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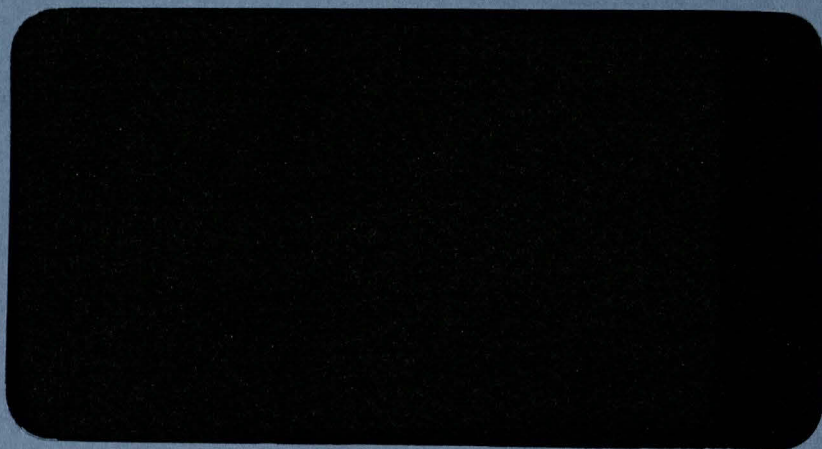
**ARCHAEOLOGICAL FIELD EVALUATION REPORT
LAND EAST OF SPRING FARM,
GREAT CARLTON, LINCOLNSHIRE**

Site Code: SGC98
LCNCC Acc No. 249.98
NGR TF 4098785260

Lincolnshire County Council
Archaeology Section

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Illustrations

Report prepared for Willsons Chartered Surveyors on behalf of Mr D Bullivant
by James Albone BSc., PIFA.

December 1998

Fig. 1 General site location

Fig. 2 Plan showing location of archaeological trenches

Fig. 3 Plan and section

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Summary

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*An archaeological field evaluation place on land east of Spring
Forest, Great Carlton, Lincolnshire (Fig. 1).*

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suspected as possible house platforms and hollow-ways during an earlier* 1

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of the site and did not appear to be associated with house platforms.* 2

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were excavated during the sixteenth and* 3

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pottery, fifteenth to sixteenth century pottery, brick and tile, coins
and a range of environmental information. Although the other ditches
were investigated, fragments of possible sixteenth century brick
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Illustrations

- Fig. 1 General site location (1:10,000)
- Fig. 2 Plan showing location of archaeological trenches
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Summary

- * *An archaeological field evaluation took place on land east of Spring Farm, Great Carlton, Lincolnshire (Fig. 1).*
- * *Three trenches were excavated to establish the nature of earthworks identified as possible house platforms and hollow-ways during an earlier survey.*
- * *It was established that the earthworks sampled reflect the natural topography of the site and did not appear to be associated with house platforms.*
- * *Four large ditches were exposed beneath one of the 'platforms'. These probably related to drainage and reclamation during the sixteenth and early seventeenth centuries. One of the ditches contained abundant domestic waste, including fifteenth to sixteenth century pottery, brick and tile, animal bone and a range of environmental information. Although the other ditches were not fully investigated, fragments of possible sixteenth century brick were recovered, as were further environmental remains.*
- * *Environmental sampling revealed a range of botanical and zoological information, providing data relating to human diet, the local environment and the more general interpretation of the archaeological remains and archaeological setting.*

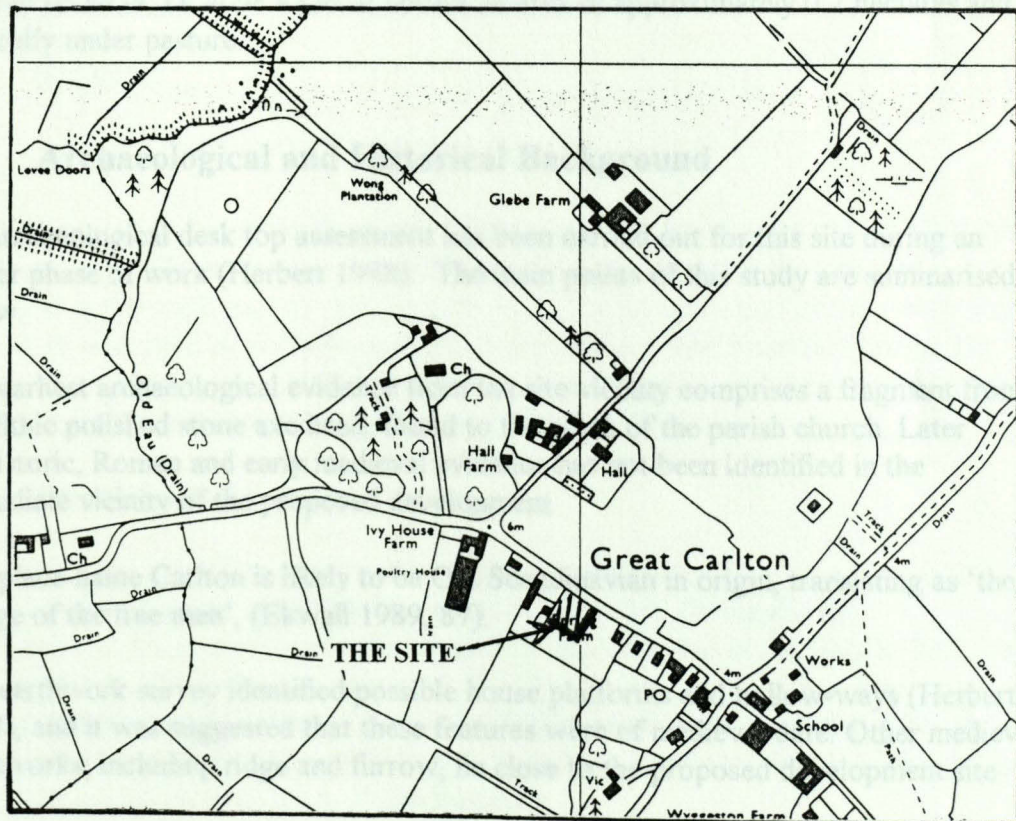


Fig. 1: Site location (1:10,000)
 (OS Copyright Licence No: AL 515 21 A0001)

1.0 Introduction and Methodology

A two-day programme of archaeological trial excavation was carried out on a site east of Spring Farm, Great Carlton, Lincolnshire (Fig. 1). The work was commissioned by Willsons Chartered Surveyors on behalf of their client Mr. D. Bullivant. The evaluation was carried out to fulfil a planning requirement attached to an application to erect three dwellings (Ref: N/63/0685/98).

The results of this report will assist the local planning authority and the client to assess the archaeological significance of the site, the potential impacts which may be imposed by development and the requirement / non-requirement for further archaeological investigation in advance of or during development.

A copy of this report will be deposited at the County SMR, and a short text will be submitted to the editor of the county journal, *Lincolnshire History and Archaeology*; effectively placing the information in the public domain. Reports will be deposited at the City and County Museum, Lincoln, accompanied with an ordered project archive.

2.0 Location and Description

The village of Great Carlton is situated in the administrative district of East Lindsey, approximately 6 km. west of Mablethorpe; 5 km. east-south-east of Louth. The underlying geology consists of glacial clay and gravel. The site lies at c.4m OD and is centred on NGR TF 4098 8526. It covers an area of approximately 0.2 hectares and is presently under pasture.

3.0 Archaeological and Historical Background

An archaeological desk top assessment has been carried out for this site during an earlier phase of work (Herbert 1998). The main points of this study are summarised below.

The earliest archaeological evidence from the site vicinity comprises a fragment from a Neolithic polished stone axe head, found to the north of the parish church. Later prehistoric, Roman and early medieval evidence has not been identified in the immediate vicinity of the proposed development

The place-name Carlton is likely to be Old Scandinavian in origin, translating as 'the village of the free men', (Ekwall 1989, 87).

The earthwork survey identified possible house platforms and hollow-ways (Herbert 1998), and it was suggested that these features were of medieval date. Other medieval earthworks, including ridge and furrow, lie close to the proposed development site.

4.0 Objectives and Methodology

In order to confirm the nature of the earthworks identified during the previous survey, a project brief was issued by Lincolnshire County Council Archaeology Section requesting the excavation of three trial trenches.

The three trenches (two 15m. long and one 10m. long) were excavated to determine the nature of the archaeology (its character, date, depth, state of preservation, extent and significance). The overall objective of this phase of work was to present the client and District Planning Authority with a set of data from which reasoned decisions may be taken regarding future management of the archaeological resource.

Recording was undertaken using standard context record sheets (incorporating physical descriptions, interpretations, and stratigraphic relationships). Features were planned and drawn to scale in section, and photographic recording was undertaken (some prints are reproduced in this report). The drawings, and the rest of the paper record, will form the basis for a long-term project archive. Pottery, tile, animal bone and a single glass vessel fragment were recovered and specialist reports on these are included in the appendices. Waterlogged deposits (with a potential for the survival of important environmental remains) were exposed in the ditches in Trench three, and samples were taken (see Appendix 8.2).

The evaluation was carried out on the 9th and 10th of November 1998 and was supervised by the writer assisted by two experienced field archaeologists.

5.0 Results

5.1 Trench 1 (Pl. 1)

This trench was positioned at the north end of the site to investigate a small platform identified during the earthworks survey. It was 11.5 m. long, 1.6 m. wide and was orientated north-north-east to south-south-west. The northern part of the trench was extensively disturbed by roots from a tree in the adjacent field boundary hedge. No significant archaeological deposits were exposed, although a land drain and three areas of modern disturbance (possibly filling tree-holes) were noted.

5.2 Trench 2 (Pl. 2)

This trench was located at the east side of the site across the edge of a large platform. It was 16.5 m. long and aligned north-west to south-east. No significant archaeological features were exposed: a gully at the west end of the trench [202] was of modern date. Two other apparent features [203 & 204] had resulted from compression by hydraulic legs of the mechanical excavator. An area of mid-brown to dark grey gravel and clay [205] filled a broad shallow depression in the surface of the natural gravel which was also probably natural.

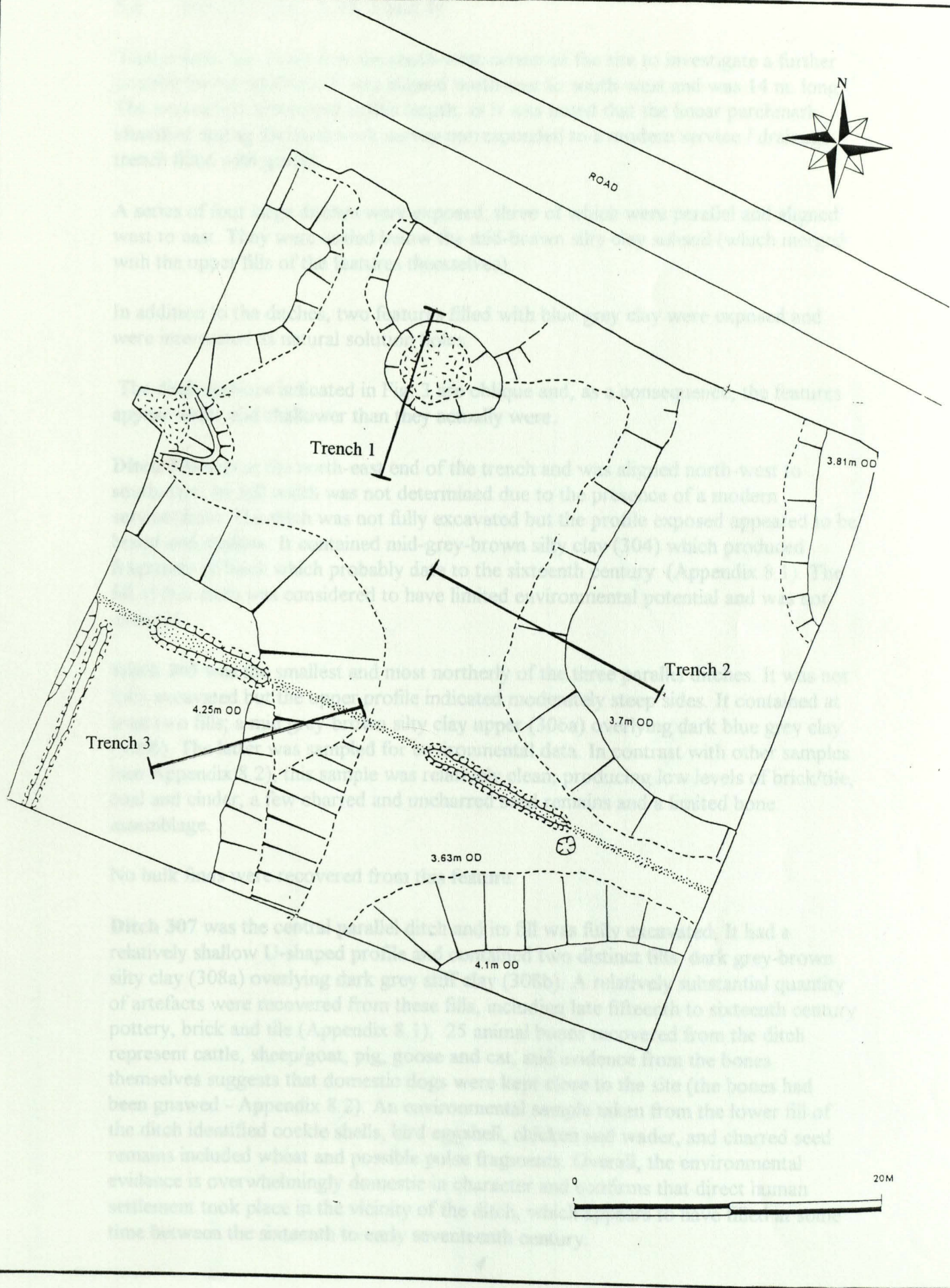


Fig. 2: Location of archaeological trenches

5.3 Trench 3 (Fig. 3, Pl. 3 and 4)

Trench three was located at the south-west corner of the site to investigate a further possible house platform. It was aligned north-east to south-west and was 14 m. long. The excavation terminated at this length, as it was noted that the linear parchmark identified during the earthwork survey corresponded to a modern service / drainage trench filled with gravel.

A series of four large ditches were exposed; three of which were parallel and aligned west to east. They were sealed below the mid-brown silty clay subsoil (which merged with the upper fills of the features themselves).

In addition to the ditches, two features filled with blue grey clay were exposed and were interpreted as natural solution holes.

The ditch sections indicated in Fig. 3 are oblique and, as a consequence, the features appear wider and shallower than they actually were.

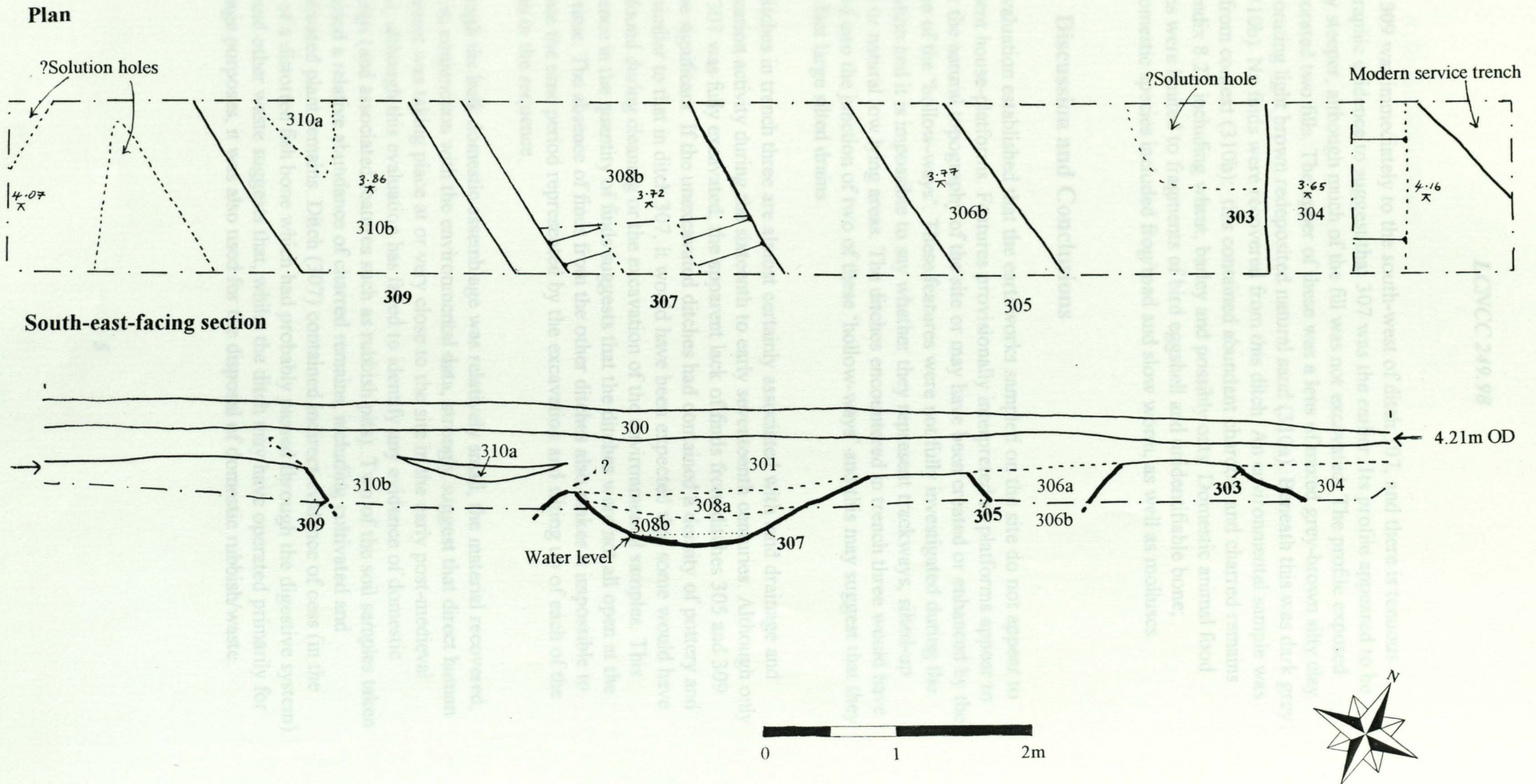
Ditch 303 was at the north-east end of the trench and was aligned north-west to south-east. Its full width was not determined due to the presence of a modern service/drain. The ditch was not fully excavated but the profile exposed appeared to be broad and shallow. It contained mid-grey-brown silty clay (304) which produced fragments of brick which probably date to the sixteenth century (Appendix 8.1). The fill of this ditch was considered to have limited environmental potential and was not sampled.

Ditch 305 was the smallest and most northerly of the three parallel ditches. It was not fully excavated but the upper profile indicated moderately steep sides. It contained at least two fills; a mid grey-brown silty clay upper (306a) overlying dark blue grey clay (306b). The latter was sampled for environmental data. In contrast with other samples (see Appendix 8.2), this sample was relatively clean, producing low levels of brick/tile, coal and cinder, a few charred and uncharred seed remains and a limited bone assemblage.

No bulk finds were recovered from this feature.

Ditch 307 was the central parallel ditch and its fill was fully excavated. It had a relatively shallow U-shaped profile and contained two distinct fills: dark grey-brown silty clay (308a) overlying dark grey stiff clay (308b). A relatively substantial quantity of artefacts were recovered from these fills, including late fifteenth to sixteenth century pottery, brick and tile (Appendix 8.1). 25 animal bones recovered from the ditch represent cattle, sheep/goat, pig, goose and cat, and evidence from the bones themselves suggests that domestic dogs were kept close to the site (the bones had been gnawed - Appendix 8.2). An environmental sample taken from the lower fill of the ditch identified cockle shells, bird eggshell, chicken and wader, and charred seed remains included wheat and possible pulse fragments. Overall, the environmental evidence is overwhelmingly domestic in character and confirms that direct human settlement took place in the vicinity of the ditch, which appears to have filled at some time between the sixteenth to early seventeenth century.

Fig. 3: Plan and main section of features exposed in Trench 3



7.0 Acknowledgements

Ditch 309 was immediately to the south-west of ditch 307, and there is tenuous stratigraphic evidence to suggest that 307 was the earlier. Its profile appeared to be slightly steeper, although much of the fill was not excavated. The profile exposed incorporated two fills. The upper of these was a lens of mixed grey-brown silty clay incorporating light brown redeposited natural sand (310a). Beneath this was dark grey clay (310b). No finds were recovered from this ditch. An environmental sample was taken from context (310b): this contained abundant charcoal and charred remains (Appendix 8.2), including wheat, barley and possibly oats. Domestic animal food remains were limited to fragments of bird eggshell and unidentifiable bone; non-domestic species included frog/toad and slow worm, as well as molluscs.

6.0 Discussion and Conclusions

The evaluation established that the earthworks sampled on the site do not appear to represent house-platforms. Features provisionally interpreted as platforms appear to reflect the natural topography of the site or may have been created or enhanced by the erosion of the 'hollow-ways'. These features were not fully investigated during the evaluation and it is impossible to say whether they represent trackways, silted-up drains or natural low lying areas. The ditches encountered in trench three would have drained into the junction of two of these 'hollow-ways' and this may suggest that they are in fact large silted drains.

The ditches in trench three are almost certainly associated with land drainage and reclamation activity during the sixteenth to early seventeenth centuries. Although only ditch 307 was fully excavated, the apparent lack of finds from ditches 305 and 309 may be significant. If the unexcavated ditches had contained a density of pottery and bone similar to that in ditch 307, it would have been expected that some would have been found during cleaning or the excavation of the environmental samples. This difference in the quantity of finds suggests that the ditches were not all open at the same time. The absence of finds from the other ditches also makes it impossible to estimate the time period represented by the excavation and silting up of each of the ditches in the sequence.

Although the bulk domestic assemblage was relatively small, the material recovered, taken in conjunction with the environmental data, strongly suggest that direct human settlement was taking place at or very close to the site in the early post-medieval period, although this evaluation has failed to identify any evidence of domestic buildings (and associated features such as rubbish pits). Two of the soil samples taken contained a relative abundance of charred remains, including cultivated and uncultivated plant remains. Ditch (307) contained indirect evidence of cess (in the form of a distorted fish bone which had probably passed through the digestive system). This and other waste suggests that, whilst the ditch may have operated primarily for drainage purposes, it was also used for the disposal of domestic rubbish/waste.

7.0 Acknowledgements

Pre-Construct Archaeology (Lincoln) express their sincere thanks to Willsons Chartered Surveyors and their client Mr. D. Bullivant for this commission. Thanks also to, Mark Bennet and Sarah Grundy (County SMR), the site team; Miles Ridsdale and Jim Snee and the specialists; Jane Cowgill, James Rackham and Jane Young.

8.2 Environmental Archaeology and Animal Bone Analysis by DJ. Rackham

8.3 Colour plates

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8.5 Site Archive

8.6 List of archaeological contexts

8.0 Appendices: *of Spring Farm (SGC98)*

8.1 Pottery and Tile Analysis by J. Young

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8.6 List of archaeological contexts

Date: MIDD-PMID, LATE 15TH TO 16TH

Tile

304	BRICK	2	HANDMADE; 16TH
308	BRICK	2	MISC. 17TH
	BRICK	2	HANDMADE; 16TH
	PNR	1	POST-MED
	PNR	2	POST-MED
	PNR	1	ALMOST A CORNER; ODD FABRIC, PROB MED

Comments

Too small a group to say much about but looks post-medieval, probably 16th century but possibly first part of the 17th century.

Great Carlton, land east of Spring Farm (SGC98)

8.1 Pottery and Tile Analysis by J. Young

Context Ware Sherds Form Comments
 301 TB 1 JUG BS
 Date: MH8-PMH4; 14TH-MID 17TH

308 TOYII 1 JUG/CISTERN RIM AND UHJ; THU STRIP
 UNDER RIM; OVAL STRAP
 HANDLE

site	sample	material	volume	description	form	comments
		TB	1		JUG/CISTERN	BS
SGC98		TB	1	ditch fill	JUG	BS; INT DEP
SGC98		TB	1	ditch fill	JUG	X3
SGC98		TB	1	ditch fill	JUG	BASE

Date: MH10-PMH3; LATE 15TH TO 16TH

Tile

304 BRICK 2 - HANDMADE; 16TH?
 308 BRICK 2 - MISC; ??16TH
 BRICK 2 - HANDMADE; 16TH?
 PNR 1 - POST-MED
 PNR 2 - POST-MED
 PNR 1 - ALMOST A CORNER; ODD
 FABRIC; PROB MED

Comments

Too small a group to say much about but looks post-medieval, probably 16th century but possibly first part of the 17th century.

An archive catalogue of the animal bone was prepared following the procedures of the Environmental Archaeology Consultancy and this catalogue is attached (Appendix)

Results

The samples were composed of a fairly clayey silt. In samples 1 and 3 this washed fairly well but in context 310, sample 2, a proportion of the sediment had become concreted through mineral deposition. The archaeological finds from the three samples are summarized in Table 2 and the environmental finds in Tables 3 and 4.

Spring Farm, Great Carleton - SGC98

8.2 Environmental Archaeology and Animal Bone Analysis by DJ. Rackham

Three samples were submitted for environmental analysis and a small collection of animal bones. The samples derived from the fills of three ditches in Trench 3 and are all of probable 16th or early 17th century date. Only one of these ditches was excavated, and the deposits removed yielded 25 fragments of animal bone, the other two were revealed by stripping of the topsoil and were sampled by the excavation of a small sondage in the visible ditch fills.

Table 1: Samples taken for environmental analysis

site	sample	context	volume in l.	description
SGC98	1	308	10	ditch fill
SGC98	2	310	10	ditch fill
SGC98	3	306	9	ditch fill

Methods

Soil 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 residue and second flot were then re-dried. The dry volume of the flots was measured, and the volume and weight of the residues recorded. A total of 29 litres of soil was processed in this way.

The sample residues were sorted by eye, and environmental and archaeological finds picked out, noted on the assessment sheet and bagged independently. A magnet was run through each residue in order to recover magnetised material such as hammerstone and prill. The residue was then discarded. The float of each sample was studied under a low power binocular microscope. The presence of environmental finds (ie snails, charcoal, charred seeds, bones etc) was noted and their abundance and species diversity recorded on the assessment sheets. The float was then bagged. The flots and finds from the sorted residues constitute the material archive of the samples. The individual components of the samples were then preliminarily identified and the results are summarised below in Tables 2-4.

An archive catalogue of the animal bone was prepared following the procedures of the Environmental Archaeology Consultancy and this catalogue is attached (Appendix).

Results

The samples were composed of a fairly clayey silt. In samples 1 and 3 this washed fairly well but in context 310, sample 2, a proportion of the sediment had become concreted through mineral deposition. The archaeological finds from the three samples are summarised in Table 2 and the environmental finds in Tables 3 and 4.

Context 308

The residue was composed of small flint gravel with coarse sand, other stones and pebbles and occasional chalk pebbles and small fragments of ceramic building material. The archaeological finds from this sample include coal and cinder, brick/tile, mortar, pottery, animal bone and shell. Small fragments of coal and cinder are common occurring in both the residue and flot.

Charcoal and charred material is not abundant in the sample although a few grains of charred cereal, including wheat, are present, some possible charred pulse fragments and one or two weed seeds. Uncharred seeds of elder, *Sambucus* sp., occur in abundance and could indicate the use of elderberries as a food source or possibly a hedgerow bush overhanging the ditch. The survival of these seeds but very few other species is probably due to their robusticity. Other food remains include cockle shells (*Cardium edule*), bird eggshell, bones of sheep, cattle, pig, chicken, a wader (woodcock size), eel and other fish species. All these probably derive from food waste, and the presence of a misshapen fish vertebra suggests that this has been through a digestive system (Wheeler and Jones 1989) and the context probably contained faecal material.

The presence of species usually commensal with man, house mouse (*Mus musculus*) and rat (*Rattus* sp. - in this case probably black rat (*Rattus rattus*) since the brown rat is not thought to have been introduced until the 18th century (Rackham 1979)), indicates that human occupation is nearby. Other small vertebrates include frog/toad, newt and field vole. The mollusc assemblage includes species that prefer shaded or woodland habitats, as well as more catholic species (Table 4) and it is possible that the ditch may have been hedged along its bank.

Table 2: Finds from the samples

sample	cont	vol in l	residue vol in ml.	pot *	brick/tile #	coal & cinder #	ham'r scale (no flakes)	bone #	marine shell #	other
1	308	10	900	3/7	9	17		17	3	mortar
2	310	10	1150		1	<1	1 flake	1		burnt flint
3	306	9	250		<1	<1		<1		

(* - sherd no/weight in g.; # weight in grammes)

Context 310

There was a high level of mineral deposition in the sediment of this context and much of the residue is composed of mineralised soil crumbs. Archaeological finds are limited with a few small fragments of brick/tile (Table 2), some tiny pieces of coal and cinder in the flot, one burnt flint and a single flake of hammerscale. While the latter is testament to the working of iron if this had been taking place nearby hammerscale would have been expected in very much greater abundance.

Charcoal and charred remains are relatively abundant in this sample. Charred cereal grain is common with wheat, barley and probably oats represented, and a considerable number of poorly preserved and fragmented unidentifiable grains. A single charred bean and a few wild seeds are also present. Uncharred elder seeds again occur, but not in any numbers. There is little evidence for animal foods, with just a couple of fragments of bird eggshell and a few tiny unidentifiable bone fragments.

The wild vertebrate fauna of the ditch included frog/toad and slow worm, *Anguis fragilis*. The molluscs include species of catholic, grassland and shade loving habits as well as one or two shells of an aquatic species, and do not occur in sufficient numbers to permit any confident comment on the adjacent environment.

Table 3: Environmental finds from the samples

cont	vol. in l.	flot vol ml	snail */#	ch'rd grain *	chaff *	ch'rd seed *	unch'rd seed */#	Char coal *	egg-shell *	fish *	small vert. *	comment
308	10	10	2/2	1		1	4/1	2	2	1	2	wheat, sheep, cow, pig, house mouse, field vole, rat, wader, chicken, eel
310	10	15	2/2	3		1	2/1	3	1		1	wheat, barley, oats, bean, slow worm
306	9	1	1/1	1			2/1	2	1		1	wheat, common shrew

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

diversity of molluscs and uncharred seeds as follows: 1=1-3; 2=4-10; 3=11-25; 4=26-50 taxa.

Context 306

The residue of this sample was largely composed of small flint gravel with frequent pebbles and other stones, and a little concreted sediment. Archaeological finds were very limited with only a few tiny pieces of brick/tile, coal and cinder being recovered.

Very little charred material was present with only a few fragments of charcoal and one or two cereal grains, including wheat. A few uncharred seeds of elder were present. Only a very few tiny fragments of animal bone were present although a fragment of mandible of the common shrew, *Sorex araneus*, was found, and a single 3rd phalanx of a small bird. The snail assemblage in this sample (Table 4) was limited to the species *Cecilioides acicula*, the blind snail, a species that burrows and may not be contemporary with the deposits (Evans 1972).

Table 4: Mollusc taxa in the samples

species	1	2	3
	308	310	306
<i>Discus rotundatus</i>	+		
<i>Carychium tridentatum</i>	+		
<i>Oxychilus</i> sp.	+	+	
<i>Retinella</i> sp.		+	
<i>Vitrea</i> sp.	+		
<i>Hygromia hispida</i>		+	
<i>Cochlicopa</i> sp.	+	+	
Limacidae	+	+	
<i>Cecilioides acicula</i>		+	+
<i>Vallonia</i> sp.		+	
<i>Lymnaea truncatula</i>	+		
<i>Planorbis leucostoma</i>		+	

Discussion

Context 306 shows very little evidence of occupation nearby or rubbish entering the ditch. This contrasts with the other two contexts. Context 310 while having little general domestic debris is relatively rich in charcoal and charred cereals suggesting waste from a fire, perhaps used to parch grain before milling. The absence of any chaff in the samples, and the low frequency of charred weed seeds suggests that the cereal component derives from clean

processed grain, such as would be used for cooking or bread making. Context 308 in contrast to the other samples includes a large range of debris including coal and cinder, brick/tile, pottery, bone and eggshell, which with a possible cess content, also indicates disposal of a range of domestic rubbish and suggests that occupation is close by.

A sample of 25 fragments of animal bone was collected from context 308 in the upper fills of the ditch. Most of this material could be identified and comprised bones of cattle, sheep (or goat), pig, goose and cat. A very young piglet was represented by two metacarpal bones and suggests pigs were probably being bred at the site. There is evidence for lambs and immature cattle but these specimens do not indicate animals young enough to suggest breeding. There was a relatively high incidence of dog gnawing on the bones (see Appendix - catalogue of bones) indicating that the bones were fed to, or scavenged by, dogs.

The character of the bone assemblage, including the evidence for chopping and 'boning' (a knife cut on the shaft of a sheep humerus), combined with the other finds in the sample from this context reinforces its interpretation as a domestic rubbish assemblage.

Recommendations

The samples from the three ditches in Trench 3 suggest that human occupation and activities at the site are likely to be located in the vicinity of the ditches filled by 308 and 310 and if any further field work is required it should be directed in these areas.

If no further excavation is proposed at the site then a detailed analysis of the botanical material from context 310 would positively identify the cereal types being utilised or grown at the site and a determination of the species of fish represented by the few small vertebrae in context 308 would establish whether marine fish are being consumed as well as freshwater species. No other work is recommended.

Acknowledgments

I should like to thank Alison Foster for the sample processing.

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Key to codes used in the cataloguing of animal bones

SPECIES		BONE		SIDE	FUSION
BOS	cattle	SKL	skull	W - whole	Records the fused/unfused condition of the epiphyses
CSZ	cattle size	TEMP	temporal	L - left side	P - proximal; D - distal; E - acetabulum;
SUS	pig	FRNT	frontal	R - right side	N - unfused; F - fused; C - cranial; A - posterior
OVCA	sheep or goat	PET	petrous	F - fragment	
OVI	sheep	PAR	parietal	TOOTH WEAR - Codes are those used in Grant, A. 1982 <i>The use of tooth wear as a guide to the age of domestic animals</i> , in B.Wilson, C.Grigson and S.Payne (eds) <i>Ageing and sexing animal bones from Archaeological sites</i> , 91-108.	
SSZ	sheep size	OCIP	occipital	Teeth are labelled as follows in the tooth wear column:	
EQU	horse	ZYG	zygomatic	h ldpm4/dupm4	f ldpm2/dupm2
CER	red deer	MAN	mandible	H lpm4/upm4	g ldpm3/dupm3
CAN	dog	MAX	maxilla	I lml/uml	
MAN	human	ATL	atlas	J lm2/um2	
UNI	unknown	AXI	axis	K lm3/um3	
CHIK	chicken	CEV	cervical vertebra	ZONES - zones record the part of the bone present. The key to each zone on each bone is on page 2	
GOOS	goose, dom	TRV	thoracic vertebra	MEASUREMENTS - Any measurements are those listed in A.Von den Driesch (1976) <i>A Guide to the Measurement of Animal Bones from Archaeological Sites</i> , Peabody Museum Bulletin 1, Peabody Museum, Harvard, USA	
LEP	hare	LMV	lumbar vertebra	PRESERVATION	
UNB	indet bird	SAC	sacrum	1 - enamel only surviving	
MALL	duck, dom.	CDV	caudal vertebra	2 - bone very severely pitted and thinned, tending to break up teeth with surface erosion and loss of cementum and dentine	
GULL	gull sp.	SCP	scapula	3 - surface pitting and erosion of bone, some loss of cementum and dentine on teeth	
FISH	fish	HUM	humerus	4 - surface of bone intact, loss of organic component, material chalky, calcined or burnt	
UNIB	bird indet	RAD	radius	5 - bone in good condition, probably with some organic component	
UNIF	fish indet	MTC	metacarpus		
GSZE	goose size	MC1-4	metacarpus 1-4		
BEAV	beaver	INN	innominate		
CORV	crow or rook	ILM	ilium		
		PUB	pubis		
		ISH	ischium		
		FEM	femur		
		TIB	tibia		
		AST	astragalus		
		CAL	calcaneum		
		MTT	metatarsus		
		MT1-4	metatarsus 1-4		
		PH1	1st phalanx		
		PH2	2nd phalanx		
		PH3	3rd phalanx		
		LM1-LM3	Lower molar 1 - molar 3		
		UM1-UM3	upper molar 1 - molar 3		
		LPM1-LPM4	lower premolar 1-4		
		UPM1-UPM4	upper premolar 1-4		
		DLPM1-4	deciduous lower premolar 1-4		
		DUPM1-4	deciduous upper premolar 1-4		
		MNT	mandibular tooth		
		MXT	maxillary tooth		
		LBF	long bone		
		UNI	unidentified		
		STN	sternum		
		INC	incisor		
		TTH	indet. tooth		
		CMP	carpo-metacarpus		

ZONES - codes used to define zones on each bone

SKULL -	<ol style="list-style-type: none"> 1. paraoccipital process 2. occipal condyle 3. intercornual protuberance 4. external acoustic meatus 5. frontal sinus 6. ectorbitale 7. entorbitale 8. temporal articular facet 9. facial tuber 0. infraorbital foramen 	METACARPUS -	<ol style="list-style-type: none"> 1. medial facet of proximal articulation, MC3 2. lateral facet of proximal articulation, MC4 3. medial distal condyle, MC3 4. lateral distal condyle, MC4 5. anterior distal groove and foramen 6. medial or lateral distal condyle
MANDIBLE	<ol style="list-style-type: none"> 1. Symphyseal surface 2. diastema 3. lateral diastemal foramen 4. coronoid process 5. condylar process 6. angle 7. anterior dorsal ascending ramus posterior M3 8. mandibular foramen 	FIRST PHALANX	<ol style="list-style-type: none"> 1. proximal epiphysis 2. distal articular facet
VERTEBRA	<ol style="list-style-type: none"> 1. spine 2. anterior epiphysis 3. posterior epiphysis 4. centrum 5. neural arch 	INNOMINATE	<ol style="list-style-type: none"> 1. tuber coxae 2. tuber sacrale + scar 3. body of illium with dorso-medial foramen 4. iliopubic eminence 5. acetabular fossa 6. symphyseal branch of pubis 7. body of ischium 8. ischial tuberosity 9. depression for medial tendon of rectus femoris
SCAPULA	<ol style="list-style-type: none"> 1. supraglenoid tubercle 2. glenoid cavity 3. origin of the distal spine 4. tuber of spine 5. posterior of neck with foramen 6. cranial angle of blade 7. caudal angle of blade 	FEMUR	<ol style="list-style-type: none"> 1. head 2. trochanter major 3. trochanter minor 4. supracondyloid fossa 5. distal medial condyle 6. lateral distal condyle 7. distal trochlea 8. trochanter tertius
HUMERUS	<ol style="list-style-type: none"> 1. head 2. greater tubercle 3. lesser tubercle 4. intertuberal groove 5. deltoid tuberosity 6. dorsal angle of olecranon fossa 7. capitulum 8. trochlea 	TIBIA	<ol style="list-style-type: none"> 1. proximal medial condyle 2. proximal lateral condyle 3. intercondylar eminence 4. proximal posterior nutrient foramen 5. medial malleolus 6. lateral aspect of distal articulation 7. distal pre-epiphyseal portion of the diaphysis
RADIUS	<ol style="list-style-type: none"> 1. medial half of proximal epiphysis 2. lateral half of proximal epiphysis 3. posterior proximal ulna scar and foramen 4. medial half of distal epiphysis 5. lateral half of distal epiphysis 6. distal shaft immediately above distal epiphysis 	CALCANEUM	<ol style="list-style-type: none"> 1. calcaneal tuber 2. sustentaculum tali 3. processus anterior
ULNA	<ol style="list-style-type: none"> 1. olecranon tuberosity 2. trochlear notch- semilunaris 3. lateral coronoid process 4. distal epiphysis 	METATARSUS	<ol style="list-style-type: none"> 1. medial facet of proximal articulation, MT3. 2. lateral facet of proximal articulation, MT4 3. medial distal condyle, MT3 4. lateral distal condyle, MT4 5. anterior distal groove and foramen 6. medial or lateral distal condyle

Archive catalogue of the animal bone from SGC98

site	cont.	species	bone	no	side	fusion	zone	butchery	gnawing	measurement	comment	preservation
SGC98	308	BOS	HUM	1	R		50		DG		PROX SHAFT-PROX END CHEWED OFF	4
SGC98	308	BOS	INN	1	L		3		DG		ILIAL SHAFT-POROUS-BOTH ENDS HEAVILY CHEWED	3
SGC98	308	BOS	MTC	1	R	DF	12345			GL-210 Bp-63.4 SD-37.2 Bd-70 Dd-33.8	COMPLETE	4
SGC98	308	BOS	MTC	1	F	DN					HALF ZONE 5-SPLIT FRAG DISTAL SHAFT	4
SGC98	308	BOS	RAD	1	R	PF					SPLIT FRAGMENT OF PROX END-PART ZONE 1	3
SGC98	308	BOS	SES	1	W		1				DISTAL SESAMOID	4
SGC98	308	CSZ	RIB	1	F						SHAFT FRAG	4
SGC98	308	CSZ	TRV	1	F		1		DG		SPINE-DORSAL CHEWED	4
SGC98	308	FEL	HUM	1	L	DJPN	567890				SHAFT AND DISTAL END-JUV CAT	4
SGC98	308	FEL	TIB	1	R	PNDN	47				COMPLETE SHAFT	4
SGC98	308	GOOS	MTC	1	R						BROKE DISTAL END-POROUS AND EPI NOT COMPLETELY HARD	4
SGC98	308	GOOS	TIB	1	R						MID AND DISTAL SHAFT	4
SGC98	308	OVC	HUM	1	L		69	KN	DG		DISTAL SHAFT-END CHEWED OFF-MIDSHAFT CUT AROUND HALF CIRCUMFERENCE	4
SGC98	308	OVCA	FEM	1	L				DG		MIDSHAFT-POROUS-LAMB-PROX END CHEWED	4
SGC98	308	OVCA	HUM	1	L	DF	6789			SD-15 Bd-32.6 BT-32.2 HT-19.6	DISTAL HALF	4
SGC98	308	OVCA	INN	1	R	EF	2359		DG		ILIAL SHAFT-ACETAB AND PART ISCHIAL SHAFT-CHEWED	4
SGC98	308	OVCA	INN	1	L	EF	234579		DG		ILIAL SHAFT-ACETAB AND PARTS OF PUBIS AND ISCHIUM-ANT CHEWED	4
SGC98	308	OVCA	RAD	1	L	PF	2	B			SPLIT PROX END-CHARRED	4
SGC98	308	OVCA	RIB	1	R	DF	567			SD-13.6 Bd-26 Dd-20.3	DISTAL END AND SHAFT	4
SGC98	308	OVCA	TIB	1	R	DF	567	CH		Bd-27.1 Dd-19.6	DISTAL END-CHOPPED OBLIQUELY ACROSS ARTIC FACET	4
SGC98	308	SUS	INN	1	R		39		DG		ILIAL SHAFT-BOTH ENDS CHEWED	4
SGC98	308	SUS	MC3	1	R	DN	12				PIGLET-VERY YOUNG - L=26.9	4
SGC98	308	SUS	MC4	1	R	DN	12				PIGLET-VERY YOUNG-SAME FOOT AS ABOVE	4
SGC98	308	SUS	MC5	1	L	DN	12				PROX END AND SHAFT	4
SGC98	308	SUS	SKL	1	R		12				CONDYLE AND PARA-OCCIPITAL PROCESS	4



P1. General view of Trench 1, looking south-west



P2. General view of Trench 2, looking north-west



P3. View of unexcavated ditches in Trench 3, looking north-east



P4. Excavated section through ditch 307, looking south-west

8.4 References

- Ekwall, E. 1989 *The Concise Oxford Dictionary of English Place-Names*. 4th ed.
- Herbert, N. 1998 Archaeological Desktop Assessment and Earthwork Survey of Land East of Spring Farm, Great Carlton, Lincolnshire. APS Rpt. 56/98
- Pevsner, N., Harris, J. 1995 *The Buildings of England: Lincolnshire*. and Antram, N.

8.5 Site archive

Primary records are currently with PCA (Lincoln). An ordered archive of both paper and object elements is in preparation and will be deposited at the City and County Museum, Lincoln, within six months.

8.6 List of archaeological contexts

Trench 1

- 100 Dark greyish brown silty clay topsoil
- 101 Mid brown silty clay subsoil
- 102 Natural orange brown sandy clay silt

Trench 2

- 200 Mid to dark grey clay silt topsoil
- 201 Natural brown / orange sandy clay
- 202 Modern gully with mid to dark grey clay silt fill
- 203 Not archaeological - JCB damage
- 204 Not archaeological - JCB damage
- 205 Mid brown to dark grey gravel and clay filling ?natural depression

Trench 3

- 300 Dark brown silty clay topsoil
- 301 Mid brown slightly silty clay subsoil
- 302 Not used.
- 303/304 NW - SE ditch with mid grey brown silty clay fill
- 305 W - E ditch
- 306a Upper fill of 305. Mid grey brown silty clay
- 306b Lower fill of 305. Dark blue grey clay
- 307 W - E ditch
- 308a Upper fill of 307. Dark grey brown silty clay
- 308b Lower fill of 307. Dark grey clay
- 309 W - E ditch
- 310a Upper fill of 309. Grey brown silty clay with redeposited light brown natural sand
- 310b Lower fill of 309. Dark grey clay.
- 311 Light grey to orange gritty sandy silt clay