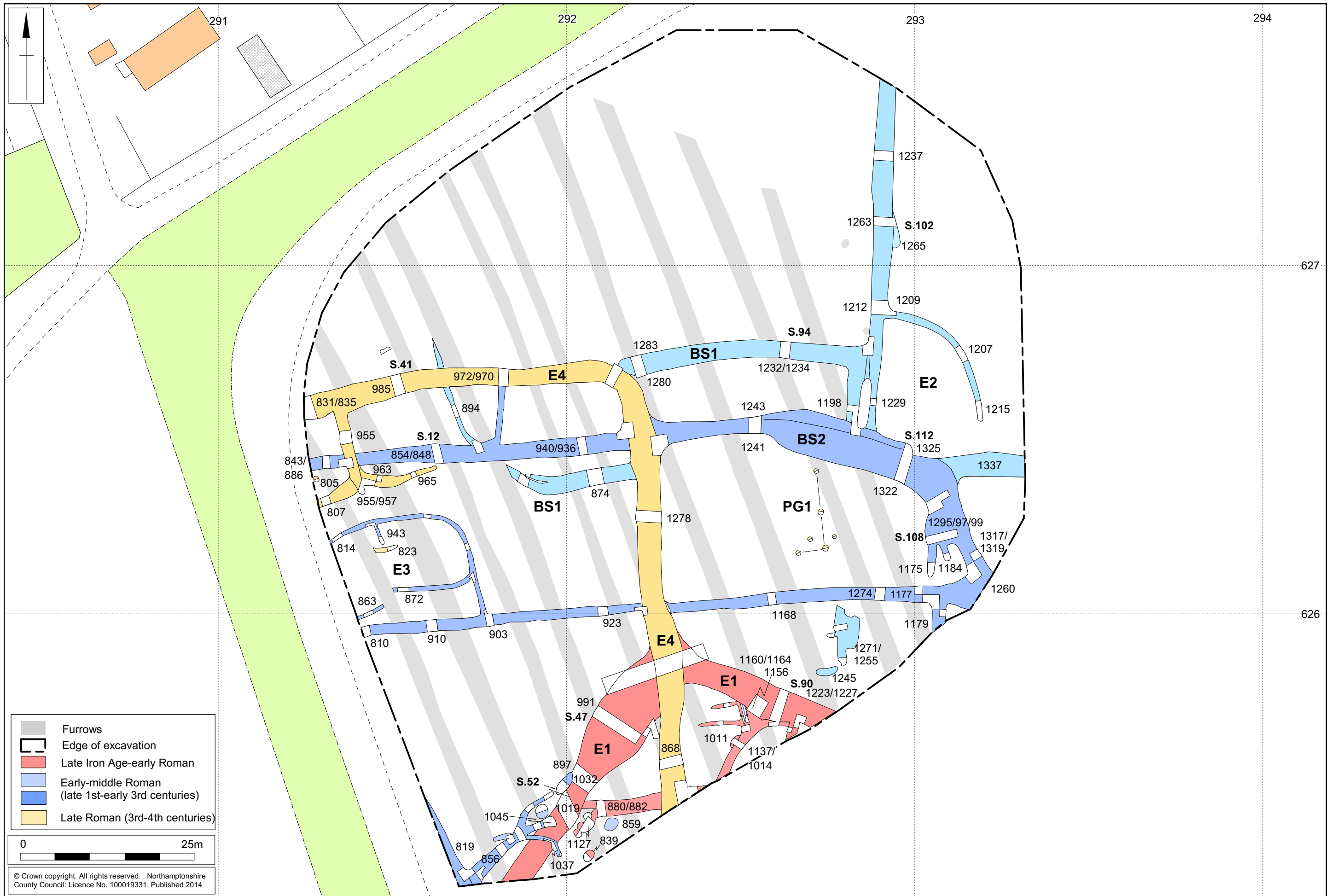
To the west, ditch [882] was 1.93m wide by 0.37m deep, with a fill of mid brown silty clay (892), accumulated through weathering of the ditch sides, overlain by dark brown-grey clay silt (881). A steep-sided re-cut, ditch [880] was 1.3m wide by 0.71m deep. The later ditch had a slumped primary fill of mottled grey-brown silty clay (879), a secondary fill accumulated through slow silting with mid grey clay silt (878), and there was an upper fill (891) of mid green-brown clay silt.

To the east, a pit [1011], 0.84m wide and 0.29m deep, with a fill of light brown-yellow clay, was cut by ditch [1014], which was 1.76m wide and 0.84m deep with a primary fill of light brown-grey silty clay (1013), and contained the residual Neolithic polished flint axe. The secondary fills of mid brown-grey silty clay (1025) and light brown-yellow clays (1024) & (1023) were the result of weathering of the ditch sides, and the upper fill comprised dark brown-grey silty clay-loam (1012). This ditch was also re-cut [1137]. Some animal bone and the largest amount of hand-built Iron Age pottery, probably dating to the 2nd-1st centuries BC, came from these ditch fills, and

A number of other features attributable to this phase include ditch/pits [1127], 1.10m wide and 0.73m deep, along with other pits and the narrow and shallow gullies to the east.

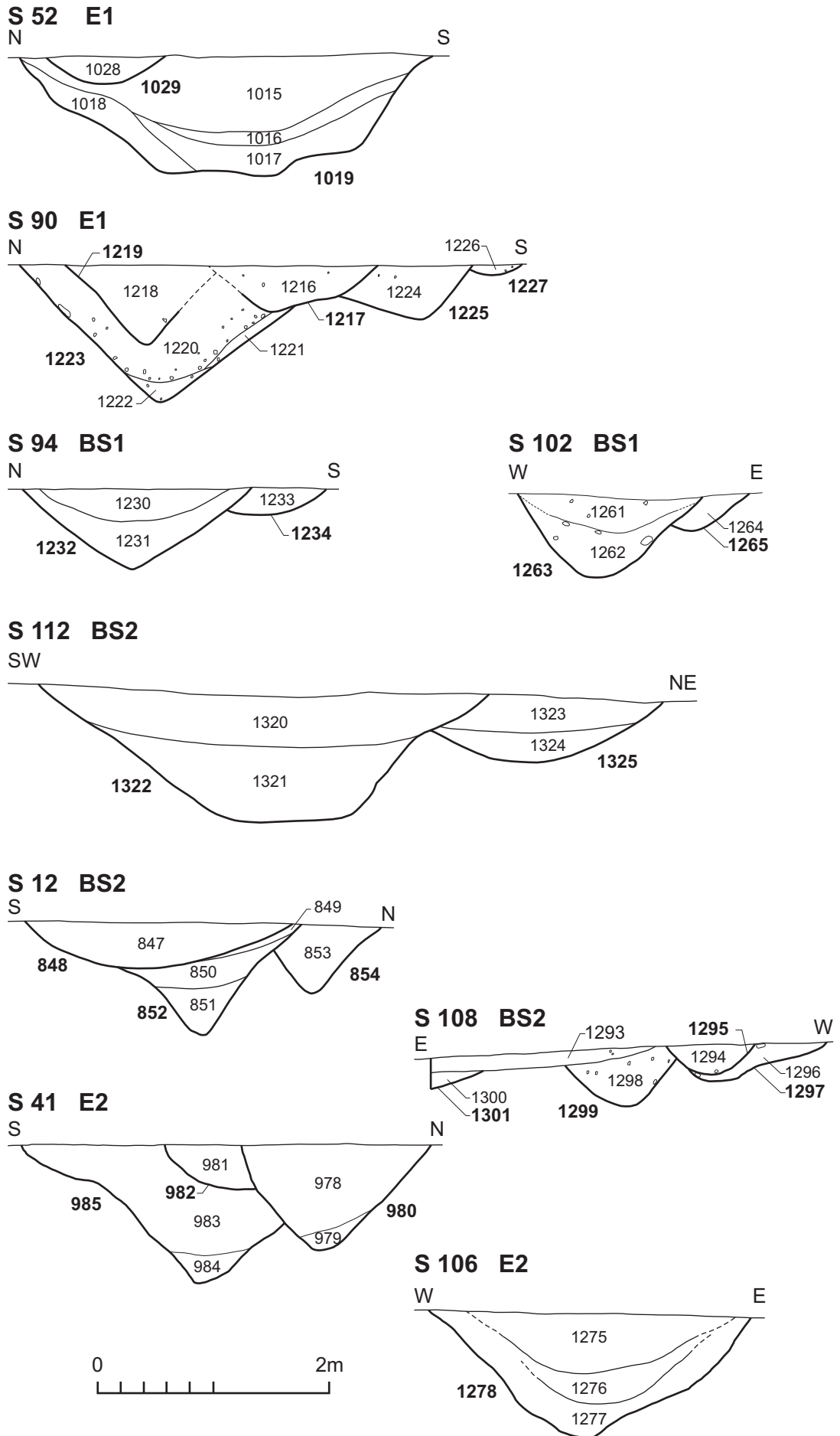


Excavation of the late Iron Age ditch, looking east, showing flooded features and surface water Fig 6



Scale 1:500 (A3)

Iron Age and Roman-British enclosures and boundary systems Fig 7



Scale 1:50 (A4)

Sections of enclosure and boundary ditches Fig 8

4.2 Late Iron Age to early Roman enclosure (1st century AD)

The origin of enclosure E1 probably lay within the later Iron Age, as suggested above. However, it was only the fills of the later cuts that produced pottery in any quantity and this is of late Iron Age to early Roman transitional forms, indicating that the latest enclosure ditches were still receiving material into the later 1st century AD. This leaves the date of origin for the enclosure uncertain.

The full enclosure was probably sub-square in plan and the cropmark suggests that it was some 60-65m wide, enclosing an area of c 0.39ha, although this is an estimate as the plotting of the cropmarks was not to same accuracy as the plotting of the excavated features (Figs 4 & 7).

The western ditch [1019]/[1156]/[1223] was 3.0-4.0m wide by up to 2.2m deep, and had been re-cut on at least two occasions. Ditch [1019] was 3.36m wide and 1.05m deep (Fig 8, S52). Mid grey-orange sand (1018) against the northern side of the ditch may have been a truncated remnant of an early fill, with the layer of mid brown-grey clay (1017), overlain by a thin layer of light yellow-grey silty clay (1016), perhaps the primary fill of a re-cut. The upper fill was mid grey-brown silty clay (1015). Along its north-western edge, the ditch was cut by a shallow gully [1029], 1.0m wide and 0.40m deep. The ditch system was wider towards the northern corner, where there were two evident re-cuts, ditches [991] and [1113] (Figs 7 and 9).



Late Iron Age/early Roman enclosure (E1):
Section 47 with re-cuts [991] and [1113], looking north-east Fig 9

On the north-eastern arm, ditch [1223] was c 2.75m wide by 1.20m deep (Fig 8, S90). The ditch here was V-shaped, with a primary silt of mid grey-orange clay (1222) and a secondary fill of mid brown-grey silty clay (1220). There was a shallower, V-shaped re-cut, ditch [1219], with a fill (1218) of dark brown-grey silty clay. Along the inner edge of the enclosure ditch, ditch [1225], was 1.5m wide and 0.45m deep with a fill of mid brown silty clay, with a further re-cut, ditch [1217], 1.40m wide by 0.41m deep, with a fill of dark brown-grey silty clay (1216).

Also to the east, in ditch [1156] the fills of mid yellow-grey (1154), dark brown-grey silty clay (1153) and dark grey-brown silty clay (1136), contained dumped fired clay, including a fragment from a probable kiln plate, which suggests that there was a short-lived episode of pottery manufacturing at around the mid-1st century AD.

4.3 Roman boundary systems (late 1st – early 3rd centuries AD)

By the later 1st century AD, the late Iron Age/early Romano-British settlement enclosure (E1) had been replaced by a rectilinear boundary system, with ditches generally aligned north-south and east-west (Fig 7: BS1 and BS2). The exact form and phasing of these ditch systems is unclear, as much of the system lay beyond the excavated area. It may have comprised a series of smaller enclosures, with internal sub-divisions, set along a linear boundary or trackway running north to south, perhaps a ladder settlement arrangement, as is implied by the cropmark evidence to the south (Fig 4).

Surviving early ditch systems (BS1)

It likely that parts of the ditch system still in use during the second phase of this sequence (BS2), see below, had an origin contemporary with the ditch systems, BS1, which were only open in the earlier part of this phase (late 1st to early 2nd century AD).

There was a distinct group of early Roman ditch systems to the north and north-east. An L-shaped ditch system [1232/1234], aligned east to west, ran parallel with ditch system BS2, with a southward return to the east, ditch [1198]. A potential western return was perhaps lost beneath the eastern arm of enclosure E4. This ditch system may have formed a sub-enclosure some 30m long but only 8m wide.

Towards its eastern end, the L-shaped ditch [1232] was 1.98m wide and 0.69m deep, with a shallow V-shaped profile (Fig 8, S94). A fill of orange-brown silty clay (1231) was overlain by an upper fill of light brown-orange silty clay (1230). The eastern arm, ditch [1198], was 1.40m wide and 0.60m deep.

To the west there was a length of curving ditch, [874/894] dated to the late 1st-early 2nd century AD, which seems anomalous in plan form to the rectilinear ditches that otherwise characterised this period. This curving ditch, as suggested for the western end of ditch [1232/1234], may have branched from an early ditch running north-south, on the same line as the eastern arm of the later Romano-British enclosure, E4.

To the north-east, a linear ditch system [1237]/[1263], continued northward beyond the excavated area. The ditch was 1.6m wide and 0.70m deep, and had a fill of mid grey-brown silty clay (1262) and mid brown-grey clay silt (1261). The ditch cut a shallow pit [1265], c 2.0m long and 0.20m deep (Fig 8, S102, and Fig 10). To the south the ditch narrowed, to only 0.60m wide and 0.18m deep, where it lay alongside ditch [1198].

There was no indication that this ditch system continued to the south, but some 27m further south there were short lengths of intercut gullies, [1255] and [1271], with terminals to the south, on a similar alignment, with an oval pit [1245] nearby. The gullies had distinctive fills of mid black-grey clay silt, but were only up to 0.19m deep. The northern ends of the gullies were truncated by a modern drain, and they were not observed further to the north, but their presence does suggest that other shallow elements, perhaps forming sub-divisions within the larger boundary systems may have been lost to truncation.

Adjoining the eastern side of ditch [1263/1212] there was a curvilinear ditch [1207], 0.56m wide and 0.18m deep, with a fill of mid brown silty clay (1206). This appears to have formed a sub-enclosure (E2), measuring 14m east-west by 18m north-south, with the terminal [1215] of the curving ditch forming an entrance 3.7m wide. This sub-enclosure was probably in the south-western corner of a larger enclosure or field, where it would have been used for stock control.

This interpretation only makes sense if the unexcavated ditch [1337] continuing eastward at the corner of ditch system of BS2, not investigated as this area was flooded for much of the duration of the excavation, was open during this early phase (Fig 7). However, the long sequence of re-cuts indicates that for most of its lifetime the ditches of BS2 turned southwards, suggesting that this paddock and sub-enclosure may have had a short lifetime in the later 1st to early 2nd century AD.



Ditch [1237], early Roman boundary ditch, BS1, looking south Fig 10

Ditch system BS2

The major part of the later ditch system comprised the northern and eastern arms of an L-shaped ditch system, which was broader to the east with a complex series of re-cuts turning southwards. A narrower ditch running parallel, lay 23m to the south, with a small sub-enclosure (E3) to the west (Fig 7).

The western end of the L-shaped ditch [854] was 2.0m wide and 0.6m deep with fills of orange-grey clay silting layer (851) overlain by brown-grey loam clays (850) and (849). There was a deeper, V-shaped re-cut, ditch [852], which was 1.0m deep, and possibly a broad shallow re-cut, ditch [848], 2.50m wide and 0.50m deep with a fill of brown loam clay (847) (Fig 8, S12).

To the east, an early ditch terminal [1325], was c 2.0m wide and 0.60m deep, with fills of mid grey-brown silty clay (1324) overlain by dark brown-grey clay (1323), which contained a large group of early to middle Roman pottery (Fig 8, S112). The re-cut ditch [1322], was 3.60m wide and 1.10m deep, and the fills of mid grey silty clay (1321) and dark brown-grey clay (1320) also contained large groups of early to middle Roman pottery.

There was a much more complex sequence to the south-east, where ditch system BS2 turned southwards, with smaller ditches re-cut or modified on several occasions. Those to the west, on the inside edge of the turn, were 0.78-1.28m wide, and 0.26-0.50m deep, with fills of dark brown and mid brown-yellow silty clay, and mid orange-grey clay. These ditches [1297, 1299 and 1295] (Fig 8, S108), all terminated to the south [1184 and 1175].

On the outside of the turn, the ditches [1301, 1319 and 1317] all continued southward beyond the limit of excavation. Ditch [1319] was 0.70m wide and 0.28m deep, with a fill of dark brown-grey silty clay (1318), and the re-cut ditch [1317] was 2.15 wide and 0.65m deep with a fill of dark grey-brown silty clay (1316) overlain by dark grey silty clay (1315) and dark grey-brown silty clay (1314). Ditch [1317] contained a large group of early to middle Roman pottery, late 1st to early 3rd century AD. These ditches were overlain by a layer of dark grey-brown silty clay (1293).

Parallel to ditch system BS2, and 23m to the south, there was a linear ditch [810/1177 etc], which was 1.18-1.50m wide and 0.39-0.49m deep, with a consistent sequence of fills along its length comprising grey-orange loam clay (809) overlain by grey-brown loam clay (808). This may have been a subdivision within a larger enclosure defined to the north and east by the L-shaped ditch system of BS2.

To the west a small sub-enclosure (E3), at least 20m long by 14m wide, abutted the northern side of ditch [810] (Fig 7). The defining gully [814] was 0.38m wide and 0.19m deep, with a fill of brown-grey silty clay (813). Internal sub-divisions branching from the eastern [872] and northern [943] arms were similar in character. A piece of samian pottery was recovered from gully [863] to the west.

In the southern corner of the site, ditch [819] was aligned north-west to south-east and a complex of ditches and smaller gullies ran eastward, ditch [856], which was 1.10m wide and 0.36m deep, with a fill of mid black-grey silty clay (855), and gullies [917], [1045], [1048], [915] and [819]. They are broadly contemporary with ditch system BS2, early 2nd to early 3rd centuries AD.

4.4 Roman enclosure (later 3rd to mid 4th century)

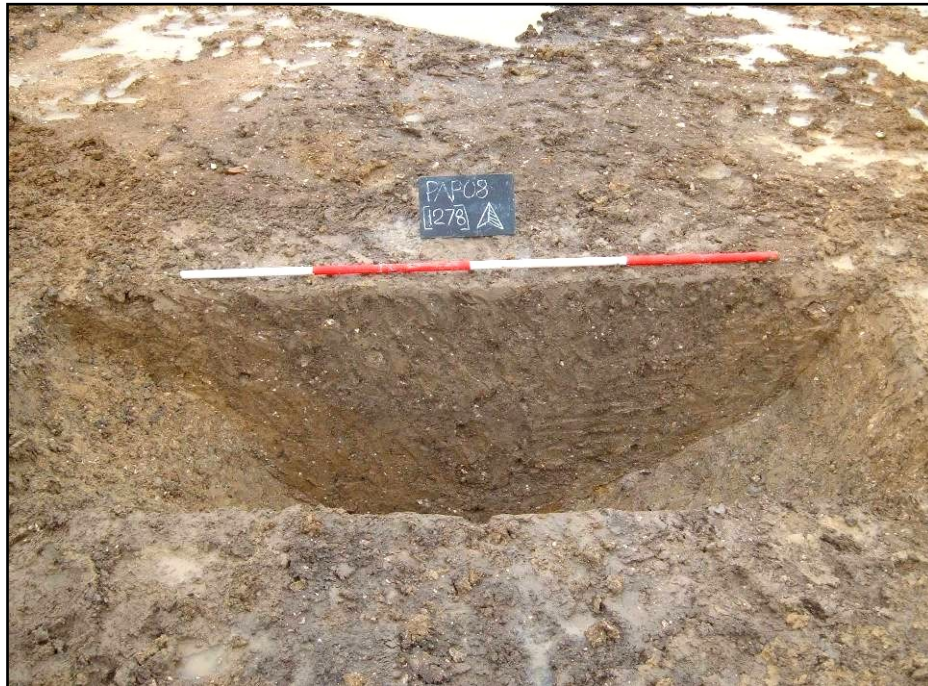
In the later Roman period, probably the later 3rd century or into the 4th century AD, the existing boundary system was replaced by an L-shaped ditch, E4, perhaps the north-eastern corner of a large rectangular enclosure (Fig 7). It appears to have been a completely new arrangement, cutting across two elements of the preceding system, BS2, aligned east-west, but probably respecting and overlying part of an early sub-enclosure, part of BS1. However, the same broad pattern of north-south and east-west alignments was retained, indicating that while it was a new creation it was still set within the existing settlement pattern.

The northern arm, ditch [985] was 1.30m deep and 1.20m wide, with a primary fill of yellow-brown silty clay (984) and a secondary fill of brown silty clay (983) (Fig 8, S41). There was a shallower re-cut, ditch [982], 0.62m deep with a fill of mid grey-brown silty clay, while the final re-cut along the northern edge, ditch [980], was V-shaped, 1.64m wide and 0.92m deep. The primary fill of yellow-brown silty clay (979) was overlain by a secondary fill of mid grey silty clay (978).

The eastern arm was a broad V-shaped ditch [1278], 2.80m wide and 1.07m deep (Figs 8, S106 and Fig 11). The primary fill comprised mid grey-brown silty clay (1277), with a secondary fill of mid green-grey silt (1276) and upper fill of mid grey clay silt (1275).

Towards the western end of the northern arm there was a T-shaped arrangement of gullies. Ditch [955] running south from the enclosure ditch was 0.51m wide and 0.48m deep, with a fill of brown-grey silty clay. The side gullies, gully [807] to the west and [957/965] to the east, were up to 0.70m wide and 0.26m deep but tapering out at either end. They had fills of brown-grey silty clay, containing pottery and animal bone. To the south there was an arc of shallow gully [823], 0.48-0.63m wide and up to 0.18m deep, with a fill of brown-grey silty clay.

To the east of enclosure E4, a line of three postholes, set 5m apart with a single surviving posthole 4m to the west, may have formed a small timber building (Fig 7, PG1). The postholes were 0.29-0.70m in diameter, but no more than 0.15m deep with fills of brown-grey silty clay. One posthole [1192] contained a sherd of late Roman pottery.



Ditch [1278], late Roman enclosure E4, Section 106, looking north Fig 11

The concentration of pottery, animal bone and fragments of tile from features of Roman date suggests that the focus of the Romano-British settlement lay to the south or west of the excavated area. The entire site appears to have been abandoned within the later 4th century.

Undated features

There were a number of features that contained no datable artefacts, but the majority of these, primarily small gullies and a shallow pit, were probably associated with the settlement and date to the middle/late Iron Age and Roman periods.

4.5 Iron Age and Roman pottery by Ed McSloy

Pottery amounting to 1341 sherds (22.94kg) was recovered from 125 separate deposits (Tables 2 and 3).

A total of 272 sherds, weighing 3994g (20.3% of the total sherd count), comprises hand-built Iron Age material. The bulk of the remainder dates to the Roman period, the 1st to 4th centuries AD.

The majority of the pottery was recovered from ditches or gullies (1224 sherds; 91% of the total), with the remainder mostly from pits/postholes (103 sherds or 8%) and with small quantities from layers or unassigned/unstratified contexts.

Methodology

The pottery assemblage was recorded directly to an MS Access database. The assemblage was examined by context, sorted by fabric macroscopically or with the aid of a binocular microscope (x 20), and quantified according to sherd count; weight and rim EVEs (Estimated Vessel Equivalents). Fabrics are defined according to major/secondary inclusion type and/or firing characteristics (Table 2). Full fabric descriptions are contained in the archive. For the Roman assemblage, fabric-type codes of the National Roman Fabric Reference Collection (Tomber and Dore 1998) have been applied where appropriate.

Iron Age pottery

The Iron Age pottery was derived from 47 separate deposits. The majority came from or in the vicinity of the ditched enclosure (E1), partially exposed in the southern part of the site. Some abrasion was noted with the residual Iron Age pottery in Romano-British deposits. The good condition of the group overall is reflected in a mean sherd weight value of 14.7g, a moderately high figure for later prehistoric pottery in the region.

The assemblage comprises material in a range of hand-built sandy or calcareous fabrics (Table 2), all of which is probably local in origin. Identifiable forms comprise mainly jars of rounded/globular, slack-shouldered or barrel-shaped profile and with simple rims. Decoration in any form is uncommon, found only on 26 sherds, 9.4% of the group. Scoring is the most common (19 sherds), occurring in lightly-scribed vertical or diagonal strokes. Three sherds feature regularly-spaced vertical strokes probably executed using a comb. The only other decoration recorded consists of finger ornament to the tops of or below rims, which was noted on five sherds. This can be combined with scoring and may take the form of finger-tip or oblique/radiating fingernail slashes.

Over half of the Iron Age group was re-deposited within Romano-British deposits; 149 sherds, along with later pottery types. The discrete Iron Age context groups were concentrated in the southern part of the site, associated with the ditched enclosure (E1). The largest context group (79 sherds, weighing 888g) comes from ditch [1014] to the east. There is little obvious chronological separation possible for the assemblage based on stylistic traits. A bowl with high, upright rim could be representative of earlier Iron Age activity. Overall, however, there is a lack of the angular vessel forms, incised or 'extensive' finger decoration, or the flint-tempered fabrics which can define early Iron Age styles in the region. The scored and restricted finger decoration and the rounded or barrel-shaped forms are consistent with middle Iron Age scored ware, which characterises pottery across the East Midlands from the 4th to 1st centuries BC (Elsdon 1992). However, regular scoring using a comb appears to be a feature of late Iron Age assemblages, 1st century BC (A Chapman pers comm). There is some evidence for the continuance of hand-built Iron Age type fabrics into the early 1st century AD, the transitional period; and a

channel-rimmed jar (Fig 14, 1) is an example of this, comparing to vessels dating to the mid-1st century AD common from the Ouse and Nene Valleys (Friendship-Taylor 1999).

Table 2: Quantification of Iron Age pottery

Fabric Code	Short description	Sherds	Weight (g)	EVEs
IAGSH	grog/shell	6	69	0.07
IALI	limestone	71	984	0.29
IALlo	Limestone/shell with organic	5	46	0.07
IAQ	quartz	32	568	0.29
IAQf	quartz with flint	1	6	-
IAQLI	quartz/limestone	72	654	0.20
IAQo	quartz with organic	7	60	0.10
IASH	shelly	78	1607	0.46
Total		272	3994	1.48

Roman pottery (including 'transitional' late Iron Age to early Roman)

This grouping accounts for the largest part of the assemblage: 1060 sherds (18.9kg; 16.7 EVEs), from 108 separate deposits. Preservation was poor in some instances, resulting in the partial or total loss of surface slips to some fineware fabrics (Oxford red-slipped ware and Lower Nene Valley colour-coated). The mean sherd weight for the Roman material is at 17.8g, a high figure for a Roman group.

Grogged fabric types and a proportion of the shelly and 'Romanising' sandy wares are characteristic of the late Iron Age to early Roman 'transitional' period, early to mid 1st century AD (Table 3). Regional or continental wares are absent all could have been made locally. Among the later fully Romanised assemblage, reduced and shell-tempered coarsewares dominate, much of which probably originated reasonably locally. Among locally-sourced types are Horningsea greywares and, more commonly, gritty whiteware identifiable with production at Godmanchester, 8km to the north (Evans 2003).

Regionally-traded wares are common only among the later Roman groups (below). Most abundant is Midlands/Harrod shell-tempered, which matches in its fabric and forms pottery from north Bedfordshire (Brown 1994). Other types for which the source is known are the products of the major regional production centres of the Lower Nene Valley, Oxfordshire and Much Hadham, Hertfordshire. Continental imports are restricted to a small group (five sherds) of Gaulish samian.

Table 3: Quantification of Iron Age 'Transitional' and Roman pottery

Fabric Code	Short description	Sherds	Weight (g)	EVEs
Iron Age/Roman 'Transitional'				
BS1r	'Romanising' reduced sandy	54	1168	0.85
BS2	'Romanising' reduced sandy with grog/mudstone	43	618	0.23
BSg	'Romanising' reduced sandy with grog	28	868	0.87
BSs	'silty' black wares	4	39	0.10
GR1	handmade sparse grog	11	145	0.11
GR2	coarser grog with quartz	35	1837	-
GR3	fine grog	60	737	0.40
GR4	fine grog with mudstone	9	94	-
GRq	grog with quartz	23	281	0.32
GRSH	grog with shell	8	52	0.23
Roman: local/unsourced				
BS1	black-sandy	123	1437	2.15
GW1	greyware, grey brown with sparse flint	64	448	0.23
GW2	greyware; finer with sparse quartz	58	766	1.0
GW3	sandy greyware with common flint	90	1070	1.08
GW4	hard, dense greyware	33	363	0.16
GW5	soft greyware with limestone	12	92	0.18
GWfm	greyware, fine, micaceous	2	32	0.07
BBIM	late BB imitations	21	580	0.59
OXc	coarse oxidised	12	102	0.27
OXf	oxidised, fine	13	53	0.10
OXWS	oxidised, white-slipped	2	8	-
BUFFf	fine buff, painted (Nene valley?)	4	80	1.0
WW1	Godmanchester gritty white	84	1339	1.80
WW2	fine whiteware	16	89	0.23
RSH	misc. Roman shelly	77	2012	0.36
Roman: Regional				
HAD OX*	Hadham oxidised	18	152	0.21
HOR RE*	Horningsea greyware	25	2223	-
LVN CC*	Lower Nene Valley colour-coated	39	801	1.91
LVN GW	Lower Nene Valley grey	2	19	-
LVN WHm	Lower Nene Valley whiteware mortaria	2	61	-
OXF RS*	Oxford red-slipped ware	5	116	0.18
HAR SH*	Midlands/Harold shell-tempered	78	1131	2.07
Roman: Imports				
LGF SA*	South Gaulish (La Graufesenque) samian	1	7	-
LEZ SA2*	Central gaulish (Lezoux) samian	3	35	-
EGSA	East Gaulish samian	1	4	-
Total		1060	18859	16.7

*codes match National Roman fabric Reference Collection (Tomber and Dore 1998)

Forms and pottery use

A breakdown of the vessel forms according to generic class indicates that jars are heavily dominant (67.2% by EVEs), with bowls next most common (21.9% by EVEs), followed by flagons (6%), dishes (3.4%) and beakers (1.5%). Mortaria are present, though they occur only as bodysherds with no EVEs value.

Carbonised residues were present only rarely (five sherds), probably as the result of poor surface preservation. In addition, a jar with a bifid rim, exhibits a thick, gummy residue to the underside of its rim (Fig 12). This probably represents a decayed resin or waxy substance, perhaps used as a sealant. Four vessels feature post-firing holes to the base; in three instances the perforations are irregular and probably the result of secondary damage to the bases of vessels originally with multiple perforations and functioning as strainers. More difficult to account for is a butt-beaker copy from the fill (1015) of early enclosure ditch [1019] (E1), with a drilled perforation approximately 15mm in diameter and central to the base.



Residue on the underside of a jar rim, from ditch [868] Fig 12

Stratigraphy and dating

A significant number of context groups (40), typically those of modest size and including only long-lived fabric types or form classes, are only broadly dateable to within the Roman period (later 1st to 4th centuries). The largest quantities relate to the 'transitional' (below) and earlier Roman periods, with late Roman activity, 4th century AD, represented by smaller context groups.

Late Iron Age/early Roman ('Transitional')

Earliest elements are the quantities of wheel-thrown grogged wares, and 'Romanising' sandy fabrics considered to span the early to mid-1st century AD to c AD 70. Additionally, a proportion of the shell-tempered wares belong to this period. Forms are the necked/shouldered bowls with cordons (Fig 14, 2 & 3) associated with Late La Tène/'Belgic' pottery styles in the south-east midlands (Knight 2002). Butt-beaker copies, dating to around the time of the conquest also occur (ditch re-cut [1019], ditch [1164]). The largest groups relate to gully [1319] (25 sherds) and enclosure ditch [1032] (19 sherds) and [1164] (18 sherds). The material in the enclosure ditch and from discrete features, pits [897] and [1127], located in this area, indicate that there was continuity of occupation from the late Iron Age into the Roman period.

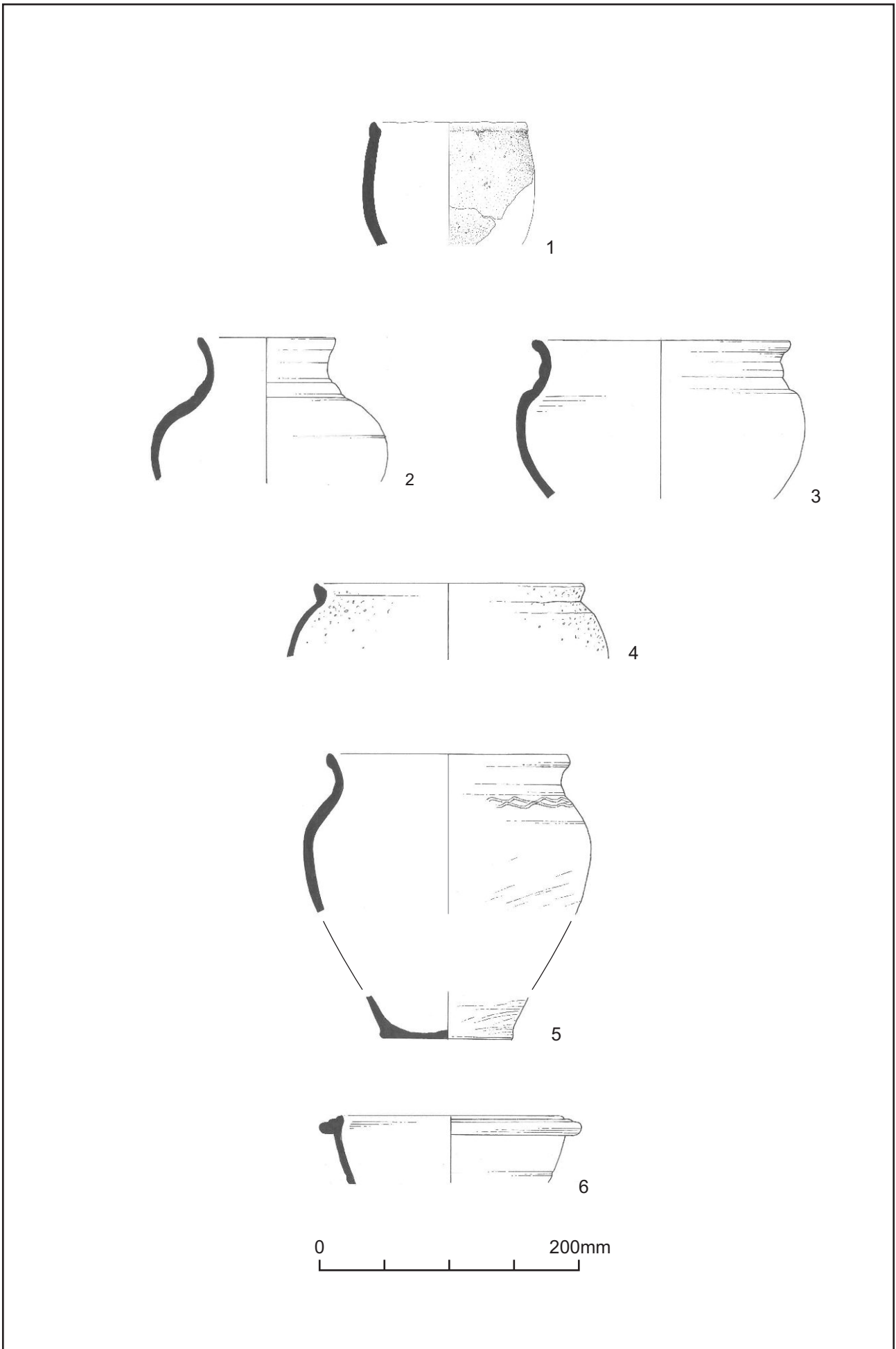
Roman (later 1st to later 2nd/earlier 3rd centuries AD)

Evidence for early or middle Roman activity occurs from individual vessels, some of which are re-deposited and as a small number of larger and discretely-dated groups. The larger groups of this date appear to cluster towards the eastern limits of the site, notably from ditches [1179], [1317], [1322], and pit [1325]. The small group of samian (five sherds weighing 46g) mostly relates to these features, with a single stray find from gully [862]. A scrap from a South Gaulish (form 37) decorated bowl from ditch [1179] (fill 1178) dates to the Flavian/Trajanic, late 1st to early 2nd century AD, although is probably residual in this context. The remainder consists of Central and East Gaulish plain forms. The only identifiable vessel form is a form 38 bowl from gully [862], which should date to the second half of the 2nd century.

Coarsewares among the earlier Roman groups consist of reduced sandy wares, shelly types and Godmanchester type gritty whitewares. Channel-rimmed jars are a feature of the earlier groups, occurring in shell-tempered fabrics (Fig 14, 4) and greywares. The largest earlier Roman group comes from the southern section of the latest enclosure ditch [868] (E4) and amounts to 134 sherds (3229g; 2.14 EVEs). This group is made up primarily of reduced coarsewares which include 24 sherds from a large Horningsea storage jar. Godmanchester whitewares are also well-represented (45 sherds) and include carinated/reeded-rim bowls (Fig 14, 6) and distinctive bifid-rim jars (Fig 12), forms seemingly derived from Verulamium region whiteware prototypes. Antonine (mid or later 2nd century) dating for ditch group [868] would be consistent with dating proposed for the Godmanchester kilns production (Evans 2003) and for that at Horningsea (Evans 1991, 37–8). The single fineware vessel from this ditch group is a bag-shaped/cornice-rim vessel in Lower Nene valley colour-coated ware (Fig 13) which would accord with a mid or later 2nd-century date for the group.



Lower Nene Valley colour-coated, bag-shaped beaker
with cornice rim, from ditch [868] Fig 13



Scales 1:4

Illustrated Roman pottery Fig 14

Later Roman (Later 3rd to 4th centuries AD)

Deposits containing later Roman pottery are for the most part confined to the western half of the site to the south and west of the main enclosure ([1278]/[972]/[985]) and from fills associated with re-cuts of this feature. Quantities are relatively small, with only three deposits with more than 10 sherds (pit fill 1036; gully fill (822) and ditch fill (1176). Gully features [807] (fill 806), [823] (822), [955] (954), [957] (954) and posthole [805] (fill 804) appear to represent a discrete phase of activity probably dating to the mid/late 4th century.

The late groups are characterised by decreased reliance on local wares. Godmanchester whitewares and Horningsea wares are absent; however wheelthrown Black-burnished 'imitation' ware and a proportion of the greywares are probably relatively local in origin. Regional wares comprise shell-tempered wares from north Bedfordshire, Hadham oxidised wares from Hertfordshire, and Oxfordshire red-slipped wares. Lower Nene valley colour-coated wares are also common and occur as the 'coarseware' vessel classes (necked jars/bowls, plain-rim dishes and flanged bowls) which define late production (after c 270/300 AD). A disc-neck flagon in this fabric from ditch fill (825) may date to the 3rd or 4th century (Perrin 1999, 98).

The shell-tempered wares occur as necked jars with undercut/hooked rim, forms associated with production in the second half of the 4th century (Brown 1994). The presence of Hadham oxidised wares similarly points to activity towards the end of the Roman period, this type becoming progressively more common in the course of the 4th century. Identifiable forms in this type are restricted to a bowl in imitation of samian from 36 (ditch fill (1275)); Going 1999, fig 5.55, 112) and a flagon of uncertain type. The Oxford red-slipped wares occur as fineware bowls; among these, a bowl of Young's form C77 from deposit (822) should date after c AD 325 (Young 1977, 164–6).

Pottery use and site status

The 'transitional' and Roman assemblages are largely devoid of the continental imported finewares or specialist wares which might indicate higher status. The samian component is small (0.5% by sherd count), a feature shared with lower status rural settlement sites. 'Status' in the smaller late Roman assemblage is more difficult to assess, however the late Oxford and Hadham finewares do not appear to occur at untypically high levels. Across the assemblage the range of coarse pottery forms reflects largely 'utilitarian' usage with jar/bowl/dish forms expected to have been used for kitchen-related tasks including cooking and storage.

Catalogue of illustrated late Iron Age and Roman pottery

Fig 12 Fabric WW1 (Godmanchester gritty white). Jar with bifid rim. Gummy residue under rim. Fill 865 of ditch 868

Fig 13 Fabric LNVCC (Lower Nene Valley colour-coated). Bag-shaped beaker; simplified cornice rim. Fill 865 of ditch 868

Fig 14

- 1 Fabric IASH (shelly Iron Age). Channel-rim jar (hand-built). Fill 1001 of ditch 1003.
- 2 Fabric BS1r (Sandy, transitional). High-necked bowl with multiple cordons. Fill 1031 of ditch 1032.
- 3 Fabric BS2 (Sandy transitional). Shouldered, necked bowl with cordon. Fill 124 of ditch 1225.
- 4 Fabric RSH (Roman shelly). Channel-rim jar. Fill 1030 of ditch 1032.

- 5 Fabric BSG (Transitional, sandy with grog). Necked jar with scored wavy decoration at shoulder. Fill 1017 of ditch 1032.
- 6 Fabric WW1 (Roman Godmanshester, gritty white). Carinated bowl with reeded rim. Fill 865 of ditch 868.

4.6 Other Roman finds by Ian Meadows, Pat Chapman, Andy Chapman and Tora Hylton

Coins by Ian Meadows

A small assemblage of ten coins was recovered from Roman features or the topsoil. The coins are heavily corroded presumably because of soil conditions being hostile to good preservation. Because of this, the level of identification was hampered, often to the basic observation of the shape of a 4th-century bust on the obverse, and seldom could the legend or even any part of the legend be deciphered. A full catalogue of the coins has been prepared in accordance with English Heritage guidelines (Brickstock 2004), and this is summarised below (Table 4).

Table 4: Roman coin catalogue

Fill/cut (SF No)	Ruler	Date	Size/weight	Comments
832 (final fill)/ 835 (5)	Wear: C/C	4th century	Diam: 9mm Weight: 1.0g	Obv: 4th century bust visible
887/888 (6)	Wear: C/C	4th century	Diam: 15mm Weight: 1.0g	Obv: 4th century bust visible
968/970 (7)	Constantine I Denom: FOLL Wear: SW/SW	310-12 AD	Diam: 22mm Weight: 3.8g	Obv: CONSTANTINVSPFAVG Rev: CONCORDMILIT Mint: LN
927/928 (9)	Constans Wear: C/C	341-46 AD	Diam: 18mm Weight: 1.7g	Obv:]PFAV[VICTORIAEDDAVGGQNN
914/915 (10)	Wear: C/C	4th century	Diam: 12mm Weight: 0.3	
1178/1179 (14)	Wear: C/C	4th century	Diam: 13mm Weight: 1.8g	Obv: 4th century bust visible Rev: Two victories standing facing holding wreath with votive within, legend all however illegible
Topsoil (19)	Constantine I Wear: C/C	330-35 AD	Diam: 14mm Weight: 0.7g	Obv: CONSTANTINOPOLIS Rev: Illeg victory on prow
869/870 (20)	Wear: C/C	4th century	Diam: 15mm Weight: 0.7g	Obv: CONSTAN[
1314/1317 (22)	Wear: C/C	4th century	Diam: 13mm Weight: 1.9g	Obv: 4th century bust visible Rev: Copy of Falling horseman type FEL TEMP REPARATIO
Topsoil (40)	Wear: C/C	4th century	Diam: 16mm Weight: 1.4g	

The coins are all dateable to the 4th century, except for one corroded flan that bore no discernible detail but on the grounds but is of a size that could be either 3rd or 4th

century in date. Only a third of the assemblage could be identified down to coin type and in only one instance could the mint be recognised.

That the whole of the assemblage dates to the 4th century might indicate the period of occupation on the site, however, coin loss in this period was generally greater than the preceding centuries, perhaps reflecting an increasing monetisation of even rural sites, but it may also be an artefact of the inflation.

Ceramic building material by Pat Chapman

Roman ceramic tile

There are nine small tile sherds no bigger than 80mm x 60mm, weighing 616g, from six contexts. Four sherds, between 11mm and 14mm thick, come from curved *imbrex* roof tile made from a hard fine slightly sandy orange fabric. Three thicker sherds made from slightly soft fine orange clay and shellyware, 20mm and 22mm thick, are body sherds, possibly from the flat *tegulae* roof tile. There is a possible sherd of flue tile with the vestigial remains of an adjacent side, also made in a shellyware fabric, although there is no visible combing as the sherd is very worn; the body is 16mm thick, which is generally too thin for a *tegula* and flange.

Fired clay

The whole of this assemblage comprises 78 fragments, weighing 3205g. However, the significant part of this assemblage is the remains of kiln furniture from the fill (1136) of the Iron Age enclosure ditch [1156] (E1). The remains comprise 19 sherds, and 17 lumps plus crumbs, the whole weighing 2721g. Part of the kiln furniture seems to comprise a curved flat plate or ring with a diameter of c 600mm, between 10mm and 25mm thick and at least 90mm wide. The upper surface and the outer edge are smooth, but cracked. There is no indication of ventilation holes, and the size of the sherds suggests some sort of broad plate or surface. The fabric is very hard silty clay with some flint, sub-rounded grit and calcareous material up to 10mm long, fired to orange with a 5mm thick light brown surface. It is attached to lumpy slightly soft, loosely mixed silty orange clay with mixed flint, shell and calcareous material up to 20mm long, which is probably derived from natural clay or subsoil adhering to the base.

The fragmentary nature of its survival makes interpretation difficult. The fact that some of the surviving sherds are attached to looser material suggests that it was placed directly onto the floor of its associated structure. As the fabric is hard, but not overfired, it indicates that it was not subjected to intense or prolonged heat.

The remains of a clay ring were found in a pottery kiln at Caldecotte, Milton Keynes. The upper surface of the ring was 110mm wide, although the diameter was not given. The upper surface and both sides were well finished and smoothed, but it had a rough under surface. The tentative interpretation was that of a spacer or stacking ring (King 1994, 181). This kiln furniture at Papworth Everard may be a clay ring similar to that at Caldecotte, or perhaps the remains of a raised area to form the base of a pedestal. It may have had some other purpose as no kiln bars were discovered to strengthen the pottery kiln argument. Whatever it was, the use was probably short-lived.

The remainder of the fired clay, comprising 42 fragments and weighing 484g, are typically small irregular pieces from 20 contexts. About a third are hard and orange brown and sometimes black, with quite frequent small to large flint inclusions. Another group are typically slightly soft pale brown, and a few comprise very hard orange to white amorphous lumps. A few small fragments have curved or flat surfaces and one has a vesicular surface caused by intense heat.

Slag by Andy Chapman

There is a spherical lump of light grey, vesicular fuel ash slag, weighing 121g, from the fill (1030) of ditch [1032], Iron Age enclosure (E1), and a smaller fragment of grey fuel ash slag, weighing 26g, came from the fill (966) of gully [967], enclosure (E4). This material is from high temperature burning, but is not necessarily derived from metalworking.

In addition, very small quantities of hammerscale were recovered from soil samples from several contexts, but in many of these there is literally a single flake of flat hammerscale, although in others there are several flakes. It is difficult to interpret such a low level and such widely scattered debris. At best it might indicate that some limited and short-term iron smithing had taken place on the site, but the wide scatter might be more consistent with it being accounted for as low-level contamination during sample processing.

Metal objects by Tora Hylton

The excavations produced 21 metal small finds. Of that number, four were recovered by metal detector from unstratified topsoil deposits, while the remainder were located in ten stratified deposits. Finds of Roman date are represented by two brooches, a weight, a hooked fitting, together with twelve nails and four miscellaneous fragments. All datable objects were recovered from unstratified topsoil deposits.

There are Colchester (SF 21) and Hod Hill brooches (SF 38), both recovered from topsoil deposits and displaying signs of excessive decay. The former is incomplete (catch-plate, part of hinge and spring missing), it has a plain bow with oval cross-section, curved profile and a vestige of the catch survives at the base of the bow. Although part of the spring mechanism is missing (three coils and a forward facing hook survive), it is possible to determine that originally there would have been six coils. This brooch displays similarities to an example from Stonea, Cambridgeshire (Mackreth 1996, fig 95, 24). Colchester brooches date to the early 1st century.

The Hod Hill brooch is also incomplete (most of head, catchplate, pin and foot of bow missing). A vestige of the rolled over head, which originally housed the axis bar of the hinged pin, survives. The bow is decorated with a succession of cross-mouldings, like an example from Stonea Camp, Cambridgeshire (Ibid 1996, fig 101, 106). There is a single transverse ridge at the top, then a short panel of vertical ridges with protruding knobs at each end (one missing), beneath which are seven horizontal mouldings narrowing down to the foot (now missing). Hod Hill brooches date to the early mid 1st century.

A lead steelyard weight was also recovered from topsoil. It is biconical in form and a patch of ferrous corrosion indicates that the suspension loop was made from iron. At present the weight weighs 66.3g which equates to 2.4oz; bearing in mind that the piece shows signs of extensive decay, it is possible that originally the weight corresponded to 3 *unciae*.

A hooked fitting from the fill (1030) of ditch [1032] Iron Age enclosure (E1), comprises a solid square-sectioned shank with hooked terminal and may represent part of a wall hook. A total of 12 nails were recorded, they include two hobnails presumably from footwear. Groups of nails were recovered from fill (1182) of ditch [1184] and fill (1256) of ditch [1260], both parts of BS2, while the majority were recovered as individual finds. Where possible the nails have been classified according to Mannings Typology (1985, fig 32). The majority of the nails (seven) did not retain their heads, therefore could not be classified. Identifiable nail types are represented by Type 1b

(three examples) which have a flat sub-circular head; complete examples range in recorded length from 48-70mm. This type of nail is common and would have had numerous applications with wood, for furniture or light structural fixings. The final type represented is Type 8, a dome headed nail (hobnail) for use with shoes (two examples). The head of the hobnails are 8mm in diameter and they are 20mm long.

4.7 Animal bone by Matilda Holmes

A small assemblage of animal bone was recovered from Iron Age and Roman ditches across the site, with fewer bones coming from other features (Table 5). Sample sizes were too small to subdivide into phases, and two major periods will be used: middle-late Iron Age; and Roman (1st-4th century AD).

Table 5: Number of bones and teeth identified to species and/ or element recovered from various feature types

Feature	Iron Age	Roman
Ditch	144	319
Gully	2	5
Pit	-	34
Posthole	-	9
Other	-	4

Methodology

All the animal bones were hand collected, no sieved samples were noted and all fragments were recorded. Due to anatomical similarities between sheep and goat, bones of this type were assigned to the category 'sheep/goat', unless a definite identification using guidelines from Prummel and Frisch (1986) or Payne (1985) could be made. Bones that could not be identified to species were, where possible, categorised according to the relative size of the animal represented (small – rodent /rabbit sized, medium – sheep / pig / dog sized, or large – cattle / horse size). Ribs, vertebrae and skull fragments were not identified to species with the exception of 1st and 2nd cervical vertebrae, sacral elements and occipital and zygomatic areas of the skull.

Tooth wear and eruption were noted using guidelines from Grant (1982) and Silver (1969), as were bone fusion, metrical data (Albarella and Payne 2005; Davis 1992; von den Driesch 1976), anatomy, side, zone (Serjeantson 1996), pathology, butchery (Lauwerier 1988; Sykes 2007), bone working and condition (Lyman 1994) of the bones.

Taphonomy and Condition

The bone assemblage was generally in good condition (Table 6), though subject to considerable fragmentation, with a Fragmentation Index of 0.50 (Iron Age) and 0.43 (Roman) (Holmes and Browning 2011). A greater proportion of fresh breaks and refitted fragments were also observed in the Roman material suggesting that these bones were more friable and liable to breakage upon excavation, although the reasons for this are not clear. The proportion of loose teeth to those remaining in the mandible was similar in both phases indicating the delay in burial, or disturbance post-burial of some of the material. The high proportion of gnawed bones in both phases is also similar and again suggests that bones were not immediately buried following their discard.

Table 6: Condition and taphonomic factors affecting the bone assemblage

Condition	Iron Age	Roman	Taphonomic Factors	Iron Age	Roman
1: Excellent	10	35	Burnt	2%	1%
2: Good	46	143	Butchered	9%	2%
3: Fair	36	94	Gnawed	21%	20%
4: Poor	-	14	Fresh break	5%	22%
5: Very bad	-	-	Refit	6=13	55=187
Total	92	286	Ratio loose teeth: teeth in mandibles	1:1.7	1:1.2

Small numbers of bones showed signs of burning, but they were not routinely exposed to fire, either through processing, cooking or as a means of fuel. A greater proportion of fragments in the Iron Age assemblage bore butchery marks, possibly indicating that they were more heavily butchered, or at least subject to different butchery techniques than in the later phase.

No associated bone groups were noted, and there were no isolated deposits of distinct industrial or craft production.

Iron Age bone

This was a very small assemblage (Table 7) dominated by cattle, although sheep/goats were also frequently recorded. Pigs were the next most common species, though rarely found. A dog mandible and skull fragment, horse radius from a mature animal and a red deer skull fragment were also noted. It is likely that all these species formed part of the diet of those living within the associated settlement, and chop and cut marks on cattle and sheep bones reflect this.

Table 7: Animal species represented (NISF) in the hand collected assemblage

Species	Iron Age	Roman	%
Cattle	66	200	59
Sheep/ goat	36	88	27
Sheep	6	3	-
Goat	-	1	-
Pig	4	14	4
Dog	2	-	-
Horse	1	31	9
Red deer	1	-	-
Domestic fowl	-	1	-
Total identified	116	338	-
Unidentified mammal	27	9	-
Large mammal	81	418	-
Medium mammal	26	82	-
Bird	-	2	-
Large bird	7	-	-
Total	257	849	-

Cattle bones were recorded from all parts of the carcass (Table 8), suggesting that whole animals were processed on site. The sheep assemblage, however, was

dominated by a group of mandibles recovered from fill (2012), ditch [1137] that may represent a deposit of primary butchery waste.

Both the fusion and tooth wear data for the cattle assemblage suggest that there was no large cull of animals until they reached well into maturity – over four years of age, consistent with the use of cattle for secondary products, although there are isolated, unfused bones from juvenile animals less than a year and three years of age. The two mandibles suitable for ageing also came from older animals that produced wear stages of G and I (following Hambleton 1999).

Sheep were generally younger, with no evidence for any older than 28 months in the fusion data. Two of the four tooth wear stages reflected this, coming from animals that died at stages C and E, although the remaining two were from older animals at stage G, that would have been between four and six years of age. This suggests that sheep were of prime importance for meat, rather than wool.

Table 8: Carcass representation (epiphysis only count)

Bone element	Iron Age		Roman		
	cattle	sheep	cattle	sheep	pig
Metacarpal P	-	1	3	2	-
Metatarsal P	3	1	3	2	-
Metacarpal D	-	1	2	2	-
Metatarsal D	1	1	3	-	-
1st phalange *	1	-	3	1	-
2nd phalange *	1	-	1	-	-
3rd phalange *	1	-	2	-	-
Scapula D	2	-	6	1	1
Humerus P	1	1	1	1	-
Humerus D	3	1	10	6	1
Radius P	1	-	11	4	1
Radius D	-	-	4	2	-
Ulna	-	-	1	-	1
Pelvis	3	-	11	1	1
Femur P	-	-	3	-	1
Femur D	-	-	5	-	2
Tibia P	1	-	2	1	-
Tibia D	3	-	7	3	-
Calcaneum	-	-	5	-	-
Horn core	2	-	7	3	-
Skull	-	-	1	-	-
Mandible**	2	8	9	2	3
Zygomatic	2	1	2	-	-
Occipitale	1	-	3	-	-
Atlas	2	-	7	2	-
Axis	2	2	-	1	-
Sacrum	-	-	1	-	-

* count adjusted for frequency bias; ** mandibles with molars or 4th premolar

This assemblage is similar to other rural settlements in the region (Hambleton 1999, 45), although the high number of elderly cattle is unusual. The size of the sample, however, means that this may not be representative of the wider economy.

Roman bone

Slightly more bones were recovered from this phase of settlement (Table 7). The majority were again cattle, followed by sheep/ goat bones. Pigs were more common in this phase, however, as were horse, present in 9% of the assemblage. One bone from a domestic fowl (most likely chicken) was also identified. Again, the sparse butchery marks recorded suggest that this assemblage most likely originated as food refuse, with chop marks on cattle and sheep bones, and a cut on two cattle phalanges most likely the result of skin removal. This is also reflected in the carcass parts recorded: while all parts of the animals are present, indicating they were processed on site, the majority of bones come from the main meat-bearing bones of the fore and hind limbs (Table 8), suggesting that the assemblage was heavily biased towards table and kitchen waste. Indeed, pig bones were all from the upper limbs or head, indicating that these animals were butchered elsewhere – they may even have been bought in as joints of meat.

Table 9: Cattle bone fusion data

Element	Age	U	F
	(months)		
Metacarpal P	0	-	3
Metatarsal P	0	-	3
Scapula	7-8	-	6
Pelvis	7-10	-	11
1st phalange	13-15	-	6
Humerus D	15-18	1	9
Radius P	15-18	-	11
2nd phalange	18	-	2
Metacarpal D	24-36	-	2
Tibia D	24-30	-	7
Metatarsal D	27-36	1	2
Calcaneum	36-42	3	2
Ulna	42	1	-
Femur P	42	3	-
Humerus P	42-48	-	1
Radius D	42-48	-	4
Femur D	42-48	2	3
Tibia P	42-48	1	1
Total	-	12	73

Ageing data from bone fusion suggests that there was a major cull of cattle at around 36-42 months of age (Table 9), with another smaller cull of animals prior to maturity. This was reflected in the tooth wear data, with two mandibles at both stages C and E, and one at stage G. The additional presence of a number of skeletally mature animals suggests that, although animals were important for meat, there was also some call for older animals to provide secondary products such as milk and traction.

Sheep were culled prior to maturity, with all but one animal culled before reaching 36 months in the fusion data (Table 10), and two mandibles at wear stage E, suggesting that the onus was on meat production. Nearly all ageing evidence for pigs came from

juvenile animals with the exception of a mature animal that may have been used for breeding.

Table 10: Sheep bone fusion data

Element	Age	U	F
	(months)		
Metacarpal P	0	-	2
Metatarsal P	0	-	2
Scapula	6-8	-	1
Pelvis	6-10	-	1
Humerus D	10	2	4
Radius P	10	1	3
1st phalange	13-16	-	1
2nd phalange	13-16	-	-
Metacarpal D	18-24	2	-
Tibia D	18-24	-	3
Metatarsal D	20-28	-	-
Ulna	30	-	-
Femur P	30-36	-	-
Calcaneum	30-36	-	-
Radius D	36	1	1
Femur D	36-42	-	-
Tibia P	36-42	1	-
Humerus P	36-42	1	-
Total	-	8	18

The considerable number of horse bones came from all parts of the body, and their presence amongst deposits that were likely the result of domestic food refuse suggests they may also have formed part of the diet. However, there is no direct evidence in the butchery record for this. With the exception of an animal that died before reaching 20 months of age, all horse bones were fused.

The Roman assemblage is broadly similar to other contemporary rural sites from the region (Table 11), both in the relative proportions of animals present, and the animal economy. The presence of 30% or more sheep bones and very low numbers of pig is typical of many un-Romanised, native sites, although the placement of the Papworth assemblage at the lower end of this bracket makes it also comparable with some Romanised rural sites (King 1978, 213; King 1984, 190).

Table 11: Animal bone: Comparative sites from the region

Site (period)	% Cattle	% Sheep/ Goat	% Pig	NISP	Reference
Orton Hall Farm (1st-4th century)	57	40	3	6041	King 1996
Barnack (3rd-4th century)	75	21	4	234	Harman 1993
Orton Longueville (1st-2nd century)	53	41	7	2009	Davis 2001
Prickwillow Rd, Ely (1st-4th century)	58	36	6	649	Deighton 2003
Lynch Farm, Peterborough (3rd-4th century)	82	15	3	419	Wilson 1975
Stonea Grange (3rd-4th century)	45	44	12	2905	Stallibrass 1996
Papworth Everard (1st-4th century)	65	30	5	306	-

Summary

The animal bones recorded at this site are indicative of a number of propositions:

- A number of bones were not buried directly following their discard;
- There were no distinct areas associated with industry or craft, though a single Iron Age deposit of sheep mandibles may indicate the presence of primary butchery waste. The majority of deposits are mixed, consistent with the burial of refuse following butchery, skinning and consumption. The increase in meat-bearing bones in the Roman phase, however, may suggest that some activities took place and were disposed of elsewhere on the site – or that joints of meat were bought in;
- Beef would have been the most commonly eaten meat, followed by mutton, with a small contribution to the diet of pork, and the addition of chicken and possibly horse in the Roman phase;
- Sheep were of prime importance for meat in both phases, and cattle were put to mixed uses, some being culled prior to, or around maturity for their meat, while others were not culled until they had been used for secondary products such as milk or traction.

4.8 Plant remains by Val Fryer

Samples for the retrieval of the plant macrofossil assemblages were taken from across the excavated area and thirty nine were submitted for assessment.

The samples were bulk floated by NA and the flots were collected in a 300 micron mesh sieve. The dried flots were scanned under a binocular microscope at magnifications up to x16 and the plant macrofossils and other remains noted are listed in Tables 12 and 13. Nomenclature within the tables follows Stace (1997) for the plant remains and Kerney and Cameron (1979) and Macan (1977) for the mollusc shells. All plant remains were charred. Modern contaminants including fibrous and woody roots, seeds, chaff and grass were present throughout.

Grains, chaff and seeds of common weeds were present at a low to moderate density within eighteen of the assemblages studied. Preservation was moderately good, although some grains were puffed and distorted, probably as a result of combustion at very high temperatures. The remaining twenty one assemblages contained only charcoal/charred wood fragments or other remains.

Wheat (*Triticum* sp.) grains and chaff were relatively common within the assemblages from ditch [823] (samples 1 and 2) and ditch [957] (sample 3), the late Romano-British enclosure, E4, but in all other instances they occurred as single specimens within an assemblage. Spelt wheat (*T. spelta*) glume bases were particularly common within sample 1. Weed seeds occurred infrequently. Most were of common segetal or grassland taxa including stinking mayweed (*Anthemis cotula*), black bindweed (*Fallopia convolvulus*), medick/clover/trefoil (*Medicago/Trifolium/Lotus* sp.), grasses (Poaceae) and dock (*Rumex* sp.). Charcoal/charred wood fragments were present, often as single pieces, within all but eight of the assemblages studied. Other plant remains were exceedingly scarce, but did include pieces of charred root/stem and a fragmentary indeterminate tuber.

Black porous and tarry residues, all of which were probable residues of the combustion of organic remains at very high temperatures, were relatively common within the assemblage from sample 1, but only occurred as single fragments within a further eleven samples.

Small assemblages of mollusc shells were present within all but three samples. Although most were fragmented and slightly abraded, the contemporaneity of the material with the contexts from which the samples were taken was uncertain. However, all four of Evans (1972) ecological groups of terrestrial molluscs were represented, with open country/grassland species occurring most frequently. A limited number of freshwater obligate taxa were also recorded, with shells of *Anisus leucostoma*, a species commonly found in marshes and ponds prone to seasonal drying, being especially common within samples 11 (Iron Age ditch [1137]), 13 (Iron Age pit [839]), 32 (RB ditch [1322], BS2) and 39 (RB ditch [1263], BS1).

Although many of the assemblages studied are small and very insubstantial, the occurrence of grains and chaff within samples 1, 2 and 3 may indicate that the western edge of the current area was close to a focus of either domestic or agricultural/pastoral activity during the Roman period. This hypothesis is supported by the occurrence of small quantities of grain/chaff within other nearby features, although it is presumed that in these instances, this material was probably accidentally incorporated within the feature fills in the form of scattered or wind-blown detritus. Samples 19 and 20, from ditch fills at the southern limit of the excavation (Iron Age ditch [1137] and [1014]), contained moderate densities of charcoal/charred wood and may represent small deposits of hearth waste.

The remaining assemblages contain little other than charcoal flecks and mollusc shells, the latter possibly indicating that while the local habitat was largely composed of short-turfed grassland, certain features were probably of a sufficient depth to retain some water, although they may have been prone to seasonal drying.

Table 12: Charred plant macrofossils and other remains

Sample	19	20	11	32	1	2	3
Fill	1012	1025	809	1321	822	822	956
Feature	1137	1014	810	1322	823	823	957
Feature Group	Iron Age gullies		RB ditch System BS2		Late RB Enclosure ditch E4		
Cereals							
<i>Triticum</i> sp. (grains)	x	-	-	-	x	x	x
(glume bases)	-	-	x	-	xxx	x	xx
(spikelet bases)	-	-	-	-	x	-	x
(rachis internode)	-	-	-	-	-	x	-
<i>T. spelta</i> L. (glume bases)	-	-	-	-	xx	x	x
Cereal indet. (grains)	x	x	-	-	xxx	x	x
Herbs							
<i>Anthemis cotula</i> L.	-	-	-	-	-	-	-
<i>Fallopia convolvulus</i> (L.)	-	-	-	-	xtf	-	-
Lamiaceae indet.	x	-	-	-	-	-	-
<i>Medicago/Trifolium/Lotus</i> sp.	-	-	-	-	x	-	-
Small Poaceae indet.	-	-	-	-	-	-	-
<i>Rumex</i> sp.	-	-	-	-	xcf	x	-
<i>Tripleurospermum inodorum</i> (L.)	-	-	-	xcf	-	-	-
Other plant macrofossils							
Charcoal <2mm	xxx	xxx	x	-	xx	x	x
Charcoal >2mm	x	x	-	-	-	-	-
Charcoal >5mm	-	-	-	-	x	-	-
Charred root/stem	-	x	-	-	x	-	-
Indet,tuber	-	-	-	-	-	-	x
Molluscs							
Woodland/shade loving species							
<i>Aegopinella</i> sp.	-	-	-	-	-	-	-
<i>Clausilia</i> sp.	-	-	x	-	-	-	-
<i>Ena</i> sp.	-	-	x	-	-	-	-
<i>Oxychilis</i> sp.	-	-	-	-	-	-	xcf
<i>Punctum pygmaeum</i>	-	-	-	-	-	-	-
<i>Vitrea</i> sp.	-	-	x	-	-	-	-
Zonitidae indet.	-	-	-	x	-	-	-
Open country species							
<i>Helicella itala</i>	-	-	-	-	-	-	-
<i>Pupilla muscorum</i>	-	x	-	x	-	-	x
<i>Vallonia</i> sp.	x	-	x	-	-	-	xx
<i>V. costata</i>	-	-	x	x	-	-	xx
<i>V. pulchella</i>	-	-	-	-	-	-	-
<i>Vertigo</i> sp.	-	-	x	x	-	-	-
<i>Vertigo pygmaea</i>	-	-	-	-	-	-	-

Molluscs

PAPWORTH EVERARD, HOSPITAL CAR PARK

Sample	19	20	11	32	1	2	3
Fill	1012	1025	809	1321	822	822	956
Feature	1137	1014	810	1322	823	823	957
Feature Group	Iron Age gullies		RB ditch System BS2		Late RB Enclosure ditch E4		
Catholic species							
<i>Cepaea</i> sp.	-	-	-	-	-	-	-
<i>Cochlicopa</i> sp.	-	-	x	-	-	-	x
<i>Nesovitrea hammonis</i>	-	-	-	x	-	-	-
<i>Trichia hispida</i> group	x	x	-	-	-	-	xx
Marsh/freshwater slum species							
<i>Carychium</i> sp.	-	-	x	-	-	-	x
<i>Lymnaea</i> sp.	-	-	x	x	-	-	-
Freshwater obligate species							
<i>Anisus leucostoma</i>	-	-	xx	xxxx	-	-	x
<i>Armiger crista</i>	-	x	-	-	-	-	-
Sample volume (litres)	40	40	40	40	40	40	20
Volume of flot (litres)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
% flot sorted	100%	100%	100%	100%	100%	100%	100%

x = 1 – 10 specimens xx = 11 – 50 specimens xxx = 51 – 100 specimens xxxx = 100+ specimens
 tf = testa fragment cf = compare

Table 13: Selected samples containing only charcoal and/or other remains and mollusc shells

Sample	10	13	16	17	38	39	22	26	37
Context	808	837	986	989	1261	1262	933	938	1277
Feature	810	839	991	991	1263	1263	936	940	1278
Feature Group	Iron Age ditch & pit		Iron Age ditch E1		RB ditch system BS1		RB ditch system BS2		RB E4
Other plant macrofossils									
Charcoal <2mm	x	-	x	x	x	x	x	x	x
Charcoal >2mm	-	-	-	-	-	-	-	-	-
Charred root/stem	-	-	x	-	-	-	-	-	-
Molluscs									
Woodland/shade loving species									
<i>Oxychilis</i> sp.	-	x	-	-	-	-	-	-	-
<i>Clausilia</i> sp.	-	-	-	-	-	-	-	-	x
<i>Vitrea</i> sp.	x	-	-	-	-	-	-	-	-
Open country species									
<i>Helicella itala</i>	-	-	-	-	-	-	-	x	-
<i>Pupilla muscorum</i>	x	-	x	-	x	-	-	x	x
<i>Vallonia</i> sp.	-	-	x	x	x	-	x	xx	
<i>V. costata</i>	x	xx	-	-	-	x	-	-	x
<i>V. pulchella</i>	-	-	-	-	x	-	-	x	x
<i>Vertigo</i> sp.	-	-	-	x	-	-	-	x	-
<i>Vertigo pygmaea</i>	-	-	-	-	-	-	-	x	x
Catholic species									
<i>Cochlicopa</i> sp.	-	-	-	-	-	-	-	-	x
<i>Trichia hispida</i> group	x	x	x	-	x	-	-	x	x
Marsh/freshwater slum species									
<i>Carychium</i> sp.	x	-	-	-	-	-	-	-	x
<i>Lymnaea</i> sp.	-	x	x	-	x	-	-	xxx	x
Freshwater obligate species									
<i>Anisus leucostoma</i>	-	xx	x	-	x	xxx	-	x	-
<i>Armiger crista</i>	-	-	-	-	x	-	-	-	-
Sample volume (litres)	40	40	30	30	40	40	80	80	40
Volume of flot (litres)	<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%

x = 1 – 10 specimens xx = 11 – 50 specimens xxx = 51 – 100 specimens xxxx = 100+ specimens
 tf = testa fragment cf = compare

4.9 Charcoal by Dana Challinor

Fifteen samples of charcoal retrieved from 10 litre sub-samples of soil were submitted for assessment from the Romano-British farmstead at Papworth Everard, Cambridgeshire (Table 14). The charcoal was scanned under a binocular microscope at up to x45 magnification. Fragments >2mm were considered identifiable and quantified; for larger samples, random fragments were extracted, fractured if necessary and examined in transverse section. This method is reliable for the identification of ring-porous wood, but diffuse porous fragments often require further examination at high magnification (up to x400).

The quantity of charcoal was extremely low, with most samples containing only a few fragments, and only one produced a reasonable assemblage of more than 50 fragments, Iron Age pit [839]. Five taxa were provisionally identified; Maloideae (hawthorn, apple, pear etc.), *Prunus* sp. (cherry/blackthorn), *Quercus* sp. (oak), *Fraxinus excelsior* (ash) and *Rhamnus cathartica* (buckthorn). Some coal was noted.

Table 14: Quantification of charcoal by context

Fill / Cut	Feature Group	Quantity	Identifications
Late Iron Age			
836/ 839	pit	+++	Maloideae, <i>Rhamnus</i> , mostly diffuse
837 / 839	pit	++	Maloideae, <i>Prunus</i>
1025 / 1014	ditch	++	Maloideae rw, <i>Prunus</i>
1013 / 1014	ditch	+	<i>Prunus</i>
1012 / 1137	ditch	++	<i>Fraxinus excelsior</i> , <i>Quercus</i>
Roman			
822 / 823	Late RB, E4	-	+ coal
822 / 823	Late RB, E4	+	<i>Prunus</i> , coal
968 / 970	Late RB, E4	+	Maloideae, <i>Prunus</i> , coal
961 / 963	Late RB, E4	+	Maloideae
1275 / 1278	Late RB, E4	+	Maloideae rw
1044 / 1045	Gully, BS2	+	Maloideae rw
1315 / 1317	Ditch system BS2	+	diffuse, v small
1316 / 1317	Ditch system BS2	+	Maloideae rw
1320 / 1322	Ditch system BS2	+	1 small indet fragment
1321 / 1322	Ditch system BS2	+	<i>Quercus</i>

+ = present; ++ = occasional; +++ = common; ++++ = abundant; r-w = roundwood

Given the paucity of charcoal in most contexts, it is likely that it represents wind-blown material which accumulated in ditches, potentially over time, rather than deliberate dumps of spent fuelwood. The interpretation of the material is therefore limited.

Iron Age pit [839] produced the most reliable assemblages in terms of context type and quantities. However, the provenance of the material from Iron Age gully [1014] and its re-cut [1137] is uncertain; potentially from several events and accumulated over time. Without enough of a range of secure contexts, these deposits are of doubtful use.

The apparent scarcity of oak suggests that fuelwood selection might have been derived from hedgerows or marginal woodland type habitats, but without a range of samples to examine further analysis will not be conclusive.

5 ANGLO-SAXON TO MODERN ACTIVITY

5.1 Anglo-Saxon activity (5th to 9th centuries AD)

Several sherds of Anglo-Saxon pottery, broadly dating to the 5th to 9th centuries AD, were recovered from the upper fill of the re-cut of the 4th century enclosure ditch. The presence of the pottery sherds suggests Anglo-Saxon activity in the general vicinity, although this need not be associated with the settlement, which was probably only visible as a pattern of earthworks in subdued relief at the time they were deposited.

5.2 Anglo-Saxon pottery by Ed McSloy

Nine sherds, weighing 95g (0.19 EVEs) of early/middle Anglo-Saxon pottery was recovered. The group relates to three deposits (829), (968) and (978), all fills of re-cuts of the later Roman enclosure ditch [831] and [970] and located close to a discrete area of late Roman (mid/late 4th-century) activity in the north-western portion of the site. A single Anglo-Saxon fabric was defined, which was probably locally made. Featured sherds are restricted to rims from deposits (829) and (978) probably from the same vessel. The sherds are unabraded and the vessel from deposit (968) exhibits a thick internal carbonised (burnt food?) residue. The fabrics and the vessel form from deposit (829) are consistent with Anglo-Saxon pottery dating across the mid-5th to 8th centuries. Absence of stamped or other decoration precludes closer dating.

5.3 Later features

Medieval or post-medieval furrows, from a truncated ridge and furrow field system, were spaced c 7m apart, and were aligned north to south. The fills were relatively loose, dark soil, similar to the topsoil, and they contained dumps of clinker and modern pottery and glass, mainly dating to the 19th century, suggesting that they were leveled in the 19th or early 20th century.

The site was criss-crossed by a network of ceramic land drains of the 19th and 20th centuries, and a mole plough had also been used to improve the drainage, with deep scars running the length of the site from north to south. A line of pits on the eastern side of the site, some of which were packed with beer bottles and bricks, had probably held the posts of a modern fence line.

5.4 Post-medieval coin

A single illegible penny was recovered from topsoil.

6 DISCUSSION

Further analysis of the pottery and the stratigraphic relationships has allowed a refinement of the phasing of the Iron Age and Romano-British settlement at Papworth Hospital car park. The settlement had an origin in the middle/late Iron Age, certainly the 1st century BC and perhaps even beginning in the 2nd century BC, and continued to the late Roman period, the mid-4th century AD.

Nearby cropmarks recorded by aerial photography as well as evaluation and excavation on the Business Park to the south, show that the excavated elements are just part of a much larger area of settlement, extending at least 470m north-south and at least 300m west to east. However, as the original cropmark plot did not match the excavated features, it has been repositioned to provide the best possible match with the excavated features (Fig 15).

There is also a broader pattern of local settlement from the middle/late Iron Age through to the later Roman period, partially understood through fieldwork at Sommersfield and Papworth Everard bypass to the west, and these settlements relate to other sites, further afield but also lying on the clay uplands, at Cambourne and Scotland Farm, Dry Drayton (Fig 2).

6.1 Cropmarks and excavated evidence

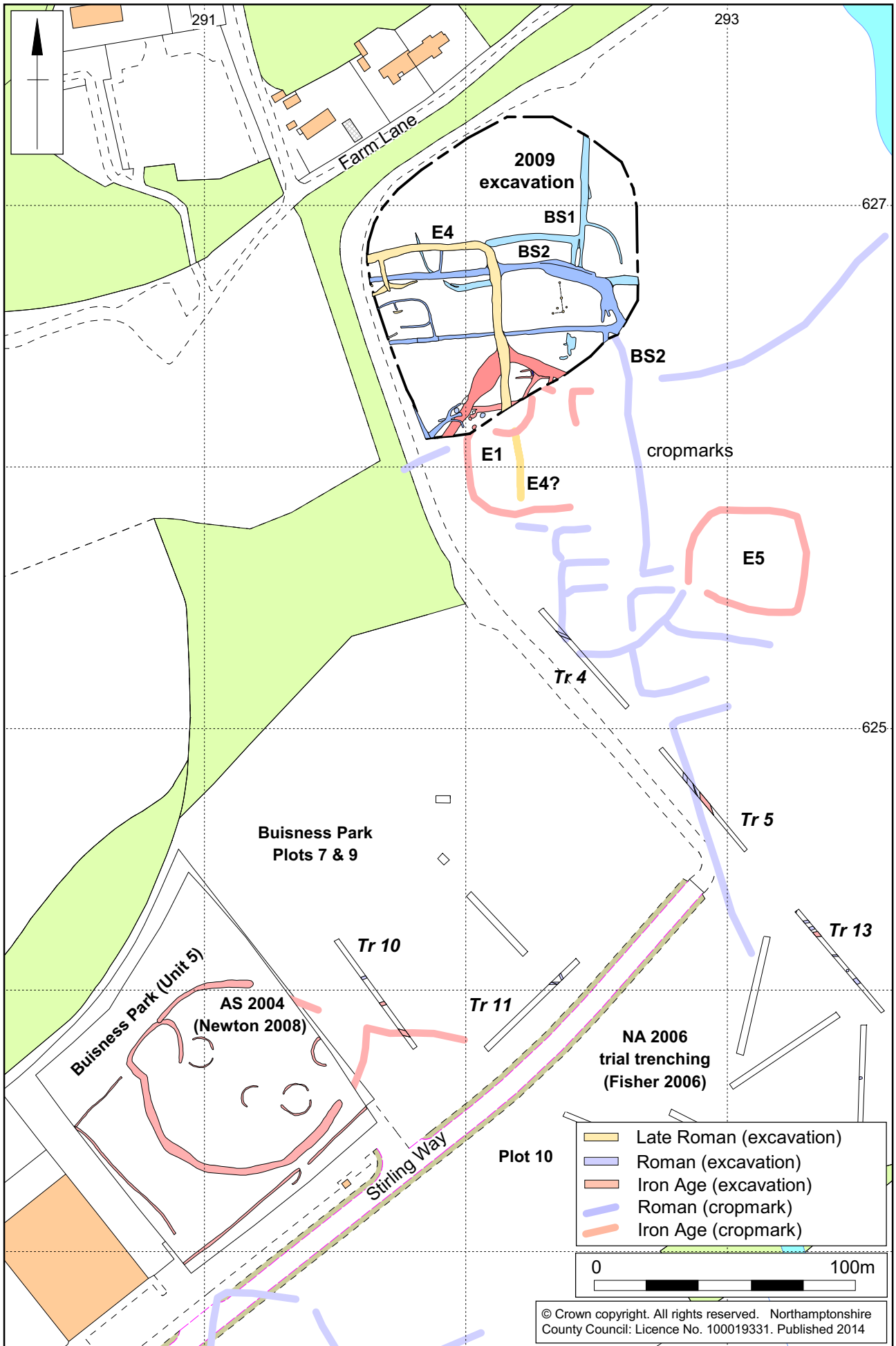
The recorded cropmarks provide a basic outline of the palimpsest of Iron Age and Roman settlement, but the results of trial trenching (Upson-Smith 2008; Fisher 2006; Hallybone and Pole 2007) have all shown a greater density of features than those evident on the aerial photographs alone.

Trial trenching was carried out in 2006 on Plots 7, 9 and 10 of the Business Park (Fisher 2006), lying between the excavations at Papworth Hospital car park to the north and the Business Park (Unit 5) to the south-west (Fig 15). Features possibly corresponding to cropmarks, were found in Trenches 4, 5 and 10, while further archaeological features identified in Trenches 5 and 13 were not visible in the cropmarks. Trench 5 also contained a soil layer which was interpreted as an occupation deposit overlaying a possible structure.

The excavation on the Business Park (Unit 5) revealed a circular enclosure of middle/late Iron Age date, 75m in diameter, with an elaborate access to a north-eastern entrance and containing four roundhouse ring ditches, with a possible stock enclosure to the west (Newton 2008) (Fig 15). There are also further cropmarks to the south of the Business Park (Unit 5) excavations.

While it has been demonstrated that the cropmark evidence does not show all of the surviving archaeology, it is sufficient to define the broad structure of the settlement pattern. The southern arm of the excavated Iron Age enclosure (E1) is recorded, and a possible sub-rectangular enclosure to the south-east, 45m long by 40m wide (E5), might also be Iron Age in date. The circular enclosure to the south, at 75m diameter and containing at least four roundhouses may be the largest of the three probable elements of Iron Age settlement.

This pattern of scattered enclosures was probably replaced in the later 1st century AD by a more structured landscape. The central element appears to be a boundary system aligned north to south, and at least 250m long, which terminates to the north in the ditch complex (BS2) that lies within the excavated area. To the south, multiple ditches at right angles to this boundary may form a series of abutting enclosures, perhaps a ladder settlement arrangement.



Scale 1:2000 (A4)

The Iron Age and Roman landscape Fig 15

6.2 The local and regional landscape

In recent years there has been an increased understanding of settlement on the clay uplands through the Iron Age and Roman periods through the discovery of many more settlements than previously known. Generally, there was an increase in settlement in the region during the middle Iron Age, including an expansion from the river valley onto the clay uplands, with this indicating an increasing population (Wright *et al* 2009). There have been frequent discussions regarding the distribution of Iron Age sites on clay soils in comparison to the gravel soils of the river valleys, but it is difficult to discern any definite patterns when there is a bias in the identification of sites. However, there has now been an increase in excavation opportunities on the clay uplands and a consequent increase in identified sites, which is starting to counterbalance the previous paucity of sites on clay, which resulted from cropmarks not showing up as well as on gravel soils (Wright *et al* 2009).

The height of activity for many of these small rural settlements was during the early Roman period. The nearby Summersfield (Patten 2012) and the Cambourne sites saw a population increase (Wright *et al* 2009), and this may have been related to the receding of water levels that had risen during the middle/late Iron Age and early Roman period (Newton 2008). Around the 3rd century AD there appears to be a decline in settlement (Patten 2013).

In terms of later settlement, the excavations at Cambourne show some Romano-British settlements continuing into the 5th century AD, such as at the Lower Cambourne and Childerley Gate sites, but generally a marked reduction of known settlement sites in the immediate post-Roman period. In a similar fashion to the Papworth Hospital car park site, many Roman settlements have a few finds of Anglo-Saxon age from the subsidence fills of the final Roman ditches, which would have been visible earthworks throughout the Anglo-Saxon period if not levelled by ploughing. The main focus of settlement during the Anglo-Saxon period was on the fen-edge and dry islands (Wright *et al* 2009).

Medieval ridge and furrow cultivation was present at the car park site, indicating that it lay within the former open fields of Papworth Everard village, and truncated furrows have also been uncovered during the other excavations and trial trenching nearby (Hallybone and Pole 2007, Upson-Smith 2008; Hounsell 2007). The medieval core of Papworth Everard was located around St Peter Church.

The prehistoric landscape

There are no records of Neolithic remains in immediate vicinity, so the polished flint axe is an isolated find of its specific type, although there were also a few flint flakes. In the broader area, there was a middle Bronze Age cremation cemetery on Papworth Everard bypass (Gilmour *et al* 2010), and excavations at Summerfield found flints dating to the Mesolithic and limited occupation in the Late Bronze Age/Early Iron Age (Patten 2012). Trial trenching and excavations on the neighbouring business Park revealed residual pottery of possible late Bronze Age/early Iron Age date (Wilson 1999; Hallybone & Pole 2007).

At the Papworth Hospital car park site is a single pottery bowl with early Iron Age characteristics, but this does not necessarily imply that there was early Iron Age occupation on the site, as a single vessel can contain archaic stylistic elements.

It has been suggested that this lack of evidence for Bronze Age and early Iron Age settlement may be a result of sparse population densities and the agricultural practices in the Cambridgeshire claylands (Gilmour *et al* 2010).

The middle/late Iron Age and late Iron Age/early Roman landscape

The first evidence for occupation at the Papworth Hospital car park site is from the middle/late Iron Age, probably the 2nd century BC, and comprised a ditched enclosure with internal features, lying largely to the south of the excavated area. The final filling of the ditch occurred in the 'transitional' late Iron Age/early Roman period, perhaps as late as 70AD, indicating that the existing settlement remained relatively unchanged until some decades after the Roman Conquest.

The archaeological investigation of a circular cropmark to the south-west at Business Park (Unit 5) revealed a middle/late Iron Age settlement of four roundhouses within a circular ditched enclosure, perhaps abandoned due to the rising water table (Newton 2008). A previously suggested relocation of settlement from the Business Park site to the Papworth Hospital car park site because of flooding can be discounted as the hospital site is actually lower lying, and would have had the same environmental problems (Newton 2008). The two sites were probably contemporary and abandonment of the Business Park site may have been for other reasons.

The environmental analysis suggests that there was open country/grassland, but some of the deposits in late Iron Age to early Roman features suggest the presence of seasonal marshes and ponds. This pattern was also suggested as a possibility for sites further south-east, excavated as part of the Cambourne development.

It is possible that the Iron Age settlement at the Papworth Hospital car park was initially open, as the internal features contained pottery dated to the middle/late Iron Age while the main assemblages from the enclosure ditch (E1) are dated to the transitional later Iron Age/early Roman. However, the assemblages from the ditches are probably dating the final filling of the ditch and not its origins, so it remains uncertain whether the enclosure ditch (E1) was an original or a later enclosing of an open settlement.

There are three examples from the Cambourne development of middle/late Iron Age sites. At Knapwell Plantation it was estimated that the settlement was enclosed after two or more generations, and that the settlement at Lower Cambourne was enclosed soon after establishment. At Little Common Farm settlement and enclosure may have been contemporary (Wright *et al* 2009) and at the nearby Business Park (Unit 5) the enclosure and settlement are described as contemporary (Wright *et al* 2009). The two phases of Middle Iron Age settlement revealed at Summersfield, comprised an open settlement replaced by an enclosed settlement (Patten 2012).

The enclosure of previously open settlements has been variously interpreted as a status symbol, as part of social change or a response to environmental changes, perhaps to protect a settlement from rising water levels (Wright *et al* 2009).

The earlier and later Roman landscape

During the early Roman period the Iron Age settlement was replaced with a boundary system with various sub-enclosures, and the cropmarks indicate a continuation of similar boundary systems southward (Fig 15). While fragmentary, the overall appearance is of a ladder settlement, with multiple enclosures and paddocks set along a primary boundary system, in this case aligned near north-south. By the later 3rd century AD this complex system may have been replaced by simpler enclosure system, perhaps denoting contraction and decline, but as only a single element of later enclosure lay within the Papworth Hospital car park site it is uncertain how representative this may be of the broader pattern of later Roman settlement across the adjacent areas.

At the Summersfield site, three phases of late Iron Age/early Roman farmsteads were identified with the fourth phase occurring in the early Roman period, when the Iron Age settlement was replaced. The excavations revealed two farmsteads with a track, thought to have branched off Ermine Street, and 20 ditched enclosures, which were categorized into settlement, horticultural, crop processing and paddocks (Patten 2012). A late Iron Age and earlier Roman boundary system was uncovered during the excavation of the Papworth Everard Bypass. The pottery evidence suggested that it was maintained from the Iron Age into the earlier Roman period. It was thought that the occupation was in the vicinity of the northern end of the second area of excavations (Hounsell 2007).

During the excavation of the Cambourne sites, the majority contained Roman features, and half of these were of late Iron Age origin. However, only one or two sites had evidence of continuous occupation through the Iron Age and Roman periods, the Lower Cambourne site and possibly the Jeavons Lane site (Wright *et al* 2009). The settlement at Lower Cambourne was thought not to have been influenced substantially by the Romans until, perhaps, the late 2nd/3rd century BC when new sub-rectangular enclosures were created. Roundhouses were apparently still in use in these new enclosures, but alongside sub-rectangular buildings (Wright *et al* 2009).

The excavations at the Papworth Hospital car park revealed the north-eastern corner of a later Romano-British enclosure. At Summersfield it was found that the settlement declined during the later Roman period (Patten 2012). Papworth Everard bypass revealed a few ditches of mid to late Roman date, but it was not possible to establish how concentrated the settlement was (Hounsell 2007).

6.3 The Iron Age and Romano-British settlement and its economy

The finds recovered are appropriate for domestic activity on a small, low status, rural farmstead. The late Iron Age transitional pottery and the Roman pottery is indicative of a lower status settlement, as it comprises coarse wares, typically used to cook and store food, with few imported continental fine wares and no more specialist imports, such as mortaria, than would be expected in such a settlement.

The faunal remains suggest a diet comprising cattle, sheep and pig. Horse was, perhaps, also eaten, and dogs were also present. Part of a red deer skull from the Iron Age settlement may have been related to collecting antlers for craft rather than food debris. It is likely that butchery happened on site, a possible deposit of butchery waste was found in Iron Age gully [1137]. The ageing data showed that the cattle were allowed to mature, suggesting that they were used for secondary products before culling, while sheep were mostly kept for their meat.

The animal bone assemblage is similar to that on other rural settlements in the region (Hambleton 1999, 45). There is a higher number of elderly cattle than usual, but given the small size of the sample this may not be representative of the wider economy. However, a similar cattle bone assemblage was found at the Iron Age settlement at the Business Park (Unit 5) site, where it was suggested that the animals were kept for their secondary products. Also sheep/goat, small amounts pig, horse and dog were found with some butchery possibly taking place on site (Newton 2008). The Cambourne sites produced a similar assemblage of cattle sheep/goat and pig. Cattle bones were mostly of more mature animals and, unlike the Papworth Hospital car park assemblage, there were few juvenile sheep/goat animals butchered (Wright *et al* 2009). At Summersfield cattle, sheep/goat, pig, horse and poultry were identified (Patten 2012).

During the earlier and later Roman phases, cattle and sheep were still consumed, but there was an increase in pig and horse, also possibly chicken, an assemblage broadly similar to other contemporary rural sites from the region. Butchery and skinning of cattle and sheep was still taking place on site, but some butchery and disposal also happened elsewhere, either another part of the site or off site. Ageing data suggests the same pattern of culling, with cattle used for milk and traction and sheep mostly for meat. Pig, however, was probably butchered off site. Pig bones, similarly to sheep, indicated that they mostly were bred for meat with the occasional pig allowed to mature for breeding purposes.

At the Cambourne site it was found that cattle was predominant, followed by sheep/goat while pig was rarely present, and horses were thought to be unimportant (Wright *et al* 2009). The Summersfield bone assemblage suggested a similar consumption in meat of beef, mutton, poultry and a similar increase in pork (Patten 2012).

There was very little evidence of crop growing/processing at the Papworth Hospital car park site. Soil samples from later Roman features from the western edge of the site were the only ones containing small amounts of, probably windblown, cereals. Similarly, very little evidence of agriculture was found on the Business Park (Unit 5). At Summersfield evidence of crop processing was found in the Roman period, generally a mixed economy with specialist crop processing (Patten 2012). At the Papworth Hospital car park site the small enclosures within the boundary system were probably at least partly in use as paddocks for animals.

At the Iron Age site of the Business Park (Unit 5) evidence was found of smithing and iron-working within a possible industrial area, within a roundhouse gully and a pit. There was no evidence of smelting, so iron objects were brought in through trade and were only repaired or recycled on site (Newton 2008). There is no sound evidence that iron smithing played any part in the economy of the Papworth Hospital car park site at any time, as the very small quantities of hammerscale recovered from a few soil samples could be a result of sample contamination.

6.4 Conclusion

The partial excavation of the Iron Age and Romano-British settlements at the Papworth Hospital car park has provided a story broadly similar to that obtained from other excavations in the area. A decade ago very little was known about Iron Age and Romano-British settlement of the clay uplands around Papworth Everard. It had been thought that the gravel terraces were the favoured location for settlement.

Recent excavations, including the Papworth Hospital car park site, have shown that there was gradual settlement of the clay uplands beginning in the Bronze Age, and expanding rapidly through the middle and late Iron Age to reach a peak in the early to middle Roman period. There was an apparent decline already in progress prior to the end of the Roman occupation. There is a little evidence of the Anglo-Saxon settlement, and then a resurgence of use in the medieval period following the Norman Conquest.

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