Sleaford Enterprise Park, East Road, Sleaford Archaeological Evaluation Trenching

NGR: TF 0780 4710 Site Code: SEP 00 Accession no.: 2000.126

Report for

Kennedy Design

on behalf of

Platts Harris Agricultural Group

LAS Report No. 423

June 2000

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PPNS 60812 LI 60812
60767 LI 60767
60768 LI 60768
61212 LI 80853

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Summary

A total of 6 trenches were excavated in the former Sleaford Rugby Club fields. Six ditches all aligned north-east/south-west were recorded. Their alignment suggests they may be contemporary and as such are post medieval in date, one of the ditches cutting a borrow pit revealed in Trench 4 which contained post medieval pottery and brick fragments. A posthole and post pit of later date were noted to cut the pit. Of the same date was an east - west orientated ditch, also in Trench 4, which produce a large brick fragment. A large modern pit like feature was recorded in Trench 1, cut by one of the many modern land drains seen on the site.

All but one of the recorded features contained no finds of any date. A single ditch in Trench 3 yielded several fragments of Iron Age pottery and animal bone.

Given the shallow depth of archaeological deposits on the site the potential impact of development on the would be considerable. However, the lack of archaeological remains indicates that the damage to significant archaeological deposits would be minimal.

Introduction

Lindsey Archaeological Services was commissioned by Kennedy Design, on behalf of Platts Harris Agricultural Group, in April 2000, to undertake an archaeological evaluation at the above site, in accordance with the Brief set by the North Kesteven Heritage Officer. The scope of the work complies with the *Guidance and Archaeology and Planning* (PPG 16), Department of the Environment (1990); *Management of Archaeological Projects*, English Heritage (1991); *Standard and Guidance for Archaeological Field Evaluations*, Institute for Field Archaeologists (1993, revised 1994).

The Site

The development site comprises an L- shaped piece of land to the west of East Road behind the former premises of Sleaford Rugby Club. It comprises 1ha of land proposed for industrial development, which is currently rough grass land.

Aims and Objectives

The purpose of the evaluation was to

 establish the presence or absence, quality and extent of archaeological remains and their location within the development area

1

- gather sufficient information to enable an assessment of the potential and significance of any archaeological remains to be made and the impact which development will have upon them
- enable an informed decision to be made regarding the future treatment of any archaeological remains and consider any appropriate mitigatory measures either in advance of and/or during development

Archaeological Background

Archaeological excavations on the east side of Sleaford have identified late Iron Age and Roman settlement remains along the Roman road which runs south from Ruskington, to the north and east of the proposed development site. The proposed development lies east of an area of extensive cropmarks which may represent further prehistoric/Romano-British settlement sites and associated field systems (Tann1996).

Evaluation trenching, on land to the west, near Sleaford Wood, carried out in 1998, identified evidence for Neolithic occupation on high ground to the south and established that the lower ground, immediately west of the Rugby Club, would have been too waterlogged for occupation during the prehistoric and Roman times (LAS records). Between this site and the Rugby Club, evaluation by Archaeological Project Services in September 1999 located ditches identified on aerial photographs but failed to find any associated dating evidence (Raynor 1999).

A geophysical survey carried out on the rugby pitches in 1997 (EAS 1997) revealed some linear anomalies.

Excavation

- 1. Six machine-excavated trenches, each 20m x 1.8m were dug using a toothless ditching bucket providing a 2% sample of the total development area of 1ha (Pl.1). The trenches were positioned to investigate features identified on aerial photographs and anomalies recorded by the geophysical survey as well as in blank areas (Fig. 2).
- 2. Archaeological recording on the site was carried out by a team of 3 experienced archaeologists, including a Site Director. After machine removal of the topsoil and subsoil, the trenches were cleaned by hand and selected excavation of features was carried out in order to achieve the objectives outlined above.
- 3. A plan of each trench was made with section drawings illustrating topsoil and subsoil depth. In addition sections were made of individual features, or groups of features, as appropriate. A full photographic record was kept throughout the progress of the excavation to cover each feature together with general site shots. LAS operates a standard context recording system, developed by its staff over the past 20 years, based on MOLAS and CAS formats.

- 4. All archaeological deposits were given a context number, these numbers being prefixed with the number of the trench (i.e. Trench 1 began with 100, Trench 2 200 etc.). Finds recovered from each context were given the same number for processing thus enabling the deposits to be dated.
- 5. All man-made artefacts and animal bone recovered during evaluation were retained for examination by the appropriate specialist and processed in accordance with the requirements set out in the Brief.
- 6. Environmental sampling was carried out on the fills of selected features.
- 7. Processing of finds was carried out by LAS before distribution to the appropriate specialists.

Results

Trench 1 (Fig. 3; Pl.5)

Trench 1 was positioned 35m south of the former Sleaford Rugby Club, orientated east - west. The 0.32m thick topsoil, 100 sealed a mixed sand and gravel natural, 102. Aligned north west - south east along the trench was modern land drain 101 (Pl.5). On the same orientation was plough furrow 105/111 which contained a clay tobacco pipe stem (Fig. 5; Pls. 5-9). The furrow cut through a possible ditch terminal 107 (Fig. 5; Pl.6), which was 1m wide and 0.36m deep. It contained three different fills of sand silt 109, 108 and a primary fill 110. All were devoid of finds.

Approximately 6.50m west of **107** was a north - south aligned gully, **113** (Fig. 5; Pl.7), 0.68m wide, and 0.20m deep, also sealed by furrow **105/111**. Its only fill **114**, a coarse grey brown silt sand, produced two pieces of animal bone. Of similar dimensions and on the same alignment was gully **103** (Fig. 5; Pl.8). Its upper fill, **104**, was sandier than **114**, and did not produce any finds. Dark grey brown sand silt **119** represented the initial silting up of the gully.

Between the two gullies was ditch 115, 2.15m wide and 0.40m deep (Fig. 5; Pl.9). It had a grey brown silt sand upper fill, 116, a dark grey loam, 117, secondary fill and a mixed grey yellow brown silt sand primary fill (118). Eight tiny scraps of brick or tile were found in the sieved material from the environmental sample taken from (117). They are too small to identify further. Molluscs found in this deposit suggest wet conditions with a number of aquatic species represented (see Appendix 2).

Two areas of root disturbance, 120 and 122, were noted at the eastern end of the trench.

Trench 2 (Fig. 3; Pls.2 and 10)

Trench 2 was 14m west of the former Sleaford Rugby Club building, aligned north - south. Beneath the 0.28m deep topsoil, **201**, was an orange-brown subsoil, **201**, 0.20m deep overlying the natural mixed sands and gravels, **202**.

Six areas of root disturbance were recorded, **203** (Pl.11), **205** (Fig. 6; Pl.12), **207** (Pl.13), **209** (Pl.14), **211** (Fig. 6; Pl.15) and **213** (Pl.16). All contained an orange brown sand silt often with a dark humic content towards the centre of the features.

A single posthole **215** (Fig. 6; Pl.17) was recorded in this trench. It had a diameter of approximately 0.30m and was 0.15m deep. Its only fill **216**, a mid-orange grey-brown sand silt contained no finds.

Trench 3 (Fig. 3; Pls.3 and 18)

Trench 3 was situated 20m from the road north of the evaluation area. Underlying the 0.30m thick topsoil, 300, were the natural sands and gravels 302. No subsoil was present. At the eastern end of the trench was 305 (Fig. 6; Pl.19), a 1m wide and 0.25m deep, ditch. It was filled with, a mid to dark grey brown sand silt, 306, containing three fragments of animal bone and fourteen sherds of shell-tempered Iron Age pottery. Seven of the sherds were found in the residue of the environmental sample and were tiny fragments. There was one small rim sherd and four joining pieces from the base of a second vessel (see Appendix 3).

Cutting ditch **306** was an irregular feature **307** (Fig. 6; Pl.19), probably created by tree root action. Its fill **308** was a dark grey sand silt turning brown towards the edge of the feature.

Toward the western end of the trench was ditch **303** (Fig. 6; Pl.20), aligned north-east/south-west It was 1.12m wide and 0.38m deep and contained a mid to dark grey brown sand silt with occasional small, rounded stones **304**. Root disturbance was noted either side of the ditch. There were no finds.

Trench 4 (Fig. 4; Pls. 3 and 21)

Trench 4 was positioned west of Trench 2 on the western boundary of the proposed development, to investigate the possible continuation of cropmarks recorded to the west. Beneath topsoil 400 was a subsoil 401 which sealed all features in the trench except for posthole, 433 (Fig. 7; Pl.22), which contained one fragment of brick and was clearly modern in date. To one side, almost directly below 433 was a 0.43m deep post pit, 421 (Fig. 7; Pl.22). It contained a 1.10m long rectangular post, 423, as well as a 0.30m long bolt.

Two ditches, **403** (Fig. 7; Pl.23) and **418** (Fig. 7; Pl.22), *c*.3m apart ran north-east / south-west across the trench. They were 0.80m - 0.90m wide, 0.35m -0.45m deep. Both had brown grey upper fills, **404** and **419**, of varying sand content. Their lower fills were compact blue

grey clay sands, **405** and **420**. Similarity of fills and alignment suggests these ditches are contemporary. They may be the ditches recorded as cropmarks (NMR ref. SF1715-20). Next to ditch **403** was an oval posthole **406** (PI.23). It measured 0.70m x 0.33m x 0.10m. Its sole fill, **407**, was identical to the fill of ditch **403**, suggesting that they fell into disuse at the same time.

A fire pit 438 (Fig. 7; Pl.24), 0.20m deep, 0.92m long, containing burnt sand and an apparently charcoal rich grey brown silt, 439, lay between the two ditches. However, the environmental sample produced little of interest (see Appendix 2).

Ditch 418 cut through a large pit, 411 (Fig. 7; Pl.22). Its upper fill, 412, was redeposited natural which contained a sherd of late 17^{th} - 18^{th} century pottery (see Appendix 2). Beneath 412 was a grey brown clay silt 413, which overlay a compact grey clay rich with mollusc shells 414. It contained a fragment of brick, an abraded sherd of Roman Samian ware pottery and 14 fragments of animal bone,. Also sealing 414 was 415, a redeposited gravel, which was 0.20m deep. A light grey clay, 416, which turned sandy towards the edges of the pit, contained two brick fragments and sealed fill 417, a blue grey silt clay. Excavation was stopped at this depth because of water seepage into the pit.

To the north of pit **411** was gully **435** (Fig. 7; Pl.25), 0.28m wide, 0.12m deep, filled by a brown silt sand **436**, which did not yield any finds. Further north was ditch **430** (Fig. 7; Pl.26). It produced one piece of brick from its fill **431**. Both features were aligned east - west.

Four areas of root disturbance, 408 (Pl.23), 424 (Pl.27), 427 (Pl.27) and 432 (Pl.28), were also noted in the trench. All had brown sand fills 410, 426, 429 turning grey and humic 409, 425, 428 and 432.

Trench 5 (Fig. 4; Pl. 4 and 29)

This trench, was south of Trenches 2 and 4 and was aligned west-east. Topsoil **500** was 0.40m thick, overlying a mottled orange sand **501**. A single ditch **503** (Fig. 8; Pl.30), aligned north-west/ south-east, was located at the east end of the trench. Its full width was not exposed but a depth of 0.38m was recorded. It contained one fill, **504**, a light to mid grey brown clay sand with a single very abraded sliver of pottery, possibly Roman in date, retrieved from the residue of the environmental sample.

The other four features in this trench (505 (Fig. 8; Pl.31), 508 (Pl.32), 510 (Pl.33) and 512 (Pl.34)), when investigated, proved to be the result of root action. They were, like similar features in Trench 2, filled by a brown sand, turning humic and grey.

Trench 6 (Fig. 4; Pl. 35)

Trench 6 was located on the east side of the site, south of Trench 1. The topsoil, 600, which contained sand pockets was 0.70m deep and overlay subsoil 601, 0.30m deep. The natural sands and gravels were recorded as 602 in this trench.

Immediately beneath the topsoil and dug through the subsoil was a large modern feature, 603 (Fig. 8; Pl.36). It had an exposed width of c.6m and an minimum depth of 0.60m. Its lowest fill of crushed limestone, 615, was not excavated. To the east, and cutting 603, was a north west - south east orientated land drain 612. A tree throw, 617, was also recorded cutting into 603 to the west (Fig. 8).

Beneath the subsoil **601,** close to the western end of the trench, was ditch **609** (Fig. 8; Pl.37), crossing the trench from north-east/ south-west. It was 1m wide and 0.36m deep. Its fill **610**, a grey brown clay sand, was sampled for environmental examination. A single charred wheat grain was found together with snails representing species preferring damp to wet grassland habitats (see Appendix 2). Also found in the environmental sample were four pieces, including two joining base sherds, of a single Roman pottery vessel in a fine grey fabric, probably 2nd century in date.

A ditch terminal, **605** (Fig. 8; Pl.38), was noted c.5m east of **609**. The ditch had a width of 0.60m, depth of 0.23m and projected 1m into the trench. Its fill, **606**, was identical to **610**.

A possible circular posthole, **607** (Fig. 8; Pl.39), was also recorded. It was approximately 0.70m in diameter and 0.17m deep. Its two fills, **608** and **616**, were very similar to those identified as areas of root disturbance in other trenches but the clarity of the edges suggested human activity.

Discussion

The evaluation established that the majority of activity within the site was of recent date. A system of ditches 107, 303, 403, 418, 605, 609, aligned north east - south west, was in operation during the post-medieval period, probably representing a period when the land underwent agricultural usage. The presence of furrow 105/111, containing a clay pipe stem, also suggests the land was used for cultivation during the post-medieval period. An earlier large pit 411, still post-medieval in date, might represent a borrow pit, the extracted sand and gravel possibly being used for, what is now, Sleaford's East Road. Ditch 430, to the north, may well be associated with the borrow pit, functioning as a drainage ditch, as might gully 435 and even gully 113.

Several postholes, 215, 406 and 607, ditches 115 and 503 and pit 438 were recorded but produced no finds to allow dating. These features could be of any date from the Roman to the post-medieval periods.

The only positive dating evidence was found in ditches **305** and **609**. **305** produced fourteen sherds of pottery (7 of minute size) which were Iron Age in date, confirming that limited activity of this period, already noted to the west and east of this site, extends into the proposed development site. Four joining base sherds from a Roman pot were found in the fill of ditch **609**, also confirming limited activity for this period on the site. The results of the environmental assessment suggest that the land was open grassland in the Iron Age and Roman periods of fluctuating degrees of wetness. There was nothing to suggest habitation in the area of the evaluation and the ditches probably represent field boundaries.

No evidence for Bronze Age or earlier Neolithic activity was noted, suggesting that the hand axe recorded in the SMR (SMR no. 60473) was probably not *in situ*.

Conclusion

The evaluation established that the majority of the archaeological features are probably of post-medieval date. The Iron Age and Roman ditches were probably field boundaries dividing up the grassland for grazing of animals rather than human occupation of the site. The potential impact of any development planned for the site will be relatively minor in archaeological terms.

Acknowledgements

LAS would like to thank Steve Poole the JCB driver. Thanks also to the New Agra Indian restaurant for allowing use of their parking facilities. All fieldwork was undertaken by Wendy Booth, Mick McDaid and Jeremy Mordue. The report was collated and produced by Jane Frost.

Mick McDaid Lindsey Archaeological Services June 2000

References

Armour-Chelu, R., 1999 Bonemill Lane, East Road, Sleaford. Archaeological Evaluation Trenching. LAS Report no.371

EAS 1997a, *Sleaford East Road, Geophysical Survey*.Report by Engineering Archaeological Services, commissioned by Archaeological Project Services. May 1997.

EAS 1997b, *Sleaford East Road, Geophysical Survey*.Report by Engineering Archaeological Services, commissioned by Archaeological Project Services. November 1997.

Johnson A.E. 1999. Land East of Sleaford Wood, Sleaford. Archaeological Geophysical Survey. Oxford Archaeotechnics report for LAS.

Raynor, T., 1999 Archaeological Evaluation on Land to the Rear of the Old Rugby Pitch, East Road, Sleaford, Lincolnshire. APS developer report.

Tann, G., 1996 Sleaford, Land off East Road,. Archaeological Desk Top Assessment. LAS Report no.193

Contents of Site Archive

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Sections: 20

Contexts: 100-123

200-216

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500-516

600-618

Photographs:

LAS Film Nos. 00/49/ negatives 2-37

LAS Film Nos. 00/50/ negatives 0-37

LAS Film Nos. 00/51/ negatives 2-37

Finds: One box of pottery, bone and brick fragments

Correspondence

The Appendices

Context	Trench	Туре	Description	Finds
Trench 1			•	
100	1	Layer	Topsoil	
101	1	Layer	Subsoil	
102	1	Layer	Natural	
103	1	Cut	Gully	
104	1	Fill	Fill of 103	
105	1	Cut	Furrow	
106	1	Layer	Fill of 105	Clay tobacco pipe stem
107	1	Cut	Ditch	cia) to seed of pipe sterin
108	1	Fill	Fill of 107	
109	1	Fill	Fill of 107	
110	1	Fill	Fill of 107	
111	1	Cut	Furrow (same as 105)	
112	1	Fill	Fill of 111(same as 106)	
113	1	Cut	Gully	
114	1	Fill	Fill of 113	Animal bone
115	1	Cut	Ditch	Allitial bolie
116	1	Fill	Fill of 115	
117	1	Fill	Fill of 115	Brick/tile fragments
118	1	Fill	Fill of 115	Dileville fragments
119	1	Fill	Fill of 103	
120	1	Cut	Tree throw	
121	1	Fill	Fill of 120	
122	1	Cut	Tree throw	
123	1	Fill	Fill of 122	
125	'	1.111	FIII OI 122	
Trench 2				
200	2	Layer	Topsoil	
201	2	Layer	Subsoil	
202	2	Layer	Natural	
203	2	Cut	Root disturbance	
204	2	Fill	Fill of 203	
205	2	Cut	Root disturbance	
206	2	Fill	Fill of 205	
207	2	Cut	Root disturbance	
208	2	Fill	Fill of 207	
209	2	Cut	Root disturbance	
210	2	Fill	Fill of 209	
211	2	Cut	Root disturbance	
212	2	Fill	Fill of 211	
213	2	Cut		
	2	Fill	Root disturbance	
214 215	2		Fill of 213	
		Cut Fill	Posthole Fill of 215	
216	2	FIII	Fill of 215	
Trench 3				
	2	Lover	Toncoil	
300	3	Layer	Topsoil	
301	3	Layer	Subsoil	
302	3	Layer	Natural	
303	3	Cut	Ditch	
304	3	Fill	Fill of 303	

Context	Trench	Type	Description	Finds
Trench 3 cont.			-	
305	3	Cut	Ditch	
306	3	Fill	Fill of 305	Iron Age Pottery and animal bone
307	3	Cut	Root disturbance	
308	3	Fill	Fill of 307	
Trench 4				
400	4	Layer	Topsoil	
401	4	Layer	Subsoil	
402	4	Layer	Natural	
403	4	Cut	Ditch	
404	4	Fill	Fill of 403	
405	4	Fill	Fill of 403	
406	4	Cut	Posthole	
407	4	Fill	Fill of 406	
408	4	Cut	Root disturbance	
409	4	Fill	Fill of 408	
410	4	Fill	Fill of 408	
411	4	Cut	Pit	
412	4	Fill	Fill of 411	Pottery
413	4	Fill	Fill of 411	
414	4	Fill	Fill of 411	Brick and animal bone
415	4	Fill	Fill of 411	
416	4	Fill	Fill of 411	Brick fragments
417	4	Fill	Fill of 411	
418	4	Cut	Ditch	
419	4	Fill	Fill of 418	
420	4	Fill	Fill of 418	
421	4	Cut	Post pit	
422	4	Fill	Fill of 421	
423	4	Fill	Fill of 421	
424	4	Cut	Root disturbance	
425	4	Fill	Fill of 424	
426	4	Fill	Fill of 424	
427	4	Cut	Root disturbance	
428	4	Fill	Fill of 427	
429	4	Fill	Fill of 427	
430	4	Cut	Ditch	
431	4	Fill	Fill of 430	Brick
432	4	Cut	Root disturbance	
433	4	Cut	Posthole	
434	4	Fill	Fill of 433	Brick fragment
435	4	Cut	Gully	
436	4	Fill	Fill of 435	
437	4	Fill	Fill of 432	
438	4	Cut	Pit	
439	4	Fill	Fill of 438	
1				

Context	Trench	Type	Description	Finds
Trench 5				
500	5	Layer	Topsoil	
501	5	Layer	Subsoil	
502	5	Layer	Natural	
503	5	Fill	Ditch	
504	5	Fill	Fill of 503	?Roman pottery
505	5	Cut	Root disturbance	
506	5	Fill	Fill of 505	
507	5	Fill	Fill of 505	
508	5	Fill	Fill of 505	
509	5	Cut	Root disturbance	
510	5	Fill	Fill of 508	
511	5	Cut	Root disturbance	
512	5	Fill	Fill of 510	
513	5	Cut	Root disturbance	
514	5	Fill	Fill of 512	
515	5	Cut	Root disturbance	
516	5	Fill	Fill of 508	
517	5	Fill	Fill of 510	
Trench 6				
600	6	Layer	Topsoil	
601	6	Layer	Subsoil	
602	6	Layer	Natural	
603	6	Cut	Modern disturbance	
604	6	Fill	Fill of 603	
605	6	Cut	Ditch	
606	6	Fill	Fill of 605	
607	6	Cut	Posthole?	
608	6	Fill	Fill of 607	
609	6	Cut	Ditch	
610	6	Fill	Fill of 609	Roman pottery
611	6	Fill	Fill of 603	
612	6	Cut	Drain	
613	6	Fill	Fill of 612	
614	6	Fill	Fill of 603	
615	6	Fill	Fill of 603	
616	6	Fill	Fill of 607	
617	6	Fill	Tree throw	
618	6	Fill	Fill of 617	
*				

Sleaford Rugby Pitch, Sleaford - SEP00

Environmental Archaeology Assessment

Introduction

An archaeological evaluation conducted by Lindsey Archaeological Services at the south east part of Sleaford Rugby Pitch, Sleaford uncovered a number of archaeological features and ditches, but produced very little dating evidence and many of these features remain undated. Five soil samples were taken for environmental assessment (Table 1).

Table 1: Samples taken for Environmental Assessment

Sample	context	volume	weight	feature	date
		in l.	in kg.		
1	306	10	15		IA
2	439	10	12.5		
3	504	19	23		
4	610	20	25		Rom
5	117	20	24		

Methods

The five samples were processed in the following manner. Sample volume and weight was measured prior to processing. The samples were washed in a 'Siraf' tank (Williams 1973) using a flotation sieve with a 0.5mm mesh and an internal wet-sieve of 1mm mesh for the residue. Both residue and float were dried, and the residues subsequently re-floated to ensure the efficient recovery of charred material. The dry volume of the flots was measured, and the volume and weight of the residue recorded.

The residue was sorted by eye but apart and environmental and archaeological finds were picked out. A magnet was run through each residue in order to recover magnetised material such as hammerscale and prill, but none was found. The residue was then discarded. The float of each ample was studied under a low power binocular microscope. The presence of environmental finds (ie snails, charcoal, carbonised seeds, bones etc) was noted and their abundance and species diversity recorded on the assessment sheet. The float was then bagged. The float and snails from the sorted residue constitute the only material archive of the samples.

The individual components of the samples were then preliminarily identified and the results are summarised below in Tables 1 and 2.

Results

The residues of all five samples were composed of sub-angular and sub-rounded limestone gravel with occasional pebbles and flint, and a little ironstone in the finest fraction. Four of the samples had uncharred seeds, including Chenopodium sp., which are presumed to be intrusive, and two contained the larval cases of insects whose grubs lived in the soil.

Although pottery sherds were recovered from three of the samples (Table 2) charcoal and charred seeds were very infrequent in the samples. Only one sample, context 610 containing Roman pottery, produced any charred grain, and then only one grain, probably of wheat. The

Iron Age context 306 produced four small fragments of very eroded bone, but no other finds were present except for a small prill of slag in 306. The magnetic element in context 439 included a little burnt stone.

Table 2: Samples taken for environmental analysis and the finds from them

sample	context	volume	residue	pottery	charcoal	snails	charred	bone	comment
		in l.	vol in l.	no./wt.	*	*/#	seed		
1	306	10	2.5	7/3g	1	4/3	1	1	
2	439	10	0.5		2	2/2			
3	504	19	2	1/1g		4/3			
4	610	20	2.5	4/32g	1	5/3	1		grain, wheat?
5	117	20	1.5		1	5/3			ostracod

^{*} frequency of items: 1=1-10; 2= 11-100; 3=101-250; 4=251-500; 5=>500

The bulk of the environmental evidence were the freshwater and terrestrial snails (Table 3). The terrestrial snail fauna from all the samples is an assemblage that reflects open country or calcareous grassland. Taxa such as *Pupilla muscorum*, *Vallonia excentrica*, *Vallonia costata* and *Vertigo pygmaea* and typical of such habitats, and are present in most of the samples. The main difference between the samples is the level of dampness indicated by the taxa. *Lymnaea truncatula*, which is frequent to abundant in all the samples, is a damp grassland or marshland and ditch taxum, and *Carychium minimum* (the probable species present here) is also characateristic of marsh or wetter environments, as are the Succinidaea. *Planorbis leucostoma* which is present in all the samples tends to be found in ditches and ponds that have a tendency to dry up seasonally.

Table 3: Mollusc from the soil samples

context	306	439	504	610	117
sample	1	2	3	4	5
flot vol.(ml)	4	1	4	8	6
Carychium sp.	+	+	+	+	++
Succinea sp.			+		+
Cochlicopa sp.	+		+	+	+
Vertigo sp.	+		+	+	+
Pupilla muscorum	+		+	+	+
Vallonia costata	+				
Vallonia excentrica	++			+	+
Vallonia pulchella			+	+	+
Vallonia sp.		+	+		+
Hellicella sp.	+				
Oxychilus sp.	+				
Cepaea sp.	+		+	+	
Hygromia hispida	+	+	+	+	+
Lymnaea truncatula	++	++	+	++	+
Lymnaea palustris				+	+
Planorbis leucostoma	+	+	+	+	++
Planorbis planorbis	+				+
Planorbis carinatus					+
Aplexa hypnorum.					+

⁽⁺ present; ++ common)

[#] diversity of molluscs as follows: 1=1-3; 2=4-10; 3=11-25; 4=26-50 taxa.

The assemblage from context 117 suggest the wettest conditions with fully aquatic species such as *Lymnaea palustris*, *Planorbis planorbis*, *P. carinatus* and *Aplexa hypnorum* occurring.

Discussion

There is very little evidence indeed of the remains normally associated with domestic settlement in these samples. The charcoal and charred seeds are at a very low density, and although a few sherds of pottery were recovered this overall lack of 'rubbish' suggests that there is no contemporary settlement in the immediate vicinity of the sampled features.

The area of the site appears to have been an open grassland habitat, which was probably wetter at some periods than others. The presence of *Vallonia costata* in context 306, the Iron Age sample, which prefers dry grassland, while *Vallonia pulchella*, which prefers damp to wet grasslands, is present in contexts 504, 610 and 117, suggests changes in the wetness of the ground. Since 610 contained Roman pottery it may have become a wetter area in the Roman period.

Acknowledgments

I should like to thank Jeremy Dubber for the sample processing.

Bibliography

Cameron, R.A.D. and Redfern, M. 1976 *British Land Snails*. Linnean Soc. Synopses of the British Fauna No. 6

Evans, J.G. 1972 Lands Snails in Archaeology, Academic Press

Macan, T.T. 1977 A Key to the British Fresh- and Brackish-water Gastropods. FBA

Williams, D.1973 Flotation at Siraf, Antiquity, 47, 198-202

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APPENDIX 3

The Iron Age Pottery

Naomi Field

Fourteen pieces of Iron Age pottery were found in context **610**, the fill of ditch **609** in Trench 6. Seven of these pieces were tiny fragments retrieved from the residue of the environmental sample after wet sieving. All the pottery was shell-tempered. Four joining sherds came from the base of a vessel of unknown form and dimensions. The internal and external surfaces are both black.

A single rim sherd, only 1.5cm surviving, and 1.3cm thick, had an oxidised (brick red) external surface. Part of a horizontal groove is visible along the middle of the rim. Possibly part of the same vessel were a body sherd, 4 x 2cm in size, and seven of the small fragments.

Both vessels identified were hand-made. The small size of the sherds precludes more precise dating.

Pottery and Tile Identification

Jane Young

pottery archive SEP00

context	cname	full name	form type	sher	ds	weigh	t part	description	date	condition
306	IA	Iron Age		1	4	0	Rim BS & base	shell tempered	Iron age	abraded tiny frags
412	STMO	Staffordshire/Bristol mottled-glazed	?	1		3	BS		late 17-18th	slightly abraded
414	R	Roman pottery		1		2	BS	Samian	Roman	very abraded
504	MISC	Unidentified wares		1		0	BS	probably Roman	Roman?	very abraded
610	R	Roman pottery		. 4		0	base		Roman ? 2nd	abraded

Tile archive SEP00

context	cname	full name	frags	weight	date
117	MISC	Unidentified wares	7	0	not datable
414	BRKDISC	brick (discarded)	1	1	early modern
416	BRKDISC	brick (discarded)	2	80	early modern
431	BRKDISC	brick (discarded)	1	1300	18th
434	BRKDISC	brick (discarded)	1	2	early modern



Fig. 1 Bonemill Lane, Sleaford, site location. Reproduced from OS 1:2500 map with the permission of the Controller of HMSO, © Crown Copyright. LAS license no. AL50424A (reduced scale).

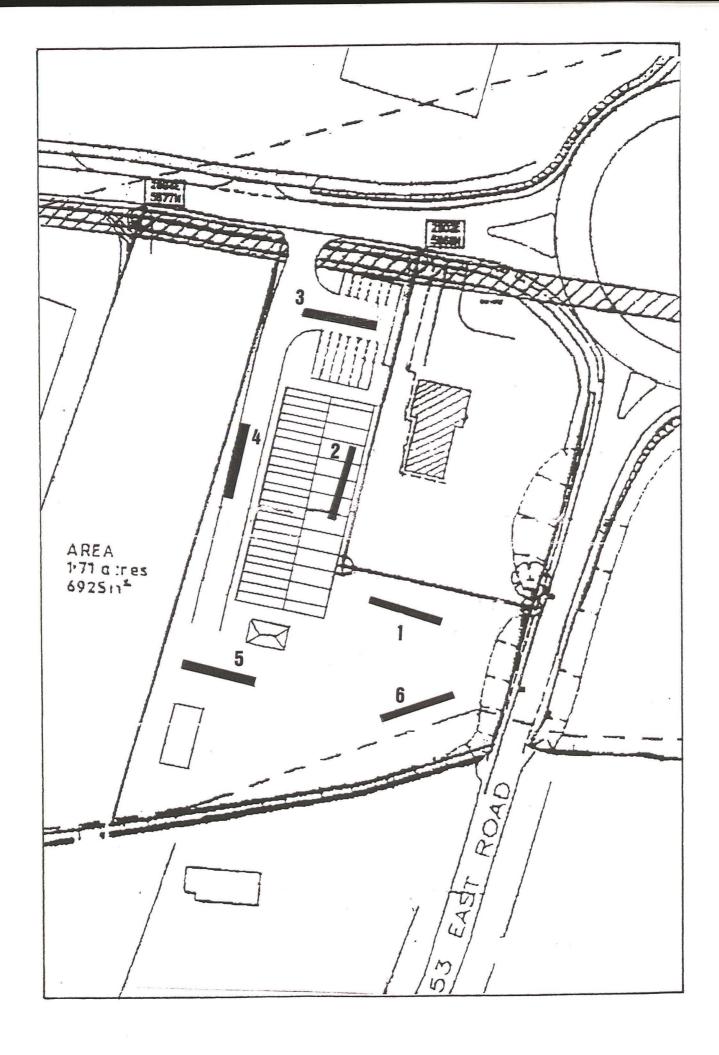


Fig. 2 Location of the evaluation trenches.

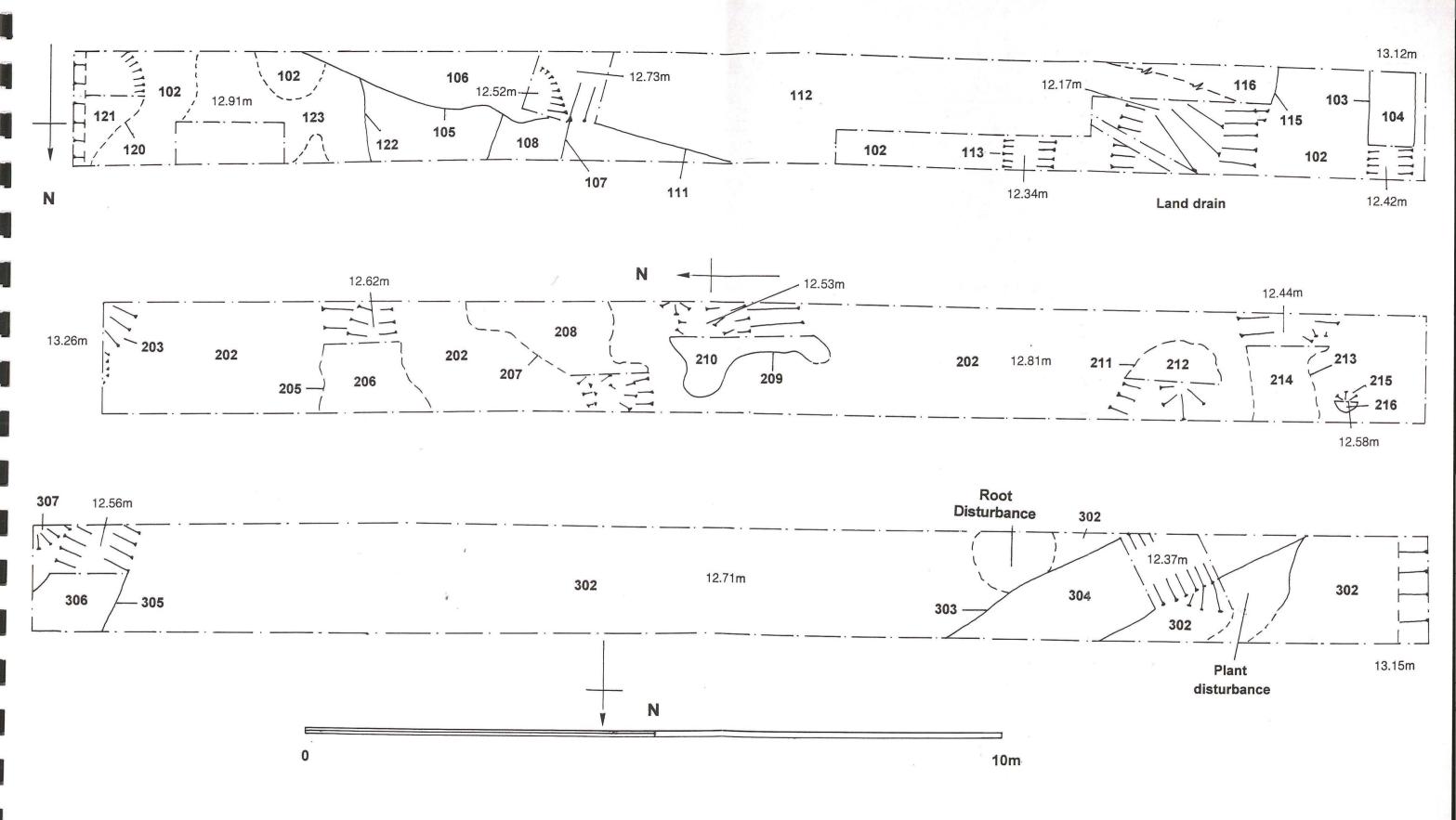


Fig. 3 Plan of Trenches 1, 2 and 3.

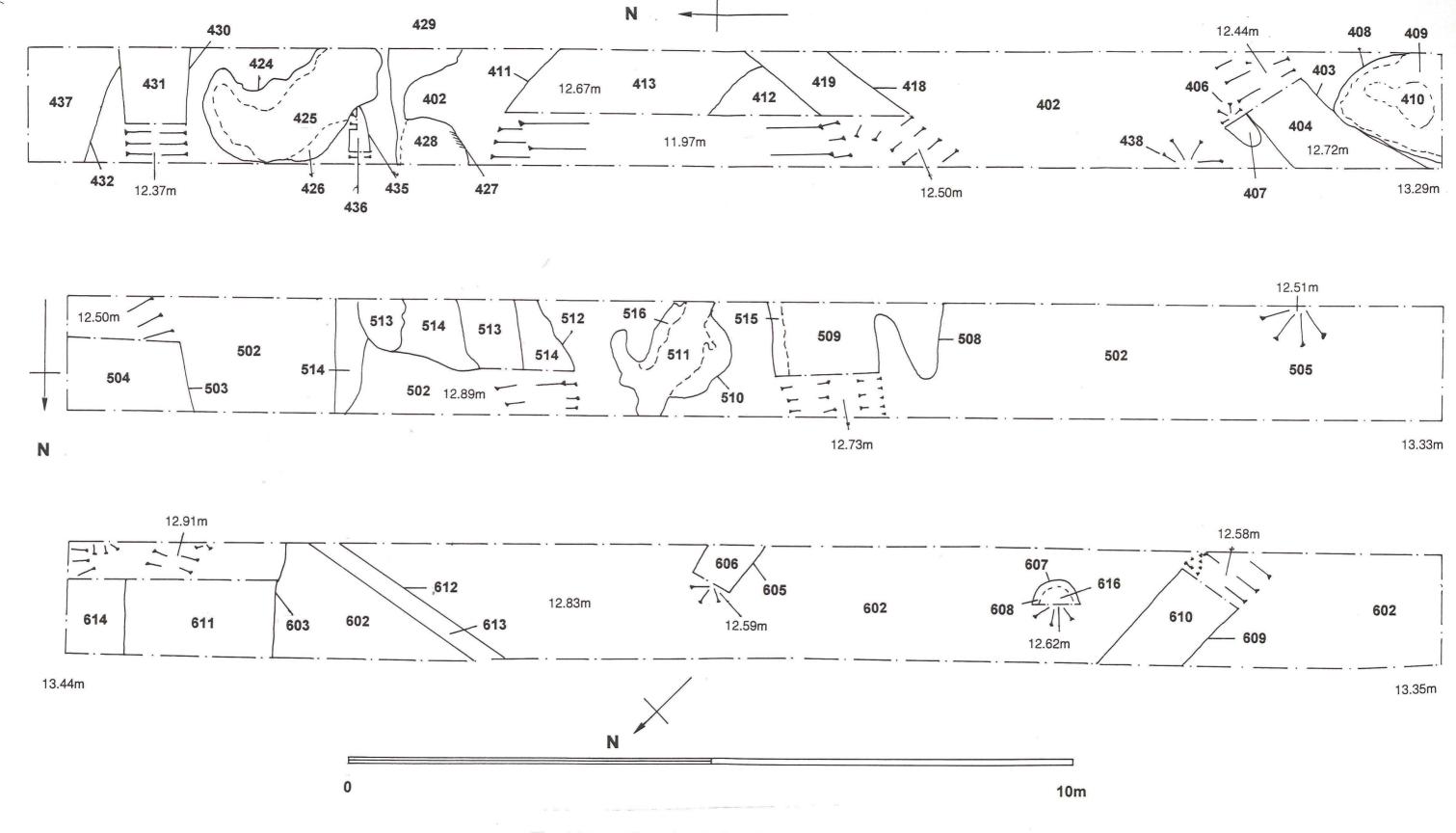


Fig. 4 Plan of Trenches 4, 5 and 6.

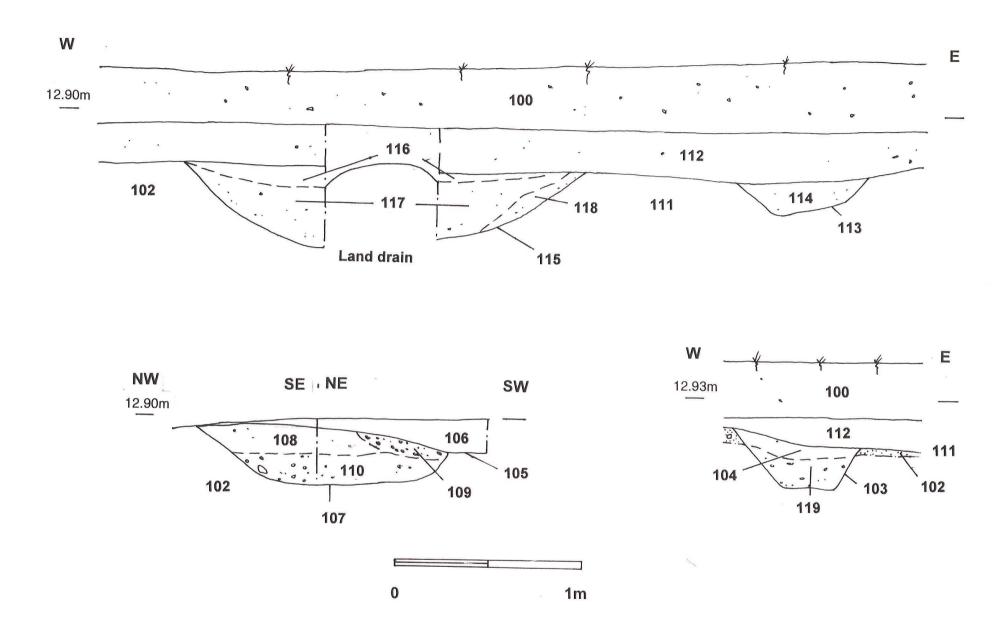
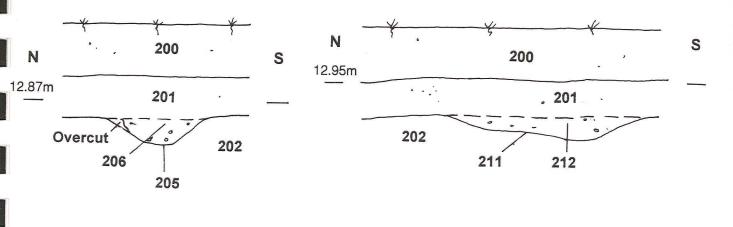
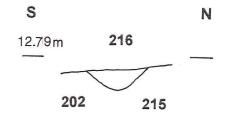


Fig. 5 Trench 1 sections.





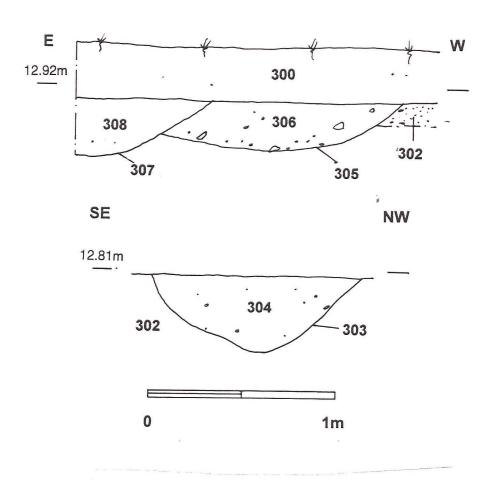


Fig. 6 Sections from Trench 2 and 3.

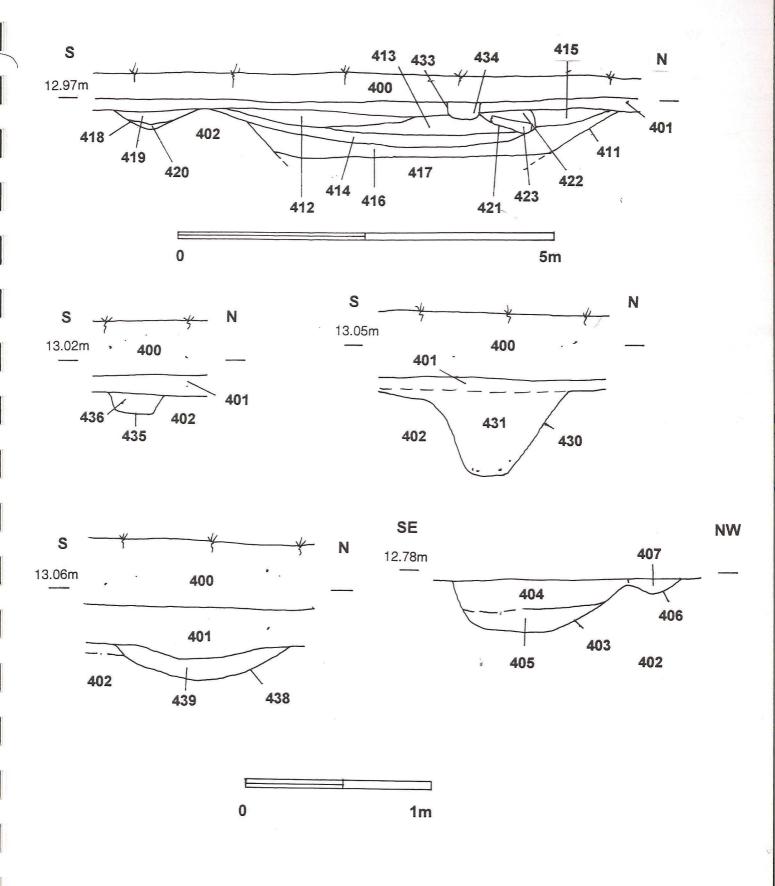


Fig. 7 Trench 4 sections.

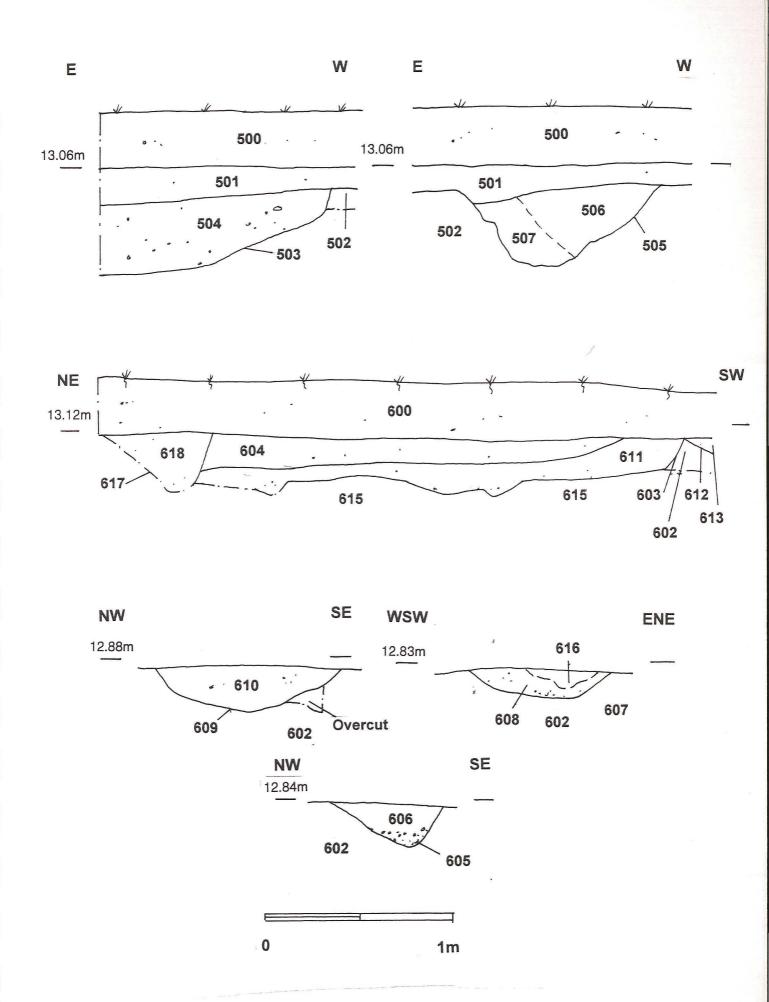


Fig. 8 Sections from Trenches 5 and 6.



Pl. 1 Monitoring of machining.

Pl. 2 Location of Trench 2 in relation to the former Rugby Club. View north-east.





Pl. 3 Location of Trenches 3 and 2. View north.







PI. 5 Trench 1, pre-excavation. View east. Scales 1m and 2m.

PI. 6 Trench 1. Furrow 105 and ditch terminal 107, sectioned. View east.

Horizontal scale 1m, vertical scale 0.30m.





Pl. 7 Trench 1. Ditch 113, south facing section. Horizontal scale 2m, vertical scale 0.50m.

Pl. 8 Trench 1. Gully 103, south facing section. Horizontal scale 1m, vertical scale 0.30m.





Pl. 9 Trench 1. Ditch 115, south facing section. Horizontal scale 2m, vertical scale 0.50m.







Pl. 11 Trench 2. Root disturbance 203, west facing section. Scales 0.30m.

Pl. 12 Trench 2. Root disturbance 205, east facing section. Horizontal scale 0.30m, vertical scale 0.20m.





PI. 13 Trench 2. Root disturbance 207, west facing section. Horizontal scale 0.30m, vertical scale 0.20m.

PI. 14 Trench 2. Root disturbance 209, west facing section. Horizontal scale 1m, vertical scale 0.30m.





Pl. 15 Trench 2. Root disturbance 211, west facing section. Horizontal scale 1m, vertical scale 0.30m.

Pl. 16 Trench 2. Root disturbance 213, west facing section. Horizontal scale 1m, vertical scale 0.30m.







Pl. 17 Trench 2. Posthole 215, east facing section. Horizontal scale 0.30m, vertical scale 0.20m.

Pl. 18 Trench 3, pre-excavation. View east-north-east. Scales 1m and 2m.



Pl. 19 Trench 3. Ditch 305 and disturbance 307, north facing section. Horizontal scale 2m, vertical scale 0.30m.

Pl. 20 Trench 3. Ditch 303, south west facing section. Horizontal scale 1m, vertical scale 0.30m.





Pl. 21 Trench 4, pre-excavation. View north. Scales 1m and 2m.



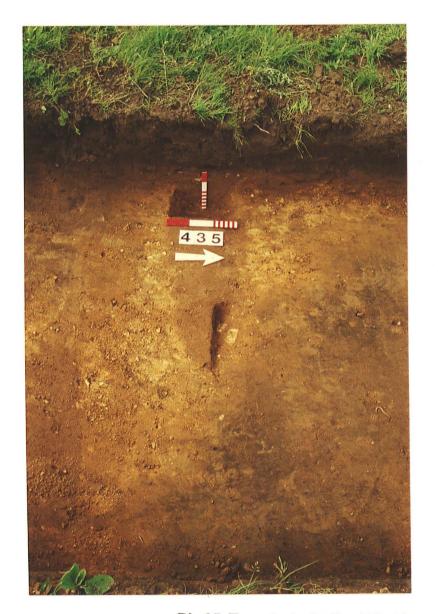
Pl. 22 Trench 4. Ditch 418 and pit 411, east facing sections. Horizontal scale 2m, vertical scale 1m.



Pl. 23 Trench 4. Ditch 403 and posthole 406, north-east facing section and Root disturbance 408. Horizontal scale 1m, vertical scale 0.30m.

Pl. 24 Trench 4. Fire pit 438, east facing section. Horizontal scale 0.50m, vertical scale 0.30m.







Pl. 25 Trench 4. Gully 435, View west. Horizontal scale 0.30m, vertical scale 0.20m.

Pl. 26 Trench 4. Ditch 430, east facing section. Horizontal scale 1m, vertical scale 1m.



Pl. 27 Trench 4. Root disturbance 424 and 428. View south-east. Scales 1m.

Pl. 28 Trench 4. Root disturbance 432. View north. Scales 0.30m and 1m.





Pl. 29 Trench 5, pre-excavation. View west. Scales 1m and 2m.
Pl. 30 Trench 5. Ditch 503, north facing section. Horizontal scale 1m, vertical scale 0.50m.





PI. 31 Trench 5. Root disturbance 505, north facing section. Horizontal scale 1m, vertical scale 0.30m.

Pl. 32 Trench 5. Root disturbance 508, south facing section. Horizontal scale 1m, vertical scale 0.30m.

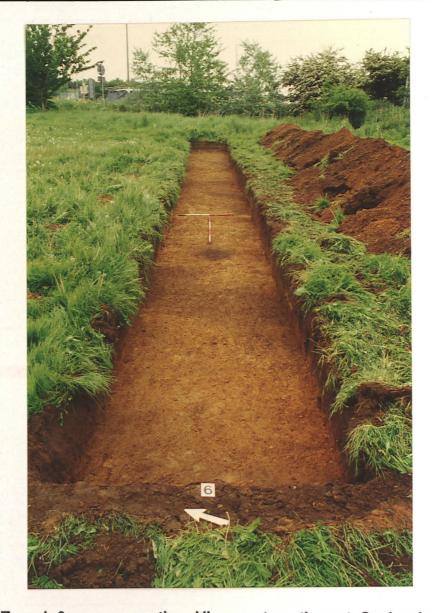




Pl. 33 Trench 5. Root disturbance 510, View south-east. Scales 1m and 2m.

Pl. 34 Trench 5. Root disturbance 512, south facing section. Horizontal scale 1m, vertical scale 0.50m.





Pl. 35 Trench 6, pre-excavation. View east-north-east. Scales 1m and 2m. Pl. 36 Trench 6. Disturbance 603, View north-north-west. Horizontal scale 1m, vertical scale 0.50m.





PI. 37 Trench 6. Ditch 605, north-east facing section. Horizontal scale 0.30m, vertical scale 0.20m.

PI. 38 Trench 6. Posthole 607, north-north-west facing section. Horizontal scale 0.30m, vertical scale 0.20m.





Pl. 39 Trench 6. Ditch 609, north-east facing section. Horizontal scale 1m, vertical scale 0.50m.