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CCC AFU Report Number 895

Late Saxon to Post-medieval Manorial and Settlement Remains to the South of Wash Road, Kirton, Lincolnshire

An Archaeological Evaluation

Rob Atkins with Mo Muldowney

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Cover Images

Machine stripping, Soham	On-site surveying
Roman corn dryer, Duxford	Guided walk along Devil's Dyke
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An Archaeological Evaluation

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Summary

Between the 3rd and 14th July 2006 the Cambridgeshire County Council Archaeological Field Unit (CCC AFU) conducted Phase 1 of an archaeological evaluation (to which the main body of this report refers) on land to the south of Wash Road, Boston (TF 3090 3780) in advance of proposed construction of a storage and distribution park. The work was commissioned by Lincolnshire County Council. The remaining twelve trenches, referred to as Phase 2, were located to the south of Princess Road (and Phase 1). This took place during June 2007 and the results are presented in Appendix 10.

Twenty-nine trenches (2% of the proposed development area) were mechanically excavated. The evaluation uncovered archaeological remains in the northern part of the site across an area measuring *c.*500m by *c.*80m. The remains consisted of at least four phases of settlement and manorial remains dating from the 10th century until around the 18th century.

The moat of Bozon Hall (dating from at least 1377), measuring 6m wide by 2.7m deep, runs into the north-western part of the site. The development area, including the former moat, was evidently affected by the enclosure of the parish in the 18th century when the site became fields.

Generally, the trenches near to the present Wash Road contained moderate to very dense archaeological remains with the frequency of features gradually diminishing towards the south. No pre-modern archaeological features were found in the southern area of the evaluation. Houses/structures (postholes and slots) were found in five trenches (Trenches 6, 13, 14, 19 and 30) with parts of several structures in Trenches 6, 13 and 14, all in the extreme northern part of the site. Pottery dating and stratigraphy imply that at least two structures in Trench 13 were Late Saxon in date, while a medieval structure was located in Trench 14 and a post-medieval (and possibly earlier) structure(s) in Trench 6. The Trench 6 structures were within the moated enclosure of Bozon Hall and presumably represent former manorial buildings. Large quantities of iron working smithing slag, including hearth bottom and lining, may indicate production during the post-medieval period, which perhaps originated in the Late Saxon period.

Other ditches (including curvilinear examples representing enclosures and boundaries) and pits were uncovered in many of the northern trenches. Their presence may imply that agricultural/industrial as well as domestic features survive across that area. Moderate to large assemblages of artefacts and ecofacts were found, many deriving from sequential deposition of domestic waste in a variety of features, which contained a high proportion of humic material and charcoal.

In all phases there is evidence for trade, social status and use of the landscape.

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1 Introduction

Phase 1 of this archaeological evaluation was undertaken on land to the south of Wash Road, Kirton, Lincolnshire (TF 3090 3780; Fig. 2) in advance of proposed construction of a storage and distribution park. The work was carried out in accordance with a trial trench Brief issued by Jenny Young, South Kesteven and Boston Borough Planning Archaeologist (Young 2006) and supplemented by a Specification prepared by Jacobs UK (formerly known as Jacobs Babtie) dated 18th May 2006 (Jacobs UK 2006). A second evaluation (Phase 2) took place to the south of Princess Road in 2007 and is referred to in Appendix 10 only.

The work was designed to gather sufficient information to establish the presence/absence, extent, condition, depth, character, quality and date of any archaeological deposits in order to establish the impact of the development on the archaeological resource (Jacobs UK 2006, 9). More specifically, the work sets out to fulfil the aims and objectives set out by Jacobs UK in the document "Kirton Storage and Distribution Park Specification for Archaeological Trial Trenching" (Jacobs UK 2006) and re-iterated here below:

- To identify, investigate and record any such archaeological remains to the extent possible by the methods put forward in this Specification;
- To examine a representative sample of the potential archaeological remains that were identified by the geophysical survey and to clarify the results of that survey;
- To test the remaining 'blank' areas to asses the potential for unrecorded archaeological remains within the development area;
- To determine (so far as is possible) the stratigraphic sequence and dating of the deposits and features identified;
- To establish any ecofactual and environmental potential of archaeological deposits and features; and
- To disseminate the results through deposition of an ordered archive at the local museum, the deposition of a detailed report at the Sites and Monuments Record, and publication at a level of detail appropriate to the significance of the results.

The site archive is currently held by CCC AFU and will be deposited with Lincoln Museum (museum accession number 2006.135). The site code was WRKI 06.

2 Geology and Topography

The drift geology of the area is recorded as Terrington Beds, which (generally) comprise younger Marine Deposits (Romano-British to the present day), salt marsh, tidal creek and river deposits (sandy silt, sand and clay). These overlie clays that were deposited during the Jurassic period (British Geological Survey 1995). The natural deposits

observed on the site varied from silty clays in the extreme south-eastern part to sandy silts with a little clay over much of the area.

The land is fairly flat with an extremely gentle north to south slope across the site with the northern part at Wash Road lying at between 3.34 and 3.08m OD falling to between 2.97m and 2.96m OD at the south side by Princess Road.

3 Archaeological and Historical Background

3.1 Cropmark evidence

Two cropmarks (Jacobs UK Site number 17) are recorded within the subject area and located to the south of the area of the known moated medieval manorial site of Bozon Hall (Jacobs UK 2005, Fig. 13.2). The northernmost cropmark was recorded as a semi-circular arc, possibly representing a large ditch enclosing a circular area *c.*150m in diameter. This may have been a moat/enclosure around Bozon Hall manor and the cropmark was evaluated within Trench 7 where a large ditch was encountered. The second cropmark formed an 'L'-shaped feature (interpreted as of probable modern origin) and seemed to link with others to the north of Wash Road (shown on the 1st and 2nd Ordnance Survey map as earthworks). If the cropmarks denote features of pre-modern origin, it is possible that with the earthworks to the north, they form a feature of probable pentagonal shape, surrounding Bozon Hall manor. This cropmark was projected to cross the centre of Trench 11, where a pit or possibly a ditch terminus was encountered.

3.2 Geophysical survey

A fluxgate gradiometer survey was conducted across the proposed development area (Bunn 2006). The survey recorded possible pits and enclosure ditches along the northern edge of the site (Fig. 4). These were thought to represent settlement remains that date from at least the medieval period. This interpretation was reinforced by the presence of medieval pottery seen on the ground surface during the survey. The above cropmark features were not found in this geophysics survey.

Further to the south, groups of linear anomalies were recorded and interpreted as former field boundaries. There was spatial evidence to suggest that these were contemporary with the settlement. A number of ephemeral and sinuous curvilinear anomalies were thought to represent palaeochannels.

3.3 Desk-based assessment and other archaeological and historical evidence

Jacobs UK produced a desk-based assessment of the site as part of an environmental statement (Jacobs UK 2005). This assessment was largely included within the specification for trial trenching (Jacobs UK 2006).

Kirton has Saxon origins, being recorded as 'Chirchetune' in the Domesday Book (1086). It was also a wapentake and there are therefore many other entries describing places in the vicinity.

A brief search has not located any Anglo-Saxon charters which mention Kirton (Ruarigh Dale Jacobs UK pers. comm.), although there are records left by the 18th century historian William Stukely. He suggested that the soke of Kirton (or Drayton) was the original estate and seat of the first Saxon kings and Earls of Mercia, and the origin of the potent kingdom of that name (Green *c.*1910). The place-name evidence (*Cherchetune* = Church Town) may suggest that a church existed at Kirton in the pre-Viking era (Stocker 1993, 114).

Kirton is recorded as a reasonably wealthy settlement in the Domesday Book (1086), worth about £3 a year under Edward the Confessor and £2½ in 1086 (see below). The Domesday survey reports that Kirton was owned by two landowners: Count Alan Rufus and Guy de Craon. Count Alan received generous land tracts from William I in return for services at the Battle of Hastings. Domesday Book records that 'In Kirton [is] sokeland [of] Drayton, 10 carucates of land and 1 bovate' (Williams and Martin 1992, 906). Also 'Kirton Wapentake In Kirton, Eadric had 10 bovates of land to the geld. [There is] land for 1 plough and 5 oxen. Toli, the count's man, has 1 plough there and 4 villeins have 1 plough and [there are] 8 acres of meadow. TRE worth 40s; now 20s' (Williams and Martin 1992, 907).

In addition, 'In Kirton, Ælfric had 14 bovates of land and 2 parts of a bovate to the geld. [There is] land for 17 oxen. Guy has 1 plough there in demesne; and 2 sokemen on 1 bovate of this land having 3 oxen in a plough, and [there are] 16 acres of meadow. TRE worth 20s; now 30s' (Williams and Martin 1992, 950).

Of possible significance is the fact that two major land-holding elements of Kirton were also recorded in later medieval records: at Kirton, Bozon Hall linked to the present development site (see below); and Littlebury Hall *c.*300m to the north, the seat of the Littlebury's between the 14th and 16th centuries (Palmer-Brown 1996a).

Although resembling a village today, in the medieval period Kirton was a successful market town; the third largest settlement in the county (Palmer Brown 1996a, 5). The prosperity of medieval Kirton is apparent in the size and grandeur of the church St Peter and St Paul,

about 0.5km to the north-west of the proposed development, which has been described as "a town church in a village" (Pevsner and Harris 1988, 419). This church is early in date with Norman architecture visible. Kirton declined in size in the post-medieval period. The parish was enclosed in the late 18th century with Holland Fen enclosed in 1769 (Palmer-Brown 1996a).

Late Saxon remains have been found elsewhere in Kirton. Excavations to the north-east of the town have uncovered the remains of a small Anglo-Saxon settlement (PRN 13722), dating from the 9th to the 10th century (Jacobs Babtie 2006).

An archaeological evaluation in 1996 directly to the north of Wash Road, opposite the present evaluation, found 11th to 12th century ditches, many undated features and the moat of Bozon Hall itself which was backfilled in the 19th century (Palmer-Brown 1996b; Fig. 4, No. 4; Table 1, No. 4). This moat was more than 5.4m wide and in excess of 2.70m deep (Palmer-Brown 1996b, 7). Features were found in three of the four trenches with the number of features in these three trenches varying from moderate to dense. The archaeological potential of the site was noted as high (Palmer-Brown 1996b, 1).

The date for the founding of Bozon Hall is presently unknown and the desk-top assessment only found one medieval reference it. A record of 1377 states that the hall belonged to Thomas de Branstaun (Pink 1990; Palmer-Brown 1996a). Medieval activity is recorded adjacent to the west of the site at King Street (Fig. 4, No. 1; Table 1).

The 1839 enclosure map recorded a building called Bozon Hall just north of Wash Road, with Princess Road also drawn. Within the subject site itself there were no structures, with the site divided into three fields (Fig. 4, No. 11; Table 1). Bozon Hall was recorded on the 1st edition and 2nd Edition Ordnance Survey maps (surveyed 1887; revised 1903). To the north and north-east of the Hall parts of two sides of an associated ditch were recorded on these maps as a moat.

Several post-medieval buildings front onto Wash Road and Princess Road (Fig. 4, Nos. 4, 10 and 14) although it is uncertain when these roads were built. In the 19th century a railway was built along the site's western boundary (which became the A16). In 1977 the post-medieval Bozon Hall was (for reasons undocumented) demolished (Palmer-Brown 1996a). It was a good quality building although the photograph on the front cover of the 1996 desk-top assessment seems to imply it was of a good yeoman size rather than a large manorial building (Palmer-Brown 1996a). Attached structure(s) lay to the east although the photograph is of insufficient quality to establish whether the main structure was brick- or stone-built. It clearly had a thatched roof.

Site No.	SMR No.	Site Name	Period	Importance
1	13682	Medieval Activity on Land at King Street	Medieval	Local
2	13683	Undated Ditches on Land at King Street	Unknown	Local
3	13448	Crossing Keeper's Cottage, Wash Road	Post-medieval	Destroyed
4	N/A	Structure on Wash Road East of Bozon Hall	Post-medieval	Local
5	13394	Medieval Features at Wash Road (Bozon Hall)	Medieval	Regional
6	13395	Undated features	Unknown	Local
7	N/A	GNER Loop Line Railway	Post-medieval	Unknown
8	N/A	Pond	Post-medieval	Unknown
9	N/A	Guide Post on Wash Road	Post-medieval	Destroyed
10	N/A	The Limes	Post-medieval	Local
11	N/A	Field Boundaries in 1839 Enclosure Map	Post-medieval	Unknown
12	N/A	Milepost	Post-medieval	Destroyed
13	13470	Kirton Level Crossing Gate House	Post-medieval	Unknown
14	N/A	Structure South of Princess Road	Post-medieval	Local
15	N/a	Kirton Drain	Medieval/post-medieval	Local
16	13455	Level Crossing Keeper's Cottage, Brainside Road	Post-medieval	Local
17	N/A	Cropmarks	Post-medieval	Unknown

Table 1: Cultural sites (after Jacobs Babtie 2006, fig 3.3 with minor changes)

4 Methodology

The objective of the evaluation was to determine as far as reasonably possible the presence/absence, location, nature, extent, date, quality, condition and significance of any surviving archaeological deposits within the development area.

At the time of evaluation, the eastern part of the development area was under crop. Trenches 7, 13, 14 and 30 were moved or amended to damage the crops as little as possible. The original Trench 30 was divided into two and a new trench (48) was added. Other crops were left untouched with seven proposed trenches to the south of Trenches 7-19 not evaluated at this stage (Trenches 12, 18, 24-28). Further evaluation trenches to the south of Princess Road are to be excavated in 2007 (Appendix 10).

Twenty-nine trenches were machine excavated under constant archaeological supervision with a tracked 360°-type excavator using a 2.2m wide toothless ditching bucket. Spoil, exposed surfaces and features were scanned with a metal detector. All metal-detected and hand-collected finds were retained for inspection, other than those that were obviously modern.

Hand cleaning proved especially important in defining features as machining failed to provide clear edges and actually masked some small features. The methodology of excavation consisted of cleaning, then immediately planning and excavating each of the trenches in turn. Leaving trenches open without cleaning resulted in subsequent difficulties as the clay soil dried rapidly making it difficult to identify features.

Several of the trenches contained dense or very dense archaeological remains and, with the agreement of the Boston Planning Archaeologist, only a representative number of features were evaluated. This methodology followed the specification, which stipulated that 'care shall be taken not to compromise the integrity of archaeological features and deposits whose excavation was not required' (Jacobs Babtie 2006, 5.3.9).

All archaeological features and deposits were recorded using CCC AFU's *pro-forma* sheets. Trench locations, plans and sections were recorded at appropriate scales and colour and monochrome photographs were taken of all relevant features and deposits.

Thirteen 10 litre environmental samples were taken across the site from a variety of features of different phases. Charred and primary fill deposits were particularly sampled. The moat was hand augered to establish its depth and deposits from the auger survey were sent for pollen analysis.

The evaluation took place during a heat wave, which meant that the site was mostly very dry and the water table particularly low. Apart from the probable moat, water was not encountered anywhere else on the site.

5 Results

Topsoil across the whole site was typically *c*.0.30m thick and in some areas, directly overlay a thin layer of subsoil. Where present, the subsoil largely consisted of yellow/brown silt up to 0.17m thick (except in the extreme north-eastern area where it was up to 0.33m thick) and was probably a remnant of late medieval or post-medieval silting. In most of the site, archaeological features were encountered directly below the topsoil cutting the natural subsoil.

The archaeological trenches near to the present Wash Road contained moderate to very dense remains with a general reduction in the frequency of features towards the south as the ground level gently falls away. Fourteen of the excavated trenches produced either modern or no archaeological remains (Trenches 4, 5, 9, 15, 16, 17, 20-23 and 31-4) and all but two of these (Trenches 4 and 5) were located in the

southern half of the site. Table 2 lists all the blank trenches; those with non-archaeological features are described below.

Trench	Orientation	Dimensions
5	NW-SE	10m by 5m
9	E-W	41m long
15	E-W	40m long
16	N-S	40m long
17	E-W	40m long
20	E-W	40m long
21	E-W	40m long
22	NW-SE	40m long
23	N-S	40m long
33	NE-SW	40m long
34	NE-SW	40m long

Table 2: Blank trenches, with orientation and dimensions

There was some stratification of features across the site and features have been phased where possible (see Appendix 1), although not all features were excavated making this more difficult. Five broad phases of activity were identified:

Phase 1 Late Saxon to Saxo-Norman (10th to mid 12th century)
Phase 2 Medieval (later 12th/13th to 14th century)
Phase 3 Late Medieval/early post-medieval (15th to 16th century)
Phase 4 Post-medieval (17th to 18th century)
Phase 5 Modern (19th to 20th century)

5.1 Trench 1 (Figs. 5 and 6)

Trench 1 was 40m long and aligned north-east to south-west. It was targeted on two ditches and a possible palaeochannel recorded in the geophysical survey (Fig. 5).

A series of four ditches spanning the 9th to 18th centuries was found in the north-east part of this trench. The earliest ditch (**308**) ran roughly north to south and was the southernmost of the four ditches. It was 2.2m wide by 0.5m deep with moderately sloping sides (*c.*40°) and a slightly concave base. Three fills were identified, the earliest of which (336) contained 2 sherds of 9th to 11th century pottery. The mid fill (312) consisted of very light brown silty sand - probably river/flood silting, implying that the ditch may have been open for some time. The final fill (311) of the ditch comprised dark brown silty clay that contained a good assemblage of charred seed (sample 1), twenty-one pottery sherds ranging in date from the 9th to 14th century, animal bone and shell. The entire assemblage suggests the ditch was opened and in use during Phase 1, then deliberately backfilled during Phase 2 with material that included domestic waste.

A change in alignment took place in Phase 2 with the backfilling of Phase 1 ditch **308** and subsequent instatement of roughly east to west oriented ditch **332**. Ditch **332** was severely truncated by Phase 4 ditch **333**, but probably about *c.*2m wide by over 0.2m deep. Only the upper fill (313), dark brownish black silty clay with charcoal and orange/red burnt patches was excavated. It contained 14 sherds of pottery and a shell and another good assemblage of charred grains was recovered (sample 2). Any relationship between ditches **332** and **308** lies beyond the west edge of the trench.

Ditch **314** lay on the same alignment as ditch **332** and may have been the first of two re-cuts (see ditch **333**, below). Due to truncation by ditch **333**, the width of **314** is unclear, but excavation showed that it was more than 1m deep. The single excavated fill contained five sherds of 13th to 14th century pottery and brick (N.B. Appendix 5).

The final phase of activity in this trench is represented by post-medieval ditch **333**, the second and last re-cut of Phase 2 ditch **332**. This was a major boundary ditch, over 2.5m wide and more than 1m deep that contained both brick and 18th or 19th century pottery. As the ditch was not recorded on the 1839 enclosure map it was presumably backfilled before this date.

5.2 Trench 2 (Figs. 5 and 6)

Trench 2 was 40.7m long and aligned roughly north to south and positioned to target a series of features including two potential curvilinear ditches recorded in the geophysical survey on the south side of the trench. Excavation identified a number of features, including a possible ditch or alignment of intercutting pits and a single isolated pit. No pottery was found.

The largest feature in the trench was possible ditch (**7**) or linear area of intercutting pits, which ran roughly east to west across the south end of the trench. It measured at least 10m wide by 0.95m deep and was partly machine-sampled on its south side (by extending the width of the trench and machining down to *c.*1.15m below ground level) in a sondage in the centre of the extended area (Fig. 5). At least five deposits were seen within this feature(s), which ranged from soft pinkish orange silty sand to hard very dark brown clayey silt. A shallow pit/ditch (**52**) and two undated possible pits (**15** and **17**, seen in section only) may have cut the top of the feature(s). They were over 2m wide by 0.35m deep, 0.45 and 1.05m in diameter and 0.23 and 0.34m deep respectively. The presumed northern edge of the feature(s) was hand excavated (**33** and **35**) which showed irregular bases implying intercutting pits (Fig. 7, S.69 and 70). An environmental sample from pit **33** (sample 12) produced a large quantity of charred grain as well as some fishbone.

It is possible that this area was subject to quarrying of the natural subsoil for some purpose and may explain why all features were backfilled with the same deposits.

Undated circular pit **31** lay 2.5m north from the north-east edge of the large nebulous feature(s) (**7**, **15**, **17**, **33**, **35** and **52**). It was 1m in diameter and 0.17m deep and filled with soft greyish brown sandy silt.

5.3 Trench 3 (Figs. 5 and 7)

Trench 3 was 10m by 5m in size and aligned north to south over a pit-like feature recorded in the geophysical survey (Fig. 5). The evaluation found two features (**448** and **457**) within the extreme southern part of the trench (Fig. 7).

Curvilinear ditch **448**, possibly part of an enclosure, was 2.3m wide and 0.55m deep with gently sloping sides (*c.*30°-40°) and a concave base. It was filled with dark brown/black silty sand with a little clay and small patches of clean yellow sand silt with large quantities of burnt red clay flecks and charcoal flecks. A single late 11th to 12th century (Phase 1) pottery sherd was recovered plus a large collection of charred grains as well as some fishbone (sample 11). A second (unexcavated) feature (**457**) was located mostly under the south baulk but a sherd of 12th to 13th century pottery (Phase 1/2) was found during cleaning.

5.4 Trench 4 (Figs. 5 and 7)

Trench 4 measured 10m by 10m and was placed over an area of features including a possible oven/hearth suggested in the geophysical survey (Fig. 5).

A large Victorian quarry pit (**458**) was uncovered in the southern part of the trench. The pit was more than 9m long and 2m wide and filled with disturbed mid grey brown silty sand with clay and yellow silty sand patches. Nineteenth century glass and brick were recovered.

5.5 Trench 6 (Figs. 5 and 7)

Trench 6 measured 10m by 5m and was located within an area where the geophysical survey recorded dense features. The cropmark evidence implied that it lay within the moated enclosure (Fig. 5). The evaluation trench uncovered very dense archaeological remains directly below 0.30m of topsoil, which comprised one ditch, *c.*2 pits and *c.*15 postholes (possibly several buildings of different periods). A representative number of features were evaluated (Fig. 7).

A probable Late Saxon (Phase 1) pit **325** was more than 2m long, 0.80m wide and 0.31m deep (Fig. 7, S.6). It was filled with three deposits (322-4) with the primary fill (324) consisting of light brownish yellow silty clay, which contained a Late Saxon pottery sherd, some iron slag and fired clay. This deposit was overlain by very dark greyish brown silt (323) with occasional slag, three sherds of pottery and two iron artefacts (SF 9 and 10). The upper layer was brown silt containing a Late Saxon pottery sherd, slag, animal bone and a Saxo-Norman iron knife blade (SF 13).

Most of the excavated features were dated to the late medieval or earlier post-medieval periods (Phase 3 or 4). Six postholes (**116**, **118**, **120**, **316**, **318** and **320**) were half-sectioned (Figs. 6 and 7, S.51 and 54) as a representative sample to ascertain survival levels and obtain dating evidence for their construction. Four of the postholes (**116**, **118**, **120** and **318**) were truncated and survived to between 0.30m and 0.60m in diameter and 0.10m and 0.20m deep (Fig. 7, S.51 and 54). They were filled with mid brownish grey clay sand. Two contained a few finds consisting of a pottery sherd, shell and brick. These postholes may relate to a smithy(ies) since an apparently contemporary ditch (**124**) adjacent to the west was backfilled with large quantities of iron smithing slag.

Postholes **316** and **320** were possibly both part of the same structure since both survived to the same depth: posthole **320** was more regular and was square with rounded corners. It had a width of 0.55m and was 0.4m deep with vertical edges (Fig. 7, S.54). Both postholes were filled with similar mid yellowish brown grey silt and both contained brick. In addition posthole **320** contained pottery including Cistercian Ware, shell, animal bone and a clay pipe stem.

Ditch **124** ran roughly north-east to south-west, it was more than 1.40m wide and 0.80m deep (Fig. 7, S. 52 and 53). Its primary fill (125) was mid bluish grey sandy clay with occasional charcoal. There was then a slumping episode along the eastern edge of the feature which consisted mainly of redeposited natural (128) containing a brick fragment. This layer was in turn sealed by dark greyish black sandy clay mix (126). This fill contained large chunks of slag including a smithy hearth bottom as well as several animal bones (consisting of a variety of butchered cattle and sheep remains), 16 pottery sherds including a post-medieval brown glazed earthenware sherd and 13 shells. Environmental sample 3 produced large quantities of charred grains and some fish bone. The upper layer (127) was mid greyish brown clay sand with occasional charcoal flecks, pottery, shell and animal bone. Environmental sample 4 produced relatively large quantities of charred grain and fish bone.

5.6 Trench 7 (Figs. 5 and 7)

Trench 7 was *c.*10m by 5m in size and was targeted on pit-like features revealed in the geophysical survey (Fig. 5). A large cropmark curvilinear ditch was also recorded running through the trench and was probably the moated ditch of Bozon Hall (Figs. 3 and 5). The evaluation located this large ditch (**208**), which was *c.*6m wide and *c.*2.7m deep. It covered most of the trench with a ditch adjacent to the south (**210**).

Ditch **208** was only sampled to a depth of 0.25m although it contained a complex sequence of at least five deposits (215-219). These ranged from light greyish orange sandy silt to dark grey sandy silt. The earliest deposit (219) exposed in the trench was environmentally sampled (sample 5) and produced a good collection of small animal bones and a few charred grains. Nine pottery sherds were recovered from the layers including a single 17th or 18th century sherd from fill 218. A medieval roof tile fragment was recovered from fill 216. The latest deposit (209), 1.08m wide and 0.08m deep, was possibly a post-medieval ditch cutting the top of the former moat or alternatively the last infilling deposited when the land reverted to fields at the time of the enclosures. This layer/ditch was filled with dark greyish brown clayey silt and contained brick pieces.

A hand augered, 0.10m diameter borehole was drilled into the ditch to ascertain its depth and to establish whether pollen survived in these deposits. The samples became moist under a depth of 1.1m and the water table was encountered at *c.*2m deep and possible natural sands at 2.7m deep. Five samples were taken at varying intervals to 3m deep and seemed to consist mostly of sandy silts and no peat was encountered. No pollen was found in any of the samples.

Ditch **210** was more than 2.7m wide by 0.7m deep and was filled with two deposits (211 and 212; Fig. 7, S.57). They ranged from orange brown clay silt to mid brown clay silt. Animal bone was recovered from the primary deposit (211). Phase 3 ditch **231** truncated ditch **210** and was also filled by two deposits (213 and 214), the latter of which contained animal bone, shell and late medieval pottery.

5.7 Trench 8 (Figs. 5 and 6)

Trench 8 was 40m long and ran north to south adjacent to the A16. The geophysical survey suggested the presence of a single ditch at the extreme northern end of the trench (Fig. 5). On excavation, however, this proved to be an undated small rectangular pit (**204**) measuring 2m by 0.50m and 0.3m deep and filled with very dark grey brown silt with a little clay.

5.8 Trench 10 (Figs. 5 and 6)

Trench 10 was 40m long and was located to form a 'T' shape with Trench 9. No geophysical anomalies were recorded within the trench (Fig. 5). The evaluation found an undated east to west ditch (**47**) which was 0.7m wide and 0.35m deep and filled with mid orange brown silty sand (Fig. 6). This ditch was on the same alignment as the modern field boundary recorded in Fig. 3 and was therefore likely to have been of recent origin. A modern drain ran within the ditch on its south side and was probably contemporary.

5.9 Trench 11 (Figs. 5 and 6)

Trench 11 was 40m long and ran north to south within the centre of the site. The cropmark evidence recorded that part of a probable pentagonal shaped ditched enclosure ran through the middle part of the trench (Figs. 2 and 5). The geophysical anomalies suggested a ditch and a pit within the centre of the trench (Fig. 5).

The evaluation found a probable Late Saxon (Phase 1) ditch at the extreme northern part of the trench (**155**). An undated pit or ditch butt-end (**149**) lay in the middle of the trench and an undated pit (**152**) at the northern end. The stratigraphic relationship between ditch **155** and pit **152** was uncertain.

Ditch **155** ran roughly east to west although its proximity to pit **152** made edges difficult to discern. The ditch was 1.44m wide and 0.72m deep, it was of unusual appearance with a vertical south side and a moderately sloping northern side (Fig. 7, S. 73). This may imply that there was a fence positioned along the southern face of the feature. Four deposits were recorded within the ditch (156-9), each consisting of tipped deposits from the north which imply a hasty backfill of the feature.

The primary deposit was dark blackish grey silty sand with some clay and abundant charcoal flecks. Three 10th century pottery sherds were recovered as well as shell and animal bone. Environmental sample 13 from this layer produced a large collection of charred grain. This deposit was overlain by a clean redeposited natural layer, which in turn was sealed by a black layer containing a large proportion of charcoal, some sandy silt as well as some burnt clay flecks but no finds. The upper layer consisted of mid brown clay sand, which contained a Late Saxon pottery sherd, animal bone and lava quern.

Pit or ditch **149** situated within the centre of the trench was 1.60m in diameter and 0.40m deep. It was filled with orange brown clay silty sand and grey clay silty sand. Pit **152** within the extreme northern part of the trench was 2.3m in diameter and more than 0.71m deep. It had near vertical sides and was backfilled with two deposits that consisted

of a primary deposit of greyish brown clay silty sand with some charcoal lenses and orangey brown clayey silty sand. The only finds recovered were animal bones from the primary fill.

5.10 Trench 13 (Figs. 5 and 6)

Trench 13 was 40m long and ran roughly north-east to south-west adjacent to Wash Road in the centre of the site. The geophysical survey recorded several pits and a ditch in the northern two-thirds and no features within the southern side (Fig. 5). The evaluation found dense archaeological remains of Late Saxon and early medieval date (Phases 1 and 2) beneath a 0.30m thick topsoil and a 0.15m thick subsoil. These features were in the northern two-thirds of the trench and comprised postholes, slots, ditches and pits - there were no features in the southern third of the trench (Fig. 6).

Phase 1 (Late Saxon)

The earliest phase probably included slots (**435** and **437**) and a ditch (**423**). The two undated adjacent slots ran roughly south-west to north-east in the middle of the trench and were probably part of a building(s). They were 0.22m and 0.23m wide and 0.11m and 0.13m deep respectively with very steep edges (*c*.80°) a flat base and were filled with mid orange brown silty sand with a little clay. Both deposits contained a small amount of fired clay pieces. The slots may have been related to ditch **431**, which ran perpendicular to them although the position of a later pit (**433**) had obscured any relationship.

Ditch **423** survived only in a small area as it was cut by ditch **431** (Fig. 7, S.66). It was more than 1m wide and 0.52m deep and contained a single undated deposit that consisted of light orange brown sandy silt with a little clay.

Saxo-Norman features comprised ditch **433** and pit **416**. The cut for ditch **433** was curvilinear in shape, more than 1.8m wide (probably *c*.3m wide) and 0.90m deep (Fig. 7, S.66). It was backfilled with at least eight deposits (424-430 and 446) which were tipped into the ditch from the south-west. The deposits varied from a fairly clean and sterile primary fill that consisted of light orange brown sandy silt with a little clay (430) to dark grey brown sandy silt with a little clay (446), which contained large amounts of burnt material with frequent charcoal and fired clay flecks. Soil sample 8 from this deposit produced moderate charred grain. Relatively few artefacts were recovered suggesting that the ditch was not backfilled with domestic rubbish. The fill contained nine late 11th or 12th century pottery sherds.

Pit **416** was more than 0.9m wide and 0.39m deep and was filled with mid orange brown silty sand with a little clay, containing three sherds of pottery dating to the 12th century and a few shell fragments.

There were four postholes (not excavated) in the extreme northern part of the trench (417-420) within a 4m area. These may date to this phase as cleaning of posthole **451** produced a Saxo-Norman sherd.

Phase 2

Medieval pits **433**, **444** and **445** lay within the centre of the trench. Pit **444** was 1.8m long and 0.28m deep and filled with mid grey brown silty sand with a little clay. A single medieval pottery sherd, a relatively large quantity of animal bone and a few shells were found within this deposit. Pit **433** was 4m long and 0.58m deep. It was mostly steep sided with a flat base and filled with orange brown clay silty sand. Three medieval pottery sherds and shell were recovered from the fill. Pit **445**, adjacent to the south was 2.7m wide. It remained unexcavated although two medieval pottery sherds were recovered from cleaning.

Unphased

At least one further structure was present. An undated posthole (**440**) in the middle of the trench was 0.55m in diameter and 0.22m deep with steep edges (*c.*75°) and a flat base. It was filled with mid orange grey brown silty sand with a little clay and occasional shell. Pit **442** was undated. It was 1.5m long and only 0.12m deep and contained a fairly clean deposit, which consisted of light to mid orange brown silty sand with a little clay.

5.11 Trench 14 (Figs. 5 and 7)

Trench 14 was 8.5m by 5m in size and was positioned adjacent to Wash Road in the northern part of the site. It was targeted on a ditch and pits seen in the geophysical survey (Fig. 5). The evaluation trench uncovered two ditches, a pit and five or six postholes, half of which were sampled.

There were three rectangular postholes (**408**, **410** and **412**) in a row that may represent part of a structure. Two examples contained early medieval pottery sherds (Phase 2). Postholes **408** and **410** were half sectioned and were 0.45m and 0.6m in length and 0.13m and 0.14m deep respectively.

Early medieval feature (Phase 2) **404** was a slightly curvilinear ditch that ran roughly north-west to south-east. It was more than 2.5m wide and 1.02m deep with moderate to steep sides and a flat base (Fig. 7, S. 56). The primary fill was a fairly clean mid grey orange brown silty sand with a little clay and the upper fill consisted of a light to mid orange brown sandy silt with a little clay. Five early medieval pottery sherds were recovered from the upper deposit.

Late medieval or earlier post-medieval (Phase 3/4) pit **414** on the south side of the trench was sampled. It was more than 1.5m wide and 0.28m deep with gentle sides and a flat base.

There was probably part of at least one other structure within the trench as at least two other postholes were found (**406** and **411**). Only the former was excavated - it was sub-rectangular in size measuring 0.55m by 0.35m wide and 0.07m deep. No finds were recovered from its backfill.

5.12 Trench 19 (Figs. 5 and 7)

Trench 19 was 10m by 5m in size and was adjacent to Wash Road in the northern part of the site. It was located where geophysics suggested the presence of a pit and a ditch (Fig. 5). The evaluation found four pits and a posthole directly beneath topsoil, 0.30m deep (Fig. 5).

A possible Late Saxon (Phase 1) structure was uncovered near the south baulk. Posthole **132** was 0.66m in diameter and 0.16m deep and filled with a mid brownish grey clay sand. A single tiny Stamford pottery sherd was recovered from the fill.

Three medieval (Phase 2) sub-rounded pits (**134-138**) were found in the eastern half of the trench. These all measured about 1.5m in diameter, and between 0.15m and 0.48m deep and were fairly similar implying they may have been contemporary. They were filled with a mid or dark greyish brown clay sandy silt. The fill of pit **134** contained frequent charcoal and burnt clay flecks. Medieval pottery sherds were recovered from pits **136** and **138**.

Late medieval or earlier post-medieval (Phase 3/4) pit **140** was found in the western part of the trench. Post-medieval brick found on the surface of its fill meant that it was not excavated. It was sub-rounded and 2m in diameter.

5.13 Trench 29 (Figs. 5 and 6)

Trench 29 was located in the extreme north-eastern part of the site next to Wash Road. The trench was 40m long and ran east to west in an area where the geophysical survey suggested the presence of a pit and a ditch (Fig. 5). The evaluation found probable archaeological features within the eastern part of the trench beneath topsoil and a thick alluvium subsoil layer more than 0.33m thick.

The edges of the possible features were uncertain and the dry weather meant that hand cleaning was not possible in the silty clay subsoil. Three sondages were excavated into the area of the possible features

and two possible ditches or pits were encountered (**141** and **144**) as well as a shallow natural depression which later filled up (330).

Medieval ditch or pit **141** was at least 1m wide and 0.80m deep with steep sides. The primary fill was bluish grey sandy clay with occasional bone and rare charcoal flecks. The secondary fill comprised mid brownish grey sandy clay with occasional charcoal flecks, five medieval pottery sherds and animal bone. Soil sample 9 produced a moderate assemblage of charred grain.

Undated ditch or pit **144** was more than 0.55m wide and 0.60m deep with steep sides and a slightly concave base. Its primary fill consisted of dark brownish grey sandy clay with occasional charcoal flecks. The secondary fill was mid brownish grey sandy clay with occasional charcoal and burnt clay flecks.

5.14 Trench 30 (Figs. 5 and 7)

Trench 30 was 21m long, ran roughly north-west to south-east and was positioned parallel to Wash Road in the extreme north-eastern part of the site. It was situated over an area within which the geophysical survey suggested possible pits (Fig. 5). The evaluation found undated features comprising a posthole (**21**), curvilinear ditch (**26**) with possible recut (**23**) and a pit (**222**) all within the centre of the trench (Fig. 7).

Posthole **21** was oval/sub-rounded in shape 0.65m by 0.55m and 0.38m deep with near vertical sides and a slightly concave base (Fig. 11, S.59). The primary fill was soft greyish dark orange silty sand with rare charcoal flecking. The secondary deposit was firm greyish dark brown sandy silt with some clay. Soil sample 7 from this deposit found a range of charred seeds as well as fishbone, shell and animal bone.

Adjacent to the north of the posthole was an undated curvilinear ditch (**26**) and recut (**23**), which was probably part of an enclosure (Fig. 11, S.64). It was 1.81m wide and 0.54m deep and filled with at least two deposits. The basal fill was soft orangey mid grey sandy silt and the upper deposit consisted of compact dark greyish orange sandy silt with a little clay. The possible re-cut (**23**) within the south side of the original ditch was also undated and filled with orangey dark grey sandy silt.

Pit **222** lay partly within the southern baulk of the trench. It was more than 0.80m long, 0.77m wide and 0.30m deep (Fig. 11, S.58) and was filled with mid orangey brown clay silt with some animal bone.

5.15 Trench 31 (Figs. 5 and 6)

Trench 31 was 40m long and ran north-east to south-west within the extreme south-western part of the site adjacent to Princess Road. It was positioned over a possible palaeochannel identified by geophysical survey (Fig. 5). The evaluation exposed natural subsoil and, in the centre of the suggested palaeochannel, the trench was widened to excavate a deep sondage (Fig. 5). No palaeochannel was found although marine shell was present at the base of the sondage implying that there may have been a shallow creek at this point. The lack of waterlogging here suggested that there was no real likelihood that pollen would have survived to determine the environmental conditions of the surrounding area.

5.16 Trench 32 (Figs. 2 and 6)

Trench 32 ran roughly north to south within the south side of the site adjacent to Princess Road. It located a north to south ditch (**5**) and a possible east to west ditch (**103**). Ditch **5** was recorded as a modern field boundary (Fig. 3) and this was supported by the recovery of a mixture of artefacts from the ditch ranging from medieval to 19th century in date. Possible ditch **103** was *c.*1m wide and was cut by a modern drain. It was filled with alluvial silts with some clay. The 16th to 17th century pottery sherds recovered may be residual.

5.17 Trench 48 (Figs. 5 and 7)

Trench 48 was 10m long, ran roughly north to south within the north-eastern part of the site adjacent to Wash Road. A medieval (Phase 2) curvilinear ditch **228** was uncovered beneath a topsoil and subsoil layer that together was 0.47m thick. The ditch was more than 2m wide and 0.40m deep and was filled with at least three deposits apparently tipped into the feature from the south-west (Fig. 11, S.67). The primary deposit was fairly clean redeposited natural. This was sealed by a layer of dark greyish brown with black lenses and fired clay flecks. This deposit produced a large quantity of domestic waste such as pottery, shell and animal bone including a partially articulated adult sheep. A soil sample from one of the burnt lenses produced large quantities of charred seeds.

6 Discussion

The evaluation found no evidence of activity before the Late Saxon period. Occupation started on the site in or around the 10th century and Late Saxon/Saxo-Norman and medieval features were found across the whole 500m by *c.*80m northern strip of the site. The evaluated area lay between *c.*500m and 1km to the south-east of St

Peter and St Paul church which dates from at least the Norman period. The settlement remains found therefore either represent a continuation of Kirton's Late Saxon and medieval settlement or a separate hamlet around a holding which later became Bozon Hall. Early medieval remains found directly to the west in Kings Lane (Fig. 4) may imply that the former interpretation is correct. An excavation to the north-east of Kirton found a 9th to 10th century settlement (PRN 13722).

The archaeological evidence therefore points to a large Late Saxon/Saxo-Norman and medieval settlement extending over at least a 1km² area, probably far larger since the area to the west and north of St Peter and St Paul has not been excavated. The south-eastern limits of this settlement appear to have been found in this evaluation since no archaeological remains were found on the southern two-thirds of the site.

The documentary evidence points to a very important settlement in the parish in the Middle Saxon period – perhaps the seat of the first Saxon kings and Earls of Mercia (Green *c.*1910). There is no evidence of Middle Saxon occupation in the centre of Kirton or in the present evaluation. It is therefore probable, as in so many places across England, that in the middle 10th or early 11th centuries there was a refounding of the settlement in a new position, normally between 1km and 2km from the original site.

The wealth of the medieval settlement can be seen in the fact that medieval Kirton was the third largest settlement in the county (Palmer-Brown 1996a). Domesday Book (1086) reports that Kirton was owned by two landowners; Count Alan Rufus and Guy de Craon. It is possible that the subject site was one of these land parcels as Bozon Hall was a manor house, while Littlebury Hall (*c.*300m to the north of Bozon Hall) was possibly the manor of the other landholding.

Of interest therefore is the relationship between Late Saxon/Saxo-Norman to medieval remains found in a 500m long strip immediately south of and adjacent to the Wash Road boundary and the remains of Bozon manor, elements of which seem to run into the north-western part of the site. It is possible that these represent the Late Saxon manor and associated settlement or perhaps a Late Saxon settlement with a later medieval manor imposed on the landscape.

Houses (postholes and slot structures) were found in five evaluation trenches. Pottery was recovered from a few of these postholes and stratigraphic relationships seem to imply that there were two Late Saxon structures in Trench 13, a Late Saxon structure in Trench 19, a medieval building in Trench 14 and post-medieval buildings in Trench 6 (although it is possible that unexcavated postholes here were earlier in date).

The moat (found in evaluation Trench 7) seems to have been circular in shape - cropmark evidence points to a curvilinear feature to the south of Wash Road (Fig. 5) which would give a diameter of *c.*150m. Round moats normally date to the 12th century and this may imply that the manor dates from at least this period (although there may be an earlier Late Saxon manor on the site). A late 12th century circular enclosure around the Botolph Bridge manor, Peterborough had a diameter of 160m (Atkins with Kemp forthcoming).

The evaluated moat is of a similar dimensions to moat excavated in the 1996 evaluation to the north of Wash Road which was 5.40m wide and more than 2.70m deep (Palmer-Brown 1996b). The 1996 moat was backfilled in the 19th century (still visible in the 1st and 2nd edition OS maps) whereas the moat in the subject site seems to have been backfilled in the *c.*18th century – probably when the land was enclosed and presumably when Wash Road and Princess Road were built.

Buildings just within the moat in Trench 6 may include a smithy. Iron slag was recovered from only two features in the evaluation – both in Trench 6. Here, relatively large quantities of iron smithing slag including a smithing hearth bottom and lining were recovered from a Late Saxon pit (**325,** 12**%**) and a post-medieval ditch (**124,** 84**%**). These features were found on either side of about fifteen postholes.

This may indicate settlement activity within the evaluation area continued into the 18th century until the land was enclosed and became fields, which it remains to the present day. The post-medieval Bozon Hall (presumably built on top of the former medieval manor) survived until 1977.

Ditches within the site were dated from the Late Saxon to the post-medieval period. Several of these were curvilinear in plan, which may imply agricultural or industrial enclosures. Ditches of all periods were found in trenches across the northern area and many were backfilled with burnt deposits, which may imply the presence of agricultural/industrial features nearby.

7 Conclusions

Late Saxon to post-medieval settlement remains including part of the medieval moated manor of Bozon Hall survived in the northern third of the evaluation area (*c.*500m by *c.*80m). The archaeological features survive under a modern topsoil layer about 0.30m thick and in some places (largely the extreme north-eastern part of the site) beneath a subsoil layer up to 0.33m thick.

There are at least five phases of activity. Of the seventeen trenches excavated in the northern area where there are archaeological

remains, three trenches had no features or only modern remains, three had only one feature, two had sparse remains and nine trenches contained moderate, dense or very dense archaeological features. On the whole the trenches near to the present Wash Road had moderate to very dense remains with a general diminishing frequency of features progressing southwards. The variability in density of features mirrors the findings of the 1996 evaluation to the north of Wash Road (Palmer-Brown 1996b).

The condition of the archaeological deposits within the evaluated area is good with structures including postholes and slots remains found in five separate trenches. Within three of these trenches there were parts of several structures. Surviving along with these structures were ditches (moat, enclosure and boundary) and pits. Of particular interest were structures within the possible moat of Bozon Hall in the north-western part of the site.

Moderate to large assemblages of pottery, iron working debris, animal bone, shells and charred seeds were recovered. Lava quern, fired clay, roof tile and metal objects were found in several trenches. Artefacts survive on the whole in good condition although the iron objects are particularly encrusted (Appendix 2). Animal bone has not been adversely affected with even small bones including fish recovered from soil samples. The potential for ecofacts is extremely good with an interesting collection of charred grains surviving from many contexts across the site (Appendix 7).

Domestic layers of all periods encountered across the site are important – targeting these deposits will be very profitable in understanding the environment, trade and agricultural usage from the Late Saxon to the post-medieval periods. In contrast, pollen does not seem to have survived within the site, even within the moat ditch. The possible area of iron smithing is also of potential interest.

Work on thin sectioning of pottery and fired clay at a recent site at Partney has proved very profitable (Atkins forthcoming) and it would be worth considering a similar programme at Kirton. For example, Jane Young highlights the fact that the pre-13th century pottery in the Boston area is not understood. Scientific analysis may confirm whether the unsourced shell-tempered wares found on this and other sites in the area are in fact locally produced (Appendix 4).

Further research in the documentary records – particularly Bozon Hall and associated land holdings – will clearly be important. A quick overview of other archaeological work undertaken in Kirton may also provide an idea of the size and importance of Late Saxon and medieval Kirton and place the results of the evaluation and excavation at Bozon Hall into perspective. The results of this evaluation should be included in the publication of any excavation subsequently carried out on the site.

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Appendix 1: Context Summary

Con-text	Tr. no	Category	Type	Function	Phase/Equivalent
1	32	Layer	Topsoil	-	Modern
2	32	Layer	Subsoil	-	-
3	32	Layer	Natural	-	-
4	32	Fill of **5**	Ditch	?Boundary	Phase 4/5
5	32	Cut	Ditch	?Boundary	Phase 4/5
6	2	Fill of **7**	Ditch	-	-
7	2	Cut	Ditch or intercutting pits	?Quarry	-
8	2	Fill of **7**	Ditch or intercutting pits	?Quarry	-
9	2	Fill of **7**	Ditch or intercutting pits	?Quarry	-
10	2	Fill of **7**	Ditch or intercutting pits	?Quarry	-
11	2	Layer	Topsoil	-	Modern
12	2	Layer	Subsoil	-	-
13	2	Layer	Natural	-	-
14	2	Fill of **15**	Pit or Ditch	-	-
15	2	Cut	Pit or Ditch	-	-
16	2	Fill of **17**	Pit or ditch	-	-
17	2	Cut	Pit or Ditch	-	-
18	2	Layer	Natural	-	-
19	30	Fill of **21**	Posthole	Structure	-
20	30	Fill of **21**	Posthole	Structure	-
21	30	Fill of **21**	Posthole	Structure	-
22	30	Fill of **23**	Ditch	-	-
23	30	Cut	Ditch	-	-
24	30	Fill of **26**	Ditch	-	-
25	30	Fill of **26**	Ditch	-	-
26	30	Cut	Ditch	-	-
27	30	Layer	Topsoil	-	Modern
28	30	Layer	Subsoil	-	-
29	30	Layer	Natural	-	-
30	2	Fill of **31**	Ditch	-	-
31	2	Cut	Ditch	-	-
32	2	Fill of **33**	Pit	?Quarry	-
33	2	Cut	Pit	?Quarry	-
34	2	Fill of **35**	?Pit	?Quarry	-
35	2	Cut	?Pit	?Quarry	-
36	2	Fill of **33**	?Pit	?Quarry	-
37	2	Fill of **33**	?Pit	?Quarry	-
38	2	Fill of **33**	?Pit	?Quarry	-
39	2	Fill of **33**	?Pit	?Quarry	-
40	2	Fill of **35**	?Pit	?Quarry	-
41	2	Fill of **35**	?Pit	?Quarry	-
42	2	Fill of **35**	?Pit	?Quarry	-
43	10	Layer	Topsoil	-	Modern
44	10	Layer	Subsoil	-	-
45	10	Layer	Natural	-	-
46	10	Fill of **47**	Ditch	-	-
47	10	Cut	Ditch	-	-
48	9	Layer	Topsoil	-	Modern
49	9	Layer	Subsoil	-	-
50	9	Layer	Natural	-	-
100	34	Layer	Topsoil	-	Modern
101	34	Layer	Subsoil	-	-
102	34	Layer	Natural	-	-
103	32	Fill	?Ditch	-	?Phase 3/4
104	22	Layer	Topsoil	-	Modern
105	22	Layer	Subsoil	-	-
106	22	Layer	Natural	-	-
107	23	Layer	Topsoil	-	Modern
108	23	Layer	Subsoil	-	-
109	23	Layer	Natural	-	-
110	17	Layer	Topsoil	-	Modern
111	17	Layer	Subsoil	-	-
112	17	Layer	Natural	-	-
113	16	Layer	Topsoil	-	Modern

Con-text	Tr. no	Category	Type	Function	Phase/Equivalent
114	16	Layer	Subsoil	-	-
115	16	Layer	Natural	-	-
116	6	Cut	Posthole	Structure	Phase 3/4
117	6	Fill of **116**	Posthole	Structure	Phase 3/4
118	6	Cut	Posthole	Structure	Phase 3/4
119	6	Fill of **118**	Posthole	Structure	Phase 3/4
120	6	Cut	Posthole	Structure	Phase 3/4
121	6	Fill of **120**	Posthole	Structure	Phase 3/4
122	6	Fill of **120**	Posthole	Structure	Phase 3/4
123	6	Layer	Subsoil	-	-
124	6	Cut	Ditch	-	Phase 3/4
125	6	Fill of **124**	Ditch	-	Phase 3/4
126	6	Fill of **124**	Ditch	-	Phase 3/4
127	6	Fill of **124**	Ditch	-	Phase 3/4
128	6	Fill of **124**	Ditch	-	Phase 3/4
129	19	Layer	Topsoil	-	Modern
130	19	Layer	Subsoil	-	-
131	19	Layer	Natural	-	-
132	19	Cut	Posthole	Structure	Phase 1
133	19	Fill of **132**	Posthole	Structure	Phase 1
134	19	Cut	Pit	-	-
135	19	Fill of **134**	Pit	-	-
136	19	Cut	Pit	-	-
137	19	Fill of **136**	Pit	-	-
138	19	Cut	Pit	-	Phase 2
139	19	Fill of **138**	Pit	-	Phase 2
140	19	Fill/cut	Pit	-	Phase 3/4
141	29	Cut	Pit/Ditch	-	Phase 2
142	29	Fill of **141**	Pit/Ditch	-	Phase 2
143	29	Fill of **141**	Pit/Ditch	-	Phase 2
144	29	Cut	Pit/Ditch	-	-
145	29	Fill of **144**	Pit/Ditch	-	-
146	29	Fill of **144**	Pit/Ditch	-	-
147	11	Layer	Topsoil	-	Modern
148	11	Layer	Natural	-	-
149	11	Cut	Pit or ditch butt end	-	-
150	11	Fill of **149**	Pit or ditch butt end	-	-
151	11	Fill of **149**	Pit or ditch butt end	-	-
152	11	Cut	Pit	-	-
153	11	Fill of **152**	Pit	-	-
154	11	Fill of **152**	Pit	-	-
155	11	Cut	Ditch	-	Phase 1
156	11	Fill of **155**	Ditch	-	Phase 1
157	11	Fill of **155**	Ditch	-	Phase 1
158	11	Fill of **155**	Ditch	-	Phase 1
159	11	Fill of **155**	Ditch	-	Phase 1
200	20	Layer	Topsoil	-	Modern
201	20	Layer	Natural	-	-
202	8	Layer	Topsoil	-	Modern
203	8	Layer	Natural	-	-
204	8	Cut	Pit	-	-
205	8	Fill of **204**	Pit	-	-
206	7	Layer	Topsoil	-	Modern
207	7	Layer	Natural	-	-
208	7	Cut	Moat Ditch	Moat	Phase 2-4
209	7	Fill of **208**	Moat Ditch	Moat	Phase 2-4
210	7	Cut	Ditch	-	Phase 3
211	7	Fill of **210**	Ditch	-	Phase 3
212	7	Fill Of **210**	Ditch	-	Phase 3
213	7	Fill of **210**	Ditch	-	Phase 3
214	7	Fill of **210**	Ditch	-	Phase 3
215	7	Fill of **208**	Moat Ditch	Moat	Phase 2-4
216	7	Fill of **208**	Moat Ditch	Moat	Phase 2-4
217	7	Fill of **208**	Moat Ditch	Moat	Phase 2-4
218	7	?Fill of 208 or recut boundary?	Ditch		Phase 2-4
219	7	Fill of **208**	Moat Ditch	Moat	Phase 2-4

Con-text	Tr. no	Category	Type	Function	Phase/Equivalent
220	30	Layer	Topsoil	-	Modern
221	30	Layer	Natural	-	-
222	30	Cut	?Pit	-	-
223	30	Fill of **222**	?Pit	-	-
224	48	Layer	Topsoil	-	Modern
225	48	Layer	Natural	-	-
226	48	Layer	Natural	-	-
227	48	Layer	Natural	-	-
228	48	Cut	Ditch	-	Phase 2
229	48	Fill of **228**	Ditch	-	Phase 2
230	48	Fill of **228**	Ditch	-	Phase 2
300	33	Layer	Topsoil	-	Modern
301	33	Layer	Natural	-	-
302	31	Layer	Topsoil	-	Modern
303	31	Layer	Natural	-	-
304	21	Layer	Topsoil	-	Modern
305	21	Layer	Natural	-	-
306	15	Layer	Topsoil	-	Modern
307	15	Layer	Natural	-	-
308	1	Cut	Ditch	? Enclosure	Phase 2
309	1	Layer	Topsoil	-	Modern
310	1	Layer	Natural	-	-
311	1	Fill of **308**	Ditch	?Enclosure	Phase 2
312	1	Fill of **308**	Ditch	?Enclosure	Phase 2
313	1	?Fill of **332**	Ditch	?Enclosure	Phase 2
314	1	Cut	Ditch	-	?Phase 4
315	6	Fill of **316**	Posthole	Structure	Phase 3/4
316	6	Cut	Posthole	Structure	Phase 3/4
317	6	Fill of **318**	Posthole	Structure	Phase 3/4
318	6	Cut	Posthole	Structure	Phase 3/4
319	6	Fill of **320**	Posthole	Structure	Phase 3/4
320	6	Cut	Posthole	Structure	Phase 3/4
321	6	Layer	Topsoil	-	Modern
322	6	Fill of **325**	Pit	-	Phase 1
323	6	Fill of **325**	Pit	-	Phase 1
324	6	Fill of **325**	Pit	-	Phase 1
325	6	Cut	Pit	-	Phase 1
326	29	Layer	Topsoil	-	Modern
327	29	Layer	Subsoil	-	-
328	29	Fill of **330**	Ditch	-	-
329	29	Fill of **330**	Ditch	-	-
330	29	Cut	Ditch	-	-
331	29	Layers	Natural	-	-
332	1	Cut	Ditch	?Enclosure	Phase 2
333	1	Cut	Ditch	?Boundary	Phase 4/5
334	1	Fill of **333**	Ditch	?Boundary	Phase 4/5
335	1	Fill of **314**	Ditch	-	-
336	Top soil	Layer	Topsoil	-	Modern
400	14	Layer	Topsoil	-	Modern
401	14	Layer	Subsoil	-	-
402	14	Fill of **404**	Ditch	-	Phase 2
403	14	Fill of **404**	Ditch	-	Phase 2
404	14	Cut	Ditch	-	Phase 2
405	14	Fill of **406**	Posthole	Structure	Phase 2
406	14	Cut	Posthole	Structure	Phase 2
407	14	Fill of **408**	Posthole	Structure	Phase 2
408	14	Cut	Posthole	Structure	Phase 2
409	14	Fill of **410**	Posthole	Structure	Phase 2
410	14	Cut	Posthole	Structure	Phase 2
411	14	Fill/cut	Posthole	Structure	Phase 2
412	14	Fill/cut	Posthole	Structure	Phase 2
413	14	Fill of **414**	Ditch	?Enclosure	Phase 3/4
414	14	Cut	Ditch	?Enclosure	Phase 3/4
415	13	Fill of **416**	Pit	-	Phase 1/2
416	13	Cut	Pit	-	Phase 1/2
417	13	Fill/cut	Posthole	Structure	Phase 1
418	13	Fill/Cut	Posthole	Structure	-
419	13	Fill/cut	Posthole	Structure	-

Con-text	Tr. no	Category	Type	Function	Phase/Equivalent
420	13	Fill/cut	Posthole	Structure	-
421	13	Fill/cut	Pit or Ditch	-	
422	13	Fill of **423**	Ditch	-	Phase 1
423	13	Cut	Ditch	-	Phase 1
424	13	Fill of **431**	Ditch	-	Phase 1
425	13	Fill of **431**	Ditch	-	Phase 1
426	13	Fill of **431**	Ditch	-	Phase 1
427	13	Fill of **431**	Ditch	-	Phase 1
428	13	Fill of **431**	Ditch	-	Phase 1
429	13	Fill of **431**	Ditch	-	Phase 1
430	13	Fill of **431**	Ditch	-	Phase 1
431	13	Cut	Ditch	-	Phase 1
432	13	Fill of **433**	?Pit	-	Phase 1
433	13	Cut	?Pit	-	Phase 1
434	13	Fill of **435**	?slot	Structure	Phase 1
435	13	Cut	?slot	Structure	Phase 1
436	13	Fill of **437**	?slot	Structure	Phase 1
437	13	Cut	?slot	Structure	Phase 1
438	13	Fill/cut	Pit or Ditch	-	-
439	13	Fill of **440**	Posthole	Structure	?Phase 1
440	13	Cut	Posthole	Structure	?Phase 1
441	13	Fill of **442**	Pit	-	-
442	13	Cut	Pit	-	-
443	13	Fill of **444**	Pit	-	Phase 2
444	13	Cut	Pit	-	Phase 2
445	13	Fill/cut	Pit	-	Phase 2
446	13	Fill of **431**	Ditch	-	Phase 1
447	3	Fill of **448**	Ditch	?Enclosure	Phase 1
448	3	Cut	Ditch	?Enclosure	Phase 1
449	3	Fill/cut	Ditch	-	Phase 2
450	4	Fill/cut	Pit	Quarry	Phase 5

Appendix 2: The Metal Objects

by Nina Crummy

1 Summary

Nine objects were examined. Few were diagnostic of date, with those that were ranging from ?Saxon to post-medieval or modern.

2 Condition

The copper-alloy and lead objects are in good condition and quite lightly corroded. Most of the ironwork is more heavily corroded, but the metal seems generally well preserved and will probably produce clear images when X-radiographed.

The objects are packed to a high standard of storage in polythene bags supported by pads of foam. The bags are stored in larger crystal boxes or airtight Stewart boxes with silica gel.

3 Assemblage

The objects are briefly listed in the catalogue (Table 3). Each has been assigned to one of the functional categories defined in Crummy 1983 and 1988 and the results are shown in the Table 2. Categories represented in this assemblage are: 1..dress accessories; 8..transport; 10..tools; 11..general fittings; 13..military equipment; and 18..miscellaneous.

Material	1	8	10	11	13	18
copper-alloy	1	-	-	-	-	-
lead	-	-	-	-	1	-
iron	-	1	1	3	-	2
Totals	**1**	**1**	**1**	**3**	**1**	**2**

Table 3: Artefacts by metal type

The assemblage conforms to a general pattern in which fittings and miscellaneous pieces predominate. The remaining categories are each represented by only one object, and the assemblage therefore has no individual defining characteristics.

The earliest object is a small knife with offset tang similar to examples from 10th to 11th century contexts at York and at the Manor of Goltho, Lincolnshire, and from a late 12th century context at London (Ottaway 1992, fig. 234, 2934; Goodall 1987, fig. 157, 36; Cowgill et al. 1987, fig. 54, 3). The other objects than can be reasonably closely dated are a copper-alloy buckle and a piece of lead shot, both of which belong to the late medieval or early post-medieval period. The shot has here been placed in the category for military equipment, but it might equally well have been used for hunting. A horseshoe fragment may also be

late medieval to early post-medieval, but its comparatively light surface corrosion suggests a later post-medieval to modern date.

4 Recommendations

All the ironwork should be X-radiographed (seven objects). This should facilitate dating and accurate identification. It is recommended that this work is done at Colchester Museum. A report on the objects should form part of the published site report. A limited number of the items should be drawn and these are indicated in the catalogue. Given the corroded nature of the ironwork the precise number cannot be accurately given at this stage, but the maximum should be no greater than one copper-alloy and four iron objects, and will probably be less.

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Catalogue

Copper-alloy

SF	Context	Identification	Clean	X-ray	Draw	Category	Date
2	51	double oval buckle, most of one loop missing	-	-	y	1	late medieval-early post-medieval

Lead or lead-alloy

SF	Context	Identification	Clean	X-ray	Draw	Category	Date
1	123	shot	-	-	-	13	post-medieval

Iron

SF	Context	Identification	Clean	X-ray	Draw	Category	Date
12	126	horseshoe branch	-	y	y?	8	late medieval-modern
13	322	tanged knife	-	y	y	10	probably Saxon
9	323	split-spike loop?	-	y	y?	11	-
10	323	sheet fragment	-	y	-	18	-
11	128	?nail shank	-	y	-	11	-
14	103	nail shank fragment	-	y	-	11	-
8	230	tapering shank (?punch, bolt, nail, awl, etc)	-	y	y?	18	-

Table 4: Catalogue of metal objects

Appendix 3: The Iron Slag

by Tom Eley

1 Methodology

A visual assessment of the morphological characteristics was undertaken to assign the slag by-products to a metallurgical process, either iron smelting or smithing. Also recorded was mass and magnet response. Testing with a magnet was used to identify slag with a high iron or magnetite content. Magnetite is a product of reducing conditions in a smelting furnace, whilst the presence of iron could distinguish the type of iron being utilised, it is not possible to differentiate between iron and magnetite without further analysis.

Slag with a metallic smooth, ropey, flowed surface is considered to derive from the bloomery smelting process whereby iron ore is converted direct into wrought iron, but contained within a 'spongy' mass of slag called a bloom. This type of slag is called tap slag because it would have been 'tapped' out of the furnace as a molten liquid. To obtain a usable iron the bloom needs to be worked to remove the slag termed 'primary smithing'.

The secondary smithing process converts bar iron into tools, equipment and utensils and repairs damaged items. Slags with no characteristic shape and a rough, coarse exterior are thought to derive from this process, but they can sometimes be formed in the smelting furnace. Smithing hearth bottoms are an exception; they have a distinctive plano-convex shape, created by the shape of smithing hearth's base from a heated agglomeration of iron, slag, hearth lining, flux and charcoal. Iron smithing slag is rarely found in primary smithing contexts because the hearths were regularly cleaned out and more importantly were built above ground at about waist height, so are susceptible to being destroyed by later activity. Hammer-scale is small flakes and droplets of slag and iron emitted as showers of sparks during smithing. Sampling for hammerscale from post-holes and pits could locate the smithy building. Hammerscale is small and can be left near to the place where it was created, i.e. smithing hearth, unlike larger slag fragments that can be dumped further away.

2 Results

Context	Type	Mass (Kg)
99999	Undiagnostic	0.1
323	Lining	0.013
323	Iron	0.013
323	Smithing	0.268
128	Lining	0.084
128	Undiagnostic	0.09
127	lining	0.143
127	Iron	0.008
127	Iron	0.022
127	Iron	0.217
127	Undiagnostic	0.051
126	Smithing	0.91
126	Smithing Hearth Bottom	0.462
126	Undiagnostic	0.04
126	vitrified lining	0.021
125	Lining	0.025
125	Smithing	0.7
125	Undiagnostic	0.065
Total		2.413

Table 5: Slag by context, debris type and mass

Feature	Weight (Kg)	%
124	2.019	84
325	0.294	12
U/S	0.1	4
		100

Table 6: Slag percentage by feature

3 Discussion

The morphological analysis of the slag indicates that it derives from iron smithing with no evidence for iron smelting. The slag was found in two separate features in Trench 6, a Late Saxon pit (**325**) and a post-medieval ditch (**124**). The majority of the slag, approximately 84%, came from ditch (**124**) whilst only 12% came from (**325**) with the remaining 4% unstratified. This indicates that iron smithing was being practised in the post-medieval period. The small quantity of slag from

pit **325** could have been re-deposited from earlier contexts or brought in from elsewhere.

The iron smithing slag, including a plano-convex smithing hearth bottom, was found in ditch **124**. This represents a dump of smithy waste and is not in the original location where it was created. The survival of ceramic lining on the smithing hearth bottom indicates it was not exposed too much weathering before it was deposited in the ditch, which could indicate that the smithy was located nearby. A smithy may have provided iron tools and implements for a manor house and surrounding dependant agricultural community. The type of iron being consumed would be important to identify. Was it low carbon wrought iron that would have been cheaper but of low quality, or was higher carbon steel also being utilised? High carbon steel made good cutting edges and more durable objects but was difficult to produce, therefore more expensive and rare. Identifying the location of the smithy would be important as a means of understanding the social context of iron smithing, which is often regarded as a liminal activity on the boundaries of society. This could be achieved via sampling features, in particular hammer-scale, which is thought to stay close to its original place of production, unlike slag, which is often moved around and dumped further a field.

4 Recommendations for further Work

The iron smithing slag recovered from the evaluation has the potential to provide important information about the workings of earlier post-medieval and possibly Late Saxon smithing. The association with a high status moated manor house is important as it could provide insights regarding the social context of iron production. This has been highlighted as a high priority for research (Lewis 2006, 214). Identifying structures related to iron smithing by sampling postholes and features for hammer-scale would be important, as smithy structures are rare in the archaeological record and poorly understood.

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Appendix 4: The Pottery

by Jane Young

1 Introduction

In total, one hundred and seventy-nine sherds of pottery representing a maximum of one hundred and twenty-eight vessels were submitted for examination. The pottery recovered ranges in date from the Late Saxon to early modern periods. The assemblage was quantified by three measures: number of sherds, weight and vessel count within each context. Fabric identification of some of the pottery was undertaken by x20 binocular microscope. The ceramic data was entered on an Access database using fabric codenames agreed locally and nationally (Table 8).

2 Condition

The pottery is mostly in a slightly abraded to abraded condition with sherd size mainly falling into the small size range (below 20 grams). In total twenty-four vessels are represented by more than one sherd and there were no cross-context joins. One vessel appears to have cracked during firing and may have been sold as a second. Forty vessels have external soot residues showing that they have been used over an open fire, several of these appear to have broken during use as the soot is found to continue over the broken edges. Some vessels also have internal soot or carbonised deposits suggesting that the contents of the vessel have burnt. Several vessels have external residues suggesting that they have been in a waterlain environment.

3 Overall Chronology and Source

A range of forty different, identifiable post-Roman pottery ware types were identified, the type and general date range for these fabrics are shown in Table 6. The post-Roman pottery ranges in date from the Late Saxon to early modern periods. A limited range of vessel types was recovered including examples of bowls, jugs and pitchers, jars, drinking vessels, a bottle and a plate.

Codename	Full name	Earliest date	Latest date	Sherds	Vessels
BERTH	Brown glazed earthenware	1550	1800	1	1
BL	Black-glazed wares	1550	1750	3	3
BOSTLT	Boston Glazed ware - Lincoln type	1230	1330	3	3
BOU	Bourne D ware	1350	1650	1	1
BOUA	Bourne-type Fabrics A, B and C	1150	1400	8	7
CIST	Cistercian-type ware	1480	1650	5	5
CREA	Creamware	1770	1830	1	1

Codename	Full name	Earliest date	Latest date	Sherds	Vessels
DST	Developed Stamford ware	1150	1230	4	2
ELQC	East Lincolnshire Quartz and Chalk fabrics	1100	1220	1	1
ELY	Ely-type ware	1175	1350	15	6
EMHM	Early Medieval Handmade ware	1100	1250	7	3
EMX	Non-local Early Medieval fabrics	1150	1230	1	1
EST	Early Stamford ware	870	1010	2	2
FREC	Frechen stoneware	1530	1680	3	2
GRIMT	Grimston-type ware	1200	1550	2	2
GSS	Greensand and shell	1050	1250	2	1
LKT	Lincoln kiln-type shelly ware	850	1000	5	5
LMX	Late Medieval Non-local fabrics	1350	1550	1	1
LS/SNLS	Late Saxon/Saxo-Norman Lincoln Sandy ware	850	1050	1	1
LSH	Lincoln shelly ware	850	1000	23	15
LSLOC	Late Saxon Local Fabrics	850	1050	4	3
LSW2	13th to 14th century Lincoln Glazed Ware	1200	1320	4	4
LSW2/3	13th to 15th century Lincoln Glazed Ware	1200	1450	1	1
LSX	Non-local late Saxon fabrics	870	1080	2	1
MEDLOC	Medieval local fabrics	1150	1450	1	1
MEDX	Non Local Medieval Fabrics	1150	1450	1	1
MY	Midlands Yellow ware	1550	1650	1	1
NCBW	19th-century Buff ware	1800	1900	2	1
PGE	Pale Glazed Earthenware	1600	1750	1	1
PSHW	Peterborough Shelly Ware	1175	1400	1	1
SLEMO	South Lincolnshire Early Medieval Oolitic	1100	1220	4	1
SLST	South Lincolnshire Shell Tempered ware	1150	1250	4	3
SNLS	Saxo-Norman Lincoln Sandy Ware	970	1080	1	1
SNX	Non-local Saxo-Norman Fabrics	870	1150	8	1
ST	Stamford Ware	970	1200	23	15
TB	Toynton/Bolingbroke wares	1450	1750	10	9
THETT	Thetford-type ware	880	1050	3	3
TOY	Toynton Medieval Ware	1250	1450	17	15
TOYII	Toynton Late Medieval ware	1450	1550	1	1
UNGS	Unglazed Greensand-tempered fabrics	950	1250	1	1

Table 7: Pottery codenames and date range with total quantities by sherd and vessel count

Trench 06 produced the largest assemblage of pottery (see Table 7) with smaller groups coming from Trenches 01, 07, 13 and 32. Few sherds were recovered from Trenches 03, 11, 14, 19, 29 and 48. Thirty-two vessels examined are definitely of pre-conquest date, mainly being recovered from Trench 06 and with at least twenty vessels dating to the 10th century. The pottery suggests possible peaks in activity in three main periods: the 10th century (Trench 06), the 13th to 14th centuries (Trenches 01 and 07) and the mid 15th to 16th century (Trench 06).

Ceramic period	Trench 01	03	06	07	11	13	14	19	29	32	48	Topsoil and unstratified	Total vessels
Late Saxon (late 9th to mid/late 11th)	0	0	19	0	4	3	0	0	0	0	0	2	28
Saxo-Norman (late 9th to 12th)	1	1	3	0	0	6	1	0	0	0	2	5	19
Early medieval (12th to mid 13th)	2	1	0	0	0	2	1	2	0	1	1	0	10
Medieval (13th to 15th)	8		2	14		2	2	4	5	1	2	4	44
Late medieval to early post medieval (mid 15th to 16th)	0	0	6	0	0	0	0	0	0	3	0	8	17
Post-medieval (16th to 18th)	0	0	3	1	0	0	0	0	0	3	0	1	8
Early modern (late 18th to 20th)	1	0	0	0	0	0	0	0	0	1	0	0	2
Total vessels	12	2	33	15	4	13	4	6	5	9	5	20	128

Table 8: Vessel counts by chronological period

3.1 Late Saxon

Twenty-eight vessels are identifiable as Late Saxon types with at least twenty of these (LKT and LSH) dating to the period before the 11th century. The vessels are mainly jars and bowls with soot residues and have been used over an open flame, few vessels appear to have been used for storage and no examples of lamps or crucible occur.

Most of the vessels are jars and bowls in Lincoln produced shell-tempered fabrics (LKT and LSH). These wares are produced from the late 9th to the late 10th centuries and are a common find on sites of this date in the county. The competence of manufacture, together with the diagnostic rim types present suggests that the vessels are probably of 10th century date. One unusual vessel is a small globular jar or cup found in context 322 (fill of pit **325**).

This site produced a few reduced quartz-tempered fabrics of late 9th to mid 11th century date (SNLS, LS/SNLS and LSLOC). SNLS is unknown in assemblages in Lincoln before the late 10th century and has probably ceased production before the conquest. The LS/SNLS sherd could either belong to the late 9th to early 10th century Lincoln production (LSLS) or is a well-executed early example of SNLS. The dating of the two LSLOC vessels is slightly more problematical as this fabric is as yet uncharacterised. The vessels may be a variant Lincoln type, however the fabric contains common iron-rich lumps, not typical of known Lincoln productions. These vessels are competently manufactured on a fast wheel and are evenly fired, suggesting that

they were produced by an experienced urban production centre. A similar reduced ware was found in a Late Saxon group at Crowland, stratified with 10th century wares.

A small number of other local (LSLOC) and regional imports (EST and LSX) date to this period, including two early Stamford ware (EST) jars. The wheelthrown LSLOC jar from context 415 (fill of pit **416**) is in a medium-sized shell-tempered fabric visually not unlike that of the Lincoln Shelly ware (LSH). Under microscopic examination however, the shell appears to be thinner than is usual for Lincoln products, perhaps suggesting that this vessel has been manufactured elsewhere. The fine to medium shelled vessel (LSX) from context 432 (fill of ?pit **433**) is also superficially similar to LSH and again the shell is thinner although the colouring of this sherd is more reminiscent of St. Neots ware. The two early Stamford ware (EST) jars are both unglazed and one has a soot residue suggesting that it has been used for cooking.

3.2 Saxo-Norman

Nineteen vessels are of long-lived ware types (late 9th to 12th century) and can be assigned to the Saxo-Norman period (THET, SNX and ST). It is possible that the three Thetford ware (THET) and one unspecific non-local sherd (SNX) are contemporary with the 10th century Late Saxon material, however only three of the fifteen Stamford ware vessels recovered are likely to predate the conquest.

Three of the Stamford ware vessels are probably of pre-conquest date whilst the other twelve vessels are of late 11th to 12th century type. The vessel forms represented are, with one exception, glazed and unglazed jars or pitchers. A single bowl in Fabric B was recovered from an unstratified context. Two vessels in Fabric C and two in Fabric B/C and are unlikely to predate the mid 12th century. One of the vessels in Fabric C is identifiable as a glazed pitcher.

It was only possible to determine the vessel form of one of the three Thetford-type sherds although the other two are likely to be from jars, large containers or pitchers. The sherd from context 128 (ditch **124**) is from a small jar, a form that is not commonly found on Lincolnshire sites. The vessel from context 323 (pit **325**) is in a fabric thought to have been made in Lincolnshire (Fabric L). None of the vessels are closely dateable, except to within the Saxo-Norman period.

A single vessel, a small jar, is tempered with fine to medium crushed fossil oyster shell. Visually the sherd looks like St. Neots ware, however the sherd lacks the distinctive fabric of the Cambridgeshire, Northamptonshire and Oxford wares and is more likely to be a Lincolnshire or, possibly, a Norfolk product.

3.3 Early Medieval

The assemblage includes ten vessels of early medieval type of which only the three glazed finewares (DST and EMX) are definitely of mid 12th to early/mid 13th century date. The other vessels are in ware types that have origins in the late 11th century and remain in production until the mid-13th century.

A single splash-glazed ware jug (EMX) from context 137 is in an unknown fabric, although microscopic examination suggests that it is likely to come from a Midlands source. The two Developed Stamford ware jugs (DST) could date as early as the mid 12th century, although they are more likely to be of late 12th to early/mid 13th century date.

The remaining early medieval assemblage comprises a variety of coarse ware fabrics (ELQC, EMHM, GSS, SLEMO and UNGS) from a number of known and unknown production centres in Lincolnshire and Norfolk. Two of the three Early Medieval Handmade vessels are likely to be products of kilns at Grimston, Norfolk (Fabric A) whilst the third was probably manufactured at Bourne in south Lincolnshire. These vessels appear to have remained in use in Boston until possibly as late as the third quarter of the 13th century. The other vessels, all jars or bowls, come from unknown production centres in East Lincolnshire (ELQC), the Lincolnshire Wolds (GSS and UNGS) and South Lincolnshire (SLEMO).

3.4 Medieval

Overall, forty-four of the pottery vessels recovered from the site can be dated to the medieval period, between the late 12th and 15th centuries. Eleven different local and regional ware types are represented with products from the kilns at Toynton All Saints in Lincolnshire (TOY) being the most common.

Fifteen of the medieval vessels are jugs, bowls or jars in Toynton-type ware. Two bowls and two jars together with eleven jugs occur in the assemblage. One of the jugs has applied iron-stained decoration similar to that found at the Roses Kiln at Toynton All Saints. The manufacture of the Toynton-type vessels suggests that they are mainly of late 13th to 14th century date. Seven vessels, mainly identifiable as jars, are in Bourne-type fabrics (BOUA). Two of the vessels are in Fabric G that at present is thought to date to between the late 12th and mid 13th century. One of these vessels (context 313) is a bowl with thumb-pressed decoration to the rim edge. The other vessels are not chronologically diagnostic and could date anywhere between the late 12th and 14th centuries. Six vessels are of Ely-type, although an actual Ely source needs confirmation by scientific analysis. Only one of the vessels, a jug, is diagnostic of a specific vessel form, although that from context 214 may be a bowl. The jug, from context 142, has

combed wavy decoration beneath combed cross-hatching at the lower glaze edge.

A small number of other regional imports are present in the assemblage including Glazed Lincoln-type wares (LSW2, LSW2/3 and BOSTLT), Grimston-type ware (GRIMT) and single examples of unspecific local (MEDLOC) and non-local (MEDX) medieval wares. The Lincoln-type glazed ware vessels are with the exception of a single jar/pipkin sherd (LSW2) all jugs, one of which is decorated with an applied iron-rich strip. Three South Lincolnshire coarse shell-tempered (SLST) and one miscellaneous shell-tempered ware (PSHW) vessels were also recovered.

3.5 Late Medieval to Early Post-medieval

A small group of seventeen vessels are in ware types that belong to the period between the mid 15th and 16th centuries. The vessels found on this site include vessels made in the county at Toynton All Saints (TOYII and TB) and Bourne (BOU) as well as regional imports (CIST and LMX). The Toynton vessels are predominantly jugs and bowls with one possible jar also occurring, whilst the regionally imported vessels are mainly cups (CIST). A variety of Cistercian (CIST) fabrics occur on the site, one of which could possibly have been produced locally at Boston, although the other vessels are likely to have been imported from Yorkshire and/or the Midlands. A single unsourced sherd (LMX) with a dark glaze may be from an East Anglian source.

3.6 Post-medieval to Early Modern

A small number of the vessels examined are of later 16th to 20th century date; these include both coarsewares (BERTH, BL, MY and PGE) and industrial finewares (CREA and NCBW). A single continental import, a Frechen (FREC) bottle was present in the assemblage.

4 Summary and Recommendations

This is a small but important group of post-Roman pottery. The ceramic assemblage suggests that there are possible peaks of activity in the Late Saxon, medieval and late medieval periods, although overall the material indicates that the site was probably occupied continually from the Late Saxon to the post-medieval period. The recovered pottery suggests that the archaeology is relatively undisturbed and that if the site were to be excavated a large ceramic assemblage could be expected.

Groups of pottery predating the 13th century in this area are critical to the understanding of early Boston and its environs. Only by studying large assemblages in this area can we hope to understand the local

ceramic sequence of the 11th and 12th centuries. Before the late 10th century the pottery from Boston's hinterland (especially from Kirton and Old Leake) suggests a close link with Lincoln, where the sequence is well understood. Somewhere between the late 10th and early/mid 11th centuries the pottery supply to the area seems to change and wheelthrown shell-tempered wares similar to, but not identical to, both the Lincoln and St Neots industries appear in assemblages. These fabrics have not as yet been identified outside of the Boston area. The competence of manufacture suggests a producer familiar with the fast-wheel throwing technique usually only found in urban centres in the midlands at this date. It is known that some 'daughter' industries set up at this time with LKT being produced in the Horncastle area and Torksey ware in Newark. Both of these productions are so similar to the original ware type that they appear to have been operated by potters going out from Lincoln and Torksey. Scientific analysis may be able to confirm if the unsourced shell-tempered wares found on this and other sites in the area are in fact locally produced. If this is so it may suggest the presence of a Late Saxon 'urban' centre in the area, although it is still possible that somewhere like Peterborough may be the source. Few stratified 12th century groups occur in the area and as yet no ceramic sequence can be suggested. In north and northeast Lincolnshire Beverley and Beverley-type wares dominate 12th century assemblages, further south and to the east along the River Trent Nottingham Splashed wares are only replaced by Lincoln Splashed wares towards the end of the 12th century. The Stamford area uses Stamford ware and by the late 12th to early 13th century, Lyveden, Nottingham and Bourne wares, but little is known about the Boston area. This site has the potential to produce key stratified groups of ceramics and an experienced local ceramic consultant should be involved in the discussion of any excavation priorities for the site.

The two LSLOC greyware sherds should be scientifically analysed and compared to known Lincoln products. The unsourced shell-tempered fabrics should only be used as part of a wider analysis programme if a larger sample is recovered during excavation. Two vessels should be drawn for the archive and these have been noted in the archive catalogue. The assemblage should be kept for future study, especially as part of any characterisation of the fabrics for a type series.

Catalogue

Tr	cont	cname	Sub fabric	form type	sherds	No. vess	wt	decoration	part	description
01	311	BOSTLT		small jug	1	1	20		rim	cuff rim; corrugated neck
01	311	ELY		jar ?	3	1	21		BS	abraded; concretions; ? ID
01	311	ELY		small jug / jar	1	1	11		BS	thin walled; no glaze; ? ID

Tr	cont	cname	Sub fabric	form type	sherds	No. vess	wt	decoration	part	description
01	311	ELY		jug	8	1	257	multi combed wavy horizontal lines at lower glaze edge below a combed cross hatch pattern	base + BS	abraded
01	311	SNX	OX/R/OX; fine to medium shelly	small jar	8	1	40		BS	external and part internal soot; wheel thrown; abundant fine to medium crushed oyster ? shell; occasional coarse moderate fe; sparse quartz; central lincolnshire source ?
01	313	BOUA	G(A)	bowl	1	1	77	pressed rim top	rim	soot; square rim
01	313	BOUA	G(A)	bowl	1	1	77	pressed rim top	rim	soot; square rim
01	313	EMHM	A	jar	3	1	14		BS	
01	313	EMHM	BOUA E	?	3	1	9		BS	? fabric ID
01	313	EMHM	BOUA E	?	3	1	9		BS	? fabric ID
01	313	EMHM	A	jar	3	1	14		BS	
01	334	CREA		plate	1	1	2		rim	
01	335	TOY	+ ca	jug	1	1	15		BS	run of thick glaze
01	335	TOY		jug	1	1	1		BS	
01	335	TOY		jug	3	1	15		BS	
03	447	ST	B	jar / pitcher	1	1	5		BS	glaze
03	449	ELQC		?	1	1	1		BS	abraded; ? ID
06	117	BOU		?	1	1	5		BS	? ID
06	126	BERTH		bowl / jar	1	1	4		BS	internal glaze
06	126	EST	A / D	jar	1	1	13		BS	unglazed
06	126	LS/SNLS		jar	1	1	22		BS	external soot
06	126	LSH	E	?	1	1	1		BS	flake; internal soot
06	126	LSH	E	jar	1	1	3		BS	internal and external soot
06	126	LSH	E	jar	2	1	44		BS	external soot
06	126	LSH	E	?	1	1	1		BS	flake
06	126	LSH	E	jar ?	1	1	6		BS	
06	126	LSH	E	small jar	1	1	18		rim	internal soot; EVERA 3
06	126	LSH	E	jar	1	1	3		rim	EVERA3
06	126	LSH	E	jar ?	2	1	7		BS	same vessel ?; abraded
06	126	LSH	E	jar	1	1	13		rim	external soot; EVERB1
06	126	LSH	E	jar / bowl	1	1	6		base	external soot
06	126	THET		jar / bowl	1	1	8		BS	ridged body
06	127	LKT		jar	1	1	54		BS	soot; shell part leached from interior and exterior surface
06	128	THET		small jar	1	1	9		base	concretions, waterlain ?; abraded
06	315	BOUA	A	jug / jar	1	1	10		BS	? ID
06	315	TB		bowl	1	1	4		BS	internal glaze
06	319	BL	GRE	drinking vessel	1	1	1		BS	
06	319	CIST	brown	cup	1	1	1		BS	
06	319	CIST		cup	1	1	1		handle	
06	319	MY		jar ?	1	1	5	grooved shoulder	BS	internal and external glaze
06	319	TB		jug	1	1	24		BS	
06	319	TB		bowl	1	1	15		rim	
06	319	TOY		jug	1	1	13	shoulder groove	BS	? ID or TOYII
06	321	LSH	E	small jar	1	1	2		base	internal and external soot
06	321	LSLOC	light firing; medium	small jar	1	1	13		BS	wheel thrown; abundant fine to medium sub round to round quartz; common lumps of fe; thin walled;

Tr	cont	cname	Sub fabric	form type	sherds	No. vess	wt	decoration	part	description
			sandy							similar to those at crowland ?; ? ID or LSPS or ? ID; soot; removed to fabric type series
06	321	LSLOC	light firing; medium sandy	jar	1	1	10		base	wheel thrown; abundant fine to medium sub round to round quartz; common lumps of fe; thin walled; similar to those at crowland ?; soot; removed to fabric type series
06	322	LKT		small globular jar / cup	1	1	24		rim	external soot and over internal rim edge; EVERA3; 10cm diameter
06	323	EST	A	small jar	1	1	14		BS	soot; concretions, waterlain ?
06	323	LKT		small jar	1	1	10		base	internal carbonised deposit on base only
06	323	THET	L	?	1	1	14		BS	concretions, waterlain ?; ? ID
07	209	BOSTLT		jug	1	1	7	shoulder cordon	BS	reduced glaze; ? ID
07	214	ELY		jug / jar	1	1	7		BS	abraded; ? ID; soot ?
07	214	ELY		bowl ?	1	1	21		base	very abraded; ? ID; remains of internal glaze
07	214	TOY		jug	1	1	4		BS	
07	214	TOY		jug	1	1	3	applied vertical fe strip	BS	
07	214	TOY		bowl	1	1	44		BS	very unusual; internally flanged rim; soot patch ? on internal rim; ? ID or TOYII
07	215	LSW2/3		jug	1	1	6		BS	cu glaze
07	215	TOY	A	jar	1	1	15		rim	soot
07	215	TOY		bowl	1	1	8		BS	internal glaze
07	216	GRIMT		jug	1	1	105		handle	rod handle; thumbed upper join; glaze spots and patches
07	216	LSW2		large conical jug	1	1	26	incised horizontal line 40mm above basal angle	base	cu glaze; glazed right down to base ?; very odd
07	216	MEDX	fine	jug	1	1	5		shoulder	reduced white external margin; ridged body; cu glaze over white slip; abundant fine quartz; moderate medium quartz; moderate fe; some aggregate fine sst
07	216	SLST		jar ?	1	1	2		rim	abraded; ? ID
07	216	TOY		jar ?	1	1	28		base	soot; abraded
07	218	PGE		bowl	1	1	5		BS	very abraded internal glaze
11	156	LKT		jar	1	1	7	diamond roulette on shoulder	BS	abraded
11	156	LSH	A	jar	1	1	6		BS	
11	159	LKT		small jar	1	1	3		BS	soot
11	159	LSH	E	small jar	6	1	19		BS	soot
13	415	LSLOC	OX/R/OX; medium shelly	small jar	2	1	26		BS	common to abundant mixed shell; boreholes; sparse quartz; thin walled; soot; ? ID or LSH A; odd; wheelthrown
13	415	ST	B / C	jar / pitcher	1	1	2		BS	glaze; soot
13	417	ST	B	jar / pitcher	2	1	9		BS	glaze; soot
13	428	ST	B	small jar / pitcher	1	1	8		base	no glaze; fresh
13	429	GSS		jar ?	2	1	9		BS	external and part internal soot
13	429	ST	B	jar	1	1	10		BS	soot; unglazed
13	429	ST	G	jar / pitcher	4	1	12		BS	glaze; soot over one break
13	429	ST	B	jar	1	1	3		BS	unglazed

Tr	cont	cname	Sub fabric	form type	sherds	No. vess	wt	decoration	part	description
13	432	LSH	A	bowl	1	1	10		rim	sloping rim; soot
13	432	LSX	dull OX/R/OX; fine to medium shelly	jar / bowl	2	1	6		BS	wheelthrown; internal soot; ? ID or odd LSH A
13	443	BOUA	A	jar	1	1	21		rim	soot
13	445	BOUA	A	jug / jar	1	1	6		base	
13	445	EMHM	A	bowl ?	1	1	7		BS	plough damaged; soot across broken edge
14	402	DST		jug ?	1	1	1		BS	abraded
14	402	ST	B / C	jar / pitcher	4	1	6		BS	glaze
14	407	BOSTLT		jug	1	1	11	applied fe strip	BS	reduced glaze; ? ID
14	409	SLST		large bowl / jar	1	1	10		BS	thick external soot
19	137	DST	C	jug	3	1	48		neck + BS	faint cu specks; fresh
19	137	EMX	light oxidised ; fine to medium sandy	jug	1	1	67	applied decoration at base	base	soot on underside; splashed glaze; important; common fine to medium sub round to round quartz; moderate fine fe; striated pale orange and white clay; early SCAR ?
19	137	LSW2		jar / pipkin	1	1	1		BS	soot; glaze
19	139	LSW2		jug	1	1	39		handle	strap with deep central hollow
19	140	BOUA	A / C	jar	1	1	26		rim	ridged shoulder; square everted rim
19	140	TOY		jug	1	1	20		BS	
29	142	BOUA	G(A)	jar	1	1	4		BS	soot
29	142	ELY		jar / bowl	1	1	4		BS	? ID
29	142	GRIMT		small jug	1	1	10		rim	collared rim; spots of glaze; abraded internally; ? ID
29	142	LSW2		small jug	1	1	6		BS	abraded
29	142	TOY		jug	1	1	7		BS	abraded; pocked glaze ?
32	004	BL		bowl	1	1	40		rim	internal glaze; staffordshire
32	004	FREC		large bottle	2	1	60		HJ	? ID or LONS; late
32	004	NCBW		dish / bowl	2	1	13		base	
32	004	TB		large jug	1	1	34		BS	abraded
32	004	TB		large jug	1	1	96		base	
32	004	TB		jug	2	1	56		UHJ	abraded; ? ID or TOY
32	103	BL	GRE	drinking vessel	1	1	5		handle	abraded
32	103	SLST		jar ?	2	1	5		BS	
32	103	UNGS		?	1	1	2		BS	very abraded
48	229	BOUA	B / C	jar / bowl	2	1	13		BS	internal glaze
48	230	PSHW		jar ?	1	1	5		BS	? ID; flake
48	230	SLEMO		jar	4	1	45		rim + neck + BS	soot; hollow everted rim; external soot
48	230	ST	C	pitcher	2	1	13		BS	glaze
48	230	ST	C	jar / pitcher	1	1	14		BS	unglazed
top soil	336	LSH	A	jar / bowl	2	1	5		BS	soot; ? ID or a LSLOC wheel thrown
us	99999	CIST	soft light	cup	1	1	4		BS	same vessel ?

Tr	cont	cname	Sub fabric	form type	sherds	No. vess	wt	decoration	part	description
			red							
us	99999	CIST	thick purple	cup	1	1	22		BS	
us	99999	CIST	soft light red	cup	1	1	25		base	brown glaze; flat plain base; fe slipped interior; same vessel ?
us	99999	FREC		jug / jar	1	1	16		UHJ	
us	99999	LMX	dull OX/R/OX; fine sandy	jug / jar	1	1	19		BS	dark cu ? glaze; east anglian ?; striations of light firing clay
us	99999	MEDLOC	dull OX/R/OX; fine to medium sandy	jar / pitcher	1	1	25		base	external soot and over some breaks; untrimmed; common mixed sub round to round quartz; moderate fe
us	99999	SNLS		jar	1	1	15		BS	soot
us	99999	ST	G	jar / pitcher	1	1	4		BS	glazed
us	99999	ST	B	bowl	1	1	44		rim	everted / flanged rim; soot ? On rim edge; unglazed
us	99999	ST	B	jar / pitcher	1	1	6		BS	
us	99999	ST	G	jar / pitcher	1	1	7		BS	glazed
us	99999	ST	A	jar	1	1	8		rim	hollow everted; unglazed
us	99999	TB		bowl	1	1	11		BS	internal glaze; ? ID
us	99999	TB		jug / jar	1	1	22		BS	
us	99999	TB		bowl	1	1	15		base	
us	99999	TOY		jug ?	1	1	2		BS	
us	99999	TOY		jug	1	1	15		BS	
us	99999	TOY		jug	1	1	15		base	abraded
us	99999	TOYII		small jug	1	1	28		BS	cracked during firing at basal angle; odd; thick walled but narrow; ? ID TB/TOY

Table 9: Catalogue of pottery

Appendix 5: The Lithic Material, Fired Clay, Roof Tile, Brick, Clay Pipe and Glass

by Jane Young and Rob Atkins

1 Lava Quern

Lava quern fragments were found in three deposits at different parts of the site (Trenches 11, 13 and 29) and also from the topsoil (weighed 0.551kg). These contexts are Late Saxon and early medieval in date – a period where the environmental samples (Appendix 7) demonstrate that crops were being grown and processed on site. The quern stones were presumably related to this processing activity.

Context	Date of Context	Feature	Weight (kg)
142	Early medieval	Pit/ditch	0.339
156	Late Saxon	Ditch	0.088
445	Early medieval	Pit	0.042
U/S		-	0.082

Table 10: Quern stones

2 Fired Clay

A total of 33 fragments (310g) of fired clay were recovered from 12 separate contexts (Table 10). These contexts were found across the northern part of the site in eight separate trenches (Trenches 1, 3, 6, 7, 11, 13, 29 and 48) ranging in date from Late Saxon to late medieval/earlier post-medieval periods. Fabric identification of some of the material was undertaken by x20 binocular microscope. Four fabric types were seen comprising a fine silty, fine micaceous, micaceous and very micaceous types (Table 10).

A shaped corner and curved surface survive on two fragments (127 and 311) and these probably represent the remains of former agricultural/industrial structures.

Thin sectioning of fired clay has proved important at Partney, Lincolnshire where evidence for medieval saltmaking has been found on an inland site (pers. comm. Alan Vince). At full excavation stage it may be suggested that the collection should be inspected to advise on whether it would be useful to thin section some of the fired clay for targeted analysis.

3 Roof Tile

Only two roof tile fragments were recovered (176g). These comprise a medieval Boston flat roof tile from Trench 7, context 216 (the backfill of the moat ditch **208**), and a probable modern ridge tile from Trench 4 quarry pit (**450**).

4 Brick

A collection of five part bricks and fifty-five brick fragments (6.183kg) came from fifteen separate contexts (Table 10). They are all red bricks of two fabric types calcaceous or silty. None of the bricks are anywhere near complete and these fragments are therefore very difficult to date with any certainty except to say that, apart from context 4, which was modern – all date before the end of the 18th century. Although most of the part bricks are well made with good near vertical arises, they could date from the late medieval period since Boston was producing good quality bricks at this time (Jane Young, pers. comm.). It is likely that from at least the 17th century Kirton would have been producing its own bricks.

Given the manorial status of the site it is possible that it could afford bricks. Certainly it is very likely that the manorial outbuildings would have been made of brick from at least the earlier post-medieval period. Indeed brick was recovered from posthole fill 119 (Trench 6), part of a possible smithy structure.

5 Clay pipe

Only four clay pipe fragments were recovered from the site. A stem fragment was recovered from context 319 (posthole **320**) and three stem fragments were found unstratified.

5 Glass

Modern bottle glass (19th to 20th century) was recovered from pit **450**.

Tr	Context	Full name	Fabric	Frags	Wt	Description
01	311	fired clay	fine micaceous	4	21	one sherd has slightly curved surface; very abraded
01	334	Brick	silty	1part brick; 4 fragments	2014	c.60mm thick; well made arises
01	335	Brick	fine silty	3	21	handmade; moderate fe + moderate ca; very
01	335	Brick	silty + rounded quartz	1	1	very abraded
01	335	Brick	silty	2 part bricks; 2 fragments	2032	125mm wide and 50-55mm+ thick. Overfired;crude
03	447	fired clay	fine micaceous	2	25	very abraded
04	450	RID PNR	Fine oxid fabric	1	76	13 th-15th or 18th+
04	450	Brick	calcareous	2	41	very abraded
06	119	Brick	silty	4	51	very abraded
06	126	fired clay	micaceous + fe	3	7	flattened surface; very abraded
06	126	fired clay	micaceous	1	6	carbonised vegetation voids; very abraded
06	126	fired clay	micaceous	2	44	very abraded
06	127	fired clay	fine micaceous	1	11	very abraded
06	127	fired clay	fine micaceous + fe	1	95	shaped corner at ca. 130 degrees; very abraded
06	128	Brick	calcareous	1	32	glazed; fuel ash glaze; very abraded
06	315	Brick	calacreous	3	13	very abraded
06	315	Brick	mixed silty + areas of	4	40	very abraded
06	315	fired clay	micaceous + fe	1	2	very abraded
06	315	fired clay	micaceous	1	1	very abraded
06	317	Brick	silty + rounded quartz +	1	24	very abraded
06	319	Brick	calcareous	7	79	very abraded
06	319	Brick	silty	1	3	very abraded
06	319	fired clay	fine micaceous + fe	3	12	very abraded
06	319	fired clay	fine micaceous	3	7	very abraded
06	323	fired clay	micaceous	4	28	very abraded
07	209	Brick	silty	1	1	very abraded
07	209	Brick	silty	1 part brick	416	120mm wide and 56mm thick

Tr	Context	Full name	Fabric	Frags	Wt	Description
07	209	Brick	calcareous	2	10	very abraded
07	214	fired clay	micaceous	1	0	heat affected; very abraded
07	214	fired clay	micaceous	1	2	very abraded
07	214	fired clay	micaceous	1	2	very abraded
07	215	Brick	calcareous	2	82	very abraded
07	215	Brick	fine silty	1	4	very abraded
07	216	Brick	silty + rounded quartz	1	63	very abraded
07	216	PNR	Boston fabric 1	1	100	13th –15th cent; abraded
07	218	Brick		1	2	very abraded
11	156	fired clay	micaceous	1	6	very abraded
13	429	fired clay	fine micaceous	1	15	soot on one face; very abraded
14	413	Brick	calcareous	1	21	part sooted; very abraded
19	140	Brick	silty	1part brick; 1 fragment	648	56mm thick. Well made arrises
29	142	fired clay	fine silty	1	2	possible brick; very abraded
32	004	Brick	silty	1	42	very abraded
32	004	Brick	silty + rounded quartz	1	63	very abraded
32	004	Brick	calcareous	1	35	very abraded
32	004	Brick	calcareous	5	386	salt surfacing; very abraded
48	230	fired clay	fine micaceous	1	23	very abraded
us	99999	Brick	calacareous	3	11	very abraded
us	99999	Brick	silty + rounded quartz	1	24	very abraded

Table 11: Catalogue of fired clay, roof tile and brick

Appendix 6: The Faunal Remains

by Chris Faine

1 Introduction

A total of 86 'countable' bones were recovered through hand collection from features within the evaluation, with 58 fragments being unidentifiable to species (67.4% of the total sample). Fragments were obtained from a variety of contexts ranging in date from the Saxon to medieval periods. The condition of the assemblage is extremely good, with the majority of fragmentation being attributed to butchery rather than any taphonomic processes.

This report does not include the animal bones and fish bones found in the sieved samples (Appendix 7). This has therefore imbalanced the assessment in favour of larger mammals.

2 Methodology

All data was initially recorded using a specially written MS Access database. All elements identifiable to species and over 25% complete were included in the database. Loose teeth, caudal vertebra and ribs without proximal epiphyses were noted but not included in any quantification. Elements not identifiable to species were classed as 'large/medium/small mammal' but again not included in any quantification. Initially all elements were assessed in terms of siding (where appropriate), completeness, tooth wear stages (also where applicable) and epiphyseal fusion Tooth wear was assessed using Grant (1982). Completeness was assessed in terms of percentage and zones present (after Dobney & Reilly, 1988). Initially the whole identifiable assemblage was quantified in terms of number of individual fragments (NISP) and minimum numbers of individuals MNI (Table 11).

Any instances of butchery were noted and recorded using a separate table from the main database. The type of lesion, its position, severity and direction were all noted. The presence of any further taphonomy, i.e. burning, gnawing etc was also noted. A separate table for any pathology, giving the position and type of lesion was also used.

3 The Assemblage

Domestic mammals dominate the assemblage, with sheep being the most prevalent species (48.2% of the identifiable sample). Cattle and pig remains make up 31% and 12% of the identifiable sample respectively. The species distribution for the entire assemblage can be

seen in Table 11. The largest number of identifiable fragments was recovered from context 230 (ditch **230**). This consisted of the remains of at least one adult sheep of around 2 years of age. The ribs and limb bones showed evidence of severe butchery, most likely with a large knife or cleaver. Butchery marks are centred on the epiphyses, perhaps indicating disarticulation of the limbs. Interestingly a sheep mandible found in this context displayed no sign of a 3rd molar. No evidence of periodontal disease or alveolar resorbtion was seen; indicating that is was most likely a congenital defect.

Contexts 126 and 127 (ditch **124**) contained a variety of butchered cattle and sheep remains, along with a single dog 1st molar. Many of these remains show evidence of butchery similar to context 230 above. All remains appear to cone from adult animals. A single cattle naviculo-cuboid recovered from 126 (ditch **124**) showed significant exostoses on its proximal articulation. Such lesions are most often indicative of stress on the joint, although it is unclear in this case whether this is due to lifestyle or simply old age. Context 127 (ditch **124**) also contained an intact cattle horn core showing evidence of butchery at its base. Metrical analysis suggests it originated from a female animal (Armitage 1982, 40). The presence of dogs on the site is further attested to by the gnawing/digestion patterns seen on a single sheep calcaneus from context 126 (ditch **124**).

The remaining contexts yielded only small amounts of identifiable bone, with 145 (pit/ditch **144**), 311 (ditch **308**) and 443 (pit **444**) containing further butchered cattle and sheep remains. Contexts 36 (pit **33**), ditch **208**, 211 (ditch **210**), 214 (ditch **210**), 219 (ditch **208**), 319 (posthole **320**) and 336 (topsoil) contained 7 fragments of pig remains, with only two radii showing signs of butchery. It is worth noting however, that this is the only element from these contexts that one would normally expect to find any evidence of butchery on. Two mandibular molars from adult horse were recovered from context 335 (ditch **314**).

Evidence of wild taxa from the assemblage was represented by the skull and scapula of a Black-backed gull (*Larus marinus*) from context 39 (pit **33**). No butchery marks were seen on these remains and they most likely represent accidental deposition.

Species	NISP	NISP%	MNI	MNI%
Sheep/Goat (*Ovis/Capra*)	28	48.4	5	20.7
Cattle (*Bos*)	18	31	9	37.5
Pig (*Sus scrofa*)	7	12	7	29.2
Horse (*Equus caballus*)	2	3.4	1	4.2
Black-backed gull (*Larus marinus*)	2	3.4	1	4.2
Dog (*Canis familiaris*)	1	1.8	1	4.2

Species	NISP	NISP%	MNI	MNI%
Total:	58	100%	24	100%

Table 12: Animal species distribution from hand collected assemblage (identifiable sample)

4 Conclusion

Animal bone survives well within features of all periods on the site. This survival includes small animal bone and fish bones which were recovered from the environmental samples (see Appendix 7 below).

From the hand collected bone, it is likely, given the range of elements, the approximate ages of the individuals and the pattern of butchery, that the assemblage represents small-scale domestic waste, with animals being raised to physical maturity before slaughter to maximise meat yield and other secondary products. However, given the sample size few definite conclusions can be drawn.

5 Recommendations

An excavation on the site will produce enough data to answer questions such as butchery patterns. The evaluation has shown that there were deposits in both ditches and pits that produced moderate or large quantities of domestic waste. During the excavation such deposits should be targeted with, for example, the whole layer excavated. The evaluation has shown that it is profitable to have an intense soil sampling policy of these domestic deposits with up to 20 or 30 litre samples taken.

The animal bone and fish bone from this evaluation should be included for analysis in any excavation report.

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Dobney, K and Reilly, K., 1988 'A method for recording archaeological animal bones: the use of diagnostic zones' *Circaea* 5(2), 79-96

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Appendix 7: Environmental Remains

by Rachel Fosberry with identifications by Alan Clapham

1 Introduction and Methods

Thirteen 10 litre samples were taken from features within the evaluated areas of the site in order to assess the quality of preservation of plant remains and their potential to provide useful data as part of further archaeological investigations. The plant remains were dominated by the grains of crop plants, namely cereals (hulled barley, wheat and rye) along with legumes (peas and beans). Cereal chaff (culm nodes and rachis internode fragments) and numerous seeds of wild taxa are also present. All of the samples produced a sufficient density of material for further quantitative analysis.

Each sample was processed by bucket flotation for the recovery of charred plant remains, dating evidence and any other artefactual evidence that might be present. The flot was collected in a 0.5mm nylon mesh and the residue was washed through a 1mm sieve. Both flot and residue were allowed to air dry. The dried residue was passed through 5mm and 2mm sieves and a magnet was dragged through each resulting fraction prior to sorting for artefacts. Any artefacts present were noted and reintegrated with the hand-excavated finds. The flot was examined under a binocular microscope at x16 magnification and the presence of any plant remains or other artefacts is noted in Table 12.

Pollen samples were also taken from the moat and assessed for their potential to provide further environmental data (Appendix 9).

2 Results

2.1 *Plant macrofossils* (Table 12)

Cereal grains and seeds of common weeds and wetland plants are present in high densities in most of the samples. Preservation is by charring and is generally good although a proportion of the plant macrofossils, in particular the cereals, were abraded and/or fragmented. Charcoal fragments are present in all of the samples in varying quantities. Mineral replaced seeds occurred as single specimens in one sample only (Sample 3).

2.2 *Wild flora*

Charred seeds of common weeds of crop fields include fat hen (*Chenopodium album*), dock (*Rumex* sp.) vetch/vetchling (*Vicia/Lathyrus* sp.), corncockle (*Agrostemma githago*), cleavers (*Gallium aparine*), stinking mayweed (*Anthemis cotula)* and brassicas (*Brassica* sp.) A large quantity of *Lithospermum arvense* (corn gromwell) seeds were present in Sample 12. Charred seeds of wetland plants occur in most of the assemblages and include sedges (*Carex* sp.), spike-rush (*Eleocharis* sp.), bulrush (*Shoenoplectus lacustris*) duckweed (*Lemna* sp.) and saw sedge (*Cladium mariscus*).

2.3 *Legumes*

Legumes occur in several assemblages. Beans (*Vicia faba*) predominate with peas (*Pisum* sp.) and possibly cultivated vetch (*Vicia* sp.) occurring in smaller quantities.

2.4 *Cereals*

Barley (*Hordeum* sp.), wheat (*Triticum* sp.), rye (*Secale cereale*) and oat (*Avena* sp.) grains were recorded with barley being predominant. Both lax and dense-eared varieties of barley were noted. Cereal chaff rachis fragments of barley and, to a lesser extent, wheat is present in two of the assemblages.

2.5 *Other Finds*

Mussel and cockleshells are common within most of the samples. Fishbone and fish scale were also recorded along with a few fragments of animal bone. Ostracod cases were noted in several of the samples.

2.6 *Industrial activity*

Evidence of industrial activity is found in the residue of Samples 3, 11 and 12 (contexts 126, 447 and 36) in the form of hammerscale. Sample 3 also contains three pieces of metallic slag (up to 4cm). A few flakes of hammerscale are present in the flots of Samples 1,2,3,4 and 8.

3 Discussion and Conclusions

The evaluation samples have produced interesting and informative assemblages. It has been noted by Dr A. Clapham that the assemblages have many similarities with those produced at the Botolph Bridge manorial site, Peterborough (Atkins with Kemp forthcoming). Evidence of agricultural importance at this site is evident in the large quantities and diversity of cereal crops. The reasonably large amounts of legumes suggest that beans and peas were also a cultivated crop. The weed seed /wild plants assemblage mostly seem

to have originated as weeds of crop plants in addition to culinary refuse and possibly domestic waste in the form of roofing/flooring material.

The grains of crop plants, namely cereals, dominate the plant remains recovered from this site. The major crop consumed was barley along with wheat and smaller amounts of rye. The presence of oats may represent another crop or may be a weed of the arable fields. The crops would almost certainly have been grown locally and the presence of stinking mayweed indicates that heavy clay soils were being cultivated in addition to the lighter, sandier soils.

Cereal chaff was noticeably absent from the majority of assemblages although rachis fragments of barley and wheat were present in low quantities in a few samples. This scarcity of chaff elements in the overall plant assemblage is unusual as the presence of grains, chaff and weeds (possibly associated with the cereal crops) is an important indication that crop processing took place on site. The large quantities of segetal seeds indicate that the latter stages of crop processing were performed. The larger seeds of weeds such as corn gromwell and cleavers are the same size as the cereal grains and can only be removed by hand-picking. It is the evidence of the earlier stages of crop processing such as winnowing and threshing that is lacking. It is highly probable that these activities took place at other areas of the site and could probably be revealed by further excavation.

The reasonably large quantities of beans (*Vicia faba*) are significant and indicate that they are an important food resource. Pulses are less likely to be burnt accidentally than grain, as they do not need to be exposed to heat as cereals do, and they are less likely to be recovered from archaeological deposits. The other dietary remains of fragments of animal bone and remains of fish and shell fish along with the charred grain are derived from the deposition of domestic, culinary refuse.

A major component of the plant assemblages was of seeds of typical wetland/fenland plants such as sedges, spike-rush and saw-sedge. These species are considered to be only found in extremely damp or waterlogged environments. The site is known to have been on the fen edge and it is likely that these wetland species were encroaching into the arable fields and were harvested along with the cereal crop. Additionally, sedges make excellent flooring and roofing material and were likely to have been utilised as such.

The presence of flake hammerscale in both flots and residues of some of the samples is indicative of iron smithing in the near vicinity. This has been discussed elsewhere in the report.

In conclusion, from the thirteen samples examined it appears that there is good potential for further archaeobotanical study. If excavation is planned for this evaluated area, additional samples should be taken to

supplement these assemblages as they clearly show that they contain valuable evidence of the utilisation of local plant resources, agricultural activity and economic evidence economy during the Late Saxon/ early medieval period.

4 Recommendations

A comprehensive sampling strategy should be planned to include the following:

- Additional samples of up to 20 litres in volume should be taken from dated features including pits, post-holes and ditches.

A specific sampling strategy should be employed to recover evidence of industrial activity. All samples should be checked with a magnet for evidence of metalworking. The northern area of the site has been highlighted as an area of metalworking activity with the high possibility of a smithy structure. Any postholes from this area should be 100% sampled and processed using fine meshes of 0.5mm for the residue and 0.3mm for the flot. If a structure were identified with a remaining floor surface, a grid-sampling strategy would be essential.

Bibliography

Atkins, R., with Kemp, S.,	Forthcoming	*Rise and Fall of a Late Saxon village and medieval manor: excavations at Botolph Bridge, Peterborough 1987 and 1999/2000* EAA Monograph

Sample No.	Context No.	Cut No.	Feature Type	Flot Volume (ml)	Cereals	Chaff	Legumes	Weed Seeds	Hammerscale	Charcoal <2mm	Charcoal > 2mm	Residue Volume (ml)	Small animal bones	Large animal bones	Fishbone	Shell	Pottery	Fired Clay/CBM	Slag	Magnetic residues
1	311	308	ditch	5	+++	0	0	++	+	++	+	30	0	0	0	+	0	0	0	0
2	313	332	ditch	20	+++	0	+	+++	+	++	+	50	0	0	+	+	0	+	0	0
3	126	124	ditch	45	+++	+	+	+++	+	++	++	600	0	+	+	+++	+	+	+	++
4	127	124	ditch	5	+++	0	0	++	+	++	+	40	0	+	++	+	+	0	0	0
5	219	208	ditch	1	+	0	+	+		+	0	30	++	0	+	+	+	0	0	0
6	223	222	pit	1	+	0	0	+		+	0	100	0	0	0	0	+	0	0	0
7	19	21	Post/ hole	5	++	0	++	++	+	++	+	20	0	+	+	+	0	0	0	0
8	446	431	ditch	5	++	0	+	++		++	+	400	0	+	0	0	0	+++	0	0
9	142	141	ditch	1	++	0	0	+		+	0	150	0	0	0	0	0	0	0	0
10	230	228	ditch	50	+++	0	+	++		++	+	700	0	0	0	+	0	+++	0	0
11	447	448	ditch	25	++	+	+	+++		+	+	150	0	0	+	+	0	++	0	+
12	36	33	pit	85	+++	+	+	+++		++	++	400	0	0	+	+	0	0	0	+
13	159	155	ditch	25	+++	0	+	++		++	+	150	0	0	0	+	+	0	0	0

Table 13: Environmental samples

Key to Table

+ = 1 – 10 specimens ++ = 10 – 100 specimens +++ = 100+

Appendix 8: Molluscs

by Helen Stocks

1 The Assemblage

An assemblage of 83 shells was retrieved by hand from twenty-two different Late Saxon and medieval features (Table 13), but more than two-thirds of these shells were recovered from only four contexts, giving the data a bias. Shells recovered from environmental samples have not been included but the quantities are presented in Table 13 (Appendix 7).

The assemblage comprised four oyster valves (*Ostrea Edulis*), 21 cockles (*Cerastoderma*) and more than 58 mussels (*Mytilus Edulis*). Shell size varied to some extent and although only a few were very young or old, most were adult. The former were presumably picked up in error when harvested. The molluscs may have been collected from the sheltered inlets/bays along the coast. The good condition of the shells implies they were deposited soon after eating.

This is a significant assemblage for a rural site, which suggests that molluscs contributed to the diet in the Late Saxon and medieval period as they were largely retrieved from contexts associated with domestic refuse.

Context	No. of Oysters	No. of Cockles	No of Mussels	Total
4	1	-	-	1
36	-	1	-	1
103	-	-	1	1
119	-	-	1	1
126	1	-	12	13
127	-	1	24	25
140	-	1	-	1
159	-	-	1	1
214	1	1	1	3
215	-	4	-	4
216	-	1	-	1
218	-	1	-	1
229	-	-	8	8
311	-	5	3	8
313	-	1	-	1
319	1	-	-	1
413	-	1	-	1
429	-	1	3	4
432	-	-	1	1
439	-	-	2	2
443	-	2	-	2

445	-	1	-	1
447	-	-	1	1
Total	4	21	58	83

Table 14: Molluscs by context and type

2 Recommendations

The quantities of molluscs found in the evaluation are significant and they should be included with any recovered in the excavation and reported on by a mollusc specialist. Similar evidence has recently been found at a former Late Saxon village and manorial site from Botolph Bridge, Peterborough (Light forthcoming).

Bibliography

Light, J., Forthcoming 'The marine shells' in Atkins, R., with Kemp, S., *Rise and Fall of a Late Saxon village and medieval manor: excavations at Botolph Bridge, Peterborough 1987 and 1999/2000 EAA* Monograph

Appendix 9: The Pollen

by Dr Steve Boreham

1 Introduction

This report presents the results of pollen analysis from five samples of sediment from a Late Saxon/Medieval moat or enclosure ditch sequence at Kirton, Lincolnshire.

The sediments filling a c.6m wide enclosure ditch around a medieval manor were investigated by a hand-augered borehole drilled down to a depth of more than 3m. Samples for pollen analysis were taken at 0.7m, 1.8m, 2.4m, 3.0m and '3.0m+'. The five samples were prepared using the standard hydrofluoric acid technique, and counted for pollen using a high-power stereo microscope. A single slide of the residue from each pollen sample was made, and on each slide 400 fields of view were scanned for palynomorphs at x400 magnification.

2 Pollen Analyses

The somewhat unexpected result of these pollen analyses is that each slide from the Kirton moat borehole was entirely barren of pollen. The exotic spike of *Lycopodium clavatum* spores added to the preparation, proves that the pollen was not lost during the preparation process. It also allows the calculation of the maximum concentration of pollen in the sediments, which if present must be well below c.250 grains per cm3 of sediment. It is extremely unusual to find apparently promising and somewhat organic or silty sediments, which do not contain any palynomorphs at all. Usually, the first sign of oxidation and the action of soil processes is that certain resistant pollen and spores become over-represented in the pollen signal. More severe oxidation results in a severe reduction in the concentration of pollen and the number of taxa present, so that only a few resistant types remain. Often the proportion of unidentifiable indeterminate (corroded and degraded) pollen grains becomes rather high in these oxidised sediments, as the structure and surface features of the pollen grains are eaten away. Only extremely severe oxidation, usually attributable to seasonal sub-aerial wetting and drying cycles and vigorous microbial activity can destroy the most resistant pollen grains and render the sediment barren of palynomorphs. The pollen preparations did contain some indeterminate algal debris, and in some cases micro-charcoal.

3 Conclusions

The principal conclusion of this report is that the Kirton moat sediments were deposited in an environment that frequently dried out allowing intensive oxidative decay of fine-grained organic material including pollen. It is unusual to find a 3m sequence of sediment deposited in this way, since oxidation often holds the sequence in depositional stasis or causes its demise. The preservation potential for other organic material in this sediment is consequently not likely to be very high.

Appendix 10: Evaluation Phase 2

by Spencer Cooper with Mo Muldowney

1 Introduction

Between 21st and 26th June 2007, Cambridgeshire County Council's CAM ARC (formerly Archaeological Field Unit) undertook Phase 2 of the archaeological evaluation on land to the south of Princess Road, Kirton. This work was carried out in accordance with a Specification prepared by Jacobs UK (formerly known as Jacobs Babtie), dated May 2006 (Jacobs UK 2006), and followed an evaluation (Phase 1) (Atkins 2006) and excavation (Muldowney 2007), which uncovered settlement remains dating to the Saxon and early-medieval period.

Prior to the evaluation stage, a Desk-based Assessment of the site was produced by Jacobs UK as part of an environmental statement (Jacobs UK 2006) and a fluxgate gradiometer survey was conducted over the development area (Bunn 2006). The Desk-based Assessment showed that four archaeologically sensitive remains once stood near Phase 2 (Table 14).

Site number	Grid reference	Site Name	Form	Condition
12	TF 30610 37700	Milepost	Signpost	Destroyed
13	TF 30690 37830	Kirton Level Crossing Gatehouse	Building	Destroyed
15	TF 30690 37830	Kirton Drain	Building	Destroyed
16	TF 30690 37830	Level Crossing Keeper's Cottage, Brainside Road	Building	Destroyed

Table 15: Archaeological remains adjacent to the Phase 2 evaluation area (taken from Appendix 13-1, Jacobs UK 2006)

The fluxgate gradiometer survey results for the Phase 2 area (Fig. 3, B0132600, Jacobs UK 2005) show a series of linear and curvilinear anomalies, some of which may be ridge and furrow, whilst others appear to be modern field boundaries or field drains. The curvilinear anomalies are most likely to correspond with geological features.

2 Methodology

Machine excavation was carried out under constant archaeological supervision with a tracked 360 excavator using a toothless ditching bucket, operating under the direct and continuous supervision of an experienced member of CAM ARC's staff.

Topsoil and subsoil (where encountered) were stored separately and stocked in bunds adjacent to the excavated area. The excavation of overburden ceased when the first archaeological horizon was encountered.

All archaeological features and deposits were recorded using CAM ARC's *pro-forma* sheets. Trench locations, plans and sections were recorded at appropriate scales and colour and monochrome photographs were taken of all relevant features and deposits.

No human remains were encountered.

The excavated area was survey using a Total Station Theodolite and tied into the Ordnance Survey National grid and Ordnance Datum.

Weather conditions were poor for the time of year. Observations were partially hampered by rainfall and groundwater.

3 Results

This section refers to the Phase 2 evaluation trenches only, as explained in the 'Summary' (above). The results of Phase 1 are presented in the main part of this document.

Twelve trenches were excavated across the development area (Fig. 8). The overburden consisted of dark grey silty clay topsoil which was 0.30–0.50m and in places overlay a light brown silty sand subsoil.

Trench 35

Trench 35 was located on a north-west- to south-east alignment in the north-western part of the development area. It measured 40m long 2.10m wide and 0.45m deep. No archaeological features were uncovered in this trench. Observations were obscured by ground water.

Trench 36

Trench 36 was located on a north-east- to south-west alignment in the north-eastern part of the development area. It measured 40m long 2.10m wide and 0.55m deep. No archaeological features were observed in this trench. Observations were obscured by ground water.

Trench 37

Trench 37 was located on a north to south alignment in the western part of the development area. It measured 40m long 2.10m wide and 0.40m deep. No archaeological features were observed in this trench. Observations were obscured by ground water.

Trench 38

Trench 38 was located on a north to south-west alignment in the northern part of the development area. It measured 40m long, 2.10m wide and 0.50m deep. No archaeological features were encountered in this trench. Observations were obscured by ground water.

Trench 39

Trench 39 was not excavated due to the proximity of overhead electricity cables.

Trench 40

Trench 40 was located on a north-west to south-east alignment in the southern part of the development area. It measured 40m long, 2.10m wide and 0.38m deep. No archaeological features were recorded in this trench. The only feature encountered was a possible furrow. Observations were obscured by ground water.

Trench 41

Trench 41 was located on a north-west to south-east alignment in the eastern part of the development area. It measured 40m long 2.10m wide and 0.60 m deep. No archaeological features were uncovered in this trench. In the northern part of the trench two field drains and two animal burrows were encountered. Observations were obscured by ground water.

Trench 42

Trench 42 was located on a north to south alignment in the southern part of the development area. It measured 40m long 2.10m wide and 0.53m deep. No archaeological features were observed in this trench. Observations were obscured by ground water.

Trench 43

Trench 43 was located on a north-west to south-east alignment in the southern part of the development area. It measured 40m long 2.10m wide and 0.38m deep. No archaeological features were uncovered in this trench. Observations were obscured by ground water.

Trench 44

Trench 44 was located on an east-west alignment in the southern part of the development area. It measured 40m long 2.10m wide and 0.51m deep. No archaeological features were observed in this trench. Observations were obscured by ground water.

Trench 45

Trench 45 was located on a north-west to south-east alignment in the southern part of the development area. It measured 40m long 2.10m wide and 0.50m deep. No archaeological features were uncovered in this trench. Observations were obscured by ground water.

Trench 46

Trench 46 was located on a north-west to south-east alignment in the southern part of the development area. It measured 40m long 2.10m wide and 0.30 m deep. No archaeological features were observed in this trench. Observations were obscured by ground water.

Trench 47

Trench 46 was located on a north to south alignment in the southern part of the development area. It measured 40m long 2.10m wide and 0.30 m deep. No archaeological features were observed in this trench. Observations were obscured by ground water.

4 Discussion

Phase 2 of the evaluation has made a limited contribution to the understanding of the landscape of Late Saxon and medieval Kirton, despite the results of the gradiometer survey, which showed good potential for finding archaeological remains.

The absence of features within the Phase 2 evaluation area corresponds with the results from the southern half of the Phase 1 area (Atkins 2006), which contained few archaeological features. This corroborates the statement made previously concerning the general diminishing frequency of features progressing southwards from the Wash Road boundary.

The area covered by Phase 2 was clearly not part of the settlement of Kirton and was, in all likelihood, given over to agricultural practices, or subject to regular inundations, which rendered it unsuitable for settlement or domestic occupation of any kind.

Drawing Conventions

Figure 1: Drawing conventions

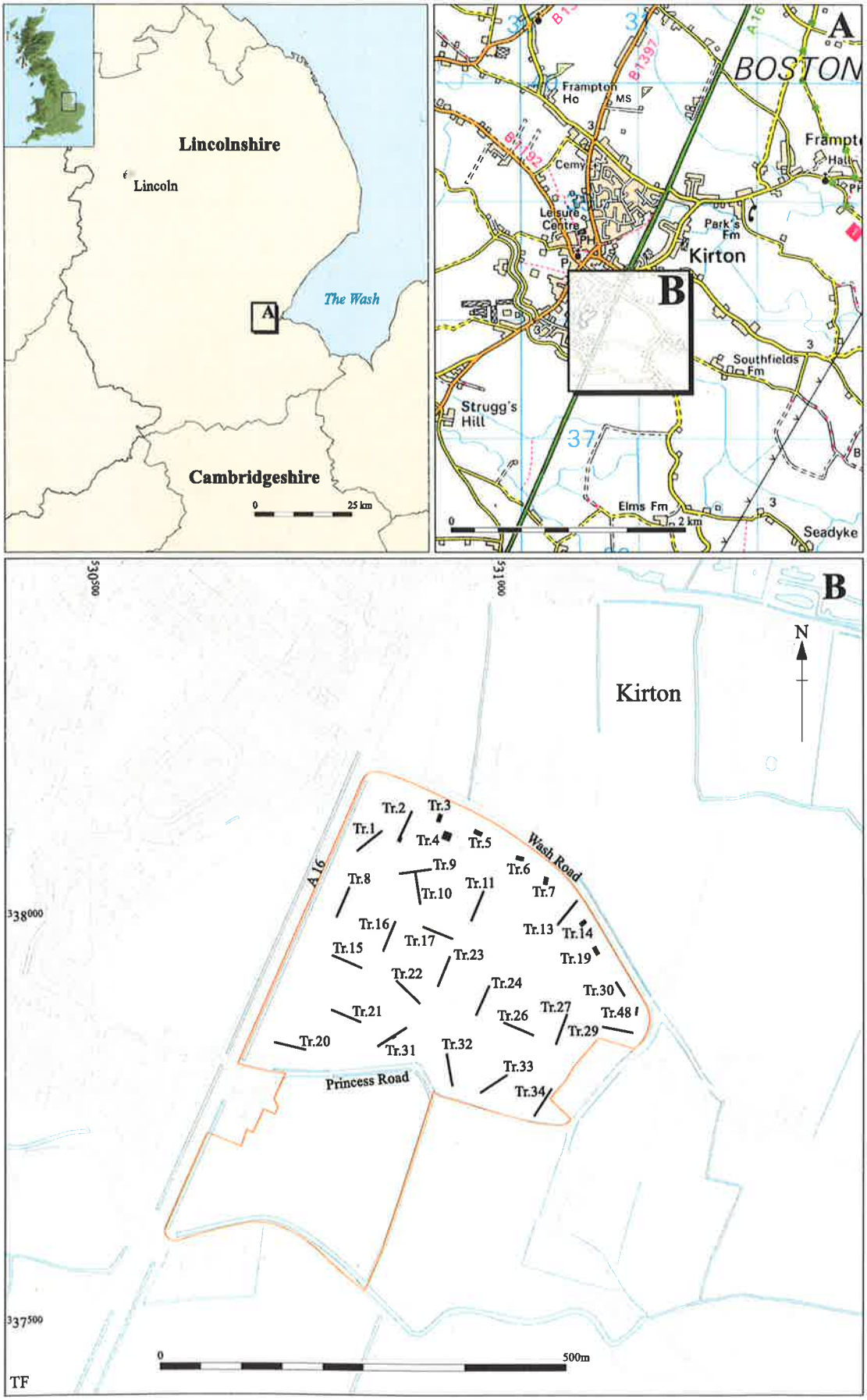


Figure 2: Location of Phase 1 trenches (black) with the development area outlined (red)

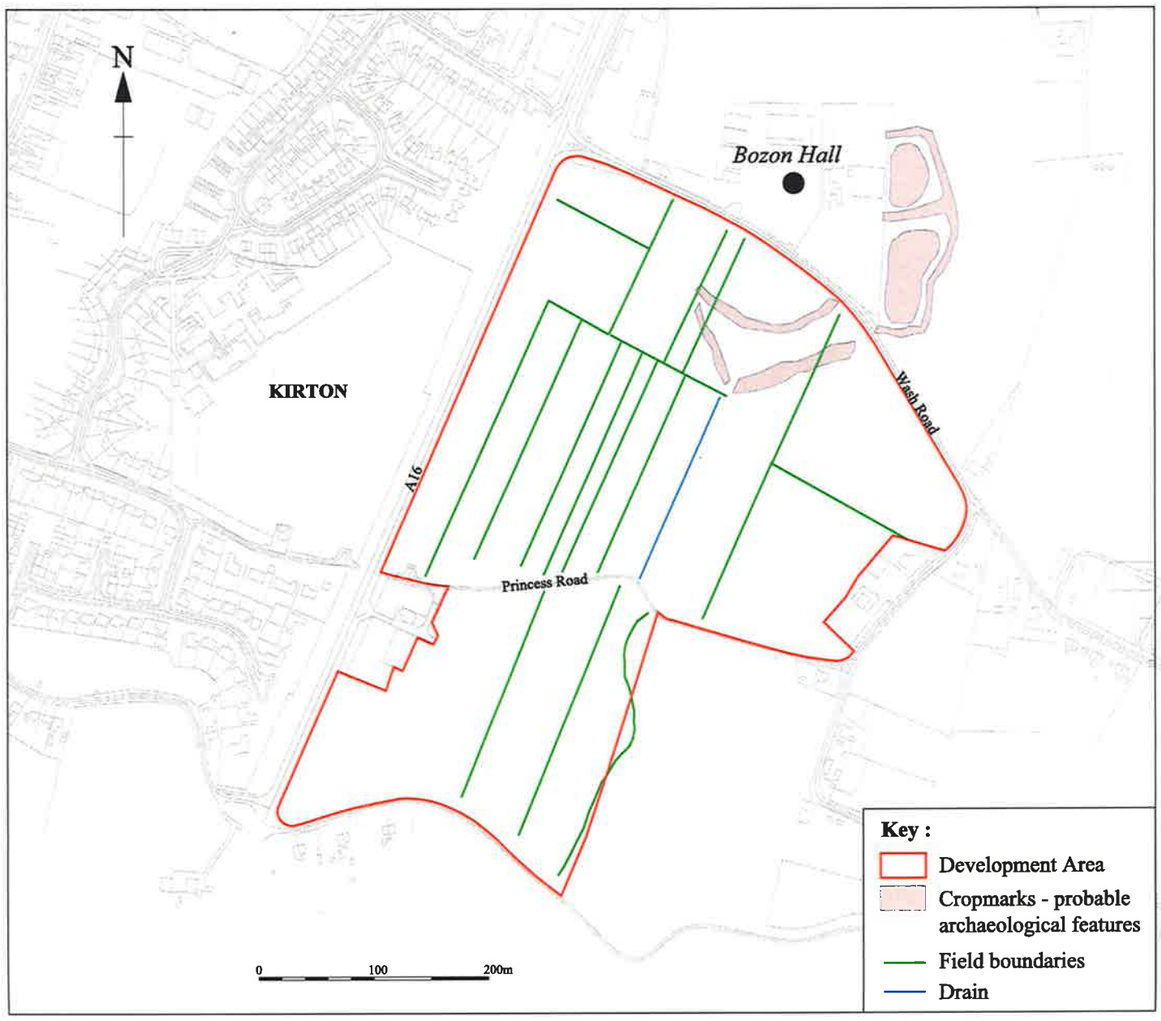


Figure 3: Cropmarks (after Jacobs Babtie 2005 Fig 13.2 with minor changes)

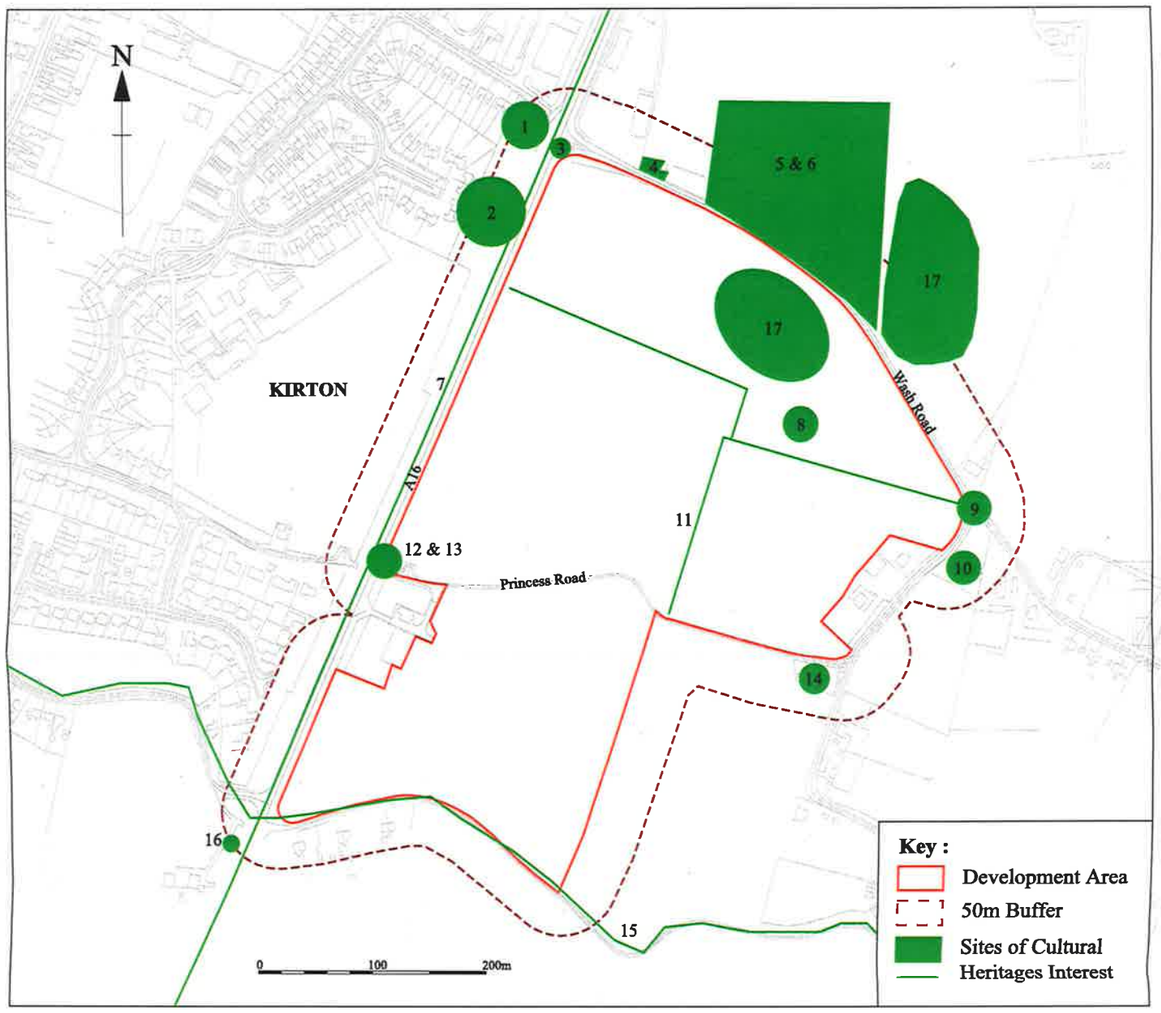


Figure 4: Sites of Cultural Heritage interest (after Jacobs Babtie 2005 Fig 13.1 with minor changes)

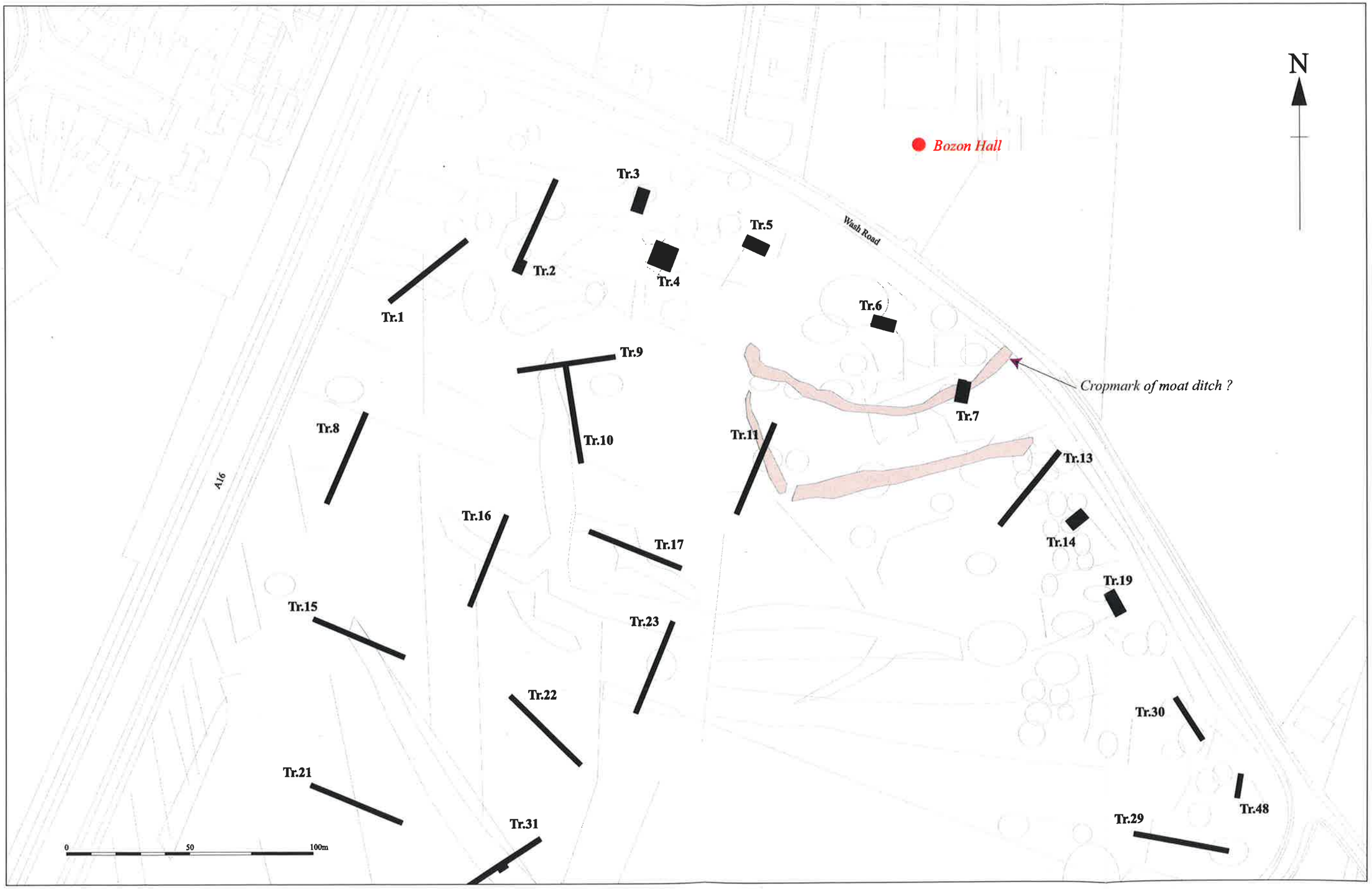


Figure 5: Trenches in the nothern part of the site overlying geophysics and cropmarks of moated ditch, with location of the former Bozon Hall manor house

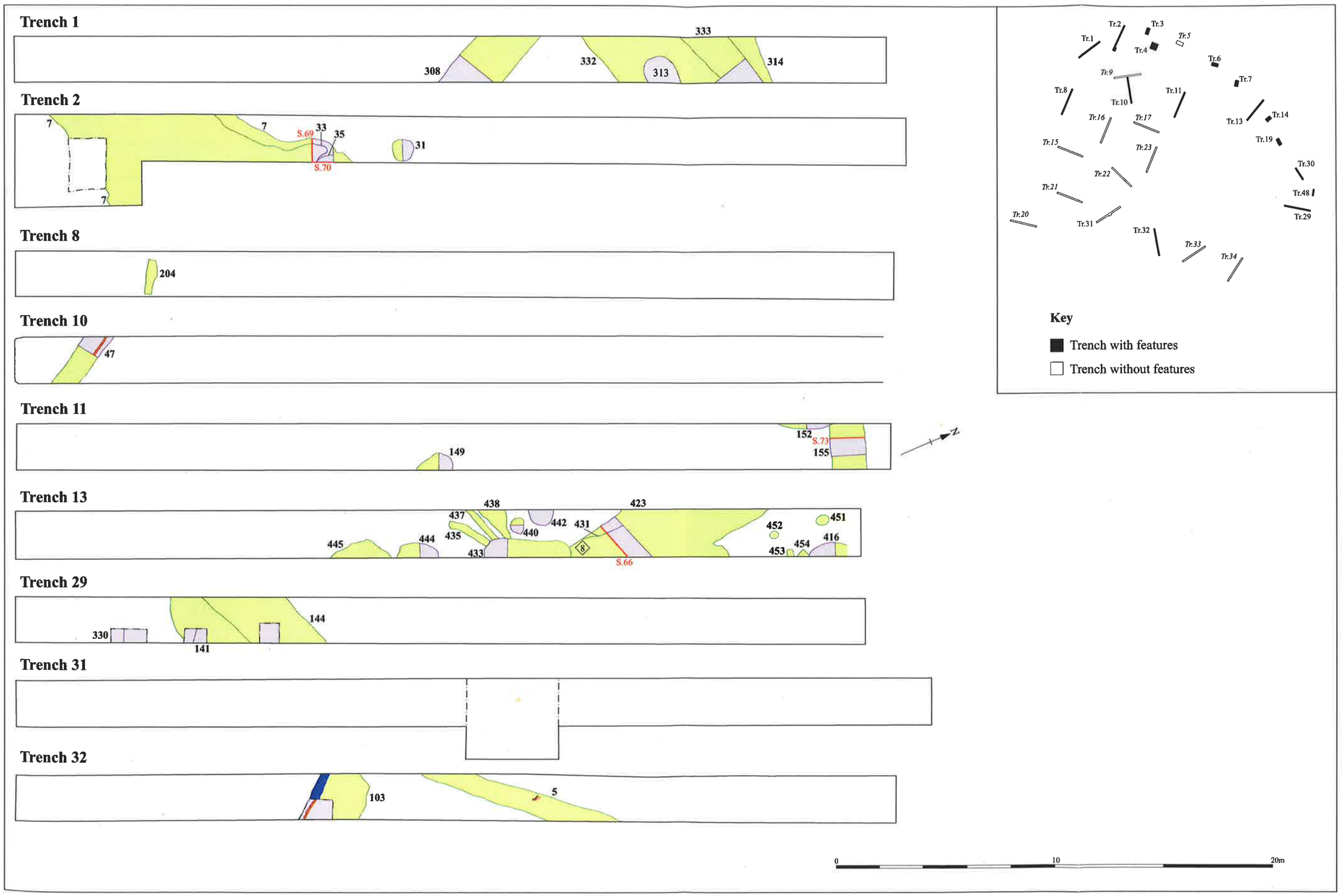


Figure 6: Trench plans

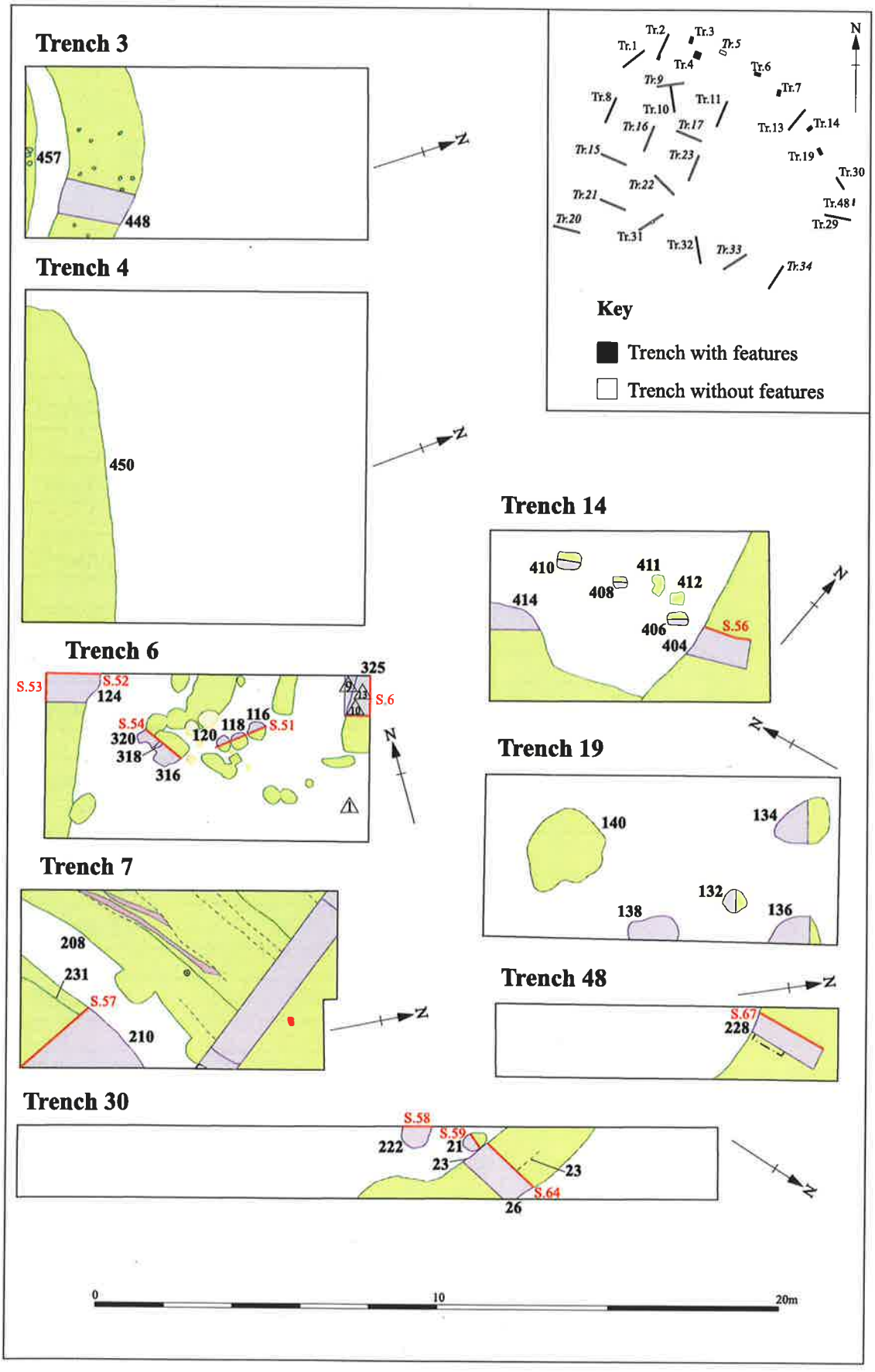


Figure 7: Trench plans

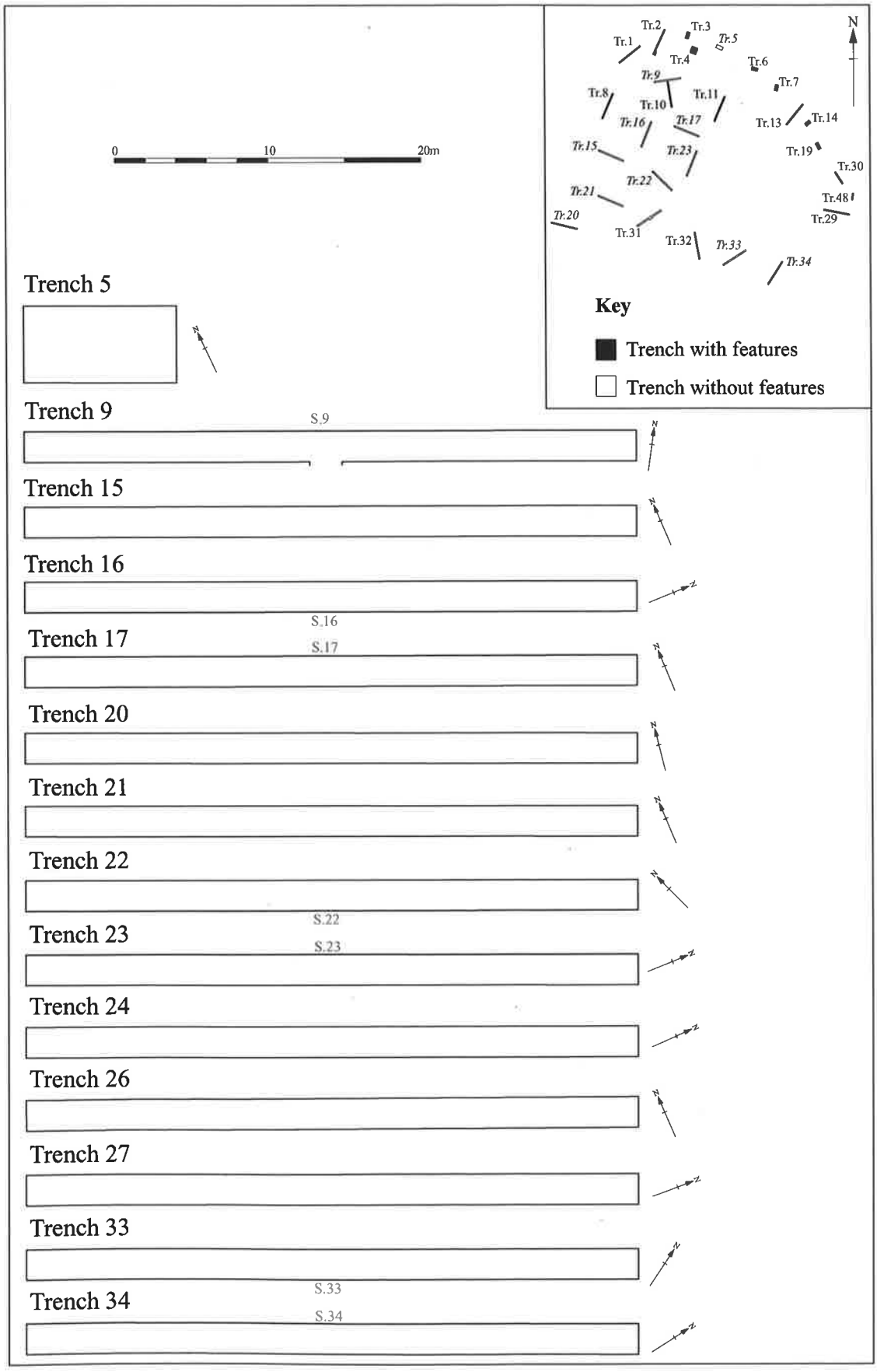


Figure 8: Blank trench plans

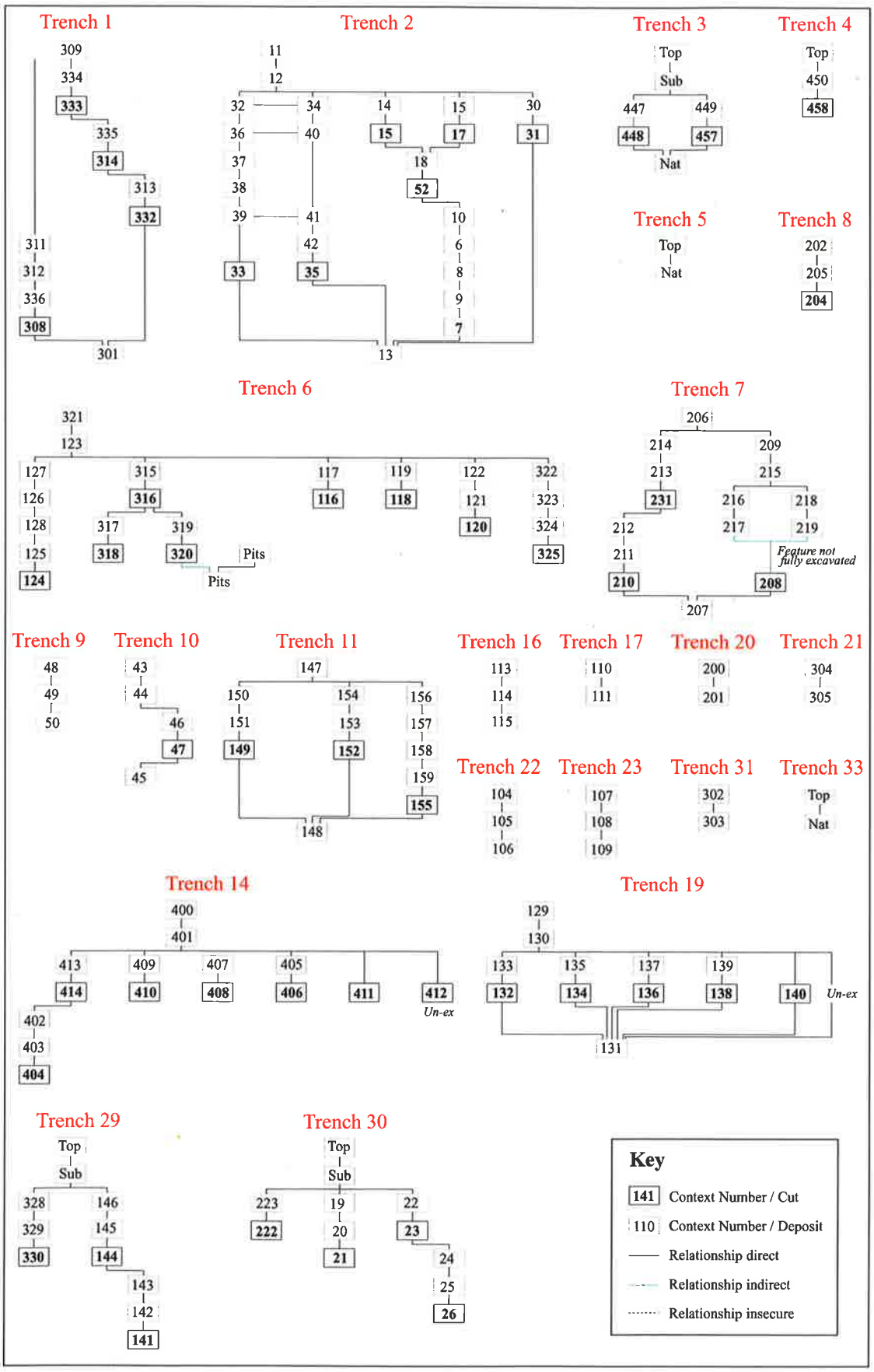


Figure 9: Matrix of the evaluation trenches

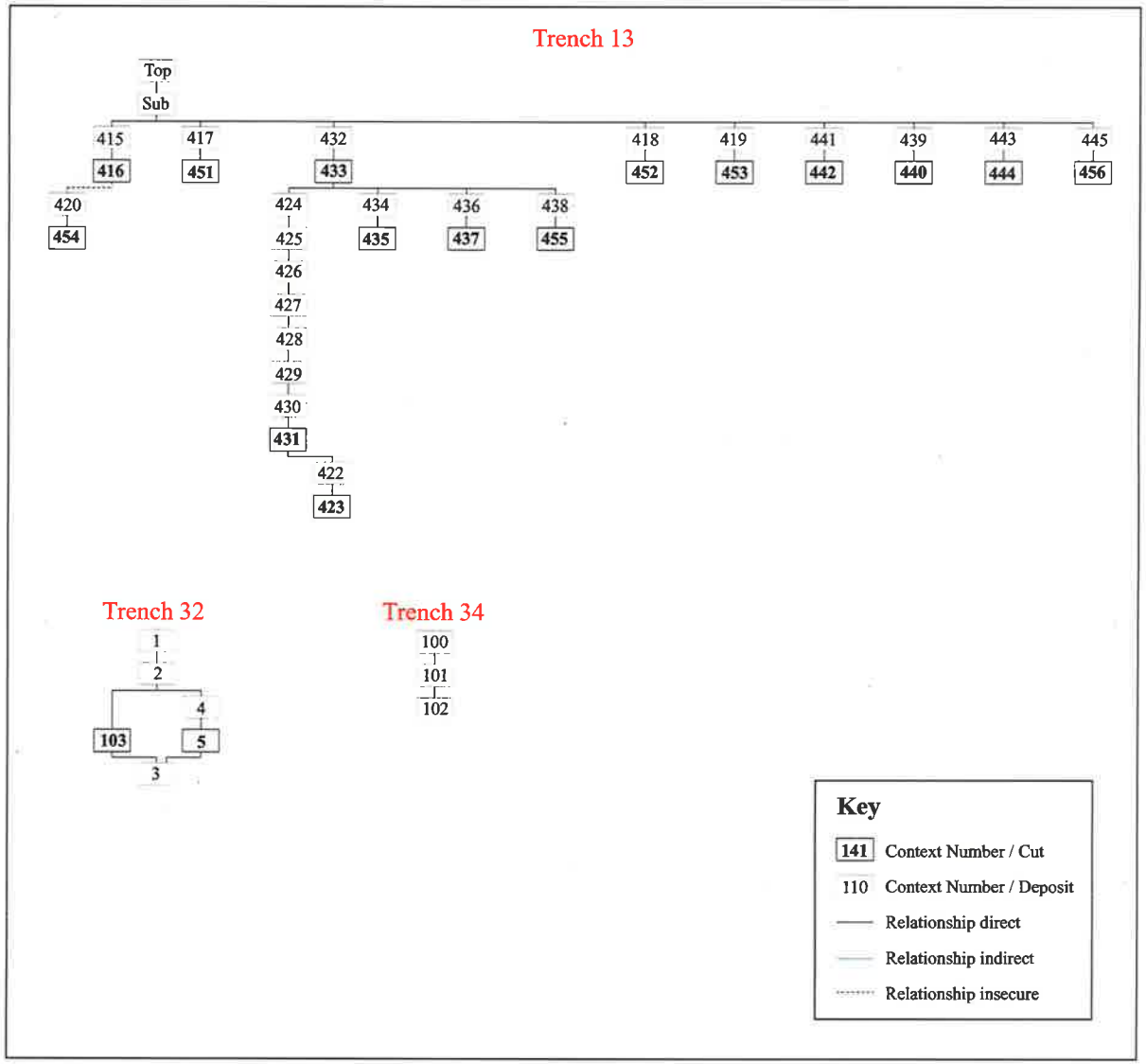


Figure 10: Matrix of the evaluation trenches

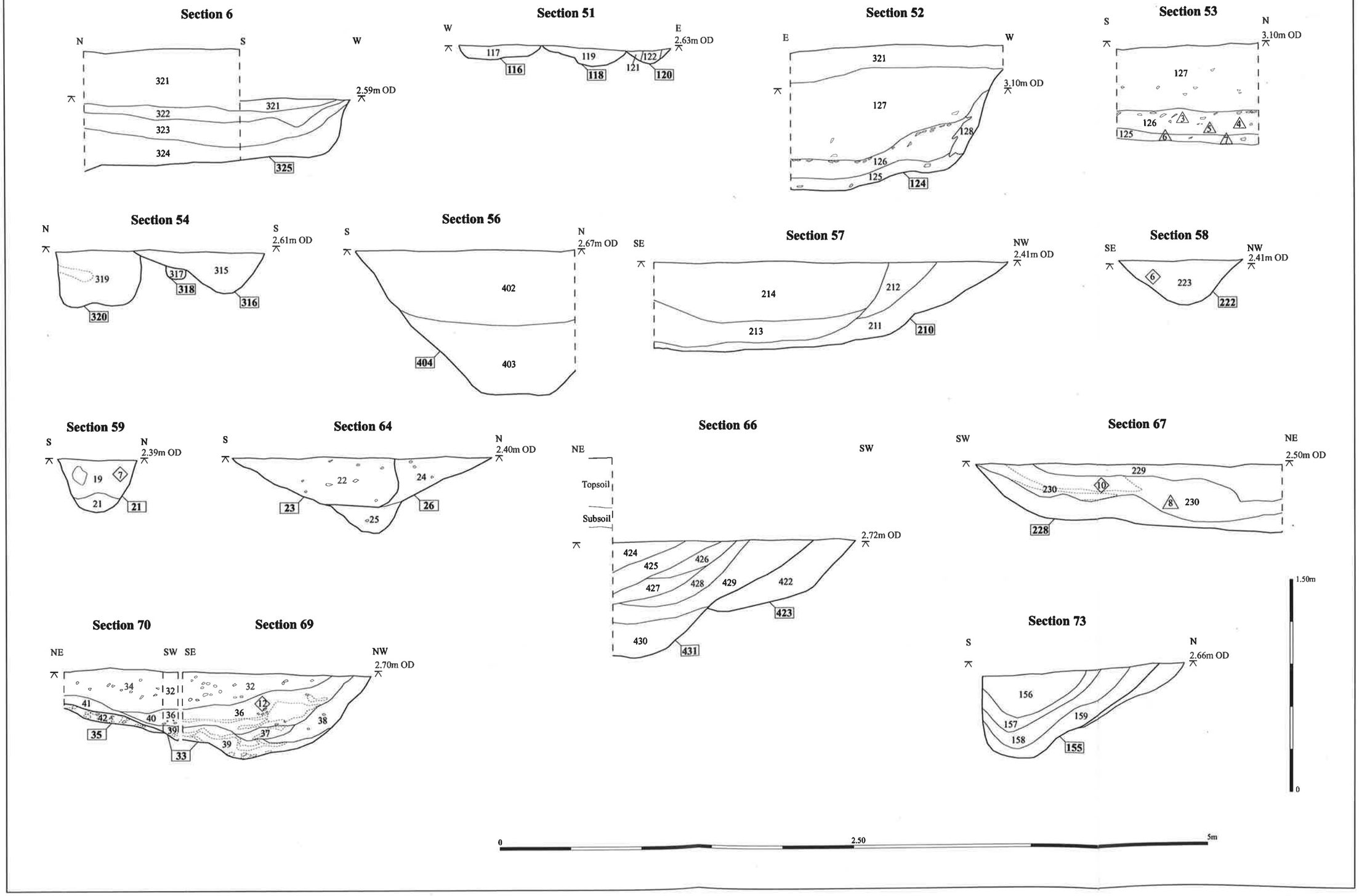


Figure 11: Section drawings

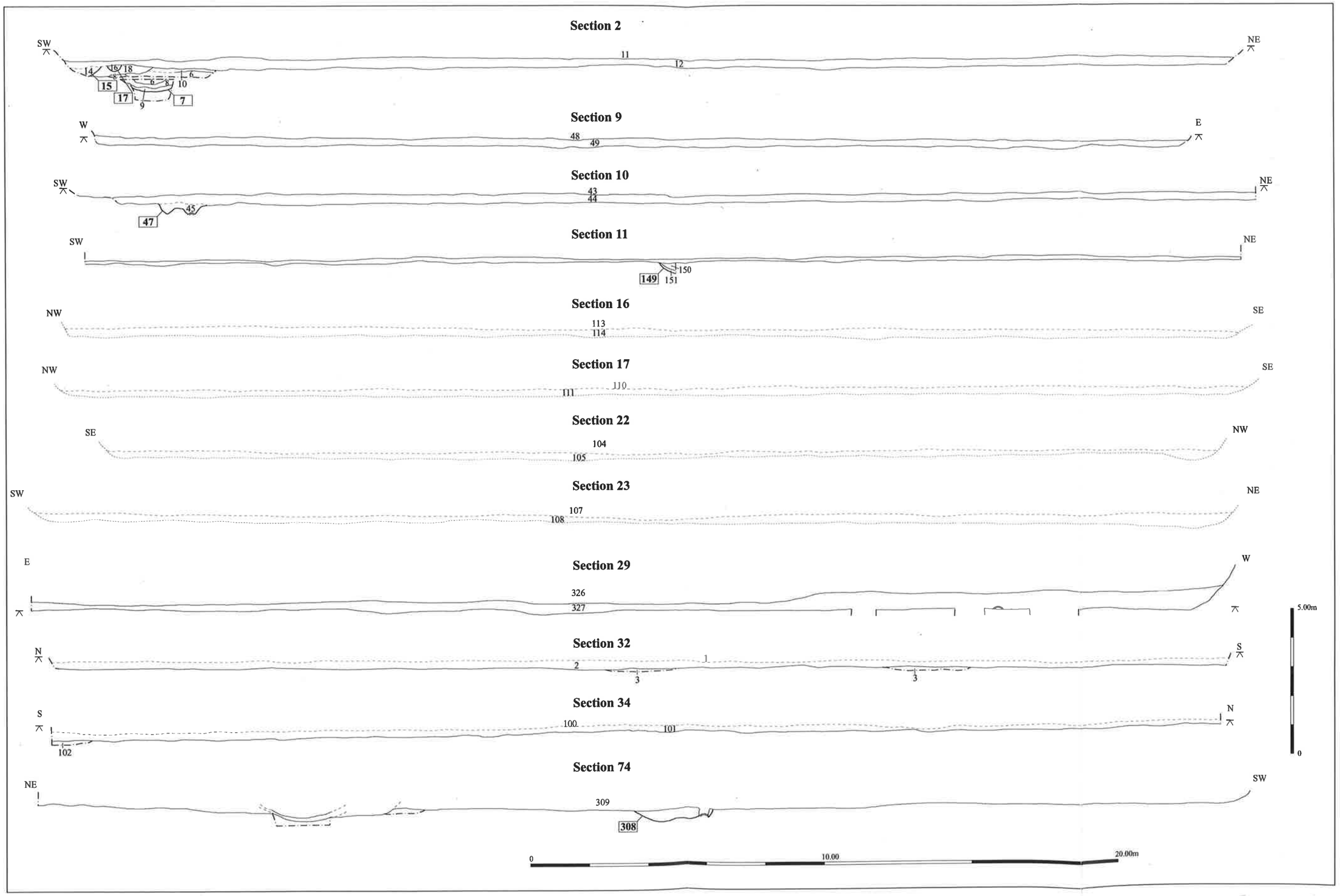


Figure 12: Section drawings

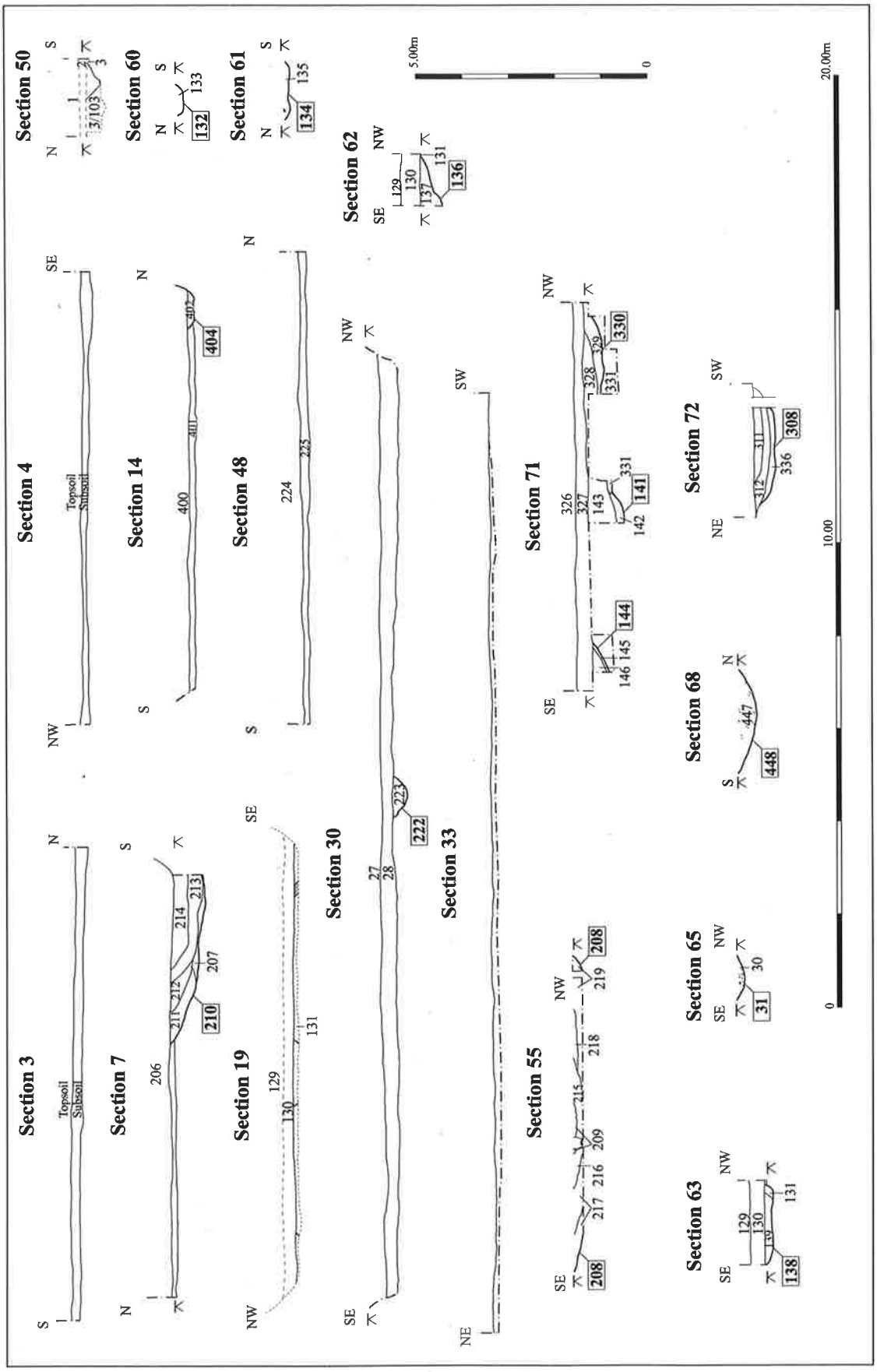


Figure 13: Section drawings

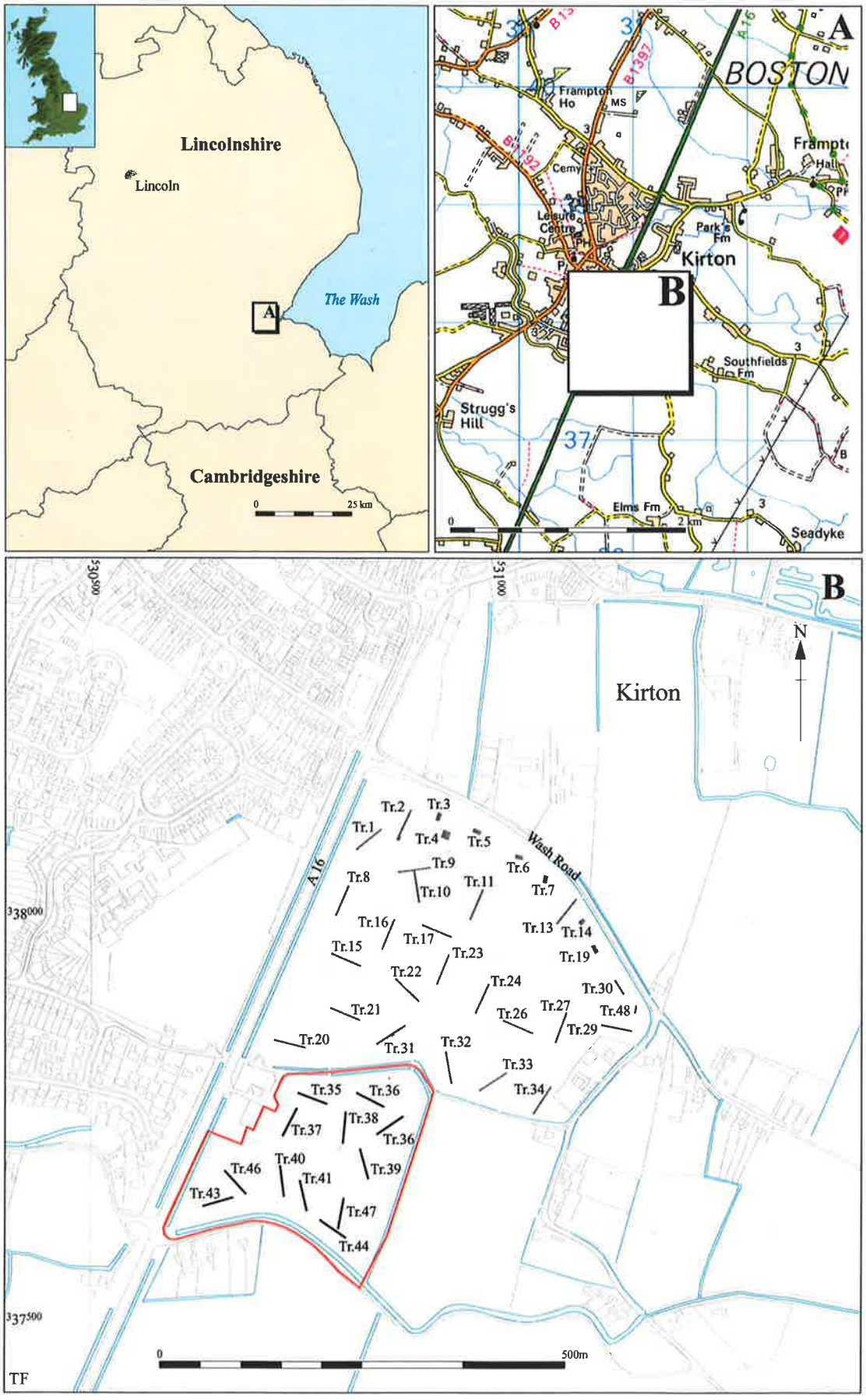


Figure 13: Location of Phase 2 trenches (black) with the development area outlined (red)

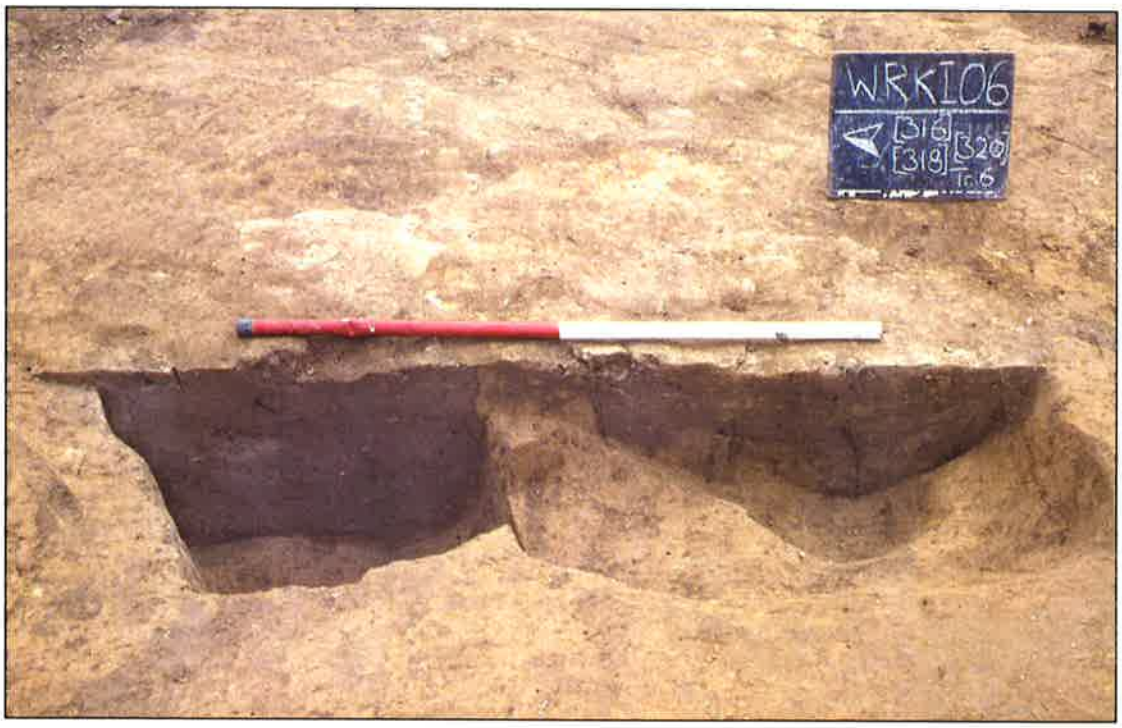
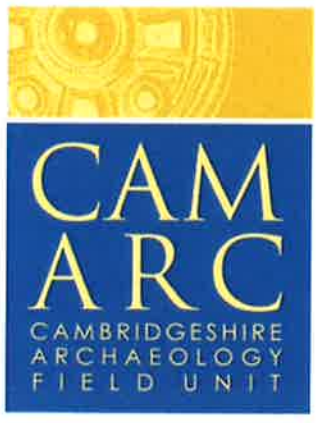


*Plate 1: Phase 3/4 postholes **316**; **318** and **320**, Trench 6*

*Plate 2: Late Saxon ditch **124**, Trench 6*

*Plate 3: Trench 7; possible moat ditch **208** and parallel ditches **210** and **231** in background*



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