



Northamptonshire County Council

Northamptonshire Archaeology

Late Iron Age and Romano-British settlement at

Papworth Everard, Hospital Car Park

Cambridgeshire

November 2008 to January 2009

Assessment report and updated project design



Simon Carlyle and Paul Kajewski

September 2009

Report 09/124

Northamptonshire Archaeology

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QUALITY CONTROL

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Approved by	Andy Chapman		

OASIS REPORT FORM

PROJECT DETAILS		OASIS No 72802
Project name	Papworth Everard, Hospital Car Park, Cambridgeshire	
Short description	<p>The earliest artefact from the excavation was a polished Neolithic flint axe, recovered from an Iron Age ditch. Settlement on the site commenced in the middle/late Iron Age, with continuous occupation extending into the 4th century AD. The focus of the early settlement (middle/late Iron Age to mid 1st century AD) appears to lie in the field to the south of the site, with the northern corner of an enclosure, bounded by a large ditch, extending into the excavated area. Pits, ditches and gullies, some of which were cut by the enclosure ditch, and the significant quantities of pottery and bone from this area, suggest habitation nearby. Parts of a contemporary boundary system, probably demarcating fields or paddocks, lay to the north-east of the enclosure. In the early Roman period a regular boundary system was established over the earlier settlement. A small sub-enclosure within one of the enclosed areas suggests that they were probably used to hold livestock and that the settlement's economy was largely pastoral. In the late Roman period the boundary system was replaced by a large enclosure. The site appears to have been abandoned in the 4th century AD, although sherds of pottery in the upper fills of the enclosure ditch suggest activity in the vicinity during the early/middle Saxon period. Medieval or post-medieval furrows extended across the site from north to south.</p>	
Project type	Excavation	
Site status	-	
Previous work	DBA (Slatcher 2007); Trial trench evaluation (Upson-Smith 2008)	
Current land use	Arable	
Future work	None	
Monument type/ period	Late Iron Age and Romano-British rural settlement	
Significant finds	Neolithic polished flint axe; Iron Age, Romano-British 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	52921 26275	
Height aOD	52.5-50.8m	
PROJECT CREATORS		
Organisation	Northamptonshire Archaeology (NA)	
Project brief originator	Cambridgeshire County Council	
Project Design originator	Dan Slatcher, RPS Planning and Development	
Director/Supervisor	Paul Kajewski (NA)	
Project Manager	Simon Carlyle (NA), Dan Slatcher (RPS)	
Sponsor or funding body	Varrier Jones Foundation	
PROJECT DATE		
Start date	24th November 2008	
End date	30th January 2009	
ARCHIVES	Location	Content
Physical	NA store	Pottery, 3 boxes; animal bone, 6 boxes; other, 4 boxes
Paper	NA store	Drawings, 21 sheets; 5 BW films; 180 colour slides; 4 archive boxes
Digital		Photographs
BIBLIOGRAPHY		
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OASIS ID: northamp3-72802

Project details

Project name	Papworth Everard, Hospital Car Park, Cambridgeshire
Short description of the project	The earliest artefact from the excavation was a polished Neolithic flint axe, recovered from an Iron Age ditch. Settlement on the site commenced in the middle/late Iron Age, with continuous occupation extending into the 4th century AD. The focus of the early settlement (middle/late Iron Age to mid 1st century AD) appears to lie in the field to the south of the site, with the northern corner of an enclosure, bounded by a large ditch, extending into the excavated area. Pits, ditches and gullies, some of which were cut by the enclosure ditch, and the significant quantities of pottery and bone from this area, suggest habitation nearby. Parts of a contemporary boundary system, probably demarcating fields or paddocks, lay to the north-east of the enclosure. In the early Roman period a regular boundary system was established over the earlier settlement. A small sub-enclosure within one of the enclosed areas suggests that they were probably used to hold livestock and that the settlement's economy was largely pastoral. In the late Roman period the boundary system was replaced by a large enclosure. The site appears to have been abandoned in the 4th century AD, although sherds of pottery in the upper fills of the enclosure ditch suggest activity in the vicinity during the early/middle Saxon period. Medieval or post-medieval furrows extended across the site from north to south.
Project dates	Start: 24-11-2008 End: 30-01-2009
Previous/future work	Yes / No
Any associated project reference codes	PAP08 - Sitecode
Any associated project reference codes	ECB3028 - Museum accession ID
Type of project	Recording project
Current Land use	Cultivated Land 3 - Operations to a depth more than 0.25m
Monument type	SETTLEMENT Middle Iron Age
Monument type	SETTLEMENT Late Iron Age
Monument type	SETTLEMENT Roman
Monument type	RIDGE AND FURROW Medieval
Significant Finds	POLISHED FLINT AXE Neolithic
Significant Finds	POTTERY Iron Age

**Project
bibliography 1**

Publication type	Grey literature (unpublished document/manuscript)
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**IRON AGE AND ROMANO-BRITISH SETTLEMENT AT
PAPWORTH EVERARD, HOSPITAL CAR PARK
CAMBRIDGESHIRE**

NOVEMBER 2008 TO JANUARY 2009

Assessment Report and Updated Project Design

Abstract

Between November 2008 and January 2009, Northamptonshire Archaeology excavated part of a middle/late Iron Age and Romano-British farming settlement near Papworth Everard, Cambridgeshire. 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 from the excavation was a polished Neolithic flint axe, recovered from an Iron Age ditch. Settlement on the site commenced in the middle/late Iron Age, with continuous occupation extending into the 4th century AD. The focus of the early settlement (middle/late Iron Age to mid 1st century AD) appears to lie in the field to the south of the site, with the northern corner of an enclosure, bounded by a large ditch, extending into the excavated area. Pits, ditches and gullies, some of which were cut by the enclosure ditch, and the significant quantities of pottery and bone from this area, suggest habitation nearby. Parts of a contemporary boundary system, probably demarcating fields or paddocks, lay to the north-east of the enclosure. In the early Roman period a regular boundary system was established over the earlier settlement. A small sub-enclosure within one of the enclosed areas suggests that they were probably used to hold livestock and that the settlement's economy was largely pastoral. In the late Roman period the boundary system was replaced by a large enclosure, the north-east corner of which lay within the excavation area. The site appears to have been abandoned in the 4th century AD, although sherds of pottery in the upper fills of the enclosure ditch, broadly dating to the 5th to 9th centuries AD, suggests activity in the vicinity during the early/middle Saxon period. Medieval or post-medieval furrows, which appear to have been levelled in the 19th or 20th century, 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.

1 INTRODUCTION

1.1 Site location and project background

Between November 2008 and January 2009, Northamptonshire Archaeology (NA) carried out the excavation of part of a middle/late Iron Age and Romano-British farming settlement at Papworth Everard, Cambridgeshire (site centred on 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 vicinity.

The mitigation strategy was set out in the Archaeological Project Design issued by RPS (Slatcher 2008). This assessment report and updated project design has been 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).

1.2 Topography and geology

The excavation area, which covers approximately 0.7ha, is 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 the site c 0.4km to the west (Fig 1).

The site is 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, c 150m east of the site, are two balancing ponds, fed by a small stream.

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/GeoIndex/index.htm>). The overlying soils belong to the Hanslope Soil Association (411d), comprising slowly permeable calcareous clayey soils (SSEW 1983).

1.3 Historical and archaeological background

A review of existing archaeological information within a c 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); their locations are shown in Figure 1.

To the west of Ermine Street, at Summersfield, a Bronze Age pit and associated gullies (MCB17287) were investigated prior to development, and late Bronze Age/early Iron Age activity was encountered in the south-west corner of Papworth Business Park (CB14640; Kenny 1999). A fragment of a Bronze Age rapier was recovered from the topsoil at the eastern end of the development (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, forthcoming) has revealed a complex of fields, small enclosures, fence lines and ring ditches, linked by drove ways, 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 Romano-British agricultural settlement and activity (Upson-Smith 2008).

In the 1st century AD, a major road (Ermine Street) was built to link the Roman fort at Godmanchester (*Durovigutum*), c 10km to the north-west of Papworth Everard, with Braughing 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 Saxon pottery was recovered from the current excavation area. 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; this was confirmed by the current excavation which found no evidence for medieval activity on the site, other than furrows, which may be medieval or post-medieval in date. 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).

1.4 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. Initially, the

spoil was removed from the site in 25-tonne dumpers and stored in an allocated area to the east of the site. However, due to wet weather and poor ground conditions a revised strategy had to be adopted to avoid rutting and damage to archaeological deposits. This entailed off-hiring the dumpers and using a D-6 Dozer in conjunction with the 360° excavator to complete the site strip. In selected areas the 360° excavator was used to excavate sections in 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 up 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 generally half-sectioned, or fully sectioned if features were part of recognisable structures, contained deposits or artefacts of particular value or were likely to hold significant artefact or environmental assemblages. Intersections were investigated to establish stratigraphic relationships. Representative sections of linear and curvilinear features were sample excavated away from intersections with other features or deposits, to obtain unmixed samples of material. 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 have been 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.

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 all aspects of 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 EXCAVATION RESULTS

2.1 Site summary

At present, three provisional phases of activity associated with the settlement have been identified, based on an assessment of the pottery and stratigraphic relationships (Fig 2). The archaeological remains were generally well-preserved, although ploughing had caused significant truncation in places, particularly at the southern end of the site.

A polished Neolithic flint axe, the earliest artefact recovered from the excavation, was found near the base of an Iron Age ditch. Settlement on the site commenced in the middle/late Iron Age, with continuous occupation extending into the 4th century AD (Fig 2). There was some evidence, in the form of pottery sherds in the upper fill of a 4th century enclosure ditch, of Anglo-Saxon activity at the northern end of the site.

The focus of the early settlement (middle/late Iron Age to mid 1st century AD) appears to lie in the field to the south of the site, with the northern corner of an enclosure, bounded by a large ditch, extending into the excavated area. Pits and gullies, some of which were cut by the enclosure ditch, and the significant quantities of pottery and bone from this area, suggest habitation nearby. Parts of a contemporary boundary system, probably demarcating fields or paddocks, lay to the north-east of the enclosure. In the early Roman period a more regular boundary system was established over the earlier settlement. A small sub-enclosure (E3) within one of the enclosed areas suggests that they were probably used to hold livestock and that the settlement's economy was largely pastoral. In the late Roman period the boundary system was replaced by a large enclosure that extended to the south and west. There was no structural evidence for domestic dwellings within the excavated area, although the quantity of pottery, animal bone and other finds suggests domestic occupation close-by. The distribution of small finds, primarily Roman coins, and industrial debris is shown in Figure 3.

Medieval or post-medieval furrows, which appear to have been levelled in the 19th or 20th century, 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 (not shown in figures). 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.

The subsoil, which sealed the archaeological remains, was intermittent and varied in thickness between 0.1 and 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.

2.3 Neolithic

A polished Neolithic flint axe was found in the basal fill of a middle/late Iron Age ditch (D1014), along with a small quantity of animal bone. Middle/late Iron Age pottery was recovered from overlying fills. The axe may originally have been found locally and used as a tool or kept as a curio or talisman. There was no evidence for Neolithic activity on the site and there are no records of Neolithic remains in immediate vicinity.

2.4 Iron Age settlement (middle/late Iron Age to 1st century AD)

The earliest evidence for settlement on the site dates to the middle/late Iron Age and was located close to the southern edge the excavation area. It comprised two ditches (D882 and D1014), c 1.2m wide and up to 0.7m deep (Fig 4), several gullies and a cluster of pits (PG1; Fig 5). Middle/late Iron Age hand-built pottery, broadly dating from the 4th to 1st centuries BC, was recovered from these features, along with animal bone and a polished Neolithic flint axe from one of the ditches (see Section 2.3). These features, and the finds recovered from them, suggest domestic activity on a small, rural farmstead, the focus of which is probably located in the field immediately to the south of the excavation area.

Towards the end of the 1st century BC or in the early 1st century AD, the farmstead was enclosed by a large ditch (D1223), the northern corner of which extended into the excavation area (E1). The ditch measured between 3-4m wide by up to 2.2m deep and had been recut on at least two occasions. Part of a kiln plate suggests pottery manufacture on the site. Parts of a contemporary boundary system, probably demarcating fields or paddocks, lay to the north-east of the enclosure. This was defined by a large ditch (D1232) that was aligned east to west and measured approximately 38m long by 2.5m wide by 0.8m deep. At its eastern end it joined a smaller north to south aligned ditch (D1265), which became increasingly shallow towards its southern end, where it was truncated by a later ditch (D1322). An adjoining curvilinear ditch (D1207) formed a small enclosure (E2), possibly a livestock pen, on the eastern side of D1265. Ditch D976 formed a curving boundary to the west of ditch D1232.

2.5 Romano-British boundary system (mid 1st to late 3rd century AD)

In the early Roman period, the Iron Age enclosure and boundary system was replaced by a more regular boundary system, containing a small sub-enclosure or pen (E3), suggesting that they were probably used to hold livestock. The fields were partly defined by two parallel ditches (D810 and D936) that were aligned east to west and measured approximately 1.0m wide and up to 0.7m deep. On the eastern side of the field system there was a large curvilinear ditch (D1322) and an arrangement of smaller ditches that had been recut or modified on a number of occasions. In the south-west corner of the site, ditch D819 probably forms part of the same field system.

A cluster of postholes on the eastern side of the site may be the remains of a small timber building (PG2). The concentration of pottery, animal bone and fragments of tile from Roman features suggests that the focus of the Roman settlement lay to the south or west of the excavation area.

2.6 Romano-British enclosure (late 3rd to 4th century AD)

In the later Roman period, probably in the late 3rd to mid 4th century, the field system was replaced by a large enclosure (E4) with a rounded north-east corner. The enclosure ditch (D831) ranged in width between 1.8m and 3.4m, measured up to 0.9m deep and extended beyond the excavation area to the south and west (Figs 6 and 7). The ditch had been recut on at least one occasion. There was no evidence for buildings or other structures, in the form of pits, postholes and beam slots, within the enclosure except for several small ditches and a posthole close to the northern edge of the enclosure that may be associated with domestic activity in this area. The entire site appears to have been abandoned towards the end of the 4th century.

2.7 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 recut of the 4th century enclosure ditch, at the northern end of the site. 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.

2.8 Undated features

There were a number of features that contained no artefactual dating evidence, 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.

2.9 Later features

Medieval or post-medieval furrows, spaced c 7m apart, extended across the site from north to south. They were filled with relatively loose, dark soil, very similar to the topsoil, and they contained extensive dumps of clinker and modern (mostly 19th century) pottery and glass, suggesting that they were levelled in the 19th or early 20th century.

The site was criss-crossed by a network of 19th and 20th century ceramic land drains 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, were probably the remains of a modern fence line.

2.10 Quantification of the site archive

Site records

Plans: A2 sheets at 1:100: **7**

Sections: A2 sheets at 1:10 and 1:20: **14**

Contexts: **536** on individual *pro-forma* record sheets

Supporting records: **61** on individual *pro-forma* record sheets

Colour slides: **180**

Black and white: **5** films

Finds

Pottery (boxes): **3**

Animal bone (boxes): **6**

Tile, shell, fired clay (boxes): **1**

Worked stone (boxes): **1**

Small finds (boxes): **2** (small)

Environmental and dating samples

Bulk soil samples (20-40 litres): **39**

3 FINDS ASSESSMENT

3.1 Worked flint by Yvonne Wolfram Murray

In total, five pieces of worked flint were recovered as residual finds from Iron Age and Roman contexts. The assemblage included four flakes, of which two were broken, and a polished flint axe.

In general, the condition of the flakes was good with little post-depositional edge damage. The raw material of three pieces was vitreous flint of a light to mid greyish-brown colour; the other was of opaque mid brownish-grey flint. Cortex or a heavy white patina was present on the dorsal surfaces of the flints.

A complete polished flint axe was recovered as a residual find from the basal fill (1013) of a late Iron Age ditch, 1014. It measured 126mm long, 51mm wide and 29 mm thick. Post-depositional edge damage was minimal and one side exhibited slight patination. The axe was manufactured from an opaque brownish-grey granular flint. The piece had thin, flattened edge facets, up to 4mm wide, on either edge and around the butt end and both sides were flattened as a probable aid to hafting. The axe had been utilised, as indicated by small chips concentrated on one side of the cutting edge.

The polished flint axe is characteristic of the Neolithic, whereas the remaining pieces of worked flint could not be assigned to a date.

3.2 Pottery by Ed McSloy

Introduction

Pottery amounting to 1,417 sherds (22.48kg) was recovered from 124 separate contexts. A total of 255 sherds, weighing 3,534 grams (18% of the total assemblage according to sherd count) comprised handmade material of Iron Age type. The bulk of the remainder dated to the Roman period and included material dating to between the 1st to the 4th centuries AD. A small group of 7 sherds (104g) has been provisionally identified as of Anglo-Saxon type and dateable to the 5th to 9th centuries AD.

The majority of the pottery was recovered from ditches or gullies (1,226 sherds; 86.5% of the total), with the remainder mostly from pits/postholes (132 sherds or 9.3%), and with small quantities from layers or unassigned/unstratified.

Methodology

The pottery was scanned by context and quantified by sherd count and weight. As an additional measure, vessels identifiable to form (mostly rim sherds) were recorded for each context by fabric. A list of fabrics present within each context and context dating, expressed as a *terminus post quem*, were also recorded. The whole assemblage was entered on to a MS Access database. Recording was undertaken under the supervision of the author by Angela Aggujaro.

Iron Age and Anglo-Saxon fabrics have been broadly grouped according to major inclusion type (Appendix 2). For the Roman assemblage fabric type codes of the National Roman Fabric Reference Collection (Tomber and Dore 1998) have been applied where appropriate. Otherwise fabric codes devised for this assessment follow Tomber and Dore's fabric coding format.

Assemblage range and variety

Iron Age

Pottery of Iron Age type amounts to 255 sherds (3,534g) and was recovered from 48 separate deposits. The entire assemblage relates to ditch fills, the majority seemingly from or in the vicinity of Enclosure E1. The largest groups were from ditch D1014 (93 sherds), ditch 1003 (D882) (18 sherds) and ditch D1223 (24 sherds).

The Iron Age assemblage comprised handmade material in shell, quartz or organic-tempered fabrics (Appendix 2). The condition of this material is typically good and reflected in a mean sherd weight value of 13.8g, which is moderately high for a group of this period and not suggestive of high levels of disturbance.

Identifiable vessel forms among the Iron Age group consist of slack-shouldered, rounded and barrel-shaped jars. Incidence of decoration is restricted to fingertip impressions to the rim uppers (noted from deposits 881 and 1012) and scoring, noted with sherds from deposits (1004, 1025, 1136, 1157 and 1221). The forms and decoration represented and the absence of angular-profiled and other forms of earlier Iron Age type, suggests that the assemblage dates to the middle to late Iron Age, between the 4th to 1st centuries BC.

Roman

The Roman assemblage (incorporating for convenience types associated with the late Iron Age to early Roman transition) amounts to 1155 sherds (18.8kg), recovered from 101 separate deposits. Surface preservation was poor in some instances, resulting in the partial or total loss of slips characterising some fineware fabrics (OXF RS; LNV CC, SA). The mean sherd weight value for the Roman material is at 16.3g, a moderately high figure for a Roman group. There is however a number of instances of probable contamination where sherds in later Roman types occur within otherwise soundly earlier (1st or 2nd century) groups. A possible cause of intrusiveness is the furrows cutting across the site.

'Transitional' late Iron Age/early Roman

Evidence for activity spanning the late Iron Age to early Roman transition (the early to mid 1st century AD) was recovered as quantities of wheel-thrown grogged or sandy wares (fabrics GROG, GROGQ) occurring as 'Belgic' style vessel forms. Forms comprised necked jars or bowls with a smaller number of probable butt-beaker copies (deposits 857 and 895). Larger groups relating to this period include 16 sherds from Enclosure E1 ditch 1032 (D1232), and 19 sherds from ditch 1164 (D1232). The presence of 'transitional' material from the fills of Enclosure E1 and from pits (features 839 and 859, part of PG1) located to the south suggest the continued use or 'visibility' of this feature.

Roman (later 1st to 4th centuries AD)

The remainder of the assemblage consists of fully Romanised material dating after c 70 AD. It comprises mainly utilitarian reduced (LOC GW, LOC RE) and shell-tempered wares, much of which probably originates reasonably locally (Appendix 2). Types for which the source is known with more certainty include greywares from Horningsea, Cambridgeshire (HOR RE); the products from the major regional production centres of the Lower Nene Valley (LNV CC, LNV RE, LNV SC); Oxfordshire (OXF RS); Much Hadham, Hertfordshire (HAD OX) and Harrold, Bedfordshire (HAR SH). To this list might be added whiteware products (GOD WH) almost certainly produced at Godmanchester, approximately 8km to the north. Forms in this fabric compare to examples associated with excavated kilns (Evans 2003) and include reeded-rim bowls (deposit 865) and jars with distinctive bifurcated rims (deposits 867, 1224 and 1315). Continental imports are restricted to a small group (5 sherds) of

Gaulish samian and a single sherd of amphora, probably of southern Gaulish (Gauloise flat-based series) type.

A relatively narrow range of forms is represented with jars dominating, followed by utilitarian type dishes and bowls. Lower Nene Valley wares provide most of the non-utilitarian forms including a disc-rim flagon (deposit 825) and bag-shaped/cornice-rim (deposit 865) and indented beakers (deposit 1256) each in colour-coated ware and mortaria sherds in whiteware (deposits 993 and 1298). Fineware bowls occur in samian as sherds from decorated Drag. 37 (deposit 1178) and plain, flanged Drag. 38 forms (deposit 862); and in Oxford red-slipped ware as samian-derived Young C49 and C51 (deposits 1275, 969) and necked Young C79 forms (deposit 822).

Chronological indicators are provided primarily by forms among the traded wares and also by the probable Godmanchester products. The latter are clearly influenced by the repertoire of the Verulamium region potters and probably date before the late 2nd/early 3rd centuries. Date markers occur rarely among the local-type coarseware fabrics, examples of which include conical flanged bowls in reduced wares (deposit 1276) which imitate forms in Black-Burnished ware and date after c. AD 250. Also notable in this respect are sherds (ditch fill 1025) from a channel-rimmed jar in shell-tempered fabric ROM SH, a form common from the Nene and Ouse valleys and typically dating before the 3rd century. The Lower Nene Colour-Coated Valley wares include bag-shaped beaker forms (deposit 865), probably dating to the mid/late 2nd century. The majority of identifiable forms in this fabric are the 'coarseware' classes which characterise production after c. AD 270 and include examples of wide-mouth jars (deposits 804, 978, and 1224), conical flanged bowls (956) and plain-rimmed dishes (824). Evidence for the Later Roman period is also provided by Oxford red-slipped wares, all of which date after c. AD 240 and incorporating forms (bowl C75 from deposit 822) known to date after c. AD 325 (Young 1977). Additional indications of dating to the mid/late 4th century are examples of distinctive jars with undercut rims in fabric HAR SH which are common from this period across a wide area of central England (Brown 1994) and also, probably, as sherds of Hadham oxidised fabric HAD OX, a type progressively more common in the course of the 4th century.

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). In terms of quantities and on the basis of the chronological markers outlined above, the emphasis within the assemblage is with the earlier Roman period, the later 1st to 2nd/early 3rd centuries. The majority of the larger pottery groups relate to this period, including material from deposits 865, 867, 1030, 1224 and 1314 (each over 50 sherds), and it can probably be suggested that the construction and first use of enclosure features succeeding Enclosure E1 relate to this period.

Late Roman pottery (later 3rd to 4th century) occurs in relatively small quantities, though reasonably discretely from features across the western portion of the site. Material of this date occurs as small groups (to a maximum of 18 sherds), including from ditch 1278 (fills 1225/26), gully features 807 (fill 806), 823 (822), 955 (954), 957 (954) and posthole 805 (fill 804). The gully

and posthole appear to represent a discrete phase of activity, almost certainly dating to the features mid/late 4th century.

Pottery use and site status

The range of forms represented reflects largely 'utilitarian' usage with jar/bowl/dish forms expected to have been used for kitchen-related tasks including cooking and storage. There are no clear indications of higher or otherwise special status as perhaps might be indicated by greater incidence of fineware or amphora types. Indications of pottery use were recognised in the form of carbonised and other residues. One vessel, a jar in fabric GOD WH from deposit 1314, exhibited a thick, gummy residue to the underside of its rim. This probably represents a decayed resin or waxy substance, perhaps used as a sealant. A number of vessels featured post-firing holes to the vessel base. In one instance, to a butt-beaker copy from deposit 1015, the hole was small (approx. 15mm) and clearly drilled. In three further instances the perforations are larger and irregular. In such instances the larger holes may be the result of secondary damage to the bases of vessels originally with multiple perforations and functioning as strainers.

Anglo-Saxon

A small group of Early to Middle Anglo-Saxon pottery (7 sherds weighing 104 grams) was recovered from two deposits 829 and 968 associated with re-cuts of the main enclosure (D831, re-cuts 931 and 970). In both instances the Anglo-Saxon sherds were found in association with presumed residual Roman pottery. Perhaps significantly the Anglo-Saxon pottery was located in the north part of the site close to a discrete area of late Roman (mid/late 4th century) activity noted above.

The only featured sherds come from deposit 829 and consist of a rim sherd from a globular jar with slightly everted rim in a handmade coarse quartz-tempered fabric. Material from deposit 968 consisted of body sherds in a hard, black-firing fabric with organic inclusions. In the absence of stamped or other decoration close dating is not possible. The fabrics and the vessel form from deposit 829 are consistent with Anglo-Saxon pottery from the area. However in the absence of stamped or other decoration only broad dating in the mid 5th to mid 9th centuries AD range is possible. The sherds are unabraded and the vessel from deposit 968 exhibits a thick internal carbonised (burnt food?) residue.

3.3 Ceramic building material and fired clay 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 context (1136) ditch 1137 (see Fig 3). 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. The reverse side is 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 over-fired, 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 is hard, and heated to 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.

3.4 Slag by Andy Chapman

There is a spherical lump of light grey, vesicular fuel ash slag, weighing 121g, from the fill (1030) of a ditch 1032, and a smaller fragment of grey fuel ash slag, weighing 26g, came from the fill (966) of gully 967. 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. In many of these there is literally a single flake of flat hammerscale, while in others there are several. The material is from: (804), pit 805; (808), ditch 810; (822), gully 823; (838), pit 839; (987), ditch 991; (1261) and (1262), ditch 1263; (1314), ditch 1317; and (1320) and (1321); ditch 1322 (see Fig 3).

It is difficult to interpret such a low level and such widely scattered debris, but it would seem to indicate that some iron smithing had taken place on the site.

3.5 Metal objects by Tora Hylton

In total, the excavations produced 21 metal small finds dating from the Roman to post-medieval period. Of that number four were recovered by metal detector from the topsoil, 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.

Roman finds

The brooches, both of which were recovered the topsoil and display signs of excessive decay, are represented by Colchester (SF 21) and Hod Hill types (SF 38). 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 (3 coils and a forward facing hook survive), it is possible to determine that originally there would have been 6 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. 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 was recovered from the fill (1030) of ditch 1032. It comprises a solid square-sectioned shank with hooked terminal and may represent part of a wall hook. A total of 12 nails were recorded, including two hobnails presumably from footwear. Groups of nails were recovered from ditches 1184 (fill 1182) and 1260 (fill 1256), 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 measured 8mm in diameter and they measure 20mm in length.

3.6 Roman and post-medieval coins by Ian Meadows

A small assemblage of ten Roman coins and a post-medieval penny was recovered by hand excavation or by the use of a metal detector from Roman features or from the topsoil. The coins are heavily corroded and their general condition is considered poor. Because of this the level of identification was hampered, often to the basic observation of the shape of a 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 is presented in Appendix 3.

The coins were all dateable to the 4th century, except for one corroded flan that bore no discernable detail but on the grounds of size 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.

The coins from stratified deposits came almost solely from the 4th century enclosure ditch (D831) or from the upper fills of earlier Roman features that had largely silted up or been backfilled (see Fig 3). Coin loss in this period was generally greater than the preceding centuries, perhaps reflecting an increasing monetisation of even rural sites.

The post-medieval penny, which was recovered from the topsoil, was illegible.

4 ENVIRONMENTAL ASSESSMENT

4.1 Animal bone by Matilda Holmes

Introduction

The animal bones were recovered from Iron Age and Roman contexts. They were present in greatest numbers (88%) from ditches, the rest came from gullies, pits, postholes and root bowls.

Methodology

Bones were recorded in a full catalogue. 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 (Amorosi, 1989; Silver, 1969), 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. All the animal bones were hand collected, no sieved samples were noted and all fragments were recorded. Contextual dating was available, and the bones recorded in line with this.

Taphonomy and condition

The bones were generally in good to fair condition but extremely fragmentary, 232 fragments were conjoined to make 70 larger pieces of bone. This was reflected in the proportion of fresh breaks in the assemblage (22%), and may indicate a poor burial medium that led to the bones becoming friable and easily broken, yet leaving the surface of the bone well preserved. Most of the conjoins came from bones that had recently broken, rather than being the result of a high degree of post depositional movement.

There was little evidence for burning, only 4 bones showed signs of burning, all of which came from roman contexts. There was a greater quantity of gnawing, nearly a quarter (24%) of the bones had been chewed by dogs, indicating that a large number had been buried shallowly, or left on the surface of the ground, within easy access of dogs.

Basic description of findings

Table 1 shows the number of bones identified to species for each of the periods in the database. Unfortunately sample sizes are very small if phased in such a way, so broader categories may be more useful.

The range of species recovered is summarised in Table 1, of which the main domesticates (cattle, sheep / goat, pig, horse and dog) predominate, along with chicken and red deer. The state of fusion was recorded for over half the assemblage, and a number of mandibles were complete enough to be used to calculate wear stages. Metrical data was rather sparse, given the highly fragmented nature of the assemblage.

Table 1: Animal bone; species represented by period

Species	Iron Age	Roman	Iron Age/Roman	Unphased
Cattle	64	183	12	27
Sheep / Goat	35	73	11	13
Sheep	7	2	-	1
Goat	-	1	-	-
Pig	5	13	-	1
Horse	-	30	-	5
Dog	2	-	-	1
Red Deer	1	-	-	-
Chicken	-	-	-	1
Total	114	302	23	49

4.2 Plant remains by Val Fryer

Introduction and method statement

Excavations in advance of construction at Papworth Everard, undertaken by Northamptonshire Archaeology (NA), recorded a number of ditches, pits, post-holes, gullies and other discrete features of mid/late Iron Age and Romano-British date. Samples for the retrieval of the plant macrofossil assemblages were taken from across the excavated area and 39 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 x 16 and the plant macrofossils and other remains noted are listed in Appendix 4. Nomenclature within the appendix 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.

Results

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 ditches 823 (Enclosure E3) and D957, but in all other instances they occurred as single specimens within an assemblage. Spelt wheat (*T. spelta*) glume bases were particularly common in the sample taken from ditch 823. 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 ditch 823 (Enclosure E3), 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 in samples from ditch 1137 (D1014), pit 839 (PG1), ditch D1322 and ditch 1263 (D1265).

Conclusions

Although many of the assemblages studied are small and very insubstantial, the occurrence of grains and chaff within samples from ditches 823 (Enclosure E3) and D957 may indicate that the western edge of the current area was close to a focus of either domestic or agricultural/pastoral activity during the Romano-British 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 from ditch fills at the southern limit of the excavation (ditch D1014), contain 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.

4.3 Charcoal by Dana Challinor

Fifteen samples of charcoal retrieved from 10 litre sub-samples of soil were submitted for assessment from the late Iron Age and Romano-British farmstead at Papworth Everard, Cambridgeshire. 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 results of the assessment are given in Table 2. The quantity of charcoal was extremely low, with most samples containing only a few fragments, and only one producing a reasonable assemblage of more than 50 fragments (context 836, 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 2: Quantification of charcoal by context

Date	Fill	Cut	Feature type	Quantity	Identifications
Roman	822	823	ditch	-	+ coal
Roman	822	823	ditch	+	<i>Prunus</i> , coal
Roman	968	970	ditch	+	Maloideae, <i>Prunus</i> , coal
Roman	961	963	ditch	+	Maloideae
LIA	836	839	pit	+++	Maloideae, <i>Rhamnus</i> , mostly diffuse
LIA	837	839	pit	++	Maloideae, <i>Prunus</i>
Roman	1044	1045	gully	+	Maloideae rw
Roman	1012	1137 (1014)	ditch	++	<i>Fraxinus excelsior</i> , <i>Quercus</i>
MLIA	1025	1014	ditch	++	Maloideae rw, <i>Prunus</i>
MLIA	1013	1014	ditch	+	<i>Prunus</i>
Roman	1315	1317	enclosure ditch	+	diffuse, v small
Roman	1316	1317	enclosure ditch	+	Maloideae rw
Roman	1320	1322	ditch	+	1 small indet fragment
Roman	1321	1322	ditch	+	<i>Quercus</i>
Roman	1275	1278	enclosure ditch	+	Maloideae rw

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

Results of the charcoal assessment

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. Even if further charcoal were recovered in additional processing of soil, the interpretation of the material would be limited. The fact that much of the charcoal was identified as diffuse porous species, rather than oak, means that there would be potential for radiocarbon dating, with the proviso that some might be intrusive.

Four contexts, 836 and 837 from pit 839 (PG1) and 1012 and 1025 from ditch D1014, produced enough charcoal to suggest that further processing might yield useful quantities. Pit 839 produced the most reliable assemblages in terms of context type and quantities. However, the provenance of the material from ditch D1014 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 in this assessment 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 SUMMARY OF POTENTIAL AND PROPOSALS FOR ANALYSIS

5.1 Review of 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, Roman 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.

5.2 Revised research objectives

The assessment has demonstrated that the excavation has produced sufficient evidence to broadly attend to the original research objectives, as outlined in Section 5.1 above. This is with the exception of the environmental objectives, where assessment of the soil samples has shown limited potential, due to the small size of the assemblages. However, a comparative environmental study can be made with other Romano-British rural settlements in the area.

Three provisional principal phases of settlement, dating from the middle/late Iron Age through to the 4th century AD, have been identified. Further analysis of the pottery and feature relationships may define further phases in due course, enabling a detailed picture of how the settlement developed throughout its period of occupation. The use of radiocarbon dating to determine the period of initial settlement on the site has to be discounted due to recognised problems in calibrating Iron Age dates.

A greater understanding of the site may be achieved through the accurate plotting of cropmarks to establish the extent and layout of the settlement, with reference to the findings of previous fieldwork in the surrounding vicinity. However, the excavation demonstrated that the correlation between plotted cropmarks and archaeological features was relatively poor, with furrows and

modern land drains being incorporated into the plotted settlement layout. Any attempt at understanding the settlement based on cropmark evidence must therefore be treated as fairly speculative.

In the light of the excavation and subsequent assessment, it is now possible to revise the original generic research objectives and focus on specific aspects of middle/late Iron Age and Romano-British social, cultural and economic activity associated with the settlement remains on the site. However, it should be borne in mind that although a large part of the settlement was excavated, the major part, including areas of habitation, has not been investigated in any detail and parts examined by the earlier evaluation (Fisher 2006) were heavily truncated by modern activity. Understanding the function of the site and its relationship with its agricultural hinterland is therefore limited to a certain degree. Nonetheless, there is still plenty of scope to examine the role of the settlement in the local middle/late Iron Age and Roman agricultural system.

With reference to regional research frameworks (Brown and Glazebrook 2000; Gurney 2002), the revised research objectives are listed below.

- i. The settlement will be set in the context of the local and regional middle/late Iron Age and Roman 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, where recommended, of the artefactual and environmental evidence. The Cambridgeshire HER will be consulted to assist in this task.
- ii. 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 Roman agricultural system.
- iii. 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.
- iv. With the assistance of 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. The distribution of the pottery, animal bone and other finds will be plotted to identify, where possible, areas of domestic and industrial activity.

5.3 Proposals for further analysis

Worked flint

The Neolithic axe should be illustrated, otherwise no further work is recommended.

Pottery

Although modestly-sized, the pottery assemblage is of significance at a local and regional level, providing evidence for site continuity across the late Iron Age to Roman periods and limited evidence for activity into the post-Roman period. Aspects of the larger Roman assemblage are noteworthy, in particular the evidence for pottery supply in the earlier Roman period and the distribution of whitewares known to be produced at the small town of Godmanchester.

The Iron Age assemblage is small, and presents limited scope for analysis. Additional work is recommended with this material aimed primarily at its characterisation and the systematic cataloguing of variation relating to fabric and form. A report detailing variation and relating this to chronology should be produced to publication standard, to be supported by recording to the minimum standards identified by the Prehistoric Ceramic Research Group (1997).

Assessment of the larger Roman assemblage demonstrates that there is good potential to assist with defining the internal chronology of the site. To facilitate this and to maximize potential for examining aspects of pottery supply and use it is recommended that the assemblage is recorded to the standards recommended by the Study Group for Roman Pottery (SGRP 1994). Accordingly, recording should include quantification to fabric (sherd count and weight) and vessel form, using rim sherds and measurement of rim percentage (Rim EVEs). Additionally the recording of attributes such as sooting or use wear will permit investigation of vessel use and when tied to form, inform wider aspects of site use and relative status. The final analysis of the pottery would benefit from structural analysis in order to better separate enclosure and other feature groups.

It is recommended that a small and representative selection of the Iron Age and Roman pottery is drawn, with emphasis placed on material forming larger and discrete groups or pieces of intrinsic interest.

Little further analysis is possible or recommended with regard to the small group of early to middle Anglo-Saxon pottery. The featured sherds (1 vessel) should be drawn and the fabrics fully described for publication. It is possible however that the further recording recommended for the late prehistoric assemblage might, in combination with stratigraphic analysis, identify additional material of this type. The carbonised residue would be suitable for radiocarbon dating if desired and this might refine the dating suggested.

Ceramic building material and fired clay

Due to the small size of the assemblage, no further work is recommended on this material, although the assessment should be included in the final report.

Metal objects

No further work is required for the metal objects. The assessment and catalogue of metal objects should be included in the final report.

Roman coins

The poor state of preservation of the coins means further work, including conservation measures, would not yield any further information. The assessment and Roman coin catalogue should be included in the final report.

Animal bone

This assemblage is very small, particularly given the time span covered. Even if only the Roman phase is considered, the sample size is still rather small (302 identified fragments) given the 400 years of deposition. The species recorded are typical of domestic waste for the Iron Age to Roman period, but the size of the assemblage will limit its usefulness to little more than a note of which species were present.

Although there is little potential for a detailed analysis of the assemblage, further investigation of species representation and mortality profiles from Roman phases should be carried out for the final report, to provide a complete record of the assemblage available for others to use for comparison purposes.

Plant remains

With the exception of the sample taken from ditch 823 (Enclosure E3), none of the assemblages contain a sufficient density of material (i.e. 100+ specimens) for quantification. As analysis of a single sample in isolation would contribute little to the overall interpretation of the site, no further work is recommended. However, a summary of this assessment should be included within any report or publication of data from the site.

Charcoal

Pit 839 (PG1) has some potential, with further processing, to provide a greater species list; the assessment suggests that a variety of diffuse porous and shrub type wood was used. However, any examination of fuel use would be limited to a single feature and is of little interpretative use. Unless this feature is deemed of especial significance by the excavator, no further work is recommended.

6 REPORTING AND PUBLICATION PROPOSALS

A client report, combining the results of this study with those of other archaeological fieldwork projects in the immediate area, will be prepared and distributed in accordance with the instructions set out in the project design (RPS 2008). A summary note with a general plan will be submitted to CBA Eastern England for inclusion in their archaeological notes section and the client report will be entered on to the Archaeology Data Service (ADS) through OASIS. It is tentatively proposed to publish the report in a future volume of the *Proceedings of the Cambridgeshire Antiquarian Society*.

The synopsis provided below will form the basis for both the full report and the report digest prepared for final publication.

Title page
Contents
Acknowledgements
Abstract

INTRODUCTION

Project background
Aims and objectives
Topography and geology
Archaeological and historical background
Excavation strategy

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Late Iron Age enclosure and boundary system (late 1st century BC to mid 1st century AD)
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Iron Age pottery
Fired clay
Other finds
Environmental evidence
Animal bone
Plant remains
Charcoal

ROMANO-BRITISH SETTLEMENT

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Romano-British enclosure (late 3rd to 4th century AD)
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Fired clay and ceramic building material
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Metal objects
Roman coins
Environmental evidence
Animal bone
Plant remains
Charcoal

ANGLO-SAXON ACTIVITY

Anglo-Saxon pottery

DISCUSSION

BIBLIOGRAPHY

APPENDICES

7 STORAGE AND CURATION

A microfilm copy of the site archive and narrative will be made to RCHME standards and submitted to the National Archaeological Record. The final report will be uploaded onto the Online Access to the Index of Archaeological Investigations (OASIS) and will include the OASIS summary form and reference number.

The site archive will comprise all written, drawn and photographic records, and all material finds and processed sample residues recovered from the excavation. The site archive will be accompanied by the research archive, which will comprise the text, tabulated data, the original drawings and all other records generated in the analysis of the site archive. The archive will be fully catalogued and stored to the requirements of the Cambridgeshire Museum Service. It will not contain material requiring special curation. The location for the long-term storage of the site archive has yet to be arranged.

8 RESOURCES AND PROGRAMMING

8.1 Work completed

Work completed to-date includes the consolidation of the site archive, finds and environmental sample processing, assessment of structural evidence, finds and ecofacts, and the preparation of the interim report and assessment report and updated project design.

8.2 Proposed work and completion dates

Tasks	Personnel	Timetable*
Structural site narrative	Simon Carlyle	May 2010
Pottery	Ed McSloy	April 2010
Animal bone	Matilda Holmes	April 2010
Illustrations	NA drawing office	July 2010
Integration of specialist reports	Simon Carlyle	June 2010
Report digest and discussion	Simon Carlyle	June 2010
Editing	Andy Chapman	July 2010
Preparation of research archive	Simon Carlyle	Aug 2010

**Subject to approval of this document by the end of January 2010.*

8.3 Key personnel

The key personnel associated with carrying out the tasks detailed in section 8.2 are as follows:

Simon Carlyle	Senior Project Officer (NA)
Ed McSloy	External specialist, Roman pottery
Andy Chapman	Senior Archaeologist (NA)
Matilda Holmes	External specialist, archaeozoologist

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APPENDIX 1

Summary of features and contexts

Abbreviations

F flint; P pottery; T tile; Fc fired clay; B animal bone; c coin; sf small find (details in **Comments** column); M mid; L late; IA Iron Age; RB Romano-British; C century

Context no.	Feature type	Notes	Date of pottery	Finds
801	Topsoil	Coins (2), brooch		c sf
802	Subsoil			
803	Natural substrate			
804 [805]	Post hole		C3/4	P
806 [807]	Ditch	Fe tool	C1/2	P B sf
808 809 [810]	Ditch		C2 RB	P B P B
811 [812]	Post hole			
813 [814]	Gully	Part of group 941		
815 [816]	Ditch		C3/4	P
817 818 [819]	Ditch		IA	P
820 [821]	Modern gully			
822 [823]	Gully	Part of group 941	C1/2	P B
824 825 [826] 827	Gully		C3/4 C3	P P
829 830 [831]r 832 833 834 [835]	Main enclosure ditch	Coin, 4th C	IA C3/4	P B P B B c B
836 837 838 [839]	Pit		LIA	P B
840 [841]	Ditch	Fe nails (2).	RB	P B sf
842 [843] 844 845 [846]r	Ditch			B
847 [848]r 849 850 851 [852]r	Ditch		?	P B
853 [854]	Ditch			
855 [856]	Ditch		RB	P B
857	Pit		RB	P B

PAPWORTH EVERARD, HOSPITAL CAR PARK

Context no.	Feature type	Notes	Date of pottery	Finds
[858] 859				
860 [861]	Furrow			
862 [863]	Gully	Part of group 941	C1/2	P
864 865 [866] 867 [868] 869 [870]	Main enclosure ditch	Fe object Coin, 4th C	RB C1-4 C2	P B P B B sf P B c
871 [872]	Gully	Part of group 941		
873 [874]	Ditch		RB	P
875 [876]	Gully			
877	Fill	Fill of [874]		B
878 879 [880]r 881 [882]	Ditch		IA IA	P B P
883 [884]	Gully	Part of group 941	RB	P
885 [886]	Ditch			
887 [888]	Ditch	Coin, 4th C	C3/4	P B c
889 [890]	Enclosure ditch		RB	P B
891	Fill	Fill of [880]		
892	Fill	Fill of [882]		
893 [894]	Gully			
895 896 [897]	Pit/ terminus		RB	P
898 [899]	Gully terminus		RB	P
900 [901]	Gully			B
902 [903]	Ditch		IA/RB	P B
904 [905]	Gully			
906 [907]	Gully		RB	P B
908 909 [910]	Ditch			B
911	Fill	Fill of [903]		
912 [913]	Furrow			F
914 [915]	Gully	Coin, 4th C	RB	P T B Fc c
916 [917]	Gully		RB	P B
918 [919]	Gully	No visible relationship with [921]		
920 [921]	Gully	No visible relationship with [919]	RB	P
922 [923]	Ditch			
924	Fill	Fill of [923]		
925	Ditch			

PAPWORTH EVERARD, HOSPITAL CAR PARK

Context no.	Feature type	Notes	Date of pottery	Finds
[926]				
927 [928]	Main enclosure ditch	Coin, 341-46		c
929 [930]	Gully			
931 [932]	gully			
933 934 935 [936]r 937 938 939 [940]	Ditch		RB	B P
941	Group number			
942 [943]	Gully			
944 [945]	Gully			
946 [947]	Gully			
948 [949]	Gully terminus	Fe nail		B sf
950 951 [952]	Gully		RB	P B
953 954 [955]	Gully		RB	P B
956 [957]	Gully		C1-4	P B Fc
958 959 960	Unused			
961 962 [963]	Gully		RB	P B
964 [965]	Gully			
966 [967]r 968 969 [970]r 971 [972]	Main enclosure ditch	Coin, 310-12	RB IA-C2 C3/4	P B P B c P B B F
973 [974]	Gully			
975 [976] 977	Ditch			
978 979 [980] 981 [982] 983 984 [985]	Main enclosure ditch		C3/4 RB C3/4	P B T P B P B B
986 987 988 989 990 [991] 992	Ditch	Bone pin	C1/2 C2 RB RB	B P B sf P B P B B P
993	Gully		C2	P

PAPWORTH EVERARD, HOSPITAL CAR PARK

Context no.	Feature type	Notes	Date of pottery	Finds
[994]				
995 [996]	Gully			
997 [998]	Gully terminus		IA-C2	P
999	Fill	Fill of [890]		
1000 1001 1002 [1003]	Ditch		IA	P B
1004 [1005] 1006 [1007]r	Main enclosure ditch		IA	P B
1008 [1009]	Tree throw			B
1010 [1011]	Tree throw			B
1012 1013 [1014]	Ditch	Neolithic axe	IA IA	P B P B sf
1015 1016 1017 1018 [1019]r 1020 1021 [1022]	Ditch		C1/2 C2/3 LIAT	P B P B P B F
1023 1204 1025	Fill	Fill of [1014]	IA	P B
1026 1027	Fill	Fill of [991]	IA	P B
1028 [1029]	Ditch			
1030 1031 [1032]	Ditch	Fe object.	C3/4 C2	P B sf Sg Fc P B
1033 [1034]	Gully			
1035	Unused			
1036 [1037]	Pit		C2-4	P
1038 [1039]	Gully			
1040 [1041]	Pit		IA/RB	P B
1042 [1043]	Gully			
1044 [1045]	Gully terminus		C2/3	P B
1046 [1047]	Gully			
1048 [1049]	Gully			
1050 [1051]	gully			
1052 [1053]	ditch			
1054 through 1093	Unused			
1094 1095 1096 [1097] 1098 [1099]r	Ditch		LIA/C2/3	P

PAPWORTH EVERARD, HOSPITAL CAR PARK

Context no.	Feature type	Notes	Date of pottery	Finds
[1100]r		Filled by 1109, 1110		
1101 [1102] 1103 1104 1105 [1106]r 1107 [1108]r	Main enclosure ditch		RB RB ? RB C2	P P P P P
1109 1110	Fill	Fill of [1100]		
1111 1112 [1113]	Ditch			
1114 [1115]	Modern feature			
1116 [1117]	Ditch			B
1118 [1119]	Gully6			
1120 [1121]	Pit			
1122 [1123]	Pit			
1124 [1125]	Ditch			B
1126 [1127]	Ditch		RB	P B
1128 [1129]	Ditch		RB	P B
1130 [1131]	Gully			
1132 [1133]	Gully			
1134 [1135]	Gully			
1136 [1137]	Ditch	Oven plate/base	C1/2	P B Fc
1138	Layer			
1139	Fill			
1140 1141	Fills			
1142	Fill			
1143 [1144]	Gully			
1145 [1146]	Gully		IA	P
1147 [1148]	Gully/slot		IA	P B
1149 1150 [1151]	Ditch			
1152	Fill			
1153	Fill		IA	P B
1154 1155 [1156]	Ditch		LIAT	P B Fc
1157 1158 1159 [1160]	Ditch		IA LIAT?	P B Fc P B
1161 1162 1163 [1164]	Ditch		LIAT RB	B P B F P B Fc
1165 [1166]	Posthole			
1167 [1168]	Ditch		C2/3	P T B

PAPWORTH EVERARD, HOSPITAL CAR PARK

Context no.	Feature type	Notes	Date of pottery	Finds
1169 1170 1180 1181 [1171]	Ditch		RB RB	P B Fc P
1172 [1173]	Ditch		C2-4	P B Fc
1174 [1175]	Ditch		?	P
1176 [1177]	Ditch	Fe nail	C1-4	P T B sf
1178 [1179]	Ditch	Coin, 4th C	C2	P B c
1180 1181	Fill	Fe nail.	RB	P B sf
1182 1183 [1184]	Gully??	Fe nails (5)	C1/2	P B Fc sf
1185 [1186]	Pit			
1187 [1188]	Pit			
1189 [1190]	Pit			
1191 [1192]	Pit		C2/3	P B
1193 [1194]	Pit			Fc
G1195	Pit group			
1196 1197 [1198]	Ditch			
1199 1200 [1201]	Ditch		RB	P
1202 [1203]	Ditch			
1204 [1205]	Ditch			
1206 [1207]	Gully		RB	P B
1208 [1209]	Gully			
1210 1211 [1212]	Ditch			B
[1213]	Gully			
1214 [1215]	Gully			
1216 [1217]	Gully			
1218 [1219]	Ditch		IA/RB	P B Fc
1220 1221 1222 [1223]	Ditch			B Fc B Fc
1224 [1225]	Ditch		C1/2	P B
1226 [1227]	Gully		RB	P
1228 [1229]	Gully		C2	P
1230 1231 [1232]	Ditch			
1233 [1234]	Ditch			
1235 1236	Ditch		RB	P B

PAPWORTH EVERARD, HOSPITAL CAR PARK

Context no.	Feature type	Notes	Date of pottery	Finds
[1237]				
1238 1239 1240 [1241]	Ditch		RB	P B
1242 [1243]	Ditch			
1244 [1245]	Tree bowl		RB	P B
1246 [1247]	Gully		RB	P B
1248 1249 [1250]	Ditch			
1252 [1253]	Ditch			
1254 [1255]	Ditch		?	P B
1256 1257 1258 1259 [1260]	Ditch	Fe nails (3).	C2-4	P B Fc sf
1261 1262 [1263]	Ditch			
1264 [1265]	Ditch			
1266 [1267]	Gully			
1268 [1269]	Furrow			
1270 [1271]	Ditch			
1272 1273 [1274]	Ditch			
1275 1276 1277 [1278]	Ditch		RB	P B B
1279 [1280]	Ditch			
1281 1282 1284 [1283]	Ditch			
1287 1286 [1285]	Ditch			
1289 [1288]	Ditch			
1292 1291 [1290]	Ditch			
1293	Layer		C2	P
1294 [1295]	Gully		C2	P
1296 [1297]	Ditch			
1298 [1299]	Ditch		C2	P
1300 [1301]	Ditch		C2/3	P B Fc
1302 [1303]	Furrow			
1304 1305 1306 [1307]	Enclosure ditch		RB	P B B

PAPWORTH EVERARD, HOSPITAL CAR PARK

Context no.	Feature type	Notes	Date of pottery	Finds
1308 [1309]	Ditch			
1310 [1311]	Ditch			
1312 [1313]	Ditch		C2?	P B
1314 1315 1316 [1317]	Ditch	Coin, 4th C	C2/3 C1/2	P B c P T Fc
1318 [1319]	Gully			
1320 1321 [1322]	Ditch	Fe nail	C1-4 C2/3	P T B sf P B
1323 1324 [1325]	Pit		C1-4(2) LIAT	P P B
1326 1327 [1328]	Ditch		RB	P B
1329 1335 [1330]	Ditch			
1331 [1332]	Posthole			
1333 [1334]	Pit			
G1336	Group			

APPENDIX 2

Pottery fabrics (grouped); incidence by context

Description	Code	Present in context nos.
Middle to Late Iron Age		
IA shelly	IASH	869,883,916,979,989,1001,1004,1025,1026,1105,1136,1145,1157,1318,1017,1126
IA quartz	IAQ	829,864,865,878,881,889,895,937,978,987,990,992,1012,968,1015,1104,1128,1147,1153,1163,1169,1172,1154,1180,1182,1206,1221,1030
IA organic	IAO	878, 1013,1153,1220
'Transitional' LIA/Early RB		
Belgic type grogged	GROG	837,895,979,1154,1159,1162,1256,1314,1315,1318,1017,1218
Belgic type sandy/grogged	GROGQ	857,988,987,1017,1020,1030,1031,1126,1172,1224,1321,1323,1324,1031,1210,987,1200,1015,1098, 1136
Roman		
Misc. (mostly local) greywares	LOC GR	808,809,822,840,855,858,867,887,906,951,988,993,864,865,869,895,916,968,978,987,989,990,1017,1030,1036,1044,1101,1107,1174,1169,1172,1180,1182,1224,1226,1228,1238,1256,1293,1294,1298,1300,1314,1315,1320,1321,1323,1296,1176,1178,1200,1218,1015,1098,1136
Misc. (mostly local) black, sandy		824,829,867,889,914,916,978,987,1017,1030,1036,1103,1200,1218,1244, 1246, 1275,1298,1312,1320,1321,1323
Misc. (mostly local) shell-tempered	LOC SH	817,824,829,830,837,840,855,858,865,867,869,898,903,906,914,920,966,978,983,988,989,992,1030,1044,1101,1170,1172,1180,1182,1200,1218,1224,1226,1255,1256,1293,1296,1300,1305,1314,1320,1321,1323,1327
Misc. oxidised	LOC OX	808,840,855,867,869,906,914,916,951,954,956,61,968,990,992,993,1036,1044,1170,1172,1178,1182,1191,1224,1235,1256,1314,1315,1320
Godmanchester gritty white	GOD WH	865,867,989,1030,1031,1040,1136,1218,1224,1226,1256,1300,1314,1315,1321
Horningsea grey	HOR RE*	865, 867, 887
Lower Nene self-coloured	LVN SC	865,898,1176,1320
Lower Nene mortaria	LVN WH	993, 1298
Lower Nene grey ware	LVN RE	1224
Lower Nene colour-coated ware	LVN CC*	804,815,822,824,825,830,865,887,956,978,983,1030,1036,1172,1176,1224,1256,1320,1321,1323
Hadham oxidised	HAD OX*	822, 954
Harold, Beds shell-tempered	HAR SH*	806,822,956,1036,1176
Oxfordshire red-slipped	OXF RS*	822,873,887,969,1275,1294
Samian (most Central Gaulish)	SA	862,1178,1315,1320,1323
Gaulish amphora	GAL AM	1323
Anglo-Saxon		
AS organic with quartz	SAXOQ	968
AS quartz/igneous	SAXQ	829

* NRFRC codes (Tomber and Dore 1998)

APPENDIX 3

Roman coin catalogue

SF no.	Context	Ruler					
5	832	- Denom: - Wear: C/C	Cat: - Axis: -	Date: 4th century	Diam (mm): 9 Wt (g): 1.0	Obv: 4th century bust visible Rev: - Mint: -	Ref: -
6	887	- Denom: - Wear: C/C	Cat: - Axis: -	Date: 4th century	Diam (mm): 15 Wt (g): 1.0	Obv: 4th century bust visible Rev: - Mint: -	Ref: -
7	968	CONSTANTINE I Denom: FOLL Wear: SW/SW	Cat: - Axis: 6	Date: 310-12	Diam (mm): 22 Wt (g): 3.8	Obv: CONSTANTINVSPFAVG Rev: CONCORDMILIT Mint: LN	Ref: RIC 195
9	927	CONSTANS Denom: - Wear: C/C	Cat: - Axis: 12	Date: 341-46	Diam (mm): 18 Wt (g): 1.7	Obv:]PFAV[Rev: VICTORIAEDDAVGGQNN Mint:	Ref: -
10	914	- Denom: - Wear: C/C	Cat: - Axis: -	Date: 4th century	Diam (mm): 12 Wt (g): 0.3	Obv: - Rev: - Mint:	Ref: -
14	1178	- Denom: - Wear: C/C	Cat: - Axis: 6	Date: 4th century	Diam (mm): 13 Wt (g): 1.8	Obv: 4th century bust visible Rev: Two victories standing facing holding wreath with votive within, legend all however illegible Mint: -	Ref: -
19	Topsoil	CONSTANTINE I Denom: - Wear: C/C	Cat: - Axis: -	Date: 330-35	Diam (mm): 14 Wt (g): 0.7	Obv: CONSTANTINOPOLIS Rev: Illeg victory on prow Mint:	Ref: -
20	869	- Denom: - Wear: C/C	Cat: - Axis: -	Date: 4th century	Diam (mm): 15 Wt (g): 0.7	Obv: CONSTAN[Rev: - Mint: -	Ref: -
22	1314	- Denom: - Wear: C/C	Cat: - Axis: 9	Date: 4th century	Diam (mm): 13 Wt (g): 1.9	Obv: 4th century bust visible Rev: Copy of Falling horseman type FEL TEMP REPARATIO Mint:	Ref: -
40	Topsoil	- Denom: - Wear: C/C	Cat: - Axis: -	Date: 4th century	Diam (mm): 16 Wt (g): 1.4	Obv: - Rev: - Mint: -	Ref: -

APPENDIX 4

Summary of ecofacts by context

Key

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

Sample No.	1	2	3	4	5	6	7	8	11	19
Context No.	822	822	956	966	968	969	971	961	809	1012
Feature No.	823	823	957	967	970	970	972	963	810	1137
Feature type	Ditch	Ditch	Ditch	Gully	Ditch	Ditch	Ditch	Ditch	Ditch	Ditch
Cereals										
<i>Triticum</i> sp. (grains)	x	x	x			x	x	x		x
(glume bases)	xxx	x	xx					x	x	
(spikelet bases)	x		x							
(rachis internode)		x								
<i>T. spelta</i> L. (glume bases)	xx	x	x	x				x		
Cereal indet. (grains)	xxx	x	x		x					x
Herbs										
<i>Anthemis cotula</i> L.								x		
<i>Fallopia convolvulus</i> (L.)A.Love	xtf									
Lamiaceae indet.										x
<i>Medicago/Trifolium/Lotus</i> sp.	x									
Small Poaceae indet.						x				
<i>Rumex</i> sp.	xcf	x								
<i>Tripleurospermum inodorum</i> (L.)Schult-Bip										
Other plant macrofossils										
Charcoal <2mm	xx	x	x	x			x	x	x	xxx

PAPWORTH EVERARD, HOSPITAL CAR PARK

Sample No.	1	2	3	4	5	6	7	8	11	19
Context No.	822	822	956	966	968	969	971	961	809	1012
Feature No.	823	823	957	967	970	970	972	963	810	1137
Feature type	Ditch	Ditch	Ditch	Gully	Ditch	Ditch	Ditch	Ditch	Ditch	Ditch
Charcoal >2mm										x
Charcoal >5mm	x									
Charred root/stem	x									
Indet,tuber			x							
Other remains										
Black porous 'cokey' material	xx	x				x				x
Black tarry material	x									
Small coal frags.	xx									
Vitrified material	x									x
Molluscs										
Woodland/shade loving species										
<i>Aegopinella</i> sp.				xcf		x				
<i>Clausilia</i> sp.									x	
<i>Ena</i> sp.									x	
<i>Oxychilis</i> sp.			xcf							
<i>Punctum pygmaeum</i>				x						
<i>Vitrea</i> sp.									x	
Open country species										
<i>Helicella itala</i>						x	x			
<i>Pupilla muscorum</i>			x	x	x	x	x			
<i>Vallonia</i> sp.			xx	x	x	x	x	x	x	x
<i>V. costata</i>			xx		x		x		x	
<i>Vertigo</i> sp.									x	
<i>Vertigo pygmaea</i>					x			x		
Catholic species										
<i>Cepaea</i> sp.							x			
<i>Cochlicopa</i> sp.			x						x	

PAPWORTH EVERARD, HOSPITAL CAR PARK

Sample No.	1	2	3	4	5	6	7	8	11	19
Context No.	822	822	956	966	968	969	971	961	809	1012
Feature No.	823	823	957	967	970	970	972	963	810	1137
Feature type	Ditch	Ditch	Ditch	Gully	Ditch	Ditch	Ditch	Ditch	Ditch	Ditch
<i>Trichia hispida</i> group			xx	x	x		x	x		x
Marsh/freshwater slum species										
<i>Carychium</i> sp.			x		x	x	x		x	
<i>Lymnaea</i> sp.					x				x	
Freshwater obligate species										
<i>Anisus leucostoma</i>			x		x	x	x		xx	
<i>Armiger crista</i>						x	x			
Volume of flot (litres)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
% flot sorted	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Sample No.	9	10	12	13	14	15	16	17	18	22	23	24
Context No.	804	808	836	837	838	987	986	989	1044	933	934	935
Feature No.	805	810	839	839	839	991	991	991	1045	936	936	936
Feature type	ph	Ditch	Pit	Pit	Pit	Ditch	Ditch	Ditch	Gully	Ditch	Ditch	Ditch
Other plant macrofossils												
Charcoal <2mm	xx	x	x		x	x	x	x	x	x		
Charred root/stem			x				x					
Indet.seeds						x						
Other remains												
Black porous 'cokey' material				x			x					
Molluscs												
Woodland/shade loving species												
<i>Oxychilis</i> sp.				x								
<i>Vitrea</i> sp.		x										
Open country species												
<i>Helicella itala</i>						x						

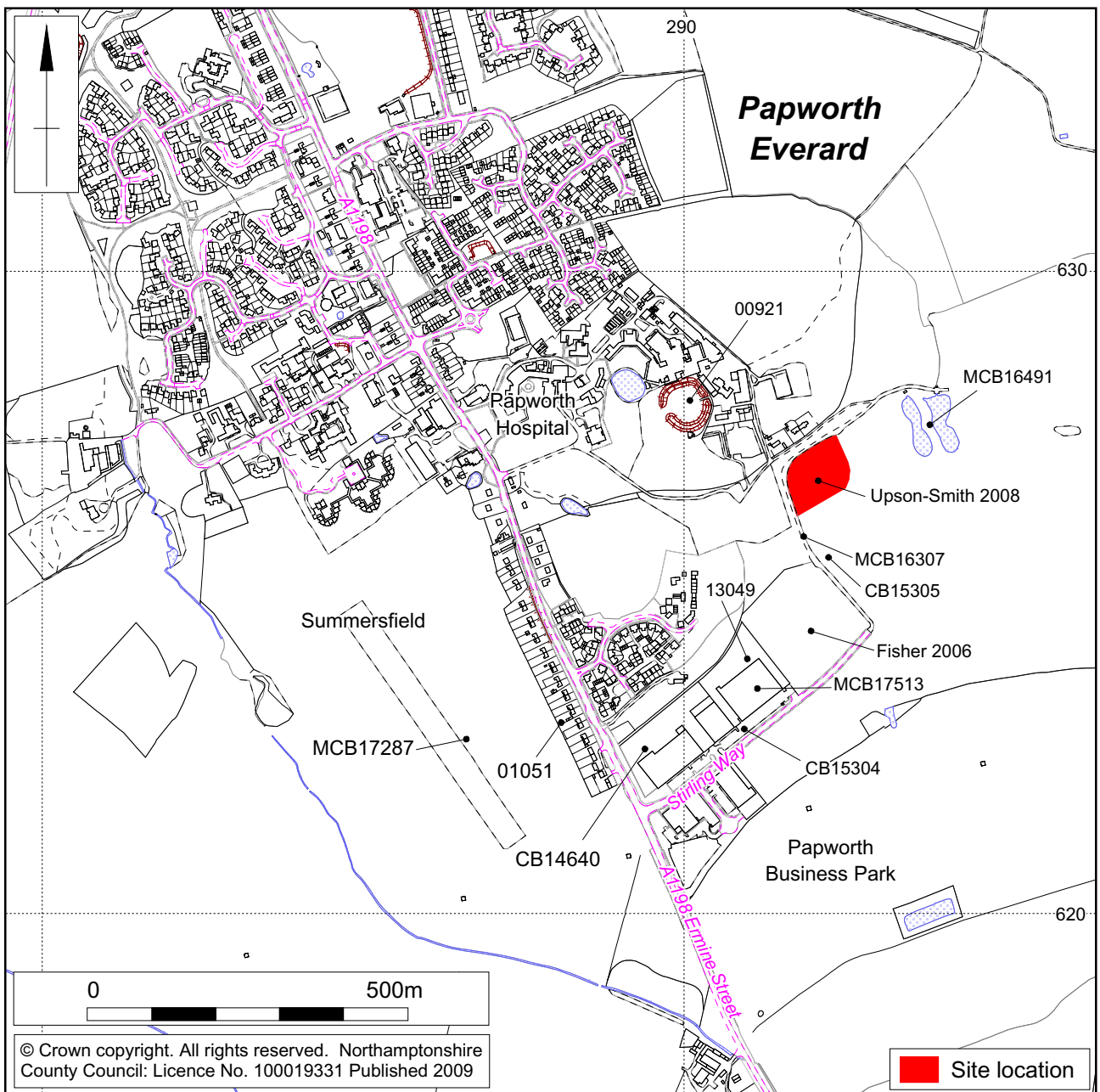
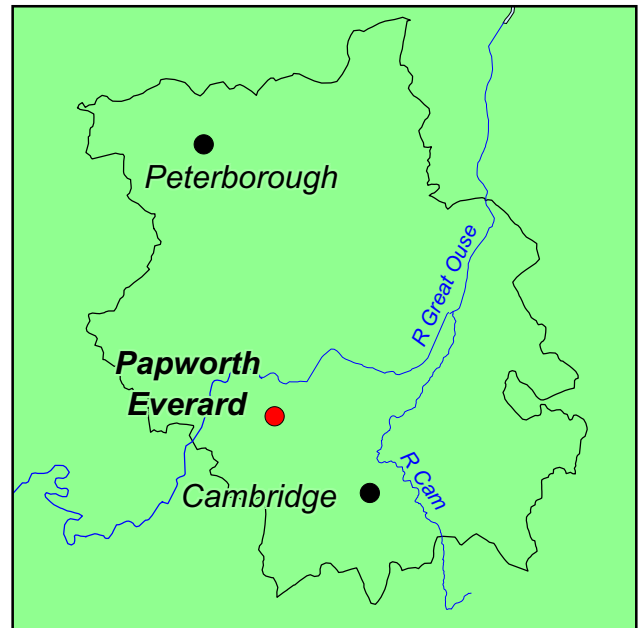
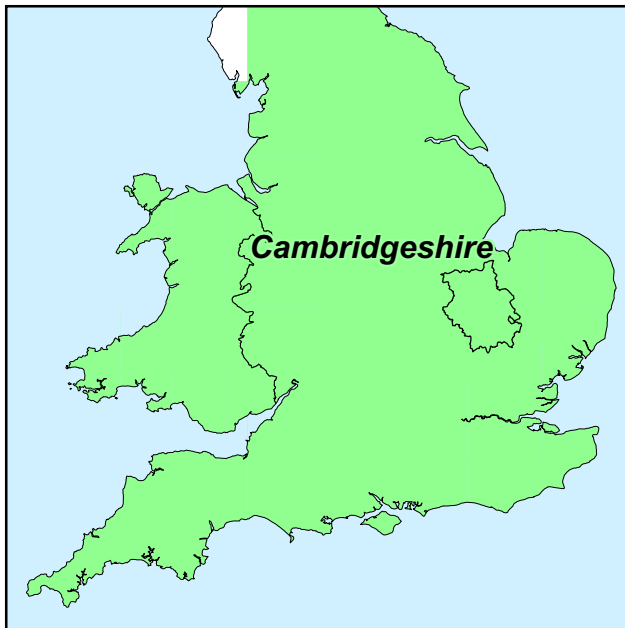
PAPWORTH EVERARD, HOSPITAL CAR PARK

Sample No.	9	10	12	13	14	15	16	17	18	22	23	24
Context No.	804	808	836	837	838	987	986	989	1044	933	934	935
Feature No.	805	810	839	839	839	991	991	991	1045	936	936	936
Feature type	ph	Ditch	Pit	Pit	Pit	Ditch	Ditch	Ditch	Gully	Ditch	Ditch	Ditch
<i>Pupilla muscorum</i>		x					x		x		x	
<i>Vallonia</i> sp.					x		x	x	x	x	x	
<i>V. costata</i>		x	x	xx	x				x			
<i>Vertigo</i> sp.								x				
Catholic species												
<i>Trichia hispida</i> group		x		x			x		x			
Marsh/freshwater slum species												
<i>Carychium</i> sp.		x				x						
<i>Lymnaea</i> sp.				x			x				x	x
Freshwater obligate species												
<i>Anisus leucostoma</i>				xx			x				x	
Volume of flot (litres)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
% flot sorted	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

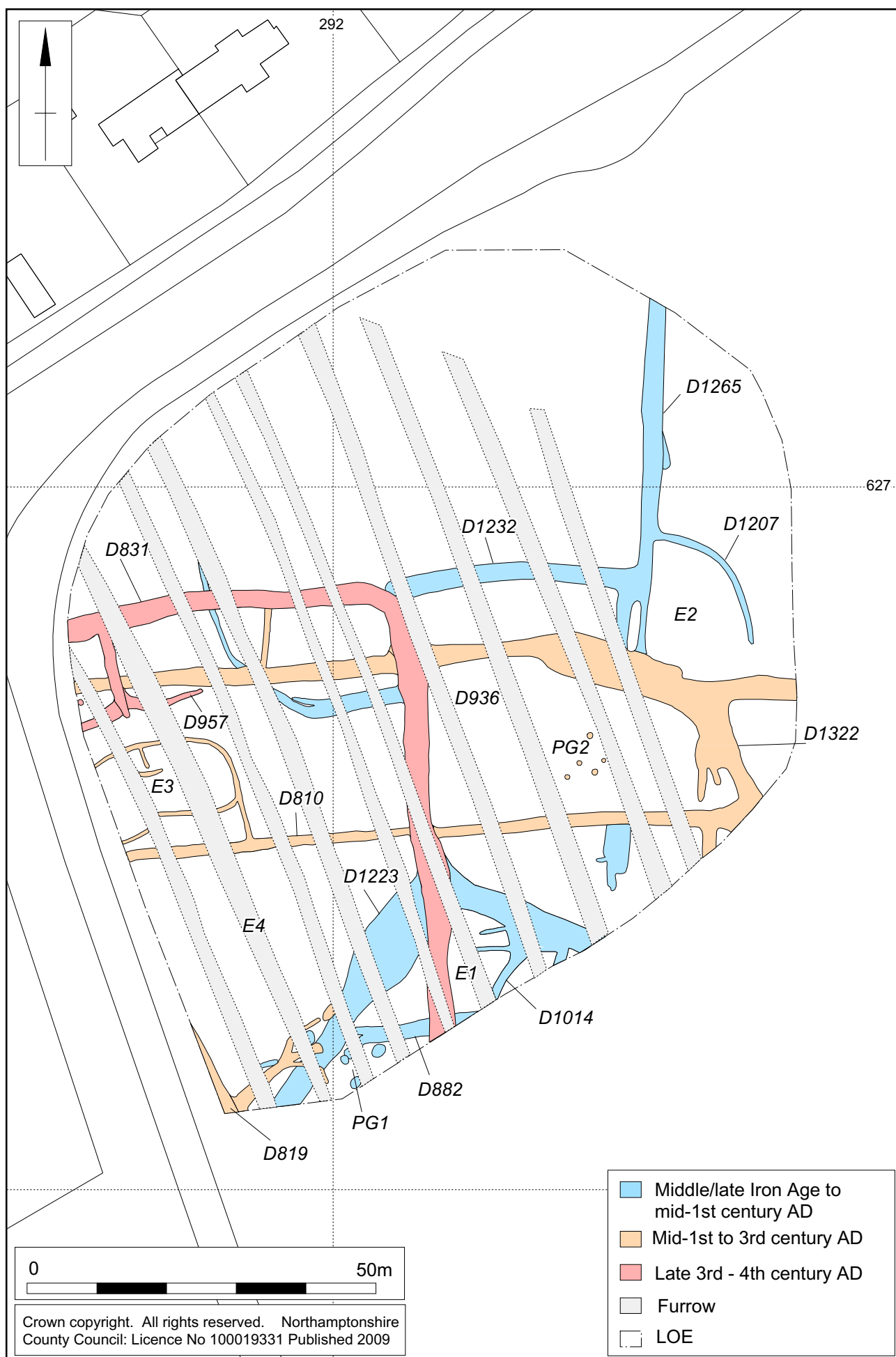
Sample No.	25	26	27	29	30	34	37	38	39
Context No.	937	938	939	1315	1316	1324	1277	1261	1262
Feature No.	940	940	940	1317	1317	1325	1278	1263	1263
Feature type	Ditch	Ditch	Ditch	Ditch	Ditch	Pit	Ditch	Ditch	Ditch
Other plant macrofossils									
Charcoal <2mm		x	x	x	x	x	x	x	x
Charcoal >2mm			x						
Charred root/stem					x				
Other remains									
Black porous 'cokey' material		x		x					
Molluscs									
Woodland/shade loving species									
<i>Aegopinella</i> sp.									

PAPWORTH EVERARD, HOSPITAL CAR PARK

<i>Clausilia</i> sp.							x		
<i>Vitrea</i> sp.				x					
Open country species									
<i>Helicella itala</i>		x	x						
<i>Pupilla muscorum</i>	x	x					x	x	
<i>Vallonia</i> sp.		xx		x	x	x		x	
<i>V. costata</i>			x		x		x		x
<i>V. pulchella</i>		x					x	x	
<i>Vertigo</i> sp.		x							
<i>Vertigo pygmaea</i>		x					x		
Catholic species									
<i>Cochlicopa</i> sp.							x		
<i>Nesovitrea hammonis</i>					x				
<i>Trichia hispida</i> group		x		x	x		x	x	
Marsh/freshwater slum species									
<i>Carychium</i> sp.							x		
<i>Lymnaea</i> sp.		xxx					x	x	
Freshwater obligate species									
<i>Anisus leucostoma</i>		x		x	x			x	xxx
<i>Armiger crista</i>				x				x	
<i>Succinea</i> sp.					xcf				
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%



Site location and HER sites Fig 1



Scale 1:750

Papworth Hospital Car Park, provisional phase plan Fig 2



Scale 1:750

Papworth Hospital Car Park, finds distribution Fig 3



Late Iron Age ditch (D1014), facing north-east Fig 4



Late Iron Age pit 839, part of PG1, facing east Fig 5



Enclosure ditch (D831), facing west

Fig 6



Enclosure ditch (D831), facing east

Fig 7



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