

99/18

**ARCHAEOLOGICAL FIELD EVALUATION REPORT  
LAND AT CHAPEL HEATH, NAVENBY,  
LINCOLNSHIRE**

Site Code: CHNE99

LCNCC Acc No. 180.99

NGR: SK 59887 35725

SK ~~59887~~ 9910 5728



20/01/2020  
11:00  
D. J. O'NEILL



EVENT L12426  
SOURCES L17068 L17069  
60537  
60557  
60538

99/18

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Report prepared for Ploughsound Ltd.  
by Colin Palmer-Brown and Jim Rylatt

Pre-Construct Archaeology (Lincoln)  
61 High Street  
Newton on Trent  
Lincoln  
LN1 2JP  
Tel. & Fax. 01777 228155

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Pottery illustrations by D Watt

Summary

- \* A programme of archaeological trial excavation took place on land situated between Ermine Street and Grantham Road on the south side of Navenby in Lincolnshire (SK 59887 35725).  
9910 5728
- \* The works followed a programme of gridded fieldwalking and a detailed gradiometer survey; both of which produced results suggesting the presence of in situ buried archaeological remains
- \* Although areas of archaeological interest were identified and investigated, it is the broad conclusion of this report that areas of archaeological interest are sparse and restricted, and that the impact of any development on this particular site would be relatively minimal
- \* The most significant archaeological remains lie towards the western periphery of the site, consisting of isolated pits dating to the Late Bronze Age / Early Iron Age; these pits appear to relate to a cluster of similar features that were exposed in 1996 during a watching brief off Winton Road

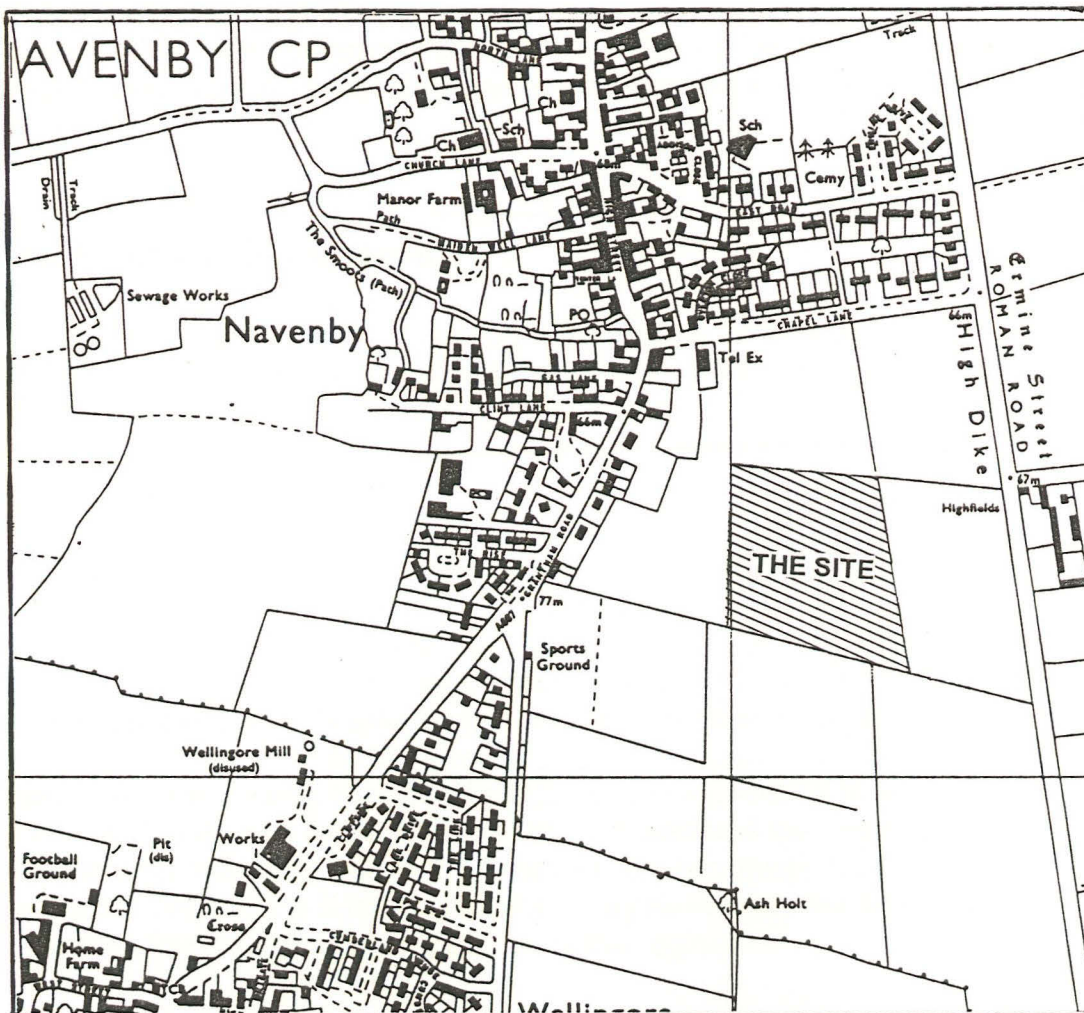


Fig. 1 Site location at scale 1:10,000.  
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## 1.0 Introduction

Ploughsound Ltd commissioned Pre-Construct Archaeology (Lincoln) to undertake a programme of archaeological investigation on c. 4.4 hectares of land at Chapel Heath in Navenby, Lincolnshire. These works were commissioned to fulfil a planning requirement in advance of residential development.

This report documents the results of a trial excavation that follows a programme of geophysical survey and gridded fieldwalking, and it incorporates a series of assessments by specialist researchers. The text follows current national guidelines (IFA 1994) and the local guidelines set out in the Lincolnshire County Council document *Lincolnshire Archaeological Handbook: A Manual of Archaeological Practice* (1998).

## 2.0 Location and Description

Navenby is in the administrative district of North Kesteven approximately 10km south of Lincoln. The proposed development site comprises approximately 4.4 hectares of set aside agricultural land that lies amongst a larger unit between Grantham Road to the west and Ermine Street to the east (Fig. 1).

## 3.0 Planning Background

Initially, planning permission is sought (in outline) for residential development: to erect 10 dwellings in the south-west corner of the site. At some time in the future the development may be extended to the full c. 4.4 hectares, and the current evaluation takes in the whole of this zone.

## 4.0 Archaeological and Historical Background

A Roman site at Navenby was identified in 1965 following fieldwalking by pupils and teachers of the local primary school. Romano-British pottery, building materials and coins were picked up over a wide area on both sides of Ermine Street, leading Whitwell to suggest (Whitwell 1966, 45) that Navenby was possibly the site of a Roman posting station (it lies equidistant between the Roman fort at Ancaster to the south and the Legionary Fortress at Lincoln (Lindum) to the north). Other writers (eg Jones 1980, 285) have suggested that in the C1st AD Navenby may have been the site of a (?timber) fort during initial occupation of the region.

Research in recent years has demonstrated that the earliest settlement activity at Navenby cannot be attributed solely to Roman influence. Artefact



scatters over wide areas indicate that settlement of the area can be traced to the Neolithic or Bronze Age periods.

Recent investigations in the Chapel Lane area have produced evidence of occupation in the immediate pre-Roman Iron Age, although the data is not entirely clear-cut. A magnetometer survey carried out in 1994 identified a large native-type enclosure containing circular structures (Lyll 1994). Trial excavations through part of the enclosure ditch produced sherds of coarse hand made pottery, although it is not possible to clarify whether or not this enclosure was pre or post-Roman.

In the later Roman period, both sides of Ermine Street were lined with substantial stone buildings. These buildings were of more than one phase and incorporated plastered walls and floors. They appear to conform to a typical pattern of roadside (ribbon) development.

Of direct relevance to the present investigation are the limited excavations carried out in 1996 close to Grantham Road (approximately 100m west of the present site). A watching brief carried out during the groundworks for a residential development exposed pits containing post-Deverel Rimbury pottery (late Bronze Age / early Iron Age transition) (D Knight, pers. comm.). An apparent cluster of six pits was identified. The contents of each was similar, consisting of soil mixed with charred plant remains, pottery sherds and fire-shattered pebbles ('pot boilers'). Despite detailed examination of the pit contents, functional interpretation remains a problem: the pit sides contained no evidence of in situ burning, and it was concluded that the burnt and other remains constituted secondary backfilling.

Fieldwalking of the current site in 1995 (Palmer-Brown 1995) identified sparse scatters of artefactual remains consisting of worked flints, Iron Age, Romano-British and medieval pottery sherds. For the most part, these remains were of low density, although there was some evidence of clustering on the south-east side of the site: in this area a number of large and 'fresh' Romano-British pottery sherds were recovered, and appeared to coincide with an area of slight topographical deviation.

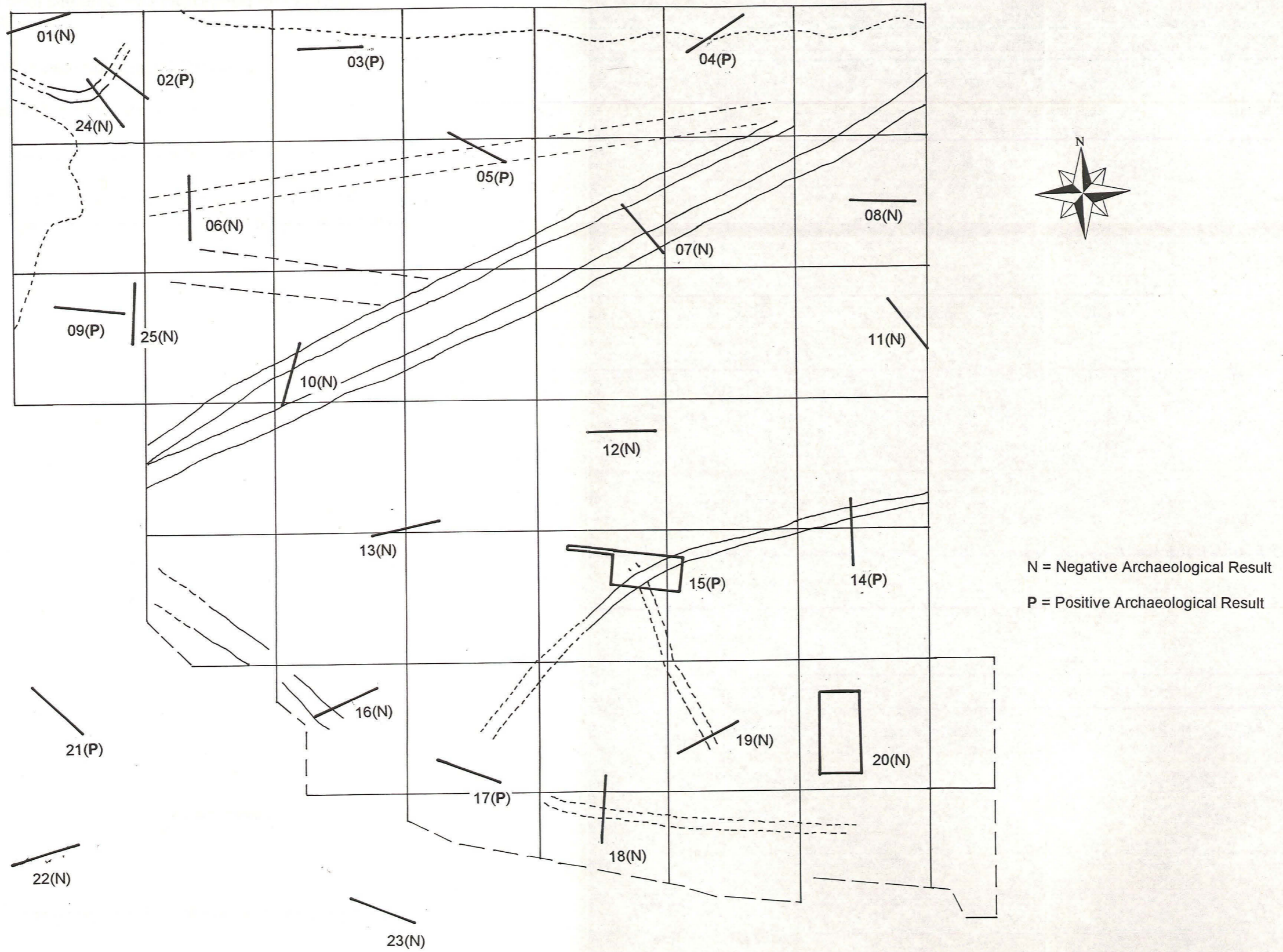
In July 1999, a detailed gradiometer survey was carried out over most of the site by Pre-Construct Geophysics (Snee 1999). The site was found to be magnetically responsive, and a series of anomalies were identified and presented in an independent report. Whilst significant numbers of these appeared to reflect natural reticulation in the limestone bedrock, some, mainly linear, anomalies appeared to be of potential archaeological significance.

## **5.0 Methodology**

A trenching scheme proposed by the Heritage Officer of North Kesteven was based largely on the results of the gradiometer survey, but it also took into



Fig. 2 Location of archaeological trenches in relation to magnetic anomalies



Scale = 1:1000



consideration the possibility that some remains may not have been identified by that survey: either because of size (small isolated features are difficult to detect by geophysical prospection alone), or because the possibility existed that some remains may not have been magnetically responsive. Approximately 2% of the total site area was highlighted for detailed archaeological investigation:-

x21 trenches, each measuring 15m x 1.6m in plan

*including* x2 open areas measuring 15m x 8m in plan

*Additional* x5 trenches, each measuring 15m x 1.6m in plan

The location of all areas investigated (including additional/extended trenches) is indicated on Fig. 2, and the location of the gradiometer survey in real space is indicated on Fig. 3.

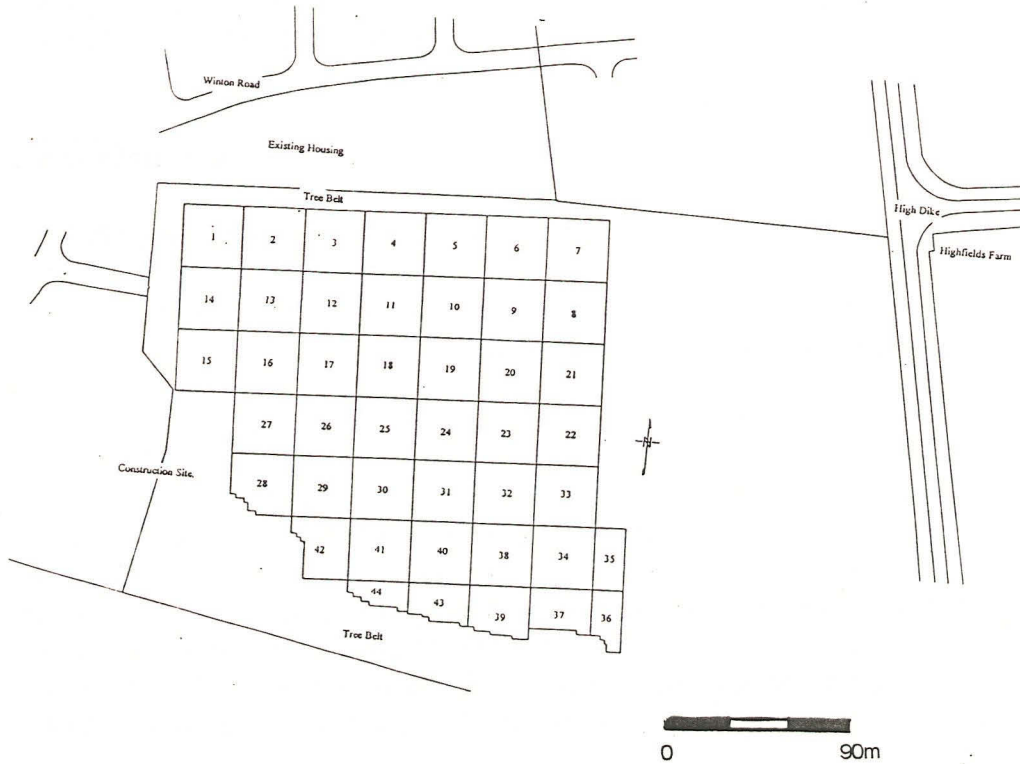


Fig. 3 Location of gradiometer survey grids in relation to fixed surrounding features



The position of each archaeological trench was surveyed prior to excavation (excluding Trenches 21 - 25, which were marked out during the course of the investigation), and a JCB fitted with a wide toothless ditching blade was used to remove all topsoil, subsoil and underlying non-archaeological deposits in spits no greater than 20cm in depth. The process was repeated until the first archaeologically significant or natural horizon(s) was exposed. All further excavation was by hand.

Where exposed, archaeological features and deposits were sample excavated, and context information was entered on standard Context Record Sheets. Drawings were made to scale in plan and in section, and colour photography (prints and slides) was undertaken widely. Selective prints have been reproduced in this report, with the remainder forming part of the project archive.

The excavation was carried out by an experienced archaeological team of seven individuals over a period of eleven days; between August 23 and September 6, 1999.

Artefactual remains and soil samples were recovered from the site and these have been washed, processed and assessed by specialist archaeological researchers. Specialist accounts are included as independent appendices to this report, and the general conclusions of such accounts have been integrated within the main text.

## **6.0 Results**

### **6.1 Negative results**

Of the 25 trenches excavated, 16 of these contained no archaeological remains, and each of these areas is summarily discussed below.

#### **Trench 01**

This was located in the north-west of the gradiometer survey to assess an area that may have been internal to an enclosure that was tenuously identified. Modern ploughsoil sealed a degraded limestone bedrock surface, into which was 'cut' an irregular feature filled with an homogenous red-brown silty clay. A section through this was excavated, revealing an irregular profile and sterile fill devoid of finds. The feature was interpreted as a periglacial ice wedge of no archaeological significance.

#### **Trench 06**

This was located on the north-west side of the survey and was positioned to intercept an east-west anomaly (thought to be a modern track).

The anomaly detected by the gradiometer survey was indeed modern, and represented the line taken by tracked vehicles in association with existing developments at Chapel Heath. It was not associated with any metalling, but its presence was shown by the compaction of the soil in this area, which even the JCB had difficulty breaking.

No archaeological remains were exposed in the trench, although a number of natural features, all filled with identical sterile material, were exposed above degraded limestone bedrock.

#### **Trench 07**

The results obtained were similar to those obtained in Trench 06, where the upper soil deposits were so compact that the JCB experienced some difficulty removing them. This compaction was again almost certainly due to the movement of modern heavy plant and accounted for two parallel linear anomalies picked up by the gradiometer survey.

The ploughsoil overlay further natural features, each of which was filled with a characteristic clean red-brown silty clay-sand. These in turn rested over a geology of degraded bedrock.

#### **Trench 08**

This was a random siting on the north-east side of the site, orientated east-west.

Intermittent areas of subsoil were exposed beneath the modern ploughsoil, as were a series of voids of natural origin. Three sherds of Romano-British pottery were recovered from the subsoil 0801.

#### **Trench 10**

This was on the west side of the survey over the line of one, possibly two, suspected modern trackways (the same trackways associated with Trench 7).

On the north side of the trench, a vaguely linear feature was investigated, where it appeared to cut through natural limestone deposits. The investigation revealed an extremely irregular void filled with a sterile matrix of red-brown silty clay-sand. The excavator concluded that the feature was natural.

The site records do not confirm the levels of compaction associated with the upper stratum (ie topsoil), but no archaeological features were exposed that corresponded with the two linear anomalies detected by gradiometry.



### **Trench 11**

This was on the extreme east side of the survey and was orientated north-west - south-east in a geophysically blank area.

Again, naturally formed and filled depressions were investigated and photographed, but no archaeologically significant remains were exposed.

### **Trench 12**

This took a central location and was orientated east-west within a suspected blank area.

The ploughsoil sealed natural degraded limestone, interspersed with shallow areas of subsoil that had escaped the effects of ploughing. No archaeological remains were exposed.

### **Trench 13**

This was in a south-west/central location and was orientated broadly east-west. Areas of glacial/periglacial disturbance were recorded above natural parent bedrock, but no archaeological deposits were present.

### **Trench 16**

This was sited over the top of a magnetic anomaly orientated north-west to south-east: thought to represent yet another modern trackway associated with contemporary construction.

The overlying ploughsoil in this area was extremely compact. This rested over an intermittent and shallow subsoil layer which, in turn, was over the top of natural limestone. A number of natural fissures in the top of the parent bedrock were filled with natural-looking subsoil-type deposits of no archaeological significance.

### **Trench 18**

This trench was orientated north-south close to the southern boundary of the site. It was positioned to intercept an east-west, positive but faint, linear anomaly on the south side of the geophysical survey.

Although three features (up to 20cm in depth) orientated east-west were exposed in the base of the trench, partial excavation showed each of these to be of entirely natural origin, representing natural/periglacial fissures over limestone bedrock.



### **Trench 19**

This was orientated north-east to south-west on the south-east side of the survey. It was positioned to traverse a linear anomaly that was orientated north-west to south-east. This anomaly was considered to be of tentative archaeological significance.

No corresponding linear feature was recorded; only irregular natural depressions over limestone bedrock. Each of these was partially investigated, revealing irregular profiles filled with homogenous and sterile soil.

### **Trench 20**

This open area close to the south-east corner of the site measured some 18m x 4.5m. It was located in an area of scattered small discrete anomalies. These anomalies were thought to reflect the presence of ferrous and other litter in the topsoil, although it was suggested that some could reflect the sites of small pits and that their true status could not be assessed without the application of intrusive methods.

The trench was stripped of its topsoil to subsoil and/or natural limestone brash. A series of pit-like features were exposed over much of the trench, and each of these was investigated by sample excavation. All of the features were interpreted as being of natural origin and, again, these must have been part of a glacial or periglacial environment. All of the features were filled with sterile red-brown silty clay-sand, not dissimilar from the general subsoil deposit, which was exposed intermittently where it had escaped plough penetration.

### **Trench 22**

This was located outside of the zone sampled by magnetometry in the south-west corner of the site. It was orientated north-west to south-east.

Removal of the ploughsoil exposed an intermittent subsoil of up to 14cm depth. Beneath this subsoil was parent bedrock consisting of degraded limestone fragments/brash.

### **Trench 23**

This trench also was located beyond the area surveyed by gradiometry on the south side of the site.

The modern ploughsoil sealed subsoil deposits of up to 7cm in depth. These deposits incorporated modern plough scores, and they appeared to fill a series of natural fissures and depressions over the parent bedrock. As usual, these features were sample excavated but were found to be entirely natural in origin.



## Trench 24

Trench 24 was excavated as a contingency item to verify the status of a curved anomaly in the north-west corner of the gradiometer survey. Trench 2, which was positioned a short distance to the north-east had failed to clarify this (see below) and, given that the magnetic anomaly detected was quite strong, verification of status was considered to be necessary as part of the evaluation. The trench was orientated north-west to south-east.

Beneath the ploughsoil, three irregular linear features were exposed, all of which were filled with natural-looking (subsoil-site) soils. Sections were excavated through each of these, confirming their non-archaeological status. They were again interpreted as natural fissures in the limestone bedrock.

## Trench 25

This trench was positioned immediately to the east of, and at right angles to, Trench 09 (see below) which exposed a pit-like feature containing late prehistoric pottery, fire-shattered pebbles and charcoal. The exposure of a group of such features during a watching brief on land west of the current site in 1996 (Palmer-Brown 1997) suggested that the feature exposed in Trench 9 may have been part of a similar group. However, Trench 25 failed to identify further remains, although a few fire-shattered pebbles were recovered from beneath the ploughsoil. It is likely that these remains related to the pit exposed immediately to the west (ie Trench 09).

Amorphous depressions falling within the trench area were investigated. However, these features were similar to others on the site and were, without doubt, natural.

One point that should be stressed is that artefactual remains were recovered from the central part of Trench 25, consisting of two fire-shattered pebbles and one pottery sherd. Although the report on the prehistoric pottery suggests that these finds were from a pit (Knight, Appendix 2), this is in fact a mistake. No clearly stratified finds were recovered from Trench 25, and it was concluded that the finds were associated with the large pit exposed in Trench 09, immediately to the west.

### **6.1 Positive results of limited archaeological significance (Trenches 02, 03 and 04)**

A series of trenches on the north side of the excavation exposed traces of a metallised surface orientated east-west. In all but one respect, this resembled a Romano-British trackway that was exposed in 1994 during the evaluation of a site in the angle of Chapel Lane and Ermine Street (Palmer-Brown 1994). Despite this, however, the top of the surface was impregnated with modern brick and late post-medieval/modern pottery. The possibility that this material



had been pressed into the top of the surface as a result of rutting from modern vehicles was taken seriously, before the client company confirmed that the track had in fact been purposely constructed by them during an earlier building phase when topsoil was removed and temporarily stored close to the southern boundary of the present site.

The trackway was recorded as a geophysical anomaly which skirted the northern site boundary. It was photographed as part of the current investigation, although detailed drawing was confined to Trench 04 (Fig. 4).

### **Trench 02**

This was located in the north-west grid of the gradiometer survey and was orientated north-west to south-east to intercept the line of a curved anomaly; interpreted as a possible enclosure boundary (Trench 24 to the south-west was excavated subsequently). No archaeological feature corresponding to this anomaly was detected in either Trench 02 or 24. However, Trench 02 did contain voids filled with subsoil-type deposits, devoid of artefactual remains. These features were sample excavated to establish their natural origin.

At the north-west end of the trench, a layer of compressed limestone rubble was exposed, 0204, which appeared to be aligned broadly north-west - south-east. In the central area of this was a pronounced depression approximately 7cm deep. Filling this depression was a greater depth of modern top/ploughsoil 0200.

Although the anomaly picked up by gradiometry did not appear to extend as far south as the metalling exposed in Trench 02, the relationship between the top of the surface and the modern overburden suggested a modern date.

### **Trench 3**

This was approximately 35m east of Trench 02 and was orientated east-west.

Removal of the ploughsoil 0300 exposed a compact layer of limestone rubble, the top of which was worn. The limestone fragments were generally less than 10cm in length and incorporated occasional fragments of ceramic building materials, including modern brick fragments. Generally the surface was level, although some pronounced rutting (orientated east-west) was also recorded.

Edges to the surface were not exposed, but there is little or no doubt that the feature exposed was modern and was part of the trackway previously created by Ploughsoud Ltd. This track was apparently in use approximately two years ago (R Overton, pers. com.).

#### **Trench 04 (Fig. 4)**

This was approximately 70m east of Trench 03 and was orientated south-west to north-east close to the northern site boundary, and falling within the linear anomaly identified by gradiometry.

The ploughsoil 0400 was stripped by machine to expose a surface of compact limestone rubble 0402, intermittently sealed by shallow areas of subsoil-type material 0401. Wide rutting in the top of the surface confirmed its east-west orientation, and its modern origin was confirmed by the presence of brick, glass and tile fragments embedded in its surface.

The track was located at a depth approximately 25cm below the modern ground surface, and the interface between it and the ploughsoil was well defined: this suggests (as confirmed by the client company) that topsoil in the area has been previously stripped and then returned following a period of use.



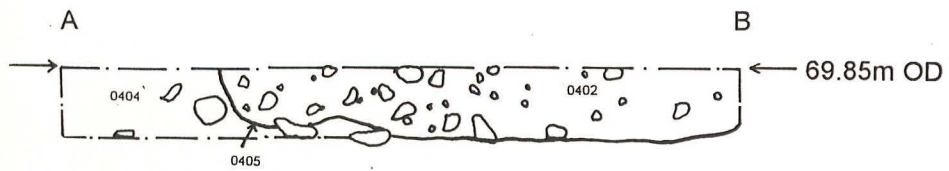
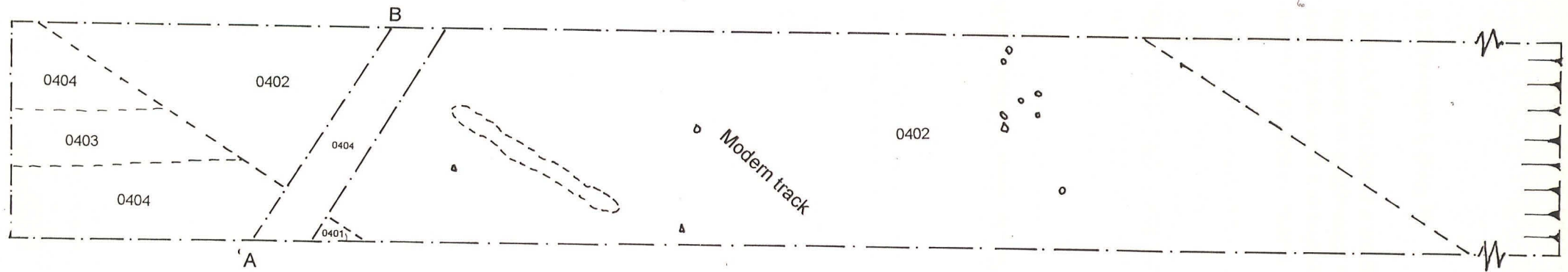


Fig. 4 Plan of Trench 4 (south-west side) and section across track deposits

## 6.2 Trench 5 (Fig. 5)

Trench 5 occupied a north-central area of the site and was orientated north-west to south-east to traverse a linear anomaly believed to be associated with the tracking of modern plant. This was not as evident (ie in terms of topsoil compaction) as it had been elsewhere.

For the most part, removal of the ploughsoil 0500 exposed a natural limestone brash/bedrock surface, 0506, with areas of orange-brown subsoil, 0505, sandwiched intermittently between; never exceeding 10cm in depth. Natural fissures in the bedrock were exposed towards the south-east end, but a feature of possible archaeological origin was exposed at the north-west end of the trench.

The feature was only partially exposed and appeared to be orientated north-east to south-west, although its irregular shape did not present an instant and easy interpretation. Its cut, 0504, was dug into the natural limestone bedrock. In plan this measured in excess of 1.6m x 1.85m. Both edges of the feature descended in two steps, and these steps were completely different from each other. The surviving depth of the feature was c. 35cm and its base was predominantly flat.

No interpretation of this feature was offered at the time of excavation, and its significance remains unclear. However, one sherd of undiagnostic Romano-British pottery was recovered from its fill 1503. A sherd of post-Roman pottery was recovered from the subsoil.



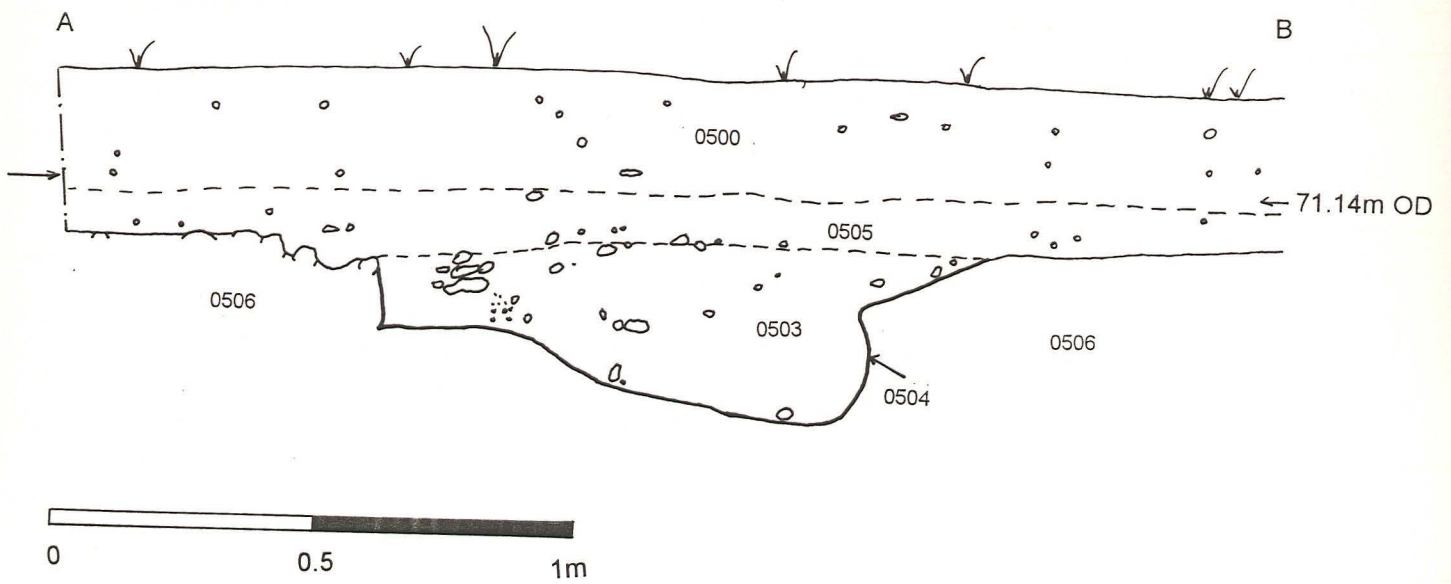
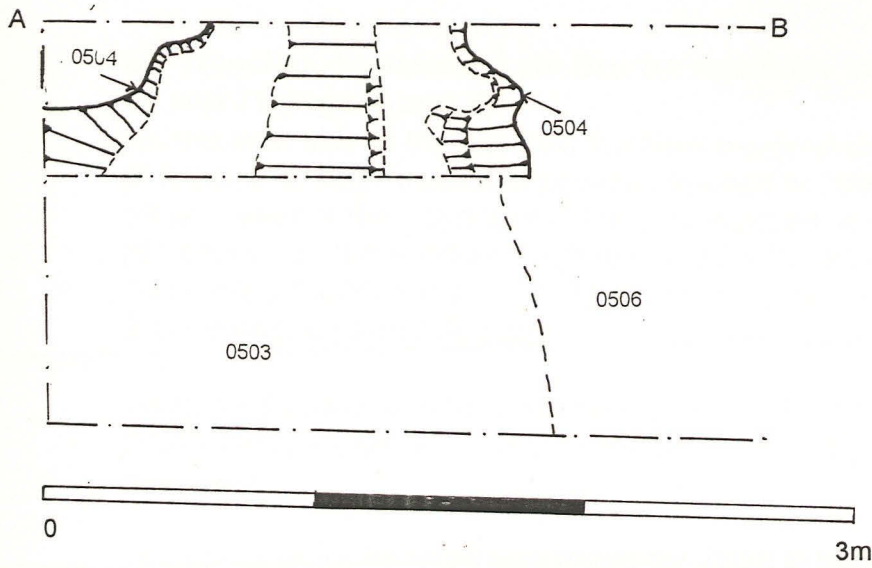


Fig. 5 Plan and section, north-west end of Trench 5 (Feature 0504)

### 6.3 Trenches containing Late Bronze Age/Early Iron Age pits: Trenches 09 and 21 (Figs. 6 and 7)

On the west side of the site, two trenches exposed pits that were reminiscent of a group of such features that were exposed in 1996 during a watching brief on land west of the current site. The pits exposed in 1996 contained burnt plant remains, fire-shattered pebbles and the bones of domestic animals. Associated Post-Deverel Rimbury-type pottery suggested a date in the later Bronze Age or earlier Iron Age.

**Trench 09** was a random siting on the west side of the site and was not located to intercept any particular magnetic anomaly. It was orientated east-west.

The ploughsoil measured approximately 20cm in thickness, and this was stripped by machine. Beneath this were thin pockets of red-brown subsoil 0901 overlying natural degraded brash 0904.

Most of the trench was devoid of archaeological remains, although an elongated pit-like feature was exposed at the east end, 0902, orientated broadly east-west. In plan this measured approximately 1.06m x 0.54m and its surviving depth was 0.23m. The sides of the feature were steep, although these tended to round-out close to the base. Although the pit fill (below) incorporated charred remains, the sides showed no indication of *in situ* burning.

The pit was filled predominantly with mid-grey-brown sandy silt mixed with small limestone fragments (burnt and unburnt), chert, fire-shattered pebbles, occasional pottery sherds, charcoal and uncharred bone fragments. A lens of clean yellow sandy silt in the base of the feature suggested that the sides had weathered slightly prior to backfilling, but that the bulk of the backfill was deliberate and sudden.

An assessment report on the pottery recovered from pit 0902 is presented by Dr D Knight in Appendix 2. Only two body sherds were recovered, both of which would apparently fit comfortably within a post-Deverel Rimbury date range, suggesting manufacture in the Late Bronze Age or earlier Iron Age.

Environmental samples from the pit were submitted to DJ Rackham for quantification, as were the bones from the pit (see Appendix 4). These yielded fewer remains than the pits associated with the previous investigation to the west of the current site and included charcoal and small quantities of charred cereal grains (including barley), a single pulse and other charred seeds; all fairly typical domestic waste. Several possible contaminants were recorded in the sample. All of the animal bones recovered were either sheep or goat (ovicaprid).

**Trench 21** was also a random siting close to the south-west corner of the site, orientated north-west to south-east.



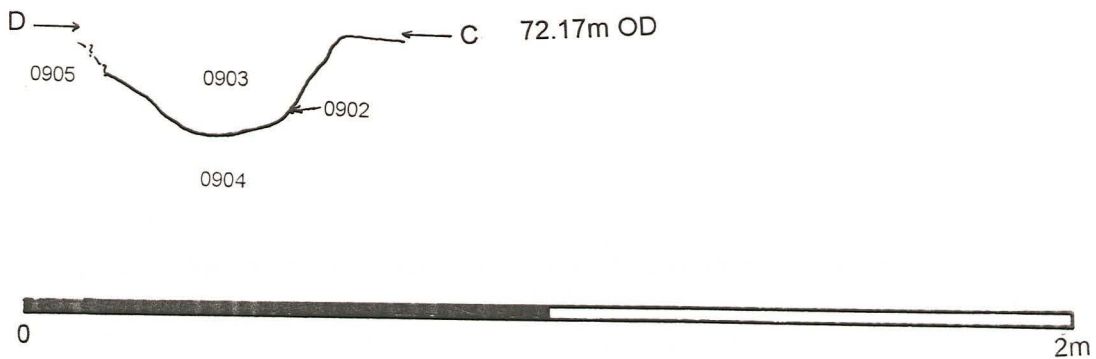
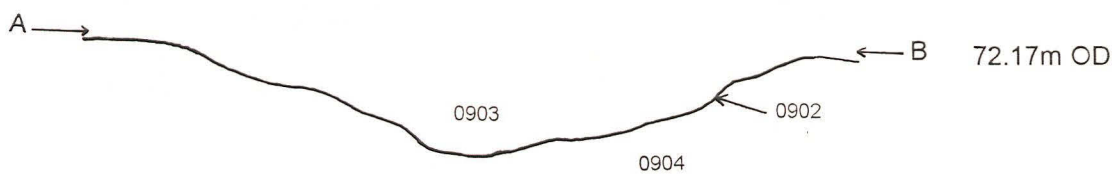
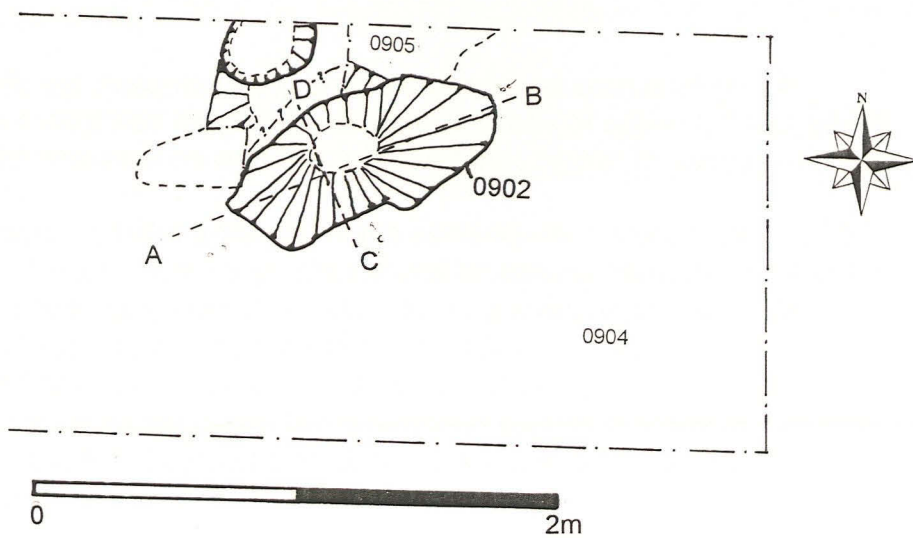
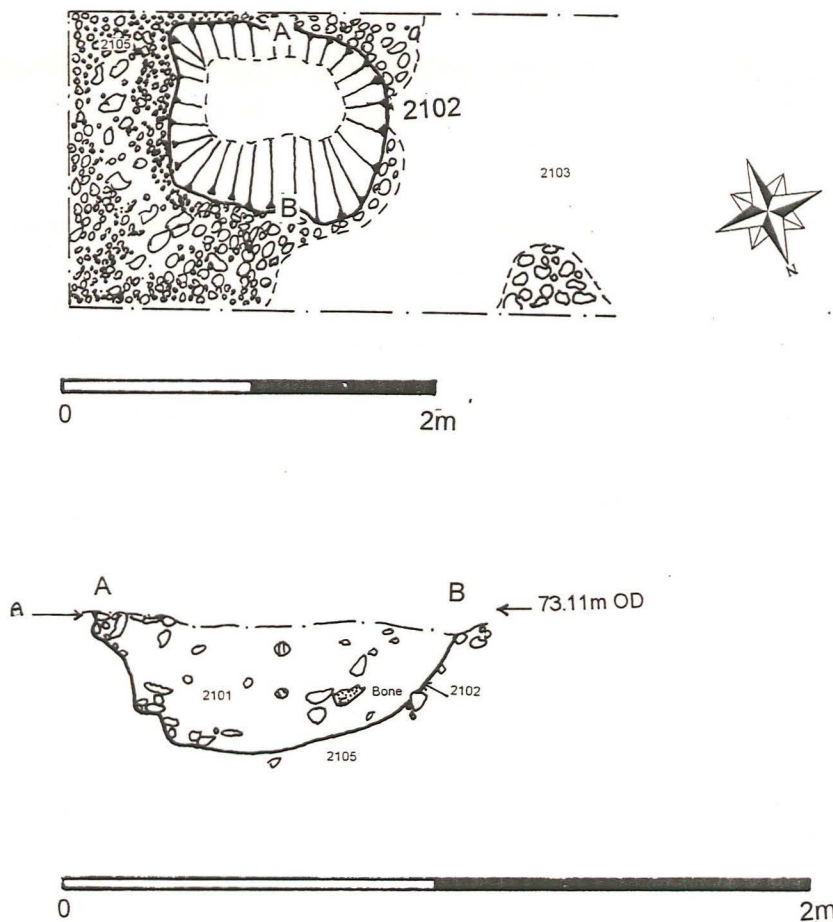


Fig. 6 Plan and sections, east end of Trench 09  
(Feature 0902)

Like Trench 09, the majority of the area exposed was archaeologically negative, with ploughsoil overlying intermittent areas of subsoil, 2103, which, in places, filled depressions and fissures over the natural limestone bedrock.

At the south-west end of the trench, a sub-rectangular pit-like feature 2102 was exposed where it cut through the natural limestone bedrock. In plan this measured approximately 96cm x 1.0m and its surviving depth was 36cm. Its sides were quite steep, stepped in places, and these broke to a predominantly flat base. The pit was filled predominantly with compact light-medium brown sandy clay 2101 mixed with pieces of limestone brash, fire-shattered pebbles, fragments of animal bone and a few sherds of domestic pottery.



**Fig. 7 Plan and sections, south-east end of Trench 21  
(Feature 2102)**

Included amongst the pottery were some thin-walled sherds with traces of geometric patterning, indicative of a Late Bronze Age / Early Iron Age, rather than plain post-Deverel Rimbury ceramic tradition. A date range between the C9th and C5th/4th BC has been tentatively suggested (Knight, Appendix 2).



Soil samples from the pit contained small fragments of fired earth, which may have had a direct association. However, contaminants were also recovered, including brick/tile fragments and probably flake hammerscale. Small numbers of charred grains were recovered from the processed flot, as were fragments of egg shell and other charred seeds. The presence of house mouse bones in the sample has been taken either to represent the earliest such context in the country, or as evidence of post-depositional contamination (Rackham, Appendix 4).

In contrast with the pit exposed in Trench 09, cattle and cattle-like bone fragments appear to make up the small bone assemblage recovered from pit 2102.

#### **6.4 Trenches associated with the trackway / worn surface exposed in the south-east area of the site: Trenches 14, 15 and 17 (Figs. 8, 9, 10 and 11)**

The gradiometer survey detected a series of linear or curvilinear anomalies (of varying strengths) in the south-east corner of the site. These features appeared to be archaeological, and it was suggested that they were possibly ditches (Snee 1999). The anomalies were in the vicinity of an area where fieldwalking in 1995 yielded sherds of freshly broken Romano-British pottery and where, generally, the Romano-British sherd count was slightly elevated.

The trial excavation failed to identify archaeological remains corresponding to weak linear anomalies in the vicinity of Trenches 18 and 19 (see above), but an extensive curvilinear feature was sampled by Trenches 14, 15 and 17, and this is discussed below.

**Trench 15** was an open area measuring approximately 15m x 8m, with a narrow extension heading westwards from the north-west corner (Fig. 2). It was positioned to intercept the junction of two linear/curvilinear anomalies; one originating on the south-east side of the site and extending westwards and south-west for a distance of at least 80m; the other, a more tentative linear orientated broadly north-west to south-east, possibly associated with the more positive anomaly.

The ploughsoil was stripped by machine, exposing clean areas of natural limestone brash 1511 and, where this was absent, substantial areas of natural and/or cultural fill. Initial cleaning of the surface confirmed the presence of a substantial linear feature orientated broadly north-east to south-west. It also exposed fills extending north and south of the main feature, and these also appeared to conform to the pattern indicated by geophysics.

The initial impression was that the central feature orientated north-east to south-west 1510 was a ditch, the maximum width of which was in excess of



3m. However, substantial excavations across this feature demonstrated that its form was more subtle and that its profile was very shallow, not exceeding c.35cm ( See Fig. 9A, B and C).

Something in the region of 75% of the fill was excavated manually where it fell within Trench 15. This confirmed the predominant orientation, although the situation was not straightforward: on the north side, the feature stretched northwards and appeared to be associated also with a westerly off-shoot 1504 (see below); to the south, its relationship with a complex of depressions was not entirely clear.

The main alignment appeared to be cut through the limestone brash. Its base comprised a surface of tightly-grouped and worn limestone fragments and occasional cobbles, resembling a worn trackway. It was filled predominantly with clean orange-brown sandy silt mixed with varying proportions of redeposited limestone chunks and fragments, 1509. The impression was that the feature has filled slowly, without any formal human effort. Low concentrations of Romano-British pottery sherds were recovered throughout the fill. These tended to be highly abraded and did not suggest that any primary occupation had been taking place at this time in the immediate vicinity of the trench. Most of the sherds were undiagnostic and a date range falling somewhere within the C2nd - C4th is suggested (Darling, Appendix 3).

Close to the centre of the feature, four iron nails were recovered from its fill. They were not set equidistant, but they did appear to suggest a linear arrangement, possibly indicating the site of a collapsed fence (that may even have collapsed into the feature from one side).

The north side of the above extended northwards and north-west for an undetermined distance (here coded 1504). This apparent off-shoot was identical in every respect to 1510 and must be viewed as part of the same feature/complex. Its fill was coded 1503 and this also was identical to the material filling 1510. Of interest is the presence of two further iron nails.

The south-central side of 1510 merged with a complex arrangement of irregular depressions of uncertain significance or foundation. A section through the southernmost portion of this arrangement exposed a curved grouping of circular holes of differing dimensions (Fig. 8 and Fig. 9E). These holes were in the base of what appeared to be an uneven slot-like feature 1502 orientated broadly east-west. This feature was filled with very clean sterile-looking deposits, devoid of any artefactual remains, and not incorporating any internal features such as stone packing around post holes, for example. The excavators conclusion was that either the feature/feature group was entirely of natural origin, or that it was in some way structural and was filled with material completely devoid of any cultural remains.

On the south-east side of the principal alignment were two shallow elongated pit-like features that appeared to respect this alignment: 1506 and 1508 (Fig. 8 and Fig. 9F and G). They were relatively shallow and contained no finds,



but their general orientation did appear to respect the line of the major feature.

**Trench 14** was approximately 42m east of Trench 15 (Fig. 2 and Fig. 10). It was positioned north-south to intercept the line of the major anomaly sampled in Trench 15 (which was clearly seen at this point on the gradiometer survey). It was anticipated that the continued line of the worn surface would fall at the north end of the trench and this was indeed the point at which the feature was identified.

Removal of the ploughsoil exposed a familiar background of intermittent subsoil 1401 overlying limestone brash 1403. On the north side, a short section of a linear feature 1402 was exposed, orientated east-west. Excavation of its fill 1404 exposed a shallow profile breaking to a flat predominantly base. Small worn limestone fragments were exposed, although these appeared to be slightly more disturbed than they had been in Trench 15. However, there was little doubt that this was the continuation of the sunken trackway/surface exposed farther west. No finds were recovered from the section

**Trench 17** was positioned on the projected continuation of the trackway feature, approximately 60m south-west of Trench 15 (in an area where no corresponding anomaly was clearly detectable by gradiometry). It was orientated north-west to south-east.

The subsoil, 1701, which was beneath the ploughsoil, measured up to 15cm in places. This rested over limestone brash 1705 which, in two places, was traversed by irregular sterile-looking features of certain geological origin (central an east side).

At the west end of the trench was a depression similar to 1402 in Trench 14 (here coded 1704). A 1.6m wide section of this was exposed, although a full profile was not obtained. The linear depression was up to 23cm deep and incorporated basal deposits of worn, sub-rounded, limestone fragments (some of which were stained black). Dating evidence was not recovered but it is certain that the feature exposed represents the continuation of the 'sunken trackway' exposed in Trench 15.



**Fig. 8 Plan of Trench 15**  
 (sections indicated on Fig. 9)

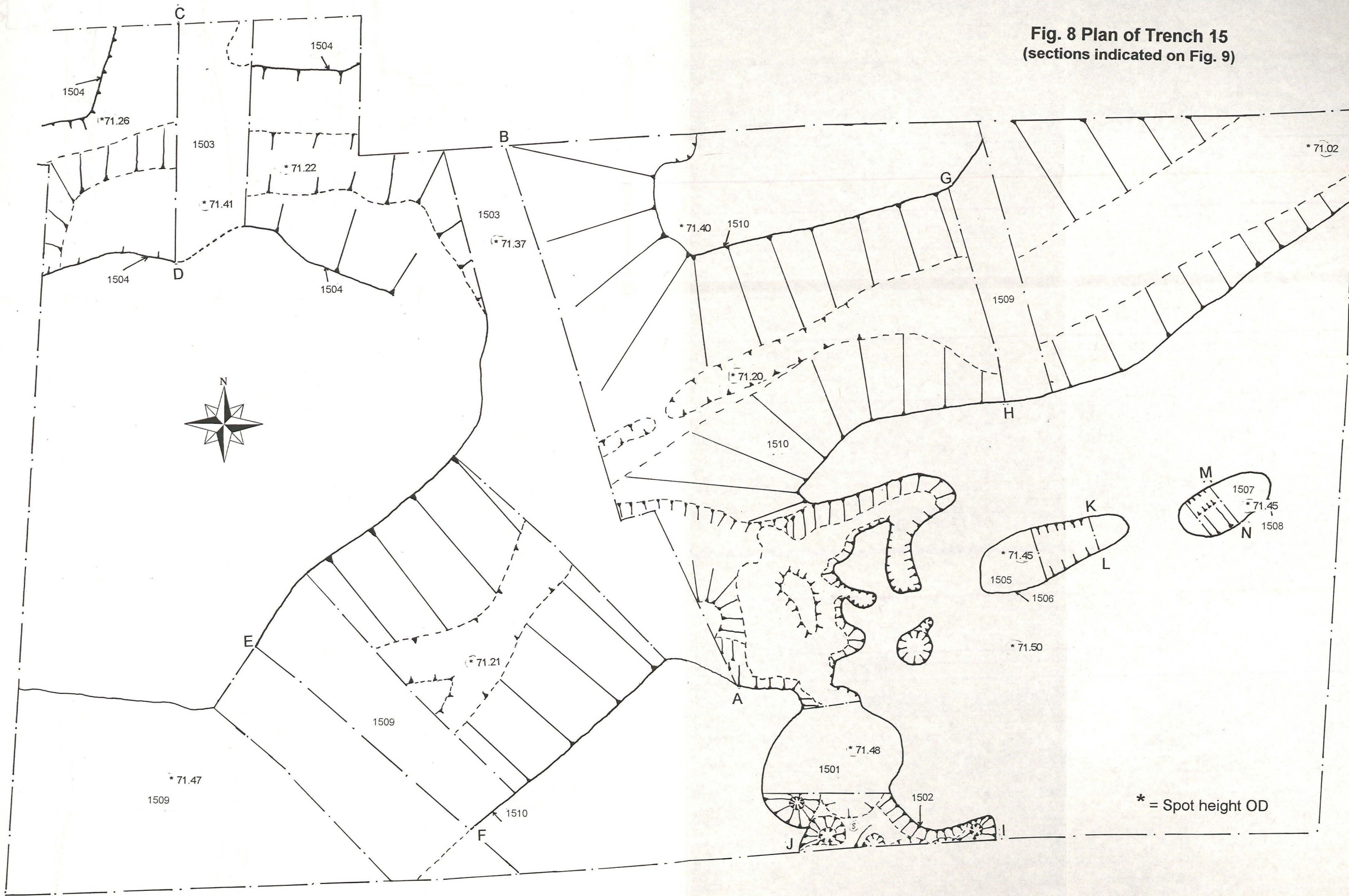


Fig. 9 Feature sections to be examined in conjunction with Fig. 8

\* = Spot height OD



Fig. 9 Feature sections to be examined in conjunction with Fig. 8

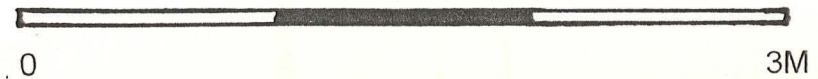
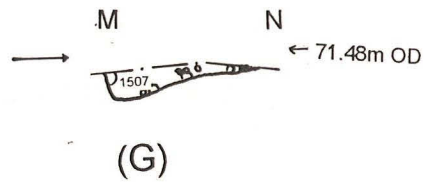
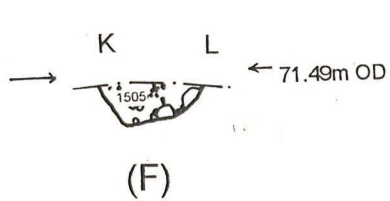
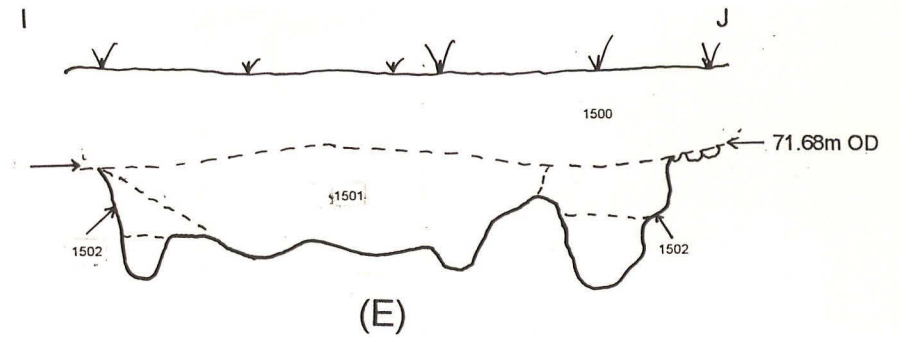
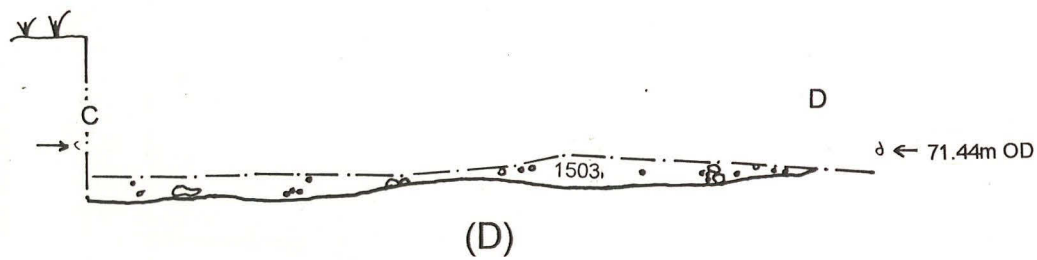
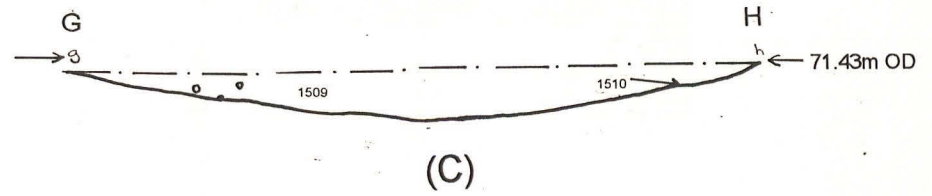
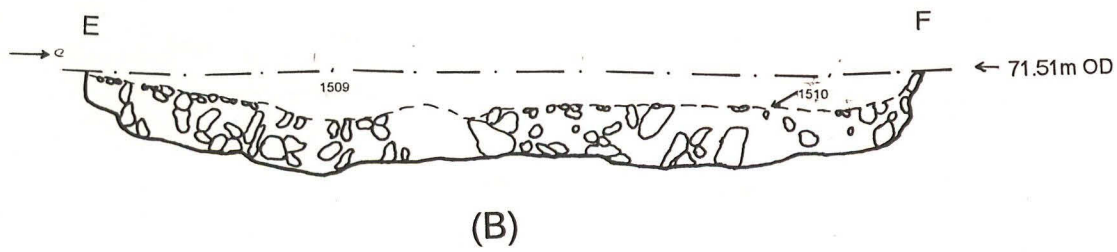
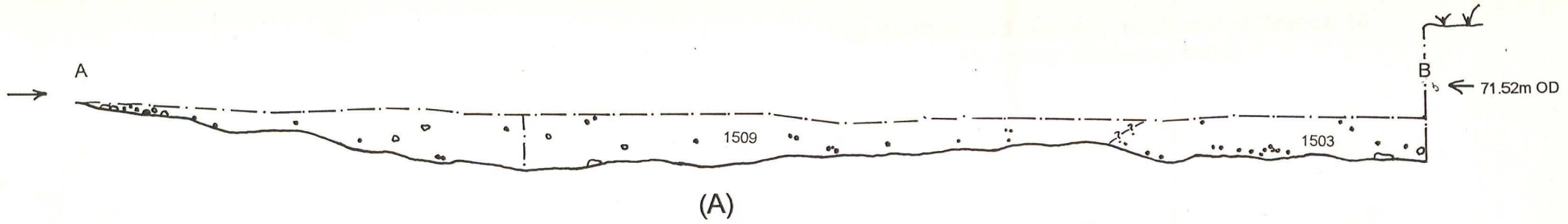


Fig. 10 Plan and section, north end of Trench 14  
(‘sunken’ trackway 1402)

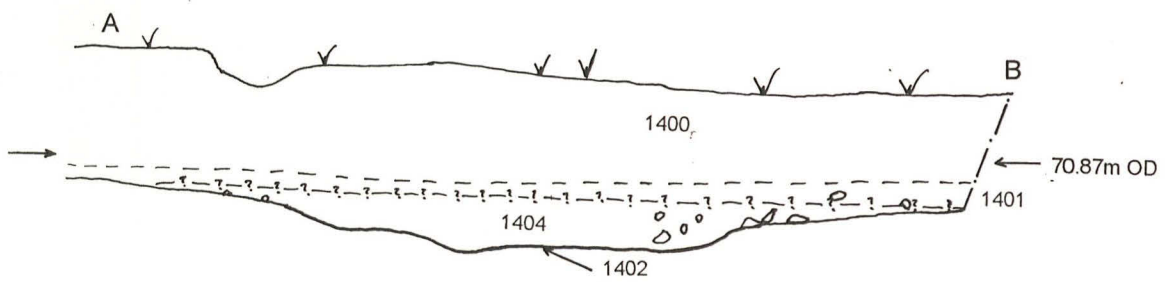
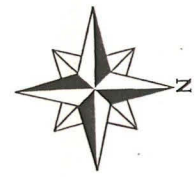
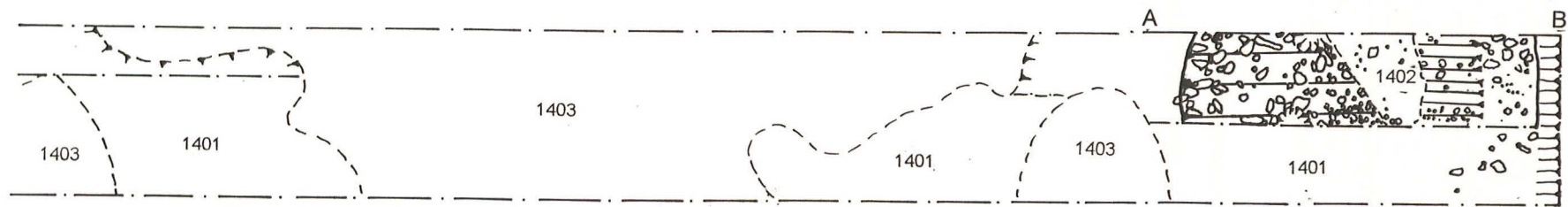
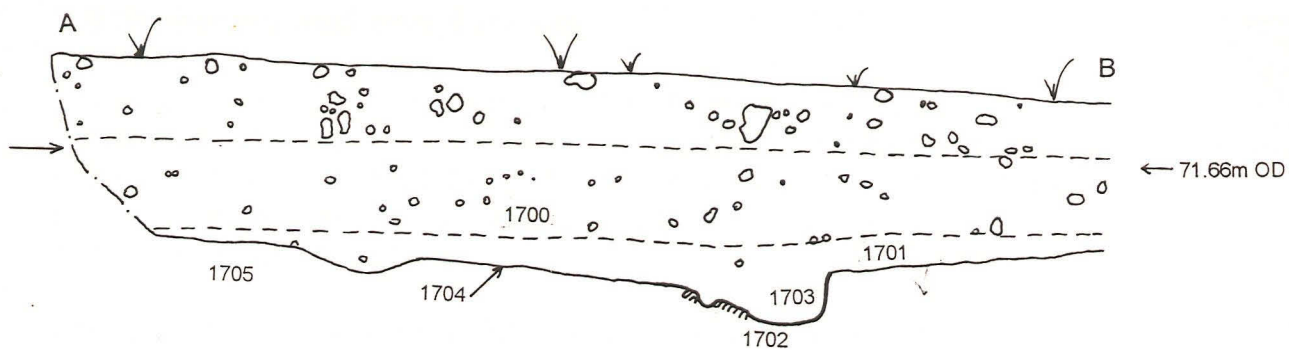
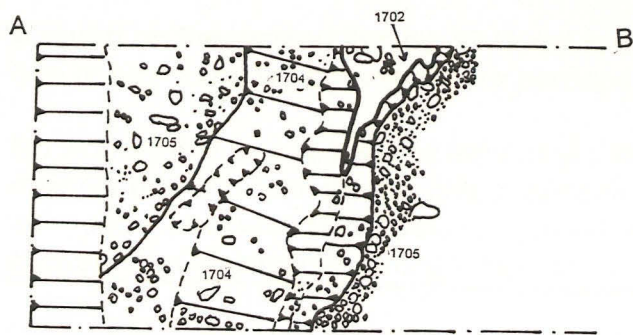




Fig. 11 Plan and section, west end of Trench 17  
(‘sunken’ trackway 1704)



## **6.5 Comment on the worked flint**

A report on the worked flint by JD Rylatt is included as Appendix 5, although one or two summary comments are perhaps relevant.

No worked flint was recovered from useful stratified contexts, with the majority deriving from topsoil and/or subsoil contexts. Dating is a problem, although it has been tentatively suggested that the artefacts may range between the Neolithic or Bronze Age periods.

Worked flint is recovered widely from the vicinity of the present site, indicating some form of occupation in the Neolithic/Bronze Age. In situ Neolithic remains have not been recovered during any of the investigations at Navenby (?sites lost to the plough), and Bronze Age remains have either been funerary (eg a bucket urn with cremation from land south of Chapel Lane) or limited to the pits exposed during the present investigation or similar pits west of the present site.

## **7.0 Summary and conclusions**

The results of this evaluation suggest that, for the most part, the archaeological potential of the site is low, despite the relatively close proximity of remains known to be of local, regional and possibly national significance. Despite widespread trenching, many of the areas investigated were archaeologically sterile.

No significant archaeological deposits or remains were exposed on the north side of the site. Trenches 02, 03 and 04 exposed sections of a trackway that was identified by gradiometry. The presence of modern rubble in the surface of this track, coupled with information supplied by the client company, demonstrates beyond reasonable doubt that the feature is of no archaeological interest whatsoever.

The evaluation has proved also that a series of straight linear anomalies that were picked up by the gradiometer survey (usually orientated broadly east-west) also result from the tracking of modern vehicles.

Random trenches positioned in the central area of the site (Trenches 8, 11, 12 and 13) produced negative results (ie all features that were exposed within these areas can be explained in geological rather than archaeological terms).

The south-eastern part of the site always appeared to be the most interesting area; based both on fieldwalking and on geophysics. A series of extensive linear or curvilinear anomalies were detected by gradiometry and these have been sampled by trial excavation. Some of the interpretations put forward as part of the gradiometer survey were tentative, and Trenches 18 and 19 failed to locate archaeological remains confirming the presence of east-west and north-south linear anomalies. Trench 20 was a large open area, designed to



assess the significance of possible pit-like anomalies detected by the gradiometer survey. This also failed to identify any archaeological remains, although it confirmed the presence of localised geological features.

The second large open area, Trench 15, and also Trenches 14 and 17 to the east and west respectively, identified a substantial and extensive linear feature, with possible off-shoots extending northwards and southwards of Trench 15. Substantial sections were excavated across this feature, particularly in Trench 15. In almost every respect, it resembled a limestone metalled trackway, whose principal orientation was east-west: its surface was predominantly worn as if walked on by humans and/or animals, and it incorporated occasional medium-sized pebbles that are not usually associated with the natural limestone in this area. The problems of interpretation rest with form: it is difficult to understand why anybody would want to go to the trouble of excavating through solid limestone bedrock if only to create a pathway or track - why not simply remove the topsoil, as indeed the client company had done on the north side of the site? Alternatively, it is perhaps possible that a holloway developed as a result of continued use/wear.

Clearly, the east end of this track-like feature extends beyond the current investigation, however this is not clearly indicated on greyscale or interpretative images associated with a gradiometer survey carried out by the Landscape Research Centre Ltd. in 1996 (Lyall 1996). If it is a truly man-made feature, then it must originate somewhere to the rear (west) of buildings that are known to have lined both sides of Ermine Street in the Roman period. If it is a natural feature (ie a natural depression in the limestone surface), then its point of origin could be an extensive and massive north-south feature that lies approximately 90m east of the current investigation and appears to delineate the rears of property boundaries associated with occupation on the Ermine Street frontage. At the present time it is not known whether this feature is natural or man-made, as it is known only as a magnetic anomaly.

Two trenches on the west side of the site, 09 and 21, traversed two features of some considerable archaeological interest, adding to the results obtained during a watching brief on land west of the current site. It now seems clear that pits dating to the Late Bronze Age/Early Iron Age are a feature common to land closer to the Grantham Road rather than Ermine Street frontage. Patterning is difficult to predict and, clearly, the pits are too small to be detected by non-intrusive means such as gradiometry. The evidence that exists for the occupation of the area at this time is sparse and one suspects that all structural remains must have been lost to the plough.

It is difficult to provide an absolute interpretation for the prehistoric pits, although one or two ideas can at least be suggested. They were clearly not the sites of *in-situ* fires, as none has yet provided evidence of *in situ* burning and the contents of the pits comprise a mixture of charred and uncharred remains. One assumes also that they were not a feature of day-to-day life, as



they are relatively infrequent. This might suggest that they had some kind of special significance.

One idea is that the pits contain the leftovers from ceremonial feasting: perhaps after the harvest?

In considering the future management of the archaeological resource, the following points are emphasised:-

1. Most of the current site appears to be archaeologically sterile: a widespread trenching scheme has assessed all of the magnetic anomalies that were highlighted by gradiometry. A few of these are archaeologically significant, but many are not and it may be reasonably concluded that residential development over most of the site would have a minimal impact.
2. Romano-British remains centre on the track-like feature exposed in the south-east area of the site. Whilst the current investigation has failed to establish a firm interpretation of this feature(s), it seems doubtful that extensive digging would add significantly to the information that is already available as a result of the current investigation, although one or two selective limited intrusions could be worthwhile.
3. Prehistoric pit-like features on the west side of the site are important, and there is little doubt that, ideally, such features should be recorded before they are destroyed. However, there is a problem associated with the detection of these features.

## 8.0 Acknowledgements

Pre-Construct Archaeology (Lincoln) would like to thank Ploughsound Ltd. for this commission. Warm thanks are expressed to Richard Overton, Dwain Herkes, David Woodward and to all members of the construction team who assisted the archaeologists during the course of this investigation.

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### **10.0 Site archive**

The site archive (documentary and physical) for this project is in preparation and will be deposited at the Lincoln City & County Museum and the Lincolnshire Archives Office (documentary) within six months. Access to the archive may be granted by quoting the global accession number 180.99.

## APPENDIX 1: COLOUR PHOTOGRAPHS



P1. Aerial view of the site looking south-west (Ermine Street is in the foreground, Grantham Road is in the background)





2. Trench 15: general (post-exc.)  
view looking west-west-south



P3. Trench 15: close up of 'sunken'  
metallised surface 1510 looking north



P4. Trench 15: general (post-exc.) view looking south



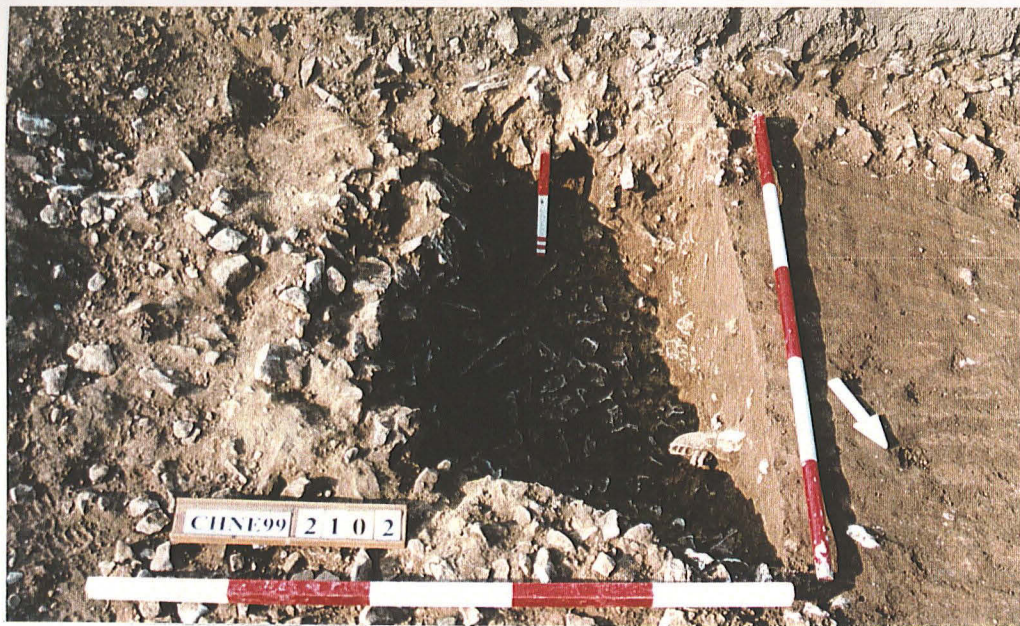


P5. Trench 14: easterly continuation of 'sunken' metallised surface 1402 at north end of trench



P6. Trench 17: south-westerly continuation of 'sunken' metallised surface 1704 at north-west end of trench





P7. Trench 21: sectioned LBA/EIA pit 2102 looking south-south-west



P8. Trench 21: fully excavated LBA/EIA pit 2102 looking west



P9. Trench 09: fully excavated LBA/EIA pit 0902 looking north



P10. Trench 05: feature of uncertain interpretation 0504 (one sherd of Romano-British pottery was recovered)





P11. Trench 04: general view showing east-west modern track 0402 looking west-west-south

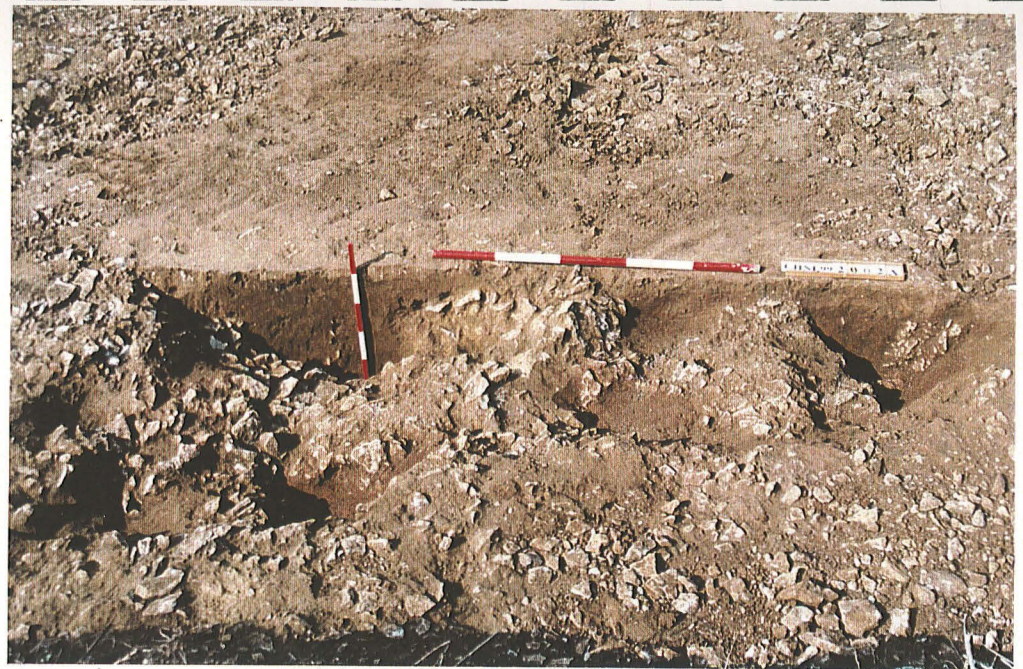


P12. Trench 03: general view looking east showing modern metallised surface looking east





**P13.** Trench 20: general (pre-exc.) view following cleaning looking north



**P14.** Trench 20: close-up of part-excavated natural/glacial features



**P15.** Trench 25: close-up of probable geological feature in central part of trench looking south-east





**P16.** Trench 07: general view showing part-excavated natural features looking north-west



**P17.** Trench 18: general (pre-exc.) view of natural features in advance of sample excavation



**P18.** Trench 19: general view of sample excavations through natural features looking south-east



**P19** Trench 11: general (pre-exc.) view of natural features in advance of sample excavation



## Appendix 2

### REPORT ON THE LATE BRONZE AGE AND EARLIER IRON AGE POTTERY FROM CHAPEL HEATH (CHNE99)

By Dr D Knight (Trent & Peak Archaeological Unit)

Evaluation excavations recovered pottery from three pits, in each case mixed with fire-shattered pebbles and charcoal. The pottery from pit 2101 is the most important for dating purposes, and hence is discussed first,

**Pit 2101.** From the fill of this feature were retrieved a moderately abraded rim and three moderately to slightly abraded body sherds in a fine fabric characterised by frequent calcareous (shelly limestone?) inclusions. The rim is slightly everted, with traces of an internal bevel, and invites comparison with some of the rim-forms which in this region characterise the 'post Deverel-Rimbury' (PDR) ceramic tradition (*e.g.* Kirmond le Mire, Lincs: Field and Knight 1992, fig. 8.1; Tetney, Lincs.: Elsdon 1996, fig. C3c; Stickford, Lincs.: Knight forthcoming; see Knight 1999 for recent review of PDR ceramics). Two of the body sherds derive from vessels with noticeably thin walls (3-4mm) and preserve traces of smoothing or burnishing on the outer face (possibly from the same vessel). Most significantly, one of these thin-walled sherds preserves faint traces of an incised geometric pattern: a single incised line and two faintly visible converging lines which may form part of a single chevron. The combination of a thin wall with geometric decoration suggests an affinity with LBA/EIA rather than plain PDR ceramic traditions (*e.g.* Fengate, Cambs.: Hawkes and Fell 1943, especially figs 2, 6-7), and hence a date range from the ninth to fifth/fourth centuries BC (Knight 1999). This ascription must remain rather tentative in view of the small size of the collection, and the possibility must also remain of some mixing of plain PDR and LBA/EIA ceramic elements.



**Pit 0903.** Two body sherds were retrieved from this feature. One of these is a small and abraded plain girth fragment from a vessel with a pronounced rounded or perhaps carinated girth; the exterior is unfortunately too worn for the girth angle to be determined with certainty. The other fragment is a tiny plain body sherd, only slightly abraded; several linear impressions on the exterior could represent brush marks, but the sherd is too small for their origin to be determined with any certainty. Both sherds incorporate calcareous inclusions, and compare on fabric grounds with the pottery from pit 2101. The round-shouldered or carinated vessel would fit comfortably within a plain PDR or LBA/EIA context, but close dating is not possible.

**Pit 2510.** This yielded one moderately abraded plain body sherd in a coarse quartz-gritted fabric, contrasting with the fabrics with calcareous inclusions which were retrieved from elsewhere on the site. The sherd is typologically undiagnostic, and cannot be related to a particular ceramic tradition.

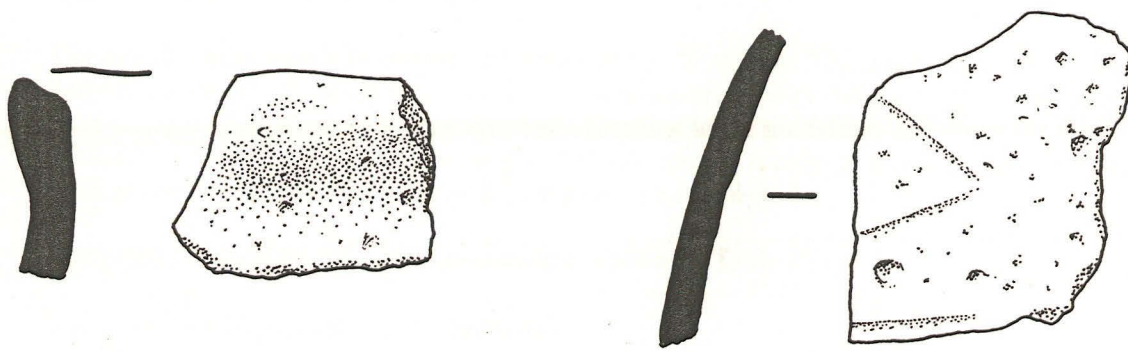


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PREHISTORIC POTTERY ILLUSTRATIONS BY DAVE WATT



PIT 2101  
SCALE 1:1



# REPORT 51 ON THE POTTERY FROM NAVENBY, CHNE99

for PRE-CONSTRUCT ARCHAEOLOGY

by Margaret J. Darling, M.Phil., F.S.A., M.I.F.A.

13 October 1999

## QUANTITY AND CONDITION

The pottery came from 10 contexts, and amounted to 30 sherds. The sherds were mostly small and often abraded; no weighing was considered necessary. No problems are anticipated for long term storage. The pottery has been archived according to the guidelines laid down for the minimum archive by *The Study Group for Roman Pottery*. A copy of the database is attached (and can be supplied on disk), and will be curated for future study.

The pottery quantities and dating by context is shown on Table 1.

**Table 1** Quantities, dating and comments.

Context	Sherds	Date
0503	2	ROM
0505	3	POST-ROMAN
0801	3	ROM
1304	1	ROM
1509W	6	ROM
1509E	2	ROM
1509C	5	3-4C?
1601	5	3-4C?
1901	2	3C+
2502	1	POST-ROMAN?
Total	30	

## DISCUSSION

The sherds included 4 fragments of tile. Apart from a single abraded sherd of Nene Valley colour-coated ware from a closed vessels, 17 sherds were indeterminate grey, 4 medium shell-gritted, 2 oxidized (one possibly not Roman) and two post-Roman sherds.

Very few diagnostically datable sherds occurred, the evidence for 3rd or 4th century dates in 1509C and 1601 being very slight, with no certain evidence for the 4th century. 1509C contained a sherd from a possible wide-mouthed bowl with probable burnished wavy line decoration, and a sherd from a bowl in 1601 could be from a 3rd century or later type. Two of the shell-gritted sherds were from a single jar rim with a slight lid-seating, probably wheel-made, but too fragmentary for close dating, while another sherd was from a base showing the string marks of wheel-turning. A fragment of a flange from a grey bowl or dish is possibly of earlier Roman date, perhaps 2nd century.

With such a small group, the likelihood of a date range from 2nd to 4th century can be only suggested; what evidence there is centres on the 3rd century or later.



Cxt	Fabric	Form	Manuf+	Ves	D?	DNo	Details	Links	Shs
0503	GREY	-	-	-	-	-	BS LTGRY;SABR	-	1
0503	OX?	-	-	-	-	-	FLAKE THICK;GRY CORE;RB ?POT	-	1
0503	ZDATE	-	-	-	-	-	ROM	-	-
0505	GREY	JB	-	-	-	-	RIM FRAG;VABR LTGRY	-	1
0505	PRO	-	-	-	-	-	BS GLAZED	-	1
0505	TILE	-	-	-	-	-	FRAG	-	1
0505	ZDATE	-	-	-	-	-	POST-ROMAN	-	-
0801	SHEL	JEV	WM?	1	-	-	RIMS SL.L'SEAT;SOOTED;?WM	-	2
0801	GREY	-	-	-	-	-	BS;ABR	-	1
0801	ZDATE	-	-	-	-	-	ROM	-	-
1304	GREY	JB	-	-	-	-	NECK FRAG;LTGRY;SABR	-	1
1304	ZDATE	-	-	-	-	-	ROM	-	-
1509W	SHEL	J?	-	-	-	-	RIM FRAG;LSEAT;THIN WALL;ABR;?IA	-	1
1509W	GREY	-	-	2	-	-	BSS;1 ABR	-	2
1509W	TILE	-	-	-	-	-	FRAGS ?ROOFERS	-	3
1509W	ZDATE	-	-	-	-	-	ROM	-	-
1509E	GREY	-	-	2	-	-	BSS;1 ABR	-	2
1509E	ZDATE	-	-	-	-	-	ROM	-	-
1509C	SHEL	J?	-	-	-	-	BASE FRAG;STRING	-	1
1509C	GREY	BDFL?	-	-	-	-	FLANGE FR ONLY ?2C	-	1
1509C	GREY	BWM?	BIWL?	-	-	-	BS;SABR	-	1
1509C	GREY	-	-	-	-	-	BS;SABR	-	1
1509C	OX	-	-	-	-	-	THICK BS;VABR;OCC SHELL;RB ?WM	-	1
1509C	ZDATE	-	-	-	-	-	3-4C?	-	-
1601	GREY	B	-	-	-	-	BS WALL;BURNISH BASAL ?LROM	-	1
1601	GREY	J?	-	1	-	-	BASE FRAGS;LTGRY	-	2
1601	GREY	-	-	-	-	-	BS;ABR	-	1
1601	GREY	BD	LA?	-	-	-	BS BBT;LA OR BIA?	-	1
1601	ZDATE	-	-	-	-	-	3-4C?	-	-
1901	NVCC	CLSD	-	-	-	-	BS;CR FAB;ABR	-	1
1901	GREY	-	-	-	-	-	BS VABR	-	1
1901	ZDATE	-	-	-	-	-	3C+	-	-
2502	PRO?	-	-	-	-	-	LTRB BS;RB ?SLIP EXT	-	1
2502	ZDATE	-	-	-	-	-	POST-ROMAN?	-	-
									30



## Chapel Heath, Navenby - CHNE99

### Environmental Archaeology Assessment

#### Introduction

An archaeological evaluation conducted by PreConstruct Archaeology at Chapel Heath, Navenby uncovered archaeological remains of Late Bronze Age (LBA)/Early Iron Age (EIA) and Roman date. During the excavation three samples were collected for environmental analysis (Table 1) and a small assemblage of animal bones was recovered by hand.

**Table 1:** Samples taken for environmental analysis

site	sample	context	volume in l.	description	date
CHNE99	1	903	31	pit fill	LBA/EIA
CHNE99	2	2101	30	pit fill	LBA/EIA
CHNE99	3	2510	20	pit fill	LBA/EIA

#### Methods

The soil samples were processed in the following manner. Sample volume and weight was measured prior to processing. The samples were washed in a 'Siraf' tank (Williams 1973) using a flotation sieve with a 0.5mm mesh and an internal wet-sieve of 1mm mesh for the residue. Both residue and float were dried, and the residues subsequently re-floated to ensure the efficient recovery of charred material. The dry volume of the flots was measured, and the volume and weight of the residue recorded. A total of 81 litres of soil was processed in this way.

The residue was sorted by eye, and environmental and archaeological finds picked out, noted on the assessment sheet and bagged independently. A magnet was run through each residue in order to recover magnetised material such as hammerscale and prill. The residue was then discarded. The float of each sample was studied under a low power binocular microscope. The presence of environmental finds (ie snails, charcoal, carbonised seeds, bones etc) was noted and their abundance and species diversity recorded on the assessment sheet. The float was then bagged. The float and finds from the sorted residue constitute the material archive of the samples.

The individual components of the samples were then preliminarily identified and the results are summarised below in Tables 2-4.

#### Results

A few uncharred seeds were present in some of the samples. These included seeds of goosefoots, *Chenopodium* sp., docks, *Polygonum* sp. and other species. In the very calcareous soils of the site these are not likely to survive for very long and can be presumed to be of recent origin having gained access to the deposits through natural soil processes. Small fragments of coal and brick/tile were present in one of the samples, and these and the presence of hammerscale in all three samples suggests that there has been movement of more recent material down into the fills of the LBA/EIA pits. These finds are unlikely in deposits of this date and since these items were rarely more than 2-3mm in diameter and in very low densities they are presumed to have entered the deposits in a similar manner to the 'modern' seeds. Finally the blind snail *Cecilioides acicula*, a species that burrows and lives underground, typically in grasslands, is extremely common in all three samples. This species is believed to have been introduced after the Roman period (Evans



1972) and its occurrence in these samples is further evidence for intrusion and soil processes effecting the buried sediment.

#### Sample 1, context 903, Late Bronze Age/Early Iron Age pit fill

This sample produced a little pot, animal bone and marine shell. The residue was almost entirely limestone brash, with occasional pebbles and flint. A small amount of fired earth and flake hammerscale was recovered from the residue.

Small quantities of charcoal, a number of poorly preserved charred cereal grains (including barley), one or two fragments of chaff, a pulse and other charred seeds were recovered in the flot. This assemblage appears to be typical domestic waste and occurs at fairly low densities. The terrestrial molluscs that are not the blind snail (Table 4) are catholic and grassland taxa.

**Table 2:** Finds from the samples

Sam p	cont	vol	residue vol in l.	pot */#	fired earth #	ham' scale	slag #	flint	brick /tile #	coal #	bone #	marine shell #	residue description
1	903	31	6	2/4	3	++					14	<1	limestone brash
2	210 1	30	1.75	3/3	1	++		2?	<1	2	1	<1	limestone brash
3	251 0	20	1.25	2/1		+	1						limestone brash

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

#### Sample 2, context 2101, Late Bronze Age/Early Iron Age pit fill

This sample also produced a little pot, animal bone and marine shell with a similar residue to sample 1. Small fragments of fired earth, coal, flint, brick/tile and flake hammerscale were recovered from the residue.

Charcoal, very small numbers of charred grain and chaff, charred seed and eggshell were also present, an essentially similar low density assemblage to sample 1. The terrestrial molluscs were dominated by the blind snail (Table 4) with only two other taxa, both of which are found in calcareous grassland, present. The find of house mouse, *Mus musculus*, in a deposit of this date is unique, the earliest secure finds being of Iron Age date and this may indicate further evidence of contamination of the pit contents, (or possibly an error in the dating?).

**Table 3:** Environmental finds from the samples

Sam p	cont.	vol.	flot vol ml.	snail */#	ch'rd grain *	chaff *	ch'rd seed *	Char coal *	egg-shell *	small mam-mal *	comment
1	903	31	9	5/2	2	1	1	3		1	barley?, pulse, sheep/goat, rodent, amphibian, cockle, mussel
2	2101	30	7	5/1	1	1	1	3	1	1	grain, rodent, amphibian, house mouse, mussel
3	2510	20	6	5/2	1			2			grain

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

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



### Sample 3, context 2510, Late Bronze Age/Early Iron Age pit fill

Context 2510 contained lower densities of finds and no animal bone, the latter almost certainly due to preservational conditions (see below). Two sherds of pottery, a little hamerscale and a piece of slag were the only finds, and apart from charcoal and a charred grain little evidence for the domestic economy occurred. The snail fauna mirrored the assemblage from sample 1.

**Table 4:** Mollusc from the soil samples

Period	LBA/EIA	LBA/EIA	LBA/EIA
context	903	2101	2510
sample	1	2	3
flot vol.(ml)	6	7	6
<i>Cecilioides acicula</i>	+++	+++	+++
<i>Vertigo</i> sp.	+		+
<i>Vallonia excentrica</i>			+
<i>Vallonia pulchella</i>	?		?
<i>Vallonia</i> sp.	+	+	+
<i>Hygromia hispida</i>	+		+
<i>Helicella</i> sp.	+	+	
<i>Cepaea</i> sp.	+		

(+ present; ++ common; +++ abundant)

The biggest problem with these samples relates to the level of contamination. If the assignment of the features and their fills to the LBA/EIA is correct then the brick/tile, coal, hamerscale, house mouse and blind snails are all almost certainly contaminants. Although these are all small fragments or shells it raises questions about the security of the charred grain, pulses, seeds and some other remains all of which could have travelled down through the soils in a similar manner, possibly from Roman deposits on the site. Under these circumstances it is very difficult to attach any reliability to records of cereals, pulses or small vertebrates in these samples. The extremely poor condition of much of the excavated bone in these pits is further testimony to the unlikelihood of some of this material surviving if contemporary with the original fills of the pits.

#### *Animal Bone*

A sample of 41 animal bones was hand excavated during the evaluation. The most significant characteristic of this collection is its poor state of preservation. All the bone, except the burnt bone, is pitted with surface root etching and some is extensively eroded. Both dentine and cementum is heavily eroded on the teeth and it is probable that a proportion of the original deposited sample has been lost in the ground through leaching and solution of the bone. There are variations in the preservation. Context 2101, although in poor condition, is not as bad as contexts 903 and 1601, but none of the bone could be described as in good condition. An archive catalogue of the material has been produced and recorded using the coding system of the Environmental Archaeology Consultancy (see Appendix).

The LBA/EIA pits include fragments of cattle (see Appendix) and sheep (or goat). The only other species identified in the sample is a broken fragment of red deer antler cortex, which may have been worked, and this was recovered from context 1509, the fill over a Romano-British holloway or track.



### *Discussion*

While the remains from the soil samples suggests largely domestic waste the utility of this evidence is prejudiced by the occurrence of what is almost certainly intrusive material which makes finds of grain and other small fragments suspect. Probably only the excavated animal bone can be confidently assigned to the original pit fill, and even this has been subject to erosion in the soil and cannot certainly be viewed as representative of the originally deposited bone assemblage.

### *Recommendations*

No further work can be justified on the excavated material. The few charred cereals are unlikely to be identifiable to species, and their contemporaneity with the pit fills cannot be guaranteed although the richer sample 1 is probably alright. Should further work be carried out at the site a programme of sampling and bone collection should be implemented, using sample sizes of 30 litres for the soil samples, but it should be anticipated that a proportion of the samples may not warrant post-excavation analysis and the information potential of the bone collection will be significantly lower than a well preserved assemblage. On the other hand contexts of Late Bronze Age/Early Iron Age date are not common and if this area of Navenby has a reasonable density of features of this date it is potentially a very important site. The results from the features at GRN96 clearly show that some of these deposits are rich in remains

### *Acknowledgments*

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1st October 1999



**Chapel Heath, Navenby - CHNE99**  
**Animal Bone Archive catalogue**

site	cont.	species	bone	no.	side	fusion	zone	butchery	gnawing	toothwear	measurement	path.	comment	preservation
CHNE99	903	OVCA	CQ	1	F		1						TWO PIECES	2
CHNE99	903	OVCA	MAN	1	L		4578						ASC RAMUS- 3 PIECES	2
CHNE99	903	OVCA	SCP	1	R		235						GLENOID AND NECK- 2 PIECES-SMALL GRACILE	2
CHNE99	903	OVCA	TIB	1	R	PN							PROX SHAFT FRAGMENT	3
CHNE99	903	OVCA	ULN	1	L	PN	23						PROX EPI LOST-SEMILUNARIS AND SHAFT- 3 PIECES	2
CHNE99	903	SSZ	LBF	1	F			W					CALCINED SHAFT FRAGMENT	4
CHNE99	903	SSZ	LBF	1	F								SHAFT FRAG- 2 PIECES-FEM?	2
CHNE99	903	SSZ	RIB	2	F								PROX SHAFT	3
CHNE99	903	SSZ	RIB	6	F								SPLIT SHAFT FRAGMENTS	3
CHNE99	903	SSZ	SKL	1	F								FRAG CRANIAL VAULT	2
CHNE99	903	SSZ	UNI	1	F								INDET	2
CHNE99	903	SSZ	UNI	1	F								INDET CALCINED FRAGMENT	4
CHNE99	903	SSZ	VER	1	F	CN	2						ANT CENTRAL EPIPHYSIS	3
CHNE99	1503	CSZ	LBF	1	F								SHAFT FRAGMENT-PROBABLY CATTLE METATARSUS	2
CHNE99	1509	BOS	UM1	1	L					I16			VERY WORN - VERY ERODED	2
CHNE99	1509	CER	ANT	1	F								ANTLER CORTEX - 4 PIECES	3
CHNE99	1509	CSZ	LBF	1	F								SHAFT FRAGMENT	2
CHNE99	1509	OVCA	LM2	1	L					J12			ERODED	2
CHNE99	1601	BOS	CEV	1	F	AN	15						NEURAL ARCH AND FRAG TP AND CENTRUM- 9 PIECES	3
CHNE99	1601	BOS	LM1	1	L					I16			VERY ERODED	2
CHNE99	1601	BOS	PH2	1	R	PF	12						DAMAGED-SEVERELY ERODED	2
CHNE99	1601	OVCA	RAD	1	R		3						PROX POST SHAFT FRAG	2
CHNE99	1601	SSZ	LBF	2	F								SHAFT FRAG	2
CHNE99	1703	SSZ	LBF	1	F								SHAFT FRAGMENT	3
CHNE99	1901	BOS	MTT	1	F								SPLIT PROXIMAL END WITH SMALL PART SHAFT	3
CHNE99	2101	BOS	CEV	1	F	CF	15						POST CERVICAL VERT WITH NEURAL ARCH AND ANT PART CENTRUM	3
CHNE99	2101	BOS	MAN	1	L		23						ANT HORIZONTAL RAMUS WITH PM ALEVOLI	3
CHNE99	2101	BOS	MAN	1	R		7			K12	15A-58.5	G	LAST COLUMN ON M3 REDUCED-POST HALF HORI RAMUS	3
CHNE99	2101	BOS	ULN	1	R	DN	4						DISTAL EPIPHYSIS	4
CHNE99	2101	CSZ	LBF	1	F								SHAFT FRAGMENT	3
CHNE99	2101	CSZ	MAN	1	F								FRAG WITH AVEOLUS-POSS PART OF ABOVE	3
CHNE99	2101	CSZ	RIB	1	F								SHAFT FRAGMENT- 4 PIECES	3
CHNE99	2101	CSZ	SKL	1	F								BASI-OCCIPITAL- ?HORSE?	3
CHNE99	2502	SSZ	LBF	1	F								SHAFT FRAGMENT	2



## Appendix 5

### Chapel Lane, Navenby CLN96 Lithic Materials: Catalogue and Assessment

Report by Jim Rylatt – September, 1999

#### Catalogue

Ten pieces of flint were recovered during excavation:

Context No.	S.F. No.		Description
100	5	Core	Small core with opposed platform working (B1). Scars (8) indicate flake removal: c. 30% cortex on dorsal face. Brown opaque (?Wolds) flint with some inclusions. 38 x 24mm.
100	4	Broken secondary flake	Fragment of a small flake with one lateral edge broken off. Possible use-wear on other lateral edge. Pale grey opaque flint (?Wolds flint).
101		Side scraper	Produced from a tertiary flake with a crescentic section of the proximal end of one lateral edge detached. This may have occurred prior to the manufacture of the scraper. The thicker lateral edge has extensive abrupt retouch. The thinner (broken) lateral edge is also retouched and/or use-worn. Bulb reduced by localised flaking on ventral face. Pale grey Wolds flint with some inclusions. (36 x 25mm).
101	6	Broken tertiary flake	Medial fragment of a blade, with limited use-wear on one lateral edge. Brown translucent flint.
101	16	Core	Pyramidal core with evidence of flake and blade removal (10+ scars). Two platforms, nearing right angles (B2). Grey opaque Wolds flint with frequent chalky inclusions: no cortex. 30 x 32mm.
107	8	Broken secondary flake	Proximal fragment of a flake. Possible use-wear on both lateral edges. Grey opaque Wolds flint with frequent inclusions.
108	9	Complete tertiary flake	Small flake. Grey opaque Wolds flint with some chalky inclusions. 20 x 16mm.



108	10	?Scraper	Squat secondary flake with bulbar scarring. Abrupt retouch or use-wear along one lateral edge. Grey opaque Wolds flint with large chalky inclusion and c.60% cortex on dorsal face. 20 x 29mm.
115	14	Broken tertiary flake	Proximal fragment of a blade or blade-like flake – small portion of the distal end detached. Probable use-wear on one lateral edge. Lightly patinated brown/grey opaque flint (?Wolds).
117	13	Complete secondary flake	Blade-like flake with small prepared platform. Cortex on c.50% of dorsal face. Scars indicate blade removal. Possible use-wear along one lateral edge. Lightly patinated brown opaque flint. 58 x 13mm.

*NB:* Measurements are given only for cores and complete flakes. They were taken at right angles to the platform; the first figure relates to length, the second to breadth.

### Discussion

Of the 10 pieces of flint recovered from Chapel Lane, Navenby, 5 (and 3 possible) were produced from Wolds flint. In summary, the assemblage comprises:

	Number	Percentage
Secondary flakes	3	(30%)
Tertiary flakes	1	(10%)
Core	2	(20%)
Scrapers	1 (+1?)	(20%)
Blades	2	(20%)

This is a very small assemblage, and as such it is difficult to establish its character and chronology. Additionally, the flakes are generally quite small. Consequently, the possibility of re-deposition by a variety of taphonomic processes should temper any interpretation. The assemblage is loosely indicative of both tool production and use. However, it is impossible to give a more exacting interpretation, as fine trimming and pressure flakes are difficult to recover, and cores may be re-utilised in structured deposits.

The presence of a blade, blade like flakes and a core – S.F. 16 - (40% of assemblage) allows a tentative dating of at least part of the assemblage, being suggestive of an earlier Neolithic industry. Flake removal from the other core – S.F. 5 - is indicative of later Neolithic or Bronze Age industries. Working is relatively crude, which may imply a date later in this range.

This assemblage suggests that there may be a moderate-to-low density of datable lithic material across much of the site.



## Appendix 6

### Trench N° 1

Context No.	Category	Description
0100	Layer	Topsoil.
0101	Fill	Fill of natural depression.
0102	Cut	Natural periglacial void.
0103	Layer	Subsoil.
0104	Layer	Natural deposit, truncated by ploughing.

### Trench N° 2

Context No.	Category	Description
0200	Layer	Topsoil
0201	Layer	Subsoil
0202	Layer	Natural limestone brash
0203	Fill	Fill of voids in 0204
0204	Layer	Part of modern trackway
0200	Layer	Topsoil
0201	Layer	Subsoil
0202	Layer	Natural limestone brash
0203	Fill	Fill of voids in 0204
0204	Layer	Part of modern trackway

### Trench N° 3

Context No.	Category	Description
0300	Layer	Topsoil
0301	Layer	Subsoil
0302	Layer	Part of modern trackway

### Trench N° 4

Context No.	Category	Description
0400	Layer	Topsoil
0401	Layer	Subsoil
0402	Layer/Fill	Part of trackway
0403		Natural fissure in limestone
0404	Layer	Limestone brash
0405	Cut	Cut for track

### Trench N° 5

Context No.	Category	Description
0500	Layer	Topsoil
0503	Fill	Fill of cut 0504
0504	Cut	Cut into limestone brash
0505	Layer	Subsoil
0506	Layer	Limestone brash



## Trench N° 6

Context No.	Category	Description
0600	Layer	Topsoil
0601	Fill	Fill of natural void
0602	Cut	Natural void
0603	Fill	Fill of natural void
0604	Cut	Natural void
0605	Layer	Subsoil
0606	Layer	Limestone brash

## Trench N° 7

Context No.	Category	Description
0700	Layer	Topsoil
0701	Fill	Fill of natural void
0702	Cut	Probable solifluxion void
0703	Fill	Fill of natural feature
0704	Cut	Probable solifluxion void
0705	Fill	Fill of natural feature
0706	Cut	Probable solifluxion void
0707	Layer	Limestone brash

## Trench N° 8

Context No.	Category	Description
0800	Layer	Topsoil
0801	Layer	Subsoil
0802	Layer	Limestone brash
0803 <sub>a,b,c</sub>	Fill	Fills of natural voids

## Trench N° 9

Context No.	Category	Description
0900	Layer	Topsoil
0901	Layer	Subsoil
0902	Cut	Small oblong pit, cut into limestone brash
0903	Fill	Fill of 0902, containing variety of domestic waste
0904	Layer	Limestone brash, truncated by ploughing
0905	Fill	Fills of natural voids

## Trench N° 10

Context No.	Category	Description
1000	Layer	Topsoil
1001	Layer	Subsoil
1002	Fill	Deposit formed by slumping of 1001 into partially filled natural feature. Artefacts have entered this deposit through cultivation, bioturbation <i>etc.</i>
1003	Cut	Natural feature contained by 1004
1004	Layer	Limestone brash, truncated by ploughing



### Trench N° 11

Context No.	Category	Description
1100	Layer	Topsoil
1101	Layer	Subsoil
1102	Fill	Natural fills of natural features
1103	Layer	Limestone brash, truncated by ploughing

### Trench N° 12

Context No.	Category	Description
1200	Layer	Topsoil
1201	Layer	Subsoil
1202	Layer	Limestone brash, truncated by ploughing
1203	Fill	Natural fill of natural voids

### Trench N° 13

Context No.	Category	Description
1300	Layer	Topsoil
1301	Layer	Subsoil
1302	Fill	Natural fill
1303	Layer	Limestone brash

### Trench N° 14

Context No.	Category	Description
1400	Layer	Topsoil
1401	Layer	Subsoil, truncated by ploughing
1402	Cut	Sunken trackway/Hollow way
1403	Layer	Limestone brash
1404	Fill	Fill of 1402

### Trench N° 15

Context No.	Category	Description
1500	Layer	Topsoil
1501	Fill	Natural fill of natural feature 1502
1502	Cut	Geological feature
1503	Fill	Fill of probable natural feature 1504
1504	Cut	Probable natural geological feature
1505	Fill	Sterile fill of 1506
1506	Cut	Probable natural void
1507	Fill	Sterile fill of 1508
1508	Cut	Probable natural void
1509	Fill	Fill of probable natural feature 1510
1510	Cut	Probable natural feature
1511	Layer	Limestone brash



## Trench N° 16

Context No.	Category	Description
1600	Layer	Topsoil
1601	Layer	Subsoil
1602	Fill	Slumped subsoil in natural fissures
1603	Fill	Natural fill in lower levels of fissures
1604	Layer	Limestone brash

## Trench N° 17

Context No.	Category	Description
1700	Layer	Topsoil
1701	Layer	Subsoil
1702	Fill	Natural fill of features in 1705
1703	Fill	Fill of 1704
1704	Cut	Part of trackway
1705	Layer	Limestone brash

## Trench N° 18

Context No.	Category	Description
1800	Layer	Topsoil
1801	Layer	Subsoil
1802 a,b,c	Cut	Natural fissures in limestone brash 1804
1803	Fill	Fill of natural fissures in limestone brash 1804
1804	Layer	Limestone brash

## Trench N° 19

Context No.	Category	Description
1900	Layer	Topsoil
1901	Layer	Subsoil
1902	Layer	Limestone brash
1903	Fill	Natural fill of voids in 1902

## Trench N° 20

Context No.	Category	Description
2000	Layer	Topsoil
2001	Layer	Subsoil
2002 a,b,c,d,e	Fill	Natural fill of geological voids in 2003
2003	Layer	Limestone brash

## Trench N° 21

Context No.	Category	Description
2100	Layer	Topsoil
2101	Fill	Fill of pit 2102
2102	Cut	Pit, roughly oval in plan
2103	Layer	Subsoil
2104 a,b	Fill	Natural fill of natural voids
2105	Layer	Limestone brash



## Trench N° 22

Context No.	Category	Description
2200	Layer	Topsoil
2201	Layer	Subsoil
2202	Fill	Natural fill of geological voids
2203	Layer	Limestone brash

## Trench N° 23

Context No.	Category	Description
2300	Layer	Topsoil
2301	Layer	Subsoil, partially truncated by ploughing, partial slumped into natural fissures
2302	Fill	Fill of natural fissures
2303	Fill	Fill of natural fissures
2304	Layer	Limestone brash, partially truncated by ploughing

## Trench N° 24

Context No.	Category	Description
2400	Layer	Topsoil
2401	Layer	Subsoil, truncated by ploughing
2402	Fill	Slumped subsoil contained in natural fissures in 2404
2403	Fill	Natural fill of lower levels of fissures in limestone brash 2404
2404	Layer	Limestone brash
2405	Fill	Probably created recently by action of heavy machinery

## Trench N° 25

Context No.	Category	Description
2500	Layer	Topsoil
2501	Layer	Subsoil
2502	Fill	Natural fill of geological feature
2503	Fill	Natural fill of geological feature
2504	Fill	Natural fill of geological feature, with some finds introduced in upper part, probably as a result of ploughing
2506	Fill	Natural fill of geological feature