

96/3

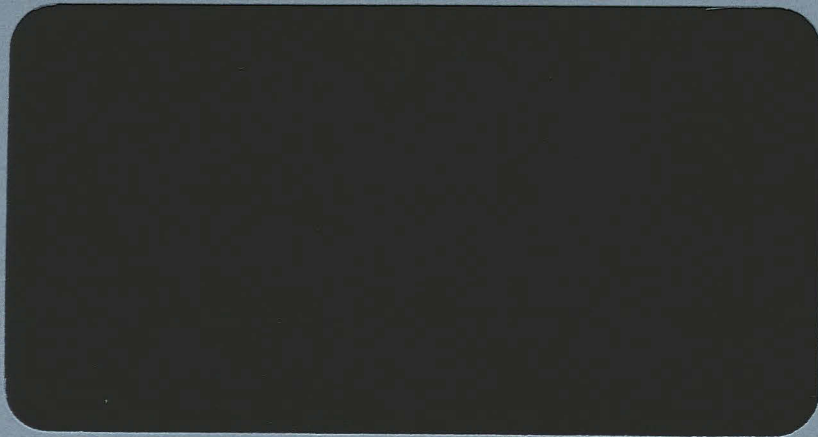
9613

FIELD EVALUATION REPORT

WASH ROAD, KIRTON, BOSTON

LCCM Accession No.: 27.96

Lincolnshire County Council
Archaeology Section
12 Friars Lane
LINCOLN LN2 5AL
TEL: 01522 530724 FAX: 0522 530724
12396



Event LI 4907
Saved LI 1988
LI 1758
Mon 13394 13395

9613

FIELD EVALUATION REPORT

WASH ROAD, KIRTON, BOSTON

LCCM Accession No.: 27.96

WASH ROAD, KIRTON
AN ARCHAEOLOGICAL EVALUATION REPORT
FOR
DAVID O'CONNOR AND ASSOCIATES

BY
COLIN PALMER-BROWN

PRE-CONSTRUCT ARCHAEOLOGY (Lincoln)
DRAYTON HOUSE COTTAGE
59 HIGH STREET
EAGLE
LINCOLN
LN6 9DG

PHONE & FAX 01522 868953

MARCH 1996

CONTENTS

1.0	Non-Technical Summary	1
2.0	Introduction	1
3.0	Planning background	1
4.0	Geology and topography	4
5.0	Archaeological potential	4
6.0	Aims	4
7.0	Methodology	4
	7.1 Evaluation trenching	4
8.0	Results	5
	8.1.1 Trench 1	5
	8.1.2 Trench 2	7
	8.1.3 Trench 3	8
	8.1.4 Trench 4	10
	8.2 Environmental potential	12
9.0	Conclusions and discussion	12
10.0	Acknowledgements	13
11.0	References	13
12.0	Appendices	14
	12.1 Post-medieval pottery assessment and archive	
	12.2 Colour photographs	
	12.3 Project specification	
	12.4 List of contexts	
	12.5 Site archive	

1.0 Non-technical summary

David O'Connor and Associates propose to construct a steel-framed cold storage unit and office on land north of Wash Road, Kirton, Boston (Fig.'s 1 and 2). Combined desk top and geophysical survey reports suggested the site was of moderately high archaeological potential (Palmer-Brown 1996; Lyall 1996).

This report follows a five day trenching programme, which was designed to assess the impacts to archaeological resources which could take place as a result of construction procedures. Four trenches were excavated within the areas of proposed development to sample magnetic anomalies identified by the geophysics, and to assess areas which appeared to be archaeologically sterile or which had not been assessed by non-intrusive survey techniques.

The evaluation has confirmed that the site occupies the west side of the moated enclosure associated with Bozon Hall, which, in 1377, was the property of Thomas de Branstaun (Pink 1990). It has also demonstrated that effects from development will be minimal, provided that the client is able to re-establish the position of the proposed office.

2.0 Introduction

An intrusive archaeological field evaluation took place between Monday, February 26th and Friday, March 1st, 1996 on the site of a proposed commercial development. The works were commissioned by Mr D O'Connor of David O'Connor and Associates and followed a combined desk-top and geophysical survey report.

The non-intrusive reports concluded that the archaeological site potential was moderately high. The conclusions were based on historical and cartographic data and on the geophysics.

Two geophysical survey techniques (magnetometry and resistivity) were applied to the east side of the site (approximately 0.5 hectares), though only one technique, magnetometry, was productive due to a high incidence of surface water which had a bleaching effect on the resistivity. Significant magnetic anomalies were identified on the south side of the survey; two of which lay within a zone designated for office construction.

The Community Archaeologist for Boston, using the results of the non-intrusive assessments and surveys, issued a requirement for strategic archaeological trenching, to involve the excavation of five trenches, within and outside of the impact areas. However, following subsequent consultations with the client, it was agreed that the number of trenches should be reduced to four, with these being sited exclusively over potential development zones.

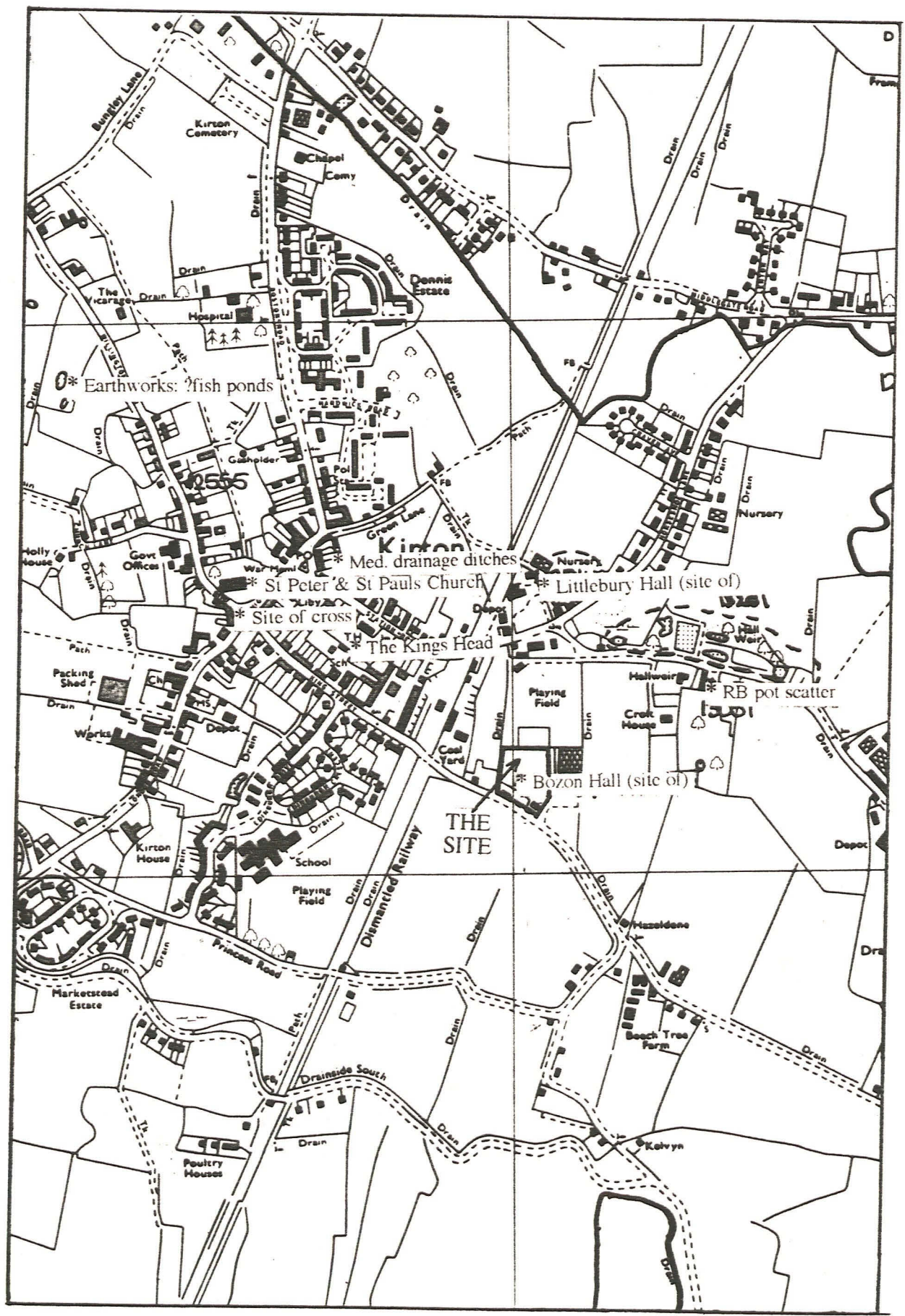
An assessment of the material remains exposed within the evaluation trenches is presented below and is supported with specialist assessment reports. On the basis of this information, it has been variously concluded that the overall archaeological potential of the site is high. However, in most areas impacts from development will be minimal, provided that the client is willing to relocate one of the proposed buildings.

The site central national grid reference is TF 3100 3817.

3.0 Planning background

Planning permission has been granted in outline only for the erection of a steel-framed cold storage unit, an office and associated infrastructure (reference B14/0603/95).

Fig. 1 1:10,000 site location, incorporating extracts from the Sites and Monuments Record and records held by the Boston Community Archaeologist



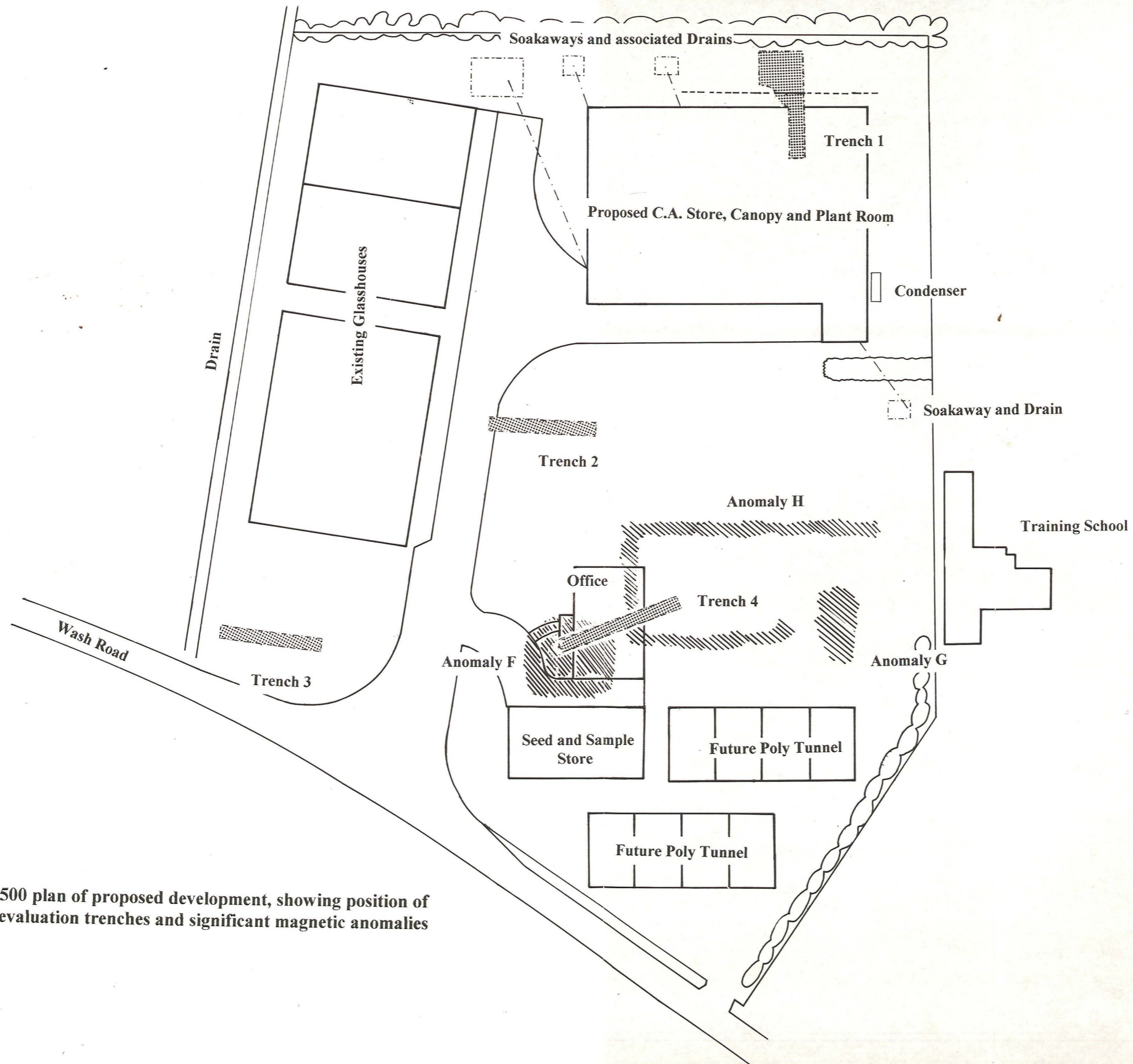


Fig. 2: 1:500 plan of proposed development, showing position of evaluation trenches and significant magnetic anomalies

4.0 Geology and topography

The geology which underlies Kirton is dominated by the Snargate Series: coarse silty gleyic brown alluvial soils (Robson 1990).

The site is covered with 30 - 35cm of humic silty clay topsoil. This overlies natural strata of silt and silty clay; deposits associated with seasonal flooding in a fen environment. It is into these deposits that archaeological features have been cut.

The modern ground surface lies at a point approximately 3.4m OD.

5.0 Archaeological potential

The archaeological and historical significance attached to the proposed scheme was established and described in the preceding desk top/geophysical survey report and is only summarised below.

The site lies within the moated enclosure of Bozon Hall which, in 1377, was in the ownership of Thomas de Branstaun (Pink 1990). There are no documentary records which identify a date for the foundation of the moated complex.

The second edition Ordnance Survey map (surveyed 1887; revised 1903) identifies a building as Bozon Hall, as well as buildings and other features extending westwards from it. The map also identifies a moat on the north side of the site.

In 1977, a large building called Bozon Hall was sadly demolished. This structure, which was probably post-medieval in date, was on the site of the former medieval hall.

The magnetometer survey identified an anomaly which appeared to extend westwards from the site of the former Bozon Hall. The west edge of this anomaly, which now appears to equate with features depicted on the Ordnance Survey 2nd edition, extended to areas which may be occupied by the proposed office block, unless remedial steps are taken.

6.0 Aims

The aim of the intrusive field evaluation was to establish the presence/absence of archaeological deposits and to assess their significance in local, regional and national terms. This was to include an assessment of some of the major geophysical anomalies, an assessment of the cartographic data, and an assessment on the impacts to the archaeology which could take place as a result of development.

7.0 Methodology

7.1 Evaluation trenching

Following the circulation of assessment and survey reports, the Community Archaeologist requested that a proportion of the site be examined excavation. A revised brief required that five trenches be examined, with each of these measuring 15.0m x 1.5m. Trenches were to be sited as follows:-

Trench 1: located extreme north side of site to assess presence/absence of moat depicted on 2nd edition Ordnance Survey

Trench 2: located on west-central side of geophysical survey zone: to sample a seemingly blank area

Trench 3: located on south-east side of site to sample elliptical magnetic anomaly

Trench 4: located close to south-west corner of geophysical survey zone to sample section of enclosure-type anomaly and large circular anomaly.

Following detailed consultations with the client, the Community Archaeologist amended the brief, and the trenching programme was altered. This revised programme was geared more specifically towards assessing the present, as well as possible future, impact zones associated with development:-

Trench 1: as above

Trench 2: as above

Trench 3: located in extreme south-west corner of site, beyond the area of geophysical survey. The area may be used to site a domestic dwelling at some future date, but is not connected with the present planning application

Trench 4: as above.

A team of four experienced field archaeologists excavated and recorded features and deposits exposed within the four trenches (working under the direction of the writer). All deposits were recorded on standard pro-forma context sheets and contexts were drawn and, where necessary, photographed. All finds were washed and/or processed and were selectively presented to specialists for individual appraisal (Appendix 1; bone report forthcoming).

Where no features of archaeological significance were exposed (Trench 2), the level of work was restricted to cleaning, photography and context recording.

On February 28th, the site was inspected and assessed by an environmental consultant.

A mechanical excavator fitted with a straight ditching blade was used in each of the trenches to strip regular, level spits no deeper than 200mm. The process was repeated until the first archaeologically significant or natural horizons were exposed. All further excavation was by hand. Section and plan surfaces were meticulously cleaned and a representative sample of each archaeological feature (where present) was excavated.

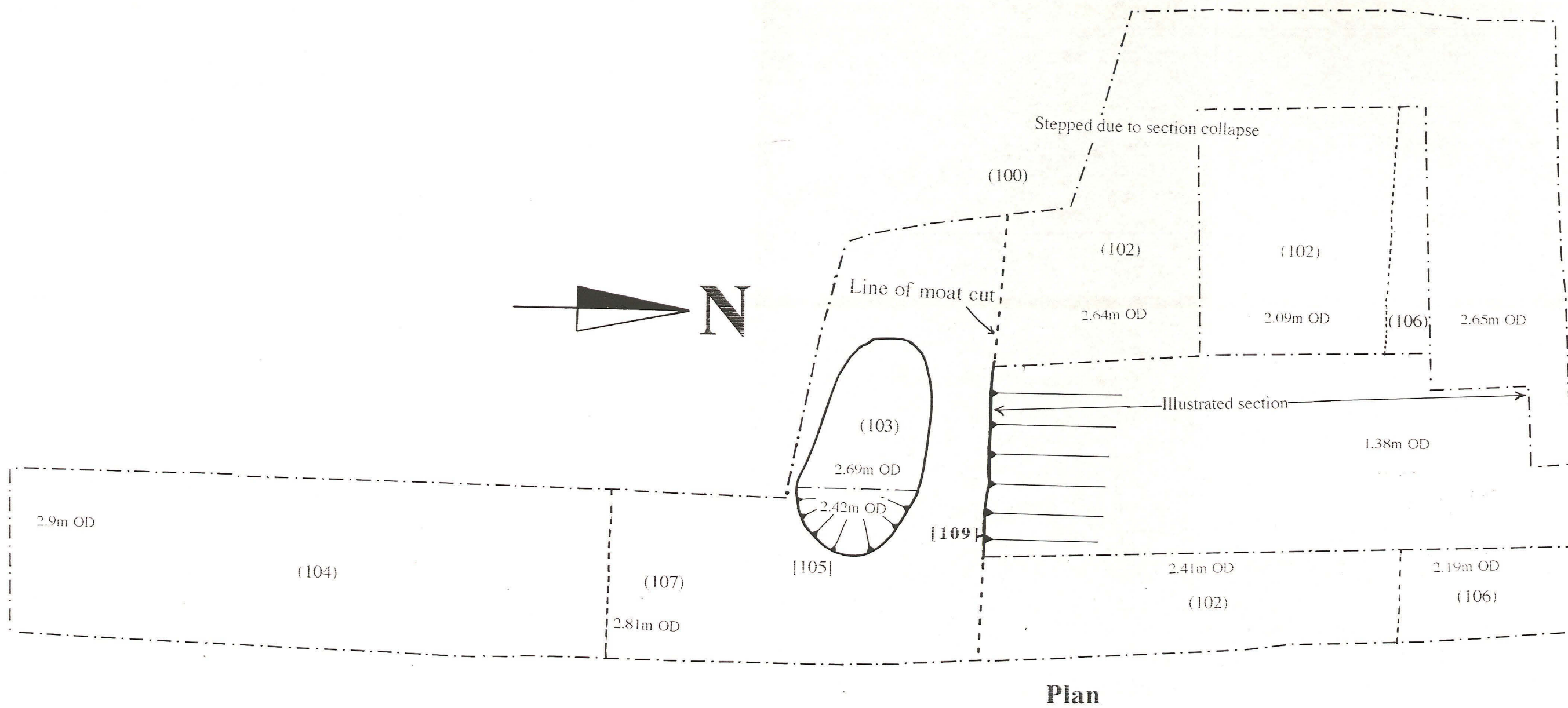
8.0 Results

8.1.1 Trench 1 (Fig. 3)

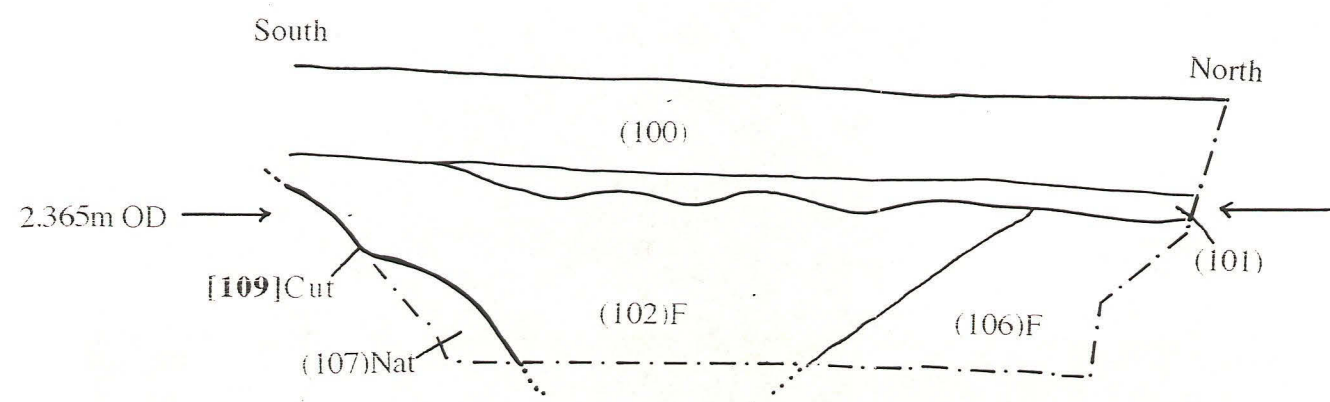
A 15.0m trench was positioned on the north side of the site. It was orientated north-south with a view to exposing a section of the moat which is indicated on the Ordnance Survey 2nd edition and is currently perpetuated by a shallow east-west ditch and modern hedge. The site of the moat lies close to the proposed cold storage unit, and it was considered essential, therefore, that any threat from the latter on the former should be fully addressed as part of the evaluation agenda.

Initially, machining was restricted to removing the topsoil, which measured between 35cm and 40cm in thickness. This exposed, on the south side of the trench, natural deposits of fen silt, [104] and alluvial clay, [107]. The latter had been cut through by the south edge of a large earth-filled feature which was assumed to be the backfilled moat, [109].

Fig. 3 Plan and section, Trench 1



Plan



Section



Following cleaning of the upper moat backfill, a reduced cutting was marked-out within the wider trench and the internal stratigraphy was removed in the opposite order to which it had been deposited.

At a depth approximately 1.5m beneath the modern topsoil, when no personnel were in the trench, the west section and part of the east section collapsed, effectively destroying the soil surfaces which had been prepared for drawing and photography.

After consulting with the Community Archaeologist, it was agreed that excavation should continue; either with the use of shoring, or by re-excavating and stepping the trench sides. The latter technique was applied, and a mechanical excavator was used to achieve much of the result. Regrettably, however, the sides continued to collapse due to the high incidence of sub-surface water, which appeared to concentrate and even flow through some of the sandy fills within the moat. Eventually, a deep section was cut by machine, with a view to retrieving primary dating evidence and determining the depth of the moat. This section again collapsed, following remedial photography, but a body of information was recorded, and it was possible to establish the alignment of the moat, and to draw an incomplete section through its backfills. The stratigraphic sequence recorded was as follows:-

- [100] Modern ploughsoil horizon
- /
- [101] Approx. 17cm of distinctively dark grey/brown soft sandy silt; possible old topsoil horizon which had sunk into the top of the depression left by the backfilled moat
- /
- [102] Bulk secondary backfill of moat; up to 1.4m of clean, soft, light grey/brown silty clay; restricted to the south side of the void and assumed to represent purposeful backfilling (in-filling with bank material)
- /
- [106] Thick accumulation of dark grey silty sand containing brick fragments, animal bone and later post-medieval pottery sherds; overlain by [102]; extent and depth not established; possibly associated with in-filling from the north side
- /
- [108] Waterlogged deposit sealed beneath [106] and only exposed briefly (prior to section collapse); approx. 0.6m of compact grey/blue clay-silt containing fragments of wood and other organic material; a slow-moving/standing water deposit containing fragments of ?early 19th century pottery.
- /
- [110] Lowest deposit sampled in moat; 20cm+ of light grey, loose, coarse sand; a moving water deposit (when exposed in machine trench, a considerable body of water flowing from west section face)
- /
- ?
- /
- [109] Extensive east-west cut for moat. Its depth is in excess of 2.7m, and its width exceeds 5.4m.

No primary dating evidence was recovered from the moat, which appears to have been backfilled in the early 19th century or later (Appendix 1). The south edge of the feature lies approximately 2.0m north of the proposed new cold storage unit

8.1.2 Trench 2

A second trench was positioned on the west central edge of the geophysical survey zone and was orientated east-west (Fig. 2). Its purpose was to evaluate the status of a seemingly blank area where no geophysical anomalies had been recorded in an area part-designated for access construction. No archaeological features were exposed in this trench.

The ploughsoil, [200], measured approximately 30cm in depth. This had a well-defined interface with an underlying matrix of light brown/yellow sandy silt, [201] - the top of a natural bed of fen silt, the accumulation of which had presumably resulted from successive phases of flooding prior to the effective draining of the fens. A small sondage was excavated through this material to a depth of c. 40cm in the north-east corner of the trench.

Two sherds of pottery were recovered from the top of [201], which must have been introduced by modern ploughing. They were both local medieval wares which should date somewhere between the 14th and 15th centuries (Appendix 1).

8.1.3 Trench 3 (Fig. 4)

This trench did not feature within the original project design, and its relocation from the east side of the site to the south-west corner was based on information supplied by the client; namely, that there would be no development on the east side, but that a single dwelling could be constructed to the south of existing greenhouses at some future date.

The trench was orientated east-west, with its west end positioned close to a large north-south ditch which forms the west boundary to the site (there is a suggestion from the 2nd edition Ordnance Survey map that the existing ditch lies on the same alignment as the original medieval moat).

The topsoil and overburden, which measured approximately 30cm in depth, was removed by machine. The matrix was soft, loose and damp and it was assumed that some of it had accumulated as a result of recent ditch cleaning and spreading.

Cut through the top of the natural sub-stratum, [317], was a complex of gullies and other features. While some of these features may be modern, others have been securely dated within the medieval period and are assumed to have been associated with the occupation of the moated enclosure.

Ditch [303]

At the extreme west end of the trench was the east side of a large ditch-like feature which curved north-west to south east. Most of it lay beyond the area investigated, but the profile exposed suggested it was a ditch which pre-dated, and was cut through by, the present north-south ditch. The feature was excavated to a depth exceeding 1.2m (below the modern ground surface). Its upper backfill consisted of soft dark grey/brown silty clay mixed with fragments of brick rubble (no complete examples). It also contained a single sherd of 18th/19th century pottery, though the occurrence of plastic and asbestos fragments in the uppermost fill could imply a much later backfilling.

The curve, orientation, and profile of the above suggested that it was once part of the present north-south ditch and may have connected with an east-west ditch on the south side of the site. As such, it is possible that the ditch section sampled related to the original cut of the moat which (as we have seen in Trench 1) was backfilled in the early part of the last century or later.

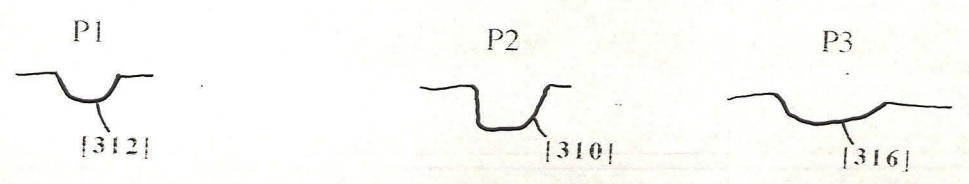
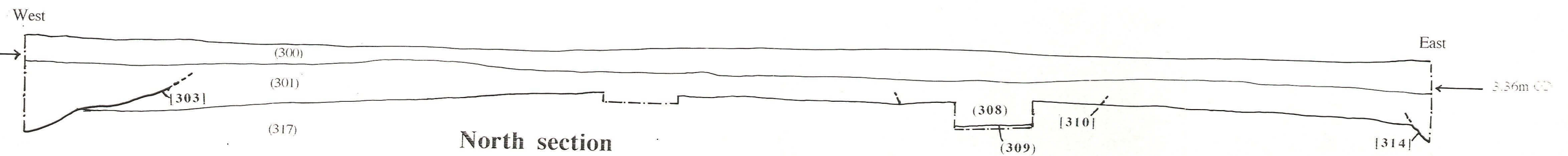
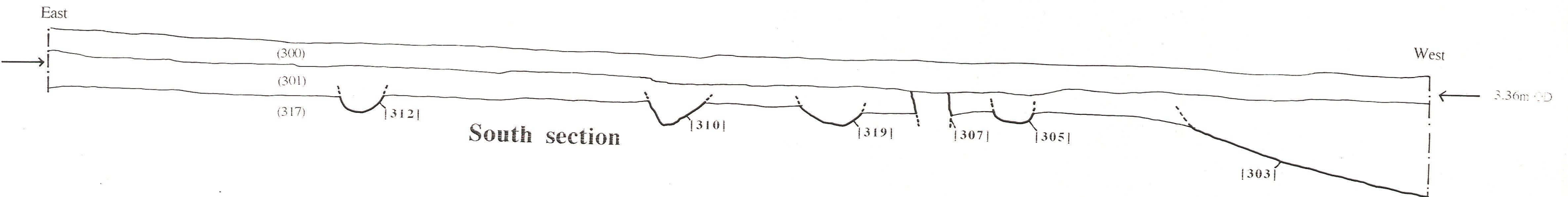
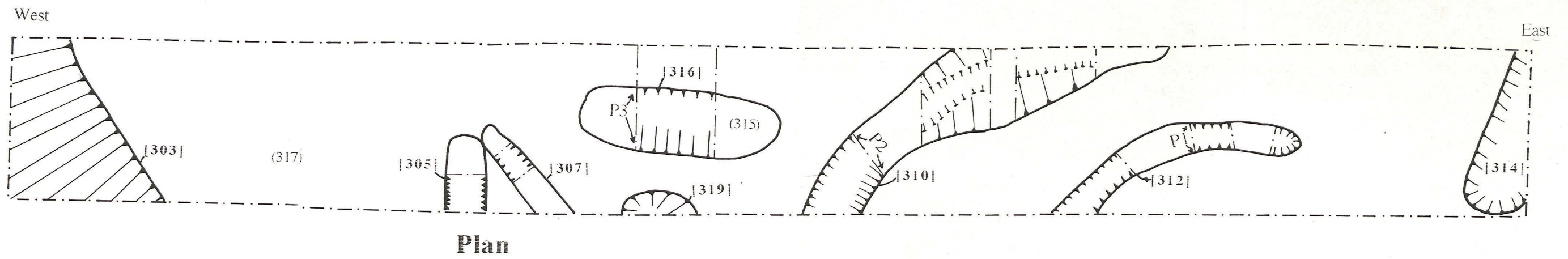
Curved gullies [310] and [312]

On the east side of the cutting, two, almost matching, gullies extended from the south section, curved inwardly towards the east, before terminating abruptly.

The more westerly of these, [310], measured up to 28cm in depth; its profile was broadly U-shaped. Its bulk fill, [308], consisted of firm light grey/brown silty clay which was virtually devoid of coarse inclusions. Beneath this was c. 1cm of dark grey/blue silty clay which contained fragments of either charcoal or manganese.

The other gully, [312], which measured approximately 20cm in depth, was filled with a soil matrix similar to the upper bulk fill of gully [310].

Fig. 4 Plan and sections, Trench 3



Several sections were excavated though the above features but no dating evidence was recovered.

Gullies [305] and [307]

Two further shallow gullies were exposed, which also emerged from the south section. Both were linear, and their orientation and close proximity suggested the two were probably contemporary.

The most westerly, [305], extended c. 70cm north of the south section, its end being marked by a blunt terminal. It measured up to 28cm in depth and was filled with compact light grey/brown silty clay, free of coarse inclusions.

The second gully, [307], was orientated north-west to south-east, and its terminal met with the north terminal of gully [305]; implying, perhaps, that the two were related. The fill of [307] contained asbestos fragments and it is possible, therefore, that both features are modern.

?Gully [314]

The south terminal and part of the length of a further possible gully was exposed on the extreme east side of the trench. It appeared to be orientated broadly north-south, and its width exceeded 60cm. Its depth was greater than 20cm. It was filled with soft light brown/grey silty clay and, within this, were two large sherds from a Stamford ware vessel dating somewhere between the mid-11th century and the mid-12th century.

Other features

Close to the centre of the trench was a shallow cigar-shaped feature, [316], which measured approximately 1.9m x 0.6m in plan, 14cm in depth. Its fill consisted of light brown/grey silty clay which was free of coarse inclusions. No finds were recovered.

The north edge of a small pit-like feature or the terminal of another gully, [319], was exposed approximately 35cm south of the above. It was again filled with fairly clean light grey/brown silty clay, incorporating fragments of charcoal.

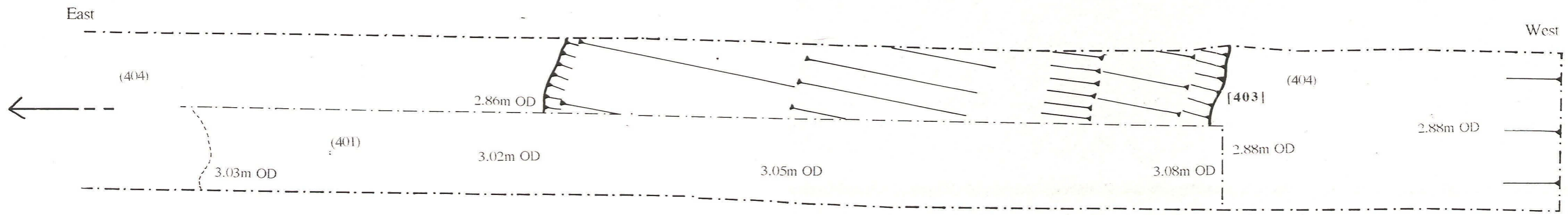
8.1.4 Trench 4 (Fig. 5)

Trench 4 was orientated SWW - NEE, and was positioned to assess two anomalies (F and H) which were detected during the magnetometer survey. One of these anomalies, F, could not be matched with a corresponding archaeological feature, though the other, H, was proved to relate to a medieval ditch; part of an enclosure extending westwards from Bozon Hall.

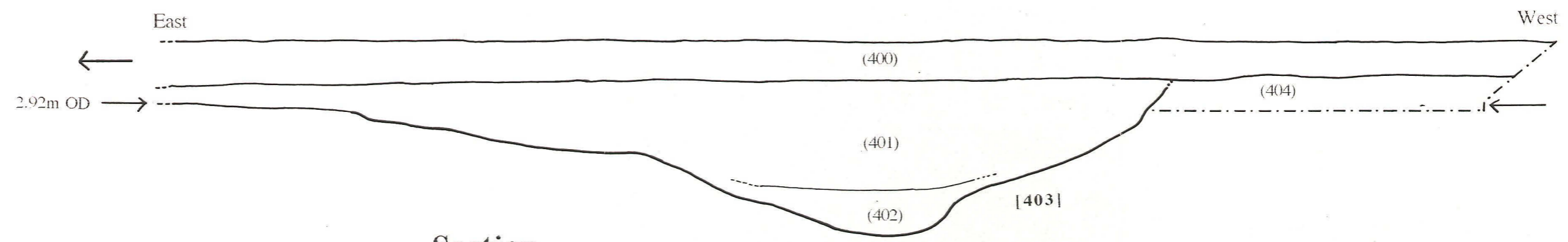
The modern ploughsoil, [400], was removed by machine. This exposed clean natural silt deposits on the east and west sides of the trench, though much of the central zone was characterised by merging deposits of soft light greyish-brown sandy silt, [401]. A section line was placed longitudinally through this deposit, and the south side of (what was later identified as) an upper ditch fill was excavated.

The base of the ditch, [403], was 1.6m below the modern ground surface. Its edges were difficult to clarify in places, due to the leaching and homogenising of the silty soils, and there is little doubt that the wide oblique section illustrated on Fig. 5 was a modification which was partly based on side collapse and slumpage following abandonment or neglect.

Fig. 5 Plan and section, Trench 4



Plan



Section



The lower 35cm of ditch fill consisted of dark grey silty clay: a primary deposit indicative of slow-moving or standing water. It contained the bones of domestic animals and a relatively high incidence of domestic pottery sherds. These have been dated between the middle 11th century and the early/middle 12th century, though one sherd (?Lincoln kiln type) could date to the 10th century. The upper or secondary backfill similarly contained a relatively large pottery assemblage which could extend to the 13th century, though the evidence is not conclusive (Appendix 1).

There is little doubt that the ditch section examined relates to the enclosure-type anomaly shown on the geophysical survey (anomaly H) and is likely to correspond to an enclosure-type feature which extended westwards from Bozon Hall and surrounded structures which are no-longer extant (the fact that these structures were not detected by the surveys could reflect the poor conditions under which the resistivity survey took place, or that they were thoroughly dismantled, leaving little surface or sub-surface remains).

Following the excavation of ditch [403], the west end of the trench was extended by approximately 2.0m with a view to identifying a feature corresponding to anomaly F. No such feature was exposed.

8.2 Environmental potential

During excavation, an environmental consultant, Mr DJ Rackham, inspected the site to assess whether or not environmental sampling procedures should be employed (for example, to recover charred or waterlogged plant remains). Although some useful discussion took place, it was advised that there were no deposits exposed which would benefit greatly from laboratory analyses. Waterlogged deposits were exposed within the moat (Trench 1), though there was no evidence to suggest these deposits accumulated much earlier than the 19th century; and their archaeological value was thus questionable.

In ditch [403], basal deposits were not water-logged and it was considered unlikely that these would contain informative environmental remains.

Quantities of domestic animal bone were recovered from features in Trenches 1, 3 and 4. The material, which is in relatively good condition, has been washed, marked and bagged. It has been presented for specialist appraisal but it has not been possible to include the results of this work, and the assessment will eventually be submitted as part of the completed site archive.

9.0 Conclusions and discussion

The trenching programme at Wash Road, Kirton, has confirmed that the site lies within the moated enclosure associated with Bozon Hall. The moat itself was sectioned on the north side of Trench 1 and possibly on the west side of Trench 3. Accepting the latter, it is tenuously suggested that the north, west and south boundaries to the site demarcate the route taken by the medieval moat, which appears to have been infilled in the later post-medieval/modern periods.

The east/central part of the site is occupied by a backfilled and deep enclosure ditch (Trench 4), which was expressed as a geophysical anomaly and appears to equate with a feature depicted on the 2nd edition Ordnance Survey map, extending westwards from Bozon Hall. The ceramic assemblage recovered during the present investigation suggests that this ditch was abandoned by the middle/late 12th century, although the evidence is based on a rather small sampling strategy and could be modified, were a larger area to be excavated. If the date ranges are correct, then this feature was already redundant when Bozon Hall is first referenced in 1377.

The evidence from Trench 2 and the south side of Trench 1 suggests limited occupation during the medieval period (ie the areas were largely devoid of cultural remains), although, of the many features exposed in Trench 3, at least one can be securely dated within the 11th/12th centuries; implying occupation which was contemporary with the life of the enclosure ditch exposed in Trench 4.

The principal impacts associated with the present development relate to the siting of the proposed office block on the south side of the site. In its present form, this will have a significant impact on the enclosure ditch (context [303]), the west edge of which appears to lie some 5.0m west of the alignment suggested by the geophysics. In order that this feature be avoided during development, therefore, it is suggested that the office block should be moved at least 10.0m west of its current (proposed) location.

Although the proposed cold storage unit lies south of the moat exposed in Trench 1, it is noted that three soakaway pits which are indicated on the clients site plan (Drawing 256/2B) lie within the area of the moat. The situation has been discussed with the client, and it is understood that these drains will be sited elsewhere (ie south of the moat).

Features recorded on the south-west side of the site (Trench 3) are slightly problematical in that, although dense, some of these remain undated. Only one feature was dated to the medieval period, although there is little doubt that the ditch-like cut on the west side of the trench perpetuated the original line of the medieval moat. Other features such as the respecting curved gullies could be medieval, or they could simply be post-medieval or even modern horticultural slots. It is understood that the client may wish to site a domestic dwelling in this area at some future date.

10.0 Acknowledgements

Pre-Construct Archaeology (Lincoln) wish to express their sincere thanks to David O'Connor and Associates for commissioning this company to undertake assessment and evaluation work at the Kirton site. Thanks are expressed to Jim Bonnor, the Community Archaeologist, for monitoring the work, and to Jane Young and James Rackham for their contributions to this report.

Finally, thank you to the excavation team: Rob Schofield, Malcolm Otter and Miles Ridsdale.

11.0 References

Lyall, J 1996, Unpublished geophysical survey report, Wash Road, Kirton

Palmer-Brown, CPH 1996, Unpublished desk top/evaluation report

Pink, D 1990 *Kirton-in-Holland: The Changing Face of a Fenland Village*

Robson, JD 1990 *Soils of the Boston and Spalding District*, by the Soil Survey and Land Research Centre

12.0 Appendices

12.1 Post-Medieval pottery assessment report and archive

12.2 Colour photographs

12.3 Project specification

12.4 List of contexts

12.5 Site archive

Appendix 12.1

Post-Roman pottery report and archive by J Young (CLAU)

The material from the site indicates occupation from at least the 10th century. The pottery from trench 1 was entirely of late post-Medieval or early modern date indicating infill in the late 18th or early 19th century. The two sherds from trench 2 are of medieval date probably of 14th or 15th century date and are from somewhere along the east coast of Lincolnshire.

The most interesting material was recovered from trenches 3 and 4. This pottery includes both wares imported from Stamford, Lincoln and Lyveden as well as more locally produced vessels. Most of this material dates to the period between the late 11th and the mid/late 12th century although one sherd is of 10th century date and the two Stanion/Lyveden-type sherds must postdate the mid/late 12th century. The freshness and size of the sherds in context 313 indicates that there is probable nearby occupation during this period.

POST-ROMAN POTTERY ARCHIVE: WRK96 WARE TYPES BY CONTEXT

Context	Ware	Sherds	Form	Comments
102	CRMWARE	1	-	-
102	LPM	2	-	BL/W CHINA;EARLY?
106	GRE	1	LARGE VESSEL	BASE;18TH
106	LPM	1	-	COLOURED EARTHENWARE;18TH?
108	CRMWARE	1	BOWL	-
200	GLGS	1	JUG	-
200	GLGS	1	JUG	14TH/15TH
302	SLIP	1	BOWL	18TH/19TH
313	ST	4	JAR;COLLARED	LARGE FRAGS;UNGLZE WITH SPOTS; INCISED WAVY DEC ON RIM TOP
401	LFS	1	?	SCRAP
401	LKT	1	BOWL	? ID
401	MISC	1	-	UNFIRED CLAY?
401	SNLOC	1	?	UNGLZE;FABRIC INCLUDES FINE SUBROUND QUARTZ + CHAFF +OCC FE + OCC FLINT
401	SNLOC	1	?	UNGLZE;FABRIC INCLUDES FINE SUBROUND QUARTZ + CHAFF +OCC FE + OCC FLINT
401	SNLOC	1	?	UNGLZE;FABRIC INCLUDES FINE SUBROUND QUARTZ + OCC CA CEMENTED SST LUMPS + OCC ROUNDED CA + OCC CHAFF
401	SNLOC	1	?	UNGLZE;FABRIC INCLUDES FINE SUBROUND QUARTZ + OCC CA CEMENTED SST LUMPS + OCC ROUNDED CA + OCC CHAFF
401	SNLOC	1	?	UNGLZE;FABRIC INCLUDES FINE SUBROUND QUARTZ + OCC CA CEMENTED SST LUMPS + OCC ROUNDED CA + OCC CHAFF
401	SNLOC	1	?	UNGLZE;FABRIC INCLUDES FINE SUBROUND QUARTZ + OCC SST LUMPS + CHAFF + OCC CA + OCC FE + OCC FLINT
401	SNLOC	1	BOWL	SHELLY FABRIC;EVERTED RIM
401	SNLOC	2	?	UNGLZE;FABRIC INCLUDES FINE SUBROUND QUARTZ + CHAFF + OCC CA + OCC FE + OCC FLINT
401	SNLOC	4	JAR	SHELLY FABRIC
401	ST	1	JAR	GLZE;11/12TH
401	ST	1	JAR/PITCHER	UNGLZE;INCISED WAVY DEC;11/12TH
401	ST	5	?	UNGLZE;11/12TH
401	STANLY	1	BOWL	SHELLY FABRIC
401	STANLY	2	BOWL	EVERTED RIM;? ID;INT GLZE
402	LFS	1	?	-
402	LFS	1	JAR	-
402	LIM	1	JAR	11/12TH
402	SNLOC	1	JAR	SHELLY FABRIC
402	SNLOC	1	JAR	SHELLY FABRIC
402	SNLOC	2	BOWL/WIDE JAR	SHELLY FABRIC;RIM
402	ST	2	?	UNGLZE;11/12TH
402	ST	4	?	GLZE;11/12TH
402	UNGS	1	JAR	-

POST-ROMAN POTTERY ARCHIVE: DATING BY CONTEXT

	Context	Earliest horizon	Latest horizon	Date and comments
108	PMH9	EMH	-	MID 18TH TO EARLY 19TH
102	EMH	EMH	-	LATE 18TH TO EARLY 19TH
106	EMH	EMH	-	LATE 18TH TO EARLY 19TH
200	MH7	MH10	-	MID 14TH TO LATE 15TH
302	PMH8	EMH	-	EARLY 18TH TO EARLY 19TH
313	ASH14	MH2	-	LATE 11TH TO MID/LATE 12TH
402	ASH14	MH2	-	LATE 11TH TO MID/LATE 12TH
401	MH3	MH4	-	LATEST TWO SHERDS GIVE MID/LATE 12TH TO EARLY/MID 13TH DATE BUT THE REST OF THE POT IS 11TH TO MID 12TH

CLAU MEDIEVAL POTTERY DATING 5TH TO 19TH CENTURIES SEP 1994

HORIZONS	DATING	PERIOD
ASH1	5TH - ?L7TH	ANGLO-SAXON
ASH2	?L7TH - ?L7/E8TH	MIDDLE SAXON
ASH3	?E8TH - ?M8TH	
ASH4	?M8TH - ?L8TH	
ASH5	?E9TH - ?M9TH	
ASH6	?M9TH - ?L9TH	
ASH7	?L9TH	LATE SAXON
ASH8	L9TH - E10TH	
ASH9	E/M10TH - M10TH	
ASH10	M10TH - L10TH	
ASH11	L10TH	
ASH12	E11TH - ?E/M11TH	SAXO-NORMAN
ASH13	?E/M11TH - M/L11TH	
ASH14	L11TH - E/M12TH	
MH1	?E/M12TH - M12TH	EARLY MEDIEVAL
MH2	M12TH - M/L12TH	
MH3	M/L12TH - E13TH	
MH4	E13TH - E/M13TH	
MH5	E/M13TH - ?L13TH	HIGH MEDIEVAL
MH6	?L13TH - ?M14TH	
MH7	?M14TH - ?L14TH	LATE MEDIEVAL
MH8	?L14TH - ?E15TH	
MH9	?E15TH - M/L15	
MH10	M/L15TH - L15TH	
PMH1	E16TH-M16TH	EARLY POST-MEDIEVAL
PMH2	M16TH-M/L16TH	
PMH3	M/L16TH-E17TH	POST MEDIEVAL
PMH4	E17TH-M17TH	
PMH5	M17TH-M/L17TH	
PMH6	M/L17TH-L17TH	
PMH7	L17TH-E18TH	
PMH8	E18TH-M18TH	LATE POST-MEDIEVAL
PMH9	M18TH-L18TH	
PMH10	L18TH-E19TH	
EMH	L18TH-20TH	EARLY MODERN

ESAXLOC	EARLY SAXON LOCAL FABRICS	ESAX	ASH1	ASH2
ESAXX	EARLY SAXON NON-LOCAL FABRICS	ESAX	ASH1	ASH2
ESG	YORK EARLY GLAZED WARE;TYPE 1	LSAX	ASH8	ASH12
ESGS	GREENSAND FABRICS	ESAX	ASH1	ASH2
EST	EARLY STAMFORD WARE	LSAX	ASH7	ASH11
FE	IRONSTONE ORE-TEMPERED FABRIC	ESAX	ASH1	ASH2
FERTH	FINE EARTHENWARES	PMED	PMH9	EMH
FINSP	FINE SPLASHED WARE	EMED	MH2?	MH4?
FREC	FRECHEN/COLOGNE STONEWARE	PMED	PMH2	PMH8
FREN	FRENCH WARES (GENERAL)	MED-PMED	MH3	PMH5
FLINT	FLINT TEMPERED FABRICS	PREH-MSAX	0	ASH3
GLGS	GLAZED GREENSAND FABRICS	EMED-LMED	MH2	MH10
GRAP	GRAPHITIC CRUCIBLE FABRICS	PMED	PMH3	EMH
GRBURN	GREY BURNISHED WARES	MSAX	ASH3	ASH4?
GRE	GLAZED RED EARTHENWARES	PMED	PMH3	PMH9
GRIM	GRIMSTON-TYPE WARE	MED	MH3	MH8
GS	GREY STONEWARES	EMOD	PMH5	EMH
HLKT	HORNCastle-TYPE LKT WARE	LSAX	ASH9?	ASH11?
HUM	HUMBERWARE	LMED-PMED	MH7	PMH2
HUMB	HUMBER BASIN GLAZED FABRICS	MED	MH1	MH10
IA	IRON AGE	PREH	0	0
IALSAX	IA OR LSAX	PREH-LSAX	0	0
IMP	UNDATED IMPORTED FABRICS	ND	ASH1	PMH7
INDUS	UNSPECIFIED INDUSTRIAL MATERIAL	ND	ASH1	EMH
IPS	IPSWICH-TYPE WARE	MSAX	ASH2?	ASH6
IS	UNIDENTIFIED IMPORTED STONEWARE	PMED	PMH1	PMH7
ISLG	ISLAMIC GLAZED WARES	SN-MED	ASH11	MH8
ITGE	IMPORTED TIN-GLAZED EARTHENWARES	LMED	MH7	MH10
KEUP	MERCIAN MUDSTONE-TEMPERED WARE	ESAX-MSAX	ASH1	ASH?
KOLN	COLOGNE STONEWARE	PMED	PMH1	PMH2
L/LSW4	LLSW OR LSW4	LMED	MH9	PMH1
LANG	LANGERWEHE STONEWARE	LMED	MH7	PMH1
LARA	LANGERWEHE/RAEREN STONEWARE	LMED	MH8	PMH1
LEMS	LOCAL EARLY MEDIEVAL SHELLY WARE	EMED	MH1	MH4
LERTH	LATE EARTHENWARES	EMOD	PMH9	EMH
LEST	LEICESTER-TYPE WARE	LSAX	ASH7?	ASH9?
LFS	LINCOLN FINE-SHELLED WARE	SN	ASH11	MH3?
LFS/ELFS	LFS OR ELFS	MSAX-SN	ASH6	MH3?
LG	LINCOLN GRITTY WARE	LSAX	ASH7	ASH7
LG/SLS	LG OR SLS	LSAX	ASH7	ASH8
LHUM	LATE HUMBERWARE	PMED	PMH2	EMH
LIGU	LIGURIAN BERRETINO TIN-GLAZED WARE	PMED	PMH2	PMH6
LIM	OOLITE-TEMPERED FABRICS	ESAX-SN	ASH2	ASH13
LKT	LINCOLN KILN-TYPE WARE	LSAX	ASH7	ASH11
LLSW	LATE GLAZED LINCOLN WARE	LMED	MH8	MH10
LMED	LATE MEDIEVAL	LMED	MH7	MH10
LMF	LATE MEDIEVAL FINE WARES	LMED	MH9	PMH1
LMIMP	LATE MEDIEVAL IMPORTED FABRICS	LMED	MH7	MH10
LMLOC	LATE MEDIEVAL LOCAL FABRICS	LMED	MH8	PMH1
LMPM	LMED OR PMED	LMED-PMED	MH7	PMH10
LMX	LATE MEDIEVAL NON-LOCAL FABRICS	LMED	MH7	MH10
LOCC	LOCAL SPLASHED WARE	EMED	MH1	MH3?
LONS	LONDON STONEWARE	PMED	PMH7	EMH

LPM	EARLY MODERN OR MODERN	EMOD	EMH	EMH
LPMDISC	EARLY MODERN OR MODERN (DISCARDED)	EMOD	EMH	EMH
LS/SNLS	LSLS OR SNLS	LSAX-SN	ASH7	ASH13
LSAX	LATE SAXON	LSAX	ASH7	ASH11
LSCRUC	LINCOLN CRUCIBLE FABRICS	LSAX-SN	ASH7	ASH12
LSH	LINCOLN SHELLY WARE	LSAX	ASH7	ASH12?
LSIMP	LATE SAXON IMPORTED FABRICS	LSAX	ASH7	ASH11
LSLOC	LATE SAXON LOCAL FABRICS	LSAX	ASH7	ASH13
LSLS	LATE SAXON LINCOLN SANDY WARE	LSAX	ASH7	ASH8
LSMED	LSAX OR MED	LSAX-MED	ASH7	MH10
LSPLS	LIGHT-BODIED LSLS WARE	LSAX	ASH7	ASH8
LSTON	LATE STONEWARES	EMOD	PMH10	EMH
LSW	UNDATED LINCOLN FABRICS	LSAX-LMED	ASH7	MH10
LSW1	GLAZED LINCOLN WARE	EMED	MH1	MH4
LSW1/2	LSW1 OR LSW2	EMED	MH1	MH6
LSW2	GLAZED LINCOLN WARE	MED	MH4	MH6
LSW2/3	LSW2 OR LSW3	MED	MH4	MH9
LSW3	GLAZED LINCOLN WARE	LMED	MH6	MH9?
LSW4	GLAZED LINCOLN WARE	LMED	MH10	PMH1
LSWA	GLAZED LINCOLN WARE;FABRIC A	EMED-MED	MH1	MH10
LSWE/1	ELSW OR LSW1	LSAX-EMED	ASH7	MH4
LSX	LATE SAXON NON-LOCAL FABRICS	LSAX	ASH7	ASH13
MAGR	MAGREBI WARE	MED	MH5	MH7
MAMPH	ROMAN/MEDIEVAL AMPHORA	ROM-MED	0	0
MARTI	MARTINCAMP WARE;TYPE I	PMED	MH10	PMH2
MARTII	MARTINCAMP WARE;TYPE II	PMED	PMH1	PMH3
MARTIII	MARTINCAMP WARE;TYPE III	PMED	PMH3	PMH7
MAX	NORTHERN MAXEY-TYPE WARE	MSAX	ASH2	ASH6?
MAY	MAYEN-TYPE WARES	MSAX	ASH3	ASH6?
MED	MEDIEVAL	MED	MH4	MH10
MEDLOC	MEDIEVAL LOCAL FABRICS	MED	MH4	MH10
MEDPM	MED OR PMED	MED-PMED	MH4	PMH10
MEDX	MEDIEVAL NON-LOCAL FABRICS	MED	MH4	MH10
MIMP	MEDIEVAL IMPORTED FABRICS	MED	MH4	MH10
MISC	UNDATED MISCELLANEOUS FABRICS	ND	ASH1	EMH
MLSAX	MSAX OR LSAX	MSAX-LSAX	ASH2	ASH11
MLTG	MONTELUPO POLYCHROME	PMED	MH10	PMH7
MMAX	RMAX WITH QUARTZ	MSAX	ASH2?	ASH6?
MP	MIDLAND PURPLE-TYPE WARE	LMED-PMED	MH8?	PMH3?
MSAX	MID-SAXON	MSAX	ASH2	ASH6
MSAXLOC	MID-SAXON LOCAL FABRICS	MSAX	ASH2	ASH6
MSAXX	MID-SAXON NON-LOCAL FABRICS	MSAX	ASH2	ASH6
MVAL	MATURE VALENTIAN LUSTREWARE	LMED	MH7	PMH3
MY	MIDLAND YELLOW-TYPE WARE	PMED	PMH2	PMH8
NEWS	NEWARK SANDY WARE	SN	ASH11	ASH12
NFM	NORTH FRENCH MONOCHROME	MED	MH4	MH5
NFRE	NORTH FRENCH FABRICS	EMED-MED	MH3?	MH5
NFSVA	NORTH FRENCH SEINE VALLEY FABRIC A	MSAX	ASH2?	ASH4?
NHSLIP	NORTH HOLLAND SLIPWARES	PMED	PMH3	PMH7
NITALS	NORTH ITALIAN SGRAFFITO WARE	PMED	PMH3	PMH4
NLST	NORTH LINCOLNSHIRE SHELLY WARE	EMED-MED	MH1	MH8
NOTG	NOTTINGHAM GREEN-GLAZED WARE	MED	MH4?	MH7
NOTS	NOTTINGHAM WARE	LSAX	ASH9?	ASH12?

NSP	NOTTINGHAM SPLASHED GLAZED WARE	EMED	MH1	MH4?
ORP	OXIDISED RED-PAINTED FABRICS	MSAX	ASH4?	ASH6?
PBIC	LIGHT-BODIED BICHROME FABRICS	PMED	PMH2?	PMH3?
PGE	LIGHT-BODIED GLAZED EARTHENWARES	PMED	PMH3	PMH5
PING	PINGSDORF-TYPE WARE	SN-EMED	ASH7	MH3
PMED	POST-MEDIEVAL	PMED	PMH1	PMH10
PMF	POST-MED FINE WARES	PMED	PMH1	PMH7
PMIMP	POST-MED IMPORTED FABRICS	PMED	PMH1	PMH10
PMLOC	POST-MED LOCAL FABRICS	PMED	PMH2	PMH9
PMX	POST-MED NON-LOCAL FABRICS	PMED	PMH1	PMH10
PORC	PORCELAIN (GENERAL)	PMED	PMH8	EMH
PORTF	PORTUGESE TIN-GLAZED WARES	PMED	PMH3	PMH5
POTT	POTTERHANWORTH WARE	MED	MH4?	MH9?
PREH	PREHISTORIC	PREH	0	0
R	ROMAN	ROM	0	0
RAER	RAEREN STONEWARE	PMED	MH10	PMH2
RESAX	ROMAN OR ESAX	ROM-ESAX	0	0
RGRE	REDUCED GLAZED RED EARTHENWARES	PMED	PMH3	PMH9
RLG	ROMAN OR LG	ROM-LSAX	0	0
RLSAX	ROMAN OR LSAX	ROM-LSAX	0	0
RLSLS	ROMAN OR LSLs	ROM-LSAX	0	0
RMAX	SOUTHERN MAXEY-TYPE WARE	MSAX	ASH2	ASH6?
RMED	ROMAN OR MED	ROM-MED	0	0
RMSAX	ROMAN OR MSAX	ROM-MSAX	0	0
ROUEN	ROUEN-TYPE WARES	EMED-MED	MH3	MH5
RSN	ROMAN OR SN	ROM-SN	0	0
RSTON	RED STONEWARES	PMED	PMH8	PMH10
SAIC	SAINTONGE CHAFING DISH	PMED	PMH1	PMH4
SAIG	SAINTONGE GREEN-GLAZED WARE	MED	MH5	MH6
SAIM	SAINTONGE MOTTLED WARE	MED	MH5	MH7
SAIP	SAINTONGE POLYCHROME WARE	MED	MH5	MH6
SCAR	SCARBOROUGH WARE	EMED-MED	MH3	MH7
SIEG	SIEGBURG STONEWARE	MED-LMED	MH6	PMH1
SLIP	SLIPWARE (GENERAL)	PMED	PMH4	EMH
SLST	SOUTH LINCOLNSHIRE SHELLY WARE	EMED-MED	MH1?	MH7?
SN	SAXO-NORMAN	SN	ASH7	ASH14
SNEMED	SN OR EMED	SN-EMED	ASH11	MH4
SNEOT	ST.NEOTS-TYPE WARE	SN-EMED	ASH11	MH3?
SNIMP	SAXO-NORMAN IMPORTED FABRICS	SN	ASH7	MH3
SNLOC	SAXO-NORMAN LOCAL FABRICS	SN	ASH7	MH3
SNLS	SAXO-NORMAN LINCOLN SANDY WARE	SN	ASH11	ASH13
SNTG	SOUTH NETHERLANDS TIN-GLAZED WARES	PMED	MH10	PMH1
SNX	SAXO-NORMAN NON-LOCAL FABRICS	SN	ASH7	MH3
SPAN	SPANISH UNGLAZED COARSEWARES	PMED	PMH1	EMH
SRCRUC	STAMFORD OR ROMAN CRUCIBLES	ROM-SN	0	0
SST	SANDSTONE-TEMPERED FABRICS	ESAX-MSAX	ASH1	ASH6
ST	STAMFORD WARE	SN	ASH7	MH3
STANLY	STANION/LYVDEN-TYPE WARE	MED	MH5	MH7
STCRUC	STAMFORD WARE CRUCIBLES	SN	ASH7	MH3
STMO	STAFFORDSHIRE MOTTLED WARE	PMED	PMH6	PMH8
STSL	STAFFORDSHIRE SLIPWARE	PMED	PMH5	PMH8
TB	TOYNTON OR BOLINGBROKE-TYPE WARE	PMED	MH10?	PMH8
TGE	TIN-GLAZED EARTHENWARES	PMED	PMH4	PMH10

TGEM	MAIOLICA (ANGLO-NETHERLANDS)	PMED	PMH3	PMH4
THET	THETFORD OR THETFORD-TYPE WARE	SN	ASH7	MH2
TILE	TILE FABRIC	MED	MH3	MH10
TORK	TORKSEY WARE	SN	ASH7	ASH13
TORKT	TORKSEY-TYPE WARE	SN	ASH7	ASH13
TOY	TOYNTON WARE;KILN 1 (ROSES)	MED	MH5	MH6
TOYII	TOYNTON WARE;KILN 3	LMED	MH10?	PMH1
UNGS	UNGLAZED GREENSAND	SN-MED	ASH11	MH7
VGF	VICTORIAN GARDEN FURNITURE	EMOD	PMH10	EMH
VITR	UNIDENTIFIED VITRIFIED SHERDS	ND	ASH1	EMH
WERRA	WERRA/WANFRIED WARE	PMED	PMH3	PMH4
WESER	WESER WARE	PMED	PMH3	PMH4
WEST	WESTERWALD STONEWARE	PMED	PMH4	EMH
WINC	WINCHESTER-TYPE WARE	SN	ASH10	ASH14
WS	WHITE SALT-GLAZED WARES	PMED	PMH8	PMH9
YG	YORKSHIRE-TYPE GRITTY WARES	SN	ASH13	MH3
YORK	YORK GLAZED WARE	EMED-MED	MH3	MH5?
YORKSPL	YORK-TYPE SPLASHED WARES	EMED	ASH14?	MH4?
YW	YORK WARE	LSAX	ASH6	ASH9

Appendix 12.2 Colour photographs



P1 View of machine-excavated section through backfilled moat deposits, Trench 1 looking west



P2 General view, Trench 2, looking east



P3 Close-up of sondage at east end of Trench 2 looking north



P4 General view of Trench 3 following excavation of features, looking east



P5 General view, Trench 4, looking east: the vertical scale is in the centre of ditch [103]

**PRE-CONSTRUCT ARCHAEOLOGY (Lincoln)
SPECIFICATION FOR AN ARCHAEOLOGICAL DESK TOP STUDY
AND FIELD EVALUATION**

**LAND OFF WASH ROAD, KIRTON,
BOSTON, LINCOLNSHIRE**

Site Address: Land north of Wash Road, Kirton, Boston, Lincolnshire

Planning Application No.: B14/0603/95)

Grid Reference: TF 3100 3817

1.0 Introduction

Pre-Construct Archaeology (Lincoln) have been invited by David O'Connor & Associates to tender for an archaeological scheme of work at the above proposed development site. The development scheme will involve the construction of an office block, steel-framed storage unit and associated infrastructure on land which is currently agricultural.

It is possible, during the course of development, that there will be some impacts to archaeological resources, if such resources are present within the defined development area. The scheme of works proposed below, therefore, is designed to (cost-effectively) identify areas of sensitivity and to propose a mitigation scheme whereby the interests of both the archaeology and development may be addressed to the satisfaction of both parties.

This specification has been produced following consultation with the Client, the Community Archaeologist for Boston Borough Council and the Landscape Research Centre Ltd. It centres on a project brief which was issued by the Community Archaeologist on 11/1/95.

2.0 Location and description

Kirton lies approximately 6.0km south-west of Boston in the fens of Lincolnshire.

The site of proposed development comprises an irregular unit of approximately 0.8 hectares, which lies to the north of Wash Road, and east of the modern settlement focus. The west third of the site is occupied by Greenhouses, paths and other features, though the dominant feature is flat arable land which is largely clear of vegetation.

The application made to Boston Borough Council is for the construction of an office and, steel-framed, cold storage unit: the latter will occupy the south side of the site, with the cold storage unit being located on the north side. Detailed construction plans were not provided for the purpose of this specification, though it is understood that the office will be built over a raft foundation: the cold storage unit will involve the cutting of foundation holes in conjunction with lesser general ground reduction to take in the floor area.

3.0 Archaeological potential

A specific archaeological potential has been outlined in the project brief: cartographic sources suggest that Bozon Hall occupied the site east of the present development, and that ephemeral buildings and features actually extended into it. The moated manor was built c. 1377 and parts of it were destroyed as late as 1977.

The greatest (superficial) archaeological potential, therefore, is that part of the moat and other features relating to the manor will lie within the proposed development site.

Surface finds dating within the later medieval period have been recovered from Kirton, which was a Domesday settlement (the origins of which may have been firmly rooted in the Saxon period). When the site of proposed development was inspected, a single sherd of early medieval pottery was picked up on its east side.

4.0 Requirement for work.

The archaeological requirement is for a detailed desk-based assessment and field evaluation; to

include an appropriate level of geophysical survey. The assessment and geophysical survey must be completed in advance of any strategic trenching, as a strategy for the latter will depend (to a greater or lesser extent) on the outcome of the former.

The purpose of the archaeological assessment/evaluation will be to gather a suitable and sufficient body of data to allow the planning authority to make an informed judgement on the overall archaeological significance and potential of the site; the threat posed by development; and ways by which the archaeological resource may be recorded or preserved *in situ* (the favoured and least-expensive option).

If a major archaeological discovery is made, it is hoped that this will be accommodated within the scheme (ie the scheme may be constructed around it, with the archaeological resource remaining preserved *in situ*).

5.0 Proposed methodology

Two principal levels of investigation are proposed: non-intrusive and intrusive.

The non-intrusive element would consist of a combined desk-based assessment and geophysical survey(s). The intrusive element would consist of a limited programme of archaeological trenching. As a requirement of the brief, this has been based on a 2% sampling strategy (of the entire site): in practice, a smaller unit may be sampled, which will be based on the sum of information derived during the non-intrusive surveys.

5.1 Desk top assessment

Put simply, an archaeological desk top assessment is a detailed and ordered composition of material of relevance to a scheme of proposed development which may threaten archaeological resources. Sometimes, an assessment will be carried-out in parallel with preliminary field investigations (eg field walking, geophysical survey): usually resulting in a more informative document than a solely desk-based one.

An assessment report would draw from the following minimum sources of information:-

- the County Sites and Monuments Record (SMR)
- records held by the Boston Community Archaeologist
- records held by the Lincolnshire Archives Office
- the local studies library
- published and unpublished sources
- geotechnical records (if available)
- aerial photographic records
- cartographic sources (Tithe, Enclosure, Ordnance Survey and other maps)

The assessment would consider impacts which may have affected archaeological deposits in the past (eg drainage ditches), as well as those which may be caused by the proposed development.

It is suggested that the methodology proposed will be to the advantage of the developer and the curator, in that it will provide both parties with a detailed and combined set of desk and field-based data. Based on the results of these preliminary investigations, useful discussions may take place between the Client and the Community Archaeologist regarding the use, location and frequency of

evaluation trenches at a final evaluation phase; as well, possibly, as influence the final building location, if important remains are indicated.

A fully-detailed desk top assessment would take between four and five working days to compile. It would be structured in the following manner:-

1. Non-technical summary
2. Introduction
3. The proposed scheme of development
4. Planning background
5. Geology, topography and land use
6. Archaeological and historical background
7. Archaeological potential (in this case, incorporating information derived as a result of geophysical survey)
8. Environmental potential (eg the potential for the existence of organic deposits/materials such as peat, wood, leather etc and the information which could be derived by sampling such remains)
9. Impacts to buried archaeological resources
10. Mitigations
11. Conclusions
12. Acknowledgements
13. Appendices (references, lists of sources etc).

5.2 Geophysical survey

In view of the potential range of archaeological deposits which could be present, two methods of survey have been deemed appropriate for this particular project: magnetometry and resistivity.

Magnetometry. This technique can identify buried pits and ditches, and also certain structures such as kilns and burnt deposits. It is a scan and plot-type survey where an instrument (fluxgate gradiometer) is used to detect magnetic variability in the subsoil: contrasted against a measured background magnetic susceptibility, earth-cut archaeological features may be expressed as anomalies if their backfills contain iron-rich soils or inclusions. As part of the (filled-in) moated enclosure associated with Bozon Hall may lie within the development zone, it is important that this feature is identified (or eliminated) as early as possible.

Resistivity. This technique, which, in practice, is a more laborious undertaking than magnetometry, measures sub-surface electrical resistance. Electrical probes are inserted into the ground at regular sampling intervals and a current is passed between them. Features such as wet ditches may be indicated as areas of low electrical resistance, whereas stone or brick walls, or rubble surfaces, will be expressed as areas of high electrical resistance. Its use in this project is advocated due to the potential existence of structural remains associated with Bozon Hall.

It is proposed that 0.5 hectares of the site be surveyed using both of the above techniques. This will cover the area east of the greenhouses and, therefore, the whole of the impact zone.

The surveys would be undertaken by The Landscape Research Centre Ltd. This company was consulted during the production of this specification.

Both surveys would be undertaken over a period of two days in the field. The data would then be processed and presented **in accordance with the guidelines set out in the English Heritage document, *Geophysical Survey in Archaeological Field Evaluation: Research & Professional Services Guideline No. 1 (1995)***. It is expected that at least four survey grid pegs would be left *in situ*: to be relocated, as and when necessary.

The results of the geophysical surveys would be attached to (and integrated with) the desk-based assessment. In practice, these combined data sets would then be used as a basis for determining the level of any further (ie intrusive) field investigation.

5.3 Evaluation trenches

The siting and number of trenches required will be determined by the nature and layout of the proposed development (ie the impact), and by results obtained during geophysical survey. It would not exceed 2% of the total site, and this is the figure worked on for the purpose of this specification.

It is anticipated that intrusive investigation would be undertaken by a team of between three and four experienced archaeologists, over a period of 5 - 8 working days. As noted elsewhere, it is not possible (without supportive data) to refine this figure further, though the client should note that an intrusive phase of work would not take place until such a time as a clear set of objectives had been established. Evaluation trenching is quite distinct from full archaeological investigation. It is undertaken with a view to establishing the date, type, extent and significance of the archaeological resource and is not, therefore, an indiscriminate indulgence of the field archaeologist or the archaeological curator.

Archaeological trenches would be opened with a mechanical excavator which would remove all undifferentiated topsoil or modern overburden to the top of the first significant archaeological or natural horizon. The machine would remove level spits of no more than 200mm depth, moving along the length of each trench. This exercise would be repeated until the first significant archaeological/natural horizon was reached, using a wide toothless (ditching) blade. The machine would not be used to cut arbitrary trenches to natural deposits without regard to archaeological stratification and all machine clearance would be under strict archaeological supervision.

A representative sample of each archaeological feature would be excavated by hand. Information would be entered on standard context sheets and contexts would be drawn in plan and in section. Full photographic coverage would form part of the recording strategy.

Although there is no requirement to fully excavate all features during evaluation (and that preservation *in situ* is to be given full consideration in cases where the resource justifies that preservation) enough information would be gathered to determine the date, nature, extent, quality and significance (at local, regional and national level), of deposits exposed within each of the trenches, thereby providing sufficient data to allow informed decisions to be made regarding future management of the archaeological resource.

During Evaluation, archaeo-environmental potential would be fully considered and an assessment made for further study of environmental remains. If required, specialist appraisal would take place during the fieldwork.

Upon completion of fieldwork, all artefacts/ecofacts would be processed and made available to specialists for written assessment reports; to be included within the evaluation report. In the case of this project, it is anticipated that the ceramic assemblage (pottery sherds, tile etc) would be handled by staff at the City of Lincoln Archaeology Unit.

All site work would be carefully supervised at all times and carried out in accordance with Health and

6.0 Evaluation report

All excavation work would be fully documented and a detailed report prepared for: the Client; the Community Archaeologist; the County Archaeologist; the Lincolnshire Archives Office.

The format and layout would address the following points:

- a description of the methods used and results obtained.
- a general location plan and a trench location plan at appropriate scales; plans of features and selected sections (at least one major section from each trench)
- colour photographic plates
- a critical review of the methodology used
- an assessment of the significance of the archaeology at local, regional and national level (incorporating an assessment of archaeo-environmental potential)
- an assessment of impacts which would affect buried archaeological resources and, if necessary, a discussion of ways by which archaeological resources could be avoided during development (preservation *in situ*)
- discussion.

Features and artefacts would be tabulated by trench and appendices at the end of the report would contain specialists reports, photographs, tabulated data and other material deemed appropriate as an attachment to the main document..

Wherever possible the report would indicate the predicted extent of archaeological deposits within and beyond the development area.

The results contained in the copy forwarded to the City & County Museum, Lincoln would form part of the Sites & Monuments Record (SMR), effectively placing the information in the public domain.

An ordered site archive, upon completion of the project, would be lodged with the City & County Museum, Lincoln. It is anticipated that this would take place within 6 months following the completion of fieldwork. Also, a summary of the results obtained during field evaluation would be presented to the editor of the local County journal, *Lincolnshire History & Archaeology*, for publication in a future edition

Colin Palmer-Brown
Pre-Construct Archaeology (Lincoln)

January 20th, 1996

Appendix 12.4: Context list

Trench 1

Context	Description
[100]	Modern ploughsoil horizon: c. 40cm of humic sandy clay-silt; few inclusions but frequent roots from nearby hedge trees
[101]	Approx. 17cm of dark grey/brown soft sandy silt. Below topsoil and filling depression in top of backfilled moat. ?Old (slumped) turf line
[102]	Bulk fill of moat below [101]: up to 1.4m of clean, soft light greyish-brown silty clay. Filled much of upper void and was assumed to be bank material which was pushed-back into the moat (from where it was derived) from the south side
[103]	c. 27cm of very clean, soft sandy silt filling ?natural depression [105] on south side of backfilled moat
[104]	Upper exposure of natural brown/yellow sandy silt on south side of Trench 1. Natural flood silts which pre-date the archaeology
[105]	Shallow regular depression on south side of moat; seen in top of [107]
[106]	Upper 'primary' fill of moat; sealed beneath [102], sealing [108]. Dark grey silty sand containing brick, animal bone and post-medieval pottery; an in-wash deposit
[107]	Extensive deposit of clean mid-brown clay-silt; sealed beneath north lip of [104], and cut through by moat [109]
[108]	Waterlogged deposit in moat beneath [106]. Approx. 0.6m of compact grey/blue clay-silt containing fragments of wood and other organics. A slow-moving/standing water deposit. Contained fragments of later post-medieval pottery
[109]	Cut for moat. Only south side seen in excavation cutting, with north edge possibly marked by existing east-west hedge line. Appeared to be a large U-shaped void with c. 50° slope; base of cut not examined due to section collapse.
[110]	Lowest fill examined in moat [109]: 20cm+ of light grey, loose, coarse sand: a moving-water deposit

Trench 2

Context	Description
[200]	Layer of homogenous humic silty clay: modern ploughsoil, same as [100]
[201]	Thick deposit(s) of soft light brown/yellow sandy silt below ploughsoil [200]. Excavated in sondage to depth 40cm beneath topsoil. Series of cumulative flood deposits; deposited in low energy, ?tidal, environment; fen silts.

Trench 3

Context

Description

- [300] Widespread layer of loose, moist dark grey/brown humic silty clay; depth = c. 30cm. A combination of modern plough soil and scattered upcast from north-south modern drain to west of Trench 3
- [301] Flood/wash deposit cut by [303], [305], and [307]; c. 28cm of soft light brown silty clay; underlies plough soil, and seals [313], [311], [308] and [315]. Influenced by leaching from topsoil
- [302] Upper backfill of large feature, extreme west side of trench: more than 90cm of soft dark grey/brown silty clay mixed with occasional brick rubble, asbestos fragments and plastic. Modern in-fill of ?backfilled moat
- [303] Cut for the above: orientated broadly N/W - S/E; apparently curving. Could be part of original moat which has been backfilled and re-aligned
- [304] Fill of butt-ended linear feature [305]: c. 28cm of compact light grey/brown silty clay, free of coarse inclusions.
- [305] North end of butt-ended linear feature extending c. 70cm north from south section. Max. depth c. 28cm. Function uncertain.
- [306] Fill of feature adjacent to [304]/[305]. Linear slot-like form, orientated north-west to south-east. Compact light grey/brown silty clay; contains coal fragments + fragments of asbestos
- [307] Cut of the above
- [308] Upper fill of curved gully [310] on east side of trench: c. 28cm of moderately firm light fawn/grey silty clay, free of coarse inclusions
- [309] lower fill of gully [310]. Only 1cm of dark grey/blue silty clay containing charcoal or manganese
- [310] Curved, undated, gully on east side of trench, orientated south-west to north-east
- [311] Fill of curved gully [312]. Very similar to subsoil; no finds
- [312] Curved gully to east of, and mirroring orientation of, gully [310]; depth = 20cm.
- [313] Fill of terminal end of ?gully seen extreme east side of trench. Approx. 20cm of soft light brown/grey silty clay. Contained large fragments of Stamford ware rim
- [314] Cut of the above: south terminal of linear feature extending northwards of trench and extending beneath east section
- [315] Shallow fill (c. 14cm) of cigar-shaped feature in centre of trench; light brown/grey silty clay, free of coarse inclusions
- [316] Cut for the above; orientated east-west
- [317] Extensive layer(s) of soft yellow/brown sandy silt, extending over entire trench and cut through by archaeological features. Natural flood horizon(s)
- [318] Fill of small pit-like feature extending north from central part of south section; 22cm+ of soft, light grey/brown silty clay, occasional fragments of charcoal

[319] Cut for the above; small bowl-shaped, ?pit. Function unknown.

Trench 4

Context

Description

- [400] Modern plough soil horizon identical to [100], [200], [300]
- [401] Upper bulk backfill of enclosure ditch [403]; 90cm of soft light greyish-brown (mottled in places) sandy silt. Containing pottery sherds, animal bone, mussel shells and charcoal flecks. Uniform texture but colour differentiation due to leaching from A horizon (topsoil). Possibly purposeful backfilling, but could be natural infilling leading to wide ditch profile associated with weathering, side slumpage/collapse
- [402] Lower fill of enclosure ditch [403]; c. 35cm of dark grey silty clay in base of ditch. Water-born deposit associated with functional life of enclosure ditch. Several sherds of medieval pottery recovered. Primary fill.
- [403] Cut associated with enclosure ditch filled with [401] and [402]; wide undulating U-shaped profile which may have been substantially remodelled as a result of side slumpage and weathering. Depth = 1.25m, estimated width (from oblique section) = 6.0m max.
- [404] Widespread layer(s) of soft mottled orange/yellow sandy silt, cut through by ditch [403]. Natural fen silt deposits.

Appendix 12.5 Site Archive

The basic site archive comprises the following:

38 context record sheets

x1 colour print film, x1 colour slide film

x6 scale drawings (plans and sections)

x1 box of finds

Primary records are currently with Pre-Construct Archaeology (Lincoln), though the paper and physical archive will be deposited with the City and County Museum within 1 year of completion of this report, together with a more detailed archive list.

The site accession number (CCM, Lincoln) is 27.96