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CHAPEL HEATH, NAVENBY

ARCHAEOLOGICAL EVALUATION REPORT



PRE-CONSTRUCT ARCHAEOLOGY

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CHAPEL HEATH, NAVENBY

AN ARCHAEOLOGICAL EVALUATION REPORT

FOR

PLOUGHSOUND LTD

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1.0 Non-Technical Summary

Ploughsound Ltd intend to seek full planning consent to construct approximately 67 dwellings on land on the south side of Chapel Lane, Navenby (Fig. 1). Planning permission has been granted in outline, though full consent will not be given until such a time as the Clients have implemented a programme of investigation to establish the status of archaeological remains, the presence of which have been known since the mid-1960's. This field evaluation report is the end result of a staged programme of non-intrusive and intrusive investigations and will form a basis for future resource management decisions.

A desk top assessment was completed in June 1994, which brought together information contained in the Sites and Monuments Record, cartographic records, published accounts and other sources (Brown, 1994). Prior to excavation, a geophysical (magnetometer) survey was undertaken by the Landscape Research Centre Ltd, which provided the predominant basis for strategic intrusive investigation (Appendix 2).

The report presented below documents the results of an eleven day trenching programme, designed to assess the impacts to archaeological resources which may be occasioned during the construction of the proposed housing scheme. Seven evaluation trenches, of varying dimensions, were sited within the area of proposed development, with a view to examining magnetic anomalies identified during geophysical survey, as well as draw-together the results of previous assessments (not connected with the present planning application).

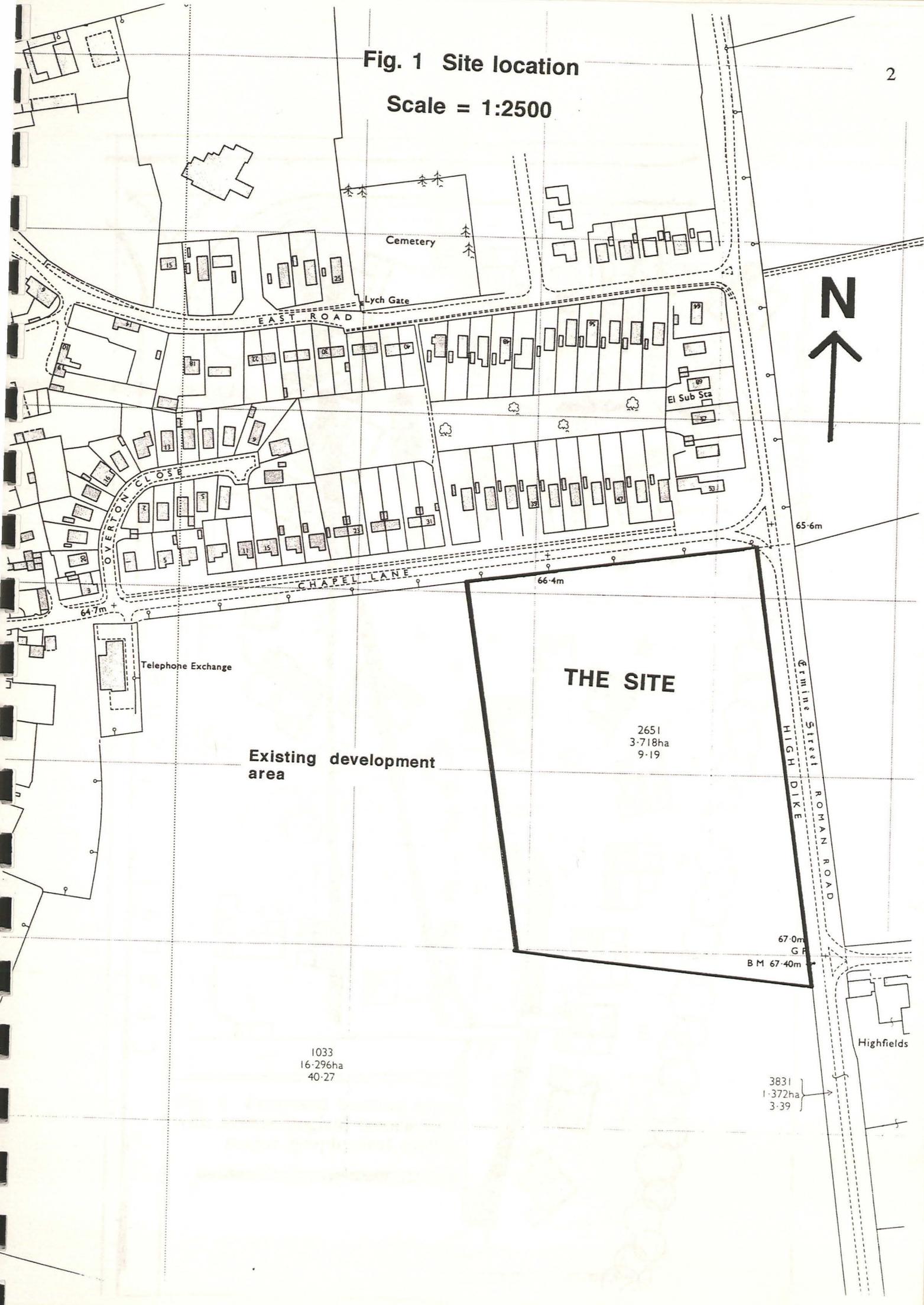
It is clear that the archaeological potential of the site is very high. Remains dating from the later prehistoric period are present within the proposed development area, and Roman roadside settlement remains (stone buildings) appear to line the east side of the site, forming what appears to be part of an extensive ribbon development. The remains are well-preserved and incorporate floor surfaces and occupation remains.

Roman 60537
IA 60557

In its present form, the proposed housing scheme would incur significant impacts to archaeological resources, though the Clients have stressed their willingness to consider all possible preservation *in situ* strategies, with a view to minimising the overall impact to buried remains. Informal discussions between Pre-Construct Archaeology and the Clients have centred on the use of sympathetic foundation designs (rafts) that would be constructed in such a way as to avoid damaging archaeological resources.

Fig. 1 Site location

Scale = 1:2500



Existing development area

THE SITE

2651
3.718ha
9.19

1033
16.296ha
40.27

3831
1.372ha
3.39



2.0 Introduction

An intrusive phase of archaeological field evaluation took place between Monday, October 31st and Monday, November 14th on the site of a proposed residential housing scheme (Fig. 1). These works were commissioned by Ploughsound Ltd. and followed a detailed desk top assessment, researched and written by Pre-Construct Archaeology (Brown 1994).

Based on existing data (incorporating the results of earlier field walking) the latter report concluded that the archaeological potential of the site was high.

Since its discovery, nearly thirty years ago, a wide interest in the site has been expressed, from professional archaeologists, interested amateurs and also from metal detectorists. The academic value to be attached to this area cannot be over-stated.

The central national grid reference is SK 9930 5750.

3.0 Planning background

As noted earlier, planning permission has been granted in outline. Full consent would not normally be granted until such a time as the Clients have satisfied the planning authority that suitable provision has been made, either to preserve archaeological remains *in situ*, or fully excavate those remains that would be threatened by development (ie preservation by record).

The District Council's policy towards archaeology reflects advice contained within Planning Policy Guidance: Archaeology and Planning (PPG 16). In particular, section C5 states:

"DEVELOPMENT PROPOSALS WHICH ARE LIKELY TO ADVERSELY AFFECT A SITE OF ARCHAEOLOGICAL INTEREST WILL NORMALLY BE SUBJECT TO A CONDITION OF PLANNING PERMISSION REQUIRING ARCHAEOLOGICAL INVESTIGATIONS TO TAKE PLACE BEFORE AND/OR DURING DEVELOPMENT"

4.0 Geology and topography

The solid geology surrounding the proposed development site comprises Oolitic Limestone (British Geological Survey Sheet 114, 1:50,000). The site lies approximately 0.5km east of the limestone cliff at a point approximately 70m above sea level. To the east, Navenby Heath gently fluctuates between the 70m and 60m contour lines, whereas, to the west, the land dips dramatically to 40m OD.

Less than 5.0km west of Navenby lies the River Brant, which is the closest major water course, though springs occur on the west side of the escarpment, where permeable rock formations overlie impermeable liassic clays.

The proposed development site measures approximately 9.2 acres (3.72 ha) in area, and is broadly rectangular in plan. It lies immediately west of Ermine Street and south of Chapel Lane, and is situated mid-way between Lincoln and Ancaster

5.0 Archaeological and historical background

The archaeological and historical significance attached to the proposed scheme, within a local and regional framework, was established in the preceding desk top report.

Artefactual evidence which has been recorded from around and within the proposed development site (sometimes taking the form of 'chance discoveries') indicates that human settlement has taken place within the area from at least the late Neolithic or early Bronze Age periods, though the majority of finds have been Roman.

Systematic field walking by Allison Peach (former Community Archaeologist) and Ben Whitwell in 1991 indicated that there was evidence of Iron Age and Romano-British occupation on both sides of Ermine Street (worked flints of earlier origin were also picked up). Approximately one third of the proposed development site was surveyed at this time, when it was noted that the majority of finds lay close to Ermine Street, with a gradual tailing-off of surface material towards the west.

Reported finds from metal detectorists (principally those of Mr K. Borrell) suggest that Roman occupation at the Navenby site may have been early (during the initial conquest period).

The stimulus behind the siting of a potentially large settlement at Navenby during the Roman period has been the subject of some considerable speculation, though it has not been tested by intrusive archaeological methods. The discovery during the present investigation of at least one large native precursor raises the interesting possibility that Ermine Street succeeded a late prehistoric forerunner.

The strategic potential of Navenby for the early Roman period is clear: it lay mid-way between the fort sited at Ancaster and the Legionary Fortress at Lincoln (later, *Lindum Colonia*). Ermine Street, which played a crucial role as a supply and communication route, linked the major and minor settlements between York and the capital at London (*Londinium*).

Surface material suggests that occupation at Navenby occurred throughout the Roman period (C1st to early C5th AD). Following the withdrawal of Roman administration from Britain, the site appears to have been vacated and never reoccupied. The later (Saxon/medieval) settlement appears to have developed within the confines of the present village, closer to the Lincoln Cliff.

6.0 Aims

The principal aim of the Field Evaluation at the Navenby site was:

- to establish the presence/absence of archaeological deposits dating from the prehistoric to post-medieval periods and to assess their significance at local, regional and national level: in particular,
- to establish the status of magnetic anomalies recorded during geophysical survey and assess the remains from which surface collections were derived.

A project Specification, based Around these objectives, was jointly agreed between Pre-Construct Archaeology, the Community Archaeologist for North Kesteven and Ploughsound Ltd.

7.0 Methodology

7.1 Magnetometer survey

Prior to excavation, the Landscape Research Centre Ltd undertook a magnetometer survey on behalf of Pre-Construct Archaeology as a first step towards identifying areas or concentrations of

archaeological features which may be vulnerable to development (Appendix 2). The survey identified a wide-ranging group of anomalies, including two possible native-type (Iron Age) enclosures (containing round houses), two oval enclosures, part of a square enclosure (perpendicular to Ermine Street), linear ditches as well as other, less diagnostic, anomalies.

7.2 Evaluation trenches

Following the circulation of desk top assessment and geophysical survey reports, the Community Archaeologist requested, as a further necessary means of assessing the date, depth, nature, quality, significance and extent of archaeological resources, that areas be selectively sampled by excavation; the sample sizes being based on results obtained during geophysical survey. This involved digging seven trenches, of varying lengths, each measuring approximately 1.8m in width.

Each of the trenches were sited with a view to assessing specific magnetic anomalies.

A team of four experienced field archaeologists, assisted by an intermittent fifth member, excavated and recorded features and deposits revealed within the evaluation trenches. All deposits were recorded on standard pro-forma context sheets and contexts were drawn and, where appropriate, photographed. All finds were washed and/or processed and were selectively presented to specialists for appraisal (Appendix 3). Following completion of the field project, an environmental archaeologist was commissioned to take selective samples, at the request of the County Archaeologist.

A mechanical excavator fitted with a straight ditching bucket 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. All section and plan surfaces were meticulously cleaned following mechanical stripping and a representative sample of each archaeological feature was excavated.

8.0 Results

8.1.1 Trench 1 (Fig. 3)

The geophysical survey revealed the presence of a large sub-rectangular ditched enclosure, occupying much of the south-west part of the site. Inside the enclosure could be seen at least three circular anomalies; almost certainly penannular ditches that functioned as the eaves drips for round houses, the entrances for which appeared to face east towards a large entrance to the enclosure.

A dog-legged trench, measuring approximately 20.4m in length, was orientated north-south, with a view to sampling the enclosure ditch, as well as one of the circular gullies within it.

The topsoil, which was stripped mechanically, measured approximately 30cm in thickness. Beneath it lay a shallow, intermittent subsoil-like deposit which appeared to seal the archaeology.

The enclosure ditch, [103], was located on the south side of the trench. It measured at least 6.0m in width, though only half of the exposed plan was excavated (Trench 1 was the last of the seven areas to be sampled, when time was becoming increasingly precious).

The ditch had been dug to at least 1.5m. Its north edge indicated a basically U-shaped profile with a flat base (cut to the top of the limestone bedrock).

Five basic units of stratification were recorded in the ditch: the lower fills ([108] and [109]) contained no Roman pottery; only fragments of crudely-made, shell-tempered coarse wares of Iron Age type (see report by M. Darling, Appendix 3). These lower fills were sealed beneath a distinct lens of charcoal-filled soil, [107]. It may be significant that, below this horizon, only native-type pottery was recovered, whereas the two bulk fills above ([102] and [101]) contained a limited selection of early Roman sherds.

Fig. 3 Trench 1

Approximately 6.0m north of the above, a shallow gully was exposed, [105] which had a slight inward curve. This was the penannular gully that surrounded one of the round houses, the full diameter of which would be approximately 14.0m. A section of its homogenous sandy clay fill was removed, exposing a V-shaped cut, surviving to a depth not exceeding 15cm. There were no associated finds.

Approximately 40cm inside the arc of the house gully was a small pit-like feature, [115], which contained two small depressions; possibly marking the site of the house timber/wattle walls. No other features could be directly associated with the round house.

Immediately outside of the house was a shallow butt-ended gully or trench, [113]. A section of its fill was excavated, though this contained no finds, and its purpose was not clear.

Fig. 3 Trench 1

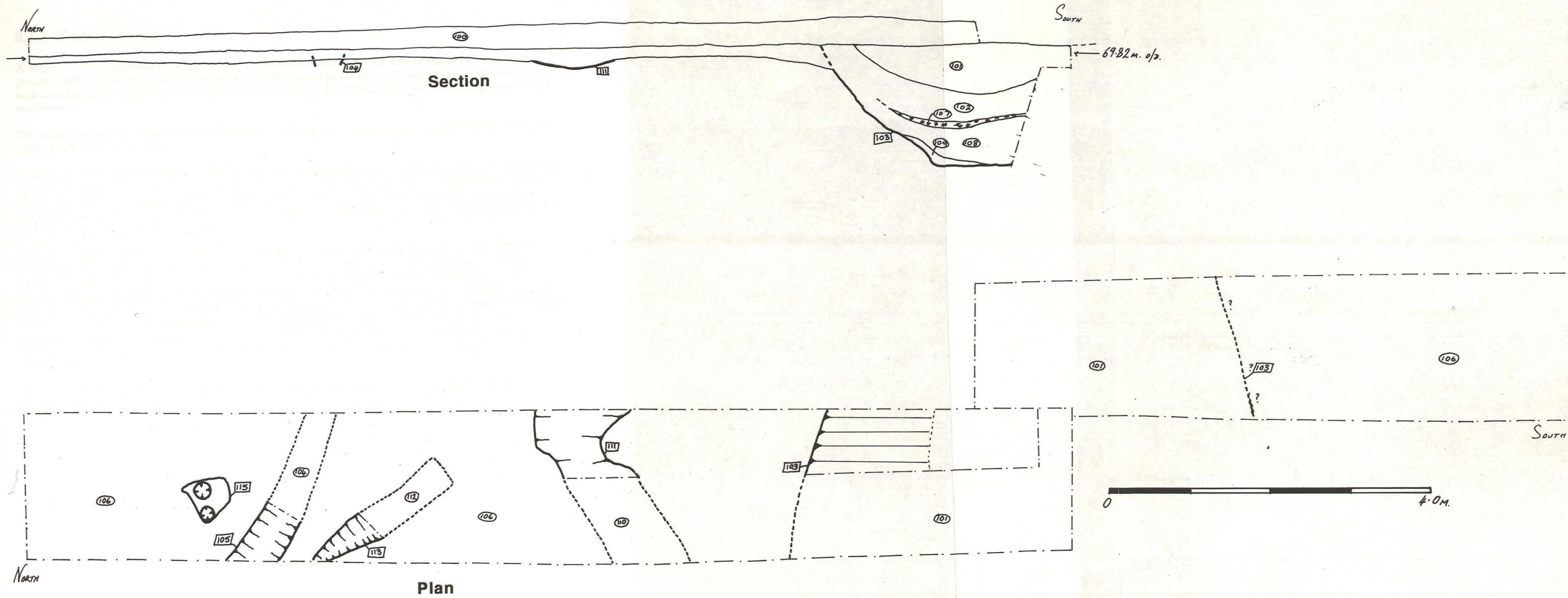


Fig. 4 Trench 2

8.1.2 Trench 2 (Fig. 4)

A second trench, orientated east-west, was positioned to intercept the east boundary of a further possible sub-square enclosure, revealed as a weak magnetic anomaly during geophysical survey. It was also hoped the trench would help to evaluate a large, localised, amorphous anomaly, east of the enclosure.

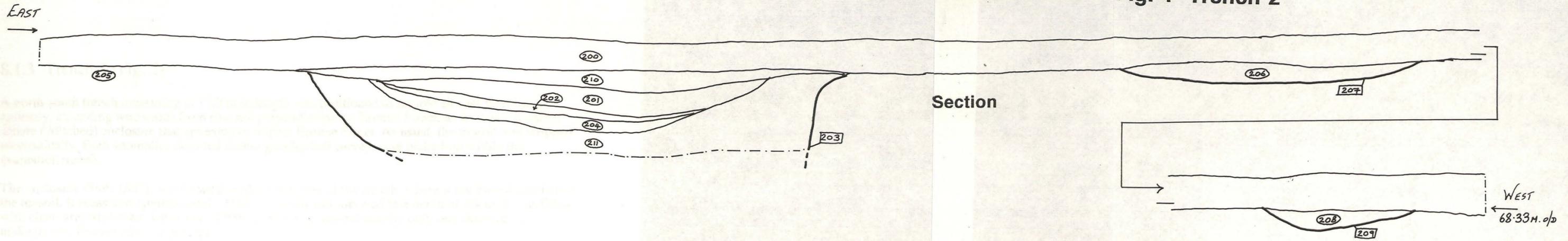
The trench measured approximately 20.5m in length and was stripped of its topsoil (between 30 and 40cm thickness) mechanically.

A wide, shallow linear depression, [207], orientated north-south, was sampled on the east side of the trench. An equally shallow, similarly-orientated depression, [209], lay less than 2.0m west of the above. One of these features, probably [207] represented the enclosure-like anomaly seen on the geophysical survey plot. Unfortunately, it contained no dateable finds. The less substantial gully contained only two sherds of later Roman pottery.

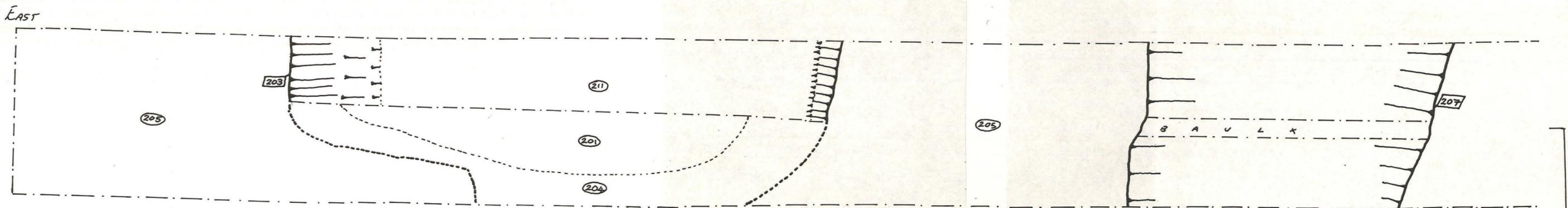
A distinct, large, dark area of soil indicated the site of the localised geophysical anomaly, [203], which measured more than 6.0m on its east-west axis. Its depth was not determined for reasons of health and safety, though it exceeded 1.0m beneath the top of natural strata. Its west edge was vertical, though its east side sloped at approximately 40°. The lowest bulk fill to be sampled, [211], measured up to 80cm in thickness, comprising an homogenous mass of loose brown soil mixed with limestone fragments. This (and subsequent fills, [204], [202], [201], [210]) was clearly of purposeful origin; some being excavated and backfilled waste, the remainder being a mixture of redeposited soil and domestic rubbish, dating to within the later Roman period (latest date from context [201]).

This is probably the site of a stone quarry, and it may be that some of the extracted stone was used to construct buildings further to the east, on the Ermine Street frontage (below).

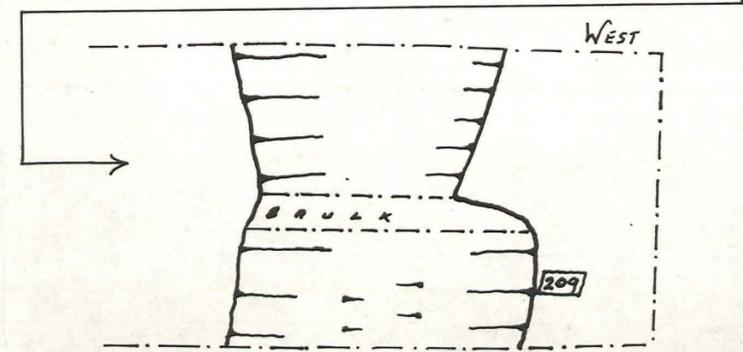
Fig. 4 Trench 2



Section



Plan



8.1.3 Trench 3 (Fig. 5)

A north-south trench measuring c. 17.0 m in length was positioned to sample an east-west linear anomaly, extending westwards from (but not perpendicular to) Ermine Street, as well as a possible square (?ditched) enclosure that appeared to respect Ermine Street. As usual, the topsoil was stripped mechanically. Both anomalies detected during geophysical survey were picked-up within the evaluation trench.

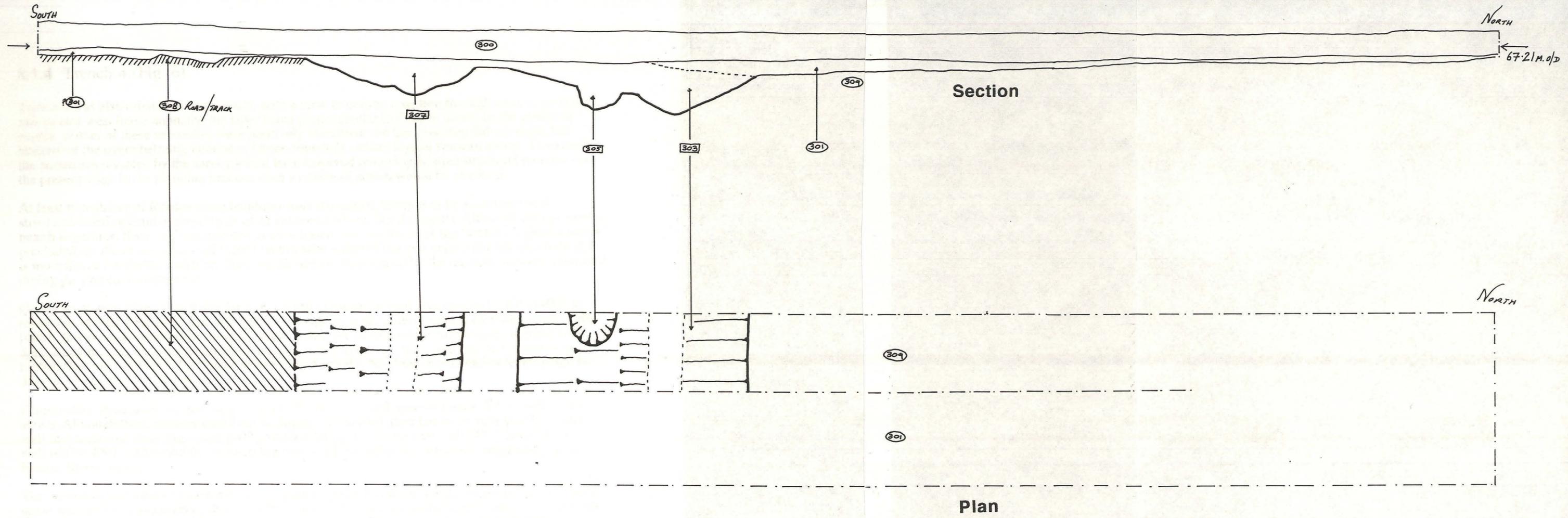
The enclosure ditch, [307], was located on the south side of the trench, where it lay buried just below the topsoil. It measured approximately 2.00m in width and survived to a depth of 45cm. It was filled with clean greyish-brown sandy clay, [306], containing (unfortunately) only one sherd of undiagnostic Romano-British pottery.

The south edge of the above was met by the north edge of a well-laid metalled surface, [308], comprising worn, rounded limestone fragments. The width of this road/track exceeded 3.0m (its south edge lay beyond the area investigated). It was assumed that it respected the whole of the perimeter of the enclosure ditch, the full extent of which was not made clear during geophysical survey.

A second ditch, [303], was identified c. 60cm north of the enclosure ditch described above. It measured 2.6m in width and was excavated to a depth not less than 60cm. Within the ditch, lying within the west section, was a single post-hole, [305], which appeared to be contemporary (ie the fills of both features, greyish-brown sandy clay, were identical). It may be that the ditch contained an internal fence line, though this could not be proved within the context of the present investigation. Sherds of late first/early second century pottery were recovered from within the ditch fill.

No other archaeological features were identified.

Fig. 5 Trench 3



8.1.4 Trench 4 (Fig. 6)

Trench 4 was also orientated north-south, with a view to cutting a section through an oval enclosure and an east-west linear anomaly; the latter being perpendicular to Ermine Street. In the course of events, neither of these anomalies were positively identified: not because they did not exist, but because of the overwhelming volume of (stone-founded) archaeological features above. To examine the anomalies revealed by the survey would have involved removing Roman structural remains - at the present stage in the planning process, such a course of action would be unethical.

At least two phases of Roman stone buildings were examined, thought to be associated with structures fronting Ermine Street (part of an extensive ribbon development). Although well-preserved hearth structures, floor surfaces and drains were found, the smallness of the 'archaeological window' precluded the direct association of these features with either of the two main stone phases (indeed, it is more than a possibility that more than two phases are represented by the material remains examined during the present investigation).

On the north side of the trench, the base of a north-south stone wall was exposed, [407]/[409]. It measured at least 4.8m in length and was cut through by a later, more robust, east-west stone wall, [408]. It was made from large, roughly-faced, limestone blocks with a rubble core, bonded with dark sandy mortar. Only two courses of stonework survived, and the south end of the wall was robbed (leaving no clear indication of an associated trench). No floor or occupation levels could be directly associated with the wall.

Fragmentary remains of an east-west wall, [437], were exposed approximately 2.7m south of the above. Although these remains could not be directly associated, they too were truncated by a later wall that respected their alignment, [402], and it is likely, therefore, that wall [437] once adjoined wall [407]/[409], both probably representing part of a large strip-type structure originating on the Ermine Street frontage.

The second stone building phase was represented by walls [408] and [402]. As noted, the east-west stone wall, [408], was notably substantial (0.8m in width) and may have been external. It was made from roughly-dressed stones set in orange sandy mortar. Again, its core was of rough rubble construction. Only one course of stonework appeared to survive, set in a construction trench, [411] which has cut through the earlier alignment.

A parallel, but slighter, foundation to the above, [402], lay c. 5.2m further south. The wall, which measured c. 60cm in width, was bonded with sandy mortar, though its survival was sporadic, suggested that the lower foundation (a single course) was earth-bonded. It is likely that the structure represented by walls [408] and [402] was also a strip building, perhaps a direct successor.

As noted, no floor or occupation surfaces could be directly related to the above sequences, though such remains were present, notably on the south side of the trench.

An east-west stone-lined drain was exposed ([441], [424]/[425]) and partially excavated, c. 7.0m south of wall [402]. It appeared to pre-date the earliest of the walls as it lay sealed beneath a distinct layer of levelling material, [439] which was itself earlier than the first stone building phase (and therefore amounted to an earlier building phase). The drain measured c. 80cm in overall width and was filled with loose, greyish-brown, sandy silt, [423], which was probably deposited (not surprisingly) by moving water.

A further (possibly contemporary, though less complete) drain, [433], was disturbed by the north face of the fragmentary east-west wall [437]. Although the drain was not excavated, its distinctive dark fill, [434], was exposed and underlay the fragmentary remains of a stone capping, [432].

Some of the stone rubble on the south side of the above, [426]/[427], appeared to butt the drain edge (as if by design) and could represent, therefore, the fragmentary remains of contemporary rough flooring, though the evidence was not entirely clear.

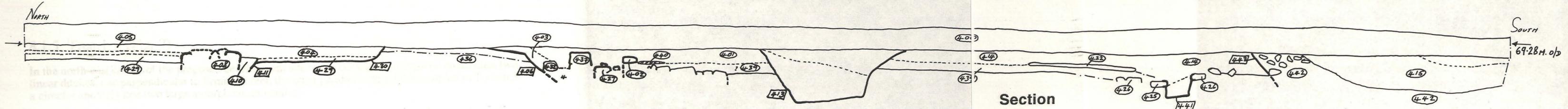
Hearth/mortar floor remains were found in at least three areas ([431], [440], [422]), though none could be related to the major structural sequences. A north-south row of, stone-packed, equidistant post holes was also exposed ([417], [419], [421]): these definitely post-dated the stone-lined drain, [441], but appeared to pre-date one of the earlier wall foundations, [437].

Clearly, a larger excavation area would have resolved some of the ambiguity, though the information gleaned is considered more than adequate for planning purposes.

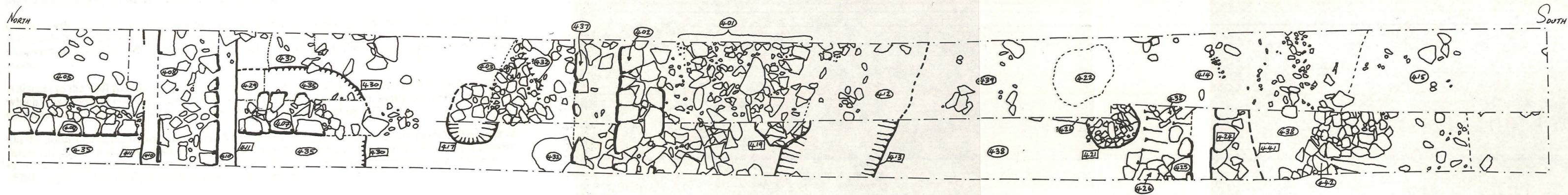
Pottery from Trench 4 was recovered mainly from demolition spreads, though some sherds were recovered from construction/occupation features. The majority of sherds were late or very late Roman, suggesting that the Navenby settlement was occupied until the very latest phases of the Roman period (Appendix 3).

Although the two anomalies identified by the geophysical survey were not investigated, it is noteworthy that, in two parts of the trench, demolition rubble appeared to fill the tops of voids that were not investigated; [430] on the north side of the trench and [443] on the south side. It is possible, therefore, that these depressions indicate the sites of earlier intrusive features.

Fig. 6 Trench 4



Section



Plan



8.1.5 Trench 5 (Fig. 7)

In the north-east corner of the proposed development site was a complex of magnetic anomalies: two linear ditches, one perpendicular to Ermine Street, the other parallel with a ditch sampled in Trench 3; a circular anomaly and two large amorphous anomalies.

A trench orientated north-west to south-east was positioned to intercept and examine as many of these anomalies as possible. At least two phases of archaeology were exposed - a substantial ?quarry pit, ditches and pits, most of which contained Romano-British pottery.

Most of the south side of the trench was dominated by a substantial pit, [509], which was backfilled during the later Roman period; probably the later fourth century. It was assumed that the pit, which measured at least 9.5m in length (where it fell within the cutting) was a backfilled quarry; again perhaps to supply raw material for neighbouring structures. Unfortunately, its base was not reached for safety reasons, though excavation ceased at a point 1.2m below the top of the cut.

At least nine major deposits filled the void of the presumed quarry pit, though these will not be individually and laboriously described here, the details of which can be read in Appendix 6 at the end of this report. Most of the soil filling the pit contained very large quantities of ash which was relatively free of charcoal inclusions; suggesting, perhaps that straw-like material (rather than wood) had been burnt. The lowest excavated deposit, [514], contained no ash, but did contain a relatively high density of limestone fragments, some of these being quite large. It is possible this was in fact the lowest fill - the level at which limestone was being extracted when the quarry was abandoned.

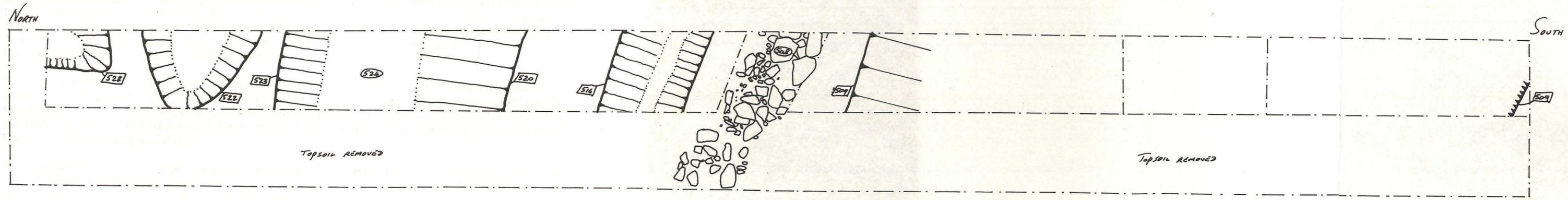
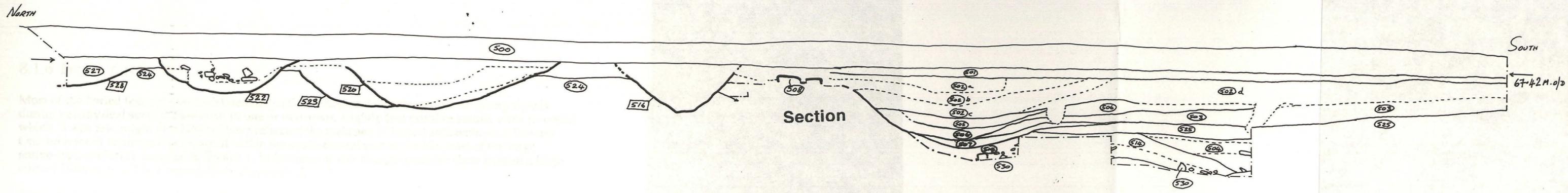
On the north side of the backfilled quarry lay the remains of a low quality, ?dry stone, wall, [508]. It is possible the wall delineated the edge of the quarry, though this was not proved. It was orientated east-west, and only its lowest course survived - a linear, though shabby, arrangement of stones of all sizes.

Adjacent to the wall foundation, c. 35cm north of it, was a parallel V-shaped shallow ditch, [516], which was probably contemporary. It was filled with loose, dark brown, sandy silt, [515], that contained sherds of Romano-British pottery, dated to the third century AD.

On the north side of the trench was a complex of inter-cutting features (pits, ditches etc). The latest of these, [522], was a shallow, dish-shaped pit, the upper fill of which contained a considerable density of stones in association with mid-fourth century pottery. The pit cut earlier features; one of which, [528], may have been little more than a natural depression.

On the south side of the pit (and truncated by it) was a ditch of at least two phases, [520] and [523], respectively. The later of these, [520], was widely U-shaped in profile, measuring approximately 2.5m in width and at least 60cm in depth. Although both ditches appeared to be on the same alignment, the geophysical survey suggests that they would in fact diverge further west. Both contained Roman pottery, the latest sherds being early - mid-second century or later.

Fig. 7 Trench 5



0 4.0M.

Plan

8.1.6 Trench 6 (Fig. 8)

Most of the buried features that registered magnetic readings at Navenby produced strong signals during geophysical survey. However, in one or two areas, slightly less positive results were recorded which, it was felt, might or might not have reflected the presence of buried archaeological features. One such set of readings was obtained within the south-central part of the site, east of the large native-type enclosure sampled in Trench 1. In this area, it was thought possible there existed a large curved feature, possibly a buried ditch (Appendix 2, p. 9).

A trench was located approximately 7.0m east of the large native enclosure, to sample the area where this weak signal was obtained. Two substantial trench-like features were sectioned on the east side of the cutting, the backfills of which appeared to have been truncated by a third phase of archaeology, this being poorly-understood at the time of excavation. Discreet features were also exposed on the west side which did not register on the magnetometer survey.

The earliest feature in the area was a (truncated) flat-bottomed trench, [611], the base of which measured more than 1.0m in width. Little remained of its steep west side. More of its east edge survived, though not all of the fill on this side was removed. It contained redeposited, natural-looking soils ([609], [608], [607], [612]) to a depth at least 1.2m. There were no associated datable finds.

The west edge of the above was truncated by the east face of a ?similarly-aligned, flat-bottomed trench or ditch-like feature, [610]. It measured at least 2.4m in width, 1.1m in depth. Its fill(s), [605], comprised lenses of clean, natural-looking soils (clay, silty sand, sandy clay etc) that appeared to have been deposited deliberately. However, in the base of the trench, an accumulation of darker, more silty, soil probably is a reflection of gradual silting and accumulation over a more protracted period. Again, no datable finds were recovered: an absence of such material on an otherwise productive site could imply that the above features were earlier rather than later.

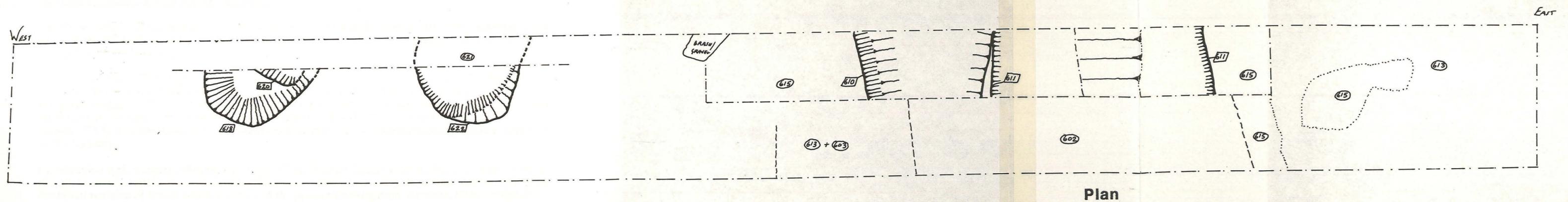
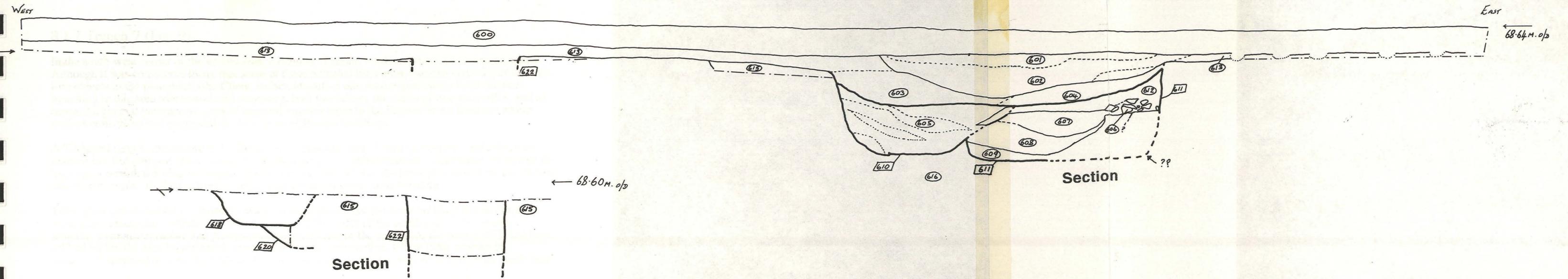
Both of the above appeared to underlie a further, very wide truncation which, regrettably, was not adequately understood within the area or time available. The top of both features lay beneath a wide band of loose silty clay-sand mixed with limestone fragments, [603]/[604]. It appeared to lie within [611] on its east side and (although theoretically unlikely) the west edge of trench [610], comprising fills [603]/[604], [602] and [601].

Approximately 4.0m west of the above group of features, a sub-circular, vertically-sided pit, [622], was excavated to a depth of approximately 75cm, though its base was not reached. Its diameter measured approximately 1.3m, and it was backfilled with clean-looking lenses of redeposited natural soils mixed with pottery and other domestic waste, [621]. Its function was not determined, though associated pottery probably dates to within the second century AD.

1.2m west of the above was a further sub-circular, but shallower, pit-like feature, [618]. It too was backfilled with clean sandy clay lenses containing pottery of a similar date range. It was cut through the top of an earlier feature, [620], that was only partially investigated: the one sherd of pottery recovered may be late Iron Age.

Unfortunately, it proved difficult placing the above features within a defined and meaningful context. For the purpose of the stated planning requirement, excavations within Trench 6 demonstrated that there are indeed substantial archaeological features corresponding to the weak magnetic variability recorded at survey stage, though a more adequate interpretation would depend upon larger-scale investigations, beyond the scope of the present evaluation.

Fig. 8 Trench 6



8.1.7 Trench 7 (Fig. 9)

In the south-west corner of the survey area, a number of small, localised anomalies were recorded. Although it was considered likely that some of these reflected little more than the presence of isolated iron objects in the ploughsoil (the Client, in fact, identified one such object on the field surface), trenching in this area was considered necessary, both to evaluate the status of two anomalies, and to assess the general presence/absence of material remains close to the Ermine Street frontage where surface collections had suggested the proximity of Roman buildings.

A T-shaped trench, measuring c. 12.2m on its north-south axis, 11.6m on its east-west axis, was marked-out and stripped of its topsoil. A stratified large iron object may have accounted for one of the high spots recorded during the magnetometer survey (below). For the most part, however, the trench area was occupied by the well-preserved remains of at least one stone building.

Three principal structural components made-up the evidence for the stone building phase. An east-west wall, measuring c. 40cm in width, situated c. 2.5m north of the south end of the trench, underlay demolition rubble and plough-truncation levels. For the most part, the wall, [707], had been robbed within the area investigated, except close to the west section, where three courses of stonework survived to a depth of 35cm. Traces of *in situ* wall plaster were recorded on its south face.

A second, parallel, and contemporary wall had lain c. 2.3m south of the above, where its course was delineated by the line of a robber trench, [724], on the very edge of the excavation.

Filling the gap between these alignments was a well-preserved floor surface, [718], comprising yellow sandy mortar, intermingled with limestone fragments. It was exposed, not excavated. There was a distinct reddened area on its north-west side, probably the edge of a hearth, built against the wall, perhaps, slightly further to the west.

Approximately 3.2m north of wall [707] was the remains of a further, parallel, east-west foundation line, [721]; a line of stones, approximately 2.0m in length, up to 70cm in width. The feature had undoubtedly suffered at the mercy of the plough, though enough survived to suggest that it was a further building alignment; perhaps a partition associated with the two wall lines further south.

No other construction features were exposed.

The floor surface, [718], had been cut through on its north side by a small, shallow, rectangular pit-like feature, [715]. It was filled with ashy soil, thought by the excavator to be associated with the occupation of the building.

Another small pit, [713], lay c. 1.7m north of wall [707] and was partially concealed behind the west section. It too was filled with ashy soil, [712], and was probably contemporary with a more extensive spread, [709], which lay north of the wall. The excavator believed that both the pit and the layer were associated with occupation. A layer of ash and soil, [708], which overlay the floor surface, [718], was also thought to represent material that had accumulated during the functional life of the building.

Construction and occupation features in Trench 7 lay beneath intermittent horizons of demolition and plough-scattered rubble and soil; [706], [703], [710]. One of these layers, [703], was thought to be the fallen remains of a wall which lay west of the present investigation. Another, [706], contained substantial quantities of wall plaster, identical to that adhering to the south face of wall [707].

A number of features appeared to post-date the demolition of the building, including, of course, the robber trench associated with the wall that had lain on the extreme south side of the excavation, [719]/[724].

The south side of the suggested east-west partition foundation, [721], was cut through by the north

edge of a substantial east-west trench or gully, [717]. It was perpendicular to Ermine Street and extended the full length of the cutting. Only a small section of its fill, [716], was removed, exposing a trench measuring approximately 35cm in depth, with gently-sloping sides and a relatively flat base. It is possible the feature was a property boundary that post-dated the former stone building. The top of a potentially similar (late) feature, [705], was recorded c. 50cm further north, though only the upper few centimetres of its fill was removed.

Most of the pottery recovered from occupation/demolition layers was late third or fourth century AD, again implying that occupation at the Navenby site continued into the very late Roman period.

The archaeology lay beneath c. 30cm or less of topsoil, with most features being truncated, to greater or lesser extents, by the plough.

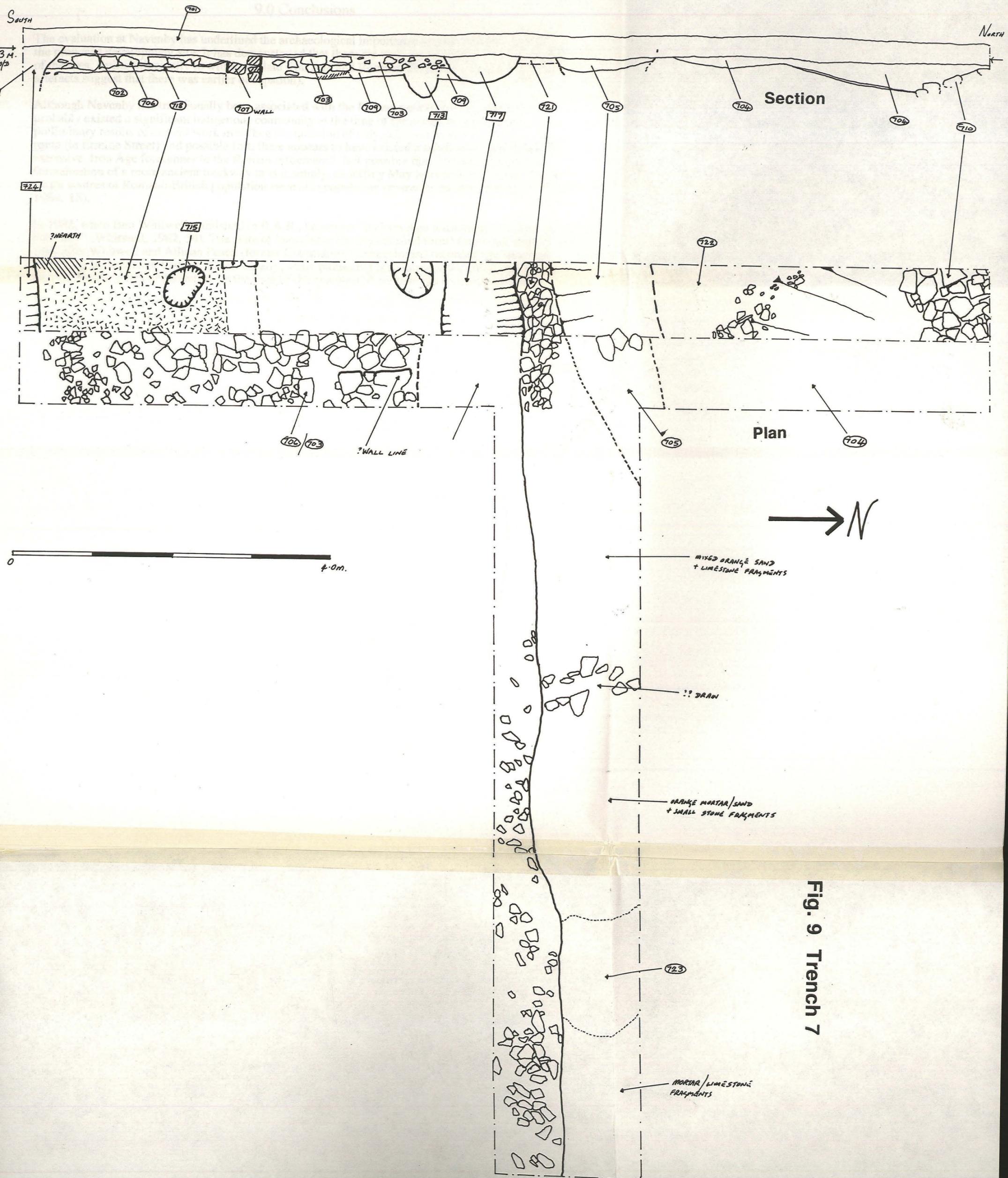


Fig. 9. Trench 7

9.0 Conclusions

The evaluation at Navenby has underlined the archaeological importance which should be attached to the proposed development site. It has demonstrated that there are well-preserved remains over much of the area, dating principally to within the late Iron Age and Romano-British periods (unstratified artefacts suggest that there was earlier occupation).

Although Navenby has traditionally been associated with the Roman period, it is clear that there probably existed a significant indigenous community at the time of the conquest. Indeed, the preliminary results of current work must beg the question of why, adjacent to an early Roman supply route (ie Ermine Street) and possible fort, there appears to have existed a substantial, and possibly extensive, Iron Age forerunner to the Roman settlement?. Is it possible that Ermine Street was a formalisation of a more ancient trackway or is it simply, as Jeffrey May has commented, that "most major centres of Romano-British population were also population centres in the late Iron Age"? (May, 1984, 18).

In 1982, when Ben Whitwell published in B.A.R., he wrote: "no Iron Age settlement is known at Navenby" (Whitwell, 1982, 54). The state of knowledge (in unpublished form) improved slightly in 1991 after Whitwell and Allison Peach (former Community Archaeologist) recorded late Iron Age pottery on both sides of Ermine Street. Clearly, some rethinking is required if we are to understand the pre-Roman status of Navenby - at the time of the conquest, there may have already existed a complex of native enclosures.

English Heritage have outlined research priorities for the 1990's in their document, 'Exploring Our Past' (Wainwright et al, 1991). On page 36 of that document, under the heading 'Briton into Roman (c. 200BC - AD200)', the following may be read:

A high level of continuity in settlement and land use and, by implication, in social and economic organisation, between the late Iron Age and Romano-British periods is becoming increasingly apparent, as are contemporary regional variations. **The possible pre-conquest origins of what have often been seen as the developments of the Romano-British period would repay closer examination.**

Clearly, there is scope at Navenby to examine the interplay between 'invader' and 'invaded' (if I may use these sweeping terms), and to study the direct social, economic and political implications of the Roman invasion on native culture. One might not seriously propose that the charcoal horizon separating all things Roman from all things (apparently) Iron Age in the large enclosure ditch (Trench 1) can be taken to indicate purposeful and violent destruction of the native homestead. However, only by studying such evidence will it be possible to address the problem of how accommodating the local tribe (the *Corieltavi*) was to the incoming Roman Army (accepting that there existed a military site at Navenby, perhaps north of the proposed development area).

The status and origin of the Roman settlement at Navenby has not been established, though material remains dating between the first to early fifth centuries have been recorded over the years. Most authorities believe that the site was chosen for purely military and strategic reasons: the nearest water supply, for example, lies further west in the vicinity of the modern village (Whitwell 1992).

Navenby lies exactly 10 Roman miles south of Lincoln, 10 miles north of Ancaster. As both of these settlements originated as military bases in the early Roman period (significantly, with Iron Age precursors), it is likely that a fort would have been sited at Navenby, perhaps on the boundary of the *territorium* of Lincoln (*ibid*). First century military equipment has been reported from the site (Goodburn 1979, 295)

The apparent scale of the Roman remains at Navenby, as defined by surface collections and the unfortunate development circumstances of days past, could imply that the site was not the 'lesser settlement' referred to by Todd (Todd, 1991, 78). Surface finds suggest that building remains exist to a point at least 60.0m into the field which lies south of the proposed development site.

Navenby continued to be a centre of population long after its military status had declined in the later first century. However, its post-military settlement profile has not been satisfactorily established. The present investigation has demonstrated that, from at least the third century AD, stone buildings lined the west side of Ermine Street, within the proposed development area: the fact that building remains were found, both in Trenches 4 and 7, suggests these structures were part of an extensive ribbon development; possibly the houses and workshops of traders, the ancestors of whom may have been 'camp followers', attracted by the inevitable commercial viability of the Roman Army. In overall plan, the structures sampled at Navenby could resemble strip houses, of a type excavated at the site of St Marks Church in Lincoln (Gilmour 1981) and, on the opposite side of the road, St Marks East (Chitwood 1988, 26).

In its present form, the proposed development would seriously threaten the archaeological resource (Fig. 2). Were strip-type footings to be used on this site, there is little doubt that archaeological remains would be disturbed or destroyed (it must be noted that several features that were recorded during trial trenching did not register as geophysical anomalies during survey, and that some, relatively weak magnetic anomalies are expressions of substantial earth-dug features). In this respect, it would be difficult to propose a scheme of alternative housing layout that would not threaten archaeological resources, **if strip footings were used.**

Although the Clients express their personal concern for the archaeological resource, they, understandably, wish to avoid the prospect of a protracted programme of further archaeological investigations (even if staged): such investigations are costly and are usually undertaken as a matter of last resort, when preservation *in situ* is not possible. Ploughsound Ltd. have underlined their willingness, therefore, to work closely with the curatorial archaeologists/planning authority, with a view to constructing dwellings on rafted foundations, possibly incorporating a revised layout that would leave very sensitive areas as open spaces.

It is acknowledged that a planning decision based on the archaeology which could affect an application is a matter for the Curatorial Archaeologist and the District Council, not Pre-Construct Archaeology. However, it is the opinion of the writer that, **if** Ploughsound Ltd. can devise a strategy whereby archaeological remains can be **guaranteed** long-term preservation, there should not exist a need for large-scale intrusive investigations. However, even if such a scheme were devised, one assumes there would, by necessity, be some impacts from service trenches and similar intrusions. Such trenches would require additional archaeological investigation.

10.0 Acknowledgements

On behalf of Pre-Construct Archaeology, sincere thanks are expressed to Ploughsound, the Commissioning Clients; in particular, Dwain Herkes and Richard Overton. Thanks go also to Nicola Nuttall, the Community Archaeologist for North Kesteven.

The site was managed, on a day-to-day basis, under excellent supervision by Rob Schofield, assisted by Wayne Livesey, Malc Otter and Mike Garrett. Sincere thanks are expressed to them for their professional services, and to Jim Rylatt (once again) and Miles Ridsdale for voluntary help. Thanks go to Maggi Darling and James Rackham for specialist services in the areas of Iron Age/Roman pottery and environmental/faunal assessment (the latter being current work, to be included as part of the project archive). Finally, thank you to the Landscape Research Centre Ltd. for undertaking the geophysical survey on behalf of Pre-Construct Archaeology.

11.0 Appendices

11.1 Colour photographs

11.2 Geophysical survey report (Landscape Research Centre)

11.3 Roman/Iron Age pottery report (MJ Darling, CLAU)

11.4 Soils/Environmental report (DJ Rackham, freelance)

11.5 Trench matrices

11.6 Context lists

11.7 Site archive

Appendix 11.1 Colour photographs



PHOTO. 1 (Trench 1)
Iron Age enclosure ditch [103] (half-profile), looking south



PHOTO. 2 (Trench 1)
Iron Age house gully [105] (centre), internal post hole feature [115] (foreground), and butt-ended gully [113], looking south-west



PHOTO. 3 (Trench 3)
Road/track [308], adjacent contemporary enclosure ditch [307], and east-west linear ditch [303] (background)



PHOTO. 4 (Trench 4)
General view of Roman stone buildings, with walls [407]/[409] and [408] in foreground, looking south



PHOTO. 5 (Trench 4)
General view, looking north



PHOTO. 6 (Trench 5)
General view of part-excavated quarry pit [509], looking north



PHOTO. 7 (Trench 5)
Wall foundation [508] and parallel ditch [516], looking north-east



PHOTO. 8 (Trench 6)
Pits [618] and [620] (foreground) and pit [622] (background), looking north-east

on the section face above the number board, and the robbed wall trench [724] is on the left side of the photograph



PHOTO. 9 (Trench 6)
 General view of area, with deeply-cut features [611] and [610] in foreground (registered as weak magnetic anomaly in geophysical survey; looking north-west



PHOTO. 10 (Trench 7)
 Mortar floor surface [718], looking west. Stone wall [707] can be seen protruding from the section face above the number board, and the robbed wall trench [724] is on the left side of the photograph



PHOTO. 11 (Trench 7)
General view of east side of trench with
stone ?partition foundation [721] in
foreground



PHOTO. 12 (Trench 7)
General view of area, looking south

Appendix 11.2

Summary

A magnetometer survey was carried out by the Landscape Research Centre Ltd for the Lincolnshire Archaeology Society at Navenby, Lincolnshire, on 16th, 19th-20th September, 1994. The purpose of the survey was to identify any buried archaeological features and to record their positions. A number of features were identified and are described on the following pages.

Landscape Research Centre Ltd

Magnetometer Survey

Navenby, Lincolnshire

16th, 19th-20th September, 1994

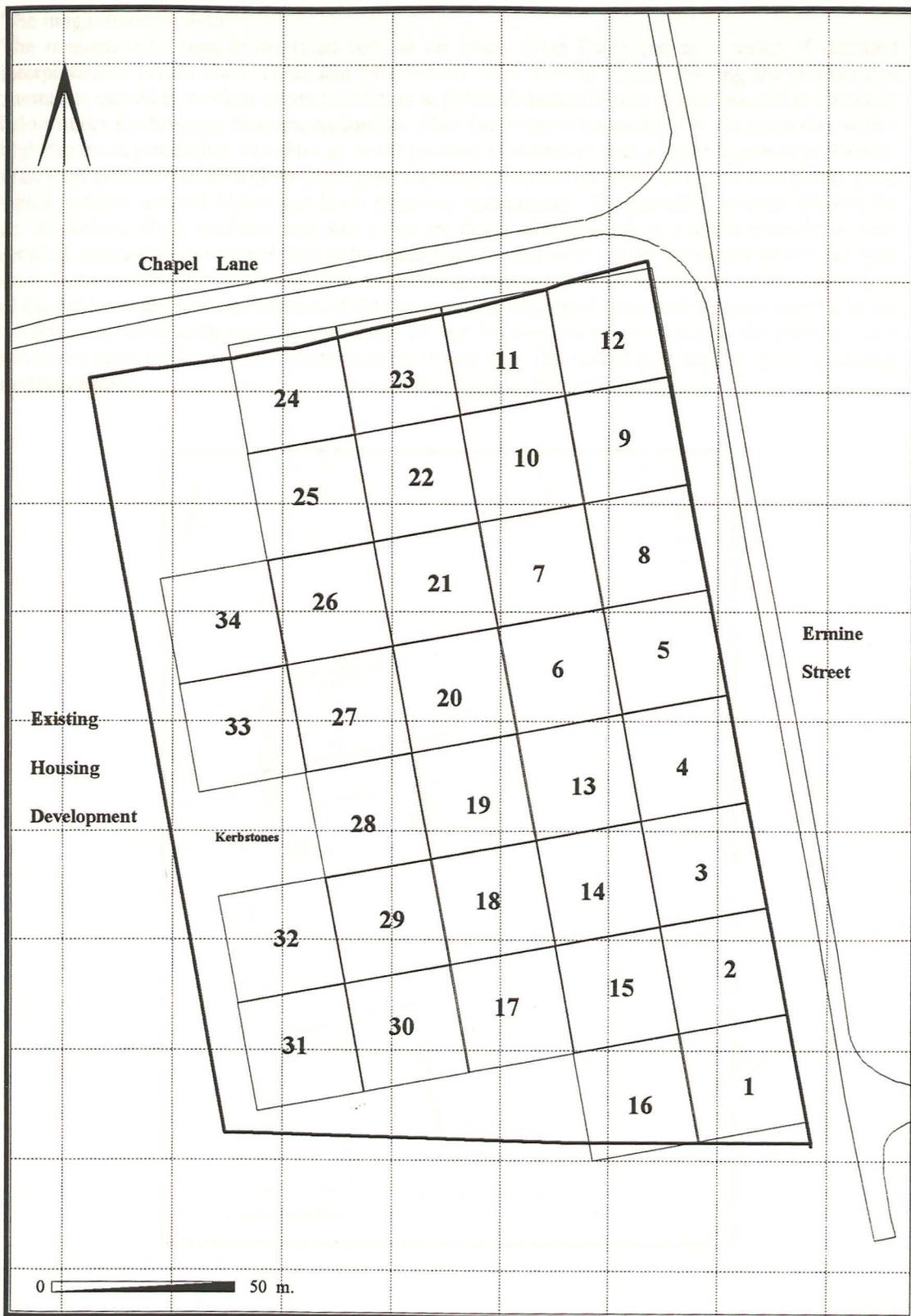
Summary

A magnetometer survey was carried out by the Landscape Research Centre Ltd. for Pre-Construct Archaeology, as part of an archaeological assessment of a proposed housing development at Navenby, Lincolnshire. The proposed development area was particularly receptive to this form of survey and had a number of magnetic anomalies which are discussed in detail below.

Report:

The subject of this report is the discussion of the results of a magnetometer survey carried out on behalf of Pre-Construct Archaeology. The site in question is a proposed housing development at Navenby, Lincolnshire. The magnetometer survey was conducted using a *Geoscan Research* fluxgate gradiometer (model FM36), hereafter referred to as a magnetometer. The zigzag traverse method of survey was used. The survey was conducted by taking readings every 25cm along the north/south axis and every metre along the east/west axis (thus 3600 readings for every 30m grid). The data has been processed and presented using the programs GeoImage (a program dealing with the processing of geophysical data) and GSys (a program which can display, process and present digitised plans and images).

The survey was carried out on the 16th, 19th and the 20th September, 1994. The personnel involved were James Lyall and Heather Clemence. The proposed site was 3.71 hectares in area and consisted of one field, bounded on the north (Chapel Lane) and east (Ermine Street) by existing roads, in the south by a hedge field boundary and in the west by the current housing development. The field was covered in stubble of approximately 10cm in height, and the underlying soil was a sandy loam with a low clay content. The developers had cut a narrow trench in the west of the area which showed the immediate underlying geology was sand in this part of the site. A total area of 3.06 hectares was surveyed. All the plans and images in this report have north pointing to the top of the page.

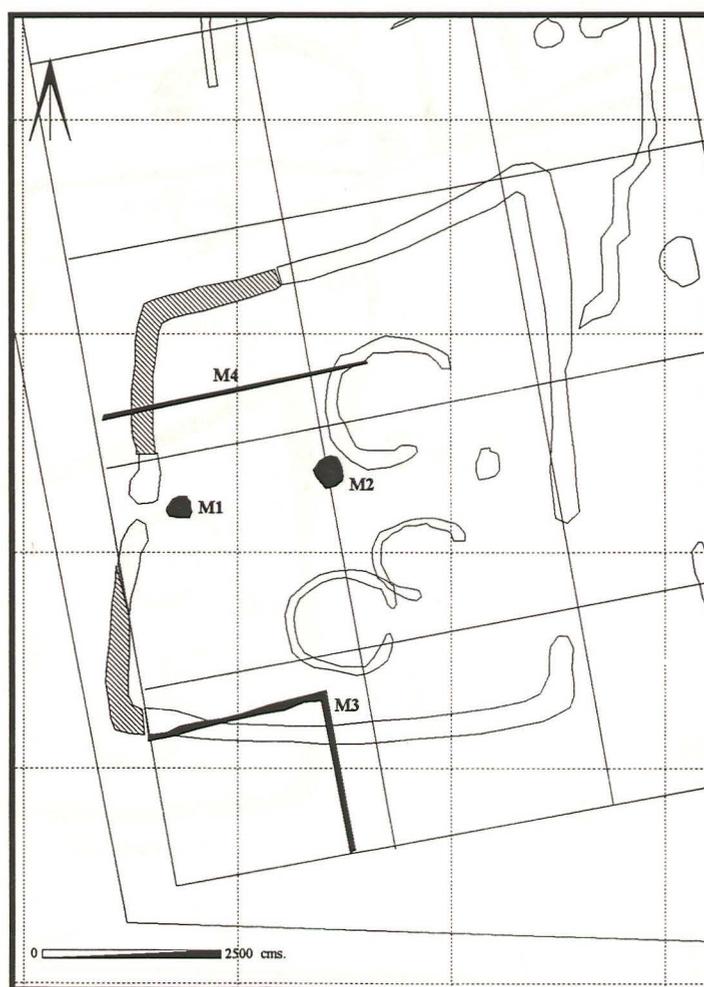


Plan One Scale 1:1667

This plan gives the position and numbers of the grids used in the magnetometer survey. The plan also shows the position of the two roads, Chapel Lane and the line of Ermine Street. The field boundary containing the survey area is the slightly thicker dark line. The existing housing development is to the west. Also shown is the approximate position of the recently laid kerbstones. A large spoil heap exists just to the south of grid 30.

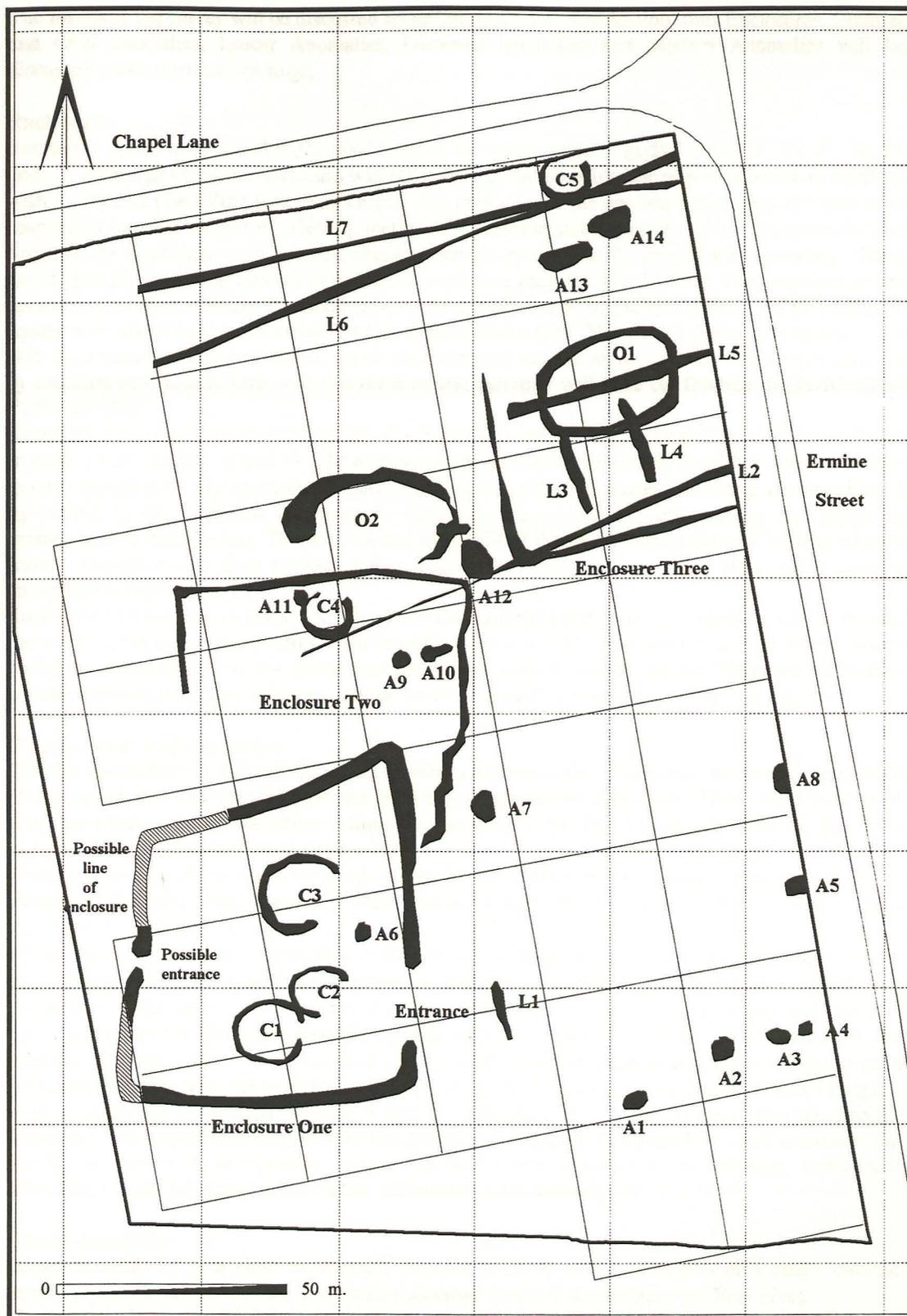
The magnetometer data

The magnetometer data is displayed both as an image (Plan Four) and as a series of digitised interpretations (Plans Two, Three and Five below). Plan Two is a plan showing the positions of anomalies caused by modern action in relation to potential archaeological anomalies and is discussed below under the heading; **Modern Anomalies**. Plan Three shows the position of the anomalies with a high degree of probability. Plan Five gives the position of anomalies with a lower degree of probability. Plan Four is presented as a greyscale image. The anomalies are the areas of lighter and darker grey, which indicate areas of higher and lower magnetic susceptibility. The sampling strategy allowed for an 82% cover of the total area and thus it was felt that a solid block of data would allow for a more detailed interpretation of anomalies to be made than if gaps were left in the centre of the surveyed area. Certain areas were not surveyed due to existing obstacles, thus an area in the south\western part of the field was not surveyed because of the presence of a large spoil heap, and the grid missing in the westernmost north\south line (between grids 32 and 33) was not surveyed due to the presence of a newly-cut ditch next to a line of kerbstones set in concrete. The results from the survey are discussed in detail below.



Plan Two Scale 1:1042

This plan gives the position and numbers of the modern anomalies noticed during the course of the survey, numbered M1 to M4. M1 and M2 are iron bars placed in the field. M3 is the outline of an area which has been scraped flat to a depth of about 6cm beneath the current surface. The spoil heap mentioned in the text above is presumably the spoil from this area. M4 is the concrete kerb which was already in place when the survey began. Note that it cuts through Enclosure One and round anomaly three.



Plan Three Scale 1:1350

This plan shows the positions of the digitised interpretation of the magnetic anomalies with the letters and numbers used (L=Linear, C=Circular, O=Oval and A=Anomaly) in the text below. The grid is at 30 metre intervals. Note that these are the digitised outlines of magnetic signals and need not necessarily equate with the true size of the feature, which might be either larger or smaller than the extent of the magnetic signal.

The results of the survey will be discussed according to a type classification, thus Enclosures, Circular and Oval anomalies, Linear Anomalies, Localised anomalies and Modern Anomalies will be discussed under separate headings.

Enclosures

Enclosure One is to be found in the south\west of the survey area, in grids 17, 18, 19, 20, 27, 30, 31 and 32. Although the entire enclosure was not surveyed, the probable line of the enclosure is digitised with a diagonal line filling (see Plan Three). The perimeter of the enclosure measures 234 metres in length and encloses an area of 3500 sq. metres. It is probable that an entrance to the enclosure is to be found in the south\east, with another, smaller entrance possibly in the central west boundary. There are at least three circular anomalies within the enclosure area, discussed below. The perimeter of the enclosure has been recently disturbed in two areas. The first is in the south\west, and is a roughly square area which has been scraped flat to a depth of about 6cm. The second disturbance is where the kerb for a road has been constructed. As we were carrying out the survey, a ditch was being excavated by machine next to this kerb, and this ditch almost certainly will have cut through the perimeter of Enclosure One.

Enclosure Two occurs just to the north of Enclosure One, and is rectilinear in shape. It is to be found in grids 19, 20, 21, 26, 33 and 34. The enclosure appears to terminate in the west, but this may be due to later disturbance. The approximate perimeter length is thus 230 metres, enclosing an area of 2475 sq. metres. In the south\east, the magnetic signals for the enclosure become weaker, and appear to deviate from a straight line. This may be due to the fill of the feature being dragged by later plough action. Though not as clear as the circular features in Enclosure One, there are possible circular anomalies in this enclosure.

Enclosure Three occurs in grids 7, 8, 9 and 10. The eastern boundary of this enclosure extends beyond the survey area under the existing field boundary and road. The perimeter length of the enclosure within the surveyed area is 164 metres and encloses an area of 1620 sq. metres. There are no obvious circular anomalies in this enclosure, and the northern boundary may be the linear Anomaly L5.

Circular and Oval Anomalies

Circular anomalies C1, C2 and C3 all occur within Enclosure One. They may be contemporary with the enclosure, but this cannot be proven from the magnetometer data alone. There are a number of other potential circular anomalies within the enclosure, but they are not as clear as the three mentioned above, and thus were not digitised.

Circular anomaly C4 occurs in the north central area of Enclosure Two, and circular anomaly C5 is situated in the north\west of grid 12. These two anomalies are roughly the same size, smaller than anomalies C1, C2 and C3.

While interpreting magnetometer data is fraught with difficulties, one possible interpretation of the circular anomalies is that they are round houses. While it is not clear from the data, it is possible that anomalies C1, C2 and C3 all have a break in the east, potentially indicating an entrance or doorway.

There are a number of further possible circular anomalies, occurring in the north of grid 34, the boundary of grids 6 and 20 and in grids 2 and 3, but the magnetic signals from these anomalies were weak and thus they were not included in the digitised plan. They can be seen on the greyscale image.

Oval anomaly O1 is situated in grids 9 and 10. The anomaly is larger in area than the circular anomalies, and is unusually shaped, thus interpretation is difficult. It is possibly a small enclosure, but this is not certain. A stratigraphic relationship with Linear anomaly L5 is indicated, and Linear anomalies L3 and L4 may also have some relationship with anomaly O1.

Linear Anomalies

Linear anomaly L1 is a short north\south oriented anomaly and may be part of a larger circular anomaly (discussed below under the heading; **Further Possible Anomalies** - see Plan Five).

Linear anomaly L2 is ENE\WSW oriented and extends across the boundaries of Enclosures Two and Three. The magnetic strength of the signal for this anomaly increases to the east.

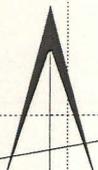
Linear anomalies L3 and L4 are two parallel north\south oriented, medium strength anomalies occurring within the boundary of Enclosure Three. It is possible that they form part of a small rectangular enclosure, but this is not certain as the east\west boundaries would be masked by the signals from the longer linear anomalies L2 and L5.

Linear anomaly L5 may form the northern boundary of Enclosure Three, but this is not certain.

Linear anomaly L6 is on the same orientation as L2.

Linear Anomaly L7 is situated in the north of the survey area and is parallel with the existing field boundary, indicating a modern ploughmark or perhaps an earlier field boundary.

There are a number of further possible linear anomalies, with weaker signals, discussed below.



Plan Five Scale 1:1000

0  25 m

This plan shows the magnetometer data displayed as a greyscale image. The anomalies are shown as areas of lighter and darker grey, with the high and low spots shown as white and black. The grid is at 30 metre intervals.

Localised Anomalies

Anomalies A1, A2, A3 and A4 (grids 2 and 15) are a group of localised anomalies apparently in a roughly east/west alignment. Anomalies A2, A3 and A4 are of a high magnetic signal strength.

Anomaly A5 is also a strong magnetic anomaly, occurring in the east of grid 3, on the eastern field boundary.

Anomaly A6 (grid 29) is situated within the bounds of Enclosure One.

Anomaly A7 (grid 19) is a strong magnetic anomaly.

Anomaly A8 (grid 4) is a particularly strong magnetic anomaly, probably indicating the presence of metal in this area.

Anomalies A9 and A10 (grid 20), A11 (grid 26) and A12 (grid 7) are all medium to strong magnetic anomalies. In particular, anomaly A10 may be caused by the presence of metal.

Anomalies A13 and A14 (grids 11 and 12) are very strong magnetic signals. It is possible that these signals were caused by the presence of large pieces of metal, although their size could indicate the presence of some burnt clay material, indicating either hearths or kilns. This interpretation is doubtful, but remains a possibility.

Interpreting localised anomalies of this nature is difficult, as any number of archaeological or recent origins are possible. However, it is fair to assume that a number of these anomalies may be pits, some of which may contain metal, the age of which cannot be established from magnetometer survey data alone.

Modern Anomalies

Four definitely modern anomalies occur on the magnetometer image (Plan Five), and were digitised (Plan Two, with the modern anomalies filled, and the archaeological anomalies unfilled).

Anomalies M1 (grid 32) and M2 (grids 29 and 32) were caused by the presence of two iron bars, presumably placed here by the developers.

Anomaly M3 shows the outline of the area which was scraped flat to a depth of 6cm below the present surface. The spoil from this area presumably created the spoil heap to the south of grid 30. The anomaly was caused by the difference in magnetic susceptibility between the ploughsoil on the surface and the relatively undisturbed soil below.

Anomaly M4 was caused by the presence of a row of kerbstones set into concrete, which was already in place when the survey began.

Further possible anomalies (Plan Four, below)

There are a number of further possible anomalies which are discussed below. The nature of these anomalies was difficult to establish either because of the weak magnetic strength of the anomalies or because of the sheer extent of the anomalies grouped together in one area.

The most obvious of these possible anomalies is the large circular anomaly (grids 5, 6, 13, 17, 18 and 19). The true extent of this possible anomaly is masked by stronger magnetic signals. Anomaly L1 may be part of this anomaly. The size and shape of this anomaly (if it proves to exist) could mean that this is part of an earlier prehistoric landscape.

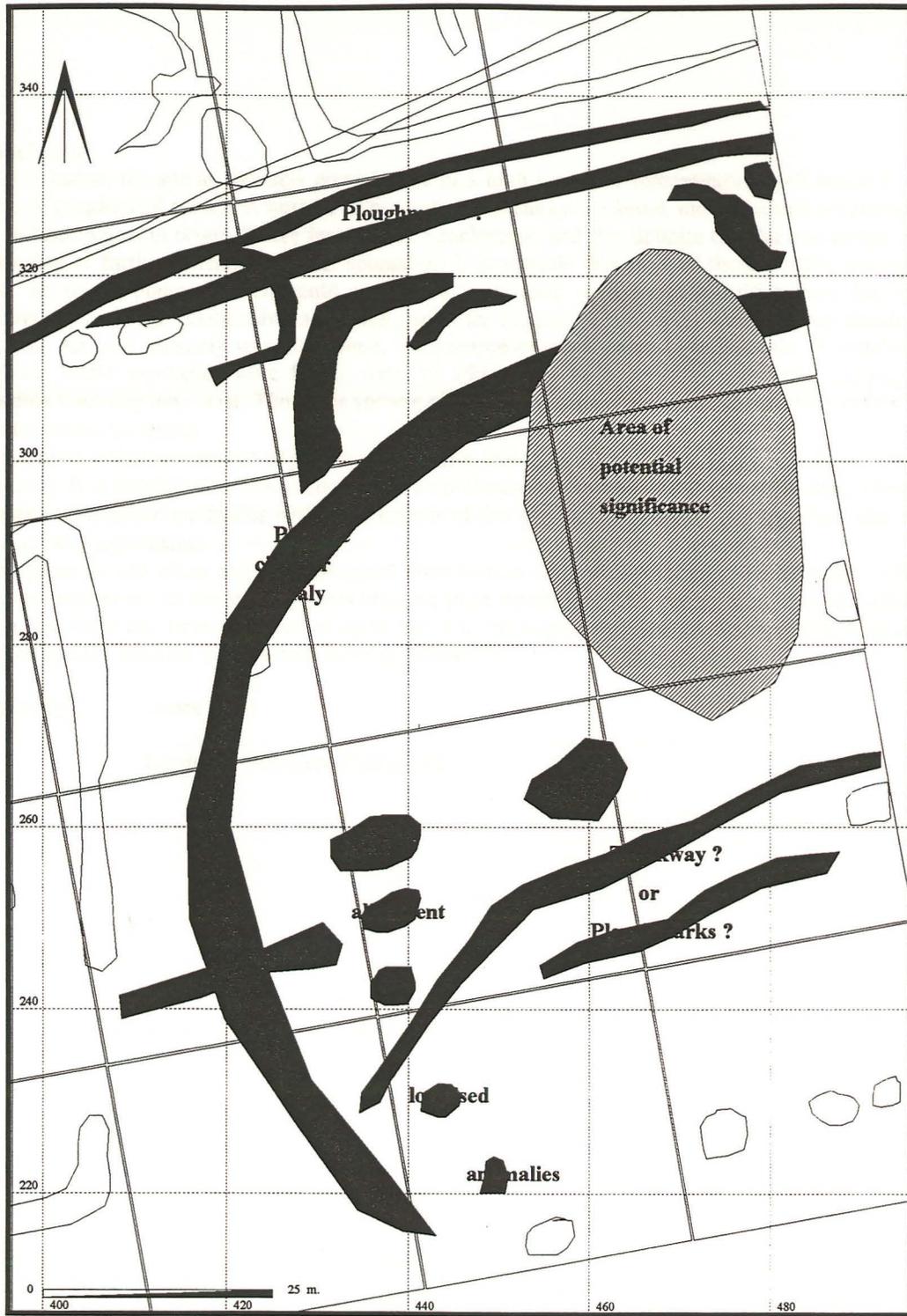
Within the bounds of this anomaly are a series of localised anomalies (grids 14 and 15) in a north/south alignment. These may have some relationship with the east/west aligned anomalies A1, A2, A3 and A4.

Two linear anomalies (grids 3, 14 and 15) are also visible. They may be the remnants of ploughmarks, but it is also possible they may be of greater significance (ie. a potential trackway?).

The area shaded in grey (grids 4, 5 and 13) has a number of potential anomalies, although none are clear. The magnetic signals from this area are different from the rest of the survey area (seen as a lighter grey in the magnetometer image on Plan Five), and this may prove to be of significance.

To the north of the possible circular anomaly are a number of potential anomalies (grids 5 and 6), the nature of which is difficult to establish, but which appear to be archaeological in origin.

There is a possible circular anomaly (grids 6 and 20), which appears to be attached to the eastern boundary of Enclosure Two.



Plan Four Scale 1:715

This plan shows the positions of the digitised interpretation of the magnetic anomalies which are less obvious in the magnetometer image. The grid is at 30 metre intervals. The grid in the south east of this plan is grid number 2.

APPENDIX ONE

Conclusion

In conclusion, the site at Navenby proved to be of a high magnetic susceptibility, well suited to this form of geophysical survey. A number of magnetic anomalies were found, most of which are certain to be archaeological in origin. These include three enclosures, and five definite circular anomalies, with a number of further potential circular anomalies. It is possible that some of these circular anomalies may be round houses, which could indicate a prehistoric or a Romano-British date for these anomalies, although establishing a definite period for magnetometer survey data is never absolutely certain. An oval anomaly was also found, the interpretation of which is not certain. A number of definite linear anomalies were found, some of which may be remnant ploughmarks, although a possible trackway may exist. The sheer volume of data in the area of the possible trackway makes this interpretation uncertain.

In addition, a further number of potential anomalies was noted, one of which may be a large circular anomaly. It is possible that this anomaly may be prehistoric in origin, and if this is the case, then the number of localised anomalies within the bounds of this anomaly, apparently in alignment, may take on a greater significance.

The plans should allow any archaeological investigation (if such is deemed to be necessary) of the area to concentrate in the specific areas believed to be significant. The United Kingdom latitudes are such that there can be a distortion of up to half a metre in position between the magnetic anomalies shown and the position of the actual features themselves.

Report by James Lyall

Landscape Research Centre Ltd.

APPENDIX ONE

GRID NO	MINIMUM	MAXIMUM	RANGE	AVERAGE	STD. DEVIATION
1	-25	30	55	-4	5
2	-38	31	69	-1	5
3	-29	29	58	-4	5
4	-363	40	403	-7	19
5	-35	31	66	-2	5
6	-16	21	37	-2	3
7	-17	66	83	-3	5
8	-12	20	32	1	4
9	-145	30	175	-8	7
10	-16	20	36	-3	3
11	-90	129	219	-5	6
12	-127	72	199	-4	10
13	-11	32	43	4	4
14	-32	24	56	3	4
15	-19	40	59	-1	3
16	-53	27	80	-3	4
17	-17	38	55	-2	3
18	-12	136	148	0	5
19	-10	52	62	-1	4
20	-27	48	75	-2	4
21	-10	17	27	0	3
22	-12	14	26	-2	2
23	-38	12	50	-4	3
24	-25	38	63	-3	3
25	-9	15	24	1	4
26	-21	24	45	1	3
27	-10	24	34	1	3
28	-10	49	59	-1	3
29	-404	27	431	-3	0
30	-13	39	52	-3	-3
31	-370	288	658	-2	10
32	-352	80	432	-4	12
33	-21	66	87	-3	3
34	-58	134	192	-2	4

TABLE ONE

The table gives the raw data and statistics in NanoTesla for each of the 34 grids. Values shown are the minimum value, maximum value, range, average value and the standard deviation of each grid.

Appendix 11.3

REPORT ON THE POTTERY FROM CHAPEL HEATH, NAVENBY (CHN94)

A

Report to *Pre-Construct Archaeology*

December 1994

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**ASSESSMENT OF THE ROMAN
POTTERY FROM CHAPEL HEATH,
NAVENBY (CHN94)**

By M Darling

CLAU ARCHAEOLOGICAL REPORT NO: 140

REPORT ON THE POTTERY FROM CHAPEL HEATH, NAVENBY (CHN94)

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1 INTRODUCTION

The pottery from chn94 has been recorded in the archive format of the City of Lincoln Archaeology Unit, the resulting computer database being available on the CLAU system. Listing of the archive file is in the appendix. The pottery comprised 733 sherds, weighting 16.603kg. The spatial distribution of pottery was very heavily weighted to the Ermine Street frontage, 89-94% (sherds-weight) coming from trenches 4,5 and, above all, trench 7.

2 CONDITION

The condition of the pottery was generally good with little abrasion or deterioration of fabrics. There were some heavily burnt sherds and a fragmented single vessel in Trench 5.

3 SUMMARY OF DATING

The dating by context with quantities and any comments relating to the context is below.

Table 1: Dating summary

Cxt	Sherds	grams	Date	Comments
102	3	20	E2	DATE FROM SAMIAN
108	7	60	LIA?	
Trench 1	10	80		
201	9	197	ML4	
202	3	13	3?	
204	21	249	ML3+	
208	2	71	L3-4	
Trench 2	35	530		
302	23	340	L1E2?	
306	1	2	RO	
Trench 3	24	342		
401	51	1058	ML4	
403	31	616	ML3?	
404	18	380	EM4	
405	6	190	L3-4 PROB 4	
410	20	326	EM3	
412	17	531	VL4	
414	13	332	ML3-4	
415	28	1233	VL4	
428	4	325	3?	
429	2	59	LATER RO?	
Trench 4	190	5050		
500	12	313	L4	
502	41	1049	L4	
503	8	275	M3+	
504	2	47	3?	
506	7	81	M3+	
507	8	81	ML3	
510	7	58	M3+	
514	14	330	M3+	SOME HEAVILY BURNT SHS
515	9	144	M3	UNUSUAL FRAGMENTED VESSEL

517	9	63	EM2+	V.LITTLE EVIDENCE FOR DATE
518	1	248	RO	
521	5	61	M4	
Trench 5	123	2750		
601	3	30	ML3-4	
603	1	11	RO	
617	2	30	L1+	NO REAL DATING EVIDENCE
619	1	6	LIA?	ONLY SINGLE ABRADED FRAG
621	3	35	2?	NO REAL EVIDENCE FOR DATE
Trench 6	10	112		
700	83	1473	ML4	
702	34	1080	L3+ PROB 4	
703	51	1154	ML3+	
704	31	447	L3-4 PROB 4	
705	22	744	ML3	
706	8	157	M3?	NO STRONG EVID EXCEPT BK
708	22	396	ML3	
709	29	590	ML4	
712	29	909	ML3-4	
714	12	366	3	ONLY SINGLE BOWL;POCKED SURFACES
723	20	423	ML3	
Trench 7	341	7739		
TOTAL	733	16603		

4 DISCUSSION OF EVIDENCE BY TRENCH

Trench 1

Located across enclosure 1 ditch, and round house gully.

The only pottery came from the enclosure ditch, the earliest context producing 7 sherds of handmade shell-tempered pottery, possibly from a single vessel, which could be LIA.

The only other context with pottery contained a tiny shell-tempered rim fragment, possibly of LIA date, an abraded possibly grog-tempered sherd, but also the base of a SAMLM bowl or plate, probably a form 18/31, which would give an E2 date for the top fill of the enclosure ditch.

Trench 2

Across enclosure 2 ditch.

Only 2 sherds came from the gully 208, possibly L3-4. The other finds were all from the quarry pit, the earliest context giving a ML3 date, and the top fill (201) dating to the ML4, and including a fragment from a grey bowl of romano-saxon type (almost certainly from the Swanpool kilns), usually only seen in Lincoln in L-VL4 deposits.

Trench 3

Enclosure 3 ditch, with metalled road surfacing.

The enclosure ditch produced a single grey body sherd, undatable beyond Roman. A small group came from the E-W ditch (302) which gave little evidence for close dating, but would conservatively be dated L1-E2. This included an oxidized flanged bowl more in the tradition of the Flavian-Trajanic reeded rim bowls than the later BB1 bowls, sherds representing three different rusticated jars, one notably thin-walled (perhaps more a beaker form), and a handle from a coarse lug-handled jar. There is nothing definitely 1st century in this group.

Trench 4

Oval enclosure and E-W ditch westwards from Ermine Street. These features were not excavated, due to two phases of stone buildings overlying them.

The earliest phased pottery came from the 2nd stone building phase (410), a small group giving a EM3 date. Two unphased contexts give similar 3rd century dating, the two sherds from 429 being indeterminate but a string base suggesting the later Roman period, and the dating of four sherds from 428 resting tenuously on body sherds from a possible wide-mouthed bowl, a type starting in the 3rd century but continuing.

Apart from 412, post-dating the stone buildings, all the rest of the pottery came from demolition rubble layers, the dates for individual groups varying from ML3 to VL4. The only context giving the VL4 date was 415, rubble in a depression, the pottery including a SPIR rim and a base from a SPCC bowl or dish. SPIR sherds are usually only found in Lincoln in the latest Roman deposits. A similar date might be applied to 405 which contained a South Midlands shell-tempered jar; while these have only been seen in Lincoln in L-VL4 contexts, their occurrence to the south has a wide date-range.

The group from 412, an E-W palisade type trench, is also dated VL4, and contains a lid in LCOA fabric and a fragment of a B38 bowl in SPCC, LCOA fabric being typical of the latest Roman groups in Lincoln. This group has a joining sherd link to 521, a late pit in the trench to the north.

Trench 5

2 linear ditches west of Ermine Street, a penannular ditch and anomaly. The anomaly was a quarry pit, and the other feature intercutting ditches.

Virtually all the pottery came from the quarry pit, the earliest contexts giving a M3 or later date, and closing with a L4 date (502). This includes Swanpool types, a high bead-and-flange and an inturned bead-and-flange, the latter usual in L-VL4 deposits in Lincoln. There is a joining sherd link between 503 and 502.

The ditch 515 contained a sherd probably from the same vessel as in 510 (not on the matrix), and dated to M3 on the basis of a dales ware rim.

518, the earliest fill of a ditch, contained only a single shell-tempered wheel-thrown base, more likely to be Roman than earlier. The 9 sherds from the later fill (517), included body sherds from a grey cooking pot of BB1 type, giving only a EM2 or later date.

The later pit 521 had a joining sherd link to 412 in the trench to the south, and the five sherds are dated to the M4 or later by a late NVCC dish.

The final context 500 is dated L4, containing a MOSP painted mortarium from the Swanpool kilns and another NVCC dish in a late fabric.

Trench 6

Investigation of a weak magnetic anomaly to the east of enclosure 1. Found intercutting features and pits.

Only ten sherds came from this trench. The earliest feature with pottery, 619, produced a single shell-tempered body sherd, probably hand-made, which could be LIA. A round pit, 617, had two grey sherds, including a jar or beaker base with slight moulding, giving only a L1 or later date. The three sherds from feature 621 included a coarse "native" type body sherd, and a grey body sherd from a jar or bowl with a cordon and scored wavy line decoration. None are closely datable, but the latter could suggest a 2nd century rather than earlier date.

Context 603 had a single grey body sherd, while the three sherds from 601, the latest context, included a NVCC body sherd probably from a bowl of B38 form, which would indicate a ML3 or later date.

Trench 7

Ermine Street frontage, stone buildings with wall-plaster.

This trench produced the most pottery, some 342 sherds, 112 from 5 contexts phased to occupation (?), 90 phased to building demolition, and 140 to post-building demolition features and cleaning. There were sherd links between all phases, sherds of the same vessel, for instance, occurring in 712 pit, 703 collapsed wall and the latest 702.

The earliest groups were from occupation (?), mostly fitting into a ML3 dating, but 709 ashy spread is dated ML4 by a NVCC body or dish sherd in a later fabric. Context 714 contained sherds from a single bowl, other sherds of which occurred in 708 above. Context 708 had a PART beaker, sherds of which were also found in 706 in the demolition phase.

The building demolition contexts, with sherd links back to the occupation and above to the post-building phase, have a similar ML3 dating with the probability of running into the 4th century in context 704. This context contained the sherds from a possible Smith God figured pot, which were probably residual; the probable 4th century date comes from a NVCC disc-necked flask. Context 703 was linked by sherds of the same cordoned vessel to 702 and 705 of the demolition phase.

The post-building contexts again had dates spanning the L3 to 4th century, except for the cleaning layer 700, which is dated ML4 on later NVCC beakers and more particularly Swanpool products, including an oxidized bead-and-flange bowl. There is no evidence for conclusively L-VL4 dating.

5 OVERVIEW OF FABRICS

The table below shows the fabrics from the site as a whole.

Table 2: Fabrics

Fabric	Expansion	Sherds	%age	grams	%age
SAMLM	Samian Les Martres de Veyre	1	0.14	12	0.07
SAMCG	Samian Central Gaul	5	0.68	71	0.43
MONV	Mortaria Nene Valley	1	0.14	17	0.10
MOSP	Mortaria Swanpool	1	0.14	64	0.38
DR20	Dr20 amphorae	9	1.23	661	3.98
AMPH?	Amphorae?	2	0.27	39	0.23
CR	Cream	4	0.54	67	0.40
PARC	Parchment	1	0.14	9	0.05
OX	Oxidized	10	1.36	309	1.86
SPOX	Swanpool Oxidized	2	0.28	26	0.16
SPIR	Spiral-groove late jars	1	0.14	37	0.22
NVCC	Nene Valley colour-coated	53	7.23	739	4.45
NVGCC	Nene Valley grey colour-coated	1	0.14	12	0.07
SPCC	Swanpool colour-coated	2	0.28	96	0.57
BB1	BB1	15	2.05	281	1.69
BB1G	Grey BB1	2	0.27	62	0.37
PART	Parisian type	4	0.54	27	0.16
GFIN	Grey Fine	1	0.14	21	0.13
GREY	Grey	545	74.35	12379	74.56
LCOA	Late Coarse reduced	1	0.14	15	0.09
COAR	Coarse	9	1.23	308	1.86
GROG?	Grog-tempered?	1	0.14	5	0.03
NAT	"Native"	1	0.14	6	0.04
IASH	Early shell-tempered	8	1.09	63	0.38

DWSH	Dales ware	23	3.14	485	2.92
SHEL	Shell-tempered	29	3.96	757	4.56
SMSH	S.Midlands shell-tempered	1	0.14	35	0.21
Total		733	100%	16603	100%

The fabric list shows a spread from possibly the Late Iron Age to the end of the Roman period, but is relatively unexceptional for a site with later Roman dating predominating. A notable feature is the occurrence of not only Swanpool products to be expected at a site a relatively short distance from Lincoln, but also sherds of very late Roman fabrics in Lincoln, indicating activity on the site until the latest Roman period. Shell tempered vessels came from at least three sources in the late period, including jars from Bedfordshire/Northamptonshire area (SMSH). South Spanish olive-oil amphorae are represented, but the two other possible amphora sherds cannot be certainly identified. The BB1 from Dorset was all from vessels of probable 3rd century or later date. Most of the grey wares, representing 75% of the assemblage, are likely to be from local sources, probably Lincoln (particularly the Swanpool area). The emphasis of the Nene Valley colour-coated wares was towards the later 3rd and continuing into the 4th century.

6 OVERVIEW OF VESSELS FORMS

The table below gives a summary of vessels by their general class. A listing of vessels by the more detailed type by fabric is in Appendix 1.

Table 3: Vessels by vessel class

Class	Code	Sherds	%age	grams	%age
Closed					
Flagon	F	6	0.82	91	0.55
Jar	J	52	7.09	1932	11.64
Cook Pot	CP	30	4.09	665	4.00
Figured jar	Z	4	0.54	38	0.23
Jar/beaker	JBK	4	0.54	55	0.33
Beaker	BK	97	13.23	1188	7.16
Closed	CLSD	30	4.09	719	4.33
Open					
Bowl	B	75	10.23	2290	13.79
Bowl/dish	BD	26	3.55	409	2.46
Box	BX	1	0.14	10	0.06
Colander	COL	3	0.41	64	0.38
Dish	D	14	1.91	329	1.98
Jar/Bowl	JB	39	5.32	811	4.88
Lid	L	1	0.14	15	0.09
Specialist					
Mortarium	M	2	0.27	81	0.49
Amphora	A	10	1.36	691	4.16
Unclassified	-	339	46.25	7215	43.46

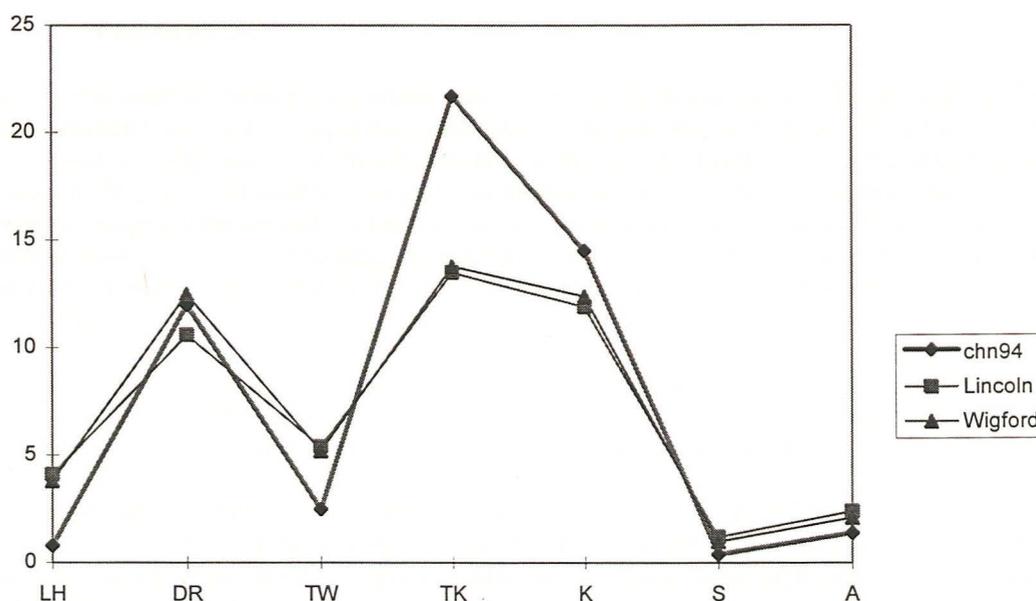
The table below analyses the sherds that can be assigned to probable functions. The percentages based on sherd count can be compared to the overall figures from the city of Lincoln, and to figures from the Wigford suburb to the south, selected because most of the sites there had their main occupation in the 3rd and 4th centuries.

Table 4 Assumed functions of vessels

Function	Sherds	%age	All Lincoln	Lincoln Wigford
Amphorae	10	1.4	2.4	2.1
Liquid Holders	6	0.8	4.1	3.8
Drinking Vessels	88	12.0	10.6	12.5
Table Ware	18	2.5	5.4	5.2
Table or Kitchen ware	159	21.7	13.5	13.8
Kitchen ware	106	14.5	11.9	12.4
Storage	3	0.4	1.2	1.0
Ritual	4	0.5	0.1	0.3
Unallocated	339	46.3	50.7	48.9
Total	733	100.1	99.9	100

Until figures for rural sites are available, the only guidance in the area comes from Lincoln. The chart below illustrates the most obvious differences, as the comparative paucity of amphorae, liquid holders and table wares at Navenby, but in view of the bias of the dating to the 3rd-4th century, this is not too surprising. That the drinking vessels give such a high percentage, particularly given the minute quantity of samian (which might otherwise have contributed a number of cups) comparative to most Lincoln sites of similar date, is notable.

CHN94 Functions, compared to Lincoln



The table or kitchen wares category give the most interesting figure, considerably higher than seen in Lincoln (the only Lincoln site with anywhere near this percentage was a waterside dump). This arises to some extent from the large number of sherds which could be attributed probably to wide-mouthed bowls, the function of which is unclear, but presumed to be intermediate between kitchen food preparation and table food presentation. Virtually all the wide-mouthed bowls would have come from the Swanpool area of Lincoln, some reminiscent of the marginally earlier Rookery Lane kiln. The field of functional analysis is a new-comer to Roman pottery studies, so at present we can only note that this seems to be an exceptional characteristic of the site assemblage, and hopefully it can be set in context in the future.

The site produced one remarkable vessel, body sherds with an applied male figure, tentatively identified as a representation of a Smith God, holding perhaps a pair of tongs (from 704). A further

unusual sherd came from 712, apparently the rim of a grey funnel-necked beaker with an applied vertical strip.

7 SHERD LINKS

As noted above, the only sherd link between trenches was between the relatively close trenches 4 and 5. Otherwise the links were within each individual trench and confined to trenches 5 and 7, noted above.

8 RECOMMENDATIONS FOR FURTHER WORK

Clearly the figured sherd, the beaker from 712 and a further beaker from 410 will require drawing and publication. There is also a fine fabric beaker from 708, a bowl of samian form 30 from 514, and an unusual oxidized flanged bowl from 302. Apart from these there are at least six vessels which should be drawn for archive if not publication. Drawing work of these selected sherds would take at least a day. This is a very minimal selection out of some 40 vessels noted as being publishable to illustrate the ceramic assemblage and dating evidence for the site. The full list is in Appendix 2.

The samian is comparatively straight-forward but includes a stamped base (from 700) which should be identified and reported on by Brian Hartley and Brenda Dickinson at Leeds University.

If there is no further work on the site, the present assemblage should be put into the public domain via a published report, probably in the county journal, which would be largely based on the data in this report, supplemented by illustrations, and further comment.

9 SUMMARY

The ceramic evidence from the site relates almost totally to the Roman period. There are a few sherds from trenches 1 and 6 which might date to the LIA. No Roman sherds of exclusively 1st century date were found, although some from trench 3 could span the later 1st to early 2nd century period. 2nd century pottery occurred in all trenches but was notably very sparse. Only five samian vessels occurred, ranging from the early to later 2nd century. The main emphasis was in the 3rd century, and probably more the latter part, running into the 4th century. Of the trenches adjacent to Ermine Street, the southern trench 7 closed earlier than those to the north, trenches 4 and 5, between which was a sherd link.

The fills of the (?)quarry pits in trenches 2 and 5 closed in the late 4th century. The earliest fill of both pits is dated ML3. If the upper fills represent rubbish accumulating or being dumped in the sinkage of the original fill, this would indicate building or road work activity in the ML3.

The unfortunate result of the evaluation trenches is the absence of evidence relating to the obviously important Iron Age site. It is strongly recommended that if no further excavation is allowed on this site, the closest possible attention is given to all intrusive excavation during building work and any features investigated where possible.

APPENDIX 1

Table Vessel types by fabric

Fabric	Expansion	Code	Sherds	grams
AMPH?	Amphora	A	2	39
BB1	Bowl Bead and flange low bead	BFBL	3	78
BB1	Bowl/dish flanged	BDFL	1	12
BB1	Bowl/dish	BD	2	11
BB1	Cook pot late	CPL	2	43
BB1	Cook pot	CP	5	105
BB1	Dish plain rim	DPR	2	32
BB1G	Cook pot late	CPL	1	53
BB1G	Cook pot	CP	1	9
COAR	-	-	7	155
COAR	Jar lug-handle	JLH	1	92
COAR	Jar	J	1	61
CR	Closed	CLSD	4	67
DR20	Amphora	A	9	661
DWSH	-	-	13	196
DWSH	Jar dales ware	JDW	8	259
DWSH	Jar	J	2	30
GFIN	Bowl fm 30	B30	1	21
GREY	-	-	285	6256
GREY	Beaker Gillam 177	BKG177	1	42
GREY	Beaker folded funnel grooved	BKFOFG	8	155
GREY	Beaker folded	BKFO	21	323
GREY	Beaker funnel neck grooved	BKFG	3	23
GREY	Beaker funnel neck	BKFN	9	49
GREY	Beaker	BK	4	38
GREY	Bowl Bead and flange high	BFBH	3	232
GREY	Bowl Bead and flange low	BFBL	1	15
GREY	Bowl Bead and flange	BFB	1	60
GREY	Bowl Gillam 225	BG225	2	71
GREY	Bowl Inturned bead and flange	BIBF	1	55
GREY	Bowl flanged	BFL	18	534
GREY	Bowl necked	BNK	9	118
GREY	Bowl romano-saxon type	BRS	1	8
GREY	Bowl triangular rim	BTR	8	188
GREY	Bowl wide mouth	BWM	20	671
GREY	Bowl/dish flanged	BDFL	1	7
GREY	Bowl/dish	BD	20	340
GREY	Closed	CLSD	21	543
GREY	Colander	COL	3	64
GREY	Cook pot	CP	21	455
GREY	Dish grooved rim	DGR	1	10
GREY	Dish plain rim	DPR	5	88
GREY	Dish	D	2	120
GREY	Jar collared rim	JCR	2	103
GREY	Jar curved rim	JCUR	3	71
GREY	Jar dales type	JDW	5	80
GREY	Jar everted rim	JEV	1	15
GREY	Jar handled	JHA	1	71
GREY	Jar narrow neck	JNN	3	178
GREY	Jar	J	15	495
GREY	Jar/beaker curved rim	JBKCUR	1	5
GREY	Jar/beaker	JBK	3	50
GREY	Jar/bowl cordoned	JBCOR	4	63

GREY	Jar/bowl curved rim	JBCUR	1	35
GREY	Jar/bowl everted rim	JBEV	1	24
GREY	Jar/bowl wide mouth	JBWM	1	22
GREY	Jar/bowl	JB	31	664
GREY	Smith God pot	SMIT	4	38
GROG?	-	-	1	5
IASH	-	-	7	60
IASH	Jar/bowl	JB	1	3
LCOA	Lid	L	1	15
MONV	Mortarium flanged	MFL	1	17
MOSP	Mortarium collar rim	MCO	1	64
NAT	-	-	1	6
NVCC	Beaker as RPNV27	BKNV27	1	17
NVCC	Beaker folded scale funnel neck	BKFOSF	2	30
NVCC	Beaker folded scaled	BKFOS	3	43
NVCC	Beaker folded	BKFO	10	77
NVCC	Beaker funnel neck beaded	BKFB	1	5
NVCC	Beaker funnel neck	BKFN	1	5
NVCC	Beaker plain rim	BKPR	2	9
NVCC	Beaker slit-folded	BKSF	2	34
NVCC	Beaker	BK	15	181
NVCC	Bowl flanged	BFL	2	44
NVCC	Bowl form 38	B38	2	96
NVCC	Bowl/dish	BD	2	39
NVCC	Box	BX?	1	10
NVCC	Dish plain rim	DPR	3	58
NVCC	Flagon	F	5	65
NVCC	Flask disk-neck	FDN	1	26
NVGCC	Beaker	BK?	1	12
OX	-	-	5	245
OX	Bowl grooved flange	BGF	3	33
OX	Closed	CLSD	2	31
PARC	Closed	CLSD	1	9
PART	Beaker funnel neck	BKFN	4	27
SAMCG	Bowl Fm 31	31?	1	5
SAMCG	Bowl	B	3	45
SAMCG	Dish Fm 79	79	1	21
SAMLM	Fm 18/31 Bowl	18/31?	1	12
SHEL	-	-	19	283
SHEL	Closed	CLSD	2	69
SHEL	Jar everted rim	JEV	1	16
SHEL	Jar rounded rim	JRR	2	28
SHEL	Jar	J	5	361
SMSH	Jar S.Midlands shell-tempered	JSM	1	35
SPCC	Bowl	B	1	44
SPCC?	Bowl Fm 38	B38	1	52
SPIR	Jar	J	1	37
SPOX	Bowl Bead and flange	BFB	1	16
SPOX?	Bowl	B	1	10

APPENDIX 2
VESSELS NOTED FOR DRAWING

Fields: Cxt,Fabric,Form,Decor,Vessels,Draw,Dwg No,Detail,Joins,Sherds,grams

208,GREY,JCR,-,-,D,-,RIM NECK;CF SP.C43,-,1,51
302,OX,BGF,-,1,D,-,RIM/BSS GRY CORE;LT RB SURF;SKETCH,-,3,33
401,GREY,J,BWL,1,D,-,RIM & BS;?JHA;SKETCH,-,2,42
401,GREY,JBEV,-,-,D?,-,RIM/SHLDR CF SP-C31?,-,1,24
403,GREY,BTR,-,1,D,-,COMP PROF;U/C RIM,-,8,188
404,GREY,BFBH,-,-,D,-,RIM/WALL BURNT,-,1,51
404,GREY,BK?,-,-,D,-,RIM WALL;DIAM 6;SKETCH,-,1,5
410,GREY,BKFN,-,1,D,-,RIMS/BSS;BURNISHED;UNUSUAL,-,9,49
412,LCOA,L,-,-,D?,-,RIM PT WALL,-,1,15
414,GREY,BFB,-,-,D?,-,RIM/WALL,-,1,60
414,GREY,CP,LA,-,-,D?,-,RIM/WALL;EM3 TYPE?,-,1,48
415,SPJR,J,-,-,D,-,RIM/NECK ONLY;BURNT,-,1,37
500,MOSP,MCO,PB,-,D?,-,RIM/WALL,-,1,64
502,GREY,BIBF,-,-,D?,-,RIM,-,1,55
502,GREY,BKFOFG,-,-,D?,-,RIM/BSS JOINS,503,4,67
514,GFIN,B30,ROUZ,-,D,-,RIM/WALL,-,1,21
517,SHEL,JEV,-,-,D?,-,RIM/SHLDR;VESIC SURF;SKETCH,-,1,16
700,DWSH,JDW,-,-,D?,-,RIM-WALL,-,1,147
703,BB1,BFBL,-,1,D?,-,RIMS/BS MOST PROF,-,3,78
703,GREY,BFL,-,1,D?,-,OVERFIRED NEAR COMP PROF,-,2,44
703,GREY,DPR,-,-,D?,-,COMP PROF;UNDEC,-,1,14
703,GREY,DPR,-,-,D?,-,RIM/WALL STRAIGHT;UNDEC,-,1,17
703,GREY,JBCOR,-,1,D,-,RIM/NECK/CORDON;SKETCH;SAME,702;705,2,35
703,GREY,JDW,-,-,D?,-,RIM/NECK,-,1,29
704,GREY,BWM,-,-,D?,-,CURVED U/C RL TYPE RIM WALL,-,1,41
704,GREY,SMIT,-,-,V,-,FIGURED SHERDS ?SMITH,-,4,38
704,NVCC,BFL,-,1,D?,-,RIM/WALL,-,2,44
704,NVCC,FDN,-,-,D?,-,100% NECK,-,1,26
705,BB1,CP,-,-,D?,-,RIM/SHLDR ML3? G76-9,-,1,35
705,GREY,BKG177,-,-,D,-,RIM TO BELOW CARINATION,-,1,42
708,GREY,BNK,-,1,D?,-,SMALL B RIMS/WALL;SKETCH,-,4,49
708,PART,BKFN,-,1,D,-,RIMS/NECK/GLOB BODY AS RPNV49 UNDEC;SAME,706,3,19
709,BB1,DPR,BIAF,-,D?,-,RIM/WALL,-,1,10
709,GREY,BG225,-,-,D?,-,RIM/WALL UNDEC,-,1,46
709,GREY,JB,-,-,D,-,RIM/WALL.DIAM 10;SKETCH,-,1,23
712,GREY,BFL,-,-,D?,-,THICK RIM/WALL,-,1,63
712,GREY,BKFG,APS,-,D,-,RIM W APPLIED VERT.STRIP;UNUSUAL,-,1,8
712,NVCC,B38,-,-,D?,-,RIM/WALL;CR FAB,-,1,75
714,GREY,BFL,-,1,D?,-,RIMS/BSS ALL ONE;JOINS,708,12,366

CHN94 POTTERY DATABASE

Fields: Cxt,Fabric,Form,Decor,Vessels,Draw,Dwg No,Detail,Joins,Sherds,grams

102,GROG?,-,-,-,-,ABR BS,-,1,5
 102,IASH,JB,-,-,-,-,RIM FR;NO BRY.SKETCH,-,1,3
 102,SAMLM,18/31?,-,-,-,-,BASE,-,1,12
 102,ZDATE,-,-,-,-,E2,-,-,-
 102,ZZZ,-,-,-,-,DATE DEPENDS SAMIAN,-,-,-
 108,IASH,-,HMAD,1?,-,-,BSS NO OBV.BRYOZOA,-,7,60
 108,ZDATE,-,-,-,-,LIA?,-,-,-
 201,BB1,CPL,-,1,-,-,RIM FR J.L3E4?,-,2,43
 201,BB1G,CPL,-,-,-,-,RIM ONLY ?WHEEL,-,1,53
 201,DWSH,JDW,-,-,-,-,RIM FR,-,1,10
 201,GREY,-,-,1,-,-,BSS LGE VESS;BWM?,-,2,59
 201,GREY,BD,-,-,-,-,BS,-,1,14
 201,GREY,BRS,-,-,-,-,BS W INDENT USUAL LINC.TYPE ?SP,-,1,8
 201,SPOX?,B,PA,-,-,-,BS GROOVED BASAL;CF RPNV86;SKETCH,-,1,10
 201,ZDATE,-,-,-,-,ML4,-,-,-
 202,GREY,-,-,-,-,GROOVED BS & FLAKE,-,2,6
 202,GREY,JBK,-,-,-,-,UPR RIM;BURNISH;D12 BEAD RIM;SKETCH,-,1,7
 202,ZDATE,-,-,-,-,3?,-,-,-
 204,BB1,CP,FET,-,-,-,-,BS,-,1,11
 204,BB1G,CP,HMAD;LO?,-,-,-,-,BS,-,1,9
 204,GREY,-,-,-,-,BSS,-,9,75
 204,GREY,-,LA,-,-,-,-,BS,-,1,7
 204,GREY,BD,-,-,-,-,BSS,-,3,28
 204,GREY,BWM,-,-,-,-,CAVETTO RIM ONLY,-,1,39
 204,GREY,BWM,-,-,-,-,RIM FR;COARSER FAB;STRONG CURVE,-,1,30
 204,GREY,JCUR,-,-,-,-,RIM FR,-,1,12
 204,GREY,JDW,-,-,-,-,RIM FR,-,1,11
 204,NVCC,F?,-,-,-,-,HDLE STUMP;THICK SUB-R,-,1,22
 204,SHEL,-,-,-,-,BS;SMALL;POSS DWSH,-,1,5
 204,ZDATE,-,-,-,-,ML3+,-,-,-
 208,GREY,-,-,-,-,BS,-,1,20
 208,GREY,JCR,-,-,D,-,RIM NECK;CF SP.C43,-,1,51
 208,ZDATE,-,-,-,-,L3-4,-,-,-
 302,COAR,JLH,-,-,-,-,HDLE DK GRY RB CORTEX;?EARLY,-,1,92
 302,CR,CLSD,-,-,-,-,BS ?FLAGON,-,1,3
 302,GREY,-,-,-,-,BS DK FAB;EARLY?,-,1,17
 302,GREY,-,-,-,-,BS FAB? GROG? CALC?,-,1,57
 302,GREY,-,-,-,-,BSS,-,3,18
 302,GREY,-,RLIN,-,-,-,-,SHLDR GROOVE & BODY,-,1,8
 302,GREY,-,RNOD,-,-,-,-,BS,-,1,11
 302,GREY,-,RNOD,-,-,-,-,THIN WALL LT GRY BS;GROOVE;SMALL VESS,-,1,4
 302,GREY,J?,-,1,-,-,BSS ONE ?JAR;THINNISH WALL;BLK INCLS,-,9,90
 302,OX,BGF,-,1,D,-,RIM/BSS GRY CORE;LT RB SURF;SKETCH,-,3,33
 302,SHEL,-,-,-,-,BS;MINIMAL SHELL,-,1,7
 302,ZDATE,-,-,-,-,L1E2?,-,-,-
 306,GREY,-,-,-,-,BS,-,1,2
 306,ZDATE,-,-,-,-,RO,-,-,-
 401,BB1,BD,-,-,-,-,WALL;POSS BIAP DEC,-,2,11
 401,BB1,BDFL,-,-,-,-,ABR.RIM ONLY;POSS BIAP DEC,-,1,12
 401,DWSH,JDW,-,-,-,-,ABR RIM FR;LATISH?,-,1,22
 401,GREY,-,-,-,-,BSS INCL SOME THICK X LGE VESS,-,29,436
 401,GREY,-,BIWL,1,-,-,BASE BWM? STRING,-,2,148
 401,GREY,-,BZZ,-,-,-,-,THICK BS;BZZ BETW.GROOVES,-,1,38
 401,GREY,BWM,-,-,-,-,RIM ONLY V.LGE SP?,-,1,57
 401,GREY,BWM,-,-,-,-,RIM ONLY;V.LGE;SP?,-,1,51
 401,GREY,BWM,-,1,-,-,RIM ONLY;CF SP-D42,-,2,44
 401,GREY,BWM,-,2,-,-,BSS SHLDR/BODY,-,2,54
 401,GREY,BWM?,BSCR,-,-,-,-,BS GROOVES W BURNISH SCRIBBLE BELOW,-,1,18
 401,GREY,J,BWL,1,D,-,RIM & BS;?JHA;SKETCH,-,2,42
 401,GREY,JBEV,-,-,D?,-,RIM/SHLDR CF SP-C31?,-,1,24
 401,GREY,JEV,-,-,-,-,RIM ONLY,-,1,15
 401,SAMCG,79,-,-,-,-,RIM/WALL,-,1,21
 401,SHEL,-,-,-,-,THICK ABR.BS;MIN.SHELL,-,1,46
 401,SHEL,-,-,2,-,-,BSS ?WHEEL MIN.SHELL,-,2,19
 401,ZDATE,-,-,-,-,ML4,-,-,-

403,DR20,A,-,-,-,BS LATER FAB,-,1,105
403,GREY,-,-,-,BSS,-,9,125
403,GREY,-,BVL,-,-,-,BS,-,1,15
403,GREY,-,LA,-,-,-,BS,-,1,7
403,GREY,BG225?,-,-,-,ABR.RIM FR ONLY,-,1,25
403,GREY,BTR,-,1,D,-,COMP PROF;U/C RIM,-,8,188
403,GREY,CP,-,1,-,-,RIMS ONLY;M3?,-,2,25
403,GREY,CP?,FET;HMAD,1,-,-,BASE/BSS,-,5,102
403,NVCC,BK,-,-,-,FTM LATER FAB;CF RPNV43,-,1,16
403,SHEL,-,-,2,-,-,BSS;MIN.SHELL,-,2,8
403,ZDATE,-,-,-,ML3?,-,-,-
404,AMPH?,A,-,-,-,FLAKE;LT BN MICA,-,1,30
404,GREY,-,-,-,BSS VARIOUS 1 BURNISHED,-,8,128
404,GREY,BD,-,-,-,BS WALL,-,1,5
404,GREY,BFBH,-,-,D,-,RIM/WALL BURNT,-,1,51
404,GREY,BK?,-,-,D,-,RIM WALL;DIAM 6;SKETCH,-,1,5
404,GREY,CLSD,-,-,-,SHLDR/NECK;BURNISHED,-,1,7
404,GREY,CLSD,-,-,-,THCK HEAVY SMALL VESS BASE;JBK?,-,1,113
404,GREY,JDW,-,-,-,RIM ONLY,-,1,13
404,SHEL,-,-,3,-,-,BSS MIN.SHELL;ONE ?OPEN,-,3,28
404,ZDATE,-,-,-,EM4,-,-,-
404,ZZZ,-,-,-,SLAG FRs,-,-,-
405,GREY,-,-,-,BS,-,1,5
405,GREY,CLSD,-,1,-,-,BASE ?JAR,-,3,65
405,SHEL,-,-,-,THCK BS;LGE VESS;CALC DEP INT,-,1,85
405,SMSH,JSM,-,-,-,RIM FR;LGE J;U/CUT RIM;BRYOZOA,-,1,35
405,ZDATE,-,-,-,L3-4 PROB 4,-,-,-
405,ZZZ,-,-,-,TILE FR ETC.,-,-,-
410,GREY,-,-,-,BSS,-,4,162
410,GREY,-,BS,-,-,-,BS ?BWM,-,1,40
410,GREY,-,BS?,-,-,-,BS;POCKED SURF.,-,1,18
410,GREY,BD,-,1,-,-,CHAMFER BASE,-,3,41
410,GREY,BKFN,-,1,D,-,RIMS/BSS;BURNISHED;UNUSUAL,-,9,49
410,GREY,DGR,-,-,-,RIM/WALL;ST.SIDE;UNDEC;E3?,-,1,10
410,NVCC,BKPR,BA,-,-,-,RIM-GROOVE;BAD;CR FAB,-,1,6
410,ZDATE,-,-,-,EM3,-,-,-
412,COAR,-,HMAD,-,-,-,COARSE BS ?GROG BLK FAB LT BN EXT JOINS,521,1,62
412,GREY,-,-,-,BASAL ZONE BS;HIGH BLK BURNISH,-,1,16
412,GREY,-,-,-,BS NECK SP?,-,1,11
412,GREY,-,-,-,BSS,-,6,95
412,GREY,-,BS,4,-,-,BSS PROB BWM,-,4,192
412,GREY,BWM,-,-,-,RIM ONLY;LGE BOWL CF SP-D43,-,1,66
412,GREY,JBWM,-,-,-,CURVED RIM ONLY,-,1,22
412,LCOA,L,-,-,D?,-,RIM PT WALL,-,1,15
412,SPCC?,B38,PARC,-,-,-,ABR.FLANGE/BS,-,1,52
412,ZDATE,-,-,-,VL4,-,-,-
414,DWSH,JDW,-,-,-,RIM ONLY,-,1,19
414,GREY,-,-,-,BSS INCL SMALL BASE & STRING,-,6,114
414,GREY,-,BS,-,-,-,BS;BWM?,-,1,30
414,GREY,BFB,-,-,D?,-,RIM/WALL,-,1,60
414,GREY,CP,LA,-,D?,-,RIM/WALL;EM3 TYPE?,-,1,48
414,GREY,DPR,-,-,-,RIM/WALL;UNDEC,-,1,23
414,NVCC,BK,-,-,-,SM.PL.BASE;DIAM 25MM;CR FAB,-,1,25
414,SHEL,-,-,-,BS;MIN.SHELL;POSS DWSH,-,1,13
414,ZDATE,-,-,-,ML3-4,-,-,-
415,AMPH?,-,-,-,BURNT FLAKE,-,1,9
415,COAR,-,-,-,STRING BASE FR.SIMILAR FAB,-,1,29
415,COAR,-,RIL,-,-,-,COARSE BS INT.SURF.LOST,-,1,19
415,DWSH?,J,-,-,-,SHLDR ONLY,-,1,11
415,GREY,-,-,-,BSS,-,8,170
415,GREY,-,-,-,LGE THICK BS X LGE VESS,-,1,508
415,GREY,-,BS,1,-,-,BSS ?BWM,-,4,99
415,GREY,-,BWL?,-,-,-,LGE BS;BS X LGE ?JAR,-,2,179
415,GREY,-,LA,-,-,-,SM.VESS BS,-,1,4
415,GREY,CLSD,LA,1,-,-,LT.GRY BSS;FINE;?FLASK,-,2,26
415,OX,-,-,-,ABR.BS,-,1,8
415,OX,CLSD,-,-,-,BASAL ZONE SH,-,1,21
415,SHEL,CLSD,-,-,-,BASAL V.LGE VESS ?WHEEL,-,1,52
415,SHEL,CLSD,-,-,-,BS FLAKED EXT.WHEEL,-,1,17

415,SPCC,B,-,-,-,BASE STRING W WHITE U/SLIP,-,1,44
415,SPIR,J,-,-,D,-,RIM/NECK ONLY;BURNT,-,1,37
415,ZDATE,-,-,-,VL4,-,-,-
428,GREY,-,-,-,BASE;SLIGHT FTRG,-,1,67
428,GREY,-,BS,1,-,-,BSS LGE VESS ?BWM,-,2,238
428,GREY,-,LA,-,-,-,BS,-,1,20
428,ZDATE,-,-,-,3?,-,-,-
429,GREY,-,-,-,STRING BASE ?JAR,-,1,47
429,GREY,CLSD,-,-,-,BS;?SHLDR & CORDON;BURNISH EXT,-,1,12
429,ZDATE,-,-,-,LATER RO?,-,-,-
500,GREY,-,-,-,BSS INCL STRING BASE,-,3,40
500,GREY,BK?,-,-,-,SMALL BASE,-,1,19
500,GREY,CLSD,BWL,-,-,-,BS,-,1,14
500,GREY,D,-,1,-,-,50% BASE FINE POLISH UNDERSIDE,-,2,120
500,MOSP,MCO,PB,-,D?,-,RIM/WALL,-,1,64
500,NVCC,BK,-,1?,-,-,BSS;LT RB FAB,-,2,10
500,NVCC,DPR,-,1,-,-,RIM/WALL;LT RB FAB;COMP PROF,-,2,46
500,ZDATE,-,-,-,L4,-,-,-
502,DWSH,-,-,-,BSS PROB DWSH,-,3,47
502,DWSH,JDW,-,-,-,RIM FR,-,1,17
502,GREY,-,-,-,BSS INCL STRING BASE,-,16,236
502,GREY,-,BS,-,-,-,PROB. BWM BS,-,1,25
502,GREY,-,BS,-,-,-,THICKER LGE BS,-,1,98
502,GREY,BD,-,2,-,-,BASAL SHS,-,2,65
502,GREY,BFBH,-,-,-,RIM,-,1,37
502,GREY,BIBF,-,-,D?,-,RIM,-,1,55
502,GREY,BKFOFG,-,-,D?,-,RIM/BSS JOINS,503,4,67
502,GREY,BWM,-,-,-,RIM ONLY U/C RL TYPE,-,1,19
502,GREY,BWM,-,-,-,RIM/BODY BURNT;SP TYPE,-,1,50
502,GREY,BWM?,-,-,-,BS PROB BWM,-,1,74
502,GREY,JCUR,-,-,-,RIM FR. SMALLISH J,-,1,10
502,GREY,JDW,-,-,-,RIM FR,-,1,9
502,GREY,JNN,-,-,-,HEAVY RIM/SHLDR;SP?,-,1,81
502,GREY,JNN,-,1,-,-,RIM/SHLDR/BS RL/SL TYPE,-,2,97
502,MONV,MFL,-,-,-,BURNT FR PART RIM,-,1,17
502,NVCC,BK,-,-,-,BURNT FTM,-,1,40
502,NVCC,BKFB,-,-,-,RIM;LATE RB FAB,-,1,5
502,ZDATE,-,-,-,L4,-,-,-
503,GREY,-,-,-,BS LGE VESS,-,2,83
503,GREY,-,BS,-,-,-,LGE BS;PROB BWM,-,1,94
503,GREY,BKFOFG,-,1,-,-,BSS NECK/SHLDR/BODY,502,4,88
503,NVCC,BX?,ROUZ,-,-,-,BS;CR FAB,-,1,10
504,GREY,-,-,-,BSS;ONE BASAL ZONE ?BWM,-,2,47
504,ZDATE,-,-,-,3?,-,-,-
506,DWSH?,J,-,-,-,BS,-,1,19
506,GREY,-,-,-,BSS,-,4,44
506,GREY,-,LA,-,-,-,BS,-,1,6
506,SAMCG,B,-,-,-,BS,-,1,12
506,ZDATE,-,-,-,M3+,-,-,-
507,GREY,-,-,-,BSS,-,4,39
507,GREY,DPR,-,-,-,RIM/WALL;UNDEC,-,1,20
507,NVCC,BK?,-,-,-,BS;LATER RB FAB,-,1,5
507,SHEL,-,-,2,-,-,BSS;WHEEL;MIN.SHELL,-,2,17
507,ZDATE,-,-,-,ML3,-,-,-
510,DWSH?,-,-,-,CHIP;PROB DWSH,-,1,2
510,GREY,-,-,-,BSS,-,3,16
510,GREY,-,-,-,FTM,-,1,14
510,GREY,-,BV,-,-,-,COARSE BS AS IN 515,515?,1,16
510,GREY,BD,BSCR,-,-,-,BASAL W SCRIBBLE,-,1,10
510,ZDATE,-,-,-,M3+,-,-,-
514,COAR,J,-,-,-,SHLDR THICK LGE;SOME SHELL/CALC;?GROG;BURNISH,-,1,61
514,GFIN,B30,ROUZ,-,D,-,RIM/WALL,-,1,21
514,GREY,-,-,-,BS;HEAVILY BURNT,-,1,13
514,GREY,-,-,-,THICK POKED BS W GROOVES;LGE VESS,-,1,32
514,GREY,BWM?,-,1,-,-,GROOVED BS;V.HEAVILY BURNT,-,2,31
514,GREY,CLSD,-,-,-,BS;BURNISH EXT,-,1,11
514,GREY,CLSD,LA,2,-,-,BSS,-,2,21
514,GREY,JB,-,-,-,DAMAGED RIM;M3?,-,1,27
514,SHEL,J?,-,-,-,BASE & BSS ?WHEEL,-,4,113

514,ZDATE,-,-,-,-,M3+,-,-,-
514,ZZZ,-,-,-,-,SOME HEAVILY BURNT SHS,-,-,-
515,DWSH,JDW,-,-,-,-,RIM FR ONLY,-,1,20
515,GREY,-,BV,1,-,-,-,THICK SHS LGE VESS;DK GRY FAB;WHEEL,510?,7,106
515,GREY,BD,-,-,-,-,BASAL SH,-,1,18
515,ZDATE,-,-,-,-,M3,-,-,-
515,ZZZ,-,-,-,-,UNUSUAL FRAGMENTED VESSEL,-,-,-
517,GREY,-,-,-,-,BSS,-,5,24
517,GREY,BD,-,-,-,-,BS,-,1,7
517,GREY,CP,LA,1,-,-,-,BSS,-,2,16
517,SHEL,JEV,-,-,D?,-,RIM/SHLDR;VESIC SURF;SKETCH,-,1,16
517,ZDATE,-,-,-,-,EM2+,-,-,-
517,ZZZ,-,-,-,-,V.LITTLE EVID. FOR DATE,-,-,-
518,SHEL,J,-,-,-,-,BASE STRING;NO BRYOZOA,-,1,248
518,ZDATE,-,-,-,-,RO,-,-,-
521,COAR,-,HMAD,-,-,-,-,BLK FAB ?GROG LT BN SURF EXT.JOINS,412,3,31
521,GREY,CLSD,BZZ;BDL,-,-,-,-,BS W DEC BELOW GROOVES,-,1,18
521,NVCC,DPR,-,-,-,-,RIM/WALL METALLIC CC,-,1,12
521,ZDATE,-,-,-,-,M4,-,-,-
601,GREY,-,-,-,-,BSS,-,2,9
601,NVCC,B38?,-,-,-,-,BS,-,1,21
601,ZDATE,-,-,-,-,ML3-4,-,-,-
603,GREY,-,-,-,-,BS,-,1,11
603,ZDATE,-,-,-,-,RO,-,-,-
617,GREY,-,-,-,-,BS,-,1,3
617,GREY,JBK,-,-,-,-,FTM BASE,-,1,27
617,ZDATE,-,-,-,-,L1+,-,-,-
617,ZZZ,-,-,-,-,NO REAL DATING EVIDENCE,-,-,-
619,SHEL,-,HMAD?,-,-,-,-,BS PROB HMAD,-,1,6
619,ZDATE,-,-,-,-,LIA?,-,-,-
619,ZZZ,-,-,-,-,ONLY SINGLE ABRADED FRAG,-,-,-
621,GREY,-,-,-,-,CHIP,-,1,1
621,GREY,JB,SWL,-,-,-,-,NECK/CORDON/BODY ?BOWL;SKETCH,-,1,28
621,NAT,-,-,-,-,BS GRY CORE RB CORT.DK SURF;?GROG RARE SHELL ?EARLY,-,1,6
621,ZDATE,-,-,-,-,2?,-,-,-
621,ZZZ,-,-,-,-,NO REAL EVIDENCE FOR DATE,-,-,-
700,BB1,DPR,-,-,-,-,COMP PROF;UNDEC,-,1,22
700,CR,CLSD,-,-,-,-,BS ?FLAGON,-,1,8
700,CR,CLSD,-,-,-,-,BS LGE FLAGON?,-,1,42
700,DWSH,-,-,-,-,BSS PROB DWSH,-,5,97
700,DWSH,JDW,-,-,D?,-,RIM-WALL,-,1,147
700,GREY,-,-,-,-,BSS,-,26,348
700,GREY,-,-,-,-,MISC DEC BSS;BS ETC.,-,6,111
700,GREY,-,BDL,-,-,-,-,BSS,-,2,18
700,GREY,-,JUD,1,-,-,-,BSS;LT BN SURF;DEEP DEC,-,2,25
700,GREY,-,LA,-,-,-,-,LGE BS; JAR?,-,1,72
700,GREY,BD,-,-,-,-,BS,-,1,11
700,GREY,BKFG,-,-,-,-,RIM FR,-,1,7
700,GREY,BKFO,-,1?,-,-,-,BSS;ROUL REPL.BY GROOVES,-,17,249
700,GREY,BWM,-,1,-,-,-,BSS,-,3,85
700,GREY,COL,-,-,-,-,FRAG PIERCED BASE,-,1,25
700,GREY,DPR,-,-,-,-,RIM/WALL,-,1,14
700,GREY,JCR,NOTC,-,-,-,-,RIM/PT NECK;SP-C41,-,1,52
700,NVCC,BD,-,-,-,-,BASAL SH;CR FAB,-,1,9
700,NVCC,BK?,-,-,-,-,BS;RB FAB,-,1,11
700,NVCC,BKFO,-,2,-,-,-,BSS;LT RB FAB,-,3,21
700,NVCC,BKSF,-,-,-,-,BS;RB FAB,-,1,4
700,NVCC,BKSF,ROUL,-,-,-,-,BS;VARIANT W DIAG.INDENTS;LATE FAB;UNUS,-,1,30
700,NVCC,F?,ROU,-,-,-,-,BS;CC EXT;CR FAB,-,1,7
700,PARC,CLSD,PS,-,-,-,-,BS W DIAGONAL STRIPES,-,1,9
700,SAMCG,B,NAME,1,-,-,-,HEAVY FTRG W INDISTINCT STAMP,-,2,33
700,SPOX,BFB,-,-,-,-,RIM/PT WALL,-,1,16
700,ZDATE,-,-,-,-,ML4,-,-,-
702,DR20,A,-,-,-,-,BSS;MID-LATE FAB,-,3,407
702,GREY,-,-,-,-,BSS,-,10,193
702,GREY,-,-,-,-,THICK BURNISHED BSS;SIMILAR FAB TO HDLE,-,3,64
702,GREY,BDFL,-,-,-,-,FLANGE ONLY,-,1,7
702,GREY,BFBH,-,-,-,-,RIM/WALL LACKING FLANGE;UNDEC,-,1,144
702,GREY,COL,-,-,-,-,FRAG PIERCED BASE,-,1,18

702,GREY,CP,-,-,-,CURVED RIM FR; 3?,-,1,8
702,GREY,CP,-,1,-,-,OXID FAB BBT RIMS/BS;3?,-,3,22
702,GREY,JBCOR,-,-,-,-,RIM/NECK AS IN,703;705,1,18
702,GREY,JBCUR,-,-,-,-,LTGRY RIM;?BWM 20DIAM AS RL,-,1,35
702,GREY,JDW,-,-,-,-,RIM,-,1,18
702,GREY,JHA,-,-,-,-,UNUS LGE TRIAG.SECT.HDLE;BURNISHED,-,1,71
702,NVCC,BK,-,-,-,-,FTM AS FOR BKFO;LT RB FAB,-,1,14
702,OX,-,-,-,-,FLAKE,-,1,7
702,SHEL,-,-,-,-,PROB DWSH BSS,-,3,26
702,SHEL,JRR,-,1,-,-,RIM & BS;WHEEL,-,2,28
702,ZDATE,-,-,-,-,L3+ PROB 4,-,-,-
703,BB1,BFBL,-,1,D?,-,RIMS/BS MOST PROF,-,3,78
703,CR,CLSD,-,1,-,-,BS ?FLAGON,-,1,14
703,DR20,A,-,-,-,-,FLAKES,-,2,16
703,GREY,-,-,-,-,BSS,-,8,53
703,GREY,-,-,2,-,-,BASES ?JARS,-,2,140
703,GREY,BFL,-,1,D?,-,OVERFIRED NEAR COMP PROF,-,2,44
703,GREY,CLSD,-,-,-,-,FTM;SKETCH,-,1,15
703,GREY,CLSD?,-,-,-,-,FTM LGER VESS,-,1,54
703,GREY,CP,-,-,-,-,BASE,-,1,33
703,GREY,CP,-,-,-,-,RIM FR,-,1,5
703,GREY,CP,LA,2,-,-,BSS,-,3,31
703,GREY,DPR,-,-,D?,-,COMP PROF;UNDEC,-,1,14
703,GREY,DPR,-,-,D?,-,RIM/WALL STRAIGHT;UNDEC,-,1,17
703,GREY,JB,BS,1,-,-,BASE/BSS,-,11,268
703,GREY,JBCOR,-,1,D,-,RIM/NECK/CORDON;SKETCH;SAME,702;705,2,35
703,GREY,JDW,-,-,D?,-,RIM/NECK,-,1,29
703,NVCC,BKFO,-,1,-,-,BSS;GROOVES INSTEAD ROUL;RB FAB,-,3,25
703,NVCC,BKFO,-,1,-,-,BSS;LT RB FAB,-,2,14
703,NVCC,BKFOS,-,-,-,-,BS;BIGHT RED FAB;JOINS,712,1,27
703,NVGCC,BK?,-,1,-,-,FTM,-,1,12
703,OX,-,-,1,-,-,LGE SANDY GRY/RB FAB;STRING BASE 87MM;POLISH RB EXT UNUS,-,3,230
703,ZDATE,-,-,-,-,ML3+,-,-,-
704,DWSH,-,-,-,-,BSS,-,3,42
704,DWSH,JDW,-,-,-,-,RIM ?BURNT,-,1,16
704,GREY,-,-,-,-,BSS,-,11,118
704,GREY,-,LA,-,-,-,BS,-,1,8
704,GREY,BD,-,-,-,-,BS BASAL,-,1,11
704,GREY,BWM,-,-,D?,-,CURVED U/C RL TYPE RIM WALL,-,1,41
704,GREY,BWM?,-,-,-,-,BS,-,1,12
704,GREY,CLSD?,BIWL?,-,-,-,BASE,-,1,31
704,GREY,JB,-,-,-,-,CURVED RIM;SKETCH,-,1,10
704,GREY,SMIT,-,-,V,-,FIGURED SHERDS ?SMITH,-,4,38
704,NVCC,BFL,-,1,D?,-,RIM/WALL,-,2,44
704,NVCC,BKFO,-,-,-,-,BS,-,1,15
704,NVCC,F,-,-,-,-,BS LGE VESS GROOVED;CC EXT ONLY,-,1,30
704,NVCC,FDN,-,-,D?,-,100% NECK,-,1,26
704,SAMCG,31?,-,-,-,-,RIM,-,1,5
704,ZDATE,-,-,-,-,L3-4 PROB 4,-,-,-
705,BB1,CP,-,-,D?,-,RIM/SHLDR ML3? G76-9,-,1,35
705,BB1,CP,-,1?,-,-,SHLDR,-,2,33
705,BB1,CP,LA,-,-,-,BS,-,1,26
705,GREY,-,-,-,-,BSS,-,3,34
705,GREY,-,-,1,-,-,COARSE THICK V.LGE BASE/BSS,-,4,514
705,GREY,BFBL,-,-,-,-,RIM FR,-,1,15
705,GREY,BKG177,-,-,D,-,RIM TO BELOW CARINATION,-,1,42
705,GREY,CLSD,-,1,-,-,THIN-WALL SMALL JBK;GROOVED,-,2,5
705,GREY,JBCOR,-,-,-,-,BS;SAME IN,702;703,1,10
705,GREY,JBKCUR,-,-,-,-,RIM/SHLDR GROOVED,-,1,5
705,NVCC,BK,-,-,-,-,FTM;LT RB FAB,-,1,7
705,NVCC,BK,BACC;BADS,-,-,-,BS;LT RB FAB,-,1,2
705,NVCC,F?,-,2,-,-,BSS;CC EXT ONLY;LT RB & BN FABS,-,2,6
705,OX,CLSD,-,-,-,-,BS;SL.MICACEOUS,-,1,10
705,ZDATE,-,-,-,-,ML3,-,-,-
706,GREY,-,-,-,-,BSS;1 GROOVED BWM?,-,3,36
706,GREY,BD,-,-,-,-,BASAL,-,1,14
706,GREY,J?,-,1,-,-,J.BSS,-,2,50
706,GREY,JCUR,-,-,-,-,RIM/NECK SLIGHT CORDON,-,1,49
706,PART,BKFN,-,-,-,-,BS;SAME IN,708,1,8

706,ZDATE,-,-,-,-,M3?,-,-,-
706,ZZZ,-,-,-,-,NO STRONG EVID EXCEPT BK,-,-,-
708,GREY,-,-,-,-,BS,-,1,7
708,GREY,BFL,-,1,-,-,RIMS;JOINS,714,3,61
708,GREY,BNK,-,1,-,-,NON-J BSS;POSS X COLANDER,-,2,26
708,GREY,BNK,-,1,-,-,NON-J RIM/BSS;SIMILAR TYPE,-,3,43
708,GREY,BNK,-,1,D?,-,SMALL B RIMS/WALL;SKETCH,-,4,49
708,GREY,CLSD,-,-,-,-,PEDESTAL BASE;7CM DIAM.SKETCH,-,1,100
708,GREY,CLSD,-,1,-,-,BASE/BS J,-,2,51
708,GREY,COL,-,-,-,-,PIERCED BASE FR,-,1,21
708,NVCC,BKFO,-,-,-,-,BS;RED FAB,-,1,2
708,NVCC,BKNV27,-,-,-,-,BASE ONLY;GRY/BN FAB,-,1,17
708,PART,BKFN,-,1,D,-,RIMS/NECK/GLOB BODY AS RPNV49 UNDEC;SAME,706,3,19
708,ZDATE,-,-,-,-,ML3,-,-,-
709,BB1,DPR,BIAF,-,D?,-,RIM/WALL,-,1,10
709,COAR,-,HMAD?,-,-,-,BS,-,1,14
709,DR20,A,-,-,-,-,BS & 2 FLAKES,-,3,133
709,GREY,-,-,-,-,BSS,-,7,87
709,GREY,BD,-,2,-,-,BASAL SHS,-,2,59
709,GREY,BG225,-,-,-,D?,-,RIM/WALL UNDEC,-,1,46
709,GREY,BKFG,-,-,-,-,RIM-SHLDR TURN,-,1,8
709,GREY,JB,-,-,D,-,RIM/WALL.DIAM 10;SKETCH,-,1,23
709,GREY,JB,BIWL,-,-,-,BSS JL OR BWM,-,4,61
709,GREY,JB,BS?,1,-,-,BSS JL OR BWM,-,4,93
709,GREY,JB,SWL,-,-,-,BS,-,1,19
709,NVCC,BD,-,-,-,-,BS LT RB FAB,-,1,30
709,NVCC,BK,-,-,-,-,BS METALLIC GRY-RB FAB,-,1,4
709,NVCC,BKPR,-,-,-,-,RIM-GROOVE+;CR FAB,-,1,3
709,ZDATE,-,-,-,-,ML4,-,-,-
712,DWSH,JDW,-,-,-,-,RIM FR,-,1,8
712,GREY,-,-,-,-,BSS INCL STRING BASE FR,-,5,55
712,GREY,-,LA,-,-,-,BS,-,1,8
712,GREY,BD,-,-,-,-,BS,-,1,4
712,GREY,BFL,-,-,D?,-,THICK RIM/WALL,-,1,63
712,GREY,BK,-,1,-,-,BSS FRAG ?CURVED RIM,-,2,14
712,GREY,BKFG,APS,-,D,-,RIM W APPLIED VERT.STRIP;UNUSUAL,-,1,8
712,GREY,CP?,-,1,-,-,COMP BASE & BS;CP?,-,2,165
712,GREY,J,-,-,-,-,SHLDR NECK ONLY,-,1,23
712,GREY,J?,-,-,-,-,COMP LGE BASE;STRING,-,1,290
712,GREY,JB,BIWL,1?,-,-,BSS & BASE,-,7,135
712,NVCC,B38,-,-,-,D?,-,RIM/WALL;CR FAB,-,1,75
712,NVCC,BK?,-,-,-,-,BS RB FAB,-,1,3
712,NVCC,BKFN,-,-,-,-,NECK;LT RB FAB,-,1,5
712,NVCC,BKFOSF,-,1,-,-,BSS TALL LATE;BRIGHT RB FAB;JOIN,703,2,30
712,SHEL,-,-,-,-,BS POSS HMAD,-,1,23
712,ZDATE,-,-,-,-,ML3-4,-,-,-
714,GREY,BFL,-,1,D?,-,RIMS/BSS ALL ONE;JOINS,708,12,366
714,ZDATE,-,-,-,-,3,-,-,-
714,ZZZ,-,-,-,-,ONLY SINGLE BOWL;POCKED SURFACES,-,-,-
723,DWSH,-,-,-,-,BS,-,1,8
723,GREY,-,-,-,-,BSS X LGE THICK VESS;?SHAPED SHERD,-,1,50
723,GREY,-,-,-,-,BSS,-,5,76
723,GREY,-,-,1,-,-,BSS X LGER VESS J?,-,2,86
723,GREY,BD,-,-,-,-,BASAL,-,1,53
723,GREY,BKFO,-,1,-,-,BSS,-,4,74
723,GREY,JBK,-,-,-,-,CURVED RIM/SHLDR,-,1,16
723,NVCC,BK?,ROUL,1,-,-,BASAL ZONE-TWIN ROUL LGE;GRY/RB FAB,-,3,44
723,NVCC,BKFOS,-,-,-,-,BS CR-BN FAB,-,1,12
723,NVCC,BKFOS,-,-,-,-,BS;LT BN GLOSS CC;BN FAB,-,1,4
723,ZDATE,-,-,-,-,ML3,-,-,-

Chapel Heath, Navenby, CHN94**Environmental Archaeology Assessment**

This assessment is based upon 6 samples taken from selected contexts of Iron age and Roman date and the animal bone collected during the excavation of the evaluation trenches.

The samples

The following samples were collected.

Trench	Context	Volume (lt)	context type	date
1	104	7	house gulley	Iron age
1	107	3	ditch fill	Iron age
1	108	10	ditch fill	Iron age
2	202	10	quarry fill	Roman
5	507	10	quarry fill	Roman
6	609	6	ditch fill	?Iron age

All the samples were processed in the following manner:

Sample volume was measured prior to processing. The samples were washed on a 'Siraf' tank using a flotation sieve with a 0.5mm mesh and an internal wet-sieve of 1mm mesh for the residue. Both residue and float were dried, the dry volume of both measured, and the weight of the residue recorded.

The residue was sorted by eye, and environmental and archaeological finds picked out, noted on the assessment sheet and bagged independently. The residue was then bagged. The float of each sample was studied under a low power binocular microscope. The presence of environmental finds (ie snails, charcoal, carbonised seeds, bones etc) were noted and their abundance and species diversity recorded on the assessment sheet. The float was then bagged. The sorted residue, float and finds constitute the material archive of the samples.

The assessment sheets are attached and the results summarised below.

Iron age

The primary and secondary fills of the main enclosure ditch in Trench 1 had low levels of charcoal, carbonised cereals, weeds and chaff, and fragments of mammal bone. A few bones of cattle and horse were excavated from the primary fill. There is clearly a domestic waste component in the ditch at sufficient density that worthwhile samples of carbonised material and animal bone could be extracted if a sufficient length of ditch was excavated. Concentrations are nevertheless not high and sample size would probably need to be of the order of 50lts and perhaps 10% of the

enclosure ditch would require excavation for a reasonable sample of animal bone.

A small sample from the house gully in this trench also produced a few exploded cereal grains, some mineralised plant remains and bone fragments. Large samples (50lts) from these features would be needed if more than presence/absence data is to be collected. Potentially distributional information, and therefore functional interpretation may be possible if the gulleys within the enclosure are sampled.

Although snails were preserved their frequency and diversity is too low to warrant study.

In trench 6 a small sample from context 609 produced two fragments of carbonised grain, and a few snails and charcoal pieces. This deposit was poorer than those in trench 1.

Roman

Two samples were taken from the ashy bands, 202 and 507, in trenches 2 and 5 at the north end of the site. These samples contained very little parent soil and were composed almost entirely of ash and vitrified mineral material. Domestic animal and plant debris occurred in the samples at densities that warrant study and indicate that some at least of the deposit is probably domestic in origin. Considering the layers were so full of fire debris the small amount of charcoal present was unexpected. The fire may have burnt too hot for charcoal to survive or the vitrified material may not derive from the fire itself. The vitrified material includes both small fused pieces and large conglomerated lumps. It is light and pale and occurs in quantities such that it probably derives from some 'industrial' process and not domestic fires. The layers include a number of pieces of degraded limestone and it is possible that the vitrified material is the fused silica waste from a kiln roasting limestone for the production of mortar. The quarry pits into which this material was being dumped possibly being the quarries for the extraction of the limestone.

These samples are richer than those from the Iron age features to the south and include higher numbers of snails, carbonised and mineralised seeds and the only fish bone from the site.

Animal bone

191 bones were recovered from the evaluation. These have been identified and an archive catalogue produced (attached).

The bone is in general in good condition, includes many measurable skeletal elements and sufficient material that can be aged to permit the reconstruction of the slaughter pattern of the cattle and sheep were a large sample to be collected.

The collection includes cattle, sheep, pig, horse and a single red deer bone. A domestic dominated assemblage which is typical of rural sites of Iron age and Roman date. Some of the sheep, presumably in Iron age contexts are very small and gracile. The number of horse bones in the sample is relatively high and appears to reflect a pattern emerging from Lincolnshire sites of these periods.

Potential

1. The soils are well drained sandy silts over calcareous gravels and bedrock. There is no evidence for and very little likelihood of any deposits producing preserved organic remains.
2. For the above reasons the ditch sediments are not likely to contain pollen in a condition that would repay study.
3. Snails survive in low numbers in many deposits and in very good condition in the Roman layers studied. However the environmental (ie ecological) data sets for this site are limited and the study of the terrestrial snails with no other environmental studies would be of limited interpretive use.
4. Carbonised material survives well in the samples, and occurs in all samples although at variable concentrations. Two elements have the potential for yielding useful information.
 - i) Charcoal. Charcoal is present in all the samples, although in fragments too small to identify in some. Sampling for and identification of charcoal would indicate the wood species being used for fuel during the Iron age and Roman occupation of the site. We know very little of the nature of the landscape on the limestone plateau during these periods, and the species and size of fuel being used would indicate the nature of any residual woodland at this time.
 - ii) Carbonised cereal remains and seeds. Grain, chaff and seeds were found in the evaluation samples. These remains have the potential for indicating what cereals are grown, whether cereals are being processed on site, and potentially whether they are being grown on the light soils on the top of the ridge or heavier soils in the valley below. Evidence, or not, of a change in the agricultural pattern between the Iron age and Roman settlements should be investigated, and whether the Roman settlement is identifiable as a farming settlement or of some other character. Sampling has considerable potential but may require samples of 50lt, particularly from some of the earlier deposits.
5. Mineralised plant remains. These have been identified in the ashy Roman layers of Trenches 2 and 5. They are likely to have a different origin to the carbonised material and reflect more general ecological conditions on the site. Their potential is limited, but the evidence should be scanned for material of

economic relevance and it will in any case be recovered from the samples taken for carbonised material.

6. Animal bone. The condition and potential of this category of find is good. However the ability to understand the pastoral husbandry, identify changes through time and the possible introduction of new stock in the Roman period necessitates fairly large samples. The evaluation has indicated that quite a lot of bone is present in the deposits but fairly extensive excavations of the ditches, quarry pits and structures will need to be undertaken in order to generate a sample size sufficient to address these questions.

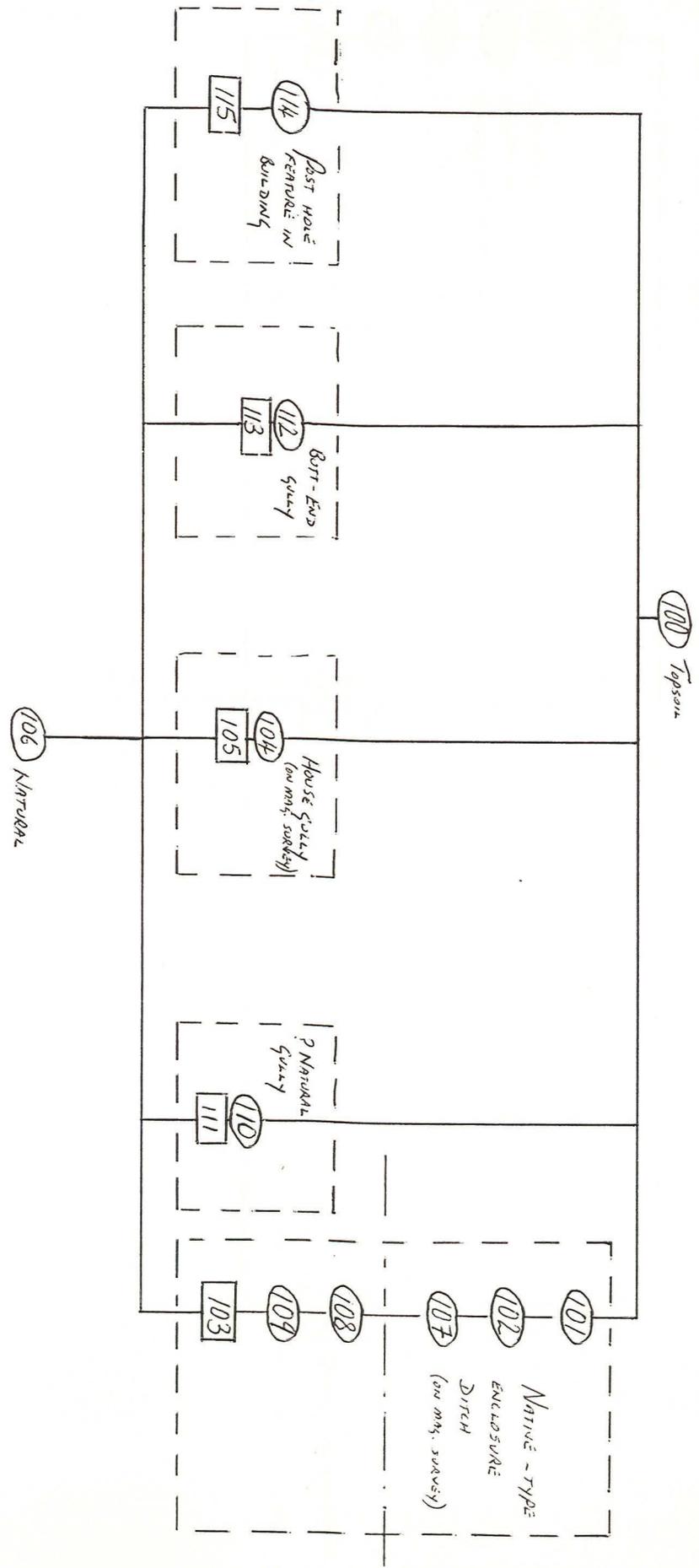
7. No 'buried soils' were observed on site and it is clear from most of the sections that the Iron Age and Roman ground surfaces must have lain at a similar level to the modern surface and since been destroyed by agricultural activity. No soil or micromorphological analysis would appear to be warranted.

Clearly if further excavation takes place on the site the 'economic' elements of the environmental evidence need to be targeted, particularly the carbonised plant remains and the animal bones. These should be sampled and studied with specific reference to questions on the pattern of arable and pastoral husbandry, evidence for change between Iron age and Roman sites, and distribution and character of activities taking place within the settlements, including industrial activities.

Appendix 11.5 Trench matrices

NORTH

CHIN 94
MATRIX, TRENCH 1

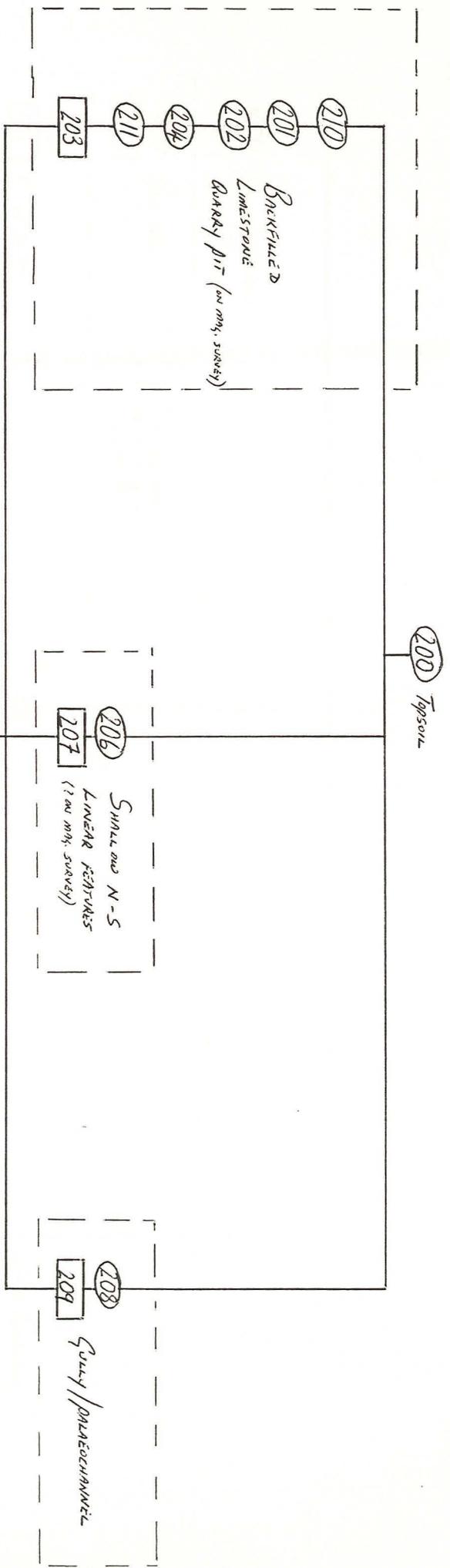


SOUTH

EAST

WEST

CHN 94 MATRIX, TRENCH 2



205 Natural

210
201
202
204
211
203

Buckfield
Limestone
Quarry pit (on map, survey)

200 Topsoil

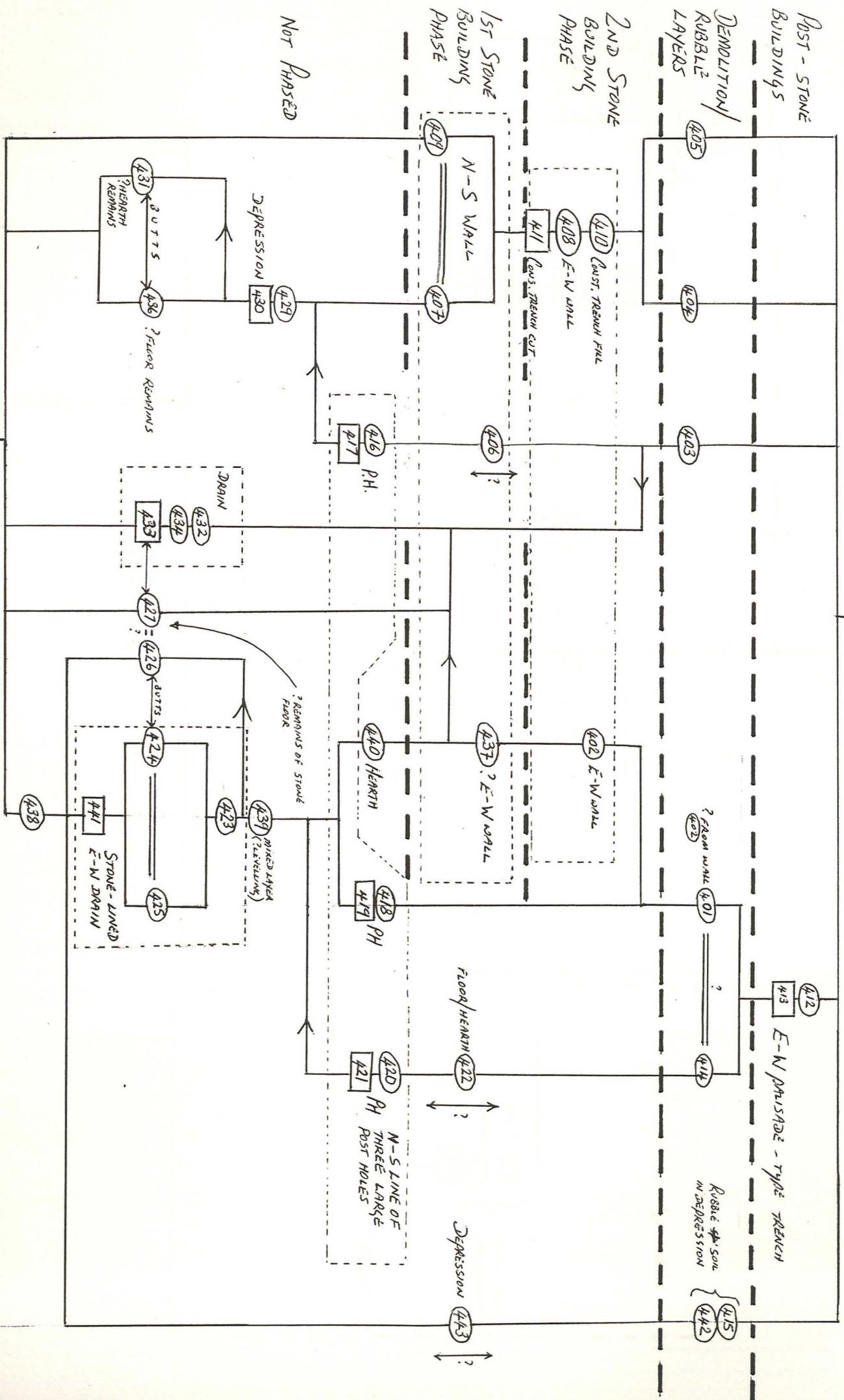
206
207
Small and N-S
Linear Features
(on map, survey)

208
209
Gully/Drainage Channel

CHIN 94 MATRIX, TRENCH 4

NORTH

SOUTH

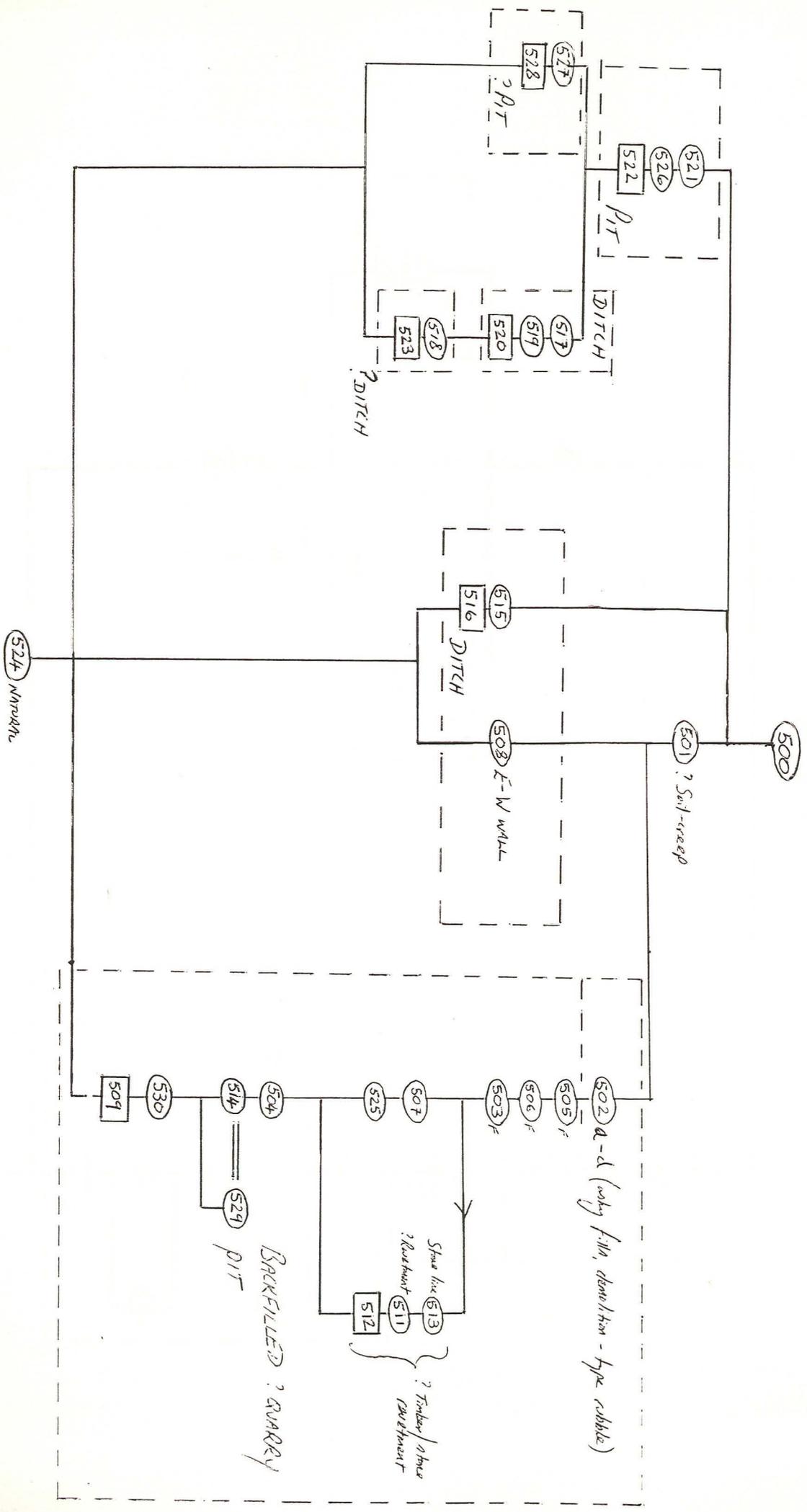


LIMIT OF EXCAVATION

NORTH

CHAN 94 MATRIX, TRENCH 5.

SOUTH



524 MOUND

BACKFILLED ? QUARRY

Spore hole
? Rubbish
? Timber / other
? Sawdust

502 a-d (very fill, demolition-type rubble)

501 ? Soil-sweep

503 E-W WALL

515

516

DITCH

513

511

512

517

519

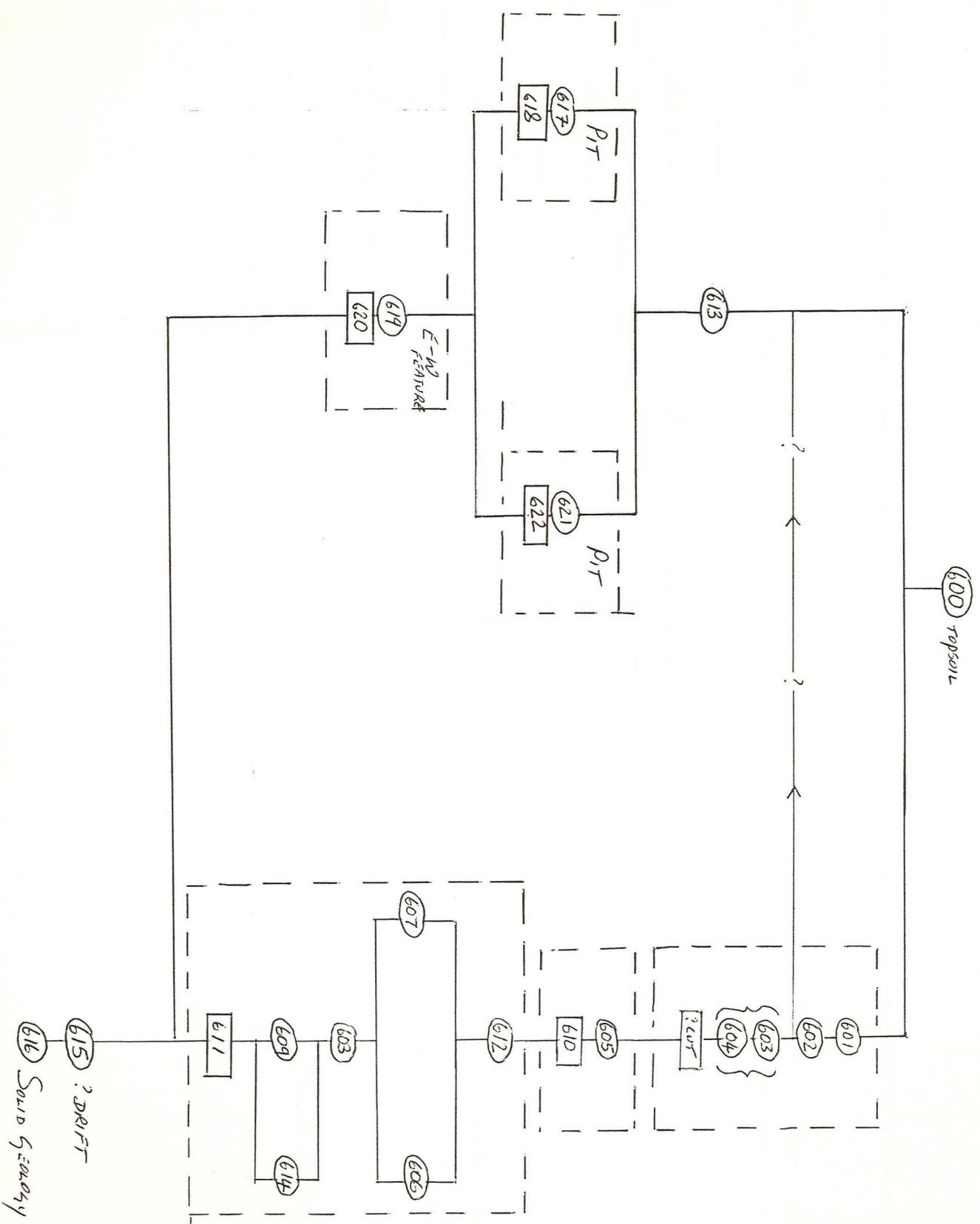
520

518

523

DITCH

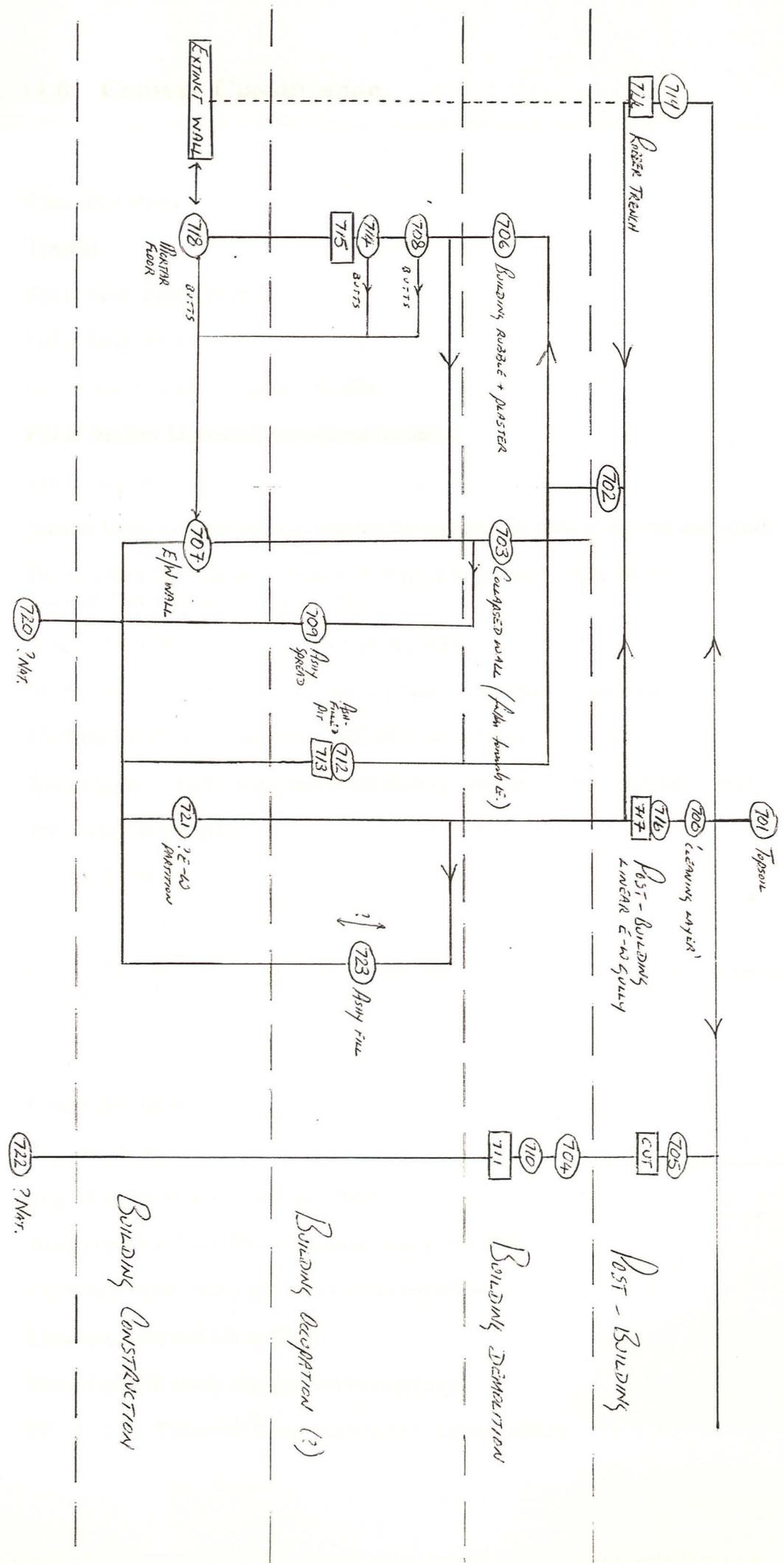
MATRIX TRENCH 6



SOUTH

CHAN 94 MATRIX, TRENCH 7.

NORTH



Appendix 11.6 Context Classification

Trench 1

Context	Classification
[100]	Topsoil.
[101]	Fill of large ditch [103].
[102]	Fill of large ditch [103].
[103]	Enclosure ditch cut. U-shaped profile.
[104]	Fill of shallow U-shaped curvi-linear feature.
[105]	Cut for the above.
[106]	Natural layer. General context number for complex of natural subsoil and ?drift.
[107]	Distinct dark horizon/lens in lower section of large ditch [103]. More charcoal than material above and below.
[108]	Thick (clay/sand) layer/fill in large ditch [103].
[109]	Stony clay/sand in base of (and lining lower north edge) of ditch [103].
[110]	Uniform fill of very shallow amorphous east-west linear feature.
[111]	Amorphous, vaguely linear east-west shallow channel. Sides slope very gently.
[112]	Fill of butt-ended gully.
[113]	Cut for the above.
[114]	Fill of irregular feature, ?post-hole.
[115]	Cut for the above. (Quadrangular-shaped, steep-sided, breaking to undulating base. In base, two shallow circular depressions.)

Trench 2

Context	Classification
[200]	Topsoil/ploughsoil.
[201]	Top fill of backfilled quarry pit [203].
[202]	Ashy deposit in backfilled limestone quarry pit [203].
[203]	Large limestone quarry pit. Deliberately backfilled.
[204]	Limestone and soil fill of [203].
[205]	Natural glacial sandy clay (yellow/orange) layer.
[206]	Fill of [207]. Truncated linear north/south shallow feature.

- [207] Cut. Linear north-south feature.
- [208] Fill of [209]. Occasional stones and appears to have tip-line of stones running in from east side.
- [209] Gully/palaeochannel. Truncated by ploughing.
- [210] Mid brown subsoil. (Backfill of limestone quarry pit [203]).
- [211] Lower fill of [203].

Trench 3

Context

Classification

- [300] Dark brown topsoil.
- [301] Layer. ?Soil creep/subsoil.
- [302] Fill of east-west ditch [303]. Dark grey-brown sandy silty clay.
- [303] Cut for east-west ditch. U-shaped with irregular bottom sloping to the south.
- [304] Fill of post-hole [305]. Very similar to [304]. ?Contemporary with [304].
- [305] Cylindrical cut. May be from fence on south side of ditch [303].
- [306] Fill. Loose soily fill of east-west gully [307].
- [307] Cut for the above. East-west quarry enclosure ditch with gently rounded bottom. Butts road [308].
- [308] Metalled (70% limestone) road surface (external).
- [309] Natural orange sand layer.

Trench 4

Context

Classification

- [400] Topsoil.
- [401] Layer. Rubble spread containing building rubble (limestone) on south side of east-west wall [402].
- [402] East-west wall. Single-course with thin rubble core.
- [403] Layer. Rubble spread north of wall [402].
- [404] Layer. Rubble spread south of wall at north end of trench.
- [405] Layer. Rubble spread north of wall at north end of trench.
- [406] Cut for [403]. Appears to be a drain or camber down to drain [433].

- [407] Wall. Aligned north-south, two faces of roughly shaped limestone blocks with thin rubble core.
- [408] Wall. Aligned east-west, two faces present with rubble core and mortar bonding.
- [409] Wall. Aligned north-south. Thin rubble core. Part of [407].
- [410] Construction trench fill for east-west wall [408].
- [411] Cut for construction trench for wall [408].
- [412] Fill of east-west palisade-type trench [413].
- [413] Cut. U-shaped east-west linear palisade-type trench.
- [414] Fill of depression near south end of trench. ?Same as [401] with less rubble.
- [415] Thick dark rubble layer filling depression [442].
- [416] Fill of post-hole [417]. Top of fill rubble, while lower part of fill was virtually stone-free. Part of north-south line of post-holes.
- [417] Cut for [416].
- [418] Fill of post-hole [419]. Packed with limestone rubble. Part of north-south line of post-holes.
- [419] Cut for [418].
- [420] Fill of post-hole [421]. Contained limestone rubble. Part of north-south line of post-holes.
- [421] Cut for [420].
- [422] Hearth. Burnt clay layer bounded by stones.
- [423] Fill of east-west drain.
- [424] Revetment on north side of east-west drain.
- [425] Revetment on south side of east-west drain.
- [426] Remains of rough stone surface. ?Same as [427]. Butts [424]. ?Remains of stone floor/courtyard.
- [427] Remains of rough stone surface. ?Same as [426]. ?Remains of stone floor/courtyard.
- [428] ?
- [429] Fill of depression [430].
- [430] Cut for the above.
- [431] Hearth remains. Layer of oxidised red sandy clay and crushed limestone. Butts [436].
- [432] Flat limestone slabs. Top of a capped drain associated with [427].
- [433] Cut for drain [432].
- [434] Fill. Dark dirty sandy silty fill of drain [432].

- [435] Layer. Rough surface in shallow depression [430].
- [436] Layer of possible floor remains. Frequent limestone mortar-type context. Butts [431] hearth remains.
- [437] ?East-west wall. Line of roughly-faced stones.
- [438] Dirty layer under lowest stone building levels.
- [439] Very mixed stony/sandy/silty layer. ?Levelling.
- [440] Hearth. Hard fired clay ash layer.
- [441] Cut for stone-lined east-west drain.
- [442] Fill comprising hard rubble and soil in depression [443].
- [443] Cut for the above.

Trench 5

Context

Classification

- [500] Topsoil.
- [501] Subsoil or upper fill of quarry pit [509].
- [502] Destruction layer/fill of quarry pit [509]
- [503] Ash fill of quarry pit [509].
- [504] Ash layers within [509].
- [505] Soft light grey-brown gritty silt layer within depression of quarry fill [514].
- [506] Light yellow brown gritty layer of quarry pit [509].
- [507] Soft light grey ash fill of quarry pit [509].
- [508] East-west very rough wall. One course of rough unfaced limestones. No visible cut.
- [509] Cut for ?quarry pit cutting through natural. Not fully excavated (depth restrictions).
- [510] Soft light brown gritty silt fill of ?pit 531.
- [511] Soft light grey-brown fill. Beam post-hole/beam fill, forming revetment. Almost vertical.
- [512] Cut for the above.
- [513] Layer/fill. Soft light brown sandy gritty silt with large frequent limestones, butting up to revetment [512]. (Silt given separate context no. [525])
- [514] Layer/fill. Moderate orange-brown sandy silt fill of quarry [509]. Same/similar to [529].
- [515] Dark grey-brown fill of v-shaped cut [516].

- [516] Cut for the above. East/west parallel to Chapel Lane. Boundary ditch with wall on south side.
- [517] Top fill (loose, grey-brown) of cut [520] over [519] primary fill. Contains much ash. ?Domestic rubbish dump.
- [518] Very clean fill of cut [523], cut by [520].
- [519] Loose primary fill of [520]. Part silting, part weathering.
- [520] Wide shallow u-shaped cut. ne/sw alignment.
- [521] Very stony loose fill of small shallow pit at north end of trench.
- [522] Cut for the above.
- [523] Cut for possible ditch.
- [524] Loose orange sand. Natural.
- [525] Soft light brown sandy ashy silty fill of quarry pit [509].
- [526] Soft orange brown fill. Primary silting on north side pit [522].
- [527] Soft orange-brown/light brown pebbly silty sandy fill of pit [528].
- [528] Cut for the above. Shallow pit, ?natural feature.
- [529] Moderate orange-brown fill. Very similar/same as [514]. Fill of quarry pit [509].
- [530] Moderate mid brown fill with limestone rubble. Deposit within quarry pit [509].
- [531] Cut for ?pit only seen in section. Containing one fill [510].

Trench 6

Context	Classification
[600]	Topsoil.
[601]	Top fill of large ditch feature [610] (mid brown with frequent small stones).
[602]	Fill of dense rubble and soil in upper part of large feature(s) [610].
[603]	Loose mid brown fill of feature [610].
[604]	Fill of feature [610]. Probably the same as [603].
[605]	Mixed orange-brown fill with several tip-lines of redeposited natural looking soils, filling north-south ditch.
[606]	Hard sandy clay fill with limestone rubble. ?Demolition rubble associated with structural remains further east.
[607]	Loose orange-brown sill. Upper fill of feature [611].
[608]	Average/loose mid brown sandy silty fill of [611].

- [609] Average/loose light brown sandy silty fill. Lower fill of cut [611] (?natural accumulation)
- [610] 1m deep ditch cut with U-shaped bottom.
- [611] Cut for ?flat-based ditch. East edge not clarified.
- [612] Average/loose sandy silty fill of [611].
- [613] Reddish brown subsoil/soil creep layer.
- [614] Orange-brown average fill in bottom of cut [411], butts [609], very clean.
- [615] Orange-brown layer. ?Glacial drift.
- [616] Hard yellow layer with natural limestone in bottom. Geological, Lincolnshire limestone.
- [617] Average density fill of [618].
- [618] Cut for the above. Round pit at west end of trench.
- [619] Fill of [620], east-west linear feature, appears cut by [619] and [622].
- [620] Cut for the above.
- [621] Fill of pit [622].
- [622] Cut for vertical-sided round pit (not bottomed). ?Unusual, like a well-shaft.

11.7 Site Archives

The basic site archive comprises the following:

161 context record sheets: [100] - [115]; [200] - [211]; [300] - [309]; [400] - [443]; [500] - [531]; [600] - [622]; [700] - [724]

x5 colour print films, x3 colour slide films

17 scale drawings (plans and sections)

x5 boxes of finds

x26 small finds (metallic and non-metallic)

Primary records are currently with Pre-Construct Archaeology, 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.

11.8 References

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