



Northamptonshire  
County Council

# Northamptonshire Archaeology

Archaeological evaluation  
at Papworth Hospital car park  
Papworth Everard, Cambridgeshire  
September 2008  
ECB 3028



Tim Upson-Smith

October 2008

Report 08/161

## Northamptonshire Archaeology

2 Bolton House  
Wootton Hall Park

Northampton NN4 8BE

t. 01604 700493 f. 01604 702822

e. [sparry@northamptonshire.gov.uk](mailto:sparry@northamptonshire.gov.uk)

w. [www.northantsarchaeology.co.uk](http://www.northantsarchaeology.co.uk)



**STAFF**

Project Manager      Antony Walsh BA

Fieldwork              Tim Upson-Smith BA PG Dip, Katie Campbell BA, Jonathon  
Elston, Elizabeth Hawksley MA

Text                      Tim Upson-Smith

Pottery                  Tora Hylton

Animal Bone          Karen Deighton MSc

Charred Plants        Karen Deighton

Illustrations          Richard Watts

**QUALITY CONTROL**

	Print name	Signed	Date
Verified by	Antony Walsh		
Checked by	P Chapman		
Approved by	A Chapman		

**OASIS REPORT FORM 49555**

<b>PROJECT DETAILS</b>		
Project name	Archaeological evaluation at Papworth Hospital car park, Papworth Everard, Cambridgeshire	
Short description (250 words maximum)	Northamptonshire Archaeology carried out an archaeological evaluation comprising seven trial trenches on the proposed site of a car park at Papworth Everard Hospital. The trial trenches were targeted on a cropmark enclosure. The evaluation confirmed three small enclosures along a north-south ditch with two roundhouses overlain by medieval furrows. The finds suggest a 2nd-4th Century date for the enclosures.	
Project type (eg DBA, evaluation etc)	Trial trench evaluation	
Site status (none, NT, SAM etc)	None	
Previous work (SMR numbers etc)	Evaluation NA 2006, DBA RPS Planning and Development	
Current Land use	Arable	
Future work (yes, no, unknown)	Unknown	
Monument type/ period	Roman settlement	
Significant finds (artefact type and period)	Roman pottery	
<b>PROJECT LOCATION</b>		
County	Cambridgeshire	
Site address (including postcode)	Papworth Hospital car park, Papworth Everard	
Study area (sq.m or ha)	0.7ha	
OS Easting & Northing (use grid sq. letter code)	TL 2921 6275	
Height OD	52.5 – 50.0	
<b>PROJECT CREATORS</b>		
Organisation	Northamptonshire Archaeology	
Project brief originator	RPS Planning and Development	
Project Design originator		
Director/Supervisor	Tim Upson-Smith	
Project Manager	Tony Walsh	
Sponsor or funding body	Varrier Jones Foundation	
<b>PROJECT DATE</b>		
Start date	Sept 2008	
End date	Sept 2008	
<b>ARCHIVES</b>		
	Location (Accession no.)	Content (eg pottery, animal bone etc)
Physical		
Paper		
Digital		
<b>BIBLIOGRAPHY</b>		
	Journal/monograph, published or forthcoming, or unpublished client report (NA report)	
Title	Archaeological evaluation at Papworth Hospital car park, Papworth Everard, Cambridgeshire	
Serial title & volume	08/161	
Author(s)	Tim Upson-Smith	
Page numbers	29	
Date	10th October 2008	

## Contents

<b>1</b>	<b>INTRODUCTION</b>	<b>5</b>
<b>2</b>	<b>ARCHAEOLOGICAL BACKGROUND</b>	<b>5</b>
<b>3</b>	<b>TOPOGRAPHY AND GEOLOGY</b>	<b>6</b>
<b>4</b>	<b>OBJECTIVES</b>	<b>7</b>
<b>5</b>	<b>METHODS</b>	<b>7</b>
	<b>Trial Trenching</b>	<b>7</b>
	<b>Health and Safety</b>	<b>7</b>
<b>6</b>	<b>EVALUATION RESULTS</b>	<b>8</b>
<b>7</b>	<b>FINDS</b>	<b>13</b>
	<b>The Roman pottery</b> <i>by Tora Hylton</i>	<b>13</b>
	<b>The other finds</b> <i>by Tora Hylton</i>	<b>14</b>
	<b>Animal bone</b> <i>by Karen Deighton</i>	<b>14</b>
	<b>Soil samples</b> <i>by Karen Deighton</i>	<b>16</b>
<b>8</b>	<b>CONCLUSION</b>	<b>18</b>
	<b>BIBLIOGRAPHY</b>	<b>19</b>
	<b>Web Sites</b>	<b>20</b>
	<b>APPENDIX 1: POTTERY TABLES</b>	<b>21</b>
	<b>PLATES</b>	<b>23</b>

**Tables**

Table 1: Taxa by context

Table 2: The availability of ageing and metrical data

Table 3: Ecofacts by sample and context

**Plates**

Cover: Feature [304]

Plate 1: Ditch [106]

Plate 2: Ditch [204]

Plate 3: Ditch [522]

Plate 4: Gullies [515] and [517]

**Figures**

Fig 1: Site location

Fig 2: Cropmark and trench locations

Fig 3: Trench plans

Fig 4: Sections 20, 22 and 3

**ARCHAEOLOGICAL EVALUATION**  
**AT PAPWORTH HOSPITAL CAR PARK,**  
**PAPWORTH EVERARD, CAMBRIDGESHIRE**  
**SEPTEMBER 2008**  
**ECB 3028**

*Abstract*

*Northamptonshire Archaeology carried out an archaeological evaluation comprising seven trial trenches on the proposed site of a car park at Papworth Everard Hospital. The trial trenches were targeted on a cropmark enclosure. The evaluation confirmed three small enclosures along a north-south ditch with two roundhouses overlain by medieval furrows. The finds suggest a 2nd-4th Century date for the enclosures.*

**1 INTRODUCTION**

Northamptonshire Archaeology were commissioned by RPS Planning and Development on behalf of the Varrier Jones Foundation to carry out an archaeological evaluation in advance of a planning application (planning ref S/1214/07/F) for the change of use of land to form a new car park at Papworth Hospital, Papworth Everard, Cambridgeshire (NGR TL 2921 6275 Fig 1).

RPS Planning and Development produced a desk-based archaeological assessment of the proposed development which indicated that the area had high potential to contain archaeological remains and that further investigation was warranted.

The archaeological evaluation was undertaken in accordance with current guidelines and best practice. These include the Institute of Field Archaeologists *Standards and Guidance for Field Evaluation* (revised 2001), and Northamptonshire County Council *Fieldwork Standards and Guidance* (1995). Northamptonshire Archaeology is a Registered Organisation under the Institute of Field Archaeologists.

**2 ARCHAEOLOGICAL BACKGROUND**

There is substantial evidence for prehistoric, particularly later prehistoric, and Roman activity in the area. The proposed development area is located approximately 500 metres east of the alignment of Ermine Street Roman road.

The main known area of settlement is located towards the summit of the low clay mound that encompasses the business park and hospital site. However, aerial photographic

evidence indicates a further area of activity further north-east. The cropmark remains in the area may represent further settlement activity. Given that trial trenching carried out in the area has revealed linear features containing Iron Age and Roman pottery, the potential for settlement and/ or agricultural remains of Iron Age date was high.

Excavated remains of the Roman period are not well represented in the archaeological record in the vicinity of the proposed development area. However, aerial photographic evidence indicates an area of linear features and enclosures perhaps representing settlement or agricultural activity to the south of and within the proposed development area.

During the medieval period the site lay within one of the open arable fields of the village of Papworth and the potential for remains of medieval date, other than those relating to agriculture, is low.

A Scheduled Ancient Monument consisting of a moated site, probably of medieval origin, is located c150 metres north-west of the proposed development area. Further evidence for medieval activity within or near the proposed development area survives in the form of furrow bases recorded during archaeological work on Papworth Business Park (Fisher 2007).

### **3 TOPOGRAPHY AND GEOLOGY**

The proposed development area is located to the south of Farm Lane, outside the southern boundary of the hospital site, to the north of Papworth Business Park. It is centred on NGR TL 2921 6275 and is currently used as arable agricultural land.

The proposed development area covers approximately 0.7ha. It lies on the west side of a small valley, the site slopes to the north-east, from approximately 52.5 metres aOD on the farm track leading from Stirling Way on the western site boundary to c50 metres at the east. At the base of the slope are two balancing ponds, about 150 metres east of the proposed development area.

The geology of the proposed development area comprises Till overlying Amptill clay, Kimmeridge clay and Corallian deposits <http://www.bgs.ac.uk/GeoIndex/index.htm>.

#### 4 OBJECTIVES

The main objective of the archaeological evaluation 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.

#### 5 METHODS

##### **Trial Trenching**

A series of seven trial trenches, measuring 50 m long by 2 m wide were excavated in the proposed development area (Figs 2-4). The trench locations were designed to intercept known or suspected features identified by cropmark.

The trenches were plotted on the ground using Leica System 1200 GPS surveying equipment (with a tolerance of generally +/- c 0.3m) and were related to Ordnance Survey.

The topsoil, subsoil and non-structural post-medieval and later deposits were removed under archaeological supervision by mechanical excavator, fitted with a toothless ditching bucket, to reveal significant archaeological remains or, where these were absent, the natural substrate. All features of potential archaeological significance were sampled by hand excavation to determine their date and character.

All archaeological deposits and artefacts encountered during the course of excavation were fully recorded. Recording followed standard Northamptonshire procedures. Archaeological deposits were given individual context numbers and were described on pro-forma context sheets.

Where appropriate the surface of the trenches was cleaned by hand to enhance feature definition, and planned at a scale of 1:50. Sections through features and areas of complex stratigraphy were drawn at a scale of 1:10. Levels were related to Ordnance Datum.

Soil samples were taken from appropriate archaeologically significant deposits for the retrieval and assessment of environmental and economic data.

A full photographic record comprising both 35mm monochrome negatives, and colour transparencies was maintained this was supplemented with digital photographs.

##### **Health and Safety**

Fieldwork was conducted in accordance with the Health and Safety Policy of Services Northamptonshire. A site specific risk assessment was prepared and re-assessed during the



progress of work. All site staff were inducted in the risk assessment and made aware of potential hazards before they commence the works on site.

## 6 EVALUATION RESULTS

All of the seven trenches contained archaeology consisting of ditches and gullies which in the main reflect the known cropmarks (Fig 2). The pottery and small finds recovered during the evaluation suggest that the enclosure dates to the 2nd-4th centuries AD.

Context numbers include the trench number as a prefix throughout.

### **Trench 1 (Fig 3)**

This trench was targeted on the south western part of the cropmark enclosure and was aligned north east-south west. Natural buff Boulder Clay (103) was exposed at a depth of c0.5m. Two ditches cut the undisturbed natural; a north to south aligned ditch [106] at the north eastern end of the trench and an east-west aligned ditch [105] towards the centre of the trench (Fig 3). Ditch [106] was 3m wide by 0.96m deep with a shallow V-shaped profile (Plate 1). The primary fill (109) was an orange brown gritty sand and Roman pottery was recovered from this fill. The secondary fill (108) consisted of firm light grey brown silty clay, which contained Roman pottery and animal bone. The upper fill of the ditch [107] consisted of a dark grey brown silty clay (107), which also contained a single sherd of Oxfordshire Colour Coat pottery and animal bone.

It is likely that ditch [106] formed part of the principal north-south aligned enclosure ditch, as identified from the cropmark.

The east-west aligned ditch [105] was 1.35m wide by 0.35m deep with a U-shaped profile. Its fill (104) was dark orange brown sandy clay. No pottery was recovered from this feature, although it did contain a burnt stone and two iron nails. It is likely that this ditch formed part of the northern boundary of the south-western enclosure.

Six north-south aligned furrows were also present. The archaeology was overlain by a layer of yellowish brown clay loam subsoil (102) 0.04-0.10m-thick, which was overlain by a dark brown black clay loam topsoil (101) 0.32-0.4m thick.

### **Trench 2 (Fig 3)**

This trench was targeted on the south-eastern part of the cropmark enclosure and was aligned north west-south east. Natural buff Boulder Clay (203) was exposed at a depth of between 0.34m and 0.47m.

Three ditches and a curvilinear gully cut the natural. Ditch [207] at the northern end of

the trench was clearly a continuation of ditch [106] in Trench 1 and was therefore not excavated. A single sherd of Samian ware was found on the surface of the fill (208) of ditch [207].

Ditch [204] was aligned east-west and probably formed the northern arm of the south-eastern sub-circular enclosure, (as identified from the cropmark). The ditch [204] was 2.8m wide and had a depth greater than 0.6m (1.1m from top of trench), with a likely shallow V-shaped profile (Plate 2). The ditch was not fully excavated, but the fills contained Roman pottery. The lower fill (206) consisted of a compact mid grey brown silty clay. The upper fill (205) was a firm dark grey brown silty clay loam. A fragment of a copper alloy Roman bracelet (SF 6) was recovered from this fill.

Immediately to the south of ditch [204] was a narrower northeast-southwest aligned ditch [209] which may have formed part of an internal division within the south-eastern part of the enclosure. This ditch was 1.7m wide by 0.32m deep with a shallow U-shaped profile. It was filled by (210) a firm dark grey brown silty clay loam from which animal bone and Roman pottery were recovered.

In the middle part of the trench there was a narrow curvilinear gully [211]. The gully was 0.4m wide by 0.12m deep with a U-shaped profile. The fill (212) consisted of a mid grey silty clay, only animal bone was recovered from the fill. The feature may be the ring ditch of a roundhouse.

Two north-south aligned furrows were present in the south eastern part of the trench. The archaeology was overlain by a layer of yellowish brown clay loam subsoil (202) 0.06-0.12m-thick, which in turn was overlain by a dark brown black clay loam topsoil (201) 0.25-0.35m thick.

### **Trench 3 (Fig 3)**

This trench was located in the eastern part of the proposed development area and was aligned north-south; the trench was crossed half way along its length by trench 4 which was aligned east-west. Natural buff Boulder Clay (303) was exposed at a depth of between 0.30m and 0.50m. A gully and a possible large pit, the limits of which were outside of the trial trench, cut the natural.

The gully [307] was located towards the northern end of the trench, it was aligned north-west to south-east and may have been part of the ditch extending north-eastwards from the enclosure, as seen from the cropmark interpretation. The gully was 0.7m wide by 0.26m deep with a U-shaped profile. The fill (308) consisted of a firm dark brown silty clay. No artifacts were recovered from this feature.

At the southern end of the trench there was a possible large pit [304], the full extent of which lay outside the trench. The feature extended 15m into the southern part of the trench with a depth greater than 0.8m (1.35m below top of trench) (Cover). The profile of the northern edge had a break in slope from  $c20^\circ$  to  $c50^\circ$ . The lower fill (306) was a soft mottled grey brown silty clay. This was overlain by firm dark grey loamy clay (305). Roman pottery was recovered from both fills. A probable posthole [311] cut the lower fill of the pit [304] (Fig 4, Section 20). The posthole was 0.55m in diameter by 0.5m deep with steep tapering sides. It had a fill (312), consisting of a soft dark grey silty clay loam.

The pit [304] was further cut at its southern end by a modern sub rectangular pit [313], this feature was not excavated.

The archaeology was overlain by a layer of yellowish brown clay loam subsoil (302) 0.06-0.2m-thick, which in turn was overlain by a dark brown black clay loam topsoil (301) 0.28-0.3m thick.

#### **Trench 4 (Fig 3)**

This trench was located in the eastern part of the proposed development area and was aligned east-west; it was crossed towards its eastern end by Trench 3 which was aligned north-south. Natural buff Boulder Clay (404) was exposed at a depth of between 0.30m and 0.43m, at the eastern end of the trench was a deposit of natural reddish buff colluvium (403). Two ditches, a gully and five furrows cut the natural.

Ditch [413] was aligned north-south and was cut on its eastern edge by ditch [415] suggesting that ditch [415] was a later re-cut on a slightly different alignment of the same boundary.

The ditch [413] was 2.6m wide by greater than 0.5m deep. It contained a fill of dark grey silty clay loam (414), Roman pottery was recovered from this fill. Ditch [415] cutting the eastern edge of ditch [413] was 1.45m wide by 0.48m deep, with a fill of mid grey brown silty clay (416).

The gully [417] was located in the junction area between Trench 3 and 4. It was slightly curvilinear and was aligned north east-south west. The gully was 0.65m wide by 0.08m deep with a very shallow concave profile. The fill (418) was a mid brown clay loam. No finds were recovered from this feature.

There were four north-south aligned furrows in the trench, one of which, (412) contained part of a handle from a post-medieval pot. The archaeology was overlain by a layer of yellowish brown clay loam subsoil (402) 0.1-0.12m-thick, which in turn was overlain by dark brown black clay loam topsoil (401) 0.28-0.3m thick.

### **Trench 5 (Fig 3)**

This trench was located in the northern part of the proposed development area and was aligned north east-south west. Natural buff Boulder Clay (503) was exposed at a depth of between 0.31m and 0.43. Three ditches, three gullies and six furrows cut the natural.

Ditch [533] was clearly a continuation of ditch [106] in Trench 1 and ditch [207] in Trench 2 and was therefore not excavated.

Ditch [511] was aligned north west-south east; it was 2.6m wide by 0.84 deep. Dating evidence consisting of Roman grey ware and oxidized wares and an iron collar ring (SF 4) was only recovered from the primary fill (514), a soft mid grey silty clay. Fill (513) consisted of a firm mid brown clay. This was overlain by (512), a firm mid brown grey silty clay. There was a re-cut [508] in the upper fill (512) of ditch [511]. The re-cut was 1.55m wide by 0.45m deep. The primary fill (510) consisted of a firm mid brown gritty clay. The upper fill (509) was a firm dark grey silty clay loam. Both cuts had a U-shaped profile with sloping edges (Fig 4, Section 3).

Immediately to the north-east of and cut by the inter-cutting ditches [522], [519] and [525] was a gully [527]. The gully was 0.52m wide by 0.26 m deep with a U-shaped profile. Roman pottery and animal bone was recovered from its fill (528) a firm dark grey silty clay loam.

Ditch [522] at the south-western end of the trench had two re-cuts [519] and [525] (Plate 3). The earliest ditch [522] was c2m wide by 0.94m deep. No artifacts were recovered from the primary fill (524), a firm orange brown sandy clay or the secondary fill (523), a firm mid brown silty clay. The first re-cut [519] was 1.8m wide by 0.6m deep, with very shallow sloping edges. Pottery and animal bone was recovered from the primary fill (521) a soft mid grey silty clay. The second re-cut [525] on the north-eastern side of ditch [522] was 0.55m wide by 0.56m deep with a V-shaped profile. The ditch had a fill (526) of firm dark grey brown silty clay, which was undated (Fig 4, Section 22). The ditches may form part of the northern arm of the western enclosure identified from the cropmark.

To the north-east of ditch [533] were two further gullies [515] and [517] (Plate 4). Gully [515] was aligned east-west and gully [517] was aligned north-south and it is likely that they formed a corner outside the north-western bulk of the trench. Both gullies were 0.55m wide by c0.35m deep with rounded profiles. Both gullies contained a similar fill of a firm mid brown grey silty clay. The fill (516) of gully [515], contained Roman pottery whilst the fill (518) of the gully [517], contained animal bone.

There were five north-south aligned furrows in the trench. The archaeology was overlain by a layer of yellowish brown clay loam subsoil (502) 0.06-0.1m-thick, which in turn was

overlain dark brown black clay loam topsoil (501) 0.25-0.33m thick.

### **Trench 6 (Fig 3)**

This trench was located in the northern part of the development area and was aligned west south west-east north east. Natural buff Boulder Clay (603) was exposed at a depth of between 0.34m and 0.5m. The archaeology in this trench was characterized by undated narrow gullies and at least five furrows. For the latter part of the fieldwork this trench was largely underwater.

Towards the western end of the trench there was an L-shaped gully [604] which appeared to cut an east-west aligned gully [608]. This gully was 0.28m wide by 0.2m deep with near vertical sides and a flat base. The fill (609) consisted of firm mid brown grey silty clay. No finds were recovered from this feature.

The gully [604] was 0.58m wide by 0.13m deep with gently sloping sides and a flat base. Its fill (605) consisted of a firm dark grey brown silty clay and a single post-medieval sherd of pottery was recovered.

In the middle part of the trench there were two roughly parallel gullies aligned east-west. The southernmost [610] was 0.3m wide by 0.36m deep with near vertical sides. It was filled by (611) a friable mid brown silty clay. The northern gully [612] was 0.44m wide by 0.10m deep with shallow sloping sides and a flat base, its single fill (613) was a firm mid brown grey silty clay. No finds were recovered from these features.

The archaeology was overlain by a layer of yellowish brown clay loam subsoil (602) 0.04-0.2m-thick, which in turn was overlain by dark brown black clay loam topsoil (601) 0.22-0.34m thick.

### **Trench 7 (Fig 3)**

This trench was targeted on the western part of the cropmark enclosure and was aligned north west-south east. Natural buff Boulder Clay (703) was exposed at a depth of between 0.42m and 0.49m.

The archaeology in this trench consisted of two ditches, a layer, a curvilinear gully and two furrows. Ditch [716] at the south eastern end of the trench was clearly a continuation of ditch [105] in Trench 1 and was therefore not excavated.

Ditch [710] was aligned north east-south west and is likely to form part of the northern arm of the western enclosure, (as identified from the cropmark). It was 1.45m wide by 0.65m deep, with an irregular profile. The primary fill (711) consisted of a soft mid yellow grey sandy clay from which a single sherd of Roman Nene Valley Colour Coat pottery was recovered. The upper fill (723) was a firm brown black clay loam.

At the north western end of the trench there was an irregular spread of firm dark grey brown sandy clay (704), filling a natural hollow, which contained burnt clay and large rounded stones as well as Roman pottery. The bulk of the Roman pottery from this spread (11 sherds) was Nene Valley Colour Coat fine ware; a sherd from a *mortaria* was also recovered.

To the south east of ditch [710] there was a narrow curvilinear gully [712]. The gully was 0.65m wide by 0.12m deep with steep sides and a flat base. It was filled by (720) firm grey yellow silty clay. No finds were recovered from the fill. The feature may be the ring ditch surrounding a roundhouse.

Two furrows aligned north-south were also present in the trench. The archaeology was overlain by a layer of yellowish brown clay loam subsoil (702) 0.06-0.14m-thick, which in turn was overlain by dark brown black clay loam topsoil (701) 0.34-0.37m thick.

## 7 FINDS

### **The Roman pottery by Tora Hylton**

In total, 139 sherds with a combined weight of 1.674kg were recovered from 20 individual deposits in seven trenches (1-7) (Appendix 1). With the exception of a small number of post-medieval sherds from Trenches 4 (context 412) and 6 (context 605), the entire assemblage dates to the mid 2nd to 4th century.

There was a distinct concentration of pottery in Trenches 1 and 2, making up 68.8% by weight of the total assemblage. Much of the assemblage comprises un-diagnostic body sherds, and a small number of sherds display signs of abrasion, but the majority show little sign of wear suggesting that it had not been lying around for a great length of time prior to deposition.

The assemblage is dominated by locally manufactured coarse greywares (37% by weight) and shell-gritted wares (23% by weight). Forms represented include necked and neckless jars and a small pedestal base in greyware and a jar, a shallow dish with plain rim in shell gritted ware. Colour coated wares make up 23% of the total by weight and are represented by common forms in red, brown and grey slips. These include fragments from beakers, flanged bowls (cf. Howe *et al* 1980, fig 7, 79) and a wide mouth jar (ibid 1980, fig 7, 76) which dates to the 4th century. In addition there is a base of a dish/bowl ornamented with on the inside with a barbotine/painted motif.

Other fabrics represented include a flanged bowl in black burnished type ware (Perrin 1996, fig 99, 468.469) and a fragment of *mortaria* furnished with worn black slag

trituration grits, which was probably manufactured in the Lower Nene Valley in the Cast-Stibbington area. A single sherd of Samian ware was also recovered from the upper fill (208) of ditch [207].

**The other finds** by *Tora Hylton*

The evaluation produced six individually recorded small finds.

Finds from Roman deposits comprise a fragment from a copper alloy armlet, two iron nails and one iron ring/collar. The armlet was recovered from the upper fill (205) of ditch [204]. It is cast and simply decorated with marginal grooves, rather like a finger ring from Fishbourne (Cunliffe 1971, fig 41, 53). Armlets of this type generally date to the late 3rd and 4th centuries. Other finds from Roman deposits include two nails of Mannings Type 1b (1985) from the fill (104) of ditch [105] and a collar/ring from the primary fill (514) of ditch [511]. Collars would have had any number of functions, to bind pivots or the ends of heavy wooden hafts and handles which held large tangs (ibid 1971, 140).

A single iron nail and small plano-convex lead weight were recovered from topsoil deposits.

**Animal bone** by *Karen Deighton*

**Introduction**

A total of 7.8kgs (two archive boxes) of animal bone were collected by hand. This material was assessed to ascertain the condition of the bone, the species present and potential contribution to the understanding of the site and to inform on future collection strategies.

**Method**

The animal bone was scanned and identifiable elements were noted (following Halstead 1985 after Watson 1979). Preservation and modification (after Binford 1981) were also noted. Any available biometrical data (after von den Driesch 1976) was noted as was any available ageing data. Ageing data included state of fusion (after Silver 1969), neonatal bone (after Amorosi) and tooth eruption and wear (after Payne 1973 for *Ovicaprids* and Halstead 1985 after Payne 1973 for *Bos*).

**Results**

Fragmentation varied from moderate to high with context, this was largely the result of old breaks. Surface abrasion was low, with the exception of context (205) where bone appeared weathered. Nine instances of canid gnawing were noted, which suggests the presence of dogs/foxes at the site. The low frequency of both surface abrasion and canid gnawing (7.5%) could suggest bone was rapidly buried after disposal. Evidence for

butchery was noted on a single *Bos* bone from context (108).

Table 1: Taxa by context

Cut/fill	Feature	<i>Bos</i> Cattle	<i>Ovicaprid</i> Sheep/goat	<i>Sus</i> Pig	<i>Canis</i> Dog	<i>L. ungulate</i> large hoofed	<i>S. ungulate</i> small hoofed	Total
104/105	Ditch	4				2		6
106/107	Enclosure ditch	10	1	1				12
106/108	Enclosure ditch	5	1	1		1		8
204/205	Enclosure ditch	5	5			1		11
210/209	Ditch	3	2			1		6
211/212	Roundhouse Gully	2		1				3
304/305	Possible pond		2					2
304/306	Possible pond	3						3
413/414	Ditch		1					1
511/514	Ditch	17	27	1	1	1	5	52
519/521	Ditch	1	2			1		4
527/528	Gully		1				1	2
614/615	Gully	3	3					6
710/711	Ditch	3						3
<b>Total</b>		<b>56</b>	<b>45</b>	<b>4</b>	<b>1</b>	<b>7</b>	<b>6</b>	<b>119</b>

Only indeterminate bone fragments were observed from context (416) (ditch [415]).

*Bos* (cattle) was the most abundant taxa present, closely followed by *Ovicaprid* (sheep/goat) with much smaller quantities of *Sus* (Pig) and *Canid* (dog). A small concentration of bone can be observed in context (514).

#### *Sieved material*

Animal bone was recovered from sieved samples 1 (context 514) and 3 (306). Identifiable material consisted of a *Bos* (cattle) distal tibia, an *Ovicaprid* (sheep/goat) third phalange and an *Ovicaprid* (sheep/goat) distal metatarsal from (514) and a *Bos* (cattle) tibia shaft from (306).

#### *Ageing and metrical data*

Table 2: The availability of ageing and metrical data

<i>Bos</i> (Cattle)			<i>Ovicaprid</i> (Sheep/goat)			<i>Sus</i> (Pig)		
Tooth wear	fusion	measurements	Tooth wear	Fusion	measurements	Tooth wear	fusion	Measurements
4	23	53	4	20	51	1	1	1

No neonatal bone was observed.



### ***Discussion***

The dominance of *Bos* (cattle) and *Ovicaprid* (sheep/goat) is to be expected for a site of this period. Any discussion of animal husbandry, diet or farming economy at the site is precluded by the small size of the assemblage.

The reasonable level of preservation, identifiable bone and the availability of ageing and metrical data suggests that the collection of further material from dateable/phaseable contexts, should further excavation take place, would provide information on the animal economy of the site.

The importance of the assemblage lies in the fact many sites in the region are on acid sand or gravel therefore preservation of bone is poor and assemblages are small. It will add to and can be compared with the corpus of existing work (eg Edix hill (Davis 1995), late Iron Age features at West Stow (Crabtree 1989), Ely West Fen (Higbee in press) and Ely Prickwillow (Deighton 2003). It will also provide useful comparanda for future work in the region.

Analysis has revealed a reasonably well preserved small assemblage of common domesticates and has demonstrated potential for future work.

### ***Soil samples by Karen Deighton***

#### ***Introduction***

Four samples were collected by hand during the course of trial trenching. These were assessed to determine the presence, nature and preservation of ecofacts, as well as informing on any future sampling strategies.

#### ***Method***

All samples were processed using a modified siraf tank fitted with a 250 micron mesh and flot sieve. The resulting flots were dried and sorted using a microscope (10x magnification).

Any ecofacts were identified where possible with the aid of atlases (see references). The author's small reference collection was also used to aid with seed identification.

#### ***Results***

All plant remains were preserved by charring. Fragmentation and surface abrasion were low for all ecofacts.

Table 3: Ecofacts by sample and context

Sample	1	2	3	4
Cut/fill	511/514	106/109	304/305	515/516
Feature	Ditch	Ditch	Large pit/Possible pond	Gully
Cereal	18	2	3	1
Chaff	11	9	8	
Wild/weed	3		2	2
Charcoal*	1	1	3	3
Molluscs	235	100	100	130

\* Key for charcoal +=present, 1=2-10, 2=10-20, 3=20-30, 4=30-50

The cereal types present included spelt (*Triticum spelta*) and naked barley (*Hordeum vulgare var nudum*), which were identified both from chaff and grains. Wild/weed taxa included sheep sorrel (*Rumex acetocella*) and chickweed (*Stellaria media*), both are common crop weeds. Molluscs included the terrestrial taxa *Pupilla muscorum*, *Vertigo pygmaea*, *Cochlicopa lubrica/lubricella* and *Clausilidae sp.* The freshwater taxa *Planorbis*, *Lymnaea* and *Bithynia* were noted in three samples.

### Discussion

Spelt and barley are both typical crops of the Iron Age/Roman period.

The presence of chaff could suggest processing was taking place on or near the site. The low number of charred plant remains present suggests its presence is the result of material washed or blown into features from activities taking place elsewhere on the site or nearby. The molluscan taxa present suggest damp conditions with some standing water.

The fact that identifiable ecofacts were present in all samples suggests sampling of dateable/phaseable contexts for charred plant remains during the course of future excavations will provide information on the arable economy and possibly the status of the site. The incremental sampling of features with suitable stratigraphy for snails will provide information on the local environment through time. The results will add to and can be compared with the corpus of existing work for example Wendens Ambo (Jones *et al* 1982) and Stonea (Murphy 1992) and well as providing comparanda for future work.

A small range of well preserved ecofacts were present. Analysis has shown that further sampling could possibly provide valuable information on the environment, economy and function of the site.

## 8 CONCLUSION

The archaeological evaluation has confirmed the evidence suggested by the cropmark plot. The cropmark shows three small sub-circular enclosures, arranged either side of a north-south aligned ditch which at its northern end turns west. Two of the small enclosures are on the western side of the central ditch, sharing the ditch as their eastern boundary. The third small sub-circular enclosure is located to on the south east bounded by continuous circuit of ditch. The north-south ditch continues into the area south of the evaluation, where there is a possible entrance arrangement.

The evaluation found two possible roundhouses, one in Trench 2 and one in Trench 7. The majority of the pottery assemblage was recovered from Trenches 1 and 2, supporting the suggestion that the features in these trenches reflect settlement activity during the second to fourth century AD. The environmental evidence although relatively small suggests from the presence of chaff that crop processing was happening in the vicinity, which with the pottery and small finds would suggest that the group of enclosures had domestic and processing areas.

The Roman features are overlain in some trenches by evidence of medieval furrows. Trench 6 in the northern part of the development area has what appear to be modern drains, there was no Roman archaeology seen in this trench.

## BIBLIOGRAPHY

- Atkins, R, and Mudd, A, 2003 An Iron Age and Romano-British settlement at Prickwillow Road, Ely, Cambridgeshire: Excavations 1999-2000 *Proceedings of the Cambridge Antiquarian Society*, **XCII**
- Amorosi, T, 1989 *A Postcranial Guide to Domestic Neo-natal and Juvenile Mammals*, British Archaeological Reports, International Series, **533**, Oxford
- Binford, L, 1981 *Bones: early man and modern myth* Chicago University Press
- Brothwell, D, and Higgs, E, (eds) 1969 *Science in Archaeology*, Thames and Hudson, London
- Crabtree, P J, 1989 West Stow, Suffolk: Early Anglo-Saxon Animal husbandry, *East Anglian Archaeology*, **47**, 155
- Cunliffe, B, 1971 *Excavations at Fishbourne, Volume II: The Finds*, Society of Antiquaries
- Davis, S J M, 1995 *Animal bones from the late Iron age site at Edix Hill, Barrington, Cambridgeshire 1981-1991 excavations*, AML report **54/95**
- Deighton, K, 2003 The animal bone, in R Atkins and A Mudd 2003, 40-44
- Halstead, P L 1985 A study of mandibular teeth from Romano-British contexts at Maxey, in F Pryor and C French, 219-24
- Fisher, I 2006 *An archaeological evaluation at Papworth everard business park plots 7, 9 and 10 Cambridgeshire*, Northamptonshire Archaeology Report, **06/107**
- Higbee, L, in press The animal bone, in A Mudd and M Webster
- Hodder, I 1982 *Wendens Ambo. The excavations of an Iron Age and Romano-British settlement*, The Archaeology of the M11, **2**, London: Passmore Edwards Museum.
- Howe, M D, Perrin, J R, and Mackreth, D F, 1980 *Roman Pottery from the Nene Valley: A Guide*, Peterborough City Museum, Occasional Paper, **2**
- Jones, G, Halstead, P, and Morse, V, 1982 The carbonised seeds, in I Hodder 1982
- Kerney, M P, and Cameron, R A D, 1994 *Land Snails*, Harper Collins, London
- Mackreth, D F, 1996 *Orton Hall Farm: A Roman and Early Anglo-Saxon Farmstead*, East Anglian Archaeol, **76**
- Manning, W H, 1985 *Catalogue of the Romano-British Iron tools, fittings and weapons in the British Museum*, British Museum
- Mudd, A, and Webster, M, in press *Iron Age and Middle Saxon Settlements at West Fen Road, Ely: The Consortium Site*, British Archaeological Reports, British Series
- Murphy, P 1992 *Stonea Camp, Cambridgeshire: plant macrofossils and molluscs from the Iron Age hillfort ditch fills*, AML Report, **58/92**
- Payne, S 1973 Kill-off patterns in Sheep and goats: the mandibles from Asvan Kale, *Anatolian Studies*, **23**, 281-303
- Perrin, J R, 1996 The Roman Pottery, in D MacKreth 1996, 114-190
- Pryor, F, and French, C, 1985 *Cambridgeshire: The Fenland Project No 1: Archaeology and Environment in the lower Welland Valley*, East Anglian Archaeol, **27**
- Schoch, W H, Pawlik, B, and Schweingruber, F H, 1988 *Botanical macro-remains* Paul Haupt, Berne

Silver, I, 1969 The ageing of domestic mammals, in D Brothwell and E Higgs (eds) 1969, 283-302

Von den Driesch, A, 1976 *A guide to the measurement of animal bone from Archaeological sites*, Harvard: Harvard University press

Watson, J P N, 1979 The estimation of the relative frequencies of mammalian species: Khirokitia 1972, *Journal of Archaeological Science*, **6**, 127-37

**Web Sites**

<http://www.bgs.ac.uk/GeoIndex/index.htm>

## APPENDIX 1: POTTERY TABLES

FABRIC TYPE	TRENCH/CONTEXT NUMBER																			
	107		108		109		201		205		206		208		210		305		305	
	No/Wg		No/Wg		No/Wg		No/Wg		No/Wg		No/Wg		No/Wg		No/Wgt		No/Wg		No/Wg	
<b>Roman Pottery</b>																				
Black burnished ware type	1	26																		
Greyware	8	50			6	39			7	141	1	24			7	54	11	111	9	70
Grog-tempered wares	1	6							2	20							1	4		
Misc. sandy wares	1	22	2	15	1	4													1	8
Misc. oxidized wares	1	2					1	37	1	2							4	32		
Mortaria																				
Shell-gritted ware	6	98	1	5							4	84			2	32	1	21		
<b>Roman Fine wares</b>																				
Lower Nene Valley CC			3	58															1	6
Oxfordshire CC	1	51																		
<b>Imported wares</b>																				
Samian													1	3						
<b>Post-medieval pottery</b>																				
<b>Total</b>	19	255	6	78	7	43	1	37	10	163	5	108	1	3	9	86	17	168	11	84

Papworth Everard Hospital Car Park

FABRIC TYPE	TRENCH/CONTEXT NUMBER																			
	312		412		414		514		516		521		528		605		704		711	
	No/Wg		No/Wg		No/Wg		No/Wg		No/Wg		No/Wg		No/Wg		No/Wg		No/Wg		No/Wg	
<b>Roman Pottery</b>																				
Black burnished ware type																				
Greyware	1	41					1	17									4	58	1	4
Grog-tempered wares					9	29														
Misc. sandy wares									1	9										
Misc. oxidized wares							1	8	1	2							3	12	2	16
Mortaria																	1	15		
Shell-gritted ware					3	5					5	31	1	3			5	42		
<b>Roman Fine wares</b>																				
Lower Nene Valley CC																	11	227	1	91
Oxfordshire CC																				
<b>Imported wares</b>																				
Samian																				
<b>Post-medieval pottery</b>			1	33													1	6		
<b>Total</b>	1	41	1	33	12	34	2	25	2	11	5	31	1	3	1	6	24	354	4	111

**PLATES**



Plate 1: Ditch [106]



Plate 2: Ditch [204]

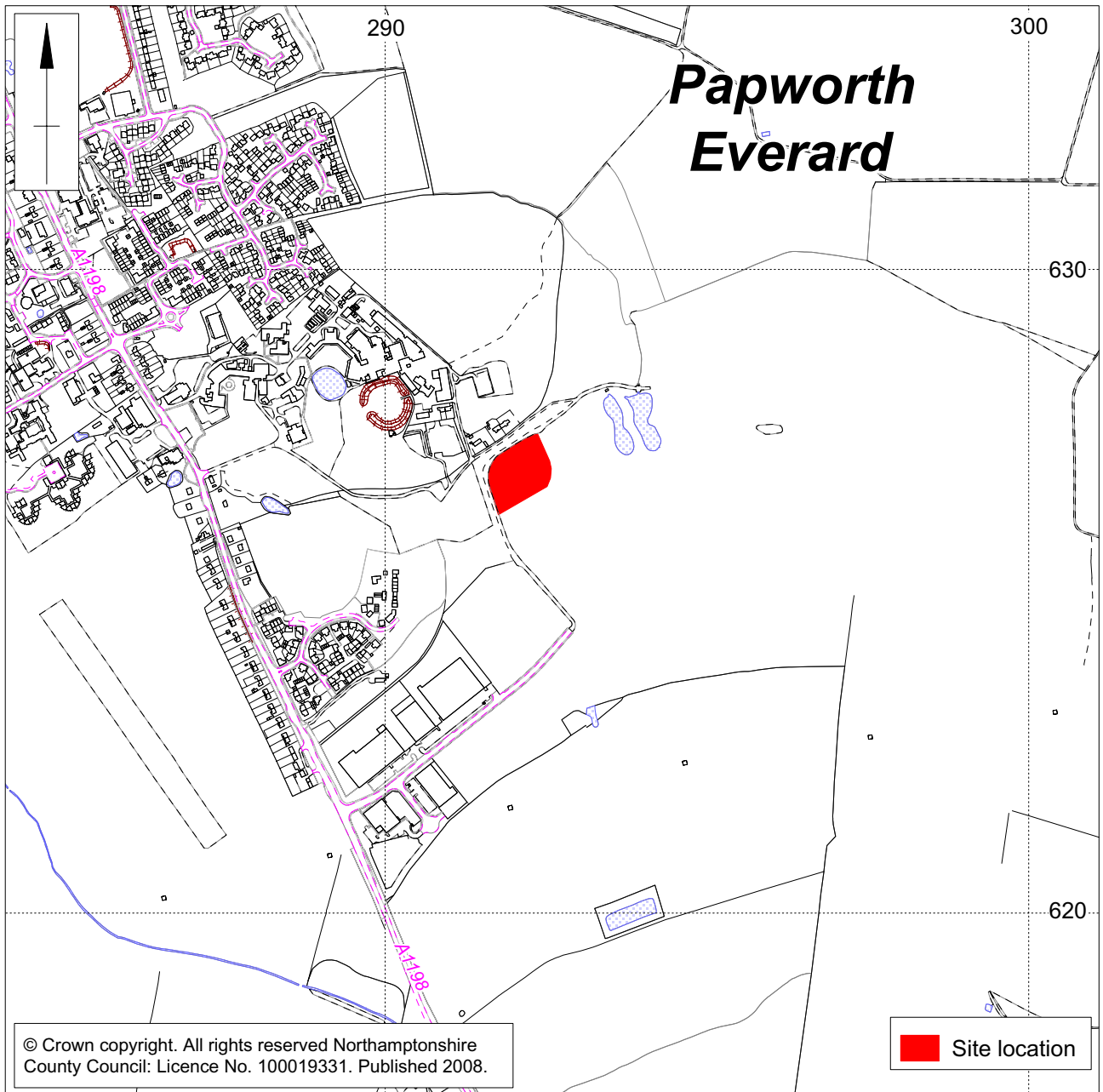
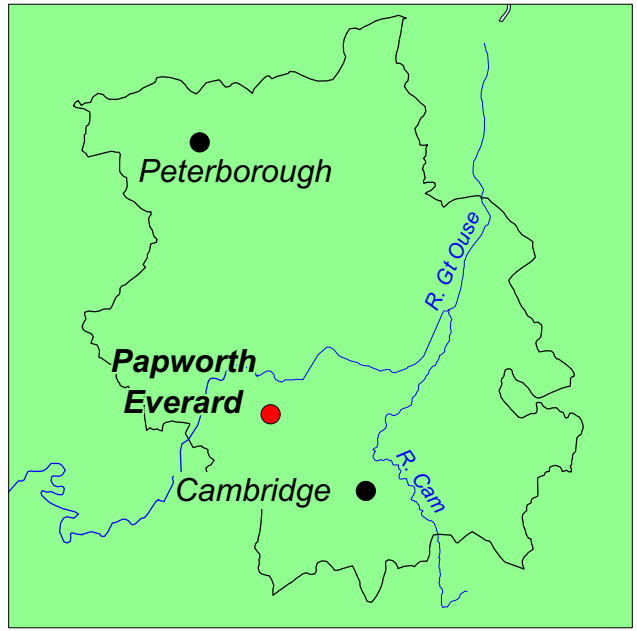
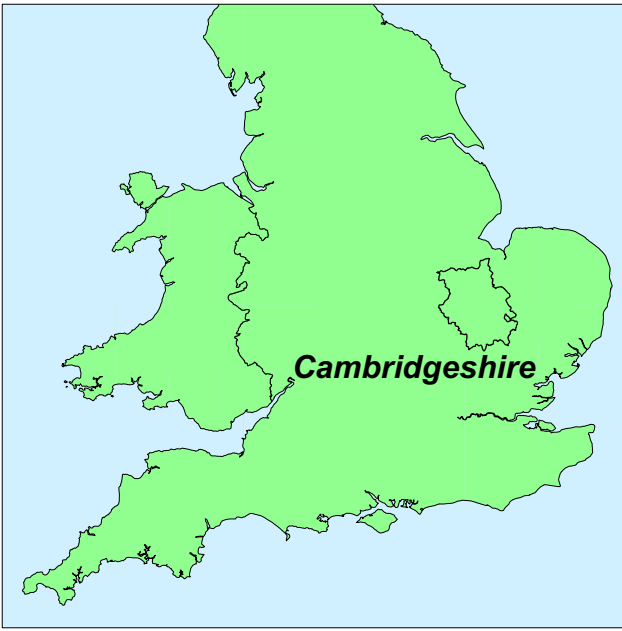




Plate 3: Ditch [522]

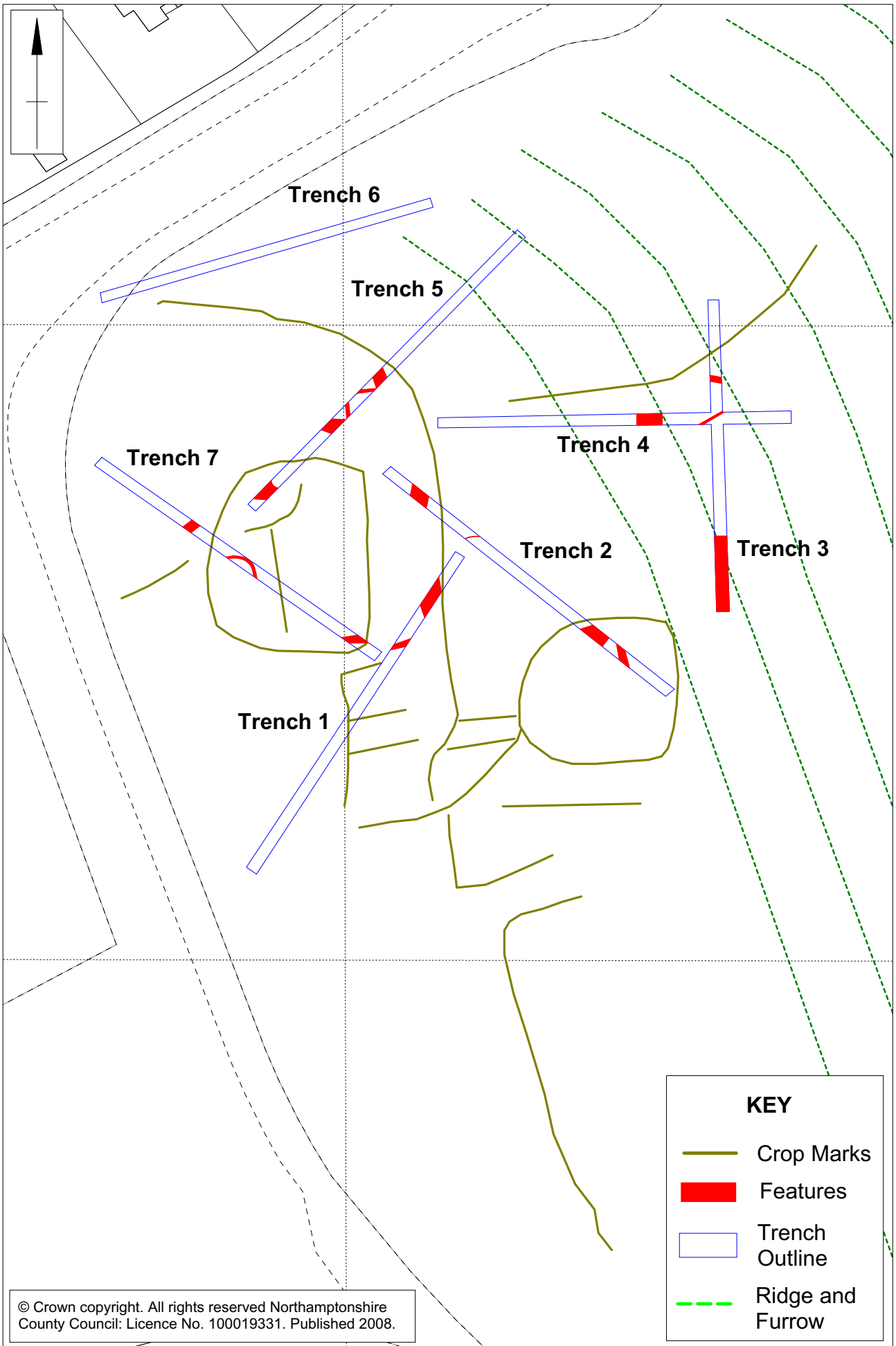


Plate 4: Gullies [515] and [517]



Scale 1:10,000

Site location Fig 1

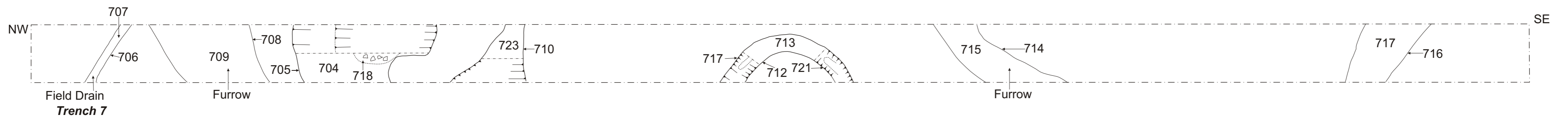
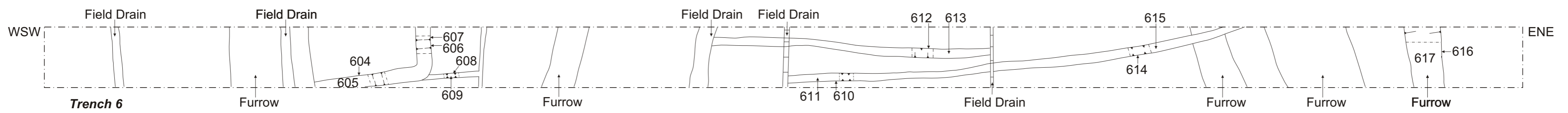
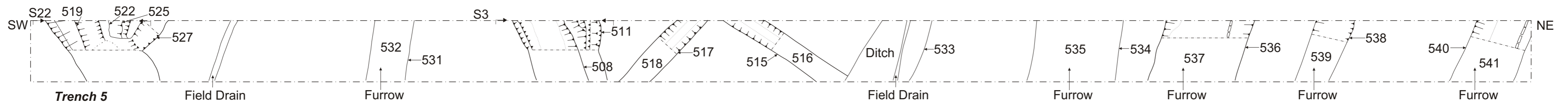
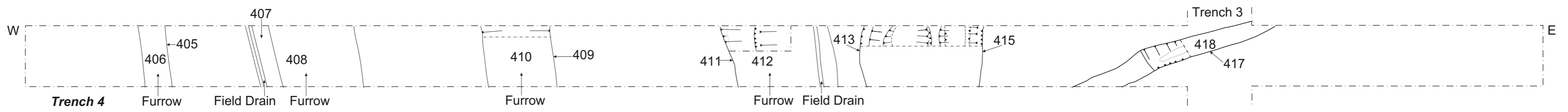
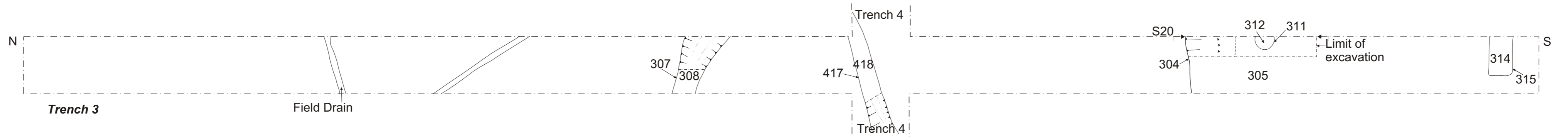
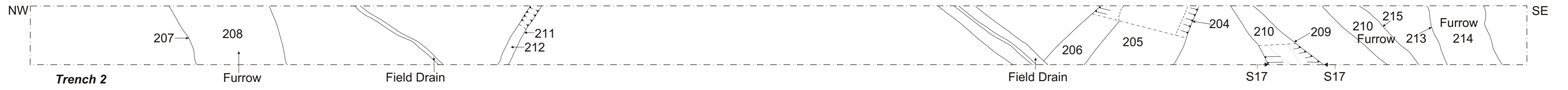
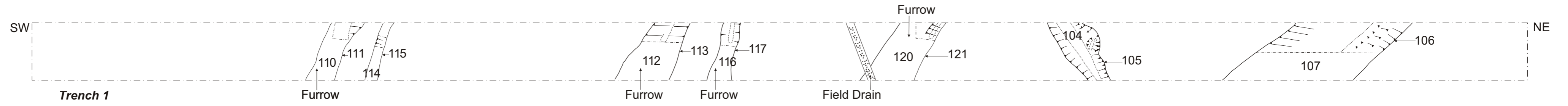


© Crown copyright. All rights reserved Northamptonshire County Council: Licence No. 100019331. Published 2008.

Scale 1:750

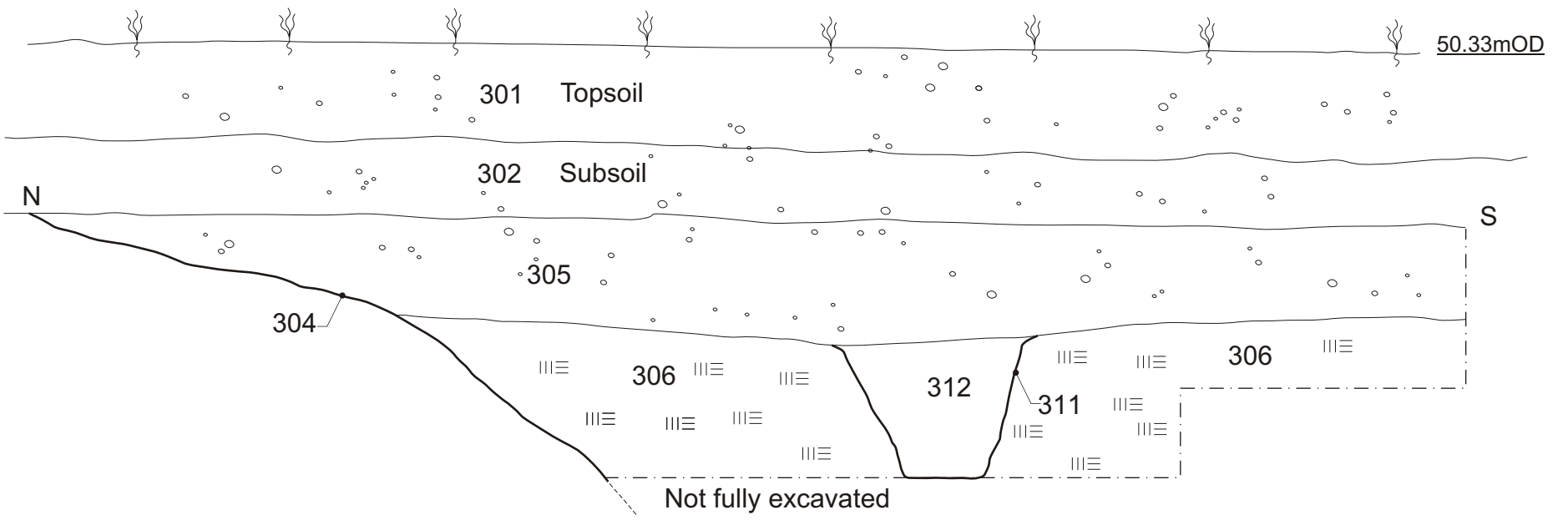
Archaeological features Fig 2



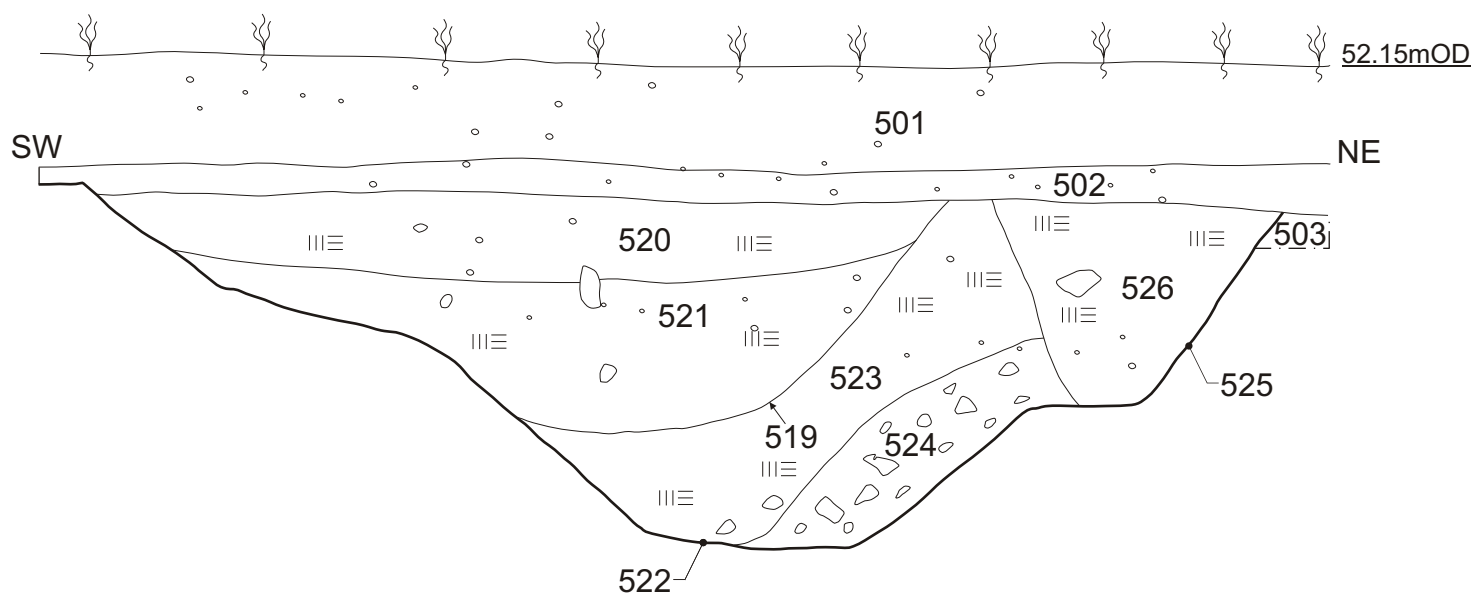


Trench Plans Fig 3

**Section 20**



**Section 22**



**Section 3**

