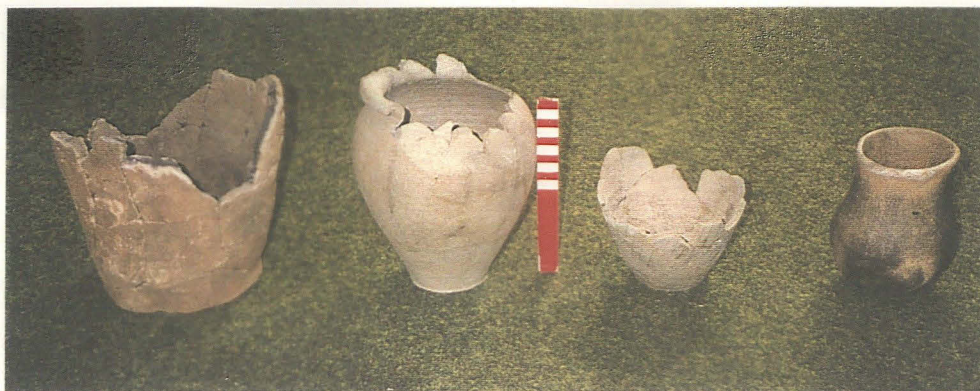


LCNCC: 85.96

CHAPEL LANE, NAVENBY

ARCHAEOLOGICAL WATCHING BRIEF REPORT

Report prepared for Ploughsound Ltd.
by Colin Palmer-Brown with contributions by James Albone



Site Code: CLN96
LCNCC Acc. No.: 85.96
NGR: SK 9917 5757

99/25
 Gwent LI1020
 61151 - BA
 63246 - RB
 60537 - RB
 61152 - A-S
 61153 - Undated
 Sources LI 5685
 LC 5686

Contents

Summary	1
1.0 Introduction	2
2.0 Planning Background	2
3.0 Archaeological and historical background	2
4.0 Methodology	4
5.0 Results	4
5.1 The Bronze Age cremation	4
5.2 The Romano-British cremations	4
5.3 The Romano-British pits and ?enclosure on the west side of the development	5
5.3.1 The stone-capped ritual pit 119	
5.3.2 The Romano-British pits exposed in the garage footprint to Plot 28	
5.3.3 The Romano-British ?enclosure ditch exposed in Plot A23	
5.4 The Anglo-Saxon and undated inhumations (section by J Albone and C Palmer-Brown)	8
5.4.1 Grave 156 (Burial 1)	
5.4.2 Grave 161 (Burial 2)	
5.4.3 Grave 166 (Burial 3)	
5.4.4 Grave 172 (Burial 4)	
5.4.5 Grave 169 (Burial 5)	
5.4.6 Romano-British pottery recovered from the inhumation burials	
5.5 The undated remains	11
5.5.1 Undated cremation burials	
6.0 Discussion and conclusions	12
7.0 Review of the effectiveness of the methodology	13
8.0 Acknowledgements	13
9.0 References (main text)	14

Appendices

Appendix 1	Colour photographs
Appendix 2	Report on the prehistoric pottery by Dr D Knight
Appendix 3	Report on the Romano-British pottery by MJ Darling
Appendix 4	List of archaeological contexts
Appendix 5	Site archive
Appendix 6	Animal bone report by James Rackham

Wrexham County Council
 Archaeology Section

1 5. DEC 99

Illustrations

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

Fig. 2: Plan showing location of major archaeological features

Fig. 3: Location of archaeological features exposed in Plot A23

Fig. 4: Cremation burials exposed in drive to Plot A24

Fig. 5 Cremation burials and large (?ritual) pit, south end of access road

Fig. 6 Section through pit 119

Fig. 7 Location of graves on north side of Plot A26

Fig. 8 Individual plans of Burials 1 - 5

Fig. 9 Romano-British pits exposed in the garage footprint to Plot A28

Summary

- * An enhanced archaeological watching brief took place during the construction of seven detached houses and associated infrastructure on land south of Chapel Lane, Navenby, Lincolnshire (SK 9917 5757).
- * An exceptional range of archaeological remains were identified, indicating that the site was a focus for ceremonial and funerary activities between the Bronze Age to the Middle Saxon period
- * The information confirms earlier suggestions that the Roman settlement at Navenby was superimposed over a settlement history whose origins may be sought in the Neolithic or Bronze Age periods

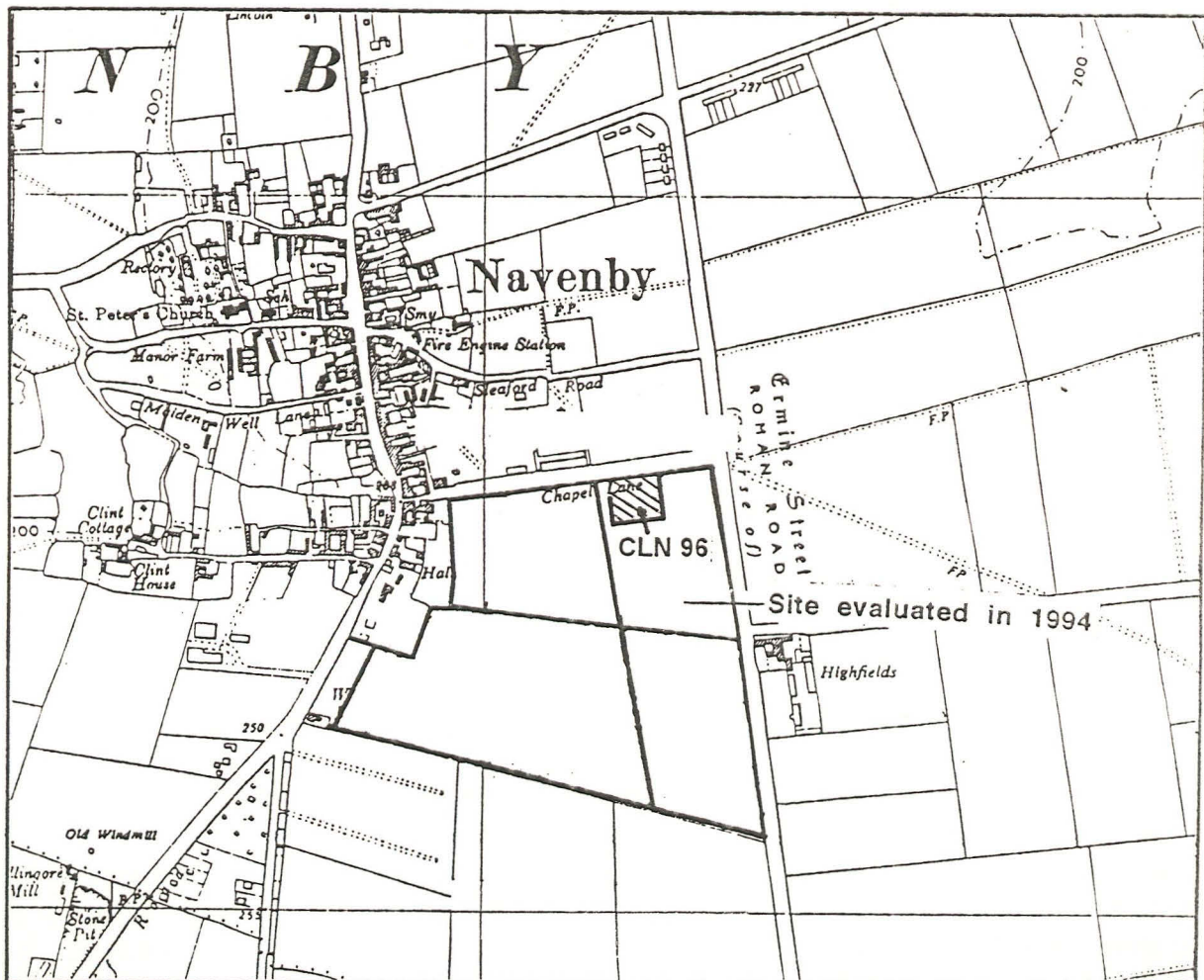


Fig. 1 Site location at scale 1:10,000.
 (OS Copyright Licence No: AL 515 21 A0001)

1.0 Introduction

An enhanced archaeological recording brief was commissioned by Ploughsound Ltd to fulfil a planning requirement associated with the construction of seven detached houses and associated access on land south of Chapel Lane, Navenby.

The work was undertaken following a programme of geophysical survey and trial excavation in 1994, which identified aspects of an exceptional archaeological landscape over a wide area west of Ermine Street, but did not provide information relating to the complex that was exposed as a result of the current brief.

This report documents the results of the brief and provides an analysis of the material remains. The report includes a series of assessments by specialist researchers, but it does not include detailed illustrations of the finds, most of which have been photographed for inclusion. The reason for this omission is that the brief recovered an atypically large finds and sample archive, well beyond that which is normally associated with this level of recording. In view of this, some level of compromise has been inevitable, and it is certainly desirable that some further work should be undertaken in the future (this is a problem for Navenby as a whole, as there is an increasing body of unpublished data that has been accumulating for more than 30 years).

2.0 Planning Background

Following evaluation of c. 4 hectares of land south of Chapel Lane and west of Ermine Street, most of this unit was de-allocated for residential development due to the significance of archaeological remains sampled during the evaluation in 1994. Planning permission was subsequently granted in 1995 for the erection of seven dwellings on the current site (Ref. N40/200/95). The permission was granted subject to the undertaking of an enhanced archaeological recording brief.

3.0 Archaeological and Historical Background

A Roman site at Navenby was first identified in 1965 following fieldwalking by pupils of the local primary school under the guidance of their head teacher. Concentrations of 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 mid-way 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 shown that the earliest settlement activity at Navenby cannot be attributed solely to Roman influence and occupation. Artefact scatters over wide areas indicate that settlement of the area can be traced to the Neolithic or Bronze Age periods. Limited excavations in 1996 close to Grantham Road on the south side of the present village exposed pits containing post-Deverel Rimbury pottery (late Bronze Age / early Iron Age transition) (D Knight, pers. comm.), and further more recent evaluation has confirmed this (Palmer-Brown and Rylatt 1999).

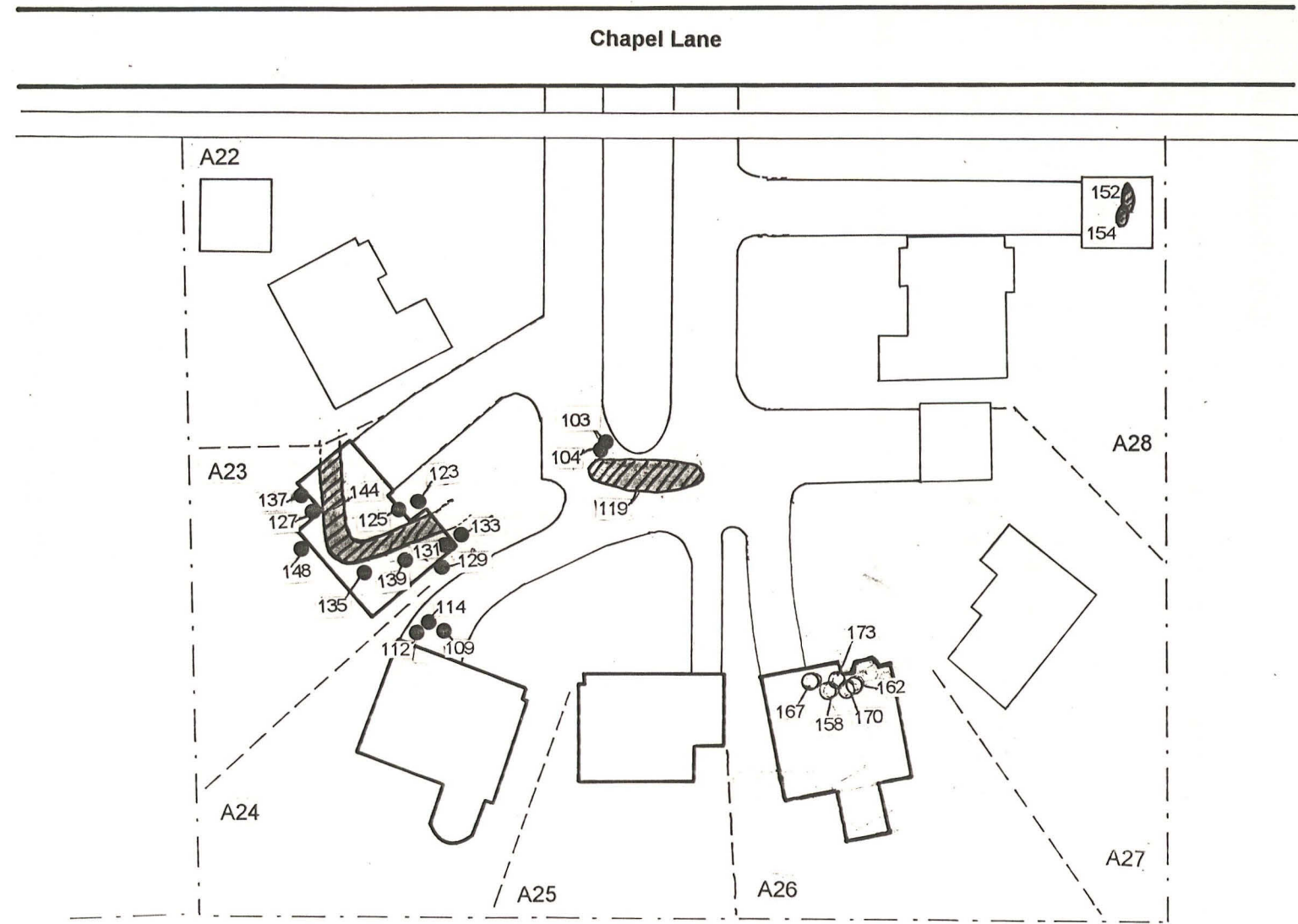
In the context of the present site, recent investigations in the Chapel Lane area have produced evidence of occupation in the immediate pre-Roman Iron Age, although the data is far from clear. A magnetometer survey carried out in 1994 identified a large native-type enclosure containing circular structures (Lyll 1994). Trial excavations through part of the enclosure ditch produced sherds of coarse hand made pottery but, given the uncertainty that surrounds the dating of most types of late Iron Age ceramic groups, it is not possible to clarify whether or not this enclosure was pre or post-conquest.

In the later Roman period, both sides of Ermine Street at Navenby 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.

A significant feature common to recent investigations has been the apparent absence of Roman artefactual remains dating positively to the C1st AD. The stone buildings referred to above appear to be relatively late, although it is always possible that earlier activity (?timber phases) may lie beneath the levels thus far investigated. It remains a noteworthy observation, however, that no archaeological remains clearly associated with the conquest phase have been identified as a result of formal investigations carried out in the 1990s; and not all of these investigations have sought exclusively to preserve *in situ*. If there was a fort at Navenby, then the site of this monument is proving illusive to identification (it is of course possible that it lies beneath modern building developments to the north of Chapel Lane; in which case it will have suffered unquantified damage and will not be available to archaeologists for some considerable time).

Returning to the present brief, this area was not sampled by trial excavation in 1994, although it was surveyed by gradiometry. The latter identified only two positive anomalies consisting of linear features orientated east-west (see Lyll 1994). These were interpreted as ditches or/and plough furrows. A linear ditch of Roman date parallel with Chapel Lane could imply a Roman origin for Chapel Lane itself. Unfortunately, no corresponding linear ditch was exposed during the course of the brief.

Fig. 2 Location of major archaeological features



Chapel Lane, Navenby, Lincolnshire

- Key
- Cremations
 - ◐ Other Features
 - Inhumations

4.0 Methodology

The watching brief took place on an intermittent basis between May 1996 and October 1998. A total of 37 site visits took place.

The fieldwork comprised observation during all excavations; involving a thorough inspection of all plan and section surfaces exposed as a result of the groundworks. Records consist of scale drawings (in plan and section), colour photographs, and written descriptions (on standard context record sheets). All archaeological features were subjected to limited or (in some cases) total excavation.

Artefacts recovered from the site were washed and processed prior to submission for written appraisal and/or assessment.

5.0 Results

5.1 The Bronze Age Cremation (Fig. 4)

A single cremation (108) contained within a Bronze Age bucket urn was located during excavation of the driveway for plot A24. The urn, which has been substantially damaged by modern ploughing, rested in a circular pit with near-vertical sides and a flat base [109]. Two undated cremation burials were exposed a short distance south-west of this (see Section 4.5 below).

The cremation urn was examined by Dr D Knight (Appendix 2) who confirms that the vessel closely resembles a Deverel-Rimbury bucket urn similar in character to examples recovered from Pasture Lodge Farm in Lincolnshire and Coneygre Farm in Nottinghamshire. However, given the lost rim, the identification is not positive. A date in the second half of the second millennium BC is suggested.

Although the cremation is the only such prehistoric feature to which a reasonably secure date can be assigned, it is suggested that some of the other cremations (excluding the three Romano-British examples described in the next section) could also date to the Bronze Age.

5.2 The Romano-British Cremations (Fig.'s 2, 3 and 5)

Two cremations contained by grey urns of Romano-British date (103 and 104) were found during excavations for the access road extending off Chapel Lane. These features were separated by only 0.5m and were 0.6m north of a large elongated pit-like feature 119, which was also almost certainly of ritual value. A third Roman cremation, 123, was exposed on the east side of Plot A23, approximately 14m south-west of the other two.

Fig. 3 Location of archaeological features exposed in Plot A23

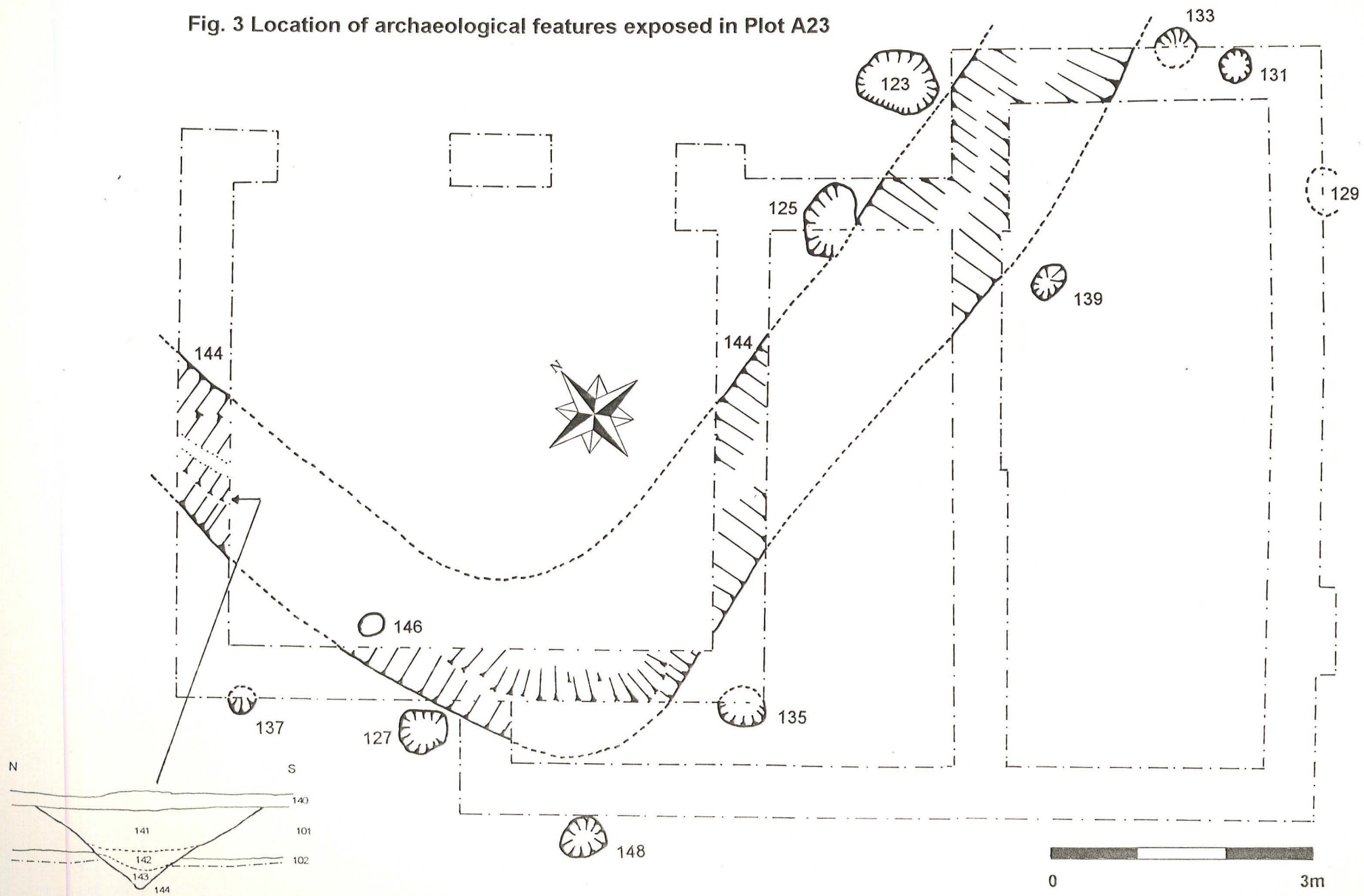
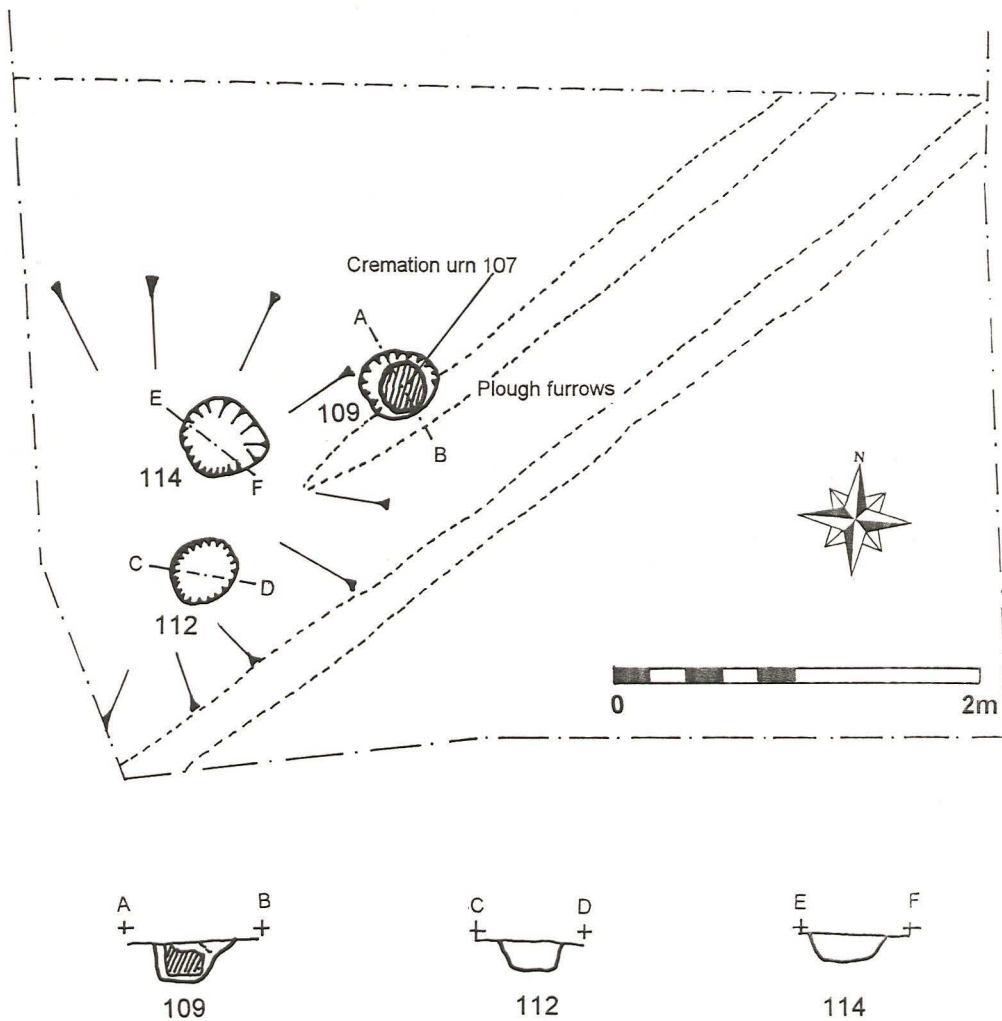


Fig. 4 Cremation burials exposed in drive to Plot A24
(location on Fig. 2)



The most northerly of the three, 103, was in a small pit (the cut of which was difficult to define). The human remains were contained within a grey jar, of which the rim had been completely removed by ploughing. The jar is decorated with diagonal burnished lines which is unusual for this area (see Darling, Appendix 3). A date range from the mid to late C2nd is suggested.

Adjacent to 103 was a second urn, 104, which has also been dated between the mid to late C2nd. The rim of this vessel was largely intact, although it required reconstruction following damage by machine. The vessel bears no decoration, but traces of burning have been recorded in the form of vertical streaks on the exterior and burn marks on the interior, suggesting that the vessel was placed on the pyre while it was still alight, and that the cremated bones were still alight when deposited in the urn.

The slight outlier within this small group, 123 was on the north-east edge of Plot A23 (Fig. 3). A sub-rounded cremation pit contained charred (presumed human) remains and incorporated a relatively rare Nene Valley colour coated funnel-necked beaker, probably dating to the mid C3rd AD. The beaker was broken but appeared to have been deliberately placed within the cremation pit. Three well preserved iron nails were recovered, possibly deriving from a coffin prior to burning.

5.3 The Romano-British pits and ?enclosure on the west side of the development

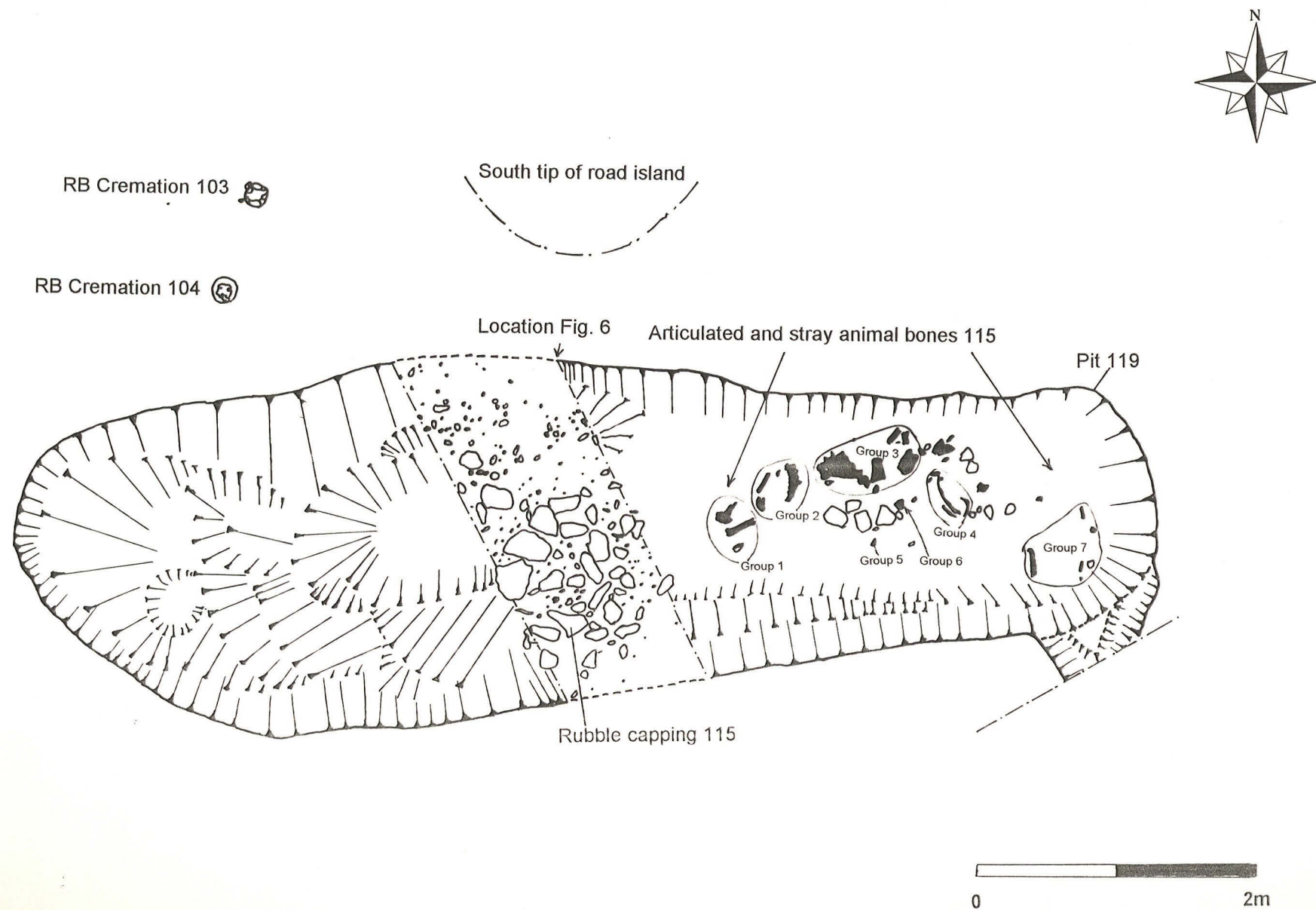
5.3.1 The stone-capped ritual pit 119 (Fig.'s 2, 5 and 6)

Within the turning arc of the new access, adjacent to the Romano-British cremations 103 and 104, was a substantial elongated pit-like feature, orientated east-west. In plan this measured some 8.0m x 2.7m and it was wider towards its west end. Its surviving depth was up to 0.8m, its shape and profile being almost boat-like.

The pit was filled with a complex of deposits as follows:

- 115** rubble upper fill, extending beyond the edges of the feature, probably as a result of ploughing; some of the stones appeared burnt; interpreted as capping to cairn-like feature (same as 116)
- 117** mid-brown silty sand mixed with limestone inclusions; incorporated occasional bone fragments and pottery, including developed scored ware sherds usually associated with the late Iron Age / early Roman period. Within 117 was 118; a series of articulated and stray bones, mostly deriving horses that appear to represent butchery waste (see Fig. 5).
- 120** essentially the same as 117, but beneath level of articulated

Fig. 5 Cremation burials and large (?ritual) pit, south end of access road
(location on Fig. 2)



bones

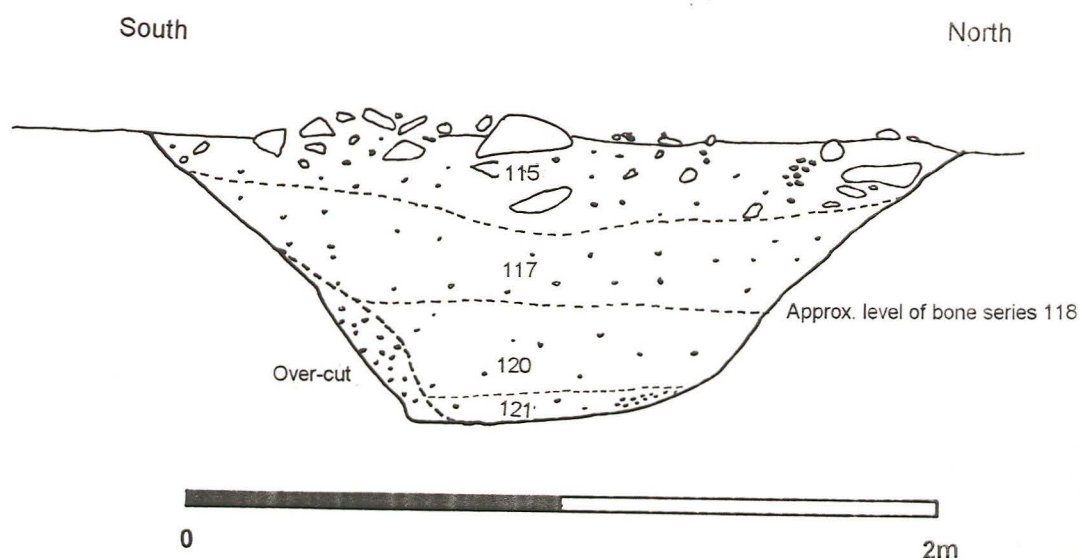
- 121 primary fill of pit 119; incorporated large portion of a Vesicular vessel.

During excavation, it was thought that the articulated bones were associated with a single animal, although analysis of the remains indicates that the pit contained parts of more than one horse. These animals were probably eaten (see Rackham, Appendix 6).

There would seem little doubt that the pit was used for some form of ritual activity (possibly feasting) and that, in its final form, it may have resembled a cairn: the surrounding area (including the topsoil) incorporated widespread areas of rubble and it is assumed that this derived from what may have been a substantial stone capping over the pit.

Pottery from the pit was diverse. It incorporated scored ware that would normally fall within a late Iron Age / early Roman bracket, and also forms that would be better placed in the mid C3rd AD (see Darling, Appendix 3).

Fig. 6 Section through pit 119
(location on Fig. 5)



5.3.2 The Romano-British pits exposed in the garage footprint to Plot 28 (Fig.'s 3 and 9)

In the extreme north-east corner of the development, within the footprint of the garage to Plot 28, two Romano-British pits were exposed which may also have had some form of ritual purpose.

The most northerly of these 152 was more than 2.2m in length, 1.1m in width. It was orientated north-south and its upper portion was significantly truncated by machine during clearance for the garage foundation.

The pit was filled predominantly with dark brown clay-bonded sand 149: two additional context numbers 150 and 151 were allocated to differentiate what appeared to be finds clusters; at the north and south ends of the feature respectively. On the north side, 150 comprised a group of unarticulated animal bones and several Romano-British pottery sherds, including a mortarium rim, providing a possible C2nd date. In contrast, pottery recorded as bulk fill (ie 149) incorporated a footing base, probably from an Oxfordshire red colour-coated beaker, which would suggest a late date - in the C4th AD. The southern finds group 151 included pottery of late C2nd or C3rd date, as well as a series of articulated horse vertebrae. Also recovered from the fill of the pit was a single infant human tibia.

Possibly cut through the south end of the above was a second and smaller pit 154, which was also orientated north-south. A single sherd of Romano-British pottery was apparently recovered from the fill 153, although this could not be located in post-excitation. Also recovered were some fire-shattered pebbles.

5.3.3 The Romano-British ?enclosure ditch exposed in Plot A23 (Fig.'s 2 and 3)

An L-shaped ditch alignment 144 was exposed in footing trenches associated with Plot A23. This was orientated north-south and then east-west (Fig. 3). It was not exposed in Plot A22 to the north or in the eastern access cuttings, so its full course was not determined. It is possible that the north-south and east-west alignments simply terminated, but it is equally possible that excavations for the access drives to the east were not deep enough to allow a proper and complete identification.

The average depth of the feature was 0.85m. It was predominantly V-shaped, although its profile varied within the sections that were exposed and, in places, its sides were stepped. At least three broad fills were identified as follows:

- 141: upper bulk fill consisting of reddish-brown silty sand, containing bone fragments and Romano-British pottery sherds (probably middle - later C2nd).

142: below but similar to 141: differential inclusion possibly due to worm sorting

143: primary fill; natural wash deposits of sandy silt.

The dating for this feature is not entirely clear (see Darling, Appendix 3). Although several pottery sherds were recovered from various cuttings within Plot A23, only one of these was datable, a fragmentary jar with a cordon, which may fit a mid-to late C2nd date.

The significance of the ditch remains uncertain, although (in this complex) one assumes it to have related to the general trend. If it was an enclosure, then its full plan has not been defined by the watching brief, nor have the features that it may have enclosed. Two cremation burials were recorded 'within' it, with one of these, 123, being of mid-C3rd date. However, this may be something of a 'red herring' given to the general scatter of these features on both sides of ditch 144 and further east adjacent to pit 119. Unfortunately, the occurrence of a small pit-like feature within the west side of the ditch, 146, is of little help, as this was quite distinct from the typical ?undated cremation burials, and the pit may well have been a feature of the ditch itself.

It is likely perhaps that the ditch was indeed broadly contemporary with pit 119 and the three securely dated Romano-British cremations, but this does not lead conveniently to a more satisfactory interpretation. Part of a human femur was recovered from the fill of the ditch.

5.4 The Anglo-Saxon and Undated Inhumations (Fig. 2) (section by J Albone and C Palmer-Brown)

Five inhumation burials were exposed during the excavation of foundation trenches for plot A26 (location on Fig. 2). The graves were inter-cutting, suggesting a relatively prolonged period of burial practice within what appeared to be an extremely confined area. Such confinement suggests that the grave group may have been defined by some form of permanent marker (?a barrow), although all trace of any such marker has now been lost, possibly as a result of ploughing.

The stratigraphic sequence associated with these burials is presented below, followed by a description of each grave.

BURIAL STRATIGRAPHY

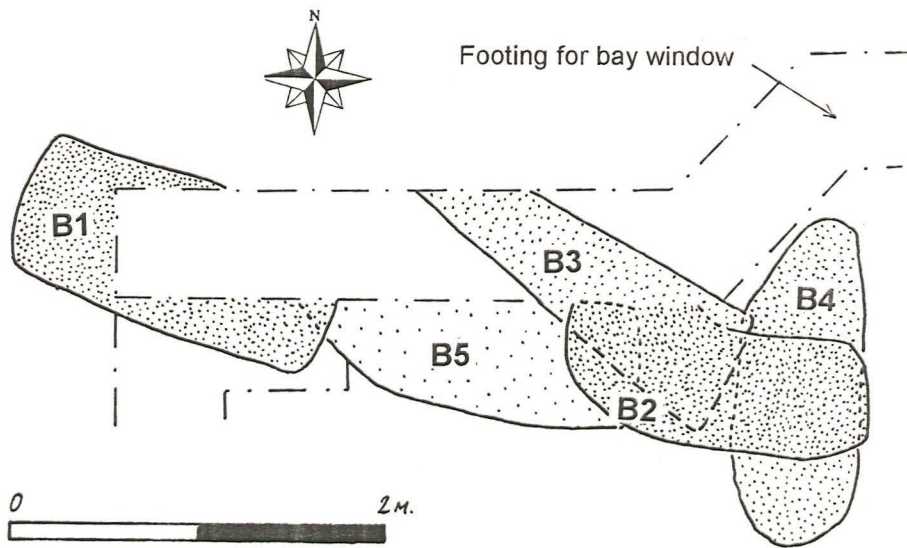
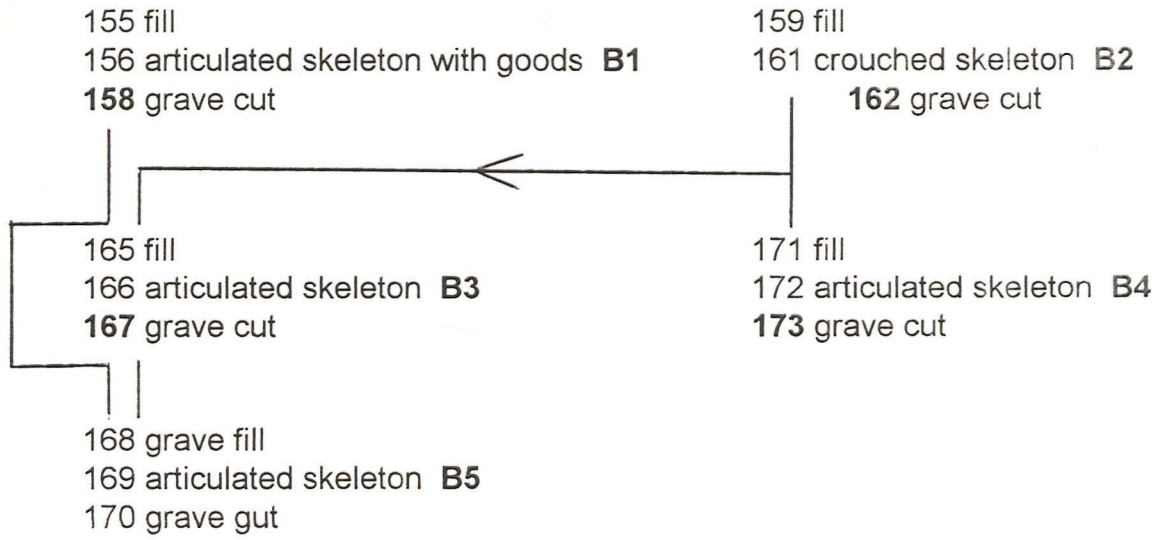
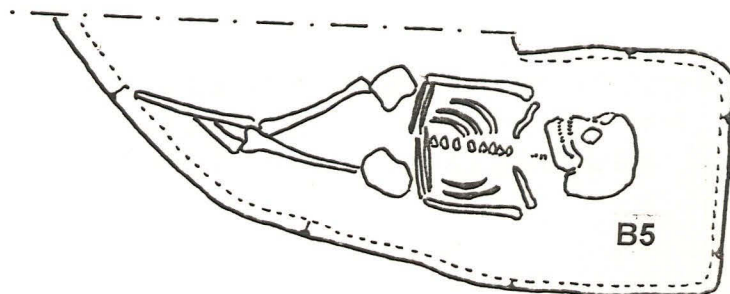
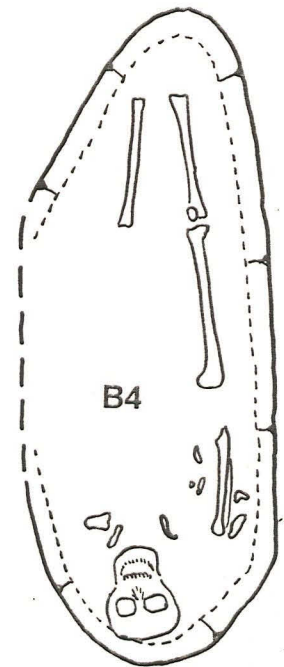
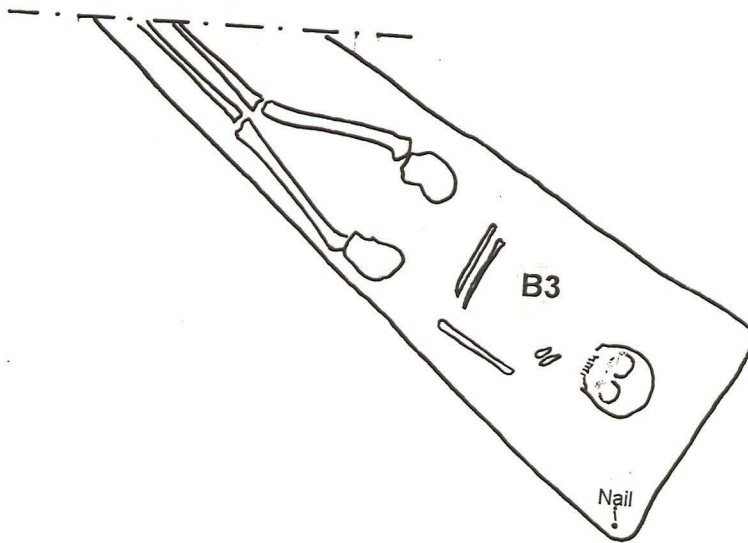
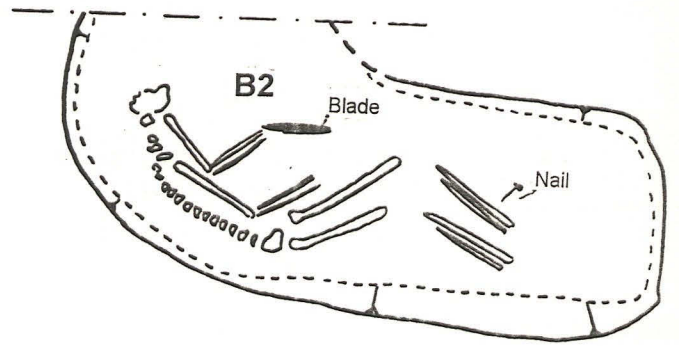
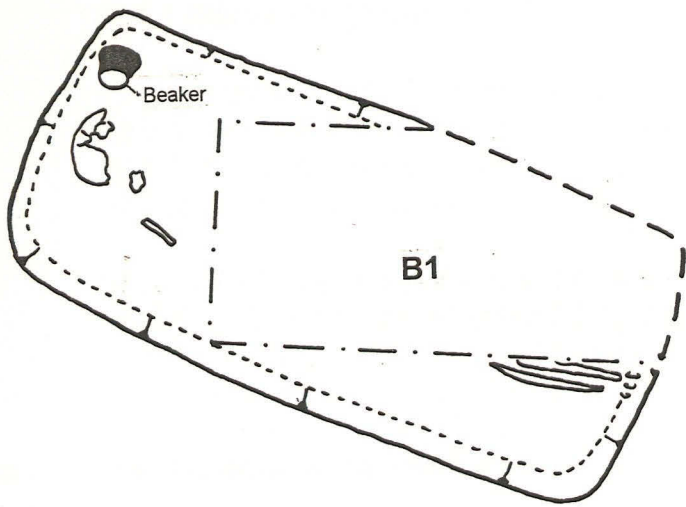


Fig. 7 Location of graves on north side of Plot A26
(see Fig. 2 for wider location of Fig. 7)

Fig. 8 Individual plans of Burials 1 - 5 (scale = 1:20)



5.4.1 Grave 156 (Burial 1)

A rectangular cut aligned east-west. The skeleton was substantially damaged by mechanical excavator. The head was at the west end of the grave, facing north. The surviving leg bones suggested that the body was in an extended or slightly crouched position.

A copper-alloy penannular brooch was found on the right shoulder of the skeleton. This has a diameter of 37mm. x 42mm., with a round profile. The terminals are rolled and close to these there is decoration consisting of incised bands. Some traces of an iron pin are present. This is not a standard Anglo-Saxon brooch type and may be a Roman example that was reused or handed down as an heirloom.

A complete undecorated pottery vessel was located to the left of the head. This vessel is a narrow necked beaker of C7th type (A Vince, pers. com.).

5.4.2 Grave 161 (Burial 2).

A sub-rectangular cut aligned east-west. The skeleton was in a flexed position with the head to the west; again facing north. An iron knife was located to the right of the skeleton. An iron nail found by the lower legs may be residual within the grave fill.

5.4.3 Grave 166 (Burial 3)

A tapering rectangular cut, suggesting that a coffin had once been present, aligned north-west to south-east. The skeleton was supine, in an extended position with the arms folded across the body. An iron nail found in the top left corner of the grave may have related to a coffin, although the occurrence of only one nail is difficult to explain and the object could be residual.

5.4.4 Grave 172 (Burial 4)

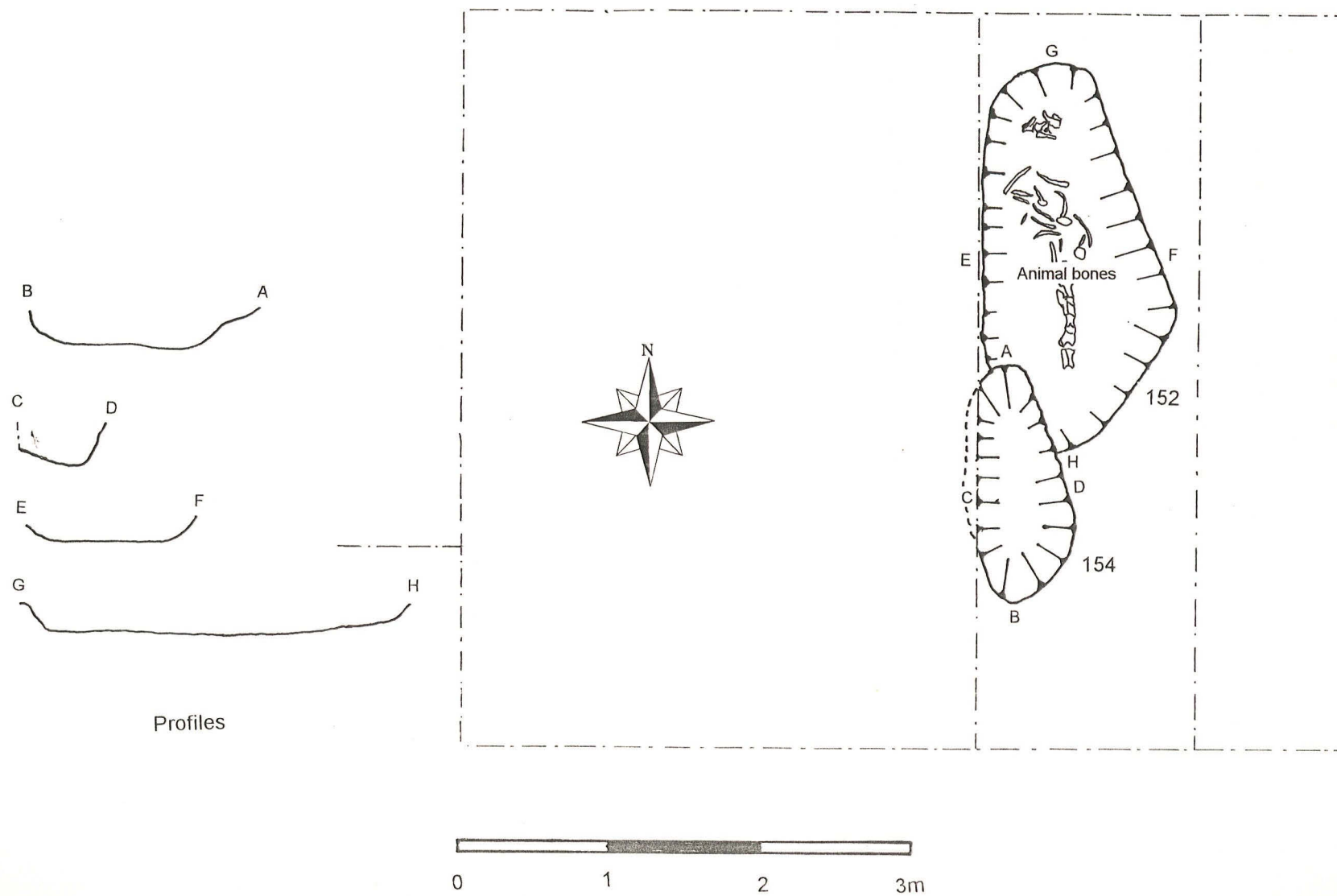
An oval cut aligned north to south. The skeleton was supine and in an extended position with the head to the south. The left side of the skeleton was truncated by Burial 2. A small quantity of Romano-British pottery was recovered from beneath right arm of the skeleton; assumed to be residual.

5.4.5 Grave 169 (Burial 5)

A blunt-ended cut (east side) aligned east-west. The skeleton was supine, in a flexed position with the head to the east, facing north. The arms were folded across the body. No artefacts were associated with this burial.

Fig. 9 Romano-British pits exposed in the garage footprint to Plot 28

(location shown on Fig. 3)



5.4.6 Romano-British pottery recovered from the inhumation burials

Romano-British pottery (presumed residual) was recovered from several of the grave fills (see Darling, Appendix 3). Although not all of these were diagnostic, those that were suggest that the sherds date to the later Roman period, which is interesting given the paucity of very late Roman pottery across the site.

5.5 The undated remains

5.5.1 Undated cremation burials (Fig.'s 2, 3 and 4)

Some eleven undated cremation burials (or suspected cremation burials) were exposed and recorded during the course of the watching brief. Two of these were in the driveway to Plot A24, with the others all falling within the footprint of Plot A23. Although the charred remains from each of these has been retained and may form the basis of any future study, no funding was available to allow qualitative assessment at this level, and each feature is simply described below.

Plot A24 (Fig. 4)

- 112 A sub-rectangular pit with near-vertical sides and an almost flat base; depth 16cm, filled with ashy sand mixed with charred bone.
- 114 A sub-rounded pit approximately 27cm deep, 35cm wide, filled with ashy sand and charred bone.

Plot A23 (Fig. 3)

- 125 Sub-rectangular pit, broadly aligned east-west, filled with an ashy sand matrix and charred bone; grey-black friable texture.
- 133 Regular bowl-shaped pit, c.20cm deep, 56cm wide; filled with dark soil/ash and charcoal matrix incorporating charred bones.
- 131 Shallow (c.10cm) bowl-shaped pit containing dark grey-black soil mixed with ash and charred bones
- 129 Irregular ?cremation pit, seen only in section; filled with ashy sand matrix mixed with charred bone and patches of red-brown silt.
- 139 Possible cremation pit, depth 12cm; contained ashy sand matrix with charred bone.
- 135 Small pit, c.14cm deep, filled with grey-black soil mixed with charred bone.

- 148 Sub-rounded bowl-shaped pit, 20cm deep, 53cm in diameter; filled with ash/sand matrix mixed with charred bone.
- 146 Small bowl-shaped pit, only 2cm depth remaining; filled with ash, silt and yellow clay, quite different to other cremations; status uncertain, possibly part of Romano-British enclosure ditch.
- 127 Sub-rounded ?cremation pit filled with ash/sand matrix but no clear indication of charred bone. Possible cremation.
- 137 Small bowl-shaped ?cremation pit, depth 12cm, diameter 58cm; filled with ash/sand matrix mixed with charred bone.

6.0 Discussion and Conclusions

The brief has resulted in the identification and recording of a ceremonial complex spanning between the Bronze Age and the Middle Saxon period. The full extent of this complex has not been determined, although the combined results of several investigations would suggest confinement around the area of the current brief. Due to the fact that recording was undertaken in a watching brief environment, there remains a strong possibility that other related remains have not been identified and, as such, several questions remain unanswered.

The spatial distribution of dated burial remains is interesting and suggests that ceremonial activities of different periods were perhaps respectful of earlier periods - there is relatively little inter-truncation between groups/classes of features: all of the inhumation burials are tightly clustered in Plot A26, and most of the undated (simple) cremations cluster in the vicinity of Plot A23.

It is not known whether or not burial groups were permanently marked, although this is possible. The large stone-capped Romano-British pit 119 was almost certainly cairn-like in appearance when first constructed, and this would account for the spread of limestone rubble that was observed in the vicinity of the pit. It could well be that the group of inhumations that has provisionally been dated to the Middle Saxon period was also marked in some way a) because the graves are so clustered and b) because no other archaeological remains were found in this area.

Previous investigations have established the presence of stone buildings on the Ermine Street frontage approximately 35m to the east of the present investigation. These buildings appear to form part of a standard ribbon development and are of more than one phase. Ephemeral Romano-British features were recorded to the rears of these properties during investigations in 1994. What is significant about the present site is that it appears to contain

remains of an exclusively ritual or ceremonial nature, suggesting that there must have been some type of formal recognition through several periods of occupation.

7.0 Review of the effectiveness of the methodology

With the benefit of hindsight, it is clear (ie given the current national approach to archaeology) that the site could well have benefited from long-term preservation and that to examine such a complex within the constraints of a watching brief was not necessarily desirable. This report has successfully documented the results of the investigation and has involved post-excavation analysis and research to a reasonable, but not ideal, standard. There remains an important archive of environmental and other remains that have been only partially investigated and would benefit from further future research, perhaps requiring funding from a third party.

With the above firmly in mind, it must be stated that nobody was in a position to predict the scale and quality of the archaeological remains present, as this was not made clear from the earlier evaluation of the site: the gradiometry carried out on this particular part of the site had located linear features that were not picked up during the course of the current brief and, presumably, the anomalies detected related to plough scores and/or similar features of relatively recent date. Most of the ceremonial features exposed were almost certainly too small to be detected by gradiometry, and the only chance of having located the complex would have been by trial excavation. Even then, trenches placed within most of the foundation footprints would have proved negative. This highlights some of the problems associated with modern evaluation techniques.

The real sadness is that the results presented represent an incomplete assessment, and given that the current properties on the site will preclude access for the foreseeable future, one can see no opportunities within the lifetime of archaeologists today to investigate the complex further.

8.0 Acknowledgements

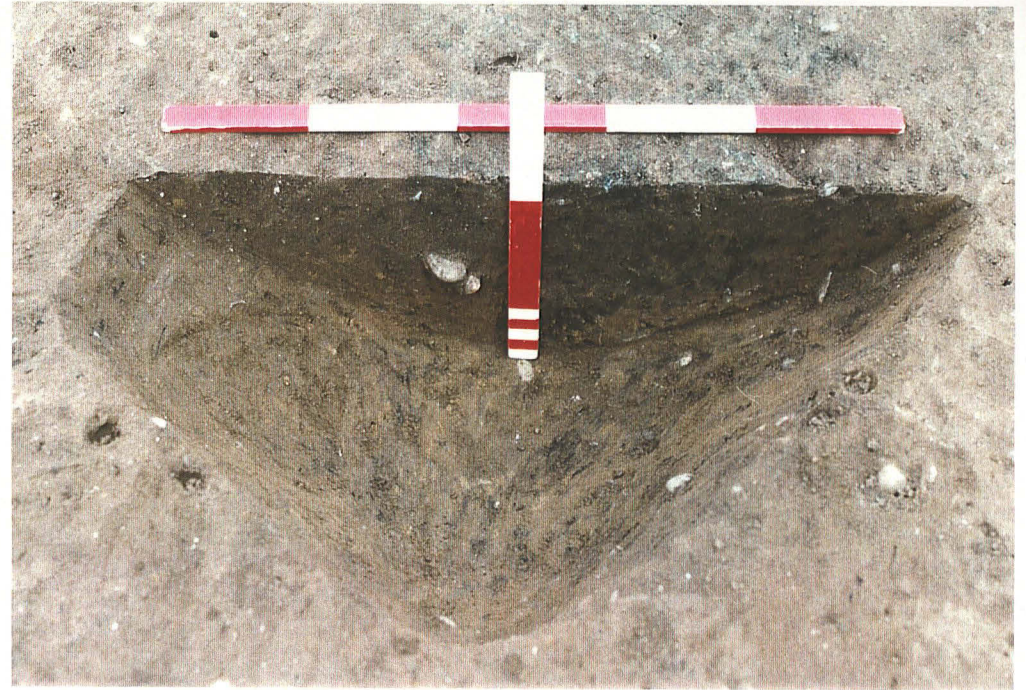
Sincere thanks are expressed to Ploughsound Ltd. for commissioning the watching brief. Thanks are certainly due to Simon Johnson who undertook most of the fieldwork on behalf of PCA and maintained exceptionally accurate site records throughout. Thanks are extended to other members of the field team: Robert Schofield, Miles Ridsdale and James Albone. Finally, thanks to the Site Manager of Ploughsound Ltd, David Woodward, and to the groundworkers who remained interested and extremely helpful throughout the course of the investigation.

9.0 References

- Jones, MJ 1980 'The Early Military Occupation of the Lincoln Area: Recent Research', in Hanson & Keppie (Eds.) *Roman Frontier Studies 1979. BAR International Series 71*
- Lyll, J 1994 *Fluxgate Gradiometer Survey: Land at Chapel Heath, Navenby* (unpublished SMR report)
- Palmer-Brown C & Rylatt, J 1999 *Archaeological Field Evaluation Report: Land at Chapel Heath, Navenby, Lincolnshire* (unpublished SMR report)
- Palmer-Brown, C 1994 *Chapel Heath, Navenby: Archaeological Evaluation Report* (unpublished SMR report)
- Whitwell, JB 1966 in *LHA 1*, 45



P1. Bronze Age cremation urn 107, showing extent of plough damage



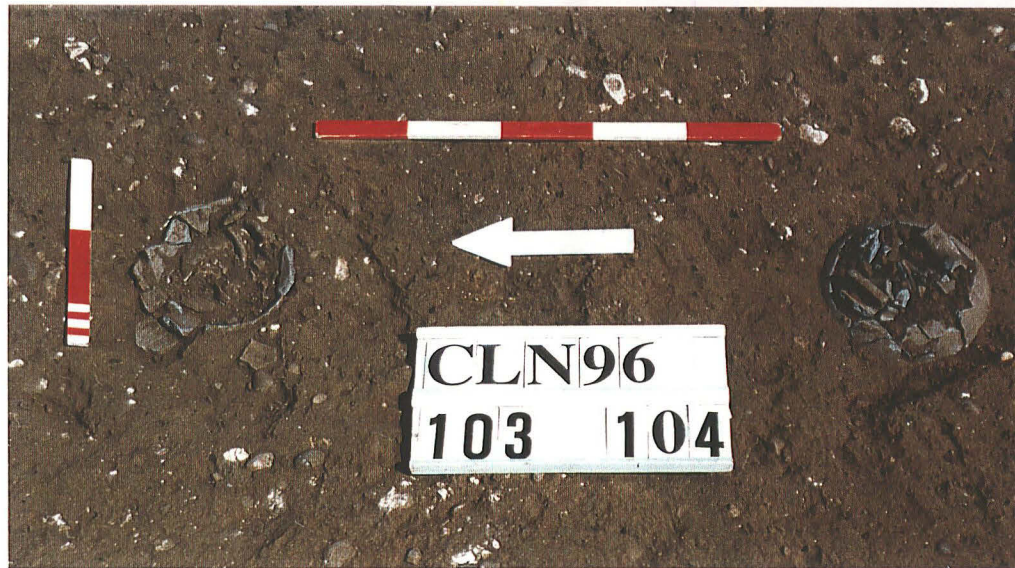
P3. Undated cremation 124/125



P2. Undated cremation 126/127



P4. Cremation pits in drive to Plot A24, looking west



P5. Romano-British cremation urns 103 and 104, as exposed



P6. Romano-British cremation 123 (note rare Nene Valley funnel-necked beaker)



P7. Top of pit 119, prior to removal of rubble capping, looking east



P8. Pit 119 partially excavated, showing articulated and non-articulated horse bones, looking north



P9. West end of pit 119 fully excavated, looking east towards baulk



P10. Articulated vertebrae and other finds in pit 152



P11. Romano-British enclosure ditch 144 exposed in north-west footing trench to Plot A23, looking north



P12 Inhumation Burial 1, looking west



P13 Inhumation Burial 1; close up showing skull and C7th beaker



P14. Inhumation Burial 2



P15. Inhumation burial 3



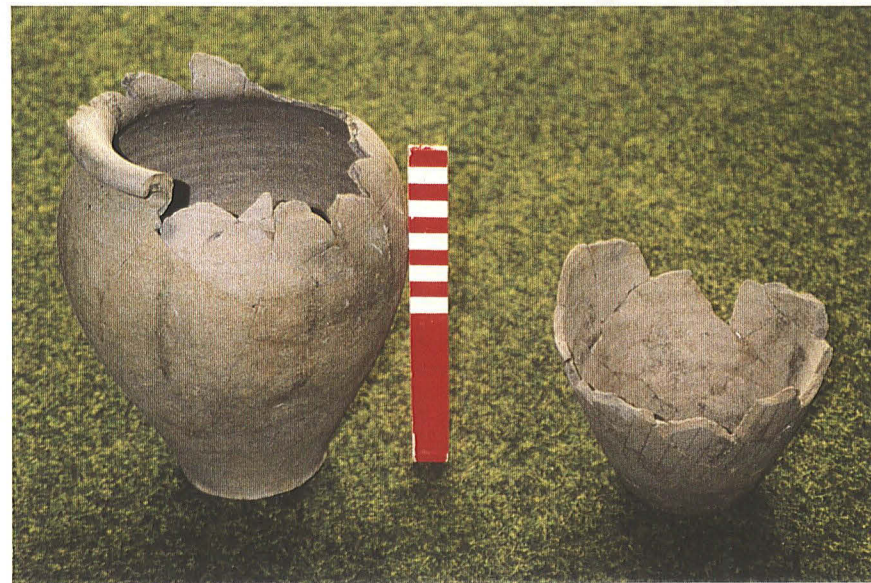
P16. Inhumation burial 4



P17. Inhumation burial 5
(lower section)



P18. Bronze Age Bucket Urn 107



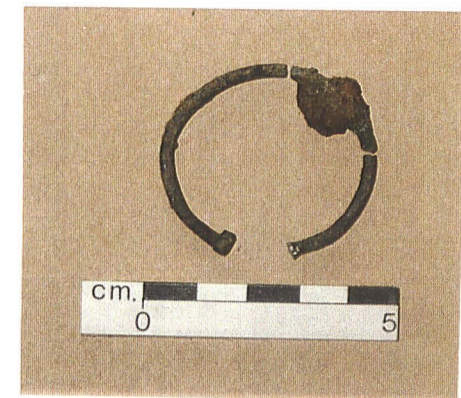
P20. Romano-British cremation urns 104 and 103



P19. Scored pottery from pit 119



P21. C7th beaker from Burial 1



P22. Copper alloy penannular brooch from Burial 1

Appendix 2

PREHISTORIC POTTERY FROM CHAPEL LANE, NAVENBY,
LINCOLNSHIRE

Author: Dr D Knight (T&PAU)

September, 1999

BRONZE AGE POTTERY FROM CHAPEL LANE (CLN96)

Three vessels were recovered from the Watching Brief on this site, from features 107, 140 and 142.

Pit 107. This small pit yielded the base and lower body wall of a coarse irregularly fired vessel, incorporating in its fabric both grog and quartz, inside which had been placed a cremation.

The upper part of the body and the rim had been truncated by modern ploughing, and hence the upper body profile cannot be determined with certainty. Numerous cracks were visible in the vessel wall before it was removed from the pit, and it proved necessary after excavation to reassemble some 33 joining body and flat base sherds. Two small non-joining body sherds from the same vessel were also retrieved. Horizontal fractures may be observed immediately above the base and around the lower body, presumably where the coils forming the vessel wall had been joined. The surviving part of the vessel is plain, although the lumpy outer surface preserves traces of finger smoothing and some areas of light brushing. The closest parallels, for both the form and fabric, lie with Deverel-Rimbury 'bucket' urns from sites such as Pasture Lodge Farm, Lincs. and Coneygre Farm, Notts. (Allen *et al* 1987, 211-7, figs 4-9 & 13-17,) - although, as noted above, the precise form of the vessel can no longer be ascertained. The somewhat meagre dating evidence for Deverel-Rimbury pottery in Lincolnshire and adjoining areas has recently been reviewed (Knight 1999), and on current evidence a date in the latter half of the second millennium BC would seem most likely for this vessel.

Feature 140. This slight depression yielded a moderately abraded sherd from the collar of a grog-tempered Collared Urn. The sherd derives from the base of the collar, and displays in the break two layers formed by the folding downwards of the vessel wall to form the collar. Two parallel horizontal lines of twisted cord impressions may be observed around the base of the collar. Two rows of twisted cord impressions, plus faint vestiges of a third row of impressions, may be seen to extend vertically from the uppermost horizontal line of cord impressions towards the rim. Comparable vessels are widely distributed in the East Midlands (*e.g.* Allen 1988, fig.15.12.78: Castor, Cambs.; *ibid.*, fig.15.65.325: Oundle, Northants.; *cf.* May 1976, fig.45) and within this region have been retrieved mainly from earlier Bronze

Age funerary contexts (Allen 1988, 31-6). Precise dating is not possible, but a date centred on the early to mid-second millennium BC would seem to fit best the available dating evidence (*e.g.* Burgess 1986; Longworth 1984, especially 79-80).

Feature 142. A plain and moderately abraded grog-tempered body sherd was recovered from the fill of this possible enclosure ditch. The fabric compares closely with that of the Collared Urn fragment, and hence this sherd might also date from the earlier Bronze Age.

REFERENCES

Allen, C.S.M. 1988. *Bronze Age Pottery of the Second Millennium bc in the East Midlands of England*. Unpublished PhD thesis, University of Nottingham.

Allen, C.S.M., Harman, M. and Wheeler, H. 1987. Bronze Age cremation cemeteries in the East Midlands, *Proceedings of the Prehistoric Society* 53, 187-221.

Burgess, C.B. 1986. 'Urns of no small variety'. Collared Urns reviewed. *Proceedings of the Prehistoric Society* 52, 339-51.

Knight, D. 1999. A regional ceramic sequence: pottery of the first millennium BC between the Humber and the Nene. in Hill, J.D. and Woodward, A., eds. *Prehistoric Britain: the Ceramic Basis*. Oxbow Monograph, Oxford.

Longworth, I.H. 1984. *Collared Urns of the Bronze Age in Great Britain and Ireland*. Cambridge University Press.

May, J. 1976a. *Prehistoric Lincolnshire*. Lincoln.

REPORT 50 ON THE POTTERY FROM NAVENBY, CLN96

for PRE-CONSTRUCT ARCHAEOLOGY

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

11 June 1999

QUANTITY AND CONDITION

The pottery came from 20 contexts, and amounted to 242 sherds weighing 4.833kg. The condition is generally good, although some contexts produced sherds, of ten of earlier date, showing abrasion. 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.

Deposit	Cxt	Sherds	Weight	Date	Comments and sherd links
Dark earth	100	10	337	3-4?	Wide mixed dates; Link with 159
Subsoil	101	1	20	2C	Abraded
Cremation	103	25	537	ML2?	Cremation urn
Cremation	104	45	1262	ML2?	Cremation urn <2>
Rubble spread	115	32	454	M3	NVCC=Date; Links with 117;118;120
Pit 119 below 115	117	20	437	M3	DWSH=Date; Links with 115;118;120
Pit 119 with horse bones	118	2	19	2C?	Links with 115;117;120
Pit 119	120	6	119	2C?	Links with 115;117;118
Pit 119 primary fill	121	13	168	L2?	VESIC bs abraded
Cremation	122	11	103	M3	Cremation <12>
Enclosure? ditch upper	141	21	153	ML2?	NAT bs very abraded & burnt
Fill pit 152	149	22	286	L3-4	
Fill pit 152 N end	150	5	362	EM2?	
Fill pit 152 S end	151	3	8	L2-3?	
Grave 158 fill	155	5	199	M3+?	
Grave 162 fill 159	159	11	210	3-4?	Link with 100
Pit 164 fill	163	4	28	ROM	
Grave	168	3	66	L3-4	
Grave 173	171	2	59	3C?	
Grave 173	172	1	6	ROM	
Total		242	4833		

Sherds from an early Roman jar decorated, and in a fabric, in a Late Iron Age style provided links between 115, 117, 118 and 120; a dish provided additional links between 115 and 117.

81 sherds, 1.902kg came from cremations 1, 2 and 12, accounting for approximately a third of the finds.

OVERVIEW OF FABRICS

The fabrics from the excavations are detailed on table 2.

Table 2 Fabrics, total site

Fabric	Code	Shs	%	Weight	%
Samian South Gaul	SAMSG	2	0.83	3	0.06
Mortaria Lincs	MOLO	1	0.41	220	4.55
Amphora Dressel 20	DR20	1	0.41	50	1.03
Cream	CR	4	1.65	21	0.43
Oxidized fine	OXF	2	0.83	19	0.39
Parchment painted	PARC	1	0.41	3	0.06
Nene Valley colour-coated	NVCC	16	6.61	140	2.90
Oxfordshire red colour-coated?	OXRC?	1	0.41	26	0.54
Grog tempered	GROG	3	1.24	81	1.68
Native style	NAT	18	7.44	466	9.64
BB1 Dorset	BB1	13	5.37	157	3.25
Grey fine	GFIN	1	0.41	5	0.10
Grey	GREY	168	69.42	3430	70.97
Dales ware shell-gritted	DWSH	2	0.83	55	1.14
Shell-gritted	SHEL	4	1.65	52	1.08
Vesicular	VESIC	1	0.41	12	0.25
Tile	TILE	3	1.24	91	1.88
Total		242	100	4833	100

THE CREMATIONS

The two main cremation urns are both grey jars, that from 103 lacking the rim although neck fragments survive. The 104 urn is undecorated, but that from 103 is decorated with diagonal burnished lines, a relatively unusual decoration in this area. Neither are vessels which are closely datable, suggesting a broad mid to late 2nd century range. The colour-coated beaker from 122 is a less common type from the Nene Valley, a funnel-necked type with constrictions on the body and barbotine stripes, and is likely to date to the mid 3rd century. A further fairly complete vessel is a small Black-Burnished 1 beaker from 121, the primary fill of pit 119, for which a later 2nd century date is feasible. Whether this was originally related to a cremation is unknown, and the presence of horse bones in this pit indicates an unusual deposit. Context 117 at the top of the pit is dated by the presence of a Dales ware jar but it is possible that this could have been intrusive from the overlying rubble spread, and the other contents of the pit could all date to the 2nd century. A small cream fabric jar or beaker, from the rubble spread 115 is also a relatively unusual vessel.

A notable feature of the cremation urn from 104 is the traces of burning as vertical streaks on the exterior, but also traces on the interior. This suggests that the vessel was placed on the pyre while it was still alight, and the cremated bones were still alight when deposited in the urn. There are similar traces of burning on the interior of the urn from 103.

THE BURIALS

The pottery from the fills of the graves - all residual sherds and not grave goods - indicate the burials to be all of later date. 22 sherds from five graves is sparse evidence for definite dating. 155 contained a wide-mouthed bowl, of the type made at the Rookery Lane kilns in Lincoln (Webster 1960; although not necessarily from that source), which indicates a later 3rd to 4th century bracket, while 159 produced sherds from a thick late Roman jar often seen in

4th century contexts, although the date-range is not well defined. The only other notable evidence was from 168, a collared rim jar, again of a type made at the Rookery Lane kilns, but which was also made by the Swanpool kilns (Webster 1960, fig 3, no 15; Webster & Booth 1947, fig 3, C40).

DISCUSSION

The overall assemblage is very mixed, and covers virtually all the Roman period. Early pottery includes the two sherds of samian, both from South Gaul and therefore likely to be of 1st century date, and also at least one of the grog-tempered sherds, an abraded bodysherd from 155, while the lost inclusions from a vesicular sherd from 121 may have also been grog rather than shell or calcareous inclusions. Grog-tempered pottery tends to be late Iron Age in this area, although the fabric continues into the early Roman period. A tiny shell-gritted rim from 100 is probably an early vessel, but is too small to be certain on the mode of manufacture, crucial for dating. It is possibly wheel-made, and could be late Iron Age or early Roman. Sherds from a large jar from the rubble spread 115 and the underlying pit 119 are decorated in a late Iron Age to early Roman style, while the fabric is consistent with such a dating. A similar vessel with vertical scored decoration was found in an early context in the fortress area in Lincoln (Webster 1949, fig 12, no 48).

Most of the pottery fits the 2nd to 3rd century. The source of the strongly hooked rim mortarium from 150 (pit 152), is uncertain, but the fabric suggests it may be a relatively local product, consistent with local production in the 2nd century. The only vessel providing any dating for the enclosure ditch 141 is a fragmentary jar with a cordon, which cannot be closely dated, but may fit a mid to late 2nd century date. There is little evidence to suggest definite 4th century dating, although a footring base from 149 is probably from an Oxfordshire red colour-coated bowl, which is unlikely to have arrived in this area until the 4th century, probably the latter part. This base has a type of graffito consisting of a grid design scratched on the interior. Some thick sherds from a large jar from 100 and 159 are of a type usually found in the 4th century contexts in Lincoln. As noted above, two of the vessels from the grave fills are of types made at the Lincoln Rookery Lane and Swanpool kilns, which would fit a later 3rd to 4th century range. Otherwise there are no other sherds definitely of 4th century date. Since the burials are of later date, the paucity of later pottery would be consistent with the area being unoccupied at that time, receiving no settlement rubbish.

RECOMMENDATIONS

14-17 vessels have been selected as of value to be illustrated. These are listed in Appendix 1. Those most important for illustration are the cremation urns, including the beaker from 122, the contents of the pit 119, and the mortarium, although it should be emphasized that the other vessels elucidate the date-range of activity on the site.

BIBLIOGRAPHY

- Webster, G., 1949 'The Legionary Fortress at Lincoln', *Journ. Roman Stud.*, 39, 57-80.
Webster, G., 1960 A Romano-British pottery kiln at Rookery Lane, Lincoln, *Antiq J*, 40, 214-40.
Webster, G. & Booth, N., 1947 The excavation of a Romano-British pottery kiln at Swanpool, Lincoln, *Antiq J*, 27, 61-79.

APPENDIX 1

DRAWINGS LIST

DNo	Cxt	Fabric	Form	Manuf	V	D	Details	Link	Shs	Wt
1	103	GREY	JCUR	BDL	1	D	BASE/BODY;NECK FRAGS	-	25	537
2	104	GREY	JCUR	-	1	D	COMP PROF;BURNING TRACES INT/EXT	-	45	1262
3	122	NVCC	BKCGF	BADS	1	D	COMP PROF POSS	-	11	103
4	121	BB1	BKCUR	LA	1	D	COMP PROF? G76-17?	-	12	156
5	141	GREY	JNN	-	1	D	RIM;CORDON NECK;ANGUL? BODY;FTM	-	20	143
6	117	DWSH	JDW	-	1	D	RIM/PT BODY;SOOTED	-	2	55
7	115	GREY	DEXR	-	-	D	RM;NON J BASE;SAME	117	3	55
7	117	GREY	DEXR?	-	1	D	RIM;NON J BASE;BURNT;FLAKED;SAME	115	4	44
8	115	CR	J?	-	-	D	RIM;PT WALL;DIAM 8;SMALL	-	1	12
9	115	GREY	BKEV	-	-	D?	RIM;PT WALL	-	1	4
10	115	GREY	JEV	-	1	D	RIM>SHLDR;BS	-	5	79
11	150	MOLO	MHK	-	-	D	STRONG HOOK RIM/PT WALL;TG ?RB;MOST LOST	-	1	220
12	155	GREY	BWM	-	-	D	RIM U/C>SHLDR	-	1	150
13	100	GROG	JLS	-	1	D	RIM/SHLDR;SOOTED	-	2	75
14	100	GREY	J	-	-	D	RIM/SHLDR	-	1	18
-	100	GREY	DPR	-	1	D?	RIM/WALL;HIGH BURNISH	-	1	17
-	100	SHEL	JEV?	-	-	D?	RIM FRAG ?WHEEL ?BURNISH	-	1	4
-	117	NAT	JS	SWL;SV	1	D?	BSS;HEAVY L'SCALE INT;VERT SCORE/BRUSH DEC;SAME	115;118;120	11	313
-	118	NAT	JS	SWL;SV	-	D?	BS;SAME	115;117;120	1	17
-	120	NAT	JL?	SVL	1	D?	BSS;SAME	115;117;118	2	95

Cxt	Fabric	Form	Manuf+	Ves	D?	DNo	Details	Links	Shs	Weight
100	SAMSG	30-37	-	-	-	-	DECOR BS	-	1	2
100	GREY	JL?	-	1	-	-	THICK BSS;?LATE;SAME?	159	2	208
100	GREY	DPR	-	1	D?	-	RIM/WALL;HIGH BURNISH	-	1	17
100	GROG	JLS	-	1	D	13	RIM/SHLDR;SOOTED	-	2	75
100	GREY	J	-	-	D	14	RIM/SHLDR	-	1	18
100	GREY	-	-	-	-	-	BSS;ONE V BURNT	-	2	13
100	SHEL	JEV?	-	-	D?	-	RIM FRAG ?WHEEL ?BURNISH	-	1	4
100	ZDATE	-	-	-	-	-	3-4?	-	-	-
100	ZZZ	-	-	-	-	-	WIDE MIXED DATES	-	-	-
101	GREY	BK	-	-	-	-	FTM BURNISHED;ABR;TRACE STRING	-	1	20
101	ZDATE	-	-	-	-	-	2C	-	-	-
101	ZZZ	-	-	-	-	-	ABRADED	-	-	-
103	GREY	JCUR	BDL	1	D	1	BASE/BODY;NECK FRAGS	-	25	537
103	ZDATE	-	-	-	-	-	ML2?	-	-	-
103	ZZZ	-	-	-	-	-	CREMATION URN	-	-	-
104	GREY	JCUR	-	1	D	2	COMP PROF;BURNING TRACES INT/EXT	-	45	1262
104	ZDATE	-	-	-	-	-	ML2?	-	-	-
104	ZZZ	-	-	-	-	-	CREMATION URN <2>	-	-	-
115	CR	J?	-	-	D	8	RIM;PT WALL;DIAM 8;SMALL	-	1	12
115	NVCC	BK	-	-	-	-	FTM BASE;PT WALL;UNDEC;LTRB FAB	-	4	35
115	NVCC	BKFOS	-	-	-	-	BS LTRB FAB	-	1	2
115	GREY	DEXR	-	-	D	-	RM;NON J BASE;SAME	117	3	55
115	GREY	BKEV	-	-	D?	9	RIM;PT WALL	-	1	4
115	GREY	JEV	-	1	D	10	RIM>SHLDR;BS	-	5	79
115	GREY	J	-	-	-	-	FTM BASE	-	1	38
115	GREY	J	-	1	-	-	PLAIN BASE;ABR	-	2	49
115	GREY	J	LA	1	-	-	BSS	-	3	48
115	GREY	JB?	LA?ARC?	-	-	-	BS ABR	-	1	14
115	GREY	-	-	-	-	-	BSS	-	7	87
115	NAT	JL?	SVL	-	-	-	BSS;SAME IN	117;118;120	3	31
115	ZDATE	-	-	-	-	-	M3	-	-	-
115	ZZZ	-	-	-	-	-	NVCC=DATE	-	-	-
117	NAT	JS	SWL;SV	1	D?	-	BSS;HEAVY L'SCALE INT;VERT SCORE/BRUSH DEC;SAME	115;118;120	11	313
117	DWSH	JDW	-	1	D	6	RIM/PT BODY;SOOTED	-	2	55
117	GREY	DEXR?	-	1	D	7	RIM;NON J BASE;BURNT;FLAKED;SAME	115	4	44
117	OX?	CLSD	-	-	-	-	THIN WALL BS;BURNT;GRY FAB;LTBN SURFS?	-	1	2
117	GREY	-	-	-	-	-	BS;BURNT	-	1	5
117	SHEL	JL?	WM?	-	-	-	BS;LTBN EXT;F.SPARSE SHELL;ABR	-	1	18
117	ZDATE	-	-	-	-	-	M3	-	-	-
117	ZZZ	-	-	-	-	-	DWSH=DATE	-	-	-
118	NAT	JS	SWL;SV	-	D?	-	BS;SAME	115;117;120	1	17
118	GREY	-	-	-	-	-	BS	-	1	2
118	ZDATE	-	-	-	-	-	2C?	-	-	-
120	SAMSG	CUP?	-	-	-	-	FRAG FTRING	-	1	1
120	CR	CLSD	-	-	-	-	THIN WALL ?FLAGON BS;FINE FAB	-	1	4
120	NAT	JL?	SVL	1	D?	-	BSS;SAME	115;117;118	2	95
120	GREY	-	-	-	-	-	BSS	-	2	19
120	ZDATE	-	-	-	-	-	2C?	-	-	-
121	BB1	BKCUR	LA	1	D	4	COMP PROF? G76-17?	-	12	156
121	VESIC	JB?	-	-	-	-	GRY;RB EXT;LOST SHELL/GROG?	-	1	12
121	ZDATE	-	-	-	-	-	L2?	-	-	-
121	ZZZ	-	-	-	-	-	VESIC BS ABRADED	-	-	-
122	NVCC	BKCGF	BADS	1	D	3	COMP PROF POSS	-	11	103
122	ZDATE	-	-	-	-	-	M3	-	-	-
122	ZZZ	-	-	-	-	-	CREMATION <12>	-	-	-
141	GREY	JNN	-	1	D	5	RIM;CORDON NECK;ANGUL ? BODY;FTM	-	20	143
141	NAT	JB?	-	-	-	-	BS;DKGRY FAB;LT? EXT;VABR;BURNT	-	1	10
141	ZDATE	-	-	-	-	-	ML2?	-	-	-
141	ZZZ	-	-	-	-	-	NAT BS VABR & BURNT	-	-	-
149	OXRC?	B?	GRAF	-	-	-	FTRG;SCORED GRID LINES INT BASE	-	1	26
149	GFIN	JBK?	ROUZ	-	-	-	BS;LTGRY;WIDE ROUZ;BURNISHED	-	1	5
149	GREY	DPR	-	-	-	-	RIM/WALL;BURNISH LTGRY	-	1	5
149	GREY	BD	-	-	-	-	BASAL SHERD;SCRIBED U'SIDE?	-	1	13
149	GREY	BFBL	-	-	-	-	RIM FR/PT WALL;BURNT	-	1	8
149	GREY	BD	-	-	-	-	BS	-	1	9
149	BB1	BD	-	-	-	-	BS	-	1	1
149	OXF	-	-	-	-	-	FTRG? & ABR FRAG	-	2	19
149	GREY	-	-	-	-	-	BSS;SOME ABR	-	9	88
149	GREY	-	-	-	-	-	BS;RB FAB;EARLIER?	-	1	21
149	TILE	-	-	-	-	-	TILE FRAGS	-	3	91
149	ZDATE	-	-	-	-	-	L3-4	-	-	-
150	GREY	J	-	1	-	-	PL.BASE;SOFT ABR FAB;RB CORTEX	-	4	142
150	MOLO	MHK	-	-	D	11	STRONG HOOK RIM/PT WALL;TG ?RB;MOST LOST	-	1	220
150	ZDATE	-	-	-	-	-	EM2?	-	-	-
151	PARC	CLSD	PAS	-	-	-	BS;?FLASK	-	1	3
151	CR	CLSD	-	1	-	-	FLAGON? PINKISH FAB	-	2	5
151	ZDATE	-	-	-	-	-	L2-3?	-	-	-

155	GREY	BWM	-	-	D	12	RIM U/C>SHLDR	-	1	150
155	GREY	-	-	-	-	-	BSS	-	2	25
155	GROG	-	-	-	-	-	BS;DKGRY;LTRB EXT;VABR	-	1	6
155	SHEL	-	-	-	-	-	GRY WM BS;ABR;SPARSE SHELL/CHALK?	-	1	18
155	ZDATE	-	-	-	-	-	M3+?	-	-	-
159	DR20	A	-	-	-	-	BS;ABR;BURNT	-	1	50
159	SHEL	-	-	-	-	-	BASE FR;BURNT	-	1	12
159	GREY	CLSD	-	-	-	-	NECK W CORDON	-	1	3
159	GREY	CLSD	-	-	-	-	BS BURNISHED EXT	-	1	7
159	GREY	-	-	-	-	-	BSS	-	5	74
159	GREY	JL	-	-	-	-	THICK BSS;LROM?;SAME?	100	2	64
159	ZDATE	-	-	-	-	-	3-4?	-	-	-
163	GREY	-	-	-	-	-	BSS	-	4	28
163	ZDATE	-	-	-	-	-	ROM	-	-	-
168	GREY	JCR	-	-	-	-	RIM FR;RL/SPOOL	-	1	40
168	GREY	-	-	-	-	-	BSS LTGRY	-	2	26
168	ZDATE	-	-	-	-	-	L3-4	-	-	-
171	GREY	CLSD	BV	-	-	-	BS;LTGRY;VERT BURNISH;?BASAL AREA	-	1	26
171	GREY	-	-	BSROLL	-	-	BS	-	1	33
171	ZDATE	-	-	-	-	-	3C?	-	-	-
172	GREY	-	-	-	-	-	BS	-	1	6
172	ZDATE	-	-	-	-	-	ROM	-	-	-

Appendix 4

Context	Description
100	Undifferentiated dark-earth comprised of a mid-dark brown humic clayey sand with frequent angular limestones and flints. Depth 30-35 cm. Plot A25
101	Light ginger-brown clayey coarse sand with occasional small pebbles; subsoil below 100, derived from underlying clay. Depth 50 cm. Plot A25
102	Layer comprised of >90% Clay; red-brown clay with patches of coarse grit. Angular limestones show intermittently in base of foundations. ?Northampton Clay, depth not determined. Plot A25
103	SF 1: Romano-British Grey Ware cremation urn; upper <i>c.</i> 70 % truncated by plough. Contained cremation [105], consisting of charred bone mixed with soil. No obvious cut visible. Cremation coded [105]. Road area, dwg 2.
104	SF 2: Romano-British Grey Ware cremation urn; rim broken during machining. Contained cremation [106]. This was x-rayed at LCC Conservation Lab., and the contents were emptied prior to conservation of the rim (damaged by JCB). Road area.
105	Cremation: ashy sand matrix with charred bone. Dark grey-black friable texture. Filled vessel [103]/SF1. R-B. Road area.
106	Cremation: ashy sand matrix with charred bone. Dark grey-black friable texture, forming contents of [104]. R-B. Road area
107	SF 3: Lower portion of Bronze Age cremation urn. Upright with upper portion truncated by plough. Contained cremation [108]. In drive to plot 24, dwg 6.
108	Cremation: ashy sand matrix with charred bone. Dark grey-black friable texture. Forms fill of [107] and cut [109]. Bronze Age. In drive to plot 24, dwg 6
109	Cut: round with near vertical sides and flat base. Urn [107] appeared to have been placed in cut prior to deposition of cremation [108]. Depth <i>c.</i> 20 cm. In drive to plot 24, dwg 3.
110	Plough furrow, 12cm wide, 9cm deep; truncates [107-109]. In drive to plot 24, dwg 6.

- 111 Cremation: ashy sand matrix with charred bone. Dark grey-black friable texture. Contained by [112]. In drive to plot 24, dwg 5/6
- 112 Sub-rectangular pit with near-vertical sides and an almost flat base sloping slightly to the north-west. Depth 16cm. Contained [111]. Drive to plot 24, dwg 5/6.
- 113 Cremation: ashy sand matrix with charred bone. Dark grey-black friable texture. Contained by [114]. Drive to plot 24, dwg 4/6
- 114 Rounded ?B/A cremation pit containing cremation [113]. Depth 27 cm, width 35cm. In drive to plot 24, dwg 4/6.
- 115 Rubble spread: possibly a cairn or capping over underlying pit [119]. Contained Romano-British pottery in upper margins. Stone re-used as some are heat affected. Damaged by plough and frost action. In road area, dwg 7. ?Top of cairn-type feature, levelled by ploughing.
- 116 Same as [115]: alignment of *in situ* stone slabs circuiting cut [119], seals [117]. Dwg 7.
- 117 Fill of pit [119]. Comprised of a mid-brown silty coarse sand with grit and limestone inclusions. Occasional charcoal flecks. Contained occasional bone and scored (?developed native tradition) pottery. Typical RB forms also present. Depth variable.
- 118 Series of articulated and stray bones of a horse within the eastern half of pit [119]. All at the same level, the bones appear to represent a quartered animal deposited with decorated scored pottery. Is this a ritual offering?
- 119 East-west aligned (?ritual) pit with *c.* 50° sides. Irregular but broadly flat-bottomed, roughly rectangular (boat shaped) with sub-rounded ends. Road area, dwg 9.
- 120 Essentially same as [117] but forms fill of pit [119] below articulated bone sections [118].
- 121 Primary fill of [119]. Mid-brown silty coarse sand with limestones and charcoal flecks. Contained *c.* 40% complete ?burnished vessel.
- 122 Cremation: ashy sand matrix with charred bone. Dark grey-black friable texture. Contained remains of a fine ware RB ribbed beaker (SF 12) and three Fe nails (SF 11). The beaker was broken and deliberately placed during deposition. The nails, one very well preserved, did not correspond to surviving charcoal lumps; it is not clear whether the nails form an offering or were contained within the wood used to burn the body. Plot 23, dwg 12/13

- 123 Sub-rounded cremation pit containing [122]. Romano-British. Dwg 12/13
- 124 Undated cremation: ashy sand matrix with charred bone. Dark grey-black friable texture. Plot 23, dwg 12/14.
- 125 Sub-rectangular cremation pit containing [124]. Broadly aligned east-west. Plot 23, dwg 12/14.
- 126 Possible undated cremation: ashy sand matrix with little sign of charred bone. Dark grey-black friable texture. Plot 23, dwg 12/15.
- 127 Rounded (?) cremation pit containing [126]. Plot 23, dwg 12/15.
- 128 Undated cremation: ashy sand matrix with charred bone and patches of reddish brown silt. Dark grey-black friable texture. Plot 23, dwg 16/17.
- 129 Irregular cremation pit seen in section only. Sealed by [140], and containing [128]. Plot 23 dwg 16/17.
- 130 Undated cremation: ashy sand matrix with charred bone and occasional pockets of reddish brown coarse silty sand. Dark grey-black friable texture. Plot 23, dwg 16/18.
- 131 Regular bowl shaped cremation pit, depth 10 cm. Contains [130].
- 132 Undated cremation: ashy sand matrix with charred bone. Dark grey-black friable texture. Disturbed by root activity, contained by [133]. Plot 23, dwg 16/19
- 133 Regular bowl shaped cremation pit with *c.* 50° sides, Contains [132]. 20cm deep, 56cm wide.
- 134 Undated cremation: ashy sand matrix with charred bone. Dark grey-black soil, friable texture. Upper deposit formed an indistinct horizon with [140], therefore uncertain whether it was sealed by [140]. Contained by [135]. Plot 23, dwg 16/20.
- 135 Cremation pit containing 134, depth >14 cm, width >46cm. Unsure whether sealed by or cuts [140].
- 136 Undated cremation: ashy sand matrix with charred bone. Dark grey-black; friable texture. Contained [137]. Plot 23, dwg 16/21.
- 137 Bowl-shaped cremation pit, depth 12 cm, width 58cm. Cutting [140].
- 138 Possible cremation (undated) or ?post hole: ashy sand matrix with charred bone. Dark grey-black; friable texture. Contained by [139]. Plot 23, dwg 16/22.

- 139 Possible cremation pit or post hole, depth 12 cm, width 28cm.
- 140 Layer not previously recorded; local to plot 23 as this sits in a slight depression. May be a buried soil or a 'B' horizon not homogenised by plough action. Comprised of a mid-red-brown coarse silty sand with frequent pebble and occasional charcoal inclusions. No dating. Depth *c.* 10 cm. Plot 23 (?not drawn).
- 141 Upper Fill of ?enclosure ditch [144]. Indistinguishable from [140], unsure whether deliberate backfill or similar post-depositional processes. Depth 27 cm. Matrix contained pottery + bone. Plot 23, dwg 16/24/26
- 142 Similar to [141]. Mid-dark red-brown: may be a truly different context or resulted from worm sorting and leaching. Depth 15-18 cm. Plot 23, dwg 16/24/26. No dating.
- 143 Primary Fill of ditch [144], undated. Moderately coarse sandy silt-clay derived from weathering. Depth 12 cm. Plot 23, dwg 16/24/26.
- 144 Enclosure ditch: Cut enters plot A 23 on a north-east/south-west alignment and turns through 90^o to exit on a north-west/south-east alignment. Broadly 'V' shaped profile with a slightly flat base; broken step to profile at corner. Depth 85 cm. Plot 23, dwg 16/24/26.
- 145 Deposit/Fill: discovered when cleaning for photograph. Distinct from all other deposits recorded. Comprised of ash, silt and yellow clay. Depth 2 cm. ?Contained by [146]. Plot 23, dwg 16.
- 146 ?Cut, 2cm deep, 23cm wide: contains [145].
- 147 Undated cremation: ashy sand matrix with charred bone. Dark grey-black; friable texture. Contained by [148], sealed by [140]. Plot 23, dwg 16/23.
- 148 Sub-rounded cremation pit, roughly bowl-shaped with regular steep sides. Depth 20 cm, diam. 53cm. Plot 23, dwg 16/23.
- 149 Fill within [152]: dark brown sandy clay mixed with limestone frags, pot sherds and bone fragments. Garage to plot 28, dwg 27.
- 150 Contexts allocated to a group of artefacts/assemblage within [149], north end of pit [152] - bone, RB coarse pottery. Garage to plot 28, dwg 27.
- 151 Contexts allocated to a group of artefacts/assemblage within [149], south end of pit [152] - bones included 6 articulated vertebrae associated with RB fine ware pottery. Garage to plot 28, dwg 27.

- 152 Sub-rectangular pit, aligned north-south, and partially destroyed by machine. Unclear relationship with [154] to south. Garage to plot 28, dwg 27.
- 153 Fill comprising friable dark brown clay-sand; containing fire-shattered pebbles, pot sherd and bone fragments. Within pit [154], aligned N-S. Garage to plot 28, dwg 27
- 154 Sub-rectangular pit, 0.75m wide, >0.5m deep, 1.1m long. Contains [153]. Garage to plot 28, dwg 27.
- 155 Fill of grave [158], comprising loose brown sandy silt mixed with gravel fragments. Grave backfill, no traces of coffin. Plot 26A
- 156 Articulated skeleton within grave [158]: Saxon brooch on left shoulder, head facing west; complete C7th drinking vessel [157] adjacent to head. Some disturbance as a result of machine excavation. Plot 26A.
- 157 Complete C7th pot in grave 158. Plot 26A.
- 158 Grave containing 155, 156 and 157. Cut orientated east-west. Plot 26A.
- 159 Fill of grave 162, comprising brown sandy soil mixed with limestone gravel frags. Plot 26A.
- 160 Iron knife blade in grave 162. 22cm long, 1.5cm wide. Plot 26A.
- 161 Crouched skeleton in grave 162: orientated E-W, head facing W. Laid on side, body facing north. Legs flexed, semi-crouched position.
- 162 Grave cut associated with 159 - 161. This grave cut through grave backfill 165 and grave backfill 171. Plot 26A.
- 163 Fill of pit 164: brown sandy silt mixed with gravel; sherds of RB pottery. Plot 26A.
- 164 Pit cut through natural; contains fill 163. Plot 26A.
- 165 Fill of grave, cut by 162, comprising brown sandy soil mixed with limestone gravel frags. Part of grave 167. Plot 26A.
- 166 Skeleton in grave 167. Orientated east-west, head towards the east. Remains damaged by machine (some bones missing); Fe nail recovered from corner of grave (?coffin remains); lying on its back, left arm twisted upwards, hand close to left shoulder; lower right arm across body. Plot 26A. Dwg 32/35.
- 167 Grave cut orientated east-west; containing 165 and 166. Cut through

168. Plot 26A. Dwg 32/35.
- 168 Grave fill cut by 167: brown/yellow loose silty sand mixed with gravel and occ. charcoal. Part of grave 170. Plot 26A, dwg 32/35.
- 169 Skeleton in grave 170; orientated E-W, head at E end. Plot 26A, Dwg 32/35.
- 170 Grave cut containing 168 and 169; flat base. Plot 26A, Dwg 32/35.
- 171 Fill of grave 173; cut by 162; comprises brown/grey loose silty sand mixed with gravel and occ. charcoal. ?Residual grey ware pottery; Plot 26A, dwg 31/35.
- 172 Adult skeleton in grave 173; orientated N-S, head to S; upper left leg and body truncated by grave 162; pottery trapped under right arm, which is bent up above right shoulder. Plot 26A, dwg 34/35.
- 173 Grave cut orientated N-S. Plot 26A, dwg 34/35.

Appendix 5

Site Archive

The site archive (documentary and object) for this project is largely complete and will be deposited at the Lincoln City & County Museum (object) and the Lincolnshire Archives Office (documentary) within one year. Access to the archive may be granted by quoting the global accession number 85.96.

At the time of writing, the author was of the belief that the client company, Ploughsound Ltd. would be interested in retaining part of the finds archive. Further consultation with regard to this matter will take place prior to archive submission.

Church Lane, Navenby CLN96
Animal Bone Report

Introduction

Excavations by Pre-Construct Archaeology at Church Lane, Navenby, uncovered a large pit which appeared to contain the remains of a horse burial and had two Romano-British cremation burials immediately to the north. A number of other cremation burials were excavated nearby and five inhumations approximately 30 metres to the south east of the pit. The function of the pit is unknown although the initial interpretation has suggested it may have had a ritual function. Three other contexts unassociated with this pit produced animal bone.

The large pit, 119, contained an assemblage of bones (Fig. 5) originally interpreted on site as a burial. This assemblage is concentrated at the eastern end of the pit and a number of the bones were lying in articulation.

A total of 141 bones and fragments have been recorded and catalogued from the site (see Appendix). The bulk of these are horse bones, but in contrast to the early interpretation of feature 119, at least two horses are represented among the remains. Four contexts include material deriving from the fills of the pit, context number 118 was assigned to the assemblage of articulated and grouped bones from 119 (see Fig. 5). The remainder of the assemblage is from context 141, the fill of ditch 144 (see Fig. 2), and contexts 149 and 151, the fills of a north south aligned pit, 152, in the north east corner of the site (see Fig. 2). Most of this material was in a good state of preservation, although a few showed some evidence of surface etching and erosion. All the features from which animal bone has been collected are dated to the Romano-British period.

The animal bone was identified by reference to modern reference skeletons in the collection of the author and recorded directly into an ACCESS database using the recording procedures and codes routinely used by the Environmental Archaeology Consultancy. The details of these codes and the data recorded in each field are given in the key accompanying the attached Bone Catalogue (Appendix).

Analysis

Pit 119

The rubble capping, 115, covering the bone spread, 118, produced ten bone fragments including part of a cattle skull, an innominate fragment, two sheep bones and fragments of horse metatarsus, cervical vertebra and a deciduous lower premolar. The horse metatarsus shaft is clearly from a reasonably large and robust animal. The fills of the pit 119, 117 and 120, produced a further fifteen bones in which cattle, dog, sheep and a corvid, as well as horse are represented.

The bone spread itself, context 118, produced fifty two bones and thirty unidentifiable fragments. The bulk of the identifiable material is horse, but bones of cattle, dog and sheep are also present (Table 1). This group includes a number of duplicated horse bones indicating that more than one animal is present. There are two axis vertebrae, too many cervical vertebrae for one animal, two distal humeri, both from the right side, two left mandibles, two anterior ilial fragments from the left side and so on. There is also a clear difference in size between the two animals.

Table 1: Number of bone fragments of each taxa in each context

feature	119	119	119	119	144	152	152
context	115	117	118	120	141	149	151
Horse	3	1	42	1	1	2	19
Cattle size	2		31		1	1	
Cattle	3	3	7	2	3	2	
Sheep/goat	2	1	1	1		2	1
Sheep size				1			
Dog		3	1	1			
Crow/Rook		1					
Human					1	1	

During excavation the bones from this deposit were lifted in groups (see Fig. 5). It is clear from an analysis of these groups that only the vertebrae were articulated. Group 1 at the western end of the assemblage includes fragments of horse mandible, tibia and thoracic vertebra. In Group 2, immediately to the east fragments of four cervical (numbers 4-7), five thoracic and three lumbar vertebrae and a rib suggest two partially articulated groups, possibly from one animal. In the largest Group 3, immediately east of Group 2, the anterior vertebral column of a second animal is indicated by occurrences of an atlas, axis and four cervical vertebrae, a second axis probably belongs to the vertebral column to the west. Other bones include a humerus, fragments of pelvis from two different horses, two sacral fragments, scapula, skull, thoracic and ulnar fragments. These clearly give no suggestion of articulation and evidence of dog gnawing on one of the innominates and a chop mark on a zygomatic arch indicates disarticulation prior to burial. Group 4, further to the east (Fig. 5), includes fragments of cattle skull and scapula and fragments of horse lumbar vertebra, rib and a second phalanx. Again an unassociated group. A similar lack of association is indicated in the other small groups. Apart from the anterior bones of the vertebral column none of the bones of these two horses are articulated or even anatomically associated. Perhaps of even more relevance is that very few of the bones, other than vertebrae, of these animals are actually present in the collection (Table 2).

The only acceptable conclusion given the absence of any evidence for intrusion into the deposits is that this assemblage does not represent a horse burial, but the disposal, possibly as straightforward rubbish, of parts of the carcasses of two animals that appear to have been dismembered and butchered. It would appear that both animals may have been slaughtered and butchered at the same time, and this may have been related to some ritual behaviour, possibly associated with the use of the area as a cemetery. Their butchery is significantly different to that normally expected for cattle. The fragmentation level is relatively low, with a ratio of 2.7 zones per fragment in contrast to a more typical figure of approximately 0.5 for cattle bones, and some bones are nearly complete, showing only superficial damage. If the carcasses were butchered then this involved the removal of the meat but little of the processing of the bones normally associated with cattle butchery and subsequent processing. This apparent absence of reduction of the major bones and the articulation of the vertebrae indicates that both animals were dismembered on site, although many of the bones were disposed of elsewhere. Although the evidence is limited one is inclined to suggest that these animals may have been eaten, not inconceivably as part of a ritual.

Table 2: Number of fragments of each element of Horse

bone	115	117	118	120	141	149	151
Skull			1				
Mandible		1	2				
Dec. mand. pm 2	1						
Max. canine			1				
Max. molar						1	
Atlas			1				1
Axis			2				1
Cervical vert.	1		6				3
Cervical 3			1				
Thoracic vert.			7	1			2
Thoracic 1						1	
Lumbar vert.			4				
Sacrum			2				
Rib	1		5		1	1	12
Scapula			2				
Humerus			2				
Ulna			1				
Metacarpus			1				
Innominate			2				
Femur			1		1		
Tibia			1				
Metatarsus	1						
2nd phalanx			1				

A clue to the age and sizes of the horses can be obtained. One tibia with a greatest length of 311mm gives a withers height of 1.225m using Vitt's method (see Von den Driesch and Boessneck 1974) which corresponds to a height of 12 hands representing a fairly small horse or pony in Roman times. Unfortunately no other bones were sufficiently intact to obtain length measurements, but comparison with other bones, particularly the scapula suggests the second animal was only a little different in size. That both these animals were adult is indicated by the cervical vertebrae from each whose centrum epiphyses are both fused suggesting an age of over 5 years (Silver 1969). There is one tooth from context 115 which is identified as a deciduous premolar. This would suggest an animal under three years and may indicate that a third horse is represented among these remains. There is, however, no evidence of this animal among the postcranial bones, all of which indicate the adult condition for the epiphyses.

A dog skull and mandible fragment from the same animal are recorded from context 117, but otherwise the remainder of the animal bones appear to be food refuse and some fragments show evidence of butchery and dog gnawing (see Appendix).

Other excavated contexts

A human femur fragment was recovered from context 141, presumably disturbed from one of the inhumation burials on the site, and a single tibia of a human baby was recovered from context 149. Contexts 149 and 151 represent the fills of pit 152 in the north-eastern corner of the site. The context number 151 was assigned to a group of articulating bones and associated fineware ceramic sherds of Roman date. These articulating bones were the anterior cervical vertebrae (1-5) of a third horse. The association of ribs and thoracic vertebrae including the

first thoracic vertebra in context 149 suggests that the group included the neck and thoracic region of the spine, the former still in articulation when deposited in the pit. The condition of the vertebrae, whose epiphyses are fused, indicates that this animal was also adult. The absence of other bones in the pit, which was fully excavated, indicates that this animal must also have been dismembered before burial. This shows a very similar pattern to the two horses in pit 119 and if a similar behaviour is considered to be responsible then a ritual aspect to these deposits would appear inescapable.

Conclusion

This small assemblage clearly indicates that pit 119 received some of the dismembered remains of at least two adult horses while pit 152 received a those of a third adult horse. The bone finds represent only a small part of the skeletons of these animals, probably less than a quarter of one and even less of the other two. The presence of a chop mark on the zygomatic arch of one of the animals indicates that the animals were probably butchered (this chop mark possibly being associated with the removal of the mandible) and only the anterior part of the vertebral column was disposed of while still articulated. The three horses identified were small adult animals of about 12 hands.

The other remains in these features included disturbed human remains and what appear to be domestic food waste, although given the character of the assemblages the dog skull may represent a 'placed deposit'.

The consistency of pattern in the disposal of the bones of the three horses suggests that this may be associated with a ritual practice being carried out in the cemetery.

Bibliography

- Silver, I.A. 1969 The ageing of domestic animals. In D.Brothwell and E.S.Higgs (eds) *Science in Archaeology*, 283-302. Thames and Hudson, 2nd ed.
- Von den Driesch, A. and Boessneck, J. 1974 Kritische Anmerkungen zu Widerristhohenberechnung aus Langenmassen vor- und fruhgeschichtlicher Tierknochen, *Saugetierkundliche Mitteilungen* 22, 325-48

© D.J.Rackham
7th December 1999

Archive catalogue of the Animal Bone from Chapel Lane, Navenby - CLN96

site	cont.	species	bone	no.	side	fusion	zone	butchery	gnawing	toothwear	measurement	path	comment	preservation
CLN96	115	BOS	INN	1	L	EF	45						ACETABULUM AND PUBIS-MALE- 4 PIECES	4
CLN96	115	BOS	LM2	1	R					J15				4
CLN96	115	BOS	SKL	1	F		8899	CH		H12J15K14			FRAGMENTED- BASI-OCCIP-MAX-TEMP-NAS-TEETH- 15 PIECES-CHOPPED DOWN SIDE MAXILLA	4
CLN96	115	CSZ	LBF	1	F								SHAFT FRAGMENT	4
CLN96	115	CSZ	RIB	1	F								SHAFT FRAGMENT	4
CLN96	115	EQU	CEV	1	F	AF	4						POSTERIOR CENTRUM	4
CLN96	115	EQU	DLP2	1	L								WELL WORN	4
CLN96	115	EQU	MTT	1	R			CH			SD-30.4		SHAFT ONLY-PROX END CHOPPED OFF - LARGE AND ROBUST	4
CLN96	115	OVCA	MTT	1	L								MIDSHAFT-GRACILE	3
CLN96	115	OVCA	TIB	1	R								DISTAL SHAFT-GRACILE	4
CLN96	117	BOS	MAN	1	L		7						ANT PART ASC RAMUS	4
CLN96	117	BOS	UM3	1	L					K12			COMPLETE	4
CLN96	117	BOS	UPM2	1	L					F8				4
CLN96	117	CAN	MAN	1	R		78			JJK			POST FRAGMENT-SAME ANIMAL AS SKULL- 2 PIECES	4
CLN96	117	CAN	SKL	1	F		22448003 66						FRAGMENTED SKULL-CRANIUM AND MAXILLAE-POST TEETH- 7 PIECES	4
CLN96	117	CAN	TIB	1	F				DG				DISTAL SHAFT-DISTAL END CHEWED	4
CLN96	117	CORV	ULN	1	L								PROXIMAL HALF	4
CLN96	117	EQU	MAN	1	L		4						CORONOID	4
CLN96	117	OVCA	LM2	1	R					J12				4
CLN96	118	BOS	INN	1	R		78						PART OF SYMPHYSIS AND POST PART ISCHIUM- GROUP 1	4
CLN96	118	BOS	LMV	1	F	CNAN	245						CENTRUM AND ARCH WITH LOOSE ANT EPI- GROUP 6	4
CLN96	118	BOS	MTT	1	F								MIDSHAFT-VERY SMALL-POROUS-CALF- 2 PIECES - GROUP 7	4
CLN96	118	BOS	SCP	1	R		35						DISTAL BLADE AND ORIGIN OF SPINE- 2 PIECES- GROUP 4	4
CLN96	118	BOS	SCP	1	R		2345	CH			SLC-51.2		GLENOID-NECK AND MOST OF BLADE-SPINE CHOPPED DISTALLY-GROUP 3	4
CLN96	118	BOS	SKL	1	R		9			K15			MAXILLA-NASAL AND PARASPHENOID- 10 PIECES- GROUP 4	4
CLN96	118	BOS	TIB	1	L	DF	567				Bd-65 Dd-49		DISTAL END -GROUP 7	4
CLN96	118	CAN	LC	1	W								GROUP 7	4
CLN96	118	CSZ	RIB	1	F								SPLIT SHAFT FRAGMENT- GROUP 4	4
CLN96	118	CSZ	UNI	30	F								FRAGMENTS OF VERT AND SKULL PROB FROM HORSE- GROUP 3	4
CLN96	118	EQU	ATL	1	F								3 PIECES- GROUP 3	4
CLN96	118	EQU	AXI	1	F	AF	234						CENTRUM-ARCH BROKEN- GROUP 3	4
CLN96	118	EQU	AXI	1	F	CF	234						3 PIECES-GROUP 3	4

site	cont.	species	bone	no.	side	fusion	zone	butchery	gnawing	toothwear	measurement	path	comment	preservation
CLN96	118	EQU	CEV	1	F	CFAF	23						ANT AND POST EPIPHYSIS- GROUP 3	4
CLN96	118	EQU	CEV	1	F	CFAF	2345						CENTRUM AND ARCH-PERIPHERAL DAMAGE- GROUP 3	4
CLN96	118	EQU	CEV	4	F	CFAF	2345						VERTS 4-7-PERIPHERAL DAMAGE- GROUP 2	4
CLN96	118	EQU	CEV3	1	F	CFAF	2345						CENTRUM AND ARCH-DAMAGED-GROUP 3	4
CLN96	118	EQU	FEM	1	R	DF	345678				Bd-83.4 SD-35		DISTAL END AND SHAFT-SOME DAMAGE	4
CLN96	118	EQU	HUM	1	R	DF	79						LATERAL PART DISTAL CONDYLE	4
CLN96	118	EQU	HUM	1	R	DF	78				BT-70.3 HT-48		CONDYLE ONLY- GROUP 3	4
CLN96	118	EQU	INN	1	L		2						ANT FRAGMENT ILIUM- GROUP 3	4
CLN96	118	EQU	INN	1	L	EF	2345679		DG				ANT ILIUM AND POST ISCHIUM CHEWED OFF- GROUP 3	4
CLN96	118	EQU	LMV	1	F								POST FRAG BASE SPINE- GROUP 4	4
CLN96	118	EQU	LMV	3	F	CFAF	2345						PERIPHERAL DAMAGE-GROUP 2	4
CLN96	118	EQU	MAN	1	L		45678			JK			ASC RAMUS WITH M2 AND 3-GROUP 1	4
CLN96	118	EQU	MAN	1	L		45678						ASC RAMUS AND PART POST HORI RAMUS	4
CLN96	118	EQU	MTC	1	F								DISTAL MIDSHAFT - GROUP 7	4
CLN96	118	EQU	PH2	1	W	PF	12						COMPLETE- GROUP 4	4
CLN96	118	EQU	RIB	1	L	PF							PROX HALF- 3 PIECES - GROUP 2	4
CLN96	118	EQU	RIB	1	L								PROX SHAFT- GROUP 4	4
CLN96	118	EQU	RIB	1	F								SHAFT FRAG- GROUP 4	4
CLN96	118	EQU	RIB	1	L	PF	1						PROX END AND SHAFT- 2 PIECES-GROUP 4	4
CLN96	118	EQU	SAC	1	W								MOST OF SACRUM - GROUP 3	4
CLN96	118	EQU	SAC	1	F								WING FRAGMENT- GROUP 3	4
CLN96	118	EQU	SCP	1	L	DF	12345				GLP-84e LG-53.2 BG-47.2 SLC-58.3		GLENOID-NECK AND DISTAL HALF BLADE - 2 PIECES - GROUP 3	4
CLN96	118	EQU	SCP	1	L	DF	12345				GLP-81.3 LG-51.5 BG-42 SLC-55		GLENOID-NECK AND PART DISTAL BLADE - GROUP 7	4
CLN96	118	EQU	SKL	1	R			CH					ZYGOMATIC ARCH-CHOPPED-GROUP 3	4
CLN96	118	EQU	TIB	1	R	PFDf	1234567				GL-311 L1-29 SD-34.5 Bd-63.6 Dd-39.2		COMPLETE-SOME PERIPHERAL DAMAGE- GROUP 1	4
CLN96	118	EQU	TRV	1	F		1						SPINE- GROUP 1	4
CLN96	118	EQU	TRV	1	F	CFAF	15						SPINE AND NEURAL ARCH - GROUP 2	4
CLN96	118	EQU	TRV	1	F	CFAF	2345						CENTRUM AND ARCH 1ST THORACIC - GROUP 2	4
CLN96	118	EQU	TRV	1	F	CFAF	2345						CENTRUM AND ARCH- GROUP 3	4
CLN96	118	EQU	TRV	3	F		1						SPINE - GROUP 2	4
CLN96	118	EQU	UC	1	W								UPPER CANINE-WORN- GROUP 5	4
CLN96	118	EQU	ULN	1	L		23		DG				SEMILUNARIS-PROX END CHEWED OFF- GROUP 3	4
CLN96	118	OVCA	TIB	1	R		4	CH					SHAFT-DISTAL CHOPPED- GROUP 3	4
CLN96	120	BOS	CAL	1	R	PF	2						PROX SHAFT	3
CLN96	120	BOS	LM3	1	R					K14			EROSION OF CEMENTUM AND DENTINE	3
CLN96	120	CAN	SKL	1	R					J			FRAGMENT OF MAXILLA AND ZYG ARCH WITH M2	4
CLN96	120	EQU	TRV	1	W	CFAF	2345						SPINE BROKEN	4
CLN96	120	OVCA	MAN	1	R		123			FGH12115K 11			ANT HORI RAMUS AND LOOSE M3	4
CLN96	120	SSZ	RIB	1	L								SHAFT- 2 PIECES	4

site	cont.	species	bone	no.	side	fusion	zone	butchery	gnawing	toothwear	measurement	path	comment	preservation
CLN96	141	BOS	AST	1	R		1	KN			L1-66.7 L2-60.4 Bp-42.8 Db-41.8 Dd-31		COMPLETE-KNIFE CUTS ACROSS DISTAL POST FACET	4
CLN96	141	BOS	HUM	1	L		6	CH					DISTAL SHAFT FRAGMENT-CHOPPED ACROSS DISTAL SHAFT	3
CLN96	141	BOS	ULN	1	R				DG				ANT SHAFT BELOW SEMILUNARIS-PROX END CHEWED- 2 PIECES	3
CLN96	141	CSZ	RIB	1	F								SHAFT FRAG- 2 PIECES	4
CLN96	141	EQU	FEM	1	R		4						SPLIT SHAFT FRAGMENT- 2 PIECES	4
CLN96	141	MAN	FEM	1	L								PROX HALF-SURFACE ERODED-DISTAL BREAK RECENT & HEAD BROKEN OFF	3
CLN96	149	BOS	FEM	1	R	PF	123						DAMAGED PROXIMAL END	4
CLN96	149	BOS	MTC	1	F								POST MIDSHAFT FRAGMENT	4
CLN96	149	CSZ	RIB	1	F								SHAFT FRAGMENT- 3 PIECES	4
CLN96	149	EQU	TRV1	1	F	CFAF	234						CENTRUM-SMALL	4
CLN96	149	EQU	UM	1	F								BROKEN-WORN	3
CLN96	149	MAN	TIB	1	R	PNDN							SHAFT-BABY	3
CLN96	149	OVCA	TIB	1	R		4						MIDSHAFT	3
CLN96	149	OVCA	TIB	1	R		7		DG				MID AND DISTAL SHAFT- SL POROUS-DISTAL CHEWED	3
CLN96	151	EQU	ATL	1	F		12345						PERIPHERAL DAMAGE	3
CLN96	151	EQU	AXI	1	F	AF	2345						PERIPHERAL DAMAGE	4
CLN96	151	EQU	CEV	3	F	CFAF	12345						PERIPHERAL DAMAGE	4
CLN96	151	EQU	RIB	12	F								SHAFT FRAGMENTS-SOME SURFACE EROSION	3
CLN96	151	EQU	TRV	1	F	CFAF	1345						SOME DAMAGE	4
CLN96	151	EQU	TRV	1	F	AF	1345						DAMAGED CENTRUM	4
CLN96	151	OVCA	SKL	1	R		86						TEMPORAL-PARIETAL AND FRONTAL FRAG	4