

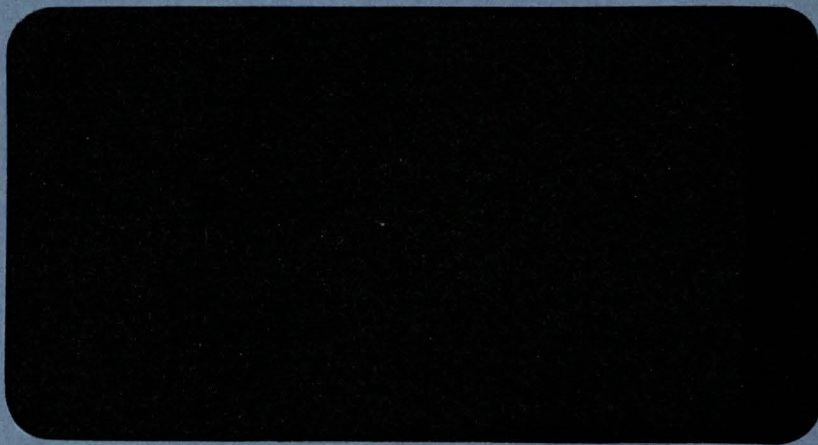
98/21

**ARCHAEOLOGICAL FIELD EVALUATION REPORT
LAND OFF NORBECK LANE, WELTON, LINCOLNSHIRE**

Site Code: NLW98
LCNCC Acc No. 221.98
NGR TF 0081 7971

*Ward 96/P/0386
Green House*

16 DEC 98
ask sent 16/12/98
accepted 14/1/99



PCA NLW 98 Welton by Lincoln

Evolution - Trial trenches.

Phase 1 - (10)-(11) post built structure Saxondate
sill-beamed or stave built building
cobbled yard

late saxon predecessor of Prebendal manor of Westhall?

Phase 2 - (13)-(14) stave wall connected with Westhall manor.

Finds - fragment of bone ~~stone~~ - see 8.3.
C10?

EVENT L13553
SOURCES L18282 L18283
S4787 L483387 (MED)
S2143 MED

89 330 A 1

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*uppl 96/P/0386
named 'Saxon House'*

Report prepared for Lincs. County Council
by James Albone BSc., PIFA.
November 1998

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Lincolnshire County Council
Archaeology Section

16. DEC 98

PCA 100/11 100/11 100/11
Evaluation of the
Archaeological Potential of the
Site of the former
Lincolnshire County Council
by James Albrow BSc, FIPA
November 1998

Illustrations

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Illustrations

An archaeological field evaluation took place on land west of Norbeck, Lincolnshire (Fig. 1). Three trenches were excavated to assess the archaeological potential of the site, which lay close to a known 12th-century manor and within the West Yard of the medieval Prebendal

Fig. 1 General site location (1:10,000)

Fig. 2 Plan showing location of archaeological trenches dating between the 10th to 11th centuries. Part of a post-hole structure which was cut

Fig. 3 Plan and section of features exposed in Trench 1 which three. Two sill-beamed or

Fig. 4 Plan and sections of features exposed in Trench 2 These remains probably

Fig. 5 Plan and sections of features exposed in Trench 2 which were associated with an iron hinge pivot and 13th to 14th century. This was exposed in Trench two and presumably relates in some way to the



Fig. 1: Site location (1:10,000)
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Summary

- * *An archaeological field evaluation took place on land west of Norbeck Lane, Welton, Lincolnshire (Fig. 1). Three trenches were excavated to establish the archaeological potential of the site, which lay close to a known Anglo-Saxon cemetery and within the West Yard of the medieval Prebendal manor of Westhall.*
- * *Two discrete phases of activity were encountered, dating between the 10th to 11th and 13th to 14th centuries. Part of a post-built structure, which was cut through an 11th century pit, was exposed in Trench three. Two sill-beamed or stave-built structures, one sealed below a 10th to 11th century cobbled surface, were tentatively identified in Trench one. These remains probably relate to a late Saxon precursor to Westhall manor.*
- * *A stone wall associated with an iron hinge pivot and 13th to 14th century tiles was exposed in Trench two and presumably relates in some way to the Prebendal manor.*

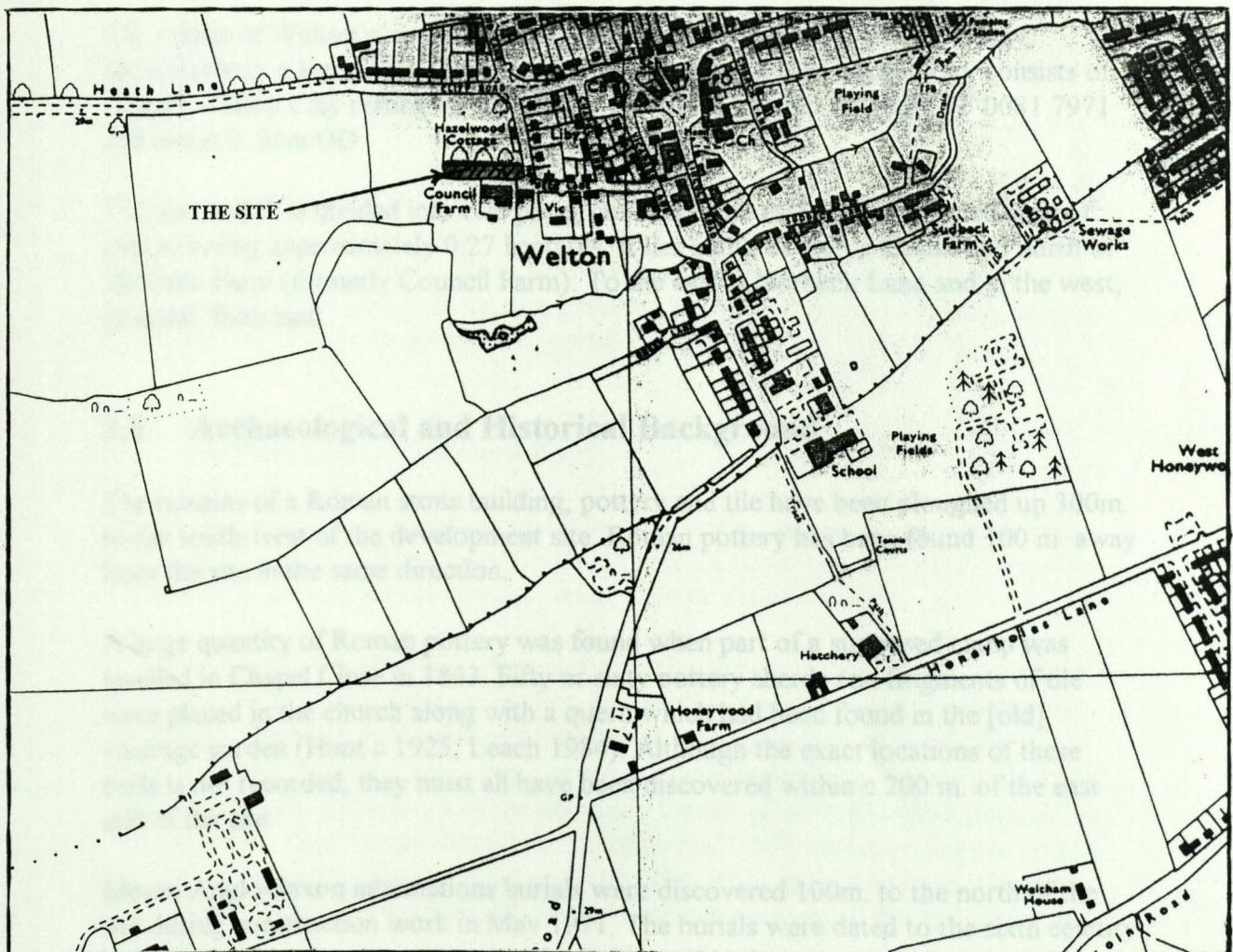


Fig. 1: Site location (1:10,000)
(OS Copyright Licence No: AL 515 21 A0001)

1.0 Introduction

A four day programme of archaeological trial excavation was carried out on a site west of Norbeck Lane, Welton, Lincolnshire (Fig. 1). The work was commissioned by Lincolnshire County Council Property Division.

The results of this report will assist the local planning authority 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 Welton is situated in the administrative district of West Lindsey, approximately 6 km. north-north-east of Lincoln. The underlying geology consists of Jurassic Tealby Clay resting on limestone. The site is centred on NGR TF 0081 7971 and lies at c. 26m OD.

The site, which is divided into two parts, consists of an east to west aligned strip of land covering approximately 0.27 hectares. It lies south of Saxon House and north of Norbeck Farm (formerly Council Farm). To the east is Norbeck Lane and in the west, pastoral farm land.

3.0 Archaeological and Historical Background

The remains of a Roman stone building, pottery and tile have been ploughed up 300m. to the south-west of the development site. Roman pottery has been found 100 m. away from the site in the same direction.

A large quantity of Roman pottery was found when part of a supposed camp was levelled in Chapel Close in 1863. Fifty or sixty pottery sherds and fragments of tile were placed in the church along with a quern which had been found in the [old] vicarage garden (Hunt c.1925; Leach 1984). Although the exact locations of these finds is not recorded, they must all have been discovered within c.200 m. of the east end of the site.

Eleven Anglo-Saxon inhumations burials were discovered 100m. to the north of the site during construction work in May 1971. The burials were dated to the sixth century by accompanying grave goods which included annular brooches, beads and shield bosses. The full extent of the cemetery was not established. Saxon pottery has been found 100m. to the south-west of the development site. A further thirteen

inhumations were found behind council houses on Norbeck Lane in 1963 (c.50m. east of the site). Although these were undated, some of the burials were below stone slabs and it is likely that they were of Roman or medieval, rather than Anglo-Saxon, date.

The place-name Welton refers to the *tun* or enclosure by the spring or stream (Ekwall 1989, 505). Following the Norman Conquest the manorial land at Welton (formerly held by Sveinn) was given to Bishop Remigus of Lincoln for its six prebends. The six canons or prebendaries were the rectors of Welton and the prebendal manors provided their endowment (Leach 1984, 9). By the time of the Domesday Survey in 1086, Welton had become established as an important manor.

The six prebendal manors of Welton were West Hall, Gore Hall, Beck Hall, Rive Hall, Pans Hall and Brink Hall (Everson et al 1991, Fig.19). The development site lies within Westhall manor. This manor was divided into three yards; West yard (which the site extends along the southern boundary of), Chapel yard and Dove yard (Everson et al 1991, 210). It was noted during the evaluation that West yard survives as a raised area of ground (see Pls 1 & 2). This had also been observed when the Anglo-Saxon cemetery was discovered when it was noted that the field was, 'raised and almost moated, and would appear to have been divided into four crofts'. The remains of a medieval or post-medieval stone building and fifteenth to sixteenth century tiles were found in the northern part of this yard during the construction of Saxon House. No traces of the land divisions within the yard remain were observed during the evaluation.

Further evidence of medieval activity in the vicinity of the site include fishpond remains to the south (Everson et al 1991, 210) and fourteenth century pottery found on Norbeck Lane. St. Mary's Church, which lies c.300m. to the east of the site, retains some thirteenth and fourteenth century elements despite extensive rebuilding between the late eighteenth and early twentieth centuries (Pevsner et al 1995, 787).

4.0 Objectives and Methodology

The site lies within close proximity of the known Saxon cemetery and possibly also settlement remains of this period and later. In view of this it was considered possible that important archaeological remains would survive within the site.

Archaeological trial trenching was considered to be the most appropriate method of evaluating the site. The Assistant County Archaeologist for Lincolnshire approved a specification for three archaeological trenches to determine the nature of the archaeology (its character, date, depth, state of preservation, extent and significance). Only by sampling a percentage of the site could the actual archaeological potential be fully addressed. The overall objective of this phase of work, therefore, was to present both the client and the District Planning Authority with a set of data from which reasoned decisions may be taken regarding future management of the archaeological resource.

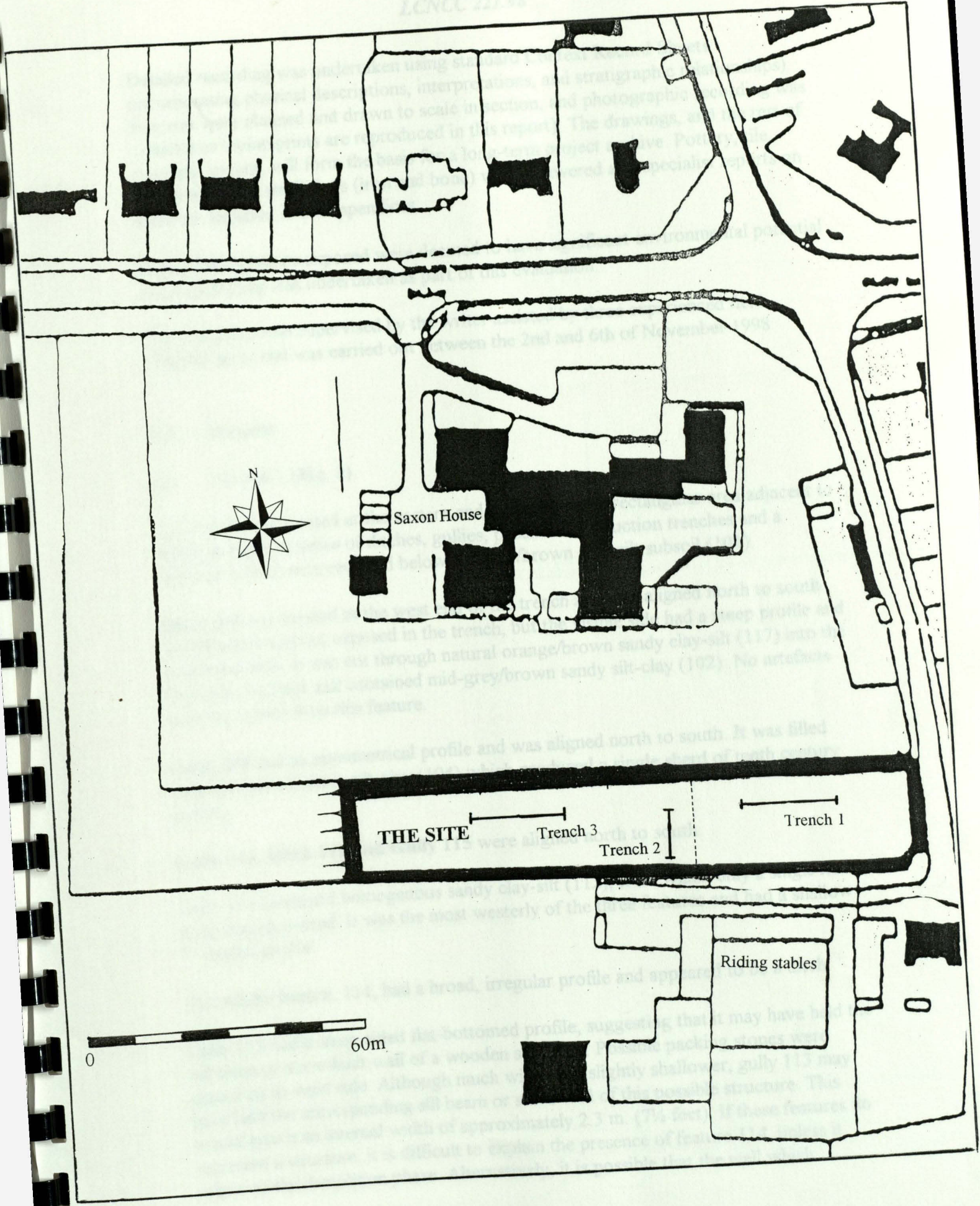


Fig. 2: Location of archaeological trenches

Detailed 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 small finds (iron and bone) were recovered and specialist reports on these are included in the appendices.

None of the deposits exposed were deemed to have significant environmental potential and no sampling was undertaken as part of this evaluation.

The evaluation was supervised by the writer assisted by three experienced field archaeologists and was carried out between the 2nd and 6th of November 1998

5.0 Results

5.1 Trench 1 (Fig. 3)

This trench was located at the eastern end of the site on a rectangular area adjacent to Norbeck Lane. A series of ditches, gullies, possible construction trenches and a cobbled surface were revealed below the grey/brown clay-silt subsoil (101).

Ditch 103 was located at the west end of the trench and was aligned north to south. Its full width was not exposed in the trench, but the visible side had a steep profile and a rounded base. It was cut through natural orange/brown sandy clay-silt (117) into the limestone bedrock and contained mid-grey/brown sandy silt-clay (102). No artefacts were recovered from this feature.

Gully 105 had an asymmetrical profile and was aligned north to south. It was filled with mid-brown sandy silt-clay (104) which produced a single sherd of tenth century pottery.

Gully 113, Ditch 114 and Gully 115 were aligned north to south.

Gully 113 contained homogenous sandy clay-silt (112), from which only a single horse bone was recovered. It was the most westerly of the three features and had a shallow U shaped profile.

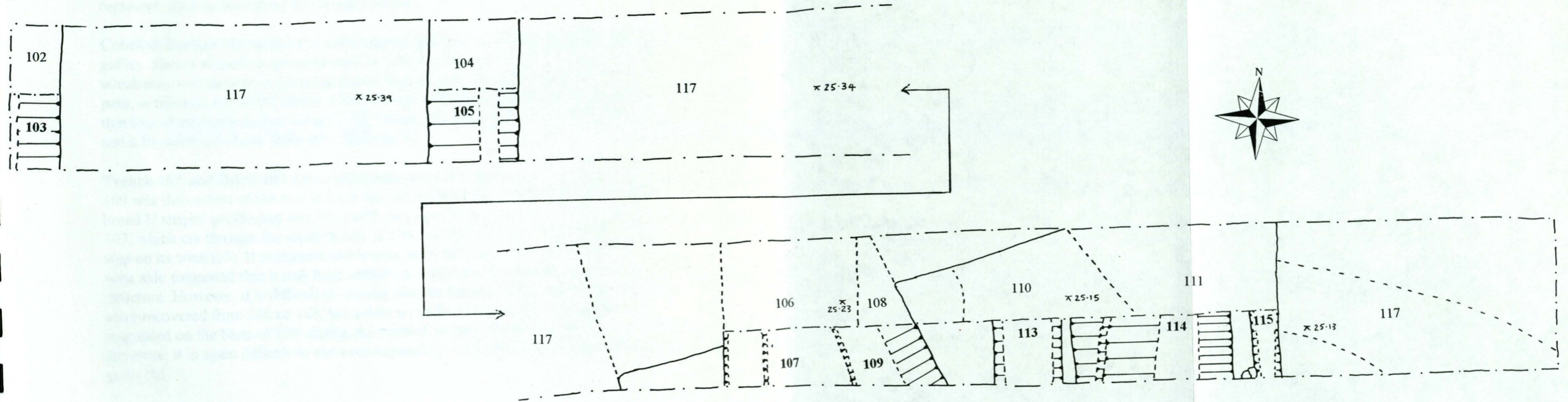
The middle feature, 114, had a broad, irregular profile and appeared to be a ditch.

Gully 115 had a steep-sided flat-bottomed profile, suggesting that it may have held the sill beam or stave-built wall of a wooden structure. Possible packing stones were placed on its west side. Although much wider and slightly shallower, gully 113 may have held the corresponding sill beam or stave wall of this possible structure. This would give it an internal width of approximately 2.3 m. (7½ feet). If these features do represent a structure, it is difficult to explain the presence of feature 114, unless it relates to the demolition phase. Alternatively, it is possible that the wall which

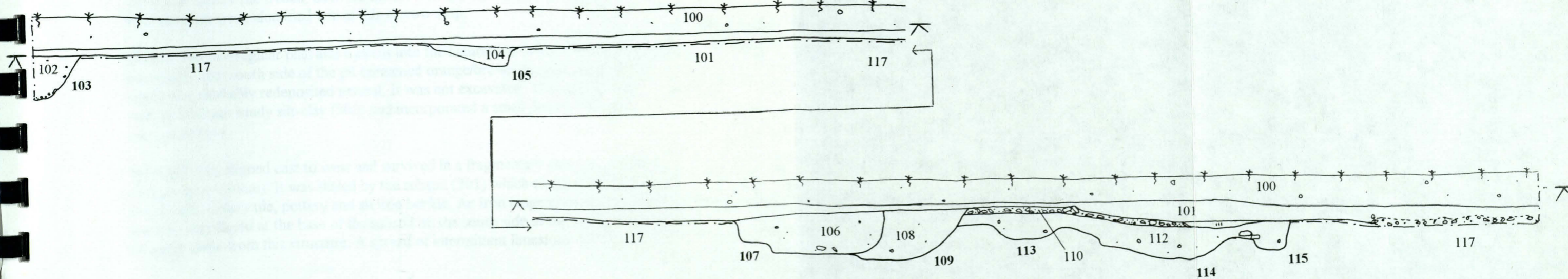
Fig. 3: Plan and section of features exposed in Trench 1

Scale = 1:40

Plan



South section face



Datum = 28.48m OD

corresponds to 115 lies beyond the eastern end of the trench. Finds from the cobbled surface which sealed 112 suggest that these features, and any structure which they may represent, date no later than the eleventh century.

Cobbled Surface 110 sealed 112 and slumped into the top of the possible ditch and gullies. Sherds of tenth to eleventh century pottery were recovered from the surface, which may well have been contemporary with an undated cobbled surface, possibly a path, at the east end of the trench (116). The east end of surface 110 was beneath a thin lens of mid-grey-brown subsoil (111) which also contained tenth century pottery, and a fragment of a bone skate (see Appendix 3).

Trench 107 and Ditch 109 were intercutting and were aligned north to south. Ditch 109 was the earliest of the two and cut the end of the cobbled surface (110). It had a broad U shaped profile and was filled with dark grey brown silty clay (108). Trench 107, which cut through the western side of 109, had vertical sides, a flat base and a step on its west side. It contained mid-brown sandy silt-clay (106). The profile of its west side suggested that it may have contained a sill beam for another wooden structure. However, it is difficult to explain why the feature was so wide. No finds were recovered from 106 or 108, but a date no earlier than the eleventh century is suggested on the basis of 109 cutting the cobbled surface. If 107 was part of a structure, it is again difficult to see a corresponding wall, unless this is represented by gully 105.

5.2 Trench 2 (Fig. 4)

Machine excavation in most of this trench was only carried out to a depth of c. 0.10m. as a layer of limestone blocks and rubble was exposed immediately beneath the turf. This was in fact an over cautious act, as investigation quickly established that the rubble layer was of relatively recent origin and was not the remains of a stone structure as had first been assumed. It is possible that the rubble related to the construction of Saxon House to the north of the site in the early 1970s.

As a result of this error it was decided that a narrow strip should be excavated by hand along one side of the trench, down to the level of any earlier archaeological remains. Four features were identified within this narrow strip.

Pit 204 had an irregular plan and was cut into the natural bedrock at the north end of the trench. The south side of the pit contained orange/brown sandy clay-silt (203) which was probably redeposited natural. It was not excavated. The bulk fill was mid-grey/brown sandy silt-clay (202) and incorporated a small quantity of tenth century pottery.

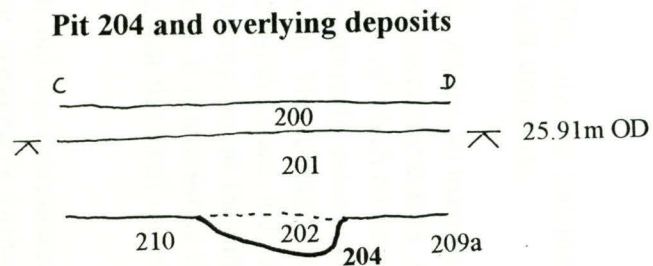
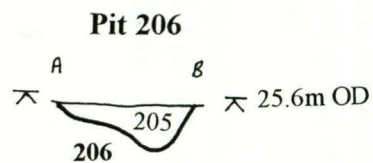
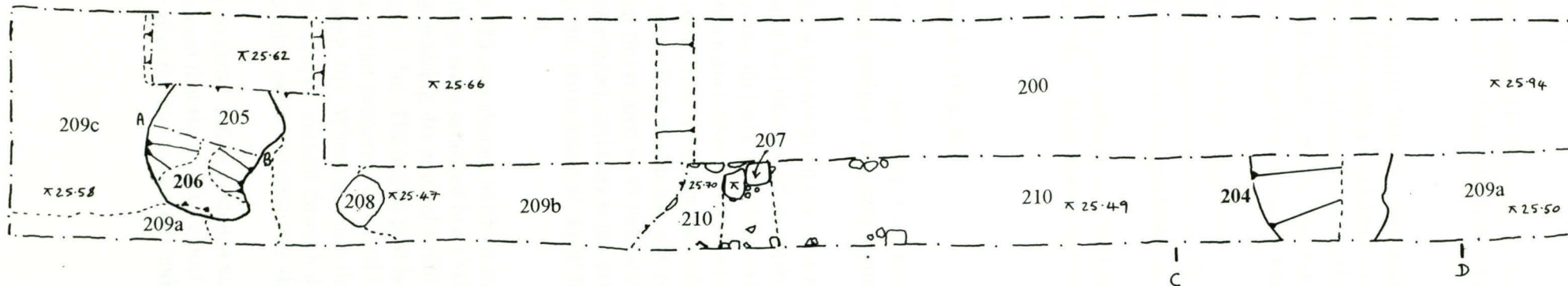
Wall 207 was aligned east to west and survived in a fragmentary state to a height of three courses (30cm). It was sealed by the subsoil (201) which contained thirteenth to fourteenth century tile, pottery and an iron buckle. An iron hinge pivot from a door or window was found at the base of the subsoil on the south side of the wall and almost certainly came from this structure. A spread of intermittent limestone rubble existed in

Fig. 4: Plan and sections, features exposed in Trench 2

Scale = 1:40



Plan



the base of the subsoil to the north of wall 207 and may also have related to this structure for which a thirteenth to fourteenth century date is suggested.

Pit 206 and Feature 208 were at the south end of the trench. Pit 206 had an irregular plan and was filled with a compacted orange brown silty clay which produced no artefacts. Although the profile across the middle of the pit was broadly V-shaped the eastern end was nearly vertical, and it is possible that the feature was the setting for a number of posts (possibly two at the east end with others in the unexcavated area).

Feature 208 was 0.30m. to the north of pit 206. It was sub-square in plan and contained an orange/brown silty clay fill similar to that in the adjacent pit. This feature was not excavated but it is possible that it also was a post setting.

These possible post settings may have formed part of an internal or external structure related to wall 207. Alternatively they may have been part of a separate and earlier structure.

5.3 Trench 3 (Fig. 5)

This trench was located at the west end of the site and contained a number of archaeological features, including a post-built structure.

Pit 303 was on the north side of the trench and had an irregular plan, suggesting perhaps that it had functioned in a number of separate events. It was filled with light to mid brown clay-silt (304/305), the lower part of which contained lots of small limestone fragments. Sherds of mid to late eleventh century pottery and animal bone were recovered from the upper part of the fill. The surface of the natural limestone brash into which this pit was cut was pink-red in colour, indicating *in situ* burning. It is possible that this related to an industrial activity, but as the full extent of the feature was not determined, certainty is not possible. It is interesting that the fill did not incorporate any burnt material, suggesting that this itself was not connected with the use of the pit.

Structure 323 was aligned north to south and was represented by eight postholes. Seven of these were arranged in a C-shape, presumably forming the end of a rectangular building. Its internal width was c. 1.9m. and the length exposed in the trench was c. 1.2m. The eighth post hole was situated just north of the main configuration but presumably related to it in some way. The north end of the building overlapped pit 303. Where this was the case, the postholes had been excavated significantly deeper, cutting through the base of the pit into natural limestone. The other postholes were comparatively shallow.

Although no direct dating evidence was recovered from any of the postholes, it can be safely assumed that the structure post-dated pit 303, placing its date at some point during or after the mid to late eleventh century.

LCNCC 221.98

Gully 325 was c. 3.5m. to the west of, and aligned broadly parallel to, structure 323. It had a shallow V-shaped profile and contained two fills which produced no artefacts.

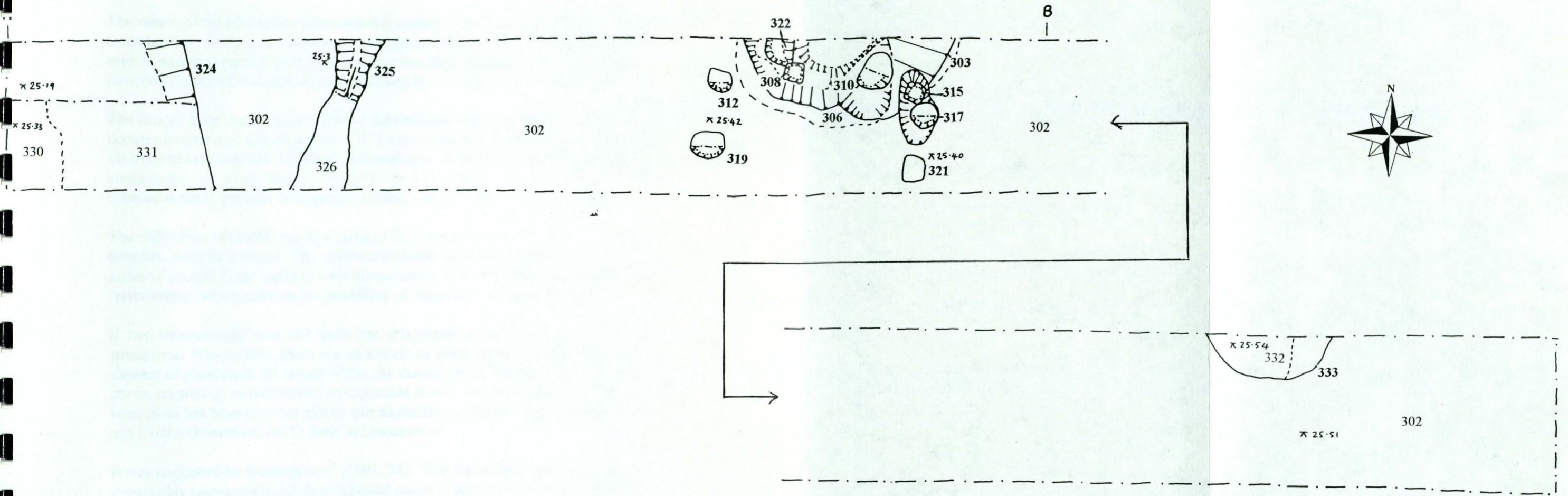
Feature 324 was a broad shallow depression at the west end of the trench. It was aligned not to south and contained two clay-silt fills. No artefacts were recovered.

Pit 333 was at the east end of the trench on its northern side. It contained a mid-orange/brown clay-silt but was not excavated due to time constraints.

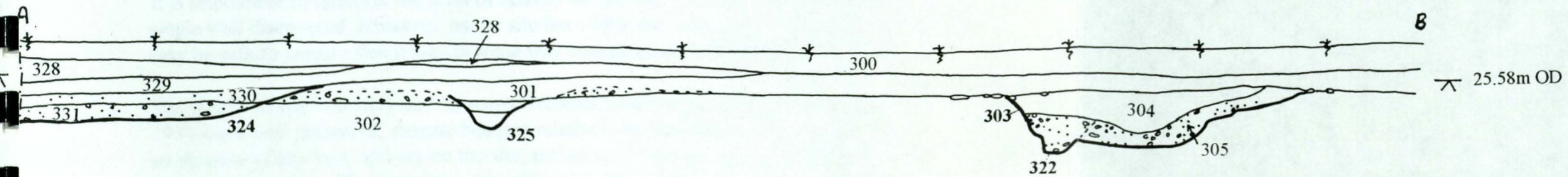
Fig. 5: Plan and sections, features exposed in Trench 3

Scale = 1:40 (profile drawings at scale 1:20)

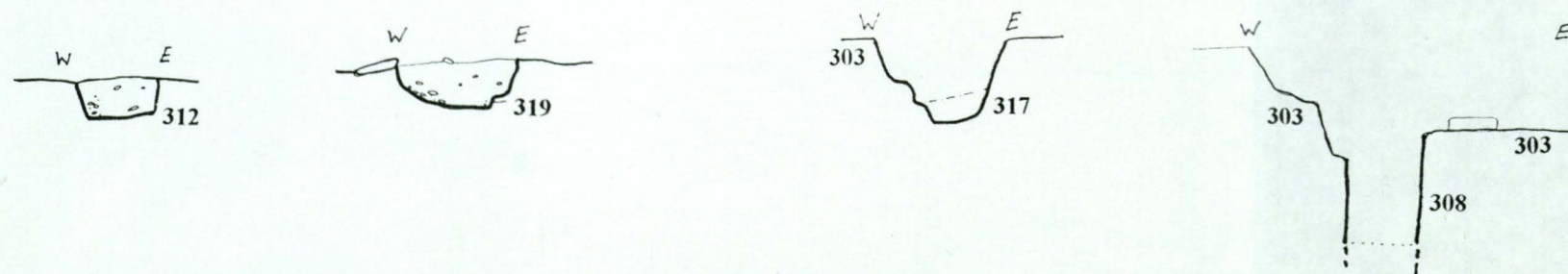
Plan



Main (north) section



Profile drawings



6.0 Discussion and Conclusions

The results of the evaluation show that it is unlikely that the Anglo-Saxon cemetery extends as far south as the proposed development site. No early Saxon settlement evidence (contemporary with the cemetery) was exposed during the evaluation. However, important structural remains dating to two phases were encountered.

The first of these phases dates between the tenth and eleventh centuries. Associated remains include a post-built structure in Trench three and the possible remains of two sill-beamed or stave-built buildings in Trench one. Although none of the buildings could be directly dated, their associations seem to suggest a broadly late Saxon date. A cobbled surface, perhaps belonging to a yard, was also dated to this period.

The difficulties of identifying structures of this type and period in small evaluation trenches, must be stressed. This problem is clearly shown by Trench one, where a series of parallel linear features were encountered. It is very difficult to be sure of their relationships, which reduces the possibility of structures being recognised.

If two structures did exist in Trench one, it is worth noting that, like the post-built structure in Trench three, these are on a north to south alignment. This may suggest an element of planning in the layout of the site during the late Saxon period. This would not be surprising, as evidence of an organised layout with successive rebuilding on the same plots has been noted at mid to late Saxon sites at Flixborough (Loveluck 1998) and Goltho (Beresford 1987), both in Lincolnshire.

It was suggested by Everson et al. (1991, 28), "that the separate existence and presumably management [of the Prebendal manors] perhaps fossilises an even older pattern". It would seem highly likely that the remains encountered during the evaluation do in fact represent a late Saxon predecessor to the Prebendal manor of Westhall.

The second phase of activity encountered dates between the thirteenth and fourteenth century. This was represented only by the stone wall [207] in Trench two which was dated by association with the scatter of tile in the subsoil at the same end of the trench. It is impossible to interpret the level of activity on the site during this period from the single wall discovered. However, as the site lies within the west yard of Westhall, it may be safe to assume that it was in some way connected with the manor.

The Anglo-Saxon cemetery and structural remains found to the north of the site in 1971 were well preserved, despite being at relatively shallow depth. This was due to an absence of any later activity on the site, including ploughing, which would have led to their destruction. The same post-depositional factors seem to have applied to the evaluated site, where remains were also quite well preserved.

7.0 Acknowledgements

Pre-Construct Archaeology (Lincoln) express their sincere thanks to Lincolnshire County Council Property Division for this commission. Thanks also to, Mark Bennet and Sarah Grundy (County SMR), the site team; Wayne Livesey, Miles Ridsdale and Jim Snee and the specialists; Jane Cowgill, James Rackham and Jane Young.

8.3 Registered Finds Archive by J. Cowgill

8.4 References

8.5 Site archive

8.6 List of Contexts

8.7 Colour plates

8.0 Appendices:

8.1 Pottery and Tile Analysis by J. Young

8.2 Animal Bone Archive by J. Rackham

8.3 Registered Finds Archive by J. Cowgill

8.4 References

8.5 Site archive

8.6 List of Contexts

8.7 Colour plates

				Comments
100	LSH	1	JAR	BASE; SOOT
	TORK	2	JAR	SHELL FABRIC
				MIXED COARSE & FINE
				FABRIC AND FE
110	LKT	1	JAR	BS
	LSH	1	JAR	FABRIC C; BS
	LKT	1	JAR	BS; SOOT; X2
	LSLOC	1	JAR	BS; SAND & SHELL FABRIC
	TORK	2	JAR	BS; FRESH BREAK
	LSLOC	1	JAR	FABRIC D?; BS
201	LFS	1	JAR	BS
	LSW2	1	JUG	BS; X2
	LSWA	1	JUG	BASE
204 (contd)	LFS	2	JAR	RIM; ASH14+
	LFS	1	JAR	RIM; ASH 14+
	LFS	1	JAR, TINY	RIM
	LFS	1	JAR	BS, X7
	LKT	1	JAR/PITCHER	PRESSED STRIP
	LSH	1	JAR	BS, WORN, X3
	LSW2	1	JUG	BS, X4
	NOTG	1	JUG	BS; 7ID
	MEDLOC	1	JUG	HARD GREY FABRIC, REDUCED GLZE
	MEDLOC	1	JUG	OVAL HANDLE; REDUCED GLZE
207 (contd)	PNR	32	TILE	VARIOUS, PROB ALL FLAT TILE; 13-15THC; SOME LINCOLN TYPES
	PNR	1	TILE	FLAT, CORNER; NOT LINCOLN
208	LSH	1	JAR	BS; X4

8.1

Norbeck Lane, Welton (NLW98)

Post-Roman pottery archive: ware types by context

By Jane Young

Context	Ware	Sherds	Form	Comments
101	LSH	1	JAR	BASE; SOOT
	LSLOC	1	JAR	SHELL FABRIC
	SST	1	-	MIXED COARSE & FINE FABRIC AND FE
Date: ASH7-13; ASH7-11; 10TH				
104	LKT	1	JAR	BS
	Date: ASH7-ASH11; 10TH			
110	LSH	1	JAR	BS
	TORK	2	JAR	BASE; FRESH BREAK
Date: ASH7-ASH13; 10-1TH				
111	LKT	1	JAR	BS
	LSH	1	JAR	FABRIC C; BS
	LKT	1	JAR	BS; SOOT; X2
	LSLOC	1	JAR	BS; SAND & SHELL FABRIC
	TORK	2	JAR	BS; FRESH BREAK
	LSLOC	1	JAR	FABRIC D?; BS
Date: ASH7-ASH13; ASH7-11; 10TH				
201	LFS	1	JAR	BS
	LSW2	1	JUG	BS; X2
	LSWA	1	JUG	BASE
Date: MH4-6; 13TH-MID14TH				
201 (contd)	LFS	2	JAR	RIM; ASH14+
	LFS	1	JAR	RIM; ASH 14+
	LFS	1	JAR; TINY	RIM
	LFS	1	JAR	BS; X7
	LKT	1	JAR/PITCHER	PRESSED STRIP
	LSH	1	JAR	BS; WORN; X3
	LSW2	1	JUG	BS; X4
	NOTG	1	JUG	BS; ?ID
	MEDLOC	1	JUG	HARD GREY FABRIC; REDUCED GLZE
	MEDLOC	1	JUG	OVAL HANDLE; REDUCED GLZE
Date: MH4-8; 13-14TH				
201 (contd)	PNR	32	TILE	VARIOUS; PROB ALL FLAT TILE; 13-15THC; SOME LINCOLN TYPES
	PNR	1	TILE	FLAT; CORNER; NOT LINCOLN
202	LSH	1	JAR	BS; X4
Date: ASH7-11; 10TH				

207	LSH	1	JAR	NECK
Date: ASHH7-11; 10TH				
304	LFS	1	JAR	RIM; SOOT INT; ASH 13+
	LFS	1	JAR	RIM; X3; ASH13+
	LFS	1	JAR	BS; X3
	LSH	1	JAR	WORN; EVERB3 RIM
	LSH	1	JAR	BS; X3
	LKT	1	JAR	BS
	LS/SNLS	2	JAR?	SV; BS
Date: ASH13-14; MID TO LATE 11TH				
U/S	LSWA	1	JAR/PIPKIN	BASE; 13/14TH
	LSH	1	JAR	BS; LEACHED EXT
	LSLOC	1	JAR	FABRIC D?, BS
	LSH	1	JAR	BS

Comments

A small but interesting group of pottery. Most of the material is of late Saxon date, probably 10th century. No definite 9th century vessels are present but this could just be the absence of diagnostic sherds. More than six different fabrics are present on the site for this period. Jar rims in LFS belonging to the mid to late 11th century (304) and the late 11th to mid 12th century (201) are both present, as are a number of undiagnostic LFS sherds indicating a probable continuation of occupation through the 11th century. There is little medieval pottery present and what is there is probably 13th/14th century, although a large quantity of tile, again of a similar date is present in (201).

THE ENVIRONMENTAL ARCHAEOLOGY CONSULTANCY

Key to codes used in the cataloguing of animal bones

SPECIES	BONE	SIDE	FUSION
BOS	cattle	SKL	skull
CSZ	cattle size	TEMP	temporal
SUS	pig	FRNT	frontal
OVCA	sheep or goat	PET	petrous
OVI	sheep	PAR	parietal
SSZ	sheep size	OCIP	occipital
EQU	horse	ZYG	zygomatic
CER	red deer	MAN	mandible
CAN	dog	MAX	maxilla
MAN	human	ATL	atlas
UNI	unknown	AXI	axis
CHIK	chicken	CEV	cervical vertebra
GOOS	goose, dom	TRV	thoracic vertebra
LEP	hare	LMV	lumbar vertebra
UNB	indet bird	SAC	sacrum
MALL	duck, dom.	CDV	caudal vertebra
GULL	gull sp.	SCP	scapula
FISH	fish	HUM	humerus
UNIB	bird indet	RAD	radius
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

SIDE
 W - whole
 L - left side
 R - right side
 F - fragment

FUSION
 Records the fused/unfused condition of the epiphyses
 P - proximal; D - distal; E - acetabulum;
 N - unfused; F - fused; C - cranial; A - posterior

TOOTH WEAR - Codes are those used in Grant, A. 1982 The use of tooth wear as a guide to the age of domestic animals, in B.Wilson, C.Grigson and S.Payne (eds) *Ageing and sexing animal bones from Archaeological sites, 91-108.*

Teeth are labelled as follows in the tooth wear column:

h 1dpm4/dupm4 f 1dpm2/dupm2
 H 1pm4/upm4 G 1dpm3/dupm3
 I 1m1/um1
 J 1m2/um2
 K 1m3/um3

ZONES - zones record the part of the bone present.
 The key to each zone on each bone is on page 2

MEASUREMENTS - Any measurements are those listed in A.Von den Driesch (1976) *A Guide to the Measurement of Animal Bones from Archaeological Sites*, Peabody Museum Bulletin 1, Peabody Museum, Harvard, USA

PRESERVATION

- 1 - enamel only surviving
- 2 - bone very severely pitted and thinned, tending to break up teeth with surface erosion and loss of cementum and dentine
- 3 - surface pitting and erosion of bone, some loss of cementum and dentine on teeth
- 4 - surface of bone intact, loss of organic component, material chalky, calcined or burnt
- 5 - bone in good condition, probably with some organic component

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
		FIRST PHALANX	<ol style="list-style-type: none"> 1. proximal epiphysis 2. distal articular facet
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 	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
VERTEBRA	<ol style="list-style-type: none"> 1. spine 2. anterior epiphysis 3. posterior epiphysis 4. centrum 5. neural arch 	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
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 	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
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 	CALCANEUM	<ol style="list-style-type: none"> 1. calcaneal tuber 2. sustentaculum tali 3. processus anterior
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 	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
ULNA	<ol style="list-style-type: none"> 1. olecranon tuberosity 2. trochlear notch- semilunaris 3. lateral coronoid process 4. distal epiphysis 		

8.3 REGISTERED FINDS CATALOGUE FOR THE EVALUATION AT NORBECK LANE, WELTON (NLW98: LCCM 221.98).

Context 111; RF 1. Fragment of a bone skate made from a horse metatarsus (pers. comm. D J Rackham). Highly polished from use. These are fairly frequent finds in Britain from the 8th - 13th century (MacGregor 1985, 142).

When the great marsh that washes the Northern walls of the City [of London] is frozen, dense throngs of youths go forth to disport themselves upon the ice. Some gathering speed by a run, glide sidelong, with feet set well apart, over a vast space of ice. Others make themselves seats of ice like millstones and are dragged along by a number who run before them holding hands. Sometimes they slip owing to the greatness of their speed and fall, every one of them, upon their faces. Others there are, more skilled to sport upon the ice, who fit to their feet the shinbones of beasts, lashing them beneath their ankles, and with iron-shod poles in their hands they strike ever and anon against the ice and are borne along as swift as a bird in flight or a bolt shot from a mangonel [engine of war]. But sometimes two by agreement run one against the other from a great distance and, raising their poles, strike one another. One or both fall, not without bodily hurt, since on falling they are borne a long way in opposite directions by the force of their own motions; and wherever the ice touches the head, it scrapes the skin off entirely. Often he that falls breaks shin or arm, if he fall upon it. But youth is an age greedy of renown, yearning for victory, and exercises itself in mimic battles that it may bear itself more boldly in true combats.

William Fitz Stephen describing skating on Moorfields (London) in c. 1170 (Fitz Stephen 1990, 58 - 59).

Context 201; RF 2. A complete rectangular iron buckle with an iron pin of a suitable size to have been used as an item of dress. Width 28mm x 22mm.

Context 201; RF 3. Complete iron hinge pivot probably originally used for hanging a door or window shutter. Length 100mm, height 66mm.

Context 201; RF 4. An iron nail with a rectangular shaft and irregular hand-made head. Length 40mm.

Context 201. Natural piece of ironstone; discarded.

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Jane Cowgill
November 1998

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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 Mid - dark grey clay silt topsoil
- 101 Light grey brown clay silt subsoil
- 102 Mid grey brown sandy silt clay fill of ditch 103
- 103 N-S ditch
- 104 Mid brown sandy silt clay fill of gully 105 (10th C)
- 105 N-S gully
- 106 Mid brown sandy silt clay fill of trench 107
- 107 N-S linear trench
- 108 Dark grey brown silty clay fill of ditch 109
- 109 N-S ditch
- 110 Cobbled surface (10th-11thC)
- 111 Thin lens of mid grey brown silty clay subsoil (10th C)
- 112 Pale brown sandy silt clay fill of features 113, 114 and 115.
- 113 N- S gully
- 114 N-S ?ditch
- 115 N-S gully
- 116 Cobbled surface ?path
- 117 Natural orange brown sandy clay silt

Trench 2

- 200 Dark grey brown sandy clay silt topsoil
- 201 Mid grey brown sandy silt clay subsoil (contains 13/14th C tile/pottery)
- 202 Mid grey brown sandy silt clay upper fill of pit 204 (10th C)

- 203 Orange brown sandy clay silt lower fill of pit 204. ?Redeposited natural - not excavated
- 204 Sub-circular pit
- 205 Orange brown silty clay fill of pit 206
- 206 Irregular pit. ?possible post settings
- 207 E-W stone wall. 3 courses (prob. 13/14thC)
- 208 Possible post-hole containing orange brown silty clay. Not excavated
- 209 Natural limestone
- 210 Limestone fragments/rubble ?relating to wall 207

Trench 3

- 300 Dark brown clay silt topsoil
- 301 Light yellow brown clay silt subsoil.
- 302 Natural yellow clay and limestone brash
- 303 Irregular pit with burnt edges
- 304 Light brown clay silt upper fill of pit 303 (md-lt 11th C)
- 305 Light - mid brown clay silt lower fill of pit 303
- 306 Dark red brown heat affected natural around pit 303
- 307/308 Light yellow grey clay silt fill and posthole
- 309/310 Light yellow grey clay silt fill and posthole
- 311/312 Light yellow brown clay silt fill and posthole
- 313/322 Light - mid brown clay silt fill and posthole
- 314/315 Light yellow brown clay silt fill and posthole

316/317 Light orange brown clay silt fill and posthole

318/319 Light yellow brown clay silt fill and posthole

320/321 Mid brown clay silt fill and posthole

323 Post-built structure

324 N-S linear feature

325 N-S gully

326 Light brown clay silt upper fill of gully 325

327 Pale orange clay silt lower fill of gully 325

328 Yellow silt clay layer below topsoil

329 Mid grey brown clay silt deposit

330 Light yellow brown clay silt upper fill of 324

331 Light - mid brown clay silt lower fill of 324

332 Mid orange brown clay silt fill of pit 333

333 Sub-circular pit

The photograph was taken from the east of the site, looking north-west
towards the posthole. The angle of the nearest
posthole is approximately 45 degrees towards the
west.

8.7 Colour plates



P1. West site boundary (hawthorn hedge) showing raised area (west edge of the former West Yard)



P2. General view, east end of site, looking north-west (Trench 1 in foreground): the angle of the nearest car shows the progressive elevation towards the former West Yard



P3. Trench 107 in evaluation Trench 1, looking south



P4. Gully 113 and ditch 114, Trench 1, looking south



P5. Gully 115 and ditch 114, Trench 1, looking south



P6. Remains of wall footing 207, Trench 2, looking north



P7. Burnt pit 303 cut by post-built structure 323, Trench 3, looking north