Between Villa and Town

Excavations of a Roman roadside settlement and shrine at Higham Ferrers, Northamptonshire

by Steve Lawrence and Alex Smith

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Summary

Oxford Archaeology (OA) undertook a series of archaeological investigations on land around Kings Meadow Lane, Higham Ferrers, Northamptonshire, from 1993 to 2003. This work revealed occupation from the Mesolithic through to the medieval period, including part of a substantial Roman roadside settlement and shrine. This volume deals with the Roman remains, in addition to excavated early prehistoric and Iron Age activity in the local area. The important early to mid Saxon settlement and the medieval remains have been published elsewhere (Hardy *et al*. 2007).

The earliest occupation is represented by an extensive redeposited flint assemblage attesting to significant (probably early) Mesolithic activity at the site. Sparse Neolithic occupation was indicated by two pits and a scatter of tools. A late Neolithic/ early Bronze Age ring ditch surrounding a probable cremation burial was found to the east of the Roman settlement, while a second cremation burial, within an inverted early Bronze Age Collared Urn, was found in the far western part of the site.

A middle to late Iron Age settlement was located *c* 370 m north-east of the Roman settlement, and consisted of a series of enclosures with associated ring gullies and other settlement features.

The excavated part of the Roman settlement was established in the earlier 2nd century, with evidence for circular buildings, wells and a small cemetery. The settlement was bounded to the west by a ditch delimiting the eastern side of a north-south road. The layout of the settlement changed significantly during the late 2nd to 3rd century, with a series of mostly rectangular buildings aligned upon the eastern side of the north-south road. A gravel 'pavement' was constructed along the whole length of the roadside frontage of the settlement, while on the western side of the road, a monumental shrine complex was constructed.

During the late 3rd to early 4th century the settlement expanded to the north, although the shrine to the west of the road fell into disuse at this time. The religious focus may have shifted to a small 'temple' at the northern periphery of the settlement. The settlement (or at least the excavated part of it) was abandoned during the second half of the 4th century, with the buildings being subjected to stone robbing, a process that continued into the post-Roman period.

At the time of the Saxon reoccupation of the site (mid 5th century onwards), many of the late Roman boundary ditches still existed as remnant earthwork hollows.

Résumé

Entre 1993 et 2003, Oxford Archaeology (OA) a entrepris une série de fouilles archéologiques dans les secteurs de Kings Meadow Lane, Higham Ferrers et du Northamptonshire. Ces travaux ont permis d'attester une occupation continue entre le Mésolithique et le Moyen-Age ainsi que les vestiges d'une voie et d'un édifice cultuel d'époque romaine. Ce volume traite de l'ensemble du site et de ses phases à l'exception de la période saxonne qui a déjà fait l'objet d'une publication en 2007 (Hardy *et al.* 2007).

Les traces d'activités les plus anciennes remontent du Mésolithique. Elles se traduisent par la découverte d'un dépôt de silex, de deux fosses et d'outils. Toutefois, ces vestiges sont épars et paraissent davantage témoigner d'une occupation ponctuelle que permanente. Les phases comprises entre le Néolithique et le Bronze Ancien sont attestées par la présence d'un fossé circulaire qui a probablement dû entourer une sépulture à crémation et qui a été localisé à l'ouest de l'implantation romaine. Une incinération du Bronze Ancien a été clairement identifiée à l'ouest de cette dernière.

La fin de la Protohistoire est représentée par une série d'enclos du milieu du second Age du Fer implantée au nord-est de l'occupation romaine et associée à des fosses circulaires et d'autres structures.

Les secteurs antiques fouillés ont livré des bâtiments circulaires, des puits et une petite nécropole du IIè siècle. La limite de l'occupation est matérialisée à l'ouest par un fossé barrant tout un secteur oriental alors bordé par une voie formant un axe nord-sud. Cette occupation se caractérise par plusieurs phases chronologiques distinctes. Autour des IIè et IIIè siècles, un changement significatif s'est opéré. Il se traduit par l'apparition d'une série de bâtiments rectangulaires longeant le côté oriental du site. Cette dernière, délimitée par l'axe nord-sud, lui-même flanqué d'une allée constituée de graviers, fait face à un complexe cultuel alors implanté dans les quartiers ouest. Au cours des III-IVè siècles, le site s'est étendu au nord alors que le secteur cultuel est laissé à l'abandon. On suppose que celui-ci a été déplacé en périphérie nord et remplacé par un seul édifice de taille bien plus modeste. Le site semble avoir été abandonné pendant la deuxième moitié du IVè siècle et avoir servi de carrière de pierres, exploitation qui a continué bien après le Bas-Empire. Le milieu du Vè siècle se caractérise effectivement par une relative abondance de fossés attestant de travaux de terrassements.

Zusammenfassung

Oxford Archaeology (OA) unternahm zwischen 1993 und 2003 eine Reihe archäologischer Untersuchungen in der Umgebung von Kings Meadow Lane, Higham Ferres, Northamptonshire. Diese Untersuchungen wiesen eine Benutzung des Areals vom Mesolithikum bis zum Mittelalter nach, darunter auch eine große römische Straßensiedlung und einen Schrein. Der vorliegende Band behandelt die römischen Hinterlassenschaften und beleuchtet ebenfalls zuvor ausgegrabene frühgeschichtliche und eisenzeitliche Aktivitäten. Die Ergebnisse zu den wichtigen früh- bis mittelsächsischen Siedlungen und den mittelalterlichen archäologischen Überresten wurden bereits in Hardy *et al.* 2007 publiziert.

Die frühesten Besiedlungsspuren zeigen sich anhand von sekundär deponierten Feuersteinansammlungen, welche von einer starken mesolithischen (wahrscheinlich frühmesolithischen) Nutzung des Areals zeugen. Ein spätneolithischer/frühbronzezeitlicher Ringwall, welcher vermutlich eine Brandbestattung umgab, wurde östlich der römischen Siedlung entdeckt, während eine weitere Brandbestattung innerhalb einer frühbronzezeitlichen Halsurne tief im Westen des Areals freigelegt wurde.

Eine mittel- bis späteisenzeitliche Siedlung, bestehend aus einer Reihe von Einfriedungen mit zugehörigen kreisförmigen Wasserablaufrinnen und anderen Siedlungsbefunden wurde ungefähr 370m nordöstlich der römischen Siedlung entdeckt.

Der ausgegrabene Teil der römischen Siedlung wurde im frühen 2. Jh. gegründet. Runde Gebäude, Brunnen und ein kleiner Friedhof konnten nachgewiesen werden. Die Siedlung war zum Westen hin durch einen Graben begrenzt, welcher die östliche Seite einer Nord- Süd verlaufenden Straße darstellte. Das Aussehen der Siedlung änderte sich beträchtlich zwischen dem späten 2. und 3. Jh., mit einer Reihe von meist rechteckigen Gebäuden welche entlang der östlichen Seite der Nord-Süd verlaufenden Straße angeordnet waren. Entlang der gesamten Länge der östlichen Seite der Straße wurde ein Bürgersteig aus Kies angelegt, während auf der anderen Seite ein monumentaler Schrein errichtet wurde.

Während des späten 3. bis zum frühen 4. Jh. expandierte die Siedlung gen Norden. Der Schrein verlor zu dieser Zeit an Bedeutung und wurde nicht mehr genutzt. Der religiöse Fokus könnte sich zeitgleich zu einem kleinen „Tempel" am Nordende der Siedlung verschoben haben. Die Siedlung (oder zumindest der ausgegrabene Teil) wurde während der 2. Hälfte des 4. Jh. verlassen und Steine wurden von den Gebäuden entfernt. Dieser Prozess setzte sich auch in der post-römischen Phase fort.

Zur Zeit der sächsischen Wiederbesiedlung des Areals (ab Mitte des 5. Jh.) existierten noch die Reste vieler spätrömischer Begrenzungsgräben als deutlich sichtbare muldenartige Erdwerke.

Acknowledgements

The scale and longevity of this project ensures that there are many people who have provided contributions both large and small over the years, and we wish to gratefully acknowledge all of their work.

In particular, we gratefully acknowledge the central part played by the Duchy of Lancaster in supporting the project so generously through the years. The Duchy's initial representative was Ken Parsons, who helped formulate the initial project strategy. His successor, Roger Whalley, saw the archaeological project through the fieldwork stage - his cooperation, patience and forbearance in the face of the increasingly complicated archaeology were crucial to the success of the project, and our thanks are profound. Roger was succeeded by Nick Dart, who has overseen the final stages of the project with similar understanding and support. All post-excavation work leading to this publication has been generously funded by English Heritage, and the support of the Project Monitor Helen Keeley is greatly appreciated.

The cast of archaeologists involved in the projects is long and varied. The project was initiated by David Miles, then director of Oxford Archaeological Unit, and was initially managed by Bob Williams. The later stages of the fieldwork were managed by Alan Hardy and post-excavation managed by Alex Smith. A number of Site Managers have been heavily involved; Klara Spandl, David Score, Steve Lawrence, Emily Glass and Gerry Thacker all deserve our appreciation for maintaining such high archaeological standards in what were sometimes very difficult circumstances.

On the curatorial side the East Northamptonshire Planning Authority was initially represented by Glen Foard, who was the architect behind the formulation of a research strategy for the project, and contributed much to the formulation of working hypotheses during the excavations. Latterly, his successor, Myk Flitcroft coped with the increasingly complex project, deftly walking the tightrope between client and archaeologist, between what was and what was not possible, and making valuable contributions to the understanding of the site.

The post-excavation programme drew on the wisdom and skills of a number of people apart from those credited. In particular, Paul Booth provided invaluable guidance and comments on the text, which is much appreciated.

The authors are pleased to express their thanks to three metal detectorists who participated over the years, Mark Gardener in the early days, and more recently Mark Davis and John Grey. We owe a huge debt to them for the discovery not only of large numbers of everyday items from the settlement but also the discovery and subsequent plotting of the finds defining the shrine. They are also commended for their tireless job of recovering all iron objects down to the last hob nail or tack from the shrine area.

To an archaeologist it is always rewarding when the local community lend support to a project such as this, and we are particularly grateful to the volunteer diggers, including John Richardson and Roy Cox. Without Roy's full time volunteering many features and large pottery assemblages would not have been excavated and collected, and he also provided help in the recovery of metal artefacts across the site. Thanks are also due to Dennis Jackson for his contribution to the excavation and interpretation of the Iron Age site.

Many thanks go to Olwen Mayes, local historian and Founder/Secretary of the Higham Archaeology Society for her inexhaustible enthusiasm and energy, organising several post-excavation local publicity and education events based around the Roman and Saxon excavations. Thanks must also go to Doreen Holyoak, for valuable information on the origin of Kings Meadow Lane.

Chapter 1: Introduction

by Steve Lawrence and Alex Smith

The town of Higham Ferrers in Northamptonshire, and the Nene Valley within which it is located, are both rich in archaeological remains, with human activity well attested from the early prehistoric period onwards. This volume presents the results of excavations undertaken by Oxford Archaeology (OA) on the Roman settlement at Kings Meadow Lane on the north-western edge of Higham Ferrers from 2001 to 2003, in addition to previous work by OA relating to prehistoric and Roman occupation of the immediate area. The development of the site is examined in relation to other excavated sites in the surrounding region, including those within the Raunds Area Project just to the north (Parry 2006). Excavations by OA of the important Saxon settlement at Higham Ferrers are the subject of a separate volume (Hardy *et al.* 2007).

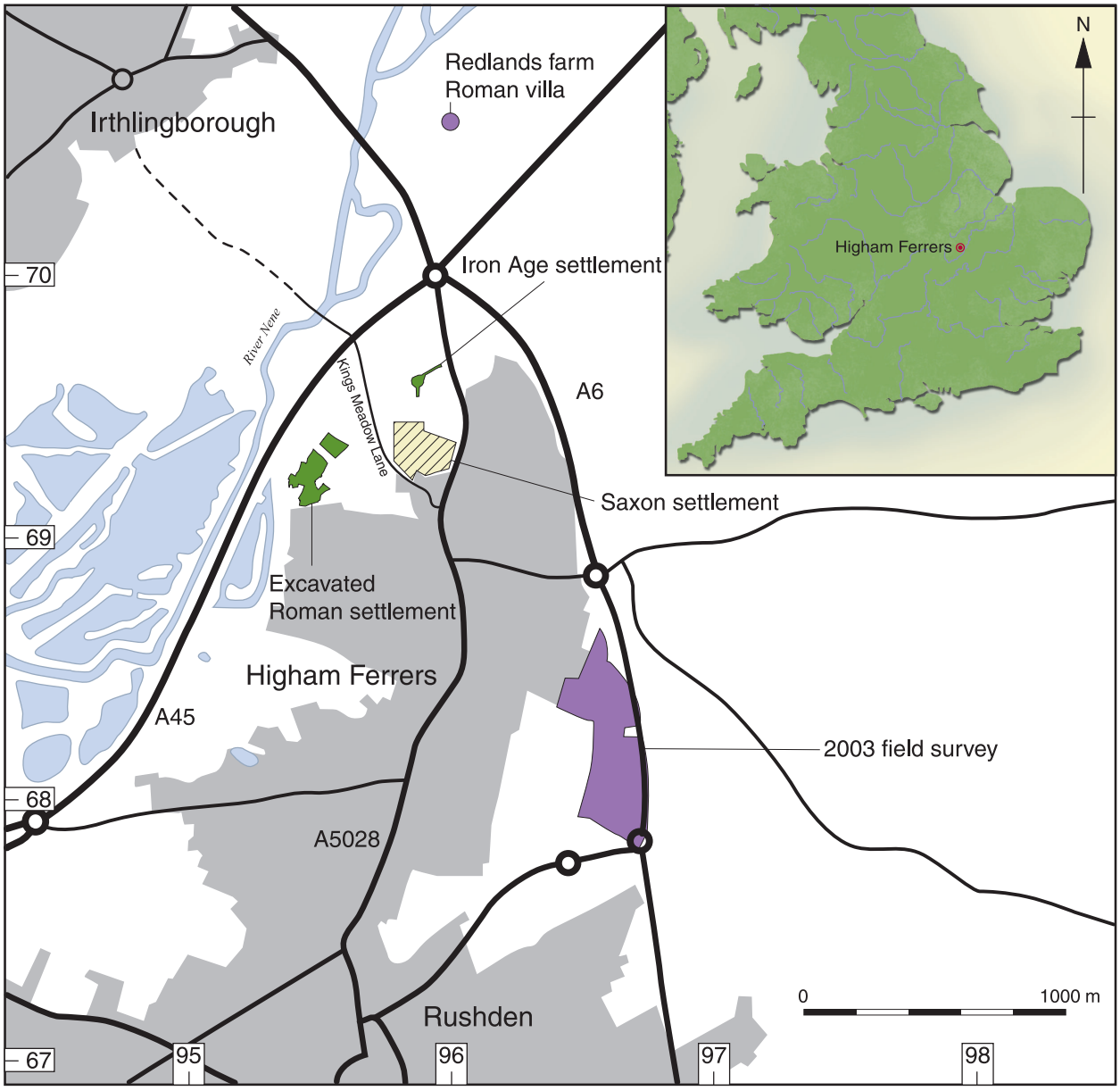


Fig. 1.1 Site location

Plate 1.1. Aerial photograph of Higham Ferrers site in the 1980s prior to any archaeological investigations (© Duchy of Lancaster)

PROJECT BACKGROUND

In October 1988 the Duchy of Lancaster (DoL) was granted outline planning permission by East Northamptonshire District Council for a large-scale residential and recreational development on 41 hectares of land bisected by Kings Meadow Lane, at the northern edge of the existing town of Higham Ferrers (NGR SP 9544 6921; Fig. 1.1; Pl. 1.1).

The planning approval predated PPG16 and subsequent discussions between the DoL and English Heritage (EH) resulted in an agreement to fund a programme of archaeological works. This comprised a desk-based assessment, fieldwalking, geophysical survey and selective trial trenching by Northamptonshire Archaeology Unit (NAU 1991), in a three-phase evaluation of the entire development area. The combined results revealed a middle to late Iron Age settlement to the north (known from cropmarks), a large Saxon settlement *c* 200 further south and an extensive Roman settlement in the south-western area (ibid.; Fig. 1.2). The Iron Age and Roman settlements form the subjects of the present volume, while the Saxon settlement is dealt with elsewhere (Hardy *et al.* 2007).

Further trenching was undertaken by the Oxford Archaeological Unit in 1994 within the area of the Saxon settlement and this confirmed the national importance of the site (OAU 1994; Hardy *et al.* 2007, 3). Also in 1995 an excavation by OAU took place at the middle to late Iron Age settlement site, prior to construction of a roundabout and access roads (See Chapter 3). Further ephemeral parts of this Iron Age settlement were uncovered in a 1997 evaluation to the east of the 1995 excavations (OAU 1997; Fig. 1.2).

The Saxon settlement was subject to further excavation in 2000, when a Roman trackway and/or boundary ditches were also revealed. Concurrent with the 2000 excavations, a magnetometer survey (covering *c* 4.5 ha) was conducted by the Bartlett-Clark consultancy in an area to the south-west, focusing upon the suggested Roman settlement. This survey was later widened to reveal a substantial part of the settlement, including defined ditched areas, or land plots, adjacent to a road/trackway aligned NE to SW along the top of the valley slope (Fig. 1.3). There were no indications of structures within them. Targeted evaluation trenching of the features identified within the geophysical survey, supplemented by a 1% percent sample of the 'blank' areas, demonstrated that good evidence for occupation survived within the area of the Roman settlement. *In situ* pitched limestone surfaces, representing structural or yard surfaces, were encountered within the ditched area defined in the northern portion of this settlement (Area G).

The geophysical survey also identified and located a previously-noted ring ditch (Fig. 1.3). A single targeted trench located across the northern side of the monument demonstrated this to be a two-phase feature. Flints from the excavated fills of the ditch were not closely dated, but unstratified material from this and adjacent trenches is mostly

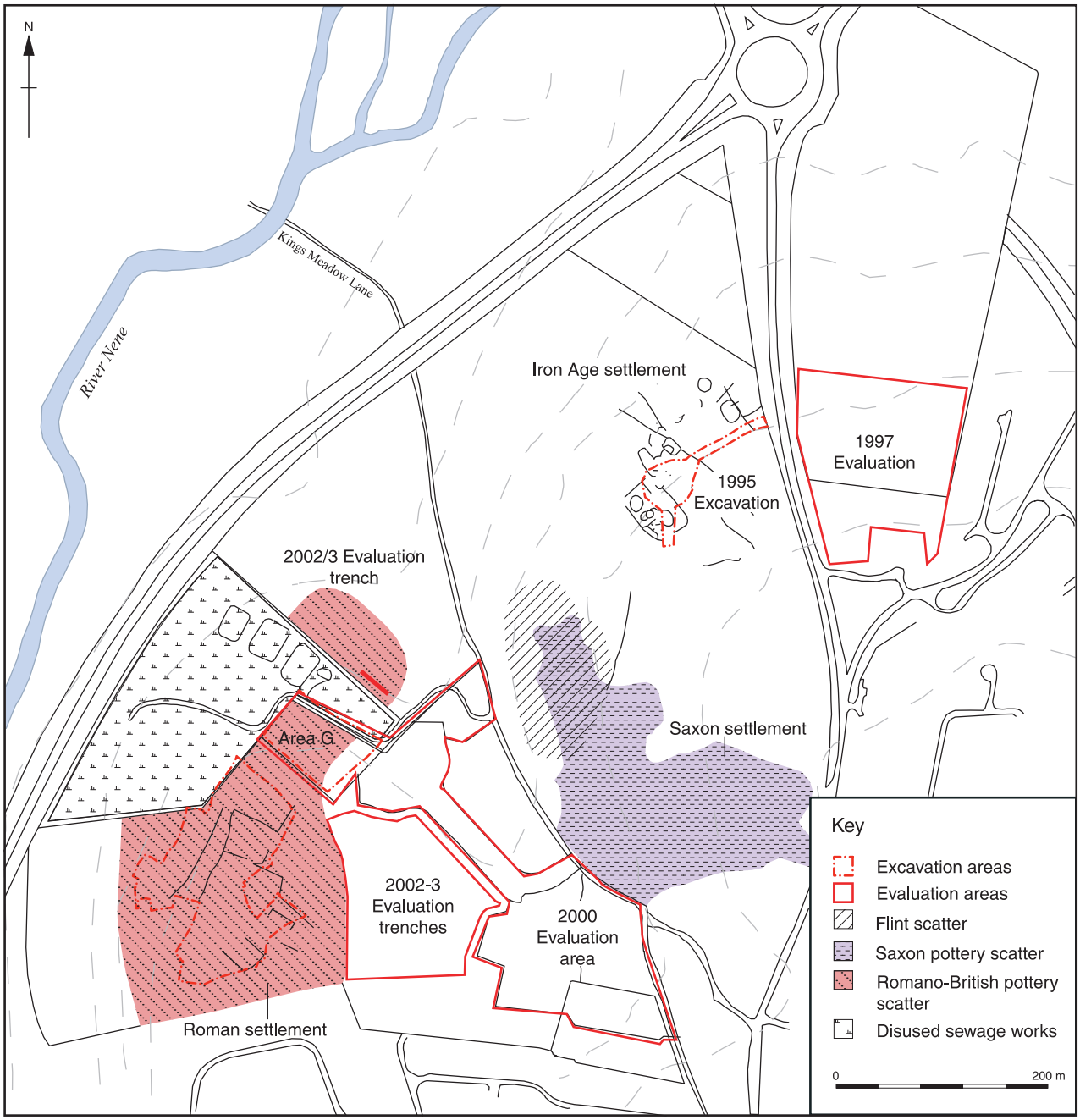


Fig. 1.2 Previous archaeological investigations in the area

Fig. 1.3 Geophysical survey of the Roman settlement

of late Neolithic – early Bronze Age character. The ring ditch was later fully excavated in 2000 (see Chapter 2).

Based on these results and further discussion between the interested parties, an agreed project design was approved which allowed for the investigation of targeted excavation areas, with funding provided by the client (DoL). EH provided specialist support and analysis during the initial excavation phase.

As a result of the continuing programme of development, OA completed the excavation of substantial parts of the Roman roadside settlement in two major phases. In 2001, an area (Area G) to the north was excavated, revealing an outlying and presumably non-domestic part of the settlement, while in 2002-3, an area containing masonry domestic structures and a shrine precinct was excavated (see below). Overall, the areas revealed by OA in 2001-3 still represent only the northern extent of the settlement area, which continues further to the south under 1960s housing development (Pl. 1.2; see Chapter 7 for discussion on extent of settlement).

In 2003 a non-intrusive survey by OA identified the extensive remains of another settlement of likely late Iron Age and Roman date located to the immediate east of The Ferrers School, 1.5 km south-east of the excavated Roman settlement (OA 2004a; Fig. 1.1).

Plate 1.2 Aerial photograph of Higham Ferrers site during 2002/3 excavations on the Roman settlement (© Duchy of Lancaster)

LOCATION AND GEOLOGY

The Roman settlement is situated on what was arable land to the south-west of Kings Meadow Lane and north of modern Higham Ferrers town limits on the eastern side of the Nene Valley, just *c* 200 m from the river (SP 95446921; Figs 1.1 and 1.2; Pl. 1.2). The excavated site lay on one side of a small dry valley running up from the Nene (with the Saxon settlement on the other side), varying in height from 35 m to 65 m OD (most of the settlement

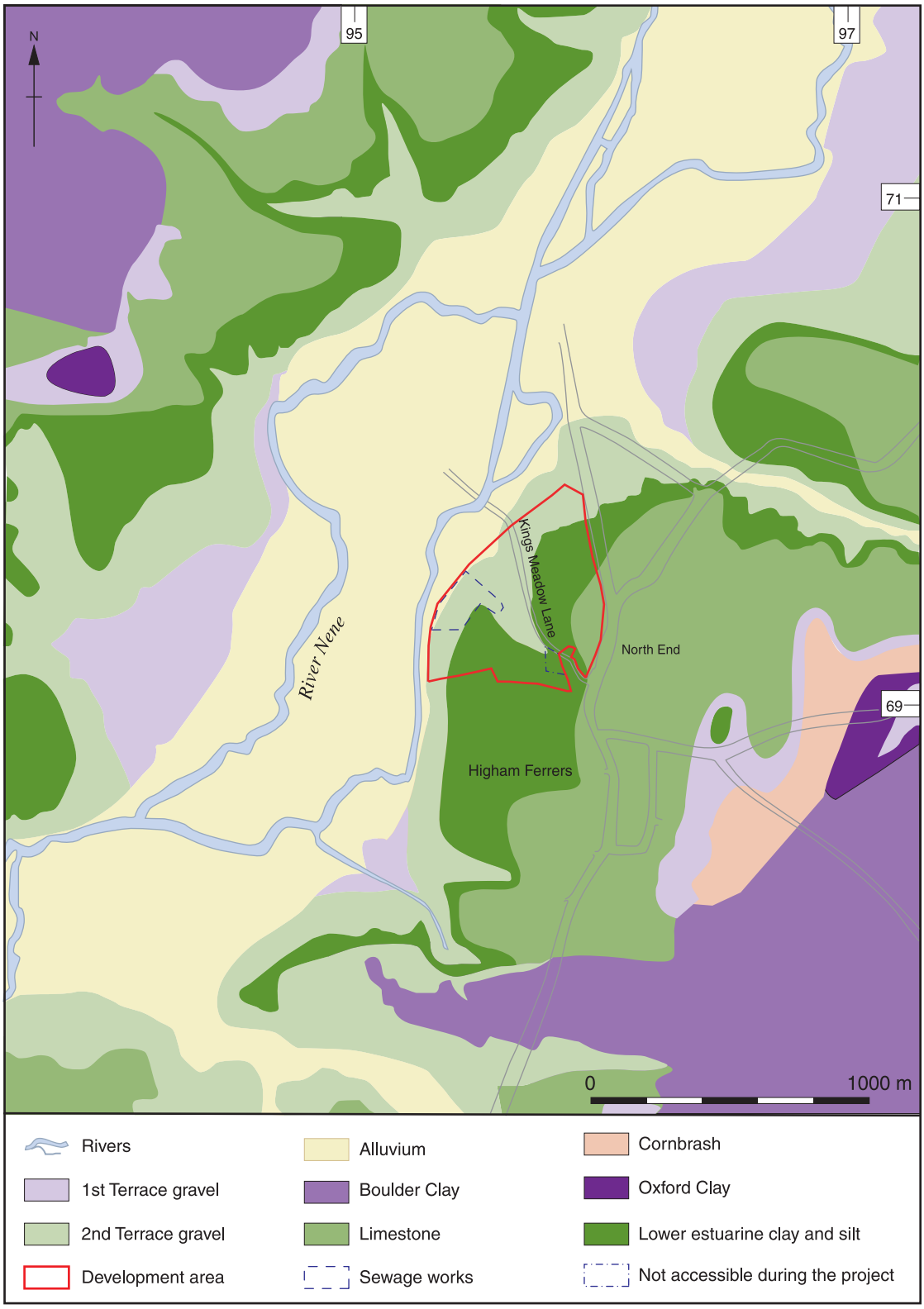


Fig. 1.4 Geology of the area

lay at *c* 50 m OD). The valley bottom has been used as a route (now known as Kings Meadow Lane) from the northern end of the town, down towards the river, and across to Irthlingborough. The geology of the Roman settlement is Northamptonshire Sands and Ironstone with the Upper Estuarine Series Silts and Clays in the extreme eastern part of the site (Fig. 1.4).

The Iron Age settlement lies *c* 0.5 km further north-east on a natural slope of Upper Lias Clay (*c* 55 m OD) overlooking the Nene Valley to the east (SP 95896958).

EXCAVATION METHODOLOGY

The excavations of the main part of the Roman settlement represented the final phases of archaeological works in advance of proposed development (Pl. 1.3). Evaluations were carried out to define the areas warranting full excavation, and initially a 'Strip-Map-Sample' approach was undertaken, which revealed a large part of the settlement.

This machine stripping began in August 2002 and it became obvious early in this exercise that the quality, quantity and extent of preservation surpassed expectations provided by the limited previous trenching and the geophysical survey results (see above). Early in the fieldwork programme it was realised that the existing budget would not be able to provide the means necessary to gain even a limited overview of the site. To mitigate this further discussions were held with the client, EH and the County Planning Archaeologist to establish a 'best means' approach to the site excavation. The results of this led to the DoL making the post-excavation budget plus an additional sum available for the immediate fieldwork and thus completing their financial responsibilities to the project. EH also provided financial and specialist support and agreed to take the financial responsibility for the assessment and post-excavation analysis and publication.

Part of the agreement for the 'best means' approach included extending the excavated area to investigate areas identified as of interest not revealed by the initial stripping exercise. A significant individual discovery was that of a shrine complex associated with very large numbers of votive finds and a piece of religious statuary. OA received further financial assistance from EH on two occasions, in order to complete the detailed recording of the shrine area and of finds scatters. Funded excavation was completed in March 2003.

Figure 1.5 provides an indication of the extent of excavated soil-cut features across the site, though does not include sections across the road surfaces and other spreads of material.

ARCHAEOLOGICAL BACKGROUND

The area of the Nene Valley around Higham Ferrers is known to be rich in archaeological remains dating from the early prehistoric to the post-medieval period. The volume dealing with the Saxon settle-

Plate 1.3 View of excavations looking northwards across the settlement with building 10850 in the immediate foreground and the road to the west.

Fig. 1.5 Extent of excavation of soil-cut features across the site

ment (Hardy *et al.* 2007) discusses the archaeological background for the Saxon and later periods, and so only a summary of the prehistoric and Roman background is presented below. More detailed discussion can be found in Chapters 2, 3 and 7.

Evidence for Mesolithic hunter-gatherers in the region, in the form of flint scatters, is generally clustered in riverine locations on well-drained soils and in areas of topographic prominence, possibly relating to the use of the valleys for navigating the wooded landscape and exploiting plant, fish and animal resources (Phillips 2006; Parry and Humble 2006, 38; see Chapter 2). This suggests that Mesolithic activity was generally confined to the lower slopes of the valley, and only infrequently reached the upper plateau.

Early Neolithic settlement sites are rare in Northamptonshire, usually just being represented by flint scatters (Humble 2006a, 45). However, monumental sites of this period are more readily identifiable, such as the West Cotton Long Mound and Turf Mound (ibid., 43-4). A number of early Neolithic causewayed enclosures are known in the county (eg Briar Hill and Dallington), although henges remain quite rare. Other Neolithic mortuary monuments and enclosures have been excavated at Redlands Farm, less than 1.5 km to the north-east of Higham Ferrers, and at other sites distributed at roughly regular intervals along the Nene Valley, all of which show some use or re-use into the early Bronze Age (Chapman 2006, 6).

Round barrows and other late Neolithic/early Bronze Age monuments are found throughout Northamptonshire. The majority, like the example at Higham Ferrers, have suffered the effects of intensive arable farming since the Middle Ages and are detectable only as cropmarks on aerial photographs. Examples have been discovered nearby at Aldwincle (Kinnes and Jackson 1971; Jackson 1976; 1977) and Grendon (Gibson 1988). A series of early prehistoric monuments, including more than one barrow cemetery, were excavated at Stanwick (Neal 1989) and Irthlingborough (Halpin 1987). As with earlier periods, there is little direct evidence of late Neolithic/early Bronze Age habitation, with most sites being represented only by flint distributions (Parry and Humble 2006, 38-42). The only later Neolithic habitation site excavated in Northamptonshire is at Ecton, Northampton (Moore and Williams 1975).

Elsewhere in Northamptonshire, late Bronze Age habitation sites are also rare, with examples at Stanwick and Thrapston. Three later Bronze Age cremation cemeteries (Kelmarsh, Chapel Brampton and Briar Hill) were all found within 25 km to the west of Higham Ferrers. The settlement pattern may have continued largely unchanged into the early Iron Age (Willis 2006, 97). Sites of late Bronze Age-early Iron Age date are sparse, but concentrate along the permeable geologies of the Nene Valley, largely confined to the valley sides such as at Crow Hill and Stanwick (Parry 2006, 65). Pottery of 8th- to 4th-century date has, however, been found on the boulder clay plateau, which may hint at occupation in these areas (ibid.).

Archaeologically recognisable settlements become far more ubiquitous from the middle Iron Age onwards in Northamptonshire, especially in and around the Nene Valley (Willis 2006, 99). In particular, a growing number of relatively small, heavily defended, rectangular middle to late Iron Age enclosures, similar to the Higham Ferrers site, have been excavated within Northamptonshire in the past few decades (Jackson 1975; Knight 1984, 191-2; Jackson and Dix 1986-87; Dix and Jackson 1989; Kidd 2004), including a possible example on the eastern fringes of Higham Ferrers (*c* 1.5 km south-east of the present site; Mudd 2004; OA 2004a). Although similar types of enclosure have been recognised elsewhere (Jobey 1962; Marshall 1991), the apparent concentration in the Midlands appears to be genuine and could be used to argue for increasingly fragmented social conditions towards the later Iron Age. In addition to these small enclosed settlements, a number of open settlements of this date have been identified (Parry 2006, 61), while a few larger heavily defended hillfort enclosures occur across a wide area between the Rivers Welland and Great Ouse. The nearest to Higham Ferrers is at Crow Hill, just *c* 2 km to the north, where an area of 3 ha was enclosed by a substantial ditch and bank during the early or possibly middle Iron Age (ibid., 64).

A high proportion of middle Iron Age sites in Northamptonshire show some continuity into the late Iron Age, with additional settlements serving to 'fill in' the landscape (Willis 2006, 107). These newly founded settlements, such as Clay Lane, Ecton (Windell 1983), largely followed middle Iron Age traditions, and indeed the pottery of the two periods was quite indistinguishable, leading to problems with dating (Jackson and Denham 2006, 71). Nevertheless, it does appear that hillforts may largely have been abandoned by this time, with the exception of Crow Hill, which was apparently strengthened with a palisade around the fort in the first half of the 1st century AD, possibly indicating some unrest prior to the Roman conquest (Parry 2006, 65).

There is no convincing evidence for any site that may be classed as an 'oppidum' within Northamptonshire, although late Iron Age occupation has been found on the sites of several Roman towns, such as Irchester (Hall and Nickerson 1967) and Towcester (Walker 1992). There is also evidence for possible high-status sites of late Iron Age date beneath villas at Weekley (Jackson and Dix 1986-7), and Piddington (Friendship-Taylor 1999), while a substantial settlement at Stanwick containing a series of roundhouses may date to the middle and/or late Iron Age (Parry 2006, 170).

Coin distributions suggest that by the latter part of the late Iron Age central and southern Northamptonshire had come under the general influence of

the Catuvellauni (Curteis 1996), although the region still lay on the edge of this south-eastern zone of 'cultural transformation', marked by new pottery styles, cremation burials and other developments of material culture (Kidd 2004, 56-7; see Chapter 7).

The patterns of early Roman land use in the Nene Valley and surrounding regions changed little from the preceding Iron Age (Parry 2006, 72), and the lack of any real evidence for an early Roman military presence suggests that the transition to Roman administration was not contested too fiercely. More significant developments are observed in the 2nd and 3rd centuries, so that the late Roman settlement pattern bears little resemblance to that of two centuries earlier.

The wealth of evidence for settlement in the Nene Valley during the Roman period has been commented upon on numerous occasions (eg Condron 1995; Taylor and Flitcroft 2004; Parry 2006), and yet there are still relatively few fully published sites, and even the nationally important Roman pottery industries of the Nene Valley have yet to be studied systematically.

Higham Ferrers lies between the walled town of Irchester (Hall and Nickerson 1967) *c* 4.5 km to the south-west and the probable small town of Titchmarsh (Curteis *et al.* 1998-9) *c* 12 km to the north-east. The villa at Redlands Farm (Biddulph *et al.* forthcoming) is only 1.5 km to the north and the major villa and associated rural settlement complex at Stanwick (Crosby and Neal forthcoming) a further 1-1.5 km away. There is also further evidence for many lower status rural settlements in the surrounding area, with the Raunds Area survey just to the north of Higham Ferrers showing an overall density of 1 site per km^2 in the early and middle Roman periods and 0.75 per km^2 in the late Roman period (Parry 2006, 76). The pattern here shows that larger settlements and villas like Stanwick and Redlands Farm occupied areas adjacent to the River Nene, while smaller more dispersed farms were generally found on the higher Boulder Clay plateau, although in some quantity (ibid., fig. 4.10). Analysis of pottery scatters representing manuring suggests that all the settlements in the Valley and on the Boulder Clay Uplands were associated with a mixed regime of grain production and animal husbandry, with hay meadows along the banks of the river (ibid., 81-2). Some aspects of the interrelationship of these sites have already been studied in part (eg Griffiths 1989; Condron 1995; Taylor 2001; Parry 2006), although much remains uncertain (see Chapter 7).

The excavated site at Higham Ferrers, lying on the upper slopes of the Valley, clearly falls into the well-known, if not completely understood, category of 'roadside settlement', although classification of this as a 'small town' is more debatable. Comparable roadside settlements have not been extensively excavated and published, with an exception being Ashton (Burnham and Wacher 1990, 279-81), 23 km to the north-east, where important excavations were carried out in the early 1980s, although these have not been published. However, the roadside setting and (for the most part) relatively simple building plans closely mirror the situation at Higham Ferrers. Elsewhere within the region settlement and structures of broadly comparable character have been examined at *Durobrivae* (Water Newton, Cambridgeshire), but the excavations were carried out in the 1950s and recent publication (Perrin 1999) has concentrated only on the ceramic aspects of that work.

Further afield it remains the case that relatively few undefended sites in the 'small town' category have seen extensive excavation and even fewer have produced evidence for the number and potential diversity of structures seen at Higham Ferrers, with domestic structures, manufacturing zones, religious areas/structures and burial areas. Taylor (2001, 57) maps ten such 'small town' sites in Northamptonshire, including the three defended sites of *Bannaventa* (near Norton), *Lactodorum* (Towcester) and Irchester. Inevitably the character of some of these sites is open to question, and morphologically Stanwick, for example, looks potentially more like an agricultural estate than a 'small town'. Overall, the total number of sites in this category within the county is relatively limited, compared with much higher numbers of villas and smaller rural settlements.

Studies of the development of settlement in the local region suggests that there was a marked decline in the numbers of settlements on the Boulder Clay plateau in the late Roman period, in contrast to those in the Nene Valley itself (Parry 2006, 80). This decline was probably due to gradual settlement nucleation, a process which may have began in the 2nd and 3rd centuries AD, and was part of a wider regional trend (ibid., 81). Villas and larger settlements in the valley seem to have either expanded or established themselves from the 2nd century onwards, possibly at around the same time as the decrease in the Boulder Clay sites.

The transition from late Roman to Saxon in this region is complicated by the difficulties of closely dating the Saxon ceramic assemblage, most of which covers a broad period of AD 450-850 (early-middle Saxon; Parry 2006, 91). Nevertheless, there are a growing number of late Roman sites where Saxon structures (sunken–featured buildings) and pottery have been found, including Redlands Farm, Stanwick and Wollaston (Brown and Foard 2004, 78). Early Saxon cemeteries have also been found near to the Roman small town of Duston (*c* 38 km south-west of Higham Ferrers) and the nucleated settlement at North Kettering (*c* 12 km north-west of Higham Ferrers), and have been used to suggest that the Anglo-Saxon takeover took place within a Roman framework (ibid.). Nevertheless, it still remains very difficult to determine any relationship between the native late/sub-Roman population and populations demonstrating a Germanic material culture (see Hardy *et al.* 2007 for a discussion of early Saxon evidence at Higham Ferrers).

CHRONOLOGY AND PHASING

The following is a summary of the main phasing of the site.

Phase 1: Early prehistoric activity

The discovery of an extensive redeposited flint assemblage attests to significant (probably early) Mesolithic occupation at the site. Sparse Neolithic occupation was indicated by two pits in the area of the Saxon settlement, along with Neolithic tools found scattered across that site.

A late Neolithic/early Bronze Age ring ditch was found to the east of the Roman settlement on the south-western slope of the Kings Meadow Lane valley. The ditch surrounded a series of internal features including a probable cremation burial. A second cremation burial, this time contained within an inverted early Bronze Age Collared Urn, was found in the far western part of the site. Other potentially prehistoric features include two parallel ditches that lay in the north-east of the site; these may have been associated with a waterhole positioned at the putative entrance of the westernmost of the pair.

Phase 2: Iron Age settlement

A middle to late Iron Age settlement was located *c* 200 m to the north of the Saxon settlement and *c* 370 m north-east of the Roman settlement on a natural slope overlooking the Nene Valley to the west. The settlement consisted of a series of enclosures with associated ring gullies and other settlement features. The largest of the enclosures was recognised as belonging to a distinctive type of relatively small defended enclosure common to the Northamptonshire area (Dix and Jackson 1989). Further archaeological evaluation on land lying to the east of the main Iron Age settlement revealed mid to late Iron Age pits and ditches. Two ditches and a waterhole in the area of the Roman settlement may also be Iron Age in date. None of the pottery from any of the Iron Age features could be dated to the latest part of the late Iron Age (early-mid 1st century AD), although it is possible that earlier pottery styles continued in use.

Phase 3: Establishment of the Roman settlement (2nd century)

The excavated part of the Roman settlement was established in the earlier 2nd century. There is evidence for three residential units, each represented by a circular building (Pl. 1.4), two of which were served by adjacent stone-lined wells. One of these units was located within the southern part of a rectangular enclosure, and a small cemetery area – comprising three adult cremation burials and an inhumation of a young child – was identified adjacent to the enclosure. Other features associated with the settlement included two large pits or waterholes. The settlement was bounded to the west by a ditch delimiting the eastern side of a NNE-SSW road.

Plate 1.4 View facing west over stone roundhouse 10920

Plate 1.5 View facing west over rectangular buildings 10860 and 11370 towards the Nene Valley

Phase 4: Development of the Roman settlement (late 2nd to 3rd century)

The layout of the settlement changed significantly during this phase, with a series of mostly rectangular buildings aligned upon the eastern side of the north-south road (Pl. 1.5). A gravel 'pavement' was constructed along the whole length of the roadside frontage of the settlement, representing a major collective or 'municipal' project. The northern end of the site remained largely empty, aside from field boundaries and two wells. On the western side of the road, a monumental shrine complex was constructed.

Phase 5: Expansion and decline of the Roman settlement (late 3rd to 4th century)

During this phase, the settlement continued to expand, extending further north, with discrete areas of stone paving laid down along the road frontage. The shrine to the west of the road probably fell into disuse after the late 3rd century, the religious focus possibly shifting to a small 'temple' at the northern periphery of the settlement. The coin and pottery evidence suggests that the settlement (or at least the excavated part of it) was abandoned during the second half of the 4th century, with the buildings being subjected to stone robbing, a process that probably continued into the post-Roman period. All the wells were abandoned during the 4th century.

At the time of the Saxon reoccupation of the site (mid 5th century onwards), many of the late Roman boundary ditches still existed as remnant earthwork hollows (see Hardy *et al.* 2007 for more details).

PUBLICATION STRUCTURE

This volume presents the results of archaeological investigations of prehistoric and Roman settlements on either side of Kings Meadow Lane, Higham Ferrers. It is based on a programme of work agreed subsequent to a post-excavation assessment of the excavation record (OA 2004b). Chapter 2 examines the evidence for early prehistoric activity (Mesolithic to late Bronze Age), while Chapter 3 looks at the middle to late Iron Age settlement excavated in 1995, along with other features possibly of this date. Both of these chapters also contain finds and environmental analysis and wider discussions of the periods in question.

Chapters 4 to 7 deal with the Roman roadside settlement and shrine. Chapter 4 provides a detailed narrative of the archaeological sequence from the 2nd to 4th centuries, while Chapters 5 and 6 examine the material culture and environment of the site. Finally, Chapter 7 presents a discussion of the development of the settlement and shrine, covering aspects such as spatial organisation, economy, social structure and ritual practice. The site is also discussed within the wider landscape of the Nene Valley and further afield.

ARCHIVES

The project archive is currently stored at OA until an adequate storage facility is provided for the county of Northamptonshire.

Chapter 2:
Early Prehistoric Activity (Phase 1)

by Kate Cramp

INTRODUCTION

Northamptonshire, and the Midlands more generally, have long been considered marginal to the main areas of prehistoric settlement in the southern and eastern counties of Britain, but traces of early prehistoric activity in the region are beginning to proliferate. Recent research (eg Gibson 1989; Cooper 2006), combined with the results of multidisciplinary fieldwork projects (eg Parry 2006), have served to populate the empty landscape and have 'brought life to a desert' (Chapman 2006, 1). The results of the excavation at Higham Ferrers have made an important contribution to the growing corpus of early prehistoric evidence in the county.

Although no Mesolithic features or *in situ* deposits were identified during the excavations, the discovery of an extensive redeposited flint assemblage attests to significant (probably early) Mesolithic occupation. This collection includes microliths, microburins, burins, a probable tranchet axe fragment and several flakes from *tranchet* axe manufacture, along with flakes and blades that probably belong broadly to the Mesolithic or early Neolithic period.

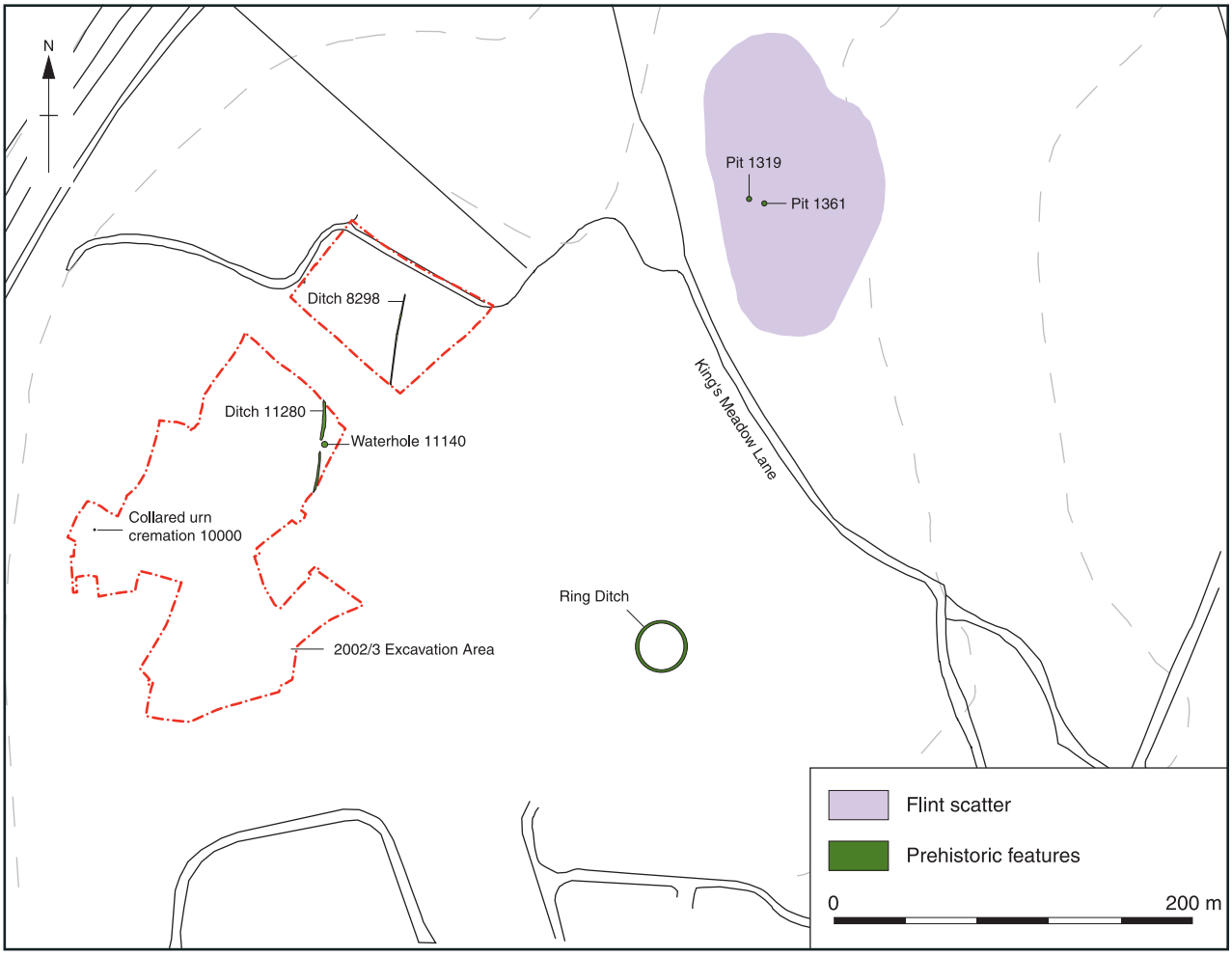


Fig. 2.1 Location of early prehistoric features

Two pits, one of which contained two sherds of Mortlake Ware, were encountered in an area of Saxon settlement (Fig. 2.1). While neither feature produced any flintwork, Neolithic tools were found scattered across the site in later features. These included a complete polished axe, a laurel leaf point, a chisel arrowhead and a flake from a polished implement.

A late Neolithic/early Bronze Age ring ditch, visible in aerial photographs, was found to the east of the Roman settlement on the south-western slope of the Kings Meadow Lane valley. The ditch, which had been recut at least one occasion, surrounded a series of internal features including a probable cremation burial. A second cremation burial, this time contained within an inverted early Bronze Age Collared Urn, was found in the far western part of the site. Other potentially prehistoric features include two parallel ditches that lay in the northeast of the site; these may have been associated with a waterhole positioned at the putative entrance of the westernmost of the pair.

MESOLITHIC (*c* 8000 BC-3500 BC)

In the absence of any earlier evidence, the narrative of human occupation at Higham Ferrers must begin with the Mesolithic period, which is represented by a relative abundance of these typologically diagnostic tools. No structural remains, cut features or *in situ* deposits were dated to this period, and reconstructions rely on an extensive but redeposited scatter of flintwork from the topsoil and subsoil that covered the site. In the absence of organic remains, structures and land surfaces, lithic assemblages provide the 'most durable, widespread and readily recoverable form of evidence for this period' (Myers 2006, 3) and can yield remarkably detailed information about such aspects as subsistence, seasonality, spatial organisation, mobility, territorial ranges and wider cultural groupings.

The flint assemblage from Higham Ferrers contains thirteen microliths, seventeen microburins, nine burins and three burin spalls (see Cramp and Lamdin-Whymark below). Although only one possible fragment of a *tranchet* axe was recovered, the presence of an axe-thinning flake and two axe-sharpening flakes attests to the probable on-site manufacture and maintenance of these tools. A considerable number of the blades and blade cores are also likely to be Mesolithic products, along with several of the crested blades and other core preparation flakes. While many of these pieces cannot be more closely dated within the Mesolithic period, the microliths all correspond to early Mesolithic types (see Cramp and Lamdin-Whymark, below).

Both spatial and compositional aspects of the lithic assemblage need to be considered when characterising the structure of settlement patterns across a region (Spikens 2000). The Mesolithic assemblage from Higham Ferrers is, however, neither stratified nor can it be safely assumed that it has not been significantly contaminated with later flintwork. Of the 278 flint-producing contexts excavated at Higham Ferrers, the greatest quantity of struck flints came from the topsoil (10500). This collection, which comprises 773 struck flints, provides 46.3% of the total assemblage and contributes a similar proportion of the diagnostic Mesolithic assemblage. However, the same layer contained an early Neolithic laurel leaf point, three late Neolithic/early Bronze Age thumbnail scrapers and a plano-convex knife (see Fig. 2.5.3 below), which confirm the mixed chronology of the flintwork. It is not possible, therefore, to closely define the limits of the Mesolithic scatter, which was clearly visible in the topsoil (10500) but also extended across the site in the fills of later features. An interpretation of the type of settlement and activity that the Mesolithic collection represents must therefore be advanced with caution.

Through a combination of typological, metrical and raw material analyses, it is possible to assign the collection to the early Mesolithic with reasonable confidence. The collection of microliths, for example, is composed entirely of early Mesolithic types. Two unclassifiable fragments probably originate from early Mesolithic shapes, and there are no geometric microliths present in the assemblage to indicate a late Mesolithic presence. Microlith typology thus implies an early Mesolithic date. This is supported by the presence of *tranchet* axe thinning and sharpening flakes, along with a possible axe fragment, which reflect the use of a tool that had effectively disappeared by the late Mesolithic, at around 8650 BP (Myers 2006, 5).

Metrical analyses (eg Pitts and Jacobi 1979) have demonstrated the generally greater length:breath ratio for blades in earlier Mesolithic assemblages, a morphological distinction that has since been applied to the dating of Mesolithic debitage. However, most of the metrical data have been gathered from assemblages in Southern England which, until a similar corpus exists for the Midlands and the North, casts doubt on the wider applicability of the approach (Myers 2006, 6). Although no formal metrical analysis was undertaken, the blades in the Higham Ferrers assemblage are generally long with straight, parallel lateral margins and straight dorsal ridges that are often paired, producing a trapezoidal cross-section often associated with early Mesolithic microlith types. The debitage does not, therefore, contradict the view that the assemblage is largely early Mesolithic in origin, but it cannot be taken as undeniable evidence for an early date.

The early-to-late Mesolithic transition apparently involved a departure from the use of high quality chalk flint to that of low-grade gravel flint, the latter usually of local origin (eg Pitts and Jacobi 1979). Where it can be determined from the condition of the cortex, the raw material used at Higham Ferrers came almost entirely from secondary sources and seems to have been adequate for most routine

knapping purposes. Small gravel flint cobbles with battered cortices are typical, but these are not readily attributable to the Mesolithic period and, as most were used for flake rather than blade production, may in fact belong to the Neolithic and Bronze Age phase of occupation. Possible sources include the local gravel deposits and the Boulder Clay plateau, which extends from Raunds to Hargrave less than 10 km to the northeast of Higham Ferrers. The latter was probably of poorer quality than the material from the gravel terraces (Brown 2006, 30).

There is some evidence to support the idea of early Mesolithic dependence on high quality flint that has been reported from other sites. The bladelet cores, for example, are generally made on flint nodules with a smooth cream or cream-yellow cortex and a brown-coloured, fine-grained interior (eg Fig. 2.5.3). While these nodules seem to have occurred locally in the gravels, it does suggest that they were being deliberately selected over their coarser-grained, frost-shattered counterparts. Most of the diagnostic Mesolithic pieces (eg microliths) are made from a similar high-quality flint but, as they are non-cortical pieces, it is difficult to quantify accurately the contribution made by different flint sources to the Mesolithic assemblage.

As mentioned in Chapter 1, Mesolithic sites in Northamptonshire are found to cluster in riverine locations on well-drained soils and in areas of topographic prominence; gravel islands within the floodplain and on the slopes of the Nene Valley were evidently favoured locations for Mesolithic hunter-gatherers. Phillips (2006) describes the preferential location of Mesolithic sites in upland areas on permeable geologies, rather than heavy clays, and suggests that the concentrations of sites in river valleys may relate to the use of the valleys as a way of navigating the wooded landscape and exploiting plant, fish and animal resources. In the East Midlands more generally, surface collection surveys have shown that Mesolithic activity favours high points, ridges, headlands and other promontories (Myers 2006).

The distribution of datable flints found during fieldwalking as part of the Raunds Area Survey also implies that Mesolithic and early Neolithic habitation favoured the valley floors and sides. Compared to surface assemblages from the lower slopes and valley bottom, the flint collection from the Boulder Clay plateau seemed to contain a much smaller quantity of Mesolithic flintwork; microliths and microburins were entirely absent from the collection (Parry and Humble 2006, 38). This suggests that Mesolithic activity was generally confined to the lower slopes of the valley, and only infrequently reached the upper plateau.

The location of the Mesolithic flint scatter from Higham Ferrers seems to reflect the same preferences. The scatter was found on a natural slope (*c* 55 m OD) overlooking the Nene Valley to the east. The underlying geology is Northampton Sand and Ironstone, which border the floodplain gravels. The factors motivating this choice of location may be summarised in terms of visibility, resources and drainage. The river provided a passable route through a densely wooded environment, and may have been an important navigational landmark in the territorial range of a hunter-gatherer group. It would also have supplied food resources, including fish and waterfowl, as well as attracting larger animals, such as red and roe deer. The permeable qualities of the underlying sand and ironstone geology would have been suitable for habitation, and these lighter soils may have supported a less impenetrable vegetation than that of the dense glacial clays and Lias Clays found in the north-west of the county. A valley-slope location would thus be an ideal place to establish a temporary campsite to re-tool while monitoring the movements of herd animals. Broadly, from the extent and composition of the collection, it seems plausible that the scatter from Higham Ferrers represents such an event.

There are more than fifty Mesolithic findspots recorded on the Sites and Monuments Record for Northamptonshire, ranging from single finds to surface scatters of varying size (Phillips 2006). With a few exceptions, notably the early Mesolithic features at Chalk Lane (Williams and Shaw 1981) and the stratified deposits at Thrapston Quarry, Aldwincle (Jackson 1976; 1977), few surviving Mesolithic deposits have been encountered in the region. Several unstratified flint scatters of early and late Mesolithic date have been recorded, including sites at Alwincle and Ecton, while a group of 11 microliths, three microburins and five burins were present in the surface collection from the Raunds Area Survey (Humble 2006b, 57). To date, the collection from Honey Hill, Elkington (Saville 1981a) remains the only uncontaminated Mesolithic assemblage in the county to have been formally analysed.

A large collection of redeposited Mesolithic flintwork came from below and within the Neolithic long barrow at West Cotton (Windell *et al*. 1990), which is located on the valley floor some 5 km to the north of Higham Ferrers. This assemblage had presumably been dug from the surrounding ground surface and incorporated in the upcast mound during construction. The collection included both obliquely-blunted and edge-blunted forms. Along with additional Mesolithic flints found during fieldwalking immediately east of the excavation trench, this collection provides the most extensive evidence of late Mesolithic activity in the Raunds Survey Area (Humble 2006a, 43), and remains the closest significant Mesolithic site to Higham Ferrers.

The often close spatial association between Mesolithic flintwork and Neolithic features, as at West Cotton, is also seen at Higham Ferrers. Here, Neolithic and Bronze Age features appear to have been dug into a Mesolithic ground surface littered with the remains of flint manufacture and use. The Mesolithic collection from Higham Ferrers appears to date entirely to the earlier part of the period, which implies an interval of some three thousand

years before the site is demonstrably re-occupied in the Neolithic period. While there is thus no evidence for continuity of occupation, it does suggest that the location held a particular attraction for both early Mesolithic and Neolithic populations.

NEOLITHIC AND BRONZE AGE (*c* 3500 BC-1000 BC)

At Higham Ferrers, a small number of features could be assigned to the early prehistoric period on stratigraphic or typological grounds (Fig. 2.1). Evidence for middle Neolithic activity was found, in the form of two small pits containing flintwork and two Mortlake Ware rim sherds (see Edwards below). A substantial ring ditch with the remains of a central cremation burial was located first by aerial photography, and then later excavated in one of the 2000 evaluation trenches. Finds from this ring ditch suggest that it was in use during the late Neolithic or early Bronze Age period, and it was recut on one occasion during this time. An isolated cremation burial in an inverted Collared Urn (10000) was also revealed in the far western area of the site. The cremation contained the remains of two individuals, one adult female and one unsexed juvenile aged between 13 and 17 years (see Witkin below). A N-S aligned ditch (11280) and an associated waterhole (11140) probably date to the Bronze Age or later; a second ditch (8298) sharing the same alignment may belong to the same phase (Fig. 2.1). Datable material from these features was scarce and, in several cases, phasing has been based upon stratigraphic and spatial factors. None of the prehistoric features was radiocarbon dated, as neither the ring ditch, waterhole (11140), nor the two ditches (8298 and 11280) contained suitable samples. The cremation pit containing the Collared Urn could be dated on typological grounds, although this does not allow for the possibility that 'heirloom' vessels were curated and re-used in mortuary contexts.

Early/middle Neolithic

On the north-eastern slope of the Kings Meadow Lane valley, within an area otherwise dominated by the Saxon settlement (Area A), two pits of middle Neolithic date were revealed (Fig. 2.1). One of these features (1319) was fully excavated, while visible finds were recovered from the fill of the other (1361). Pit 1319 was sub-circular in shape with steep sides and a concave profile. The cut measured 0.88 m in diameter and 0.3 m in depth. The primary fill (1334) was a dark grey sandy silt with a high concentration of ash, charcoal and pottery fragments; the ash and charcoal may have originated from inside the crushed pot. Above this, fill 1381 was a mid brown silty deposit containing a patch of charcoal within it. This deposit contained pieces of flint and two Mortlake Ware rim sherds (Fig. 2.7.1-2).

Pit 1361 appeared to be very similar to pit 1319, with a silty layer overlying a deposit of charcoal and pottery. Although the excavation of this feature was not completed, it is almost certain that the two adjacent features were of similar Neolithic date.

Beyond these two pits, evidence of Neolithic activity from Higham Ferrers is limited to a few diagnostic flint tools, including a flake from a polished axe, a laurel leaf point and a leaf-shaped arrowhead. It seems likely that some of the flake material in the assemblage also dates to the Neolithic period, but is less easily isolated on technological grounds alone.

One of the most remarkable Neolithic finds is a complete polished axe (Fig. 2.6.1) from the single stony fill of a Roman ditch (11249) that cuts two possibly prehistoric ditches and a waterhole (discussed below). It seems unlikely that this piece would have gone unnoticed in the boundary ditch, and complete polished axes are otherwise very rare from the Raunds area (Humble 2006b, 57). It is tempting to interpret it as a curiosity brought in from elsewhere, perhaps originally part of a hoard like that found at Stanwick village in 1938 (RCHME 1975, 79), and perhaps placed in the ditch as a foundation deposit during the Roman period.

Another example of a polished axe from a Roman feature came from Blackbird Leys, Oxfordshire (Shaffrey 2003a, 244). In this case, the axe displayed a secondary polish that suggested it had been used as a pot burnishing tool, probably in the Roman period; there is no visible evidence that the example from Higham Ferrers was used in this way.

Several flakes and fragments from polished axes were also recovered during fieldwalking undertaken as part of the Raunds Area Survey; some of these were made from a light white-grey opaque flint with small cherty inclusions (Humble 2006b, 51), similar to that of the Higham Ferrers axe; a common source seems likely.

Elsewhere in Northamptonshire, Neolithic settlement sites are rare – particularly those belonging to the early part of the period – and are usually represented by flint surface scatters identified during fieldwalking. No unequivocal evidence of settlement was detected during excavation between the monuments of the Raunds project (Humble 2006a, 45), for example. An early Neolithic pit without artefacts was identified below the Long Mound at West Cotton, but its purpose and relationship to the wider early Neolithic landscape is unclear; it may have had a similar significance to the two small pits from High Ferrers, neither of which was rich in finds.

Monumental sites of this period are more readily identifiable, and include the four founding monuments in the Raunds Study Area: the West Cotton Long Mound and Turf Mound, an avenue formed by pits and interrupted ditches, and a possible henge enclosure on the valley side about West Cotton. These early monuments seem to have been respected by later monument building (Humble 2006a, 43-4). The Long Enclosure, for example, was

later built on the same alignment as the Long Mound and Turf Mound at West Cotton.

A few early Neolithic causewayed enclosures are known elsewhere in the county, including the excavated example at Briar Hill and the nearby site at Dallington. A third example has been identified at Southwick, in the north of the county. A causewayed ring ditch was also excavated at Stanwick. Henges, meanwhile, are unusual features in Northamptonshire, which has led some authors to suggest that their particular function was fulfilled by other monument types (Chapman 2006, 5).

Other Neolithic mortuary monuments and enclosures have been excavated at Redlands Farm, less than 1.5 km to the north-east of Higham Ferrers, Tansor, Aldwincle and Grendon. These sites, along with an example from nearby Orton Longueville, in Peterborough, are found distributed at roughly regular intervals along the Nene Valley and all show evidence of continued use and re-use into the early Bronze Age (Chapman 2006, 6). At this time, there is also growing evidence for ritual activity at Higham Ferrers.

Late Neolithic/early Bronze Age

The Higham Ferrers round barrow appears from the geophysical survey to be an isolated monument, but it may have stood within a small cemetery of equivalent features centred in an area to the east and south now covered by housing or obscured from aerial visibility by repeated ploughing. The ring ditch at Higham Ferrers has been degraded in this way, and no more than a trace of the original upcast mound was found in the deposits of the ditch. The ring ditch encompassed one or more cremation burials, and had been recut and redefined after a period of silting on at least one occasion. No evidence of grave goods was recovered from the ring ditch, but it is possible that these were removed by later ploughing and distributed within the ploughsoil; the plano-convex knife from the topsoil (Fig. 2.6.3), for example, may represent such an object.

A lack of dating evidence has precluded refinement of the chronology of its use, but the stratigraphic evidence suggests that the monument was maintained for some time after its initial construction. Its setting in an area predating extensive Iron Age and Roman occupation hints at the persistent appeal of the location, perhaps in the same way that the Neolithic mortuary enclosure at Tansor appears to have attracted later re-use as a Saxon inhumation cemetery.

Round barrows and other prehistoric monuments are relatively common in Northamptonshire and can be found distributed throughout the county. The majority, like the Higham Ferrers example, have suffered the effects of intensive arable farming since the Middle Ages and are detectable only as cropmarks on aerial photographs. Gravel extraction has also led to the destruction – and discovery – of a great many prehistoric sites, including the mounds and Neolithic timber platform at West Cotton, Raunds (Windell *et al*. 1990).

Round barrows have also been discovered at nearby Aldwincle (Kinnes and Jackson 1971; Jackson 1976; 1977) and Grendon (Gibson 1988). A number of early prehistoric monuments, including more than one barrow cemetery, were excavated at Redlands Farm (Keevill 1991; 1992), Stanwick (Neal 1989) and Irthlingborough (Halpin 1987). The four barrows at Irthlingborough, three of which have been excavated, had survived as earthworks (Hall and Hutchings 1972, 14). One of these contained two inhumations along with a wealth of grave goods reminiscent of those accompanying the burial in the large mound at West Cotton (Humble 2006a, 45). These sites are thought to part of a single monument complex (Harding and Lee 1987, 4). Environmental evidence from nearby sites, including Ecton, Redlands Farm and Irthlingborough, suggests that there was a period of localised vegetation change that may have been related to valley clearance prior to monument construction in the area (Brown 2006, 26-9; Robinson 2006, 31-3).

The cremation burial in an inverted Collared Urn is less readily paralleled by other sites in the region, as such features are usually excavated as chance finds without the foresight of aerial photography or geophysical survey. Two Collared Urns, one containing a cremation, copper alloy dagger and bone pin, were found in barrow 3/1 at Irthlingborough. No potential grave goods were recovered from the Collared Urn cremation pit at Higham Ferrers, although there is always the possibility that these were of an organic nature and thus have not survived.

Whether or not the early Bronze Age cremation burial from Higham Ferrers was part of a wider cemetery or settlement is uncertain, and the question cannot easily be resolved by recourse to non-invasive survey techniques. Future excavation beyond the boundaries of the excavated area may, however, provide a more complete picture of its immediate surroundings.

There is no direct evidence of late Neolithic/early Bronze Age habitation at Higham Ferrers, although the slight traces of ephemeral surface structures may not have survived. Most sites are represented only by flint distributions detected during fieldwalking, such as those encountered during the Raunds Area Survey (Parry and Humble 2006, 38-42). The nearest – and so far, only – later Neolithic habitation site excavated in Northamptonshire is at Ecton, Northampton, which was discovered during gravel extraction (Moore and Williams 1975). A series of shallow pits and hollows was exposed, some associated with hearth debris, along with a pottery assemblage and flint scatter.

At Higham Ferrers, both the ceramic and lithic assemblages seem to have been deposited in non-domestic circumstances, being generally small and found in mortuary contexts. Where the settlement

lay is unclear. A concentration of flintwork was found in the topsoil directly overlying the barrow during fieldwalking (NAU 1991), but it seems unlikely that the excavated area was a focus of domestic habitation. The surviving excavated traces all relate to mortuary activity, suggesting that the area was reserved for activity of a ceremonial nature.

Late Neolithic/early Bronze Age ring ditch

The two-phase ring ditch was identified by aerial photography approximately 200 m east of the Roman settlement on the south-western slope of the Kings Meadow Lane valley (Fig. 2.1). The feature was partially revealed by a trench excavated during the 2000 evaluation and was more fully excavated during the excavation of the same year (Fig. 2.2).

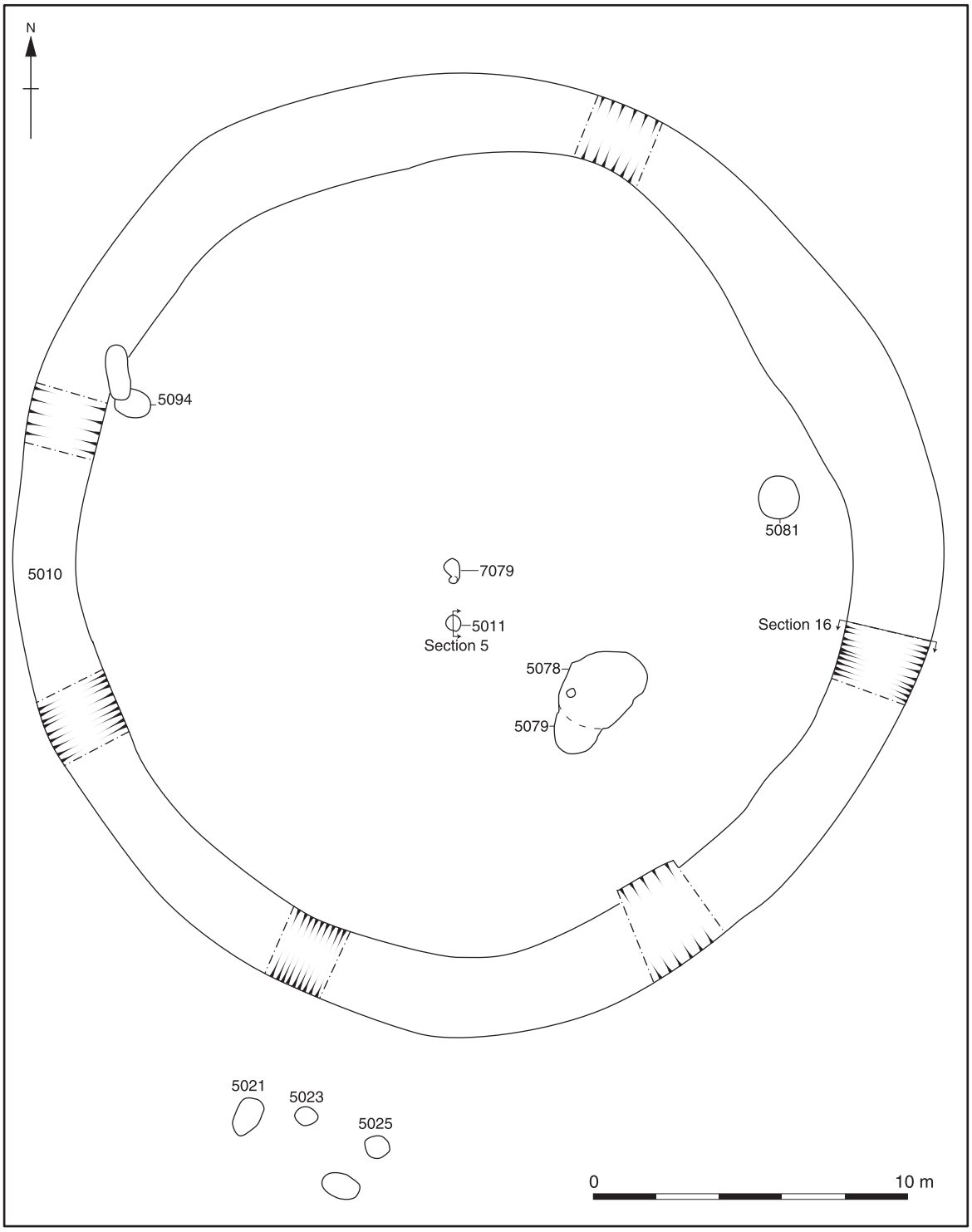


Fig. 2.2 Plan of ring ditch 5010

The remains were plough-truncated, with no preservation of associated soil horizons. In total, 12 % of the ring ditch was excavated, and each section showed a re-cut, largely following the course of the original ditch.

The earliest cut (5010) was Y-shaped in profile, with a narrow, flat base (Fig. 2.3, Section 16). The upper sides sloped at approximately 40º and, nearer the base, at approximately 80º. Where the full profile of this ditch was seen in section, the cut measured 2.4 m in width and between 0.74 m and 0.94 m in depth.

In two of the sections (including Fig. 2.3, Section 16), the stony primary fill appears to have been deposited from the central area of the ring ditch monument, and may have been eroded from a positive feature here. In all the other sections, the fill was evenly distributed in the base of the cut. The remaining four fills were mid orange-brown silts containing varying amounts of ironstone, perhaps representing interspersed episodes of silting and deposition of eroded mound material, although there is no indication from which side of the ditch this material originated. In the evaluation slots, the inside slopes were found to be shallower than the outside ones, perhaps due to greater deposition on this side. No dating evidence was recovered from the earliest ring ditch phase.

The re-cut (5030) largely followed the course of the earlier ditch, but in most sections lay towards the inside edge of the original cut (Fig. 2.3, Section 16). It was concave in profile, and was narrower and shallower than the original cut. It may have been dug to redefine the monument, in contrast to the earlier ditch, which may have had a dual function of definition and a source for mound material, necessitating a bigger cut. Most of the sections revealed two fills, the first of which was a stony mid brown sandy silt. The remainder of the cut was filled with a more friable and homogenous dark orange-brown sandy silt; this recut contained pottery of uncertain prehistoric date. These straight-sided body sherds are very abraded and not particularly diagnostic. They are most likely to date to the middle Bronze Age, but this is not certain.

Features in the ring ditch interior

Several features were located in the area enclosed by the ring ditch (Fig. 2.2), two of which displayed the characteristics of cremation burials. One of these small pits (5011) was centrally located and had been very disturbed by modern ploughing with the remains of the possible cremation deposit scattered beyond its definable limits, The pit itself was 0.4 m wide and 0.1 m deep; its sides sloped at approximately 50º on to a flat base (Fig. 2.3, Section 5). The single fill (5012) was a light orange-brown silty sand and contained occasional fragments of charcoal and burnt bone, probably human, that suggest it may have held the remains of a cremation deposit.

Early Bronze Age cremation burial

Situated in the far western part of the site on the upper slope of the Nene Valley overlooking the river (Fig. 2.1), cremated human remains were found interred in an inverted Collared Urn (Group 10000; Pls 2.1 and 2.2). The cut (10002) was oval-shaped in plan (Fig. 2.4) and measured 0.6 m in diameter and 0.35 m in depth with vertical sides and a flat base. The north-eastern side of the cut featured a ledge, upon which the urn (10003) had been placed, with a further cremated bone and charcoal deposit filling the base of the larger and deeper pit (Fig. 2.4, Section 1301). The form and

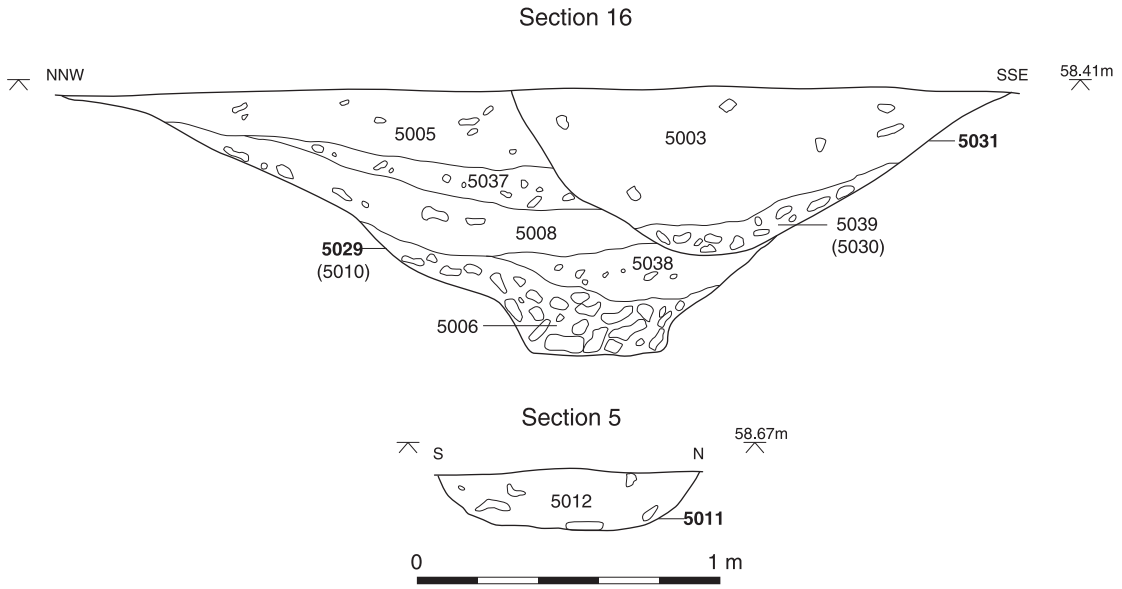


Fig. 2.3 Section drawings: ring ditch 5010 and central pit 5011

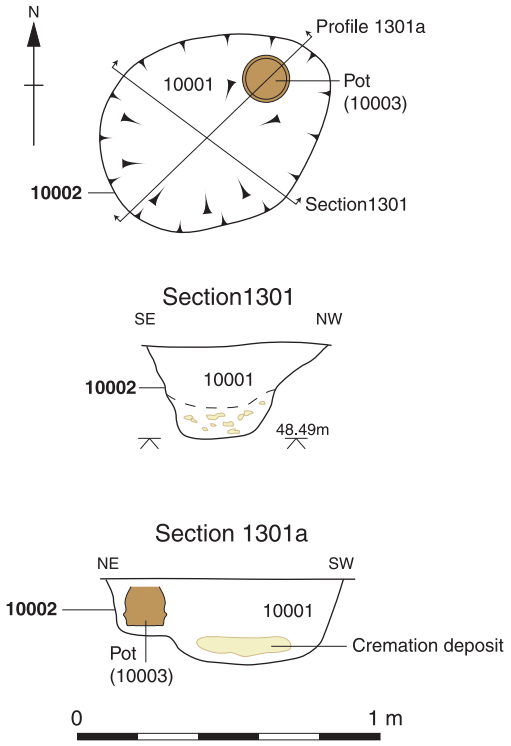


Fig. 2.4 Plan and section drawing of cremation pit 10002

decoration of the early Bronze Age Collared Urn suggest a date range of roughly the 19th to 18th centuries cal BC (see below). Due to the elevated position of the urn in the pit, the urn base was damaged during the initial machine stripping of the area.

The urn contained 557 g of cremated human bone. The remainder of the pit was filled with deposit 10001, which included a dense concentration of cremated human remains near to the base of the pit, apparently deliberately placed, and a smaller amount dispersed throughout the fill. The cremated bone weighed a total of 1212 g. Also included in the fill was a small amount of charcoal. The bone fragments within the pot and within the surrounding deposit represent the partial remains of at least two adult individuals. No nearby features belonging to this phase were identified in the excavation, but it is very possible that such features could have been located as little as 20 m to the north or west of the cremation burial, just beyond the site boundary. The location of the cremation burial, close to the far western limit of the site, thus precludes detailed spatial analysis.

Surface finds

The excavated evidence for early prehistoric activity at Higham Ferrers is corroborated by finds recovered by Northamptonshire Archaeology in 1991

Plate 2.1 The excavation of the inverted Collared Urn cremation from a ledge within pit 10002

(NAU 1991). During a fieldwalking survey, a concentration of worked flints was found around the area north of the ring ditch and east of the Neolithic pits. Finds recovered included flakes, cores, a leaf-shaped arrowhead and a barbed-and-tanged arrowhead. During this survey, a concentration of flakes and a possible blade or scraper were recovered from the topsoil immediately overlying the ring ditch.

Middle/late Bronze Age

While there is convincing evidence for ritual activity in the early Bronze Age, there is no certain evidence either for mortuary practice or habitation in the middle and late Bronze Age. The only possible exception lies with two ditches (11280 and 8298) and a waterhole (11140) – see Figure 2.1, which were stratigraphically earlier than the Roman settlement and which may have been the remnants of a middle Bronze Age field system similar to that seen at Stanwick (Humble 2006a, 46). However, artefacts of this date are conspicuously absent from both the ceramic and flint assemblages. Following this apparent hiatus in settlement (at least in the areas excavated), occupation resumes in the middle Iron Age (see Chapter 3).

Elsewhere in Northamptonshire, middle/late Bronze Age habitation sites are similarly rare. Two roundhouses and a series of boundary ditches were identified at Stanwick around 3 km to the north-east of Higham Ferrers, while a late Bronze Age/early Iron Age enclosure was excavated at Thrapston some 10 km to the north-east. Three later Bronze Age cremation cemeteries, each containing more than 20 burials, have so far been recorded in the county. These include sites at Kelmarsh, Chapel Brampton and Briar Hill, which are all found to the west of Higham Ferrers and within approximately 25 km of the site; the latter was found within an early Neolithic causewayed enclosure.

FLINTWORK

by Kate Cramp and Hugo Lamdin-Whymark

Introduction

A total of 1669 struck flints and ten pieces (42 g) of burnt unworked flint of all periods was recovered during excavations carried out between 2000 and 2002 (Tables 2.1 and 2.2). Excavation of the Roman settlement (2002/3 excavation area) produced the largest quantity of flintwork, a total of 1380 struck flints and six pieces (23 g) of burnt unworked flint.

The flint assemblage was largely recovered from unstratified or redeposited contexts, with very few pieces demonstrably *in situ* within contemporary features. Substantial quantities of Mesolithic flintwork were recovered from reworked topsoil and subsoil layers (eg 10500 and 10502), while smaller amounts came from deposits of Roman or later date. A few, possibly Neolithic, flints from the evaluation are in an exceptionally fresh condition, and may have been recovered from contemporary features. Of particular note is a complete Neolithic polished axe from a Roman boundary ditch.

Methodology

All the flints within the assemblage were individually examined and classified typologically using a series of defined categories that break down into three broad groups: debitage, cores and retouched forms.

Debitage was further divided into flakes, blades, bladelets, bladelike flakes, irregular waste and chips. A blade or bladelet is here defined as a long narrow removal, conventionally described as a flake whose length is at least twice its breadth (Bordes 1961, 6). Bladelike flakes include both blade fragments and flakes approaching blade dimensions. Irregular waste refers to those shattered pieces, frequently non-bulbar, which are produced during knapping. Particular unretouched flake types, such as those from polished or ground implements, core

Table 2.1 Summary of the struck and burnt unworked flint assemblages from Higham Ferrers

	HFKML 00		HFKML 01	HFKML 02	
Category:	*Evaluation*	*Excavation*	*Excavation*	*Excavation*	*Total*
Flakes*	20 (71.4**)	124 (71.7)	61 (69.3)	1002 (72.6)	1207 (72.3)
Chips (<10 mm^2)	1 (3.6)	6 (3.5)	13 (14.8)	9 (0.7)	29 (1.7)
Cores	5 (17.9)	22 (12.7)	3 (3.4)	129 (9.3)	159 (9.5)
Retouched tools	2 (7.1)	21 (12.1)	11 (12.5)	239 (17.3)	273 (16.4)
Hammerstone				1 (0.1)	1 (0.1)
Total:	28 (100)	173 (100)	88 (100)	1380 (100)	1669 (100)
No. of burnt unworked flints		2	2	6	10
Weight (g) of burnt unworked flints		2	17	23	42

* Including all unretouched removals (e.g. rejuvenation flakes, crested blades, flakes from polished implements, etc.)

** Percentage of total struck flint assemblage from each evaluation or excavation

rejuvenation flakes and thinning flakes, were recorded separately. Chips were defined as pieces whose broadest surface was less than 10 mm^2, including small flakes or fragments of flakes (Newcomer and Karlin 1987, 33). In order to avoid any sampling bias, a distinction was made in the database between chips that were excavated by hand and those that were recovered by sieving.

Cores were classified according to removal type and the number of platforms present (eg multi-platform flake core or single platform blade core). All complete cores were weighed.

The terminology for retouched forms follows standard morphological descriptions, for example Bamford (1985, 73-7), Healy (1988, 48-9) and Saville (1981b, 7-11). Microliths were classified according to Jacobi (1978, 16, fig. 6), and microburins according to Clark (1934, 68-9).

Additional details concerning the condition (rolled, abraded, fresh, corticated) and state of the artefact (burnt, broken, utilised) were also recorded, along with a description of any distinctive cortical surfaces that may contribute to a discussion of possible flint sources.

A separate category of burnt unworked flint was used to describe burnt pieces with no struck surfaces or obvious signs of use. This material was quantified by piece and by weight and, where possible, the source of the nodules was identified (eg chalk flint or bullhead flint).

The data was entered directly into a Microsoft Access database. A printout of the catalogue will be deposited with the archive and, where possible, a digital copy will be made available.

Condition

The condition of the flintwork is fairly typical of redeposited material recovered from topsoil layers or from the fills of later features. While generally in fresh condition, most flints display some post-depositional damage, usually in the form of minor edge nicks. A small number of flints are heavily rolled and worn, probably as a result of repeated redeposition.

The majority of flints are uncorticated, although a small number exhibit an incipient blue-white cortication. Spots of iron-staining are also occasionally present. One flint has clearly been reworked in antiquity: the original flake surface had developed a white cortication, which has been truncated by later (uncorticated) retouch to form an end scraper.

Raw material

For the most part, the flint nodules used for knapping purposes seem to have been collected from local gravel deposits. Where present, the cortex varies from a heavily abraded and pitted surface, to a worn and stained yellow-white crust a few millimetres thick. Several of the cores suggest that the raw material was collected in the form of small, river-worn pebbles. Indeed, few of the blades and flakes exceed 60 mm in length, perhaps reflecting the limitations of raw material size. Similar sources seem to have supplied the flint used for burning, although these pieces tend to be much smaller.

Around six flints possess a thick, white, unweathered cortex and dark brown or black interior that may represent the use of chalk flint sources available in East Anglia at a distance of some 50 km. This group includes one opposed platform blade core (context 10500) and one partially-worked nodule (context 10531). Other pieces of chalk flint may also be present but, without cortex, cannot confidently be distinguished from gravel flint nodules. Flint nodules from the Boulder Clay plateau, an area of drift that extends from Raunds eastward to Hargrave, may also have been used for knapping but are unlikely to have been as good in quality as the gravel flint nodules. Cortical flakes are generally under-represented in the assemblage, suggesting that core preparation was mostly performed off-site.

The assemblage

The flintwork is quantified in Tables 2.1 and 2.2. Most of the flintwork was thinly scattered across some 270 individual contexts, the majority of which contained a single flint; larger groups came from contexts 5000 (27 pieces), 5002 (25 pieces), 5036 (31 pieces), 5048 (20 pieces) and 10500 (773 pieces), 10502 (74 pieces), 10657 (29 pieces) and 11253 (96 pieces).

Despite the evidence that it has been redeposited, it seems that a substantial proportion of the assemblage dates to the Mesolithic period and may represent a relatively discrete phase of occupation. This material was mostly found in contexts 10500 (topsoil) and 10502 (finds reference layer), although stray Mesolithic finds occurred elsewhere on site. The collection includes numerous diagnostic early Mesolithic artefacts, including several microliths, and it is likely that the majority of the flakes and cores are also of this date. The Neolithic and Bronze Age period is recognised by the presence of several chronologically distinctive pieces, including a complete polished axe, a chisel arrowhead and a plano-convex knife. There is little doubt that many of the flakes, tools and cores within the assemblage also belong to this period, but these pieces are less confidently attributed on technological and morphological grounds alone.

Due to the redeposited nature of the assemblage, the discussion below is structured by broad chronological period, beginning with the Mesolithic, rather than by site phasing. Particular attention, however, is given to the few cases in which the flintwork may be contemporary with the feature in which it was found. A discussion of the Neolithic and Bronze Age flintwork then follows.

Table 2.2 Detailed quantification of the struck flint assemblage

Category:	*HFKML 00* *Evaluation*	*HFKML 00* *Excavation*	*HFKML 01* *Excavation*	*HFKML 02* *Excavation*	*Total*	
Flake	12	68	42	472	594	
Blade	2	17	6	212	237	
Bladelet		7	4	38	49	
Bladelike flake	3	11	1	126	141	
Rejuvenation flake tablet				5	5	
Core face / edge rejuvenation flake		4	1	17	22	
Crested blade	2	3	1	16	22	
Flake from ground implement	1				1	
Axe sharpening flake				2	2	
Axe thinning flake				1	1	
Burin spall				3	3	
Microburin		2		15	17	
Unclassifiable waste		12	6	95	113	
Chip	1	6	1	9	17	
Sieved chips 10-4mm			12		12	
Single platform flake core		6		8	14	
Multi-platform flake core	2	11	1	43	57	
Levallois / other discoidal flake core				2	2	
Single platform blade(let) core	2	1	1	12	16	
Opposed platform blade(let) core		3	1	30	34	
Unclassifiable blade core				6	6	
Core on a flake				10	10	
Unclassifiable / fragmentary core	1			8	9	
Partially-worked nodule		1		10	11	
Retouched flake		5	3	56	64	
Retouched blade		7	2	42	51	
End scraper	2	1	1	15	19	
Double-ended scraper		1		3	4	
Side scraper				4	4	
End-and-side scraper		2		4	6	
Thumbnail scraper				3	3	
Scraper on a non-flake blank			1	1	2	
Unclassifiable scraper		2		2	4	
Notched flake				13	13	
Notched blade		1		20	21	
Denticulate				1	1	
Serrated flake			1	7	8	
Piercer		1		19	20	
Burin				9	9	
Microlith			1	12	13	
Tanged point				1	1	
Truncated flake				1	1	
Truncated blade				6	6	
Fabricator				1	1	
Laurel leaf				1	1	
Chisel arrowhead				1	1	
Plano-convex knife				1	1	
Unclassifiable knife				2	2	
Polished axe				1	1	
Unclassifiable heavy implement (possible tranchet axe fragment)					1	1
Unclassifiable retouch		1	2	12	15	
Hammerstone				1	1	
Total:	28	173	88	1380	1669	
No. of retouched flints:	2 (7.1*)	21 (12.1)	11 (12.5)	239 (17.3)	273 (16.4)	
No. of burnt struck flints:	5 (17.9)	26 (15)	8 (9.1)	129 (9.3)	168 (10.1)	
No. of broken struck flints:	14 (50)	75 (43.4)	52 (59.1)	580 (42)	721 (43.2)	

* Percentage of total struck flint assemblage from each evaluation or excavation

Mesolithic flint assemblage (Fig. 2.5)

The assemblage from Higham Ferrers is dominated by Mesolithic flintwork, with diagnostic types including 13 microliths, 17 microburins, nine burins, three burin spalls and a small collection of flakes from *tranchet* axes. A possible fragment of a *tranchet* axe was also recovered. From their technological appearance, most of the unretouched material and cores also belong to a Mesolithic industry. This collection represents a careful, blade-based industry, involving considerable investment in platform preparation and maintenance typical of Mesolithic industries. The flintwork occurred mostly in subsoil layers, but small quantities were found scattered throughout the fills of later features. The Mesolithic flintwork forms a technologically coherent collection that seems to belong perhaps entirely to the earlier part of the Mesolithic period.

While the assemblage is dominated by unretouched flakes (594 pieces), blades are well represented and their relative abundance supports the mostly Mesolithic origin of the collection. Blades, bladelets and bladelike flakes together provide 427 pieces and account for 35.4% of all unretouched removal types (excluding chips), a percentage that falls comfortably within the range predicted for uncontaminated Mesolithic assemblages (Ford 1987, 79).

The blades are generally narrow with parallel lateral edges. The scars of previous blade removals

Table 2.3 Classification of the microliths (after Jacobi 1978, 16, fig. 6)

Microlith class	*Description*	*Total*
1a	Obliquely blunted point	3
1ac	Obliquely blunted point	3
1b	Obliquely blunted point	2
1bc	Obliquely blunted point	1
1bc/3c	Obliquely blunted point	1
3a?	Bi-truncated rhombic point	1
4	Convex backed point	1
Unclassifiable	Early Mesolithic shape	2
Total:		14

Table 2.4 Classification of the microburins (after Clark 1934, 67-8)

Microburin class	*Description*	*Total*
A1 (a)	Proximal, left-hand notch	5
A1 (b)	Proximal, right-hand notch	2
A2 (a)	Distal, left-hand notch	4
A2 (b)	Distal, right-hand notch	3
Other	Medial	3
Total:		17

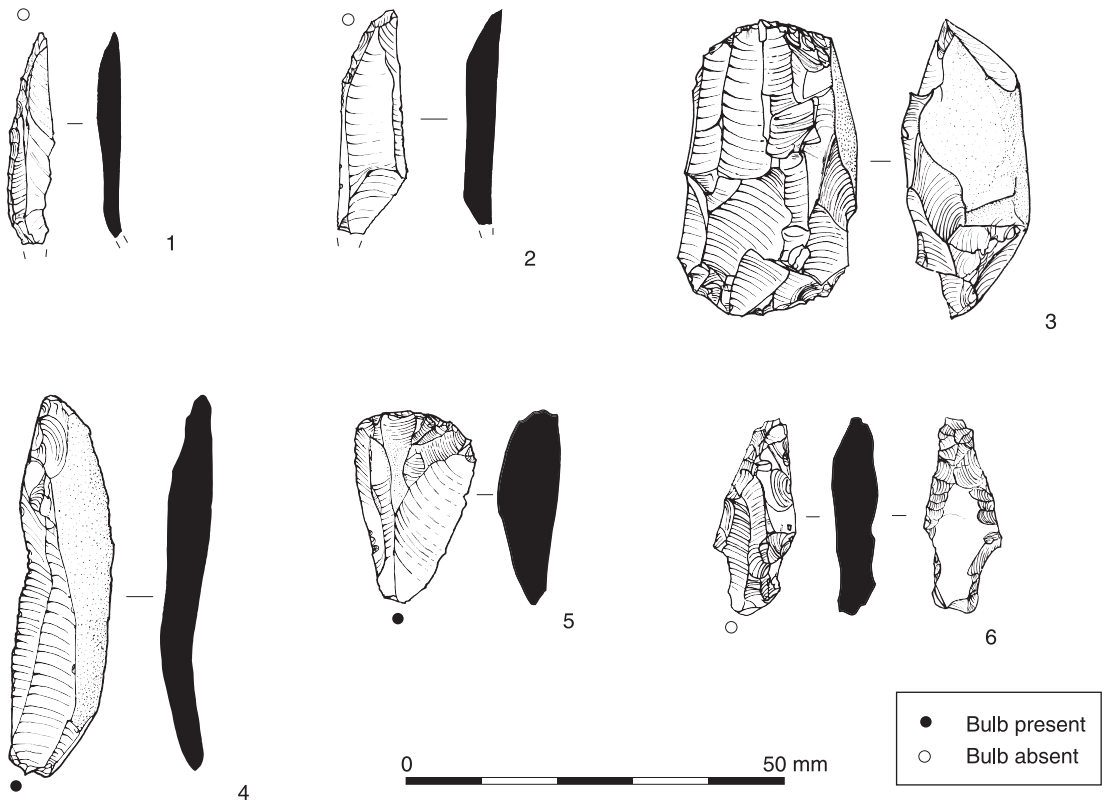


Fig. 2.5 Mesolithic flint from topsoil layer 10500

can be seen on the dorsal surfaces of both flakes and blades, indicating their position within a reduction sequence aimed primarily at blade production. Platforms are typically plain, but linear and punctiform platforms are also common and particularly occur in association with blades. Platform edge abrasion, which involved grinding or chipping the edge of an overhanging striking platform to encourage a more regular and predictable removal, is visible on cores and in remnant form on many flakes, blades and chips.

The presence of 49 rejuvenation flakes, including five tablets and 22 crested blades, suggest careful core preparation and maintenance. Two *tranchet* axe sharpening flakes indicate that axes were sharpened on site and, although only one possible axe fragment was recovered, limited evidence of production was present in the form of one thinning flake. A small number of chips were retrieved, during excavation (17 pieces) and from sieving (12 pieces). Many of these represent broken (and often burnt) fragments of larger flakes or blades, but a few may result from genuine knapping activity. The small quantities involved, however, do not support significant amounts of on-site knapping activity, although an allowance must be made for collection biases.

The majority of the Mesolithic cores were aimed at blade production, and the technology seems heavily dominated by the opposed platform approach (34 pieces). Typical examples were made on a small, elongated nodule with simple flaked platforms at each of the shorter ends (eg Fig. 2.5.3). The blade removals were usually taken along one face, with the back of the core often left cortical or sometimes shaped by a few flake removals. The dominance of the opposed-platform technique is reflected by the blades themselves, almost all of which have at least one dorsal removal from an opposite platform. Plunging blades that remove a large part of the opposite platform are also common. These pieces are presumably knapping accidents, although several were nonetheless later used or retouched. Single platform blade cores were used alongside opposed platform cores, together with a number of irregular forms that appear to have been more opportunistically reduced.

A wide variety of retouched tools were recovered, ranging from simple edge-retouched flakes to notched and serrated flakes. A total of 20 piercers were recorded, many of which had been made on blades (eg Fig. 2.5.4). Nine burins were also identified, and the presence of three burin spalls indicates that these tools were probably being retouched on site. Scrapers occurred in a variety of forms, including double-ended types, but are typically small and neatly-retouched (eg Fig. 2.5.5); a good number have been made on blades.

Along with several truncated blades and one tanged point (Fig. 2.5.6), the assemblage contains 14 microliths (Table 2.3). The collection is dominated by class 1 microliths (eg Fig. 2.5.2), which are characteristically found in Maglemosian industries dating from the first half of the 8th millennium BC (Jacobi 1978, 16). One class 4 microlith (Fig. 2.5.1) was also identified, along with one possible class 3a microlith and two further fragments that probably derive from early Mesolithic shapes. No diagnostically late Mesolithic microliths are demonstrably present in the collection. A total of 17 microburins were identified (Table 2.4), outnumbering microliths in a ratio of 1.3:1 and perhaps indicating slightly more production on site than use. Proximal, distal and medial examples are all represented, and it seems likely that several of the notched blades in the assemblage represent unfinished attempts at microlith manufacture using the microburin technique (Inizan *et al*. 1992, 69, fig. 24).

The significance of this Mesolithic flint assemblage within a local and regional context is discussed above. A catalogue of illustrated Mesolithic flints is shown in Table 2.5.

Neolithic and Bronze Age flint assemblage

Neolithic flint

A small quantity of Neolithic flintwork was identified in the assemblage, although comparatively few diagnostic artefacts were found. Typologically Neolithic artefacts include a complete polished flint axe from the 2002/3 excavation area (Fig. 2.6.1) and a flake from a polished implement recovered during the excavation to the north-east (pit 1319; Fig. 2.1). A

Table 2.5 Catalogue of flints illustrated in Figure 2.5

No.	*Feature*	*Context*	*Category*	*Description*
1	Topsoil	10500	Microlith	Class 4. Possibly utilised
2	Topsoil	10500	Microlith	Class 1ac. Tiny amount of tail lost. Possibly utilised
3	Topsoil	10500	Opposed platform	Small bladelet core. Removals taken down one face from opposed blade(let) core simple platforms. Platform edge abrasion. Gravel flint. 18 g. Mesolithic
4	Topsoil	10500	Piercer	Side-trimming blade with sharp point retouched at distal end. Mesolithic.
5	Topsoil	10500	End scraper	Small triangular scraper. Semi-abrupt, slightly invasive retouch to distal end. Mesolithic.
6	Topsoil	10200	Tanged point	Tang at proximal end. Bifacially retouched. Relatively thick piece. Mesolithic

Fig. 2.6 Neolithic and Bronze Age flint

possible broken laurel leaf point was also recovered from the 2002/3 site (context 10500). This piece was manufactured on a thick, hinged tertiary flake with invasive covering retouch on the dorsal surface and a few sporadic retouch removals on the ventral surface. A broken chisel arrowhead (Fig. 2.6.2) from the same area (context 12242) can be dated to the mid or later Neolithic, along with two Levallois-style cores (both from context 10500). The re-appearance of Levallois technology in the Neolithic period is thought to be associated with the production of blanks for transverse arrowheads (eg Green 1974, 84) and, as such, these cores probably belong to broadly the same phase as the chisel arrowhead from the same site.

The Neolithic assemblage, although largely redeposited, indicates the presence of Neolithic communities within the general area. The concentration of residual flintwork around and within the fills of the late Neolithic/early Bronze Age ring ditch might suggest that the significance of this location was also recognised in the Neolithic period and may have been a focus of particular activities and perhaps settlement.

Bronze Age flint

Diagnostic types belonging to this period are virtually absent from the Higham Ferrers assemblage, although it is possible that non-distinctive flake material of Bronze Age date is present but has been overlooked. The distal fragment of a plano-convex knife (Fig. 2.6.3) was recovered from the topsoil (context 10500), and perhaps originated from a ploughed-out Beaker burial. It may also be significant that two blades were found among cremated bones within an early Bronze Age Collared Urn; both blades were burnt and may represent grave goods. The neatly worked serrated flake (Fig. 2.6.4) is unlikely to date later than the early Bronze Age, but could equally belong to a Mesolithic or Neolithic industry. An unusual tanged flake (Fig. 2.6.5) from context 12102 may represent a knife or an unfinished barbed-and-tanged arrowhead which, in the latter case, would align it with an early Bronze Age industry. Otherwise, there is little material that can be conclusively assigned to the early part of the period, and later Bronze Age material is conspicuously absent.

It seems that the limited activity in the Bronze Age period was mostly related to non-domestic practices, including a Collared Urn cremation burial. It is possible that the plano-convex knife also originated from a burial context, but has since been redeposited in the ploughsoil. There are no groups of flintwork that could be related to general settlement activity nearby.

A catalogue of illustrated Neolithic and Bronze Age flints is shown in Table 2.6.

EARLY PREHISTORIC POTTERY

by Emily Edwards

Introduction

A total of 173 (1402 g) sherds of pottery were recovered, including a Collared Urn, two Mortlake rim sherds and two groups which were associated with the ring ditch.

Methodology

The assemblage was quantified by weight and sherd number. The pottery is characterised by fabric, form, surface treatment, decoration and colour. The vessel fabric was examined macroscopically. OA standard codes are used to denote inclusion types (G = Grog; V = voids left by leached shell

Table 2.6 Catalogue of flints illustrated in Figure 2.6

No.	*Feature*	*Context*	*Small find no.*	*Category*	*Description*
1	Ditch 11249	11248	1433	Polished axe	Partially polished axe. Complete, with modern ?plough knock to butt end. 127 x 48 x 23 mm. Blade edge finely-ground, perfunctory grinding to rest of surface. Lateral edges finely ground and shaped. Neolithic. 158 g.
2	Robber trench	12241	12242	Chisel arrowhead	Broken chisel arrowhead. Mid/late Neolithic.
3	Topsoil	10500		Plano-convex knife	Distal end of plano-convex knife made on secondary flake with thermal areas. Semi-abrupt invasive retouch. A few sporadic inverse removals. Deliberately snapped? Late Neolithic/early Bronze Age.
4	Robber trench	12154	12376	Serrated flake	Broad tertiary flake with serrations to length of left-hand edge. Silica gloss present on ventral surface of edge. Small, neat notch retouched below bulb on right-hand edge, perhaps for hafting purposes.
5	Colluvium	12102		Unclassifiable knife	Tanged piece - possible knife or unfinished barbed & tanged arrowhead? Made on broad secondary flake with inversely retouched tang and notches at distal end; proximal end apparently snapped.

or calcareous inclusions; F = flint) and the size range of inclusions (1 = <1 mm fine; 2 = 1-3 mm fine-medium; 3 = 3 mm < medium-coarse).

Fabrics

G1 The clay matrix was hackly and contained rare pieces of grog up to 5 mm
F1 10% flint, sized from 1-3 mm
V1 5-10% plate-like voids up to 1 mm. Leached shell
V3 20-30% small voids, either leeched shell or calcareous inclusions

Middle Neolithic pits

A total of two Mortlake rims were recovered from pit 1319 and are illustrated in Figure 2.7 (1 and 2). The fabrics and expanded rim form are typical of this style. The decoration on the first rim is slightly unusual, as it was applied, using the end of a sharp implement, to the area underneath the external expansion of the rim. The second rim is very similar to rims noted at Yarnton, Oxon (Edwards and Barclay forthcoming) and Horcott Quarry, Gloucestershire (Edwards forthcoming).

Early Bronze Age cremation burial (10000)

One inverted Collared Urn (Pl. 2.2; Fig. 2.7.3), weighing 853 g and containing a cremation burial, was recovered from a ledge within a pit at Higham Ferrers (context 10003, pit 10002). This is a Tripartite Form 1a according to Longworth (Longworth 1984), the collar of which has been decorated with filled triangles and horizontal lines, by means of a length of twisted cord. The vessel was handmade and smoothed before being open fired for a short amount of time at a low temperature. The form is internally moulded with a wide, concave collar and a pronounced but rounded shoulder. The collar has been exaggerated using an applied, smoothed cordon. It is clear that this vessel was deposited whole and that damage took place during excavation (see above).

It is still uncertain whether Collared Urns had a domestic function or whether they were specifically made for funerary rituals, although there is strong evidence to support the former (Tomalin 1995, 102; Burgess 1980, 84; 1986, 341). Without evidence such as a positive lipid residue result, it could not be established that this vessel was made for the cremation ritual alone.

Deposit from the ring ditch recut

A total of 122 sherds (416 g) was recovered from the recut of the ring ditch. These sherds were very abraded and the average weight was 3.4 g. The rims were equally small and, given the absence of decorated sherds and the ubiquitous nature of shell tempering during the prehistoric in this region, dating was difficult. The small squared rims and plain, straight walled body sherds do not fit with an early Bronze Age date; the rim shape and thickening below the rim are suggestive of middle Bronze Age Globular Urns. This date is by no means certain, however, as the diagnostic sherds were too small for confident identification.

Prehistoric sherds from the shrine interior soil layer

Four residual sherds (12 g) were recovered from context 12721 within the Roman shrine area, near to the cremation burial. These were manufactured from the same V1 fabric used for the manufacture of the Peterborough Ware fragments from pit 1319 and were low fired, unoxidised and smoothed. The refitting rim and shoulder fragment (Fig. 2.7.4) was decorated with a single line of impressions that were either fingernail or cord impressions. The vessel was apparently coil built and the shoulder had been formed by means of an applied, smoothed cordon which had been drawn up to thicken the rim and thus to create a putative collar. One body sherd was covered with what may either have been iron staining or the remains of charred residue, the latter of which would be extremely unusual for earlier Neolithic pottery.

It is difficult to be certain of the date of this little vessel due to its size, condition and the fact that the decoration is so minimal and worn. Cordons and single lines of decoration are very unusual for middle Peterborough Ware vessels; these features are more reminiscent of early Bronze Age urns such as Collared Urns and Food Vessels.

Given the fabric, simple flattened rim form, smoothed cordon, minimal decoration and general proportions of the sherds, a middle Neolithic or early Bronze Age date is most likely.

Discussion

Mortlake Ware was recovered in reasonable quantities from hollows at the habitation site at Ecton (Moore and Williams 1975), from the barrow ditch and a pit cut into the Long Barrow at Redlands Farm (Barclay pers. comm.), from West Cotton (Humble 1994), from Aldwincle (Jackson 1976), Grendon (Gibson and McCormick 1985) and from a central pit at the Neolithic mortuary enclosure/oval mound at Tansor Crossroads (Chapman 1997). The mound at Tansor was covered over and enclosed by a ditch around 2000-1900 cal BC, but it is not associated with early Bronze Age pottery. The fabrics and forms of the pottery from Earls Barton (Mercer 1984) suggests that these may be of Peterborough Ware date rather than being Collared Urn (Gibson 1995, 30).

A Collared Urn cremation was recovered from cremation pits at Redlands Farm, Stanwick (Barclay pers. comm.), which was excavated as part of the Raunds Area Project. Six Collared Urns were recovered from cremation pits at Grendon Quarry, four of which were recovered from one grave group; one

was bipartite and three were tripartite (Gibson and McCormick 1985). A total of 48 Collared Urns are listed in Longworth as having been recovered from Northamptonshire, three of which are of a similar form to the Higham Ferrers urn. The three comparable vessels are from Great Brixworth (987), Corby (992) and Rothwell (1017). Two of these urns were identified by Longworth as primary vessels and one as a secondary vessel (see below); the latter also contained a cremation.

Longworth's system was reviewed by Burgess (1986), who simplified the criteria and established an Early, Middle and Late Series, each relating to a phase of the early Bronze Age. Research by Needham (1996) has been used in order to place Burgess' series in a more up to date chronology. A Middle Series vessel is required to possess a minimum of three Early traits and no more than two Late traits (Burgess 1986, 345-48). The Higham Ferrers Collared Urn possesses internal moulding, an upright rim and a shoulder, all of which are Early traits. It also has a very narrow base and bold decoration with none below the collar, which are Late traits. This would place the urn in Burgess's Middle Series, which equates with the Wessex 1 or Bush Barrow phase of roughly the 19th-18th centuries cal BC (Burgess 1986, 350; Needham 1996, 131-2).

Catalogue (Pl. 2.2 and Fig. 2.7)

1. SF 95. Fabric V1. Small Mortlake rim with expanded rim and internal smoothed cordon. Decorated internally and on the rim with herringbone applied with a sharp implement. Decorated externally with the same sharp implement, pattern loosens into widely spaced zigzags. Firing, black throughout.

2. SF 96. Fabric F1. Small Mortlake rim with externally expanded rim. Decorated externally and internally with widely spaced herringbone, applied using a whipped cord motif. The top of the rim is decorated with faded cord or bone impressions. Firing: external, grey; core, grey; internal, grey; rim top, yellow brown.

3. Pit 10002. Context 10003. Fabric G1. Typologically Early, Tripartite Form 1a Collared Urn. Decoration: filled triangles and horizontal lines, applied using twisted cord. Depth of collar, 40 mm; rim diameter, 139 mm; peak of collar diameter, 130 mm; shoulder

Plate 2.2 The Collared Urn, after excavation and cleaning

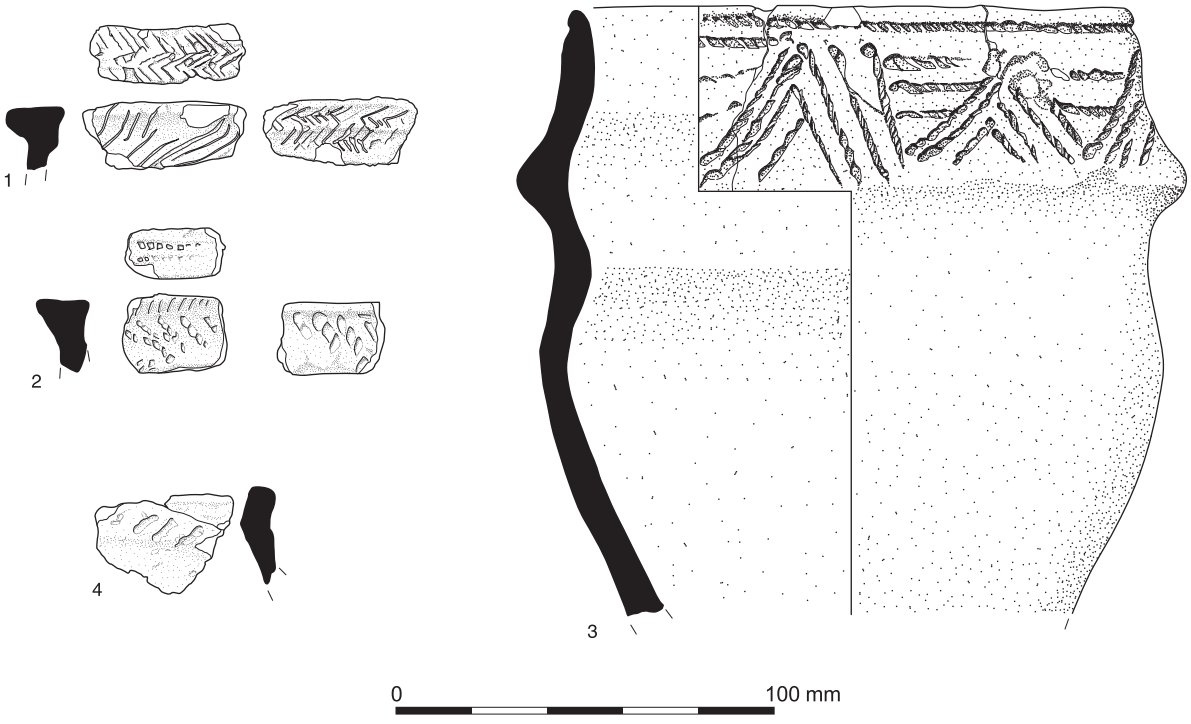


Fig. 2.7 Early prehistoric pottery

diameter, 120 mm; height, 140 mm. Weight 853 g.

4. Shrine Interior. Context 12721. Fabric V1. Small refitting, fingernail decorated shoulder and simple flattened rim from a small vessel.

THE BRONZE AGE CREMATION BURIAL

by Annsofie Witkin

The methodology for the analysis of the cremated bone can be found in Chapter 6.

Provenance

One cremation burial dated to the early Bronze Age was located on the far western edge of the site (Fig. 2.1). One deposit of cremated bone (10010) was within an inverted collared urn (10003), which had been placed on a ledge at the north-eastern edge of a pit (10002) (Pl. 2.1; Fig. 2.4). A separate substantial deposit of cremated bone (10001) was present on the base of the pit.

Condition of the bone and disturbance

The pit was 0.35 m deep and no bone was visible on the surface of the feature, which indicated that the burial was undisturbed. The cremated bone from both the urn and the pit was in good condition; none of the fragments were chalky or eroded.

Demographic data

The deposits (10001 and 10010) contained two individuals as indicated by the duplicate skeletal elements such as the dense, morphological differences of hand phalanges, and the presence of unfused as well as fused bones. Individual A was a female and aged between 27 and 39 years and individual B was of unknown sex aged between 13 and 17 years. A catalogue of the Bronze Age cremated human bone can be found in the site archive.

Pyre technology and ritual

The cremated bone was generally white, which is indicative of full oxidation (Holden *et al.* 1995a and b; McKinley 2000, 40). Observations at modern crematoria have shown that collectable fragments (<2 mm fraction) from an adult cremation weigh between 1000-2400 g with an average of 1650 g. Weights between 1600-3000 g have also been cited but it is unclear whether these figures also includes the weight of bone dust (McKinley 1997, 68). The total weight of the bone deposit 100010 within urn 10003 was 507 g and deposit 10001 weighed 1641 g. The majority of the bone from both deposits could not be assigned to either individual so the weight of bone specifically ascribed to each was therefore very low (Table 2.7). However, the weight of all bone (10001 and 10010) was 2148 g. This is quite a substantial amount which may well represent two complete individuals.

A number of factors may affect the level of fragmentation of cremated bone. These factors are the cremation, collection, burial, excavation and post-excavation treatment (McKinley 1997, 69). The largest fragment from the urned deposit (10010) was 79.8 mm long. This was slightly larger than the maximum fragment from the unurned deposit (10001) which was 68.3 mm. The majority of the bone from both deposits (61.5% from deposit 10001 and 63.7% from deposit 10010) was also represented within the 10 mm category. This indicated that the container had provided some protection against further fragmentation in the burial environment and that little further fragmentation had been caused by later activities such as ploughing.

In any cremation, the majority of the bones are unidentifiable fragments of long bone shafts and spongy bones. Some areas of the skeleton, for example the skull, are easier to identify than other bones (Table 2.7).

It was clear from the elements identified from both of the individuals that fragments from all skeletal areas and from both individuals were represented in both of the deposits. There was no preference in skeletal elements included in the burial. There was no great difference in the cortical thickness of the bone fragments because the individuals comprised a female and an individual who was near adult in age. It was therefore impossible to decide to which individual the majority of the bone belonged (Table 2.7).

Discussion of burial ritual

This single cremation burial comprised two individuals mixed through two deposits within a pit. The burial urn is assumed to symbolise a roundhouse of

Table 2.7 Weights of cremated bone within anatomical categories

Context	*Individual*	*Skull*	*Axial*	*Upper limb*	*Lower limb*	*Unidentified*	*Total weight*
10001	A	47 g	25 g	1 g	18 g	19 g	110 g
10001	B	39 g	3 g	1 g	24 g	21 g	88 g
10001	A and B	44 g	51 g	70 g	212 g	1066 g	1443 g
10010	A	24 g	17 g	2 g	6 g	0 g	49 g
10010	B	15 g	4 g	1 g	3 g	0 g	23 g
10010	A and B	45 g	59 g	25 g	71 g	235 g	435 g

the living and is therefore the symbolic home of the cremated remains, which implies a symbolic bond between the settlement and the burials (Ray 1999, 31). The commingling of the remains may also allude to this emphasis on the community since individuality has been denied.

CHARCOAL AND CHARRED PLANT REMAINS *by Dana Challinor and Mark Robinson*

Charcoal

A single sample was selected for charcoal from the Bronze Age cremation pit (10002), with results of the analysis outlined in Table 2.8. The methodology is outlined in Chapter 6.

The sample from pit 10002 came from a deposit (10001) of cremated bone and charcoal at the base of the feature. The assemblage was dominated by *Quercus*, heartwood and sapwood, with a few fragments of *Corylus avellana* and *Prunus spinosa.* Since fragments of hazelnut shell were recovered from the sample (Robinson, this volume), it is possible that the hazel wood entered the fire with food remains, rather than as a deliberate fuelwood. Indeed, since *Prunus spinosa* also produces edible fruits (sloes), this may explain the presence of this species in the charcoal assemblage. On the other hand, both of these species have been recovered as charcoal from cremation deposits of similar date, often assumed to be part of the brushwood infilling of the pyre structure, or used as kindling (Challinor forthcoming). Some cremation burials are even dominated by these species, suggesting that they were utilised as the main fuelwood on occasion (eg Challinor 2007; Gale 1992; Jones 1978).

It is of interest that the assemblage is dominated by a single species, since this trend has been noted at other sites and may be of ritual significance (Thompson 1999). Certainly, there is some suggestion that fuelwood was more carefully selected for cremations than for domestic purposes at other sites (eg Dorney, see Challinor 1999). Oak is commonly used for fuel and construction and since it would have been a valuable timber tree, it is likely to have been managed by pollarding or coppicing for most purposes, rather than felled in entirety. The presence of heartwood as well as sapwood in the Higham Ferrers sample indicates that timber of some age was included in the pyre and may support the theory that a single mature tree may have been felled for cremations. Of course, the careful selection of oak fuelwood may be related to the practical requirements of cremating a human body, for which oak is highly suited (Edlin 1949), rather than ritual significance.

The results from the nearby site of Raunds are interesting and initially appear to contrast with those from Higham Ferrers, since many of the Bronze Age cremation deposits produced charcoal assemblages of mixed species (Robinson 2006, 33). The authors suggest that there may be a correlation between the age/sex of the deceased and the fuelwood used, where infants and adults tend to be associated with a single species and children with mixed assemblages. Like the burial at Higham Ferrers, a couple of the Raunds burials represented two individuals, one adult and one sub-adult; and in each case the charcoal assemblages were dominated by oak. The burial from Higham Ferrers clearly fits into the hypothesis, although the fact that the adult was female suggests that there was no distinction between the sexes.

Table 2.8 Results of the charcoal analysis from the Bronze Age cremation pit
(r=roundwood; s=sapwood; h=heartwood)

	Feature type	*Cremation pit*
	Feature number	10002
	Context number	10001
	Sample number	600
	% flot identified	12.5
Quercus sp.	oak	159hs
Corylus avellana L.	hazel	3
Prunus spinosa L.	blackthorn	2
Indeterminate		1
Total		165

Charred plant remains

A single sample was selected from the Bronze Age collared urn for detailed charred plant analysis. The methodology is outlined in Chapter 6.

Sample 600, Context 10001, Feature 10002 (Phase 1: early Bronze Age).

Apart from a single unidentified cereal grain, the carbonised food remains from the fill of the early Bronze Age cremation burial were all of fruit and nuts. Most numerous were nut shell fragments of *Corylus avellana* (hazel) but there were also a couple of acorns (*Quercus* sp.) and a stone of *Crataegus* cf. *monogyna* (hawthorn). Carbonized hazelnut shell fragments are a frequently found class of food processing waste on Neolithic and Beaker settlements. It is possible that these remains were of a food offering placed on the cremation pyre. However, the acorns of the two native species of oak, *Q. robur* and *Q. petraea*, are rendered toxic by their very high tannin levels. Whereas acorns of some of the Southern European species of oak with lower tannin levels were commonly eaten in prehistory, there is no evidence for the human consumption of acorns in Neolithic and Bronze Age Britain. It is thought likely that the acorns and the hawthorn fruit had been on branches used to effect the cremation, along with the hazel catkins.

Since some of the charred remains from the early Bronze Age cremation were perhaps part of the fuel rather than a food offering, it is difficult to draw conclusions from the results. However, they do suggest that woodland food resources in the form of hazelnuts were being used.

Chapter 3: Iron Age Settlement (Phase 2)

by Alex Smith and Jeff Muir

INTRODUCTION

The Iron Age site was located *c* 200 m to the north of the Saxon settlement and *c* 370 m north-east of the Roman settlement on a natural slope (*c* 55 m OD) overlooking the Nene Valley to the west. (SP 95896958; Fig. 3.1; Pl. 3.1). In March 1991 a number of cropmarks, including a wide-ditched rectangular enclosure were investigated by trial trenching by the Northamptonshire Archaeology Unit (NAU). The investigation confirmed the existence of a middle to late Iron Age settlement consisting of a series of enclosures with associated ring gullies and other settlement features.

Enclosure 2 (NAU 1991, fig. 3), which was the largest of the enclosures, was recognised as belonging to a distinctive type of relatively small, defended enclosure common to the Northamptonshire area (Dix and Jackson 1989). In 1995 that enclosure was further investigated by Oxford Archaeology (OA) as part of a wider project designed to mitigate a proposed housing development. The investigations confirmed both the middle to late Iron Age date and defended character of the enclosure. A further archaeological evaluation was undertaken by OA in 1997 on land lying between Station Road and Stanwick Road, to the east of the main Iron Age settlement (Fig. 3.1). One of these evaluation trenches revealed middle to late Iron Age pits and ditches, undoubtedly representing the eastern periphery of the settlement. A few further features of possible Iron Age date were revealed in the 2002-3 excavations of the Roman settlement.

THE EXCAVATION

The nature of the development on this part of the site (construction of a roundabout and access roads) led to the excavation of an unusual 'spur' shaped trench which took in approximately one third of the principal enclosure (253; Fig. 3.1; Pl. 3.2). This had been identified from the air and previously sampled by the Northamptonshire Archaeological Unit

Plate 3.1 Machine excavating a section in the Iron Age site looking north-west across the Nene Valley

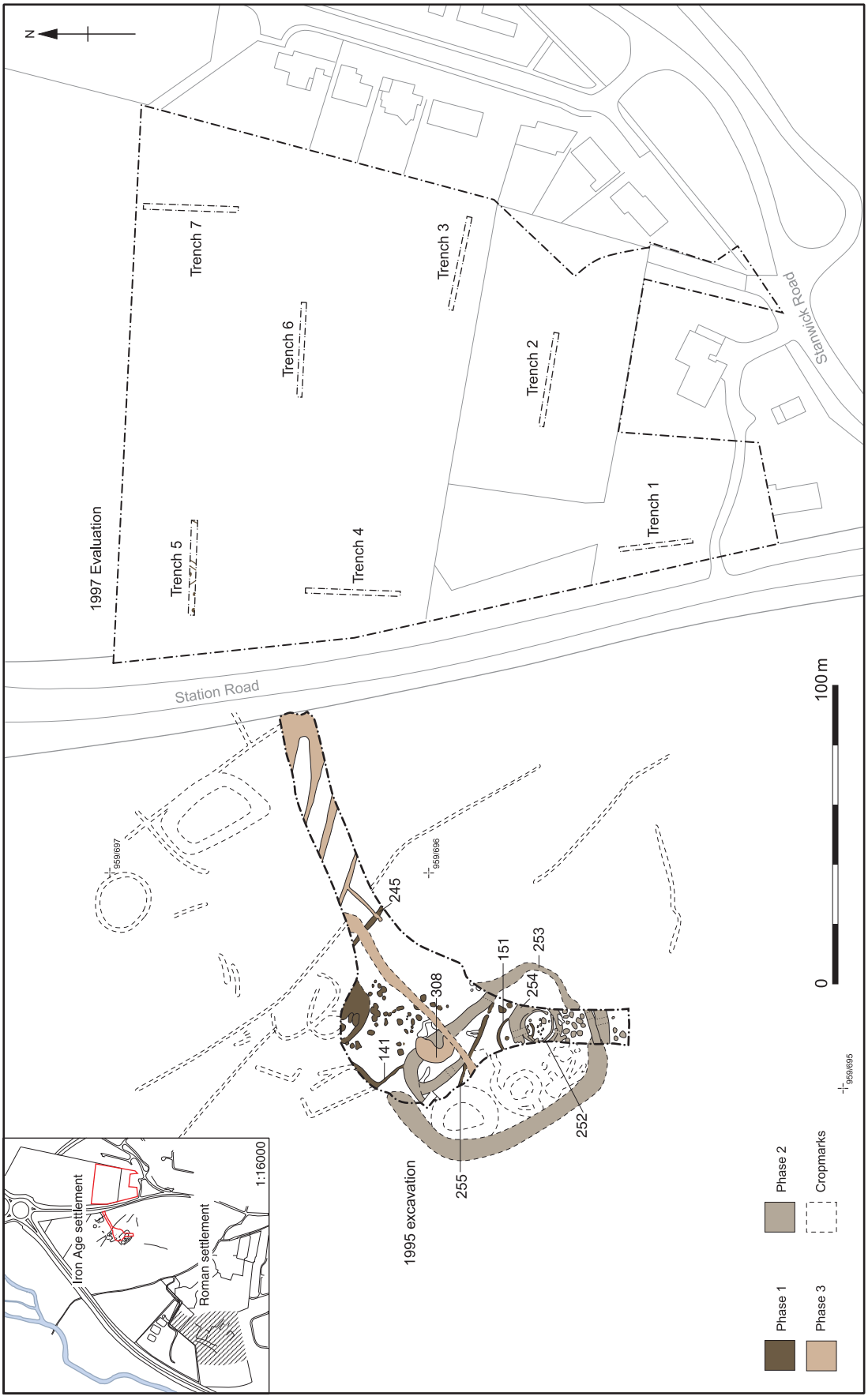


Fig. 3.1 Location of Iron Age settlement and evaluation area

Plate 3.2 Excavation of the Iron Age settlement looking north-west

(NAU 1991, enclosure 2; figs 3, 29 and 30). This allowed partial characterisation of both the enclosure ditch and its interior.

The circumstances of excavation were less than ideal, as planning permission for development had been granted before the introduction of PPG 16, and therefore funding for the project was very limited. Although features were revealed outside the enclosure, these financial constraints meant that the excavation had to concentrate almost exclusively on the enclosure itself and its internal features. The limited number of interventions coupled with a small and largely undiagnostic ceramic assemblage precluded the construction of detailed stratigraphic phasing over the majority of the site. A very broad scheme of phasing has been produced (see phasing – below) but relies heavily upon spatial considerations and should be considered more of an aid to description than a definite chronological guide.

Phasing

As is explained below (see Jackson), the chronology of the recovered pottery assemblage was insufficient to determine any site phasing. However, some stratigraphic relationships were recorded, and these plus the apparent distribution and organisation of the revealed features have enabled a plausible, if not archaeologically provable sequence of phasing to be determined.

Phase 1 (Figs 3.1-2)

Penannular gully 151

The earliest phase of activity was represented by a hut circle (151) defined by two partly revealed curvilinear gullies (151 and 132), both cut by later features. Both gullies were shallow and 'U' shaped in profile, averaging 0.35 m wide and 0.15 m deep, and contained silty clay fills with limestone fragments. Only the eastern terminus of the southern gully survived in the excavated area. Two possible pits (not excavated) were located within the area defined by these gullies, but there was no evidence of structural postholes or other internal features.

Ditch 255

A linear ditch (255) was identified approximately 4 m to the north of the hut circle, aligned WNW-ESE. It was up to 1.0 m wide and 0.23 m deep, and contained a similar fill to the gullies of 151. The line of the ditch may have been continued beyond its eastern terminus (147), indicating a 0.50 m wide gap or entrance. The ditch was on a different alignment to the enclosure ditch 253 and was cut by it. A small quantity of 2nd-century BC pottery and a few bone fragments were recovered from the sampled sections of this feature.

Enclosure 141 (Fig. 3.1)

A rectangular enclosure, defined by a shallow 'V'-shaped ditch (141) approximately 0.80 m deep, was partially revealed adjacent to the north-east side of

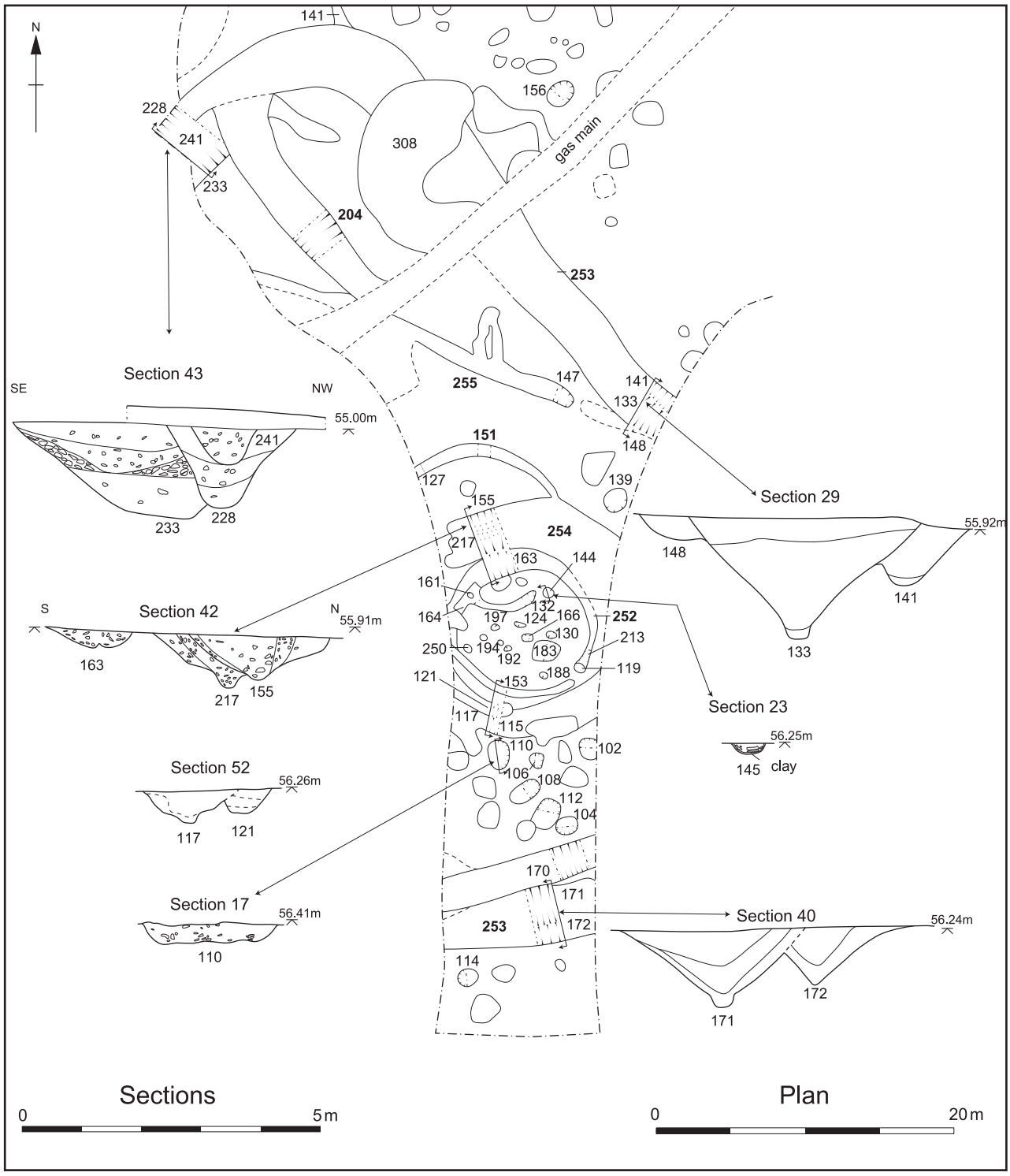


Fig. 3.2 Plan and sections of Iron Age settlement

enclosure 253. The latest cut of 253 was seen to truncate the edge of 141, and could imply that this enclosure predates the more substantial one to the south. Part of the north-west side of the enclosure ditch was revealed, along with a short section of what was considered to probably be the ditch defining the north-east side (245), which showed evidence of being recut.

The interior of the enclosure had suffered more than elsewhere from the disturbance and truncation caused by medieval ridge-and-furrow ploughing, reducing the clarity and definition of the features in plan. However, surface cleaning revealed the southern arc of a probable hut circle of comparable size to those found in the large enclosure to the south, which seemed to corre-

spond to a similarly shaped feature plotted from the aerial photographs. To the south of this arc was a scatter of oval or sub-circular pits, some of which were sample excavated. These are considered likely to have been contemporary with the enclosure only because their distribution appears to be confined within this feature. The pits showed similar characteristics in their fills and dimensions to those situated south of hut circle 252 (see below). Their purpose is equally as unclear, although two of the sampled pits produced small quantities of slag, which might suggest an industrial focus of activity within the enclosure.

Phase 2 (Figs 3.1-2)

Enclosure 253

Ditch 253 defined a sub-rectangular enclosure approximately 45 m wide by 70 m in length. The excavation exposed the north-east side of this enclosure (Pl. 3.3) along with a short length of its southern side (Pl. 3.4). Figure 3.1 indicates that there was a discrepancy of approximately 5 m NE-SW between the plotted position of the enclosure from aerial photographs and its actual location as determined from the excavation. Two of the three sampled sections indicated that the original ditch was recut at least once. It is clear that an early, 'V'-shaped ditch of relatively modest proportions (1.4 m wide by 1.0 m deep) was replaced by a much more substantial ditch (3.0-3.5 m wide by 1.2-2.0 m deep) of a similar profile (Pl. 3.4).

Some of the variation in the size of the ditch is likely to have been a consequence of truncation caused by the medieval ridge and furrow ploughing. No evidence was found for an internal or external bank in the form of any indicative sloping of the ditch fills. A short length of ditch (204) of similar dimensions to 253 was revealed close to the northern corner of the enclosure. Its relationship to the enclosure ditch was uncertain, but as is argued below, it may have represented the inturned north side of an entrance just to the west of that corner. Otherwise, no interruptions to the line of the enclosure, which might indicate an entrance, were revealed. A slight concentration of finds, in the form of pottery and animal bone fragments, was noted in the sections dug in the northern corner of the enclosure, and particularly from the inturned ditch 204, possibly indicating more intensive activity in that area.

The penannular ditch (254)

Approximately 70% of a penannular ditch (254) was revealed close to the eastern end of enclosure 253. The original cut (217) defined a circular area approximately 11.4 m in diameter with an

Plate 3.3 Section across north-eastern side of Iron Age enclosure ditch 253 looking west

Plate 3.4 Section across southern side of Iron Age enclosure ditch 253 looking east

entrance in its north-western side marked by an unexcavated terminal (Pl. 3.5). Any opposing terminal lay outside of the excavated area making an estimation of the entrance width impossible. Ditch 217 was allowed to silt up almost entirely before it was re-cut by ditch 155, enclosing an area *c* 12 m in diameter. Both ditches had very similar dimensions (0.70-0.88 m deep by 2.20 m wide) and a wide V-shaped profile with a flat cleaning slot in the base. The dimensions of the ditches seem excessive for a simple drainage function and it is possible that the penannular ditches were originally intended to act as enclosures in their own right.

Penannular gully (252)

A shallow 'U' shaped sub-circular gully (252), averaging 0.45 m wide by 0.30 m deep was identified within the area enclosed by ditch 254. A small break in the line of the gully was noted in the south-east, probably defining an entrance, although this does not correspond with the break in the circuit of the penannular ditch, which lay to the north-west. It is possible that there was another entranceway in gully 252 at this location, and the location of both entrances may be suggested by the presence of two substantial postholes, (119 and 161) on the south-east and north-west sides of the gully circle respectively. Both features contained fragments of fired clay in their fills.

Within the area confined by the gully was a random scatter of 31 postholes and small pits, of which 12 were excavated. The postholes were all either sub-circular or oval in plan but varied considerably in dimensions (0.12-0.50 m deep by 0.32-0.65 m in diameter). Three of the features (166, 145, 188) were subcircular, steep-sided pits with vestiges of a clay lining and numerous limestone pieces showing signs of burning within their fills. These may have been boiling pits; however, as one of the pits (166) was situated approximately at the centre of the gully circle, and the other two were within 0.70 m of the gully itself, the possibility that these three features might in fact be stone-packed structural postholes would be an attractive one, if not for the difficulty of accounting for the apparent clay lining.

Other excavated features within the circle included a large, flat-bottomed pit (183) and a scatter of five small post or stakeholes, one of which (124) contained fragments of fired clay similar to those from postholes 119 and 161. One other feature, a shallow scoop (250), located close to the western side of the gully circle, is worthy of note. It contained an articulated sheep skeleton, but no dating material, so its association with the rest of the activity here is purely circumstantial.

Associated features

A scatter of oval or irregular pits lay to the south of the gully 252, extending south to the line of the

Plate 3.5 View across circular building 254 looking west over the Nene Valley

enclosure ditch (253). Further features of similar appearance were noted beyond the enclosure. A sample were excavated, and most displayed a shallow 'U' shaped profile, averaging 0.25 m in depth, and contained unremarkable silty clay and limestone fills, with small assemblages of pottery and bone fragments. Pit 115 was significantly different in that it cut the original phase of the penannular ditch 254, and contained lumps of blue clay within its fill.

The finds

The animal bone assemblage from the environs of the hut circle 252 was modest, although its distribution is worthy of note. A quantity of bone was recovered from a north-western section of the penannular ditch 254 and the adjacent posthole 161. The disposal of food waste in the ditches close to a doorway is a common characteristic of Iron Age dwellings, although as very few other sections were put through this ditch there is no way of telling whether it represents a genuine concentration of faunal remains.

Phase 3 (Fig. 3.1)

As has been mentioned above, the effects of medieval ridge-and-furrow ploughing were more evident in the northern part of the trench, and the bases of three furrows were identified. A large irregular spread of silty clay (308) overlay the northern part of the large enclosure 253 (see Fig. 3.2). The feature was not excavated, and although Iron Age pottery was recovered from its surface, this is most likely residual material, and it seems more probable that feature 308 is of medieval or even modern date. Finally a NE-SW gas main trench was identified crossing the northern part of the excavated area.

Features from the 1997 evaluation

In 1997, an archaeological evaluation was carried out 60 metres to the east of the main site on land lying between Station Road and Stanwick Road. Seven evaluation trenches were excavated covering an area of 2.3 hectares (Fig. 3.1). The only trench to yield significant archaeology was Trench 5 where, in addition to several gullies and a substantial posthole at the eastern end of the trench, three pits of varying size were excavated (Fig. 3.3). A relatively large bone and pottery assemblage was recovered from the fill of pit 519, as well as a large quantity of heavily burnt limestone slabs and pebbles with frequent charred plant remains. An oval, steep-sided pit located 2.5 m to the east (517), of a type commonly found on the main Iron Age site excavated in 1995 (see above), yielded only a few pottery sherds and bones. The most substantial of the three pits (511) contained a thick square piece of unworked ironstone whose purpose remains unclear.

Three linear gullies ran across the centre of the trench, two (507 and 509) on a parallel SW-NE alignment, the third (514) perpendicular to the others. Both gullies 509 and 514 share broadly similar dimensions and may actually represent two sides of the same gully which form a corner. They contained very small quantities of Iron Age pottery. The posthole (505) and trench (503) located at the eastern end of Trench 5 were also aligned similarly to gullies 507 and 509, and suggested as Iron Age in date on this premise. The posthole was quite large and contained a fill of charred plant remains. The trench, possibly representing a beam slot, suggests

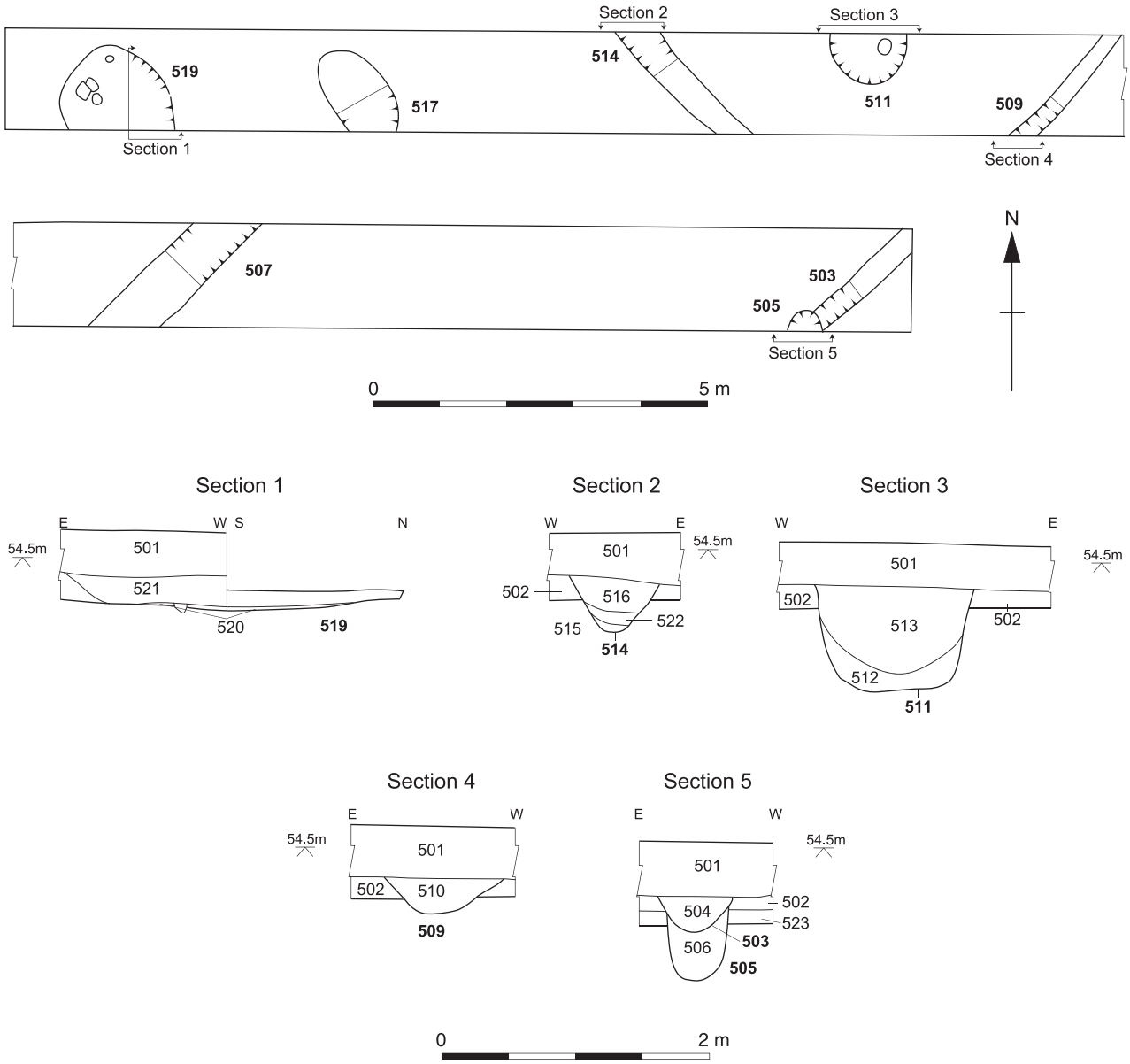


Fig. 3.3 Plan and sections of Iron Age features in Trench 5

the presence of a reasonably substantial structure, although caution must be exercised in this interpretation since very little of the feature was exposed during excavation.

THE IRON AGE POTTERY *by Dennis Jackson*

A total assemblage of 301 sherds (5949 g) of Iron Age pottery was found during the 1995 excavation and is described in this report. In addition another 300 tiny sherds were recovered, mostly during sieving, which were generally too small to use in the fabric analysis. A further 107 sherds of Iron Age pottery were recovered from the 1997 evaluation (see below).

Fabric

Shell is the dominant inclusion type in the pottery and is found in various amounts in the majority of the sherds. This is a common occurrence in most Iron Age ceramic assemblages from the Nene Valley, and north Northamptonshire, where outcrops of limestone and fossil shell widely occur. Ironstone, limestone, or organic traces occur in a number of sherds but each of these may have been present in the clay. There are no obvious inclusions in the pottery which are likely to be of non-local origin.

The quantity or density of shell can sometimes be

of chronological significance in Iron Age site assemblages from the region (eg Great Houghton, Northampton; Chapman 2001), but there appears to be no evidence of this amongst the relatively small assemblage from Higham Ferrers. There is no clear division between some fabric types described below and the quantities are therefore approximate:-

Fabric 1

Large shell inclusions up to 8 mm in diameter. The pottery is often laminated or friable. Sherds 15, weight 466 g.

Fabric 2

Shell fine and often associated with smooth dark wares. Sherds 117, weight 1708 g.

Fabric 3

Shell moderate in size and quantity. Sherds 135, weight 2465 g.

Fabric 4

Shell dense and possibly pounded. Merges with Fabric 1. Sherds 14, weight 244 g.

Fabric 5

Inclusions sparse or absent. Sherds 3, weight 70 g.

Fabric 6

Shell with ironstone or sandstone inclusions. Sherds 4, weight 292 g.

Fabric 7

Shell with large limestone inclusions. Sherds 8, weight 514 g.

Fabric 8

Grog added. Sherds 5, weight 190 g.

The majority of the sherds are in fabrics 2 and 3, which together account for 84% of the total (73% of the weight).

Forms

No complete profiles were recovered but jar and bowl forms can be recognised. Four sherds came from thick-walled vessels, including the illustrated rim sherd from context 168 (Fig. 3.4.7). These may have derived from large container jars perhaps used to bring produce to the site.

Rim sherds from other jars and bowls came from globular or slack sided vessels. There are three jars with rim diameters ranging from 240 mm to 300 mm and three bowls with diameters in the 140-160 mm range.

Hardness and surface finish

There are no soft wares in the assemblage and only a small number of sherds can be regarded as very hard. The finer wares are generally smooth faced and traces of burnishing have survived on some sherds. Examples with a sooted surface occur but are rare.

Decoration and scoring

Three rim sherds (out of 28) have fingertip or fingernail decoration on the top of the rims, and one unstratified sherd has curvilinear decoration on the body. In addition there are 21 sherds (7% of the total) with clearly defined scoring on the body which may be either decorative or functional. The percentage of scored ware is average for sites of this period in the Upper Nene Valley.

Discussion of the chronology

The rim forms and probably the assemblage as a whole appears to fit into the IA2 phase defined by Knight (1984). Locally this conforms to the pre-'Belgic' middle Iron Age period dating from around the mid 3rd century BC until the late 1st century BC, or early 1st century AD.

Most of the contexts in the excavated area contain too little diagnostic pottery to assist with the phasing of individual features. There are short stubby rims from pit contexts to the north-east of the main enclosure which are typical of the later middle Iron Age period at Weekley, Northants (Jackson and Dix 1986/7), whilst sherds from globular vessels which have slightly longer neck forms were found within ditch 204. This context yielded an above average amount of pottery, including fine wares, and is likely to date to the 2nd century BC.

The amount of pottery recovered from the penannular ditch (254) and possible roundhouse site (252) is small but contains no material that is likely to date to the later middle Iron Age (1st century BC). The pottery from the enclosure ditch (253) and the pits to the south can be paralleled in many assemblages dating to the 2nd or early lst centuries BC.

Catalogue of the illustrated pottery (Fig. 3.4)

1. Context 101. Wide mouthed bowl? Trace of burnishing on the shoulder. Red/buff outer face and grey core. Fabric 2.
2. Context 109. Jar? Coarse ware with uneven surface. Black externally and brown core. Fabric 3 with sparse larger inclusions.
3. Context 168 (6). Jar or bowl. Fine dark ware. Fabric 2.
4. Context 168 (7). Bowl. Fine dark ware with evidence of external burnishing. Fabric 2.
5. Context 168 (8). Bowl? Dark grey to brown ware. Fabric 3 but with some laminated and larger shell.
6. Context 168 (1). Large jar with flat-topped rim. Weathered externally. Dark grey ware. Inclusions include ironstone and some grog. Fabric 6.
7. Context 168 (2) Jar. Outer face orange/brown: Core grey. Fabric 8.
8. Context 301. Coarse ware jar. Some sooting externally. Grey/brown ware. Fabric 3.
9. Context 300. Jar. Face uneven. Brown ware. Fabric 3
10. Context 306. Large jar. Uneven, bumpy outer face. Brown externally with grey core. Some large inclusions of shell and limestone. Fabric 7.

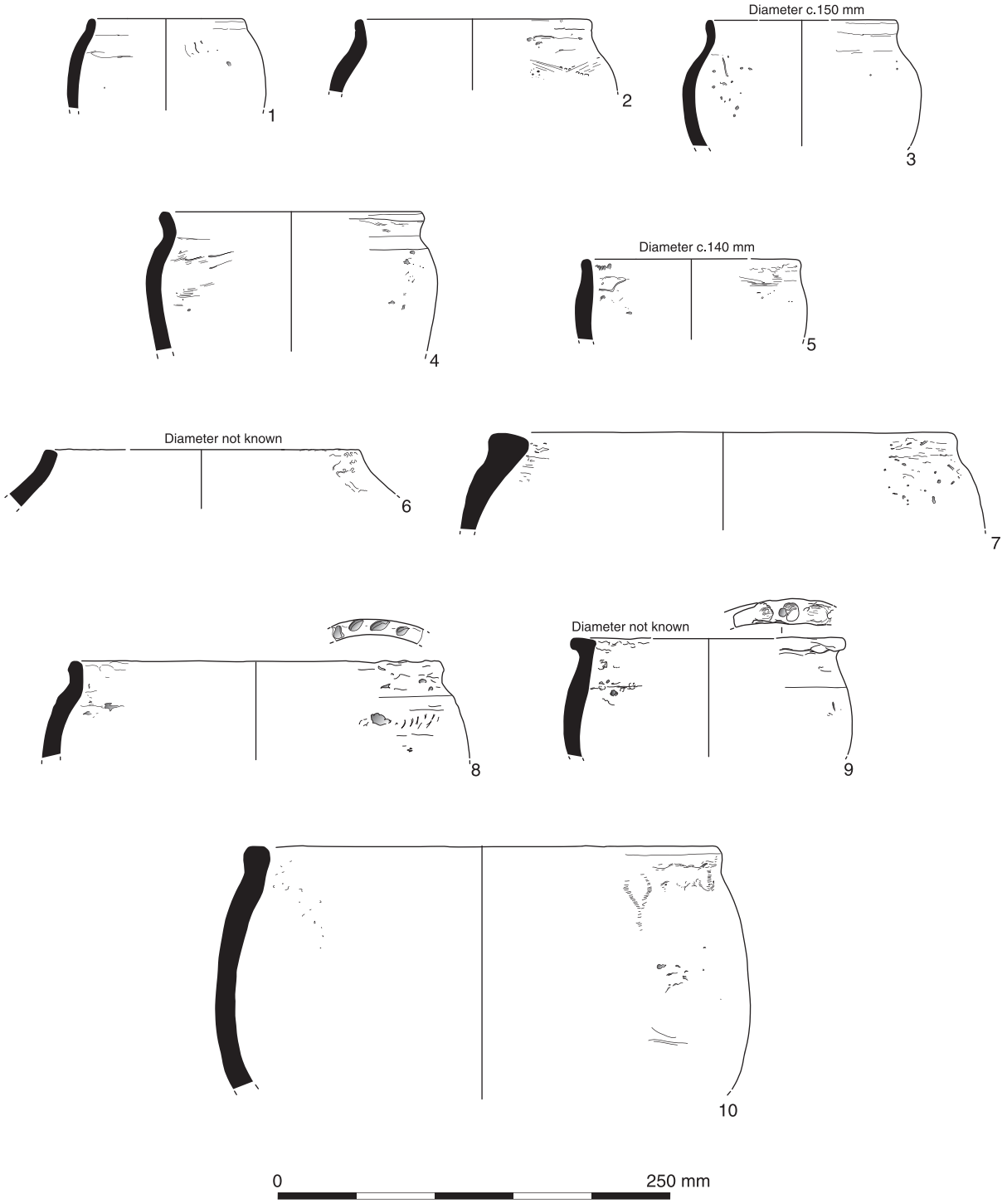


Fig. 3.4 Iron Age pottery

Pottery from the 1997 excavation *by Alistair Barclay*

A total of 107 sherds of Iron Age pottery was recovered from Trench 5, most deriving from the upper fill (521) of Pit 519 (Fig. 3.3, Section 1). The entire assemblage, with the exception of a few amorphous fragments, was manufactured from fine shell-tempered fabrics, a common occurrence on Iron Age sites in Northamptonshire. Decoration was almost totally absent, although a small number of sherds have simple shallow linear decoration and/or scored lines. The date range for the assemblage is likely to be late-middle to late (pre-Belgic) Iron Age (150-50 BC), contemporaneous with the pottery from the Iron Age site located to the west (see above).

ANIMAL BONE *by Umberto Albarella*

The limited number of bones recovered from pits and ditches on the Iron Age site belonged almost exclusively to domestic animals, with sheep/goat bones predominating. Cattle were also present, although in markedly lower numbers than those from Saxon contexts in the settlement to the south. The level of bone fragmentation corresponds with assemblages derived from butchery and kitchen refuse. There is little zooarchaeological evidence that the community was one of high social status, although any conclusions drawn from such a small assemblage must be regarded as tentative.

A small assemblage of bone was recovered from the 1997 evaluation area further east (Trench 5), with over 70% deriving from Pit 521. The larger pieces in contexts 516 and 521 showed evidence of butchery, and a small number from 521 had been burnt. The presence of sheep/goat in the assemblage was in keeping with the predominance of sheep/goat over other domestic species from the main enclosure area.

CHARRED PLANT REMAINS *by Lisa Moffett*

Seven samples were taken from the Iron Age pits and ditch fills, and all but one of these produced some plant remains, mainly fragments of wheat and barley with a few weed seeds. Contexts 207 and 205, the middle and upper fills respectively of the same ditch (204), produced only unidentifiable cereal remains. To the north of the enclosure ditch (235) a pit (156) produced a few grains of wheat and barley and a couple of weed seeds. A pit from within the roundhouse produced no remains at all, other than some wood charcoal (de Moulins 1996).

Three samples were considered to have sufficient material to be worth further analysis. These samples were from the fill of a pit to the south of the roundhouse (110) and fills from two different phases of the circular ditch around the roundhouse (254). The three samples were fully analysed (see Table 3.1). The results suggest fairly similar material, although the pit sample had rather more grain and less chaff than the ditch samples. Chaff remains of glume wheat, grains of wheat and barley, and a number of weeds were present in all the analysed samples. The glume wheat is likely to have been mainly spelt (*Triticum spelta*), although only a few spelt remains could be identified with certainty, due to poor preservation and the fact that there is considerable morphological overlap between spelt and emmer (*Triticum dicoccum*). Poor preservation also limited the identification of the barley, though some of the grains were clearly hulled, and a single, rather battered, rachis fragment suggested the presence of 6-row barley.

There is virtually no evidence for the products from the early stages of crop processing (eg threshing and winnowing) which would suggest the likelihood that the crops were grown near the site. Small-size chaff such as glume bases, weed seeds smaller than cereal grains, and the cleaned grains themselves, would all be derived from later stages of crop processing (see Hillman 1981). Evidence for crop processing is not very clear in fact, as the ratios between glumes and grains suggest either that the chaff by-product of spelt processing became mixed with cleaned grains, or that the material represents whole unprocessed spikelets. The two ditch fill samples do have a somewhat larger amount of glume bases than grains and this suggests that at least some of the material was derived from a fine sievings chaff by-product (Hillman 1981 stage 12). The somewhat lower ratio of glumes to grains in the pit sample as compared to the other two analysed samples could derive from a different set of activities but could also be accounted for by a hotter or more aerobic fire, since glume bases survive charring less well than grains. The fairly low density of items in the samples (about 4-5 items per litre) does not suggest that large amounts of cereal waste were being burned and disposed of, but with only seven samples taken from this phase it is clearly impossible to generalise.

Most of the other plants represented are species of disturbed ground which could have grown in many types of disturbed habitats such as waste ground, trackway verges and gardens, but in this case are highly likely to have been growing as arable weeds. Plants such as fat hen (*Chenopodium album* type) and henbane (*Hyocyamus niger*) are generally found in nitrogen-rich soils. This, however, does not prove that the soil in the crop fields was nitrogen-rich, as these plants could have been introduced into the field as a result of manuring from old dung or compost heaps where these plants were growing.

Most of the weed species are annuals, such as fat hen, redshank (*Persicaria maculosa*), knotgrass (*Polygonum aviculare*), black bindweed (*Fallopia convolvulus*), field gromwell (*Lithospermum arvense*), field madder (*Sherardia arvensis*) and scentless mayweed (*Tripleurospermum* cf. *inodorum*). There are, however a few perennial weeds such as dock (*Rumex* sp.) and ribwort plantain (*Plantago lanceolata* type), suggesting that cultivation practices allowed some of the perennials to survive. There were no segetals of Mediterranean origin such as corncockle (*Agrostemma githago*) and cornflower (*Centaurea cyanus*), which are sometimes found on late Iron Age/early Roman sites (eg Lambrick and Robinson 1979) though they become much more abundant later.

Most of the weeds are plants of well-drained soils. There are, however, a few plants of wetter soils. Spikerush (*Eleocharis palustris/uniglumis*), requires seasonal flooding. Many, though not all, of the sedges (*Carex* spp), grow on damp or wet ground, as does blinks (*Montia fontana* ssp. *chondrosperma*) (Stace 1997). Such conditions are not well suited for growing cereals, yet spikerush in particular is often found in Iron Age (and Roman) charred

Table 3.1: Charred plant remains from the Iron Age settlement

Context no.	109	154	221	
Sample no.	40	44	46	
Description	pit	ditch upper fill	ditch fill	
Date	150-50BC	150-50BC	150-50BC	
Sample size (litres)	40	40	40	
Flot size (mls)	50	40	40	
Amount analysed (%)	100	100	100	
Items per litre	4	4	5	
Crop species				**Common name**
Triticum cf. dicoccum Schübl glume bases	-	-	1	? emmer
Triticum dicoccum/spelta rachises	-	-	2	emmer/spelt
Triticum dicoccum/spelta glume bases	26	58	63	emmer/spelt
Triticum spelta L glume bases	4	4	5	spelt
Triticum sp	19	7	11	wheat
Triticum sp germinated	1	-	-	wheat, sprouted
Hordeum vulgare L cf 6-row rachises	-	1	-	? 6-row barley
Hordeum vulgare L hulled	2	-	5	hulled barley
Hordeum vulgare L indet	10	5	9	barley
Cereal indet	41	28	35	cereal
Cereal/large Poaceae culm bases	-	-	2	cereal/large grass
Wild species				
Papaver cf *dubium* L	-	-	1	? long-headed poppy
Corylus avellana L nutshell frags	1	-	-	hazel
Chenopodium album type	13	1	5	fat hen
Montia fontana ssp *chondrosperma* (Fenzl) Walters	-	1	2	blinks
Stellaria sp	-	-	1	chickweed
Silene cf *latifolia*	-	1	-	white campion
cf *Silene* sp	-	-	1	? campion
Persicaria maculosa Gray	-	1	-	redshank
Polygonum aviculare L	-	-	2	knotgrass
Fallopia convolvulus (L) A Love	-	1	-	black-bindweed
Rumex sp	3	1	6	dock
Vicia/Lathyrus	3	3	9	vetch/tare/vetchling
Melilotus/Medicago/large *Trifolium*	2	4	8	melilot/medick/clover
Lotus/small *Trifolium*	-	3	6	bird's foot trefoil/clover
Hyoscyamus niger L	1	1	4	henbane
Lithospermum arvense L	2	13	-	field gromwell
Plantago lanceolata type	2	1	1	ribwort plantain
Euphrasia/Odontites	-	-	2	eyebright/red bartsia
Sherardia arvensis L	1	-	-	field madder
Galium sp	3	2	1	bedstraw
Tripleurospermum cf *inodorum* (L) Schultz-Bip	1	-	1	? scentless mayweed
Asteraceae indet	-	1	-	daisy family
Eleocharis palustris/uniglumis	1	1	1	spikerush
Carex sp(p)	1	1	2	sedge(s)
Avena sp. awns	-	1	-	oat awn
cf *Avena* sp	-	-	1	? oat
Bromus hordeaceus/secalinus	1	2	-	soft/rye brome
cf *Phleum*	-	-	1	? timothy
Poaceae indet.	11	11	8	unidentified grasses
tuber fragment	1	-	-	unidentified tuber
unidentified fragments	-	6	7	unidentified seeds & other
chaff	30 (20%)	63 (40%)	73 (36%)	
grain	73 (49%)	40 (25%	60 (30%)	
weeds	43 (29%)	50 (31%)	63 (31%)	
other	2 (1%)	6 (4%)	7 (3%)	
total items	**148**	**159**	**203**	

cereal assemblages, suggesting that these conditions were common, possibly in poorly drained patches in the fields or perhaps in wet ditches at the field edges.

Overall, the Iron Age material appears broadly similar to middle Iron Age plant remains on other small to medium sized settlement sites in the East Midlands such as Wanlip, Leics. (Monckton 1998) and Gamston, Notts. (Moffett 1992). Little work has been done, however, on regional or other patterns in Iron Age sites with the exception of van der Veen's (1992) work in the north. In many areas, including the East Midlands, the published data are still insufficient to carry out such a study.

THE NATURE OF THE IRON AGE SETTLEMENT

The Iron Age settlement at Higham Ferrers is one of a growing number of sites with relatively small, heavily defended, rectangular enclosures that have been excavated within Northamptonshire in the past few decades (Jackson 1975; Knight 1984, 191-2; Jackson and Dix 1986-87; Dix and Jackson 1989; Atkins *et al.* 2001; Kidd 2004). Though similar types of enclosure have been recognised elsewhere (eg Jobey 1962; Marshall 1991), the apparent concentration in the Midlands appears to be genuine and could be used to argue for increasingly fragmented social conditions towards the later Iron Age. Whether the appearance of such heavily defended homesteads was a response to specifically localised conditions or a symptom of wider political instability is uncertain. There are, however, certain local examples of enclosed and unenclosed settlements existing in close proximity, such as at Mawsley New Village near Kettering, dated to the 4th-1st century BC (Hull and Preston 2002). This may suggest that defining status was also a key factor in the creation of such dominant boundaries (see Hingley 1990).

As with many other Iron Age settlements in the region (eg Great Houghton, Chapman 2001; Ecton, Atkins *et al.* 2001; Great Doddington, Thomas and Enright 2003), the main enclosure at Kings Meadow did not stand in isolation but appears to have been part of a loose group of smaller enclosures and associated linear boundaries which were revealed by aerial photographs. Unfortunately no stratigraphic link was established between the enclosure and the surrounding cropmark features but they have been confirmed as broadly contemporaneous by previous trial trenching (NAU 1991). In addition the 1997 evaluation to the east revealed the presence of pits, gullies, and probable posthole structures of Iron Age date indicating the extent of the overall settlement in this area. The limits of this outlying occupation may also be more extensive than previously expected, as the location of Iron Age features discovered during the laying of a gas pipeline lay some 100 m to the north of the evaluation area (OAU 1997).

Although clearly of defensive character (at least in part), the main site was also ideally situated to exploit a variety of different ecological zones including the lush grass-lands of the Nene floodplain to the north and the drier limestone uplands to the south-east. Such ecological diversity would have naturally lent itself to the establishment of a successful mixed farming regime and it is probable that the enclosure's primary function was that of an agricultural holding. Evidence for such an economy was recovered in the form of animal bones, in particular of sheep and cattle, and from cereal grains which were found in a number of features across the site including pits and the penannular ditch around Structure 252 (see above). Although the presence of charred grains of barley and wheat does not prove that arable farming was being practised by the occupants of the enclosure there is no reason to believe that the cereal at the site was being specially imported.

Evidence of craft production was very limited, consisting of a largely unremarkable pottery assemblage, a small amount of slag and a single bone gouge. There was nothing within the pottery assemblage which indicated inclusions of a non-local origin (see Jackson, above) and although there was no evidence of actual production, all of the pottery could have been produced at or near to the Kings Meadow site.

The slag was recovered from two of the pits to the north of Enclosure 253, but as the quantities were very small it was considered that further analysis was unlikely to produce information of significance. As the only evidence of metalworking on the site, it is interesting to note the slag was found outside the enclosure, and well away from what might be assumed to be the principal domestic dwelling (Structure 252). The bone gouge recovered from ditch 204 is of a type which is quite common on Iron Age sites. Although its precise function is not known, such objects may have been used in textile production or in leatherworking (Kate Atherton pers. comm.).

Beyond the suggestion of small scale pottery production, limited metalworking and the possibility that textiles or leather may have been worked on the site, it is impossible to add further detail to the picture of craft production. This lack of information is particularly unfortunate given that the most developed form of the enclosure at Kings Meadow was an impressive undertaking of defensive proportions. The implication for the status of the occupants is interesting and a fuller finds assemblage would have helped to guide interpretation.

The modest pottery assemblage from the site indicated an overall date range of *c* 3rd to 1st century BC, similar (though perhaps slightly later in origin) to that of other Iron Age sites in the region such as Mawesley New Village (Hull and Preston 2002), Great Doddington (Thomas and Enright 2003) and Ecton (Atkins *et al.* 2001). As with Higham Ferrers, most of these sites appear to have been abandoned or relocated at some point in the 1st century BC (see

Chapter 7). However, a farmstead just to the east of Higham Ferrers (*c* 1.5 km south-east of the present site) did show a continuous sequence of shifting occupation from the middle Iron Age through to the later 2nd century AD, with Iron Age ring gullies being replaced in the 1st century AD by a system of rectangular agricultural back plots (Mudd 2004; OA 2004a). An Iron Age agricultural stock enclosure was also revealed (ibid.).

The limited excavation confirmed that within the *c* 3rd- to 1st-century BC timeframe there were at least two main phases of activity in the Iron Age settlement. Other sub-enclosures clearly existed within the main enclosure, probably representing additional domestic structures, although how many structures were contemporary remain unknown and estimation of the size of the resident population is impossible. Nevertheless, the re-cutting and deepening of the enclosure ditch in a secondary phase suggests that the occupants could muster a considerable workforce either through co-operation or compulsion. What prompted the re-development can only be guessed at but a period of political instability is one possibility. Although no evidence of an internal bank was found it is difficult to imagine why such a massive ditch was required if not to produce spoil for a rampart. At other similarly defended sites in the area arguments for an internal bank have rested largely on an absence of features immediately behind the enclosure ditch (Dix and Jackson 1989, 162). No such 'blank zone' existed at Kings Meadow but it is quite possible that earlier features were buried by the new rampart.

The enclosure is perhaps best viewed as a defended farmstead, the visually impressive home of a locally important family group. In times of peace the enclosure and its occupants may have acted as the social focus of a small agricultural community, but in times of crisis would have been capable of providing short term refuge for a limited number of people and livestock.

The interpretation of the Iron Age site has through necessity been both brief and unspecific. Had fuller excavation been possible it may have facilitated a greater understanding of regional economic and social interaction during the Iron Age.

Chapter 4: The Roman Settlement and Shrine (Phases 3-5)

by Steve Lawrence and Leo Webley

INTRODUCTION

Excavations at Kings Meadow Lane revealed part of a Roman roadside settlement and an adjacent shrine complex (Fig. 4.1). Only the northern part of the settlement was excavated, with the possible core lying further to the south, now beneath a housing estate. It is unlikely therefore that we are seeing the entire sequence of development at the site, although it is demonstrated that occupation in this area at least lasted for well over two centuries, from the early 2nd century to the second half of the 4th century. The following narrative is intended to provide an account of the development of the settlement, shrine and road through Phases 3 to 5, with finds and environmental evidence incorporated where appropriate.

All Roman period features were cut into a layer of colluvium, which overlay the natural ironstone and sand deposits across the whole of the site. Both prehistoric flintwork and Roman finds were recovered from this layer.

PHASE 3: 2ND CENTURY (Fig. 4.2)

The occupation of the excavated part of the Roman settlement commenced in the earlier 2nd century, and was at first confined to the southern part of the

Fig. 4.1 Plan of all features in Roman settlement, set against geophysics plot

Fig. 4.2 Phase 3: early to late 2nd century

excavated area. There is evidence for three residential units, each represented by a circular building (10910, 10920 and 11340), two of which were served by adjacent stone-lined wells. One of these units was located within the southern part of a rectangular enclosure, the ditches of which were backfilled in the late 2nd century with a deposit rich in pottery and other artefacts. A small cemetery area – comprising three adult cremation burials and an inhumation of a young child – was placed adjacent to the enclosure. Other features associated with the settlement included two large pits or waterholes. The settlement was bounded to the west by a ditch (10680) delimiting the eastern side of the road.

The road

Roadside ditch 10680 ran on a NNE-SSW alignment across most of the length of the site, a distance of *c* 200 m (Fig. 4.2). In most sections, three successive cuts of the ditch were present (eg 10771, 10773 and 10775, Fig. 4.3 Section 5), although in some places only one or two cuts could be seen (eg 12471, Fig. 4.4 Section 8). The first two cuts (Figs 4.3–4.4, 10771, 10773, 12969, 12416) were up to 0.90 m deep, with U-shaped profiles. They had silty fills that were probably largely deposited through natural processes. In the southern part of the site, close to the area of contemporary settlement, moderate quantities of domestic refuse, including 2nd-century pottery, were recovered from these fills. In the northern part of the site, no datable finds were recovered. The final, most substantial cut of the ditch (Figs 4.3–4.4, 10775, 12948) was up to 1.0 m deep. Pottery from this last phase of the feature shows that it was infilled during the late 2nd to early 3rd centuries (see Phase 4 below).

After the second cut of the ditch had largely silted up, the remnant earthwork hollow was utilised for the construction of two hearths or ovens (12424 and 12439), cut into the western edge of the feature (Fig. 4.2). Hearth 12424 was at least 0.75 m in diameter and 0.16 m deep, with steep sides and a flat base. It had a fill of ash, charcoal and burnt ironstone, producing two sherds of pottery dated to the 2nd century or later. Hearth 12439 (Fig. 4.3 section 4) was a bowl-shaped feature measuring 0.80 m in diameter and 0.30 m deep. Its fill

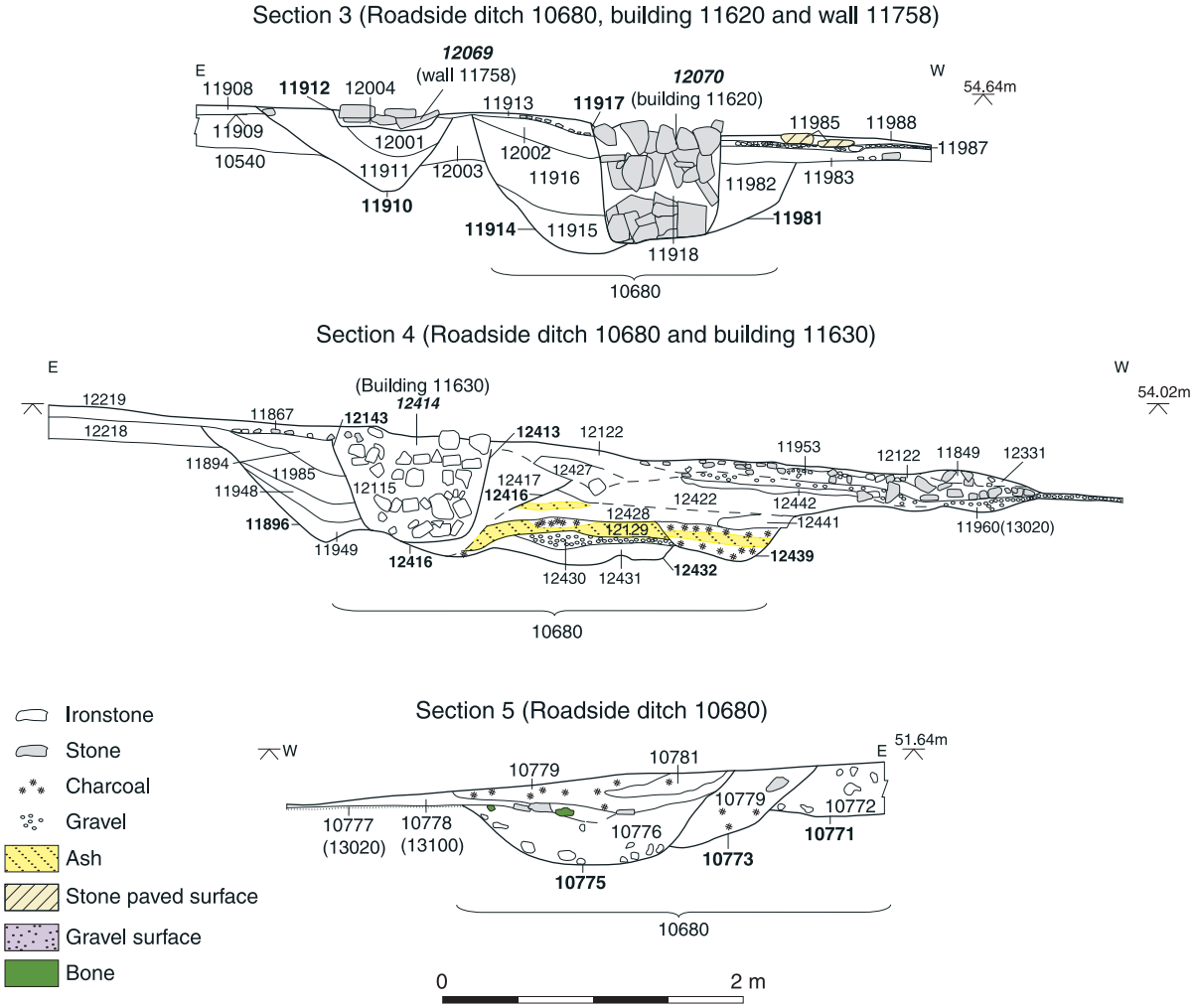


Fig. 4.3 Sections of roadside ditch (3-5)

comprised black charcoal-rich material interleaved with lenses of paler ash, capped with a layer of red scorched sand. No finds were recovered.

Although the road itself is presumed to have been in use at this time, the lack of datable finds means that it is difficult to know which stage of the road sequence belongs to this phase. The stratigraphically earliest surface of the road comprised a layer of ironstone paving (12321/12977) (Fig. 4.5). This only survived along the western edge of the road hollow; the eastern part of the surface had probably been truncated by later episodes of road construction. The ironstone paving was traced in plan for at least 80 m down the length of the site, although its full extent at its southern end is unclear because of masking by later deposits. The paved surface was 0.20 m deep and consisted of compacted ironstone rubble pieces up to 0.20 m across. It had been constructed above a distinct buried soil horizon of dark brown sandy silt (12323/12979). In one section (Fig. 4.5 section 10), the surface was overlain by a substantial deposit of sandy silt (12634, presumably formed by processes of colluviation and/or *in situ* silting) before a replacement ironstone surface of similar construction was laid down (12975).

The settlement

Enclosure 12310/12880 (Fig. 4.2)

Ditches 12310 and 12880 formed the southern and western sides respectively of a rectangular enclosure measuring at least 45 m NNE-SSW by 25 m WNW-ESE. A broad gap between the terminals of the two ditches at the south-western corner of the enclosure may mark the location of an entrance. Potentially contemporary features within the enclosure include building 10920, well 12340 and pit 11991, while a smaller enclosure 13080 may also have originated in this phase (see Phase 4 below). Ditch 12310 appears to have been routed

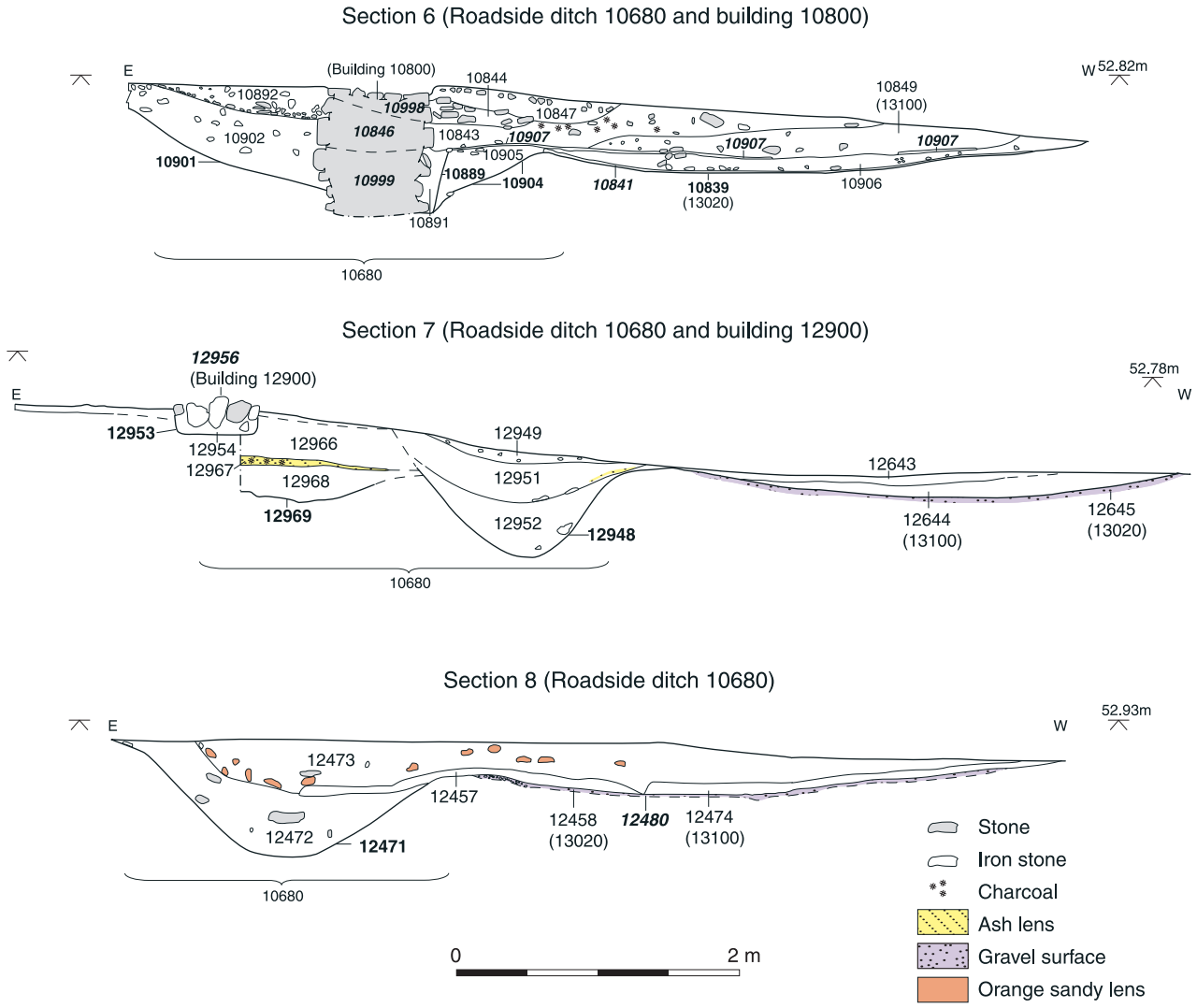


Fig. 4.4 Sections of roadside ditch (6-8)

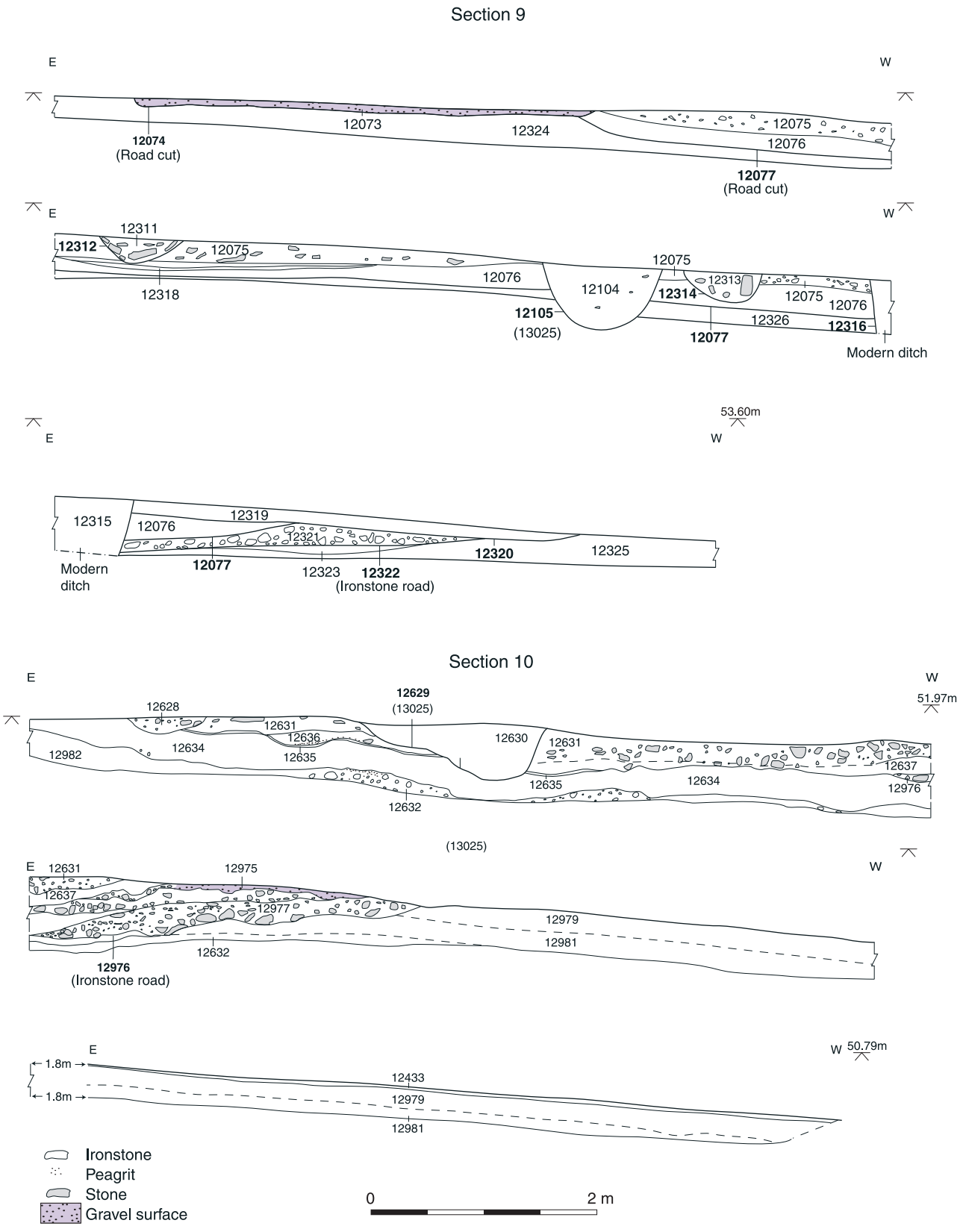


Fig. 4.5 Section through road surfaces (9-10)

around well 12340, suggesting that it was laid out when the well was already in existence. The southern end of ditch 12880 was sealed by Phase 4 building 10890.

Both ditches had relatively shallow U-shaped profiles. Ditch 12310 was up to 0.35 m deep, while ditch 12880 was 0.40 m deep at its southern end, becoming shallower towards the north. In each case, the ditch had been backfilled with a single deposit containing large quantities of finds. Within ditch 12310, the artefacts were mainly concentrated towards the western end of the feature, and included 32.4 kg of pottery dated to the mid to late 2nd century, 5.6 kg of animal bone, a subadult human vertebra, a limestone spindle whorl (SF 2006), and a piece of worked bone, possibly a roughout for a pin (SF 2004). Ditch 12880 produced 17.4 kg of pottery dated to the late 2nd century and 1.8 kg of animal bone, concentrated in the central section of the feature. These may represent 'closure deposits' with a ritual aspect. Following their backfilling, the enclosure ditches appear to have survived as shallow hollows, and they continued to act as a focus for ritual activity in subsequent phases. Several inhumation burials were cut into ditch 12880 (see Phase 5), while a possible 'ritual' pit and infant inhumation were inserted closely adjacent to ditch 12310 (see Phase 4).

Building 10920 and well 12340 (Fig. 4.6)

Building 10920 was located within the southern part of the rectangular enclosure, close to ditch 12310, and was served by nearby well 12340.

Building 10920 (Pl. 4.1)

This was the largest of the circular structures within the settlement and appears to have been slightly unusual in several ways. It was positioned furthest away from the axial alignment of the road, although this may reflect its date and the likelihood that the road was not the primary focus of early activity in this part of the settlement. The building had an external diameter of 12.3 m and an internal area of 90 m^2. The foundation (12086/12307) was unbroken around its circumference and constructed entirely from ironstone with a primary course overlain by a much more tightly packed and vertically set upper course. These were set into the base of a shallow trench cut through the silty colluvial soil layer (12330) to a depth of 0.15 m above the surface of the ironstone geology below. The foundation was consistently *c* 0.80 m wide and its upper course provided an even, flat surface. The ironstone pieces used were generally smaller than 0.20 m across and the absence of larger pieces or a definable wall course strongly suggests that this acted as a firm foundation or plinth for an organic superstructure such as wood/daub or – possibly more likely given the width of the foundation – an earthen wall. The wall does not seem to have been truncated, since both internal features and a small area of paving survived, suggesting that the level encountered was that of the contemporary Roman ground surface. This is consistent with other evidence from across the site, which shows that several of the buildings survived with at least part of their internal contemporary floor levels largely intact.

The floor area of the building was represented by a thin silty layer (10716/12306) distinguished by its darker colour, small limestone inclusions and its confinement within the interior of the building. This was clearly derived from the reworking or trampling of the colluvial soil horizon. There does not appear to have been any other form of substantial stone surface used within the structure. This layer and the underlying soil layer within the building produced 249 sherds of pottery with an average weight just over 11 g, although most were rather smaller, as would be expected from a well-trampled area. These sherds mostly dated to the 2nd century although a few were of 3rd- and 4th-century forms and post-date the use of the building. The small quantity of these in relation to the earlier forms suggests that these are incidental inclusions rather than representing any significant later activity associated with the structure.

The only constructed internal surface was a small area of worn limestone slabs against the north-western inner face of the wall (11623/11645). The slabs were set in a shallow hollow no more than 2.5 m long and 0.75 m wide. The silts sealing the limestone slabs yielded 11 sherds (114 g) of pottery dating to the early to mid 2nd century, consistent with the suggested occupation date provided by material from the larger internal area. The function of the slabs in relation to the building is not clear although there was some evidence of burning on and around the stones (11645). This does not appear to have been intensive, however, and the material may have been redeposited rather than representing an *in situ* fire or hearth. It is possible that the stone slabs represent part of a door threshold, although given that most known doorways within roundhouses faced south-east, this must remain uncertain.

Exactly central within the building was the largest of the internal features. This was a circular pit (11397) with a shallow concave profile 1.5 m in diameter and 0.24 m deep (Fig. 4.6, section 1499). Its primary fill (11398) included lightly scorched clay fragments as well as unburnt pieces of clay. Several quartzite pebbles were grouped together to one side where the clay pieces concentrated, but these, and the surrounding silt (11399) that levelled the pit, also showed little sign of scorching or other evidence of fire. On the basis of its central location it seems probable that this feature was a hearth base, and its construction technique does share some common traits with the central hearth within building 10870, although the latter was of much more permanent appearance. However, the lack of significant scorched deposits and ash does leave some doubt as to function of feature 11397.

Two other small clay-lined pits (11421 and 11424) lay north-east of the central pit. Both were less than 0.10 m deep and circular, with diameters of 0.55 m. A pale cream coloured clay was used to line each pit, although within 11424 this was limited to the sides and did not extend across the base. Within pit 11421 the clay was overlain directly by part of a coarse shell-tempered vessel laid on its side. Each pit was subsequently infilled with silting deposits (11423 and 11426). The small quantity of pottery recovered from these also dates from the 2nd century and is dominated by vessels in the shell-tempered fabric.

As with the main fabric of the building internal evidence for the superstructure was equally lacking. There were no clear postholes or pads for roof support within the structure, as might be expected with an internal diameter of 10.7 m. A single small

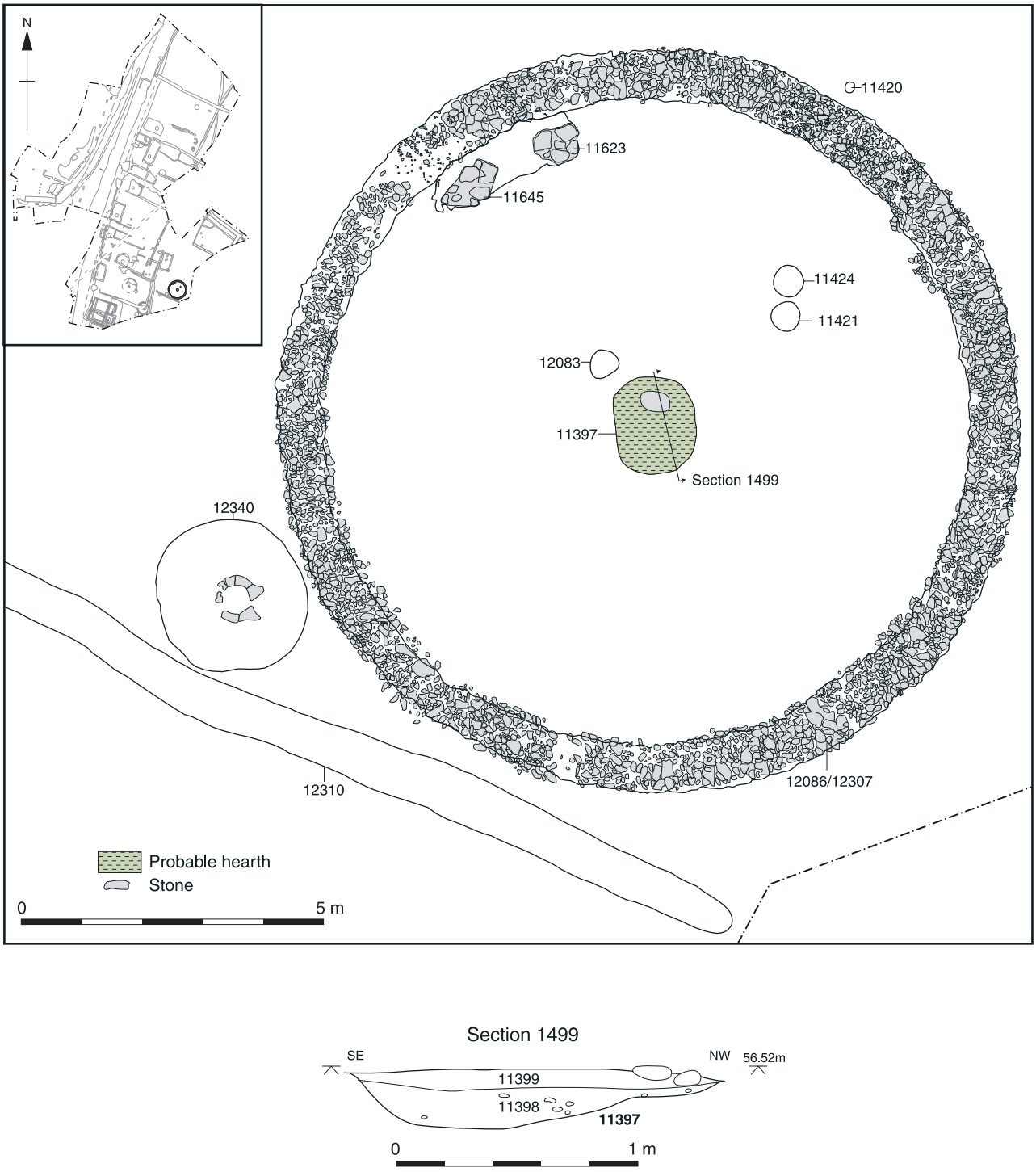


Fig. 4.6 Building 10920 and well 12340

Plate 4.1 Building 10920, facing east. Scale: 2 m

possible posthole (12083) was recorded adjacent to pit 11397 and may have been a structural feature, but its interpretation is uncertain.

There seems little reason not to assume that this building served principally as a domestic dwelling. The provision of a well (12340) is consistent with this and the layout of the building is comparable to that of the other 2nd-century and early 3rd-century circular structures interpreted as domestic units. Its size appears its most striking characteristic, but lies within the range for circular buildings within the region and does little other than provide a contrast to the smaller building 10910 (see below). The association with building 10910 is also interesting, as both seem to have had relatively short life spans. The pottery directly associated with building 10920 points to an origin in the 2nd century whilst the general lack of pottery dated after the 2nd century similarly suggests that it did not extend in used much beyond this period. The backfill of neighbouring enclosure ditch 12310 similarly dates to the mid to late 2nd century (see below). This emphasises the likely association of enclosure 12310/12880 with the occupation and ultimate abandonment of building 10920.

Well 12340

Well 12340 was located immediately south-west of building 10920. It was not excavated, but was probably constructed during this phase, as its position seems to have been respected by ditch 12310. It was set within a construction cut (11639) measuring 2.6 m in diameter. The well shaft (11638) was narrow, with an internal diameter of only 0.50 m, and was constructed of roughly hewn limestone blocks measuring around 0.2 x 0.1 x 0.1 m in size. The space between the shaft and the construction cut had been packed with an outer layer of clay and an inner layer of limestone rubble. Pottery from the surface of the fill of the shaft suggests that the well was abandoned in the 4th century (see Phase 5).

Building 10910 and well 12890 (Fig. 4.7)

Building 10910 was located 9 m to the south of the rectangular enclosure, and was served by nearby well 12890.

Building 10910

With an internal diameter of only 6.6 m and an external diameter of 8.2 m, this was the smallest of the circular buildings. Its construction method superficially matches that of building 10920 located 15 m to the north-east, although the distinct difference in materials used suggests that these were not constructed as part of a single development. As mentioned above, the lack of limestone in the structure of building 10920 is one of its more striking characteristics, whereas building 10910 utilised both limestone and ironstone in its construction. Even so, these were used in a specific manner with a single course of pitched ironstone and only small amounts of limestone set in a near-vertical arrangement to form the foundation. The shallow foundation trench was 0.15 m – 0.20 m in depth and cut through the colluvial silt soil horizon (12330) to the firm surface

of the underlying ironstone geology. A single horizontally-laid wall course (10942/10943) survived *in situ* around parts of its circumference. This consisted of roughly hewn limestone blocks forming internal and external faces with the core infilled with smaller limestone pieces. Despite its comparatively small size this building still had a wall thickness of 0.8 m, a dimension common to most of the buildings of all periods on the site. This may possibly imply that the walls were raised to eaves level, especially if this was relatively low to accommodate the slope of the roof.

Preservation of the building was very good, as demonstrated by the presence of the first wall course, which indicated the contemporary Roman ground level. However, internal features or associated occupation deposits and finds were largely absent. This was, in part, the result of the truncation of the interior by later boundary ditches aligned upon its centre, effectively removing *c* 50% of the interior area. However, a thin soil with limestone chip inclusions (13018) survived within the southern side of the building, butting up against the wall, and is most likely to have accumulated after or during the demolition of the building. The lack of any other deposits shows that the removal of the superstructure was a thorough and tidy process. The presence of layer 13018 also demonstrates that the absence of internal surfaces is unlikely to be accounted for by removal of a stone surface. Only two small postholes or post pads (11065 and 11118) possibly associated with the building were present within its interior. These were no more than shallow rounded hollows up to 0.5 m across and 0.1 m deep infilled or packed with limestone pieces. These could have provided a firm base in the soft ground surface for upright posts as part of a central arrangement to support the roof, although any other similar features in this area would have been removed by the later ditches.

There was scant artefactual material directly associated with the interior of the building. However, it was probably contemporary with a closely adjacent well 12890, which was constructed during the 2nd century (see below). The ditches that subsequently cut through the building (11750, 11760 and 12995) unfortunately produced pottery datable no more closely than to the mid/late 2nd century onwards.

The lack of associated floor surfaces and clear use-related deposits makes it very difficult to comment on the function or use of this building. Although it is the smallest building present its size does not preclude it from being a domestic unit. With an internal area of a little over 35 m^2 it was only 9 m^2 smaller than the interior of building 10870 which did have a clear domestic layout (see below). The association with well 12890 suggests that this was a domestic dwelling or at least a structure that required a plentiful water supply. Any central hearth or other features, such as those recorded in each of

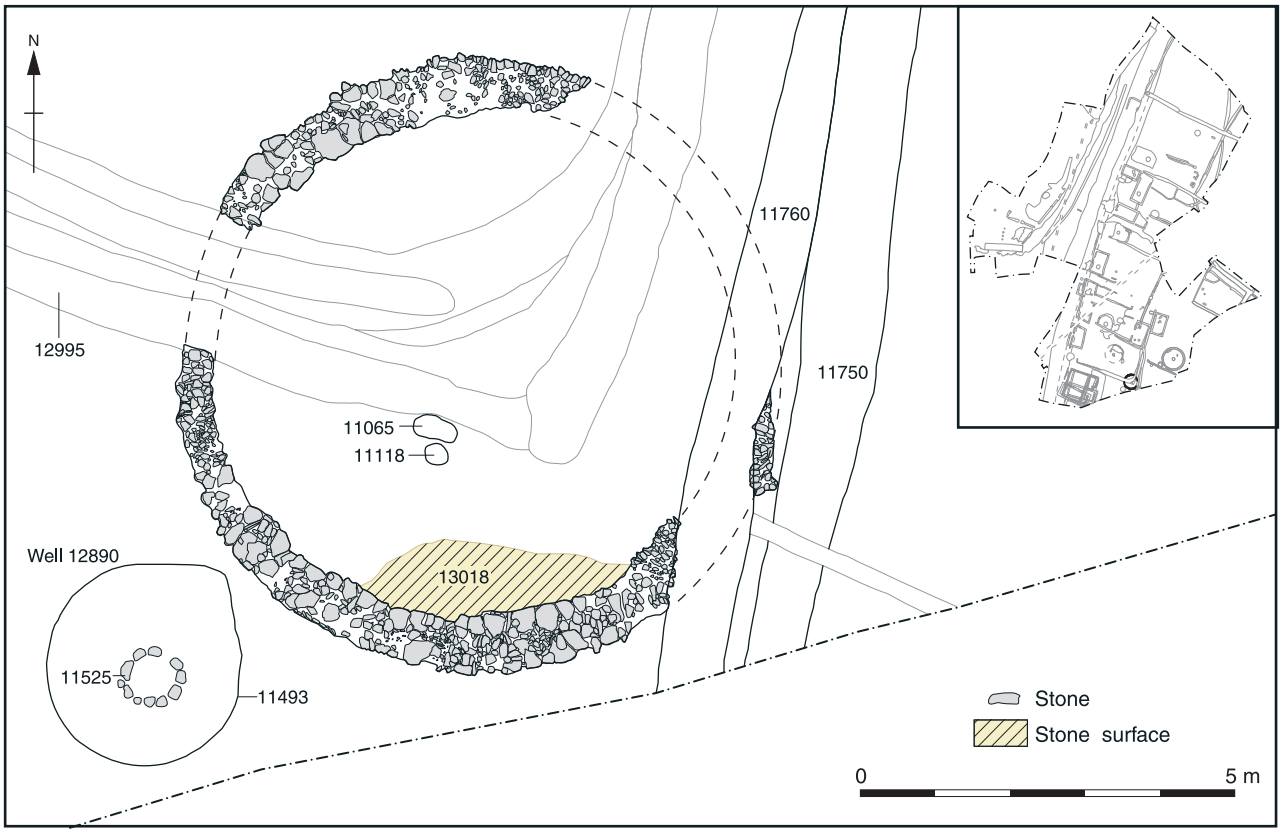


Fig. 4.7 Building 10910 and well 12890

the other circular structures, would have been removed by the later ditch sequence. The building did lack a clearly defined entrance, although if this was aligned to the south-east, in common with buildings 10870 and 11340, then it too would have been removed by ditch 11750/11760.

Well 12890

Well 12890 was placed immediately south-west of building 10910, in a similar relationship to that seen between building 10920 and well 12340. It was set in a steep-sided construction cut (11493) measuring 2.7 m in diameter, which was excavated to a depth of 0.6 m. Within this construction cut, the stone-lined well shaft (11525) had an internal diameter of 1.0 m and was excavated to a depth of 0.8 m. The well lining was constructed of roughly hewn limestone blocks with an average size of 0.25 m x 0.18 m x 0.03 m. The space between the shaft and the construction cut had been backfilled with three dumps of material. The lowest deposit (11526) was a layer of clay which produced four sherds of 2nd-century pottery, a coin dated to AD 69–193 (SF 1660), a copper alloy bracelet fragment (SF 1659, cat no. 213), and fragments of animal bone. This was overlain by a thin lens of silt (11549) containing pottery dated to the mid 2nd century or later. The uppermost deposit (1494) was a second dump of clay, which produced late 2nd-century pottery and animal bone. The excavated fill within the well shaft itself derives from the backfilling of the feature in the late Roman period (see Phase 5).

Building 11340 (Fig. 4.8)

Building 11340 was located 9 m north-west of building 10910. It is likely to have been constructed in Phase 3, although occupation may have continued into the late 2nd/early 3rd century (Phase 4). In contrast to all but the late Roman building 12900, structure 11340 was defined only by its internal deposits. No outlining wall was preserved and little evidence survived to suggest its form of construction. The remaining internal deposits clearly defined the north-eastern part of this building, and were of a comparable layout to those encountered within the nearby circular structure 10870 (see Phase 4).

Although preservation was limited, significant elements of the layout were present. An arc of horizontal limestone slabs (11557 and 11577) clearly marked the northern and eastern internal perimeter of the building. It covered a broad area some 4 m by 3 m with a tapering 'tail' extending to the south and ending in an irregular patch of dark grey silt and limestone fragments (11396) in a shallow hollow. Its position on the south-eastern edge of the surfaced area undoubtedly marked this as the entrance to the building. The presence of a hearth (11392) also helps to define the extent of this building. Based upon its position in relation to the entrance and surface it is clear that the hearth was centrally positioned. It was neatly constructed by setting limestone and ironstone pieces in clay in a shallow pit. These features combined define a building with an internal diameter of *c* 10.0 m, comparable in size to building 10920. A small posthole (11468) within the projected outline of the building to the south-west of the entrance area may also have been related to the structure, although the lack of postholes elsewhere makes this unlikely.

North of the hearth were two pits (11466 and 11482). These were of similar size, sharply defined, 0.35 m deep and up to 1 m across, and roughly circular in plan. Both were positioned 2.5 m from the hearth and were distinctive because of their infills. Pit 11466 was infilled entirely with redeposited ironstone but was otherwise unremarkable. Pit 11482 contained a 'watering can' ceramic vessel with five pre-firing holes in its base, found complete except for its rim, which may have been purposely removed. The vessel was buried under a roughly stacked group of limestone slabs on the eastern side of the pit while the remainder of the feature was backfilled with mixed silts and bands of clay (11527). This deposit probably had a votive or religious significance. A further shallow pit (11576) was positioned between 11466 and 11482. This was set back slightly in relation to the hearth and was more elongated in its surface shape (1.00 m by 0.80 m) but only 0.25 m deep. It was infilled with tightly packed limestone pieces (11575) incorporating several broken fragments from a fired clay perforated oven plate (see Poole Chapter 5). A layer of horizontally laid small limestone slabs (11574) levelled the pit, bringing it up to the interior floor level, although the stones appeared to form a discrete area of hardstanding rather than being part of the floor surface. At the very southern edge of these stones a much larger single slightly worn limestone slab partly sealed both pits 11576 and 11482.

The surfaces were sealed by a thin sequence of silting deposits (11355, 11365, 11376). These appear to represent the final occupation and abandonment or demolition of the structure. Certainly the lack of significant stone inclusions within these deposits suggests either that the removal of the structure was very tidy or that it was not stone built. The latter assumption should be treated with caution, however, given the clear evidence provided by building 10870 (see below), which was both stone-built and dismantled during the Roman occupation of the site; it produced similar silty and mainly stone-free deposits sealing the final occupation levels within the interior. The silt deposit (11376) across the north-western portion of building 11340 did seal a small patch of limestone rubble (11486; not on plan) which did not appear to represent an internal surface although it was at the same physical level. These stones lay largely beyond the projected building outline and seem most likely to have derived from the demolition of the building rather than its occupation.

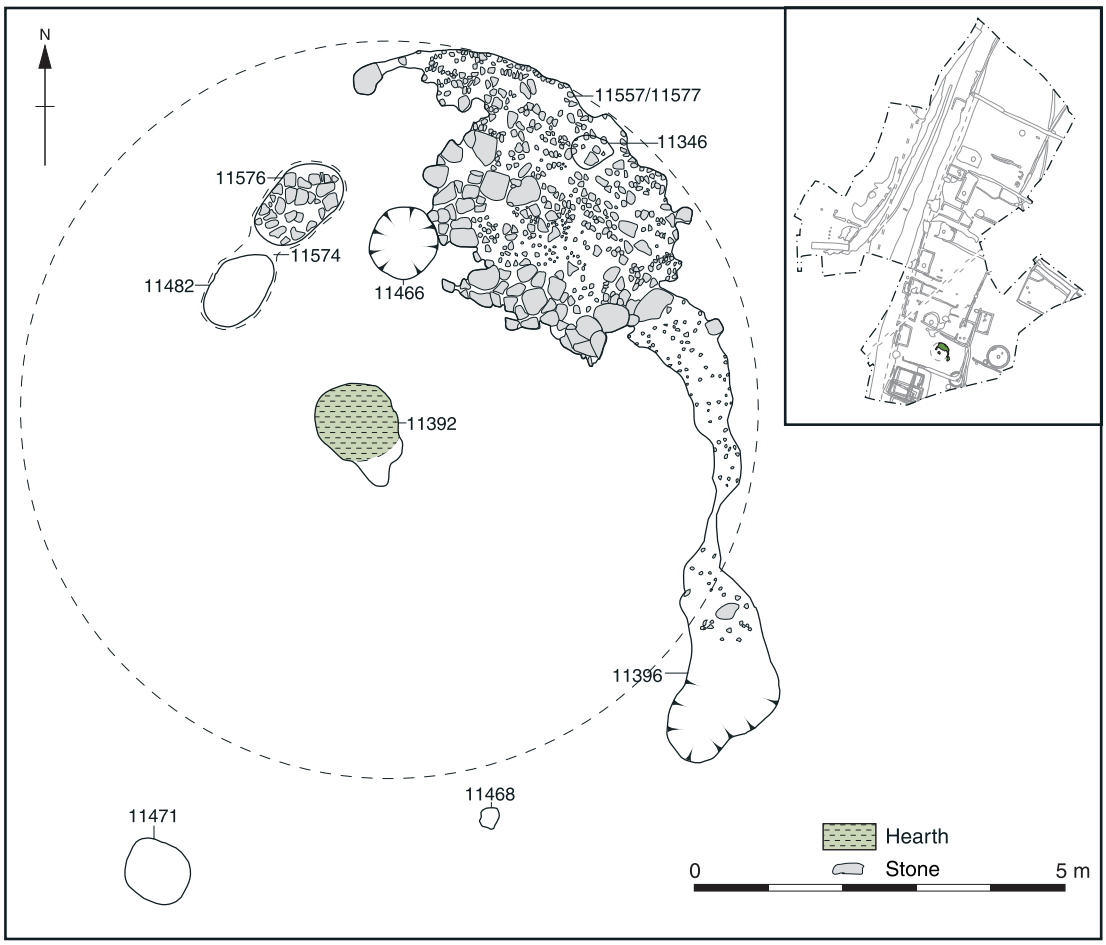


Fig. 4.8 Building 11340

Dating

A substantial pottery assemblage was recovered from the combined deposits within the building. This totalled 658 sherds (10.7 kg), and it is reasonable to consider this as a single group because of the relatively short date range represented, from the earliest horizon within the building to the deposits sealing the occupation levels. The floor surfaces produced a significant assemblage of pottery (59 sherds, 918 g) with a moderate average sherd weight of 15.6 g, despite their provenance in a context where small trampled fragments would be expected. Pit 11482 also produced a small assemblage of 19 sherds (361 g). These suggest an origin in the late 2nd century or slightly earlier. The individually small assemblages from the other features also had dates consistent with this.

The silt deposits sealing the floor levels produced the largest group of pottery (401 sherds, 5.7 kg) again largely consisting of forms dating from the late 2nd century, although a small part of the assemblage also dates from the 3rd century and marks the latest accumulation of deposits associated with the building. This relatively short date range suggests that the building was probably standing for no longer than a single generation. This would be consistent with the general lack of wear on the upper part of the limestone surface suggesting that the building was comparatively short lived or (perhaps) little used.

Function and appearance

The building shares several distinct characteristics with the better-preserved building 10870 to the north (see Phase 4). Its circular ground plan, limestone slab floor across the north-eastern part of the interior and a neatly constructed central stone-based hearth are common to both and this suggests that they largely functioned in the same manner. Based upon the finds and animal bone assemblages there seems little reason to doubt a primary domestic function in both cases. In terms of the construction and appearance of 11340, evidence for which was sparse, it seems most likely that this was of stone although other construction types cannot be ruled out. Some small fired clay fragments were recovered from the latest levels sealing the floor surfaces, but they did not bear any evidence of wattle impressions that might suggest a wooden superstructure. If the building was a stone construction, as with the three surrounding circular structures, then this must have been built on a shallow or surface level foundation. None of the

circular buildings had shallow foundations that fully penetrated the colluvial soil level into the underling ironstone geology and the slightly increased level of recent truncation over the area of building 11340 may account for the absence of any foundations or removal of them in this building.

Although the quantity or volume of deposits and features across the building was relatively sparse, these were diverse and provide a glimpse of activities within the household in addition to functional domestic use. The ceramics from the building included a relatively high proportion of samian ware (see Timby, Chapter 5), suggesting some special role or status within the settlement. Tantalisingly an individual object points to religious activity associated with the building, namely a miniature votive shield (SF 1616, cat no. 91), which was found within the entrance area. Although its find location suggests it was a casual loss, a direct association with the building seems possible. It may even have been fastened to the structure or to a household shrine within the building. The modified pot purposely buried within pit 11482 also has votive overtones and the fact that this was partly sealed by a large slab at floor level indicates that this was deposited at the time of construction and may have formed part of an initial foundation rite. The features around pit 11482 are similarly interesting in their appearance. Pit 11466 was unusual, as it had no apparent function. The function of the shallow stone filled pit 11576 may equally be questioned; it formed a firm base, possibly for an upstanding feature, although the role of this is ambiguous. The inclusion of a broken up oven plate in the stone packing seems a little more unusual and is not readily explained by the casual discard of debris. Its close physical and stratigraphic association with pit 11482 may suggest a similar votive or symbolic role here also, although this can be only a tentative suggestion.

Pits (Fig. 4.2)

Pits 11991 and 12072 were large features located close to enclosure ditch 12880. Neither contained great quantities of finds, and their function is uncertain, although they could perhaps have served as waterholes. Pit 11991 was oval, measuring 2.0 x 1.5 m in size, and was excavated to a depth of 0.80 m. It had a steep profile on its north-western side and a more gentle profile on the opposite side. It contained two silting deposits which produced six sherds of early to mid 2nd-century pottery. Pit 12072 was sealed beneath Phase 4 building 10890. It was not fully seen in plan but is likely to have been subcircular. It measured at least 2 m across and had an irregular profile. The single fill of silty clay contained 400 g of early to mid 2nd-century pottery.

Further to the west, pit 12012 was a shallow bowl-shaped feature, 1.40 m in diameter and 0.13 m deep. Its fill contained frequent patches of charcoal and burnt clay, but as there was no evidence of *in situ* burning this may represent redeposited hearth or oven waste. Finds included 17 sherds of pottery dating to the early to mid 2nd century.

Burial group 13040 (Fig. 4.9)

This burial group was located immediately to the west of the rectangular enclosure. A tight cluster of four graves was found, comprising three cremation burials (10915, 10935 and 10945) and one infant inhumation burial (10925).

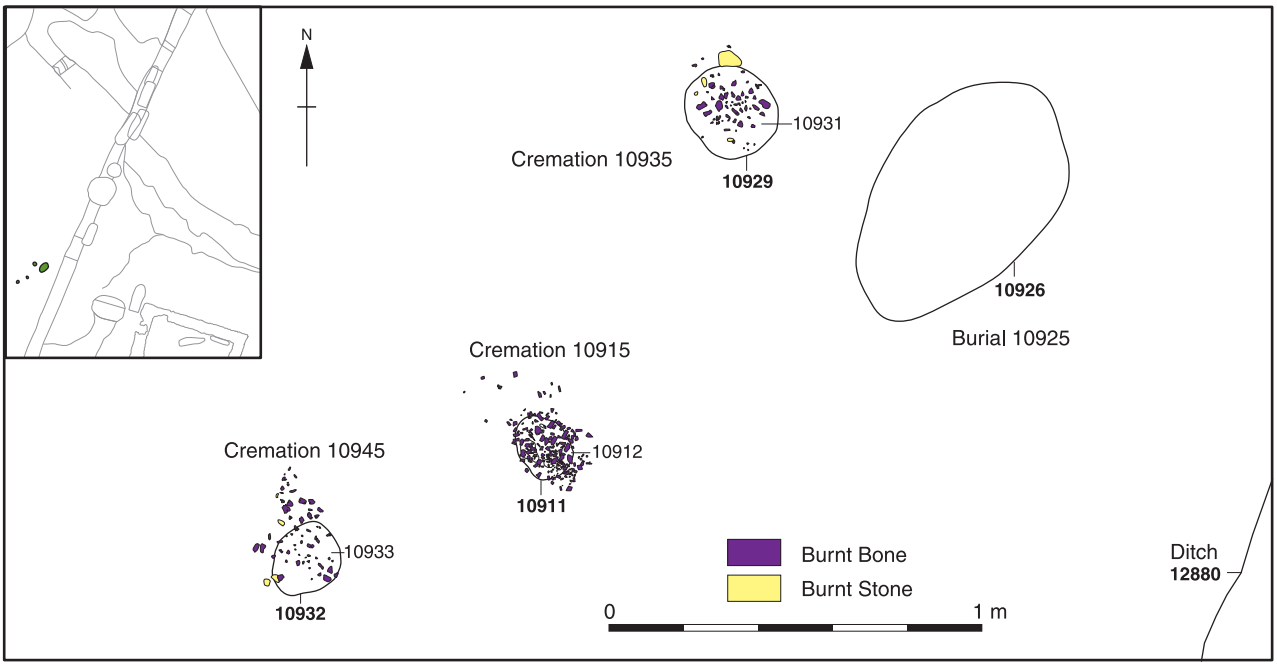


Fig. 4.9 Burial group 13040

The cremation burials were all un-urned, and contained within shallow subcircular pits, 0.19–0.25 m in diameter and no more than 0.05 m deep. In each case, the remains belonged to an adult of undetermined sex. There were no grave goods, although burial 10935 contained a single small sherd of 2nd-century pottery. Radiocarbon determinations were obtained on bone from each of the cremation burials. Burial 10915 has been dated to cal AD 120–330 (SUERC-9649: 1810 ±35 BP), burial 10935 to cal AD 130–390 (SUERC-9650: 1760 ±35 BP), and burial 10945 to cal AD 70–320 (SUERC-9651: 1835 ±35 BP). While these date ranges are fairly broad, the rite of cremation is generally more typical of the earlier than the later Roman period, and so these burials have been assigned to Phase 3 (2nd century).

Inhumation burial 10925 contained the poorly preserved remains of a child aged 2.2–3 years. The burial was contained within a NE-SW-aligned oval grave, 0.65 by 0.45 m in size and 0.11 m deep. The body had been laid out with its head to the north-east, although its posture is otherwise uncertain. The backfill of the grave contained eight sherds of pottery dating to the 2nd century.

PHASE 4: LATE 2ND TO 3RD CENTURIES
(Fig. 4.10)

Significant changes to the layout of the site occurred during this phase. The settlement increased in size, extending further north along the eastern side of the road, with many of the new buildings encroaching on the line of the former roadside ditch. A gravel 'pavement' was constructed along the whole length of the roadside frontage of the settlement, representing a major collective or 'municipal' project. The northern end of the site remained largely empty, aside from field boundaries and two wells. On the western side of the road, a monumental shrine complex was constructed.

The road

A large-scale construction event took place in this phase with the creation of gravel 'pavement' 13020 running the entire length of the roadside frontage of at least this part of the settlement, a distance of 185 m. This was constructed in a distinct terrace around 4.5 m wide, cut into the natural eastward rise of the ground (Figs 4.3, 4.4). The pavement surface consisted of a layer of rounded river gravel no more than 0.02 m thick. At the southern end of the site, some patchy traces of gravel were also seen extending further to the west of the terrace cut, suggesting that there was more extensive surfacing here that had been largely removed by truncation. In most sections the gravel pavement appeared to respect the western edge of roadside ditch 10680 by stopping just short of it, suggesting that the pavement was laid out while the final phase of the roadside ditch was still open (Fig. 4.3, section 4 and 5; Fig. 4.4, section 6). However, in two sections towards the northern end of the site the gravel pavement clearly overlay the final phase of the roadside ditch (Fig. 4.4, sections 7 and 8).

Following the final infilling of roadside ditch 10680, several buildings were constructed with their western walls cut into the ditch (buildings 10850, 10860, 11620 (Fig. 4.3, section 3) and 11630 (Fig. 4.3, section 4). It seems likely that many of these buildings would have been in contemporary use with the gravel pavement. In the case of building 11620, the pavement appeared to directly abut the western wall of the structure (Fig. 4.3, section 3).

There is little good dating evidence for these changes. Ceramics from roadside ditch 10680 are generally consistent with infilling in the late 2nd century. Early to mid 3rd-century pottery was, however, recovered from one section (Fig. 4.3, section 5). As the ditch in this section was neither sealed by the gravel pavement nor cut by a building, it is possible that it could have stayed open slightly longer than some other parts of the ditch. No dating evidence was recovered from the gravel pavement itself, but along much of its length the pavement was overlain by a distinctive red sandy deposit (13100), up to 0.30 m thick, which produced 3rd-century pottery. This could have been deposited through natural processes, although it seems more likely to have been a deliberate levelling deposit.

It is tempting to suggest that the construction of roadside gravel pavement 13020 was broadly contemporary with an episode of resurfacing in gravel of the road itself to the west. This gravel surface was most distinct where it overlay the earlier ironstone road surface at the western edge of the road hollow (12075 and 12975; Fig. 4.5). A thin lens of gravel seen at the base of the road hollow may also be related to this phase of resurfacing (12318 and 12635). In Figure 4.5 section 9, a further distinct gravel surface can be seen at the eastern edge of the road hollow (12073), although it is possible that this relates to a later phase of road surfacing (see Phase 5 below). In one section (Figure 4.5 section 9) the gravel surface had been laid over a sandy make-up layer (12076) that contained 22 sherds of mid to late 2nd-century pottery. It is also notable that the western edge of the gravel road surface ran parallel to the precinct wall of shrine 10930, suggesting contemporaneity of the two features. Furthermore, there are indications of a branch road heading south-westwards in front (ie at the south end) of the shrine complex, and possibly continuing on towards the valley floor. However, this road or trackway does not appear to have been as substantial or well maintained as the main north-south road.

At a later stage, the north-south road was resurfaced with a substantial deposit of limestone rubble in a sandy silt matrix (12075/12631), up to 7 m wide and 0.30 m deep (Fig. 4.5). This phase of the road was fairly clear in plan, running the length of the site, although the eastern edge of the limestone rubble surface at the southern end of the road was unclear due to masking by later deposits. It seems

Fig. 4.10 Phase 4: late 2nd to late 3rd centuries

Fig. 4.11 Plot divisions referred to in description and discussion of settlement

that the line of the road was shifted slightly to the east, closer to the settlement. Subsequent attempts to patch up the road surface with limestone rubble were seen in several places (Fig. 4.5, section 9: features 12312 and 12314; section 10: feature 12628).

The settlement

The placement of buildings and boundary ditches in this phase suggests that the settlement can be divided into six similarly sized rectangular units or 'plots' fronting onto the road. These have been labelled Plots A–F from south to north (Fig. 4.11), and are described in turn below. While dividing up the settlement in this way aids discussion, it should not necessarily be assumed that each 'plot' represented a separate 'property' or household unit.

Plot A (Fig. 4.11)

Plot A was defined to the north by ditch 12995 and probably to the east by a continuation of ditch 11750/11760 (see Plot B below). Two successive rectangular buildings were located on the road frontage of the plot, with building 10860 later replaced by building 11370. An ironstone wall (11410) immediately south of these structures may have belonged to a further building, most of which lay beyond the limit of excavation. East of the buildings, well 12890 continued in use in this period, although no deposits of this period were encountered (see Phase 3 above).

Buildings 10860 and 11370 (Figs 4.12 and 4.13; Pl. 4.2)

Building 10860 was a rectangular structure measuring 14.75 m WNW-ESE by 5.75 m NNE-SSW internally (Fig. 4.12). It faced onto the road frontage, with the west wall of the building cut into former roadside ditch 10680. The west, south and east walls of the building had been largely or entirely robbed out (robber cut 11330: see Phase 5 below), but survival of the north wall (11570) was rather better. Here the wall was 1 m wide, consisting of a single-course pitched limestone foundation overlain by a course of relatively large flat-laid limestone slabs (*c* 0.40 x 0.30 x 0.10 m). No floor surfaces or internal

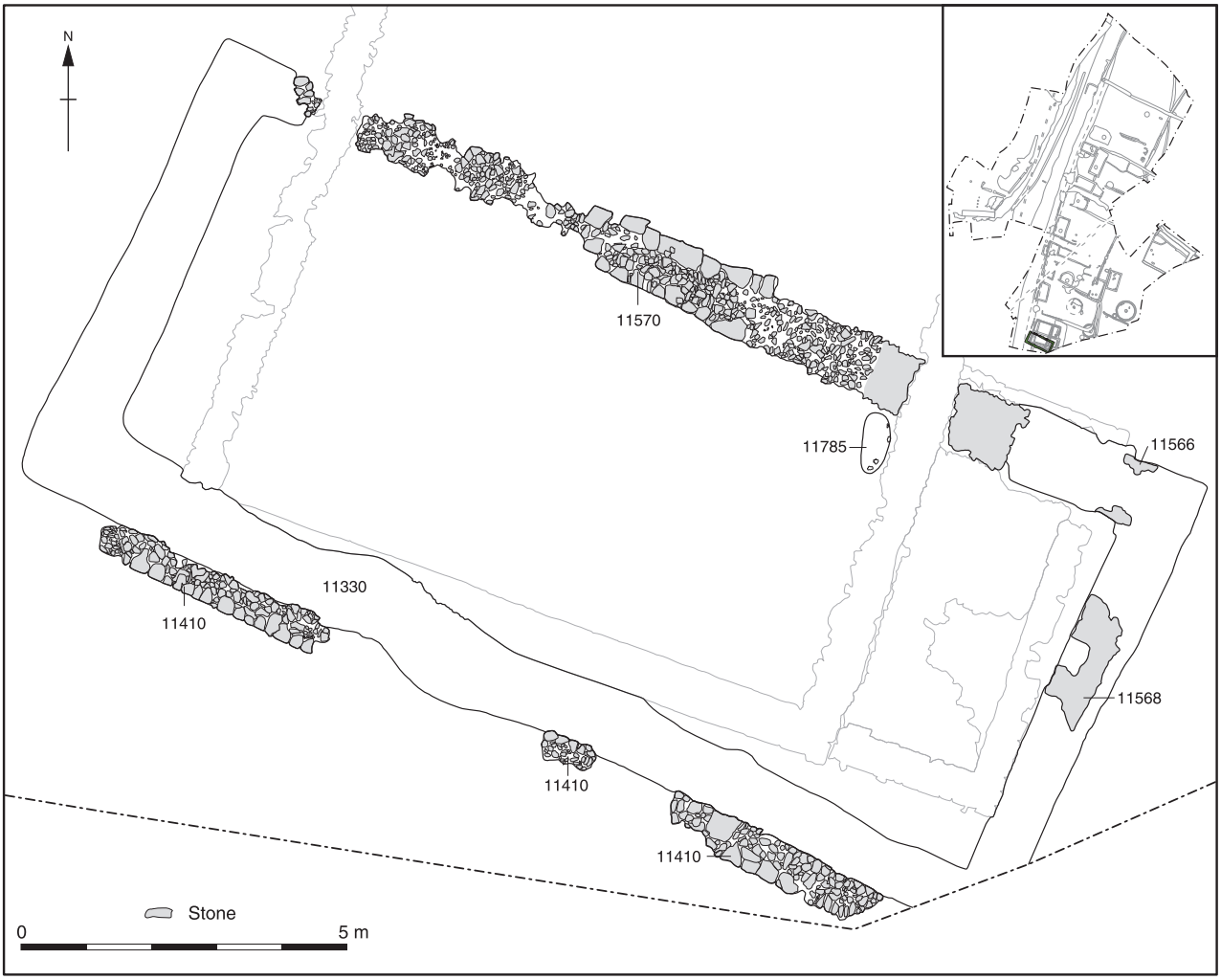


Fig. 4.12 Building 10860 and wall 11410

Table 4.1 Building 11370. Summary of internal features

Feature	*Interpretation*	*Diameter (m)*	*Depth (m)*	*Pottery (g)*	*Animal bone (g)*	*Other finds*
11442	Hearth	1.40	0.16	15	-	
11665	Posthole	0.40	0.30	16	-	Iron hinge pintle (Sf 1718)
11702	Pit	1.00	0.15	111	14	
11724	Pit	0.58	0.11	-	-	
12063	Posthole	0.30	0.18	-	-	

features survived within the building, and no datable finds were recovered.

Building 10860 may have been fairly short-lived, as its replacement by building 11370 (Table 4.1) probably also occurred during this phase, although the latter structure clearly continued to be occupied into the 4th century (see Phase 5 below). The replacement building followed an approximately perpendicular alignment to 10860, and measured 14.5 m NNE-SSW by 9.5 m WNW-ESE internally (Fig. 4.13). The walls of the building survived up to two courses high (11440, 11450, 11660 and 11670). An ironstone rubble foundation course was overlain by a wall course with a facing of flat-laid limestone slabs (up to 0.40 m long) and a core of ironstone and limestone rubble. While building 10860 must have been demolished down to ground level prior to the construction of building 11370, the relatively good preservation of the north wall 11570 suggests that it might have been retained as a partition within the new building, dividing it into two unequally-sized rooms (Pl. 4.2).

Again, no trace of any floor surface was found within this building other than the natural colluvium into which the building was cut. A few internal features occurred in the northern part of the building, which must have been either earlier than or contemporary with its use, as they were overlain by deposits associated with the destruction of the structure. Centrally placed within the northern end of the building was a bowl-shaped hearth 11442. This was filled with large stones, overlaid by a thin layer of red burnt clay around the southern part of the feature. A single sherd of 2nd-century pottery was recovered. Other features in the vicinity of the hearth included two shallow pits (11702 and 11724)

Plate 4.2 Buildings 10860 and 11370, facing north-east. Scale: 2 m

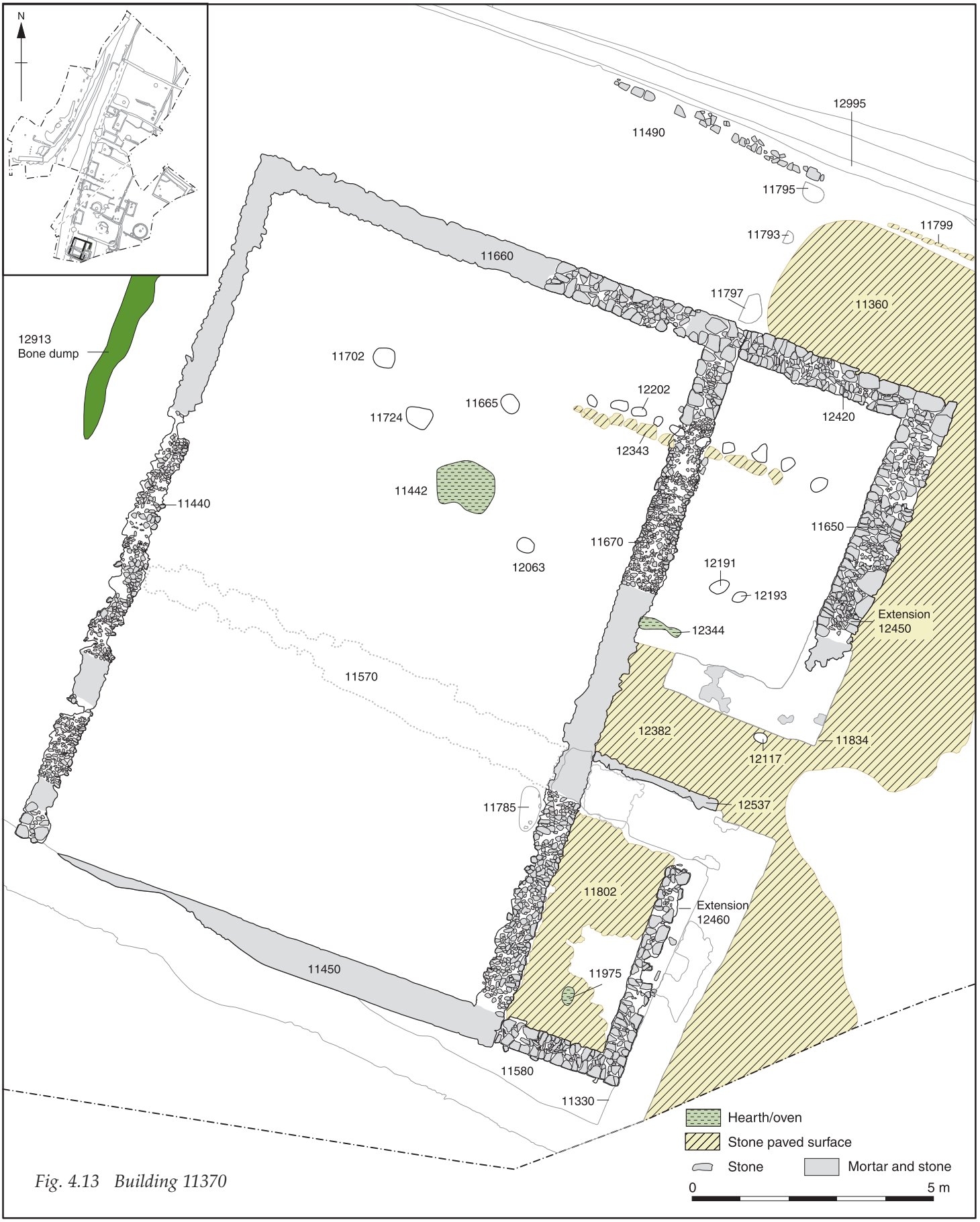


Fig. 4.13 Building 11370

and two postholes (11665 and 12063). Pit 11702 had a charcoal-rich fill that produced six sherds of 1st- to 2nd-century pottery. An iron hinge pintle (SF 1718) and a single sherd of 2nd-century pottery were recovered from posthole 11665.

At some stage during the lifetime of building 11370, two rectangular stone-built extensions (12450 and 12460) were attached to the eastern wall 11670. These are assumed to be later additions, as the masonry of their walls was not keyed in to that of the main structure. The extensions were built with their floor levels set slightly lower than that of the main part of the building, resulting in better preservation of floor surfaces and internal features.

Extension 12460

The more southerly of the two extensions (12460) measured 5.5 m NNE-SSW by 2.1 m WNW-ESE internally. The walls (11580) were constructed of limestone, with up to four courses surviving. Two courses of flat-laid slabs were overlain by a course of pitched stones, which was in turn overlain by a further course of flat-laid slabs. Much of the northern wall had been removed by later stone robbing (see Phase 5 below).

Most of the interior of the extension was floored with a surface of flat limestone slabs (11802), which abutted the east wall of the main building (Pl. 4.3). A small patch of ashy material overlying the paving in the southern part of the extension may have been the remains of a hearth (11975). A sample taken from this (sample 667) contained oak and Maloideae (hawthorn etc) charcoal. The paved floor and hearth were subsequently overlain by a layer of pale grey clay (11693), 0.52 m thick, possibly a replacement floor layer. This was in turn overlain by two thin layers of silt (11691 and 11692) – possibly make-up layers – before a further layer of yellow clay (11555), 0.56 m thick, was laid down. This overlay part of the eastern wall of the extension, and thus may represent a surface dating to after the extension went out of use. It produced 11.5 kg of 3rd-century pottery along with a small amount of animal bone. The extension was subsequently covered with deposits associated with the destruction of building 11370 during the 4th century (see Phase 5 below).

Extension 12450

The more northerly of the two extensions (12450) measured 6 m NNE-SSW by 3.5 m WNW-ESE internally. Its walls (11650/12420) consisted of two courses of pitched limestone slabs (*c* 0.25 x 0.20 x 0.06 m) laid in herringbone fashion. Much of the southern wall of the extension had been removed by later stone robbing (robber cut 11834; see below), but it appears that it never extended far enough west to meet the east wall of the main building. There may thus have been an entrance into the extension at this point. Notably, a surface of ironstone cobbles (12382) lay immediately outside this putative entrance. A single posthole (12117) lay just outside the southern wall of the extension, but

Plate 4.3 Building 11370, paved floor 11802 within extension 12460. Viewed vertically, west at top of photograph. Scale: 2 m

it is unclear what relationship (if any) this had with the building. The posthole was 0.30 m deep and contained post-packing of limestone and ironstone slabs set vertically around its edge.

A possible make-up layer or rough floor (11854) of silty clay containing limestone rubble (up to 0.3 m across) extended across most of interior of the extension. This layer overlay the original east wall (11670) of building 11370, showing that this part of the wall was removed once the extension was added. Some late 2nd to 3rd-century pottery was recovered. An E-W aligned partition within the extension is indicated by posthole row 12202 (Pl. 4.4), which cut into both layer 11854 and former wall 11670. The post row was 5.4 m long, and made up of 11 postholes set *c* 0.25 m apart. Each posthole was 0.15–0.20 m in diameter and up to 0.25 m deep, and typically contained post-packing of limestone pieces inserted vertically around the edge of the cut. A parallel kerb of seven flat limestone slabs (up to 0.40 m across) lay immediately adjacent to the southern edge of the post row (12343).

Other features within the extension and cutting into layer 11854 comprised a pair of postholes and an oven. Postholes 12191 and 12193 were up to 0.25 m deep; four sherds of 3rd-century pottery were recovered from 12191. Oven 12344 was a dumbbell-shaped feature, 1.55 m long, located directly adjacent to the southern wall of the extension. It was widest and deepest (0.26 m) at its western end, which probably formed the oven chamber itself, while the shallower eastern end is likely to have been the stoking area. The oven was lined with burnt clay, and was filled with a deposit containing lenses of burnt clay and charcoal. A few fragments of animal bone and undated Roman pottery were recovered. A sample from the fill (sample 673) produced small amounts of charred wheat and some remains of *Allium* (onion/garlic family).

Alterations to extension 12450 subsequently occurred during the late 3rd to 4th centuries. These will be discussed under Phase 5 below.

Burial 11785 (Figs 4.12 and 4.13)

Neonate burial 11785 was located adjacent to the north wall (11570) of building 10860 and the east wall (11670) of building 11370, but had no stratigraphic relationship to either structure. The only surviving remains were scattered, disturbed skull fragments (Sk 11782–4 and 11786) contained within an oval grave cut on a north-south alignment, measuring 0.90 x 0.45 m and 0.10 m deep. There were no associated finds.

Bone dump 12913 (Fig 4.13)

Immediately outside the west wall of building 11370 was a 7 m-long linear spread of animal bone (1.5 kg), mainly comprising sheep/goat remains but with some cattle and horse bone also present. The material was dominated by longbones, many of which had been worked, having been either chopped or split, and included a significant number

Plate 4.4 Building 11370, post row 12202, facing south. Scale to right: 2 m

of fragments that had been split longitudinally into narrow strips, probably rough-outs for the manufacture of bone pins (227 fragments, 563 g). This suggests that bone working was an activity associated with building 11370 (see Scott Chapter 5 and Strid Chapter 6). The deposit also contained three sherds of pottery dated to the 3rd century or later.

Stone yard surface 11360 (Fig. 4.13)

Limestone and ironstone 'yard' surface 11360 abutted the north and east walls of extension 12450, and can be presumed to have been contemporary with this structure. The surface consisted of pitched stones up to 0.40 m long, apparently laid over a make-up layer of crushed limestone. It was bounded to the west by a row of three postholes extending northwards from building 11370 (11793, 11795 and 11797). These postholes were up to 0.45 m deep and produced no finds. The northern boundary of the surface was marked by a 3.3 m long kerb of limestone slabs set on edge (11799), immediately beyond which lay the southern boundary ditch of Plot B (12995). A possible truncated limestone wall (11490) may have continued the line of the kerb westwards.

Wall 11410 (Fig. 4.12)

Wall 11410 was located at the extreme southern edge of the excavated area. It ran for 13 m directly adjacent to the robbed-out south wall of building 10860, and in fact was cut in places by the robber trench (11330). The wall was 0.70 m wide and only a single foundation course of pitched ironstone blocks (*c* 0.20 x 0.15 x 0.10 m) survived. There were no associated finds. The purpose of the wall is uncertain, but it may have formed part of a building lying beyond the limit of excavation.

Plot B (Fig. 4.11)

Plot B was demarcated by shallow ditches on its northern, eastern and southern sides (11750, 11760 and 12995). The western frontage of the plot was initially marked by a limestone wall (11758), which was subsequently replaced by building 11620. Within the interior of the plot, pre-existing circular building 11340 seems to have continued in use into the 3rd century (see Phase 3 above). Immediately to the east of the eastern boundary ditch of the plot, well 12340 is also believed to have continued in use through this phase, although no deposits of this date were encountered. Close to this well, a small pit (12826) contained a fill suggestive of 'ritual' deposition.

Boundary ditches (Fig. 4.10)

The earliest phase of the boundary around Plot B was represented by ditch cuts 12995 and 11760, which truncated earlier circular building 10910. Ditch 11760 was later recut as ditch 11750, the western terminus of which appeared to respect an external surface (11481) associated with Phase 4 building 10870 (see below), perhaps suggesting contemporaneity. At a late stage of Phase 4, ditch 11750 (by this time largely silted up) was

Plate 4.5 Building 11620, general view facing east. Scale: 2 m

encroached upon by the construction of building 10890 (see Plot C below).

All of these ditches had U-shaped cuts, up to 0.42 m deep. Their silty fills contained a range of domestic debris, including pottery, ceramic building material and animal bone. More unusual finds comprised single fragments of vessel glass from ditches 12995 (SF 1908) and 11750, and a bone hairpin fragment (SF 1607, cat. no. 298) from ditch 11750. The pottery from the ditches could be dated no more closely than to the mid 2nd century or later.

Wall 11758 (Fig. 4.14; Pl. 4.5)

Wall 11758 overlay earlier roadside ditch 10680, and was at least 11.8 m long, its northern end having been cut away by a modern pipeline trench. Up to two courses of the wall survived. The outer faces of the wall were formed by flat-laid limestone slabs, with rubble used for the core. The wall could represent part of an early phase of building 11620, but it seems more likely to have been a roadside boundary wall similar to 11010 to the north (Plot D).

Building 11620 (Fig. 4.14; Pls 4.5 and 4.6)

Building 11620 was a trapezoidal structure, measuring 10.4 m NNE-SSW by 6.75 m WNW-ESE internally. The west wall of the building cut through former roadside ditch 10680, while the south wall

Plate 4.6 Building 11620, north wall 11747, facing east. Note the manner in which the outer face of the wall is set back from the outer face of the foundation. Scale: 2 m

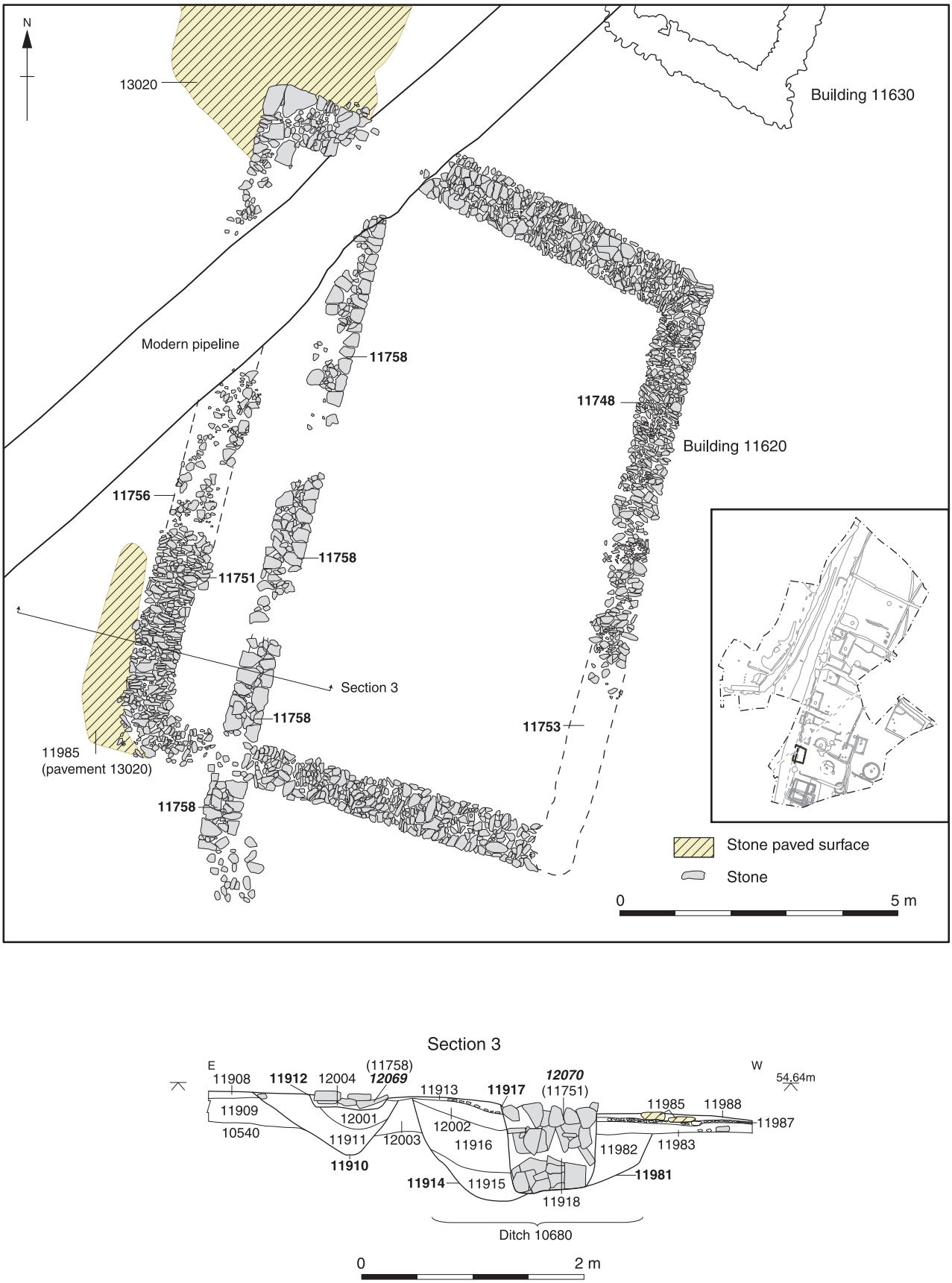
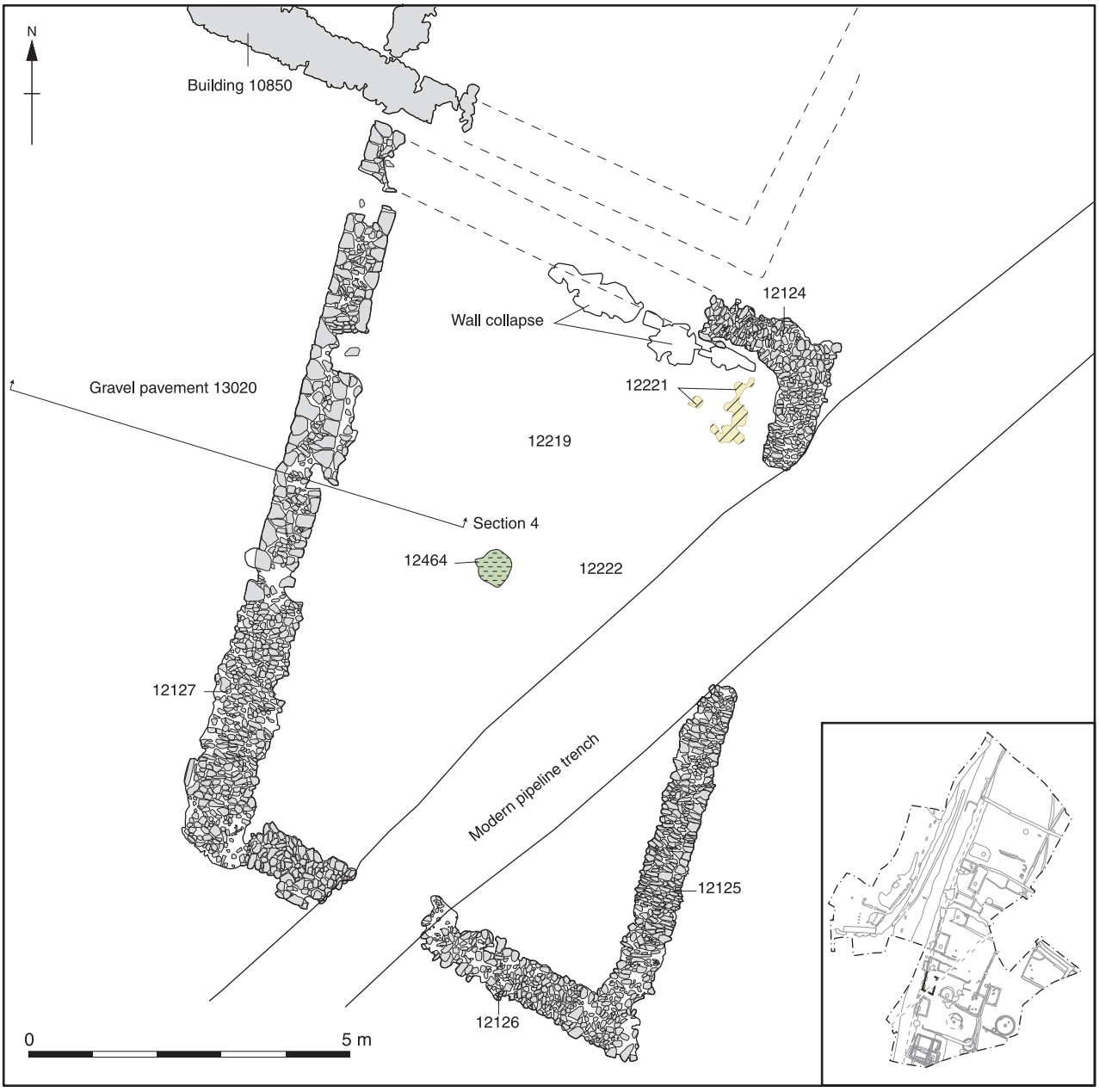


Fig. 4.14 Building 11620 and wall 11758



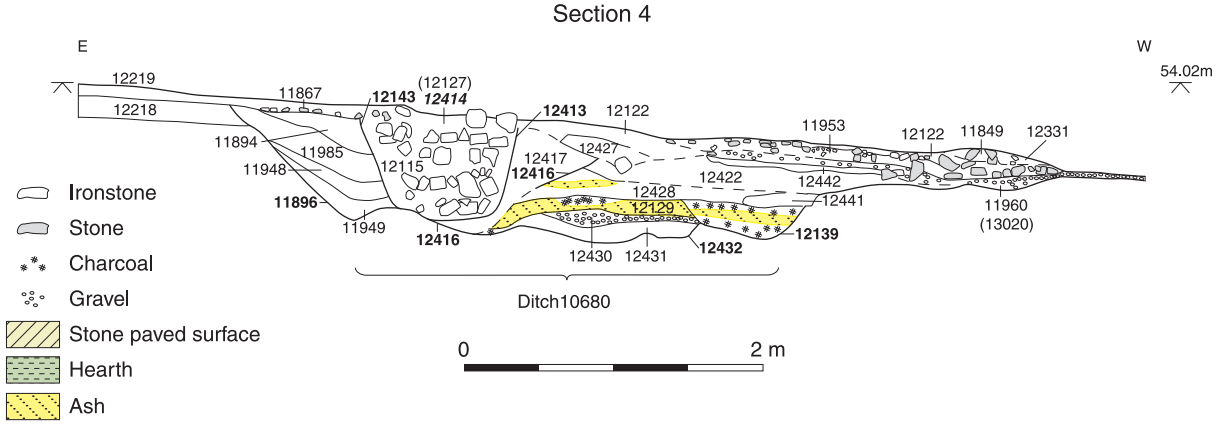


Fig. 4.15 Building 11630

cut through wall 11758. The gravel 'pavement' 13020 abutted the west wall, suggesting contemporaneity of use with the building. Beyond these stratigraphic relationships, the building is poorly dated. It is tentatively suggested that the building was constructed in Phase 4, although occupation probably continued into Phase 5 (see below).

The wall foundations (11747–9 and 11751) were 0.80–1.0 m wide, and generally consisted of two courses of pitched limestone laid in herringbone fashion; three courses were seen in the west wall where this was cut into the earlier roadside ditch. The joins between the wall foundations at the north-east and south-west corners of the building were marked by a 'seam' consisting of a row of vertically-pitched thin slabs. In places, the foundations were overlain by a single course of flat-laid limestone slabs, representing the lower part of the wall itself. The inner face of the wall was set flush with the inner face of the foundation, but the outer face of the wall was set in 0.10–0.15 m from the outer face of the foundation (Pl. 4.6).

The only datable finds directly associated with the construction of the building comprised six sherds of 2nd-century pottery from the construction cut of west wall 11751. However, as this wall was cut into roadside ditch 10680 the pottery may well have been redeposited. No floor surfaces or internal features could be seen within the building.

Paved surface 11633 (Fig 4.10)

Lying 3 m to the south-east of building 11620 were the patchy remains of a paved surface (11633). This measured 5 m across and consisted of flat limestone slabs up to 0.35 m across. The surface was overlain in places by a thin layer of sandy clay containing crushed limestone fragments (11634). The top of the paved surface produced 900 g of pottery dated to the late 2nd to early 3rd century (finds reference 11484).

Pit 12826 and burial 12745 (Fig 4.10)

Pit 12826 was located directly adjacent to Phase 3 ditch 12310 behind the eastern boundary of plot B, although no stratigraphic relationship between the two features could be discerned. The pit was 1.20 m in diameter and 0.75 m deep, with vertical sides and a flat base and contained two distinct fills. The lower fill (12838) was a sandy deposit producing 1.7 kg of animal bone, along with a single sherd of pottery, a bone pin fragment (SF 3084), a glass vessel fragment (SF 3094) and iron nails. The upper fill (12827) contained a remarkable assemblage of 18.5 kg of early 3rd-century pottery, including many large and refitting sherds. Other finds from this fill included 2 kg of animal bone (including worked fragments), glass vessel fragments (SF 3085–93) and two iron nails. A number of slabs of limestone and ironstone were found around the base and sides of the fill, possibly forming a crude lining for the upper part of the pit. The character of the material from the pit is striking, and suggestive of a ritual act.

An infant burial (12745) was located close to, or possibly within the upper fill of, pit 12826 (exact location unclear due to loss of EDM data). The body (Sk 12742) was badly truncated, but seems to have been interred in a supine position with its head to the west. The child was aged 3–6 months at the time of death. There were no associated finds.

Plot C (Fig. 4.11)

No fewer than six buildings appear to have been constructed in Plot C during this phase. Buildings 10850, 10880 and 11630 formed an 'L'-shaped complex running along the northern and western sides of the plot. These buildings produced little dating evidence, but are tentatively interpreted as having been built together as a coherent unit during this phase. A roundhouse (building 10870) and associated well (12885) were constructed in the centre of the plot. At the eastern end of the plot, rectangular building 10900 was built and later augmented or replaced by the markedly similar building 10890.

Building 11630 (Fig. 4.15)

The plan of building 11630 took the form of a parallelogram, measuring 10 m NNE-SSW by 6.5 m WNW-ESE internally. It was located directly adjacent to building 10850 to the north, although it is not clear whether the two structures were physically conjoined. The western side of the building was constructed over former roadside ditch 11680. No dating evidence was recovered from the building itself, and its construction has only tentatively been placed in this phase (for abandonment deposits see Phase 5). Interpretation of the building is also hindered by the fact that part of the structure was truncated by a modern pipeline trench.

The walls of the building were 0.70 m thick, and varied in their construction. Some sections were constructed from limestone, others from ironstone, and others still from a combination of the two. Up to two courses of stone survived. The east wall consisted of two courses of pitched stone, both courses being pitched in the same direction. In contrast, the west wall consisted of a lower course of pitched stone overlaid by an upper course faced with flat-laid limestone slabs (up to 0.45 m long) and infilled with a core of limestone and ironstone rubble. It appears that most of the north wall had been completely robbed out, although no distinct robber cut was apparent.

A thin layer of yellow-brown silt (12219) overlying the natural colluvium across the interior of the building may have been an early floor layer. Set within this layer was a central hearth (12464), consisting of a patch of heat-discoloured soil, burnt stones and burnt clay 0.70 m in diameter. In the north-east corner of the building, part of a floor surface overlying layer 12219 was uncovered. This consisted of flat limestone slabs (12221) on a make-up layer of ironstone chippings (12220). The floor surface may have continued more extensively

across the eastern half of building, but the overlying destruction deposits were not removed from this area. None of these floor layers produced any finds.

Building 10850 (Fig. 4.16)

Building 10850 was approximately rectangular in its initial form, measuring 8.2 m NNE-SSW by 5.6 m WNW-ESE internally. The western side of the building cut former roadside ditch 11680 and the red sandy layer (13100) overlying gravel pavement 13020. This suggests that construction of the building took place in the 3rd century or later. It is tentatively suggested that the building was first constructed in Phase 4, although it was clearly later altered and extended in Phase 5 (see below).

The limestone walls of the building (12677–9) were around 0.75 m wide. The walls had been truncated in places by later stone robbing (robber trenches 12154–6; see Phase 5), with nothing remaining of the south wall. Where they survived, the walls were faced with flat slabs up to 0.59 m across, with smaller rubble used for the wall core. Generally, only one course of stonework remained, although up to three courses were present on the west side of the building where the wall was set into the earlier roadside ditch.

A whiteware pottery jar (12616) was found set into the natural colluvium within the building, close to the east wall. This vessel is dated to the 2nd century, providing the main evidence for Phase 4 usage of the building. It is uncertain whether the burial of the vessel had 'ritual' connotations or a practical function. Elsewhere within the building, patchy layers of reworked colluvium could represent early floor layers contemporary with this phase (12562, 12603, 12607 and 12660). Between them these layers produced 830 g of pottery dated to the mid 2nd century or later.

Fig. 4.16 Building 10850 (Phase 4)

Pits associated with building 10850 (Fig 4.16)

Bowl-shaped pits 12253 and 12669 lay immediately adjacent to the northern end of building 10850 and may have been contemporary with it. Pit 12253 must post-date the construction of the building, as it cut a thin layer of colluvium that overlay the construction cut for the west wall. The feature was 0.18 m deep, and had a single dumped fill containing much burnt material. A sample from the fill (sample 675) contained moderate amounts of charred wheat and indeterminate cereal grain. Finds included 500 g of pottery dated to the 2nd century, and a copper alloy needle (SF 2359, cat. no. 39). Pit 12669 was 0.40 m deep and had been backfilled with three deposits again containing significant amounts of burnt material, including charcoal and burnt stone. Finds included animal bone and 4.5 kg of pottery dated to the late 2nd century or later.

Building 10880 (Fig 4.17)

Building 10880 was a rectangular structure apparently attached to the east wall of building 10850, measuring 21 m WNW-ESE by 4.5 m NNE-SSW internally. It was divided by partition wall 12392 into two almost equally-sized rooms, the western room measuring 9.5 m long and the eastern 10 m long. The building had been extensively damaged by later stone robbing, and part of the western room had also been truncated by a modern pipeline trench. Once again, there is little direct dating evidence for this structure, which is tentatively suggested to have been constructed during Phase 4 alongside neighbouring buildings 10850 and 11630. There is some evidence that activity in the eastern room continued into the late 3rd to 4th century, although it is possible that this represents post-abandonment use of the ruins of the building (see Phase 5 below).

The walls of the building (12386, 12389, 10881/12391 and 12392) were typically 0.7 m wide, and survived up to three courses high. They were constructed using flat-laid limestone slabs for the wall facing and limestone and ironstone rubble for the core. Generally, the wall proper overlay a single foundation course of pitched ironstone and limestone, although this was absent in the east wall (12386). No trace could be seen of the presumed north wall of the eastern room. While this may simply be the result of stone robbing, it is possible that this side of the eastern room was of wooden construction, or perhaps even left entirely open. An external paved surface (12388) of flat limestone slabs abutted the south wall of building 10880, although the full extent of this was not established. It could have been part of a more extensive paved courtyard around building 10870.

Within the western room, no floor surface could be seen other than a layer of reworked colluvium (11800), which produced five sherds of pottery dating to the mid to late 2nd century. Features cut into this layer included a central hearth, represented by an oval patch of charcoal, scorched sand and burnt stone (12454; not excavated). Two sub-rectangular features were also present (12236 and 12469), both filled with a deposit of greenish silty sand, possibly cess-like in nature. Excavation of 12236 showed that it was shallow (0.10 m deep), and had a layer of limestone slabs at its base, possibly a deliberate lining. Finds included 360 g of 3rd-century pottery and fragments of animal bone.

The sequence of deposits overlying the reworked colluvial layer 11800 within the eastern room proved difficult to elucidate. Towards the eastern end of the room was a hearth represented by a patch of burnt clay (11934). Abutting the hearth was a small area of flooring (12394), consisting of sections of pitched ironstone alternating with sections of flat limestone slabs. Extending across much of the rest of the room was a layer of silty clay containing frequent limestone fragments (11680/12183). This was regarded in the field as a post-occupation deposit relating to the destruction of the building, and was recorded as extending to the north of the building, sealing well 12140 and pits 12142, 12144 and 12167 (see Phase 5 below). However, it is also possible that this layer at least partly represents a contemporary occupation horizon. Finds from the deposit included some 3rd-century pottery and a coin of AD 270–274 (SF 2133), although given the stratigraphic uncertainties the chronological value of these finds is limited. Two copper alloy votive leaves were also recovered (SF 2005, cat. no. 88 and 2305, cat. no. 89), which are of significant interest in suggesting ritual activity in the vicinity of the building.

Infant burials within building 10880 (Fig 4.17)

Three infant inhumation burials were present within building 10880, all interred in shallow oval cuts located close to the outer walls of the structure (11640, 11690 and 12245). These were recorded as being cut into layer 11680/12183, and hence were believed to post-date the occupation of the building. However, given the stratigraphic difficulties discussed above, it is also possible that the burials were interred while the building was in use. None of the burials contained any finds, aside from nine sherds of pottery from burial 12245, dated to the late 2nd century or later.

Burial 11640 was located close to the south wall of the eastern room. The body (Sk 11642) had been interred in a supine position with the head to the south-west and the arms flexed over the chest. The remains belonged to a perinatal individual aged 38–39 weeks. Burial 11690 was located close to the east wall of the eastern room. The body (Sk 11687) had been placed on its left side with its head to the SSW. The remains belonged to a perinatal individual aged 42 weeks. Burial 12245 was located in the western room, close to partition wall 12392. The body (Sk 12120) had been interred in a supine position with its head to the north. The remains belonged to an individual aged 1.5–2.5 years.

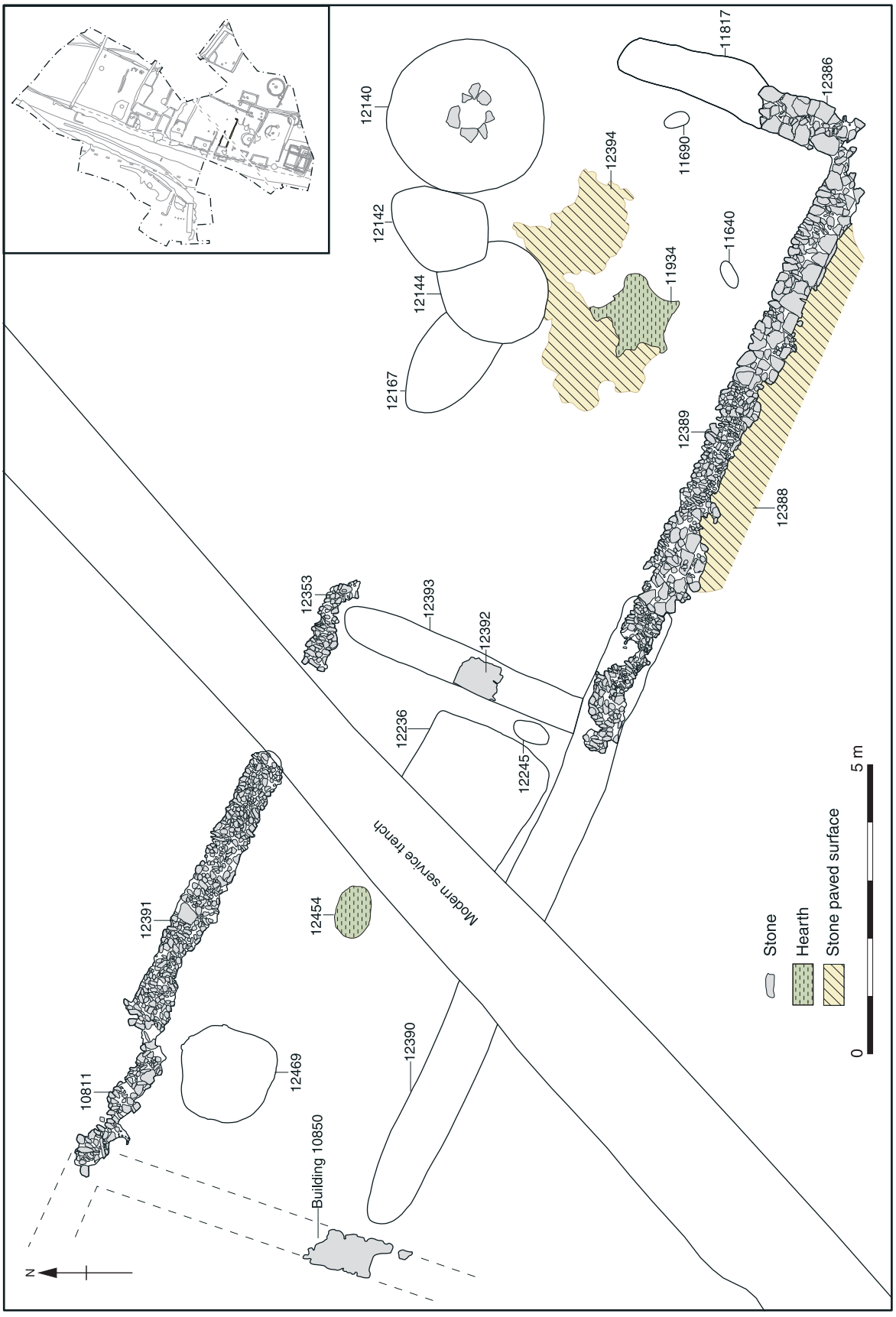


Fig. 4.17 Building 10880 and well 12140

Well 12140 (Fig. 4.17)

Well 12140 was not excavated, but is likely to have been contemporary with adjacent building 10880. The well shaft was circular, with an internal diameter of 0.50 m, and was constructed from limestone slabs averaging 0.30 m long. It was set within a construction cut measuring 2.85 m in diameter.

Building 10870 (Fig. 4.18; Pl. 4.7)

Building 10870 was a circular structure with an internal diameter of 8 m. The northern half of the building was better preserved than the southern, which had been truncated by later ditch 11530. The building was probably first constructed in this phase, though it clearly continued in use into Phase 5, when it underwent significant internal remodelling (see below).

The walls of the building had been almost entirely robbed out (robber cut 11230), but one course of stonework survived on the western side of the building (11200). This wall segment was faced with flat-laid limestone slabs (*c* 0.30 m long) with smaller limestone and ironstone rubble used to form the core. In places the stones appeared to have been bonded with yellow clay. The entrance probably lay on the eastern side of the building, as seen in the later phases of the structure (see Phase 5 below).

Two neonatal burials were found within the building. Both were stratigraphically early and could represent foundation burials. Burial 11390 was located close to the putative entrance of the building, and had been cut by Phase 5 hearth 11369. The skeleton (Sk 11389) was aged 39 weeks, and had been laid out in a supine position with its head to the north. There were no associated finds.

Burial 11850 was located adjacent to the northern wall of the building, and was sealed by a Phase 5 floor surface 11327. The grave was 0.65 m in diameter and 0.25 m deep, and contained the remains of two individuals interred one above the other. The upper, very disturbed, interment was aged 33–35 weeks (Sk 11808). The lower interment (Sk 11815) was aged 37.5–38.5 weeks, and appeared to have been laid out on its right side with its head to the south-west. The backfill of the grave contained an iron nail and ten sherds of pottery dated to the late 2nd century or later.

Other internal features

No trace of any early floor surface was present in the northern half of the building, probably due to truncation by terracing associated with the laying down of later floors (see Phase 5 below). However, several discrete features were present in this area, sealed by the later floors and cut into the natural colluvium. Seven stakeholes (11829, 11831, 11838,

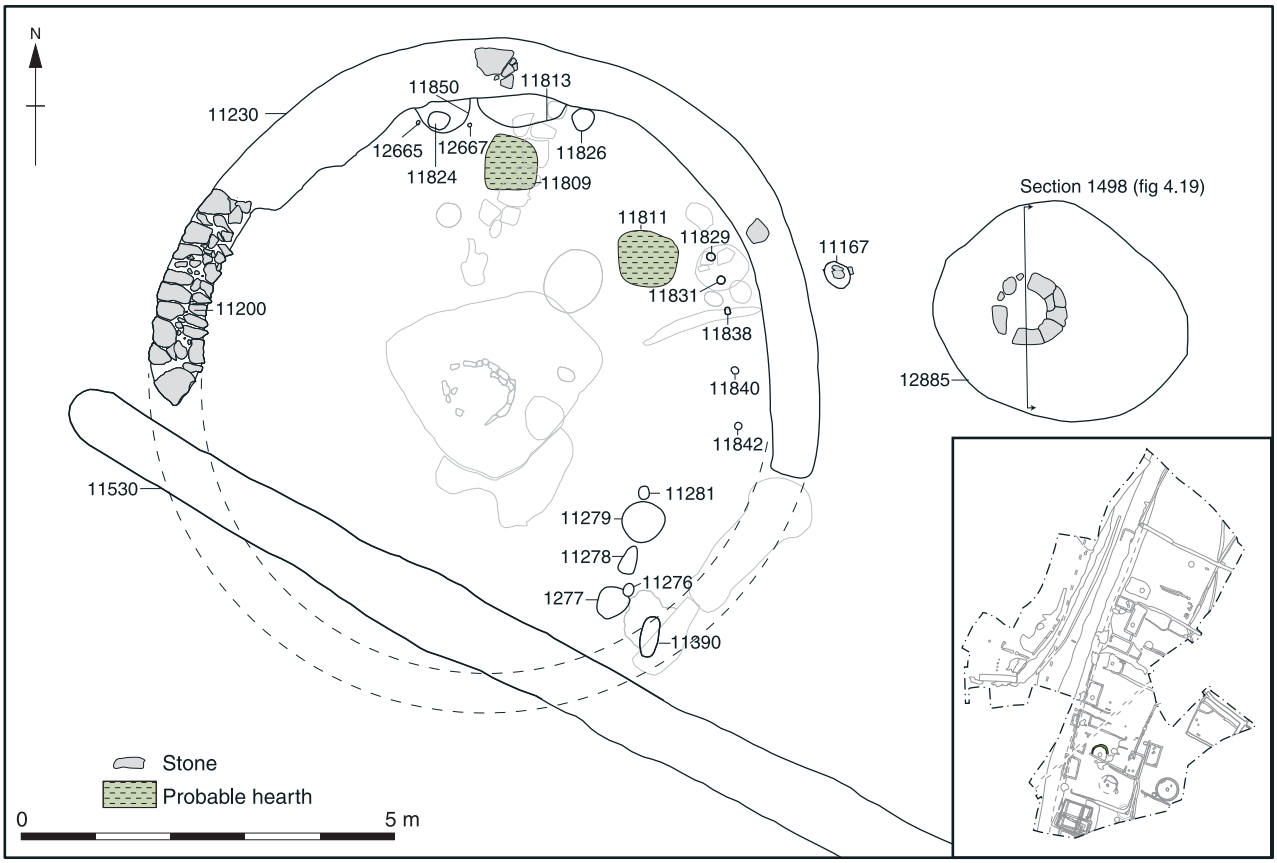


Fig. 4.18 Building 10870 (Phase 4) and well 12885

Plate 4.7 Building 10870 and well 12885, facing north. Note radial partitions 11299 and 11678 in the northern part of the building.

11840, 11842, 12665 and 12667) and two larger postholes (11824 and 11826) were located around the inner edge of the wall. Also present in the northern part of the building were two probable hearths (11809 and 11811) and a single pit (11813). The hearths were shallow, bowl-shaped features with charcoal-rich fills. A sample from the fill of hearth 11809 (sample 664) contained oak, hazel, Maloideae (hawthorn etc), field maple and ash charcoal. Both hearths produced a few sherds of 2nd-century pottery, while hearth 11811 also contained a copper alloy ligula (SF 1822). Pit 11813 was also shallow, and had been backfilled with a deposit containing large amounts of pottery dated to the 3rd century or later.

In the southern half of the building, a layer of 'dirty', reworked colluvium was present (11472). As this was not sealed by any later surfaces, it could potentially represent a floor level maintained throughout the history of the building. The only finds consisted of 400 g of 2nd-century pottery, however. A series of shallow pits or hollows was cut into this layer just inside the putative entrance to the building (11276–9 and 11281). None contained any finds, and they could thus belong to any stage of the occupation of the building. Pit 11277 contained scorched pink clay and may thus have been a hearth.

External features associated with building 10870 (Fig. 4.15)

A limestone and ironstone rubble surface (12028) abutted the west wall of building 10870. The full extent of this surface was not determined, but it appears to have extended for 3.2 m to the west of the building, stopping just short of building 11630, and may have been part of the same area of courtyard paving as layer 12388 to the north. Seven sherds of 2nd-century pottery were found amongst the stones. The surface later became covered with a thin layer of dark silty material (12027), which also produced 2nd-century pottery.

The complete lower part of a truncated shell-tempered vessel (11167) was found set into the ground immediately north-east of building 10870 (Fig. 4.18). The vessel dates to the late 2nd century or later. It is unclear whether this represents a ritual 'offering' or had a practical purpose.

Well 12885 (Figs 4.18-19; Pls 4.7 and 4.8)

Stone-built well 12885 was 4.5 m deep, with an internal diameter of 0.7 m. It was situated within a steep-sided construction cut (11112), 1.56 m in diameter and 4.5 m deep. The earliest backfill of the construction cut (12468) was a deposit of ironstone and limestone rubble in a clay silt matrix, 2.4 m thick. Above this was a thin layer of green-grey clay

(12467). The remainder of the sequence comprised a series of silty backfill deposits (11419, 11357, 11342 and 11341). Pottery from layer 11419 suggests a 3rd-century date for the construction of the well. Overlying the backfill deposits was a metalled surface of small limestone slabs and ironstone cobbles (11151), extending over an area of *c* 2 m. This may represent an attempt to consolidate the ground surface around the well.

The well shaft itself had a drystone construction of flat, roughly-hewn limestone slabs (average size *c* 0.30 x 0.23 x 0.08 m). The upper part of the well shaft

Table 4.2 Building 10870. Summary of internal features (Phase 4 and unphased)

Feature	*Interpretation*	*Diameter (m)*	*Depth (m)*	*Pottery (g)*	*Animal bone (g)*	*Other finds*
11276	Pit	0.14	0.03	-	-	
11277	Hearth	0.40	0.04	-	-	
11278	Pit	0.38	0.05	-	-	
11279	Pit	0.54	0.06	-	-	
11281	Pit	0.16	0.04	-	-	
11809	Hearth	0.72	0.14	2966	-	
11811	Hearth	0.82	0.08	77	7	Copper alloy ligula (SF 1822)
11813	Pit	1.20	0.08	1235	-	
11824	Posthole	0.35	0.26	-	-	
11826	Posthole	0.30	0.24	-	-	
11829	Stakehole	0.10	0.16	29	-	
11831	Stakehole	0.10	0.17	-	-	
11838	Stakehole	0.11	0.15	-	-	
11840	Stakehole	0.10	0.15	-	-	
11842	Stakehole	0.10	>0.21	-	-	
12665	Stakehole	0.04	Unexcavated	-	-	
12667	Stakehole	0.04	Unexcavated	-	-	

Plate 4.8 Well 12885, facing east. Scale: 0.2 m

had subsided somewhat, resulting in a slight leaning to the north. The base of the well was formed by a single large limestone slab, 1 m in diameter and 0.15 m thick, upon which the walls of the shaft rested. Situated approximately 0.4 m up from the base of the well on its northern side was a large squared limestone block with tool marks on its face. This block appeared to continue back beyond the main cut. The excavator described it as a natural block that had been cut through when it had been

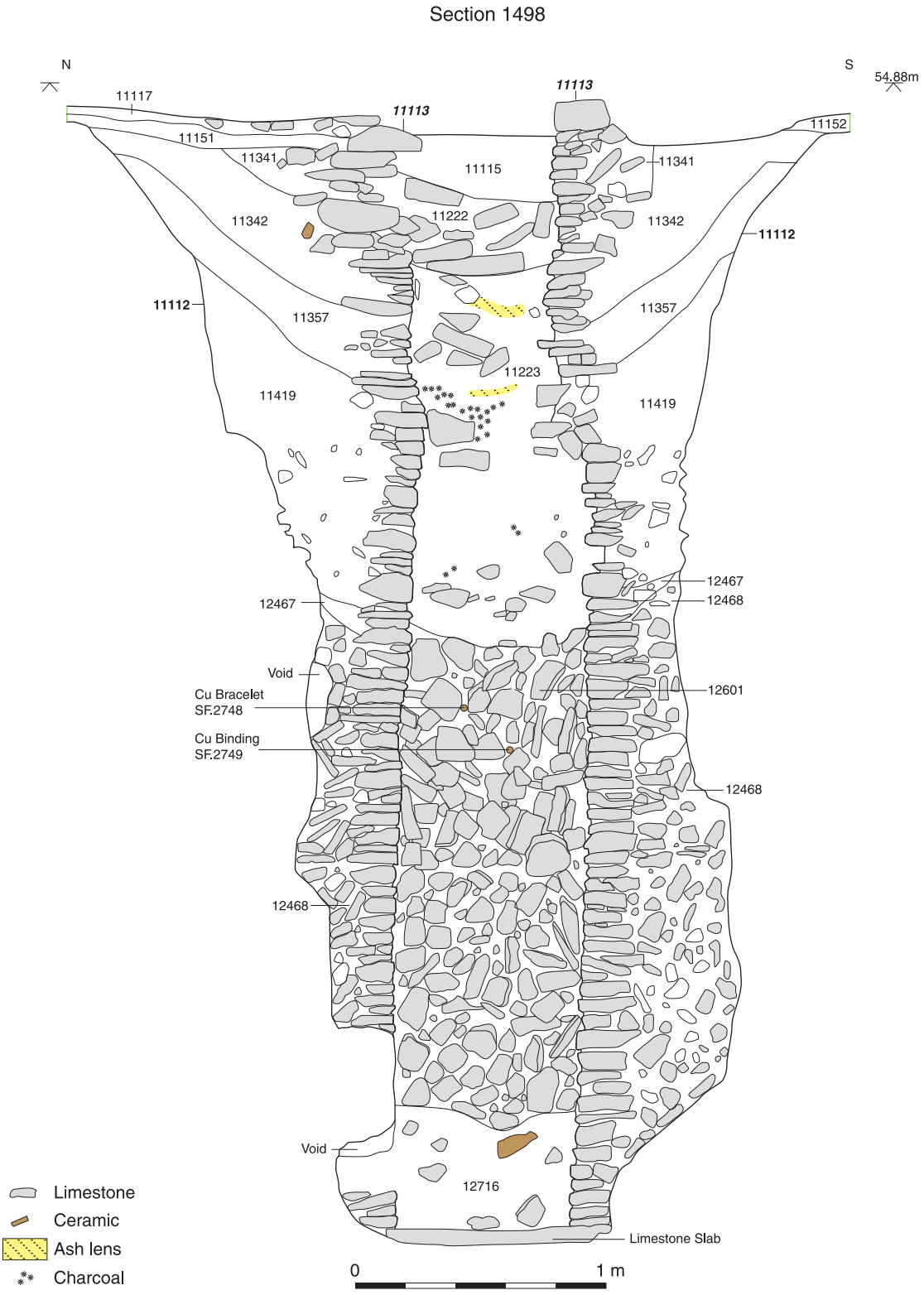


Fig. 4.19 Well 12885 section

encountered. However, a void beneath it and its situation near the base suggest that it may have been deliberately placed to form part of a water inlet, protecting the void beneath from filling with debris to allow the free flow of water into the well. When the well was excavated (in February 2002), the water table was encountered at 3.2 m below the present ground surface, which was 1.2 m from the base of the well at around 51.5 m OD. The fills encountered within the well shaft were associated with the backfilling of the structure during the late 3rd to 4th centuries (see Phase 5 below).

Ditch 12980 (Fig. 4.10)

Ditch 12980 formed the original rear (east) boundary of the plot, later being cut by building 10890 (see below). The southern end of the ditch respected ditch 11750 (see Plot B above), suggesting that these features were broadly contemporary. Ditch 12980 was 0.20 m deep, with a U-shaped profile. It had a single silty fill that produced 3.3 kg of pottery and 350 g of animal bone. The pottery could only be dated to the late 2nd century or later.

Buildings 10900 and 10890 (Figs 4.20 and 4.21; Pl. 4.9)

Two buildings of near identical construction and appearance and of similar dimensions were positioned in close proximity to each other along either side of ditch 12980. The actual sequence of these is difficult to separate and it appears that both may have stood at the same time. However, the evidence available suggests that building 10900 preceded 10890 and this is discussed in more detail below in relation to the dating suggested by the associated finds. As they were similar in construction and appearance these buildings are described together with relevant individual details highlighted as appropriate.

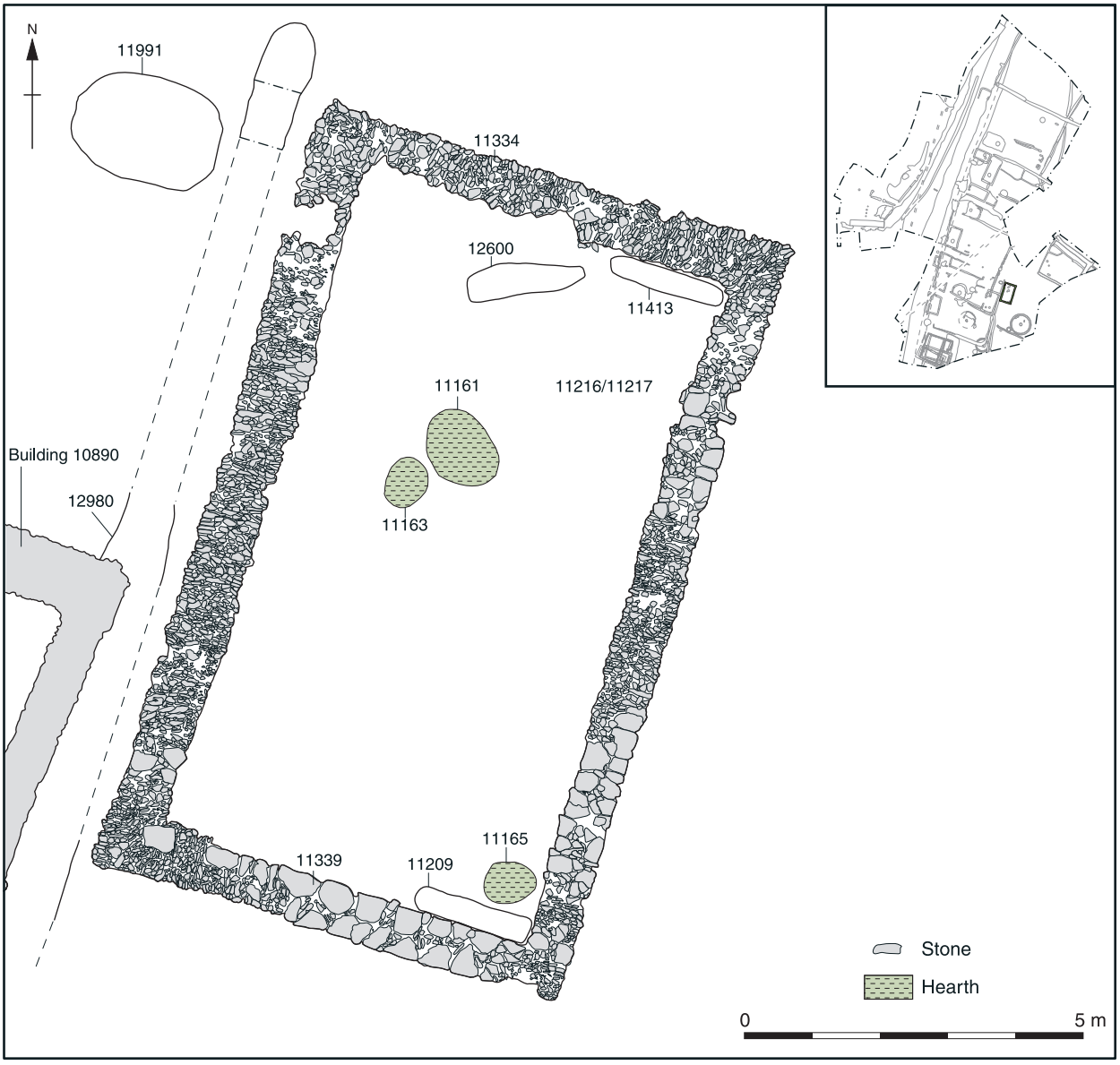


Fig. 4.20 Building 10900

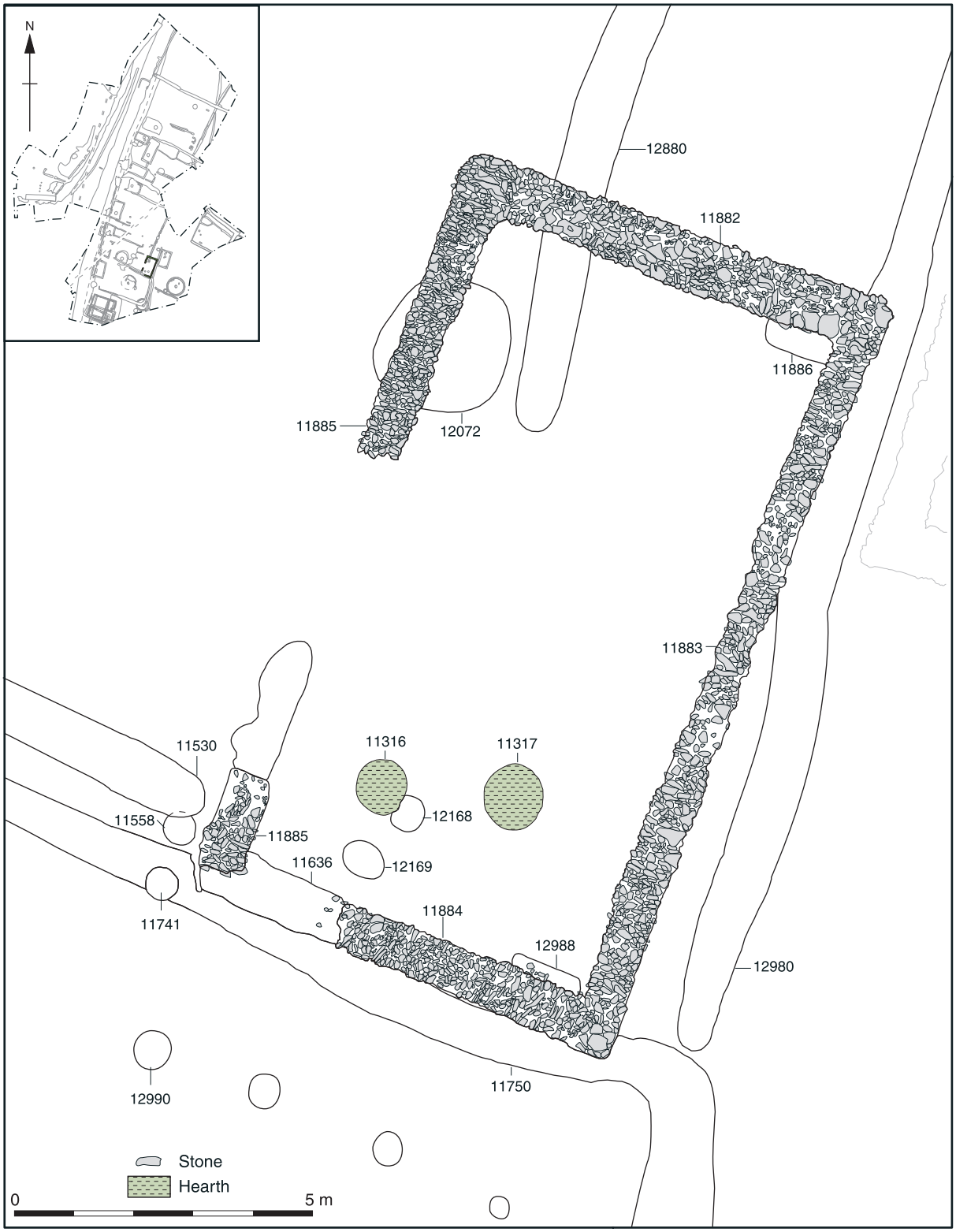


Fig. 4.21 Building 10890

The common axial alignment of NNE to SSW dictated by the road and enclosure layout was adhered to for both of these buildings. They were set over 40 m from the roadside frontage and it is the particular alignment and placing of ditch boundaries 12980 and 11750 that have influenced these specific details. Although only a very slight difference, building 10900 was angled noticeably more to the north than 10890. This appears to have been a result of the influence of the ditch alignments, with building 10900 closely following the edge of ditch 12980 suggesting that this was a contemporary feature, whilst 10890 appears to be aligned off the NW/SW alignment of ditch 11750. Although ditch 11750 was probably a contemporary part of the boundary defined by ditch 12980, building 10890 was clearly later than these ditches as its foundations cut into the infilled upper levels of both. Nonetheless ditches 11750 and 12980 clearly marked a significant boundary and one to which building 10890 related.

The foundation of each building consisted of a single course of near vertically-pitched ironstone and limestone pieces. In common with the pitched foundation technique seen widely across the site these were set in a single direction along each wall and tied in neatly at the corners between the interior and exterior angles. They were set in shallow foundation trenches 0.20 m and 0.30 m deep respectively for 10890 and 10900. The foundation of 10890 was tightly packed into the 0.80 m wide trench whereas building 10900 had the same foundation dimension set in a slightly broader (1.0 m wide) trench with the primary wall course set partly below the contemporary ground level. In building 10890 all evidence of its overlying courses and a small part of the foundation had been removed through robbing (11636), and modern truncation was also more extensive here. Although building 10900 had also been subject to stone robbing, part of its primary wall course remained *in situ* (especially on the south and east sides: 11338 and 11339). The wall was narrower than the foundation at 0.70 m wide and consisted of moderate sized roughly hewn limestone blocks forming inner and outer faces.

The external face was set flush with the exterior edge of the foundation. The core of the wall was infilled with smaller limestone and ironstone pieces and a distinctive yellow silty clay. The clay seems most likely to have been a bonding material although it is possible that it could also represent the base of an earth wall.

Internal features

The buildings also shared very distinctive internal features that appear to form an integral part of the structure. Situated within the north-east and south-east corners of each building, flush with the end walls, were narrow gully-like features (11886/12988 within 10890 and 11413/11209 within 10900). These were steep-sided and uniformly 0.40 m wide and 0.20 m deep, but 1.25 m long within 10890 and 1.75 m long within 10900. Each was infilled with limestone pieces that appeared to form a packing deposit although clear signs of any posts or beams were lacking. In fact some doubt remains if these

Plate 4.9 Building 10900, facing north.

were actually packing deposits at all as opposed to rubble infills. The profile of each excavated gully was suitably slot-like and it is not impossible that these held ground beams subsequently removed, rather than upright posts

Other internal features within 10890 and 10900 were few, although these also appeared to share common traits. No obvious floor surfaces were identified although the evidence did demonstrate that this was a genuine absence and that the ground level exposed largely formed that of the contemporary Roman interior. This showed little sign of the trampling and reworking encountered in similar circumstances elsewhere, such as within building 10920, which may have implications for the longevity or function of these buildings. Part of the interior of the north-east corner of building 10900 had been raised or levelled with redeposited ironstone and silt at the time of construction (11216), although this only produced four sherds of residual pottery and is not helpful in defining the construction date.

The presence of hearths within each building provides the most compelling evidence that this was the contemporary ground level. Within 10900 these were limited to simple circular areas of scorched underlying silts and ironstone (11161, 11163 and 11165). Within 10890 the hearths were more purposely constructed. Two hearths (11316 and 11317) were constructed in shallow circular pits (1 m across), with tightly packed small limestone and ironstone pieces forming a firm base, levelled with a clay surface. The stones and clay were scorched although no associated ash or charcoal deposits were present, perhaps indicating a small degree of truncation. This type of hearth construction is comparable to that of the more substantial central feature within building 10870 where it was clear that the upper surface of the hearth survived intact, although this too had little associated ash and charcoal over it. It is interesting that in both buildings the arrangement of the hearths appears very similar, being paired and situated off-centre within each building. This characteristic serves to reinforce the similarity between the two structures.

The only features that differed between the buildings were two other pits (12168 and 12169) within 10890. These were of similar size to the hearths but infilled by single silty deposits (12136 and 12170 respectively) containing differing amounts of animal bone. Within pit 12169 the assemblage consisted of 26 small fragments (103 g) of generally unremarkable bone fragments, although two were knife-cut fragments that appear to have been waste or rough outs resulting from bone working. The assemblage within pit 12168 was much larger with 174 pieces recovered (829 g). This was a mixture of 'butchered' and several worked waste items such as small slivers with multiple cut faces and longitudinally split pieces. The items identifiable to species were exclusively from horse, cattle and sheep/goat, suggesting the selection from larger species typical of bone working. The quantity of longitudinally split bone pieces also indicates that this deposit derives largely from the early stages of pin fabrication; the more complete fragments were 50-100 mm long, reflecting typical pin dimensions from the site. This deposit was partly cut away by the construction of the adjacent hearth (11316) and produced several similar cut pieces almost certainly derived from 12136. From these a crudely manufactured bone pin (SF 1475) may represent an incomplete piece rather than a poorly or roughly finished item.

Post-built extension 12990 (Fig. 4.21)

At the southern end of building 10890 a narrow post-built structure was added. This was poorly defined during the excavation although its general appearance was characterised. Five posthole locations were recorded although others forming a uniformly spaced east-west row were identified. None of these was excavated but they were of moderate size in plan being 0.50 m in diameter with some ironstone packing. They were spaced at approximate 1.50 m intervals. The structure had the appearance of a lean-to style construction that formed a 3 m wide 'corridor' along the exterior of the southern wall of 10890, returning to join the south-west corner of the stone structure. This added a little over 27 m^2 to the area of the building, although no evidence remained to show if this was purely an external structure or one that was incorporated into the main building. A gravel surface (11682) and limestone rubble deposits were contained within the western part of this extension but did not provide any dating evidence or other clues as to its function and relationship to 10890.

Dating

As mentioned above the relative sequence and dating of these buildings is slightly ambiguous. Neither produced many sizeable secure pottery assemblages. The largest of these was recovered from the general interior area of building 10890 and consisted of 66 sherds (924 g). However, these largely date from the mid to late 2nd century and are most likely to have been residual pieces associated with the similarly dated ditch 12880. This ditch clearly predated the building and terminated beneath the northern end of the structure. Within building 10900 small groups of pottery were recovered from the robber trenches that had removed the walls and from the interior levelling deposits, but these also consisted of residual sherds generally dated to the 2nd century. The pits and hearths within building 10890 did produce some securely stratified assemblages but these were also generally very small and not closely datable. Hearth 11316 produced the largest individual group with 23 sherds weighing 461 g recovered from its construction deposits providing a *terminus post quem* in the late 2nd century.

Owing to the relative dearth of dating evidence from the buildings themselves it is the surrounding

features and deposits that have to be relied upon to provide a more precise date range and sequence. Fortunately the dated stratigraphic sequence of the broader area and the association with contemporary features is relatively clear. The principal relationships are those between the buildings and ditches 11530, 11750, 11940, 12880 and 12980. Ditches 11750 and 12980 were clearly part of an enclosure or boundary arrangement that was in existence during Phase 4. The foundations of building 10890 were cut into the upper fills of both of these ditches, clearly placing its construction after these were infilled. In contrast the foundations of building 10900 did not cut any of the ditches. This building has a clear association with ditch 12980, with its western wall built closely along the eastern edge of the ditch. The ditch almost certainly predates the building, however, since the complete lack of limestone inclusions of any size within its infill strongly suggests that this had accumulated prior to the construction of building 10900. A soil layer (group 13015) that sealed the ditch fill also appears to butt against the top of the foundations of 10900. Although slightly tentative, this association and sequence certainly suggests that building 10900 was constructed within the later date range of ditch 12980 and prior to the construction of 10890.

With such close construction dates it seems most likely that both buildings were in existence at the same time. This may have been for the larger part of the 3rd century or even beyond, although a precise date for the end of occupation or use is lacking both in terms of finds assemblages and stratigraphic relationships. It is associated ditch boundaries that provide the best evidence here, although this is limited to building 10890. Boundaries 11530 and 11940 were aligned off the south-east and south-west corners of the building, replacing the earlier layout of boundary 11750. These ditches produced pottery assemblages dated to the late 3rd century and into the 4th century with two (worn) late 3rd-century Gallic Empire coins (SF 1196 and 1427) also recovered from ditch 11530. It is thus possible that building 10890 remained in existence into the 4th century.

Function and use

There are only limited indications as to the function and use of the buildings because of the relative absence of significant internal features and deposits associated with them. However, the buildings share distinctly similar characteristics in their construction and layout that strongly suggest they had the same or, at the very least, a similar function. The phasing of the buildings shows that 10890 was constructed after 10900 and it is possible that this was as a replacement resulting from the need for a larger version of the same building. Building 10890 had an internal area more than 10 m^2 larger than 10900, but its location west of the former boundary 12980 may also be significant and could reflect different ownership. It may equally have been the case that the buildings stood together for some time, although the gap between them was only 0.8 m and the roofs would almost certainly have touched or have been very close. As for the roofing material, in common with the other buildings there was no evidence for a tiled roof and thatch or shingles seem most likely to have been used.

The most conspicuous features of these buildings were the short internal slots or gullies within the eastern corners of each. It is difficult to see how these functioned. If they were settings for internal fittings or supports it is unclear why they were not constructed into the fabric of the walls rather than as separate features.

The only features and artefactual remains to suggest any specific use were the two pits within building 10890 that produced waste fragments from bone pin manufacture. The quantity of waste material was small, however, and the implication that the building could have been a bone workshop seems tenuous given the lack of similar waste elsewhere within it. However, if the building(s) had been subject to a degree of truncation this could have removed any surface level waste deposits. MacGregor (1985, 44) suggests that bone working within the Roman period was largely a small-scale craft, and the quantities of material present within 10890 may reflect the home-based nature of this activity, as opposed to a specialist workshop. Softening by soaking and heating in water may have been the primary treatment undertaken to work the bone (ibid. 63-4), and the 'hearths' within 10890 could thus alternatively represent the bases of shallow clay-lined pits for this purpose. However, given the scorched appearance of the stone below the clay within these features, a hearth function seems more probable. Based on these factors it seems unlikely that this building was specifically a bone-working shop.

The only other indication of the function of these buildings is based upon an interpretation of their setting within the settlement. They were positioned on the rear boundary alignment that runs the length of the settlement and marks the boundary between the domestic enclosures fronting the road and the larger field and paddock enclosures extending to the east behind. Based upon this it is not unreasonable to view them as ancillary structures.

Gully 11755 (Fig. 4.10)

Gully 11755 was aligned on the northern wall of building 10890, suggesting that it was dug in the latter part of Phase 4 or in Phase 5. The gully was up to 0.14 m deep, with U-shaped profile, and had a single silty fill. Finds were limited to animal bone and 26 sherds of pottery dated to the 2nd century or later.

Plot D (Fig. 4.11)

Plot D was defined to the north by ditch 12895 (see Plot E below), and to the east by ditch 12880.

Although the latter feature was largely backfilled in the late 2nd century (see Phase 3 above), it probably continued to be visible as an earthwork hollow as it subsequently formed a focus for burial in the late Roman period (see Phase 5 below). The roadside frontage of plot D could have been marked by wall 11010, but this feature has been tentatively attributed to Phase 5 as it seems to respect building 10840, dating to the late 3rd to 4th centuries.

There were few features within the interior of Plot D during this phase, although possible remains of one or more buildings were encountered in the form of two parallel walls, a rubble layer and a hearth (Fig. 4.22). Ironstone wall 12437 ran for 11 m on a WNW-ESE alignment, curving slightly to the north at its eastern end. Up to three courses of the wall survived, with flat-laid slabs (up to 0.30 m long) forming the faces, infilled with a rubble core. Wall 12438 lay 1.25 m to the north, and was only 2.8 m long as a result of truncation at its western end. It was identical in construction to 12437, although only two courses survived. An ironstone rubble layer 12436 butted up to the eastern ends of the two walls, extending over an area of *c* 8 m; but it is unclear whether this was a deliberately laid surface or a destruction layer. The layer produced 700 g of 3rd-century pottery. Immediately north of 12436 was an area of 'dirty', reworked colluvial soil (12620/12766) which produced 1.8 kg of mid to late 2nd-century pottery. A hearth (12641) lay within this soil layer and consisted of a patch of scorched clay, 0.70 m in diameter (not excavated).

While the interpretation of these features is unclear, it is possible that a structure with a special role of some kind stood here. It is notable that fragments of wild boar bone were recovered both from layer 12620 and from silting deposits over rubble layer 12436. Elsewhere on the site, positively identified wild boar bone was restricted to the interior of shrine 10930.

Plot E (Fig. 4.11)

Plot E was defined by ditch 12895 to the south and ditch 12940 (see Plot F below) to the north. Again, no certain buildings were present in this phase, as buildings 10820 and 10830 are more likely to have originated in Phase 5.

Ditch 12895 was up to 0.50 m deep with a U-shaped profile. Its fills were largely deposited down through natural processes of silting and erosion, although stonier deposits seen towards the western terminus of the ditch may represent deliberate backfills laid down in advance of the construction of building 10830 (see Phase 5 below). The pottery recovered from the ditch is only broadly datable to the late 2nd century onwards.

Plot F (Fig. 4.11)

Plot F was defined by ditch 12940 to the south and ditch 12965 to the north. A single rectangular building (10810) stood in the western part of the plot. Other potentially contemporary features included a large waterhole (12955) and a possible cesspit or latrine (10804).

Enclosure ditches and waterhole 12955 (Fig. 4.10)

Ditches 12940 and 12965 were both shallow features (up to 0.35 m deep) with U-shaped profiles. They contained silty fills that apparently accumulated naturally. Few finds were recovered, although in both cases sherds of 3rd-century pottery were recovered.

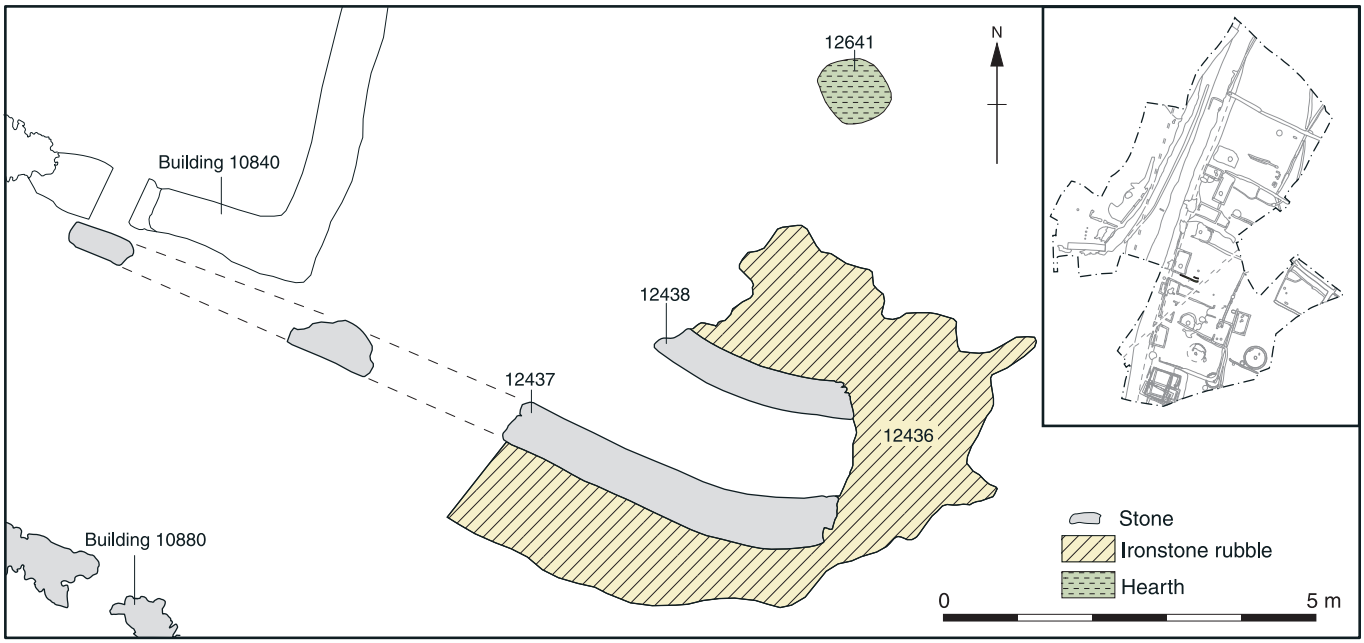


Fig. 4.22 Walls 12437 and 12438, layer 12436 and hearth 12641

Waterhole 12955 was a steep-sided feature, 4.5 m in diameter and more than 1.5 m deep (base not reached). Although the lowest observed fill probably represents an erosion deposit, the bulk of the feature was taken up by a series of deliberate backfill deposits containing occasional bands of stone rubble. Finds included 1.9 kg of pottery dated to the 3rd century and 2.3 kg of animal bone. The excavator suggested that the waterhole cut the western end of ditch 12940, although this relationship is uncertain. As the ditch appeared to become deeper towards the west, it may have been a contemporary feature that drained into the waterhole.

Building 10810 (Fig. 4.23; Pl. 4.10)

Building 10810 was a rectangular structure measuring 11.7 m NNE-SSW by 5.5 m WNW-ESE internally. Little dating evidence was recovered for the construction of the building, although a 2nd-century pottery vessel set into the floor probably relates to its early use. Occupation and alteration of the building continued into the 4th century (see Phase 5 below).

The construction of building 10810 was largely similar to that of 10800 and identical to 10820. Unlike building 10800 the foundations of 10810 did not cross the line of earlier features, and hence were only cut through the contemporary soil horizon to the level of the underlying ironstone. The foundations were built up in a single course of near vertically-pitched stone arranged perpendicular to the alignment of each wall. Limestone predominated with only incidental uses of ironstone. This was matched in the wall superstructure where only a single large block of ironstone was present. A single wall-course survived around the larger part of the building where it had not been removed by later stone robbing (see below).

In common with 10800 and 10820, internal and external faces were provided by neatly arranged slabs of limestone with the core infilled with smaller pitched fragments. The build was also clearly drystone with no evidence of clay bonding or bedding deposits such as may have existed in building 10800. A single block of limestone (12625) centrally placed along the line of the western wall represented the threshold and defined the entrance to the building. This was recessed slightly from the line of the wall face and had flanking squared blocks to either side to act as pads for the door jambs. The corresponding internal wall/foundation line was built up in small pitched stones (12626) that had been worn very smooth across their upper surfaces. These define a doorway approximately 0.70 m wide. The threshold stone, however, did not show any signs of wear corresponding to that on the pitched stones and the post pads were also unaltered with no signs of chiselled sockets or levelling. It is possible that these were covered by a wooden frame and plank threshold similar to that seen in building VII at Shepton Mallet (Leach and Evans 2001, 64).

Plate 4.10 Buildings 10800 and 10810, facing west. Scale: 2 m

Internally the definition of the entrance area was continued by a small rectangular area of neatly laid limestone pieces (12627) providing a firm surface for the area of heaviest foot wear. This also marked the point of the major division of the internal space with the significant limestone surfaces extending from here to the northern part of the building and only minor surfacing leading away to the south of the building. This division was reinforced by a small beam slot (12534) which provided a physical partition between these distinct areas. This was only a short segment 1.40 m long centrally positioned across the width of the building with 2.0 m gaps at either side, and may have held nothing more than a

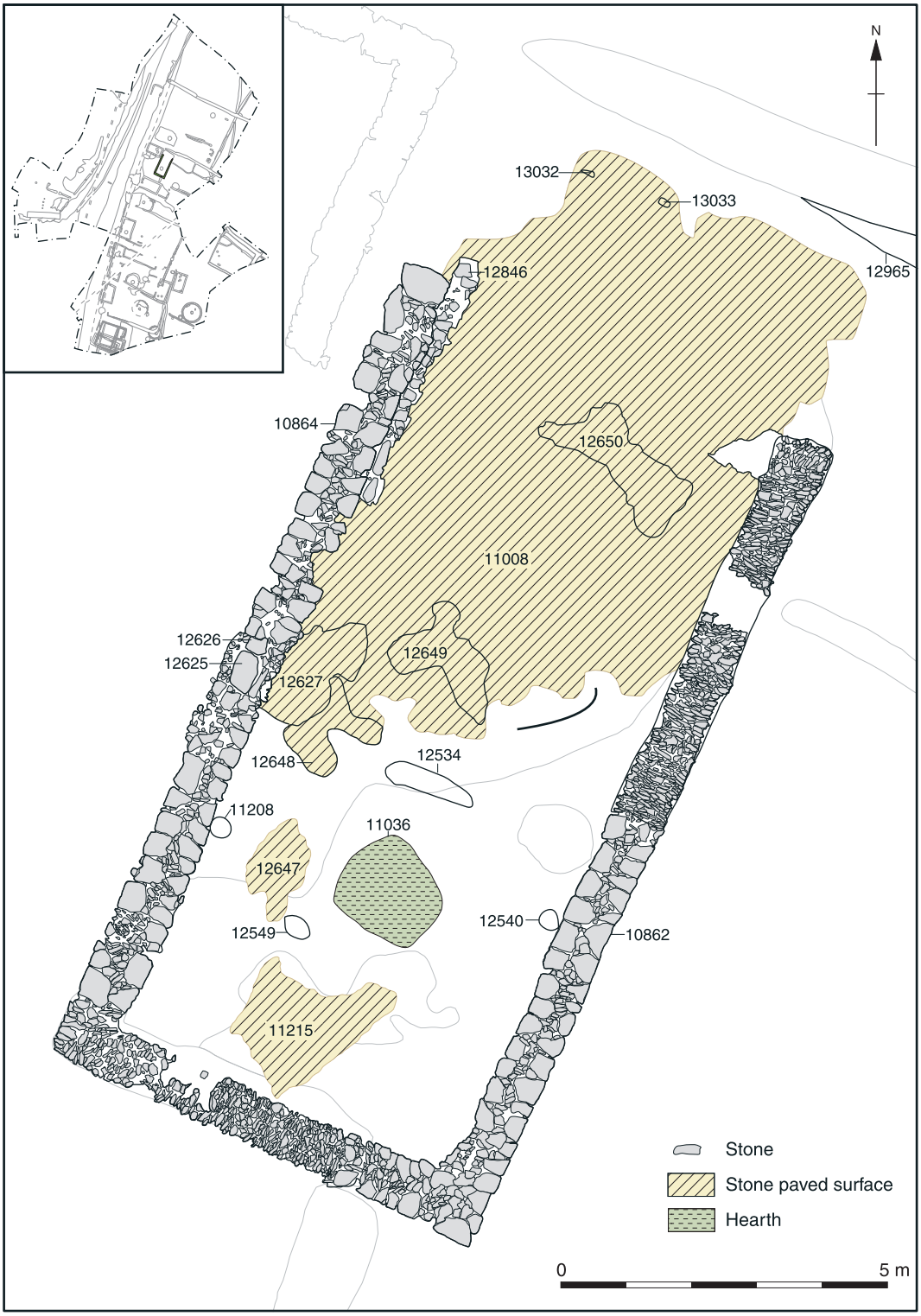


Fig. 4.23 Building 10810 (Phase 4)

small screen set in a beam for stability. The partition split the internal area slightly unevenly, the distance from it to the southern wall being 5.40 m and to the northern wall 6.30 m. This disparity was subsequently exaggerated by the extension of the building to the north (see below). Although only an insignificant amount of pottery was present in the fill of the slot and there were few stratigraphic relationships between it and later deposits, there seems little reason to doubt that the partition was part of the primary internal layout of the building. As with all structures across the site little dating evidence was present in the primary construction deposits, and the date of the building largely relies upon the artefacts recovered from the internal features and floor levels.

South of the internal partition (12534) the focal feature was a large centrally positioned hearth (11036). This was a very simple ground level hearth, lacking any structural components, that had been cut to a maximum depth of 0.30 m through repeated use and clearing of ash. It was infilled with a series of mixed and finely laminated red scorched silts and ash and charcoal layers, that spread over a roughly square 1.60 m surface area. A sample from the hearth fill (sample 618) contained oak, blackthorn, Maloideae (hawthorn etc) and ash charcoal. Patchy remains of surfacing (11215, 12647 and 12648) extended from the entrance area and around the western and southern side of the hearth. These were thin surfaces largely of small ironstone pieces that occurred naturally within the underlying soil horizon, but also including similar sized imported river gravel and limestone pieces. To either side of the hearth up against the interior wall faces were two small pits (11208 and 12540). Although not exactly opposed these features were notable for their similarity of positioning. Pit 11208 lay against the inside of the west wall south of the entrance and contained the base of a coarse ware jar (11207). This was in a grog-tempered grey fabric most typical of the 2nd-century assemblages, although the lack of the upper part of the jar profile makes closer dating impossible. This was probably a jar set slightly into the floor level for use within the building rather than an object buried as a foundation offering. Its likely date within the 2nd century also suggests that this was an original features of the layout and use of the buildings To the east similarly positioned against the internal face of the wall pit 12540 was less clear in its function. This circular pit was only 0.30 m across and of a similar depth, but its fill was unremarkable, consisting of mixed silts and clay with a few pottery sherds (13 sherds, 642 g). These were only broadly datable to the mid 2nd century or later and could thus belong to any phase of the use of the building. Another small pit (12549) lay south-west of hearth 11036.

The northern part of the building was quite different from the southern part as a stone surface (11008) was laid across its full width. This consisted mainly of limestone slabs with very smooth worn upper surfaces consistent with a long period of wear. The largest slabs were up to 0.50 m across and 0.25 m thick. However, this surface was not consistent across the building; its level was very uneven and it showed distinct patches of pitched construction in ironstone and smaller limestone fragments (12649 and 12650). These parts were generally more even and tightly packed and may reflect localised areas that required firmer surfaces within the floor area, although this does not explain the uneven appearance of the slab surface. Where slab or horizontal stone surfaces existed elsewhere across the site (eg within building 10870 and extension 12460), these surfaces remained even as laid. This suggests that post-depositional disturbance is unlikely to have been the cause of the irregularities in building 10810. Comparison to building 10820 (see below) offers a possible solution. Within that building a superficially similar slab surface was patchy with only scattered large worn slabs present. This seems to indicate that the slabs were only placed where required rather than as a single even surface. If so it may have been that floor surface 11008 actually represents a surface accumulated over an extended period, laid as required partly over earlier fragments of lower surfaces.

A single stone (SF 3197) found within the floor is of particular interest. This was a reused item having evidently derived from a piece of relief sculpture (see Davenport, Chapter 5). Its origin is not certain although it is possible that it derived from the large monumental wall associated with the roadside shrine. If so, it is likely to have been incorporated into building 10810 during or after the late 3rd to early 4th century, when the shrine had effectively ceased to function.

A modification and extension to the building northwards was also partly defined by the slab surface (11008). The surface was constructed up to a line 1.0 m from and parallel to the edge of ditch boundaries 12965/12970 laid out from the northern side of building 10800. However, the east (10862) and west (10864) walls of building 10810 clearly did not extend this far because the pitched stone foundation of the east wall turned and ran under the floor. The west wall also had a large quoin stone marking its limit at the corresponding point opposite. The original north wall of the building had been demolished and the surface built over the pitched stone foundation that remained *in situ*. The northern end of the building was replaced in timber, the structure marked by a line of at least two (13032 and 13033) and possibly four postholes with pitched limestone packing along the northern edge of the slab surface. These were only recognised very late in the excavation and were not investigated in detail, although from their surface appearance it appeared that these were square posts up to 0.17 m across. These would have been perfectly adequate to carry the roofline although no other postholes were evident along the projected line of the east and west stone walls. The confinement of the stone

surface within the projected lines of these walls indicates, however, that these lines were continued, rather than that the structure was open-ended. The construction date of the secondary floor was not established from artefact assemblages. The part of the surface beyond the line of the original wall did have a slightly different appearance from that to the south, with no areas of pitched stone present and a generally more patchy construction using larger flat slabs. Its possible that the larger slabs used generally throughout were all later additions to an overall more incomplete surface as discussed briefly above and below in relation to the internal surfacing of building 10820. Certainly some of the large flat worn slabs within the main part of the building also overlay the areas of more concentrated surfacing which used smaller stones.

A stone-lined drain (12846) constructed against the internal face of the west wall was apparently contemporary with the earliest floor surface of the pre-extension building (Pl. 4.11). The eastern edge of the drain was defined with several upright edging stones, its base was formed of small worn limestone slabs and the internal face of the wall formed its western side.

The drain had a clear point of origin within the building 3.60 m from the original north-west corner with an upright stone across the end. Levels along the base clearly demonstrate that it drained out of the building, dropping 0.06 m along its length with

Plate 4.11 Building 10810, drain 12846, facing north

a large sloped slab used just beyond the wall quoin as an out fall. This drain does not appear to have emptied into a specific feature, although the silty soil was probably sufficiently free-draining. The most striking feature also defining the extent of the drain was a consistent band of lime concretion along the face of the wall/drain stones. This was present along the full length of the drain and its thickness is suggestive of considerable repeated use probably over a long period of time. Given that the drain itself was not watertight and surrounded by a free draining silt soil, then considerable volumes of liquid must have washed along this regularly to have left such a concretion. The fill of the drain (12847), consisting of silt mixed with limestone and ironstone fragments, is likely to have resulted from its backfill rather than its use. Fill 12847 came up to the level of the larger flat slabs within surface 11008 which partly overlay the drain, suggesting that it was not used in the later phases of the life of the building. Alternatively, it is possible that the slabs merely capped the open drain, although the lime concretion was not evident on them.

The internal division and the associated hearth within this building are all suggestive of a primary domestic function. However, a dual role for such a building should not be excluded as the use of solid surfaces and partitions could also indicate that livestock were kept within it. This may explain the presence of the drain to the north-western corner of the building although its precise role is not clear. The later occupation and alteration of the building will be discussed below (see Phase 5).

Pit 10804 (Figs 4.10 and 4.24)

Pit 10804 was a sub-rectangular feature located east of building 10810 and parallel to ditch 12965. It measured 1.60 m long and 1.10 m deep, with steep sides and a fairly flat base. The pit contained two successive deposits of olive green silty sand (10802

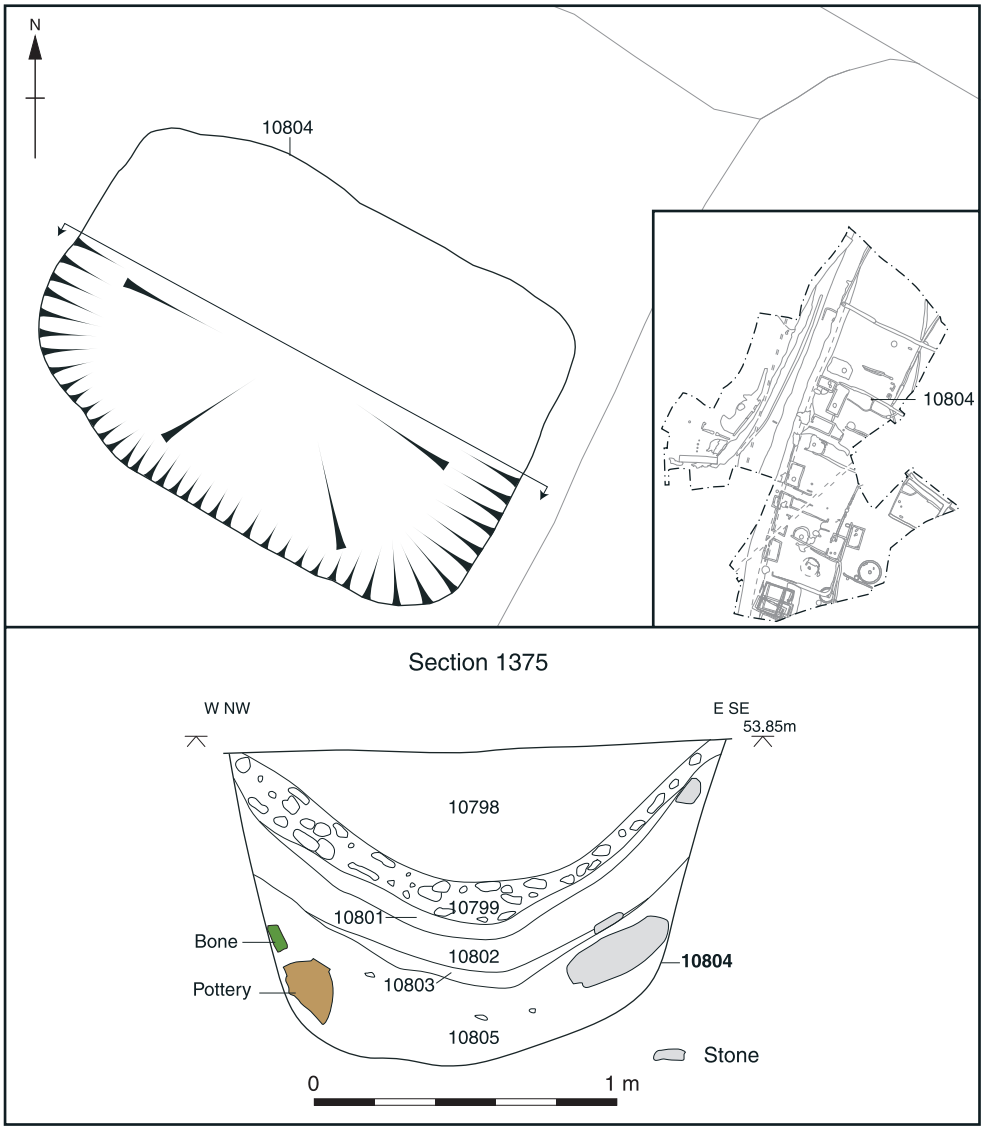


Fig. 4.24 Pit 10804

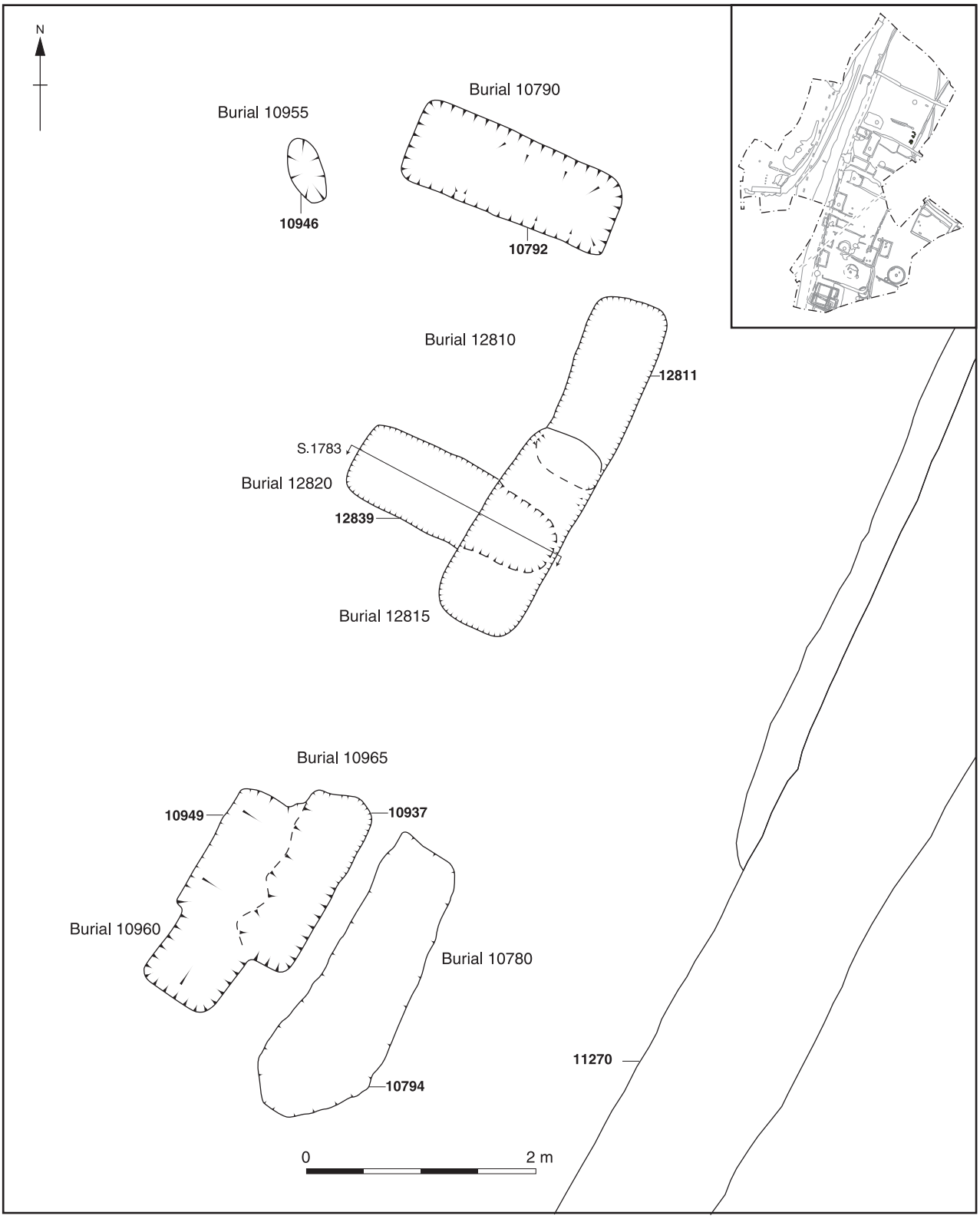


Fig. 4.25 Burial group 13050

and 10805), possibly deriving from use of the pit as a latrine or cesspit, each of which was capped by a lens of charcoal-rich material (10801 and 10803). One sherd of mid 2nd-century pottery was recovered from basal fill 10805. The pit was finally sealed with a layer of ironstone rubble (10799). The uppermost fill of the pit (10798) was a deposit of silty sand which may have been laid down following subsidence of the lower pit fills and downward slumping of the ironstone layer. This final deposit contained larger quantities of finds, including 1 kg of pottery dated to the 3rd century, and 500 g of animal bone.

The northern periphery of the settlement

The area to the north of Plot F was probably used primarily for agricultural purposes during this phase, with a few linear ditches perhaps serving as field boundaries. A small cemetery area (burial group 13050) lay adjacent to one of these ditches. Other features included two wells, one of which was certainly constructed in this phase (8032) while the other (8278) is more poorly dated.

Boundary ditches (Fig. 4.10)

Ditch 10770/11150 ran off from ditch 12965 on a NNE-SSW alignment, probably continuing into Area G as ditch 8162. It was up to 0.35 m deep, with a flat-based profile. The relatively sterile, silty fill produced a few sherds of 2nd- to 3rd-century pottery. A complete polished flint axe (SF 1433) was also recovered (see Chapter 2). This may have simply been accidentally redeposited, although examples are known at some other sites of prehistoric axes deliberately placed in meaningful contexts during the Roman period (eg Farley Heath, Surrey; Goodchild 1938, 23).

Lying at the northern edge of the site, ditch 8291 was 0.30 m deep, with a 'U'-shaped profile. The lower fills of the ditch contained 2nd-century pottery. The upper fill of the southern end of the ditch consisted of a rubble backfill laid down in advance of construction of Phase 5 building 8019.

Burial group 13050 (Fig. 4.25)

The interment of inhumation burials alongside ditch 11170 commenced in this phase, continuing into the 4th century (see below). Up to seven of the burials may belong to this phase.

Burial 10740 (Fig. 4.26) contained the remains of a female aged 28–35 years (Sk 10734). The grave was aligned NW-SE, and measured 2.1 m long, 0.88 m wide and 0.12 m deep. The body had been laid supine, with the head to the north-west. A 3rd-century copper alloy finger ring with a blue intaglio (SF 1226) was found by the right hand, though not actually on a finger. A bone hairpin fragment (SF 1227) was found by the right upper arm. Small fragments of animal bone were also recovered from the backfill of the grave.

Burial 10790 contained the remains of a female aged 35–45 years (Sk 10791). The rectangular grave was aligned E-W, and measured 1.9 m long, 0.75 m wide and 0.15 m deep. The body was laid supine, with the head to the east and the arms crossed at the wrists over the pelvis. The presence of a wooden coffin is indicated by 17 iron nails found around the edge of the grave cut, within the upper part of the

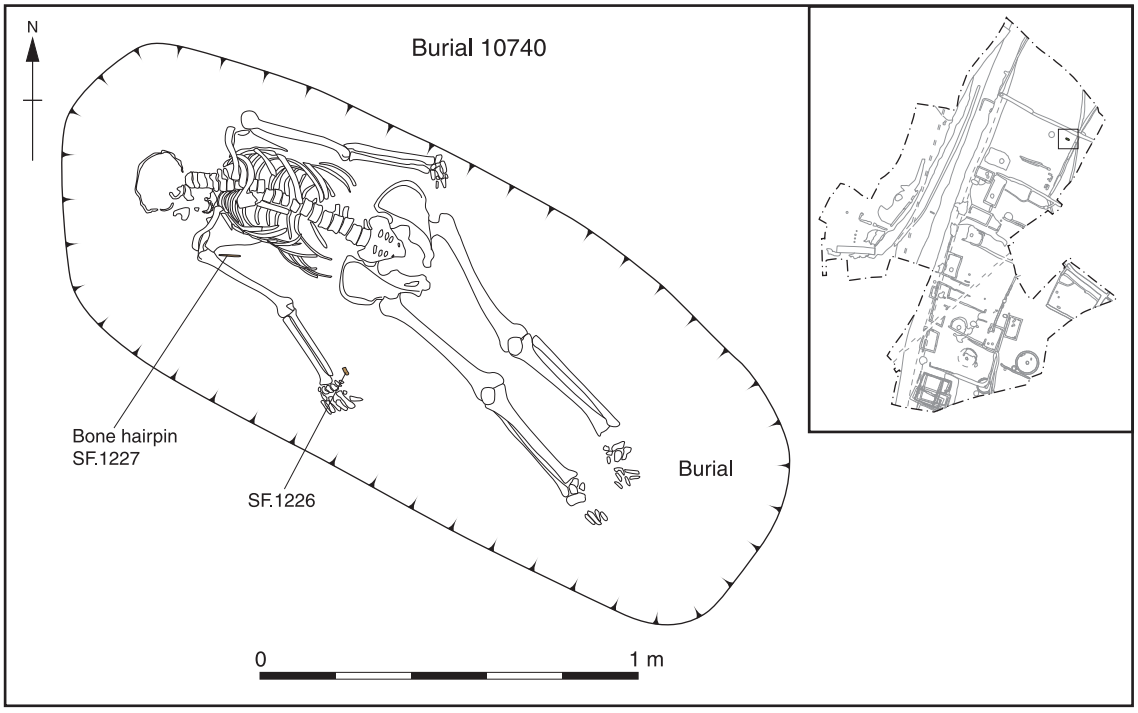


Fig. 4.26 Burial 10740

fill. The backfill of the grave contained a single sherd of pottery dated to the mid to late 2nd century, and small fragments of animal bone.

Burial 10955 contained the remains of a perinatal infant aged 38 weeks (Sk 10947). The oval grave cut was aligned SSE-NNW, and measured 0.60 m long, 0.30 m wide and 0.30 m deep. The body had been placed on its right side with the head at the SSE end of the grave. The skeleton was poorly preserved, the legs being missing. A single small fragment of animal bone was recovered from the backfill of the grave.

Burial 10960 (Fig. 4.27; Pl. 4.12) contained the remains of a male aged over 45 years (Sk 10951). The grave was aligned SSW-NNE, and measured 2.0 m long, 0.7 m wide and 0.14 m deep. It had been cut by Phase 5 burial 10965, and some bones from the right side of the body had been displaced into the latter feature. The body had been placed supine with the head to the SSW, turned slightly to face east. The backfill of the grave contained 730 g of pottery dated to the mid to late 2nd century, and small fragments of animal bone. A radiocarbon determination of cal AD 135–320 (UB-5217: 1798 ±18 BP) was obtained from the skeleton.

Burial 12810 (Fig. 4.28; Pl. 4.13) contained the remains of an individual of unknown sex aged 30–38 years (Sk 12814). The rectangular grave was aligned NNE-SSW, and measured at least 1.40 m

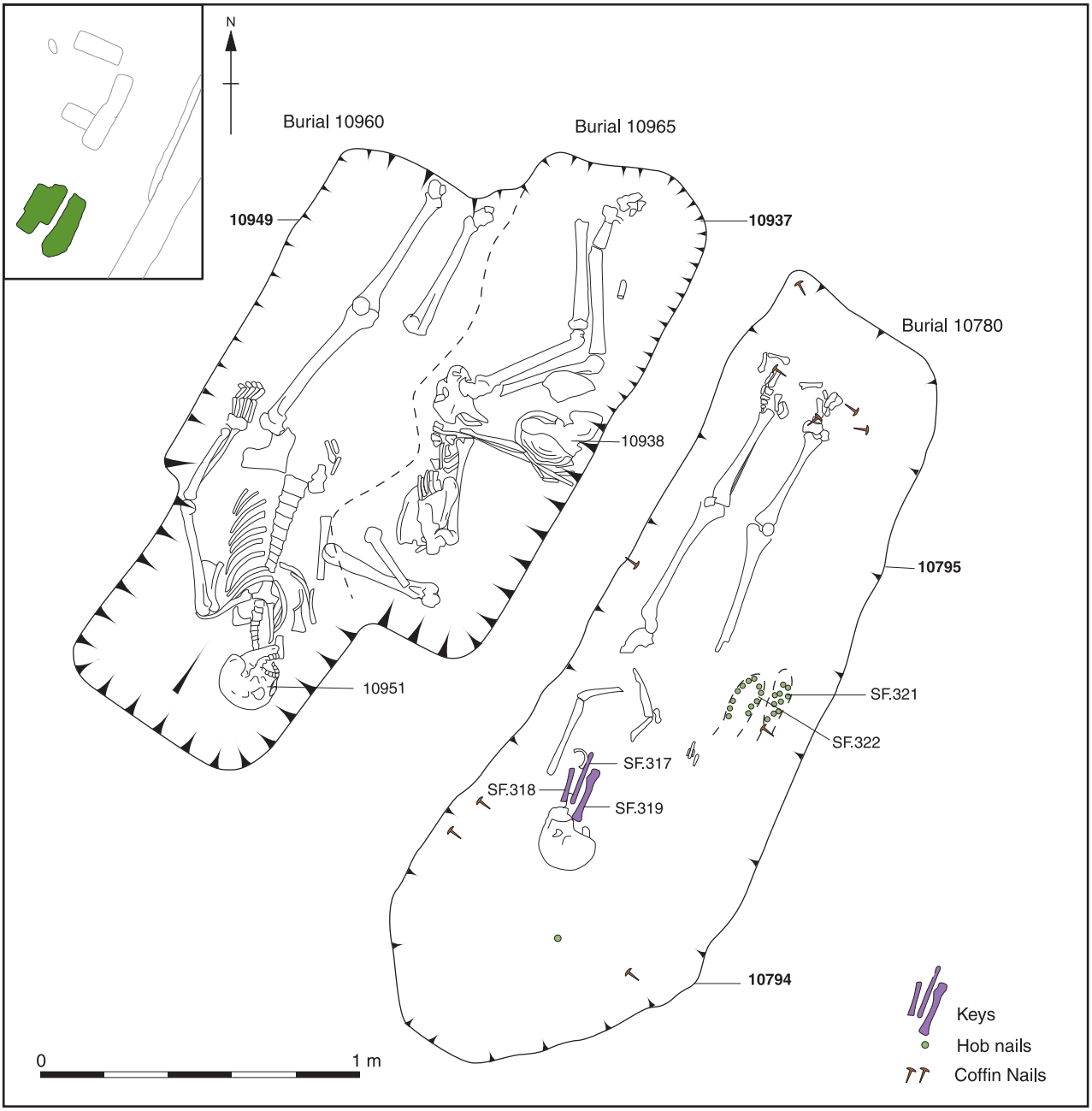


Fig. 4.27 Burials 10960 (Phase 4), 10965 (Phase 5) and 10780 (Phase 5)

Plate 4.12 Burials 10960 (right) and 10965, facing south. Scale: 1 m

long, 0.70 m wide and 0.25 m deep. The body had been placed supine, with the head to the NNE. The lower legs had been truncated by a later grave 12815 (see below). The presence of a wooden coffin is indicated by 31 iron nails from the grave fill. A fragment of colourless vessel glass (SF 3004) was found on the base of grave in the vicinity of the torso. The backfill of the grave also contained two sherds of pottery dated to the 2nd century onwards, and small fragments of animal bone. A radiocarbon determination of cal AD 70–205 (UB-5221: 1885 ± 18 BP) was obtained from the skeleton.

Burial 12815 (Fig. 4.28; Pl. 4.13) contained the remains of a male aged over 40 years (Sk 12816). The rectangular grave was aligned NNE-SSW, and measured 1.90 m long, 0.80 m wide and 0.40 m deep. It cut the southern end of grave 12810 and the eastern end of grave 12820. The body had been interred supine with the head to the NNE, turned to face east. The right arm was flexed over the abdomen, and the legs were crossed at the ankles. The displaced skull and mandible from grave 12820 (Sk 12837) were found separately at the southern end of grave 12815. The presence of a wooden coffin was indicated by 32 iron nails from the grave fill. The backfill of the grave also contained 25 sherds of pottery dated to the 3rd century, an iron bar or ring fragment (SF 3018), and fragments of animal bone. A radiocarbon determination of cal AD 215–335 (UB-5222: 1774 ± 20 BP) was obtained from the skeleton.

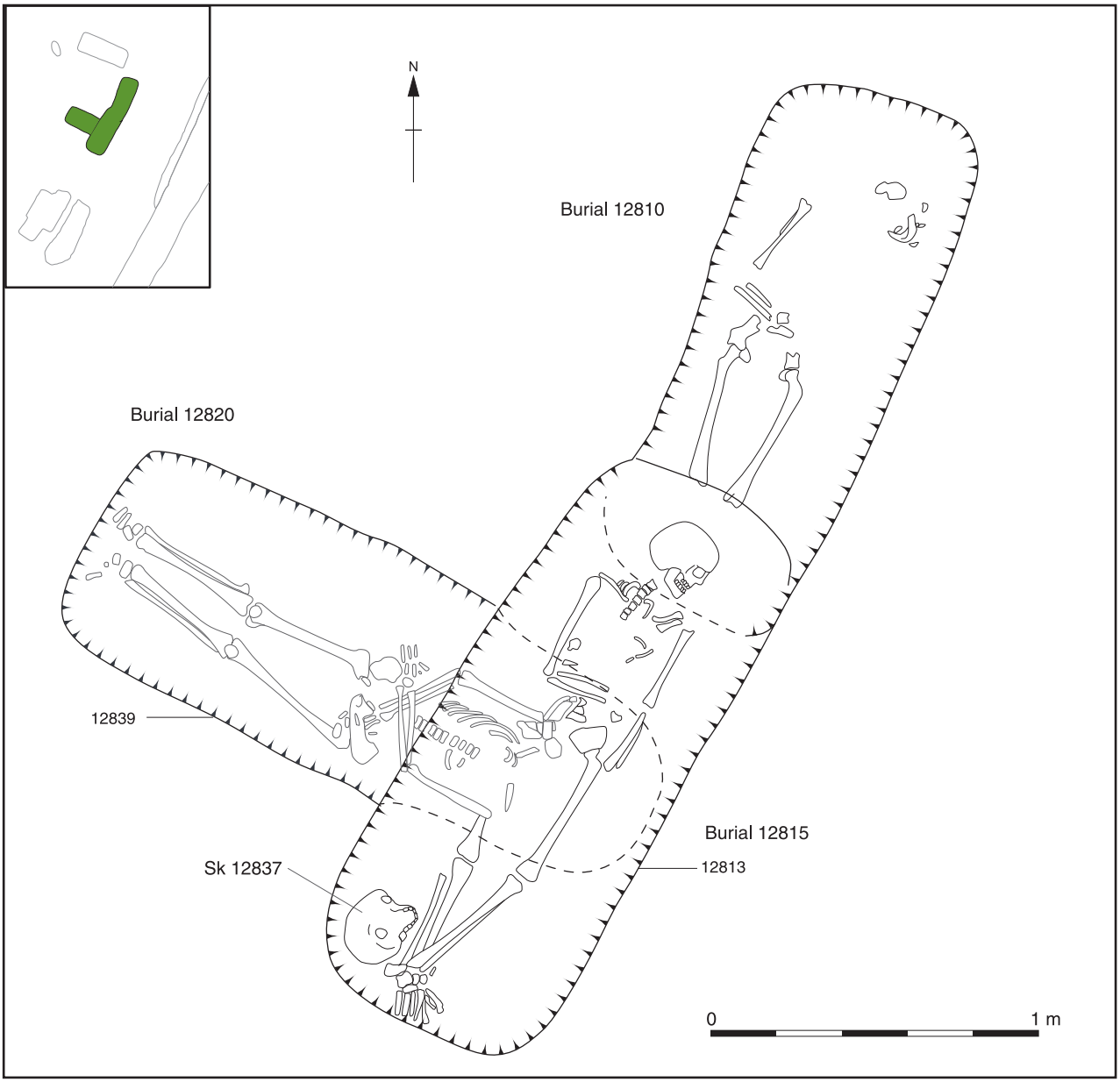


Fig. 4.28 Burials 12810, 12815 and 12820

Burial 12820 (Fig. 4.28) contained the remains of a male aged 25–35 years (Sk 12902). The grave was aligned SE-NW, and measured 1.80 m long, 0.70 m wide and 0.40 m deep. The body had been placed supine, with the head to the south-east and the arms crossed over the pelvis. As noted above, the eastern end of the grave had been cut by grave 12815, resulting in the skull and mandible being displaced into the latter feature. An imitation black burnished ware dish dated to the 3rd century or later was found near the right shoulder, although this could have been intrusive from burial 12815. The backfill of the grave also produced four further pottery sherds and fragments of animal bone. A radiocarbon determination of cal AD 75–225 (UB-5223: 1869 ± 20 BP) was obtained from the skeleton.

Well 8032 (Fig. 4.10)

Well 8032 had a circular shaft 0.45 m in internal diameter and 3.5 m deep. It had a drystone construction of limestone slabs (up to 0.43 m long) and was set within a construction cut 5 m in diameter. This construction cut predated a Phase 5 building 8019, and had an uncertain relationship with Phase 5 ditch 8290. Most of the construction cut had been backfilled with a clay packing deposit (8058) containing large fragments of unfaced limestone, 5.2 kg of pottery dating to the late 2nd to 3rd century, animal bone, iron nails and slag. The uppermost part of the cut was filled with a silty clay deposit (8048) that contained some 4th-century pottery, probably deriving from disturbance associated with the later use of the well. The fills of the

Plate 4.13 Burials 12810 and 12815, facing north-west. Scale: 2 m

well shaft itself were associated with the abandonment of the structure during the 4th century (see Phase 5 below).

Well 8278 (Fig. 4.29)

The shaft of well 8278 differed from all others at the site in being square in plan, measuring 0.4 m by 0.4 m internally. It was constructed of limestone slabs, and was excavated to a depth of 5.2 m before work was abandoned. The well shaft was set within a construction cut (8277) that flared out to a diameter of 3.5 m at the surface. This construction cut had been backfilled with a deposit of clay that contained a few sherds of pottery dated to the late 2nd century or later. The construction cut was later cut at its northern edge by ditch 8292. The fills of the well shaft itself were associated with the abandonment of the structure during Phase 5.

The eastern periphery of the settlement

A rectangular enclosure (13080) measuring 23 m NE-SW by 19 m NW-SE lay at the margins of the settlement, to the east of Plot D (Fig. 4.30). The geophysical survey suggests that this formed part of a larger group of rectilinear enclosures at the eastern periphery of the settlement. The chronology of the enclosure is not clear-cut, but finds of 2nd- and 3rd-century pottery suggest that ditches 11517, 13055, 13060 and 13065 may have been dug during this phase (or even in the latter part of Phase 3), with later alterations occurring during Phase 5 (see below).

The ditches were up to 0.75 m deep with U-shaped cuts. Ditch 13055 had been recut twice. The ditches were characterised by silty fills, probably largely naturally deposited, containing moderate quantities of finds. Aside from pottery and animal bone, finds included a copper alloy armlet fragment (SF 1788, cat no. 216) from ditch 13055. There were no internal features within the enclosure that could be attributed to this phase, although an undated hearth (11502) and posthole (11498) were present. The posthole contained the burnt remains of an *in situ* post, 0.26 m in diameter; a sample taken from this contained exclusively oak charcoal (sample 654).

Pit 10221 lay further to the east, within evaluation Trench 22 (Fig. 4.15). This feature was oval, measuring 1.80 m long and 0.30 m deep, with steep sides and a flat base. The lower fill contained much burnt stone and charcoal, and reddening of the underlying ironstone natural showed that *in situ* burning had taken place. Three sherds of 2nd-century pottery were recovered from this lower fill. The pit was then backfilled with a deposit of sandy silt containing six sherds of pottery dated to the 3rd century.

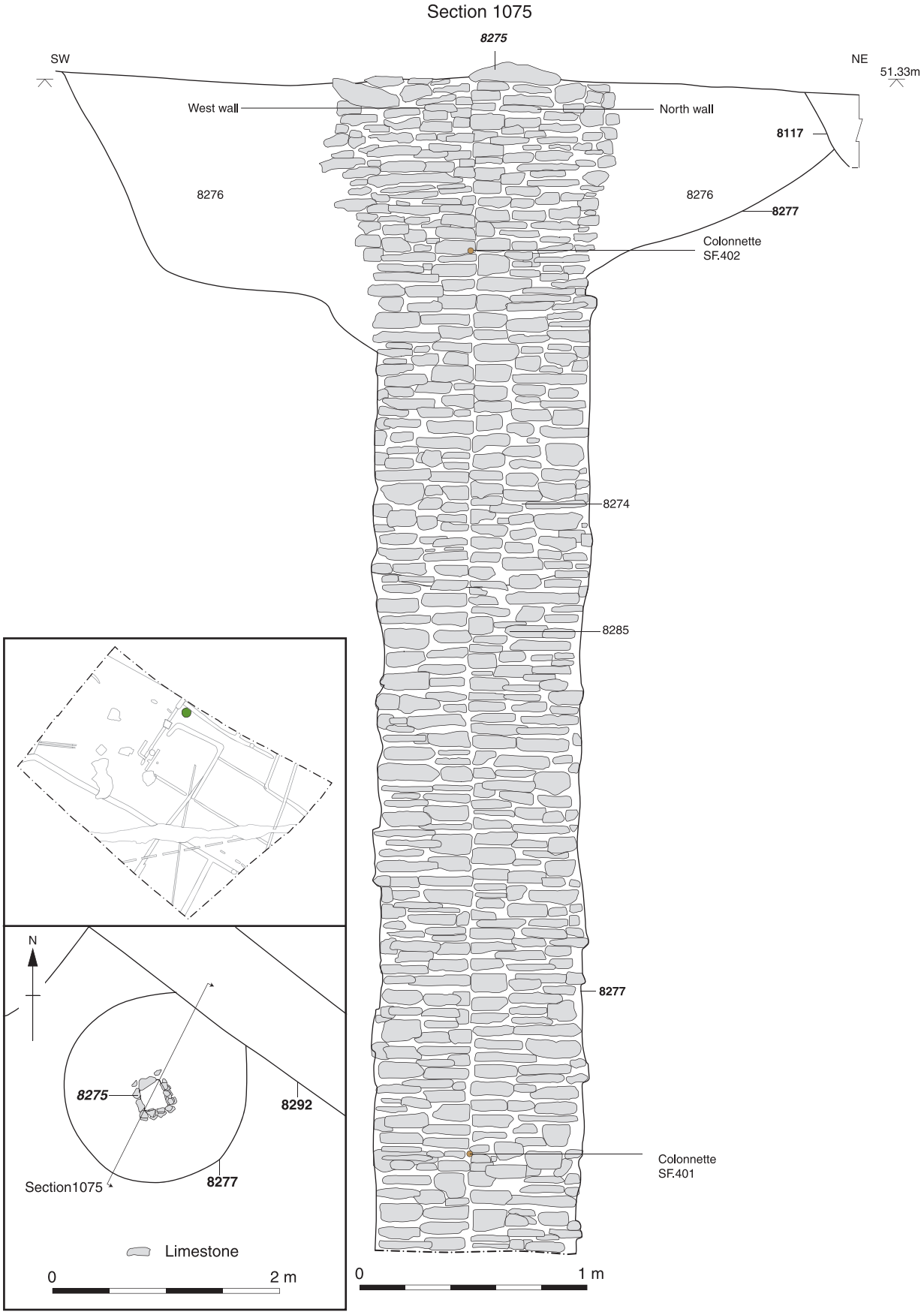


Fig. 4.29 Well 8278

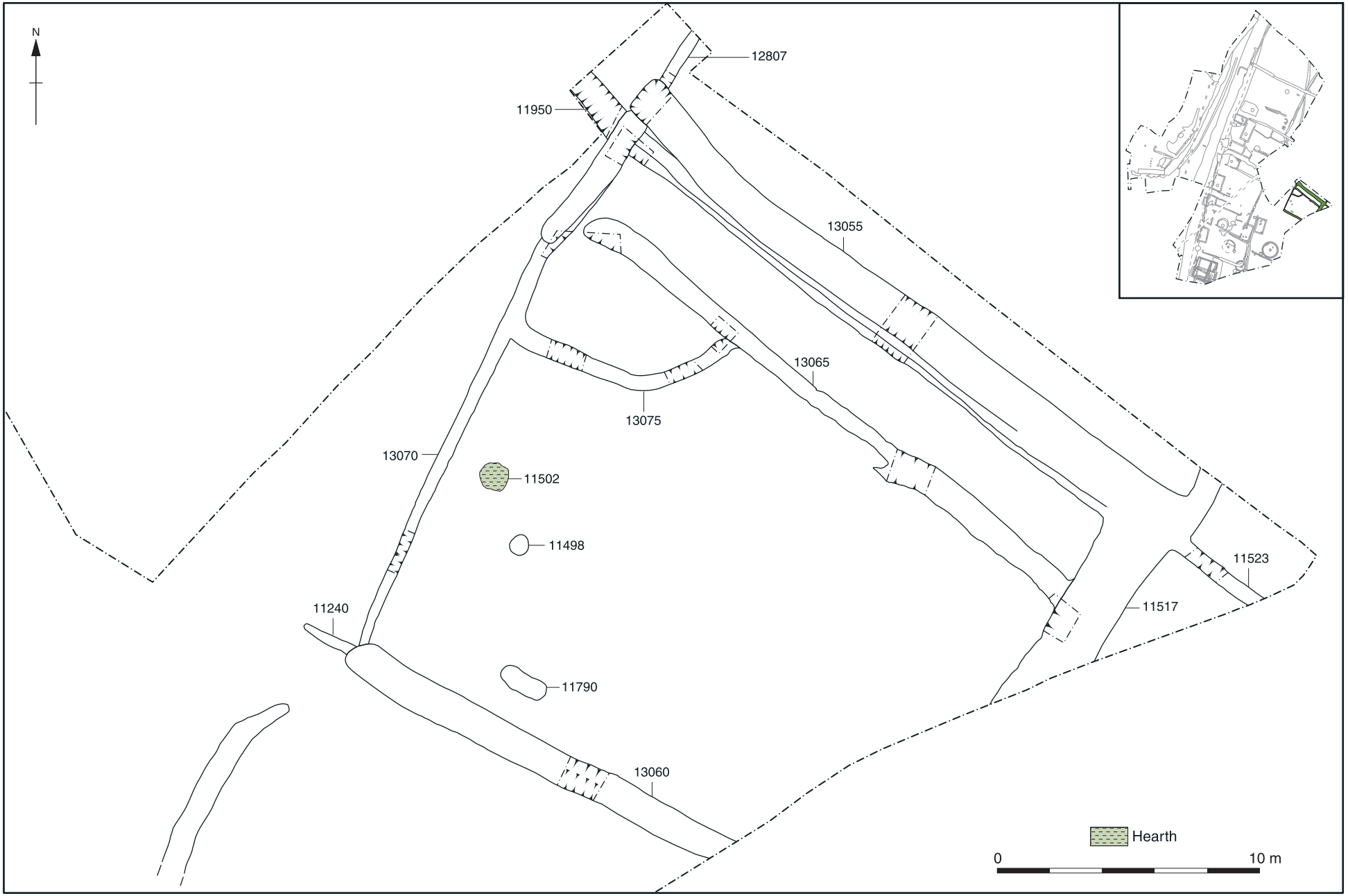


Fig. 4.30 Enclosure 13080

The shrine (Fig. 4.31)

A shrine was established on the western side of the road, opposite the main settlement buildings, apparently parallel to the edge of gravel road surface 12075/12975 (see above). However, it is clear that the structural emphasis of the shrine was not placed on the roadside frontage, but on a monumental facade facing to the south. It is possible that this facade fronted onto a trackway branching off the road and leading down towards the River Nene to the west (see discussion, Chapter 7).

The southern limit of the complex was defined by a massive wall foundation. This comprised a trench some 20.5 m long by 3.6 m wide and 0.8 m deep (12901) cut down to the top of the underlying ironstone, with a single layer of large closely-pitched and mortared limestone slabs surviving in the base (12899). The remainder of the foundation had been robbed out. Some discrete areas of gravel surfacing abutted the south face of the wall (12853, 13007-8 and 12928). These surfaces produced few finds, although a copper alloy 'T'-shaped brooch dated to the late 1st to 2nd century (SF 3081) was recovered from 12853. Slightly further south and east were larger quantities of finds, which were of similar character to the shrine assemblage (see discussion, Chapter 7).

Between the southern facade wall and the shrine itself was a forecourt area, or outer precinct,

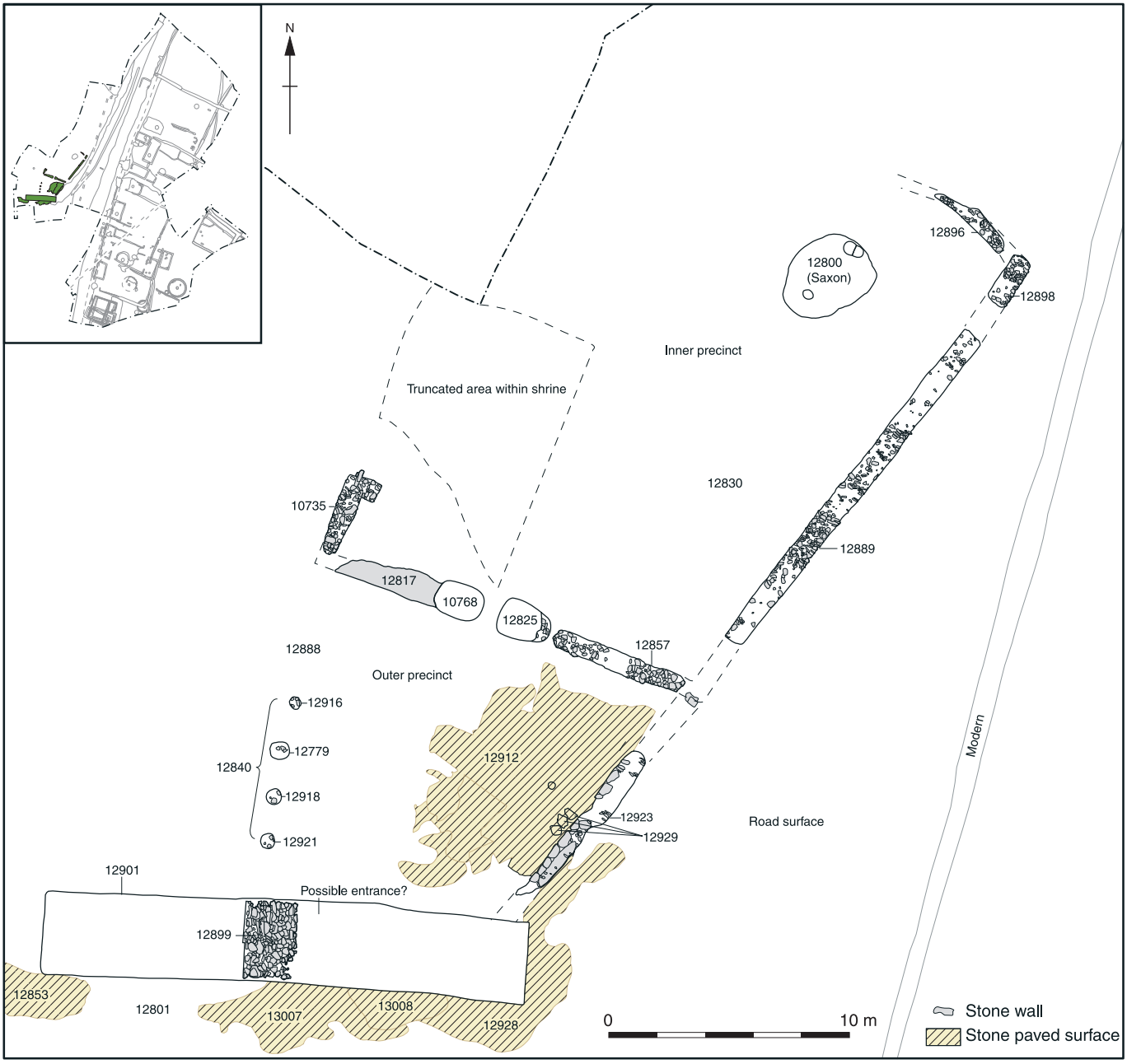


Fig. 4.31 Shrine 10930

bounded to the west by a row of four postholes (12840) and to the east by a stone wall (12923) continuing the shrine roadside boundary alignment (Fig. 4.31). The postholes were up to 0.80 m in diameter, with post sockets up to 0.40 m in diameter defined by the surrounding stone packing. The one excavated posthole (12779) was 0.13 m deep and contained no datable finds. Wall 12923 was 1.0 m thick and consisted of a single course of limestone slabs, laid flat at the west face of the wall and pitched at the east face. A limestone slab ornamented with a relief carving of a naked male (SF 3196) had been incorporated into the western face of the wall, laid face down (see Davenport, Chapter 5).

The eastern half of this forecourt area, adjacent to wall 12923, was surfaced with limestone paving, its full extent being unknown due to later truncation. The paving consisted largely of pitched stones (12912) although there were also areas of flat-laid slabs (12929) close to wall 12923. The surface was sealed by a series of destruction deposits (12924, 12925 and 12931; not shown on plan) comprising limestone rubble, gravel, large fragments of mortar, and two limestone tiles. Layer 12924 also producing a large worked limestone block (SF 3194) and two fragments from the shaft of a limestone colonnette (SF 3198). This material may have derived from the demolition of the shrine precinct to the north and/or the facade wall to the south. Dating evidence is provided by 3rd-century pottery from destruction layer 12925.

The shrine itself was demarcated by a five-sided walled precinct, measuring 23 m long on its NE-SW axis, and 15.5 m wide at the southern frontage. No evidence for any internal structure was found. Most of the western side of the precinct appears to have been left open, with no archaeologically visible boundary present. The walls had been extensively robbed, with only a single pitched limestone foundation course generally surviving (10735, 12857, 12889 and 12896). The capital from a limestone colonnette (SF 1225) had been reused in wall 10735 (Pl. 4.14). A well-defined entrance was located in the southern side of the enclosure. This was 0.8 m wide and flanked by a pair of large foundation pits, each measuring 2.2 by 1.5 m in size and 0.5 m deep. The western pit (10768) had been entirely robbed out but the eastern pit (12825) was filled with large alternately-pitched limestone courses mortared into place, with substantial bedding layers of mortar between each course. This entrance must have been similarly monumental to the facade wall to the south.

Small amounts of pottery were recovered from the precinct walls, the latest consisting of some late 2nd- to 3rd-century material from wall 12857. Two

Plate 4.14 Shrine 10930, detail of wall 10735 showing colonnette fragment SF 1225 in situ, facing south. Scale: 1 m

coins were also recovered from wall 10735 (SF 1251: AD 81–96; SF 1252: AD 69–117). Given the degree of disturbance to the walls, however, these finds cannot be regarded as securely dating the construction of the shrine.

A thin layer of silty soil (12830) extended across most of the interior of the shrine precinct (although this was truncated to the west; see Fig. 4.31). This produced the bulk of the coins and small finds associated with the shrine, along with large amounts of pottery and animal bone. The greatest concentration of finds occurred towards the southern end of the precinct, just within the entrance, although there was a small area (*c* 3 x 2 m) *c* 8 m inside the entrance that produced almost no small finds or coins at all, suggesting that some kind of focal feature may have been located here (see Chapter 7, Figs 7.6-7). It appears that this soil was largely a post-use accumulation as quantities of limestone rubble probably deriving from the destruction of the precinct wall were present across the deposit. In some places adjacent to the line of the walls, finds within deposit 12830 were sealed by discrete patches of rubble collapse. Generally the finds were recovered from the lower part of the deposit at the interface with the underlying colluvium surface. A smaller assemblage of finds was recovered from the upper part of the colluvial soil horizon underlying 12830 and immediately to its west (11627/12434). The upper levels of the colluvium had clearly been reworked, with crushed limestone trampled into the deposit, and this probably also worked finds into the soil.

The small finds assemblage from the shrine area comprised 825 objects (discussed by Scott in Chapter 5). These included a number of overtly religious items including a cult spearhead, a possible miniature votive spear, five fragments of votive leaves, and five pieces of rolled lead sheet, one of which carried an indecipherable inscription. Large numbers of personal items were also present, including brooches, bracelets, bangles, rings and hairpins, along with over 200 hobnails. The animal bone assemblage (17.1 kg) showed an emphasis on the smaller domestic species (sheep and pig), and was unusual in including corvid, duck and wild boar remains. A single adult human metacarpal was also found.

The chronological distribution of the coins from the shrine area is discussed in detail by King (Chapter 5), but the salient point is that the main period of deposition probably lay in the later 2nd and 3rd centuries. The 73 coins from layer 12830 and the underlying colluvium surface range in date from AD 69–81 (SF 2462) to AD 388–402 (SF 1529 and 2422), but only eight post-dated the 3rd century. By far the largest group of coins consists of antoniniani dated to between AD 260 or 270 and AD 286 (39 coins), although this mirrors the dominance of later 3rd-century antoniniani within the site assemblage as a whole. The ceramics from layer 12830 (21.9 kg) mirror the coin evidence, in that most date to the later 2nd and 3rd centuries, though with some late 3rd- to 4th-century material also present.

Structure 12456 (Fig. 4.10)

The truncated foundations of a probable structure lay 35 m north of the shrine. This was represented by a discrete area of pitched limestone slabs and tegula fragments set into the underlying colluvium, measuring 2.3 m N-S. It is possible that this represents the remains of a subsidiary roadside shrine. A minor concentration of metal finds occurred in the vicinity of the structure, including two copper alloy votive leaves (SF 2373 and 2374) found 7 m to its south-west. The wider area of the colluvial surface to the north of the main shrine produced a total of 68 metal small finds, including brooches, finger rings, hobnails and nails (finds reference 12433). Ten coins were also recovered, ranging in date from AD 69–81 (SF 2392) to AD 320–325 (SF 2376), although later 3rd-century issues predominated as in the site assemblage as a whole. The relatively high concentration of finds from this area may indicate its 'special status' (see discussion, Chapter 7).

PHASE 5: LATE 3RD TO 4TH CENTURIES
(Fig. 4.32)

During this phase, the settlement continued to expand, extending further north than before. Discrete areas of stone paving were laid down along the road frontage of the settlement, apparently in piecemeal fashion, contrasting with the coherent gravel pavement seen in the previous phase. As noted above, the shrine to the west of the road probably fell into disuse after the late 3rd century, though some 4th-century deposition of coins did take place. The religious focus may have shifted to building 8019, a small structure at the northern periphery of the settlement, which is suggested to have been a temple.

There is a marked decline in coin deposition at the site from the mid 4th century onwards (see King, Chapter 5), and very little pottery specifically datable to the late 4th century was recovered (see Timby, Chapter 5). This suggests that the settlement (or at least the excavated part of it) was largely abandoned around half a century before the end of the Roman period. The buildings were subjected to stone robbing after they went out of use, a process probably continuing into the post-Roman period. All of the wells were abandoned during the 4th century, the two fully-excavated examples (8032 and 12885) being backfilled with limestone rubble. At the time of the Saxon reoccupation of the site (mid 5th century onwards), many of the late Roman boundary ditches still existed as remnant earthwork hollows. This is shown by the cutting of Saxon pits into ditches 8292 and 8294, and by Saxon pottery recovered from the upper fill of ditch 10690 (see Hardy *et al.* 2007 for more details).

Fig. 4.32 Phase 5: late 3rd to 4th centuries

The road

The final stage of the development of the road was marked by the construction of ditch 13025, cutting the earlier limestone rubble road surface (Fig. 4.32). This ran for at least 95 m, although its southern end was unclear due to masking by later deposits. The ditch probably marked the western boundary of the road in this phase; if so, the line of road had once again shifted to the east, closer to the settlement and further from the now abandoned shrine. The northern terminus of the ditch seems to be aligned with Phase 5 enclosure ditch 10690, and these two features together may have defined the northern 'entrance' to the late Roman settlement. Ditch 13205 was up to 1.60 m wide and 0.60 m deep, with a U-shaped profile, and contained a single fill of silty sand. There were few finds other than five sherds of pottery dated to the late 2nd century or later. A copper alloy ligula (SF 2134) was also recovered from the surface of the feature.

It is not clear whether the road itself was surfaced at this time, and it may have effectively become a dirt track. However, a patchy band of gravel visible in plan along the eastern edge of the earlier limestone surface (and visible in Fig. 4.5, section 9 as layer 12073) could possibly be the remnants of the road surface from this phase. A distinct pair of gravel-filled wheel ruts (13085) was visible in plan in this area, running north-south along the axis of the road (Fig. 4.33). The ruts were spaced 1.0–1.4 m apart.

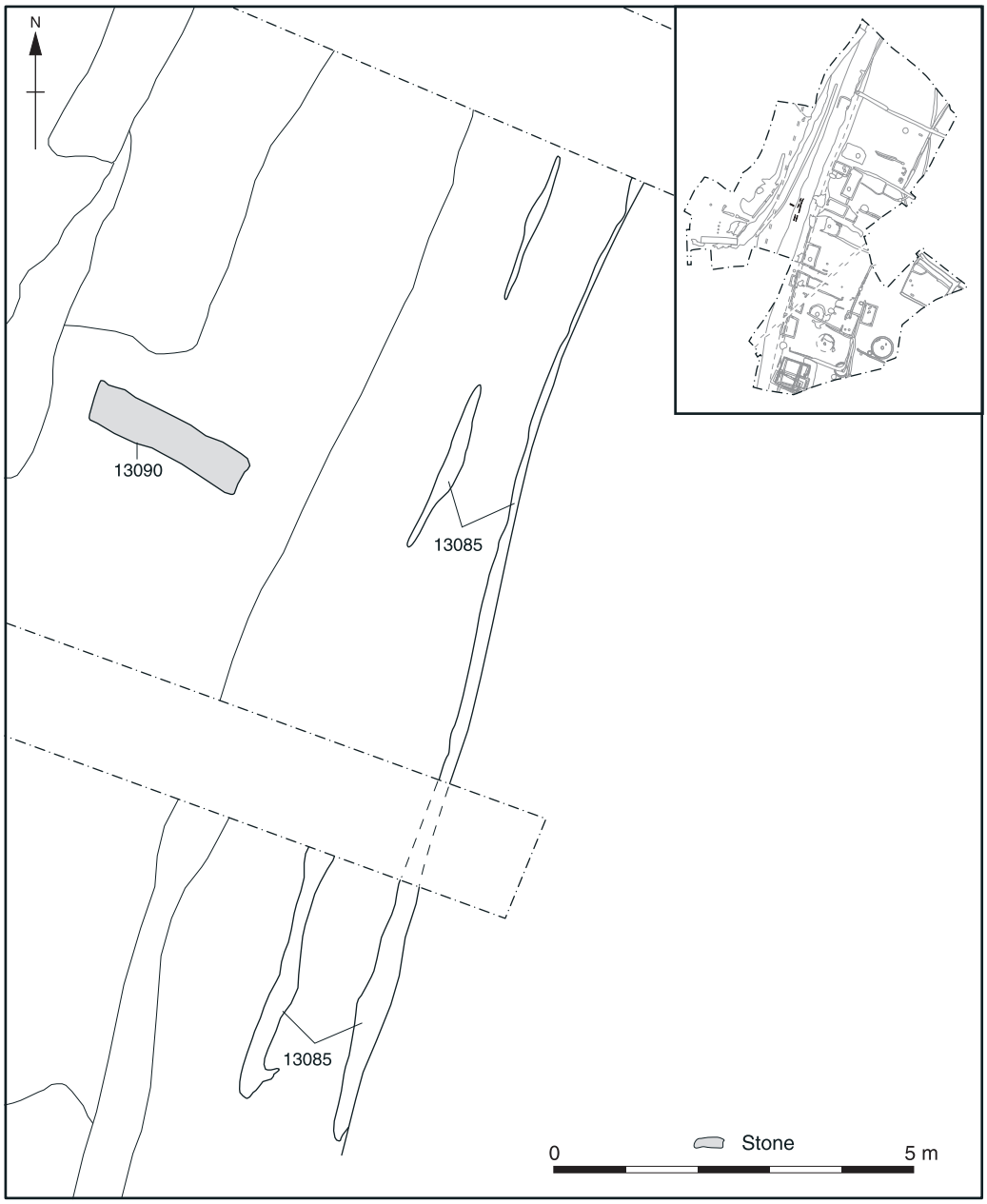


Fig. 4.33 Structure 13090 and wheel ruts 13085

Immediately west of the wheel ruts, pitched limestone foundation 13090 may also belong to this phase, as it appeared to be cut into the earlier limestone rubble road surface. This feature was not excavated, but in plan consisted of a short stretch of wall measuring 2.3 m long and 0.5 m wide (Fig. 4.33). It may have formed part of a structure situated alongside the Phase 5 road, perhaps even a small wayside shrine.

By the late 3rd century, the gravel 'pavement' (13020) running along the roadside frontage of the settlement appears to have gone out of use, being covered by sandy deposit 13100 (see Phase 4 above). Piecemeal resurfacing of the road frontage area occurred during Phase 5, with areas of limestone paving constructed in front of several properties (buildings 11620, 10800, 10820, 10830 and 10850). Silting deposits overlying some of these paved surfaces produced late 3rd- to 4th-century material (eg over surface 10907 in front of building 10800). Details are provided in the descriptions of the relevant buildings.

The settlement

During this phase, Plots A–F underwent further development, and an additional plot (Plot G) was added to the northern end of the settlement. Each plot is discussed in turn below.

Plot A (Fig. 4.11)

Building 11370 underwent internal alterations during this phase. Well 12890 also continued in use, probably being backfilled in the 4th century.

Building 11370

Further alterations to the interior of extension 12450 occurred in this phase (Fig. 4.34). The interior of the extension was resurfaced with a floor layer largely consisting of flat limestone slabs (11856/12146), but also incorporating a band of pitched ironstone fragments (12047). This floor overlay all earlier postholes within the extension, including post row 12202 (see above). Late 3rd- to 4th-century pottery was recovered from 12146. Three postholes (11820, 12082 and 12095) forming a rough north-south row were set into the stone floor. These were 0.24 m – 0.30 m in diameter and 0.12 m – 0.25 m deep, their edges being lined by thin, vertically-set limestone pieces.

A layer of silty sand containing a large proportion of limestone and ironstone fragments (11153) extending across most of building 11370 probably represents a destruction deposit. This layer contained 4th-century pottery. At some point following the abandonment of the building, stone-robbing took place. Robber trench 11330, which was clearly stratigraphically later than building 11370

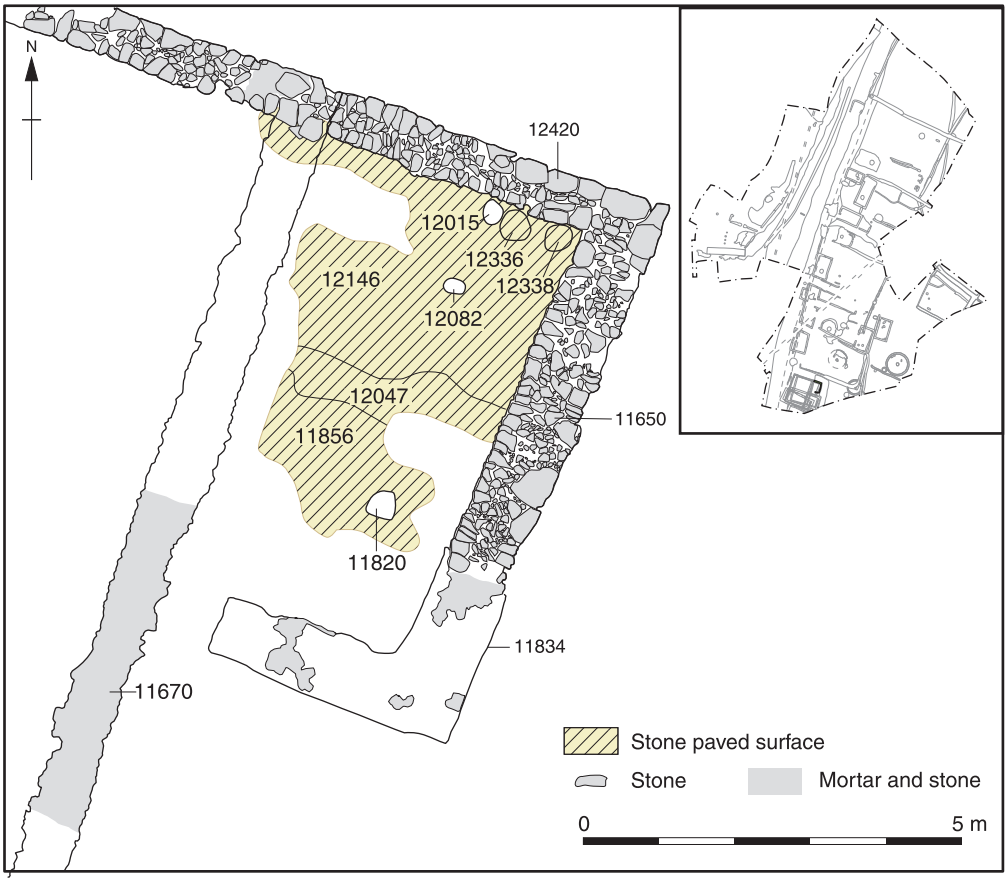


Fig. 4.34 Building 11370, Phase 5 alterations to extension 12450

and ironstone wall 11410, was dug to remove the large limestone slabs forming the foundation of the earlier building 10860. A coin dated to AD 330–348 (SF 1449) was recovered from the upper fill of this robber trench.

Well 12890 (Fig. 4.7)

Only the uppermost 0.80 m of the fill of well 12890 was excavated, consisting of a single deposit of green-grey sandy silt. By analogy with the sequence seen in other wells on the site, this deposit is likely to represent a final silting episode after the shaft was backfilled during the 4th century. Dating evidence is provided by 200 g of late 3rd- to 4th-century pottery.

Plot B (Fig. 4.11)

The boundary around Plot B was redefined in this phase in the form of a rectangular enclosure. Building 11620 may have continued in use into the late 3rd century, although there was no evidence for later occupation. Two smaller structures (13030 and 13035) were built to the east of 11620.

Boundary ditches (Fig. 4.32)

The earlier ditches forming the boundary of Plot B were recut to form a more regular rectangular enclosure. On the southern side of the enclosure the ditch was recut at least twice (ditches 13005 and 13010), while only a single cut could be seen on the eastern side (ditch 11940). The ditches on these sides received pottery into the 4th century. Ditch 11530 on the northern side of the enclosure cut through building 10870, which was abandoned in the late 3rd or 4th century (see Plot C below). It produced late 3rd- to 4th-century pottery, and a coin of AD 270–274 (SF 1427) from the base of the feature.

Building 11620 (Fig. 4.14)

Four late 3rd-century coins found during the machine stripping of the interior of building 11620 hint that occupation of the structure continued into Phase 5 (SF 1146 and 1469: *c* AD 260–286; SF 1467: *c* AD 270–286; SF 1468: AD 270). The construction of an external paved surface (11985) abutting the western wall of the building probably occurred in this phase, by analogy with similar paved areas at the road frontage of other Phase 5 buildings (10800, 10820, 10830 and 10850). This paved surface consisted of flat-laid limestone slabs, set directly over the earlier gravel pavement 13020 (Fig. 4.3, section 3). The paved surface was later overlain by a thin layer of sandy silt (11988) that produced 560 g of late 3rd- to 4th-century pottery.

Following abandonment of the building, parts of the east and west walls were entirely robbed out (robber cuts 11753 and 11756 respectively). These features produced no finds.

Plate 4.15 Structure 13030, drain 11611, facing east. Scale: 0.5 m

Structure 13030 (Fig. 4.35)

Lying 8.5 m to the east of building 11620, 13030 was a rectilinear structure of unknown purpose formed from gullies and a drain, measuring 5.0 m NNE-SSW by 3.0 m WNW-ESE. The most notable feature of the structure was 'box drain' 11611. Limestone slabs had been set on edge to form the sides of this drain, with further slabs laid flat across the top (Pl. 4.15). This feature and a parallel shallow gully 11607/11609 may have drained into deeper gully 11613, which ran on a perpendicular alignment. Two patches of a rubble surface lay closely adjacent to the structure (11585 and 11601), formed from limestone fragments up to 0.20 m across.

The gullies and drain each had an identical fill of dark brown sandy silt. Finds included 560 g of pottery, with some late 3rd- to 4th-century material from gully 11613 suggesting a Phase 5 attribution for the structure. Surface cleaning of the area of the structure produced a further 1.7 kg of late 3rd- to 4th-century pottery (finds reference 11453).

Structure 13035 (Fig. 4.36)

Structure 13035 lay 9 m south-east of building 11620. The overall form of the structure is unclear, but the combination of a stone-paved surface with a row of postholes suggests a small building of some kind.

The area of the structure was defined by a thin layer of sandy silt and small stone fragments (11583), measuring *c* 3.5 m by 5.5 m. This probably served as the preparation layer for a paved surface (11582) which survived in patches overlying the eastern part of 11583, consisting of flat-laid limestone slabs measuring up to 0.45 m in length. Immediately west of the paved surface, a patch of red scorched material within layer 11583 may have marked the location of a hearth or oven. To the west of this, and cut into layer 11583, was a 4.7-m long row of four postholes on a NNW-SSE alignment (11586, 11589, 11698 and 11700). The postholes were spaced 0.9 m – 1.1 m apart, and were up to 0.60 m in diameter and 0.16 m deep; no post-pipes were apparent. Posthole 11586 contained two coins, both dated to AD 268–271 (SF 1647 and 1648). This provides the only clear dating evidence for the structure, although it is uncertain whether these small items entered the posthole at the point of construction or after the post was removed. Posthole 11589 contained a semi-complete shell-tempered ware pottery jar, which must have been deposited after the post was removed given its central location within the feature. The pot could

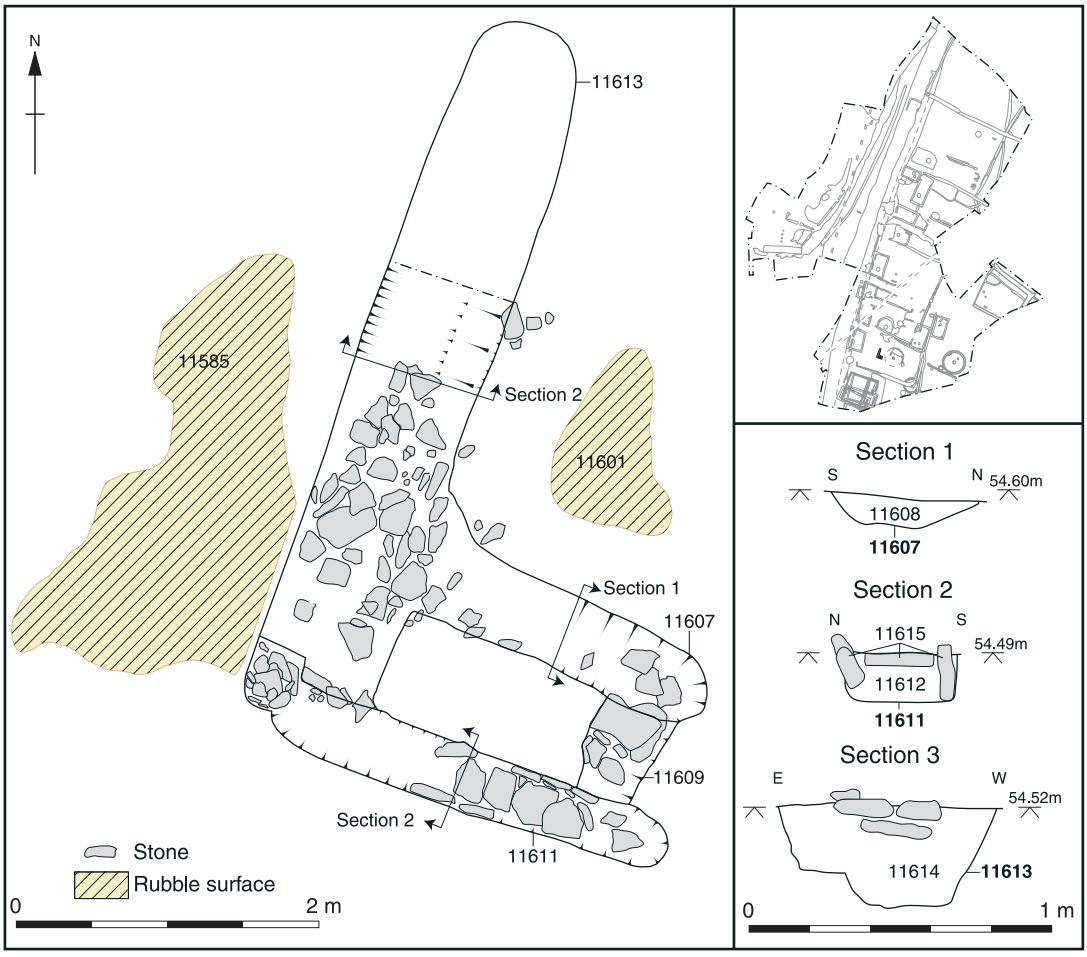


Fig. 4.35 Structure 13030

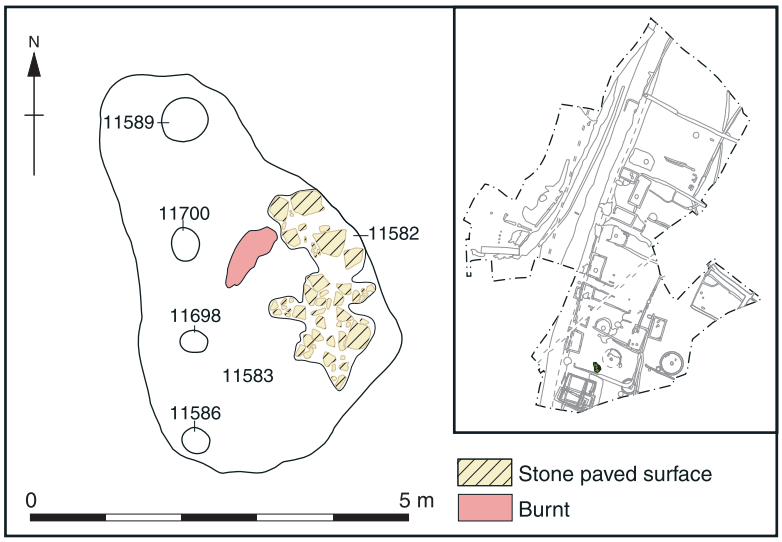


Fig. 4.36 Structure 13035

perhaps have been a deliberate deposit associated with the abandonment of the structure.

Following abandonment, the structure was overlain by a layer of silty soil (11485). This layer contained a number of finds including 2 kg of pottery, largely dating to the 3rd century, and a T-shaped copper alloy brooch (SF 1650).

Pit 11803 (Fig. 4.32)

Bowl-shaped pit 11803 lay immediately south of building 11620, and was 4.0 m in diameter and 0.80 m deep. The single fill (11803) contained frequent limestone fragments, which produced 850 g of pottery dated to the 4th century, two coins dating to AD 270 (SF 1827 and 1905), a small copper alloy bar (SF 1828), a possible bone handle (SF 1844), 850 g of ceramic building material and 1 kg of animal bone.

Plot C (Fig.4.11)

The overall layout of Plot C was little changed in this phase. Buildings 10850 and 10870 were remodelled, and there is slighter evidence that buildings 10880 and 11630 continued in use. Building 10890 may also have been occupied into this phase, although certain evidence for this is lacking (see Phase 4 above).

Building 10850 (Fig. 4.37)

Building 10850 underwent extensive alteration during this phase. A rectangular extension (12681) was added to the western side of the building, with the original west wall partially removed and robbed out (robber trench 12499). The extension measured 4.5 m NNE-SSW by 2.1 m WNW-ESE internally, and had a different construction to the rest of the building, with a single foundation course of pitched limestone and ironstone overlain by a course of flat limestone slabs. The interior of the extension was paved with a floor surface of small pieces of limestone and ironstone (12158), the edge of which was marked by a kerb or threshold of flat-laid limestone slabs (12255) overlying the line of the original west wall of the building. An external paved surface of similar limestone and ironstone construction (12490) abutted the western wall of the extension, overlying the earlier roadside gravel 'pavement' 13020.

Within the main part of the building, a thin, patchy layer of yellow clay (12563/12689) overlay the early occupation horizon of reworked colluvium. This layer, which probably represents the remains of a floor surface, is dated by a coin of AD 284–294 (SF 1667; ctx 12563). The building was subsequently re-floored in stone, an event probably contemporary with the addition of extension 12681. Much of the western part of the building was surfaced with small limestone and ironstone pieces (12373), similar to floor 12158 and similarly abutting kerb 12255. The northern edge of floor layer 12373 was defined by a kerb of three limestone slabs set on edge (12917) and a possible truncated limestone wall (12642). The area to the north of this partition was floored with larger limestone slabs (12256/12680).

Internal features probably contemporary with these late floor surfaces included a hearth, a pit, an oven and three postholes (see Table 4.3). Hearth 12602 was square in plan, and was cut into reworked colluvial layers 12603/12660, with no relationship to the later floor levels. It was filled with burnt stones and sealed with a layer of burnt clay, the latter producing a few sherds of 3rd- to 4th-century pottery.

Pit 12698 was cut through clay floor layer 12563. It was tightly packed with 3 kg of 3rd-century pottery, possibly representing a 'ritual' deposit. The pit was subsequently cut by oven 11625 (Pl. 4.16). This was U-shaped in plan, with a sunken west-facing flue 0.24 m wide and 0.34 m deep. The oven

walls (12662) were built flush with the construction cut and consisted of four courses of limestone slabs (up to 0.28 m long) lined with a thin layer of clay which had baked *in situ*. The oven walls were constructed over a floor of rough limestone slabs up to 0.48 m long. To the west of the oven flue was a bowl-shaped stoking pit (12605). The eastern half of the stoking pit was paved with limestone slabs (12663), similar to the floor of the oven but constructed at a slightly lower level, with a clay 'ramp' marking the junction between the two. The fills of the oven flue and stoking pit contained patches of burnt clay and charcoal, but the relatively low quantities of these suggest that the feature had been cleaned out before it was backfilled. A few sherds of 3rd-century pottery were recovered from the fill of the flue. The construction of this feature was similar to that of a corndrier.

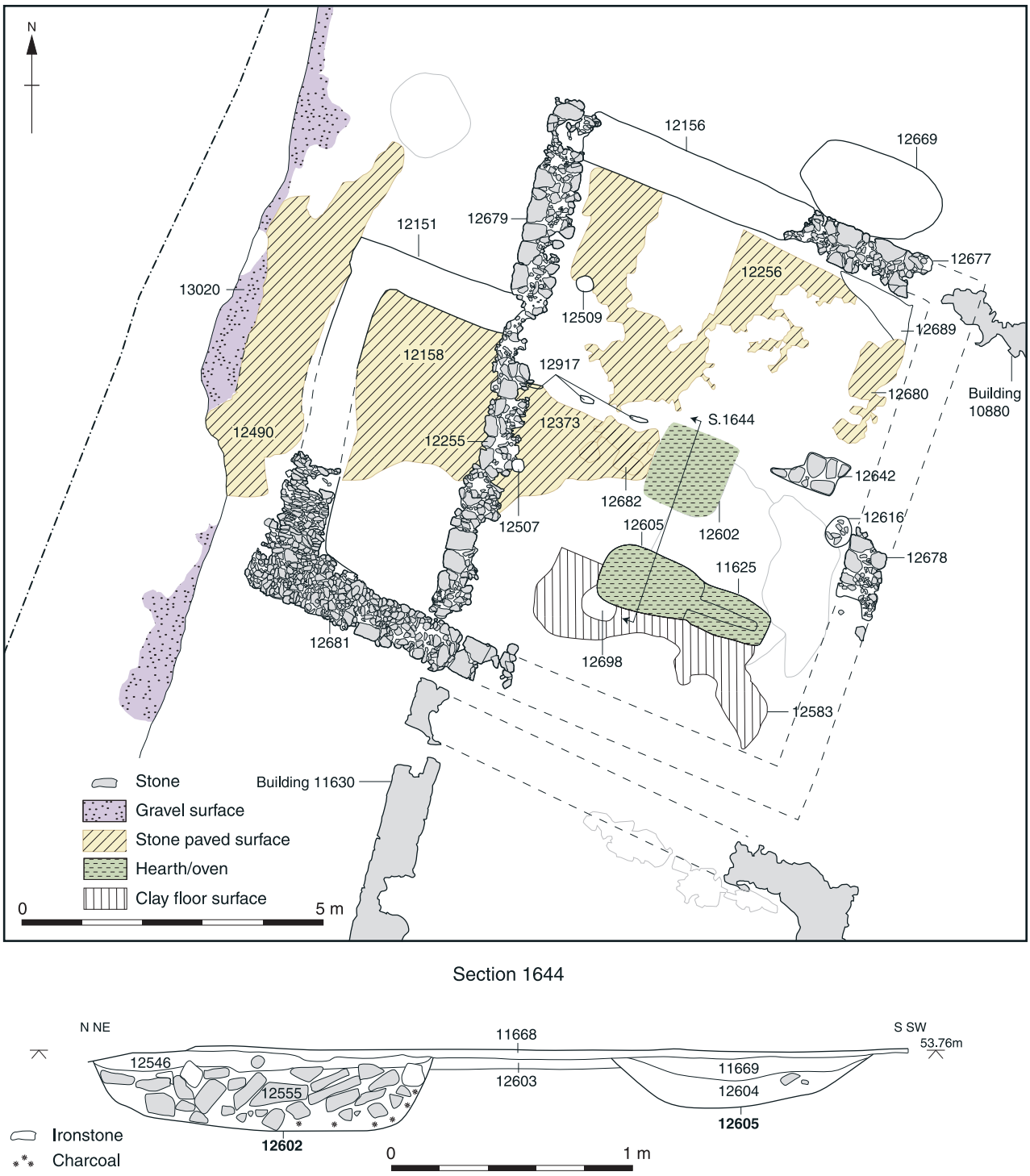


Fig. 4.37 Building 10850 (Phase 5)

Table 4.3 Building 10850. Summary of internal features (Phase 5)

Feature	*Interpretation*	*Diameter (m)*	*Depth (m)*	*Pottery (g)*	*Animal bone (g)*	*Other finds*
11625	Oven	2.95	0.23	228	15	Fired clay, CBM
12507	Posthole	0.16	0.16	-	-	
12509	Posthole	0.14	0.08	-	-	
12602	Hearth	1.28	0.30	170	-	Iron nail, CBM
12608	Posthole	0.50	0.26	-	-	
12698	Pit	0.60	0.05	2987	-	

Plate 4.16 Building 10850, oven 11625 cutting pottery-filled pit 12698, facing east. Scale: 2 m

Postholes 12507 and 12509 were set into stone floor surfaces 12373 and 12256 respectively. Posthole 12608 had no stratigraphic relationship to any of the floor layers within the building, but truncated a buried pottery vessel 12616 ascribed to Phase 4 (see above). Neither of these postholes contained any finds.

Following its abandonment, the building was subjected to stone robbing (robber cuts 12154, 12155, 12156 and 12251). The interior of the building was overlain by a layer of silty soil that contained few finds other than some 3rd-century pottery.

Building 10880 (Fig. 4.17)

The evidence for the use of building 10880 during this phase is difficult to interpret. As noted above (see Phase 4), a coin dated to AD 270–274 (SF 2133) was recovered from the eastern room of the building, but it is unclear whether this derives from an occupation or destruction deposit (ctx 12183). Two fragments of copper alloy votive leaves (SF 2305 and 2005) also came from this deposit. Otherwise, the only evidence for activity in this phase comes from a cluster of three intercutting pits (12142, 12144 and 12167), two of which (12142 and 12144) produced late 3rd-to 4th-century pottery. These pits lay across the projected line of the north wall of the eastern room, which may suggest that they date to after the abandonment of the building. However, if, as suggested above, the eastern room was in fact open along its north side, then the pits could have been contemporary with the latter stages of the occupation of the building.

The three pits had bowl-shaped profiles, up to 0.60 m deep, and silty fills. A sequence could be seen whereby 12167 was cut by 12144, which was in turn cut by 12142. In addition to pottery and animal bone, finds included a copper alloy bracelet fragment (SF 2231) from pit 2142.

The robbing of stone from building 10880 following its abandonment was represented by a series of robber trenches (11817, 12390 and 12393). The latest pottery from the backfills of the robber trenches comprised 3rd-century material from 12390. This robber trench also produced a pair of copper alloy tweezers (SF 2235).

Building 11630 (Fig. 4.15)

Building 11630 may have continued in use into this phase, although this cannot be proven given the paucity of dating evidence from the structure. Following the abandonment of the building, its interior was overlain by a layer of silt containing limestone rubble (12222). A coin dated to AD 330–335 (SF 2551) was recovered from this layer.

Building 10870 (Fig. 4.38)

Remodelling of the internal features within the northern half of building 10870 took place during this phase (Table 4.4). Initially, an ironstone rubble floor surface (11327) was laid down (Fig. 4.38 A). This produced 1.3 kg of 3rd- to 4th-century pottery, eight iron nails, a bone needle (SF 1842, cat no. 43) and fragments of animal bone. The floor surface was later partially overlain by a patchy surface of flat limestone slabs (11326/11767), perhaps an attempt at repair, and a linear band of pitched limestone (11325) was laid over the floor surface around the inner edge of the wall of the building.

A hearth (11712) and two pits (11718 and 11736) were cut into floor surface 11327 and may have been in contemporary use. Hearth 11712 was a bowl-shaped feature with scorched edges and a fill rich in burnt material. An environmental sample from the fill (sample 661) produced moderate amounts of charred barley, indeterminate cereal grain and weed seeds. Pit 11718 was a shallow feature of unknown function. Pit 11736 contained the truncated remains of a pot, which had probably been placed standing upright, flush with the cut. While this could represent a ritual 'offering' it is also possible that the vessel served a practical function as a container set into the floor. The pot was of an unknown form in a handmade shelly ware.

No floor surface was present in the southern half of the building, other than reworked colluvium layer 11472 (see Phase 4 above). Two features cut into this layer are likely to have been contemporary with floor surface 11327 to the north. Located roughly in the centre of the building, hearth 11743 was a shallow feature with a burnt clay fill. Placed between hearths 11712 and 11743, pit 11367 had steep sides and a flat base, and contained a relatively high density of animal bone.

The east-facing entrance of the building associated with this phase of use was represented by a beamslot (11706), 1.28 m long and 0.10 m deep, with a posthole at either end (11476 and 11478). The posthole at the northern end of the beamslot was significantly deeper than that at the southern end (0.32 m compared to 0.12 m). The fills of the beamslot and postholes were stony, and may have derived from backfilling after removal of the timbers, rather than from *in situ* rotting. Dating evidence is provided by a few sherds of late 3rd- to 4th-century pottery from posthole 11476.

At a later stage of Phase 5, a further episode of resurfacing of the northern half of the building took place (Fig. 4.38 B), with a series of stone floor surfaces laid out, respecting a large central hearth (11283). This hearth was an irregularly-shaped feature, measuring 2.8 m across and 0.23 m deep, and overlay the earlier hearth 11743 and pit 11367. It was filled with ironstone rubble in a scorched clay matrix. At the centre of the hearth was a 1 m-diameter circular setting of limestone slabs (11315), set at a 45° angle so as to form a bowl-shaped feature. This was filled with ironstone and clay in the same manner as the rest of the hearth. A small group of flat limestone slabs (11314) had been laid on the upper surface of the hearth, immediately east of the circular setting 11315.

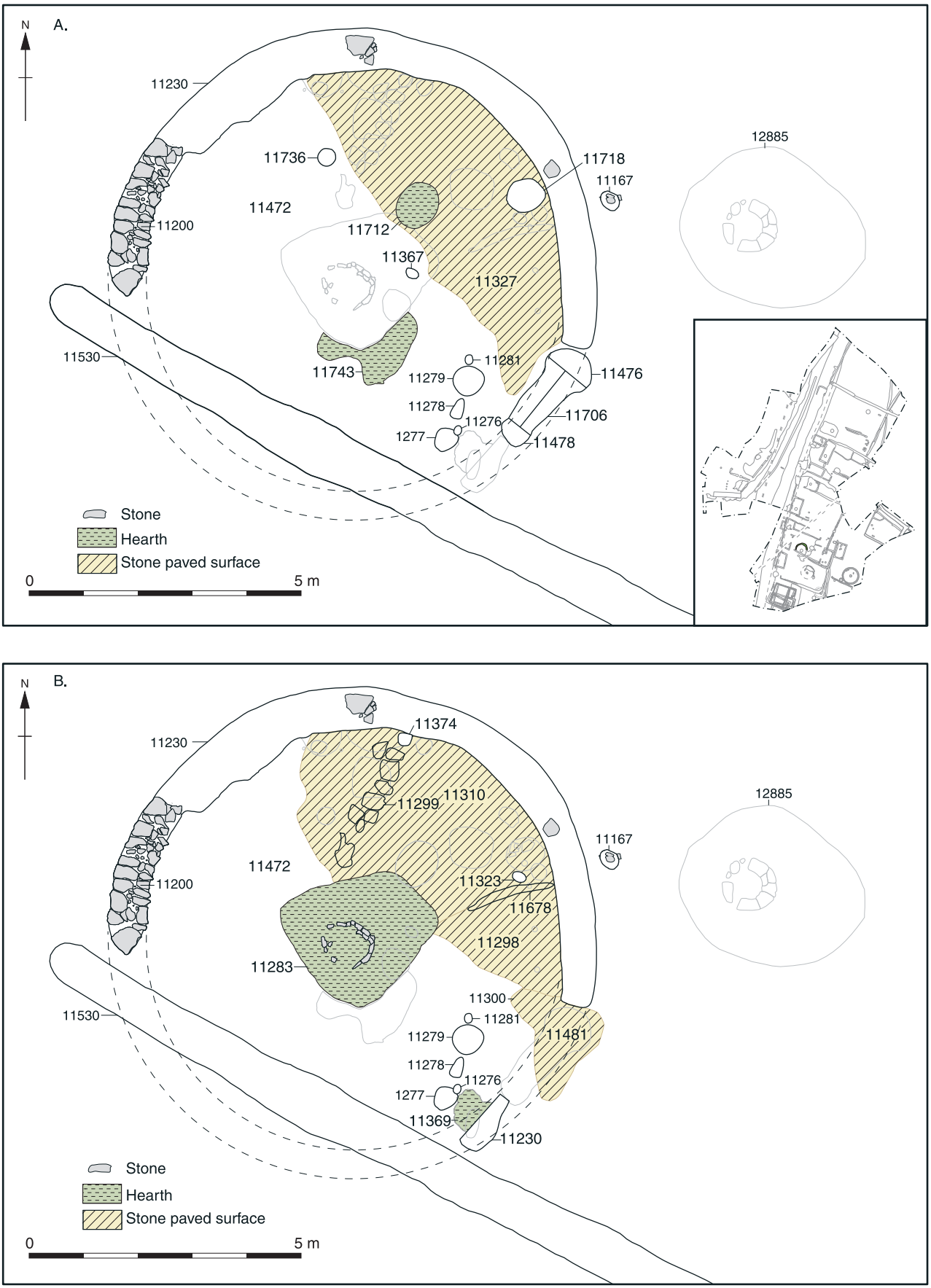


Fig. 4.38 Building 10870 (A: Phase 5 stratigraphically early features; B: Phase 5 stratigraphically late features)

Two distinct floor surfaces abutted the northern edge of the hearth, one constructed of flat ironstone slabs (11298), and the other of ironstone rubble (11310). The junction between the two was marked by a kerb of limestone slabs pitched upright (11678). A linear arrangement of limestone slabs (11299) within ironstone floor surface 11310 also probably marked a partition of some kind. Features 11678 and 11299 together suggest a radial division of space within the building, with partitions arranged like the spokes of a wheel around the focal central hearth (Pl. 4.7). The area just within the entrance, meanwhile, was paved with pitched limestone slabs (11300). Outside the building, an extensive limestone and ironstone surface (11481) was laid down, overlying the earlier beamslot entrance. This may represent a yard area in front of the building. Dating evidence for this stage in the life of the building is provided by 800 g of late 3rd- to 4th-century pottery from floor surface 11310. This floor layer also produced a coin dating to AD 103–235 (SF 1472), a bone tool handle, an iron awl (SF 1473), an iron strip and three iron nails.

Internal features stratigraphically associated with this latest stage of the occupation of the building included two pits cut into ironstone floor surface 11310 (11323 and 11374). Pit 11323 contained a relatively high density of pottery, dated to the late 3rd to 4th century, and a small fragment of a limestone roof tile (perhaps deriving from the abandoned shrine, where more complete examples were found). Pit 11374 had a charcoal-rich fill that contained no finds.

Also probably belonging to the latest history of the building was a small hearth with a burnt clay fill (11369) found to the south of the entrance, cutting burial 11390. Dating evidence was provided by a coin of AD 330–348 (SF 1449).

The building was subsequently overlain by limestone rubble from the demolition or collapse of the structure. Finds from these layers included some 3rd-century pottery and a whetstone (SF 1436). At some stage following its abandonment, the building was truncated by enclosure ditch 11530 (see below). The final event in the history of the building was the robbing of most of limestone wall 11200 down to foundation level. This is represented by robber trench 11230, which cut through the rubble destruction layers, hearth 11369, and ditch 11530. Finds from the robber trench included late 3rd- to 4th-century pottery.

Well 12885 (Figs 4.18 and 4.19)

The infilling of well 12885 occurred in this phase. In the base of the well shaft was a loose black water-logged silt (12716) 0.5 m in thickness which covered the possible water inlet and the lower half of the worked limestone block. A late 3rd-century pottery assemblage (1.9 kg) was retrieved from this layer, and three samples taken from this fill (samples 682–4) yielding coleoptera and a range of water-logged plant remains. Above this primary water-logged fill a deep rubble fill (12601) had been deliberately dumped into the shaft. Finds recovered from this backfill deposit included 200 sherds of late 3rd- to 4th-century pottery and a fragment of copper alloy binding (SF 2749, cat no. 393). Above this, fill 11223 was a mix of silt, limestone rubble and domestic debris including charcoal and ash, probably originating from a hearth. A sample from this fill (sample 648) contained charred wheat grain and weed seeds. Subsequent fill 11222 was a deposit of limestone slabs, deposited during the slumping of the well shaft that resulted in its irregular profile at this point. This fill included 49 sherds (1340 g) of pottery dating to the 4th century. The final fill of the shaft (11115) was a silting deposit, which contained no datable material.

Plot D (Fig. 4.11)

Building 10840 was constructed at the western edge of Plot D during this phase. An ironstone roadside wall (11010) appears to respect this building, and hence can also be attributed to this phase. At the rear of the plot, a series of inhumation burials (burial group 13045) was inserted into the earthwork hollow of earlier ditch 12880.

Table 4.4 Building 10870. Summary of internal features (Phase 5)

Feature	*Interpretation*	*Diameter (m)*	*Depth (m)*	*Pottery (g)*	*Animal bone (g)*	*Other finds*
11323	Pit	0.34	0.15	1805	19	
11367	Pit	0.46	0.20	-	410	
11369	Hearth	0.72	0.15	15	-	Coin (SF 1449)
11374	Pit	0.24	0.12	-	-	
11476	Posthole	0.92	0.32	64	71	
11478	Posthole	0.52	0.12	188	-	
11706	Beamslot	1.28	0.10	66	19	
11712	Hearth	0.85	0.30	39	-	Fired clay
11718	Pit	0.70	0.10	18	16	
11736	Pit	0.35	0.20	1126	11	
11743	Hearth	0.64	0.06	-	4	

Building 10840 (Fig. 4.39)

Building 10840 was a rectangular structure fronting onto the roadway and overlying former roadside ditch 10680 (Table 4.5). It measured 11 m NNE-SSW by 6.5 m WNW-ESE internally. Large quantities of finds were recovered from occupation and destruction deposits within the building, including 43 coins. Most of these finds were recovered from the southern half of building, reflecting the fact that the destruction layers overlying the northern half of the building were largely machined away prior to excavation. The dating evidence suggests that the building originated in the later 3rd century and was abandoned in the mid to late 4th century.

The walls of the building had been completely robbed away in many places, but survived in parts of the north, south and west sides of the structure (12833 and 12834). Preservation was best at the north wall, where up to three courses survived. A foundation course of pitched ironstone was overlain by a course of large, flat-laid limestone slabs. This was in turn overlain by a course consisting of flat-laid limestone slabs at the exterior face of the wall and pitched limestone slabs at the interior face and in the wall core.

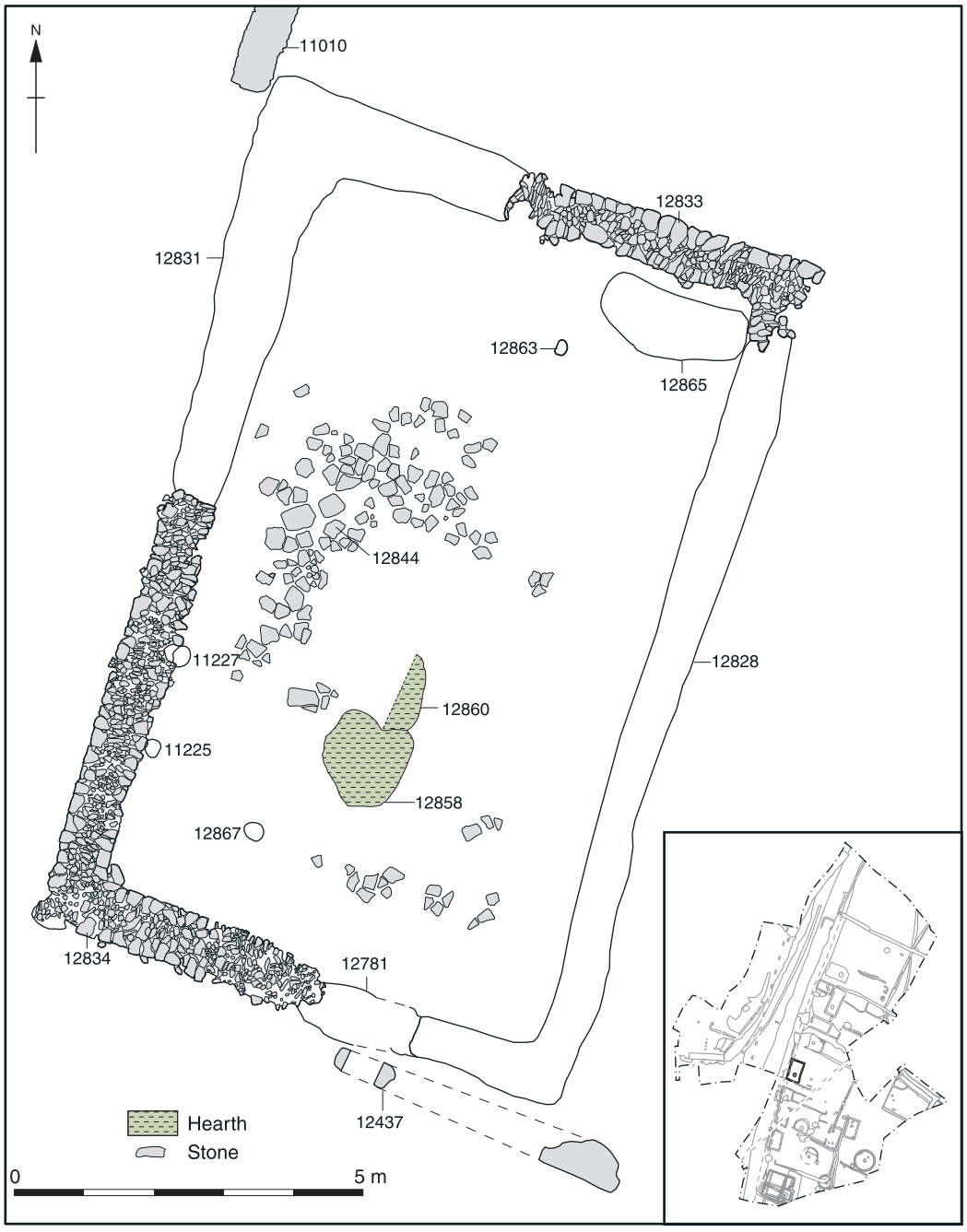


Fig. 4.39 Building 10840

Two pottery vessels had been set into the ground within the building, standing upright adjacent to the west wall. One of these (11227) was unfortunately stolen from site. To forestall further theft, the second vessel (11225) – a grog-tempered white ware jar – was rapidly excavated out of stratigraphic sequence (Pl. 4.17). It is thus unclear where the vessels belong in the sequence of occupation of the building, and whether they represent ritual 'offerings' or functional containers. While vessel 11225 has been dated to the 2nd century, its fill contained a few sherds from other vessels datable to the late 3rd to 4th century.

Other internal features (Table 4.5)

Stratigraphically early features within the building, cut directly into the underlying colluvium, included a hearth located towards the southern end of the structure (12860) and two postholes (12863 and 12867). The hearth was a bowl-shaped feature, lined with sherds of late 3rd- to 4th-century pottery and a fired clay oven plate (see Poole, Chapter 5); the fill consisted of scorched clay. It is possible that this feature was a domestic cooking structure or a small grain-drying oven. Also directly overlying the colluvium was a paved floor surface of limestone slabs (up to 0.40 m long) in the western part of the building (12844). It is possible that this floor surface related to an entrance in the west wall of the building.

These features were sealed by a probable occupation layer of silty sand (12836) that extended across most of the building. This layer contained seven coins suggesting a later 3rd-century date. Four date to AD 260–286 (SF 3070–1, 3076 and 3104), one to AD 268–270 (SF 3069), one to AD 218–222 (SF 3080) and one to AD 193–211 (SF 3072). Other finds included 3rd-century pottery, a copper alloy

Table 4.5 Building 10840. Summary of internal features

Feature	*Interpretation*	*Diameter (m)*	*Depth (m)*	*Pottery (g)*	*Animal bone (g)*	*Other finds*
12858	Hearth	1.54	0.14	-	2	
12860	Hearth	1.16	0.18	4127	-	Fired clay slab
12863	Posthole	0.16	0.08	-	-	
12865	Pit	2.25	0.28	119	25	
12867	Posthole	0.30	0.14	-	-	

Plate 4.17 Building 10840, buried pottery vessel 11225. Scale: 0.5 m

bracelet (SF 3163, cat. no. 221), a copper alloy finger ring (SF 3077, cat. no. 259) and an iron key (SF 3160, cat no. 385). A hearth in the southern end of the building (12858), cutting earlier hearth 12860, appears to have been contemporary with this layer. The hearth was a bowl-shaped feature with a fill of scorched silt, overlain by a paving of burnt limestone slabs. A sample from the fill of the hearth (sample 690) contained charred wheat grain and weed seeds. At the northern end of the building, occupation layer 12836 was cut by an oval pit (12865). This had steep sides and a flat base, and was filled with large pieces of limestone and ironstone.

Occupation layer 12836 was subsequently overlain by a deposit of limestone and ironstone rubble in a sandy silt matrix, 0.25 m thick, which extended across much of the southern half of the building (12835). It is conceivable that this represents a late episode of resurfacing, but it seems more likely to be associated with the destruction of the building. It produced 2.2 kg of late 4th-century pottery, and seven coins, one dated to AD 330–360 (SF 3097) and the others to the later 3rd century (SF 3098–3103, 3153 and 3156). Other finds included a copper alloy bracelet fragment (SF 3105, cat. no. 220), an iron 'mason's gad' (SF 3075, cat. no. 7) and four iron nails. Also recovered was a femur from a neonate aged 35–36 weeks, which could derive from an unrecognised infant burial within this layer.

Eight coins found using a metal detector within the southern end of building 10840 prior to its excavation also appear to have come from destruction layer 12835. The coins include two dated to *c* AD 330–348 (SF 1349 and 1354), one to AD 335–341 (SF 1350) and one to AD 312–316 (SF 1353), along with four later 3rd-century issues (SF 1347–8 and 1351–2). These coins may have derived from a hoard (see King, Chapter 5). The numerous other pre-excavation surface and metal-detector finds from within the building (finds reference 10624) lack any stratigraphic information. These finds included 16 further coins, 15 of which date to the later 3rd century, a copper alloy spoon fragment (SF 1157, cat. no. 352) and a copper alloy terminal with enamel decoration (SF 1120, cat. no. 367).

Robbing of the walls after the abandonment of the building was represented by robber trenches 12828 and 12831. Trench 12828 produced two extremely worn coins dating to *c* AD 260–286 (SF 3078 and SF 3079), presumably redeposited from the earlier occupation of the building.

Wall 11010 (Figs 4.32 and 4.39)

Ironstone wall 11010 ran along the road frontage of Plot D for 9 m, overlying the former roadside ditch 10680. The wall was 0.85 m wide, and consisted of two courses of flat slabs (*c* 0.20 m long) overlaid by a third course of pitched stone. No datable finds were recovered, but the southern end of the wall appears to respect building 10840. It is conceivable that the wall defined part of a compound around building 10840 along with ironstone walls 12437 and 12438 to the south, although these latter features have tentatively been interpreted as elements of an earlier building (see Phase 4 above).

Burial group 13045 (Fig. 4.40)

Burial group 13045 consisted of five adult inhumations cut into the top of ditch 12880 and following its alignment (burials 10950, 10970, 12655, 12685 and 12725). These must post-date the backfilling of the ditch in the late 2nd century (see Phase 3 above). While significant amounts of 2nd-century pottery were recovered from the graves, this material is likely to have been redeposited from the ditch fills and hence does not provide direct dating evidence. A late Roman date for the group seems more likely. It is notable that two prone burials were present (10970 and 12655), this being a rite that only became common during the 4th century (Philpott 1991, 71). Burial 10950 stratigraphically post-dated prone burial 10970 and produced a radiocarbon date of cal AD 345–430 (UB-5215: 1649 ±20). The late Roman dating is supported by another radiocarbon determination of cal AD 255–410 (UB-5219: 1701 ± 21 BP) obtained from prone burial 12655. Radiocarbon determinations from two more of the burials were unfortunately less helpful, producing relatively broad date ranges spanning the 2nd to 4th centuries (burials 10970 and 12685). All the burials from this group are described in turn below.

Burial 10970 (Fig. 4.41) contained the remains of a female aged 30–45 years (Sk 10954). The grave was aligned SW-NE, and measured 1.41 m long, 0.80 m wide and 0.34 m deep. The body was prone with the head at the south-west end of the grave, turned slightly to face east. The right arm was flexed and raised in front of the face. Nine iron nails were recovered, mostly from around the edge of the cut, indicating the presence of a wooden coffin. The backfill of the grave contained 1.4 kg of animal bone and 2.7 kg of pottery dated to the mid 2nd century AD. A radiocarbon determination of cal AD 175–325 (UB-5218: 1784 ±17 BP) was obtained from the skeleton.

Burial 10950 (Fig. 4.41) contained the heavily truncated remains of a male aged over 45 years (Sk 10922). The grave was aligned NNE-SSW, and measured 2.18 m long, 0.68 m wide and 0.18 m deep. It cut prone burial 10970 (see below). The body was supine with its head to the NNE. Five iron nails found scattered through the grave fill may indicate the presence of a wooden coffin. Other finds from the backfill of the grave comprised 400 g of pottery dated to the 2nd century, and small fragments of animal bone. As mentioned above, a radiocarbon determination of cal AD 345–430 (UB-5215: 1649 ±20) was obtained from the skeleton.

Burial 12655 (Fig. 4.42; Pl. 4.18) contained the remains of a female aged over 40 years (Sk 12656). The grave was aligned NNE-SSW, and measured 1.70 m long, 0.50 m wide and 0.45 m deep. It cut burial 12685 (see below). The body was prone, with

its head at the NNE end of the grave and turned to face east. The left arm was flexed and placed beneath body, while the left leg was flexed and placed beneath the right leg. The backfill of the grave contained 1.3 kg of pottery dated to the late 2nd century or later along with fragments of animal bone. A radiocarbon determination of cal AD 255–410 (UB-5219: 1701 ± 21 BP) was obtained from the skeleton.

Burial 12685 (not illustrated) contained the remains of an adult, possibly female (Sk 12686). The grave was aligned SSW-NNE, and measured at least 1.32 m long, at least 0.35 m wide and 0.33 m deep. The body was supine with its head to the SSW, although the whole of the skeleton above the pelvis had been cut away by burial 12655. The backfill of the grave contained 0.5 kg of pottery dated to the late 2nd century onwards, and small fragments of animal bone. A radiocarbon determination of cal AD 135–325 (UB-5220: 1793 ± 20 BP) was obtained from the skeleton.

Burial 12725 (Fig. 4.43) contained the remains of a female aged 45–55 years (Sk 12727). The grave was aligned SSW-NNE, and measured 1.56 m long, 0.60 m wide and 0.47 m deep. The body had been interred on its left side with the head towards the south-south-west end of the grave. The arms were flexed, with the right hand beneath the head and the left hand raised in front of the face. The right leg was flexed, while the left leg was not in its correct anatomical position and had thus presumably been disturbed. A copper alloy bracelet (SF 2934, cat. no. 223) was worn on the left wrist. The backfill of the grave contained 3.2 kg of residual pottery dated to the 2nd century and fragments of animal bone.

Plot E (Fig. 4.11)

Building 10830 was constructed in the southern part of Plot E during this phase, overlying earlier boundary ditch 12895 but maintaining its alignment. To the north of 10830, building 10820 was

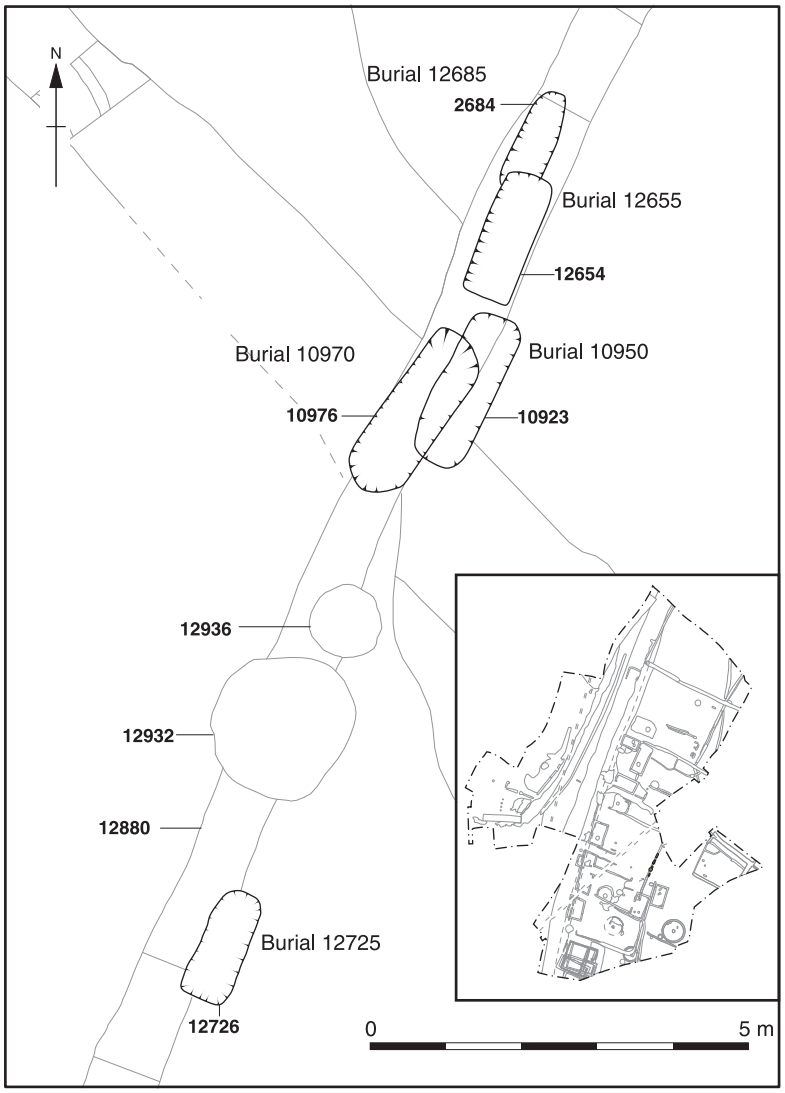


Fig. 4.40 Burial group 13045

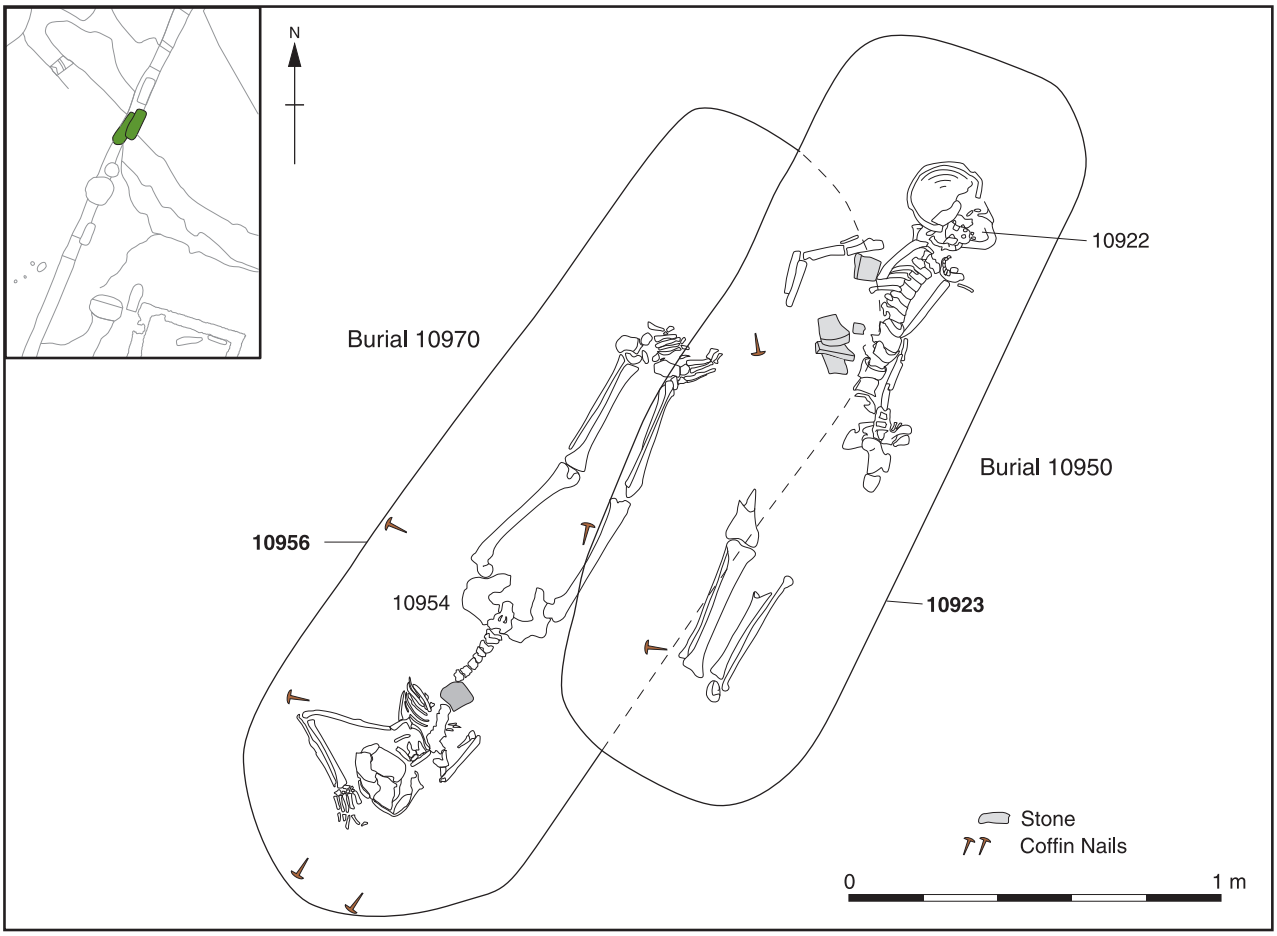


Fig. 4.41 Burials 10950 and 10970

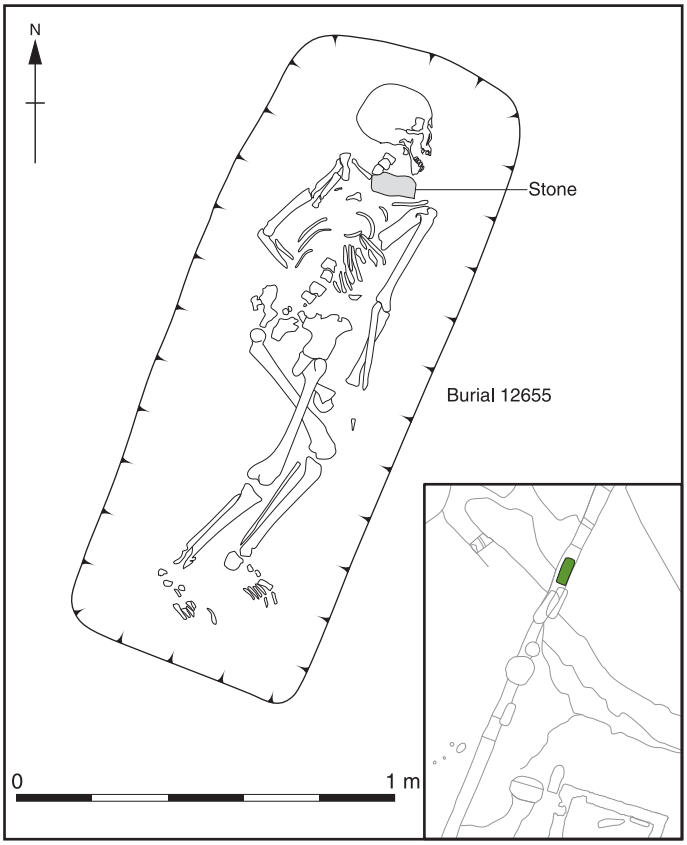


Fig. 4.42 Burial 12655

Plate 4.18 Burial 12655, facing north. Scale: 0.5 m

constructed on a parallel orientation. A surfaced trackway (12920) ran between the two buildings, giving access to the road.

Building 10820 (Fig. 4.44)

Building 10820 was a rectangular structure of two phases measuring 17.5 m WNW-ESE by 6.0 m NNE-SSW internally. While direct evidence for its date of construction is lacking, almost all finds from within the building date from the late 3rd to 4th century.

The position of building 10820 in relation to the road pavement frontage and surrounding boundaries differed from the general pattern seen across the site. It was set to the east of the former flanking ditch rather than adjacent to the gravel pavement like the buildings to the north and south. It is possible that this was purely to avoid the need for deeper foundations at the frontage if it was to be built within the line of the former ditch as seen with building 10800, but other explanations are also possible. The rear (east) wall of the primary phase of the building was aligned with the east wall of 10810 and also of 10830 to the south. As it appears that 10820 and 10810 were of almost identical dimensions, and assuming that the alignment of their east walls was a significant locational factor, 10820 would have to have been set back from the road frontage as this was further west than the length of the structure.

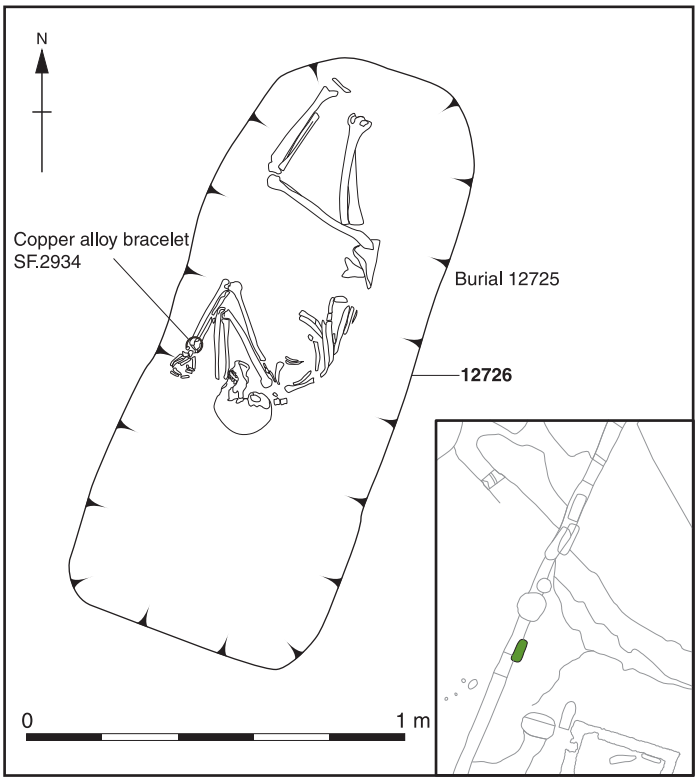


Fig. 4.43 Burial 12725

A single course of tightly packed and pitched limestone formed the foundation of main room of building 10820, cut into the contemporary colluvial soil level. The foundation survived around most of the building but the west wall had suffered greater modern truncation. Here the main entrance was defined by a large limestone threshold slab (12129), 0.80 m wide, set off-centre in the frontage. Larger slabs of limestone were used to form the internal and external faces of the surviving primary wall course with pitched stone infill of the core. Unusually the foundation was slightly narrower than the wall course at various points around the building.

In contrast to the foundation construction of the main body of the building, the walls of the later rear room were constructed without any pitched stone foundations. Laid directly onto the contemporary ground level, the surviving wall course was of similar appearance to that of the main building but used larger slabs requiring less core infill. An exterior entrance was identified in the south-west corner of the room, and a 1 m-wide access between the rooms was identifiable in the eastern wall of the main room. Like the front entrance this was offset from the central axis of the building to the south and was recognised on the basis of the smooth worn upper surfaces of the pitched stone in the foundation at this point.

The area between the road edge and the threshold slab of building 10820 was not investigated in detail beyond the uppermost (and latest) deposits. Certainly the roadside ditch (10680) and gravel pavement (13020) continued past the frontage and beneath the later levels. After the pavement had substantially silted over a large area of pitched limestone (12035) was set in front of the building. This extended the full width of the building with its southern edge neatly contained and defined by kerb stones aligned on the corresponding wall alignment. The northern limit was a little less well-defined and consisted of further slabs rather than pitched stone. The surface was 8 m by 6 m at its greatest extent and was solidly constructed throughout, although it did not extend fully to the roadside and former pavement edge. Instead a path of limestone slabs (12206) aligned on the main entrance extended from the larger surface to the roadside. Heavy wear was present on both the pitched limestone and slabs, which, combined with the evidence of patches of repair, indicate considerable use. Pottery from the silts that underlay the surface, exposed beyond its limits to the north and south, suggests that the surface was constructed no earlier than the 3rd century and probably towards the end of that century. Likewise a good sized pottery assemblage (266 sherds, 3.28 kg) recovered from the silt sealing the surface is dated to the 4th century but was slightly unusual in that it consisted almost entirely of grey wares and shell-tempered vessels and few finer items. Several coins recovered from the same level have the same date range as those recovered from the adjacent track between buildings 10820 and 10830, with all but one coin of

Constantine I (*c* AD 325–330) dating to the late 3rd century.

A further area of stone paving abutted the north wall of the building, extending towards building 10810 though stopping just short of it (12591). This surface consisted of flat-laid limestone and ironstone slabs, up to 0.25 m across. Subsequently, the paved surface was cut through by a short length of ditch (12589) that may have served to block access across the gap between the two buildings. The fill of the ditch contained 1 kg of pottery dated to the 4th century.

The internal arrangement of building 10820 differed considerably from that of 10810. The substantial slab floor seen in 10810 was not present here, although slab surfacing was utilised (12332). This was much sparser and was mostly concentrated to either side of the western room. The slabs

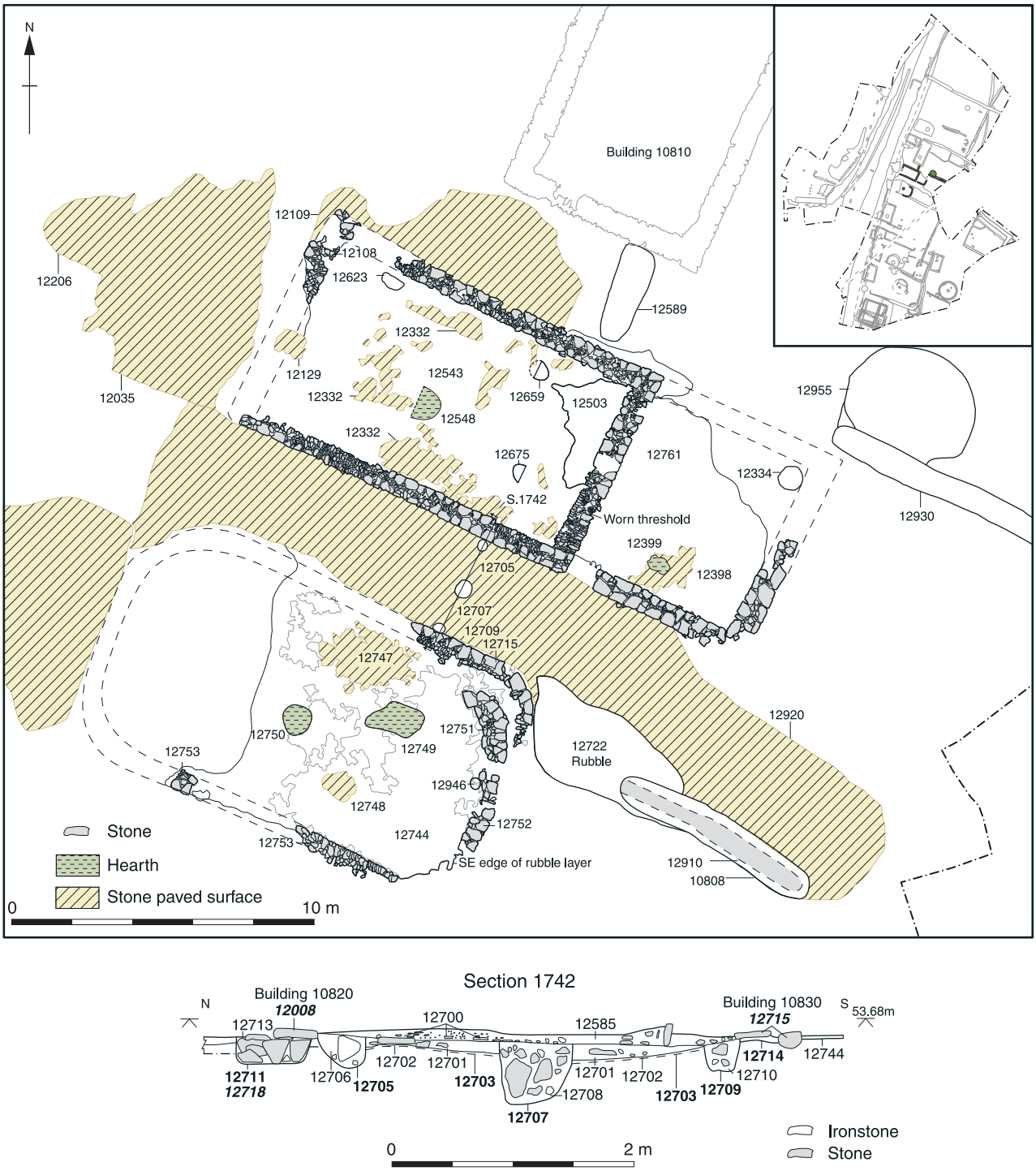


Fig. 4.44 Buildings 10820, 10830 and trackway 12920

were exceptionally worn and were set within the underlying colluvial silt soil horizon (12543) that had become reworked, clearly indicating that this was the occupation level. The silt layer overlay both features and the slabs in places, demonstrating that it had continued to be reworked throughout the life of the building. Finds from the colluvial layer included ten sherds of pottery dated to the 4th century, and seven coins, of which four belong to the 4th century with the latest dating to AD 364–378 (SF 2721). A possible floor surface of yellow clay (12503) also overlay the colluvial horizon at the eastern end of the building. This produced a further seven coins, all dating to the late 3rd or 4th century, the latest dating to AD 330–335 (SF 2537).

Three small pits or postholes (12623, 12659 and 12675) and a single hearth (12548) were scattered across the interior of the main room. The pits were clay filled and lacked finds. The hearth was much smaller than those within the buildings to its north, having a maximum diameter of 1 m and depth of 0.15 m, but was otherwise similar in being a shallow rounded hollow at floor level. It did, however, have a firm base of limestone and ironstone pieces set in clay. These were quite lightly scorched, suggesting only limited use or low-level heat. A small pottery assemblage (127 sherds, 993 g) from a clay deposit sealing the hearth dated from the 3rd to 4th centuries.

Within the east room the interior deposits were of a similar form. A rough limestone surface (12761) was concentrated around the edges of the room with a thin layer of reworked soil at the same level. The floor was much more uneven than within the main room and displayed much less surface wear. Part of this level was defined by an arrangement of larger limestone slabs (12398) approximately 1 m across. These had been burnt red and had an associated deposit of scorched silt and fired clay (12399) overlying them. Of particular interest were several fragments of coal/shale possibly indicating that this was a specialist workshop at the rear of the building. The northern portion of the room was more heavily truncated as mentioned above and no surface level deposits were present here. A single surviving roughly circular pit (12334) was identified in the north-east corner of the room. It was well defined, being steep sided and flat based. Its fill consisted of silt clearly derived from the surrounding colluvial soil while several larger limestone blocks in the upper part may have been floor stones that had sunk into the soft fill. The small amount of pottery (13 sherds, 234 g) and a single imitation coin (SF 2307) of Constantius II dated *c* AD 330–348 provide a clear mid 4th-century date for this pit. The pit also had several pieces of coal/shale included within the fill, either indicating that this material was present throughout the rear room or that it was deliberately incorporated into the fill. More unusual was the variety of metal finds also present within this deposit, including an iron key (SF 2236, cat. no. 381) and a decorative copper alloy plate (SF 2308, cat. no. 110).

It is notable that with the exception of a single antoninianus of Tetricus II dated *c* AD 270–286 all of the coins located within the rear room are Constantinian, with the earliest dated AD 302–325. This probably indicates that the rear room was added no earlier than the second quarter of the 4th century.

Trackway 12920 (Fig. 4.44 section 1742)

The 3.5 m-wide gap between buildings 10820 and 10830 was utilised as a trackway giving access to the road to the west. The track had a neatly constructed surface of sorted river gravel (12702) set into a shallow hollow. It extended 27 m from the roadside frontage between the buildings before curving slightly to the south-east at the rear of building 10830. Behind the building the southern side of the surface was partly flanked by a short length of ditch (12910) that was replaced with a drystone wall (10808) after it had infilled through silting. The ditch was only a short segment that left a 4 m gap between its western end and the rear of building 10830 whilst the existence of a rubble spread (12722) suggests that the wall may have closed this gap. Both of these features extended to the east as far as the end of the surfaced trackway, 12 m behind the rear (east) wall of building 10830. On its northern side the trackway was apparently accessible from the rear of building 10820, which extended further back than building 10830.

Pottery recovered from the silt deposits (10806 and 12701) that directly sealed the gravel surface could only be broadly dated to the late 2nd century or later. The gravel track was subsequently blocked by a row of three posts (12985) that cut through these silt deposits. Two postholes up to 0.35 m diameter and 0.25 m deep (12705 and 12709) were positioned flush against the wall faces of buildings 10820 and 10830 respectively. A larger posthole (12707), 0.60 m in diameter and 0.50 m deep, was positioned between these in the centre of the track. This arrangement has the appearance of a gateway that provided a gap of 1.30 m to either side of the central post. However, it should be noted that most of this area remained obscured by later deposits and it is possible that the post row was part of a larger structure not uncovered.

The trackway and post row were subsequently sealed by limestone rubble layers possibly associated with the destruction of building 10820 and/or building 10830 (12700 and 12585). An assemblage of 1.4 kg of pottery dated to the late 3rd to 4th century was recovered from these layers.

Building 10830 (Fig. 4.44; Pl. 4.19)

Building 10830 was rectangular in form with unusual rounded corners (see below), measuring at least 10.5 m WNW-ESE by 7 m NNE-SSW internally; its full extent is uncertain owing to truncation at its western end. The building was constructed

over ditch 12895, which was backfilled at some point in the late 2nd century or later (see Phase 4 above). While the exact date of construction of the building is unclear, pottery from within it suggests that occupation extended into the 4th century.

The walls of the building were constructed of limestone, with no more than a single course remaining. The presence of two parallel walls at the north-east corner of the building (12715 and 12751) suggests that this part of the structure was rebuilt at some point, although there were no stratigraphic indications as to which of the walls was earlier. It is notable, however, that wall 12715 shared a similar building technique with the extant eastern and southern walls (12752 and 12753), with flat slabs at the outer face of the wall, pitched slabs at the inner face, and a rubble core. Wall 12751 differed in having flat blocks on both faces and a rubble core. The unusual curved corners of this building can be readily paralleled with a structure revealed in earlier excavations just to the south, which was also dated to the late Roman period (Meadows 1992, 84, fig. 4; see discussion, Chapter 7).

Across most of the interior of the building, the natural colluvium was overlain by a thin layer of sandy silt that probably represents an occupation horizon (12744/12945). This produced significant quantities of finds, including 5 kg of 4th-century pottery, 1.7 kg of animal bone, and various iron objects including a knife blade and 15 nails. Neonate human cranial fragments were also recovered, which may derive from a truncated or unrecognised burial within the building. Apparently contemporary with this layer were two hearths. Hearth 12749 was irregular in plan, 0.14 m deep, with a fill of ashy sand and burnt stone; hearth 12750 (not excavated) was sub-circular in plan. Also apparently contemporary with layer 12744 were two areas paved with flat limestone slabs, up to 0.45 m long (12747 and 12748).

A discrete area of pitched limestone paving lay immediately west of the building, apparently overlying the earlier gravel roadside pavement. This was not excavated, but is analogous to the stone paving replacing the gravel pavement seen at the roadside frontage of other Phase 5 buildings such as 10820 and 10840.

The destruction of building 10830 was represented by a deposit of limestone rubble overlying the occupation layer (12676). Finds included 850 g of late 4th- century pottery, along with an iron chisel (SF 2776, cat. no. 3) and a fragment from a Millstone Grit rotary quern (SF 3189). The rubble was in turn overlain by a post-destruction layer of sandy silt (12372), which contained late 3rd- to 4th-century pottery and four residual or curated coins dating to the later 3rd century (SF 2326, 2475, 2527 and 2701).

Plate 4.19 Building 10830, facing west. Scale: 2 m

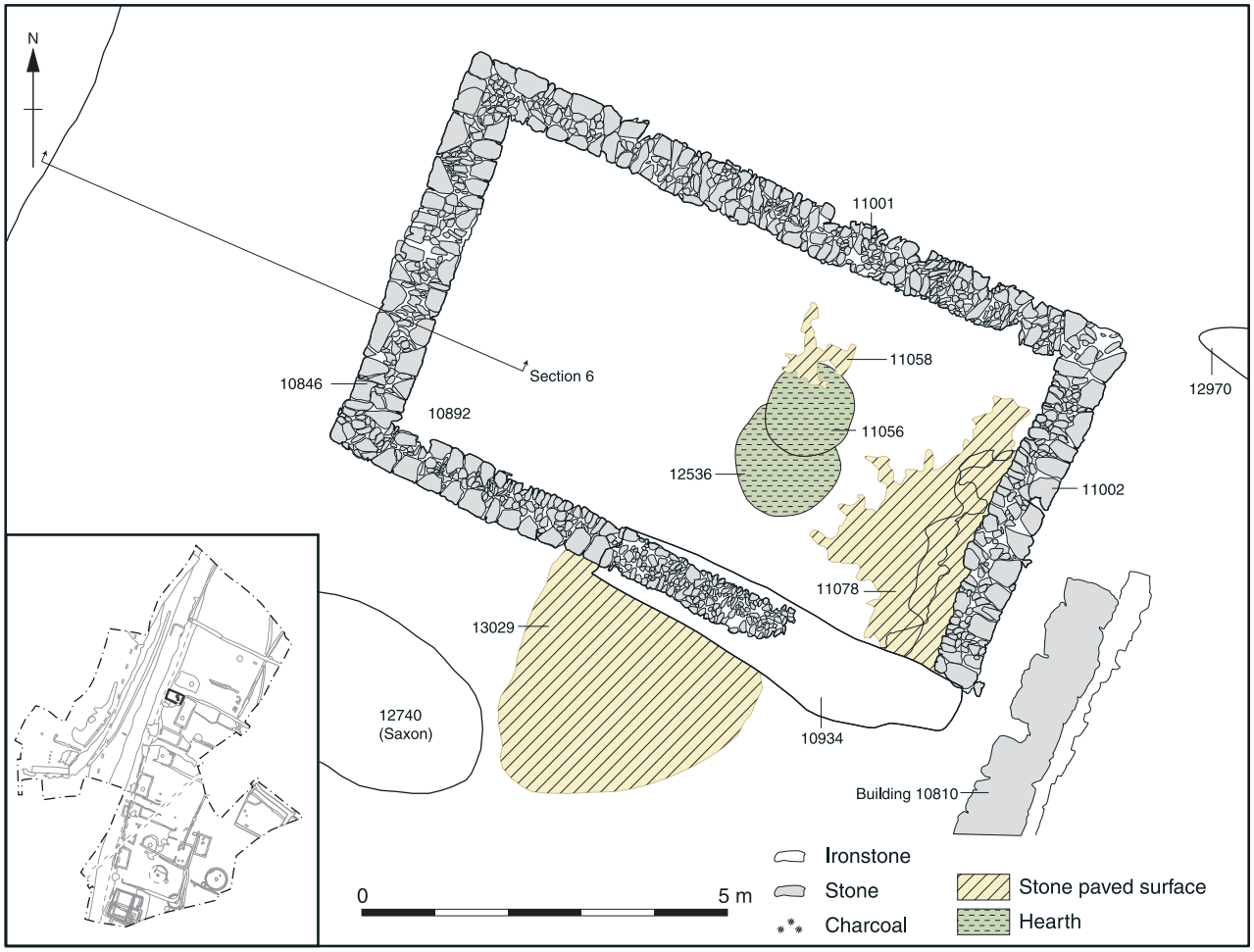
Plot F (Fig. 4.11)

The ditches demarcating the boundary of Plot F were recut during this phase. Building 10810 continued in use, and a smaller building 10800 was constructed alongside it.

Enclosure ditches (Fig. 4.32)

At the southern boundary of the plot, ditch 12930 recut the earlier boundary represented by ditch 12940, and also cut the southern edge of the now backfilled waterhole 12955. The ditch was up to 0.60 m deep, with a U-shaped profile. Its lower fill produced a coin dating to AD 270–274 (SF 1346) and sherds of late 3rd- to 4th-century pottery.

At the northern boundary of the plot, ditch 12970 recut earlier ditch 12965 for most of length. The western terminus of 12970 seems to have respected buildings 10800 and 10810. At its eastern end, the ditch continued beyond the limit of excavation. It can be traced on the geophysical plot, however, where it meets up with a north-south running rear



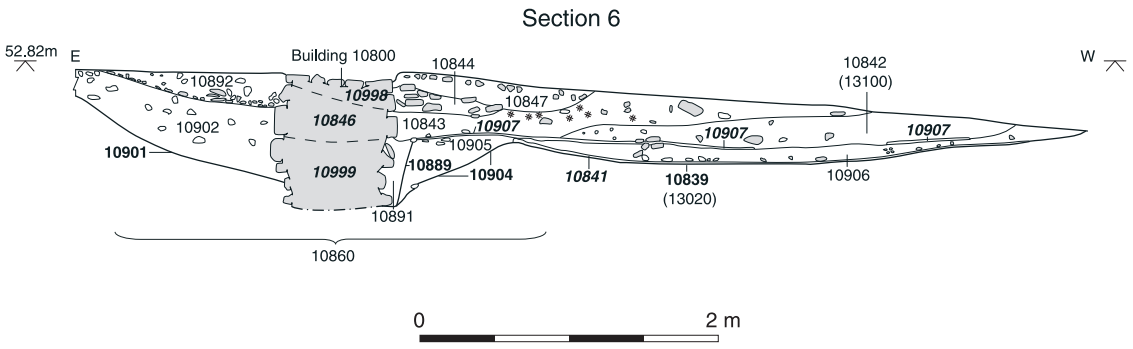


Fig. 4.45 Building 10800

boundary ditch which probably continues as ditch 8294 in Area G (see below). Ditch 12970 was up to 0.45 m deep, with a U-shaped profile. The modest amount of pottery recovered indicates that it was infilled during the late 3rd to 4th century.

Two small curvilinear enclosures (collectively 12950) defined by ditches up to 0.40 m deep were attached to the southern side of ditch 12970. The western enclosure ran up to the northern end of building 10810. If this part of the building was used as a byre (see above), then it is possible that the enclosure was used to pen livestock. Potentially contemporary features within the western enclosure included an irregular pit (10823), 0.20 m deep, which contained 490 g of 4th-century pottery. The ditch of the eastern enclosure produced a coin of AD 341–348 (SF 986) from the surface of its fill, and was cut by bowl-shaped pit 10725 (0.30 m deep), which contained a significant amount of domestic debris including late 3rd- to 4th-century pottery.

Building 10800 (Fig. 4.45; Pls 4.10 and 4.20)

Building 10800 was a rectangular structure measuring 8.0 m WNW-ESE by 4.5 m NNE-SSW internally. It was located at the roadside frontage of the plot, and was cut into former roadside ditch 10680. Its position – closely adjacent to the larger building 10810 – and the paucity of associated finds could suggest that it served an ancillary role of some kind. Chronologically, the building could have been constructed in Phase 4, but the few datable finds relate to occupation during the late 3rd to 4th centuries.

The west wall of the building (10846) was built upon substantial foundations set in a trench cut into the silting fill and to the base of earlier roadside ditch 10680 (Pl. 4.20). This was to ensure that the foundations were built directly onto the more stable ironstone natural. The other foundations were cut through the colluvial soil layer (generally 0.25 m to 0.30 m thick) to encounter the underlying ironstone. Roughly hewn slab-like pieces of limestone were used for the construction of the frontage foundation and were set pitched in alternate courses and directions to form a herringbone style construction. This was three courses deep along the outer (west) side of the frontage bringing the foundation and primary wall course to the level of gravel pavement 13020 or, more likely, the re-laid surface 10907. It is possible that the earlier surface may have silted over by this time and that 10907 was laid at a similar time as the construction of the building. As the building was built upslope of the terraced pavement the levels between the frontage interior and exterior differed considerably. The internal side of the foundation was built up higher to five courses of pitched stone before a single horizontal course of limestone slabs defined the start of the wall and, presumably, the floor level. A layer of limestone chips and silty colluvial soil (10892) levelled the

Plate 4.20 Building 10800, wall 10846, facing west. Scale: 2 m

internal slope butting against the surviving wall course. On the exterior, three or four horizontal wall courses survived rising up to 0.45 m above the contemporary pavement level. The core of the wall was packed with smaller ironstone pieces.

The western frontage wall courses were continuous, suggesting that there was no direct access from the building onto the road. There was no clearly defined access point elsewhere around the wall line, but access may have been in the south wall, removed by robbing (10934). A possible limestone surface (13029) lay against the mid point of the outer face of the south wall and probably marks the entrance. It would also have provided direct access to the centre of the 'courtyard' area framed by buildings 10800, 10810 and 10820.

Elsewhere the foundations of the building were slightly less substantial with the north and south walls constructed upon two courses of pitched foundation. Although ironstone was used in the primary course the upper level was exclusively of limestone. Generally, larger slabs were used for the internal pitched face course than within the foundation construction and these were also clearly of a neater, more careful build. This indicates that these were actually intended as the primary wall course proper rather than simply being an exposed foundation level. This combination is also clear in the east wall. Here a single course of pitched limestone slabs (12516) formed the foundation and was distinguished from the wall course by a distinctive silty sand deposit (12517). This acted to help secure the subsequent wall courses (12518) in place. The external face consisted of two horizontal courses of limestone with the internal face built up in a pitched course with smaller limestone as core infill. The pitched course was clearly at the internal floor level as shown by the presence of surface 11078 (see below) and had a single horizontally laid slab at either end at the internal wall angles.

Although the edges of the foundation trenches were generally difficult or impossible to distinguish across the site in the homogenous brown soils, the inner side of the rear wall trench did have an unusual cut edge (12519). This was not tight against the foundation as would be expected but rather a broad shallow hollow up to 0.70 m wide along the full length of the inner wall face. This also penetrated the existing colluvial soil to the level of the underlying ironstone and the base of the foundation. Its precise function is unclear but it was backfilled with limestone and ironstone rubble and roughly coursed limestone slabs (12520) up against the foundation and wall face. This could have been a post-construction attempt to support the wall that showed signs of bowing inward. Indeed a small group of late 3rd- to 4th-century pottery (14 sherds, 378 g) was recovered from the backfill of 12519 suggesting a relatively late date, although intrusion or mixing of finds from the floor level cannot be ruled out.

No dating evidence for the wall itself was recovered, although as the building was cut into the former roadside ditch (10680) it can have been constructed no earlier than the late 2nd/early 3rd century. The construction cut for the western wall of the building also appeared to cut through an external stone surface (10907) which overlay the orange sand layer (13100) sealing the roadside gravel pavement (13020). This stone surface consisted of limestone and ironstone rubble pieces up to 0.15 m diameter, and extended for 3.8 m to the west of the building. A silting deposit (10843) which built up over this stone surface and up against the west wall of the building – prior to the destruction of the building as represented by rubble layer 10844 – produced late 3rd- to 4th-century pottery and a coin of AD 312–316 (SF 1340).

Features and deposits within the building clearly relating to its use were limited. The backfill of the internal trench was partly overlain by a patchy limestone slab floor surface (11078). This was only 2 m by 4 m at its maximum extent and present only at the rear of the building. However, the slabs had very worn upper surfaces indicating prolonged and heavy use. A thin layer of silt (11004) sealed this floor against the rear wall and produced a small assemblage of pottery (15 sherds 194 g) dating to the late 3rd to 4th centuries.

A sequence of hearths, or rather ash deposits indicating the location of hearths (11056 and 12536), was positioned slightly to the rear of the building. Ash deposit 12536 was not excavated but was circular in plan, 1.5 m across and of the same appearance as 11057 that infilled a shallow circular hearth 11056. These were of the same character as other simple ground level hearths encountered within the adjacent buildings 10810 and 12900. The shallow 'cut' depth of the hearths are most likely to have resulted from the regular clearing of ash deposits from the same location rather than representing any real attempt at purposeful hearth construction. The only slight hint of the presence of a constructed element was an area of small limestone slabs (11058) around the northern edge of 11056. These do not appear to have been a surviving part of a larger floor surface, the general absence of which across the interior area seems to be genuine. It is most likely that 11058 formed a firm surface to be used in conjunction with the hearth, perhaps as a heat retentive base adjacent to the fire. Certainly the presence of scorched slabs where the ash from the hearth overlapped the surface suggest a direct association between them. A similar, albeit much better constructed, example of this is clearly seen with the central hearth of building 10870. A small assemblage of 3rd- to 4th-century pottery was recovered from the fill (11057) of hearth 11056.

A striking feature of this building and the associated internal deposits is the general lack of finds. Although superficially the building has the appearance of an average domestic dwelling with a central hearth area and stone surfacing, its relatively small

size does suggest it was probably not a principal residential structure. This appears to be confirmed by the small finds assemblages. Only 141 sherds (1907 g) of pottery and a negligible 20 fragments (108 g) of animal bone were recovered from all contexts associated with the building (excluding the robber trench infill). No other finds were present. This conspicuous absence is not satisfactorily explained by truncation, as the building was no more affected by this than other parts of the site. If the building was not primarily a dwelling it may have been for storage, or perhaps a shop as it did open out onto a courtyard adjacent to the main road.

Building 10810 (Fig. 4.46; Pl. 4.10)

Continuation of the occupation of building 10810 into Phase 5 is shown by material recovered from a dark grey-brown silt layer (11007) overlying the earlier limestone floor 11008. A pottery assemblage of 226 sherds (5.0 kg) indicates that this deposit accumulated in the 4th century, and was dominated by coarse shell-tempered jars and Nene Valley grey ware jars and bowls. The silt layer also produced 76% (3.5 kg) of all the animal bone (4.6 kg) associated with the building, an iron key with copper alloy chain (SF 1411, cat. no. 387), part of a bridle bit (SF 1413, cat. no. 68), and 20 hobnails (SF 1414) – more than any other building on site. A similar silt layer (11195) sealing surface 11215 to the south of hearth 11036 only produced a negligible amount of pottery although this was consistent with a 3rd- to 4th-century date range. Further confirmation of the date range was provided by the recovery of five coins from these silt layers. These were typical of the coin assemblage as a whole from the site (see King, Chapter 5) comprising late 3rd- and first half of the 4th-century issues (AD 270–340). A few personal items were also recovered; fragments from at least four bone pins and a single bronze pin suggest domestic occupation. The iron key (SF 1411) on a bronze chain also indicates a security requirement. An iron jointed mouth bar from a bridle bit probably indicates no more than the storage of harness and related equipment.

A surface of large limestone slabs (11148) and pitched limestone and ironstone (11069 and 11077; not on plan) overlay deposit 11007, clearly demonstrating that the building remained in use after the accumulation of the silt layers. The large slabs incorporated in this surface were not as worn as those of the earlier surface 11008, however. Surface 11148 had a slightly unusual hearth or oven (11147) built into its northern edge (Pl. 4.21). This was constructed from tegulae with a base tile (11198) set face up below the floor level. A second tegula (11197) was placed directly over this face down so that its flanges rested upon those of the lower tile. The surface of the upper tile was at floor level. Further tegulae (11199) were used to enclose three

Plate 4.21 Building 10810, tile hearth 11147 facing south. Scale: 0.2 m

sides of this construction while the limestone of the surrounding floor formed the southern side. The space between the two flat tegulae was infilled with fine clay silt (11196) that had been scorched red where it was in contact with the underside of the upper tile. Clearly this deposit was an integral part of the feature from its construction rather than a silt accumulation formed in the void between the tiles after it had gone out of use. It was never intended to create an air cavity between the tiles. There were clear burning and soot marks on the upper surface of tile 11197 whilst the buried base tile 11198 displayed no sign of burning. There were no other deposits associated with the use of this hearth. The

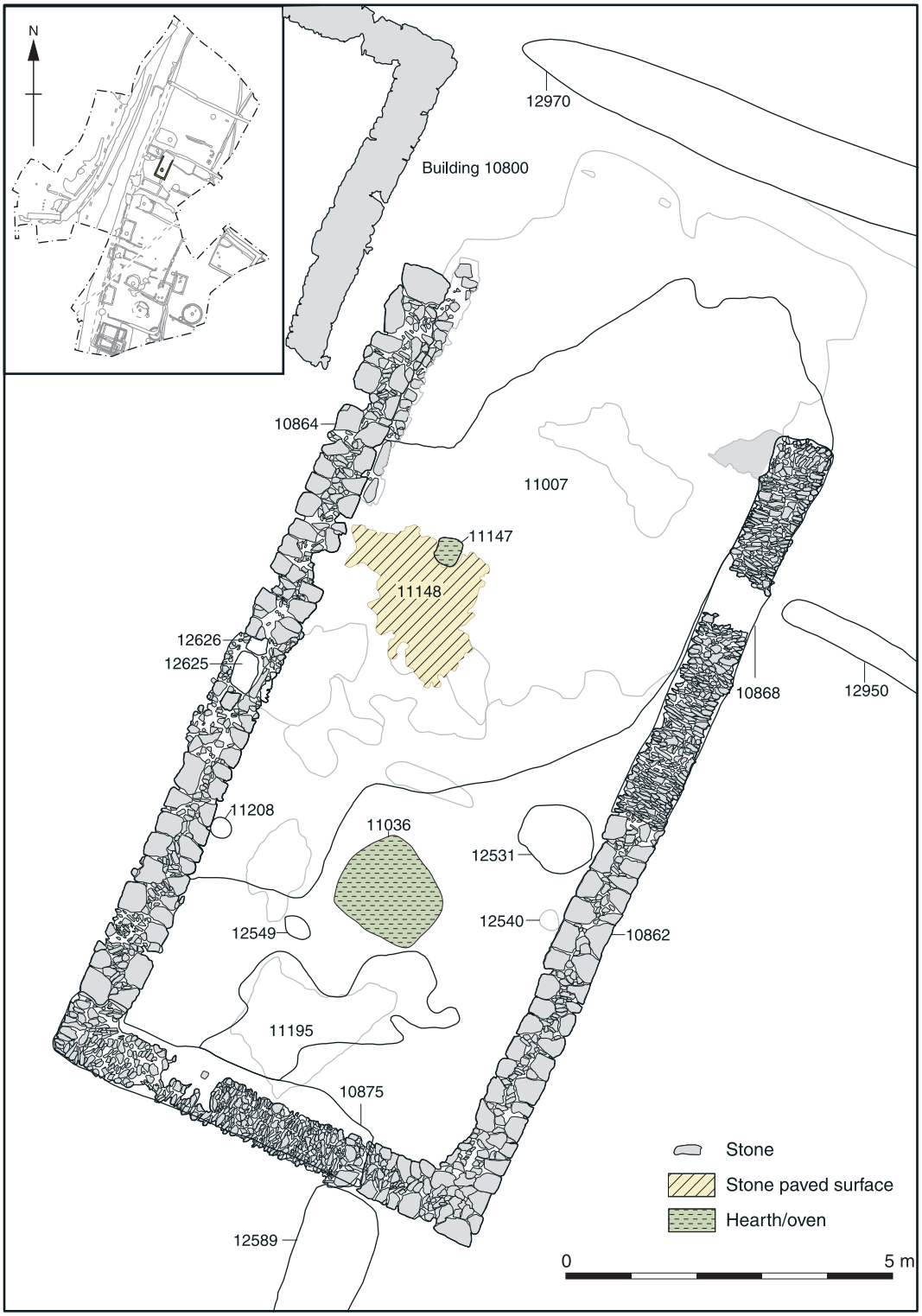


Fig. 4.46 Building 10810 (Phase 5)

reasons for this are probably twofold; first it appears that its surroundings were kept very clean as no traces of ash rake out were found between the stones of the surrounding floor surface. Secondly, the feature lay at the very base of the modern ploughsoil, so any ash or charcoal deposits associated with its final use would have been removed.

The way in which the tile setting functioned is slightly problematic. It is unusual primarily because of the use of the two tiles to create the base; this deliberate feature was presumably related to its function, as a single tile would normally have been sufficient to create a firm and level base. Therefore it seems unlikely that this was merely an open hearth and it is probable that this was in fact the basal remains of an enclosed oven. If the three sides constructed of tegulae were originally of their full dimensions (width) and topped by a similar complete tegula, these would have created a small, enclosed void. The southern side bounded by the floor would have provided access and the limestone here was scorched along its edge in contact with the tiles. A small fire could have heated the chamber effectively and the thickened base could have functioned as a heat sink to maintain a cooking temperature once the fire had been reduced to embers and a door was placed across the access. To be more effective such an oven would also have required additional insulation around its exterior although there was no evidence of this. It is also entirely possible that this was a multi-functional oven with its roof (if not insulated) being able to be used for processes such as small-scale drying.

One further feature that can be specifically related to the later periods of use of the building is pit 12531, although its stratigraphic relationship to silt layer 11007 and the later stone surfaces is unclear. The pit was relatively regular at the probable contemporary surface level, being circular in plan and 1.20 m across, but upon excavation it had a very uneven profile and a maximum depth of 0.40 m at its centre. Its function remains unclear although its position along the line of the partition and against the inside of the east wall may have been significant. Its primary fill was a sterile silt suggesting that it had remained open for a while, though without accumulating cultural material. The upper fill was of limestone blocks and charcoal levelling the central portion of the pit. This also contained few finds; only 13 sherds (642 g) of pottery and 7 fragments (76 g) of animal bone, all of sheep/goat or medium sized mammals, were recovered. The pottery was of 4th-century date, placing the final infilling of this feature in the later period of the use of the building.

In common with several of the buildings, parts of the walls were removed to foundation level at the end of the life of the structure (robber trenches 10868 and 10875). The latest silting and localised rubble patches across the interior only produced small assemblages of 3rd- and 4th-century pottery. Similarly the backfill of the robber trenches also produced a small assemblage of 3rd- and 4th-century pottery, probably largely comprising residual material.

Plot G (Fig. 4.11)

Plot G was bounded to the south by ditch 12970 (see above), to the east by ditch 11270 (see below), and to the north by ditch 10835/10845/10855. A single rectangular building (12900) lay at the roadside frontage of the plot. To the rear of the plot, the interment of burials within group 13050 continued into this phase.

Boundary ditches (Fig. 4.32)

The northern boundary of the plot was initially demarcated by ditch 10855, which appears to have been aligned on the north wall of building 12900. The ditch was recut twice (10835 and 10845), although there was no stratigraphic relationship between these recuts. The various phases of this northern boundary were up to 0.25 m deep, with silty fills containing moderate amounts of pottery and bone, mainly concentrated towards the eastern end. A late date for the boundary is indicated by late 3rd- to 4th-century pottery recovered from ditch 10855.

Pit 10885 (Fig. 4.47)

Pit 10885 cut the eastern terminus of ditch 10855. This was an oval feature, 0.95 m deep, with vertical sides and a flat base and could perhaps originally have been used as a storage pit. It contained a series of sterile silty fills, probably deposited through natural processes, interleaved with two dumped layers containing significant numbers of finds (10595 and 10597). These contained 1 kg of animal bone, a worked bone hairpin (SF 1024) and an iron nail, but notably no pottery.

Building 12900 (Fig. 4.48)

Building 12900 was positioned on the pavement frontage but east of the former roadside ditch 10680. The structural remains of this building were very limited, possibly reflecting a different style or method of construction from that seen in the majority of buildings to the south; in fact the footprint of building 12900 was largely defined by the internal occupation deposits. These revealed a comparatively large structure 9 m wide at the pavement frontage and extending back nearly 13 m, giving an internal area in excess of 100 m^2 and making this structure second in size only to building 11370.

Of the building shell only a small angle of wall foundation (12956) remained at the south-west corner. This shared the construction traits of the buildings to the south, being set in a shallow foundation trench and consisting of a single course of pitched limestone and ironstone, although this was conspicuously narrow at only 0.6 m wide. Three horizontally-laid small limestone slabs also

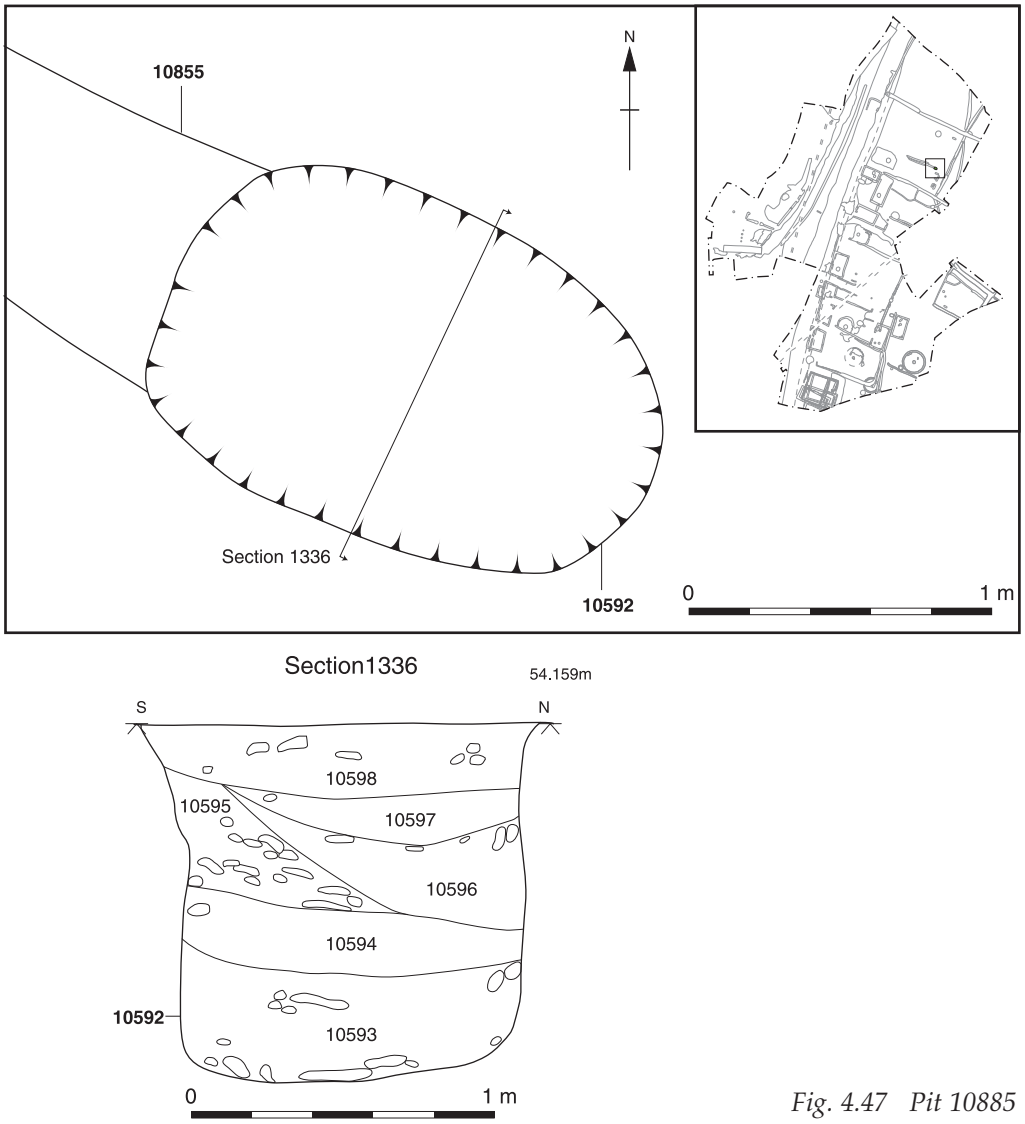


Fig. 4.47 Pit 10885

clearly formed part of the south side wall although these appeared to be laid directly into a very shallow foundation trench or the contemporary ground surface rather than on pitched stones as for the frontage. The full detail of this wall was mostly obscured by an overlying rubble layer (13028), which is most likely to have derived from the collapse or removal of the upstanding wall here. Despite this the pitched and laid stone within this context did define lengths of wall approximately 3.0 m and 2.5 m long at the corner. The absence of similar evidence for the remainder of the structure is not satisfactorily explained by differential truncation levels as the physical level of deposit survival was consistent across the building.

The apparent absence of walls could be explained if the construction of the building differed significantly from that seen elsewhere. Within the building there was a distinct arrangement of four postholes (12973, 13021, 13023 and 13026). Postholes 12973 and 13021 were placed 3.25 m apart, a similar distance either side of the axis of the building and just within the line of the building frontage. Postholes 13023 and 13026 were similarly arranged and spaced (3.85 m) in respect to each other but were not so precisely equidistant from the central axis of the building. They were positioned some 1.75 m within the line of the rear wall of the building as defined by rubble spreads. Each of the postholes had limestone packing surrounding posts with diameters of 0.20 m. Although the building was not excavated in detail the postholes showed clearly at the investigated level and it is reasonable to believe that no other significant additions to the post plan existed. Despite the lack of intervening posts it is likely that the two paired post sets did form a significant part of the structure, especially at the frontage where 12973 and 13021 may have framed a large entrance. If so, however, this would have been over 3.0 m wide, with implications for the use and function of the structure. This is discussed further below.

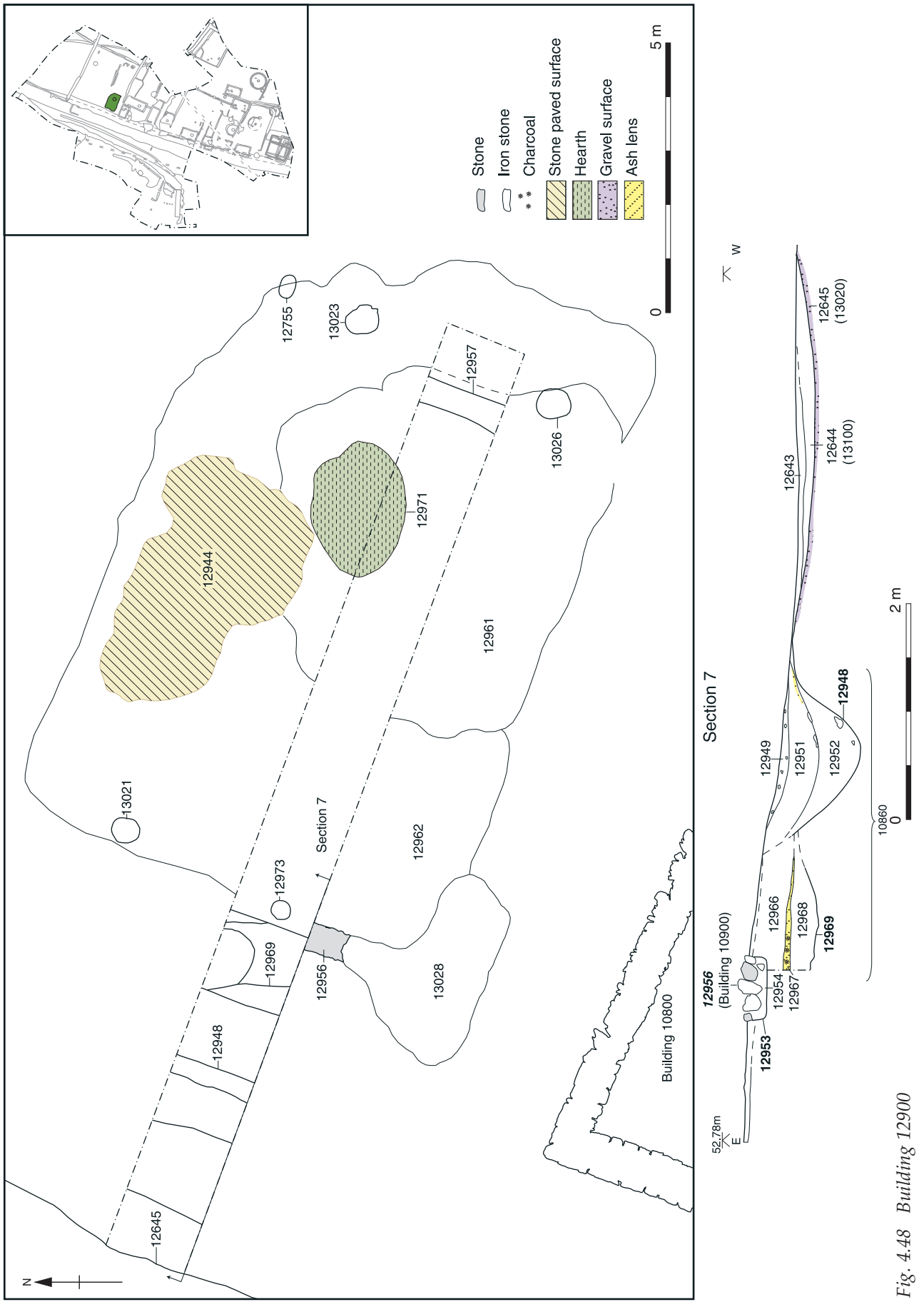


Fig. 4.48 Building 12900

One metre west of the alignment of postholes 13023 and 13026 at the eastern end of the building was a short ditch-like feature (12957). This was cut through the colluvial soil horizon overlaid by the deposits within the building and was 0.30 m deep with steeply sloping sides and a flat base. It seems unlikely that this was a beamslot forming part of a structure with the posts. The occupation horizons within the building continued east the line of the postholes and possible slot 12957, regardless of any structure that may have been formed by these features. It is more likely that 12957 was simply an internal drain or at least a barrier to water running into the building. The ground falls 0.40 m from the rear of the building to the frontage and continues on this gradient to the front of the building (see Fig. 4.48, Section 7). Surface water may have been able to run from the rear of the structure into feature 12957, especially if the east wall was of a construction not as solid as seen elsewhere on the site. However, the ditch did not extend beyond the walls to either side to expel water as would be expected if it was indeed a drain. It may have served as a simple trap for water rather than a proper drain.

The internal deposits that defined the outline of the building were largely derived from the underlying silty colluvial soil level (12964). This had been trampled and reworked into a thin greyish layer (12961 and 12962) with occasional yellow clay and ash lenses across the central part of the building. The ash inclusions probably derived from a large roughly circular hearth (12971) placed on the central axis of the building slightly towards the east end of the building, a position comparable to that of the similar hearths within building 10800. The hearth was no more than a shallow scoop into the contemporary ground level, undoubtedly created through continual use and cleaning rather than design, and was infilled with fine ash. Similar simple hearths were also the main heat source within buildings 10800, 10810 and 10830. The only constructed surface that was evident was an area of limestone slabs 3 m by 5 m in extent (12944). This was mostly a rough limestone rubble surface but it did have an arrangement of larger worn slabs at its western edge. The clustering of the slabs in one part may indicate that this was an area of most intense use within the building, such as near or at an entrance, or that an area of hardstanding was required to support an object or fixture within the building. Either way it is clear that most of the interior of the building area had no other paved surface and that the floor consisted of the soil surface or possibly some organic covering that may have contributed to the reworking and discoloration of the colluvial silt soil.

The majority of the dating evidence for the building derives from the occupation deposits or those that accumulated after occupation had ceased. No finds were recovered from the wall or postholes to suggest a construction date. An assemblage of 399 sherds (5580 g) of pottery was recovered from all deposits within the building. The sherds had an average weight of 14 g which, considering the nature of the floor, suggests good preservation and that they probably reflect a true date for the building rather than being residual in nature. The sherds recovered from the main internal layer (12961/12962) predominately date to the late 3rd and 4th century. A thin silty deposit (12943) sealing the limestone surface produced 4th-century material. Three worn late 3rd-century coins (SF 951, 1013 and 1374) recovered from the machined surface of the building (finds reference 10511) are also consistent with the late 3rd- to 4th-century date range. Closer dating, particularly for the end of the use of The only other internal feature related to the building was a burial (12755) of a full term neonate placed in a shallow scoop north of posthole 13023. The skull was just visible at the point where the occupation silts had been largely truncated down to the natural or undisturbed colluvial silt level. As a result it was not clear if the burial could be considered as a foundation offering at the point of construction or marked the termination of the use of the buildings. Interestingly, of the four sherds present in the backfill one (15 g) was in an externally burnished sandy fabric that has more in common with Saxon pottery than Romano-British. It could be that this burial therefore marks the termination of use in the post-Roman period, although this is perhaps unlikely given the character of the late 3rd- and 4th-century Roman pottery assemblage, which seems to lack very late material.

Function, use and appearance

As discussed above building 12900 appears to have been constructed in a different manner to the majority of the buildings to the south. Some stone wall elements existed and it is likely that the outer wall was largely of a stone wall construction, albeit on very shallow or non-existent foundations. However, the evidence of a partial post structure is unusual for the site. In spite of detailed excavation and good preservation within the majority of the structures, there is little evidence for the use of posts either as a main element of the building or as a support for roofs, although posts may have been used in this way in the larger buildings.. The positioning of the western post pair central to the building and on the external wall line also shows that these were an integral part of the western end of the building, supported by the fact that the stone foundation (12956) ending before reaching post 12973. Whether this wall arrangement was repeated the other side of posthole 13021 or not remains unclear but seems a reasonable assumption. If the posts defined the entrance to the building, however, its width of over 3 m suggests that this was more barn-like than domestic. Alternatively the limestone surface in the northern part of the building could indicate an entrance opening out into the enclosure to the north. If this was the case it might suggest

that although the larger enclosure was subdivided at this time this represented nothing more than an internal rearrangement rather than a fundamental reorganisation of plot layouts at this time.

The quantity and relatively good preservation of the pottery within the building make it unlikely that this was a barn structure or one that held livestock. Its street frontage location also makes such functions unlikely (though not impossible). The uniformity of the thin reworked silt layer encountered within the building, the presence of the hearth and the pottery assemblage rather point to this being a domestic structure. In this case the interpretation of the construction of the west facade of the building may need to reconsidered.

Burial group 13050 (Fig. 4.25)

The practise of burial alongside the rear boundary ditch of the plot continued into Phase 5, with at least two inhumation burials belonging to this phase. One of these burials was decapitated, a rite most common during the 4th century.

Burial 10780 (Fig. 4.27) contained the remains of a male aged 20–25 years (Sk 10794). The grave was aligned SW-NE, and measured 2.54 m long, 0.72 m wide and 0.25 m deep. The body was supine, with the head to the south-west. The arms were crossed over the pelvis. Thirteen iron nails found around the edge of the grave cut indicate the presence of a wooden coffin. Three iron keys (SF 1317–19, cat. nos 375-6, 380) had been placed over the throat. At least 170 hobnails were found in two tight clusters at the base of the grave cut, to the right of the pelvis, showing the location of a pair of shoes. The backfill of the grave also produced 13 sherds of pottery dated to the late 3rd to 4th century, and small fragments of animal bone.

Burial 10965 (Fig. 4.27; Pl. 4.12) contained the remains of a male aged over 40 years (Sk 10938). The grave was aligned SSW-NNE, and measured 1.9 m long, 0.60 m wide and 0.24 m deep and cut Phase 4 burial 10960. The decapitated body had been laid on its right side, facing east, with the upper part of the body at the SSW end of the grave and the legs slightly flexed. The head had been placed in front of the pelvis. A cluster of 21 hobnails located close to the feet indicated the presence of shoes. The backfill of the grave contained four sherds of pottery dated to the mid 2nd century onwards and small fragments of animal bone. A radiocarbon determination of cal AD 250–395 (UB-5216: 1719 ± 20 BP) was obtained from the skeleton.

The northern periphery of the settlement (Fig. 4.32)

An extensive rectilinear enclosure system lay north of the settlement core. A stratigraphically early element of this system was ditch 10980/11170/8288, recutting earlier boundary ditch 10770/11150. Dating evidence from this feature comprised sherds of 4th-century pottery from a middle fill, and a coin of AD 268–270 (SF 1409) from an upper fill. The southern end of this ditch seems to have been maintained throughout Phase 5, being recut as ditch 11130/11270. A notably late coin of AD 364–378 (SF 955) was recovered from the surface of ditch 11130. In contrast, the northern part of ditch 10980/11170/8288 appears to have gone out of use during the course of the phase. It was cut by a large square enclosure measuring 69 m NNE-SSW by 69 m WNW-ESE, formed by ditches 8042, 8294, 10670 and 10690. The ditches of this enclosure were generally 0.70–1.0 m deep, but along the western road frontage the ditch was only 0.40 m deep. A recut (10700) was present at the western end of the southern enclosure ditch. Ceramic evidence indicates that the ditches of the square enclosure were infilled during the 4th century, the evidence being particularly clear from ditches 8042 and 8294 where 4th-century pottery was recovered from lower fills. In addition, a coin of *c* AD 317–330 (SF 670) was recovered from the lower fill of ditch 8042, and one of AD 330–335 (SF 661) from the upper fill of the same ditch. The enclosure was clearly integrated with further boundary ditches continuing on same alignment to the east of the excavated area. The line of ditch 10690 can clearly be seen on the geophysical survey plot extending for *c* 60 m to the east of the eastern side of the square enclosure. Similarly, ditch 8294 continued for at least 30 m to the east, as it was encountered in evaluation Trench 9.

A bowl-shaped pit (11000) was cut into the western terminus of recut 10700, after this had silted up. The pit was 1.6 m in diameter and 0.45 m deep. The lower fill (10643) contained ash and charcoal patches, and produced late 3rd- to 4th-century pottery. A sample from this fill (sample 619) contained abundant charred wheat grains and chaff, along with barley grains and weed seeds. The upper fill of the pit consisted of sterile grey ash.

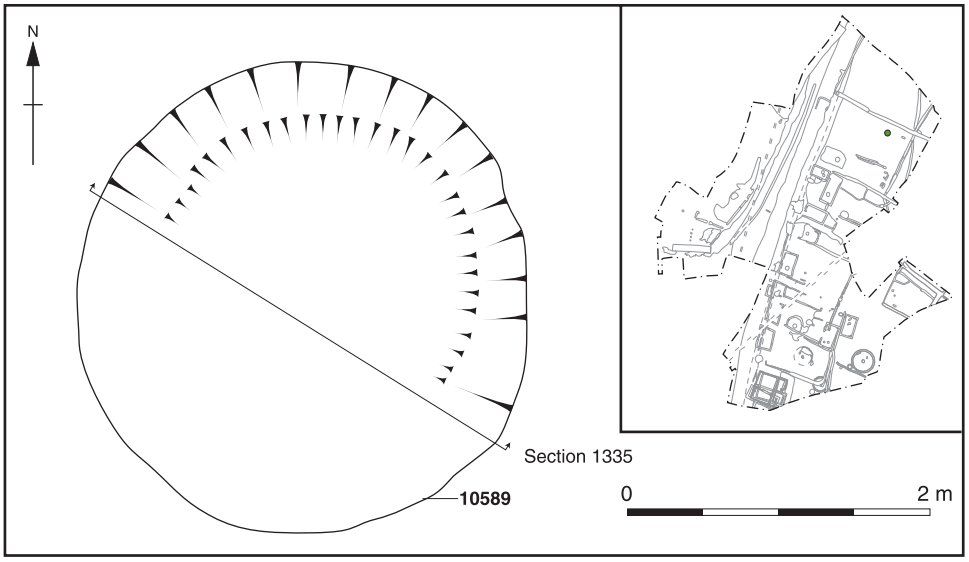
The interior of the square enclosure appears to have been empty of features, although part of it (between the main excavation area and Area G) was not excavated. Adjacent to the southern side of the enclosure was a large waterhole (10589), 3.1 m in diameter and 2.1 m deep, with moderately sloping sides in the upper part of the profile, becoming near-vertical in the lower part (Fig. 4.49). For safety reasons, only the upper 1.8 m of the feature was excavated by hand, with the remainder excavated by machine, rapidly recorded and immediately backfilled. The lower fills within the hand-excavated part of the feature consisted of a series of silt and clay deposits (10585–8), probably largely laid down through natural processes. Dating evidence is provided by 500 g of 3rd-century pottery from layer 10587, and a single sherd of late 3rd- to 4th-century pottery from layer 10585. These layers were overlain by a series of backfill deposits (10577–10584), consisting of dumps of silty sand (10577, 10578, 10580 and 10582) interleaved with lenses of burnt material (10579, 10581, 10583 and 10584). Samples taken from layers 1078, 10581 and 10584 (samples 605, 606 and 607 respectively) all

produced charred wheat grains, wheat glume bases and weed seeds. These backfill deposits contained large quantities of finds, including 2.1 kg of pottery and 1.4 kg of animal bone. The uppermost layer (10577) produced pottery specifically datable to the 4th century, and two coins, the later dating to *c* AD 348–360 (SF 1022). A further five coins recovered during the machine excavation of the waterhole cannot be attributed to a specific layer; these comprise one issue of AD 193–260 (SF 2964) and four late 3rd-century antoniniani (SF 2960–3).

To the north of the large square enclosure, a series of smaller rectilinear enclosures was present (defined by ditches 8102, 8289, 8290, 8292, 8293 and 8295–7). Ditches 8290 and 8295 seemed to form a three-sided enclosure measuring 18.5 m NNE-SSW by 17.5 m WNW-ESE, cutting ditch 8288. This respected building 8019 (see below), which was placed at the open western side of the enclosure. The ditches in this area were 0.25–0.70 m deep, with silty fills generally containing only modest quantities of finds. The ceramic evidence suggests that the ditches were infilled in the late 3rd to 4th century and two coins from the upper fill of ditch 8295 dated to AD 312–317 (SF 658) and AD 325–330 (SF 659).

Building 8019 (Fig. 4.50)

Building 8019 was a rectilinear limestone structure overlying Phase 4 ditch 8291. The building was heavily truncated, with much of the northern part



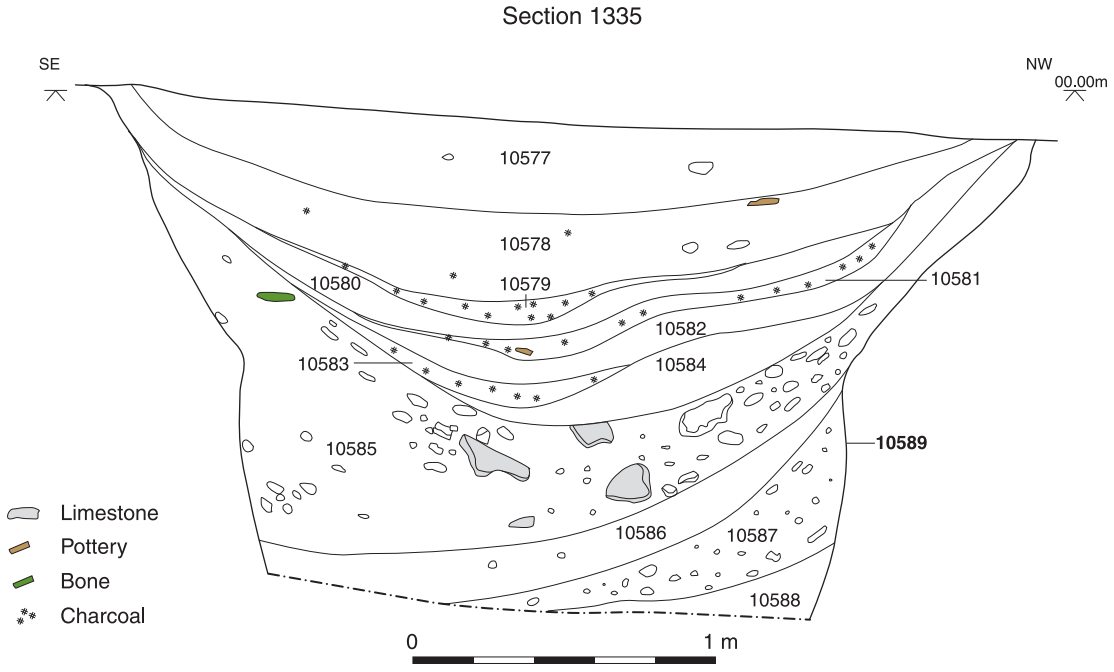


Fig. 4.49 Waterhole 10589

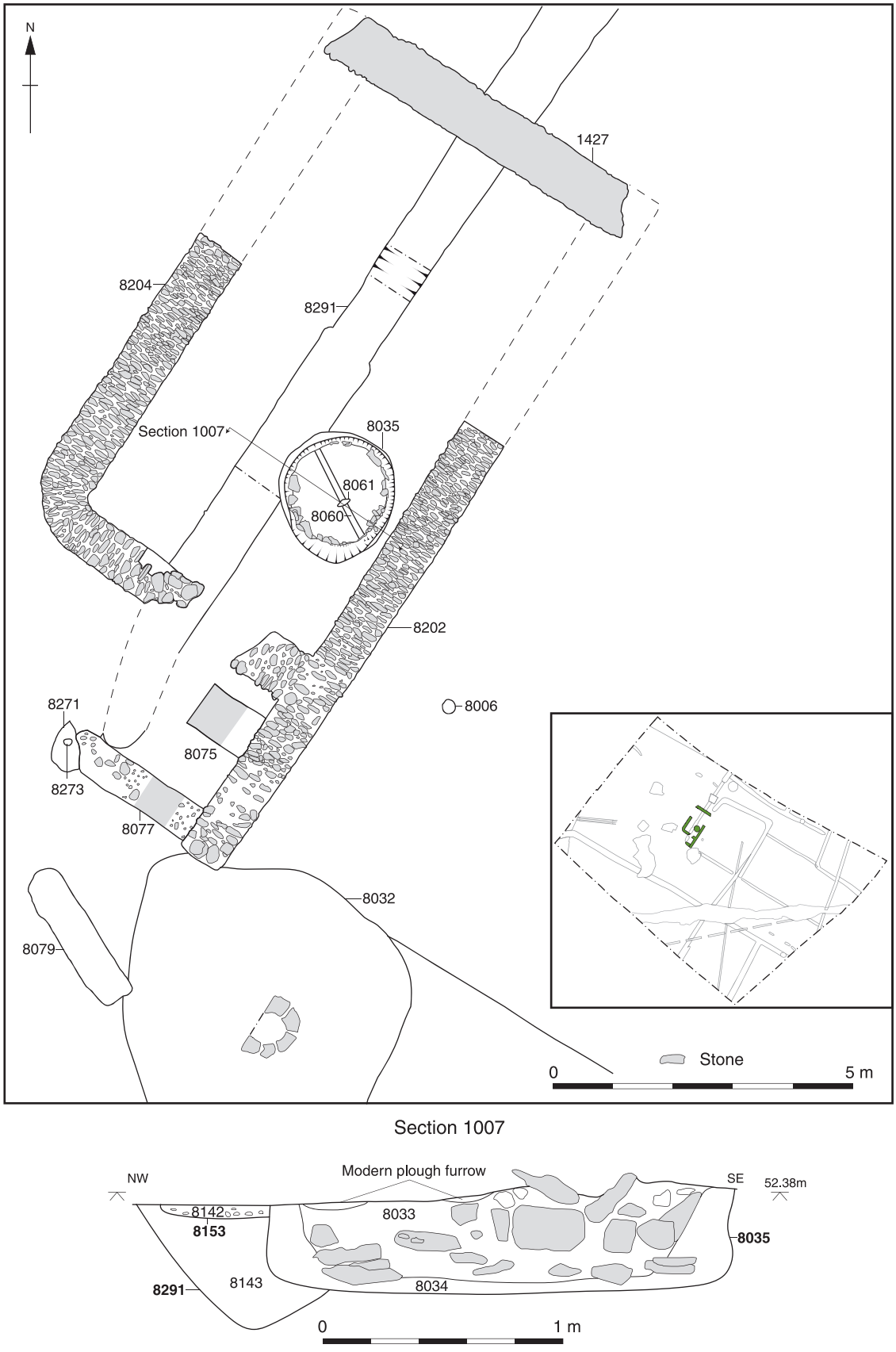


Fig. 4.50 'Temple' 8019

of the structure entirely removed. However, it appears to have taken the form of a rectangle measuring 4.5 m NW-SE by 8.5 m NE-SW internally, with a small 'annexe' or antechamber attached to its south-western side. The wall foundations of the main part of the structure (1427, 8202 and 8204) were *c* 0.7 m wide and consisted of no more than a single surviving course of pitched limestone blocks, which typically measured *c* 0.2 x 0.1 m in size. The blocks were larger and more deeply set, however, where the walls crossed the line of Phase 4 ditch 8291. This suggests that ditch 8291 still existed as a shallow hollow at the time of the construction of building 8019; indeed, a rubble layer forming the uppermost fill of the southern end of the ditch may have been deposited in order to level the ground when the building was constructed.

The 'annexe' of the building was formed by the south-west end of wall foundation 8202, along with two short linear features (8075 and 8077) running off at right-angles from this wall. These features were up to 0.1 m deep and filled with limestone rubble. They may represent further wall foundations of more irregular construction. Alternatively, they may simply have been gullies that were subsequently filled with limestone debris. The western end of linear feature 8077 cut a posthole (8271) which may have formed part of the building. The posthole contained a clear post-pipe (8273), 0.18 m in diameter and 0.23 m deep. Immediately south of the 'annexe' lay a short length of shallow gully (8079), which seems unlikely to have formed an integral structural element of the building as it followed a differing alignment.

Dating evidence for the construction of the building is scarce. Stratigraphically, it clearly post-dated ditch 8291 (dated to the 2nd century) and the construction cut for well 8032. Three sherds of 2nd-century pottery were recovered from wall foundation 8145 (part of 8204), and 30 sherds of late 2nd- to 3rd-century pottery from wall foundation or gully 8075. However, in both cases this material derived from parts of the structure probably set into ditch 8291 (the limit of 8075 is unclear), and redeposition is thus possible. The building appears to have been respected by ditch 8295, which produced pottery and coins showing that it was infilled during the late 3rd to 4th century.

The only feature within building 8019 was an unusual clay-lined pit of uncertain function (8035) (Pl. 4.22). This had no stratigraphic relationship to the building, though like the foundation trench it cut ditch 8291. The pit was 2.0 m in diameter and 0.40 m deep, with vertical sides and a flat base. The lining of blue-grey clay (8034) was up to 0.2 m thick, and had slabs of limestone set into it around the sides of the pit. Identified across the clay lining at the base of the pit was a dark

Plate 4.22 Building 8019, pit 8035, facing north-east. Scale: 1 m

grey/brown linear stain (8060) containing four iron nails, spaced 0.40–0.60 m apart and all found point-down. This would appear to represent a wooden beam nailed into the pit base or a reused timber incorporating nails. The main fill of the pit (8033) consisted of a dump of dark soil containing 16.5 kg of ceramic building material (including tegulae, imbrices and brick) and large quantities of burnt and unburnt limestone slabs. Other finds from this fill included 2.5 kg of 4th-century pottery, fragments of animal bone, and two coins dating to AD 330–348 (SF 668) and AD 341–348 (SF 669). This deposit may thus be associated with the demolition or collapse of the building in the mid 4th century.

The base of a heavily truncated pot in generic Roman shelly ware (8006) was found set into the natural colluvium immediately east of building 8019. Its function is unclear. There is no evidence that it was a cremation burial, as a bulk sample of what little remained of the vessel fill produced no bone.

While there is little evidence to directly attest the function of building 8019, the fact that it was set apart from the main settlement – with an apparently empty enclosure immediately to its south – does suggest a 'special' role of some kind. It could perhaps have been a religious structure such as a small temple. The presence of large amounts of tile may support this suggestion, as the only other structure on the site to produce significant quantities of tile was the main shrine. The placing of the building close to well 8278 (see below, which produced limestone colonnette fragments and human bone, also seems compatible with a religious function.

Limestone surfaces (Fig. 4.32)

To the west and south-west of building 8019, four discrete spreads of limestone were present. Spreads 8009 and 8095 simply consisted of layers of limestone rubble, layer 8095 perhaps representing demolition or collapse material from building 8019. Finds included 100 g of 4th-century pottery from 8009, and 900 g of late 3rd- to 4th-century pottery from 8095. In contrast, spreads 8158 and 8194/8230 seemed to represent laid surfaces, at least in part. These could perhaps have served as yard areas or as hardstanding for buildings. Surface 8194/8230 extended over ditch 8294, occupying its uppermost fill, indicating that it dates to the 4th century or later. Where it overlay the ditch, it appeared to consist of flat-laid slabs with worn upper surfaces. Finds included 600 g of late 3rd- to 4th-century pottery, and two coins, one dating to AD 335–341 (SF 699) and one to AD 341–348 (SF 697). A single sherd of Saxon pottery was also recovered. Surface 8158 consisted largely of irregular rubble, although in places the stones appeared to be deliberately laid flat or pitched. Finds included 900 g of 3rd-century pottery.

Well 8032 (Fig. 4.32)

Well 8032 continued in use into Phase 5, before finally being abandoned during the 4th century. The lower fill of the well shaft (8279) was a dark brown organic sediment, 1.54 m deep. An environmental sample from this fill (sample 412) produced coleoptera and a variety of waterlogged plant remains, including weed seeds, bracken fronds, flax capsules and abundant spelt wheat glume bases. Finds included 2.5 kg of pottery dated to the 4th century, animal bone, and part of a leather shoe (see Mould, Chapter 5). Overlying 8279 was a deliberate backfill deposit of limestone rubble (8217), 0.7 m deep, containing few finds. A void above this layer was probably created as the rubble fill sank down, as a result of settling and contraction of the basal fill of the well. The upper part of the shaft was filled with a dumped deposit of dark brown silty clay and limestone rubble that yielded 479 sherds (8068 g) of pottery dating to the late 3rd century onwards and a copper alloy pin (SF 660, cat. no. 279). Another thin levelling layer (8046) overlay the top of the feature, consisting of clay and limestone rubble and including 18 sherds (294 g) of late 3rd- to 4th-century pottery. This was most likely laid to re-level the surface after further sinking of the well fill.

Well 8278 (Fig. 4.29)

The lowest fill encountered within the shaft of well 8278 (see Phase 4) was a black silty loam deposit (8285), at least 3 m in depth, containing visible organic remains including branches and twigs. A sample from this fill (sample 413) produced coleoptera and a range of waterlogged plant remains, including weed seeds, bracken fronds and spelt wheat glume bases. The fill was dated by 1.4 kg of pottery of late 3rd- to 4th-century date. Other finds included part of a leather shoe, a fragment of a limestone colonnette (SF 401), and five human bones, comprising three femurs, a fibula and a humerus. All of these objects suggest a ritual element to the deposition of this lower fill. The remaining 2.2 m of the shaft was backfilled with a deposit of limestone rubble (8278) which contained a further limestone colonnette fragment (SF 402).

Burial group 13105 (Figs 4.32 and 4.51)

This group consisted of three inhumation burials on a NW-SE alignment, placed parallel to ditch 8294. At least one of these burials (8132) was of 4th-century date, with the others more broadly dated.

Burial 8010 (Pl. 4.23) contained the remains of a male aged over 40 years (Sk 8012). The grave measured 1.80 m long, 0.54 m wide and 0.14 m deep. The body was supine with the head at the north-west end of the grave, turned to face north-east. A Hadham oxidised ware vessel had been placed close to the head, and 50 further sherds of pottery were recovered from the backfill of the grave. Together, these ceramics provide a date of the

Plate 4.23 Burial 8010, facing north-west. Scale: 2 m

late 2nd century onwards. An iron nail was also found close to the head.

Burial 8123 contained the remains of a male aged over 40 years (Sk 8128). The grave measured 1.9 m long, 0.65 m wide and 0.23 m deep. The body was supine, with the head at the south-east end of the grave, turned to face north-east. The head had been placed on a large ceramic tile (SF 677), and the feet similarly rested on a large tegula (SF 678). A ceramic flask in a fine oxidised ware (SF 676) had been placed near the head. An iron nail was found near the head and another in the area of the chest. The backfill of the grave also contained 16 further sherds of pottery and small fragments of animal bone. The ceramics date the burial to the late 2nd century or later.

Burial 8132 contained the remains of a female aged over 40 years (Sk 8131). The grave measured 1.85 m long, 0.60 m wide and 0.20 m deep. The decapitated body lay supine, with the upper body at the north-west end of the grave, and the skull placed between the lower legs. A coin dated *c* AD 330–348 (SF 686) was found close to the skull. The presence of a wooden coffin was indicated by eleven iron nails found around the edge of the south-eastern end of the grave. The backfill of the grave contained 14 sherds of pottery dated to the late 2nd century or later, and small fragments of animal bone.

Burial group 13110 (Figs 4.32 and 4.52)

This group consisted of a cluster of three inhumation burials to the north-west of building 8019. One of the burials (8154) dates to the late 3rd century or later, while the others are more tentatively dated to this phase by association.

Burial 8016 contained the remains of a male aged over 40 years (Sk 8018). The truncated grave was aligned NW-SE, and measured 1.30 m long, 0.55 m wide and 0.12 m deep. The body was supine with the head to the south-east. The skeleton was heavily truncated, with the legs and much of the right side of the body missing. The backfill of the grave produced two sherds of pottery dated to the late 2nd century or later. Small fragments of animal bone were also recovered, including a pig tooth found in the vicinity of the left shoulder.

Burial 8154 contained the remains of a female aged over 40 years (Sk 8155). The grave was aligned NW-SE, and measured 2.1 m long, 1.0 m wide and 0.45 m deep, with a slightly irregular profile. The body was supine, with the head at the north-western end of the grave, turned to face north-east. The backfill of the grave produced a coin dated to *c* AD 260–286 (SF 691), a bone pin (SF 692), an iron nail, 350 g of pottery dated to the 3rd century, and small fragments of animal bone.

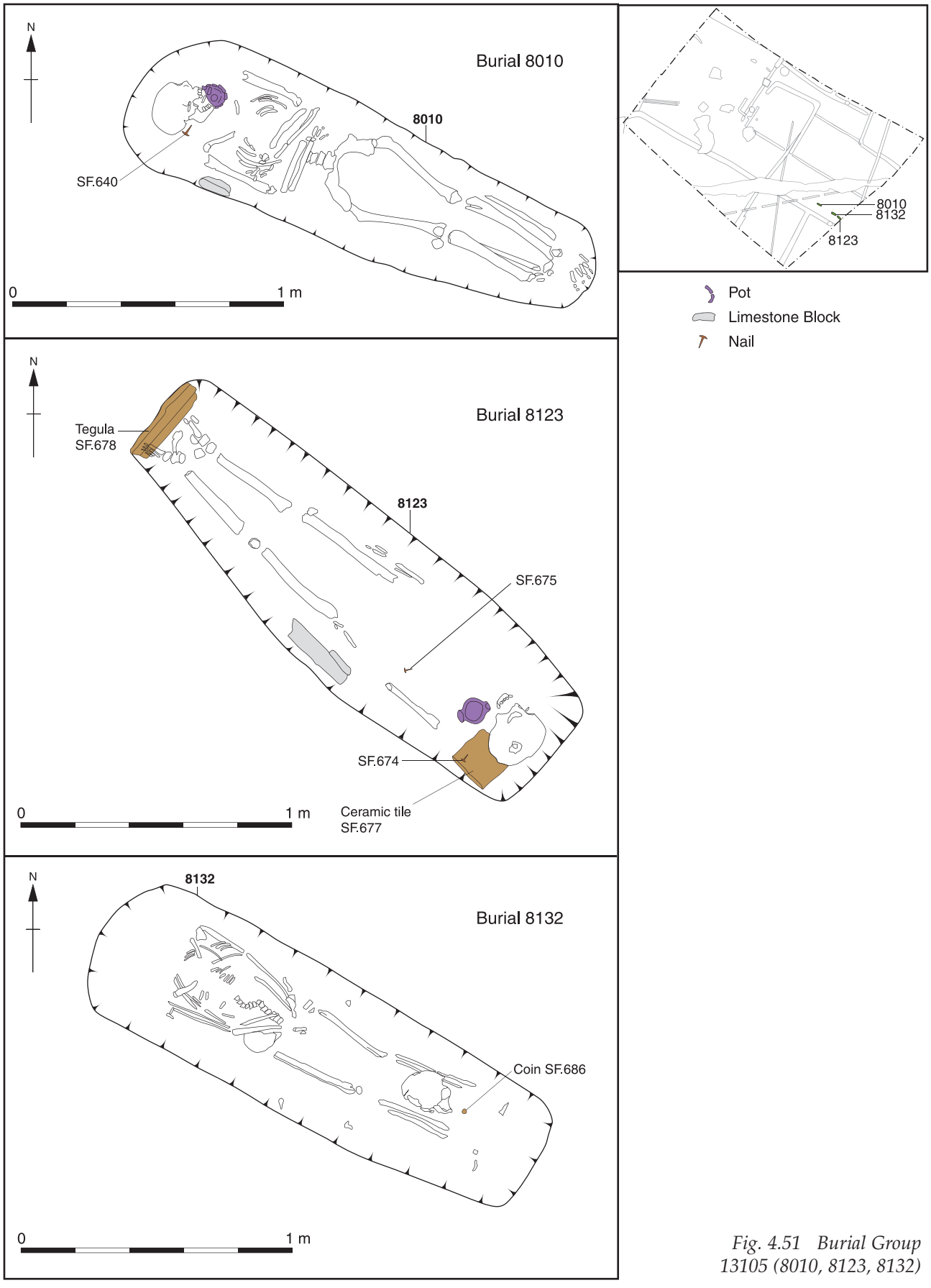


Fig. 4.51 Burial Group 13105 (8010, 8123, 8132)

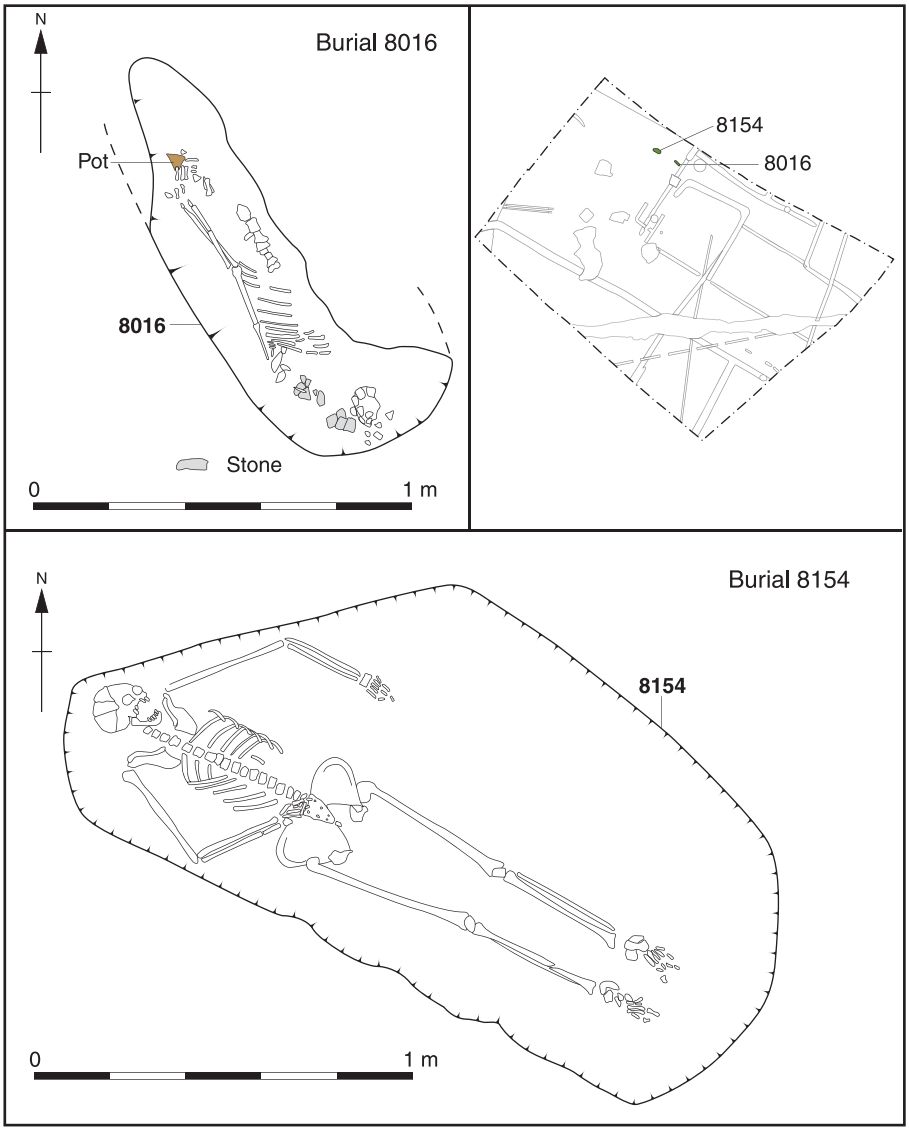
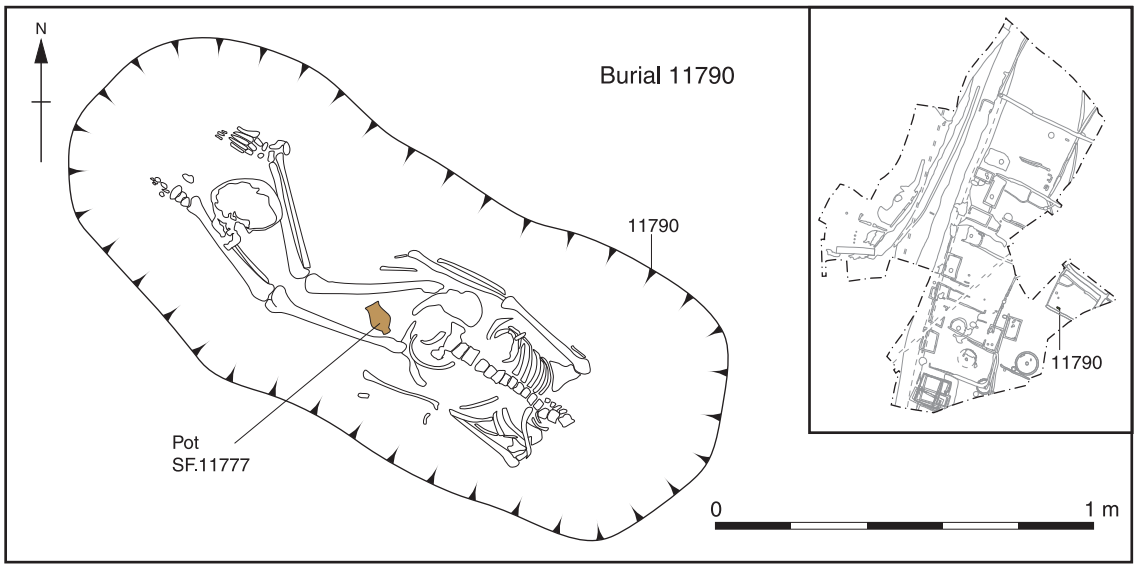


Fig. 4.52 (above) *Burial group 13110 (8016, 8154)*

Fig. 4.53 (below) *Burial 11790*



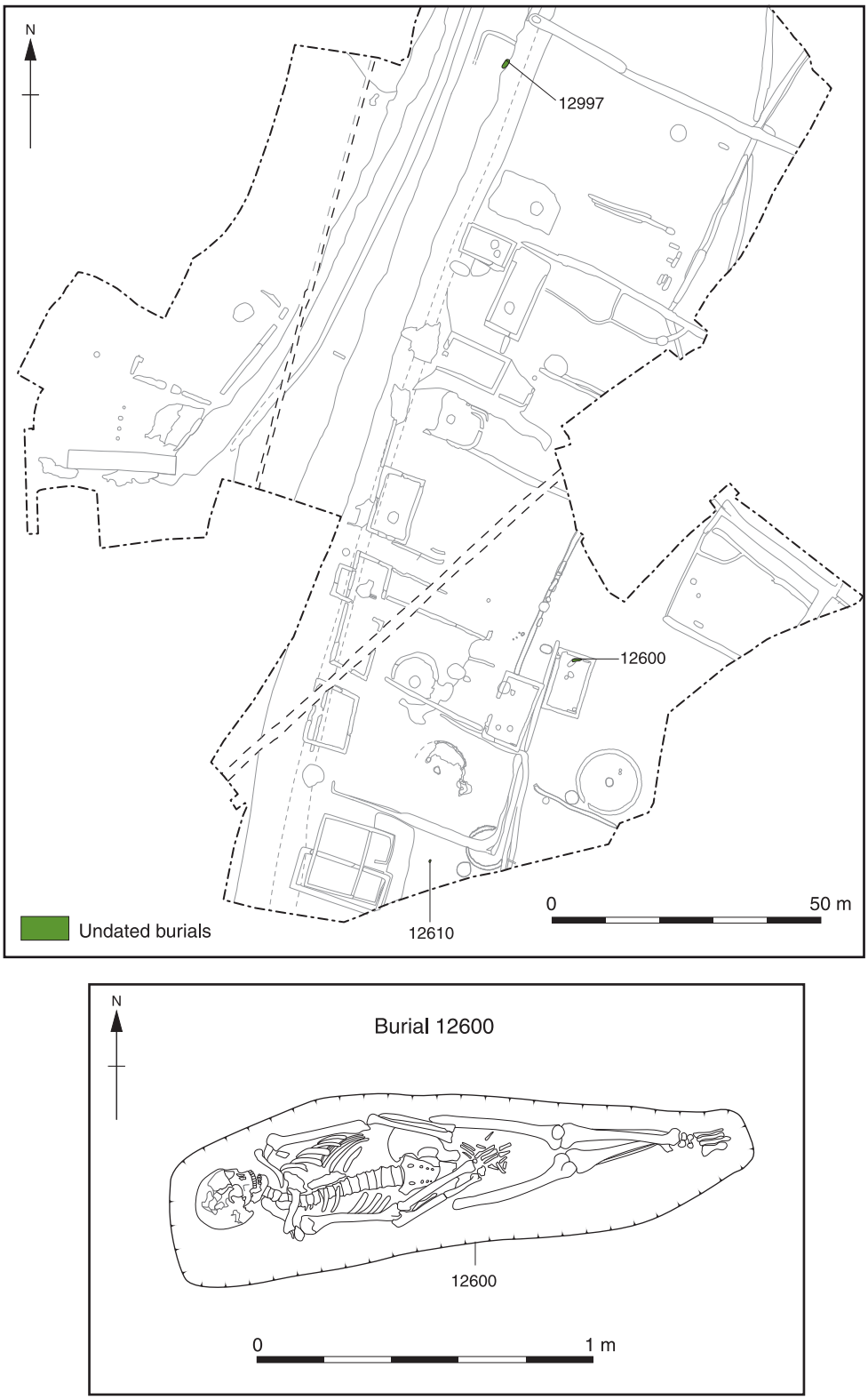


Fig. 4.54 Unphased burials

Burial 8301 contained the heavily truncated remains of an adult of unknown sex (Sk 8261; not illustrated). The body position and alignment are unknown, and there were no associated finds.

The eastern periphery of the settlement

Rectangular enclosure 13080 was modified in this phase (Fig. 4.30). Ditch 13060 was recut and gully 13070 (up to 0.42 m deep) was added to close off the previously open western side of the enclosure. These features had naturally-deposited silty fills and are dated by finds of late 3rd- to 4th-century pottery. Ditches 11517 and 13055 may have continued in use during this phase to form the remaining two sides of the enclosure.

Decapitated inhumation burial 11790 was interred alongside ditch 13060 during this phase (Fig. 4.53). The grave cut was 1.9 m long, 0.70 m wide and 0.24 m deep, and contained the remains of a woman aged over 50 years (Sk 11775). The body was supine, with its upper part at the south-eastern end of the grave, and the skull placed between the ankles. The legs were slightly flexed. Eight iron nails, recovered from both ends of the grave, may indicate the presence of a wooden coffin. A complete Nene Valley colour-coated ware beaker, dated to the 4th century, had been placed between the legs just below the pelvis. Thirteen further sherds of pottery and small fragments of animal bone were also recovered from the backfill of the grave.

East of enclosure 13080, a large irregular quarry pit (10203) was present in evaluation Trench 22. This was not fully exposed, but measured at least 14.5 m across and 1.30 m deep. It cut through a natural ironstone layer into the underlying clay, and hence may have been used for clay extraction. Following an initial silting episode, the feature was backfilled with three successive deposits, comprising a layer of clay and ironstone rubble (10216), a discrete dump of limestone rubble (10215), and a layer of sandy silt containing many ironstone fragments. A total of 2.8 kg of animal bone and 1.0 kg of pottery was recovered from the feature. Pottery from layer 10216 indicates a late 3rd- to 4th-century date for the backfilling of the quarry.

UNPHASED BURIALS

Three burials scattered across the site produced no good dating evidence, and hence can only be broadly assigned to the Roman period (Fig. 4.54). These comprised two adult inhumations and one infant burial.

Burial 12600 was located within building 10900, but had no stratigraphic relationship to the structure, other than the fact that it was cut into reworked colluvium layer 11221. The fact that the burial was on a different alignment to the building may indicate that it was not contemporary. The grave contained the remains of a male aged 35–48 years (Sk 12599). The grave was aligned WSW-ENE, and measured 1.68 m long, 0.30 m wide and 0.25 m deep. The body was supine, with the head at the WSW end of the grave. The hands were crossed at the wrist below the pelvis, and the legs were crossed at the ankles. A number of limestone slabs up to 0.15 m across were found laid flat within the upper part of the backfill of the grave. One sherd of pottery dated to the mid 2nd century onwards, and small fragments of animal bone were also recovered.

Burial 12610 (not illustrated) was located between building 10860/11370 and building 10910. It contained the remains of a neonatal infant aged 38–39 weeks (Sk 12613). The grave cut was aligned SSW-NNE, and measured 0.48 m long, 0.30 m wide and 0.04 m deep. The skeleton was severely disturbed, and the posture of the body is uncertain, although the head lay at the SSW end of the grave. The backfill of the grave contained three sherds of pottery dated to the mid 2nd century or later.

Burial 12997 (not illustrated) was discovered and excavated by volunteer metal detectorists after the formal completion of the project. The burial appears to have been located adjacent to the western edge of gravel pavement 13020. However, the position of the burial was recorded only with a GPS unit accurate to *c* 1 m, and hence its relationship to other features is uncertain. The grave was oriented NNE-SSW, parallel to the road and gravel pavement, and may have been enclosed by a small 'L'-shaped ditch on the same alignment (13095; 0.40 m deep). It measured 1.90 m long, 0.40 m wide and 0.30 m deep. The body was of a male aged 35–45 years (Sk 12999), laid supine with the head at the NNE end of the grave and the arms crossed over the abdomen.

THE RADIOCARBON RESULTS

by W Derek Hamilton, Peter Marshall, Christopher Bronk Ramsey, Gordon Cook, and Gerry McCormac

Twelve samples were submitted for radiocarbon dating to the Scottish Universities Environmental Research Centre, East Kilbride (SUERC), and the Queen's University, Belfast. Sub-samples of material sent to Belfast were also sent to the Rafter Radiocarbon Laboratory for stable isotope measurements.

The three cremated bone samples submitted to SUERC were prepared following Lanting *et al.* (2001), and measured by Accelerator Mass Spectrometry as described by Xu *et al.* (2004).

Human bone from nine inhumations was submitted to Belfast for high-precision radiocarbon measurements. These samples were processed according to methods outlined in Longin (1971), Pearson (1984), and McCormac (1992). Carbon and nitrogen stable isotope measurements on these samples were carried out at the Rafter Radiocarbon Laboratory, New Zealand, as described by Beavan Athfield *et al.* (2001).

Both laboratories maintain continual programmes of quality assurance procedures, in addition to participation in international inter-comparisons

(Scott 2003). These tests indicate no laboratory offsets and demonstrate the validity of the measurements quoted.

Results

The results are conventional radiocarbon ages (Stuiver and Polach 1977), and are quoted in accordance with the international standard known as the Trondheim convention (Stuiver and Kra 1986).

The calibrations of these results, which relate the radiocarbon measurements directly to the calendrical time scale, are given in Table 4.6 and in Figure 4.55. All have been calculated using the datasets published by Reimer *et al.* (2004) and the computer program OxCal (v3.10) (Bronk Ramsey 1995, 1998, 2001). The calibrated date ranges cited within the text are those for 95% confidence. They are quoted in the form recommended by Mook (1986), with the end points rounded outward to 10 years for errors greater than 25 years, and to 5 years when errors quoted are less than 25 years. The ranges in Table 4.6 have been calculated according to the maximum intercept method (Stuiver and Reimer 1986); all other ranges are derived from the probability method (Stuiver and Reimer 1993). Those ranges printed in italics in the text and tables are *posterior density estimates*, derived from the mathematical modelling.

Stable Isotopes

The ^{13}C and ^{15}N values from this site (Fig. 4.56) suggest a very small marine component in the diet, which is not likely to affect the radiocarbon dating significantly (Chisholm *et al.* 1982; Schoeninger *et al.* 1983). The C:N ratios suggests that bone preservation was sufficiently good to permit confidence in the radiocarbon determinations (Table 4.6; Masters 1987; Tuross *et al.* 1988).

General approach

The Bayesian approach to the interpretation of archaeological chronologies has been described by Buck *et al.* (1992). It is based on the principle that although the calibrated age ranges of radiocarbon measurements accurately estimate the calendar ages of the samples themselves, it is the dates of archaeological events associated with those samples that are important. Bayesian techniques can provide realistic estimates of the dates of such events by combining absolute dating evidence, such as radiocarbon results, with relative dating evidence, such as stratigraphic relationships between radiocarbon samples. These 'posterior density estimates', (which, by convention, are always expressed in italics) are not absolute. They are interpretative

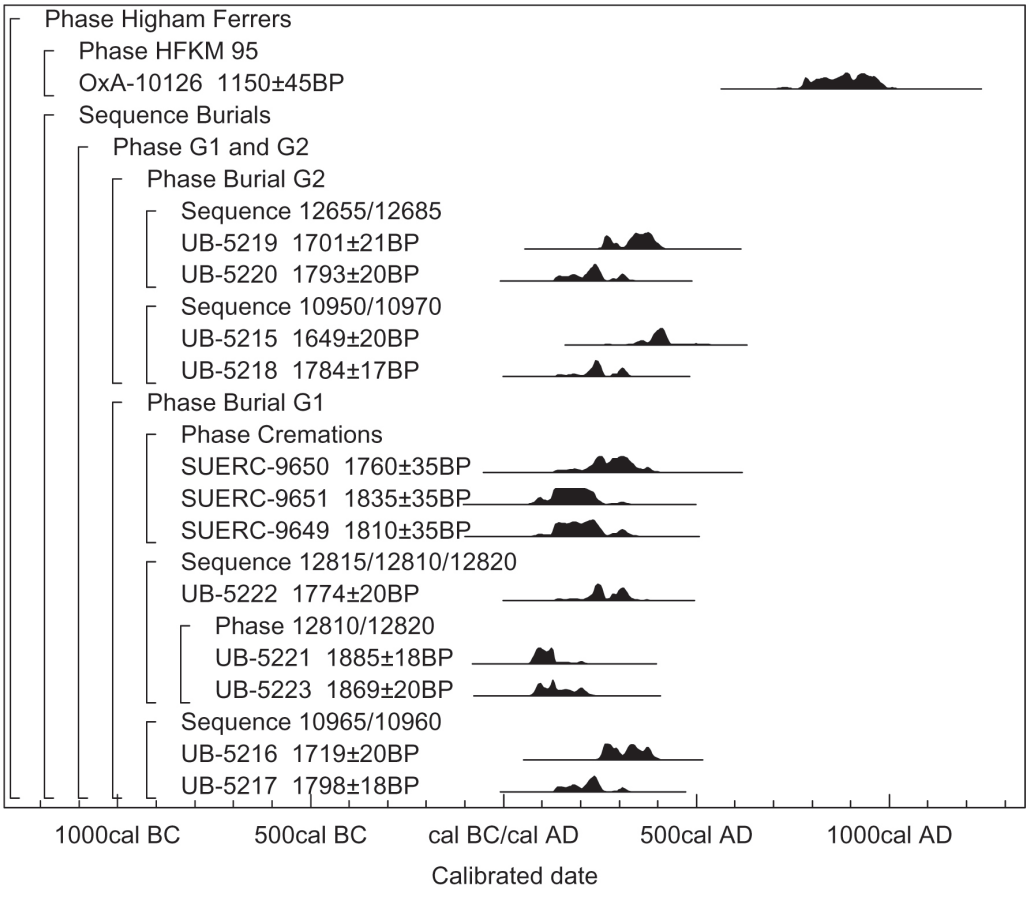


Fig. 4.55 Calibrated radiocarbon dates using the probability method of Stuiver and Reimer (1993)

estimates, which will change as additional data become available or as the existing data are modelled from different perspectives.

The technique used is a form of Markov Chain Monte Carlo sampling, applied using the program OxCal (v3.10) (http://units.ox.ac.uk/departments/rlaha/), which uses a mixture of the Metropolis-Hastings algorithm and the more specific Gibbs sampler (Gilks *et al.* 1996; Gelfand and Smith 1990). Details of the algorithms employed by this program are available from the on-line manual or in Bronk Ramsey (1995; 1998; 2001). The algorithms used in the models described below can be derived from the structure shown in Figure 4.57.

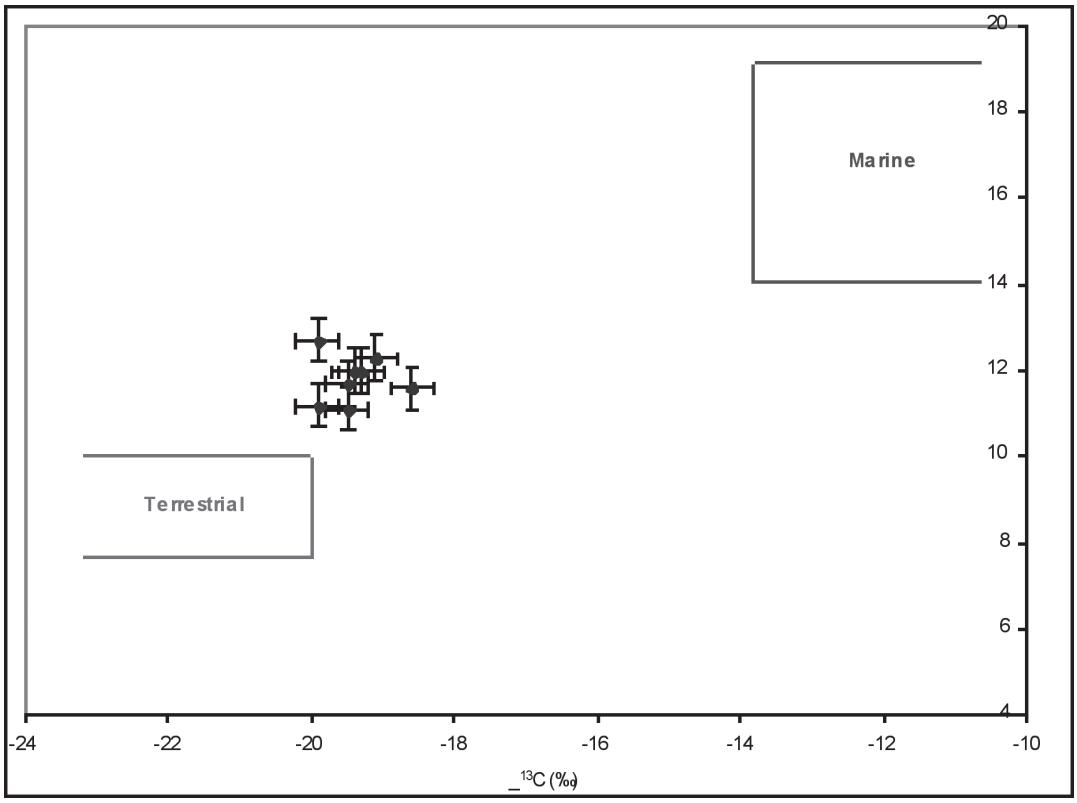


Fig. 4.56 Human bone isotope data

Table 4.6 Radiocarbon dates

Lab ID	*Sample ID*	*Grave Group*	*Material*	*^{13}C (‰)*	*^{15}N (‰)*
SUERC-9649	HFKML 02 crem 10912	10915	cremated human bone	-17.8	
SUERC-9650	HFKML 02 crem 10931	10935	cremated human bone	-15.6	
SUERC-9651	HFKML 02 crem 10933	10945	cremated human bone	-20.1	
UB-5215	HFKML 02 sk 10922	10950	human bone, right femur, ulna, humerus, and radius and left fibula	-19.5	11.7
UB-5216	HFKML 02 sk 10938	10965	human bone, right tibia and fibula	-19.9	11.2
UB-5217	HFKML 02 sk 10951	10960	human bone, left femur and right ulna	-19.1	12.3
UB-5218	HFKML 02 sk 10954	10970	human bone, left humerus and tibia and right fibula	-19.4	12.0
UB-5219	HFKML 02 sk 12656	12655	human bone, left femur and right tibia	-19.5	11.1
UB-5220	HFKML 02 sk 12686	12685	human bone, left and right fibula and right tibia	-19.3	12.0
UB-5221	HFKML 02 sk 12814	12810	human bone, right femur	-19.9	12.7
UB-5222	HFKML 02 sk 12816	12815	human bone, left femur	-18.6	11.6
UB-5223	HFKML 02 sk 12902	12820	human bone, right tibia and humerus	-18.7	11.9

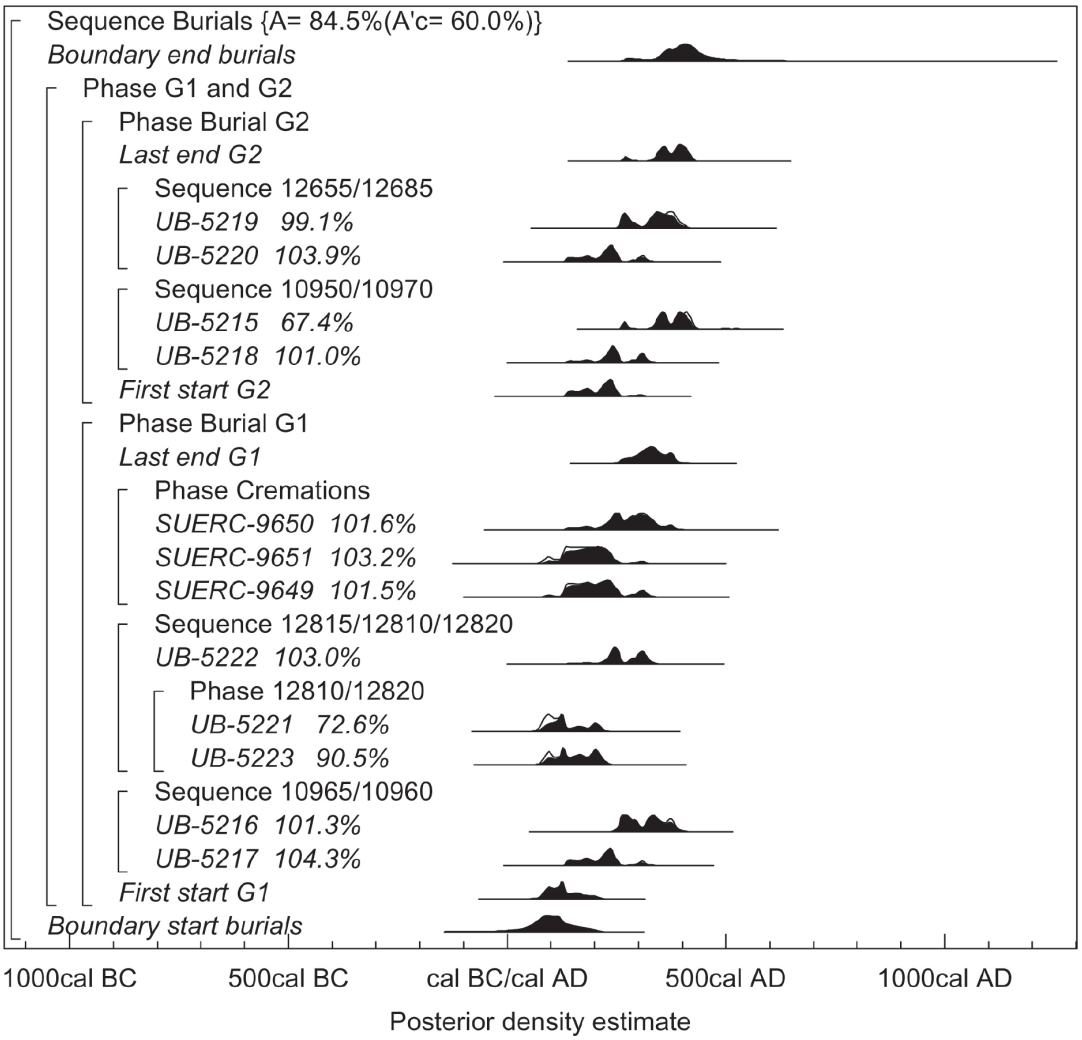


Fig. 4.57 Probability distributions of radiocarbon results from burial groups 1 and 2

C:N	*Radiocarbon Age (BP)*	*Calibrated Date (95% confidence)*	*Posterior density estimate (95% probability)*
	1810 ±35	cal AD 120–330	cal AD 125–265 (86%) or cal AD 280–325 (9%)
	1760 ±35	cal AD 130–390	cal AD 160–200 (5%) or cal AD 205–385 (90%)
	1835 ±35	cal AD 70–320	cal AD 90–255
3.3	1649 ±20	cal AD 345–430	cal AD 260–280 (6%) or cal AD 335–425 (89%)
3.2	1719 ±20	cal AD 250–395	cal AD 250–385
3.2	1798 ±18	cal AD 135–320	cal AD 135–260 (94%) or cal AD 305–315 (1%)
3.2	1784 ±17	cal AD 175–325	cal AD 140–200 (11%) or cal AD 205–265 (60%) or cal AD 280–330 (24%)
3.2	1701 ±21	cal AD 255–410	cal AD 255–305 (29%) or cal AD 315–400 (66%)
3.2	1793 ±20	cal AD 135–325	cal AD 130–260 (87%) or cal AD 295–320 (8%)
3.2	1885 ±18	cal AD 70–205	cal AD 80–220
3.2	1774 ±20	cal AD 215–335	cal AD 210–340
3.2	1869 ±20	cal AD 75–225	cal AD 85–225

Objectives

The overall objective of the dating programme was to provide a chronological framework that could be used to understand and interpret the burial record against the background of the phased site development. This included providing dates for individual burials and estimating the start and end dates of burial activity at the locations of the two spatially distinct burial groups.

Analysis and interpretation

Figure 4.57 provides the structure for, and shows the results of, the Bayesian model. The archaeological relationships between the samples in each burial group are discussed in greater detail below.

Burial Group 1

The material submitted for dating from burial group 1 consisted of three cremations and five inhumations. There was no stratigraphic relationship between the three cremations (crem 10912, 10931, and 10933; SUERC-9649, -9650, and -9651, respectively) or between the cremations and inhumations. There were, however, two stratigraphic sequences of cutting graves amongst the inhumations. The first sequence simply has grave 10965 cutting grave 10960 (UB-5216 and -5217, respectively). The second sequence has grave 12815 cutting both graves 12810 and 12820 (UB-5222, -5221, and -5223, respectively), although graves 12810 and 12820 are not stratigraphically related themselves.

Burial Group 2

The material from burial group 2 came from four contexts that formed two separate intercutting sequences that themselves were not stratigraphically related. The first sequence is grave 12655 cutting grave 12685 (UB-5219 and -5220, respectively). The second sequence is grave 10950 cutting grave 10970 (UB-5215 and -5218, respectively).

Results from Burial Groups 1 and 2

The model shown in Figure 4.57 is in good agreement ($A_{overall}$=84.5%; A'=60.0%). The dates of individual burials are estimated in Table 4.6 under the heading *"Posterior density estimate (95% probability)"*. Activity within burial group 1 is estimated to have begun in *10 cal BC-cal AD 210* (*95% probability*; Fig. 4.57; *start_burial group 1*) and probably *cal AD 40-150* (*68% probability*) and ended in *cal AD 250–44 0* (*95% probability*; Fig. 4.57; *end_burial group 1*) and probably *cal AD 260-360* (*68% probability*). The overall span of burial activity in burial group 1 is estimated at *60–400 years* (*95% probability*; Fig. 4.58; *span burial group 1*) and probably *150–310 years* (*68% probability*).

Activity within burial group 2 is estimated to have begun in 10 cal BC-*cal AD 320* (*95% probability*; Fig. 4.57; *start_burial group 2*) and probably *cal AD 100-250* (*68% probability*) and ended in *cal AD 350–570* (*90% probability*; Fig.4.57; *end_burial group 2*) and probably *cal AD 380-490* (*68% probability*). The overall span of burial activity in group 2 is estimated at *80–500 years* (*95% probability*; Fig. 4.58; *span burial group 2*) and probably *160–370 years* (*68%*

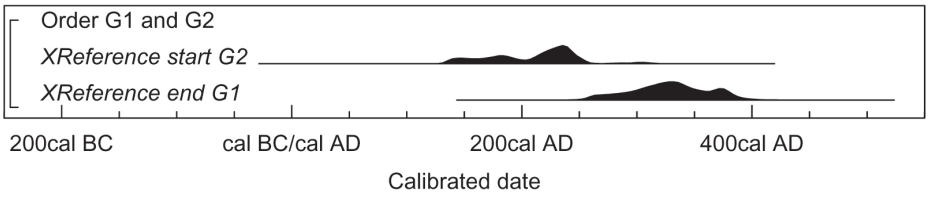


Fig. 4.58 Ordering of the end probability distribution for burial group 1 and the start of burial group 2.

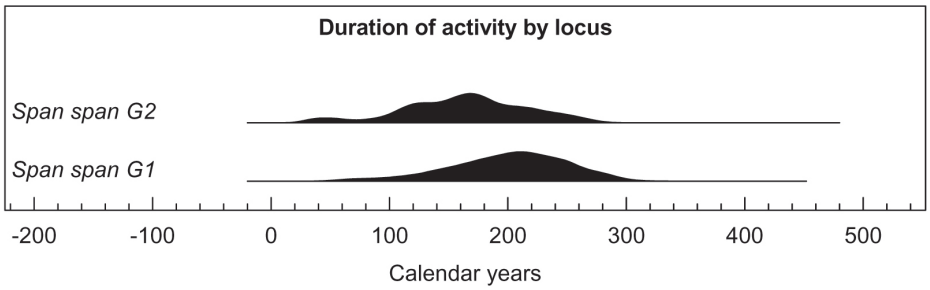


Fig. 4.59 Estimated duration of burial activity within burial groups 1 and 2

probability). The overall duration of burial activity within the two loci is estimated at *210–540 years* (*95% probability*; Fig. 4.59) and probably *270–440 years* (*68% probability*).

Although burial groups 1 and 2 were spatially distinct, further analysis shows that there is a 98% probability that activity associated with burial in group 2 preceded the cessation of activity in group 1. Furthermore there is a 69% probability that the order of events is *start_burial group 1, start_burial group 2, end_burial group 1, end_burial group 2*.

Chapter 5: Material Culture from the Roman Settlement and Shrine

THE ROMAN POTTERY *by Jane Timby*

Introduction and methodology

The evaluation and subsequent excavation resulted in the recovery of some 28,574 sherds of pottery weighing 487 kg. All this material was subjected to a rapid scan during the post-excavation phase (Booth in OA 2004b) with quantification principally derived from the initial basic finds record. A note of major ware groups was made and a spot date produced for each context. For this report all the stratified pottery was sorted into fabrics and quantified by sherd count, weight and estimated vessel equivalents (rim) (EVE) for each recorded context. Rim sherds were identified to form types and coded accordingly. Notes were made of other featured sherds. Other features, such as potters' stamps, graffiti and residues were noted where appropriate. Attribution of sherds to fabric was mainly done by eye, occasionally assisted by use of a binocular microscope (x20). Where relevant the National Roman fabric codes (NRFC) (Tomber and Dore 1998) have been used. Local or other wares not in this system were coded used a mnemonic code reflecting both the colour and the main inclusions present. A summary of all the defined fabrics can be found in Table 5.1. The quantified data was entered onto a MS Excel spreadsheet, a copy of which is deposited with the site archive.

The condition of the pottery was generally very good with a high proportion of joining sherds. Surface preservation was also good and the edges relatively unabraded. This state of good preservation is reflected in a relatively high average sherd weight of 17 g. Pottery was recovered from some 797 contexts in total. Some 10% of the assemblage by sherd count was recovered from general collection.

The report is arranged in three sections; first is a description of the fabrics and associated forms; this is followed by a period discussion including defining key groups and finally the assemblage is viewed in its local, regional and national context.

Description of fabrics and forms

The wares have been divided into four groups: continental imports, regional traded wares, local wares, and miscellaneous unknown source.

Continental imports: fine wares

Samian ware. Some 1103 sherds of samian were recovered, *c* 14.1 kg, 2600 EVEs. This is effectively 3.9% by sherd count of the whole assemblage, 2.9% by weight. This is probably one of the largest assemblages to be recovered to date from a small nucleated settlement, comparable to that recovered, for example, from the extramural area of Alchester, which yielded some 1142 sherds out of an assemblage of 45,628 Roman sherds (2.5%) (Evans 2001). Most of the sherds appear to be Central Gaulish, in particular from Lezoux, with a smaller number of vessels from Les Martres-de-Veyre, accompanied by eight South Gaulish and twelve East Gaulish vessels. At the time this report was being prepared there were no samian specialists available to undertake a detailed account of the material; as a consequence it has been quantified alongside the other pottery and any stylistic or and chronological details considered only in broad terms. Where possible, vessel forms were identified to the standard typologies. Some of the better, decorated pieces have been illustrated by using rubbings (Fig. 5.1) and the more complete potters stamps drawn (Fig. 5.2). Where parallels could be found these are cited.

South Gaulish. Just five vessels (eight sherds) in South Gaulish ware were noted, one from Phase 3, the rest from Phases 4 and 5. Forms include a decorated bowl Drag 30, a dish 18/31, a closed form, the base of a very worn reused cup and a dish with barbotine decoration, which falls into Vernhet (1986, 99) Service D. The latter, from the La Graufesenque kilns, is likely to date to the Flavian period and was recovered from Phase 3 ditch 11910.

Central Gaulish. The bulk of the samian assemblage comes from Central Gaul, in particular from the Lezoux kilns with a small amount of the slightly better quality earlier material from Martres-de-Veyre. By sherd count some 7.1% of the material came from Phase 3 contexts, 44.4% from Phase 4 and 32.6% from Phase 5 with lesser amounts from the other phases. Much of that from Phase 5 is presumably redeposited or curated material. Phase 6 (post-Roman) yielded 11 sherds recovered from sunken-featured buildings.

Table 5.2 summarises the forms present based on rim EVEs. The dish Drag 31 is by far the commonest form present, accounting for 32.7% of the assemblage.

Table 5.1 Quantified summary of Roman pottery assemblage

	Fabric	*Description*	*Wt*	*% Wt*	*No*	*% No*	*EVE*	*% EVE*
IMPORTS	SG SAM	South Gaulish samian	139	+	8	+	25	0.1
	CG SAM	Central Gaulish samian	13752	2.8	1083	3.8	2557	5.8
	EG SAM	East Gaulish samian	189	+	12	+	18	+
	ARG CC	Argonne colour-coated ware	3	+	1	+	0	
	CNG BS	Central Gaulish black slip	52	+	10	+	22	0.1
	MOS BS	Moselle black slip	30	+	11	+	0	
	BAT AM	Baetican amphorae	1226	0.3	13	0.1	0	
	GAL AM	Gallic amphorae	236	0.1	10	+	0	
REGIONAL	DOR BB1	Dorset black burnished ware	3402	0.7	205	0.7	554	1.3
	HAD OX	Hadham oxidised ware	120	+	48	0.2	38	0.1
	MAH WH	Mancetter-Hartshill mortaria	66	+	2	+	10	+
	OXF PA	Oxon parchment ware	5	+	1	+	0	
	OXF RS	Oxon colour-coated ware	373	0.1	26	0.1	44	0.1
	OXF RSM	Oxon colour-coated mortaria	65	+	4	+	12	+
	OXF WH	Oxon white ware	27	+	3	+	2	+
	OXF WHM	Oxon white ware mortaria	266	0.1	8	+	17	+
	SOC WH	South Carlton white ware	296	0.1	1	+	20	0.1
	VER WH	Verulamium white ware	443	0.1	19	0.1	99	0.2
	VER WHM	Verulamium white ware mortaria	2068	0.4	30	0.1	104	0.2
LOCAL	GROG	misc hand made grog-tempered	94	+	2	+	0	
	GR SH	grog and shell-tempered	77	+	5	+	0	
	BOX GR	burnt oxidised grog-tempered	6025	1.2	226	0.8	351	0.8
	BPNK GR	burnt pink grog-tempered	1365	0.3	24	0.1	67	0.2
	BWH GR	burnt white ware grog-tempered	38112	7.8	1782	6.3	2835	6.5
	GY GR	grey grog-tempered	6571	1.4	110	0.4	161	0.4
	OX GR	oxidised grog-tempered	4219	0.9	184	0.7	236	0.5
	WW GR	white grog-tempered	9759	2.0	272	1.0	570	1.3
	PNK GT	pink grog-tempered	2478	0.5	46	0.2	43	0.1
	LNV CC	Lower Nene Valley cc ware	43031	8.9	4011	14.1	6449	14.7
	LNV CCM	Lower Nene Valley cc mortaria	403	0.1	8	+	15	+
	LNV OX	Lower Nene Valley oxidised ware	2410	0.5	209	0.7	354	0.8
	LNV PA	Lower Nene Valley parchment ware	217	+	20	0.1	52	0.1
	LNV RE	Lower Nene Valley grey ware	134659	27.7	11000	38.6	17020	38.8
	LNV REM	Lower Nene Valley grey ware mortaria	44	+	2	+	0	
	LNV WH	Lower Nene Valley white ware	10137	2.1	804	2.8	606	1.4
	LNV WHM	Lower Nene Valley ww+C61 mortaria	14373	3.0	246	0.9	657	1.5
	SHELL1	handmade shelly ware	130137	26.8	4186	14.7	4184	9.5
	SHELL2	wheelmade shelly ware	37013	7.6	2412	8.5	3824	8.7
	SHELL3	sparse shelly ware	140	+	7	+	54	0.1
	SHLISA	misc shell/limestone/sandy	38	+	3	+	25	0.1
	BOX SY	burnt oxidised sandy ware	245	0.1	7	+	28	0.1
	BWH SY	burnt white ware sandy	7149	1.5	371	1.3	678	1.5
	BWH PA	burnt white parchment ware	55	+	5	+	0	
	BW	black sandy ware	5334	1.1	449	1.6	928	2.1
	BB1 IMIT	wheelmade BB1 copies	3605	0.7	172	0.6	572	1.3
	BW MIC	black micaceous ware	117	+	10	+	5	+
	BWF	black fine ware	198	+	15	0.1	49	0.1
	BWF MIC	black fine micaeous ware	333	0.1	34	0.1	91	0.2
	GREY	grey sandy ware	147	+	12	+	12	+
	GYF	fine grey ware	13	+	2	+	15	+
	OXID	oxidised sandy ware	853	0.2	84	0.3	145	0.3
	PNK SY	pink sandy ware	101	+	16	0.1	11	+
	BSGW	black slipped grey ware	8	+	1	+	0	
UNKNOWN	BUFF	buff sandy ware	311	0.1	30	0.1	30	0.1
	BUFF CC	buff sandy ware with colour-coat	11	+	1	+	0	
	BUFF MIC	buff micaceous ware	6	+	1	+	0	
	CC	misc colour-coated wares	305	0.1	26	0.1	19	+
	CWW CC	coarse white ware with colour-coat	5	+	1	+	0	

Table 5.1 (continued) Quantified summary of Roman pottery assemblage

	Fabric	*Description*	*Wt*	*% Wt*	*No*	*% No*	*EVE*	*% EVE*
	GLAZE	British glazed ware	2	+	1	+	11	+
	GY RB	grey with a red burnish	23	+	1	+	0	
	MICA	mica-slipped wares	614	0.1	30	0.1	61	0.1
	MORT	misc mortaria	540	0.1	7	+	8	+
	OXID F	fine oxidised wares	297	0.1	11	+	4	+
	OXID MIC	micaceous oxidised wares	309	0.1	26	0.1	39	0.1
	WS OXID	white-slipped oxidised ware	298	0.1	27	0.1	3	+
	WS GY	white-slipped grey ware	11	+	1	+	0	
	WWF	fine white wares	131	+	19	0.1	0	
	WW	misc white wares	1078	0.2	71	0.3	167	0.4
	MISC	miscellaneous unclassified	64	+	17	0.1	0	
TOTAL			486223	100.00	28502	100.00	43901	100.00

Table 5.2 Summary of Central Gaulish samian ware forms (expressed by EVE)

Form	*Type*	*EVE*	*% EVE*	*Summary total*
Dish	18	10	0.4	
	18/31	62	2.4	
	31	836	32.7	
	18/31-31	19	0.7	
	31R	67	2.6	
	32	9	0.4	
	36	62	2.4	
	42	21	0.8	
	Service E	8	0.3	
	79	23	0.9	
	Curle 15	10	0.4	
	Curle 23	44	1.7	
	Lz 070/071	30	1.2	
	Dish misc	14	0.5	47.5
Bowl	30	8	0.3	
	37	218	8.5	
	30/37	5	0.2	
	38	14	0.5	
	Curle 11	32	1.3	10.8
Cup	27	39	1.5	
	33	851	33.3	
	35	9	0.4	
	46	15	0.6	
	80	0	0.0	
	O&P LV 13	30	1.2	36.9
Mortaria	45	37	1.4	
	Curle 21	0	0.0	1.4
Jar	72	83	3.2	3.2
TOTAL		2556	100.0	100.0

In general terms dishes accounted for 47.5% of the samian assemblage. Other types include Drag 18/31, 18/31-31, 31R, 32, 36, 42, 79, Curle 15 and 23, dishes Service E and large dishes with angular rims which, if from East Gaul would be classified as Ludowici Tg, but as these are clearly Central Gaulish, fall into Bet's Lezoux form 70/71 (Bet *et al.* 1989, fig. 4). Bowls account for 10.8% overall by rim EVE and include forms Drag 30, 37, 30/37, 38 and Curle 11. Cups are the second commonest form present accounting for 36.9% of the assemblage with Drag 33 being the most frequent overall form at 33.3%. Other cups include Drag 27, 35, 46 and O&P LV 13. One of the Drag 35 cups, a Les Martres-de-Veyre vessel from colluvium 12223, had the slightly more unusual use of barbotine decoration on the body. Also present, but not as a rim, is a Drag 80. Mortaria, although present, are not that common at 1.4%. Most sherds are from Drag 45s, but at least one Curle 21 was identified from body sherds. Jars of form Drag 72 make up the remaining 3.2%, largely from a single plain vessel from pit 12826, of which 75% of the rim was present along with several body sherds.

In total some 20 stamps have been recorded, plus a mould stamp ADVOCISI from a Drag 37 found in well 12885 (Phase 5) (see Fig. 5.2.S1). Where forms could be determined two stamps were on Drag 31, one each on 18/31 and 31R, four on Drag 33 and a further six from cups and two from Drag 37 bowls. At least six vessels had some form of graffiti scratched in after firing with examples on forms Drag 31, 37, 42, 45, 79 and a cup (cf Fig. 5.5.38; Fig. 5.9.100; Fig. 5.10.115-16). Two of these vessels were also stamped.

Six vessels showed evidence of repair, mainly as drilled holes, but one vessel, a Drag 31 dish from context 10625 (a finds reference layer near building 10840), still had an *in situ* rivet. Repaired vessels include two of form Drag 31, three Drag 37 bowls and a dish Drag 42, perhaps suggesting the decorated vessels were slightly more precious.

Fig. 5.1 Decorated samian pottery

East Gaulish. Just 12 sherds of East Gaulish samian ware were present with examples of forms Drag 31, 33, 35 with no barbotine decoration, 79R and a small bowl. An unclassified sherd from a bowl form with a rouletted exterior was recovered from unphased colluvium 12233. The other sherds all came from Phase 4 and 5 contexts.

Continental imports: Decorated samian pottery (Fig. 5.1)

D1. Drag 37. CG. Finds reference (10718), Phase 3.
D2. Drag 37. CG. Finds reference11340 (10668), Phase 3-4.
D3. Drag 37. CG. Floor (11555), Phase 4.
D4. Drag 37. CG. Make-up (11692), Phase 4.
D5. Drag 37. CG. Pit 12168 (12136), Phase 4.
D6. Drag 30. CG. Layer (12158), Phase 5.
D7. Drag 37. CG. Layer (12372), Phase 5.
D8. Drag 37. CG. Ditch 12965 [12871], (12875), Phase 5.
D9. Drag 37. CG. Animal freestyle scene. Grave 12655, (12657). Unphased.

Samian stamps (Fig. 5.2)

S1. ADVOCISI Advocisus. Mould stamp, Drag 37. Lezoux. AD 160-90. Well 12885, (12601) Phase 5.
S2. ATTINIO Attinus. Drag 33. ?Lezoux. Burnt. Demolition layer (11153), Phase 5.
S3. BELINICCI: Beliniccus. Cup, Lezoux. *c* AD 135-65. Ditch 12617 (12618), Phase 4.
S4. BORILLI·OFFIO Borillus. Drag 33. Lezoux. Parallels Frocester Court (Price 2000, fig. 9.14.5). Finds reference (10718), Phase 3.
S5. C_RC_IIIO_OFI Criciro. Drag 31. Lezoux. AD 140-65. Pit 12826, (12827), Phase 4.
S6. DAMI[ ] Daminus, Bowl/dish. Lezoux. Layer 12830 (12721), Phase 4.
S7. METTI·M Mettius. ?Cup/small bowl. Lezoux. Parallels: Frocester (Price 2000, fig. 9.14.S4). Grave 12725 [12726], (12728), Phase 4.
S8. NOVEMON[ ] November. Drag 33. ?Lezoux. Layer (12435), Phase 4.
S9. SATV [ ] Cup. Graffito on underside. Finds reference (11331), Phase 5. AD 160-200
S10. SEVERI [ ] Severus. Drag 33, Lezoux. AD 130-55. Pit 12826 (12827), Phase 4.
S11. Rosette. ?Dish. Lezoux. Stakehole 11829, (11828). Unphased. Incomplete
S12. [ ] EMIINIM ?Geminus *c* AD 160-200. Cup. Lezoux. Sunken-featured building 12740, (12737), Phase 6.
S13. [ ] NVV Drag 33, Lezoux. Construction cut 8032, (8058), Phase 4.
S14. Illegible retrograde. Drag 37, Lezoux. Layer (11960), Phase 4.
S15.]IAII_ M Drag 33, Lezoux. Construction cut 12885, (11342), Phase 4.
S16. Illegible. Cup. Lezoux. Finds ref. 11620, (10656), Phase 4-5.
S17. [ ] ISCANI Drag 31. Lezoux. Ditch 10690, (10631), Phase 5.
S18.] LVPIM [Cup. ?Lezoux. Layer (12435), Phase 4.
S19.] OF Pit 12826 (12827), Phase 4.
S20. [ ] CTORIM Drag 31R. Lezoux. Ditch (10504). Unphased.
S21. [ ] LINI Cup, Lezoux. Layer (10842), Phase 4.
S22. Illegible. Base. Unstratified.

Argonne colour-coated ware (ARG CC) (Tomber and Dore 1998, 47). A single small beaker sherd was recovered from layer 12372, Phase 5, probably of 2nd-century date.

Central Gaulish black slipped ware (CNG BS) (Tomber and Dore 1998, 50). Ten sherds were recorded, mostly from beaker from Phase 4 contexts. One beaker has a post-firing graffito incised on the neck (Fig. 5.8.76).

Moselle black-slipped ware (MOS BS) (Tomber and Dore 1998, 60). Some 11 sherds were recorded, all body sherds, probably all from beakers. One sherd from 11626 shows part of a barbotine leaf decoration.

Continental imports: Amphorae

Baetican amphorae (BAT AM) (Tomber and Dore 1998, 84). Twelve body sherds and a single stamped handle (Figs 5.3 and 5.10, 114) are present from Dressel 20 olive oil amphorae. The stamp S _N_R approximates to Callender (1965), no. 1641 but has the additional triangular stops. Stamp 1641 has been documented at Corbridge and Monte Testaccio and is dated AD 140-80.

Gallic amphorae (GAL AM) (Tomber and Dore 1998, 93). Ten bodysherds from Gallic wine amphora sherds are present.

Regional traded wares: coarse wares

Dorset black burnished ware (DOR BB1) (Tomber and Dore 1998, 127). Some 204 sherds of DOR BB1 were recorded weighing 3360 g, some 0.7% of the total assemblage by count. The material all appears to be the Poole Harbour type. Apart from a single jar sherd decorated with an acute burnished lattice and thus likely to be of 2nd-century date from Phase 3, and a further two sherds from Phase 3-4, most of the sherds come from later phases. The number of sherds increases in Phase 4 to 20 sherds, 0.2% of the total assemblage, but the most significant importing period lies in Phase 5 when 155 sherds were recorded, 2.2% of the total assemblage for this phase by count. Two forms are the most frequently found, the plain-sided dish, which accounts for 42.5% by EVE, and flanged rim conical bowls, which total 40.5%. The remaining 17% are made up of jars (7.7%), flat rim bowls (5%) and grooved rim bowls (4.3%).

It has been observed by Evans (2001, 364) that in northern England jars tend to occur at similar levels

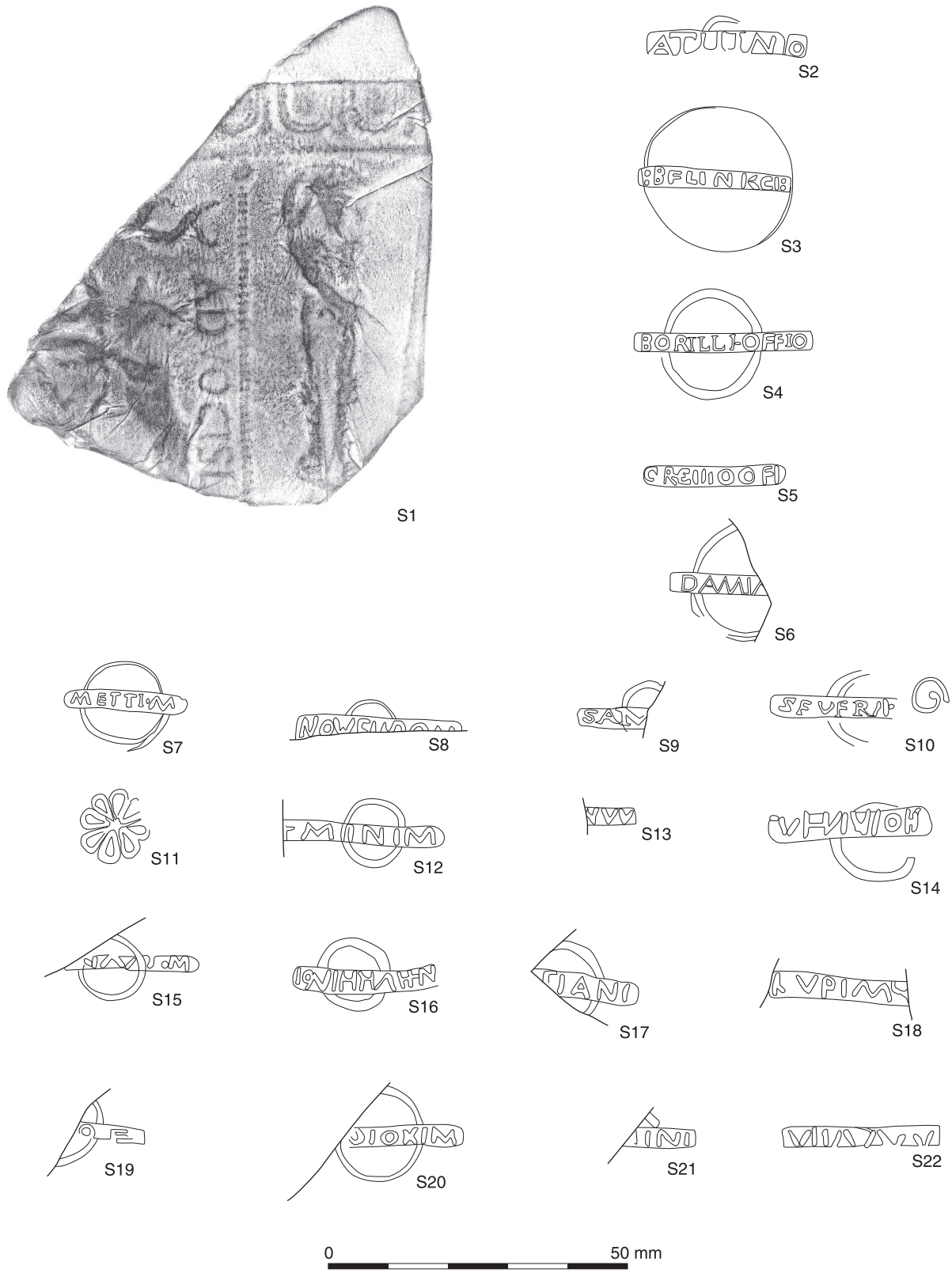


Fig. 5.2 Samian stamps

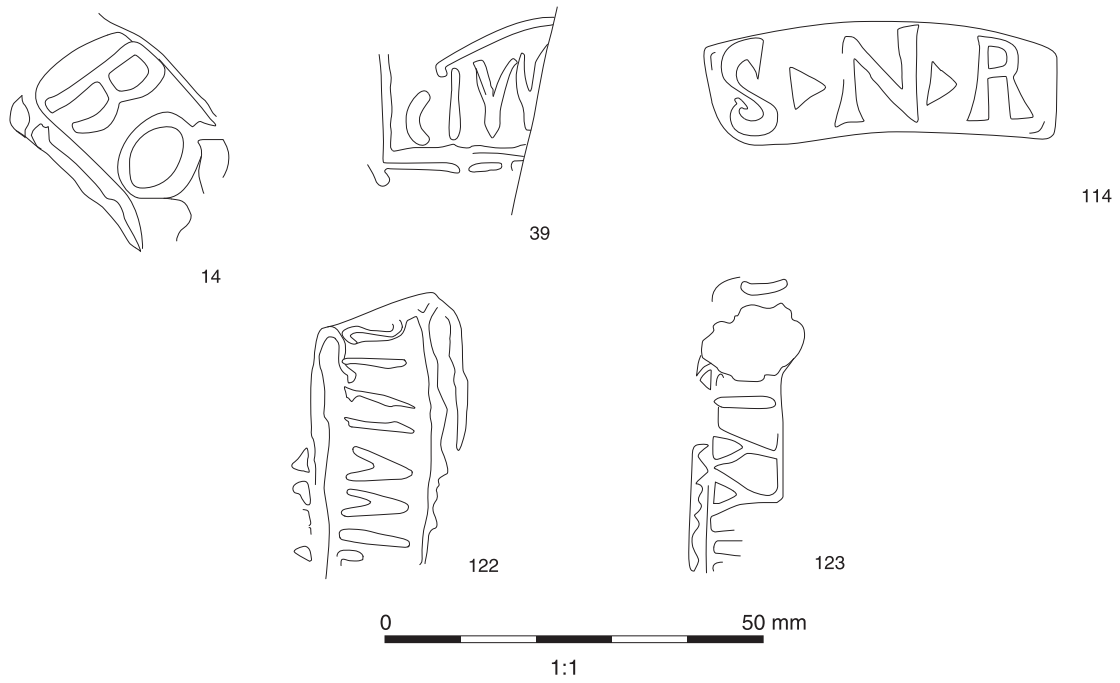


Fig. 5.3 Mortarium and amphora stamps

to dishes/bowls and on the Antonine Wall jars dominate. However at Alchester (ibid.) bowls/dishes comprise over 90% of the assemblage in the period *c* 350-400, which Evans regards as unusual and attributes to the availability of jars in other fabrics. Sites to the east in Cambridgeshire such as Orton Hall Farm (Perrin 1996, table 46) similarly have few or no jars; this absence does appear to reflect a specific marketing pattern.

Hadham oxidised ware (HAD OX) (Tomber and Dore 1998, 151). A single everted rim jar represented by 48 small fragments was recovered from grave 8010, Phase 5.

Mancetter-Hartshill mortaria (MAH WH(M)) (Tomber and Dore 1998, 189). Limited to just two sherds from a Phase 4 layer. The sherds are worn and partially burnt.

Oxfordshire parchment ware (OXF PA) (Tomber and Dore 1998, 175). A single small sherd came from Phase 5 waterhole 10589.

Oxfordshire colour-coated ware (OXF RS) (Tomber and Dore 1998, 176). A total of 30 sherds, of which four derive from mortaria. Apart from one sherd from Phase 4-5, all the material all comes from Phase 5 contexts. Forms include Young (1977) types C45, C51, C81 and C91.

Oxfordshire white ware (OXF WH) (Tomber and Dore 1998, 175). Represented by just three sherds, one from a flask of Young (1977) type W21, plus eight sherds from mortaria with examples of forms (ibid.) M17 and M22, all types typical of the later 3rd to 4th centuries.

South Carlton white ware mortaria (SOC WH) (Tomber and Dore 1998, 162). A single rim sherd came from pit 12826, Phase 4 (Fig. 5.7.74).

Verulamium white ware (VER WH) (Tomber and Dore 1998, 154). A small group of 16 white ware sherds and a further 32 sherds of mortaria distributed across Phases 3 to 5. The forms include examples of jars, a small jar and flagons, one a disk-mouthed form. One mortarium is stamped across the flange (Figs 5.3.14 and 5.4.14) with a name starting BO.., the rest of the name too poorly impressed to decipher.

Local wares: Lower Nene Valley wares

Lower Nene Valley grey ware (LNV RE). This group accounts for 27.7% by count, 38.6% by weight of the assemblage and is thus the commonest ware found. The vessels display quite a range of colour from very pale grey to dark grey. Black wares have been classified separately but may be related. The core is usually lighter in colour. This component of the Lower Nene Valley industry appears to have become established by the second quarter of the 2nd century and continues through until the late 3rd or early 4th century (Perrin 1999, 78). The vessel repertoire is dominated by jars, which account for 45.7% (by EVEs) of the ware category, the commonest forms being everted simple (Fig. 5.9.101, 110) or

rolled rim, neckless, bifid and lid-seated types (Fig. 5.8.91). Decoration includes slashed cordons, grooves, frilled rim edges and burnished line (Fig. 5.5.20). Some vessels have distinctive ridged necks and others display triple cordons. Examples of the earlier forms are present at Higham Ferrers with moulded or carinated profiles and cordons, grooves and zones of decoration. These are not prolific, with most of the forms being the more standardised everted rim forms. The rim diameters range from 60 mm through to 300 mm with peaks around 120 mm – 140 mm and 200 mm – 220 mm. The wider-mouthed forms are more common in the later phase.

Dishes are the next most frequent vessel class, accounting for 25.6% (EVEs) of the total LNV RE assemblage. The commonest form is the plain straight-sided dish, similar to the DOR BB1 form (Fig. 5.9.105); others have thickened rims (Fig. 5.8.94). Some vessels have burnished line decoration on the upper base surface or intersecting arcs on the wall.

Beakers constitute the next commonest form and are dominated by poppyhead forms often with barbotine dot decoration (Fig. 5.4.4; Fig. 5.4.15; Fig. 5.5.27) and beakers with undifferentiated rims with grooves near the lip (eg Fig 5.5.28). One beaker from Phase 5 is handled. Some beakers are indented and others have burnished line decoration as latticing or zig-zags.

The fourth commonest form is the bowl (9.9%), which shows quite a diverse range of shape, the most common being the straight-walled form with an expanded rounded or triangular rim (Fig. 5.6.49). This type is thought to appear around the mid 2nd century, continuing through until the later 3rd century. There are also two vessels imitating samian bowl form Drag 30 and examples with burnished line decoration (Fig. 5.9.96). Other forms present in minor amounts include tazze with pie-crust decoration, lids (Fig. 5.9.95), flasks (Fig. 5.5.33) and mortaria.

At least nine, and possibly ten of the LNV RE vessels show post-firing graffiti. In most cases these are in the form of a simple cross, of which there are four examples (eg Fig. 5.6.46 and Fig. 5.10.118) or incised lines on the rims, both of jars and bowls, for which at least four examples have been noted (eg Fig. 5.6.46; Fig. 5.8.75). Other examples may be more literate but are too broken to decipher (eg Fig. 5.7.72). A base from ditch group 111750 has holes drilled through after firing. Another base sherd from a jar from layer 12945 was filled with a lime-like material whilst a base from well 8278 had been re-used and was particularly worn. Just two vessels, a plain-sided dish and a flanged bowl, showed evidence of use in the form of sooting.

Lower Nene Valley white ware (LNV WH) (Tomber and Dore 1998, 119). Overall this group accounts for 2.1% by weight with a further 2.9% for the white ware mortaria (LNV WHM). The highest proportion of LNV WH occurs in Phase 4 (64.5%) whilst the highest incidence of mortaria (59.4%) by weight occurs in Phase 5 contexts. In addition a small group of finer white wares was defined, and are also presumed to belong to this category.

The white wares feature in a wide range of forms including flagons, jars, bowls, dishes, beakers, flasks and lids, none in any great quantity. The flagons include cup-mouthed forms and ring-necked forms with a larger upper ring. The jars range from necked, everted forms (Fig. 5.5.29), to a lid-seated example, a bifid rim wide-mouthed form down to a small unguent jar. Some indented sherds come from a folded jar or large beaker. Other beakers feature everted, thickened rims and a moulded rim form. The bowls include reeded rim, (Fig. 5.5.22-23) flat rim, grooved rim and flanged forms, some with red-painted decoration; the dishes a plain-rimmed form and an expanded rim straight-walled type identical to the grey ware form. Most of the white wares probably date to the mid-later 2nd century, being replaced in the 3rd century by the grey and colour-coated wares (Perrin 1999, 108).

The main white ware production seems to have focussed on mortaria, well represented in this assemblage. The earliest form at Higham Ferrers present in Phase 3 has a plain slightly curved flange with an upstanding bead (cf Hartley and Perrin 1999, type M6-7), typologically dated to the mid-later 2nd to 3rd century. In Phase 3-4 the first hammer-head rim form occurs with a plain (uncorrugated) face usually dated to the 3rd century. With the increased quantities of finds from Phase 4 contexts comes a greater range of forms, largely of 3rd- to 4th-century types with corrugated hammer-head flanged, thickened drop flanged and flatter corrugated flanged vessels (as ibid., type M40), typologically datable to the later 3rd-4th century. Several flanges have red painted decoration (Fig. 5.9.109), and one has black painted decoration. A single example of a stamp (Figs 5.3 and 5.5, 39) came from Phase 4 well 12885, with two further examples from unphased contexts (Figs 5.3, 5.10, 121, 123). Several sherds show evidence of wear. The repertoire of forms is slightly less diverse in Phase 5 compared to Phase 4 despite the slightly greater number of sherds. One vessel has red-painted Zs on the flange.

Lower Nene Valley colour-coated ware (LNV CC) (Tomber and Dore 1998, 118). The colour-coated component of the Nene Valley industry accounts for nearly 9% of the assemblage by weight, 14% by sherd count and 14.7% by EVE. The date of the earliest production of colour-coated wares is not yet known but the industry appears to have become fairly well established by the later 2nd century (Perrin 1999, 87) when the principal products were beakers, flagons and boxes. From the late 3rd century onwards all the main forms made in LNV RE were made in LNV CC, augmented by copies of samian ware forms. From around the mid 4th-century, bowls, dishes and jars dominate the output. This pattern seems to be supported by the Higham Ferrers finds.

A small number of sherds occurs in Phase 3, less than 1% of the LNV CC assemblage, this rises to 36.5% in Phase 4 and peaks in Phase 5 at nearly 54% by count. In Phase 3 rims are limited to flared rim and cornice-rim beakers and triangular rimmed bowls and decorative techniques include rough-casting, barbotine floral decoration, barbotine scales and rouletting. In Phase 4 the repertoire expands dramatically with numerous beakers, bowls, dishes, jars (Fig. 5.5.37), boxes and lids, disc-mouthed flagon, spouted flagon (Fig. 5.7.73) and a copy of a samian bowl Drag 37 (Fig. 5.5.34) and dish Drag 36. Imitations of Drag 36 were made at Stanground in the early 3rd century (Dannell *et al*. 1993). Various beaker forms include bag-shaped and bulged girth examples (Fig. 5.5.41). Beaker decoration includes barbotine scales, hunt scenes with animals, ducks, barbotine diagonal stripes, scrolls, interlocking S-shapes and hairpin designs (Fig. 5.5.35; Fig. 5.6.42-3). The duck motif is fairly unusual but parallels can be cited from a cremation burial at Ratcliffe-on-Soar, Notts (Leary 1996) and from Wallsend (R. McBride pers. comm.). Also of particular note is a sherd with a male figure displaying a distinctive hairstyle (Fig. 5.6.52). The piece is superficially similar to an example from Stonea, Cambs (Johns 1996b, fig. 174, 3) and Chesterton (Perrin 1999, fig. 60, 139) although it differs in detail. The rarity of such beakers might suggest that these were specialist items. Hunt scenes were probably not produced much after the end of the first quarter of the 3rd century (Perrin 1999, 92).

Other decoration includes the use of rough-casting, white paint and rouletting. Two vessels carry graffiti (Fig. 5.6.50). A few sherds of colour-coated mortaria also feature but were clearly not an important part of the output. Also included here are two vessels from well 8032 with an oxidised fabric but also with the classic colour-coated surfaces. One is a copy of a Drag 37 bowl including the ovolo mouldings (Fig. 5.5.34); the other a plain rim beaker with barbotine scroll decoration (Fig. 5.5.35). Mould-made Drag 37 imitations were found in the Water Newton and Great Casterton kilns (Perrin 1999, 102). Amongst the dishes is one imitating the samian form 36 with barbotine leaf decoration (Fig. 5.8.84) from a Phase 5 ditch. This form appears to date to the late 2nd -3rd century (Perrin 1999, 86).

Similar forms feature in Phase 5 but there is an increase in hemispherical bowls with a wall flange or rim flanges (Fig. 5.9.102-3), jars including rolled and almond-shaped rims and one with a ridged neck (Fig. 5.8.77, 80; Fig. 5.9.108), plain-rimmed dishes and disk-necked flagon (Fig. 5.9.106). A complete box lid came from a Phase 5 ditch (Fig. 5.8.85). Further copies of samian forms occur (eg Fig. 5.8.84). One base carries an illegible stamp (Fig. 5.2.S22). Various beaker forms continue to feature including cornice rim (Fig. 5.9.98) and folded types (Fig. 5.9.99). Amongst the beaker sherds is one decorated with raised bosses and another with a painted red and white fluted column (Fig. 5.8.86). A sherd with indented combing is also a new feature in this phase. A flanged conical bowl (10679) has a graffito, as do two beakers (Fig. 5.8.78; Fig. 5.9.107). Two further beaker sherds from unphased contexts also bear graffiti (Fig. 5.10.119-20). Grave 11790 contained a complete miniature necked beaker (Fig. 5.10.117).

Lower Nene Valley oxidised ware (LNV OX). A small group of oxidised sandy wares, which greatly resemble the LNV RE group in paste and texture, have been labelled LNV OX although this particular fabric is not a widely recognised component of the Lower Nene Valley industry *per se* and may derive from elsewhere in the locality. Most of the sherds came from Phase 4 contexts, with fewer from Phase 5. Forms include necked jars, triangular rimmed jars, ring-necked flagon, reeded rim dishes, copies of samian forms Drag 36, 30 and 38 and a carinated cup. A plain-rimmed beaker has a cross scratched onto the rim (Fig. 5.6.56) and a bowl has two cuts across the rim (Fig. 5.7.69).

Lower Nene Valley parchment ware (LNV PA) (Tomber and Dore 1998, 118). Another small group of 217 sherds distributed across Phases 4 and 5. The paste is quite fine and most pieces carry some form of red painted decoration, mainly as lines or bands. Of note is a bowl with a flanged rim with red painted decoration (Fig.5.10.118).

Local wares: grog-tempered

The grog-tempered category of wares can be divided into four main groups: handmade grog-tempered ware of the later pre-Roman-early Roman tradition; grog and shell-tempered wares of similar date; local sandy grog-tempered wares and pink grog-tempered ware, which although from a Midlands source (see below), was traded further afield. The local sandy grog-tempered wares have been divided into six sub-fabrics based on colour. This is to some extent arbitrary as depending on which part of the vessel is present could effect which group a sherd is placed, most particularly with the blackened exterior sherds. The division was made at the analytical stage to look for possible patterns in vessel type by vessel colour and to see if this changed through time.

Grog-tempered (GROG). A very small group of just two handmade body sherds, one from Phase 3 with a scratch-marked exterior. Probably residual.

Grog and shell-tempered ware (GR SH). Another small group of five unfeatured handmade body sherds distributed across Phase 4 and 5 contexts. Probably residual.

Sandy grog-tempered wares. These have been divided into six subgroups based on colour: burnt oxidised ware (BOX GR); oxidised ware (OX GR); burnt

white ware (BWH GR); white ware (WW GR), grey ware (GY GR and burnt pink grog-tempered ware (BPNK GR). Collectively the group accounts for 14.1% by weight, 9.3% by count of the total assemblage. Within the group 57.7% by weight are the burnt white wares, followed by 14.8% white ware, 9.9% grey ware, 9% burnt oxidised grog-tempered ware 6.4% oxidised ware and just 2% burnt pink ware. The term 'grog' is used loosely as the paste contains largely rounded to sub-angular clay pellets, which may occur naturally. Marney (1989, 64, fabric 2) encountered the same problem with the grog-tempered wares at Milton Keynes, which probably embrace the same fabric tradition. A kiln recently excavated at Brackley, Northants, dated to the later 1st century was producing mainly oxidised sandy grog (clay-pellets) tempered wares, the products being largely channel rim jars and bowls (Timby forthcoming a). Another similar unpublished production site is known at Ashton, Northants (Aird, n.d.). These were probably just two of a large number of similar rural production centres established in the later 1st century to early 2nd century, which later developed into more centralised industries servicing the local area resulting in the range of products in this fabric seen at Higham Ferrers.

The largest group, BWH GR is distinguished by having a white fabric with a blackened exterior. It is clear that in some vessels this blackening can vary over the surface of the vessel and some zones, particularly towards the bases, tend to have more patchy blackening. This is presumably due to stacking of the vessels during firing, where not all surfaces were exposed to the reducing atmosphere presumably deliberately introduced by burning green fuel towards the end of the firing process. Sherds were distributed throughout contexts in Phases 3 to 5 with a greater emphasis in Phase 3 where 37.7% by weight of the group occurred, gradually decreasing in Phase 4 to 34.4% and dropping away to 14.5% in Phase 5. Most of the vessels are jars, in particular, forms with triangular lid-seated rims (Fig. 5.5.18-19, 21; Fig. 5.6. 58; Fig. 5.7.63, 68; Fig. 5.8.90), accompanied by a small number of large reeded-rim or hammer-rim bowls or lids, one of which is sooted on the interior. In most cases the vessels are wheelthrown but occasional handmade sherds occur. In Phase 3 the lid-seated jars account for 53.3% by EVE of all the jars in this fabric. The remainder comprise simple everted-rim necked jars (18%), necked, everted, thickened-rim jars (13%) and smaller amounts of vessels with triangular rims, bifid rims, flat rims and cordoned necks. Usually vessels are plain but some examples occur with fine ridging on the body similar to the shelly ware, or combing. In Phase 4 lid-seated jars account for 63.7% EVE with the same range of other types. Jar diameters range from 80 mm through to 280 mm with the greatest numbers occurring between 160 mm -180 mm. In Phase 5 the quantity of vessels has considerably decreased along with the diversity; only jars are found, amongst which the lid-seated type is still dominant.

The white 'grogged' wares form the second commonest group with the highest incidence in Phase 4, where 64% by weight of the sherds occurred, and only 15.8% in both Phase 3 and Phase 5. The range of forms is very similar to BWH GR, perhaps with slightly more very large bowls (Fig. 5.5.25; Fig. 5.6.45; Fig. 5.9.97). Amongst the jars lid-seated forms again dominate (Fig. 5.4.2). One closed vessel has impressed triangles around the girth.

Similar patterns prevail for the other coloured variants GY GR, OX GR and PNK GT, all of which have their highest incidence in Phase 4. Fabric BOX GR, by contrast shows, its highest incidence in Phase 3 where 69.8% of this fabric occurs, compared to 28.4% in Phase 4. This would tie in with evidence from the early kilns in which the products are largely oxidised, suggesting that this was the preferred firing colour at this time. The forms however, are consistent across these other variants in which lid-seated jars dominate, (Fig. 5.4.1), accompanied by other jar forms and large bowls (Fig. 5.6.48). The firing colour cannot thus be equated with vessel type and is more likely to represent the output from different kilns, or the signature of different potters in the locality.

Late pink grogged ware (PNK GT) (Tomber and Dore 1998, 210). A distinctive ware mainly used for large storage jars and dating to the later 2nd to 4th centuries (Booth and Green 1989). Sherds first appear in Phase 4. A source in the Midlands, postulated on the basis of the distribution, has now been confirmed (Booth 1999).

Local wares: shelly wares

Shelly wares (fabrics SHELL1-3) collectively account for 34.4% by weight, 23.2% by count. Three fabrics have been distinguished, two of which are identical but have been divided on the basis of handmade (SHELL1) and wheelmade (SHELL2) sherds. A fourth small group of sandy ware with shell and limestone and represented by just three sherds was also defined.

SHELL1-2: A generally dark brown to black, rarely oxidised ware, with a soapy feel and containing a moderate to common density of fossil shell and other fossiliferous matter such as bryozoa of a type typically found in the Jurassic clays. Other inclusions include rare grains of red or black iron, fine, rounded quartz sand and rare fragments of limestone. The core is usually grey. There is some uncertainty as to whether the shell was deliberately added, occurred naturally in the potting clays or was a mixture of the two. The pastes are usually fairly uniform, which might suggest the latter. Shelly wares are extremely common in this area from the Iron Age through to the later Roman period and indeed it is difficult to identify late Iron

Age from early Roman material in the absence of other wares. The ware must have been made at a number of centres, few of which have been identified. A major production centre was based at Harrold, Beds from the 1st to late 4th century and perhaps beyond (Brown 1994). Other kilns producing similar products are known at Emberton, Bucks (Mynard 1970), Great Barford, Beds (Stansbie 2007) and Willington, Beds (A Slowikowski pers. comm.). The same fabric was used for making ceramic building material..

Jars dominate both the handmade and wheel-made fabrics and overall account for 93.1% EVEs. All the larger storage jars are handmade, accounting for 18% of EVEs in SHELL1. Other jar forms are quite diverse, the dominant ones being simple everted rim, everted thickened rim, triangular rim, flat rim and lid-seated (Fig. 5.4.8-12, 17; Fig. 5.5.36; Fig. 5.6.59-60; Fig. 5.7.61, 64-5, 67; Fig. 5.8.82; Fig. 5.8.89; Fig. 5.10.113). Decoration is limited but includes one vessel with impressed crescents around the girth, one storage jar with deeply impressed rouletting and occasional use of diagonal combing and incised wavy line (Fig. 5.7.61) but most vessels are plain or finely ridged. The rim diameters range from 110 mm through to 520 mm. The highest incidence lies in the 160-240 mm range but seven vessels fall into the range between 400 and 520 mm suggesting that these were storage jars. There was little evidence of use, two necked jars had sooted rims and two vessels were internally burnt. A jar recovered from well 8278 has an internal undefined deposit and another jar an internal calcareous lining from holding or heating water.

Other forms are largely restricted to bowls (4.2% EVE), dishes (1.9%) (Fig. 5.4.3) and single examples of a lid and a folded beaker. The handmade bowls are often the larger vessels with flat, down-turned rims. Some are decorated with a wavy line on the rim. The most common forms, however, are flat rim or flanged rim forms (Fig. 5.7.71). A slightly unusual closed vessel missing a rim but with five holes made before firing has been interpreted as a watering can (Fig. 5.4.6). A tubular handle or spout also in this fabric was found in Phase 3 well 12890 (Fig. 5.4.5). A fragment of a probable lamp chimney came from layer 12718, group 12830, within the shrine (Fig. 5.6.53) and a rectangular piece cut before firing from roadside ditch group 10670 (Fig. 5.8.83) may have also come from a lamp chimney

Modified items include the edge of a sherd fashioned into a counter from ditch group 12895. A hemispherical bowl from ditch group 12310 had a post-firing cut across the rim (Fig. 5.4.13) and one jar rim from ditch 10681 was marked with a graffito.

SHELL3. A small group of wares distinguished by much sparser shell temper compared to SHELL1-2 and a sandier paste. All the sherds came from Phase 4 and 5 contexts and include necked jars and one beaker.

Local wares: sandy wares

The sandy wares to some extent mirror the grog-tempered wares in that the divisions made for some of the groups have been primarily based on firing colour rather than any other distinguishing characteristics. As with the grog-tempered wares some vessels have been deliberately blackened on the exterior, giving a burnt oxidised ware (BOX SY), a burnt white ware (BWH SY), a burnt fine white parchment ware (BWH PA) and black, orange and pink sandy wares. The group overall is quite small compared to the grog and shelly categories, with only the black sandy ware and burnt white ware categories contributing just over 1% each to the overall assemblage. Also included in this group of wares is a black micaceous ware, a black ware imitating BB1 forms and a miscellaneous grey sandy group.

Burnt oxidised sandy ware (BOX SY). A small group of seven sherds, all from Phase 3. Forms are limited to a reeded rim bowl and an S-shaped bowl (Fig. 5.5.24).

Burnt white sandy ware (BWH SY). A slightly larger assemblage of 371 sherds with a white sandy body and blackened exterior. The range of forms is similar to the grog-tempered counterpart with various lid-seated jars (Fig. 5.6.44), everted rim (Fig. 5.7.66), triangular rim (Fig. 5.7.62), flat rim and bifid rim jars, some with ridged exterior surfaces. Also present in lesser amounts are triangular rimmed (Fig. 5.8.93), flat rim and reeded rim bowls and lids. One jar carries a X scratched into the inner rim face (Fig. 5.10.112) and one jar has three lines incised into the rim (Fig. 5.8.92). Two vessels have sooted exteriors and calcareous linings and one complete jar has a holed base (Fig. 5.6.55). Sherds of this ware are present from Phase 3 through to Phase 5 with 62% by count coming from contexts in Phase 4.

Burnt white parchment ware (BWH PA). A small group of five body sherds from a single Phase 4 layer.

Black sandy ware (BW). A moderately large group of 449 sherds, 1.6% of the total assemblage. Most of the sherds occur in Phase 3 and 4 contexts suggesting that this industry may have been short-lived, dating to the early-mid 2nd century. Forms include neckless and lid-seated jars, triangular rimmed jars, sharply everted rim beakers, folded beakers (Fig. 5.5.32) and plain-rimmed dishes.

Orange sandy ware (OXID). A slightly mixed group of fine to medium grade orange sandy wares mainly from Phase 4 contexts. Forms include a similar range to the BOX SY group, with lid-seated jars, bifid rim jars, everted rim jars (Fig. 5.4.16) and reeded rim and flanged rim bowls (Fig. 5.7.70) and almond-shaped rim beakers. A few sherds are decorated, the techniques including burnished lattice, white paint and rouletting.

Pink sandy ware (PNK SY). A very small group from Phases 4 and 5. The only two feature sherds are from a lid-seated jar and a flanged bowl.

Other sandy wares

Imitation black burnished wares (BB1 IMIT). Wheelmade black burnished ware copies in a hard black sandy fabric, usually burnished. This fabric is largely used to make plain-rimmed dishes, flat rim bowls and flanged-rim conical bowls (Fig. 5.8.87; 104) imitating those found in the DOR BB1 range. Jars also feature but are less common. The imitation also includes the burnished line decoration, either latticing or intersecting arcs (Fig. 5.5.40). One conical flanged bowl has a graffito scratched into the wall (Fig. 5.8.87).

Black micaceous ware (BW MIC) and *fine black micaceous ware* (BWF MIC). A medium sandy, micaceous, and finer, micaceous ware, collectively only accounting for 44 sherds. The former includes at least one everted rim jar and an open form with burnished line decoration (Fig. 5.8.81); the latter includes several bowls copying samian form Drag 30 (Fig. 5.5.26). Also included in the latter are a small dish with a particularly highly polished interior surface (Fig. 5.6.57) and a bowl with stamped and rouletted decoration (Fig. 5.6.51).

Fine black ware (BWF). A small group of 15 sherds, which includes a Drag 30 bowl with London style decoration, plain-rimmed dishes and a jar/beaker with a rouletted neck (Fig. 5.4.7).

Grey sandy wares (GREY). A miscellaneous category for grey wares that do not fit other categories.

Fine grey ware (GYF). Just two sherds, but including a beaker with unusual chevron and dimple decoration (Fig. 5.5.30).

Black-slipped grey ware (BSGW). A single polished black sherd from Phase 3.

Miscellaneous wares: unknown source

Buff wares (BUFF) a small group with one colour-coated sherd (BUFF CC) and one micaceous buff ware (BUFF MIC). The plain buff wares include one with a notched cordon, rouletted decoration and one sherd with black painted stripes.

Colour-coated wares (CC). Miscellaneous colour-coated ware. Mainly oxidised ware with a red colour-coat.

Coarse white ware with a red colour-coat (CWW CC). A single, unfeatured, sherd from Phase 4.

British glazed ware (GLAZE). A single, small cupped mouth, possibly from a flask (Fig. 5.6.54). Brownish red, sandy fabric with a dark olive-green glaze on the inner and outer surfaces.

Grey ware with a red burnished finish (GY RB). Single example of a spout in a grey, sandy, fabric with a burnished red slip from a Phase 4 ditch (Fig. 5.6.47).

Mica-slipped wares (MICA). A small group of 27 sherds with an orange, sandy, fabric covered with a golden micaceous slip. Most of the sherds occur in Phase 4 contexts and are likely to be 2nd-century products. Vessels are mainly beakers, bowls or dishes including the substantial part of a dish similar to Young (1977) form C45 from floor (11555) and a plain-sided dish from Phase 5.

Miscellaneous mortaria (MORT). Seven sherds of unclassified mortaria variously with flint and/or quartz and clay pellet trituration grits.

Fine oxidised ware (OXID F). A small group mainly used for beakers and a small flask (SF 676) deposited in a Phase 5 grave (Fig. 5.8.79). Probably largely 2nd century in date.

Micaceous oxidised wares (OXID MIC). A medium fine, dark orange ware, distinctively micaceous. Sherds are largely unfeatured but include a small sherd with a faint relief pattern (Fig. 5.8.88).

White-slipped oxidised ware (WS OXID) and *white slipped grey ware* (WS GY). Two small groups, the latter just a single sherd. Most of the sherds are unfeatured but are largely from flasks or flagons with a single example of a reeded rim bowl. Most of the sherds come from Phase 4 contexts.

Fine white wares (WWF). A small group largely from Phase 3 and 4 contexts. Vessels include a flask, a hemispherical bowl with red painted decoration (Fig. 5.5.31) and a sherd painted with a dot and circle in orange paint.

Miscellaneous white wares (WW). Various grades of white ware not easily classified and from all phases of the site. Vessels include lid-seated and rolled rim jars, flagons and bowls. A sherd from a beaker from Phase 4 is decorated with a single horizontal red line.

Discussion by stratigraphic phasing

The following section discusses the pottery by the stratigraphic phasing. Although certain chronological trends can be discerned from Phase 3 through to Phase 5 it is clear that either a substantial amount of material remained in use beyond its conventional production date, or that Phase 5 contained much redeposited material. This is particularly apparent for the samian and colour-coated wares, which might be due to their very specialist nature, surviving longer in use than the less chronologically sensitive coarse wares.

Phase 1-2 (prehistoric)

A single handmade sherd of flint-tempered ware came from ditch 11236 of prehistoric date. A large assemblage of 174 sherds of Roman pottery from waterhole 11140 (10615; see Chapter 2) is intrusive in this phase. The group dates to the mid 2nd century and comprises almost exclusively locally made grog-tempered and sandy wares and products from the Lower Nene Valley industry.

Phase 3 (early-mid 2nd century)

The earliest Roman activity appears to date from the early 2nd century and archaeological contexts allocated to this phase on stratigraphic grounds produced some 3046 sherds weighing 62.8 kg and with 45.98 EVEs (Table 5.3). Overall the sherds are well preserved with an overall average sherd weight of 20.6 g.

The only continental import present in Phase 3 is Central Gaulish samian, which accounts for 2.6% by

Table 5.3 Quantified summary of pottery from Phase 3 contexts

PHASE 3	*Fabric*	*Description*	*Wt*	*% Wt*	*No*	*% No*	*EVE*	*% EVE*
IMPORTS	CG SAM	Central Gaulish samian	1569	2.5	78	2.6	456	9.9
REGIONAL	COL CC	Colchester colour-coat	19	+	1	+	0	
	DOR BB1	Dorset black burnished ware	5	+	1	+	0	
	VER WH	Verulamium white ware	5	+	1	+	0	
	VER WHM	Verulamium white ware mortaria	1380	2.2	16	0.5	71	1.5
LOCAL	BOX GR	burnt oxidised grog-tempered	4090	6.5	148	4.9	234	5.1
	BPNK GR	burnt pink grog-tempered	8	+	1	+	0	
	BWH GR	burnt white ware grog-tempered	14354	22.8	643	21.1	1018	22.1
	GY GR	grey grog-tempered	346	0.6	11	0.4	21	0.5
	OX GR	oxidised grog-tempered	1459	2.3	57	1.9	83	1.8
	WW GR	white grog-tempered	1671	2.7	49	1.6	148	3.2
	GROG	misc hm grog-tempered	92	0.2	1	+	0	
	LNV CC	Lower Nene Valley colour-coated ware	258	0.4	28	0.9	46	1.0
	LNV OX	Lower Nene Valley oxidised ware	24	+	3	0.1	0	
	LNV RE	Lower Nene Valley grey ware	9655	15.4	954	31.3	1185	25.8
	LNV WH	Lower Nene Valley white ware	2098	3.3	177	5.8	64	1.4
	LNV WHM	Lower Nene Valley white ware mortaria	316	0.5	8	0.3	7	0.2
	SHELL1	handmade shelly ware	17837	28.4	464	15.2	480	10.4
	SHELL2	wheelmade shelly ware	4748	7.6	233	7.7	310	6.7
	BOX SY	burnt oxidised sandy ware	252	0.4	8	0.3	28	0.6
	BWH SY	burnt white ware sandy	783	1.3	46	1.5	39	0.9
	BW	black sandy ware	1014	1.6	65	2.1	205	4.5
	BB1 IMIT	wheelmade BB1 copies	87	0.1	6	0.2	27	0.6
	GREY	grey sandy ware	18	+	2	0.1	0	
	OXID	oxidised sandy ware	146	0.2	4	0.1	38	0.8
UNKNOWN	BSGW	black slipped grey ware	8	+	1	+	0	
	BWF	black fine ware	23	+	2	0.1	17	0.4
	BWF MIC	black fine micaeous ware	73	0.1	6	0.2	25	0.5
	FLINT	flint-tempered	20	+	1	+	7	0.2
	MORT	misc mortaria	13	+	1	+	0	
	OXID MIC	micaceous oxidised wares	143	0.2	8	0.3	20	0.4
	WS OXID	white-slipped oxidised ware	107	0.2	6	0.2	0	
	WWF	fine white wares	26	+	3	0.1	0	
	WW	misc white wares	200	0.3	13	0.4	69	1.5
TOTAL			62847	100.00	3046	100.00	4598	100.00

count of the overall group. Regional imports account for less than 1%, with the bulk of the assemblage comprising local wares. These can be broadly divided into the grog-tempered group, Lower Nene Valley group, shelly wares and sandy wares. Collectively the grog-tempered wares account for 30% by sherd count, 35% by weight; the Lower Nene Valley wares for 38.4% by count (19.7% weight); the sandy wares for 4.3% by count (3.7% weight) and the shelly wares for 22.9% (35.9% weight). Lower Nene Valley grey ware was the commonest individual fabric, accounting for 31.3% of the total assemblage by sherd count. It is thought that this industry was established by the second quarter of the 2nd century (Perrin 1999, 78).

Table 5.4 summarises the main forms present from Phase 3 contexts. Coarse ware jars dominate the group accounting for 60.7% followed by bowls/dishes at 16% and beakers at 9% of EVEs. Within the fine tableware cups are the commonest samian form accounting for 6.4% overall of the Phase 3 assemblage and 57.4% of the samian assemblage.

Circular building 10920 produced a modest group of some 74 sherds (653 g). Of particular note is a DOR BB1 jar decorated with acute lattice and two Verulamium white ware mortaria. Lower Nene Valley grey ware dominates, accounting for 50% of the group. Other forms present are limited to everted rim jars and one dish. Building 10910 to the south-west yielded no material but the associated well 12890 produced 94 sherds (1327 g). Of note from this group is a shelly ware tubular spout/handle (Fig. 5.4.5). Two sherds of LNV CC ware have barbotine floral decoration in imitation of samian Drag 36 dishes. This would suggest that material was accumulating in the well perhaps into the 3rd century. Vessels with this type of decoration tend to date to throughout the 3rd century and well into the 4th century (Perrin 1999, 102). Most of the other wares could be 2nd-century types and the samian appears to be mainly Antonine.

A third stone circular building, 11340, produced a smaller assemblage of 31 sherds from Phase 3 contexts and a further 144 sherds from Phase 3-4 deposits. Eighteen sherds of Central Gaulish samian from Phase 3 include two vessels with rivet holes, a Drag 42 dish and a Drag 37 bowl. The samian might suggest a Hadrianic date for this phase and certainly no LNV CC is present. Further material from the building allocated to Phase 3-4 yielded a further 16 sherds of samian, so overall this accounts for 19.4% of the pottery recovered from the building, a particularly high concentration, suggesting that the structure may have served some sort of specialised function. Moreover the samian includes as least three decorated bowls, a handled dish (Drag 42) and a mortarium alongside the more common dishes (Drag 18/31 and 31) and cups (Drag 33). Eight small sherds of LNV CC came from Phase 3-4, and together with the single samian mortarium sherd suggest a date of deposition for context (10668) after the mid 2nd century. The coarse wares include lid-seated jars, dishes, beakers and mortaria with nothing of particular note to mark them as different or of specialised function.

The boundary ditch (12310), to the south of building 10920, produced a very substantial assemblage of 1362 sherds (32.4 kg). Three ware groups dominate the assemblage: grog-tempered (BWH GR, BOX GR in particular), shelly and LNV RE, which collectively amount to 91.6% of the sherd count. The former two wares include a large number of lid-seated jars; the latter includes several expanded-rim dishes. Also present in the shelly wares are a number of reeded-rim dishes (Fig. 5.4.3). The material is generally well-preserved with an

Table 5.4 Quantified summary of vessel forms from Phase 3, 4 and 5 contexts

		Phase 3		*Phase 4*		*Phase 5*	
	Form	*EVE*	*%*	*EVE*	*%*	*EVE*	*%*
Samian	dish	176	3.9	676	3.9	410	2.4
	bowl	38	0.8	88	0.5	94	0.5
	cup	288	6.4	347	2.0	200	1.2
	mortaria	0	0.0	25	0.1	15	0.1
Coarseware	jar	2728	60.7	8254	47.1	8105	47.2
	bowl/dish	721	16.0	3400	19.4	5452	31.8
	mortaria	78	1.7	257	1.5	425	2.5
	lid	59	1.3	90	0.5	153	0.9
	beaker	406	9.0	3828	21.8	1717	10.0
	cup	0	0.0	38	0.2	18	0.1
	flagon/jug	0	0.0	309	1.8	208	1.2
	flask	0	0.0	149	0.9	310	1.8
	box	0	0.0	66	0.4	56	0.3
TOTAL		4494	100.0	17527	100.0	17163	100.0

overall average sherd weight of 24 g. There are several examples of multiple sherds from single vessels and several profiles can be reconstructed. Sherds of both Lower Nene Valley white ware and Verulamium white ware mortaria are present. The latter includes several sherds from a vessel stamped BO[..] on the flange (Fig. 5.4.14) typologically dating to the early 2nd century. Imported continental wares are quite scarce in the ditch group with just five sherds of Central Gaulish samian. The latest of these is probably a Curle 23 dish of Antonine date.

Ditch 12880, also associated with the early settlement layout, similarly produced a substantial assemblage of pottery with some 1013 sherds (17.4 kg). The sherds were slightly more fragmented compared to those in ditch 12310, with an overall average weight of 17 g. Although the group is again dominated by three fabrics: grog-tempered, LNV RE and shelly ware accounting for 73% by count, there is a greater diversity of other wares compared to ditch 12310. In particular there is more Central Gaulish samian and slightly more Lower Nene Valley colour-coated ware including an indented beaker with barbotine scale decoration. Vessels of note include a fine black, micaceous ware bowl copying the samian Drag 30 form (Fig. 5.5.26) and several sherds from a barbotine dot decorated LNV RE beaker (Fig. 5.5.27).

Other pottery allocated to Phase 3 largely came from layers, hearths, pits, ditches and colluvium deposits and comprised moderately small groups. Of particular note is a vessel from pit 11482, suggested to be a watering can. This is a wheelmade shelly ware closed form, broken at the neck but with five holes through the base made before firing (Fig. 5.4.6). Of the two large pits or waterholes near the southern terminal of ditch 12880, waterhole 12072 produced 33 sherds, over half of which were grey wares (LNV RE) and waterhole 11991 just five sherds.

Phase 3-4 (early/mid-late 2nd century)

Apart from the additional pottery from building 11340 (see above) and 16 sherds from hearth 11348 the remaining pottery from this phase came exclusively from layers (Table 5.5). Of particular note are a red painted fine white ware sherd, probably a Lower Nene Valley product (Fig. 5.5.31) and a sherd of fine grey ware beaker decorated with chevrons and dimples (Fig. 5.5.30). Sherds of LNV CC include beakers decorated with diagonal barbotine stripes, and barbotine scales and box and lid fragments. Further sherds of DOR BB1 feature, including a plain-rimmed dish from layer (12306). An imported Central Gaulish black slip beaker came from the same context.

Table 5.5 Quantified summary of pottery from Phase 3-4 contexts

	Fabric	*Description*	*Wt*	*% Wt*	*No*	*% No*	*EVE*	*% EVE*
IMPORTS	CG SAM	Central Gaulish samian	295	4.2	27	5.4	70	11.7
	CNG BS	Central Gaulish black slip	42	0.6	5	1.0	0	
REGIONAL	DOR BB1	Dorset black burnished ware	31	0.4	2	0.4	8	1.3
	VER WH	Verulamium white ware	10	0.1	1	0.2	15	2.5
	VER WHM	Verulamium white ware mortaria	47	0.7	1	0.2	0	
LOCAL	BWH GR	burnt white ware grog-tempered	1111	15.9	56	11.2	31	5.2
	GY GR	grey grog-tempered	411	5.9	9	1.8	0	
	OX GR	oxidised grog-tempered	116	1.7	5	1.0	12	2.0
	WW GR	white grog-tempered	54	0.8	3	0.6	0	
	LNV CC	Lower Nene Valley colour-coated ware	131	1.9	26	5.2	29	4.9
	LNV OX	Lower Nene Valley oxidised ware	2	+	1	0.2	0	
	LNV PA	Lower Nene Valley parchment ware	37	0.5	1	0.2	0	
	LNV RE	Lower Nene Valley grey ware	1918	27.5	201	40.4	218	36.6
	LNV WH	Lower Nene Valley white ware	119	1.7	8	1.6	47	7.9
	LNV WHM	Lower Nene Valley white ware mortaria	83	1.2	3	0.6	7	1.2
	SHELL1	handmade shelly ware	1841	26.4	76	15.3	24	4.0
	SHELL2	wheelmade shelly ware	257	3.7	32	6.4	31	5.2
	BWH SY	burnt white ware sandy	276	4.0	18	3.6	45	7.6
	BW	black sandy ware	109	1.6	16	3.2	34	5.7
	OXID	oxidised sandy ware	3	+	1	0.2	0	
UNKNOWN	GYF	fine grey ware	10	0.1	1	0.2	15	2.5
	OXID MIC	micaceous oxidised wares	20	0.3	1	0.2	0	
	WS OXID	white-slipped oxidised ware	2	+	1	0.2	0	
	WWF	fine white wares	11	0.2	1	0.2	0	
	WW	misc white wares	32	0.5	2	0.4	10	1.7
TOTAL			6968	100.00	498	100.00	596	100.00

Phase 4 (mid/late 2nd century-early/mid 3rd century)

Contexts allocated to Phase 4 yielded a substantial assemblage of 11,455 sherds weighing 182.3 kg (Table 5.6). Samian ware is well represented, accounting for 4.3% of the total assemblage by count. Other imported fine wares include Central Gaulish and Moselle black slip beakers, both current in the later 2nd-early 3rd centuries. A few sherds of Spanish olive oil and Gallic wine amphorae occur but the quantities are modest. Regional imports show a marked increase compared to Phase 3, with Mancetter-Hartshill and South Carlton mortaria appearing for the first time along with products of the Oxfordshire industry. Dorset black burnished ware and Verulamium white wares continue to feature. However, the number of regionally imported sherds is low and overall only accounts for just 0.4% of the Phase 4 assemblage.

Local wares again dominate the assemblage with products from the Lower Nene Valley industries showing the highest occurrence, collectively accounting for 60.3% by count compared to 38.4% in Phase 3. Lower Nene Valley grey wares again forms the single most common component at 40.8% by count, but the colour-coated wares and white ware mortaria show a marked increase. By contrast the grog-tempered component of the assemblage has dropped from 30% in Phase 3 to 8.5% while the sandy and shelly wares are fairly constant at 4.6% and 20.6% respectively.

The proportions of the different forms present have also slightly changed compared to Phase 3 (Table 5.4). Coarse ware jars remain the commonest form but have dropped to 47.1% (EVE) of the Phase 4 assemblage. Beakers now form the second commonest form at 21.8%, closely followed by bowls/dishes at 19.4%. The increase in beakers partly reflects the impact of the Lower Nene Valley colour-coated industry, beakers being amongst the commonest forms made in the 2nd century along with flagons/flasks and small boxes. These two forms, not present in Phase 3, now contribute 2.7% and 0.4% of the assemblage respectively. Amongst the tableware, cups are now far less common with dishes being the commonest samian form.

During Phase 4 building 10910 was demolished and cut through by two new ditch boundaries 11750 and 11760, which produced 89 and 16 sherds respectively. The larger groups from 11750 perhaps significantly did not contain any colour-coated ware with 84% of the assemblage being equally divided between grog-tempered ware, shelly ware and LNV RE. The sherds were quite large and did not appear residual. Building 10910, which produced no pottery would thus appear to have been quite early in the sequence in this area and the ditches relatively short-lived, perhaps silted up by the mid 2nd century.

Phase 3 Ditch 12880 was replaced by ditch 12980. This also appears quite short-lived producing a largely mid 2nd-century assemblage not dissimilar to that from ditch 12880. A significant difference, however, lies in the size of the sherds, which have an average weight of 35 g, twice that of material from ditch 12880. Grog-tempered wares dominate the group at 42% of sherd count and include the substantial part of a very large WW GR bowl. Just a single sherd of LNV CC is present and no samian. The only fine ware is a mica-slipped bowl. The size of the sherds strongly suggests that this is not redeposited material. The soil layers in 13015, which yielded 174 sherds (3230 g), show great similarity to those in ditch 12980, with possibly the same or very similar vessels. The layers produced a single LNV CC beaker and relatively little LNV RE, but numerous grog-tempered and shelly wares and an early 2nd-century black, micaceous ware copy of a samian bowl Drag 30.

Other features which appear to date relatively early in the phase on the basis of few colour-coated wares and a greater emphasis on grog-tempered wares, include well 12140, ditch 12471 (with five sherds of samian ware from Les Martres-de-Veyre suggesting an early/mid 2nd-century date), ditch 12617 (with a large group of 163 sherds, 5% of which are samian ware alongside a high proportion of grog-tempered wares and negligible colour-coated sherds) and grave group 12725. This last feature produced 200 sherds (3238 g), 12% of which were samian, and included the profile of a black micaceous ware dish. The sherds suggest an early/mid 2nd-century currency and are presumably all redeposited. Ditch 11750 also contained mainly grog and shelly ware with no colour-coated wares and a samian ware dish Drag 42 of probable Trajanic-Hadrianic date.

Also early is layer 12224 (with a group of Les Martres-de-Veyre samian ware), layer 12236 (with a very worn South Gaulish samian ware cup and barbotine decorated colour-coated ware), demolition layer 11159 (also with Les Martres-de-Veyre samian ware and no colour-coated ware) and layer 11555 (with a mica-slipped dish and LNV CC beaker sherd including the example with barbotine ducks (Fig. 5.8.88)).

One of the largest individual assemblages from the site came from pit 12826, with 829 sherds (18.5 kg), giving an average sherd weight of 22.3 g. Several vessels with joining sherds and near-complete profiles were present (cf Fig. 5.6.58-60; Fig. 5.7.61-74). Grog-tempered wares account for 17.6% by number; samian ware for 7.6%, LNV RE for 30% and shelly ware for 22.8%. The samian ware includes stamp S10 with a production period AD 130-55. Rare vessels include the South Carlton mortarium and parts of two white ware flagons (LNV WH).

Ditch 12895, defining the northern limit to the settlement area, also produced a good assemblage of 433 sherds of pottery (8.8 kg). A greater emphasis on colour-coated Nene Valley wares, 14% by count of the assemblage, intimates a slightly later date of

Table 5.6 Quantified summary of pottery from Phase 4 contexts

	Fabric	*Description*	*Wt*	*% Wt*	*No*	*% No*	*EVE*	*% EVE*
IMPORTS	SG SAM	South Gaulish samian	44	+	6	0.1	10	0.1
	CG SAM	Central Gaulish samian	5676	3.1	481	4.2	1118	6.4
	EG SAM	East Gaulish samian	117	0.1	6	0.1	8	0.1
	CNG BS	Central Gaulish black slip	10	+	5	+	12	0.1
	MOS BS	Moselle black slip	22	+	9	0.1	0	
	BAT AM	Baetican amphorae	130	0.1	4	+	0	
	GAL AM	Gallic amphorae	194	0.1	7	0.1	0	
REGIONAL	DOR BB1	Dorset black burnished ware	310	0.2	20	0.2	64	0.4
	MAH WH	Mancetter-Hartshill mortaria	66	+	2	+	10	0.1
	OXF RS	Oxon colour-coated ware	32	+	4	+	0	
	OXF RSM	Oxon colour-coated mortaria	36	+	2	+	6	+
	OXF WHM	Oxon white ware mortaria	12	+	1	+	0	
	SOC WH	South Carlton white ware	296	0.2	1	+	20	0.1
	VER WH	Verulamium white ware	192	0.1	10	0.1	57	0.3
	VER WHM	Verulamium white ware mortaria	224	0.1	7	0.1	25	0.1
LOCAL	BOX GR	burnt oxidised grog-tempered	1669	0.9	59	0.5	107	0.6
	BPNK GR	burnt pink grog-tempered	1317	0.7	20	0.2	67	0.4
	BWH GR	burnt white ware grog-tempered	13182	7.2	627	5.5	1153	6.6
	GY GR	grey grog-tempered	3047	1.7	17	0.2	57	0.3
	OX GR	oxidised grog-tempered	1928	1.1	89	0.8	95	0.5
	PNK GT	pink grog-tempered	252	0.1	12	0.1	10	0.1
	WW GR	white grog-tempered	5922	3.3	151	1.3	287	1.7
	GR SH	grog and shell-tempered	67	+	3	+	0	
	LNV CC	Lower Nene Valley colour-coated ware	12888	7.1	1504	13.1	2133	12.2
	LNV CCM	Lower Nene Valley cc mortaria	32	+	2	+	5	+
	LNV OX	Lower Nene Valley oxidised ware	1939	1.1	151	1.3	290	1.7
	LNV PA	Lower Nene Valley parchment ware	84	0.1	11	0.1	22	0.1
	LNV RE	Lower Nene Valley grey ware	51081	28.0	4672	40.8	7271	41.7
	LNV WH	Lower Nene Valley white ware	5964	3.3	471	4.1	367	2.1
	LNV WHM	Lower Nene Valley white ware mortaria	4456	2.4	94	0.8	175	1.0
	SHELL1	handmade shelly ware	49034	26.9	1622	14.2	1700	9.8
	SHELL2	wheelmade shelly ware	12157	6.7	733	6.4	1146	6.6
	SHELL3	sparse shelly ware	78	+	5	+	35	0.2
	SHLISA	misc shell/limestone/sandy	5	+	1	+	0	
	BWH SY	burnt white ware sandy	4489	2.5	213	1.9	377	2.2
	BW	black sandy ware	1812	1.0	182	1.6	393	2.3
	BB1 IMIT	wheelmade BB1 copies	1014	0.6	46	0.4	122	0.7
	BW MIC	black micaceous ware	199	0.1	19	0.2	61	0.4
	GREY	grey sandy ware	72	+	7	0.1	0	
	OXID	oxidised sandy ware	473	0.3	43	0.4	78	0.5
	PNK SY	pink sandy ware	91	0.1	14	0.1	8	0.1
UNKNOWN	BUFF	buff sandy ware	8	+	2	+	0	
	BUFF CC	buff sandy ware with colour-coat	11	+	2	+	10	0.1
	BUFF MIC	buff micaceous ware	6	+	1	+	0	
	BWF	black fine ware	5	+	1	+	0	
	CC	misc colour-coated wares	165	0.1	16	0.1	19	0.1
	CREAM	fine cream ware	11	+	1	+	0	
	CWW CC	coarse white ware with colour-coat	5	+	1	+	0	
	GLAZE	British glazed ware	2	+	1	+	11	0.1
	GYF	fine grey ware	3	+	1	+	0	
	GY RB	grey with a red burnish	23	+	1	+	0	
	MICA	mica-slipped wares	440	0.2	19	0.2	38	0.2
	MORT	misc mortaria	190	0.1	1	+	0	
	OXID F	fine oxidised wares	33	+	8	0.1	4	+
	OXID MIC	micaceous oxidised wares	46	+	3	+	9	0.1
	WS OXID	white-slipped oxidised ware	255	0.1	29	0.3	5	+
	WWF	fine white wares	136	0.1	22	0.2	24	0.1
	WW	misc white wares	277	0.2	10	0.1	34	0.2
	MISC	miscellaneous unclassified	33	+	3	+	0	
TOTAL			182262	100.00	11455	100.00	17443	100.00

abandonment compared to the above ditches. The forms are mainly beakers typical of the mid/later 2nd century into the early 3rd century and a copy of a samian decorated bowl is of similar date. Also present is a disk-necked flagon, generally a type dating to the 3rd century. Shelly wares account for 33% of the group and include part of a sherd reshaped as a counter.

The substantial roadside ditch 10680 produced just seven body sherds but large pieces with an average sherd weight of 41 g. These include five sherds of LNV CC and one piece of Central Gaulish samian ware.

Well 12885, probably associated with building 10870, produced a large assemblage of 278 sherds (6 kg) in the lowest fill. Three wares dominate, grog-tempered, LNV RE and shelly, collectively accounting for 82.6% by count. Also present are nine sherds of Central Gaulish samian ware and five sherds of LNV CC, including beakers and a box. It would seem that the well was constructed at some point in the second half of the 2nd century.

Other layers with substantial assemblages include rubble layer 12435 (by Ironstone wall 12437) with 455 sherds (5935 g), including MOS BS and white ware mortaria suggestive of a later 2nd- to 3rd-century date of accumulation. Slightly later are layers 12585 (buried plough soil), 12683 (colluvium), 10678 (a layer over the roadside 'pavement') and 10843 (silting against building 10800) with OXF RS mortaria, LNV CC jars and flanged bowls (DOR BB1, LNV RE), which probably date to the later 3rd or 4th centuries.

One of the largest assemblages came from 12830, a thin layer of silty soil extending across most of the interior of the shrine precinct, with 2837 sherds weighing 19,706 g. The assemblage is well-fragmented, with an average weight of 7.2 g, and chronologically diverse, ranging from the early 2nd century through to later 2nd-early 3rd century with two intrusive post-medieval pieces. Vessels of note include the only glazed sherd (Fig. 5.6.54), a fragment of lamp chimney, two small unguent jars, South, Central and East Gaulish samian ware, imported fine wares MOS BS and CNG BS and several colour-coated wares, mostly used for beakers but including a copy of a Drag 37 bowl. Samian ware accounts for 5% of the group and LNV CC for 14.2%. The composition of the assemblage in terms of forms deviates from the main trend for the overall phase in that jars only account for 27.6% by EVE but beakers account for 58.5%, distinguishing this group from a standard domestic assemblage.

Later features included in the phase are ditch 13005 (a plot boundary ditch flanking the north side of building 11370) with a 3rd-century grooved rim colour-coated bowl, robber trench 11330 of building 11370 with a colour-coated jar also typical of the later 3rd or 4th centuries, and construction cut 11821 (for the terraced area north of building 10870), also with 3rd-century forms.

Other assemblages of note include the substantial part of a large bowl in an oxidised grog-tempered ware from road surface 12031. Pit 12669 to the north of building 10850 produced an assemblage of 117 sherds (4415 g), which includes some particularly large sherds from a shelly ware storage jar giving an average sherd weight of 37.7g. This greatly contrasts with the 230 sherds from layers within the shrine (12830), which were particularly fragmented (see above). It was from this group that the barbotine figured beaker (Fig. 5.6.52) was recovered. Masonry wall 12413 from building 11630 produced a single sherd from a Drag 32 dish, a form predominantly of late 2nd-century date.

In the northern part of the site (Area G) six features probably date to this phase, wells 8278 and 8032 and ditches 8291, 8288, 8293 and 8303. Well 8278 only produced 10 sherds including six large storage jar fragments in shelly ware. Colour-coated wares were not present. By contrast well 8032 produced a large quantity of 961 sherds, 16.4 kg. Over half, 55%, comprise LNV RE with a further 18% LNV CC and 17.5% shelly ware. Grog-tempered wares are negligible and there are just 27 sherds of Central Gaulish samian ware. Most of the assemblage appears to date to the later 2nd-3rd century. Ditch 8291 produced 27 sherds of mid 2nd-century date; ditch 8288 produced 350 sherds probably also of the late 2nd-early 3rd century; ditch 8293 contained 31 sherds of 2nd-century date and ditch 8303 just seven sherds, again probably 2nd century in date. Also in the northern part of the site was a burial assigned to this phase; grave 8154 with 36 sherds, fairly well fragmented and presumably from the grave fill, which might suggest a 3rd-century *terminus post quem* for the burial. The base of a heavily truncated pot in generic wheelmade Roman shelly ware (8006) was found set into the natural colluvium immediately to the east of building 8019, but was not closely datable.

Phase 4-5 (3rd-4th century)

Contexts allocated to Phases 4-5 produced some 1444 sherds weighing 17958 g (Table 5.7). The assemblage is again quite diverse suggesting a fairly high level of redeposition; also reflected in the overall average sherd weight of 12 g. Lower Nene Valley grey wares dominate, accounting for 49.7% of sherds, followed by shelly wares at 26.5%. The grog-tempered component is still in decline at 5.6%. Samian ware levels are quite high at 4.6% but colour-coated wares are quite low at just 7.9%. There are very few specifically late wares, two exceptions being an Oxfordshire white ware mortarium (Young 1977, type M22) within construction cut 12519 (internal stone wall in building 10800) and an Oxfordshire colour-coated dish (ibid., type C45) from ditch 11729, both of which suggest a later 3rd- or 4th-century date.

Table 5.7 Quantified summary of pottery from Phase 4-5 contexts

	Fabric	*Description*	*Wt*	*% Wt*	*No*	*% No*	*EVE*	*% EVE*
IMPORTS	CG SAM	Central Gaulish samian	494	2.8	64	4.4	87	5.6
	EG SAM	East Gaulish samian	30	0.2	3	0.2	0	
	BAT AM	Baetican amphorae	164	0.9	1	0.1	0	
REGIONAL	DOR BB1	Dorset black burnished ware	156	0.9	9	0.6	16	1.0
	OXF RS	Oxon colour-coated ware	23	0.1	1	0.1	7	0.5
	OXF WHM	Oxon white ware mortaria	68	0.4	2	0.1	0	
	VER WHM	Verulamium white ware mortaria	19	0.1	1	0.1	0	
LOCAL	BOX GR	burnt oxidised grog-tempered	68	0.4	7	0.5	0	
	BWH GR	burnt white ware grog-tempered	887	4.9	31	2.2	36	2.3
	GY GR	grey grog-tempered	1615	9.0	32	2.2	0	
	OX GR	oxidised grog-tempered	37	0.2	1	0.1	0	
	WW GR	white grog-tempered	150	0.8	10	0.7	7	0.5
	LNV CC	Lower Nene Valley colour-coated ware	1093	6.1	113	7.8	201	13.0
	LNV OX	Lower Nene Valley oxidised ware	16	0.1	1	0.1	0	
	LNV RE	Lower Nene Valley grey ware	4939	27.5	718	49.7	673	43.4
	LNV WH	Lower Nene Valley white ware	217	1.2	17	1.2	0	
	LNV WHM	Lower Nene Valley white ware mortaria	366	2.0	7	0.5	18	1.2
	SHELL1	handmade shelly ware	5356	29.8	274	19.0	243	15.7
	SHELL2	wheelmade shelly ware	1439	8.0	108	7.5	165	10.7
	BWH SY	burnt white ware sandy	187	1.0	8	0.6	25	1.6
	BW	black sandy ware	69	0.4	6	0.4	21	1.4
	BB1 IMIT	wheelmade BB1 copies	265	1.5	9	0.6	51	3.3
	OXID	oxidised sandy ware	73	0.4	10	0.7	0	
	PNK SY	pink sandy ware	1	+	1	0.1	0	
UNKNOWN	BWF	black fine ware	5	+	1	0.1	0	
	MORT	misc mortaria	167	0.9	1	0.1	0	
	WW	misc white wares	40	0.2	5	0.4	0	
	MISC	miscellaneous unclassified	14	0.1	3	0.2	0	
TOTAL			17958	100.00	1444	100.00	1550	100.00

Phase 5 (late 3rd-4th century)

Features and deposits allocated to Phase 5 produced a total of 10,302 Romano-British sherds weighing 181.6 kg (Table 5.8). Whilst there is still clearly quite a lot of redeposited material from the 2nd century onwards there are certainly changes in the overall composition of the assemblage reflecting the later date, although the main ware groups found in Phases 3 and 4 are still the dominant ones. Lower Nene Valley grey wares account for 37.1% by count, colour-coated wares for 20.9% and shelly wares for 25.7%. The grog-tempered wares are present but only account for 3.6% (excluding PNK GT which is a specifically late ware). Other wares which are far more prominent than hitherto include BB1 imitations, DOR BB1 proper, LNV WH mortaria and products of the Oxfordshire industries. Samian ware, which should by this time largely be residual or curated, accounts for 3.5%.

In terms of form composition (Table 5.4) the trend established for Phases 3 and 4 continues with jars still the dominant form and, at 47.2%, at a similar level to Phase 4. Dishes/bowls on the other hand show a marked increase to 31.8% whilst beakers have dropped to 10%. This reflects the trend seen in the local colour-coated industry in which bowls, dishes and jars are the main forms produced in the later Roman period. In general terms the proportion of samian ware present has dropped, but amongst this material dishes continue to be the main form present.

In Phase 5 some 35.8% of the pottery came from layers, 45.8% from negative features and 18.4% was from unspecified collection units. Several ditches assigned to this phase produced sizeable assemblages, those in the southern area with over 100 sherds including 10690, 10700, 11940 and 12965. The material from ditch 10690, which possibly defined the northern entranceway to the late Roman settlement, was noticeably well-fragmented with an average sherd weight of 9.3 g. By contrast ditch 10835 (the northern boundary of plot G), although only producing 34 sherds, had an average sherd weight of 47 g. In all cases flanged bowls are present in various fabrics, most commonly DOR BB1, LNV RE and LNV CC indicative of a date in the later 3rd to 4th centuries. Jars in LNV CC, a common 4th-century form, are present in ditches 11940 and 10700. Robber trench 11230 (of building 10870) similarly contained a colour-coated jar.

Table 5.8 Quantified summary of pottery from Phase 5 contexts

	Fabric	*Description*	*Wt*	*% Wt*	*No*	*% No*	*EVE*	*% EVE*
IMPORTS	SG SAM	South Gaulish samian	50	+	1	+	0	
	CG SAM	Central Gaulish samian	4599	2.5	352	3.4	718	4.2
	EG SAM	East Gaulish samian	64	+	5	0.1	10	0.1
	ARG CC	Argonne colour coated ware	3	+	1	+	0	
	MOS BS	Moselle black slip	8	+	2	+	0	
	BAT AM	Baetican amphorae	889	0.5	7	0.1	0	
	GAL AM	Gallic amphorae	34	+	2	+	0	
REGIONAL	DOR BB1	Dorset black burnished ware	2671	1.5	156	1.5	433	2.5
	HAD OX	Hadham oxidised ware	20	+	13	0.1	15	0.1
	OXF PA	Oxon parchment ware	5	+	1	+	0	
	OXF RS	Oxon colour-coated ware	318	0.2	21	0.2	37	0.2
	OXF RSM	Oxon colour-coated mortaria	11	+	1	+	0	
	OXF WH	Oxon white ware	27	+	3	+	2	+
	OXF WHM	Oxon white ware mortaria	186	0.1	5	0.1	17	0.1
	VER WH	Verulamium white ware	149	0.1	4	+	7	+
	VER WHM	Verulamium white ware mortaria	435	0.2	7	0.1	20	0.1
LOCAL	BOX GR	burnt oxidised grog-tempered	105	0.1	4	+	0	
	BWH GR	burnt white ware grog-tempered	5542	3.1	299	2.9	331	1.9
	GY GR	grey grog-tempered	544	0.3	22	0.2	8	0.1
	OX GR	oxidised grog-tempered	428	0.2	16	0.2	29	0.2
	PNK GT	pink grog-tempered	1832	1.0	27	0.3	17	0.1
	WW GR	white grog-tempered	1466	0.8	35	0.3	92	0.5
	GROG	misc hm grog-tempered	2	+	1	+	0	
	GR SH	grog and shell-tempered	10	+	2	+	0	
	LNV CC	Lower Nene Valley colour-coated ware	26659	14.7	2156	20.9	3785	22.1
	LNV CCM	Lower Nene Valley cc mortaria	20	+	1	+	0	
	LNV OX	Lower Nene Valley oxidised ware	360	0.2	45	0.4	54	0.3
	LNV PA	Lower Nene Valley parchment ware	96	0.1	8	0.1	0	
	LNV RE	Lower Nene Valley grey ware	55855	30.8	3823	37.1	6799	39.7
	LNV WH	Lower Nene Valley white ware	841	0.5	65	0.6	39	0.2
	LNV WHM	Lower Nene Valley white ware mortaria	7632	4.2	114	1.1	369	2.2
	SHELL1	handmade shelly ware	47755	26.3	1484	14.4	1455	8.5
	SHELL2	wheelmade shelly ware	15921	8.8	1163	11.3	1980	11.6
	SHELL3	sparse shelly ware	62	+	2	+	19	0.1
	SHLISA	misc shell/limestone/sandy	16	+	1	+	3	+
	BWH SY	burnt white ware sandy	1070	0.6	58	0.6	170	1.0
	BW	black sandy ware	2166	1.2	168	1.6	261	1.5
	BB1 IMIT	wheelmade BB1 copies	2082	1.2	100	1.0	353	2.1
	BW MIC	black micaceous ware	177	0.1	10	0.1	5	+
	GREY	grey sandy ware	18	+	1	+	0	
	OXID	oxidised sandy ware	146	0.1	25	0.2	22	0.1
	PNK SY	pink sandy ware	49	+	4	+	0	
UNKNOWN	BUFF	buff sandy ware	109	0.1	10	0.1	0	
	BWF	black fine ware	109	0.1	10	0.1	32	0.2
	BWF MIC	black fine micaeous ware	61	+	9	0.1	5	+
	CC	misc colour-coated wares	173	0.1	14	0.1	0	
	MICA	mica-slipped wares	37	+	3	+	7	+
	MORT	misc mortaria	170	0.1	4	+	8	0.1
	OXID F	fine oxidised wares	264	0.2	3	+	0	
	OXID MIC	micaceous oxidised wares	22	+	3	+	10	0.1
	WS OXID	white-slipped oxidised ware	14	+	1	+	0	
	WS GY	white-slipped grey ware	11	+	1	+	0	
	WWF	fine white wares	4	+	1	+	0	
	WW	misc white wares	346	0.2	28	0.3	0	
TOTAL			181643	100.00	10302	100.00	17112	100.00

In the northern area (Area G) four ditches (8298, 8294, 8295 and 8297) produced moderately large assemblages, all with 4th-century forms and fabrics. Ditch 8292 had a stamped OXF RS base and a dish (Young 1977, form C45) in the same fabric alongside flanged bowls in LNV RE and LNV CC. Four handmade Saxon sherds also came from this feature, presumably intrusive or surface finds. Ditch 8294 contained the substantial part of a LNV CC jar (Fig. 5.8.77) along with further OXF RS and DOR BB1 sherds.

Pottery was recovered from five wells across the site: 12340, 12885, 12890, 8032 and 8278. Moderately small groups of late 3rd- to 4th-century wares came from 12340, 12890 and 8278. Slightly more material (163 sherds) came from well 12885, also 4th century but including the Central Gaulish samian ware bowl stamped by Advocisus (S1) (Fig. 5.1.S1). Well 8032, near the possible temple building 8019, produced a particularly large assemblage of 633 sherds (11367 g) dominated by three fabrics, shelly ware (22%), LNV CC (18.6%) and LNV RE (53%) all of which featured 4th-century types.

Large groups were also recovered from water-holes 12955 and 10589, with 128 and 170 sherds respectively. The latter contained a number of joining sherds from single vessels and a high number of flanged bowls in fabrics BW, LNV RE, LNV CC and DOR BB1, a sherd of OXF PA and a bowl in OXF RS. A large 4th-century shelly ware flanged bowl came from 12955.

Fewer large assemblages were recovered from pits in this phase, three exceptions being pits 8035, 10804 and 10823. Pit 8035 is the latest, dating to the 4th century and containing triangular rimmed shelly jars, an OXF RS bowl (Young 1977, type C81) and Hadham ware. Pit 10823 is probably late 3rd-4th century in date and pit 10804 is probably 3rd century in date.

Other features of note in this phase include hearth 12860 within building 10840, which produced 176 sherds, many of which are burnt. With the exception of a mortarium sherd all the sherds are from coarse domestic wares, both bowls and jars. Posthole 11589 (part of structure 13035) contained an *in situ* everted rim shelly ware jar and seven other sherds including a triangular rim shelly jar.

Pottery was recovered from three graves 8123, 10780 and 11790. Grave 8123 produced 23 sherds, one an almost complete oxidised flask missing its top (Fig. 5.8.79, SF 676) and 11 sherds from a plain-rimmed dish. Grave 11790 produced a complete colour-coated beaker (Fig. 5.10.117) and eight miscellaneous sherds.

At least 11 defined layers of various types produced in excess of 100 sherds and one, layer 12945 (internal occupation soil within building 10830) produced 412 sherds, fairly well fragmented with an average weight of 12.5 g, This layer contained a number of later colour-coated forms including mortaria, flagons, boxes and jars, plus three DOR BB1 conical flanged bowls and a shelly jar decorated with a wavy line on the rim. Three layers stand out as unusual in that they contained little or no colour-coated ware. These are layers 11117 (rubble between buildings 10880 and 10870), 11151 (metalled surface around well 12885) and 11152 (trample to north of building 10870). A small quantity of pottery recovered from the colluvium 11988 and 12374 included the stamped Dressel 20 amphora handle (Fig. 5.10.114).

Phase 6 (post-Roman)

Phase 6 contexts produced 113 Roman sherds (1551 g), many of which came from various sunken-featured buildings (Table 5.9). Of particular note is the relatively high proportion of fine wares, samian ware and colour-coated wares, which account for 44% by sherd count. These may have been deliberately sought out because of their colour, either as already broken sherds or useable vessels.

Table 5.9 Quantified summary of pottery from Phase 6 contexts

	Fabric	*Description*	*Wt*	*% Wt*	*No*	*% No*	*EVE*	*% EVE*
IMPORTS	CG SAM	Central Gaulish samian	79	5.1	12	10.6	7	6.3
REGIONAL	DOR BB1	Dorset black burnished ware	165	10.6	12	10.6	25	22.3
	OXF RSM	Oxon colour-coated mortaria	18	1.2	1	0.9	6	5.4
	BWH GR	burnt white ware grog-tempered	102	6.6	6	5.3	0	
	WW GR	white grog-tempered	18	1.2	1	0.9	5	4.5
	LNV CC	Lower Nene Valley colour-coated ware	269	17.3	36	31.9	11	9.8
	LNV RE	Lower Nene Valley grey ware	450	29.0	23	20.4	50	44.6
	SHELL1	handmade shelly ware	394	25.4	16	14.2	3	2.7
	SHELL2	wheelmade shelly ware	19	1.2	4	3.5	0	
	BW	black sandy ware	15	1.0	1	0.9	0	
	BB1 IMIT	wheelmade BB1 copies	22	1.4	1	0.9	5	4.5
TOTAL			1551	100.00	113	100.00	112	100.00

Graffiti

Table 5.10 summarises the incidence of sherds with post-firing graffiti. In total some 33 vessels have been noted as having some form of post-firing graffiti, ranging from simple single line incisions across the rim or footrings, to crosses or more complex symbols or letters. The vessels mainly occur in Phase 4 and 5 contexts, with only one example from a Phase 3 ditch. Sixteen of the vessels (48%) are finer tablewares, either samian ware, imported beaker or Lower Nene Valley colour-coated wares. The remainder are on coarse wares with 30% on Nene Valley grey wares. In terms of form, 27% of graffiti are on beakers, 42% on bowls or dishes, 15% on jars, two examples on cups and a single example on a mortarium; this represents a moderately high incidence of graffiti. The slightly larger assemblage from Stonea Grange, Cambs, for example, notes only nine examples of graffiti on pottery (Potter 1996, 493) of which five are on samian, two on colour-coated ware, one on a grey ware and one on a London type bowl. Most of these take the form of crosses. A lower incidence has also been observed on pottery from Silchester (Timby, 2006). By contrast however, nine vessels, all DOR BB1, from the roadside settlement at Birdlip Quarry, Glos, had simple graffiti, a ratio of 1:1855 (Timby 1999, 344). The extramural settlement at Alchester produced 17 sherds, a rate of 1:2734 (Evans 2001, 382), which Evans considered low in comparison with other urban sites but higher than comparable rural sites. The figure from Higham Ferrers of 1:864 is noticeably higher than any cited by Evans (ibid.) and could indicate either a specialised role or the sub-urban character of the settlement. Interestingly, although not quantified or discussed, there appears to be quite a high incidence of vessels with graffiti from the temple site at Uley, Glos (eg Woodward and Leach 1993, fig. 165.65, 73; fig. 167.108, 112; fig. 168.129, 137, 151a; fig 169.167).

Table 5.10 Summary of sherds with post-firing graffiti

Fabric	*Form*	*Phase*	*Type*	*Description*	*Figure*
BB1I MIT	bowl	5	waterhole 10589	possible letters on wall	5.8.87
BWH SY	jar	5	waterhole 12955	cross incised inside rim	5.10.112
BWH SY	jar	4-5	finds ref 10625	x3 incisions on rim	5.8.92
CG SAM	dish Dr 31R	4	ditch 10681	x2 parallel incisions across footring	not illus
CG SAM	bowl Dr 37	4	layer 10971	?letters below rim	5.5.38
CG SAM	cup Dr 33	5	layer 11153	cross on underside of base	not illus
CG SAM	mortaria Dr 45	5	waterhole G12955	?interior graffito- single line	not illus
CG SAM	cup	5	finds ref 11331	incised ?symbol under base	5.10.116
CG SAM	dish Dr 79	5	finds ref 10625	incised letters under base	5.9.100
CG SAM	dish Dr 31	5	ditch 10858	interior and exterior graffiti	5.10.115
CNG BS	beaker	4-5	layer 12523	x2 crosses on neck	5.8.76
LNV CC	beaker	0	ploughsoil 10977	incised V on rim interior	5.10.121
LNV CC	beaker	4	layer 12614 Gp 12830	incised cross below rim	5.6.50
LNV CC	beaker	4	floor 11555	letter or symbol near base	5.6.43
LNV CC	beaker	5	pit 10804	x1 incision on rim	not illus
LNV CC	jar	5	ditch G8295	possible graffiti on neck	5.7.78
LNV CC	bowl	5	make-up 10679	graffiti on neck ?letters	5.9.107
LNV CC	beaker	5	layer 12372	x2 incisions on rim	not illus
LNV OX	beaker	4	pit 12698	cross on rim	5.6.56
LNV OX	bowl	4	pit 12826	x2 incisions on rim	5.7.69
LNV CC	beaker	0	robbercut 10884	incised cross on body	5.10.120
LNV RE	?bowl	0	finds ref 8003	incised ?cross on interior of base	5.10.119
LNV RE	beaker	4	finds ref. G10890	incised cross on body	5.6.46
LNV RE	closed form	4	pit 12826	possible letter	5.7.72
LNV RE	bowl	4	layer 12436	x3 lines incised across rim	5.6.49
LNV RE	bowl	4	grave 8154	probable incised line across rim	not illus
LNV RE	bowl	4	layer 12435	? graffiti	not illus
LNV RE	jar	5	layer 10816	incised line on rim	not illus
LNV RE	dish	5	finds ref. 10591	?cut on base	not illus
LNV RE	base	5	layer 12945	cross on inside	not illus
LNV RE	bowl	4-5	finds ref 8031	x1 incision on rim	5.8.75
SHELL1	bowl	3	ditch G12310	x1 incision on rim	5.4.13
SHELL1	jar	4	ditch 10681	incision \ / on rim	5.5.36

Catalogue of illustrated sherds

Nos 1-29 Phase 3 (Fig. 5.4-5)

1. Lid-seated jar. Fabric BOX GR. Ditch 12310 (11508).
2. Lid-seated jar with diagonal combed decoration. Fabric WW GR. Ditch 12310 (11508).
3. Straight-sided dish with a moulded rim. Fabric SHELL1. Ditch 12310 (11508).
4. Poppyhead beaker with diamond-shaped panels of barbotine dot decoration. Fabric LNV RE. Ditch 12310 (11508).
5. Tubular handle or spout. Fabric SHELL1. Construction cut 12890 (11526).
6. Closed vessel with a narrow opening and with six holes made in the base before firing. Possibly a watering can. Fabric SHELL2. (11550).
7. Probable jar with a zone of rouletting around the neck. Fabric BWF. Burnt deposit (12011).
8. Ovoid handmade jar with a sharply everted thickened rim. Incised line on upper rim surface around the circumference. Fabric SHELL1. Burnt deposit (12011).
9. Round shouldered jar with a short everted rim. Finely rilled exterior surface. Fabric SHELL2. Burnt deposit (12011).
10. Lid-seated jar with a blackened, rilled exterior surface. Fabric SHELL2. Ditch 12310 (12065).
11. Globular-bodied, lid-seated jar. Rilled, blackened exterior. Fabric SHELL2. Ditch 12310 (12065).
12. Slightly angular hemispherical bowl with a flat rim. Fabric SHELL 2. Ditch 12310 (12065).
13. Thickened rim bowl. Single extant cut line across the rim made after firing. Fabric SHELL1. Ditch 12310 (12065).
14. White ware mortarium with a bordered stamp impressed across the flange near the spout. Only the first two letters BO… can be read. Fabric VER WH(M). Ditch 12310 (12065).
15. Bag-shaped beaker with a short everted rim. Decorated with diamond-shaped panels of barbotine dots. Fabric LNV RE. Group 12725 (12730).
16. Wide-mouthed jar with a ridged exterior. Fabric OXID. Ditch group 12880 (12908).
17. Wide-mouthed jar. Fabric SHELL2. Ditch group 12880 (12908).
18. Bifid rim jar. Fabric BWH GR. Ditch group 12880 (12908).
19. Wide-mouthed jar. Fabric BWH GR. Ditch group 12880 (12908).
20. Small grey ware jar with a sharply everted flaring rim. Diagonal burnished line decoration. Sooted exterior. Fabric LNV RE. Ditch group 12880 (12908).
21. Wide-mouthed lid-seated, globular-bodied jar. Finely rilled exterior, sooted. Fabric BWH GR. Ditch group 12880 (12908).
22. Reeded rim hemispherical bowl. Fabric LNV WH. Ditch group 12880 (12908).
23. Reeded rim bowl. Fabric LNV WH. Ditch group 12880 (12908).
24. Flanged rim hemispherical bowl with a rilled exterior. Fabric BOX SY. Ditch group 12880 (12908).
25. Hammer rim conical bowl. Fabric WW GR. Ditch group 12880 (12908).
26. Straight-sided bowl, possibly imitating samian form Drag 30, Fabric BWF MIC.

Ditch group 12880 (12908).

27. Poppyhead beaker with a cordoned neck and decorated with panels of barbotine dot decoration. Fabric LNV RE. Ditch group 12880 (12908).
28. Bag-shaped beaker with everted rim. Rouletted decoration. Fabric LNV RE. Ditch group 12880 (12908).
29. Thickened rim jar/ beaker. Fabric LNV WH. Ditch group 12880 (12908).

Nos 30-2 Phase 3-4 (Fig. 5.5)

30. Beaker decorated with incised chevrons and oval depressions. Fabric GYF. Layer (11376). The design is very similar to that on a bowl from Chesterton in 'London-type' ware from a pit dated to the second quarter of the 2nd century (Perrin 1999, fig. 44.294) and probably originates from the same source.
31. Hemispherical bowl in fine white ware with red painted decoration. Fabric WWF. Layer (11574).
32. Folded beaker with a black exterior and grey interior. Fabric BW. Layer (12306).

Nos 33-74 Phase 4 (Figs 5.5-7)

33. Flask with a burnished finish. Fabric LNV RE. Ditch 8288 (8040).
34. Bowl imitating samian form Drag 37 including the ovolo decoration. Below the ovolo are incised short lines. Matt orange red exterior on an orange fabric. Fabric LNV CC. Construction cut 8032 (8058).
35. Bag-shaped beaker with trailed barbotine decoration. Fabric LNV CC. Construction cut 8032 (8058).
36. Everted rim jar. Fabric SHELL1. Incised \ / on rim. Ditch 10682.
37. Narrow necked jar with a light grey colour-coat. Fabric LNV CC. Ditch 10682.
38. Central Gaulish samian, Drag 37 with edge of post-firing graffito]A[. Layer (10971).
39. Flange from a white ware mortarium with part of a stamp CIVV[. Fabric LNV WH(M). Construction cut 12885 (11419).
40. Base from a bowl with burnished line decoration on the interior. Fabric BB1 IMIT. Robber cut (11434).
41. Beaker with a bulging girth. Very pockmarked black colour-coat. Fabric LNV CC. Floor (11555).
42. Several sherds from a bag-shaped beaker with barbotine decoration. The decoration consists of a frieze of ducks, which survive as scars where the barbotine has come away. Fabric LNV CC. Floor (11555).
43. Bag-shaped beaker with interlinking scroll decoration. Dark brown colour-coat. Fabric LNV CC. Floor (11155).
44. Wide-mouthed lid-seated jar with a rilled exterior finish. Fabric: BWH SY. Floor (11155).
45. Hammer-headed rim bowl. Fabric WW GR. Ditch 12980 (11781).
46. Body sherd from a beaker with diagonal burnished line decoration and an incised cross graffito. Fabric LNV RE. Finds reference 10890 (11851).
47. Probable spout in a grey fabric with a red burnished finish. Fabric GY RB. Ditch 12895 (11878).
48. Large conical bowl with a thickened rim. Fabric OX GR. Road surface (12031).
49. Bowl with a triangular rim with at least three incised lines across the top. Fabric LNV RE. Layer (12435).
50. Plain rimmed beaker with a dark brown colour-coat. An incised cross graffito has been scratched

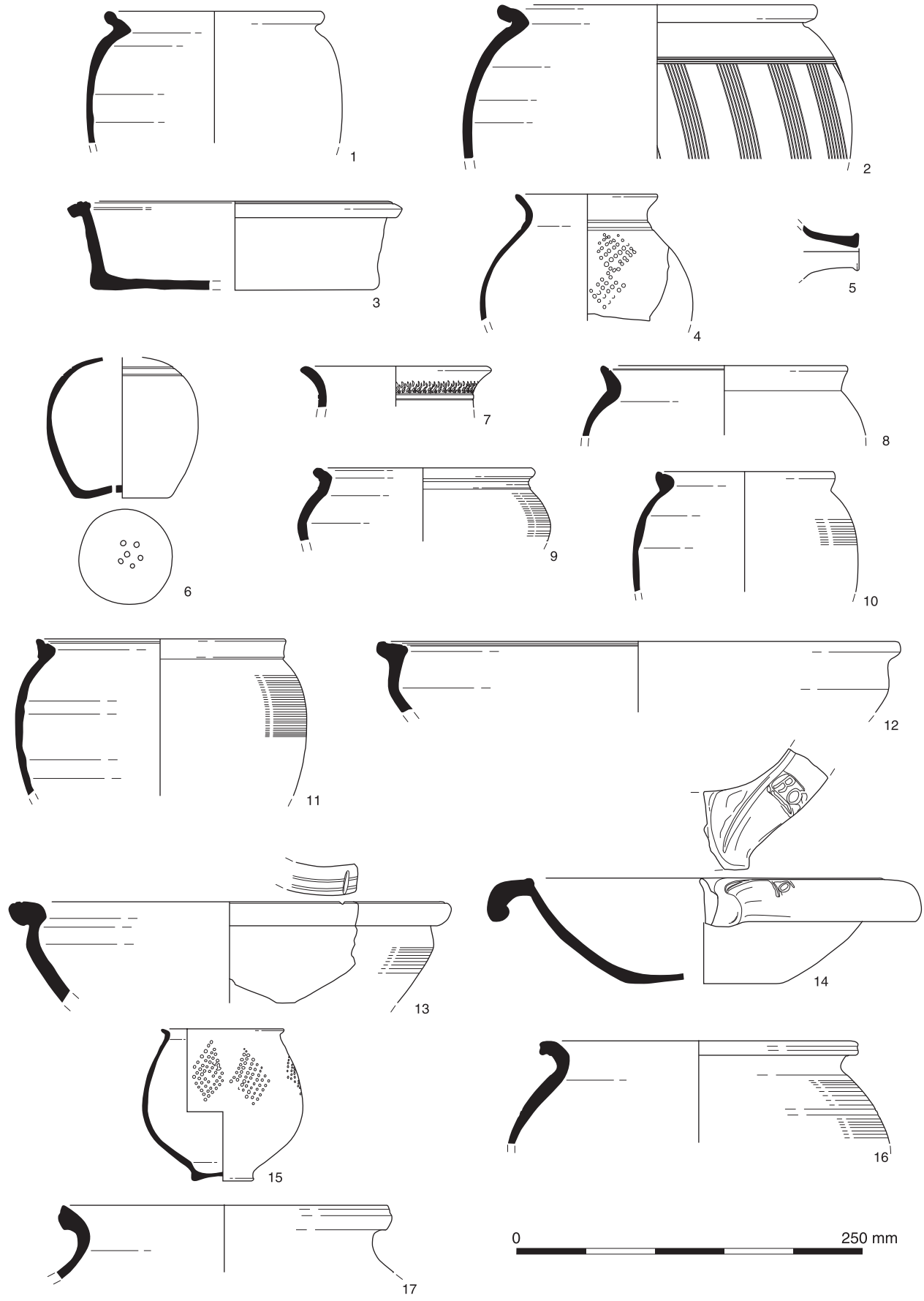


Fig. 5.4 Roman pottery

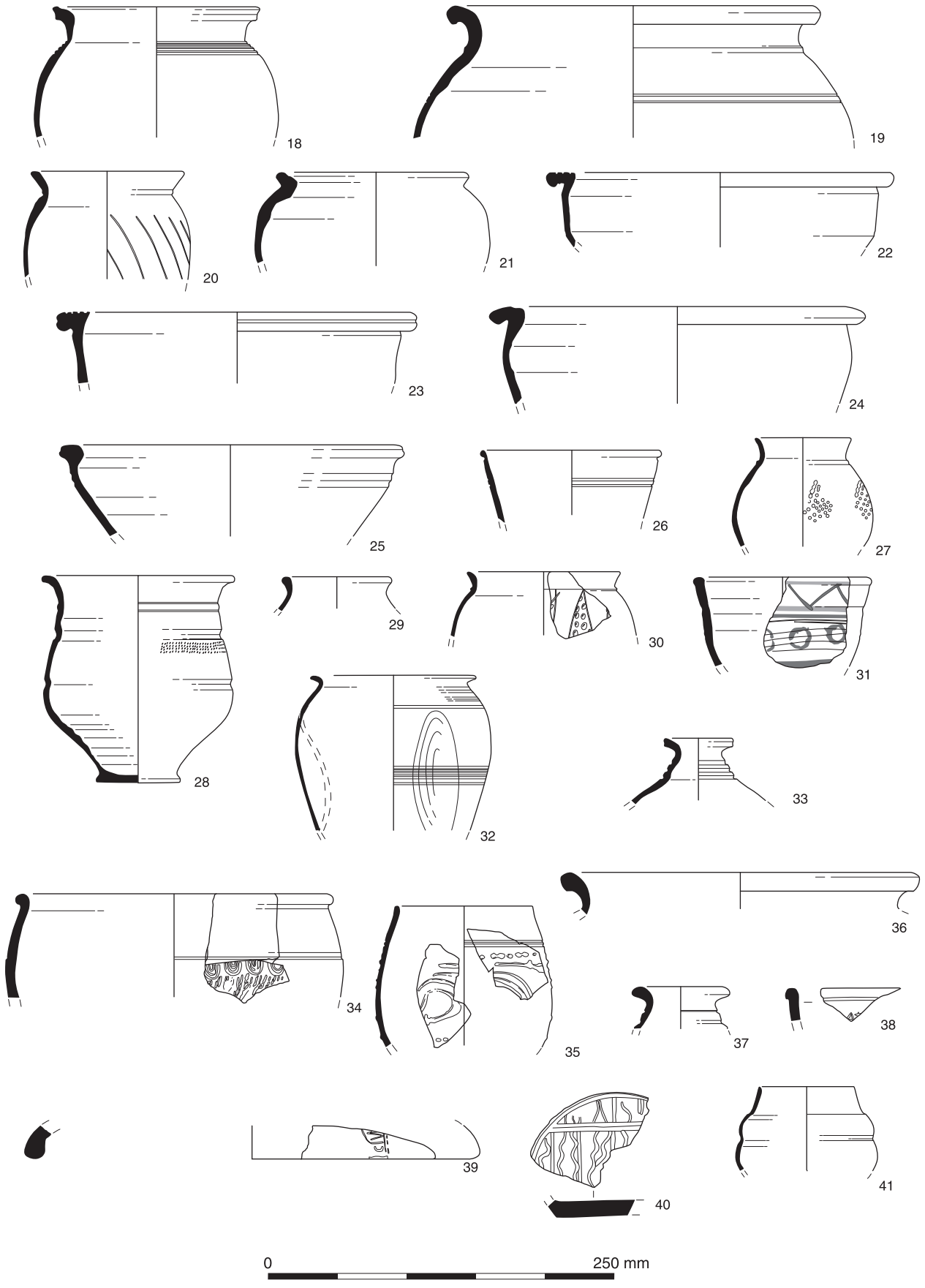


Fig. 5.5 Roman pottery

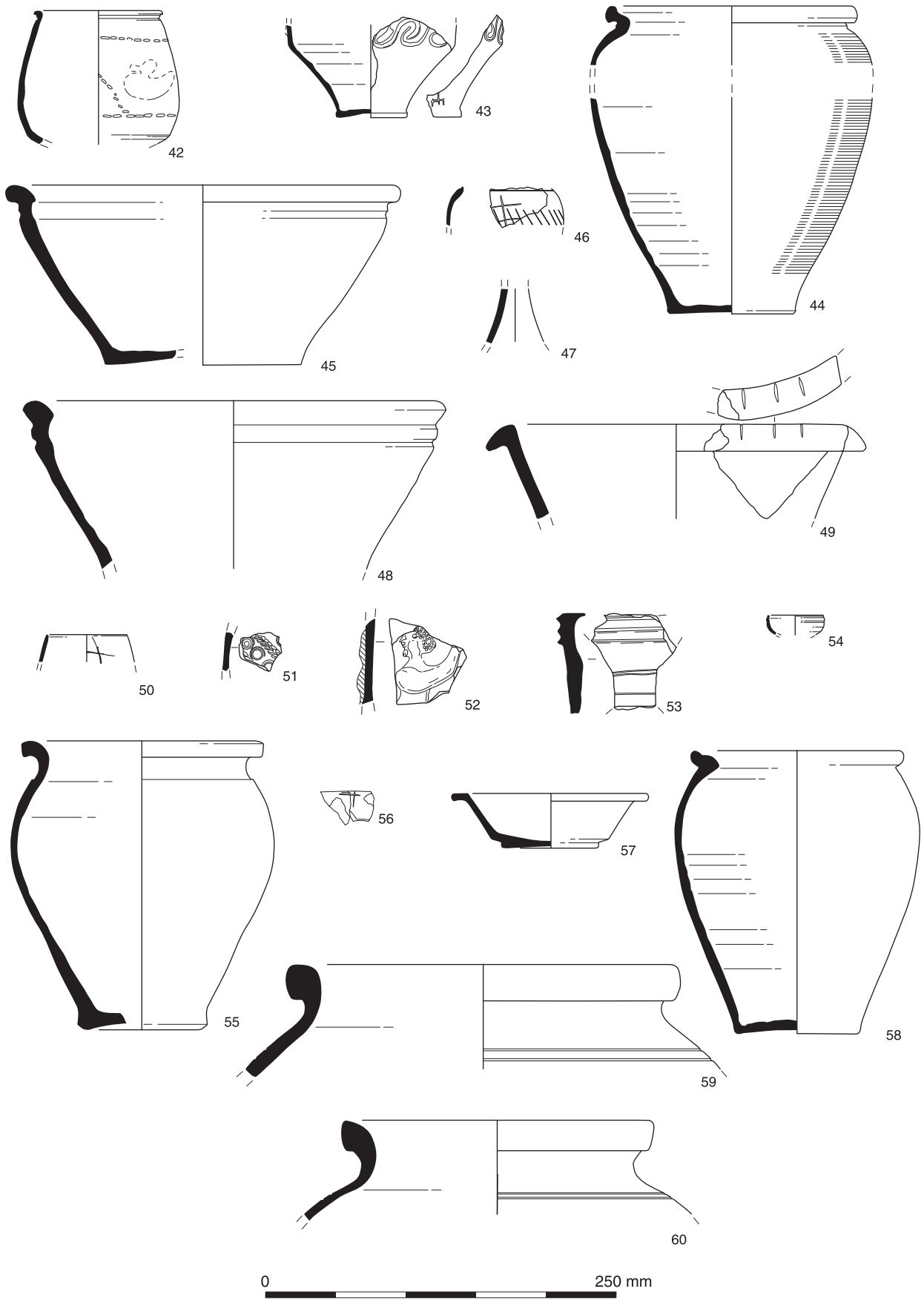


Fig. 5.6 Roman pottery

into the upper body. Fabric LNV CC. Layer (12614).
51. Body sherd from a bowl with stamped and rouletted decoration. Fabric BWF MIC. Layer G12830 (12614).
52. Body sherd from a beaker with an applied figure. The hairstyle is very distinctive suggesting a person of non-European origin. Brownish colour-coat. Fabric LNV CC. Layer G12830 (12615).
53. Fragment of lamp chimney in a shelly fabric. Angular cut apertures. Fabric SHELL1. Layer G12830 (12718).
54. Small cupped rim, ?flask. Fabric GLAZE. Layer G12830 (12691).
55. Complete jar with a deliberately holed base. Sooted, rilled exterior. Fabric BWH SY. [12692] (12616).
56. Plain rimmed beaker with an X incised near the lip. Fabric LNV OX. Pit 12698 (12699).
57. Small dish with a highly polished black interior. Fabric BWF MIC. Grave 12725 (12728).
58. Complete lid-seated jar. Fabric BWH GR. Pit 12826 (12827).
59. Storage jar. Fabric SHELL1. Pit 12826 (12827).
60. Storage jar. Fabric SHELL1. Pit 12826 (12827).
61. Wide-mouthed jar decorated with a discontinuous incised wavy line. Fabric SHELL1. Pit 12826 (12827).
62. Small jar with a pendant rim. Spaced grooves on exterior. Fabric BWH SY. Pit 12826 (12827).
63. Lid-seated jar. Fabric BWH GR. Pit 12826 (12827).
64. Narrow necked jar. Fabric SHELL2. Pit 12826 (12827).
65. Wide-mouthed jar. Fabric SHELL2. Pit 12826 (12827).
66. Wide-mouthed jar with cordon below the rim. Fabric BWH SY Pit 12826 (12827).
67. Wide-mouthed everted rim necked, cordoned jar. Fabric SHELL1. Pit 12826 (12827).
68. Lid-seated jar. Fabric BWH GR. Pit 12826 (12827).
69. Reeded rim bowl. Two incised cuts across rim. Fabric LNVOX. Pit 12826 (12827).
70. Large flanged rim bowl in a hard orange sandy ware. Fabric OXID. Pit 12826 (12827).
71. Dropped flat rim hemispherical bowl. Fabric SHELL2. Pit 12826 (12827).
72. Body sherd with part of a graffiti scratched in. Fabric LNV RE. Pit 12826 (12827).
73. Handled spouted flagon with a dark brown colour-coat. Rouletted decoration. Fabric LNV CC. Pit 12826 (12827).
74. Vertically flanged mortarium with a broken spout. The trituration grits are composed of rounded quartz grains. Fabric SOC WH. Pit 12826 (12827).

Nos 75 – 6 Phase 4-5 (Fig. 5.8)

75. Dish with thickened triangular rim. Deeply incised line across rim. Fabric LNV RE. Finds ref. (8031).
76. Several sherds from a funnel necked beaker with an incised graffito on the neck. Fabric CNG BS. Layer (12523).

Nos 77-117 Phase 5 (Fig. 5.8-10)

77. Wide-mouthed jar/bowl. Black colour-coat. Fabric LNV CC. Ditch 8294 (8022).
78. Necked beaker with a matt red colour-coat. Possible graffito on neck. Fabric LNV CC. Ditch 8295 (8092).
79. Flask broken at the neck. Fabric OXIDF. SF 676. Grave 8123 (8129).
80. Jar with a dark brown colour-coat. Fabric LNV CC. Well 8032 (8279).
81. Base of an open form decorated with burnished lines. Fabric BW MIC. Well 8032 (8279).
82. Jar with hooked rim and a ridged exterior. Fabric SHELL2. Well 8032 (8279).
83. Flat, rectangular object broken at both ends with edges cut before firing. Possibly from a lamp chimney. Fabric SHELL1. Ditch 10670 (10403).
84. Dish copying samian form Drag 36 with barbotine leaf decoration on the rim. Dark grey colour coat. Fabric LNV CC. Object reference (10507).
85. 'Castor' box lid with rouletted decoration. Red-brown colour-coat on an orange fabric. Fabric LNV CC. Ditches 10835, 10845 and 10855 (10510).
86. Body sherd from a beaker decorated with a fluted column painted in red and white. Fabric LNV CC. Ditch 10835, 10845 and 10855 (10510).
87. Flanged conical bowl with a burnished finish. Graffiti scratched onto the body. Fabric BB1 IMIT. Waterhole 10589 (10587)
88. Body sherd from a closed form. Faint impressed or moulded patterned decoration, difficult to decipher. Fabric OXID MIC. Finds reference G10840 (10624)
89. Large storage jar. Fabric SHELL1. Finds reference (10625).
90. Lid-seated jar. Fabric BWH GR. Finds reference (10625).
91. Lid-seated jar. Fabric LNV RE. Finds reference (10625).
92. Everted rim jar. Three extant post-firing incised lines on rim. Fabric BWH SY. Finds reference (10625).
93. Dish with flattish triangular rim. Fabric BWH SY. Finds reference (10625).
94. Dish with a chamfered base and thickened rim. Fabric LNV RE. Finds reference (10625).
95. Circular disk with a ridged surface perforated by four equidistant holes. Presumably a lid. Fabric LNV RE. Finds reference (10625).
96. Bowl decorated with a burnished line lattice. Fabric LNV RE. Finds reference (10625).
97. Large hammer-headed rim bowl. Fabric WW GR. Finds reference (10625).
98. Cornice rim beaker. Orange-brown colour-coat. Fabric LNV CC. Finds reference (10625).
99. Folded beaker. Black colour-coat. Fabric LNV CC. Finds reference (10625).
100. Base from a Drag 79 Central Gaulish dish with graffito, probably a name, on the underside. Finds reference (10625).
101. Almost complete everted rim jar. Fabric LNV RE. Ditch 10835 (10629).
102. Flanged bowl. Black colour-coat. Fabric LNV CC. Make-up (10679).
103. Flanged conical bowl. Dark red colour-coat. Fabric LNV CC. Make-up (10679).
104. Flanged conical bowl with a burnished lattice decoration. Fabric BB1 IMIT. Make-up (10679).
105. Plain walled dish with slightly tapered rim. The base is burnished across in one direction. Fabric LNV RE. Make-up (10679).
106. Disk-necked handled flagon. Fabric LNV CC. Make-up (10679).
107. Beaker sherd with a dark brown exterior and red interior. Barbotine decoration and part of a graffiti scratched in after firing. Fabric LNV CC. Make-up (10679).

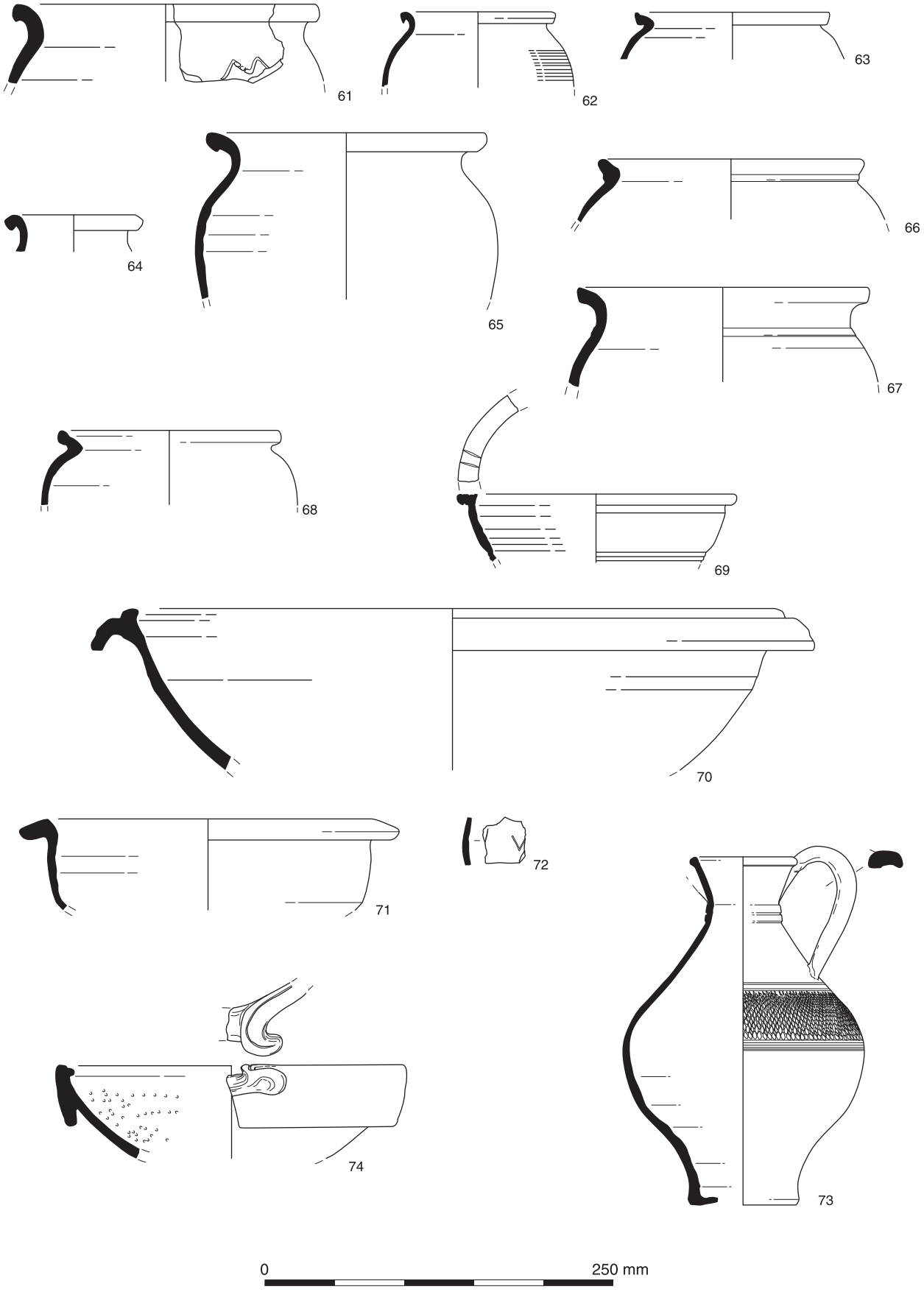


Fig. 5.7 Roman pottery

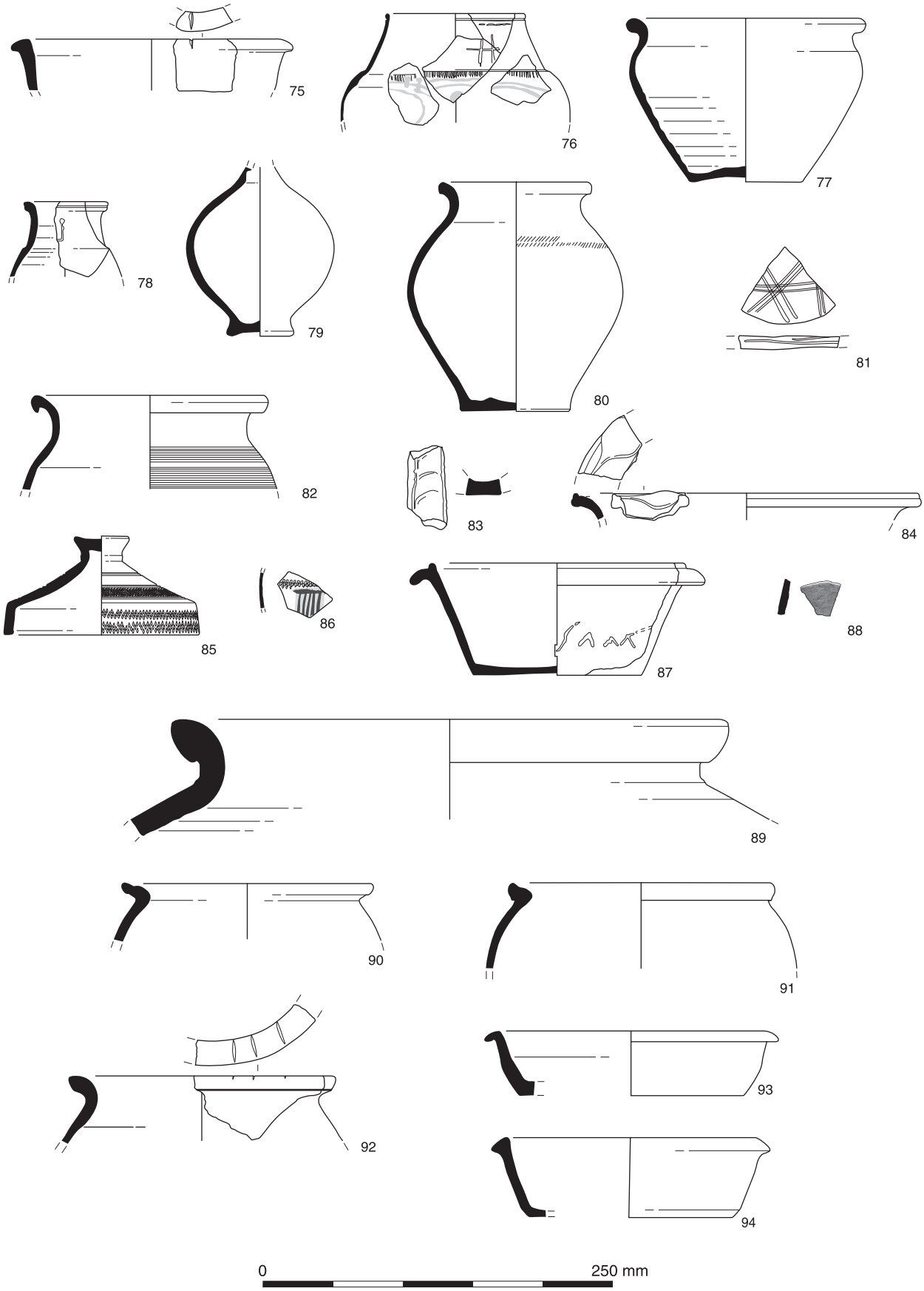


Fig. 5.8 Roman pottery

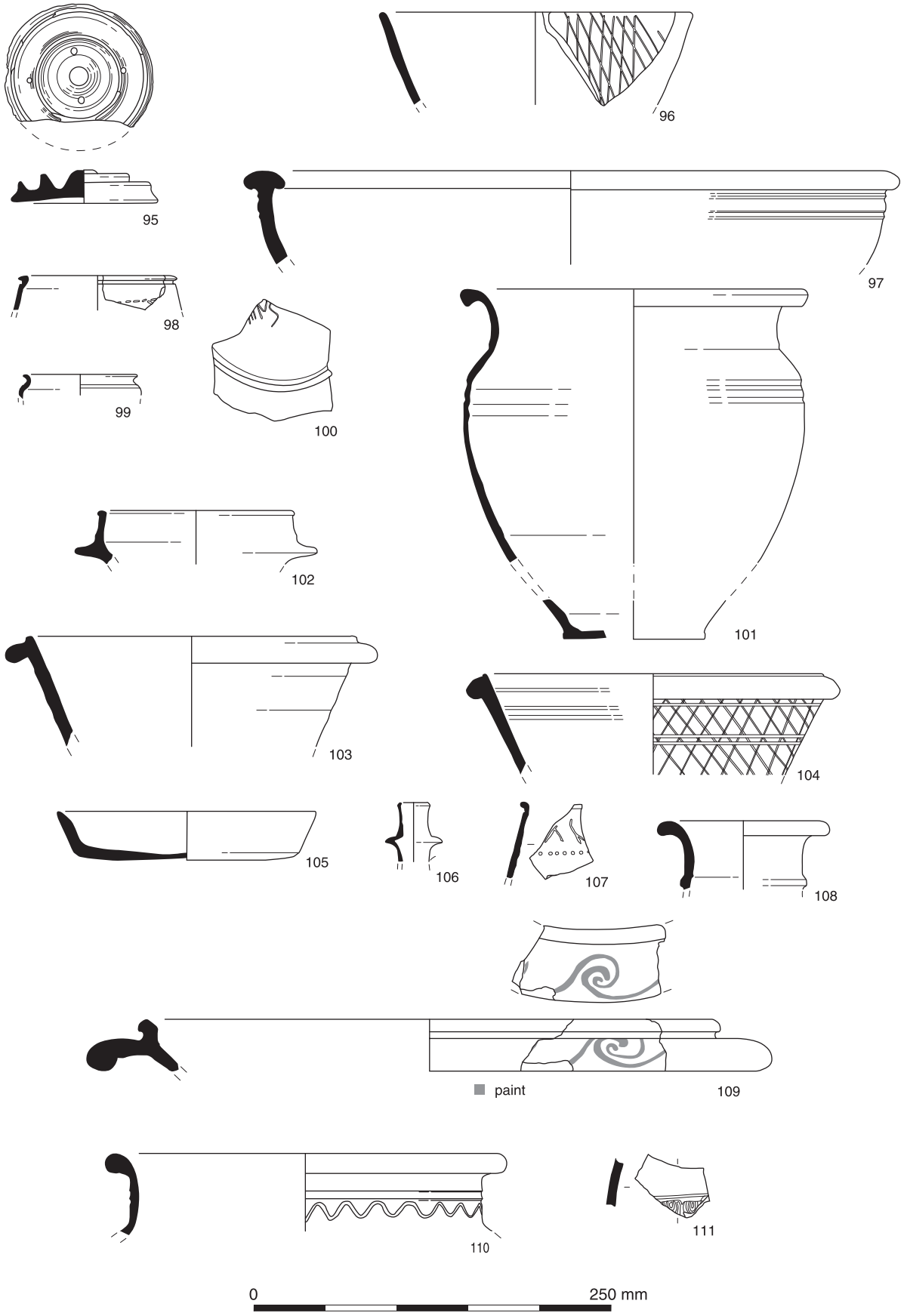


Fig. 5.9 Roman pottery

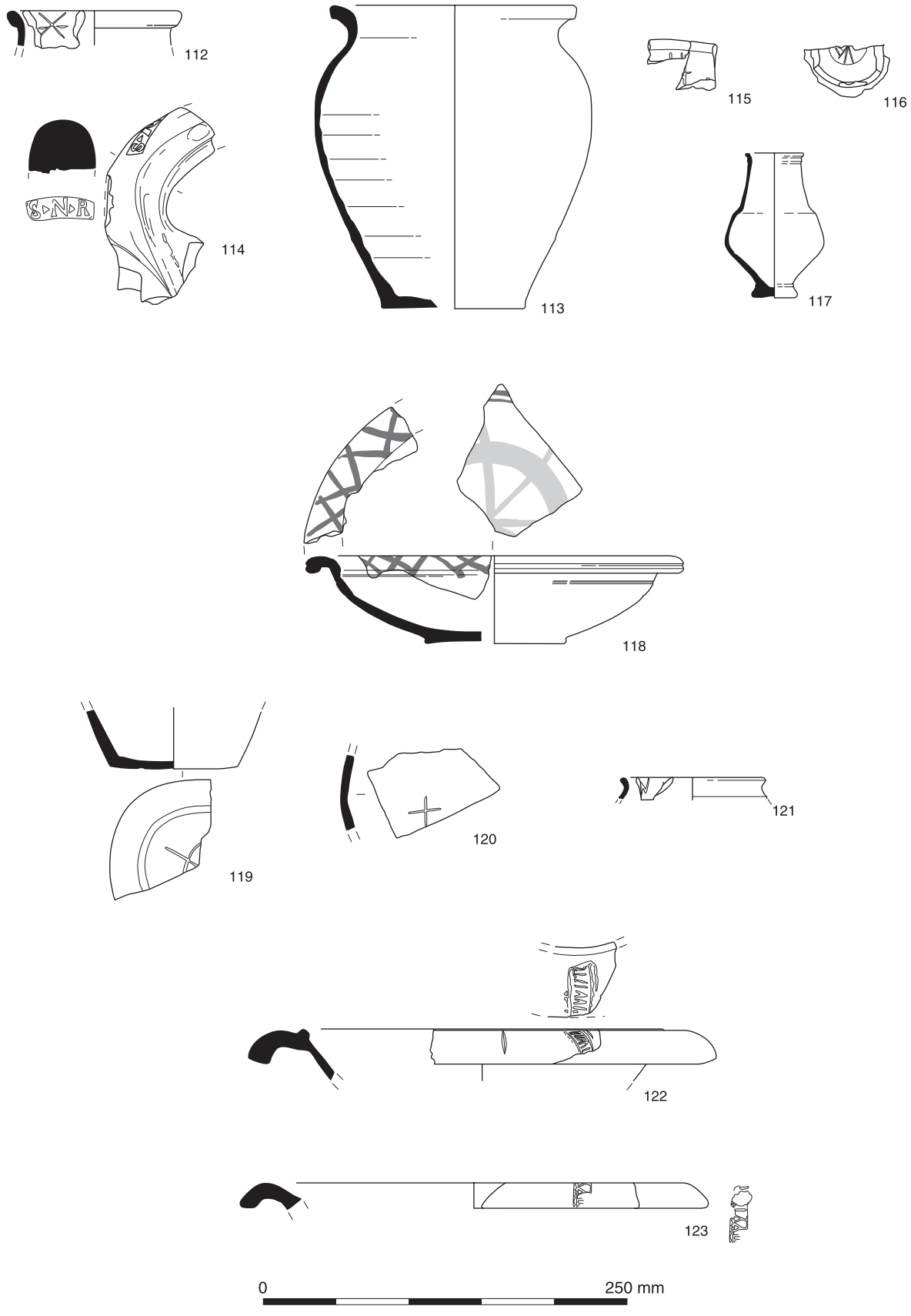


Fig. 5.10 Roman pottery

108. Narrow cordon-necked jar. Dark brown colour-coat. Fabric LNV CC. Make-up (10679).
109. White ware mortaria with red painted decoration on the flange. Fabric LNV WH (M). Make-up (10679).
110. Necked jar decorated with an incised wavy line. Fabric LNV RE. Pit 10804 (10802).
111. Body sherd from a bowl with a moulded ovolo imitating a Drag 37 form. Fabric: LNV CC. Waterhole 12955 (10921).
112. Jar with a X scratched into the inner rim face after firing. Fabric BWH SY. Waterhole 12955 (10921).
113. Wheelmade necked jar with a sooted exterior. Fabric SHELL2. *In-situ* in posthole 11589 (11591).
114. Split handle from a Dressel 20 olive oil amphora stamped S_N _ R. Colluvium (11988).
115. Central Gaulish samian dish Drag 31 with graffiti on both sides. Ditch 11270 (10859).
116. Central Gaulish cup stamped SATV[(Fig. 5.2.S9), with graffito on underside. Finds reference (11331).
117. Complete miniature beaker. Black colour-coat in orange fabric. Fabric LNV CC. Grave 11790 (11777).

Nos 118- 23 Unphased (Fig. 5.10)

118. Bowl with flanged rim. The rim and interior are decorated with red paint designs. Fabric LNV PA. Finds reference (8003).
119. Base with a graffiti scratched onto the upper surface. Fabric LNV RE. Finds reference (8003).
120. Body sherd from a closed form with an incised X graffito. Grey-brown colour-coat. Fabric LNV CC. Robber cut 10884 (10886).
121. Beaker with a grey-brown colour-coat. Incised V on interior of rim. Fabric LNV CC. Ploughsoil (10977).
122. White ware mortaria with a stamped flange. Fabric LNV WH(M). Layer (11136).
123. White ware mortaria with a stamped flange. Fabric LNV WH(M). Grave 10950 (10924).

Discussion

The pottery assemblage recovered from the excavations at documents a particularly high level of activity between the mid 2nd and mid 4th centuries although there is little evidence for late 4th-century activity. The balance between the different ware groups signifies subtle chronological changes throughout the occupation which, when grouped into the site phasing, allows general trends to be discerned (Figs 5.11-12 and Table 5.11). Four main wares/fabrics dominate the assemblage; sandy grog-tempered wares, shelly ware, Lower Nene Valley grey ware and Lower Nene Valley colour-coated ware (Fig. 5.11). The sandy grog-tempered wares form a distinct local tradition dating from the later 1st to 2nd centuries and have been recognised on all sites of this date in the region. The tradition appears to develop out of the LPR IA grog-tempered wares and seems to be the output from a series of small rural kilns scattered around the area. Eventually it appears as Midlands pink-grog-tempered ware (PNK GT) from around the later 2nd century through to the 4th century which largely features as large storage jars (Booth and Green 1989). The wider distribution of this type (Taylor 2004) suggests a more centralised source. As might be expected, sandy grog-tempered wares dominate the Phase 3 assemblage, show a rapid decline in Phase 4 and only form a very small, and undoubtedly residual, component of the Phase 5 assemblage. The shelly ware tradition by contrast shows a fairly consistent presence throughout all the phases although the nature of the forms demonstrates a typological development from forms typical of the early Roman period, developing again out of a pre-

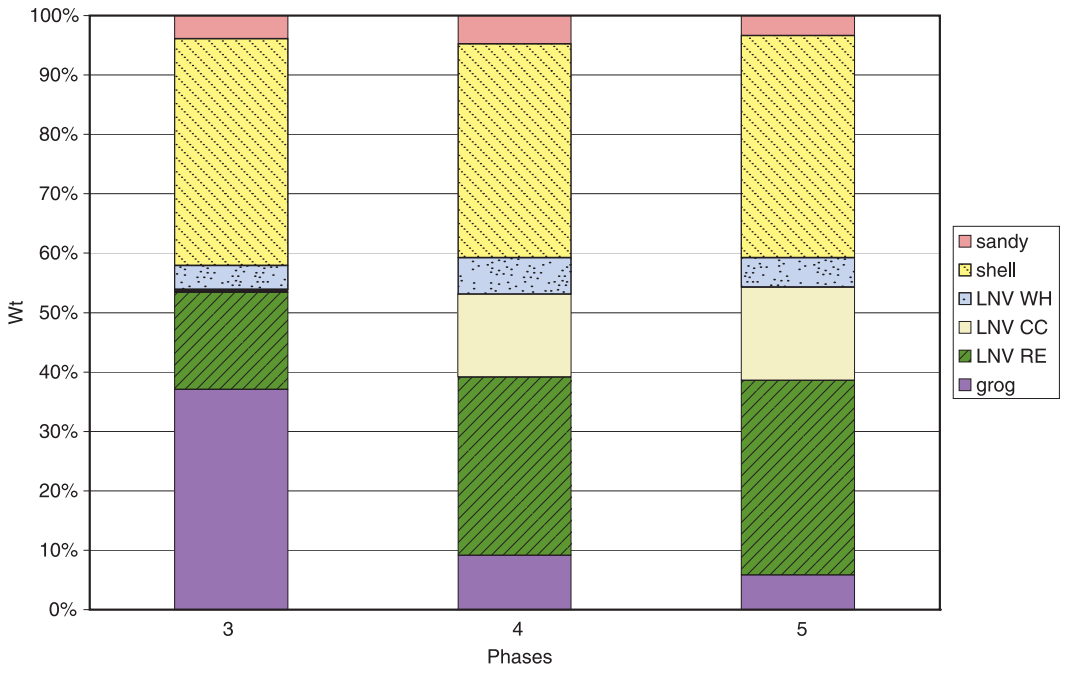


Fig. 5.11 Relative proportion of local wares for Phases 3-5

Table 5.11 Summary of main ware groups by phase

	Ware groups	*Phase 3*		*Phase 4*		*Phase 5*	
		% No	*% Wt*	*% No*	*% Wt*	*% No*	*% Wt*
Imports	samian	2.6	2.5	4.3	3.2	3.5	2.6
	other fineware	0	0	0.1	+	+	+
	amphorae	0	0	0.1	0.2	0.1	0.5
Regional	DOR BB1	+	+	0.2	0.2	1.5	1.5
	Oxon industries	0	0	0.1	0.1	0.3	0.3
	Verulamium	0.6	2.2	0.2	0.2	1.1	1.0
	Other	+	+	0.3	0.2	0.1	+
Local	sandy grog	29.8	34.9	15.0	8.5	3.9	5.5
	LNV grey ware	31.3	15.4	40.8	28.0	37.1	30.8
	LNV colour-coat	0.9	0.4	7.1	13.0	20.9	14.7
	LNV white wares	6.1	3.8	5.1	5.7	1.7	4.7
	shell	22.9	35.9	20.6	33.6	25.7	35.1
	sandy	4.3	3.7	4.6	4.5	3.6	3.2
Unknown	all other	1.5	1.2	1.6	2.7	0.4	0.3
TOTAL		100	100	100	100	100	100

Roman tradition, with lid-seated and channel-rim jars, to the later Roman period with triangular rimmed jars and flanged bowls. The nature of production also changes, again probably from a dispersed rural production to a more centralised industry as typified by the kilns at Harrold, Beds, which are likely to have produced most of the later wares.

The dominant fabric in all phases is Lower Nene Valley grey ware, the production of which was probably well established by the mid 2nd century. A diverse range of forms was produced including jars, dishes and beakers. By the early 3rd century the form repertoire had become more standardised. At least two kilns are known, at Sibson and Stibbington, and others are likely to have existed (Perrin 1999, 78). Production is thought to have ceased early in the 4th century (ibid.). This is not supported, however, by the data at Higham Ferrers, where the grey wares remain the commonest ware by percentage count, second by weight, suggesting either a high level of redeposition or that there were other kilns still producing similar wares into the 4th century. By contrast the pattern of the Lower Nene valley colour-coated wares conforms to that which might be expected, with a very low presence in

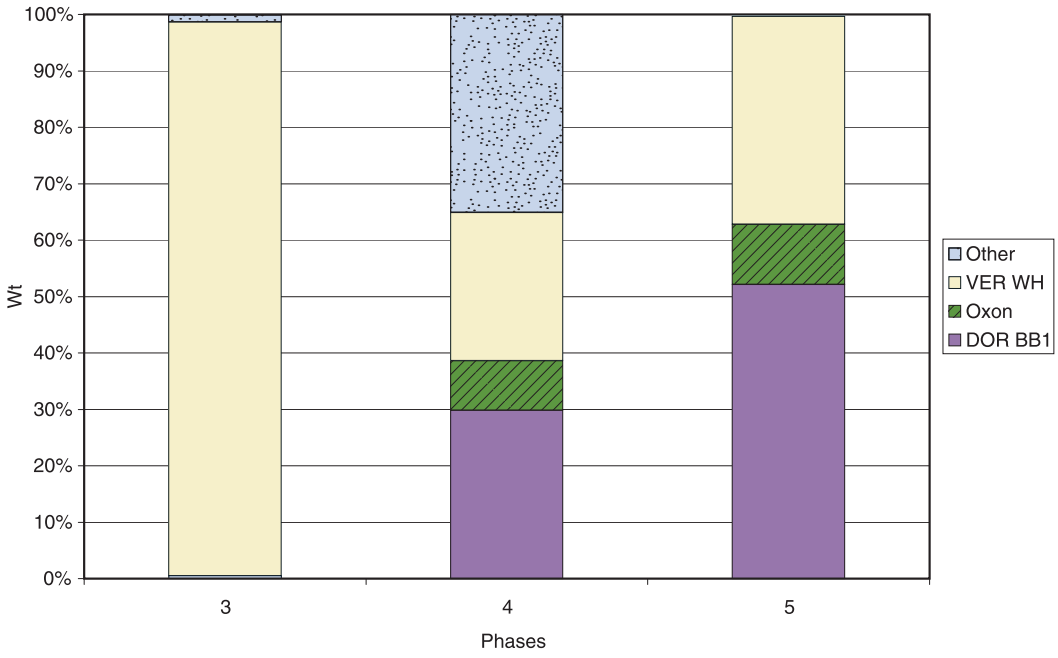


Fig. 5.12 Relative proportions of regional imports for Phase 3, 4 and 5

Phase 3 compared to Phases 4 and 5. By the later 3rd and 4th century the colour-coated industry was copying most of the forms previously made in the grey wares.

Looking at the regional imports (Fig. 5.12) both Dorset black burnished ware and products from the Oxfordshire industries start to appear in Phase 4 but largely feature in Phase 5. The highest incidence of other regional imports occurs in Phase 4. Verulamium white wares by contrast show their highest incidence in Phase 3, with small amounts in Phases 4 and 5. Samian ware accounts for 2.6% by count of the Phase 3 assemblage, 4.3% of the Phase 4 and is still at a respectable level of 3.5% in Phase 5, by which time production would have ceased. This is quite a common phenomenon with samian ware and may partly reflect the potentially high levels of redeposition already hinted at by other wares but perhaps also a deliberate curation of such vessels. Both amphorae and other continental fine wares are so sparse that no comparable trends would be detectable.

Figures 5.13a-c and 5.14a-c show a functional analysis of all the Phase 3-5 samian and coarse ware vessels quantified by rim equivalents (based on data in Table 5.4). In the samian ware range cups form by far the commonest form in Phase 3. In the Phase 4 samian repertoire dishes are more common than cups, and mortaria start to appear. By Phase 5, although the levels of samian ware have dropped, dishes remain the dominant form.

As far as the coarse wares are concerned (Fig. 5.14a-c), in Phase 3 jars account for 60.7% of the assemblage followed by dishes at 16%. By Phase 4 jars still dominate but have decreased to 47.1% and beakers have come to the fore, accounting for 21.8% corresponding with the development of the Lower Nene Valley colour-coated industry. A greater diversity of forms is present with examples of flagons, flasks and boxes. By Phase 5 jars still form less than 50% of the assemblage and dishes have become far more prominent at 31.8%. Beakers have dropped to 10% and mortaria show a slight increase.

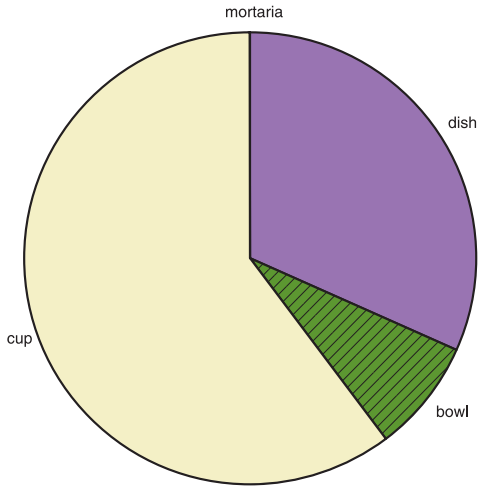


Figure 5.13a

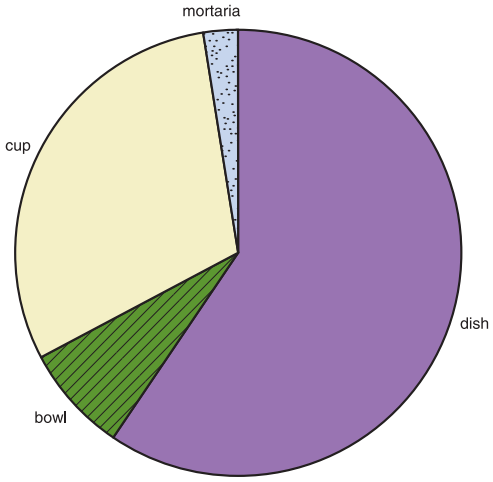


Figure 5.13b

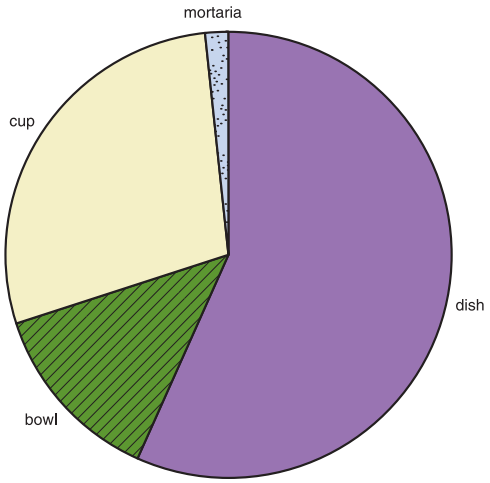


Figure 5.13c

Fig. 5.13 Functional analysis of samian (Phase 3-5)

These figures seem in broad terms to follow the normal national trend for Roman sites, in which the proportion of jars tends to decline progressively from the 1st to 4th century. It is also the norm for rural sites to show a consistently higher proportion of jars, generally 50% and above, with more 'urban' sites showing a higher proportion of dishes/bowls. From this perspective the Higham Ferrers assemblage conforms to the pattern seen at the extra-mural settlement at Alchester, Oxon, which displays rural characteristics for the earlier material but by the later period looks more urban (Evans 2001, 370). The religious nature of the site at Higham Ferrers could well be introducing different usage and depositional patterns, particularly in the case of the high proportion of beakers, although this could also be a reflection of market supply as similar irregularities were observed in the Alchester data (ibid., 372).

There is clearly quite a rapid sequence of development across the site with ongoing earth-moving activities resulting in quite a high level of redeposition. There are quite clear distinctions between the deposits in different features and layers in terms of the quality and quantity of pottery present, often reflected in the sherd size, suggesting a variety of formation processes at work. There are four particularly high concentrations of samian ware: pit 12826 (Phase 4), building 11310 (Phase 3/3-4), well 8032 (Phase 4 and 5) and shrine interior 12830 (Phase 4). It is very possible that these groups represent some form of specialised deposits.

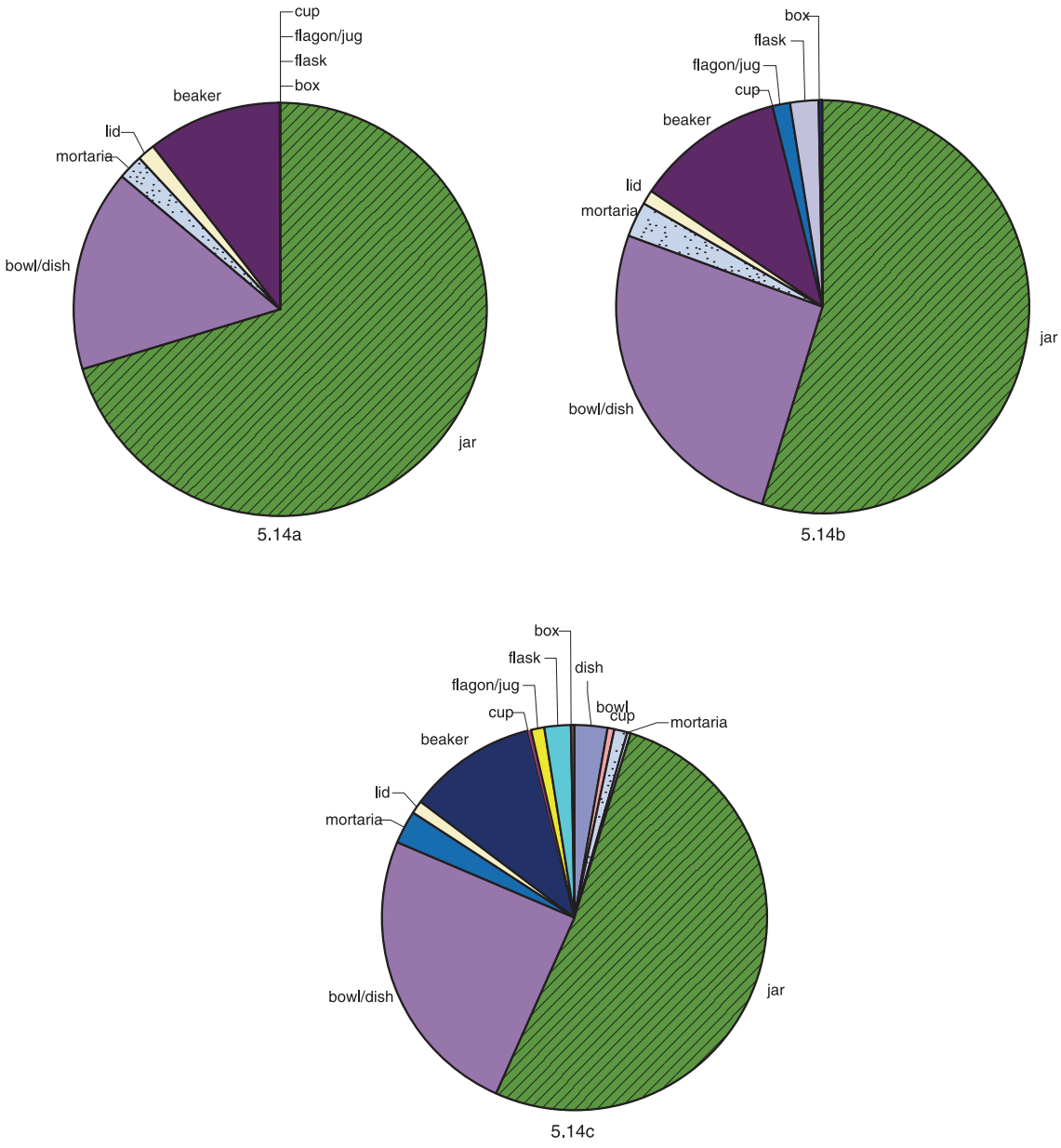


Fig. 5.14 Functional analysis of coarse wares (excluding samian) Phases 3-5 – expressed as % EVE

Shrine interior

The large assemblage from the shrine interior not only included a high proportion of samian ware but also several other unusual vessels, for example the only glazed sherd, most of the Moselle ware, a lamp chimney and two unguent jars. Figure 5.15 illustrates the different vessel composition between the shrine interior and the other deposits in Phase 4. This demonstrated the much higher incidence of beakers from the shrine area. These could have been linked to specific practices, or there may have been, for example, a market stall selling fine wares within the shrine precinct for activities linked with religious ceremony or for the hospitality of visitors. Did this involve the drinking of particular brews or potions? Were vessels available to take away as souvenirs – encapsulations not only of the place but your time at that place, much as we buy mementos today? Were different forms of vessel associated with specific festivals?

There are few other published quantified pottery reports from temple sites with which to compare the Higham Ferrers assemblage. A comparably high incidence of Moselle ware (and other fine wares) to that seen at this site was noted in association with a probable shrine at Claydon Pike, Glos (Booth 2007, 132). At Uley, Glos a number of votive miniature pots were recovered from the site (Woodward and Leach 1993, 140-4), a type not evident at Higham Ferrers. However, at Uley an analysis of the vessel forms associated with different buildings did not appear to show anything of great significance that would distinguish them as ritual as opposed to domestic in function (Leach 1993, 245-9). Analysis of material excavated in 1992 from Lowbury Hill, Berks, revealed an atypical vessel profile where jars only accounted for 30%, dishes for 41% and beakers for 12%. Plain-rimmed dishes were particularly common. Mortaria were also well represented (Timby 1994, 183). During excavations at Stonea Grange, a pit adjacent to the temple site contained an unusual group of semi-complete Lezoux samian vessels probably deposited in the early 3rd century (Jackson and Potter 1996, 219). Two of the vessels had rivet repairs. Willis (2004, section 12.2) has collated several noteworthy examples where samian has been found in association with religious *foci* suggesting a possible specific link with religious activities. Amongst these are two shrines at Brigstock, Northants, where sherds from nine samian vessels were reported, three of which had examples of graffiti on the footrings (Hartley 1963). A similar strong association of samian with a temple has also been demonstrated at Great Chesterford, Essex where large quantities recovered from the precinct area is suggested to be possibly from votive offerings, feasting or the debris of retail (Willis 2004, 12.2). By contrast other sites such as Uley show no such preferences. Willis (ibid.) points out that such variation should not be too surprising and it is likely that 'different deities will have been venerated and evoked by differing acts and procedures.' The duck motif beaker may also have some significance here. Ruth Leary has reported on a cremation vessel containing the bones of a young child with similar decoration from Ratcliffe-on-Soar, Notts (Leary 1996). Leary has highlighted several examples of the use of the duck motif in potentially ritual contexts and suggested that it may have had more than a decorative purpose and thus that these vessels may also have had a specialised purpose.

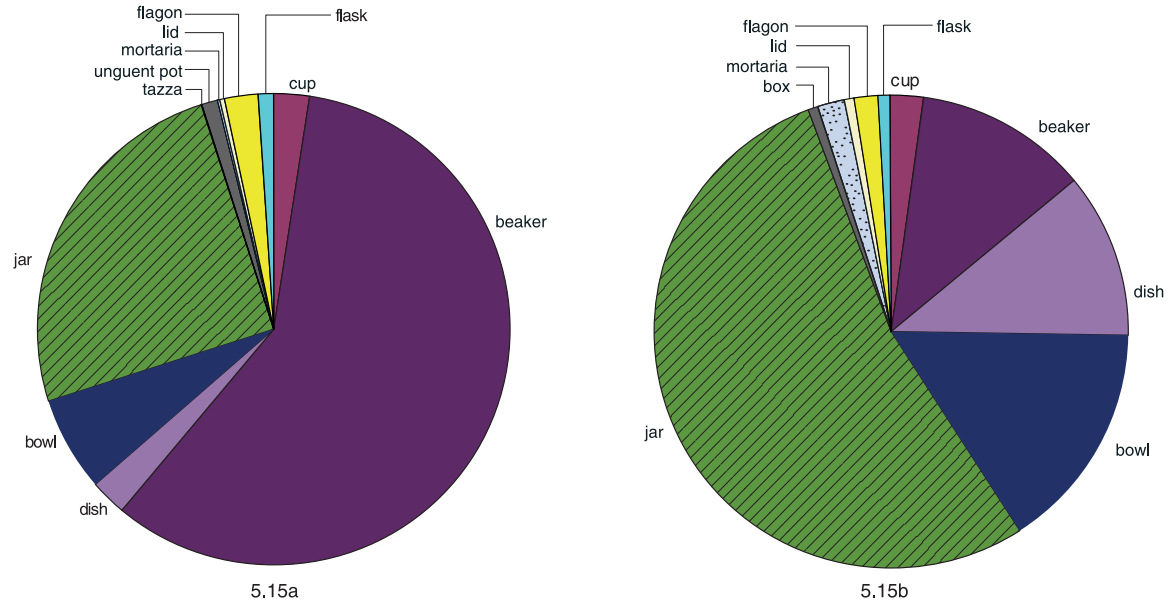


Fig. 5.15 Vessel composition in shrine interior and Phase 4 settlement contexts

Part of the recent work at Barton Street, Manchester investigated a potential shrine area (structure/enclosure G). The deposits associated with this area of the site contained a number of unusual vessels including a higher proportion of beakers and vessels with graffiti or incised marks (Leary 2007). It also contained the largest percentage of flasks and flagons from the site, which the pottery specialist suggests reflects a special function for this area associated with ritual activity. Beakers account for 37% EVE from this structure compared with the 58.5% from the shrine area at Higham Ferrers. Evans (1993) in his study of pottery function and finewares in the north has noted particularly high numbers of beakers at the mithraeum at Carrawburgh (ibid Appendix 1) and Catterick Racecourse adjacent to a cemetery, the implication being their use in religious rituals.

Local and regional comparison

The assemblage recovered from the excavations discussed in this report is chronologically quite different from that recovered from the work carried out by Northamptonshire Archaeology nearby on the A6. The latter site comprised material of early-middle Iron Age continuing through to early 2nd century (Timby 2004). The early Roman assemblage from this area of Higham Ferrers included few imports with samian constituting less than 1% of the assemblage; other imported fine wares and amphorae were absent. Sandy grog-tempered wares dominated the assemblage, particular fabrics BWH GR/WH GR and BOX GR/OX GR emphasising their later 1st- 2nd-century date. The Higham Ferrers site has a few hints of Iron Age or 1st-century material but appears to date from the early-mid 2nd century through to the 4th century, suggesting a shift in settlement focus in the early 2nd century. A high proportion of grog-tempered wares in Phase 3 could intimate a small degree of overlap between the two areas.

Several other sites have been excavated in the immediate locality, mostly as yet unpublished, in particular the villas at Redlands Farm immediately to the north and Stanwick excavated as part of the Raunds project; Rushden (Woods and Hastings 1984), and slightly further away, Oundle, Irchester, Ashton and Brixworth (Woods 1972).

The nearby site at Rushden comprised a series of late Iron Age and Roman enclosures and included at least six pottery kilns dated to the period AD 45-60 (Woods and Hastings 1984) producing an unusual range of wares, many decorated. These wares predate the main occupation at Higham Ferrers and no examples were recognised in the pottery assemblage there.

Detailed data are as yet unavailable from the Stanwick sites and the roadside settlement at Ashton. Although published and clearly comparable the Brixworth assemblage is not quantified, prohibiting inter-site comparison. Oundle and Irchester do, however, bear useful comparison as does Stonea, Cambs, slightly further afield (Jackson and Potter 1996). Recent work at Victoria Park, in the small town of Irchester produced an assemblage of *c* 2500 Roman sherds dating from the 1st to 3rd centuries. In terms of composition of material the assemblage is similar to that from Higham Ferrers with a predominance of local wares; in particular, sandy grog-tempered ware, shelly ware, Lower Nene Valley grey ware and colour-coated wares. In terms of imports samian ware was quite well represented, accounting for around 4% by weight compared to 2.9% overall at Higham Ferrers, but other imports were limited to occasional sherds, both continental and regional wares (Timby in prep). This would strongly suggest that both sites essentially had access to the same market supplies.

Recent excavations at Oundle, located on the River Nene some 25 km north-west of Higham Ferrers and close to the roadside settlement at Ashton, located a small settlement dating from the 1st-4th century which produced an assemblage of *c* 6700 sherds (Timby forthcoming b). Again imports were relatively sparse and samian only accounted for 1.7% by weight, perhaps a reflection of its lower status. As with Irchester and Higham Ferrers, both DOR BB1, Verulamium and Oxfordshire wares are present but in negligible quantities. Lower Nene Valley grey ware contributed 24.5% by weight to the assemblage compared to 27.7% at Higham Ferrers and 27% at Irchester and colour-coated wares 16% compared to 8.9% at Higham Ferrers and 11.7% at Irchester. This could well be a reflection of the proximity of the kilns to Oundle. Interestingly all these sites have produced small quantities of a British glazed ware and mica-slipped wares suggesting that some early 2nd-century kilns in the region were experimenting with these techniques.

The extent to which Stonea Grange, a settlement complex located in the Fenlands west of Durobrivae but within the catchment area for the Nene Valley industries, is comparable to other sites in the area is more difficult to judge, as samian ware was not quantified in the same way as other components of the assemblage, for which totals are given by weight. Nevertheless, roughly 3300 sherds (Johns 1996a, 409) must have represented a significant contribution to the assemblage; speculatively, if the average samian ware sherd weight at Stonea had been the same as at Higham Ferrers, the 3300 sherds would have comprised at least 5% of the total pottery (by weight) – including the amphorae. The latter amounted to *c* 7.7% (by weight) of all the pottery (excluding the samian ware). These figures suggest an assemblage rather different in character from many of the others discussed here, though other imported wares, for example, seem only to have been present in very small quantities. The grog-tempered tradition does not appear to extend out to this area, the four main wares being shelly ware (22.6% by weight), LNV RE (18.0%) and LNV CC (8.0%) and other reduced ware (26.3%)

(Cameron 1996, 475, table 21, percentages based on a weight total that excludes amphorae and samian ware).

Thus it would seem that the pottery assemblage from Higham Ferrers is quite typical for the region, reflecting a ready market for products of the Nene Valley industry and other local kilns. The sandy grog-tempered wares probably show the most restricted distribution as they only occur on sites in the immediate area and are absent to the west in Cambridgeshire and to the south from sites in and around Milton Keynes (Marney 1989). The low incidence of imported amphorae and fine wares and the absence of imported mortaria seem to be typical of the area, although clearly samian ware was as readily available as elsewhere in the country. It must be assumed that the exotic quality of the Nene Valley colour-coated industry fulfilled the demand for tablewares and that other food commodities such as wine and oil were either not in demand or arrived in non-ceramic containers. Although a few products from Dorset, Oxford and Hertfordshire were marketed it seems, especially in the case of the last two, that local wares formed suitable substitutes, particularly for mortaria.

COINS *by Cathy King*

Introduction

A total of 478 Roman coins were recovered from the excavations at Higham Ferrers between 2001 and 2003. The assemblage that will be discussed here also included five post-Roman coins, two metal objects that were not coins and two metallic non-coin fragments treated as a single item, making a total of 486 entries in the coin list (Table 5.12). The Roman coins from the shrine (107) and settlement (371) have been summarised in Table 5.13. In addition 17 Roman coins (recovered by metal detector) from an area to the west of the northern part of the site (in the vicinity of the disused sewage works) have been listed and tabulated separately (Table 5.14).

The coins have been catalogued in accordance with the guidelines suggested by R J Brickstock (2004) with some minor modifications. The date parameters listed for the imitations are usually the same as those for the prototypes they imitate and are preceded by a *c* indicating that they cannot be earlier than the initial date.

Most coins not attributable to a specific emperor can be fitted within broader parameters. For example all of the illegible bronze coins of the 1st and 2nd centuries in this assemblage can be identified as belonging to the early empire and can thus be included in the total for the years AD 41 to AD 193. The illegible silver coins and their copies fall in the years before AD 260 and most can be fitted into the chronological period between AD 193 to and AD 260 (Table 5.15). The vast majority of official illegible radiates of debased silver content were produced between AD 260 and 274 and coins of the Gallic emperors can frequently be distinguished from those of the Central Empire emperors and attributed accordingly. Where they cannot, they have been treated as part of the broader period from AD 260 to AD 296 (Table 5.16). In the 4th century a period defined between AD 330 and AD 360 has been created to deal with small bronzes and their copies issued within this period that cannot be more closely dated. A small group of coins that cannot be assigned definitively to either the 3rd or 4th century has been placed in the category '3c to 4c' and excluded from the numerical calculations below, as have the post-Roman pieces and non-coins.

Any analysis and interpretation of the Roman coins recovered from Higham Ferrers must begin by taking the nature of the site itself into account. It is part of a linear roadside settlement consisting of domestic buildings along the eastern side of a north-south road, with a shrine(s) defined by a walled temenos identified on the western side of the road. These remains only represent the northern limit of a much larger settlement of which an individual building was excavated in 1961 (Meadows 1992).

Table 5.12 Chronological quantification of all excavation coins

	Genuine		*Imitation*		*Total*	
Date	*No.*	*%*	*No.*	*%*	*No.*	*%*
To AD 41	0	0.0	0	0.0	0	0.0
41-54	1	0.2	1	0.2	2	0.4
54-68	0	0.0	0	0.0	0	0.0
69-96	5	1.0	0	0.0	5	1.0
96-117	7	1.4	0	0.0	7	1.4
117-138	9	1.8	1	0.2	10	2.1
138-161	10	2.1	1	0.2	11	2.3
161-180	6	1.2	0	0.0	6	1.2
180-192	4	0.8	0	0.0	4	0.8
193-222	7	1.4	8	1.7	15	3.1
222-238	3	0.6	0	0.0	3	0.6
238-260	0	0.0	0	0.0	0	0.0
260-275	97	20.3	70	14.6	167	34.9
275-296	10	2.1	2	0.4	12	2.5
CE/GE Illeg	5	1.0	80	16.7	85	17.8
296-317	6	1.2	0	0.0	6	1.2
317-330	11	2.3	3	0.6	14	2.9
330-348	40	8.4	35	7.3	75	15.7
348-364	3	0.6	13	2.7	16	3.3
330-360	1	0.2	8	1.7	9	1.9
364-378	10	2.1	0	0.0	10	2.1
378-388	0	0.0	0	0.0	0	0.0
388-402	2	0.4	0	0.0	2	0.4
1c-2c	12	2.5	2	0.4	14	2.9
3c-4c	3	0.6	2	0.4	5	1.0
Post Roman	5	1.0	0	0.0	5	1.0
Not coin	3	0.6	0	0.0	3	0.6
Total	260	53.0	226	47.0	486	100.0

A significant proportion of the coins from Higham Ferrers as well as a large number of other metal finds including votive leaves and personal items were recovered from the shrine and its proximity. Within the settlement area significant coin concentrations were present in buildings 10820 and 10840. This report will examine intrasite spatial pattern in coin deposition, looking at possible changes over time, and attempt to assess what evidence, if any, there is showing a relationship between the nature and location of the coins and economic and/or religious activity. The data from the current excavations is also compared with the material from the 1961 excavation (Meadows 1992; Reece n.d.) and other sites in the immediate region, including Stanwick, which has yielded 3545 Roman coins, and the Roman town of Irchester.

Finally, in order to assess how typical the coin assemblage from Higham Ferrers is in comparison with other Romano-British sites, two lines of enquiry will be followed. The first will be to analyse the coin data from other rural and/or roadside settlement sites to see how similar the data are and to what extent Higham Ferrers matches the prevailing pattern for this group of sites. The pattern of coin loss at Higham Ferrers will then be compared with other types of Romano-British sites to see if it matches the pattern for temple sites or villas.

The composition of the coin finds

Before undertaking any comparative analysis, a brief discussion of the chronological composition of the coins excavated at Higham Ferrers is needed. Although excavations can yield significant numbers of Roman coins, they tend to be those their original owners would have valued least and consequently they would have spent little time in searching for them even if they were aware they had lost them. To some extent this explains the high proportion of ancient copies and coins of low value which almost certainly do not represent the true wealth of the community. Consequently, one should exercise caution about inferring the wealth and status of a community based mainly on the nature and number of coins retrieved from excavations.

No gold coins and only 21 silver coins (denarii) which form 4.4% of the total were recovered from the excavations (Table 5.15). Over half of the denarii (11) were ancient copies. The date range of the prototypes on those copies legible enough to identify lies between *c* AD 117 and AD 235. They cluster in the years between AD 193 and AD 235 as do their prototypes as there are 8 official pieces and 8 copies from this period. There are no 4th-century siliquae (minted in some quantity between *c* AD 355 and AD 402) which is compatible with the relatively small proportion of Roman bronze coins datable to the later 4th century recovered from Higham Ferrers.

There are 56 bronze coins datable to the period between AD 41 and AD 238, two of which are imitations. It is worth noting for dating purposes that the majority of the 1st- and 2nd-century bronze coins can be categorized as either very worn or extremely worn. The most unusual coin in this early group is a quadrans of Claudius I. These are rarely found on British sites although a small number have been recovered from Harlow Temple and Hayling Island, both early temple sites with a significant Iron Age and early Roman component (France and Gobel 1985, 49-70; Briggs *et al.* 1992). The sestertius of Maximinus Thrax is also uncommon as the supply of bronze coins to Britain had largely ceased in the late 2nd and early 3rd centuries and only small numbers of these later bronzes minted between *c* AD 193 and AD 260 reached Britain (Walker 1988, 299-301).

The Higham Ferrers assemblage is dominated by the extremely debased 'silver' issues of the later 3rd century and more specifically by the antoniniani of the central emperors Gallienus and Claudius II (including Divus Claudius) and the Gallic emperors Postumus, Victorinus, and the Tetrici together with their imitations (Table 5.16). There are 264 excavation coins (55%) datable to the years between AD 260 and AD 286 and 152 (57%) of this group are ancient copies. By contrast the 112 nummi of the 4th century minted between AD 330 and AD 402 form a much smaller proportion of the total (23.4%) although the 56 contemporary imitations of these pieces (which cluster in the years from *c* AD 330 to 360) again form half the total.

While the group of 17 coins from the area to the west of the excavation is too small to provide a reliable statistical comparison with the excavation material, they are nonetheless interesting (Table 5.14). Nine coins (53%) fall in the 1st and 2nd centuries, five (29%) in the years AD 260 to 286, and three (17.6%) belong in the 4th century. By comparison with the coins from the overall excavation this group displys a higher percentage 1st- and 2nd-century coins in proportion to those of the 3rd and 4th centuries (see below). However, the coin ratios are more comparable with those from the shrine alone (Table 5.13), possibly suggesting that a similar early (and possibly ritual?) focus existed along the entire western part of the site.

The overall picture presented by the coins is of a site where Roman coins minted before AD 260 form only a small proportion of the total and where those of the 4th century are also underrepresented. The very high proportion of both official antoniniani and their copies minted in the years between AD 260 and AD 286 is atypical of roadside settlements and temple sites (see below).

These data can be compared with the list of 185 coins from the excavations in the 1960s compiled by Richard Reece (Reece n.d.). Reece divided the material into two groups. The first consists of 129 coins, which he identified as a scattered 4th-century hoard of 'nummi'. The majority of these were produced in the years between AD 330 and AD 348 (102 coins or 79%) with a tail consisting of three

Table 5.13 Summary of coins from the shrine and the settlement

	Shrine						Settlement					
	Genuine		Imitation		Total		Genuine		Imitation		Total	
Date	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
To AD 260	39	90.7	4	9.3	43	40.2	25	73.5	9	26.5	34	9.0
AD 260-296	11	21.2	41	78.8	52	48.6	101	47.6	111	52.4	212	56.1
AD 296-402	7	58.3	5	41.7	12	11.2	66	52.8	59	47.2	125	33.7
Total	57		50		107		192		179		371	

copies whose prototypes are datable to the years AD 348 to AD 364. No identifiable pieces occur after AD 364 but, unusually for bronze hoards of this period, there is a small group of coins (15) ranging from a mid 2nd-century bronze piece to eight radiates from the years between AD 260 and AD 286 and ending with six post-reform 'nummi' minted before AD 330.

Reece's second group consists of 56 coins classed as general site finds. The chronological distribution of the 4th-century coins in this group is not dissimilar to that of the hoard or the current Higham Ferrers excavation material, since the latest datable general coins do not extend beyond AD 348 to AD 364. To emphasise this point, the latest datable pieces from the current Higham Ferrers excavations minted between AD 364 and AD 402 form only 2.5% of the total and only two coins (0.4%) fall in the years after AD 378.

There is a clear difference between the Higham Ferrers coins from the earlier and the current excavations in terms of the distribution of their 3rd and 4th-century pieces (Table 5.17). The proportion of the 4th-century coins in the 1961 excavation groups is significantly larger than the proportion of 3rd-century pieces while the opposite is true of coins from the current excavations. Even excluding the 1961 hoard, the relatively low number of 4th-century coins from the current Higham Ferrers excavations is clear and reinforced by the distribution pattern of the material from Stanwick (Table 5.17) where 55% of the coins can be dated to the years between AD 330 and AD 402 (Davies n.d.).

Both the 1961 and current excavation coins have significant numbers of contemporary imitations from the peak periods AD 260 to AD 296 and AD 330 to AD 348. The 69 4th-century copies in the hoard form 37.3% of the total for that century, while the three 3rd-century imitations amount to only 5.3%. The 4th-century imitations from the current Higham Ferrers excavations, on the other hand, equal 44.6% of the identifiable total which is not dissimilar to the 1961 distribution. However, the 152 3rd-century copies form 57.5% of the total which is in sharp contrast with their percentage in the earlier excavation.

Table 5.14 Chronological quantification of the coins recovered to the west of the excavation

	Genuine		Imitation		Total	
Date	NO	%	NO	%	NO	%
69-96	1	5.9	0	0.0	1	5.9
138-161	1	5.9	0	0.0	1	5.9
180-192	1	5.9	0	0.0	1	5.9
193-222	1	5.9	0	0.0	1	5.9
260-275	2	11.8	1	5.9	3	17.6
275-296	1	5.9	1	5.9	2	11.8
330-348	1	5.9	1	5.9	2	11.8
348-364	1	5.9	0	0.0	1	5.9
1c-2c	5	29.4	0	0.0	5	29.4
Total	14	82.3	3	17.6	17	99.9

Coin distribution

Initial examination of the distribution of the Roman coins from Higham Ferrers suggests that the shrine and the buildings adjacent to it along the road in the settlement, especially building 10820, were significant areas of coin deposition from at least the later 2nd century through to the earlier 4th century (Fig. 5.16). Deposition on the site as a whole, as noted above, begins on a relatively modest level (Fig. 5.17), peaks in the 3rd century and declines significantly in the 4th century, particularly in the shrine area (see Table 5.13). In the settlement area the coins are distributed over the whole of the southern part of the site with a more intense focus in the area opposite the shrine.

The shrine itself was separate from the main settlement and its structural focus faced to the south-west along the valley rather than the roadside. The southern limit of the precinct was defined by the foundations of a monumental wall with the shrine itself enclosed in a walled temenos to the north of the monumental wall and separated from it by a paved area (see Chapter 4). If the deposition pattern of those coins which can be assigned to a specific emperor or dynasty is examined, the earliest coins (defined by their date of minting) within the shrine enclosure are of the Flavian dynasty minted between AD 69 and AD 96. They are found clustered at the southern end of the enclosure together with a small group of 2nd-

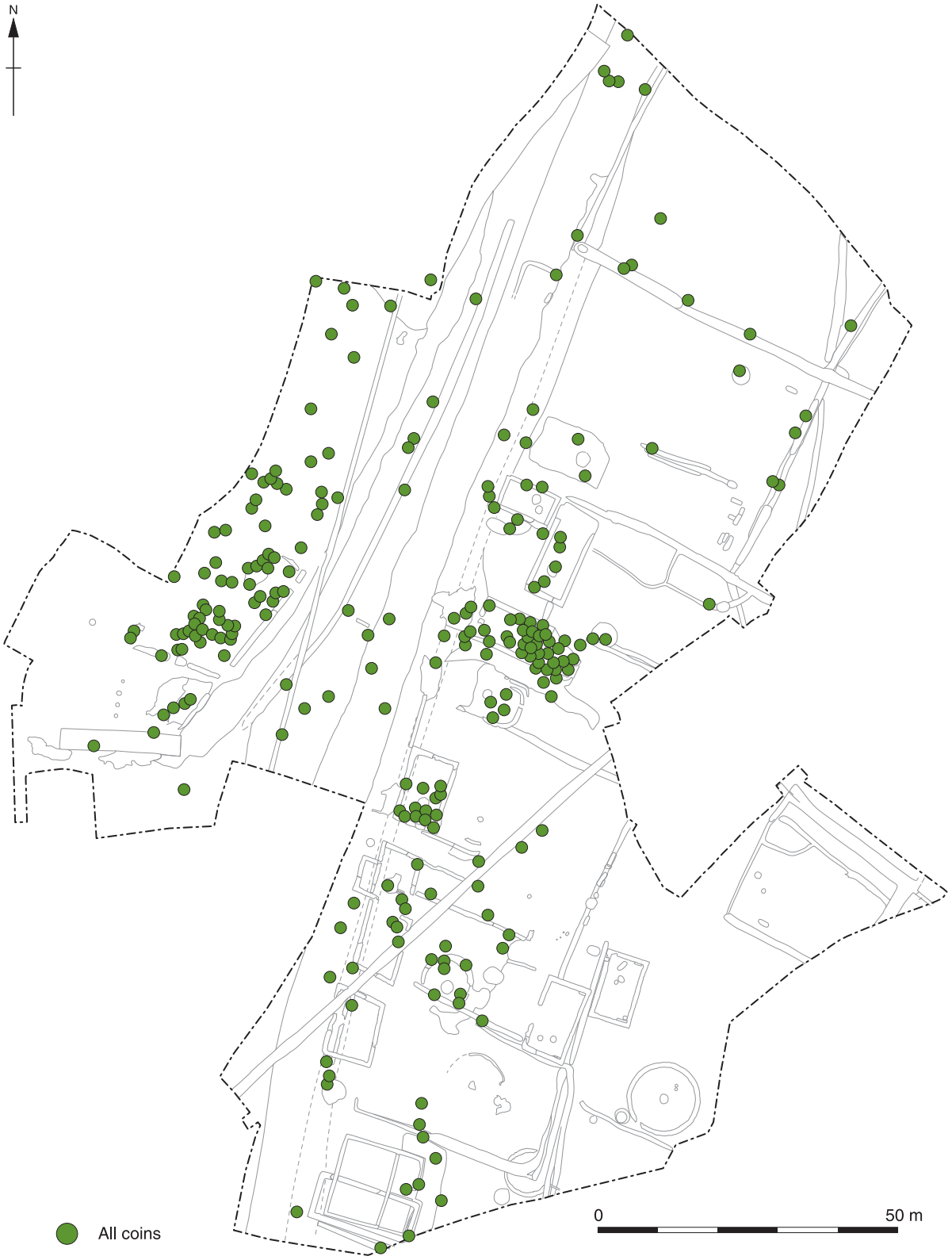


Fig. 5.16 Primary distribution of 1st- to 4th-century coins within the site

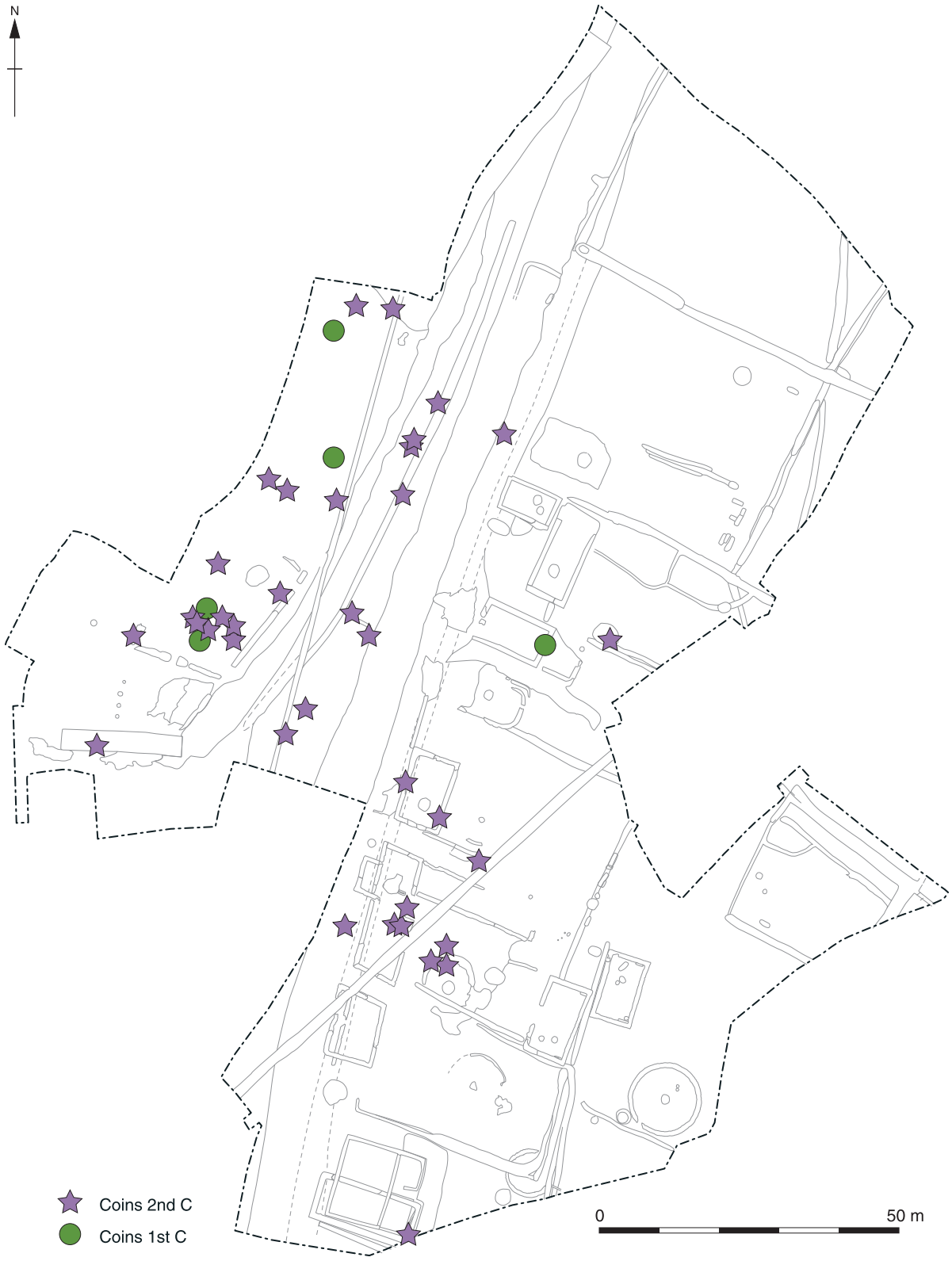


Fig. 5.17 Distribution of 1st- and 2nd-century coins

century coins ranging in date from AD 117 to AD 193 (Fig. 5.17). All of the coins show significant signs of wear and the 1st-century pieces are more worn than those of the 2nd century, which suggests a reasonably long period in circulation, compatible with a deposition date from the mid 2nd century or early 3rd century.

A small scatter of 1st- and 2nd-century coins was found to the north of the shrine enclosure. If the illegible pieces are included, the majority of the 1st- and 2nd-century coins are bronze (54 out of a total of 59) and three of the five denarii whose prototypes were produced in the 2nd century were ancient copies. It is worth noting that over half of the coins recovered outside the excavation area to the north of this group were also 1st-2nd century in date (see above).

The deposition pattern both in the shrine and over the site as a whole for coins minted between AD 193 and AD 260 is significantly different from the earlier period. Only two of the total of eighteen coins from this period are bronze (both genuine), an as of Julia Domna and a sestertius of Maximinus Thrax, and there are no coins that can be specifically identified from the years AD 238 to AD 260. The remaining 16 coins are denarii consisting of eight genuine issues and eight ancient copies, the majority of which are plated. Ten from the shrine area (including three plated pieces) have prototypes that were minted between AD 193 and AD 238 ending with two genuine denarii of Severus Alexander produced between AD 222 and AD 235 (Table 5.15). It is worth noting that the two bronze coins from these years mentioned above as well as a genuine denarius and five denarius imitations occurred in other contexts on the site and are not associated with the shrine. A similar distribution pattern applies to the five denarii of the earlier 2nd century, of which only the two genuine pieces and one ancient copy can be attributed to the shrine area.

It is uncertain whether the denarii arrived as a single group or individually over a longer period of time. Linked to this problem is the date when the coins were copied. It is possible that the copies were made in the period after the routine supply of bronze coins had effectively ceased or as part of an endemic process occurring in the 2nd century. Either scenario is tenable although the concentration of silver coins (including the imitations) in the years between AD 193 and AD 235 seems to suggest that in the absence of regular supplies of bronze coins, silver was beginning to replace them (particularly the debased silver issue of the Severans and their successors). The failure to supply sufficient amounts of the more valuable silver currency presumably was a stimulus to the production of copies.

The later 3rd-century coins are, without exception, antoniniani of the central, Gallic and British empires and their copies (Table 5.16), and most range from worn to extremely worn. Of the 179 coins (68%) that can be assigned to an emperor or group, 111 (42%) are of the Gallic Empire, 59 (22%) are of the Central Empire and 9 (3.4%) are of the British Empire. There are 85 antoniniani (32%) that cannot be fully identified of which 80 (30%) are ancient copies. As was noted above, the ancient copies significantly outnumber the genuine pieces. Where they can be specifically identified, they cluster in the reigns of Claudius II, the Tetrici, and the Gallic emperors (Victorinus and the Tetrici) who cannot be specifically identified.

Deposition of coins within and around the shrine area in the 3rd century is slightly scattered although some broad patterns are evident (Fig. 5.18). Perhaps the clearest of these is a small but distinct group located just inside the entrance of the temenos reflecting what appears to be the main shrine focus. This pattern is similarly represented by a concentration of 2nd-century coins (Fig. 5.17) and many of the personal items and nails (see Scott below). A linear distribution of 3rd-century coins is also present

Table 5.15 Chronological quantification of the silver coins

	Genuine		*Imitation*		*Total*	
Date	*NO*	*%*	*NO*	*%*	*NO*	*%*
117-138	0	0.0	1	4.7	1	4.7
138-161	0	0.0	1	4.7	1	4.7
161-180	1	4.7	0	0.0	1	4.7
181-192	1	4.7	0	0.0	1	4.7
193-235	8	38.1	8	38.1	16	76.2
c. 103-235	0	0.0	1	4.7	1	4.7
Total	10	47.5	11	52.2	21	99.7

Table 5.16 Detailed chronological quantification of coins dated AD 260-296

	Genuine		*Imitation*		*Total*	
Date	*NO*	*%*	*NO*	*%*	*NO*	*%*
Gallienus	12	2.5	5	1.0	17	3.5
Claudius II	8	1.7	4	0.8	12	2.5
Divus Cl II	8	1.7	17	3.5	25	5.2
Quintillus	2	0.4	0	0.0	2	0.4
Probus	2	0.4	0	0.0	2	0.4
Diocletian	1	0.2	0	0.0	1	0.2
Postumus	6	1.2	0	0.0	6	1.2
Marius	1	0.2	0	0.0	1	0.2
Victorinus	19	4.0	2	0.4	21	4.4
Tetrici	36	7.5	26	5.4	62	13.0
GE Illeg 268-274	5	1.0	16	3.3	21	4.4
CE/GE Illeg	5	1.0	80	16.8	85	17.8
Carausius	4	0.8	2	0.4	6	1.2
Allectus	3	0.6	0	0.0	3	0.6
Total	112	23.2	152	31.6	264	55.0

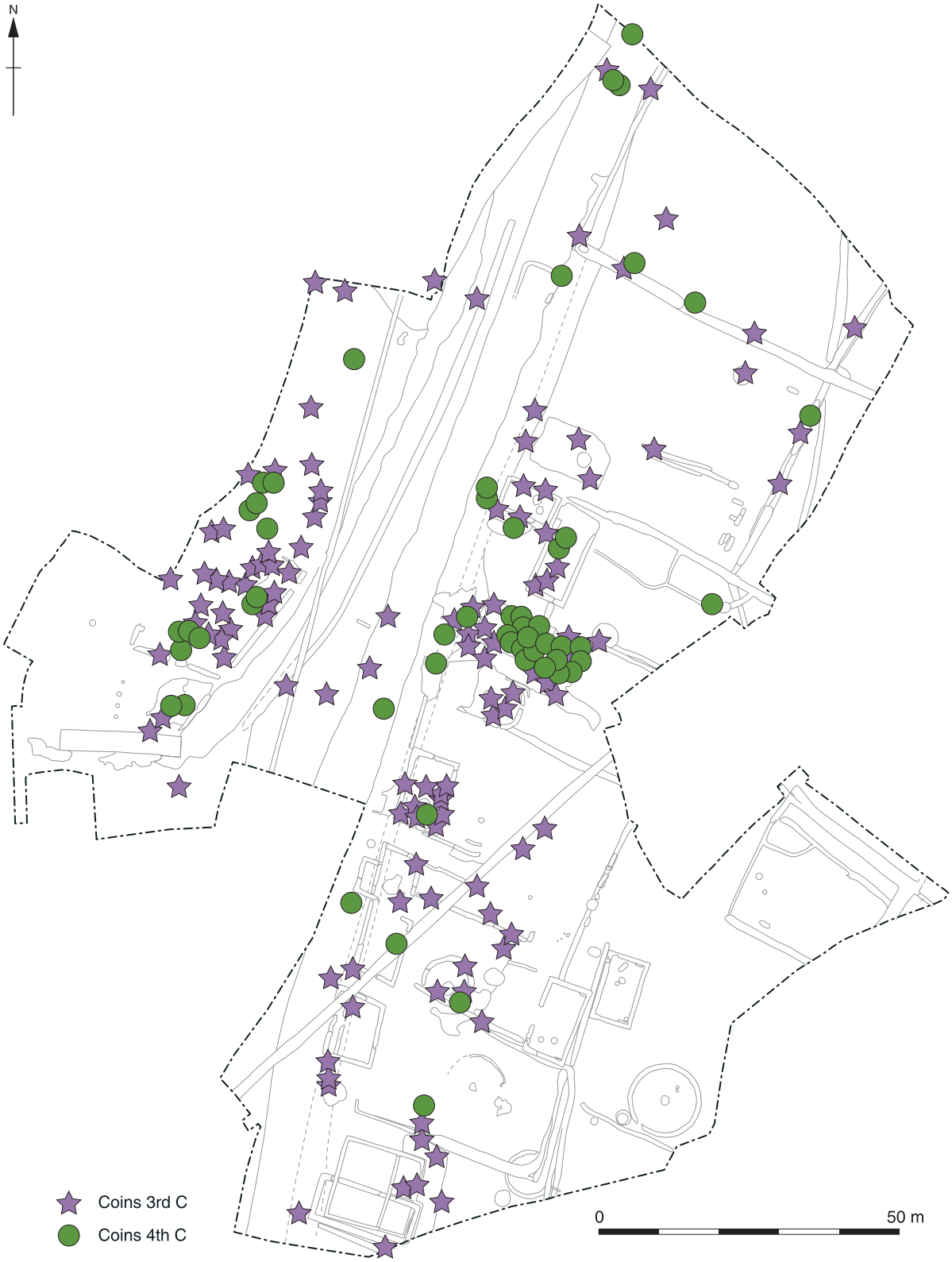


Fig. 5.18 Distribution of 3rd- and 4th-century coins

along the interior side of the temenos wall fronting the roadside, which is made more marked by the general lack of similar items within the road space area immediately east of the wall. The only other group of any size, albeit rather more scattered, is a number of coins more generally distributed across the western open side of the temenos to the north of the primary entrance focus. Others were present on the platform between the temenos entrance and the monumental wall and two were recovered in the open area to the south of the wall (not shown on plan). A few outlying coins were also located further to the north and could have been associated with a small scatter of items deposited around a further possible roadside shrine focus here (see discussion in Chapter 7).

The pattern of the 3rd-century coin deposition in the southern half of the site excluding the shrine is densest in the area containing buildings 10800, 10810, 10820, 10830 and 10840, with 10820 and 10840 in particular producing dense concentrations (Fig. 5.18). There is also a significant scatter at the southern end of the site largely associated with the buildings in the area, and a more sparse representation of 3rd-century coins in the northern part of the main settlement site. In addition, there are 3rd-century coins within contexts surrounding the possible temple to the north of the settlement (Area G; context 8000s) and the Saxon settlement (contexts 6030 and 6125) approximately 500 m to the east (Hardy *et al*. 2007), which have not been mapped. The number of 3rd-century coins from these contexts is small (18) but the ruler distribution is broadly compatible with that from the shrine contexts.

The 3rd-century chronological distribution by ruler in both shrine and roadside contexts are broadly similar. Coins of Gallienus to Quintillus amount to 13.5% from the shrine contexts and 25.3% from the roadside contexts. The distribution of coins of Postumus and the other Gallic rulers including the illegible Gallic empire pieces amounts to 32.7% from the shrine and 35.8% from the roadside contexts. Of the 18 3rd-century coins from Area G and the Saxon settlement there are three (16.6%) of the Central Empire rulers Gallienus to Quintillus and seven (38.8%) of the Gallic emperors. A similar pattern is repeated in the distribution of the 23 3rd-century coins from the spoil heap. Eleven coins (23.4%) belong in the group from Gallienus to Quintillus and 23 (48.9%) are of the Gallic Empire. The absence (or virtual absence) of other emperors reigning in the years AD 260 to AD 296 is characteristic of British sites. By contrast, the ancient imitations from shrine contexts (79%) and roadside contexts (65%) significantly outnumber those from Area G and the Saxon areas (30%) and the spoil heap (51%).

A total of 132 pieces (27.6%) can be securely dated to the 4th century, with 95 (72%) belonging in the years before AD 348, and 75 (57%) falling in the years AD 330 to AD 348. These represent the last period in which Roman coins reached the site in any real numbers. The 59 ancient copies account for nearly half (44.7%) of the 4th-century finds and 35 of them (55%) have prototypes that were produced between AD 330 and AD 348. Copies also predominate in the period AD 348 to AD 360 when 13 of the 16 FEL TEMP REPARATIO pieces are imitative.

In the 4th century coin deposition in the shrine area continued but on a much smaller scale (Fig. 5.18; Table 5.13). The finds are largely located in the shrine interior and again a small group reflects the focus located just within the temenos entrance. Another small group is located just beyond the likely northern limit of the temenos while only a single coin is located north of this. Three coins were recovered from the demolition debris sealing the platform located between the temenos entrance and the monumental wall. In the settlement area, the coins are concentrated in building 10820 (see below), and there is also a thin scatter of coins in the vicinity of or within buildings 10800, 10810, and 10830, but only one in building 10840 (not mapped on plan). Other outliers are found near ditches north of building 12900. In the southern half of the site a small number of coins are found scattered across the area although none appear to be directly associated with any of the buildings.

There are two groups of 4th-century Roman coins found in Area G (general topsoil/spoil contexts 8003 and 8004) and two from Saxon contexts 6030 and 6125. The Saxon contexts had nine 4th-century Roman coins. In Area G, four of the 14 (28.5%) coins from context 8003 were 4th century in date as were eight (40%) of the twenty coins from context 8004. Eighteen (25.3%) of the 71 coins from the spoil heap were from the 4th century, 9 official pieces and 9 contemporary copies.

One of the more interesting aspects of the 3rd-century coin distribution is the concentration of material both within the shrine and its environs and in the approximately parallel buildings along the road (see above). This suggests that a significant focus of activity involving coin use was located in this area of the site, although exactly what the nature of the activity was is less clear and it is worth noting that the associated finds do not provide evidence for any large scale 'industry' *in situ*. What one would like to know is how direct a link existed between the shrine and roadside buildings in monetary terms and what this link was in the 3rd and 4th centuries?

Figure 5.18 clearly illustrates the density of the deposition of 4th-century coins in building 10820, concentrated at the back of the west room along the north and west walls. There is a small cluster of coins from outside the entrance to the building (context 10666) and a few coins in the east room. Within the building the coins are fairly widely scattered.

The mapped 3rd-century coins in building 10840 present a somewhat different picture (Fig. 5.18). Although the total number is small, all of those

actually within the building were, with the exception of an illegible 2nd-century bronze coin, produced between *c* AD 260 and AD 286. A small cluster of eight coins in the south-west corner is almost certainly a hoard, but it is unlikely that the other 3rd-century pieces in the room ever formed part of it given their distance from the find's focal point.

The twenty coins from building 10840 from contexts that have not been three-dimensionally mapped, contexts 12836 (7 coins), 12835 (9 coins), 12829 (2 coins), and 12862 (2 coins), are also located in the southern portion of the building in the vicinity of the hearth. Nineteen of the twenty coins date to the years between AD 193 and AD 286 and 17 were minted in the later 3rd century, *c* AD 260 to AD 286. A single coin from context 12835 was from the 4th century, an ancient copy minted between *c* AD 330 and AD 360, and there are two imitative denarii of Severus and Elagabalus datable to *c* AD 193 to AD 235. Thus the picture presented by the coin deposition in building 10840 is one of coin loss predominantly from the 3rd century, with little corresponding material from the 1st, 2nd or 4th centuries.

Unlike building 10840, coin deposition continued in building 10820 until the latter half of the 4th century and ends with a coin minted between AD 364 and AD 378. In fact, the number of 4th-century coins (40) significantly outnumbers those recovered from the 3rd century (19) and those retrieved from the shrine area (12). The coins located three-dimensionally occur mostly in the western end of the west room and the southern end of the eastern room where they are more closely grouped. However, their scattered distribution does not suggest that the coins in either room form part of a hoard, despite the fact that over 70% of the coins mapped have prototypes that were minted between AD 330 and AD 348. There are only a handful of pieces from the years AD 286 to AD 330 and AD 348 to AD 378.

The picture presented by the 4th-century coin distribution in building 10820 suggests that there was a level of activity occurring here that led to an influx of coinage from the years *c* 330 to AD 360, which is not reflected in the shrine or elsewhere across the settlement. Broadly, It mirrors the 4th-century coin distribution of the hoard and general finds from the 1961 excavation further south.

While both the shrine and nearby roadside buildings are comparable in having significant numbers of coins, the distribution of other personal objects in metal and bone is much larger in shrine contexts than in buildings 10800, 10810, 10820, 10830, and 10840 (See Scott below).

Inter-site analysis

Higham Ferrers is located in an area which is rich in Roman remains, lying just over 2 km from the important settlement at Stanwick (part of the Raunds Area Project) which has yielded 3,545 Roman coins and 1.4 km from the villa at Redlands Farm both to the north. The Roman town of Irchester lies 4.5 km to the south-west with other unexcavated villas located within close distances to the north-east and south-west. Roman pottery factories were located slightly further away in the vicinity of Wellingborough at Mears Ashby and Hardwick. Thus Higham Ferrers is located within a network of larger and smaller settlements and a regional industrial context. However, the richness of the potential comparative coin material is significantly diminished by the fact that as yet it is largely unpublished and the coin material from the Raunds Area Project, for example, is available only in a brief (but still useful) summary. Nevertheless, this project is an obvious starting point in a comparison of its coin population with that of Higham Ferrers, given its proximity and the fact that it is also a rural site. The most prominent difference between the two, as noted above, is the concentration of coins in the 4th century from the Raunds area, most obviously at Stanwick, in the years from AD 330 and AD 402 (Table 5.17). Another significant distinction is the magnitude of the coin assemblage. The Raunds group of sites includes Stanwick with a total of 3575 pieces of which 3545 are Roman. Three other subsidiary sites under this project (Irthlingborough, Mallows Cotton and West Cotton) produced a total of 129 coins (Davies pers. comm.). These numbers can be contrasted with the relatively small total of 478 Roman coins from the current Higham Ferrers excavations, and even including the 185 coins from the 1961 excavations, the total does not begin to approach the volume of finds from Stanwick.

Consequently, it is unsurprising that Stanwick

Table 5.17 Chronological quantification and comparison of coins from Higham Ferrers and Stanwick

	Higham Ferrers (current)		*Stanwick*		*Higham Ferrers 1960s*	
Phase	*No.*	*%*	*No.*	*%*	*No.*	*%*
A (to AD 260)	77	16.2	456	14.0	2	3.6
B (260 to 296)	264	55.8	925	28.3	12	21.3
C (296-330)	20	4.2	86	2.6	3	5.4
D (330-402)	112	23.6	1797	55	39	69.6
Total	473	99.8	3264	99.9	56	99.9

includes a broader range of material than Higham Ferrers including 13 Iron Age coins (11 Catuvellaunian, one Trinovantian, and one Cantian). The Cantian piece is a gold quarter-stater of Eppillus, the Trinovantian is a silver unit of Tasciovanus, and the Catavellaunian are all bronzes. No Roman gold coins were found at any of the Raunds sites, but a total of 71 silver coins were retrieved from Stanwick, including five 4th-century siliquae of Julian. While the actual number of silver coins from Stanwick is much larger than that from Higham Ferrers, it still amounts to only 2% of the total.

It is unfortunate that as yet there has been no subdivision of the silver coins from Stanwick into chronological periods nor has the number of imitations, if any, been quantified, which makes detailed comparison with Higham Ferrers difficult. However, the 21 Higham Ferrers silver coins and their copies amount to 4.4% of the assemblage, which is slightly higher than at Stanwick. If the imitations are excluded from the Higham Ferrers calculation, the ten genuine pieces amount to 2.1% which is very close to the Stanwick percentage. Both sites reflect their rural nature in the very small amounts of precious metal coinage recovered.

Another way in which the two sites are comparable is in the amounts of earlier Roman coinage (to AD 260) retrieved. At Stanwick a total 456 coins or 15% were minted before AD 260, while at Higham Ferrers 77 pieces (16.2%) can be assigned to this period. The usual pattern for rural sites is to have small percentages of coins from the years before AD 260 and it is interesting to note that the early coins at both Higham Ferrers and Stanwick cluster in the area of shrines. At Stanwick a temenos was created in the 1st century AD surrounding and focused upon a Bronze Age barrow. It was situated to the north of the much later villa buildings and continued to function into the 4th century (Crosby and Neal forthcoming). At Higham Ferrers the beginnings of the shrine are dated to the later 2nd century. It continued functioning throughout the 3rd century but appears to have fallen out of use early in the 4th century.

Up to the middle of the 3rd century the two sites seem to have followed a fairly similar pattern of development although Stanwick was clearly the larger and more important settlement. However, the much higher percentage of later 3rd-century coin loss at Higham Ferrers (55.8%), as noted above, in comparison with that at Stanwick (28.3%) does not necessarily signal a significant divergence between the two settlements at that moment in time. It is worth pointing out in this context that the largest single group of coins from Stanwick also falls in the years between AD 260 and AD 296. This evidence offers some support for the similarity between the two sites beyond the mid 3rd century.

The high percentage of later 3rd-century coins recovered from Higham Ferrers can also be viewed from a somewhat different perspective. It is related (inversely) to the relatively small number of 4th-century pieces recovered from the currently excavated parts of the site. In other words, if Higham Ferrers had continued to receive and discard 4th-century coins in the same sorts of quantities as it had done in the 3rd century, the percentage total of the 3rd-century pieces would decline in relative terms as those of the 4th century rose. By contrast, the much larger numbers of 4th-century coins at Stanwick, particularly those of AD 364 to AD 378, make the 3rd-century coin loss there look much less significant numerically. However, there is no doubt that Stanwick and Higham Ferrers have divergent patterns of coin loss from the mid 4th century onwards both in quantitative terms – numbers of coins – and percentages. The coin evidence suggests, even nuanced by the predominance of 4th-century coins recovered from the 1961 excavation, that there was a decline, change, or different focus of activity at Higham Ferrers after AD 348. Certainly fewer coins reached the excavated parts of the settlement.

The reasons for the decline in the numbers of 4th-century coins retrieved from Higham Ferrers are unclear. Certainly the settlement size and quantity of the buildings continued to increase into the early 4th century. The use of the shrine as a major focus does appear to have ceased, although a small concentration of 4th-century coins suggests some continued reverence here. From the evidence of occupation within many of the buildings and the few assemblages of pottery that can be assigned to the late 4th century it certainly appears that the settlement continued to be occupied for much of this period, albeit probably at a less intensive level. At Stanwick, on the other hand, significant construction and modifications to existing buildings continued throughout the second half of the 3rd century and throughout the 4th century (see Discussion, Chapter 7).

Having examined the similarities and differences between the coin assemblages from Higham Ferrers and Stanwick which are located close to one another geographically and demonstrably 'rural' in their origins and earlier history, it is now useful to analyse coin data from other sites. This will show how closely Higham Ferrers matches the pattern for rural or other types of sites.

Unfortunately, the process of comparing the coin assemblages from Higham Ferrers with other British sites is not as straightforward as one might wish. Most recent work in Britain has been based on the premises Richard Reece has put forward in a number of studies: firstly that there is a general pattern of coin loss in Britain to which most sites conform; secondly that sites can be grouped into categories defined by their nature and function; and finally that chronological periods can be defined, to which coins can be assigned and analysed, that will yield patterns of coin loss supporting or modifying the definitions of the site categories (Reece 1991; 1993; 1995; 1996 and 1998). As Reece himself has noted, all three give rise to problems with definition

Table 5.18 Regional comparison of periods of peak coin loss in nucleated/rural settlements, temples and villas

PERIODS OF PEAK LOSS	*260-296*		*330-348*		*348-364*		*364-378*		*388-402*	
SITE	*NO*	*%*	*NO*	*%*	*NO*	*%*	*NO*	*%*	*NO*	*%*
NORTHAMPTONSHIRE NUCLEATED SETTLEMENTS/RURAL SITES										
H Ferrers Current	264	55.8	75	15.7	16	3.3	10	2.1	2	0.4
H Ferrers 1960s All	20	10.8	136	73.5	6	1.6	0	0.0	0	0.0
Stanwick	925	28.3	590	18.1	314	9.6	766	23.5	103	3.2
Irthlingborough	5	31.3	1	6.3	0	0.0	5	31.3	0	0.0
Mallows Cotton	17	25.4	17	25.4	10	14.9	13	19.4	5	7.5
West Cotton	8	33.3	2	8.3	2	8.3	3	12.5	0	0.0
Ashton Exc.	58	18.9	50	16.3	22	7.2	53	17.3	47	15.3
Ashton FW	30	27.3	26	23.6	10	9.1	18	16.4	15	13.6
BUCKINGHAMSHIRE AND OXFORDSHIRE NUCLEATED SETTLEMENTS/RURAL SITES										
Bucks	20	17.4	43	37.4	11	9.4	22	19.1	2	1.7
Somerton	34	28.0	38	20.1	30	15.9	33	17.5	45	23.8
Asthall	2	4.6	13	30.2	6	13.9	7	16.3	0	0.0
Wilcote 1990-92	7	23.3	3	10.0	2	6.6	0	0.0	0	0.0
Wilcote 1993-96	1	4.1	3	12.5	1	4.1	0	0.0	0	0.0
Wilcote Quarry	2	1.6	82	65.6	20	16.0	1	0.8	0	0.0
Wilcote 1993-96 SF	22	31.4	18	25.7	8	11.4	8	11.4	0	0.0
Wilcote All	32	12.8	106	42.6	29	11.6	9	3.6	0	0.0
ESSEX AND HERTFORDSHIRE NUCLEATED SETTLEMENTS/RURAL SITES										
Braintree	13	18.0	15	20.8	4	5.5	1	1.4	1	1.4
Wickford	219	50.4	39	4.7	11	2.5	11	2.5	7	1.6
Ware	226	27.6	262	32.0	101	12.3	113	13.8	40	4.9
Wotton Exc.	54	45.4	10	8.4	16	13.4	2	1.7	32	26.9
Wotton FW	138	26.2	209	39.7	59	11.2	55	10.4	5	0.9
Cow Roast Orch.	71	24.3	50	17.2	31	10.6	51	17.4	29	9.9
Cow Roast Mar.	50	29.0	17	13.3	2	1.5	19	14.8	3	2.3
SUFFOLK, NORFOLK AND LINCOLNSHIRE NUCLEATED SETTLEMENTS/RURAL SITES										
Hacheston 1973	102	25.9	138	35.0	26	6.6	13	3.3	2	0.5
Hacheston 1974-5	166	21.2	373	47.7	60	7.7	13	1.6	2	0.2
Hacheston FW	86	7.9	730	67.2	74	6.8	19	1.7	2	0.1
Caister	190	33.4	256	45.0	25	4.4	15	2.6	2	0.3
Sapperton	39	27.9	40	12.5	47	14.7	92	25.7	33	10.3
COTSWOLD WATER PARK SITES (GLOS) NUCLEATED SETTLEMENTS/RURAL SITES										
Somerford Keynes NB	54	19.4	36	12.9	45	16.2	10	3.6	1	0.3
Claydon Pike	142	19.4	171	23.3	71	9.7	157	21.4	21	2.9
Leaze Farm	24	9.6	56	22.5	38	15.2	64	25.7	17	6.8
Wigmore	24	43.6	16	31.4	3	5.8	2	3.9	0	0.0
Cottage Fields	10	27.0	15	40.5	3	8.1	2	5.4	2	5.4
Roughground Farm	9	18.3	17	34.7	11	22.4	1	2.0	1	2.0
OTHER GLOUCESTERSHIRE SITES NUCLEATED SETTLEMENTS/RURAL SITES										
Kingscote Site Finds	367	31.0	340	28.7	98	8.2	100	8.4	8	0.6
Kingscote 1	85	16.3	173	33.0	61	11.6	160	30.5	8	1.5
Kingscote 2	369	33.3	315	28.5	122	11.0	12	1.2	2	0.2
Kingscote 1976	61	17.0	163	43.5	64	17.8	1	0.3	0	0.0
Coln St. Aldwyns	254	18.2	471	33.8	93	6.6	219	15.7	53	3.8
Wycomb 1	11	4.5	115	47.7	55	22.8	41	17.0	6	2.5
Wycomb 2	15	5.6	63	23.7	63	23.7	49	18.5	26	9.8
ESSEX, HERTS, AND BUCKS VILLAS										
Gestingthorpe	259	55.0	104	22.1	18	3.8	12	2.5	10	2.1
Dickets Mead	146	59.1	42	28.8	9	6.1	1	0.4	0	0.0
Boxmoor	70	66.0	10	9.4	6	5.7	0	0.0	1	0.9

Table 5.18 (cont'd) Regional comparison of periods of peak coin loss in nucleated/rural settlements, temples and villas

PERIODS OF PEAK LOSS	*260-296*		*330-348*		*348-364*		*364-378*		*388-402*	
SITE	*NO*	*%*	*NO*	*%*	*NO*	*%*	*NO*	*%*	*NO*	*%*
Gadebridge	74	25.2	125	42.7	16	5.5	16	5.5	7	2.4
Bancroft 1973-1978	19	9.1	91	43.7	12	5.8	18	8.6	10	4.8
Bancroft 1983-1986	52	8.1	180	43.9	78	12.2	85	13.3	13	2.2
Bancroft Mausoleum	2	3.0	15	23.5	7	11.3	14	22.5	11	17.7
Bancroft Shrine	0	0.0	7	24.1	5	17.3	7	24.1	10	34.5
GLOUCESTERSHIRE AND WILTSHIRE VILLAS										
Chedworth	73	19.9	71	19.3	36	9.8	115	31.2	1	0.2
Barnsley Park	60	9.4	288	45.3	94	14.8	124	19.5	1	0.1
Frocester Court	188	33.7	156	28.0	42	11.1	63	11.3	47	8.4
Atworth	49	25.1	73	37.4	17	9.7	20	10.2	0	0.0
Gt. Witcombe	57	25.3	44	19.5	25	11.1	47	20.8	6	2.7
ESSEX, NORFOLK, RUTLAND TEMPLES										
Chelmsford	17	9.2	39	21.1	14	7.6	45	24.4	17	9.2
Hockwold	35	21.9	28	17.5	20	12.5	44	27.5	7	4.4
Thistleton Dyer	58	15.0	78	20.1	67	17.3	48	12.4	53	13.6
WILTSHIRE, GLOUCESTERSHIRE, AND SOMERSET TEMPLES										
Nettleton	261	14.6	448	25.0	220	12.3	507	28.3	202	11.3
Lydney SF	884	16.5	1961	36.5	320	6.0	1329	24.8	20	0.4
Lydney Exc.	203	23.7	259	30.2	89	10.4	198	23.1	13	1.5
Lamyatt Beacon	73	18.1	102	25.7	69	17.4	65	16.4	46	11.6
Henley Wood	185	41.2	119	26.5	33	7.3	37	6.0	4	0.9

or methodology, as can the analysis techniques used (Lockyear 2000).

Reece grouped his data from 140 British sites into five categories, namely large towns (including certain and possible civitas capitals), military sites, rural sites (including smaller towns, villages, and farmsteads), villas, and finally temples (Reece 1991). At first glance this list of categories seems to consist of a straightforward set of definitions but in practice a number of sites do not fit easily into any single category. For example, Stanwick and Bancroft (Williams and Zeepvat 1994) can both be classed as villa sites but both also have shrines from which coins have been retrieved. This means that they potentially overlap two of Reece's categories (temples and villas). Higham Ferrers and Fairford Claydon Pike (Miles *et al.* 2007) are classed as rural sites but they are of quite different character and they too have shrines from which coins were retrieved; again this results in their overlapping two categories (rural settlements and temples).

A further difficulty arises from the fact that sites evolve and can change over time. Harlow temple (France and Gobel 1985) and Hayling Island (Briggs *et al.* 1992), for example, are both temple sites where a large number of Iron Age coins were retrieved and the Roman assemblage peaks in the years before AD 260. This contrasts with the usual temple/shrine pattern from Romano-British sites where there tends to be a peak in deposition in the 4th century.

Despite these difficulties Reece provides a functional approach to compare different sites, as Lockyear's study has shown (Lockyear 2000). Table 5.18 records coin loss figures from periods of peak coin loss in the 3rd and 4th centuries for three types of sites – nucleated settlements and rural sites, rural temples, and villas. The three categories of site chosen for analysis tend to share one important characteristic in that they are rural in nature. Since Higham Ferrers is a settlement, it seems most useful to begin with comparing its coin profile with that of other Northamptonshire settlements and then with sites further afield as presented in the table.

The emphasis on a narrower geographical focus for nucleated settlement and rural sites than for temples or villas in this analysis is based on the fact that Higham Ferrers' primary function falls in this category. However, the definitions formulated by Reece are, inevitably, less mutually exclusive than one would wish them to be. There is no doubt that Higham Ferrers is a rural settlement site, but it also had a shrine. The question arises of whether one could expect the coin profile here to resemble more closely that of 'rural sites', 'temple sites' or fall somewhere between them. Further problems arise when one attempts to measure the extent to which Higham Ferrers conformed to the coin loss pattern for Northamptonshire, again related to the nature and definition of the individual sites and how comparable they actually are.

The similarities of Stanwick and Higham Ferrers have been noted above; both are rural settlements with shrines until the mid 3rd century when their development diverged. It is clear that coins from the current Higham Ferrers excavations have the highest peak among the Northamptonshire sites for the period between AD 260 and AD 296. In the later 4th century (AD 364+) Higham Ferrers has negligible

numbers of coins, while most of the Raunds sites (except for West Cotton) have higher percentages for these years. The Ashton assemblage is the only group to have percentages above 13% of coins from the years AD 388 to AD 402.

In a wider regional comparison, the percentage coin values for the years between AD 260 and AD 296 from Northamptonshire sites are slightly closer to those from Essex, Hertfordshire, Suffolk, Norfolk, and Lincolnshire than they are to those from Buckinghamshire and Oxfordshire. The percentage distribution of the Northamptonshire sites for this period also shows similarity with the Cotswold Water Park (CWP) sites in Gloucestershire, although not with the other Gloucestershire sites.

For the period between AD 330 and AD 348, five of the eight Northamptonshire sites have coin percentages that range from 30% to 15%. All of the other groups of central and eastern sites have a wide range of values with no clear single focal point, and vary significantly from one another. The Gloucestershire sites are generally similar to one another and again are distributed over a continuum.

From about the middle of the 4th century onwards, coin loss declined at the rural sites under discussion here with the exception of the years between AD 364 and AD 378. In the years between AD 348 and AD 364, all of the Northamptonshire sites have percentages from 0% to 15%, and this is broadly reflected in most other central/eastern and western sites shown in Table 5.18. In terms of rural sites, it is difficult to describe the years between AD 348 and AD 364 as a period of peak loss.

At most of the central/eastern rural sites the percentage range from the years AD 364 and AD 378 tends to be between 0% and 20%, with the exception of two of the Raunds sites, which have values between 23% and 31% (Irthlingborough and Stanwick). The current and 1961 Higham Ferrers excavations come at the bottom of the range, being the only two sites recorded in this group with percentages lower than 5%. The reasons for this divergence have been discussed previously. A comparison with the two groups of Gloucestershire rural sites shows a not dissimilar pattern to the eastern sites.

The final period of peak loss, AD 388-AD 402, is characterised by low levels of coin deposition. Among the Northamptonshire group, Ashton stands out in having two sites with percentages higher than 10%. Deposition at the Raunds sites (including Stanwick) has declined significantly and ranges between 0% and 7.5% and there are just two coins (0.4%) from the Higham Ferrers excavations. Among the other central/eastern sites, percentages above 10% are rare, with a few exceptions (eg Wotton-at-Stone in Hertfordshire had 26.9%), while 22 of the 28 sites in the central/eastern rural group had percentages below 5%. The level of coin deposition in this period was also low at sites in the two Gloucestershire rural groups.

On the whole, the nucleated settlement/rural sites discussed here show more similarities than differences when expressed in terms of the peak periods of loss. Where deviation occurs, such as the high percentages from Higham Ferrers in the period between AD 260 and AD 296, it suggests a different site history from the 'average'.

The coin deposition pattern from periods of peak loss at villas has quite close parallels with that at rural sites in some periods (Table 5.18). In the years between AD 260 and AD 296, the eastern villas (Essex, Herts and Bucks) have percentages that span the same range (3% to 66%) overall as the rural sites from that region, but there is no clear clustering. The western villas (Glos and Wilts) have percentages of coin from this period that are broadly compatible with the western rural group (9.4% to 33.7%), and do not have the higher values that occur at the eastern rural sites.

For the years between AD 330 and AD 348, the percentages of coin loss from the eastern villa sites generally decline, with the main exception of Bancroft, where coin loss rises to just under 44%. The percentage of coin loss at the eastern villa sites falls broadly into the same range as those of the central/eastern rural sites. The coin loss percentages at the western villas matches the eastern villa sites reasonably well (19.3% to 45.3% to).

Coin deposition at villas in the years between AD 348 and AD 364 is significantly lower at most sites. The villa and rural/settlement sites differ most sharply in this period if the number of percentages below 5% is compared. Gestingthorpe is the only eastern villa to have a coin deposition percentage below 5%, while the lowest percentage at a western villa site is 9.7% (Atworth). By contrast, the central/eastern rural group has 18 eighteen sites with percentages below 10% and eight below 5%, and the western rural group has nine sites with percentages below 10%.

Between AD 364 and AD 378, the percentages of coin loss at the eastern villa sites range from 0% to 24.1%, with the Bancroft villa sites again generally having the highest values. Overall, the eastern villas are broadly similar to the eastern rural/settlement sites in this period. Stanwick, classified in these tables as a rural/settlement site, and Bancroft have unusually high percentages of coin loss for this period and the question arises as to why this is? It seems likely that the coins from the shrine and mausoleum at Bancroft may be distorting the pattern; certainly they have low percentages of 3rd-century coins and high 4th-century ones. However, it should be pointed out in this context that coin deposition at the Stanwick temenos, although not the site as a whole, drops sharply in these years. Only 12 of the 700 dated coins from the temenos are post AD 364, suggesting that it was falling out of use (Crosby and Neal forthcoming). The shrine at Higham Ferrers, a settlement site, also has a low coin deposition for this period. The major difference between Higham Ferrers and both Stanwick and Bancroft is that the

shrine at Higham Ferrers had fallen out of use in the early 4th century.

Comparison of the western rural/settlement sites with the western villa sites presents a different picture. The range of percentages in the western villa group lies between 10.2% and 31.3%, while the rural/settlement group had coin loss percentages ranging from 0% to 43.5%. Nine sites had percentages of 10% or below and another seven ranged between 10% and 26%.

In the final period, AD 388 to AD 402, there is a decline in coin deposition at the villa sites. In the eastern group, all but two of the sites have percentages that are below 5%; the exceptions are Bancroft Shrine (34.5%) and Bancroft Mausoleum (17.7%). These two sites continue to be exceptional in their pattern of coin loss. The coin loss percentages at the western sites range from 0% to 8.4% and four of the five sites are below 5%. The overall picture is one of a decline in coin deposition at both villa and rural/settlement sites with a few exceptions, more evident in the eastern rural group than any other.

The temple sites are the final group whose patterns of coin deposition during periods of peak coin loss are to be compared that that of Higham Ferrers. The eastern group consists of sites from Essex, Norfolk, and Rutland. The western group are from Gloucestershire, Wiltshire, and Somerset. The small number of sites means that there ares not enough data to track close similarities or divergences in coin loss patterns in any meaningful way, but a general trend does emerge.

For the years between AD 260 and AD 296, the percentage range lies between 9.2% and 21.9% at the three eastern sites. Only one of the 29 central/eastern settlements had a comparably low percentage for this period (Wilcote quarry with 1.6%; Hands 1993; 1998). The western temple sites have coin loss percentages between 14.6% to 41.2% which fits within the range of the western settlement/rural sites (4% to 43.6%).

In the years between AD 330 and AD 348, the eastern temple sites have coin loss percentages between 17.5% and 21.1%, fitting within the middle to bottom range of the eastern rural/settlement sites and the bottom end of the eastern villa sites. The western temples have coin loss percentages that range from 25% to 36.5% and fit within the rural/settlement site range that clusters between 20% and 35%. At most temple sites coin loss is highest in the first two peak periods. Temples with low coin deposition in the later 3rd century and the first half of the 4th century reflect either temples that start early and peak in the years before AD 260 and decline thereafter (eg Harlow, Hayling Island), or shrines or temples that start late and are most active in the second half of the 4th century.

Coin loss is significantly lower in the years between AD 348 and AD 364 but this is characteristic of all three site groups analysed in this discussion. In the years between AD 364 and AD 378, the coin deposition percentages rise in both the eastern and western temple groups, lying within the range of the eastern and western rural/settlement sites. However, the temple sites recorded here do not have the tail of values below 5% (or even 10%) characteristic of the rural/settlement sites.

It is only in the period between AD 388 and AD 402 that the temple sites begin to reflect the declining pattern of coin loss characteristic of the rural/settlement sites and, to a lesser extent, the villa sites from the mid 4th century onwards. But even in this last period there are comparatively higher values in both the eastern and western temple groups. In these years there are more temple sites with coin percentages above 12% than the villas or settlement/rural group.

Conclusions

There is no doubt that Higham Ferrers is a rural roadside settlement site which, in terms of its residual coin population, shares many characteristics with comparable sites in Northamptonshire and other parts of Britain. The absence of significant amounts of earlier Roman coinage of the 1st and 2nd centuries is compatible with its relatively late foundation in the 2nd century. It also suggests that its origins were non-military in nature since 'military' sites frequently have significant proportions of coins minted before AD 260. The dominant economic activity was agricultural and there does not seem to have been any significant form of industry.

Higham Ferrers underwent a period of growth and consolidation in the 3rd century, which may be reflected in part by the very high proportion of coins from the years between AD 260 and AD 296 recovered from the site. Many of these were associated with the shrine and the nearby roadside buildings, suggesting that they may have been linked in some way. The shrine itself was situated on the western side of the road overlooking the navigable river. This would have provided a route for the inward and outward transport of goods and people and, presumably, coins as well.

Stanwick provides a reasonably close parallel with the development of the site at Higham Ferrers up to the middle of the 3rd century in terms of its coin population. Both sites have relatively small percentages of silver coins and coins minted before AD 260 and this is characteristic of rural sites. However, Stanwick was the larger and more important site in all periods as the much larger quantity of coins retrieved demonstrates. Both sites had active shrines; that at Stanwick began in the 1st century and continued in use until the mid 4th century. At Higham Ferrers, the shrine fell out of use slightly earlier.

From the mid 3rd century onwards Stanwick and Higham Ferrers diverged sharply. The addition of new buildings and modifications to existing structures continued at Stanwick after the middle of the 4th century and coin deposition rose significantly in

the period from AD 364 to AD 378, declining thereafter. At Higham Ferrers, the density and quantity of buildings increased into the later 3rd century but by the early 4th century new building seems to have ceased and coin deposition dropped significantly; after AD 348 it was minimal. The reasons for this divergence between the two sites are unclear but may be linked to some sort of administrative reorganisation of local agriculture for tax or other purposes. One potential cause underlying the change could be the effect of Diocletian's tax reforms in the late 3rd century which led to a reclassification of land values.

There may also have been a link between activity at the shrine and the arrival of coin at the site. The presence of outsiders from the wider community who joined with residents in feasting and ritual deposition of objects might have produced an influx as well.

Comparison of the pattern of coin deposition at Higham Ferrers with other sites (rural/settlement, villas, and temples) demonstrates that most of the close parallels tend to be with rural/settlement sites and the fewest are with temple sites. Civitas capitals, walled 'small towns' and military sites have been deliberately omitted from this analysis because they, by their very nature, are likely to show divergence. As noted above, a major problem in analysing coins by site type is that categories may not be mutually exclusive. For example, Fairford Claydon Pike is a settlement/rural site that also has a small villa and a shrine. It could, therefore, be included in any, or all, of the three site categories analysed here and need not fit neatly into any of them.

The solution to this problem, in this case, has been to emphasize the rural aspects of the site to be analysed and then define its dominant feature (villa, temple etc.) and classify it accordingly. Using this method, Stanwick and Fairford Claydon Pike have both been defined as settlement/rural sites. Even so, their patterns of coin deposition in the peak periods of coin loss are quite different from one another for reasons that are not clear.

Analysing individual sites like Higham Ferrers in the context of geographically linked site groups like those from the Cotswold Water Park or Raunds area is a potentially productive approach to use in defining 'regionality' in terms of coin deposition.

Table 5.19 Summary quantification of small finds by context group, phase and function

		Function									
Group	*Phase*	*Arms*	*Tools*	*Transport*	*Measure*	*Votive*	*Personal*	*Household*	*Door*	*Security*	*Structural*
metal	3										
detecting	4						1				
	4 to 5							3			
	5		1	2			14	12		4	5
	unph		2		1		9	7			
Sub Totals			3	2	1		24	22		4	5
settlement	3						2				
	3 to 4					1					1
	4		4				22	4		1	2
	5	1	10	6	2	3	230	15	4	11	11
	Rom		1	1	2		10	2			2
	u/s						2				
	unph						32	1	2		1
Sub Totals		1	15	7	4	4	298	22	6	12	17
shrine	4	1	24	6		14	344	11	1		12
Sub Totals		1	24	6		14	344	11	1		12
shrine	4		12	1		2	135	3		1	5
associated	4 to 5		1	1			11	1	1	1	
contexts	5						1				1
Sub Totals			13	2		2	147	4	1	2	6
Totals		2	55	17	5	20	813	59	8	18	40

There is no doubt that Higham Ferrers and Stanwick were linked in some form to one another throughout much of their history, although it is difficult to see precisely how, based on coinage use and loss alone. Until the coin evidence from Stanwick has been fully published, it can only be partially utilised to assess the extent to which a hierarchical relationship may have existed between Higham Ferrers and Raunds. The decline in coin deposition at Higham Ferrers from the mid 4th century onwards also needs explanation, especially in the context of the significant numbers of coins from the years AD 364 to AD 378 recovered from Stanwick.

SMALL FINDS *by Ian R Scott with contributions from Martin Henig and Roger Tomlin*

A total of 2363 Roman small finds (not including worked stone, glass and coins) were recovered during the excavations, including 123 from Area G (Tables 5.19 and 5.20). The assemblage comprises 1790 iron objects, 357 copper alloy finds, two objects comprising both iron and copper alloy, 94 lead objects, three silver pieces, a pewter bead, 114 bone objects, a single jet pin stem and a fragment of a shale bracelet.

Most of the small finds are from stratified contexts, with only 199 objects not phased. The assemblage can be divided into four groups: the largest part of the assemblage (n=1050) is derived from contexts of the settlement site, including Area G to the north. The second largest group of material (n=825) is derived from the shrine area. The third part of the assemblage comprises a group of material from contexts stratigraphically adjacent to the shrine. The material from these contexts (n=312) is in many ways comparable in its composition to the material from the shrine deposits. Finally there is a tranche of material recovered using a metal detector (n=176). Much of this material can be provenanced and consequently can be assigned to one of the stratigraphic phases. This material is described as 'metal detector' finds in the tables. Much of it comes from the settlement site and the roadside ditches.

The stratified material comes predominantly from contexts dated to Phases 4 and 5 (late 2nd to 4th century), with objects from the settlement site coming mainly from Phases 4 and 5, (with a preponderance of Phase 5 material) and the finds from the shrine and associated contexts both being assigned mainly to Phase 4.

All the iron and copper alloy objects were x-rayed prior to analysis. The X-rays, retained in archive, form the primary visual record of these objects.

Nails	*Bindings*	*Misc*	*Query*	*Industrial*	*Unknown*	*Totals*
			1			1
	1	5				7
6	1	5	1			16
38	5	19	6	2		108
3		15	6	1		44
47	7	44	14	3		176
5		1		1		9
1		1				4
51	2	13	4	61		164
196	22	62	16	4	2	595
75	3	20	4		3	123
						2
105		6	5	1		153
433	27	103	29	67	5	1050
240	10	128	29	3	2	825
240	10	128	29	3	2	825
67	4	26	19	1	5	281
	1	4	1			22
1		1		5		9
68	5	31	20	6	5	312
788	49	306	92	79	12	2363

Context group assemblages

The assemblages from the settlement and the shrine are considered at length. The material recovered with the use of a metal detector and the material from contexts adjacent to the shrine are not dealt with in same detail.

Settlement assemblage

The finds from Area G to the north of the main excavation of the Romano-British settlement are included with the settlement assemblage. They formed part of the stratigraphic sequence on the Saxon settlement and were assigned to a broad Romano-British phase.

Area G

The 123 objects from Romano-British contexts, include eight hobnails, 75 nails, 20 miscellaneous fragments, and three small unidentifiable fragments ('unknown'). The remaining items include four objects of uncertain function ('query'). The identifiable items include a spud, or chisel (**Cat. No. 28**), a looped peg, or possible linch pin (**Cat. No. 60**) and two weights, or possible weights (**Cat. Nos 77-78**). There is a possible bucket hoop fragment (SF 611, context 8003) and a lead plug/repair on from a ceramic vessel (Context 8058).

Table 5.20 Summary quantification of small finds by context group, phase and raw material

		Material									
Context Group	*Phase*	*fe*	*cu*	*cu & fe*	*bone*	*pb*	*ag*	*pewter*	*jet*	*shale*	*Totals*
metal	3		1								1
detecting	4	2	3			2					7
	4 to 5	12				4					16
	5	87	12		2	6			1		108
	unph	13	22			9					44
Sub Total		114	38		2	21			1		176
settlement	3	6	1		2						9
contexts	3 to 4	2	1			1					4
	4	84	11		67	2					164
	5	500	60	1	14	19				1	595
	Rom	105	5			13					123
	u/s		2								2
	unph	135	11		2	5					153
Sub Total		832	92	1	85	40				1	1050
shrine	4	652	124	1	23	23	1	1			825
Sub Total		652	124	1	23	23	1	1			825
shrine	4	186	85		1	7					281
associated	4 to 5	4	16		1	1					22
contexts	5	2	3		2		2				9
Sub Total		192	104		4	10	2				312
Totals		1790	357	2	114	94	3	1	1	1	2363

The most interesting finds are a copper alloy hairpin (**Cat. No. 279**) and a small pair of plain tweezers (**Cat. No. 310**). There are also structural fittings, bindings and objects of uncertain function.

The range and quantity of Romano-British finds is limited compared to the main settlement and suggests that these Romano-British contexts are at, or beyond, the periphery of the main settlement area. Most are from Area G which clearly lies at the edge of the main Romano-British settlement. The fact that only two personal items have been recovered contrasts with Site 10 where numerous brooches, finger rings and toilet items were recovered. The finds indicate the limited status of this part of the site.

Other Romano-British finds

In addition to the stratified finds from Area G a number of other Romano-British finds should be mentioned. Two unstratified Romano-British finger rings have been included in the quantification tables, but not catalogued: SFs 275 (context 6030) and 301 (context 6125) from Site 4. A further Romano-British object of uncertain provenance – a pair of plain tweezers (HFKM 93) has been omitted from both the quantification and catalogue. Finally reference should be made to a number of Romano-British finds found in the fills of sunken featured buildings. These have been published in the report on the Anglo-Saxon and medieval settlement (Hardy *et al.* 2007), and are not further considered here.

Phases 3 and 3 to 4

The finds from the settlement include a very small number of finds from Phase 3 and Phase 3/4 contexts (Table 5.19). There are two items of personal adornment, a fragment of a narrow copper alloy bangle or bracelet (**Cat. No. 215**) and a stem fragment from a bone hairpin (SF 1186). Perhaps more interesting is the possible small model or votive shield from context 11396, within the entrance to Phase 3 circular building 11340, and probably representing a ritual deposit (**Cat. No. 92**).

Phase 4

A larger, though still modest assemblage of small finds was recovered from Phase 4 contexts (Table 5.19), reflecting the overall expansion of the settlement. These include four tools (a punch (**Cat. No. 50**), an ox-goad (**Cat. No. 27**), an awl (**Cat. No. 53**) and a bone needle (**Cat. No. 44**)), and a number of items of personal adornment including three brooches (**Cat. Nos 153, 187, 194**), and a bracelet fragment (**Cat. No.223**). The brooches comprise a simple one-piece iron fibula with a sprung pin (**Cat. No. 153**) of 1st-century date, a T-shaped brooch (**Cat. No. 187**) of the later 1st to 2nd century, and a trumpet-headed brooch (**Cat. No. 194**) of late 1st- to mid/late 2nd-century date. There are also two plain ligulae (**Cat. Nos 327-328**), a pair of tweezers (**Cat. No. 317**) and a circular seal box without a lid (**Cat. No. 94**).

Household objects include a knife (**Cat. No. 334**), a bucket handle mount (**Cat. No. 363**) and a probable vessel handle (**Cat. No. 364**). The bucket handle mount and vessel handle were both from well 12885. There is a single L-shaped lift key (**Cat.No.382**). The only structural fittings are a T-clamp and U-shaped clamp. Only 51 nails were recovered from the settlement in this phase.

Perhaps the major find of the Phase 4 settlement assemblage is the evidence for bone working. Sixty-one fragments of cut and broken bone were recorded from settlement contexts of Phase 4. Many more small fragments of bone waste were recovered from soil samples, but not quantified in detail. The bone working debris came from a small number of contexts, but most fragments (n=41) came from context 12913, a deposit outside building 11370. A further twelve pieces came from contexts 11316 and 12170, a hearth and pit in building 10890. Crummy (2001a) has recently argued that the absence from the archaeological record of assemblages with all stages of bone working – prepared bone, worked blanks and part finished objects and bone working debris – together with lack of evidence for workshops, strongly indicates that bone was carried out by itinerant craftsmen with no fixed workshops. They would carry a small stock of finished items but generally would make objects to order.

Overall the finds assemblage from Phase 4 contexts is quite small and yet contains evidence for a variety of activities, including domestic tasks and craftworking. The occupation was apparently contemporary with the *floruit* of the shrine, and this might explain the presence of the high proportion of personal items.

Phase 5

Far more finds were recovered from Phase 5 contexts, incorporating a wider range of object types (Table 5.19). The finds included part of a copper alloy sword scabbard slide of 2nd- to 3rd-century date (**Cat. No. 1**), from a disturbed deposit (10547) over buildings 10800/10810, and obviously residual. The presence of small numbers of military fittings of 2nd- and 3rd-century date on civil settlements has now been recognised as a widespread phenomenon (Bishop 1991; see also Scott 1999, 387) and may represent the presence of soldiers involved in policing, or possibly simply billeted. There are at least seven tools from Phase 5 contexts, mostly from buildings 10820, 10830, 10840, 10860 and 11370: they are a smith's or mason's chisel (**Cat. No. 3**), a mason's gad or set (**Cat. No. 7**), a fragment of an awl or drill bit (**Cat. No. 9**), a carpenter's awl or punch (**Cat. No. 10**), a rake tine (**Cat. No. 29**), a possible sickle or reaping hook blade (**Cat. No. 31**) and a needle (**Cat. No. 39**) for sewing or for leather-working. There are also three more probable tools: a possible punch (**Cat. No. 50**), a tool of uncertain function with a solid handle and thin hooked stem (**Cat. No. 54**), and a socket possibly from a tool (**Cat. No. 57**).

The Phase 5 assemblage includes part of a slave shackle (**Cat. No. 59**) from plot division ditch 10855 (context 10627), a cast copper alloy fitting from a cart (**Cat. No. 64**), three bridle bits, or parts of bits (**Cat. Nos 66-68**), and a fragment of a hipposandal (**Cat. No. 71**) from building 10820. The slave shackle is one of two from the site. The more complete example (**Cat. No. 58**) was found by metal detecting from a dark silty deposit (context 10507) sealing the pavement area to the north of building 10800 and is also assigned to Phase 5. The same deposit produced part of a further bridle bit (**Cat.No.65**). A probable weight (**Cat. No. 75**) came from building 10820. All are items associated with transport and trade.

The only overtly cult or religious objects are three small fragments of votive leaves (**Cat. Nos 88-89**), all from a possible demolition or occupation deposit (12183) within building 10880.

Personal items, which number 230, form by far the largest part of the Phase 5 assemblage. However this number includes 193 hobnails, most of which (170) come from the grave backfill (10793) covering skeleton 10794, with 20 from context 11007, a late surface of building 10810 (see Table 5.25 below). Items of personal adornment comprise a shale bangle (**Cat. No. 209**), two bangles of cable type (**Cat. Nos 219-220**), a bangle with notched decoration (**Cat. No. 221**) (Phase 5 building 10840), a one-piece Colchester brooch (**Cat. No. 163**), a two-piece Colchester brooch (**Cat. No. 165**), a T-shaped brooch (**Cat. No. 190**), a knee brooch (**Cat. No. 197**), and a lozenge–shaped plate brooch (**Cat. No. 208**). A la Tène III brooch (**Cat.No. 160**) was found through metal detecting in the area of building 10880. There are eight finger rings (**Cat. Nos 243, 253, 255, 259-262**; and SF 1458, context 11332), two possible bangle fragments (SF 1437, context 11257; SF 2748, context 12601) and a brooch pin fragment (SF 1444, context 11153). Another finger ring (**Cat. No. 266**) was recovered by metal detecting from building 10880. Five bone (**Cat. Nos 290, 300, 303, 306-307**) and two copper alloy hairpins (**Cat. Nos 280, 287**) were found, along with one copper alloy and four

bone hairpin fragments. The remaining personal items comprise a small decorative plate (**Cat. No. 110**) perhaps for a belt, two pairs of tweezers (**Cat. No. 312-313**), one recovered through metal detecting, a ligula (**Cat. No. 322**) and a stylus (**Cat. No. 101**).

Household or domestic items include three knives (**Cat. Nos 337, 340-341),** three bone knife handles (**Cat. Nos 348-350**), and a cast copper alloy terminal from a knife handle (**Cat. No. 351**). Four knives (**Cat. Nos 335-336, 339, 346**), a spoon bowl (**Cat. No. 352**), possible flesh hook fragment (**Cat. No. 354**) and a ladle fragment (**Cat. No. 355**) were recovered through metal detecting from context 10507, a silt deposit north of building 10800 assigned to Phase 5. A further two knives were recovered by metal detecting from the area of building 10880 (**Cat Nos 330, 343**). Also found were a copper alloy vessel fragment (**Cat. No. 357**) and a lead repair for a ceramic vessel (SF 1065, context 10547). A candlestick made from copper alloy sheet with a lead base (**Cat. No. 362**) was recovered by metal detector from above ditch 10700. There is also a circular domed washer perhaps from a piece of furniture or a box (**Cat. No. 373**), two bell-shaped terminals (**Cat. Nos 365-366**), and two objects of uncertain function (**Cat. Nos 371-372**). A third bell-shaped terminal (**Cat. No. 367**) was recovered by metal detector from the area of building 10840.

Security items include two barb-spring padlock keys (**Cat. Nos 375-376**) from inhumation grave 10780, and a third recovered by metal detecting (**Cat. No. 374**), a fragment of a barb spring padlock key (**Cat. No. 377**), three L-shaped lift keys (**Cat. Nos 378, 380-381**), including one from grave 10780 and one recovered by metal detecting, a T-shaped lift key (**Cat. No. 385**), an L-shaped slide key (**Cat. No. 386**), and a possible key handle or hinge strap (**Cat. No. 388**).There is also a fragmentary iron key on a copper alloy chain (**Cat. No. 387**) from building 10880, a chain link (**Cat. No. 391**) overlying the road ditch (context 10816), and a barb-spring padlock (**Cat. No. 390**) among metal detector finds from the pavement to the north of building 10800 (context 10507). Linked with items of security are door or shutter fittings. These comprise an almost complete hinge strap (SF 2954, context 12585) and three L-shape hinge pintles (SF 1394, context 11007; SF 1718, context 11667; SF 2314, context 12372) for drop hinges.

Structural items comprise three L-staples, eight miscellaneous clamps, dogs and holdfasts, along with 196 nails and 22 pieces of binding (see Tables 5.27-9 below).

Comparison of the phase assemblages

Comparison between the phase assemblages from the settlement shows some differences. The obvious disparity in numbers is the first thing. This suggests that occupation of the settlement was less intense in the earlier phase. However, it is important to note that the smaller quantity of finds from the earlier phase may simply reflect that sites were cleared before any changes in structure or use. If that were the case earlier finds may well have been removed, recycled, dispersed or redeposited. Another difference is the presence of evidence for bone working in the earlier phase. There are more tools in Phase 5 but this seems simply to reflect the fact that the Phase 5 assemblage is substantially larger than the Phase 4 assemblage.

Both assemblages have evidence for writing – in Phase 4 a seal box, and in Phase 5 a stylus. This does not necessarily mean that the occupants of the settlement could read or write, but may reflect that among passing travellers there would be literate people. Obviously in Phase 4 the presence of the proposed shrine would draw in visitors, some of whom may have been literate, as may have been the official(s) associated with the shrine.

The items of personal adornment, especially brooches, bangles and finger rings occur in both phases. Significantly, the brooches in both phases are predominantly of copper alloy, which contrasts quite sharply with brooches from the shrine (see below). In Phase 4 one bow brooch is of iron and five are of copper alloy, and in Phase 5 all four bow brooches are of copper alloy. There are, perhaps surprisingly no finger rings from Phase 4 contexts in the settlement. The eight finger rings from Phase 5 contexts comprise one iron and seven copper alloy rings, six of which have stones, settings for stones, or bezels. A seventh ring comprises a flat band decorated with grooves around the band. Only the eighth ring is a simple plain band such as occurred in numbers in the shrine deposit.

Shrine assemblage

Before considering the composition of the finds from the shrine, it is worth considering the reasons for interpreting it as a religious assemblage. The first indication is the quantity of material and its concentration in a restricted area with clear evidence for structured deposition (see below). Then there is its composition – primarily consisting of personal items and in particular finger rings and brooches, together with a large number of coins. This is the range of finds that is regularly found associated with temples and shrines (Smith 2001, 155), and it contrasts with the composition of the small finds assemblage from the rest of the settlement. The clinching point is the presence of a number of votive items – votive 'leaves', miniature objects and an elaborate cult spearhead.

The shrine assemblage is assigned to Phase 4 (late 2nd-3rd century). Amongst the finds is a substantial number of personal items, which are considered further below. Other components of the assemblage include a shield boss (**Cat. No. 2**) and 22 tools. The latter includes nine ox-goads (**Cat. Nos 12-20**), perhaps reflecting the fact that the shrine lay beside a road that would be frequented by ox-teams, rather than being simply evidence for the rural economy.

The next most numerous category of tool was sewing needles, seven of which were found (**Cat. Nos 34-38, 41-42**). Both these categories are light, easily portable objects. The remaining tools comprise a smith's punch (**Cat. No. 6**), two chisels (**Cat. Nos 47-48**), a possible awl (**Cat. No. 52**), part of a fire tool (**Cat. No. 55**) and a fragment which may be part of tool tang or drill bit (**Cat. No. 56**).

Items relating to transport comprise part of a nave band from a wagon wheel (**Cat. No. 61**), a harness bell (**Cat. No. 69**), a decorative phalera (**Cat. No. 70**), and two fragments of hipposandal (**Cat. Nos 72-73**).

Household items are very limited in numbers. They consist of four knives (**Cat. Nos 331-332, 344, 347**), a copper alloy spoon bowl (**Cat. No. 353**), an iron ladle (**Cat. No. 356**), a small pewter dish, which has been partially flattened (**Cat. No. 359**) and a small copper alloy hinge strap (**Cat. No. 369**). One of the knives (**Cat No. 331**) is quite large with a comparatively small triangular blade, and is very distinctive. A second knife (**Cat. No. 332**) has a curved tapering blade and again it is distinctive in form. There is also a small knife with a solid handle with a terminal loop (**Cat. No. 347**), which from the form of its blade might be identified as a knife for trimming pens. The fourth knife is incomplete. It is possible to see all these objects being part of the equipment needed by a shrine for libations and sacrifices, and in this regard attention must be drawn to a very distinctive small knife (**Cat. No. 82**), which may have been a specialised knife for cult use.

As might be expected, a number of overtly cult objects have been identified. These are a large cult spear (**Cat. No. 80**), a small specialised knife with a hook on its cutting edge already noted (**Cat. No. 82**), a leaf-shaped tanged knife or spear head (**Cat. No. 81**), six fragments of votive leaves (**Cat. Nos 83-87**), and possible model or votive spear (**Cat. No. 93**). Two further fragments of votive leaves were found in contexts associated with the shrine (**Cat. Nos 90-91**). Also possibly with cult significance were five pieces of carefully rolled lead, which it was hoped might be inscribed. Four were not inscribed; the fifth was inscribed with illiterate scribbles (see Tomlin below).

Some 14 structural items were present and included dogs, clamps, holdfasts and washers. There was also a single L-shaped hinge pintle (an early hinge typically used for larger doors). More interesting there were some 240 nails, with a further 68 from associated contexts. These are in addition to the large number of hobnails from the shrine deposits (see Table 5.25 below). Although there is little evidence for structures, it is possible that some at least of these nails were used structurally, but others may have been used in the shrine, perhaps to secure defixiones. The numerous hobnails, like nails, must be linked in some way with the rituals. A likely use for the hobnails is as thumb tacks for securing prayers and curses, although the ritual deposition of actual shoes is certainly possible (see discussion, Chapter 7). The possibility that the nails and hobnails were of intrinsic ritual significance because they were made of iron will be considered below.

The assemblage is clearly of ritual or cult significance and many (though certainly not all) of the finds are likely to have been votive offerings. It would seem that preference was given to items of personal adornments when selecting items as offerings, as they were the most numerous category of find from the shrine (n=344; see discussion below). A further 147 personal items come from contexts associated with the shrine. The associated contexts are mainly assigned to Phase 4, but one context (10543), the road surface immediately adjacent to the shrine, is phased 4 to 5 while a second context (10738), comprising rubble and silts sealing the shrine 'platform', is assigned to Phase 5, after the shrine supposedly went out of use. The former context produced 23 small finds and the latter nine.

The finds from 10543 include a decorative embossed strip, which might have been part of a votive leaf or a decorative feature from a piece of furniture (**Cat. No. 368**), two brooches (**Cat. Nos 161, 164**), six finger rings (**Cat. Nos 270, 273, 275**; SFs 1040, 1116, 2358, context 10543), a hairpin (**Cat. No. 281**) and two hairpin stem fragments, an L-shaped lift key (**Cat. No. 379**), a pair of shears (**Cat. No. 33**) and a pole terret (**Cat. No. 62**). Finds from 10738 include one Anglo-Saxon type hairpin (**Cat. No. 289**) and some casting waste in the form of a silver casting header and a silver droplet (SF 1258, 1253, context 10738) and copper alloy droplet (SF 1254, context 10738) (Table 5.30 below).

It should noted that among the finds from associated contexts are objects from context 12986 (metal detector finds from within the former sewage works on the west side of the Roman road opposite Area G), which seem to have been part of the spread of votive material to the north of the main shrine. The finds include five plain finger rings, a deliberately broken sewing needle (**Cat.No.40**) and two pairs of tweezers, one pair deliberately damaged (**Cat.No.319**). However the finds also include a small strap tag (**Cat.No.111**) of medieval type, dating to the late 13th or early 14th century or later.

Distribution of the finds in the settlement and shrine

Discussion of finds within their specific contexts (eg buildings, ditches etc.) can be found within the archaeological description in Chapter 4, while an overview of finds distribution in terms of site development, functionality, ritual practice and social status is dealt with in Chapter 7. Here is it just worth noting the main overall distribution pattern of finds within the site, as illustrated in Figure 5.19 (note that Area G finds are not represented). The most obvious point of note is the much greater density of finds within the shrine area when compared with the settlement as a whole, which is

*Table 5.21 Summary quantification of personal items by context group, type and material**

Context Group	Identification	Material ag	ag/pb	bone	cu	fe	jet	shale	Totals
Metal detecting	Armlet				2				2
	Brooch, bow				2				2
	Brooch, bow unidentified				1				1
	Finger ring				3				3
	Hairpin			1	1				2
	Hairpin fragment			1			1		2
	Tweezers				2				2
	Mount				1				1
	Stylus				1				1
Sub Total				2	13		1		16
Settlement	Armlet				6	1		1	9
	Armlet fragment				2				2
	Brooch, bow				10	1			11
	Brooch pin					1			1
	Brooch, plate				1				1
	Finger ring				9	1			10
	Hairpin			8	3				11
	Hairpin fragment			9	2				11
	Pin fragment				2				2
	Decorative plate				1				1
	Stud				1				1
	Ligula				3				3
	Tweezers				4				4
	Seal box				1				1
	Stylus					1			1
Sub Total				17	45	5		1	68
Shrine	Armlet				4	10			14
	Armlet fragment					8			8
	Bead		1						1
	Brooch, bow				8	42			50
	Brooch, bow unidentified					1			1
	Brooch pin				10	3			13
	Brooch spring					4			4
	Brooch, plate				2				2
	Finger ring	1			52	11			64
	Hairpin			9	1				10
	Hairpin fragment			11	4				15
	Fungiform stud				2				2
	Ligula				4	1			5
	Ligula?					1			1
	Mirror				1				1
	Seal box				2				2
	Stylus					2			2
Sub Total		1	1	20	90	83			195
Shrine associated	Armlet				3	5			8
	Armlet fragment				1				1
	Brooch, bow				19	4			23
	Brooch, bow unidentified				2	2			4
	Brooch pin				1				1
	Brooch spring					1			1
	Brooch, penannular					1			1

Table 5.21 (continued) Summary quantification of personal items by context group, type and material

Context Group	Identification	Material ag	ag/pb	bone	cu	fe	jet	shale	Totals
	Brooch, plate				1				1
	Finger ring				29	1			30
	Hairpin				6				6
	Hairpin fragment			1	1				2
	Pin fragment					2			2
	Buckle				1	1			2
	Buckle pin					1			1
	Strap end (medieval)				1				1
	Stud				1				1
	Nail cleaner				1				1
	Tweezers				4				4
	Seal box				1				1
Sub Total				1	71	18			90
Grand Total	1	1	40	219	106	1	1	369	

* Excluding hobnails (see Table 5.24)

undoubtedly influenced by the deliberate deposition of objects as votive gifts, rather than as casual loss. Within the settlement, the finds scatter is quite dispersed, although there is a slightly higher concentration in and around buildings 10800, 10810 and especially 10820 and in the roadside ditch to the north of this group. This is probably in part due to the apparent longevity of occupation within these buildings, as indicated by the concentration of 4th-century coins (see King above). It is also noticeable that the overall finds concentration generally decreases with increased distance from the roadside buildings, as would be expected being further removed from the main zones of occupation. These 'backland' areas may have been small paddocks or horticultural plots (see Robinson, Chapter 6), and also contained a number of small cemeteries.

The finds from the shrine clearly show evidence for deliberate structured deposition, and this is discussed more fully in Chapter 7. The main focus of this deposition appears to have been located *c* 8 m north of the inner shrine entrance, but the spread of finds continues northwards, beyond the apparent northern boundary of the religious precinct. This may indicate the existence of further ritual foci along the western roadside area, which have left little or no archaeological trace.

Comparison between the settlement and shrine assemblages

Clearly the two assemblages are quite different, although the total number of finds from each part of the site is broadly comparable. The most obvious difference is that the shrine assemblage is dominated by personal items and in particular items of personal adornment (Table 5.21), with far fewer workaday objects – tools, horse and cart gear, household items and so forth. However, it is not simply the case that there are more personal items in the shrine assemblage, as the differences go deeper.

Brooches

There are 11 bow brooches from the settlement, two from metal detector finds, 50 from the shrine deposit and 23 from contexts associated with the shrine. Clearly far more brooches come from the shrine deposit, but there is a more significant difference. Brooches from the settlement and metal detector finds comprise 12 copper alloy brooches and one iron brooch, whereas the finds from the shrine comprise eight copper alloy and 42 iron brooches. The finds from the contexts associated with the shrine break down differently, with 19 copper alloy and four iron brooches (Table 5.22). The iron brooches are almost all simple one-piece sprung brooches, the so-called 'Nauheim Derivative'. It is perhaps worth drawing attention to the comment by Simpson and Blance (1998, 268) that 'Nauheim Derivatives' were 'some of the commonest types (of brooch) found on temple sites'. In addition to the brooches there is only a single brooch fragment – a brooch pin – from the settlement contexts and metal detector finds. By contrast there are 17 fragments of brooch – comprising pin and spring fragments – and an unidentified bow from the shrine deposit. The difference in this instance may reflect a difference in collection strategy between settlement contexts and the shrine deposit, although it is tempting to see it as reflecting the presence of deliberately broken items in the shrine area. There are at least two brooches which have clearly been deliberately

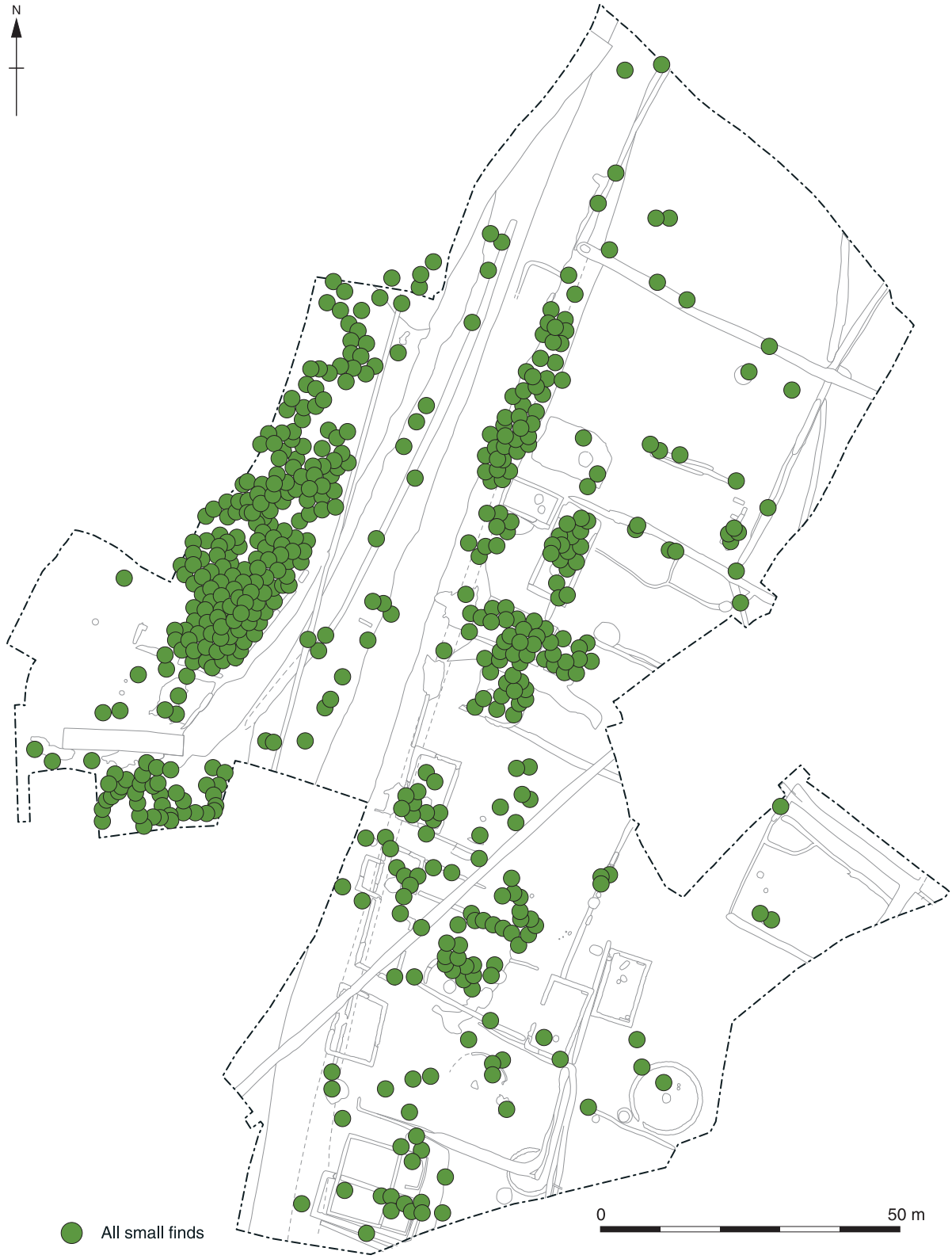


Fig. 5.19 Distribution of all finds (excluding coins) within the site

Table 5.22 Summary of occurrence of brooches by type

a) Distribution of brooch types by context group

Brooch type	*Date*	*Context Group* shrine	shrine assoc	settlement	metal detector	Totals
La Tène III brooch	early/mid 1 C				1	1
One piece sprung	1 C	30	6	1		37
One piece sprung ?	1 C	11				11
'Aucissa'	1 C		1			1
Fantail	1 C		1			1
One-piece Colchester	mid 1 C		2	1		3
Two-piece Colchester	mid 1 C		7	2		9
Hod Hill	mid 1 C	2	1			3
Dolphin	mid 1 C	1				1
Strip Bow, Early hinged	mid/late 1 C	2				2
T-shaped	1 - 2 C	4	2	5		11
Polden Hill	late 1 C – 2 C		1			1
Headstud	late 1 C – 2 C		1			1
Trumpet headed	late 1 C - 2 C		1	1		2
Knee	late 2 C – 3 C			1	1	2
Plate brooch		2	1	1		4
Penannular brooch			1			1
Total identified brooches		52	25	12	2	
unidentified bows		1	4		1	6
pin and spring fragments		17	2	1		20
Total fragments		18	6	1	1	
Totals		70	31	14	3	117

b) Distribution of brooches by type and phase

Brooch type	*Date*	*Phase* 4	4 to 5	5	unph	Totals
La Tène III	early/ mid 1 C			1		1
One-piece sprung	1 C	37				37
One-piece sprung ?	1 C	11				11
Aucissa	1 C	1				1
Fantail	1 C	1				1
One-piece Colchester	mid 1 C	1	1	1		3
Two-piece Colchester	mid 1 C	6	1	1	1	9
Hod Hill	mid 1 C	3				3
Dolphin	mid 1 C	1				1
Strip Bow, Early hinged	mid/late 1 C	2				2
T-shaped	1 - 2 C	7		1	3	11
Polden Hill	late 1 C – 2 C	1				1
Headstud	late 1 C – 2 C	1				1
Trumpet headed	late 1 C - 2 C	2				2
Knee	late 2 C – 3 C			1	1	2
Plate brooch		3		1		4
Penannular		1				1
Total identified brooches		78	2	6	5	
unidentified bows		5			1	6
pin and spring fragments		19		1		20
Total fragments		24		1	1	
Phase Totals		102	2	7	6	26

broken or damaged (**Cat. Nos 189-190**). A pair of tweezers (**Cat. No. 319**) and a sewing needle (**Cat. No. 40**), both from context 12986 associated with the shrine, also appeared deliberately damaged. The ends of the tweezers had been bent back and twisted, and the needle had been broken in two.

Jundi and Hill (1998, 134) have suggested that the regular occurrence of brooches in the archaeological record marks a change in attitudes to self. Firstly we see the sudden increase in the numbers of brooches in the archaeological record of the late pre-Roman Iron Age (Hill's so-called 'Fibula event horizon') and then over the succeeding centuries we see increasingly decorative brooches coming into use, such as the 3rd-century copper alloy oval disc-brooch, ornamented in enamel and with an intaglio depicting a male head, found within the shrine (**Cat. No. 205**). Jundi and Hill (ibid.) argue that this marks an increasing awareness of self and a desire to express this through display. This is a perfectly reasonable argument, but if it is accepted we then have to explain why the Higham Ferrers shrine brooches are predominantly early, very simple plain sprung forms, and mostly made of iron.

The shrine deposit is dated to the 2nd and 3rd centuries on the basis of coins and pottery. The brooches from the shrine are almost exclusively 1st-century forms (Table 5.22), although two later forms are present in contexts adjacent to the shrine. One possible explanation for this is that the brooches are seen as purely symbolic, and therefore directly comparable with the miniature votive offerings often found at shrines. It was perhaps not necessary therefore to offer up the very latest and most decorative brooches as offerings to the gods. The fact that the majority of the brooches are plain simple forms may simply be a consequence of their early date, although it could be argued that it represents the worshippers' perception of themselves in relation to the gods. They may in their day-to-day dealings with others have wished to display their wealth, or to indicate how they viewed themselves or wished to be seen within local society, through the adoption of certain fashions, including the wearing of decorative brooches. It may be that in their relationships with the gods they showed more restraint or humility, or they may have assumed that the gods would know them and not be fooled by outward display. An alternative explanation may be that these early iron brooches were deliberately deposited as archaic offerings, with possible ancestral associations, as has been suggested for finds at a number of other Roman temple sites in southern Britain (Smith 2001, 156). There are for example a number of iron brooches from Lowbury Hill (Atkinson 1916, 34, pl VIII, 22-28).

Another possibility is that it is the material—the iron—from which they are made that makes them particularly appropriate as offerings to the gods. In recent years a number of scholars (for example Aldhouse-Green 2002; Dungworth 1998; and Hingley 1997) have argued that iron was a metal with particular magical qualities, and therefore that it should seen as having potentially ritual significance (Hingley 2006). Aldhouse-Green (2002, 16) has argued that the process of iron production is quite different from the production of other metals—copper alloy, gold, or silver—and that this set Iron Age and Roman blacksmiths apart from other metal-workers and 'imbued them with awe, mystique and fearful respect'. Smiths had a special status which is reflected in the evidence for smith gods (Leach 1962). Hingley (1997, 9) has noted the distinctive nature of iron production, 'a mystical process during which rocks were converted into powerful cultural artefacts', and has argued that the process in the Iron Age at least was associated with the idea of regeneration (ibid., 10-13). The argument as presented is not entirely convincing, as while it is undoubtedly true that a number of significant iron objects have been found in hoards and ritual deposits (ibid., 13-16; Hingley 2006 *passim*), it is questionable whether it is the material—the iron—or the specific objects—currency bars, swords, sickles, and so forth—which are being offered to the gods. It seems most likely that it is the object that is significant rather than the material, especially as models of swords, spears, shields and axes, generally made of copper alloy, are found as votives at shrines and temples. Against this, Dungworth (1998) has argued that the metal is important, and has suggested that even objects as humble as nails have ritual significance. He cites the examples of the clavus annalis and defixiones. The clavus annalis was the annual ceremony held on 13th September in Republican Rome when a nail was driven into the wall of the Temple of Jupiter as a protection against plague. The religious and ritual significance of the act is clear and the use of the nails unequivocal. Defixiones, or curse tablets may well have been nailed up at shrines and temples in order to gain the gods' attention, but it is at least arguable that it is the tablet with the curse that is significant, and the nail is merely the means to fix the tablets. At Higham Ferrers, good numbers of both wood nails and hobnails were recovered from the shrine deposit, and it is argued that these were used to fasten curse tablets and prayers, and does not mean that the nails had any religious significance in themselves.

Although it is tempting to see magical or ritual significance in the strong representation of iron brooches, there remains a suspicion that in reality the reason is more prosaic. Iron brooches of simple sprung bow type were a relatively common form of early brooch and their presence in the shrine assemblage perhaps reflects this fact.

Higham Ferrers, Stanwick and Redlands Farm brooch assemblages compared

It is instructive to compare the brooch assemblage from Higham Ferrers with the assemblages from the villas at Stanwick (Table 5.23) and Redlands Farm. Just over 170 identifiable brooches were recovered in the excavations on the large villa at Stanwick

(Olivier, nd). Of these 129 are bow brooches, 25 penannulars and 19 plate brooches. Although the majority of the bow brooches are of 1st-century date, there are later brooches including a crossbow brooch. The big difference between the assemblages is that almost all the Stanwick brooches are copper alloy. Only one brooch – a wire bow – is explicitly noted as being of iron. The quality of the Stanwick assemblage in terms of the numbers and variety of types of brooches is arguably higher than the Higham Ferrers assemblage. The contrast is all the greater if we exclude from consideration the brooches from the shrine deposit at Higham Ferrers. Since it is argued that they are votives, these brooches are a special case and do not necessarily reflect directly the wealth and status of the settlement site and its inhabitants.

*Table 5.23 Summary quantification of brooches from Stanwick (Raunds Area Project Iron Age and Romano-British Project)**

Type	*Date range*	*Count*
la Tène III	mid 3rd – 2nd C BC	2
Augenfibel	early 1st C AD	1
Langton Down	[early 1st C AD]	4
Birdlip	[1st C AD]	2
British	1st C AD	17
Colchester	1st C AD	16
Colchester transitional	1st C AD	1
Polden Hill	1st C AD	4
Ribbon bow	1st C AD	1
Simple Gaulish	1st C AD	4
Thistle	1st C AD	3
Wire bow (fe)	1st C AD	1
Aucissa	mid 1st C AD	4
Dolphin	mid 1st C AD	13
Segmented bow	mid 1st AD	1
Hod Hill related	mid to late 1st C AD	10
Rosette	mid-late 1st C AD	1
Colchester derivative	late 1st C AD	18
Fantail	late 1st C AD	1
Bow-and-fantail	late 1st-early 2nd C AD	2
T-shaped	late 1st – mid 2nd C AD	11
Trumpet	1st – late 2nd AD	4
Zoomorphic	2nd C AD	3
Knee	late 2nd C AD	3
P-shaped	2nd – 3rd C AD	1
Crossbow standard form	3rd – 4th C AD	1
Penannular Type A3	1st C BC- 1st C AD	1
Penannular Type B1	1st C BC- 1st C AD	1
Penannular Type C	1st C BC- 1st C AD	18
Penannular Type D	1st C BC- 2nd/3rd C AD	1
Penannular Type D5	1st – 2nd C AD	3
Penannular Type D7	5th C AD	1
Plate, wheel	mid – late 1st C AD	2
Plate, umbonate	late 1st – late 2nd C AD	1
Tutulus	[1st – 3rd C AD]	1
Disc flat	2nd C AD	4
Moulded disc	2nd C AD	2
Plate, equal-ended	2nd C AD	2
Plate, lozenge repoussé	2nd C AD	1
Plate, gilded spoke disc	2nd – 3rd C AD	1
Plate, oval	2nd – 3rd C AD	3
Plate, round	early 3rd – early 4th C AD	1
Plate, unusual	-	1
Total		173

* Based on assessment and dating by Adrian Olivier (in Central Archaeological Service, n.d., Appendix 3J)

The small size of the remaining assemblage from settlement contexts and the more limited range of brooches it comprises contrast with the Stanwick collection. This clearly reflects the difference in status between a roadside settlement such as Higham Ferrers, and a large villa such as Stanwick.

By contrast the brooch assemblage from the Redlands Farm villa, sited only a few miles from Higham Ferrers, is much less impressive and includes only six brooches, comprising three disc brooches, a sawfish brooch, a rare enamelled axe brooch and a spring fragment from a brooch. The limited number of metal finds in general may reflect the status of this small rural 'villa'.

Finger Rings *by I R Scott and M Henig*

A total of 108 finger rings was recovered from the investigations at Higham Ferrers (Table 5.24). As with the brooches the majority of finger rings come from the shrine deposit (n=64) and associated deposits (n=30). There are eight finger rings from settlement Phase 5 contexts and none from Phase 4. The metal detector finds included three finger rings, of which only one could be assigned to a phase. The disparity between the shrine deposits and other deposits is even more marked than with brooches, which is probably because most of the finger rings were contemporary in date with the main use of the shrine.

Despite the fact that iron finger rings are generally quite well represented in the archaeological record, at Higham Ferrers they are almost totally absent. This absence would seem to argue against the proposition that iron had particular significance as a votive material (see brooches above).

The finger rings can be divided broadly into three groups; decorative or 'trinket rings' with bezels and other decorative features (**Cat Nos. 241-261**), plain rings comprising a simple band, in a few instances with some decorative treatment (**Cat. Nos 262-269**, **275-276**) and six rings made from wire (**Cat. No. 277**), including one possible ring of silver wire. Many of the rings are so-called 'votive rings' which are 'simple flat rings', and appear to be simple castings possibly made in one piece moulds (**Cat. Nos 270-272**). There are four rings of sub-square section which fall into the same category (**Cat. Nos 273-274**). These are comparable to rings found at Uley (Bayley and Woodward 1993), which were interpreted there as votive objects, perhaps 'votive

Table 5.24 Summary of occurrence of finger rings by metal, type, context group and phase

		metal detector finds			*settlement*				*shrine*	
Metal	*Ring Type*	*Phase 5*	*unph*	*Total*	*Phase 5*	*unph*	*u/s*	*Total*	*Phase 4*	*Total*
Silver	Wire hoop								1	1
Sub Total									1	1
Cu alloy	Decorative/Trinket rings				5	1	2	8	1	1
	Flat grooved				1			1		
	Barley sugar twist								3	3
	Simple circular	1	1	2					13	13
	Simple circular, patterned								4	4
	Simple flat		1	1					24	24
	Simple sub-square								1	1
	Simple triangular								1	1
	Strip hoop				1			1	1	1
	Strip hoop, patterned									
	Wire hoop								3	3
	Twisted wire hoop								1	1
Sub Total		1	2	3	7	1	2	10	52	52
Iron	Decorative/Trinket rings				1			1	10	10
Sub Total					1			1	11	11
Totals		1	2	3	8	1	2	11	64	64

money', and were thought to have been made on site. The Higham Ferrers examples differ in detail from the examples found at Uley, but are clearly similar in a number of ways; they are basically flat, undecorated and mass-produced in simple moulds. They differ in that the Higham Ferrers rings appear to be of one type and are uniform in size, whereas at Uley a number of clear sub-types were found, and the rings varied markedly in diameter.

The 'trinket rings' from Higham Ferrers comprise a fairly consistent group of the 2nd and 3rd centuries. None is of precious metal and such rings will not have belonged for the most part to individuals of high status. A few of the rings contain intaglios (only one a cut stone, very simply engraved), showing that the use of signet rings had trickled down to the lower ranks of society.

Bracelets

The number of bracelets and bracelet fragments within the assemblage is 43, of which 24 are of iron. There are two copper alloy bracelets found by metal detector. Ten bracelets are from settlement contexts, nine of copper alloy (one a fragment), and one of iron. By contrast, there are six iron bracelets and 12 iron bracelet fragments, and only four copper alloy bracelets from the shrine deposit. The contexts associated with the shrine produced two copper alloy bracelets, one copper alloy fragment and five iron bracelets. There is a clear association of iron bracelets and the shrine, and a clear distinction between the settlement and shrine finds. Unlike the brooches, which are predominantly of early date, the bracelets are mainly late in date, with the exception of three earlier bracelets, or armlets (**Cat. Nos 210-212**).

Copper alloy and bone hairpins

There are eleven copper alloy hairpins (**Cat. Nos 279-288**) and six hairpin stem fragments, and 18 bone hairpins (**Cat. Nos 290-307**) and 23 hairpin stem fragments. In addition there is a copper alloy hairpin of Anglo-Saxon type (**Cat. No. 289**) from rubble over the shrine platform.

The ten copper alloy pins include five (**Cat. Nos 281-285**) that can be assigned to Cool's groups 1-3, none of which can be closely dated within the Roman period (Cool 1990, 151-54 and figs 1-3). Another example (**Cat. No. 286**) belongs to Group 6 and is datable to the late 1st or early 2nd century. Group 6 hairpins are found in East Anglia and spread towards the West Country, what Cool has termed the 'Jurassic ridge distribution' (1990, 175 and fig. 15). Six copper alloy hairpins, including the Anglo-Saxon pin and a single stem fragment, are from shrine-associated contexts. The settlement has produced three hairpins, including one from Area G, and one stem fragment, while only one hairpin and four stem fragments came from the shrine deposit.

shrine associated contexts			
Phase 4	*Phase 4 to 5*	*Total*	*Totals*
			1
			1
2		2	11
			1
			3
9	2	11	26
			4
7	2	9	34
2	1	3	4
			1
			2
1	1	2	2
2		2	5
			1
23	6	29	94
1		1	12
1		1	13
24	6	30	108

The majority (10) of the bone hairpins are Crummy's Type 2, that is pins with simple conical heads and transverse grooves forming crude mouldings. These range in date from the mid 1st century to the end of the 2nd century (Crummy 1983, 21). Seven come from the shrine deposits and three from the settlement. Crummy Type 3 hairpins have spherical or near spherical heads, and these do not seem to occur much before the end of the 2nd century. They continue in use until the end of the Roman period. Only one example comes from the shrine and two examples from the settlement. The remaining hairpins are not closely datable. Of the 40 pins and stem fragments, 20 are from the shrine, 17 from the settlement, two from metal detecting, and one from a context associated with the shrine.

The impression is that hairpins are fairly evenly divided between settlement and shrine, with no marked disparity in the numbers, although six of the copper alloy hairpins were recovered from contexts associated with the shrine, but only one from the shrine itself. However, nine bone pins and eleven stem fragments were recovered from the shrine deposits, compared to eight pins and nine fragments from the settlement. Overall, there are slightly more pins and fragments of hairpins from the shrine and associated contexts than from the settlement. Similar numbers of pins (27) were found at Uley (Woodward and Leach 1993, 168-71 and fig. 131) and at Lowbury Hill (Atkinson 1916, 42-3, and pls XII and XVII), with *c* 10 copper alloy and 15 bone examples. By contrast large numbers of hairpins were found at Nettleton (Wedlake 1982, 201 and fig. 82, 10-26; and 216, fig. 93, 1-20) (63 copper alloy and 75 bone) and especially at Lydney (Woodward and Leach 1993, table 20 record 320 metal and 3 jet pins).

Toilet items

The settlement produced three ligulae (**Cat. Nos 322, 327-328**) and four pairs of tweezers (**Cat. Nos 310, 313, 315, 317**), while the metal detector finds include two pairs of tweezers (**Cat. Nos 311-312**). The shrine assemblage includes four copper alloy ligulae (**Cat. Nos 323-326**), one certain (**Cat. No. 321**) and one possible iron ligula (**Cat. No. 320**), and a mirror fragment (**Cat. No. 308**). There were no tweezers from the shrine deposits. The contexts associated with the shrine produced four pairs of tweezers (**Cat. Nos 314, 316, 318-319**) and a nail cleaner (**Cat. No. 309**). Overall the number of toilet items is not large, but comparable to the assemblages from Nettleton (Wedlake 1982, 219, and fig. 94) (n=21) and Harlow (Gobel 1985a, 82 and fig. 42) (n=19). Uley has produced only a few toilet items (Woodward and Leach 1993, 177 and fig. 135; see also 332 and table 20).

Toilet items, like brooches and other items of adornment, point to a concern with self and presentation. They are first found in the late Iron Age (Hill 1997, 96) and continue in use through the Roman period. Nail cleaners, which form part of the toilet set from the Iron Age onwards, are a distinctive British object, with few coming from continental sites. For this reason the single nail cleaner from Higham Ferrers is of particular interest. Crummy and Eckhardt (2003) have recently discussed selected types of nail cleaner at some length, including the Baldock type as found at Higham Ferrers. The Baldock type nail cleaner was in use from the mid 1st century into the 2nd century. Its geographical distribution is limited to eastern parts of Britain with a concentration in Hertfordshire (ibid., 55 and illus.4). Other types that Crummy and Eckhardt discuss also have limited distributions. This pattern of limited distributions of specific types may reflect a desire to assert local identity against the invasive Roman culture. It is interesting that nail cleaners, which are found predominantly in the south of Britain, are rare on military sites, and are found particularly on rural sites and in small towns. They are less common in the large towns of southern Roman Britain. As a peculiarly British form they are not part of the empire-wide culture, but their use might be read as an assertion of local British culture and values. Higham Ferrers is just the kind of rural site/small town that should produce nail cleaners, although the single example recovered certainly cannot be used to suggest any specific 'anti-Roman' sentiment within the settlement. Baldock, occupied in the Iron Age and Roman periods has produced 13 nail cleaners (Stead and

Rigby 1986, 130 and fig. 56, 263, 277-78, 280-85). By way of comparison the probable shrine at Lowbury Hill (Atkinson 1916, pl XII, 30-31) produced two nail cleaners, Uley (Woodward and Leach 1993, 177, fig 135, 4-8) five examples and Harlow temple eight examples (Gobel 1985a, 82 and fig. 42, 1-7).

Writing

Items relating to writing and literacy are relatively few in number. There is a single stylus (**Cat. No. 101**) and the body of a seal box (**Cat. No. 94**) from the settlement, and a stylus amongst the metal detector finds (**Cat. No. 98**). From the shrine deposit there are two seal box lids (**Cat. Nos 95-96**) and two styli (**Cat. Nos 99-100**). Another seal box lid was recovered from the contexts associated with the shrine deposit (**Cat. No. 97**). Although the number of objects is certainly not large, it is significant that five out of eight were recovered from the shrine area or related contexts. This may suggest that literacy—at least in this particular settlement—had some association with ritual practices, which is further suggested by the higher than normal incidence of graffiti noted on the pottery (see Timby above) and the inscribed lead sheet from the shrine (see Tomlin below). Literacy is discussed further in Chapter 7.

Votive items

There were a number of objects which appear to have been made specifically as cult paraphernalia. The majority of these are from the shrine deposits as might be expected, although three votive leaf fragments (**Cat. Nos 88-89**) and a possible model shield (**Cat. No. 92**) came from the settlement, the latter probably a ritual deposit in the entranceway to building 11340. The bell, identified in the catalogue (**No. 68**) as a harness bell, came from context 11328 and therefore may more plausibly be seen as part of the regalia of the shrine. The votive items from the shrine (see above) included the large cult spearhead (**Cat. No. 80**), found near the northern perimeter, which clearly belongs to a well-known class of find, often associated with shrines. Perhaps the best known examples come from Osterburken and Ehl in the Rhineland on the Upper German *limes* (Austin and Rankov 1995, pl. 10). The so-called Benefiziarierlanze from Osterburken was found in the 'sacred precinct' with a collection of 25 altars set up by beneficiarii (Schallmayer 1984; 1986; Schallmayer *et al.* 1990). The head is long and elaborate in construction, with more than one material used. The Ehl Benefiziarierlanze is a good parallel for the form (Ritterling 1919; Waurick 1971; and also Bishop and Coulston, 1993, fig. 84, 13). Both the Osterburken and Ehl heads are composite, with decorative features in contrasting materials. It is very possible that the Higham Ferrers head had bone or copper alloy embellishments, perhaps with decorative inserts in the smaller holes on the blade, and possibly copper alloy bindings around some of its margins.

The link between elaborate spearheads such as those from Osterburken and Wiesbaden and the beneficiarii, may be justified, in the case of Osterburken, on the grounds that the altars found in the shrine were dedicated by beneficiarii (see the discussion by Eibl 1994). Less elaborate, but nonetheless special, spearheads are known in Britain, such as that found a 4th-century floor surface in 'the magazine adjacent to the basilica exercitatoria (XIX)' at Caerleon, but which Boon thought earlier in date. (Boon 1972, 67, note 254 and fig. 38). The Caerleon example is a silver standard point or beneficiarius spearhead, although Boon suggested that this object was a signum head rather than a beneficiarius spearhead, because of the lack of slots and holes (cf. Trajan's Column: Lepper and Frere 1988, pl. xx, scene XXVI; pl. xcvii, scene CXXVIII). A comparable iron signum-, or lance-, head was found at Künzing on the Danube and comes from the mid 3rd-century hoard (Herrmann 1969, fig, 4.10 and also Bishop and Coulston, 1993, fig. 84.14). A similar signum head is shown on a late 1st-century relief possibly showing Praetorians and now in the Palazzo della Cancellaria (Waurick 1983, Taf. 54, 3). A spearhead from Niederbieber (Rheinisches Landesmuseum, Bonn, Acc.No. 31785) could be a military signum, or a cult spear. It has a broad blade round at the bottom and pierced by two large holes. The point is missing. The interesting features are the offset socket which joins one face of the spearhead, and the curved cross section of the blade. This supports the idea that this object is a cult spear rather than a military insignia.

Generally, military insignia can be distinguished from the spearheads found on temple and shrine sites such as Lowbury Hill (Atkinson 1916, pl XIV, 8-10; also Fulford and Rippon 1994, 177-179), Brigstock (Greenfield 1963, 243, fig. 5, 4-5 and pl. XXXVIII, c and e (copper alloy); and ibid. 249, fig. 7, 6-8 (iron)) and Wittenham Clumps (WA 2004, 25). A 'ceremonial object' with holes was actually recovered from the River Nene near Peterborough (Green 1975). Many of these objects have piercings and rings and could serve as 'rattles', such as the examples from Moorgate Street, London (Wheeler, 1930, 108, pl. XLVII, 1-3).

The association between elaborate spearheads, such as that from Osterburken, and now the example from Higham Ferrers, on one hand and shrines on the other is a key factor. The Higham Ferrers example, and almost certainly the Osterburken example, are cult objects, part of the paraphernalia of the shrine, not military badges of office. Further example of 'special' spearheads associated with shrines come from Mainz in Germany, where a shrine to Mars Leucetius produced a number of votive spear heads (Klein 1999), and simple examples come from shrines at Lowbury Hill, Oxon and Brigstock, Northants, mentioned above.

In addition to the ceremonial spearhead, excavations also recovered a possible model spearhead in

iron (**Cat. No. 93**). Spears, along with axes, are the most common form of miniature weapons to be found on Roman period temple sites (eg Uley: Henig 1993a, 131; Lamyatt Beacon: Leech 1986; Woodeaton: Bagnall-Smith 1999, 150-2) though none may have had strictly military associations, as spears may equally have been associated with hunting.

Five fragments of copper alloy votive leaf (**Cat. Nos 83-87**) were the final objects of a specific ritual nature to have been recovered from the shrine, and may have been used as votive gifts in themselves or may have been part of ceremonial dress. As with the model spears, they are not uncommon finds on temples within southern Britain, being recorded on at least 13 such sites (Smith 2001, 155).

The lead sheets by Roger Tomlin

Eight scraps of lead sheet of varying size and thickness were found within the shrine, and were unfolded and cleaned. Only one (1505) was found to be inscribed, on both sides. It is irregular in shape and is probably a fragment. The writing is illegible, and may not have been meaningful.

On one side there are at least two texts – the first lightly incised with a stylus, apparent Roman cursive letters; overlying it were deeply incised straight strokes, somewhat resembling Roman capitals, but perhaps including deletions. On the other side, there are similar deeply incised straight strokes, again somewhat resembling Roman capitals. The axis of writing seems different, however, and there is no obvious pattern to it. Individual letters can be identified, but no words or sense, although it does not seem to be a 'pseudo-text', scribble intended to look like writing.

Other classes of material

Although the key components of the shrine assemblage are the votive objects and the personal items, which are interpreted as objects offered to the gods, there are other finds which need to be briefly considered. The presence of a shield boss (**Cat. No. 2**) in the shrine deposit may be slightly unexpected, although the tradition of offering military items at sacred sites is certainly known from a number of temples across Britain and the continent (Smith 2001, 156). In many of the sanctuary complexes of northern Gaul for example, shield bosses were relatively common votive finds (Derks 1998 50), while in Britain shield parts have been found at the temples of Harlow (Bartlett 1988, 166), Hayling Island (Downey *et al.* 1980, 293) and Nettleton (Wedlake 1982 20), with model shields at Frilford (Bagnall-Smith 1995, 198) and Worth (Klein 1928, 81). Whether the shield boss at Higham Ferrers was originally attached to a shield or not remains unknown.

Unexpectedly there are more tools or craft items from the shrine deposit (24) than from the settlement (15), but these figures are misleading: the shrine figures are dominated by nine ox goads (**Cat. Nos 12-20**) and seven needles or needle fragments (**Cat. Nos 34-38, 41-42**). There are also five ox goads (**Cat. Nos 21-23, 25-26**) and two needles (**Cat. Nos 40-43**) from the shrine associated contexts. From settlement contexts there are just two ox goads (**Cat. Nos 24, 27**) and two needles (**Cat. Nos 36, 42**). Although ox-goads are functional objects, it should be noted that six complete goads and one fragment were found at Lowbury Hill (Atkinson 1916, 52 no.38 and pl. xv, 17-18), and that therefore a votive role for such objects cannot be ruled out. Household items, door fittings and locks and keys come mainly from settlement contexts, while structural items are evenly distributed between shrine and settlement.

The main distinctions between the shrine and settlement assemblages are marked by the numbers of specifically votive items from the shrine deposit, and by the numbers of personal items. In addition there is a clear selection of certain types of item – early iron brooches, finger rings and bracelets in particular – as offerings to the gods.

Small finds catalogue (Figs 5.20-47)

Weapons (Fig. 5.20)

1. **Sword scabbard slide**. 2nd-3rd century. Cu alloy. L 60 mm. Context 10547, area of buildings 10800, 10810, 10820 and 10830, SF 1653. Ph 5. In general see Oldenstein 1976, 95-101, 241-42 and Taf. 12-13.
2. **Shield boss** with shallow oval dome, *c* 37 mm deep and 110 mm x 106 mm. Fe. L 150 mm, W 115 mm. Context 11328, shrine area, SF 1478. Ph 4.

Tools (Fig. 5.21-23)

Smithing Tools (Fig. 5.21)

3. **Smith's** or **mason's chisel**. Fe. L 142 mm. Context 12676, building 10830, SF 2776. Ph 5.
4. **Small cross pane hammer**. Fe. L 62 mm, W 13 mm. Context 12433, colluvium north of shrine area, SF 2391. Ph 4.
5. **Hammerhead** fragment, with oval eye flanked by small flanges. Fe. L 47 mm, W 36 mm. Context 12434, colluvium west of shrine, SF 2431. Ph 4.
6. Possible **punch**. Fe. L 74 mm. Context 11328, shrine area, SF 1898. Ph 4.

Masonry tool (Fig. 5.21)

7. **Mason's gad**, or **set**, with battered head. Fe. L 98 mm. Context 12835, building 10840, building 10840, SF 3075. Ph 5.

Carpentry tools (Fig. 5.21)

8. (*not illustrated*) **Awl** or **drill bit**. Fe. L 113 mm. Context 10500, topsoil, SF 1903. Unphased.
9. **Awl**, or **drill bit** fragment. Fe. L 113 mm. Context 11310, building 10870, SF 1473. Ph 5.
10. (*not illustrated*) **Awl**, or **punch**. Fe. L 62 mm. Context 12984, building 10820, SF -. Ph 5.
11. (*not illustrated*) **Chisel blade** fragment. Fe. L 55 mm. Context 12801, colluvium south of shrine area, SF 3056. Ph 4.

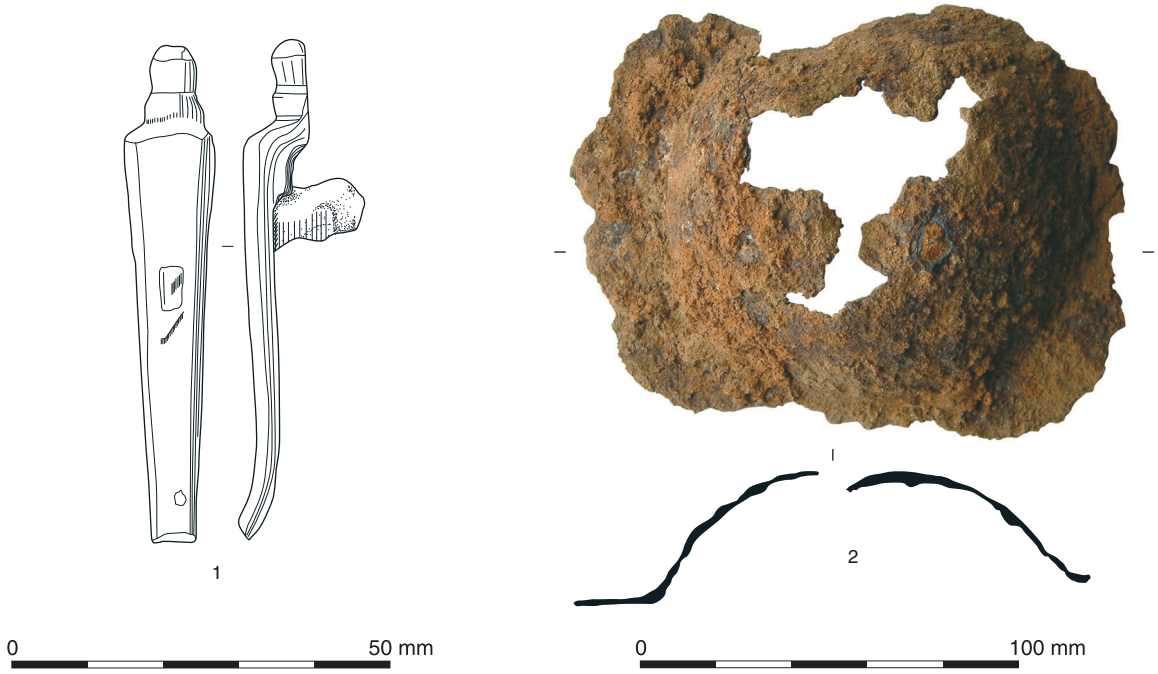


Fig. 5.20 Weapons

Agricultural tools (Fig. 5.21)

Ox goads

12. (*not illustrated*) **Ox-goad** with spiral socket. Fe. L 32 mm, D 14/15 mm, internal D 10/11 mm. Context 11328, shrine area, SF 2509. Ph 4.
13. **Ox-goad**. Fe. L 40 mm, D 16 mm, internal D 10 mm. Context 11328, shrine area, SF 2669. Ph 4.
14. **Ox-goad**. Fe. L 35 mm, D 19 mm, internal diameter 12 mm. Context 11328, shrine area, SF 1928. Ph 4.

15-17.(*not illustrated*) **Ox-goads** with spiral socket. Fe. L 25-31 mm, D 15-18 mm, internal D 8-13 mm. Context 11328, shrine area, SF 1979, 2038, 2071. Ph 4.

18. **Ox-goad**. Fe. L 37 mm, D 13 mm, internal D 7 mm. Context 11328, shrine area, SF 2121. Ph 4.
19. **Ox goad** with simple collar or plain socket. Fe. L 32 mm, D 13 mm, internal D 7/8 mm. Context 11771, shrine area, SF 1809. Ph 4.
20. **Ox goad**. Fe. L 25 mm, D 19/20 mm, internal D 12 mm. Context 11779, shrine area, SF 1850. Ph 4.
21. (*not illustrated*) **Ox-goad**. Fe. L 30 mm, D 22 mm, Internal D 16 mm. Context 12434, colluvium west of shrine, SF 2496. Ph 4.
22. **Ox-goad**. Fe. L 32 mm, D 19 mm, internal D 12 mm. Context 12434, colluvium west of shrine, SF 2614. Ph 4.

23-27 (*not illustrated*) **Ox-goads**. Fe. Context 12857, shrine foundation, Context 12434 colluvium west of shrine, (SF 2869, 2934), Context 12801, colluvium south of shrine, (SF 3124), Context 12942, ditch 12895. Ph 4.

Spud, rakes, reaping hooks and shears

28. (*not illustrated*) **Spud**, or **chisel**, socketed. Fe. L 178 mm, blade W 35mm, socket D 29 mm. Area G, Context 8048, well 8032. Ph 3-5.
29. **Rake tine**, with incomplete tang. Fe. L 94 mm. Context 12332, building 10820, SF 2680. Ph 5.
30. **Reaping hook** with reinforced back. Fe. L 155 mm. Context 10507, silty deposit north of building 10800, SF 2815. Ph 5.
31. Possible **sickle** or **reaping hook blade.** No extant tang or socket. Fe. L 82 mm. Context 11252, building 10870, SF 1435. Ph 5.
32. **Shears blade**. Fe. L 110 mm. Context 10500, topsoil, unstratified, SF 1178. Unphased.
33. **Shears blade**. Fe. L 174 mm. Context 10543, road surface, SF 1045. Ph 4-5.

Textile or leatherworking tools (Fig. 5.22)

Needles

The needles are large and are more likely to be used for sewing leather than for tailoring. Cf needles from Vindonissa (Gansser-Burckhardt 1942, 20 and Abb. 9).

34. **Sewing needle**. Cu alloy. L 139 mm. Context 11328, shrine area, SF 1500. Ph 4.
35. **Sewing needle**. Cu alloy. L 133 mm. Context 11328, shrine area, SF 1640. Ph 4.

36-38. (*not illustrated*) **Sewing needle** fragments. Cu alloy. L 27-36 mm. Context 11328, shrine area, SF 2693, 2901, 2915. Ph 4.

39. **Sewing needle**. Cu alloy. L 121 mm. Context 12254, pit 12253, SF 2359. Ph 5.
40. (*not illustrated*) **Sewing needle**. Complete but deliberately bent and broken. Cu alloy. L (extant) 123 mm. Context 12986, SF 3212. Ph 4

41-43. (*not illustrated*) Possible **sewing needles.** Fe. L 24-58 mm. Context 11328, shrine area, SF 2055, 2084, Context 12434, colluvium west of shrine area, SF 2626. Ph 4.

44. **Sewing needle**. Bone. L 74 mm. Context 11327, building 10870, SF 1842. Ph 4.

Net Weights

45-6. (*not illustrated*) Possible **net weights**. Pb. D 17-20 mm. Context 11328, shrine area, SF 1501, 1564. Ph 4.

Fig. 5.21 Tools

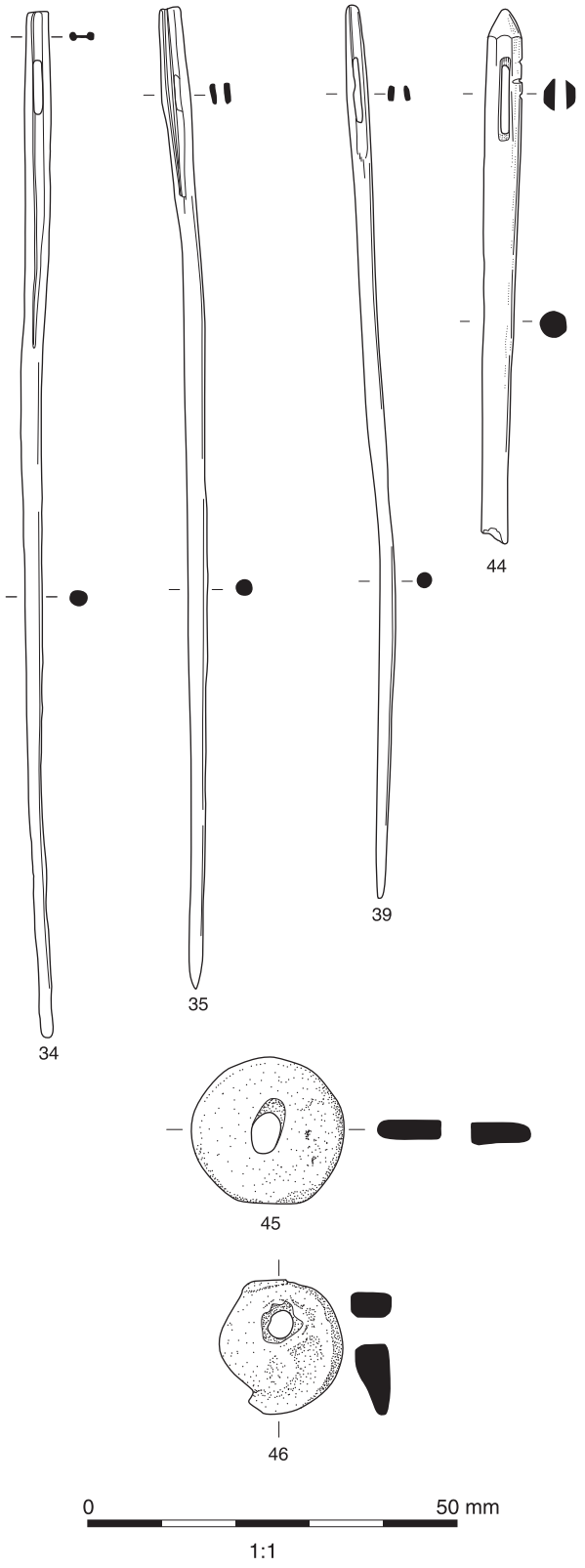


Fig. 5.22 Tools

Fig. 5.23 Tools

Tools of uncertain identification (Fig. 5.23)

47. Possible **chisel**. Fe. L 128 mm, W 22 mm. Context 11328, shrine area, SF 1636. Ph 4.
48. (*not illustrated*) **Small chisel-like object**. Fe. L 60 mm. Context 11328, shrine area, SF 1740. Ph 4.
49. Possible **chisel blade**. Fe., L 79 mm. Context 11627, colluvium beneath shrine, SF 2300. Ph 4.
50. Possible **punch**, or spike, with possibly battered head. Fe. L 89 mm. Context 11153, buildings 10860 and 11370, SF 1594. Ph 5.
51. **Punch** with battered head. Fe. L 137 mm. Context 12472, ditch 12471, SF 2457. Ph 4.
52. Possible **awl** fragment. Fe. L 59 mm. Context 11328, shrine area, SF 2947. Ph 4.
53. Possible **awl**. Fe. L 99 mm. Context 12942, ditch 12895, SF -. Ph 4.

Possible tool fragments

54. **Possible tool** with solid handle and a thin stem hooked at the end. The hook is probably not original. Fe. L 105 mm. Context 10547, buildings 10800, 10810, 10820 and 10830, SF 1073. Ph 5.

55. (*not illustrated*) **Rod handle**, possibly from a fire tool. Fe. L 200 mm. Context 11672, shrine area, SF 1776. Ph 4.
56. (*not illustrated*) Possible **tool fragment** of sub-rectangular section. Perhaps a piece of a drill bit. Fe. L 45 mm. Context 11779, shrine area, SF 1848. Ph 4.
57. (*not illustrated*) **Socket** or **ferrule**. Fe. L 80 mm, W 18 mm. Context 12835, building 10840, SF 3074. Ph 4.
58. **Slave shackle fragment**, terminating in rolled-over loops with small rings attached. Fe. L 85 mm, W 85 mm. Context 10507, silty deposit north of building 10800, SF 3173. Ph 5.

Transport and Trade (Figs 5.24-6)

Slave shackles (Fig. 5.24)

See Thompson 1993 for an overview of so-called slave shackles.

The main loop with its U-profile is comparable to examples of shackles from Bengel, Rheinland-Pfalz, Germany (Thompson 1993, illus. 72-3), Bavay, Nord, France (ibid., illus. 78) and Tournus, Saône-et-Loire, France (ibid., illus. 84). Unlike these shackles and other examples illustrated by Thompson, the Higham Ferrers example is permanently closed. It is possible that originally the shackle had just two rings, which were then secured by a barb spring padlock such as **Cat. No. 390** below, which is also from context 10507. This is how a

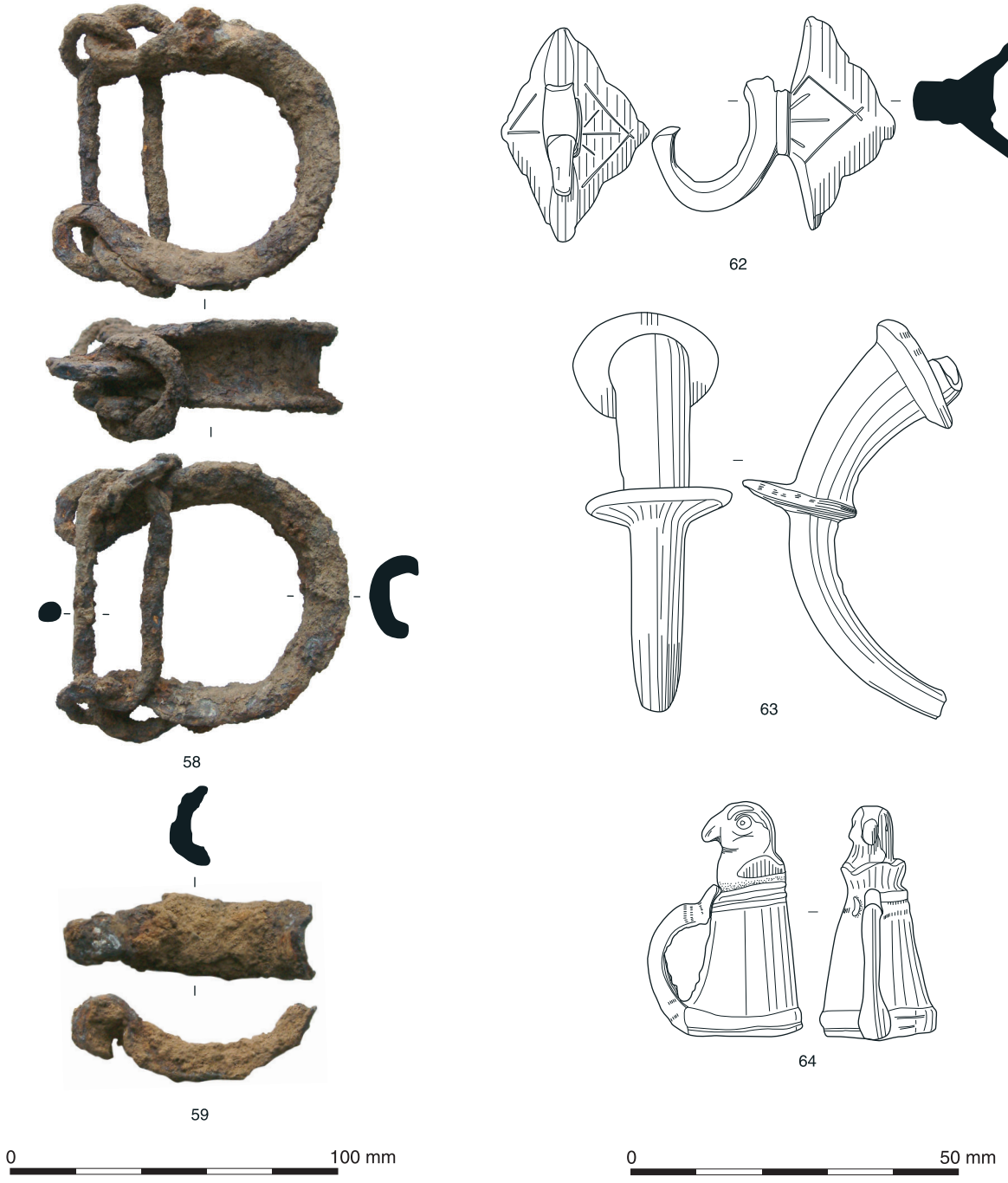


Fig. 5.24 Transport and trade

shackle from Sombernon, Côte d'Or, France (Thompson 1993, illus. 75) is closed.

59. **Slave shackle fragment** formed of curved strip of U-section, terminating in a rolled over loop at one end. Fe. L 85 mm. Context 10627, ditch 10855, SF 1343. Ph 4.

Cart or Wagon fittings (Fig. 5.24)

Transport

60. (*not illustrated*) **Looped peg**, or possible **linch pin**, with looped head. Fe. L 84 mm. Area G, Context 8095, building 8019. Ph 3-5.
61. (*not illustrated*) Possible **nave band** fragment. Fe. L 56 mm, W 45 mm. Context 11328, shrine area, SF 1630. Ph 4.
62. **Pole terret**, with decorative attachment plate, and iron nail. Cu alloy. L 34 mm, W 33 mm. Context 10543, road surface, SF 1015. Ph 4-5.
63. **Terret ring** fragment. Cast. Cu alloy. L 55 mm. Context 12801, colluvium south of shrine area, SF 3116. Ph 4.
64. **Cast ferrule**, with single loop on one side. It has a possible eagle head at the closed end. Cu alloy. H 37 mm, D 19 x 20 mm. Context 10547, buildings 10800, 10810, 10820 and 10830, SF 1103. Ph 5.

This is similar to eagle-headed mounts, which have been identified as cart or carriage fittings. Examples come from Cirencester and Colchester (Webster 1958, fig. 3, 37 and fig.4, 68), and Chichester (Down, 1978, 296-97). Although smaller than these examples, and with a single loop rather

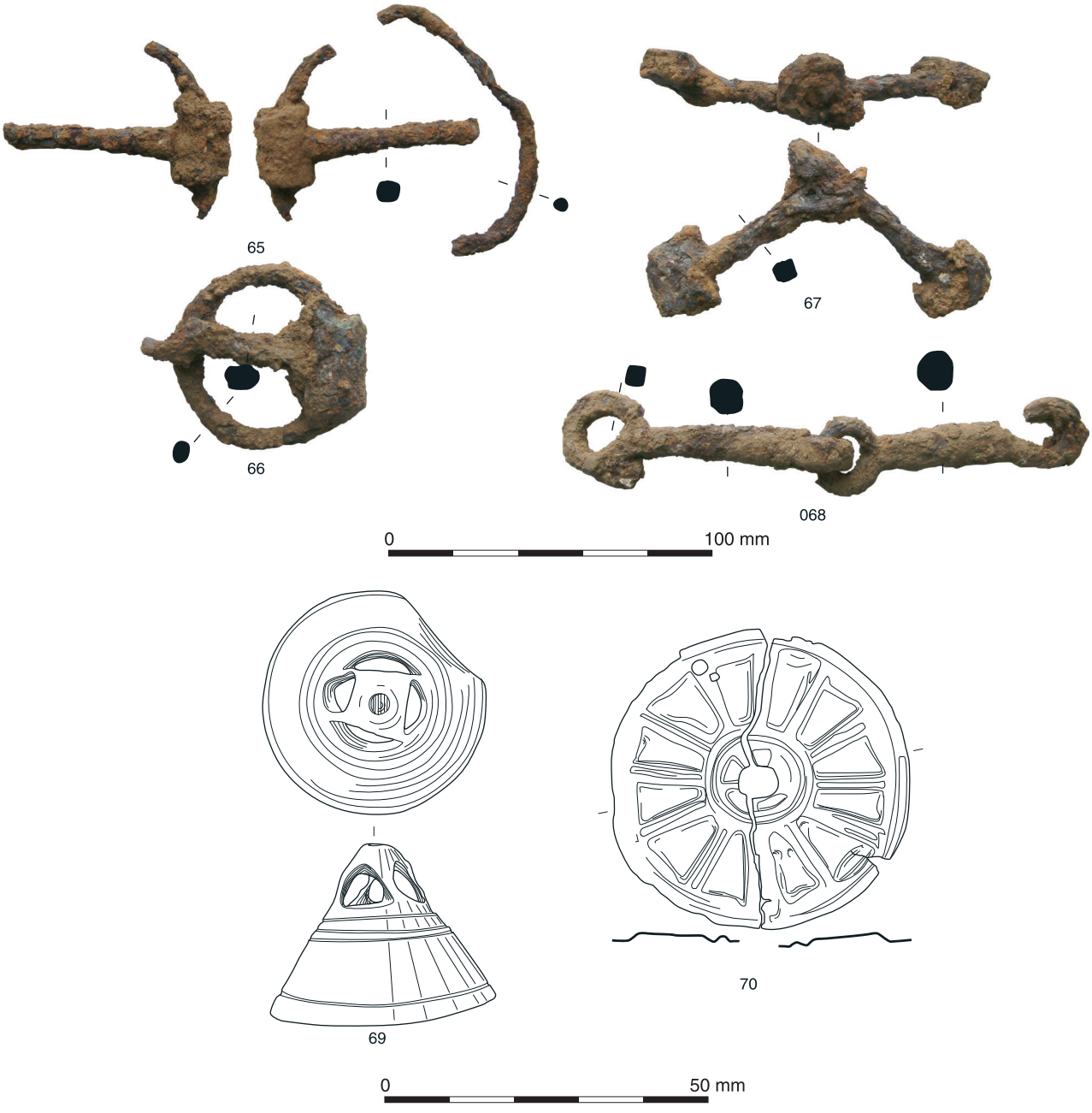


Fig. 5.25 Transport and trade

than an open hook, it nonetheless has clear affinities with them. Von Mercklin (1933) published a study of these and related decorative cart fittings, and illustrates at least one fitting with closed loops (ibid., Abb. 26), as well as a range of fittings with single and double decorative hooks (eg. ibid., Abb.21-25). The latter fittings are interpreted as mounts for securing the reins when the carriage or wagon is at rest. Although the Higham Ferrers piece could not have served this purpose, the closed loop could have served as guide for reins or more probably as a securing point for a strap.

Harness fittings (Fig. 5.25)

65. **Bridle bit fragments** comprising (1) part of mouth bar with fragment of side ring attached and (2) a broken distorted side ring. Fe. L (1) 70 mm; (2) 82 mm. Context 10507, deposit north of building 10800, SF 3174. Ph 5.
66. **Bridle bit fragment**, comprising one side ring with part of jointed mouth bar. Fe. L of bar 67 mm, D of ring 60 mm. Context 10547, buildings 10800, 10810, 10820 and 10830, SF 1057. Ph 5.
67. **Jointed mouth bar** from bridle. Fe. L 105 mm. Context 10816, layer sealing Roman features, SF 1338. Ph 5.
68. **Jointed mouth bar** from a bridle bit. Fe. L 163 mm. Context 11007, building 10810, SF 1413. Ph 5.
69. Possibly **harness bell**. Tinned. Possibly had an iron clapper. Cu alloy, tinned. L 20 mm, W 25 mm. Context 11328, shrine area, SF 1492. Ph 4.
70. **Phalera** or **decorative circular plate** decorated by 12 lightly embossed radial segments and a slight outer border. Cu alloy. D 47 mm. Context 11328, shrine area, SF 1567. Ph 4.

Hipposandals (Fig. 5.26)

Although only the wings survive, it is fairly certain these fragments are from hipposandals of Aubert Type 1 with side wings and hooks front and back (see Manning 1985, fig. 16, 1), although they could be from Type 5 hipposandals which are only half the width of the hoof (ibid., fig. 16, 5).

71. (*not illustrated*) **Hipposandal wing**. Fe. L 66 mm, W 57 mm. Context 10666, layer above metalled area to north-east of building 10820, SF -. Ph 5.
72. **Hipposandal wing**. Fe. L 72 mm. Context 11328, shrine area, SF 1545. Ph 4.
73. **Hipposandal wing**. Fe. L 65 mm. Context 11328, shrine area, SF 1579. Ph 4.

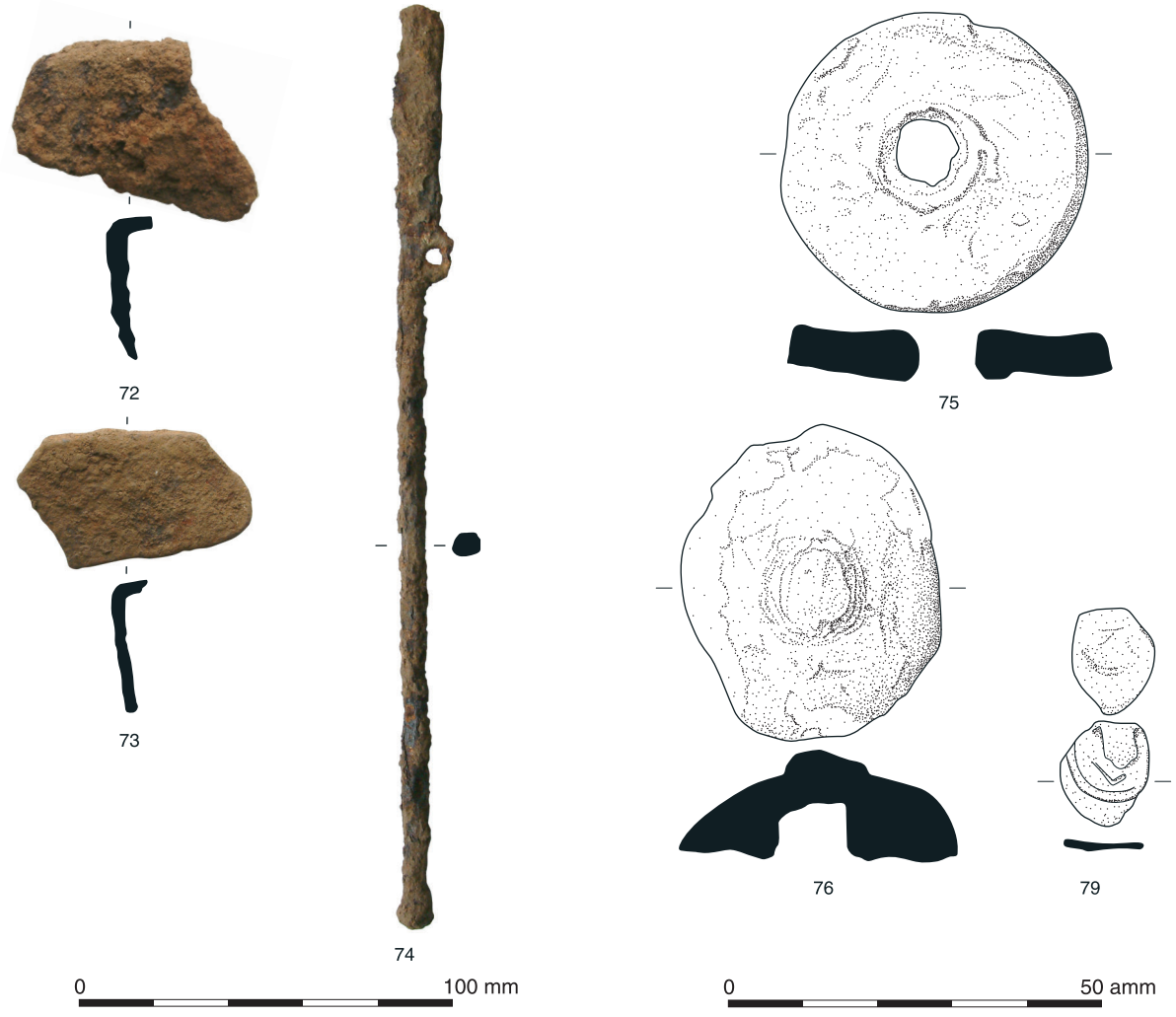


Fig. 5.26 Transport and trade

Objects of measurement

74. **Steelyard arm**. Fe. L 250 mm. Context 10660, rear of building 10860, SF 1154. Unphased.
75. **Weight**. Pb. D 40 mm. Context 12543, building 10820, SF 2717. Ph 5.
76. **Possible weight**. Pb. D 22 mm x 23 mm. Context 12984, building 10820, SF 3205. Ph 5.

77-78. (*not illustrated*) Possible **Weights**. L 23-39 mm, D 23-38 mm. Area G, Context 8003, unstratified, SF 627 (possibly medieval), Context 8004, unstratified, SF 639. Ph 3-5.

Possible lead seal (Fig. 5.26)

79. Possible **lead seal**. Pb. L 14 mm. Context 11328, shrine area, SF 1541. Ph 4.

Votive items (Figs 5.27-9)

Cult objects (Fig. 5.27-8)

80. **Cult spearhead**. It has a broad decorated blade and an elongated point with a terminal knob. The blade is largely complete. Its outline has been cut to a decorative shape, although parts are now missing,

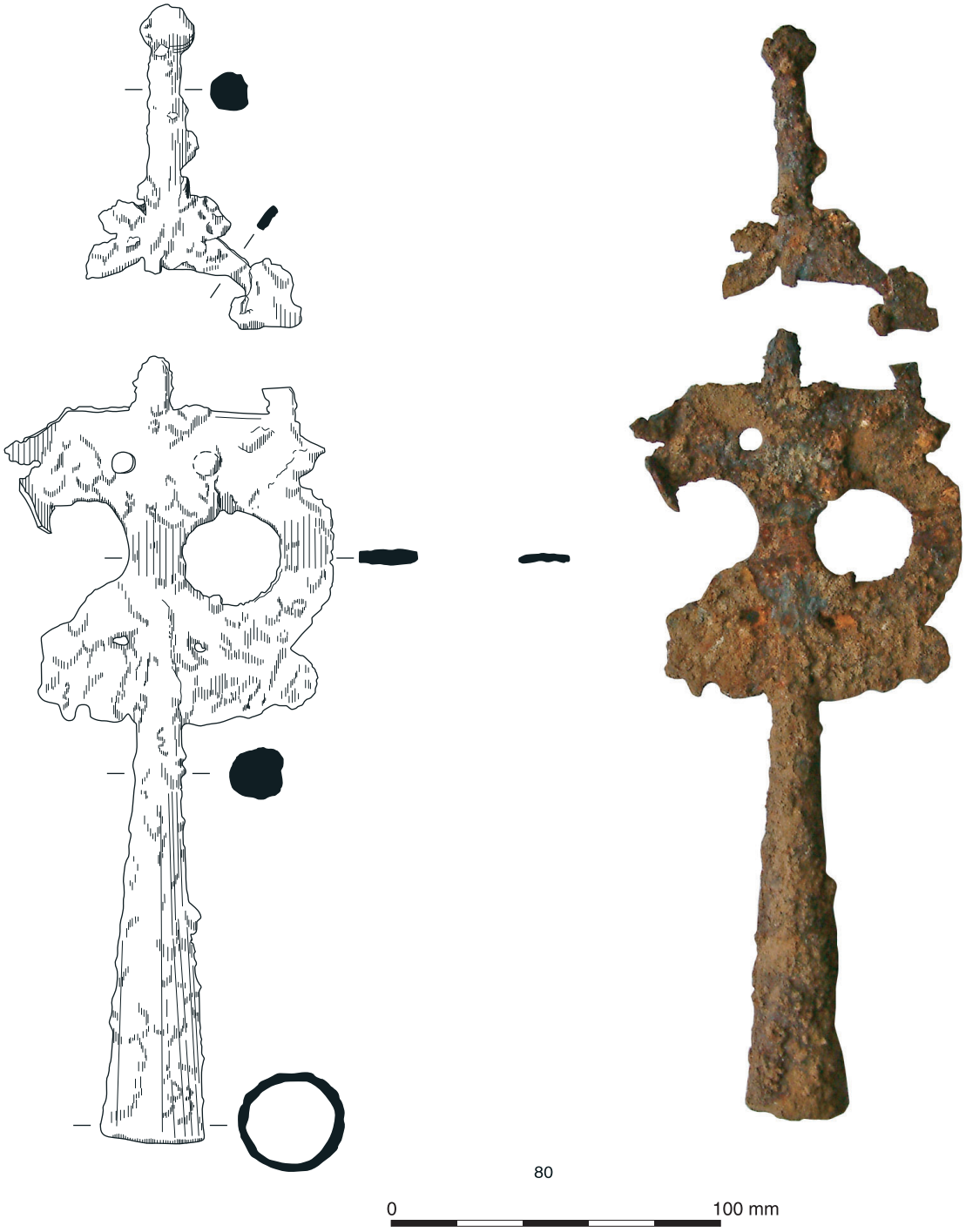


Fig. 5.27 Votive items

and the body of the blade has two large circular cut-outs and two pairs of smaller holes. The x-ray plate suggests that the lower pair may be lunate rather than circular in shape. Fe. L 320 mm, W 102 mm. Context 11328, shrine area, SF 1907. Ph 4.

81. **Whittle tang spearhead**. Elongated point of lentoidal section. Fe. L 142 mm. Context 11328, shrine area, SF 2411. Ph 4.
82. **Whittle tang knife** with S-curved back and edge, and a small hook on the blade edge. Fe. L 89 mm. Context 11328, shrine area, SF 1994. Ph 4.

Votive leaf fragments (Fig. 5.28)

83. **Votive leaf fragment**, with herring bone pattern. Folded. Cu alloy. L 30 mm. Context 11328, shrine area, SF 1489. Ph 4.
84. **Votive leaf fragment**, with lightly chased pattern of chevrons. Folded. Cu alloy. L 23 mm, W 17 mm. Context 11328, shrine area, SF 1572. Ph 4.
85. (*not illustrated*) Possible **votive leaf fragment**. No visible decoration. Folded. Cu alloy. L 23 mm. Context 11328, shrine area, SF 1642. Ph 4.
86. **Votive leaf fragment,** lightly chased with chevron and cable pattern. Cu alloy. L 43 mm. Context 11328, shrine area, SF 2242. Ph 4.
87. **Votive leaf fragment,** with central raised ridge with lightly chased angled lines running off from it. Cu alloy. L 25 mm, W 25 mm. Context 11672, shrine area, SF 1731. Ph 4.
88. **Votive leaf fragment**, with lightly chased chevron pattern. Cu alloy. L 39 mm. Context 12183, building 10880, SF 2005. Ph 5.
89. (*not illustrated*) **Votive leaf fragments** (1) Fragment with cable pattern ridge with chevron border parallel to it along one edge. No nail holes. (2) Irregular fragment with no original edges, no visible decoration or nail holes. L 20 mm. Cu alloy. L (1) 25 mm; (2) 20 mm. Context 12183, building 10880, SF 2305. Ph 5.
90. **Votive leaf fragment**, polished on one face with a low broad ridge, flanked by lightly chased chevron

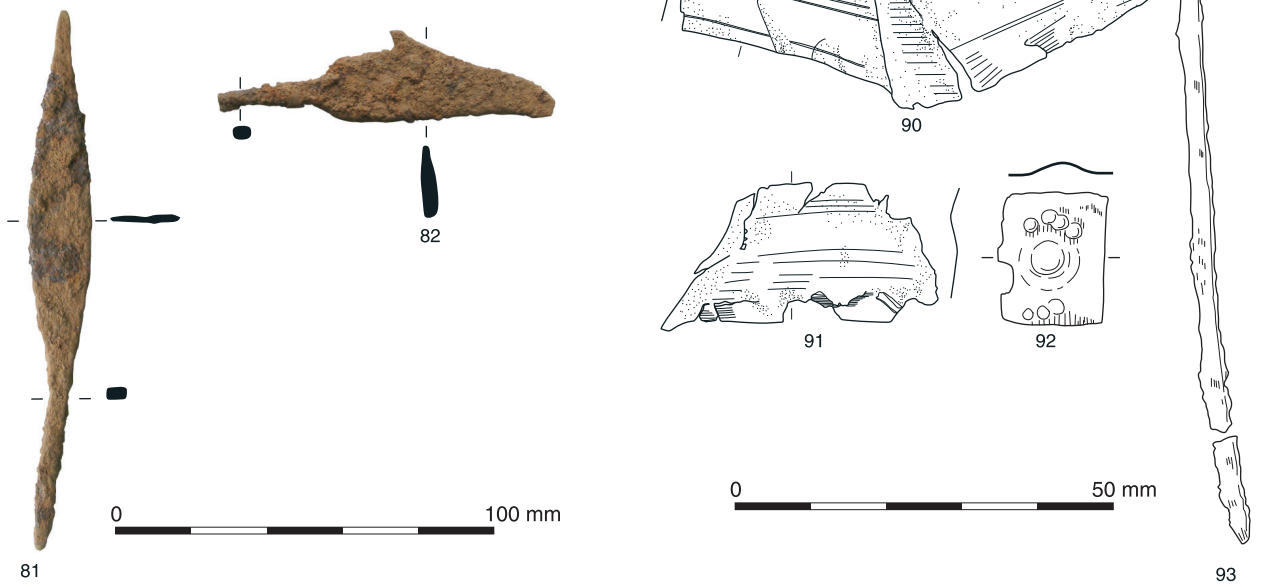


Fig. 5.28 Votive items

Fig. 5.29 Inscribed lead sheet

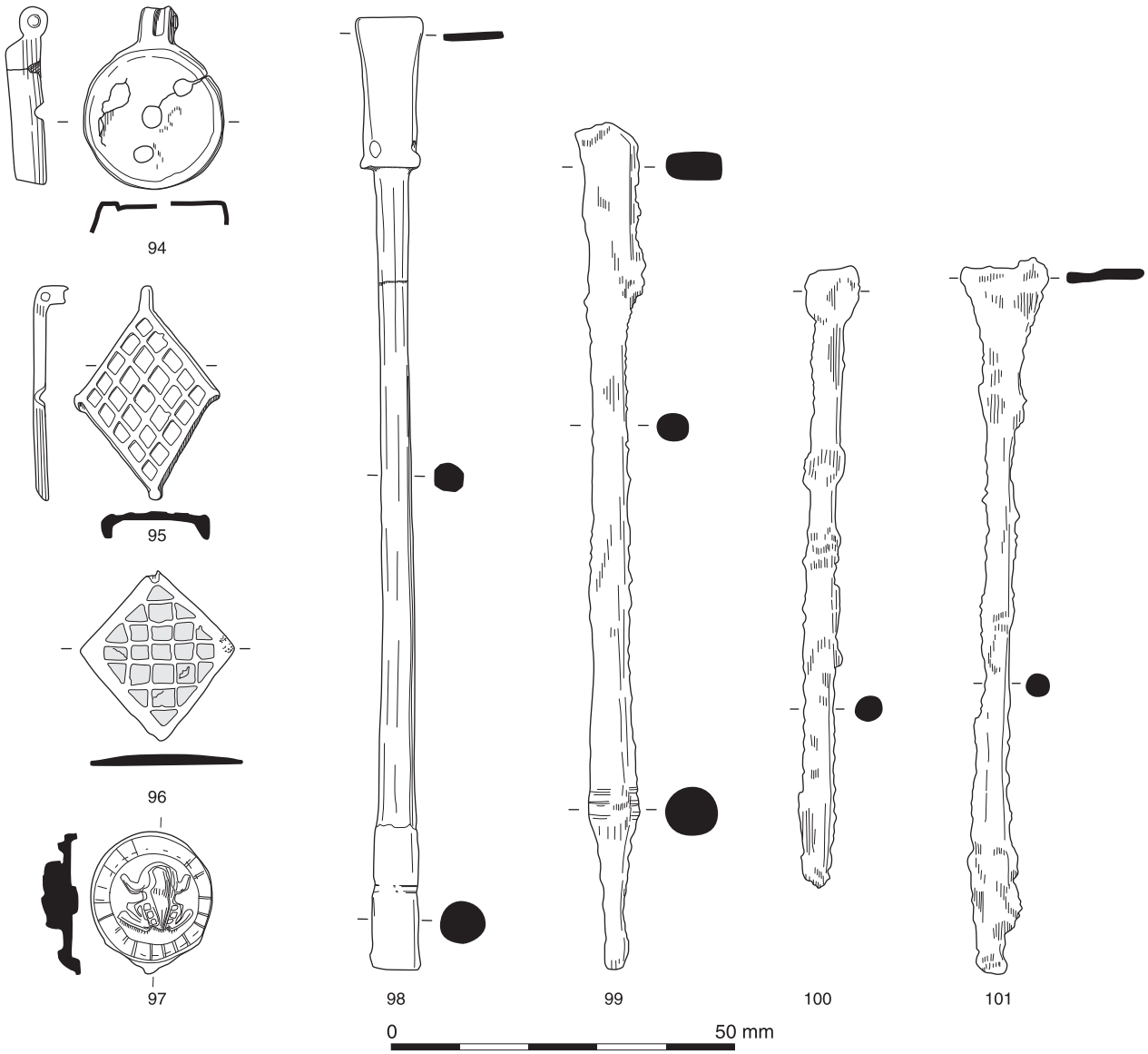


Fig. 5.30 Writing – seal boxes and styli

decorated borders. Bent and folded. Cu alloy. L 65 mm, W 19 mm. Context 12433, colluvium north of shrine area, SF 2373. Ph 4.

91. **Votive leaf fragment**, with a low wide central ridge, and chevron decorated edges. Polished on one face. Cu alloy. L 36 mm, W 17 mm. Context 12433, colluvium north of shrine area, SF 2374. Ph 4.

91a. (*not illustrated*) **Votive leaf fragments**, damaged. (1) The larger fragment has two slightly irregular edges at a angle greater than 90 degrees. There is no certain decoration, but a possible nail hole. (2) The smaller fragment appears to have a lightly chased chevron pattern. Cu alloy. L (1) 45 mm, (2) 33 mm, W (1) 32 mm, (2) 17 mm. Ctx 10738, shrine area, SF 3235. Ph 5.

Miniature objects (Fig. 5.28)

92. **Possible miniature rectangular shield?** Possible decorative features above and below 'boss'. Cu alloy. L 17 mm, W 14 mm. Context 11396, building 11340, SF 1616. Ph 3-4.

93. **Possible model spear?** Sub-rectangular section head with three mouldings. Fe. L 119 mm. Context 11328, shrine area, SF 2243. Ph 4.

Lead sheets

Five folded or folded and rolled lead sheets (36-80 mm in length) were recovered from the shrine deposit. They were investigated for possible traces of writing. As reported by Tomlin (above) only one (Fig. 5.29) had any traces and these appeared to be illiterate.

Writing: seal boxes and styli (Fig. 5.30)

Seal boxes

94. **Circular seal box**, lacking lid. Cu alloy. L 27 mm, W 22 mm, Depth 4 mm. Context 11302, south-east of building 10900, SF 1442. Ph. 4.

95. **Diamond-shaped seal box lid** with pattern of enamel inlaid diamonds. Cu alloy. L 31.5 mm, W 21.5 mm. Context 11328, shrine area, SF 1576. Ph 4.

96. **Diamond-shaped seal box lid**, with pattern of squares on top face. Cu alloy. L 25 mm. Context 11328, shrine area, SF 1608. Ph 4

97. **Circular seal box lid**, with cast frog applied to centre, and raised decorative border. Cu alloy. L 21 mm, W 19 mm. Context 12801, colluvium south of shrine area, SF 3115. Ph 4.

Styli

98. **Stylus**, Type 4 (Manning 1976, 34). Cu alloy. L 139 mm. Context 10500, topsoil, SF 2466. Unph.

99. **Stylus**, Type 4. Fe. L 123 mm. Context 11328, shrine area, SF 2924. Ph 4.

100. **Stylus**, Type 2 or 3. Fe. L 90 mm. Context 11779, shrine area, SF 1870. Ph 4.

101. **Stylus,** Type 3. Fe. L 104 mm. Context 12419, building 10820, SF 2472. Ph 5.

Personal – Footwear

The only evidence for footwear was in the form of hobnails. Many of the hobnails recovered from the excavation were found singly or in small numbers (Table 5.25).

Table 5.25 Quantification of hobnails by context group

Context Group	*Hobnails (count)*
Metal detecting	8
Settlement contexts	229
Shrine	148
Shrine associated contexts	56
Total	441

Personal – Dress fittings (Fig. 5.31)

102. **Rectangular double frame buckle**. Fe. L 34 mm, W 24 mm. Context 12433, colluvium north of shrine area, SF 2388. Ph 4.

103. **Oval double**, or **spectacle**, **frame buckle**, cast, decorated. Medieval form. Cu alloy. L 40 mm. Context 12433, colluvium north of shrine area, SF 2387. Ph 4.

104. (*not illustrated*) **Buckle pin** formed from thin square-section rod. Fe. L 24 mm. Context 12434, colluvium west of shrine area, SF 2866. Unph.

105. **Fungiform stud**, large, with strongly shaped profile. Possible harness or belt fitting. Cu alloy. D 31 mm. Context 11328, shrine area, SF 1560. Ph 4.

106. **Fungiform stud**. Cu alloy. D 13 mm. Context 11779, shrine area, SF 1817. Ph 4.

107. **Cast decorative mount**, with two stud fastenings. Could be recent. Cu alloy. L 24 mm, W 20 mm. Context 10500, topsoil, SF 973. Unph.

108. **Mount** or **stud head,** with cross motif. Cu alloy. D 10 mm. Context 12433, colluvium north of shrine area, SF 2378. Ph 4.

109. **Large stud** slightly domed head. Cu alloy. D 28 mm. Context 12683, building 10820, SF 2777. Ph 4.

110. **Decorative plate**, trapezoid in shape, with sinuous possibly Celtic pattern. Cu alloy. L 19 mm, W 19 mm. Context 12335, pit 12334, SF 2308. Ph 5.

111. (*not illustrated*) **Strap end**, three-piece. Cast forked spacer with stepped terminal moulding. Attachment plates are plain tapered and have a single rivet. Medieval form. L 29 mm, W 8.5 mm. Context 12986, SF 3218, unstrat. Egan (Egan and Pritchard 1991, 145) suggests that the tongue-shaped strap end with forked spacer was introduced in the late 13th or early 14th century in London.

Personal – brooches (Figs 5.31-5)

Early Sprung brooches

Simple one-piece iron bow brooches

These are of the type sometimes called 'Nauheim derivatives'. These brooches date to the 1st century. The examples from King Meadow Lane almost all have rod or wire bows, rather than flat bows. Copper alloy examples with rod bows are generally later than examples with flat bows, and the geographical distribution of the two forms reflects the differing date ranges. The brooches with flat section bows tend to concentrate in the south of England, whereas those with rod bows are found in the Midlands and the North. Whether iron examples of Simple one-piece brooches follow the same pattern of distribution is unclear, but the Higham Ferrers examples would seem to fit the pattern.

Fig. 5.31 Personal – Dress fittings and brooches

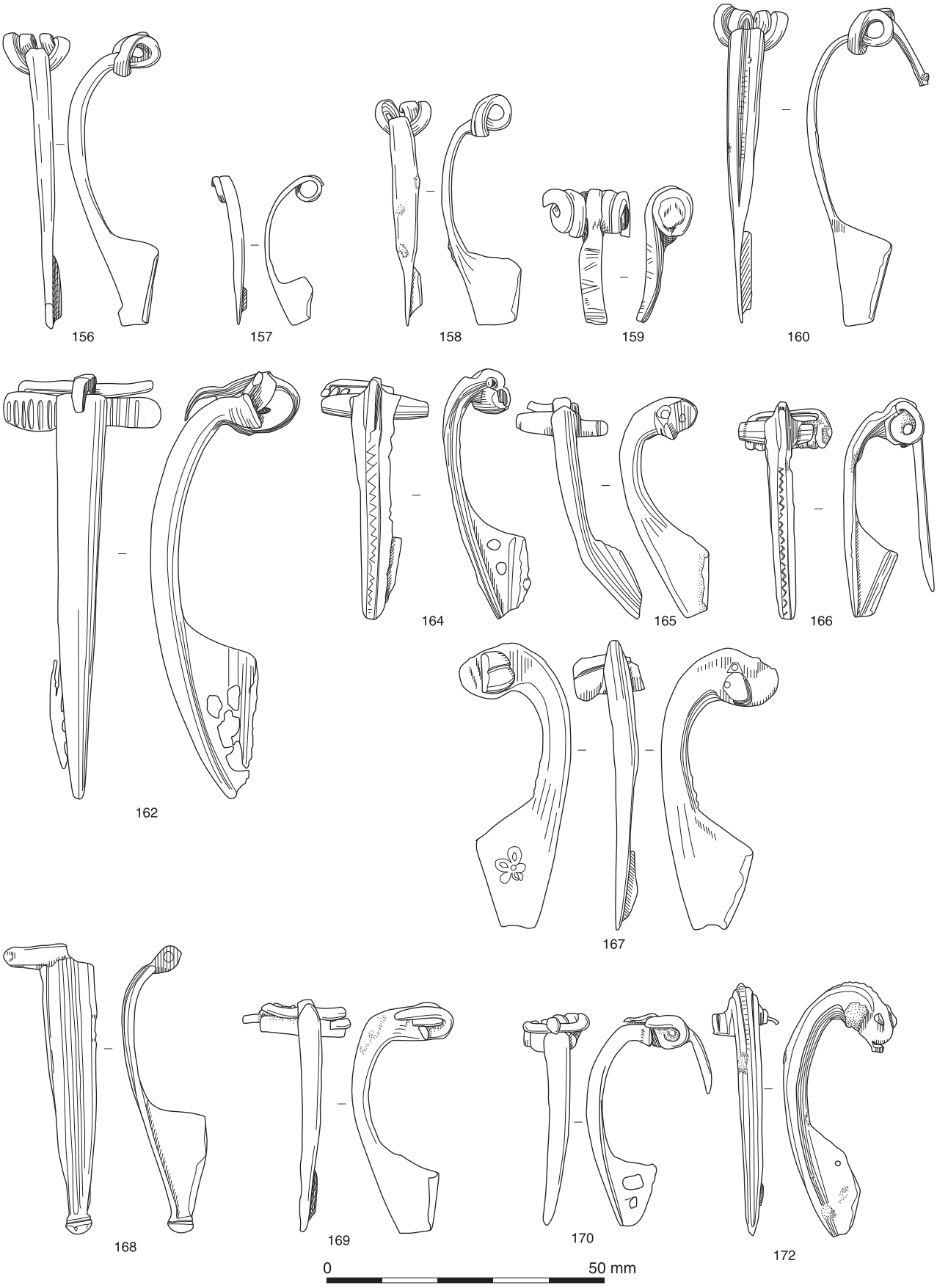


Fig. 5.32 Personal – brooches

112-121. (*not illustrated*) **One-piece sprung brooches, internal chord**. Fe. L 22-50 mm. Context 10736, shrine area, (SF 1240), Context 11328, shrine area (SF 1748, 1777, 1812, 1919, 1971, 1966, 2056, 2087). Ph 4.
122. **One-piece sprung brooch, internal chord**. Formed from wire. Pin missing. Fe. L 54 mm. Context 11328, shrine area, SF 2091. Ph 4.
123. **One-piece sprung brooch, internal chord**. Formed from wire. Fe. L 44 mm. Context 11328, shrine area, SF 2105. Ph 4.
124-125. (*not illustrated*) **One-piece sprung brooches, internal chord**. Fe. L 34-62 mm. Context 11328, shrine area, SF 2112, 2119. Ph 4.
126. **One piece sprung brooch, internal chord**. Formed from wire. Fe. L 52 mm. Context 11328, shrine area, SF 2122. Ph 4.
127. **One piece sprung brooch, internal chord**. Formed from wire. Fe. L 60 mm. Context 11328, shrine area, SF 2149. Ph 4.
128-129. (*not illustrated*) **One-piece sprung brooches, internal chord**. Fe L 16-41 mm. Context 11328, shrine area, SF 2154, 2202. Ph 4.
130. **One-piece sprung brooch, internal chord**. Formed from wire. Fe. L 53 mm. Context 11328, shrine area, SF 2220. Ph 4.
131. (*not illustrated*) **One-piece sprung brooch, internal chord**. Formed from wire. Fe. L 57 mm. Context 11328, shrine area, SF 2223. Ph 4.
132. **One-piece sprung brooch, internal chord**. Small with tapering strip bow. Fe. L 43 mm. Context 11328, shrine area, SF 2245. Ph 4.
133-138. (*not illustrated*) **One-piece sprung brooches.** Fe. L 26-54 mm. Context 11328, shrine area, SF 2252, 2278, 2286, 2511, 2544, 2550. Ph 4.
139. **One-piece sprung brooch, internal chord**. Formed from strip or wire. Fe. L 56 mm. Context 11328, shrine area, SF 2642. Ph 4.
140. **One-piece sprung brooch, internal chord**. Formed from narrow strip. Fe. L 57 mm. Context 11328, shrine area, SF 2643. Ph 4.
141-155. (*not illustrated*) **One-piece sprung brooches**. Fe. L 22-57 mm. Context 11328, shrine area (SF 2645, 2663, 2694, 2695, 2696, 2712, 2733, 2856, 2898), Context 11627, colluvium underlying shrine (SF 1699), Context 11672, shrine area (SF 1769), Context 11779, shrine area (SF 1866), Context 12349, building 10820 (SF 1882), Context 12433, colluvium north of shrine area (SF 2458, 2562). Ph 4.

One-piece copper alloy bow brooches

156. **One-piece sprung brooch, internal chord**. Formed from wire. Cu alloy. L 51 mm. Context 11328, shrine area, SF 1578. Ph 4.
157. **Miniature One-piece sprung brooch, internal chord**. Formed from thin strip. Cu alloy. L 26 mm. Context 11771, shrine area, SF 1805. Ph 4.
158. **One-piece sprung brooch, internal chord**. Narrow oval section bow. Cu alloy. L 48 mm. Context 12801, colluvium south of shrine area, SF 3060. Ph 4.
159. **One-piece sprung brooch, uncertain chord**. Five coil spring and part of bow. Cu alloy. L 24 mm. Context 10736, shrine area, SF 1242. Ph 4.

La Tène III brooch

Brooch dated to the early to mid 1st century
160. **One-piece la Tène III brooch, internal chord**. Decorated ribbon-like bow. Cu alloy. L 60 mm. Context 10676, building 10880 and adjacent surface, SF 1267. Ph 5.

One-piece Colchester brooches

These date to the mid 1st century, and were being made in Britain before the Roman conquest.
161. (*not illustrated*) **One-piece Colchester brooch**. Cu alloy. L 63 mm. Context 10543, road surface, SF 978. Ph 4 to 5.
162. **One-piece Colchester brooch**. Spring with 6/7 coils and external chord. Cu alloy. L 76 mm. Context 10739, colluvium west of shrine area, SF 1246. Ph 4.
163. (*not illustrated*) **One-piece Colchester brooch**. Spring with outside chord. No pin. Cu alloy. L 59 mm. Context 12531, pit in building 10810, SF 1193. Ph 5.

Two-piece Colchester brooches

Two-piece Colchester brooches date to the mid 1st century. They are rare north of the Humber-Severn line, and tend to concentrate in the eastern part of the country.
164. **Two-piece Colchester brooch**, with ridged bow. The spring – with external chord – originally had 6 or 7 coils. Cu alloy. L 40 mm. Context 10543, road surface, SF 1633. Ph 4 to 5.
165. **Two-piece Colchester brooch**. Plain bow. The spring had an external chord and at least 6/7 coils. Cu alloy. L 40 mm. Context 10547, buildings 10800, 10810, 10820 and 10830, SF 1368. Ph 5.
166. **Two-piece Colchester brooch**. Bow has ridge with criss-cross pattern. Sprung pin with external chord. Cu alloy. L 39 mm. Context 10736, shine area, SF 1233. Ph 4.
167. **Two-piece Colchester brooch**. With grooves down bow and on wings. Sprung pin with 8 coils and external chord. Cu alloy. L 36 mm. Context 12433, colluvium north of shrine area, SF 2395. Ph 4.
168. **Two-piece Colchester brooch**. Sprung pin. Plain bow and catchplate. Cu alloy. L 50 mm. Context 12801, colluvium south of shrine area, SF 2979. Ph 4.
169. **Two-piece Colchester brooch**. Sprung pin. Six or eight coils with external chord. Plain catchplate and bow. Cu alloy. L 42 mm. Context 12801, colluvium south of shrine area, SF 3041. Ph 4.
170. **Miniature Two-piece Colchester brooch**. Sprung pin with external chord. Cu alloy. L 39 mm. Context 12801, colluvium south of shrine area, SF 3042. Ph 4.
171. (*not illustrated*) **Two-piece Colchester brooch**. Sprung pin with external chord. Cu alloy. L 55 mm. Context 12801, colluvium south of shrine area, SF 3052. Ph 4.
172. **Two-piece Colchester brooch**. Plain bow. Sprung pin. Cu alloy. L 43 mm. Context 12938, ditch 13000, SF 2232. Unph.

Polden Hill brooch

The distribution of Polden Hill brooches is concentrated on the West Midlands. The type appears to date to the late 1st century and early 2nd century.
173. **Polden Hill brooch**. Sprung pin with at least seven coils and external chord. Cu alloy. L 62 mm. Context 10739, colluvium west of shrine area, SF 1249. Ph 4.

Early hinged brooches

Aucissa brooches are found over a wide geographical range in Europe and occur in contexts ranging in date from the reign of Augustus to *c* AD 70. They occur on many military sites and are sometimes seen as especially linked with soldiers (Bayley and Butcher 2004, 151).

174. **Aucissa brooch**. Strongly curved flat cross-section bow with ribbed decoration. The plate at the head is decorated with triangles and inverted broad arrows. Cu alloy. L 54 mm. Context 12801, colluvium south of shrine area, SF 3050. Ph 4.

Strip Bow, Early hinged brooches

These seem to be a British product dating to the mid to late 1st century and are found mainly in central southern England (Bayley and Butcher 2004, 154).

175. (*not illustrated*) **Strip Bow, Early hinged**. Undecorated flat section tapering bow. No extant catch plate. Fe. L 39 mm, W 18 mm. Context 11328, shrine area, SF 2073. Ph 4.
176. **Strip Bow, Early hinged**. Undecorated flat section tapered bow. Fe. L 56 mm. Context 11328, shrine area, SF 2177. Ph 4.

Hod Hill brooches

Hod Hill brooches are common on the continent, and seem first to arrive in Britain after the Conquest. Their floruit is the mid 1st century. According to Bayley and Butcher (2004, 190 and fig. 167) they do not occur in any numbers north of the Humber-Severn line.

177. **Hod Hill brooch**. Gently arched bow with grooved decoration. Hinged pin. Cu alloy. L 52 mm. Context 10736, shrine area, SF 2356. Ph 4.
178. **Hod Hill brooch**. Arched bow with shallow grooves on upper portion, lower portion eroded. Two side lugs. Pin mount incomplete. Cu alloy. L 32 mm. Context 10769, robber pit 10768, SF 1272. Ph 4.
179. **Hod Hill brooch**. Hinged pin (missing). Almost flat bow with sharply angle head. Silvered or tinned. Cu alloy. L 53 mm. Context 11328, shrine area, SF 1645. Ph 4.

Colchester Derivatives

Headstud brooch

Headstud brooches are widely distributed in Britain and the earliest examples occur in Neronian and Flavian contexts. They continue to be produced until well into the 2nd century.

180. **Headstud brooch**. Small headstud and bow with ridged back. Possibly sprung. Cu alloy. L 50 mm. Context 12801, colluvium south of shrine area, SF 3121. Ph 4.

Dolphin brooch

A Colchester derivative brooch dating to the mid 1st century.

181. Possible **Colchester derivative** (Dolphin) brooch with hinged pin. Plain bow of circular section. Fe. L 53 mm, W 21 mm. Context 11328, shrine area, SF 2904. Ph 4.

T-shaped brooches

T-shaped brooches fall into two groups: Initial T-shaped brooches dated to the late 1st century and concentrated in the West Country, and Developed T-shaped brooches, which as the name implies are more decorated on the bow and occur in more diverse forms and range in date from the late 1st to 2nd century. Again their concentration is in the South West. The examples from Higham Ferrers appear to be similar in form and decoration to the initial T-shaped brooches (Bayley and Butcher 2004, fig. 127, T135 and T137). Initial T-shaped brooches are usually, but not exclusively fitted with hinged pins. The developed T-shaped brooches (ibid., fig. 138) are also mainly fitted with hinged pins. The examples from Higham Ferrers are fitted for the most part with hinged pins formed from wire twisted around an axle bar, rather than the usual cast form.

182. **T-shaped brooch**, with catchplate and much of bow missing, possibly cut away. Cu alloy. W 28 mm. Context 10502, colluvium alongside road, SF 916. Unphased.
183. **T-shaped brooch**, with catch plate and much of bow cut away. Raised triangular panel on the bow. Cu alloy. W 22 mm. Context 10502, road surface, SF 932. Unphased.
184. **T-shaped brooch**. Upper part of bow with raised ridge with slight notches. Moulding at foot. Cu alloy. L 44 mm. Context 11328, shrine area, SF 1508. Ph 4.
185. **T-shaped brooch**. Bow with notched raised crest. Cu alloy. L 44 mm. Context 11328, shrine area, SF 2251. Ph 4.
186. **T-shaped brooch**, with a raised triangular panel on the bow. Cu alloy. L 36 mm. Context 11328, shrine area, SF 2886. Ph 4.
187. **T-shaped brooch**, with a raised triangular panel on the bow. Cu alloy. L 41 mm. Context 11485, building 11350, SF 1650. Ph 4.
188. (*not illustrated*) **T-shaped brooch**, with a raised triangular panel on the bow. Broken or cut across the triangular panel. Cu alloy. L 22 mm. Context 11600, ditch 11320, SF 1677. Unphased.
189. **T-shaped brooch**, with raised triangular panel on upper part of bow, and raised moulding below. The bow has been slightly bent, and the brooch pin detached and wrapped around the bow. Deliberately damaged. Cu alloy. L 37 mm. Context 11779, shrine area, SF 1871. Ph 4.
190. **T-shaped brooch**, with raised triangle at the top of the bow. The brooch has been straightened out. Deliberately damaged. Cu alloy. L 43 mm. Context 12327, building 10820, SF 2360. Ph 5.
191. **T-shaped brooch**, with raised triangle motif on the upper part of the bow. Cu alloy. L 40 mm. Context 12801, colluvium south of shrine area, SF 3064. Ph 4.
192. **T-shaped brooch**. Grooved decoration on the bow. Bent and flattened bow and twisted catchplate. Deliberately damaged? Cu alloy. L 42 mm. Context 12853, surface SW of shrine, SF 3081. Ph 4.

Fantail brooch

This type dates to the 1st century (Hattatt 1987, no. 780).

193. **Fantail brooch**, with plain fantail and moulded bow. Hinged pin. Cu alloy. L 48 mm. Context 12801, colluvium south of shrine area, SF 3122. Ph 4.

Trumpet-headed brooches

194. **Trumpet headed brooch**. Small brooch with trumpet head, small head loop and wing-like plates decorated with enamel. Cu alloy. L 33 mm. Context 11528, colluvium beneath buildings 10860 and 11370, SF 1651. Ph 4.
195. **Trumpet headed brooch**. Plain head, broken and encrusted, with head-loop. Sprung pin. Cu alloy. L 53 mm. Context 12801, colluvium south of shrine area, SF 3054. Ph 4.

Plain trumpet-headed brooch of late 1st- to early 2nd-century date.

Fig. 5.33 Personal – brooches

Knee Brooches

Knee brooches are a late form dating to the late 2nd and 3rd century. Widely distributed, they are more common in the north of Britain.

196. **Knee brooch**, eroded. S-shaped bow with flat cross-section, open half cylinder head and transverse catchplate. Pin and spring missing. Cu alloy. L 32 mm. Context 10500, topsoil, SF 1166. Unphased.
197. **Knee brooch**, with S-shaped bow of hollow curved cross-section, with half cylinder head and sprung pin. Cu alloy. L 31 mm. Context 11331, behind building 10840, SF 1453. Ph 5.

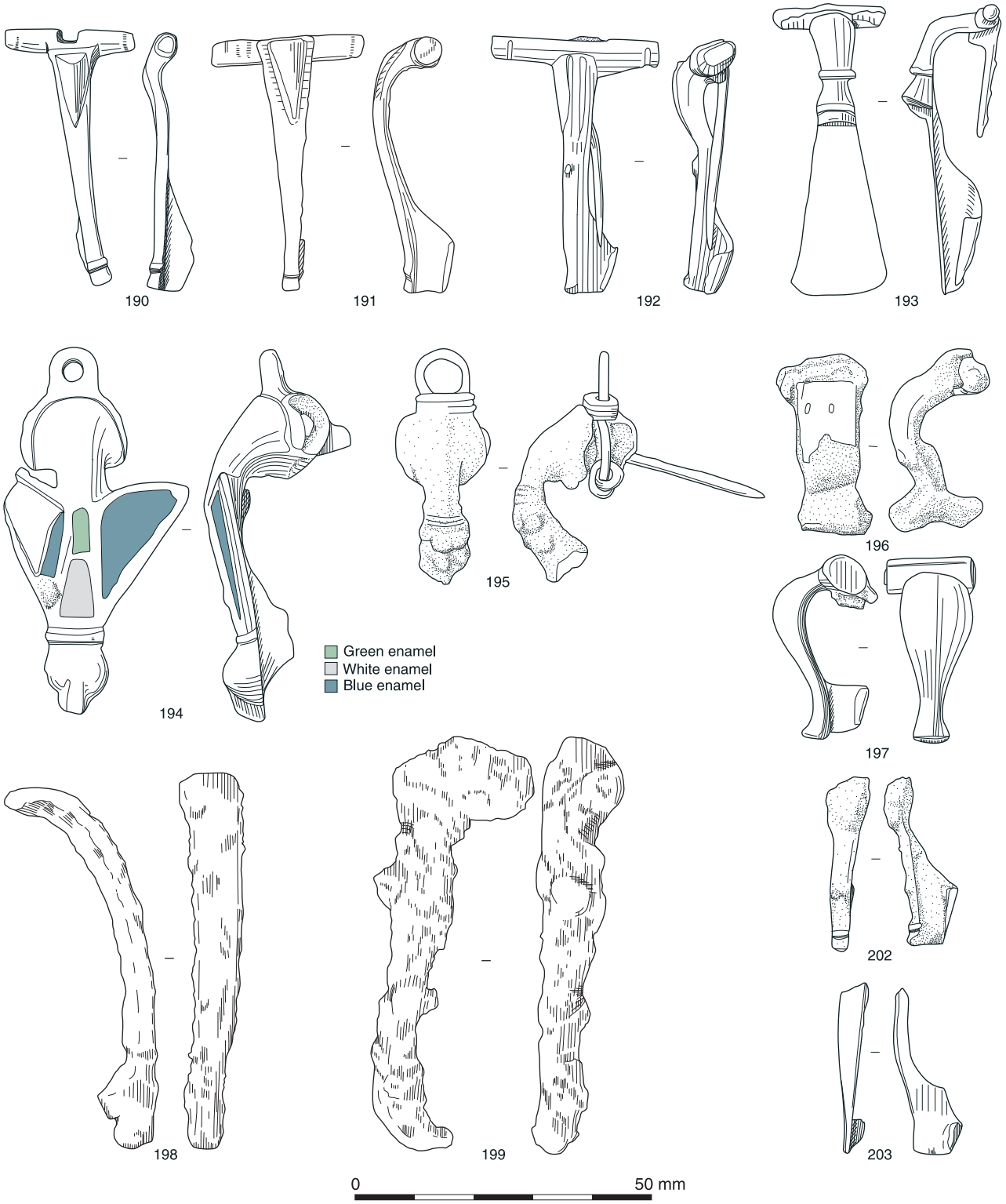


Fig. 5.34 Personal – brooches

Brooch fragments

198. **Bow fragment**, of tapering rectangular section, with plain catchplate. No pin or attachment. Fe. L 63 mm. Context 10736, shrine area, SF 1239. Ph 4.
199. **Bow and spring fragment** with at least 4 coils and originally at least 7 coils. Fe. L 70 mm. Context 12801, colluvium south of shrine area, SF 3047. Ph 4.
200. (*not illustrated*) **Catchplate fragment.** Decorative foot moulding, catchplate and part of bow, deliberately rolled and straightened. Cu alloy. L 56 mm. Context 10500, topsoil, SF 1190. Unphased.
201. (*not illustrated*) **Catchplate fragment**. Plain, with no decorative foot. Cu alloy. L 20 mm. Context 11328, shrine area, SF 2969. Ph 4.

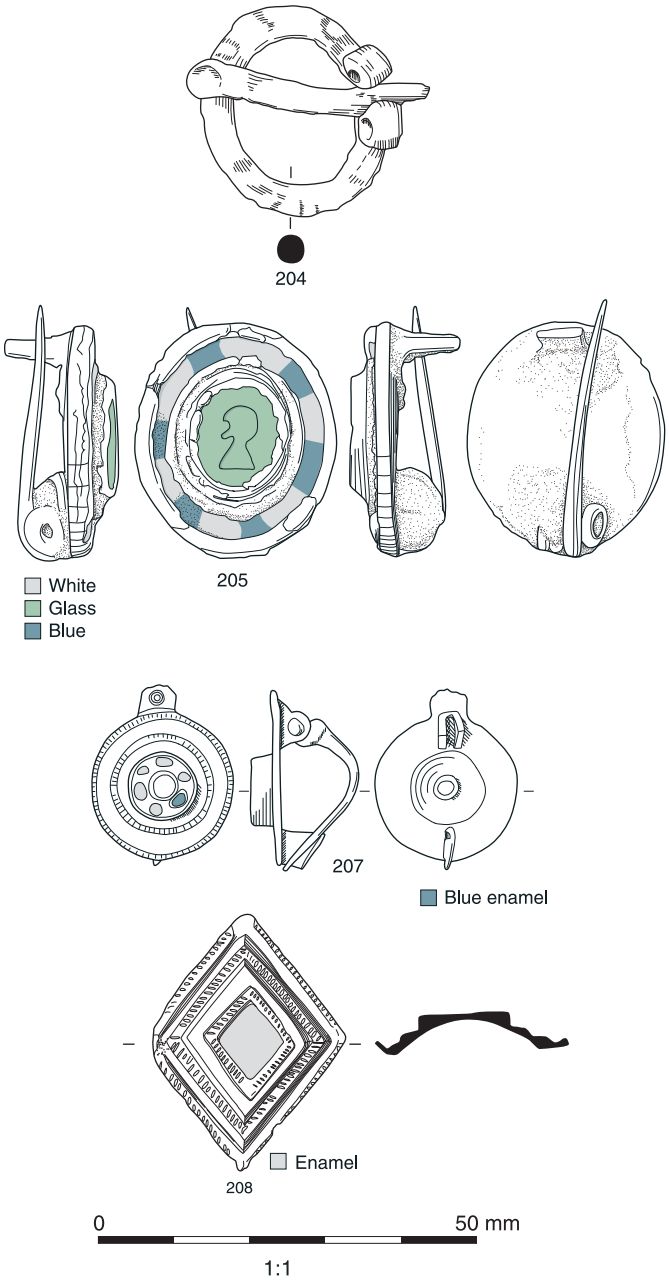


Fig. 5.35 Personal – brooches

202. **Catchplate fragment** with decorative foot moulding and part of a curved bow. Cu alloy. L 28 mm. Context 12801, colluvium south of shrine area, SF 3128. Ph 4.
203. **Catchplate fragment**. Plain. Cu alloy. L 28 mm. Context 12801, colluvium south of shrine area, SF 3132. Ph 4.

Penannular brooch

204. **Penannular brooch**. Fowler type C. Fe. L 27 mm, D 25 mm. Context 12434, colluvium west of shrine, SF 2631. Unph.

Plate brooches

205. **Oval disc brooch** with possible intaglio set at its centre. The outer border is ornamented with ivory coloured enamel. Surrounding band of longer white and shorter blue segments. Central setting impressed in intaglio with a male head left. Sprung pin with internal chord. Cu alloy. L 34 mm, W 27 mm, Central setting 15 mm x 11 mm. Context 10736, shrine area, SF 1330. Ph 4.
206. (*not illustrated*) **Composite plate brooch**, with crescent moon (white enamel inlay) and two ?stars (with central circular setting with white enamel). Cu alloy. L 44 mm. Context 11328, shrine area, SF 1260. Ph 4.
207. **Small circular plate brooch**, with moulded grooves/ridges around outer plate. The raised central section has a central hole – for the attachment of a stud? – surrounded by 6 small enamel spots. The hinged pin and catchplate are still in place. Cu alloy. L 25 mm, W 19 mm. Context 11672, shrine area, SF 1723. Ph 4.
208. **Lozenge shaped plate brooch**. stepped profile, with chased edges and enamel in central diamond setting. Hollow underside. Pin missing. Cu alloy. L 35 mm, W 27 mm. Context 10547, buildings 10800, 10810, 10820 and 10830, SF 1107. Ph 5.

Personal – other jewellery (Figs 5.36-9)

Armlets

Armlets are generally late in date, often dating to the 3rd or 4th centuries. There are three broad early copper alloy forms from Higham Ferrers (**Cat. Nos 210-212**). The remaining examples are late in date.

Shale

209. **Armlet fragment** of circular section with cable pattern on outer face. Shale. L 38 mm. Context 10506, ditch 10700, SF 2965. Ph 5.

Copper alloy

210. **Broad armlet fragment**. Plain terminal, the body of the armlet is decorated with fine parallel lines and one milled strip. Silvered or tinned Cu alloy. L 42 mm. Context 11328, shrine area, SF 1575, Ph 4.
211. **Broad armlet fragment**. Fragment with parallel lines of chased decoration. Deliberately rolled. Cu alloy. W 18 mm. Context 11328, shrine area, SF 1598. Ph 4.
212. **Broad armlet fragment**. Simple band with embossed central rib, folded and flattened. Cu alloy. L 26 mm, W 11 mm. Context 10500, topsoil, SF 941. Unph.
213. **Narrow flat armlet**. Four fragments. Two fragments join and form a broadened and rounded terminal, a

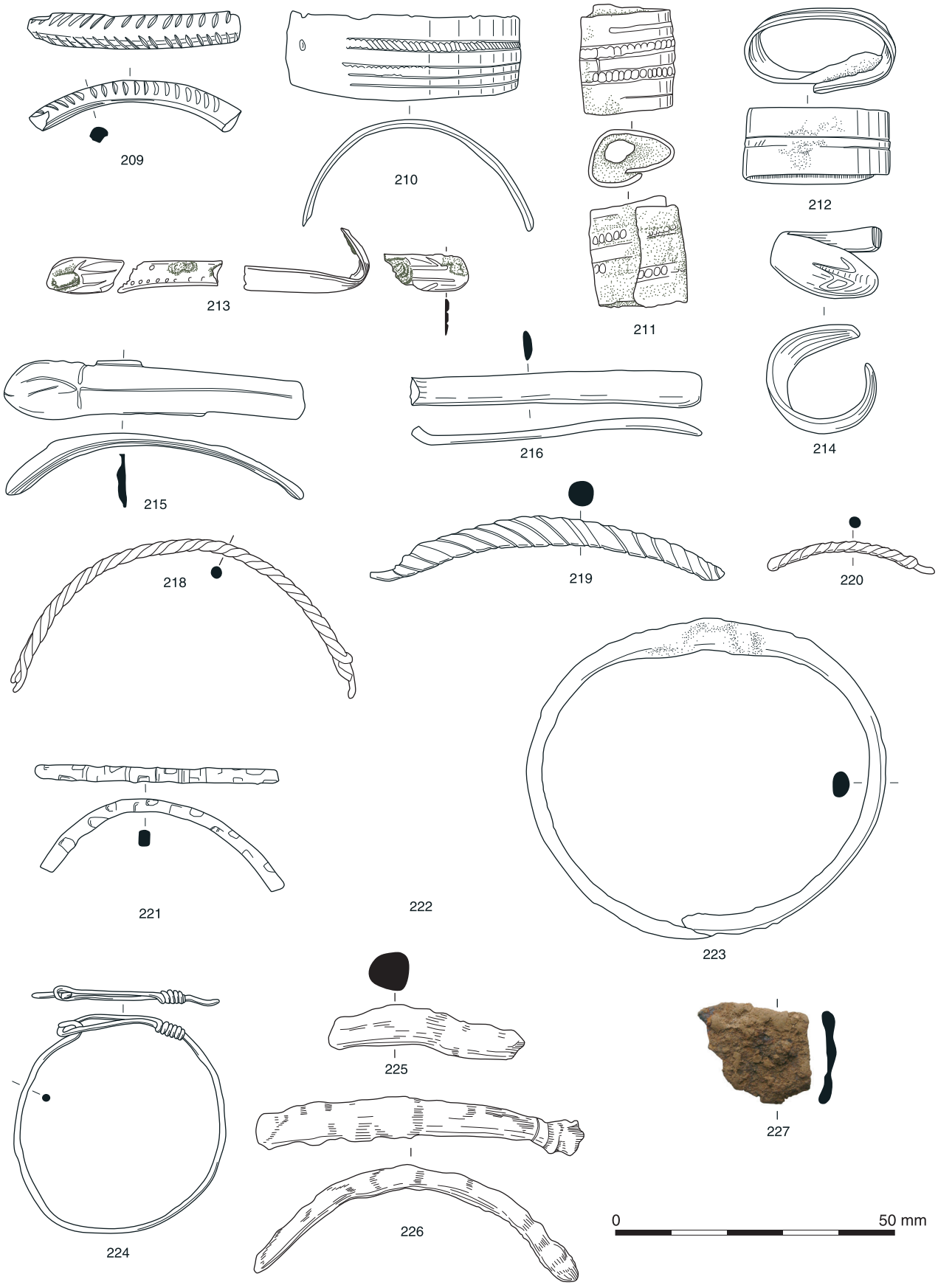


Fig. 5.36 Personal – other jewellery

third fragment forms the second terminal. The terminals are decorated with herring bone, or feather, pattern. The band has a row of dots evenly spaced along one edge. The fourth fragment is plain and may not be part of the armlet. Cu alloy. L 29 mm. Context 10500, topsoil, SF 1215. Unphased.

214. **Narrow flat armlet with snake's head terminal**. Cut and rolled. Cu alloy. L 19 mm. Context 12801, colluvium south of shrine area, SF 3151. Ph 4.
215. **Narrow flat armlet fragment**, comprising expanded round ended plain terminal and narrow band decorated with a central groove. Cu alloy. L 54 mm. Context 11526, well 12890, SF 1659. Ph 3.
216. **Narrow flat armlet fragment**. Strip of lentoidal section, widening slightly at one end to form a rounded plain terminal. Undecorated. Cu alloy. L 52 mm. Context 10739, colluvium west of shrine area, SF 1247. Ph 4
217. (*not illustrated*) **Narrow flat armlet fragment**, of flat oval section, with expanded terminal. Undecorated. Similar to **Cat. No. 216**. Cu alloy. L 35 mm. Context 12801, colluvium south of shrine area, SF 3152. Ph 4.
218. **Cable pattern armlet fragment**, formed from two lengths of thin wire twisted tightly together. At one end is a small fragment of wire, which circles the cable pattern, and which formed part of the catch. Cu alloy. L 62 mm. Context 11731, ditch 11729, SF 1788. Unphased.
219. **Cable pattern armlet fragment**, formed from two wires closely twisted together to form a cable pattern. Remains of possible hook at one end. Cu alloy. L 64 mm. Context 12141, pit 12142, SF 2231. Ph 5.
220. **Cable pattern armlet fragment**, formed from two wires tightly twisted together. Cu alloy. L 30 mm. Context 12835, building 10840, SF 3105. Ph 5.
221. **Decorated armlet fragment**, of circular section, with alternating opposed bevelled notches. Cu alloy. L 44 mm. Context 12836, building 10840, SF 3163. Ph 5.
222. **Cast decorated armlet terminal**, with cast mouldings, flat on the inner face. The end is squared off. Highly polished fragment. Cu alloy. L 17 mm. Context 11328, shrine area, SF 2102. Ph 4.
223. **Plain armlet** of oval section with flattened inner face. The band tapers to ends that overlap, but may originally have joined. Cu alloy. D 64 x 56 mm. Context 12727, grave 12725, SF 2934. Ph 4.
224. **Plain wire armlet**. The thin wire is hooked at one end, while the other end is formed into a long thin loop secured by twisting the wire around itself several times. Cu alloy. D 44 x 38 mm. Context 11328, shrine area, SF 2692. Ph 4.

Iron armlets

225. **Plain armlet fragment** comprising loop of lozenge section, with a small out curved terminal. Fe. L 69 mm. Context 11328, shrine area, SF 1762. Ph 4.
226. **Plain armlet fragment** of lentoidal section, with small expanded terminal. Fe. L 58 mm. Context 10736, shrine area, SF 1241. Ph 4.
227. **Plain armlet** of oval section, tapering to pointed terminals. Fe. D 62 x 50 mm. Context 11762, building 10870, SF 1772. Unphased.
228. (*not illustrated*) **Plain armlet** with terminal knobs.

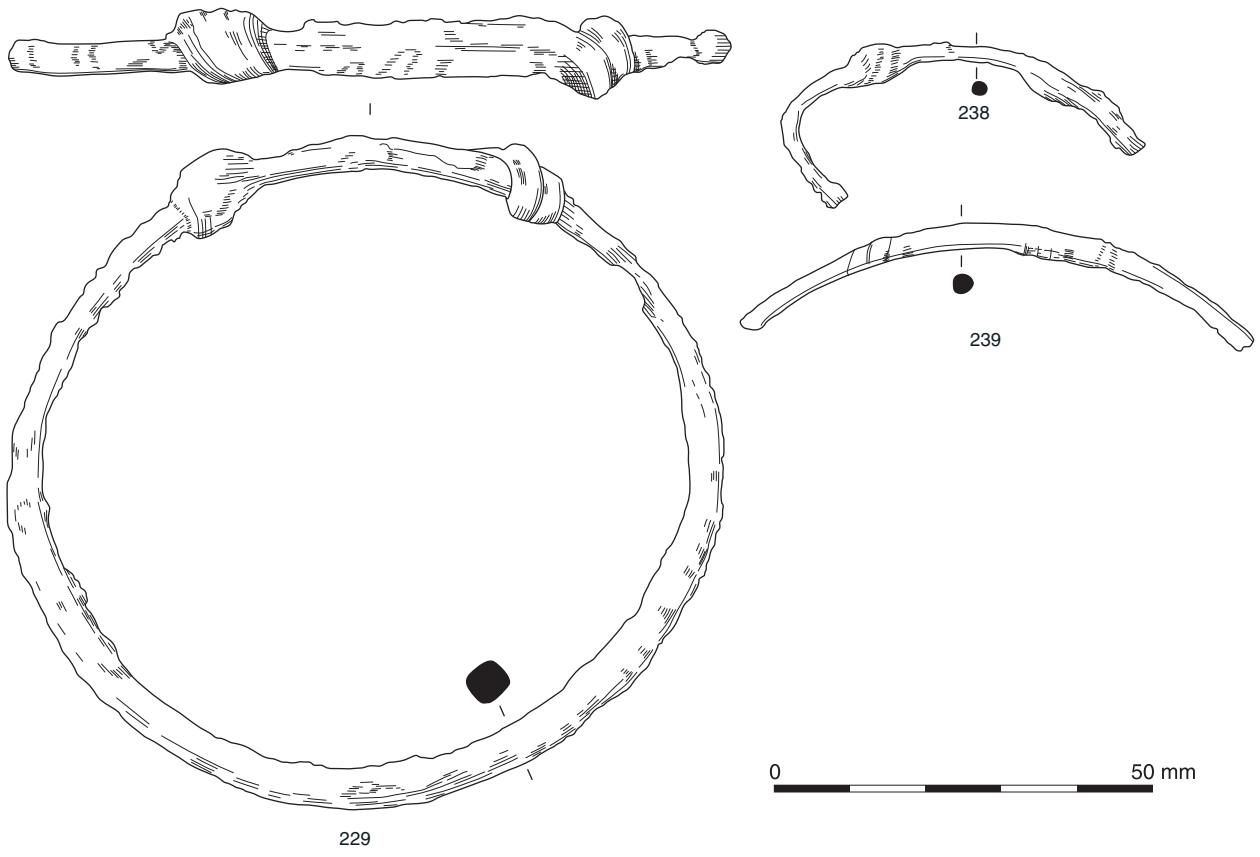


Fig. 5.37 Personal – other jewellery

Fe. D 85 x 62 mm. Context 12434, colluvium west of shrine, SF 2628. Unphased.

229. **Armlet**. Complete armlet of lozenge cross-section, thicker on one side. The ends are overlapped and formed into triple-looped slides to form an adjustable section. Fe. D 95 x 89 mm. Context 11328, shrine area, SF 1970. Ph 4.

230-237. (*not illustrated*) **Armlet fragments.** Fe. L 16-49 mm. Context 11328, shrine area (SF 2164, 1763, 2088, 2926, 2153), Context 12433, colluvium north of the shrine area (SF 2565), Context 12434, colluvium west of the shrine area (SF 2874), Context 11626, shrine area (SF 1708). Ph 4.

238. **Wire armlet fragment**, with wire slides visible on the x-ray plate. Fe. L 47 mm. Context 11627, colluvium underlying shrine, SF 2942. Ph 4.

239. **Armlet fragment** comprising curved length of wire with decorative bindings or loops attached (visible on x-ray but not to the naked eye). The decorative effect of the bindings is to give the appearance of opposed triangles or zigzags. Fe. L 67 mm. Context, 11328, shrine area, SF 2648. Ph 4.

240. (*not illustrated*) **Armlet fragment**. Curved wire fragment with decorative tubular bindings of non-ferrous metal. Fe. L 50 mm. Context, 11626, shrine area, SF 1690. Ph 4.

Finger rings (see Table 5.24 above) (Fig. 5.38)

The finger rings from Higham Ferrers can be divided into two broad groups, decorative rings, including those with intaglios and bezels, on one hand, and plain bands, sometimes with a little decoration, on the other. Only one possible ring – of silver wire – is made in any metal other than iron or copper alloy. Copper alloy rings dominate the finger ring assemblage. The entire ring assemblage is summarised in Table 5.24 above. Many of the plain rings are very similar, and only a small representative selection has been illustrated and described in the catalogue. All the trinket rings are catalogued; most have been studied by Martin Henig and his report follows:

Decorative rings by Martin Henig

Dates are ascribed to the rings on the basis of ring type and stylistic comparisons. On superficial examination the iron rings, which approximate to Henig (1978) ring types II or III, might be assigned to the late 1st or earlier 2nd centuries, but it is now clear that in iron at any rate – as shown for example by the drain deposit in the Fortress Baths at Caerleon – such rings continued to be made and used through the 2nd century and into the 3rd century, and this dating is in full agreement with the copper alloy rings listed here. The rings, indeed, comprise a fairly consistent group of the 2nd-3rd centuries. None is of precious metal and such trinket rings will have belonged for the most part to people in the lower ranks of society. A few of the rings contain intaglios (only one a cut stone, very simply engraved) showing that the use of signet rings had trickled down to the lower ranks of society.

Rings with intaglios:

241. **Iron finger ring** with flattened hoop, expanding towards the bezel, Type III/V which contains an almost circular setting, bearing the intaglio device of *Bonus Eventus*, standing to the front and facing right. In his left hand he holds a patera and in his right two ears of corn. External D 24 mm, W across hoop ranges from 3 mm to 13 mm, bezel inset 10 mm. Context 12434, colluvium west of shrine area, SF 2607. Ph. 4. For *Bonus Eventus* see Henig 1978, nos 203-19, pls vv, viii. Mid 2nd century or later.

242. **Iron finger ring**, section of circular hoop of which half survives, expanding towards the bezel which is set with a small, slightly convex cornelian intaglio evidently depicting a flower. D of hoop *c* 20 mm, W at bezel 8 mm, at narrowest remaining point 3 mm, intaglio 6 mm x 4 mm. Context 11328, shrine area, SF 1987. Ph 4. 2nd-3rd century.

243. **Copper alloy finger ring** with flattened hoop, expanding towards the bezel, ring type XII, which has an oval setting of nicolo glass bearing in intaglio the device of a running hound(?) in profile left. External D 20.5 mm, W across hoop ranging from 1.25 mm to 10 mm, intaglio 9 mm x 7 mm. Context 12473, layer sealing ditch 12471, SF 2456. Ph 5. 3rd century.

244. **Copper alloy finger ring** with pinched necking and everted shoulders. The bezel, rilled on the exterior, contains an intaglio of deep blue glass depicting a standing male figure. This is a good example of a 'Romano-British imitation' intaglio. D of ring across shoulders 23 mm, W ranges from 2 mm across narrowest point to 13 mm across bezel, intaglio D 9 mm. Context 10733, grave 10740, SF 1226. Unphased. For Romano-British imitations see Henig 1978, nos 539-78, pls xvii, xviii. For the ring see Wheeler 1930, 100-101, fig. 30 no. 10. 3rd century.

Rings without intaglios – a). iron

245. **Iron finger ring**. Incomplete hoop, and narrow bezel. D 15 mm. Context 11328, shrine area, SF 1767. Ph 4. 2nd-3rd century.

246. **Iron finger ring**. Incomplete hoop and ovoid bezel (11 mm x 8 mm). D 27 mm. Context 11328, shrine area, SF 1947. Ph 4. 2nd-3rd century.

247. **Iron finger ring** with narrow hoop of which less than half remains expanding towards bezel which retains oval seating for gem or other inset. D 25 mm, bezel 12 mm x 10 mm. Context 11328, shrine area, SF 1966. Ph 4. 2nd-3rd century.

248. **Iron finger ring** with narrow hoop (of which less than half survives), expanding markedly towards the bezel. D 20 mm, W across bezel 7 mm. Context 11328, shrine area, SF 2014. Ph 4. Henig ring type II, to which a 1st /2nd century date is assigned but see Zienkiewicz 1986, 142-3, nos 5-8 showing that such rings were extant through the 2nd century and into the 3rd century.

249. **Iron finger ring**, expanding towards bezel which once contained an intaglio or other setting. Only a small part of the hoop remains. D 20 mm, W across bezel 8 mm, narrowest point 2 mm, seating for intaglio 8 x 6 mm. Context 11328, shrine area, SF 2172. Ph 4. The type approximates to Henig ring type II.

250. **Iron finger ring** with ovoid bezel with setting missing. Ring D 16 mm, bezel 8 mm x 5 mm. Context 11328, shrine area, SF 2257. Ph 4. 2nd-3rd century.

251. **Iron finger ring** with somewhat narrow hoop. Flattened rectangular at top (10 mm x 5 mm), no trace of setting. D 17 mm. Context 11328, shrine area, SF 2292. Ph 4. Cf Zienkiewicz 1986, 142-3, nos 9 and 10. 2nd-3rd century.

252. **Iron finger ring**, broad flattened hoop expanding towards the bezel. D 18 mm, W across bezel 11 mm,

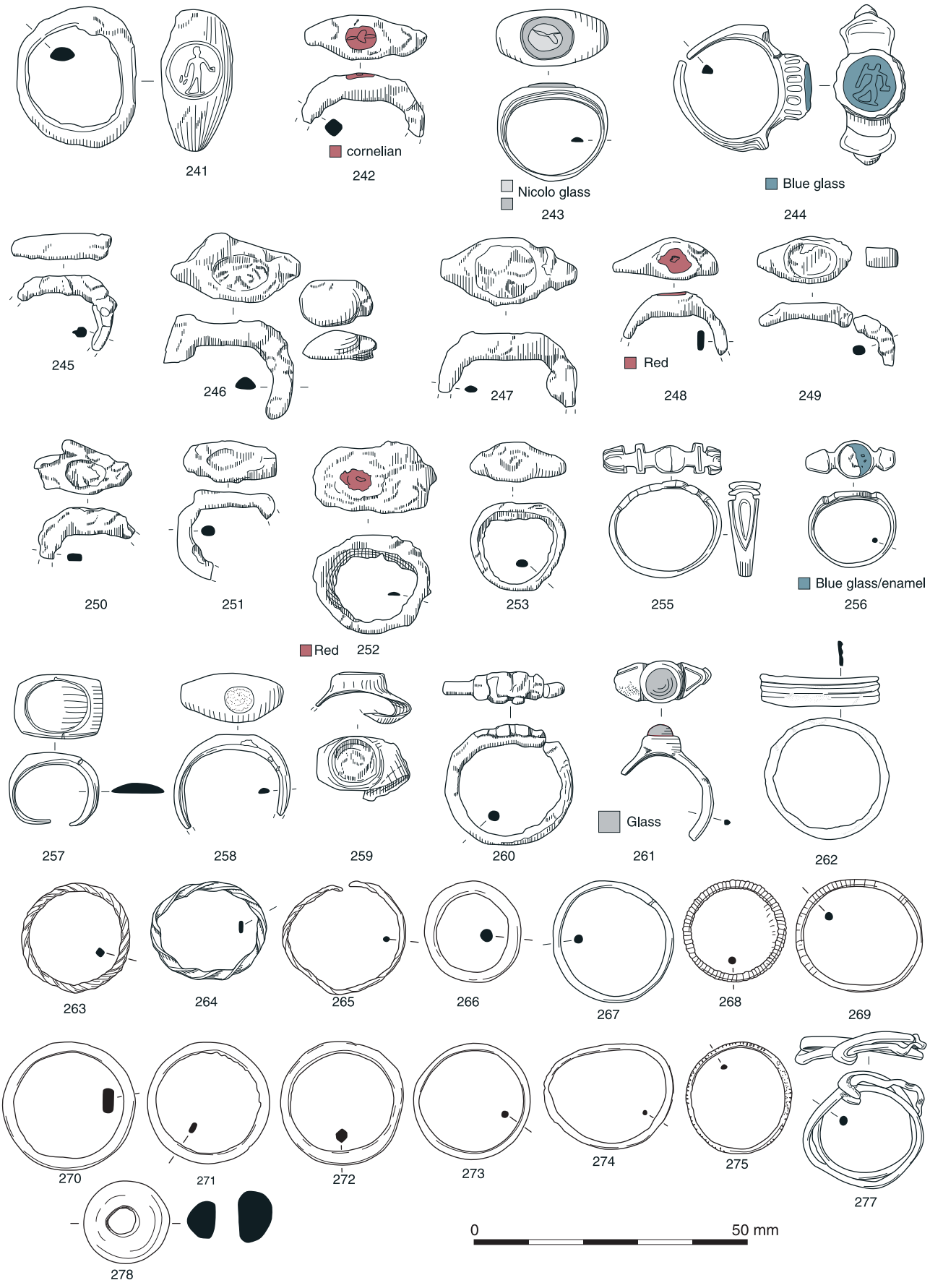


Fig. 5.38 Personal – other jewellery

W across narrowest point of hoop 3.5 mm. Context 11328, shrine area, SF 2459. Ph 4. Ring type XI, 3rd century.

253. **Iron finger ring**, expanding towards bezel. Hoop has somewhat D-shaped section. D across shoulders 17 mm, W at narrowest point 1 mm, W across bezel 7 mm. Context 12328, ditch 13010, SF 2766. Ph 5. Ring type III, but probably 2nd-3rd century.
254. (*not illustrated*) **Iron finger ring fragment** with hoop expanded for form a narrow oval bezel. The bezel has laminated at an angle. D 23 mm. Context 11328, shrine area, SF 2258. Ph 4.

Rings without intaglios – b) copper alloy

255. **Copper alloy finger ring** with flattened hoop, expanding to the shoulders which are indented on each side. Above, the neck is pinched with cross-bars and there is a circular bezel which may once have had a small box-setting with 'jewel' attached. D 21 mm, W across bezel 4mm, W at narrowest point 2 mm. Context 10547, buildings 10800, 10810, 10820 and 10830, SF 1323. Ph 5. Cf Henig 1993a, 171 no. 4, fig. 132. 3rd century.
256. **Copper alloy finger ring**, narrow hoop but expanding to the shoulders; pinched neck and circular bezel containing (broken) blue glass or enamel inset. D 17 mm, W across shoulders 4 mm, at narrowest point on hoop 1 mm, bezel 6 mm x 6 mm. Context 11328, shrine area, SF 1554. Ph 4. Cf Neal 1974,137 fig 60 no.115, but with different shoulders. 3rd century.
257. **Copper alloy finger ring** with broad flattened hoop expanding towards the bezel. Slightly D-shaped section. Part of hoop is lacking. Oval setting, now empty, formerly contained glass or stone setting or enamel. D 16 mm, W across bezel 12 mm, across narrowest remaining point 2.5 mm, setting 12 mm x 10 mm. Context 12433, colluvium north of shrine area, SF 2364. Ph 4. Ring type XI/XII. 3rd century.
258. **Copper alloy finger ring** with hoop of D-shaped section expanding towards the bezel which contains a small circular setting, filled with decayed enamel. Only half the hoop remains. D 21 mm, W across bezel 9 mm, across narrowest surviving point on hoop 2 mm, enamel inset 5 mm x 5 mm. Context 12433, colluvium north of shrine area, SF 2380. Ph 4. Ring type approximates to type XII. 3rd century.
259. **Copper alloy finger ring** with flattened hoop. Expanding slightly towards the bezel. Only part of hoop remains. Its circular raised bezel once contained a setting. W across bezel 11 mm, across narrowest remaining part of hoop 2mm, bezel 9 mm x 9 mm. Context 12836, building 10840, SF 3077. Ph 5. Ring type approximates to type XII. 3rd century.
260. **Copper alloy finger ring**, decayed. Circular hoop to which was applied a flat rectangular bezel, divided it seems into segments by grooving. D 23 mm, bezel 12 mm x 4 mm, W of hoop 1.5 mm. Context 12503, building 10820, SF 2533. Ph 5.
261. **Copper alloy ring** with much of hoop missing. It has decorated triangular shoulders, and a raised bezel with a small round dark blue ?glass setting. D 22 mm. Context 12543, building 10820, SF 2479. Ph 5.

Simple finger rings: Plain finger ring with grooved decoration

262. **Finger ring** of rectangular cross-section, with parallel grooves on outer face. Cast. Cu alloy. D 22 mm. Context 11344, building 10880, SF 1631. Ph 5.

Simple finger rings: Barley sugar twist

263. **Finger ring** decorated with a barley sugar twist. Well-preserved with little sign of wear. Cu alloy. D 20 mm. Context 11328, shrine area, SF 1561. Ph 4.
264. **Finger ring** decorated with a barley sugar twist. Cu alloy. D 21 mm x 18 mm. Context 11328, shrine area, SF 2064. Ph 4.
265. **Finger ring**, worn and distorted. Formed from thin strip with a barley sugar twist. Cu alloy. D 22 mm. Context 11328, shrine area, SF 1557. Ph 4.

Simple finger rings: Plain circular section

Twenty five examples were recovered (Table 5.24) mainly from the shrine deposits and associated contexts.

266. **Small finger ring** of circular section, eroded. Cu alloy. D 19 mm x 18 mm. Context 10676, building 10880 and adjacent surface, SF 1270. Ph 5.
267. **Finger ring** of circular section, slightly eroded. Cu alloy. D 22 mm. Context 11328, shrine area, SF 1546. Ph 4.

Simple finger rings: Decorated circular section

Four examples were found, all recovered from the shrine deposit context 11328.

268. **Finger ring** of circular cross section, with pattern of closely set radial lines around band. Cu alloy. D 19 mm. Context 11328, shrine area, SF 1481. Ph 4.
269. **Finger ring** of circular section, with slight radial grooving. Well-preserved, possibly worn. Cu alloy. D 23 mm x 21.5 mm. Context 11328, shrine area, SF 1506. Ph 4.

Simple finger rings: Flat oval or rectangular section

These rings are flat and the cross sections of the hoop are in the plane of the ring, and not at right angles to it. Thirty examples were recovered, including 24 from the shrine deposits.

270. **Finger ring** of flattened oval section. Cu alloy. D 24 mm. Context 10543, road surface, SF 1116. Ph 4 to 5.
271. **Finger ring** of rectangular section, with pattern of fine lines on faces. Cu alloy. D 22 mm. Context 11328, shrine area, SF 1476. Ph 4.
272. **Finger ring** of sub-rectangular cross-section. Well-preserved with little evidence of wear. Cu alloy. Context 11328, shrine area, SF 1494. Ph 4.

Simple finger rings: Sub-square or sub- rectangular section

Four examples were found (Table 5.24).

273. **Finger ring**, thin, sub square section, slightly eroded. Cu alloy. D 21 mm. Context 10543, road surface, SF 991. Ph 4 to 5.
274. **Finger ring** of sub-rectangular cross section. Cu alloy. D 21 mm. Context 10736, shrine area, SF 1235. Ph 4.

Simple finger ring: Triangular section

A single example (SF 1582) was found. It came from the shrine deposit, and has not been illustrated.

Simple finger rings: Hoops formed from strips of oval or rectangular section

Three examples (SFs 1458, 1555 and 1749) were recovered, two from the shrine deposit (SFs 1555 and 1749) and the third from the settlement. None is illustrated.

Simple finger rings: Thin patterned

275. **Finger ring**, thin, oval section, with pattern of parallel lines on external face. Cu alloy. D 20 mm x

19 mm. Context 10543, road surface, SF 1039. Ph 4-5.

276. (*not illustrated*) **Finger ring**, thin on one side – possibly due to wear – possibly with slight cable pattern on outer edge. Cu alloy. D 23.5 mm. Context 10736, shrine area, SF 1235. Ph 4

Simple rings: wire

Six simple rings formed from wire hoops were found. None has been illustrated. One silver example (SF 1621) came from the shrine deposit together with three copper alloy examples (SFs 1832, 1835 and 2709). Two copper alloy examples (SFs 2449 and 2621) came from contexts associated with the shrine.

Simple finger rings: Rings formed from twisted wire

277. **Possible finger ring** formed from twisted and rolled wire. Could be a bracelet fragment. Cu alloy. D 22 mm. Context 11328, shrine area, SF 2042. Ph 4.

Bead (Fig. 5.38)

278. **Annular bead** of pewter with off-centre hole. Pb. D 15.5 mm. Context 11328, shrine area, SF 1536, Ph 4.

Hairpins (Fig. 5.39)

Copper alloy

See Cool 1990 for the typology of copper alloy hairpins.

279. **Hairpin** with tapering stem and decorated head. The latter comprises an inverted conical knob with a grooved top. Cu alloy. L 95 mm. Area G, Context 8047, well 8032, SF 660. RB. No precise parallel known. It does not fit readily into any of groups defined by Cool and has to be assigned to her miscellaneous multi-grooved category, Group 25. (Cool 1990, 170).
280. **Hairpin** with rolled or coiled head. Cu alloy. L 117 mm. Context 10744, ditch 12970, SF 1269. Ph 5.
281. (*not illustrated*) **Hairpin fragment**, with large domed head. Cool Group 1 domed knob. Cu alloy. L 20 mm. Context 10543, road surface, SF 1036. Ph 4 to 5.
282. **Hairpin fragment**, with onion-shaped head with plain narrow cordon below. Cool Group 2. Cu alloy. L 16.5 mm. Context 10500, topsoil, SF 942. Unphased.
283. **Hairpin** with small baluster head and cordon, of no greater diameter than stem. Cool Group 2. Cu alloy. L 108 mm, D 1.5 mm. Context 11328, shrine area, SF 1623. Ph 4.
284. **Hairpin fragment** with neatly formed head with pointed top, baluster and reel. Cool Group 3. Cu alloy. L 44 mm. Context 12434, colluvium west of shrine, SF 2844. Unph.
285. **Hairpin fragment**, broken near point, with clear bend. Possibly a deliberate break. Small baluster head with two plain cordons. Cool Group 3. Cu alloy. L 80 mm. Context 12801, colluvium south of shrine area, SF 3061. Ph 4.
286. **Hairpin** with broad flat button-like head with slight domed top, and plain cordon below. Cool Group 6 button and cordon. Cu alloy. L 90 mm. Context 12801, colluvium south of shrine area, SF 3058, Ph 4.
287. **Hairpin fragment**, with drum-like top with mouldings below. Uncertain moulded form. Cu alloy. L 63 mm. Context 12585, between buildings 10820 and 10830, SF 2772, Ph 5.
288. **Hairpin fragment** with moulded head. Uncertain moulded form, Cu alloy. L 67 mm. Context 12801, colluvium south of shrine area, SF 3117. Ph 4.

Anglo-Saxon form

289. (*not illustrated*) **Hairpin** with tapering stem and knob with writhen decoration, with slight cordons below. Anglo-Saxon type. Cu alloy. L 96 mm. Context 10738, shrine area, SF 1302. Ph 5.

Bone

The types of bone hairpins follow Crummy 1979 and 1983.

290. **Hairpin** with three crudely cut mouldings or cordons below a short point at the head. Crummy type 2. Bone. L 104 mm. Context 11262, trample south of building 10810, SF 1400. Ph 5.
291. **Hairpin**, possibly complete. Crudely made with cut mouldings or cordons at the head and a slightly twisted stem of sub-rectangular to rectangular section. As it stands the pin is short, but appears to be complete. It may have been longer but roughly reshaped after a break. Crummy type 2. Bone. L 65 mm. Context 11318, hearth 11316 within building 10890, SF 1475. Ph 4.
292. **Hairpin fragment**, with crudely cut moulding below roughly pointed head. Crummy type 2. Bone. L 62 mm. Context 11328, shrine area, SF 2254. Ph 4.
293. **Hairpin fragment**, with crudely cut moulding or cordon below pointed head. The stem is broken and partially split, suggesting that the break may have been deliberate. Crummy type 2. Bone. L 78 mm. Context 11328, shrine area, SF 2262. Ph 4.
294. **Hairpin**, with crudely cut cordon below the head, and with a point which appears to have been re-sharpened with a knife. Crummy type 2. Bone. L 77 mm. Context 11328, shrine area, SF 2736. Ph 4.
295. **Hairpin fragment**, with knife cut moulding below pointed head. Crummy type 2. Bone. L 25 mm. Context 11328, shrine area, SF 2775. Ph 4.
296. **Hairpin fragment**, with knife cut small moulding below conical or pointed head. Crummy type 2. Bone. L 38 mm. Context 11328, shrine area, SF 2913. Ph 4.
297. **Hairpin**, complete, with pointed head and single neatly cut moulding. Crummy type 2. Bone. L 120 mm. Context 11328, shrine area, SF 2948. Ph 4.
298. (*not illustrated*) **Hairpin fragment** with conical head and single knife cut moulding below. Crummy type 2. Bone. L 61 mm. Context 11430, ditch 11750, SF 1607. Ph 4.
299. Possible **hairpin fragment** comprising pointed head with thin moulding and part of thick tapering stem. Crummy type 2. Bone. L 39 mm. Context 11771, shrine area, SF 1834. Ph 4.
300. (*not illustrated*) **Hairpin** with swelling stem and plain spherical head. Crummy Type 3. Bone. L 104 mm. Context 10597, pit 10885, SF 1024. Ph 5.
301. **Hairpin** with swelling stem and plain spherical head. Crummy type 3. Bone. L 114 mm. Context 11680, building 10880, SF 1785. Ph 4.
302. (*not illustrated*) Fragment of **small hairpin with small head**. the head is a little eroded, and is separated from the polished stem by a small collar. Crummy type 3. Bone. L 30 mm. Context 12305, shrine area, SF -. Ph 4.
303. **Hairpin fragment** with possibly drum shaped head, drum, Bone. L 62 mm. Context 11134, building 10810, SF 1423, Ph 5.
304. **Hairpin fragment** with large drum shaped head, with slightly angled sides. Stem broken. Bone. L 37 mm. Context 11328, shrine area, SF 2929. Ph 4.
305. **Hairpin fragment** with baluster moulding with writhen decoration. Stem marked with an X with a line above and below. Bone. L 52 mm. Context 10507, silty deposit north of building 10800, SF 2911. Ph 5.

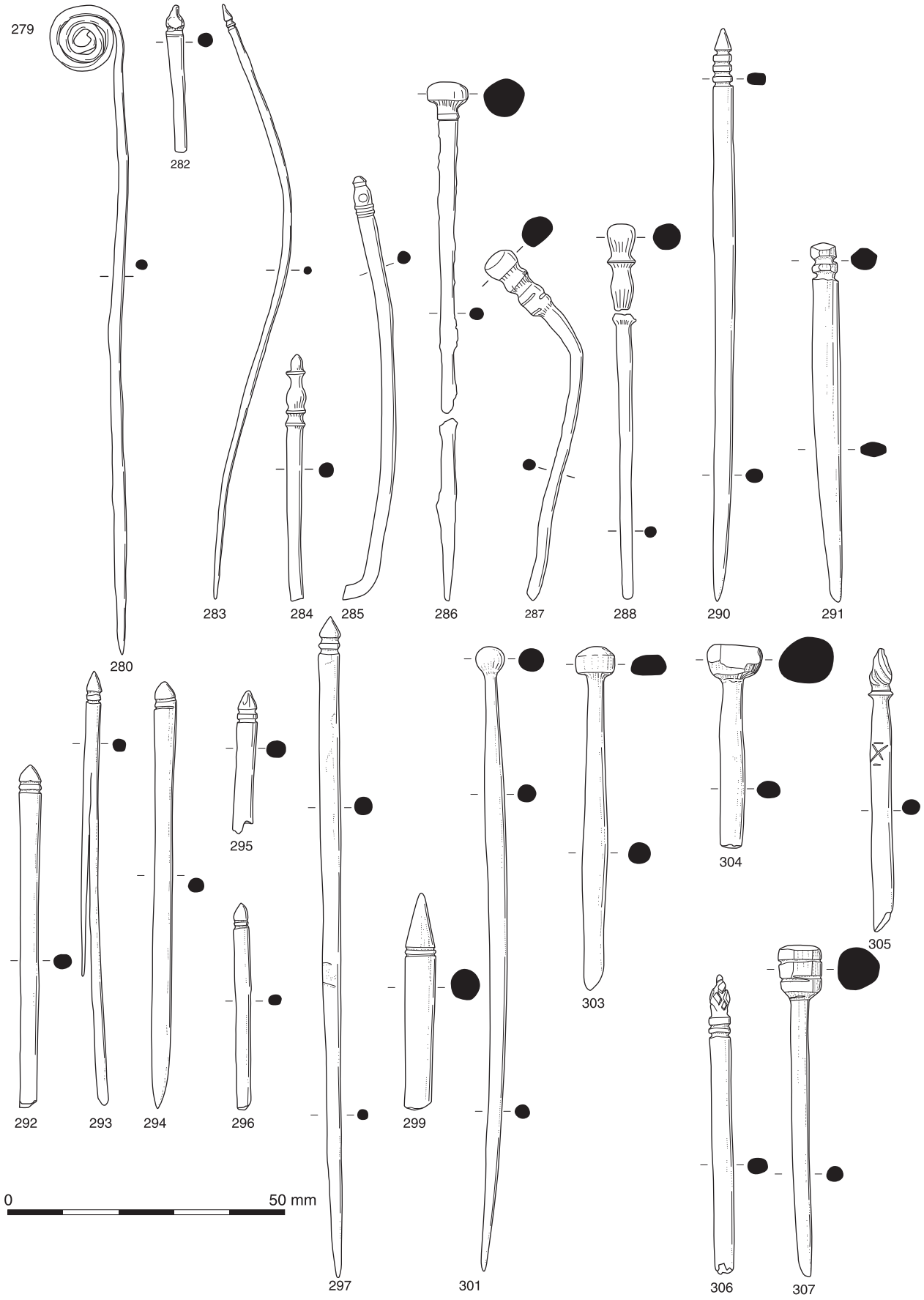


Fig. 5.39 Personal – other jewellery

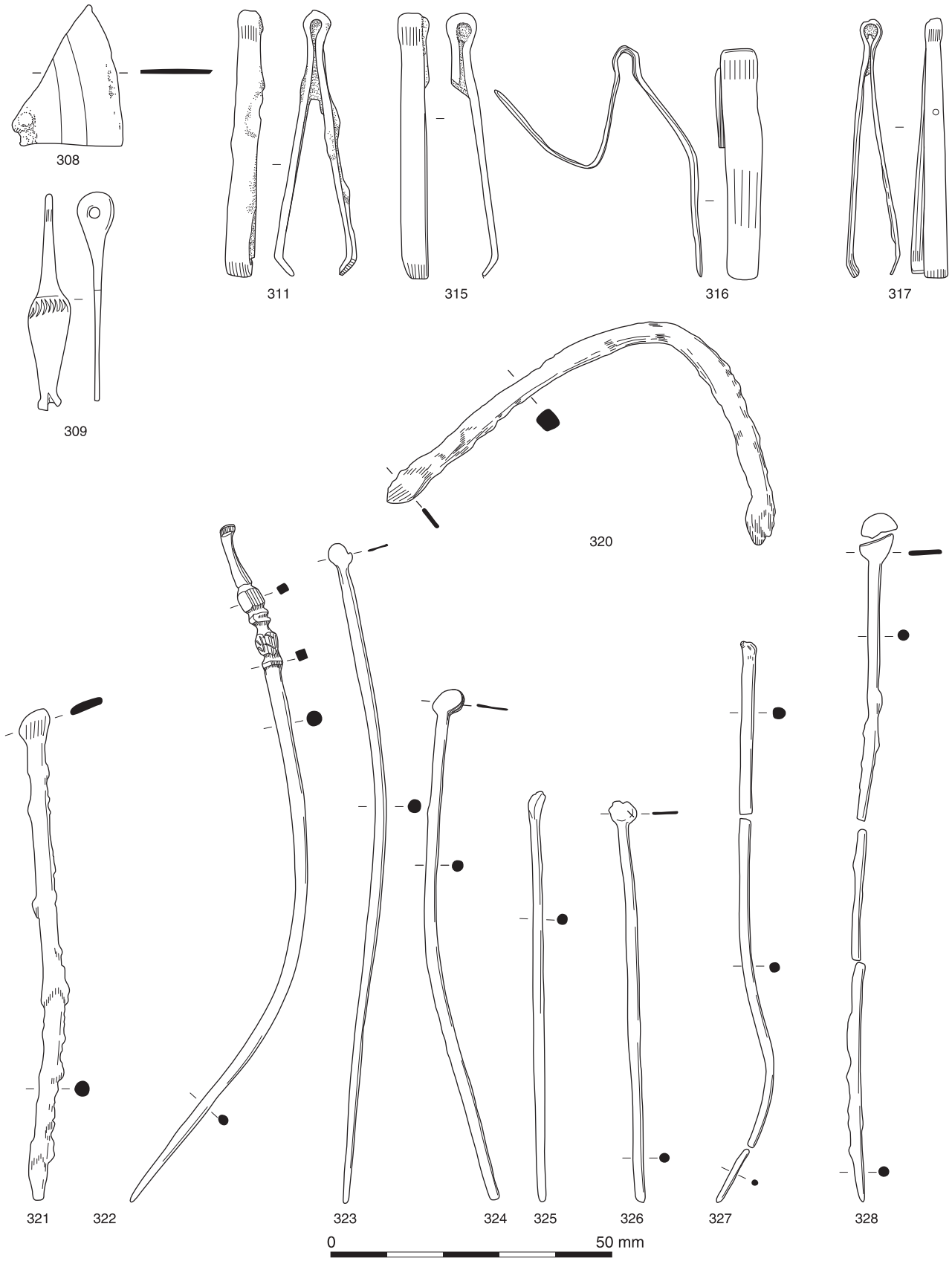


Fig. 5.40 Personal – toilet items

306. **Hairpin fragment**, with top decorated with a pine cone motif with two mouldings below. Bone. L 54 mm. Context 11018, ditch 11940, SF 1398. Ph 5.
307. **Hairpin** with cylindrical head with two cut grooves or mouldings. Bone. Context 10510, ditches 10835, 10845 and 10855, SF 995. Ph 5

Personal – Toilet items (Fig. 5.40)

308. **Mirror fragment**. Slightly concave in section. Segment of a probably circular mirror. Silvered or tinned on both faces. Copper alloy. L 25 mm. Context 11328, shrine area, SF 1613. Ph 4.

Nail cleaner

309. **Nail cleaner**, Baldock type (Crummy 2001b). There is a chevron pattern on either face of the blade. Copper alloy. L 38 mm. Context 12801, colluvium south of shrine area, SF 3048. Ph 4. This is a variant of the Baldock type identified by Crummy (2001b) and dating from the mid 1st century and into the 2nd century (Crummy and Eckhardt 2003, 53).

Tweezers

310. (*not illustrated*) **Tweezers**. Plain tweezers formed from strip. The sides are straight, not curved, and widen towards the jaws. Cu alloy. L 52mm. Area G, Context 8003, unstratified, SF 605. RB.
311. **Tweezers**, plain, complete. Copper alloy. L 48 mm. Context 10675, building 10870, SF 1199. Ph 4.
312-313. (*not illustrated*) **Tweezers**. One pair (SF 1263) bent. Copper alloy. L (extant) 24 mm; L 55 mm. Context 10676, building 10880 and adjacent surface (SF 1263), Context 11333, limestone surfacing between buildings 10870 and 11630, SF 2138, Ph 5.
314. (*not illustrated*) **Tweezers**. Broken arm deliberately rolled. Copper alloy. D 18 x 20 mm. Context 11627, shrine, SF 2051, Ph 4.
315. **Tweezers**. One arm broken. The complete arm widens towards the angled jaws. Copper alloy. L 47 mm. Context 12232, robber trench 12390, SF 2255. Unphased.
316. **Tweezers** formed from thin strip, now bent, possibly deliberately. Copper alloy. L 50 mm. Context 12434, colluvium west of shrine area, SF 2426. Ph 4.
317. **Tweezers**, plain pair, with angled jaws. The jaws are slightly wider than the sides. Copper alloy. L 47 mm. Context 12472, ditch 12471, SF 2454. Ph 4.
318. (*not illustrated*) **Tweezers**, plain, complete, almost no taper. L 53 mm. Cu alloy. Context 12986, metal detector find on the west side of Roman road opposite Area G, SF 3210. Ph 4
319. (*not illustrated*) **Tweezers**, plain, complete, but bent and twisted at the jaws, probably deliberately. L (extant) 54 mm. Cu alloy. Context 12986, metal detector find on the west side of Roman road opposite Area G, SF 3210. Ph 4

Ligulae

320. **Ligula** with square section stem ending in small spoon terminals. Bent. Fe. L 69 mm. Context 11328, shrine area, SF 1635. Ph 4.
321. **Ligula**, with a small spoon/spatula at one end and pointed at the other end. Fe. L 88 mm. Context 11328, shrine area, SF 2118. Ph 4.
322. **Ligula**, stem decorated with mouldings adjacent to the small angled spatula. Copper alloy. L 122 mm. Context 12104, ditch 13025, SF 2134. Ph 5.
323. **Ligula** with flat circular angled spatula at one end and point at the other. Copper alloy. L 115 mm. Context 11328, shrine area, SF 2253. Ph 4.
324. **Ligula**, with flat spade-shaped angled spatula at one end and broken at the other end. Copper alloy. L 91 mm. Context 11328, shrine area, SF 2671. Ph 4.
325. **Ligula** with eroded long thin spatula at one end and blunt rounded point at the other end. Copper alloy. L 74 mm. Context 11328, shrine area, SF 2716. Ph 4.
326. **Ligula**, with flat circular angled spatula, notched at the end. Copper alloy. L 72 mm. Context 11672, shrine area, SF 1768. Ph 4.
327. **Ligula**, with angled spatula, largely missing, and point at the other end. Copper alloy. L 100 mm. Context 11812, building 10870, SF 1822. Ph 4.
328. **Ligula**. Flat, circular and angled spatula. Copper alloy. L 78 mm. Context 12618, ditch 12617, SF 2470. Ph 4.

Household (Fig. 5.41-3)

Cutlery including knives (Fig. 5.41-2)

Whittle tang knives

329. **Whittle tang knife**, with slightly curved back with three notches near turned up tip. Deep triangular section blade with curved edge, and dropped edge. Fe. L 121 mm. Context 10500, topsoil, SF 965. Unphased.
330. **Whittle tang knife**. Deep blade of triangular section, with a straight back aligned with handle or tang and dropped edge. The cutting edge curves up to the tip of the blade. Fe. L 142 mm. Context 10676, building 10880 and adjacent surface, SF 1211. Ph 5.
331. (*not illustrated*) **Whittle tang knife** with short triangular blade. The blade has a straight back continuing the line of the tang, a dropped edge and an angled cutting edge. Fe. L 138 mm. Context 11328, shrine area, SF 1625. Ph 4.
332. **Whittle tang knife**, with S-curved back, and curved edge. The back continues the line of the tang. The choil is steeply angled and slightly curved. There are traces of mineralised wood on tang. Fe. L 116 mm. Context 11328, shrine area, SF 1816. Ph 4.
333. **Whittle tang knife**, with slightly curved back, which continues the line of the tang, and dropped edge. The cutting edge is curved and the choil square. Could be a blade from a pair of shears. Fe. L 99 mm. Context 10500, topsoil, SF 1177. Unph.
334. **Whittle tang knife**, with straight back with an angled break to point, and straight edge and angled choil. The blade has a more or less triangular section. Fe. L 157 mm. Context 11301, building 10870, SF 1441. Ph 4.
335. (*not illustrated*) **Whittle tang knife**, with curved parallel-sided blade, the back curves down sharply near the tip and the choil is angled. Possibly recent? Fe. L 121 mm. Context 10507, silty deposit north of building 10800, SF 3172. Ph 5.
336. (*not illustrated*) **Whittle tang knife**, with slightly curved or arched back and steeply down-curved tip. The blade has a slightly sinuous edge with curved choil, and is of triangular section. The tang continues the line of the back. Fe. L 108 mm. Context 10507, silty deposit north of building 10800, SF 3176. Ph 5.
337. (*not illustrated*) **Whittle tang knife**, with slightly curved back and sharply angled tip. The edge has a

Fig. 5.41 Household

slight concave curve. The back and edge are parallel. The triangular section blade has a dropped edge and angled choil. Fe. L 143 mm. Context 12503, building 10820, SF 2528. Ph 5.

338. (*not illustrated*) **Whittle tang knife fragment**. The blade is eroded, but has straight or slightly curved back that curves down to the tang. The blade edge has a triangular section and a curved or angled choil. Fe. L 70 mm. Context 10500, topsoil, SF 1181. Unphased.
339. (*not illustrated*) **Whittle tang knife fragment**. The blade is incomplete, but appears to be slightly tapered possibly with a slightly curved back and straight edge. The tang is centrally placed. Fe. L 105 mm. Context 10507, silty deposit north of building 10800, SF 3175. Ph 5.
340. **Whittle tang knife**. The blade has a curved back and edge, and dropped edge with angled choil. The tang continues the line of the back, but is slightly angled up. Fe. L 134 mm. Context 12945, building 10830, SF -. Ph 5.
341. (*not illustrated*) **Knife with whittle** or **plate tang**. The incomplete tang is broad and flat and continues the line of the back. The blade has a slightly curved back and edge and terminates in a rounded tip, and has a dropped edge with an angled slightly rounded choil. Fe. L 125 mm. Context 10547, buildings 10800, 10810, 10820 and 10830, SF 1063. Ph 5.
342. **Whittle tang blade**, short blade of triangular section, with curved back and edge and rounded tip. It has a lobe-like extension on the back near the tang. There was possibly a similar extension on the cutting edge. Centrally placed tang. Fe. L 88 mm. Context 10500, topsoil, SF 1179. Unph.
343. **Whittle tanged knife** of distinctive form. The blade has a step along the middle of one face. The back is straight and then curves down to the point. The edge is similar but wider near the handle. The tang continues the line of the back. Triangular section blade with dropped edge. Could be intrusive. Fe. L 191 mm. Context 10676, building 10880 and adjacent surface, SF 1212. Ph 5.
344. **Possible whittle tang knife blade**. Little of the blade survives, but it has a single cutting edge. The tang is centrally placed. Fe. L 85 mm. Context 11328, shrine area, SF 1477. Ph 4.

Socketed knives

345. **Socketed knife**, with triangular blade. The socket is heavy and has no visible nail hole. Fe. L 148 mm. Context 10500, topsoil, SF 1183. Unphased.
346. (*not illustrated*) **Socketed knife**, with broad blade. The blade is parallel sided, except near the tip where the back curves down sharply. The edge also curves down slightly. The blade has a square choil, and there is a possible nail hole visible on the x-ray near the choil. Fe. L 94 mm. Context 10507, silty deposit north of building 10800, SF 903. Ph 5.

Solid handled knife

347. **Small knife with a solid handle**, short and tapering with loop at the end. Fe. L 105 mm. Context 11328, shrine area, SF 1743. Ph 4.

Knife handles

348. **Tapering plain bone handle** with remains of iron tang inside. Bone. L 62 mm. Context 10547, buildings 10800, 10810, 10820 and 10830, SF 1652. Ph 5.
349. **Possible knife handle** made by cutting one end from a small long bone. Bone. L 96 mm. Context 11804, pit 11803, SF 1844. Ph 5.
350. (*not illustrated*) **Probable bone handle fragment** comprising polished piece of long bone. The broader end is rounded and smoothed, with traces of a sub-rectangular socket, and decorated with a band of lattice pattern. Bone. L 41 mm. Context 11310, building 10870, SF -. Ph 5.
351. **Trilobate terminal**, small, cast, probably from the hilt of a knife. Copper alloy. L 13 mm. Context 10547, buildings 10800, 10810, 10820 and 10830, SF 993. Ph 5.

Spoons

352. **Spoon fragment**, comprising part of pear-shaped bowl with cranked stem. Copper alloy. L 39 mm. Context 10624, building 10840, SF 1157. Ph 5.
353. **Spoon bowl fragment**. Copper alloy. L 22 mm. Context 11328, shrine area, SF 1532. Ph 4.

Utensils (Fig. 5.42)

354. Possible **flesh hook fragment**, with rectangular section stem and two hooked points. Fe. L 67 mm. Context 10507, silty deposit north of building 10800, SF 3180. Ph 5.
355. **Ladle fragment**, with incomplete hemispherical bowl. The handle has a barley sugar twist, except close to the bowl where it is wider and flat. Fe. L 194 mm, bowl D 80 mm. Context 10507, silty deposit north of building 10800, SF 3170. Ph 5.
356. **Ladle fragment**, comprising part of hemispherical bowl and handle with barley sugar twist. Fe. L 107 mm, bowl D *c* 80 mm. Context 11328, shrine area, SF 1528. Ph 4.

Vessels (Fig. 5.42)

357. **Vessel rim fragment**, possibly from a spun or raised vessel. Copper alloy. L 35 mm. Context 10547, buildings 10800, 10810, 10820 and 10830, SF 1084. Ph 5.
358. (*not illustrated*) **Vessel rim fragment**, probably from a bowl with everted rim. Fe. L 86 mm. Context 10657, building 10860, SF 1405. Ph 5.
359. **Small dish**, which has been flattened. Part of the rim is missing. Pewter or Pb. D 96 mm. Context 11328, shrine area, SF 1602. Ph 4.
360. Possible **vessel fragment**, comprising cut sheet of roughly square outline. Appears to have a cast ridge across it suggesting that it might have been part of a decorated vessel. Pb. L 40 mm. Context 11328, shrine area, SF 2266. Ph 4.

Lead repairs (Fig. 5.42)

A small number of lead plugs or repairs were identified. One example is illustrated and was recovered from the shrine deposit. The other five examples came from settlement contexts (SFs 1065, 1223 and 1657) or were recovered by metal detector (SFs 1124 and 1128) from over buildings 10840 and 10850.

361. **Repair plug**, roughly circular. Pb. L 25 mm. Context 11328, SF 1568. Ph 4.

Miscellaneous household items (Fig. 5.43)

362. (*not illustrated*) **Candlestick** with lead base and candle holder formed from rolled copper alloy sheet. The candle holder protrudes from lead base.

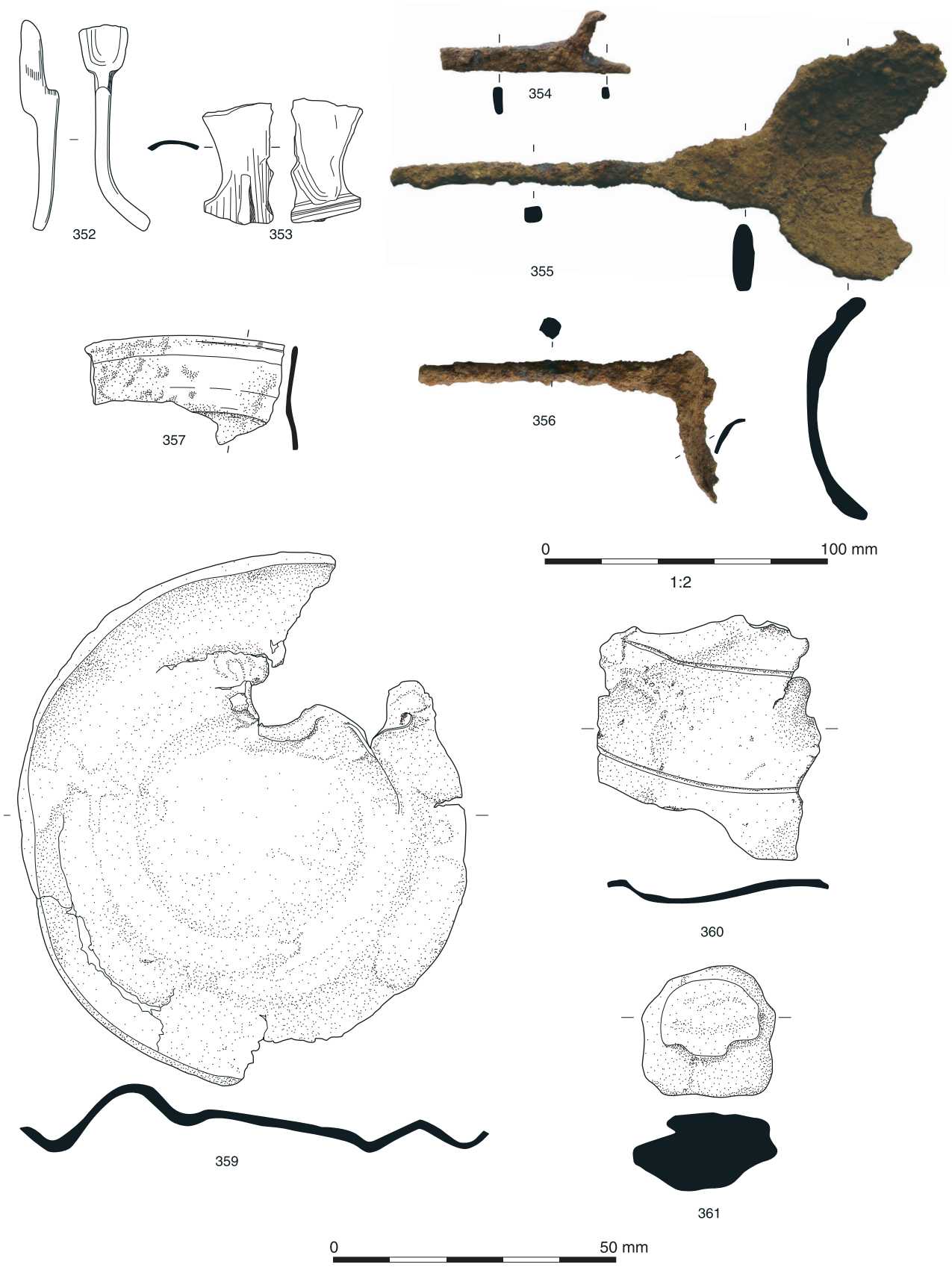


Fig. 5.42 Household

Copper alloy and Pb. H 51 mm, base D 50 x 55 mm. Context 10506, ditch 10700, SF 924, Ph 5.

363. **Bucket handle mount**, comprising strip with two possible nail holes and formed into a loop at one end. Attached is a broken ring. Fe. L 95 mm. Context 11342, well 12885, SF 1586, Ph 4.

364. Possible **vessel handle** formed from strip with diamond-shaped terminal with a thin slit (visible on x-ray plate) at one end and a broad flange pierced by a nail at the other end. This end is heavily encrusted. Fe. L 135 mm. Context 11342, well 12885, SF 1585, Ph 4.

Miscellaneous household fittings (Fig. 5.43)

365. **'Bell-shaped' terminal**, with trace of iron rod at base. Cast. Cu alloy. H 27 mm. Context 10510, ditches 10835, 10845 and 10855, SF 1381. Ph 5.

366. **'Bell-shaped' terminal**, possibly with enamelled

Fig. 5.43 Household

Fig. 5.44 Security

end. Cast. Cu alloy. H 28 mm, D 16 mm. Context 10547, buildings 10800, 10810, 10820 and 10830, SF 1061. Ph 5.

367. **'Bell-shaped' terminal**, with hollow end and enamelled central button. Cu alloy. H 30 mm, D 32 mm. Context 10624, building 10840, SF 1120. Ph 5.
368. **Decorative strip**, with rows of dots flanking a row of larger oval pellets. Flanking the dots are thin lines. No visible nail or pin holes. Cu alloy. L 38 mm, W 25 mm. Context 10543, road surface, SF 1032. Ph 4 to 5.
369. Possible **hinge strap** comprising cast tapering strip with three extant nail holes. The tapered end is decorated with a slight moulding. Cu alloy. L 48 mm, W 14 mm. Context 11328, shrine area, SF 2399. Ph 4.
370. **Decorative plate, circular**. The outer edge is milled, and there are two concentric ridges separated from the edge by a broad groove. Plate for a door knob or similar. Possibly recent and intrusive. Cu alloy. D 31 mm. Context 12433, colluvium north of shrine area, SF 2370. Ph 4.
371. **Figure-of-eight shaped object**, curved in both long and cross sections. Function uncertain. Fe. L 100 mm, W 49 mm. Context 12945, building 10830, SF 3207. Ph 5.
372. **Object of uncertain function** formed from iron strips. Comprises a roughly square central portion, with rolled scrolls at each corner. Fe. L 85 mm. Context 12945, building 10830, SF 3207. Ph 5.
373. **Circular washer** with domed centre, pierced with a nail hole. Fe. D 41 mm. Context 10506, ditch 10700, SF 927. Ph 5.

Security (Fig. 5.44-5)

Keys

Barb spring padlock keys

374. **Barb spring padlock key**. Fe. L 158 mm. Context 10507, silty deposit north of building 10800, SF 3171. Ph 5.
375. **Barb spring padlock key**, with incomplete bit. Fe. L 198 mm. Context 10793, grave 10780, SF 1317. Ph 5.
376. **Barb spring padlock key**. Fe. L 160 mm. Context 10793, grave 10780, SF 1319. Ph 5.
377. **Barb spring padlock key handle** with suspension ring. Fe. L 70 mm. Context 12332, building 10820, SF 2687. Ph 5.

Lift keys

378. **L-shaped lift key**, with two extant teeth. Fe. L 137 mm. Context 10507, silty deposit north of building 10800, SF 3169. Ph 5.
379. **L-shaped lift key**, with three teeth. Cu alloy. L 119 mm. Context 10543, road surface, SF 1193. Ph 5.
380. **L-shaped lift key**, with three extant teeth. Fe. L 152 mm, W 46 mm. Context 10793, grave 10780, SF 1318. Ph 5.
381. **L-shaped lift key**, with two extant teeth. Fe. L 89 mm. Context 12335, pit 12334, SF 2236. Ph 5.
382. **L-shaped lift key**, with two extant teeth. Fe. L 80 mm. Context 12435, plot D, SF 2444. Ph 4.
383. **L-shaped lift key**, with three teeth. Fe. L 122 mm. Context 12585, silty deposit north of building 10800, SF 2771. Ph 5.
384. **L-shaped lift key**, with two teeth on bit. Fe. L 128 mm. Context 12801, colluvium south of shrine area, SF 3040. Ph 4.
385. **T-shaped lift key**. The bit has one tooth on each side. Fe. L 85 mm. Context 12836, building 10840, SF 3160. Ph 5.

Slide key

386. **L-shape slide key**. Manning Type 1 slide key (Manning 1985, 92-3). Fe. L 176 mm. Context 11331, behind building 10840, SF 1670. Ph 5.

Other keys and latchlifter

387. (*not illustrated*) **Lever lock key**, now fragmented, with copper alloy chain, of 6 figure-of-eight links with larger rings at each end. One ring (D 25 mm) is of circular section, the other (D 26 mm) has a small inner flange or ridge. Attached to the first ring is a heavily encrusted further ring or link to which the key was apparently attached. Cu alloy and Fe. L 120 mm. Context 11007, building 10810, SF 1411. Ph 5.
388. Possible **key handle** of rectangular cross section, with rounded shoulders and the remains of a narrow loop. Fe. L 175 mm. Context 12332, building 10820, SF 2686. Ph 4 to 5.
389. **Latchlifter**. Fe. L 160 mm. Context 10676, building 10880 and adjacent surface, SF 1207. Ph 5.

Barb spring padlock

390. **Barb spring padlock** of Manning Type 2 (Manning 1985, 95-6 and fig. 25, 11). In two pieces. One piece comprises the hasp with part of lock case. One end of the hasp is attached to the case, the other end terminates in a pierced plate through which the lock bolt passes, before being secured in the lock case. The second smaller piece comprises the padlock case, broken at one end. The closed end has a T-shaped cutout for the insertion of the lock bolt. Fe. L 125 & 84 mm. Context 10507, silty deposit norh of building 10800, SFs 2797 and 2798. Ph 5.

This padlock comes from the same context as part of a slave shackle (**Cat. No. 58**) and could have been associated with it as part of a complete shackle or restraint (see above).

391. (*not illustrated*) **Chain link**, elongated figure of eight. Fe. L 77 mm. Context 10816, deposit overlying Roman features, SF 1337. Ph 5.

Hinge fittings

A number of hinge fittings were recovered (Table 5.26)

Structural fittings

A small number of structural items were found and these are shown in Table 5.27.

Table 5.26 Summary of hinge fittings by context group

Context Group	*Hinge strap*	*L-shaped hinge pintle*	*Total*
Settlement contexts	1	5	6
Shrine deposit		1	1
Shrine associated contexts	1		1
Total	2	6	8

Table 5.27 Summary quantification of structural fittings, excluding nails, by context group and phase

Context Group	*Phase*	*Bolt*	*Clamp*	*Dog*
Metal detecting				1
Settlement	3 to 4		1	
	4			
	5		2	1
	Rom			
	unph			
Shrine deposit	4	1		2
Shrine associated	4			
contexts	5	1		
Totals		2	3	4

Nails

The distribution of the nails by site area and phase is summarised in Table 5.28.

Bindings (Fig. 5.46)

There are 49 bindings (Table 5.29) but only a selection have been catalogued.

392. **Box corner binding**. Fe. L 130 mm. Context 10809, pit 10823, SF 1331. Ph 5.
393. **Corner binding**, in two parts. (1) Strip of iron bent at a right angle, with one certain and one possible nail hole. (2) Flat strip of cu alloy, deliberately shaped with waisted outline. No nail holes. Possibly originally attached to (1). Fe and Cu alloy. Dimensions: (1) L 71mm, W 17 mm. (2) L 46 mm, W 19 mm. Context 11328, shrine area, SF 1543. Ph 4.
394. **Binding**, comprising strip splayed at one end and bent over at a right at the other end. The long sides have raised borders. The right angle flange at one end has two nail/pin holes and no border. Cu alloy. L 56 mm. W 33 mm. Context 10503, roadside ditch 10670, SF 900. Ph 5.

Table 5.28 Summary quantification of nails by context group and phase

Context Group	*Phase*	*Nails*
Metal detector finds	4 to 5	6
	5	38
	unph	3
Settlement contexts	3	5
	3 to 4	1
	4	51
	5	196
	Rom	75
	unph	105
Shrine deposits	4	240
Shrine associated contexts	4	67
	5	1
Total		788

Fig. 5.45 (left) Security

Holdfast	*L-Staple*	*T-staple*	*U-staple*	*Spike*	*Split spike loop*	*Washer*	*Wedge*	*Yotting*	*Totals*
1		1	1	1					5
									1
1			1						2
3	3			1	1				11
		1						1	2
						1			1
1	1			1	3	3			12
				1		3	1		5
									1
6	4	2	2	4	4	7	1	1	40

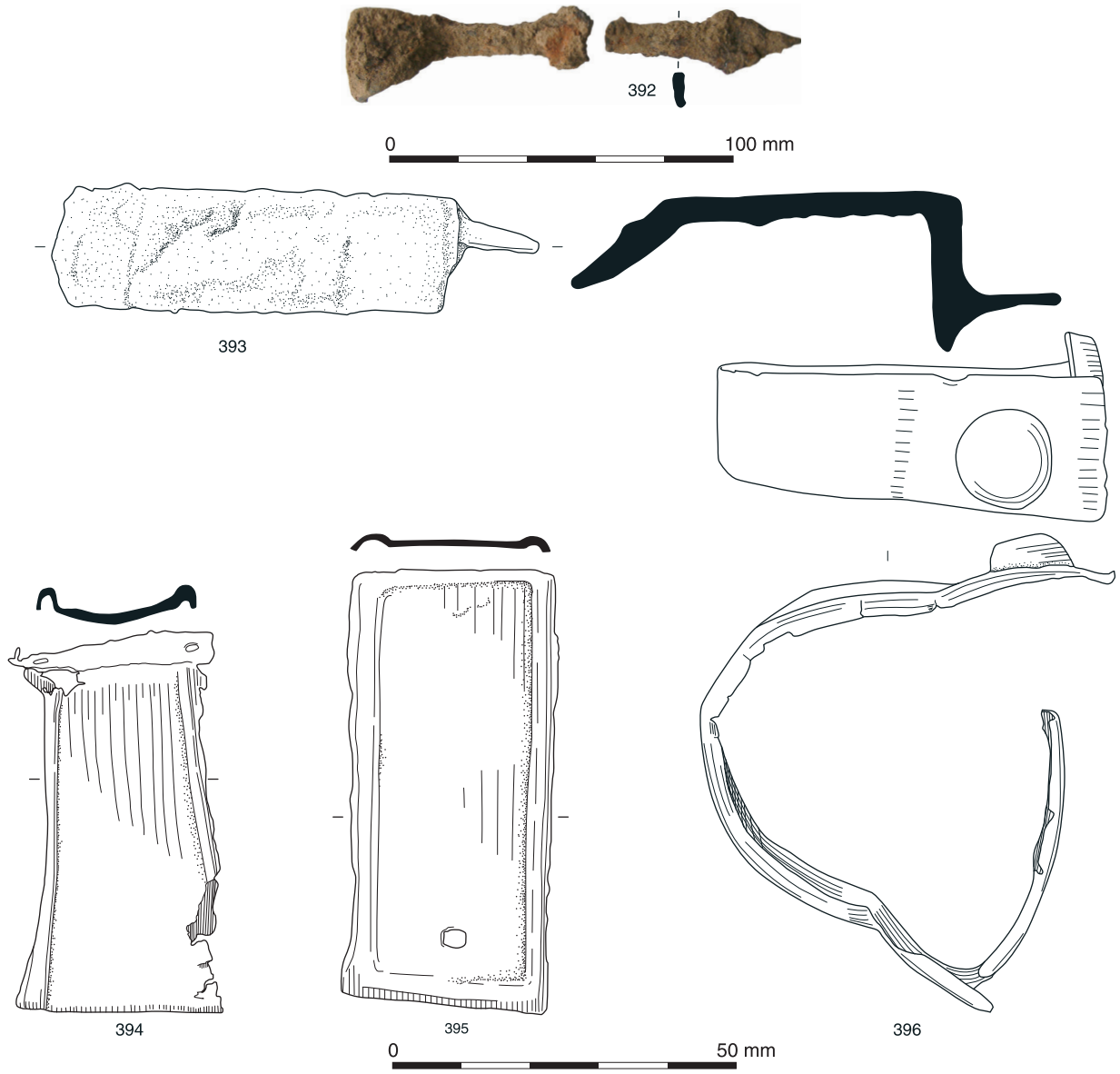


Fig. 5.46 Bindings

Fig. 5.47 Objects of uncertain identification

Group 1	*Phase*	*Silver casting header*	*droplet*
Metal detector finds	5		
	unph		
Settlement contexts	3		
	4		
	5		
	unph		
Shrine deposit	4		
Shrine associated	4		
contexts	5	1	1
Total		1	1

Table 5.29 Summary quantification of bindings by context group and phase

Context Group	*Phase*	*Binding*	*Corner binding*	*Edge binding*	*Collar*	*Totals*
Metal detector finds		5	1		1	7
Settlement contexts	4	2				2
	5	20	1		1	1
	Rom	2	1			1
Shrine	4	5	1		4	10
Shrine associated	4	2		1	1	4
contexts	4 to 5		1			1
Totals		36	5	1	7	49

395. **Binding** of thin sheet with raised border around three sides and nail holes at one end within border. Cu alloy. L 65 mm, W 30 mm. Context 11328, shrine area, SF 1512. Ph 4.
396. **Binding**. One end has a nail with a domed head, the other end has a nail hole. The strip is curved in plan. Cu alloy. L 60 mm, W 48 mm. Context 12434, colluvium west of shrine area, SF 2412. Ph 4.
397. (*not illustrated*) **Binding** of half round section, with two visible nail holes, one at each end. Cu alloy. L 60 mm. Context 12601, well 12885, SF 2749. Ph 5.
398. (*not illustrated*) **Edge binding** with one possible nail hole and one certain hole with a nail fragment *in situ*. Curved and angled. Cu alloy. L 91 mm. Context 12801, colluvium south of shrine area, SF 3063. Ph 4.

Industrial debris (Table 5.30)

Small quantities of industrial or craft debris were found. These included a silver casting header and droplet from context 10738 (Phase 5), and a copper alloy casting header (context 11253). There are also some possible iron billets. The main evidence for craft activity comprised cut fragments of bone (see above). Much this came from a small number of contexts.

Objects of uncertain identification (Fig. 5.47)

There are a number of objects of uncertain identification, and a selection have been catalogued and illustrated.

399. **Tube**, waisted and decorated with grooves. Cu alloy. L 24 mm. Context 10716, building 10920, SF 1599. Ph 3.
400. **Cast object**. Cu alloy. L 44 mm, W 18.5 mm. Context 10736, shrine area, SF 1236. Ph 4.
401. (*not illustrated*) **Rod**, with slight notches possibly cast into one side. Cu alloy. L 37 mm. Context 11203, robber trench 11230, SF 1431. Ph 5.
402. **Cast terminal**. Possibly the upper terminal of a scabbard slide. Cu alloy. L 18 mm, W 14 mm. Context 11328, shrine area, SF 1622. Ph 4.
403. **Pendant**, or **pivoted cover** with pivot or pin hole. Cu alloy. L 23 mm, D 20 mm. Context 12434, colluvium west of shrine area, SF 2446. Ph 4.
404. **Rod with rolled-over loop**, of square section. Fe. L 69 mm. Context 10656, building 11620, SF 1671. Ph 4 to 5.
405. **Curved rod with barley sugar twist**. Fe. L 78 mm. Context 11328, shrine area, SF 1815. Ph 4.
406. **Two narrow side strips** – incomplete – linked by a pivot. Between the strips and wrapped round the pivot is another strip forming a ?leaf spring. Finally an arched loop binds the whole together. Fe. L 45 mm. Context 11328, shrine area, SF 2713. Ph 4.

Table 5.30 Summary quantification of industrial debris by context group, phase and material

casting header	*Copper alloy casting waste*	*droplets*	*cut and broken bone fragments*	*Bone cut bone fragments*	*roughout*	*Iron billet*	*Lead droplet*	*Totals*
		1				2		2
		1						1
					1			1
			5	56				1
				1		2	1	1
1								1
	1	1					1	3
		1						1
		1		2				5
1	1	4	5	59	1	4	2	79

407. **Oval ring** of circular cross section with expansion/thickening at one side. Fe. L 43 mm. Context 11634, paved surface, SF 1649. Ph 4.
408. **Possible armlet fragment**, with band of lozenge section. One end angled, flattened and broken, the other end is flattened. Fe. L 75 mm. Context 11779, shrine area, SF 1883. Ph 4.
409. **Stem with looped terminal** of square section. Fe. L 49 mm. Context 12503, building 10820, SF 2529. Ph 5.
410. **Medallion** or **seal**. Pewter or Pb. D 20 mm. Context 10739, colluvium west of shrine area, SF 1250. Ph 4.
411. **Antler tine** that has been cut from the main antler. It has a large nick cut above the cut surface. Below this the surface of the antler shows significant wear and some cuts. The tip also shows signs of wear. The tine has a recent break. Antler. L 237 mm. Context 11328, shrine area, SF 1583. Ph 4.

THE ROMAN GLASS *by H E M Cool*

In total 55 fragments of Roman vessel glass were recovered, the majority of which were relatively small and undiagnostic and do not lend themselves to being more meaningfully quantified by EVEs. The assemblage was dominated by blue/green prismatic bottle fragments (Nos 10–18, 25 fragments), a form which is very common from the later 1st to the earlier 3rd century (Price and Cottam 1998, 194–200). No. 17 is a base fragment which retains a pontil scar, a technique used only occasionally on these bottles and suggesting that this particular one was made during the later part of the life of the form. None of the other bottle fragments retain any features that would enable a closer dating within the 1st- to 3rd-century date range.

Items of tableware are uncommon. The colourless body fragment No. 2 is most likely to have come from a mid 2nd-century wheel-cut beaker (Price and Cottam 1998, 91-2, fig. 32a), and the rim fragment No. 3 is most likely to come from a later 2nd- to 3rd-century cylindrical bottle (ibid., 202-3), though the rim formation is not typical of the ones used on those. The rim No. 7 might have come from a blue/green jug with pulled out spout (ibid., 159-60), though a fire-rounded rim would normally be expected on those rather than the rolled rim on this fragment. The asymmetry of the rim may merely reflect that this is a poorly made funnel-mouthed jar. Jars are represented by the yellow/brown example No. 1 and very possibly by the blue/green rim fragments No. 5. Jars tend not to be particularly chronologically sensitive, but the colour of the former would suggest a 1st- or earlier 2nd-century date. The latest item is the base fragment No. 19. The form cannot be identified but it is made in the bubbly pale greenish glass that is typical of the 4th century.

This small assemblage shows features that are to be expected, and some rather surprising omissions. That it is dominated by fragments from blue/green bottles is typical of rural sites of the 2nd century whose inhabitants often seemed to be uninterested in acquiring other types of glass vessels in any numbers. Given, however, that occupation continued throughout the Roman period, the rarity of later forms and the lack of diversification into tablewares is striking. Colourless cylindrical cups (Price and Cottam 1998, 99-101) are extremely common in later 2nd- to mid 3rd-century assemblages, and are not uncommon finds on rural sites, including in this area of the East Midlands. Several, for example, were recovered during the nearby excavation of the villa estate at Stanwick (unpublished). At Higham Ferrers they appear absent, despite the extensive excavation.

Given the poverty of the general assemblage it is of some interest that the fragment of what appears to be the only good quality drinking vessel (No. 2) comes from the area of the shrine. The jar No. 1 came from the same context and is also unusual within this assemblage as being the only fragment made from a strong coloured glass which, as already noted, is not to be expected after the early 2nd century, and indeed would have been rare by then. So even though functionally this is a utilitarian vessel, visually it would have been unusual given the date of the occupation on the site. The quantities being dealt with are very small, but it does appear that at Higham Ferrers the vessel glass used in everyday life was not thought appropriate for use within the shrine area.

A small quantity of blue/green window glass was found in contexts 11012 (plot division boundary ditch between rear of buildings 10810 and 10820) and 11341 (fill of well 12885). This was the typical window glass of the 1st to 3rd centuries and its presence here suggests some glazing in the buildings of the settlement.

Catalogue of vessel glass (Fig. 5.48)

1. Jar; rim fragment. Yellow/brown. Rim bent out, edge rolled up and in. Rim diameter 80 mm, wall thickness 1.5 mm, present height 15 mm. Context 11328, SF 2700. Illustrated.
2. Beaker; lower body fragment. Colourless. Fragment broken close to carination and sloping in. Wheel-cut line below carination. Dimensions 21 x 17 mm, wall thickness 2 mm. Context 11328, SF 2729.
3. Bottle; rim fragment. Colourless. Rim bent out, up, in and flattened; inner edge broken. Rim diameter 70 mm. Context 12945, SF 3208.
4. Body fragment. Colourless. Convex-curved with terminal of narrow rib. Dimensions 28 x 10 mm, wall thickness 1 mm. Context 12809, SF 3004.
   Also 1 undiagnostic colourless body fragment from context 12945
5. Bowl or jar; 2 joining rim fragments. Blue/green with flaking iridescence. Wide, out-turned rim with fire-rounded edge. Rim diameter 120 mm, wall thickness 1 mm, present height 10 mm. Contexts 11852 and 11854.
6. Bowl, cup or jar; rim fragment. Blue/green. Vertical (?) rim, edge externally fire-thickened. Dimensions 19 x 12 mm, wall thickness 2 mm. Context 12563, SF 1680.
7. Jug(?); rim fragment. Blue/green. Asymmetric

funnel rim with rim edge rolled out. Present height 13 mm. Context 11430.

8. Base fragment; blue/green. Shallow concave base without pontil scar. Base diameter *c* 40 mm. Context 12984, SF 3204.
   Also 18 undiagnostic blue/green body fragments from contexts 10547, 10624, 10643, 10717, 10895, 10972, 11115, 11309, 11328, 11834, 12563 (2 fragments), 12733, 12827 (3 fragments), 12945, 12984.
9. Body fragment. Blue/green. Retaining part of very shallow rib. Dimensions 20 x 19 mm, wall thickness 1.5 mm. Context 10876.
10. Bottle or Jug; neck fragment. Blue/green. Cylindrical neck broken at junction with shoulder. Neck diameter 23 mm. Context 11963, SF 1908.
11. Bottle; handle fragment. Blue/green. Angular reeded handle retaining small fragments of upper attachment. Context 10972, SF 1387.
12. Bottle; chip from outer edge of folded rim? Dimensions 14 x 7 mm. Context 11834.
13. Bottle; handle fragment. Blue/green. Edge of reeded handle. Context 10842, SF 1344.
14. Bottle; handle fragment. Edge of reeded handle fragment. Context 10577, SF 966.
15. Hexagonal bottle; base fragment. Blue/green. Base design – corner of six-sided moulding. Dimensions 45 x 16 mm. Context 11152. Illustrated.
16. Prismatic bottle; base fragment. Blue/green. Base design – part of one straight and one curved moulding. Context 10657, SF 1403.
17. Prismatic bottle; base fragment. Blue/green. Broken at edge of moulding and retaining curved scar from pontil. Dimensions 45 x 15 mm. Context 10657.
18. Prismatic bottle; lower body and edge of base fragment. Blue/green. Present height 25 mm. Context 11007.
    Also 16 blue/green bottle body fragments from contexts 10806, 11154, 11233 (2 fragments), 11656, 12146, 12643, 12827 (5 fragments), 12838, 12945 (2 fragments).

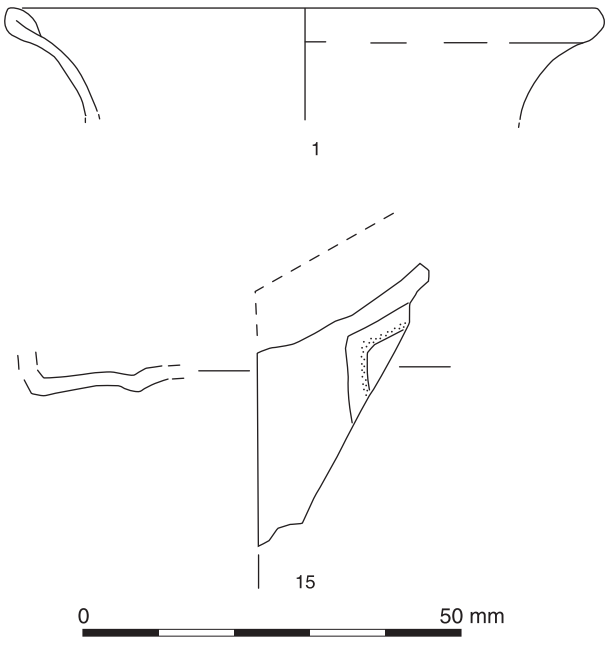


Fig. 5.48 Vessel glass

19. Bowl, cup or beaker; base fragment. Light greenish bubbly. Very shallow concave base. Base diameter 25 mm, Wall thickness 1.5 mm. Context 12984, SF 3203.

LEATHER OBJECTS *by Quita Mould*

A shoe of single-piece construction was found in backfill (8048) of the upper level of well 8032 in Area G, while the remains of a shoe of nailed construction were recovered from a lower level (8279) of the same well. The well was dug in Phase 4 (late 2nd-3rd century) although the fills (including both contexts containing the shoes) were associated with the abandonment of the structure during the 4th century. The remains of a second nailed shoe and a single piece of secondary waste were recovered from a lower fill of well 8278, also in Area G and dated to the 3rd century onward. All three shoes were of adult size and Roman date; there is no reason to doubt they are contemporary with the pottery with which they were associated.

The nailed shoes were highly fragmentary so that only the general shoe type is known. Nailed shoes have soles made of several layers held together principally by nailing. These layers, usually comprising an insole, a middle sole, middle laminae or small pieces of middle packing, and an outer sole, are known collectively as the bottom unit. The nailed shoes found at Higham Ferrers had middle laminae packing the bottom unit between the insole and sole, that in one shoe was clearly of recycled leather. This shoe, from the shaft of well 8032, had constructional thonging running around the edge of the bottom unit (type 3, Mould 1997, 328-333). The lasting margin of the upper had been sewn to the edge of a middle lamina with a narrow leather thong. The other nailed shoe found in well 8278 had constructional thonging running down the centre of the remaining bottom unit (type 1 or 2). Each shoe had a heel stiffener suggesting that they had closed uppers. Insufficient leather remained for the nailing patterns to be classified according to van Driel-Murray's typology (2001, 350-2) but the larger example, from well 8278, can be placed into type C of the classification used in earlier publications of British nailed footwear (Rhodes 1980, 105-7; Mould 1997, 331).

The single-piece shoe of cattle hide for the left foot was not heavily worn when thrown away. The larger fastening loops had been torn off. A fragment of fastening present, possibly broken from an integral fastening lace, was decorated with three opposing pairs of small lobes.

METALWORKING DEBRIS *by Gareth Hatton*

A total of 5.3 kg of metalworking debris was recovered during excavations (Table 5.31). Density and visual appearance was used to discriminate between types of metalworking debris, and all pieces were categorised, counted and weighed. All

Table 5.31 Summary quantification of slag by weight (g)

Phase	*Fuel ash slag*	*Non diagnostic*	*run slag*	*smithing hearth bottom*	*Total*
3-4	166	99		738	1013
5	57	1130	90	2804	4081
Saxon			15	25	40
Unknown				224	224
Total	223	1229	105	3791	5348

terms used below to describe the material are defined in Centre for Archaeology Guidelines, *Archaeometallurgy* (Bayley *et al*. 2001). Smithing hearth bottoms are slag that accumulates in a smith's hearth and are diagnostic of iron-smithing. Run slag refers to pieces of slag which resemble tap slag but are smaller and less distinctive while retaining their ropey appearance. This may form during iron smithing or smelting processes. Run slag and non-diagnostic iron-rich slag can form in either iron smithing or smelting processes. Here no diagnostic smelting slag was identified but smithing slag was identified. The non-diagnostic and run slag are most likely the by-products of iron smithing. The fuel ash slags only indicate high temperature activities and may not be associated with metalworking.

All the material is from backfill contexts suggesting that it was dumped. The high proportion of smithing hearth bottoms with smaller quantities of non-diagnostic slag and no corresponding vitrified hearth lining suggests that it was selected and transported from elsewhere on the site. However there is no pattern to the distribution. There is no evidence for any metallurgical installation such as a furnace. The smithing waste also is in large, fist-sized pieces, suggesting that it may have been transported by hand.

Phase assemblages

2nd to 3rd century (Phases 3 and 4)

The material studied is from three contexts at opposite ends of the site and can be considered as general backfill material.

4th century (Phase 5)

The majority (76.3%) of the metal working debris is from this period and contains all of the types identified; though most of the material consists of smithing hearth bottoms.

Saxon

There is possible run slag and a small amount of evidence for a smithing hearth bottom. However, the quality of material is limited and may be residual.

Conclusion

As 70% (by weight) of the material studied consists of smithing hearth bottoms and no definite iron smelting slag was identified, it can be assumed that smithing accounts for all the debris found on this site. It can therefore be concluded that smithing may have been the only process undertaken, but not all the wastes normally associated with smithing, such as hearth linings or hammerscale, were present. Therefore the slag must be redeposited, with only the larger, more durable pieces of a smithing assemblage being selected. The slag in the 2nd- to 3rd-century context suggests that some iron smithing took place at this time, but the bulk of the material (76.3%) was from 4th-century contexts and was evenly spread across the contexts suggesting general waste deposition. The general pattern of deposition is in backfill contexts.

ROTARY QUERNS *by Ruth Shaffrey*

A total of 19 quern fragments were recovered, of which 13 are positively identifiable as rotary querns and the remainder are almost certainly quern fragments. Six querns range from 300–490 mm in diameter, falling within the normal range for hand operated rotary querns while a single example measures at least 540 mm in diameter (and probably in the region of 600 mm); this is almost certainly from a small mechanically operated mill. The remaining specimens are too small for their original size to be determined.

Very few of the querns were recovered from primary contexts so they cannot tell us about the whereabouts of food preparation on the site and many were reused in structures and in late Roman (3rd and 4th century) or undated contexts. This makes it impossible to investigate any patterns of importing materials to Higham Ferrers, such as changes in quern supply, although generalisations can be made for the whole of the period and comparison made to other assemblages in the region.

The querns are mainly made from Millstone Grit (7), Old Red Sandstone (5), Hertfordshire Puddingstone (1) and Niedermendig Lava (3). The seven Millstone Grit fragments are all of the disc type with flat or curved but parallel faces. Several

have the deep spaced pecking typical of Millstone Grit (SF 1218, 2770, 988) and at least one of the fragments is of a small millstone, mechanically operated rather than hand turned (SF 2770). This was reused in a floor surface in building 10810 (11008). The five Old Red Sandstone (ORS) querns are all of typical sizes, varying from 350-440 mm diameter. Two of the lower querns are of cake style (SF 1336 and 2276: Fig. 5.49.12) and one is indeterminate but tapered to the edges (SF 1335). One of the upper stones is of flat-topped type with a basin shaped hopper (SF 1127: Fig. 5.49.4) and the other is of a disc or slightly tapered type (SF 1445). The ORS querns are thus of quite different design to the Millstone Grit (MG) querns, although all the ORS styles represented at Higham Ferrers have also been seen on the nearby sites of Redlands Farm or Stanwick (Shaffrey and Evans in prep). The cake style lower querns and flat-topped upper stones are the most commonly occurring ORS type in the region (Shaffrey 2006).

Of the three lava quern fragments, two are clearly identifiable as querns (SF 6630 and 10676) and the third comprises a number of small weathered pieces from a single context (fill of pit 6267). Only one example (SF 10676) survives sufficiently for its style to be determined and this is of a typical small kerbed quern. The single Hertfordshire Puddingstone quern is an incomplete lower stone (SF 1826: Fig. 5.49. 13) of typical bun shape and small size. It is not from a phased context (11325) but is almost certain to date to the 1st or 2nd century (Major 2004, 4). There are also two querns of unidentified sandstone and one of burnt Greensand.

Catalogue of rotary querns (Fig. 5.49)

1. (*not illustrated*) **Probable quern fragment**. Millstone Grit. One worked and smoothed surface. Context 10511, SF 1375. Surface find associated with building 12900.
2. (*not illustrated*) **Two adjoining probable quern fragments.** Medium grained sandstone. Two pecked and worn parallel faces. Context 10812, SF 1334. Surface find associated with building 10900.
3. (*not illustrated*) **Third of a lower rotary quern**. Old Red Sandstone. Spindle socket measures 25 mm deep x 20 mm diameter and is slightly conical. Edges are vertical and pecked although whole quern is slightly tapered to the edges. Grinding surface is slightly convex and pecked. Base is roughly dressed and flat. Measures 440 mm diameter x 71 mm max thickness. Context 10547, SF 1336. Surface finds associated with buildings 10800, 10810, 10820 and 10830.
4. **Two adjoining upper rotary quern fragments**. Old Red Sandstone. Flat-topped type with basin shaped hopper measuring 100 mm in diameter. Pecked all over. Measures 350 mm diameter x 42 mm max thickness. Context 10633, SF 1127. Surface find associated with building 10850.
5. (*not illustrated*) **Two adjoining fragments of probable lower rotary quern or possible millstone.** Millstone Grit. No edges or centre remain but the fragments are large and are dressed with very

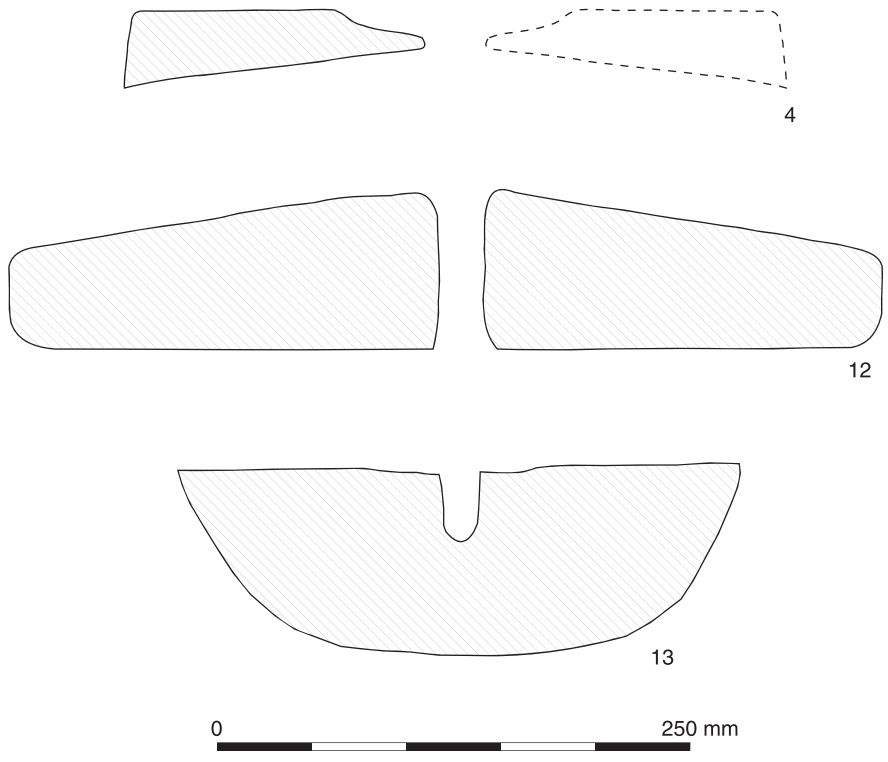


Fig. 5.49 Rotary querns

spaced style pecking (Typical of Millstone Grit querns). Measures 62 mm thick. Context 10666, SF 1218. Arbitrary deposit north-east of building 10820.

6. (*not illustrated*) **Small upper rotary quern fragment.** Millstone Grit. Edge fragment of probable disc or flat topped type. Pecked all over although both faces are worn quite smooth. Measures approximately 490 mm diameter x 33 mm thick. Context 11004. Likely demolition rubble above internal deposits. 4th century or possibly later.
7. (*not illustrated*) **Probable quern fragment**. Sandstone. Two worked faces with a curved edge and heavily burnt. Fragment measures 59 x 69 x 54mm. Context 11731. Top fill of ditch. 4th century.
8. (*not illustrated*) **Lower rotary quern fragment**. Old Red Sandstone (QC). Burnt. Small edge fragment which tapers to slightly rounded edges. The grinding surface is angled and pecked and the base is rough. Measures 40mm thick. Context 10547. SF 1335. Surface finds associated with buildings 10800, 10810, 10820 and 10830.
9. (*not illustrated*) **Upper rotary quern fragment**. Old Red Sandstone. Small edge fragment. Disc or very slightly tapered type. Edge are straight and vertical. Measures 74 mm maximum thickness. Context 11153, SF 1445. Demolition layer overlying the whole of the building 10860 and 11370. 4th century.
10. (*not illustrated*) **Small millstone fragment**. Millstone Grit. Less than 5% circumference survives but the quern measures >540 mm diameter x 56 mm max thickness. Top is slightly convex and the grinding surface has deep spaced pecking (but worn). Context 11008, SF 2770. Stone floor surface within northern end of building 10810. 3rd to 4th century.
11. (*not illustrated*) **Upper rotary quern fragment**. Lava. Very weathered but tapered to centre and in typical lava style with a thick kerb measuring 12 mm thick and 47 mm wide. Surface weathered so dressing not visible. Measures 330 mm diameter x 60 mm maximum thickness. Context 10676, SF 1333. Surface finds associated with buildings 10880 and 10870.
12. **Incomplete lower rotary quern**. Old Red Sandstone. Cake style with straight slightly splayed sides, flat base and straight convex grinding surface. Pecked all over. Measures 440 mm diameter x 64 mm maximum thickness. Context 12332, SF 2276. Smoothed limestone slab surface, 3rd century or later.
13. **Incomplete lower rotary quern**. Hertfordshire Puddingstone. Small beehive bun shaped quern. Spindle socket measuring 39mm deep x 25mm wide, slightly conical. Very damaged around all the edges. Grinding surface is worn down at the centre so there is a slight bowl around the socket and there is also some polish towards the circumference. Measures 275-300 mm diameter x 95 mm thick. Context 11325, SF 1826. Collection of unworked limestone blocks around north edge of interior of building 10870.
14. (*not illustrated*) **Lower rotary quern fragment**. Millstone Grit. Disc style quern of fairly even thickness with roughly flat faces and straight vertical edges. The grinding surface is very slightly concave and pecked (but worn) and the base has been roughly worked. Measures approximately 440 mm diameter x 48 mm maximum thickness. Context 12676, SF 3189. Demolition rubble within building 10830, 4th century.
15. (*not illustrated*) **Probable rotary quern fragment**. Burnt possible Greensand. Heavily burnt and cracked as a result. Edge fragment with flat other surface probably from flat-topped type with curved concave grinding surface. Context 8118, SF 705. Only fill of ditch 8117, gradual infilling.
16. (*not illustrated*) **Lava rotary quern fragment**. Lava. Very weathered. Context 6631. Only fill of possible SFB 6630.
17. (*not illustrated*) **Lava rotary quern fragments**. Lava. Small weathered fragments. Context 6268. Only fill of oval pit 6267 (date uncertain).
18. (*not illustrated*) **Upper rotary quern fragment**. Millstone Grit. Six edge fragments, four adjoining and two part of the same quern and joining each other but not main four. Quern is thin, curved and of even thickness. Edges are slightly curved and lean inwards. Measures 26 mm maximum thickness. Context 12984, SF 3202.
19. (*not illustrated*) **Rotary quern fragment, probably upper**. Millstone Grit. Very small edge fragment, worn all over. Top is flat, edges are straight and lean in and grinding surface has spaced pecking. Measures 26 mm maximum thickness. Context 10517, SF 988.

Discussion

Four principal materials were used for querns at Higham Ferrers: Millstone Grit, Old Red Sandstone, Niedermendig Lava and Hertfordshire Puddingstone. Redlands Farm, Stanwick, located very close to the roadside settlement, produced querns in only two of these materials (four of Millstone Grit and two of Old Red Sandstone: Shaffrey and Evans in prep). However, it is no surprise that a limited range of materials is represented in such a small assemblage. The villa at nearby Stanwick produced all these materials but the assemblage is much larger and heavily dominated by Millstone Grit and other sandstones, with lesser numbers of Old Red Sandstone and Lava and only a few querns of Hertfordshire Puddingstone.

Although no comprehensive survey has been done, Millstone Grit was a popular choice for rotary querns in the region with a number being found at Ashton (Meadows 1983) and at several sites in northern Bedfordshire (Shaffrey in prep b). Lava was also used at Ashton (Meadows 1983) and although it is less commonly found in the region, this may be due to the particular properties of the stone which make it much more vulnerable to weathering and likely to occur in small friable fragments. Neither stone type is out of place at Higham Ferrers.

Hertfordshire Puddingstone (HPS) always occurs in smaller numbers than Lava and Millstone Grit and rarely numbers more than one or two querns at any site. The best-known study found it to be rarely used west of the Icknield Way (Rudge 1966, 247) which would suggest that the Higham Ferrers quern is unusual. Since that initial survey, however, its use has been poorly researched except in Essex

(Major 2004) and in an area north of London including Bedfordshire but not Northamptonshire and Cambridgeshire (King 1980). Its distribution around Higham Ferrers has not been studied in the same way, but current research reveals that HPS querns occur quite regularly in small numbers, but are at the periphery of their distribution. Along with known finds from Great Staughton to the south-east (Anderson 1994, 103), Ravenstone to the south-west (King 1980, 74) and a number of sites in northern Bedfordshire including Odell (Dix 1980), three examples were also found at Stanwick and a single specimen was recovered at Ashton (Meadows 1983). The Higham Ferrers quern is therefore not out of place.

Hertfordshire Puddingstone is always assumed to have originated in Hertfordshire and the type seen here, a cream coloured matrix containing cream and tan coloured inclusions with iron stained rims, is very similar to two of the examples from Stanwick (SF 1827 and 96006). This pale type of HPS appears to be most common in this and the Essex region and is quite different to that usually found in Kent with a darker matrix and pebbles (eg at Thurnham villa; Booth *et al*. 2006, and at Springhead; Shaffrey 2007a). The difference in the petrology of the HPS used in these two regions may suggest some difference in the sources of the stone but a physical description of HPS querns is rarely given in published quern reports. In order to determine to what extent this spatial patterning is real, detailed descriptions of HPS querns should always be included with finds records. It is not possible, given the current lack of information, to determine whether or not Hertfordshire is the most likely source.

The Old Red Sandstone (ORS) querns add to a growing number in the area of the Bedfordshire, Cambridgeshire and Northamptonshire borders including Peterborough (Shaffrey in prep), Great Barford (Shaffrey 2007b), Kempston (Dawson 2004, 376) and a possible example from Great Staughton (Greenfield *et al.* 1994, 105). These sites are all on the periphery of ORS distribution, however, and Higham Ferrers is of particular significance because it has more than the usual number of ORS querns and because they form a high proportion of the assemblage (approximately one third). The only other sites in the region with more than one or two querns of ORS are Stanwick, which produced 22 examples, and Harrold Pit, Odell (Dix 1980), which produced fragments from seven querns. Both these sites, however, have substantially larger assemblages than Higham Ferrers (approximately 200 querns) and the proportion of ORS is therefore relatively low. Why Higham Ferrers stands out in this respect is difficult to be sure, but its proximity to other sites with relatively high numbers of ORS querns may suggest that it functioned as a secondary distribution point. This pattern has been observed for a number of other Roman towns, notably Silchester (Shaffrey 2003b) and Wanborough (Shaffrey 2006), and although the number and proportion are both lower at Higham Ferrers, they are comparable because this region is much further from source.

Higham Ferrers is located in an area where the use of Old Red Sandstone overlaps with another principal Romano-British quern supplier (Millstone Grit), although Millstone Grit appears to have been preferred (Shaffrey and Evans in prep) and occurs on fractionally more sites and in slightly higher numbers than Old Red Sandstone. While this may be in part due to problems with identification (Millstone Grit is more widely known and Old Red Sandstone has consequently often been mistaken for it; Shaffrey 2006), the dominance of Millstone Grit is highlighted by a number of assemblages containing large quantities of it, notably Stanwick and Odell. This dominance is intriguing, as Millstone Grit had no obvious advantages over Old Red Sandstone. Both stones had to be imported to the area, so Millstone Grit was not the primary choice because of easily availability. The great similarity between the two rocks petrologically also means that Millstone Grit was not chosen because of grinding superiority. The dominance is most likely to be explained in terms of the strength of the two industries and the sheer number of querns produced. The Romano-British Millstone Grit industry has not been comprehensively studied but the stone appears to have been used over a wider area than Old Red Sandstone and intensively for much longer, and the industry may simply have produced much greater numbers of querns.

Summary

The Higham Ferrers quern assemblage is not a large one but it includes all the principal materials used in the region. The area in which the settlement is located is one in which there are no natural quern resources readily to hand and the result is a region dominated by one stone type (Millstone Grit) but penetrated by other major suppliers (Old Red Sandstone, Lava, Hertfordshire Puddingstone). The differences between sites in such an area may well be highly significant and the use of materials other than Millstone Grit is likely to be related to the personal or political connections of those sites. In the case of Higham Ferrers, the broad range of lithologies within a fairly small assemblage suggests access to a number of different suppliers. Of particular interest are the Old Red Sandstone querns and their suggestion of trade links with the Wye Valley area.

OTHER WORKED STONE *by Ruth Shaffrey*

The assemblage of worked stone comprises mostly whetstones and large numbers of roof and floor stones with some rubbers, pot boilers, a loomweight, stylus tip, tessera, bead and possible pot lid. Most of the roof and floor stones retain no evidence of their

function, but three examples of Jurassic limestone slabs still have their suspension holes and were certainly used for roofing (11328 and 11324).

The main artefact class represented is whetstones, of which nine were found: four primary whetstones, four secondary and one natural. The four primary whetstones include one of a fine-grained sandstone (11146 SF 1448) and three of Kentish Rag. Two of these are surface finds associated with ditch 10506 and one was found amongst rubble within building 10840 (12835: Fig. 5.50.3). Three of the four secondary whetstones have made use of slabs previously probably used for flooring or roofing, a fairly common occurrence on Roman settlements. The fourth makes use of a rectilinear shaped waste piece of stone (8158). The natural whetstone utilises a large elongate pebble of fine grained micaceous sandstone (12843).

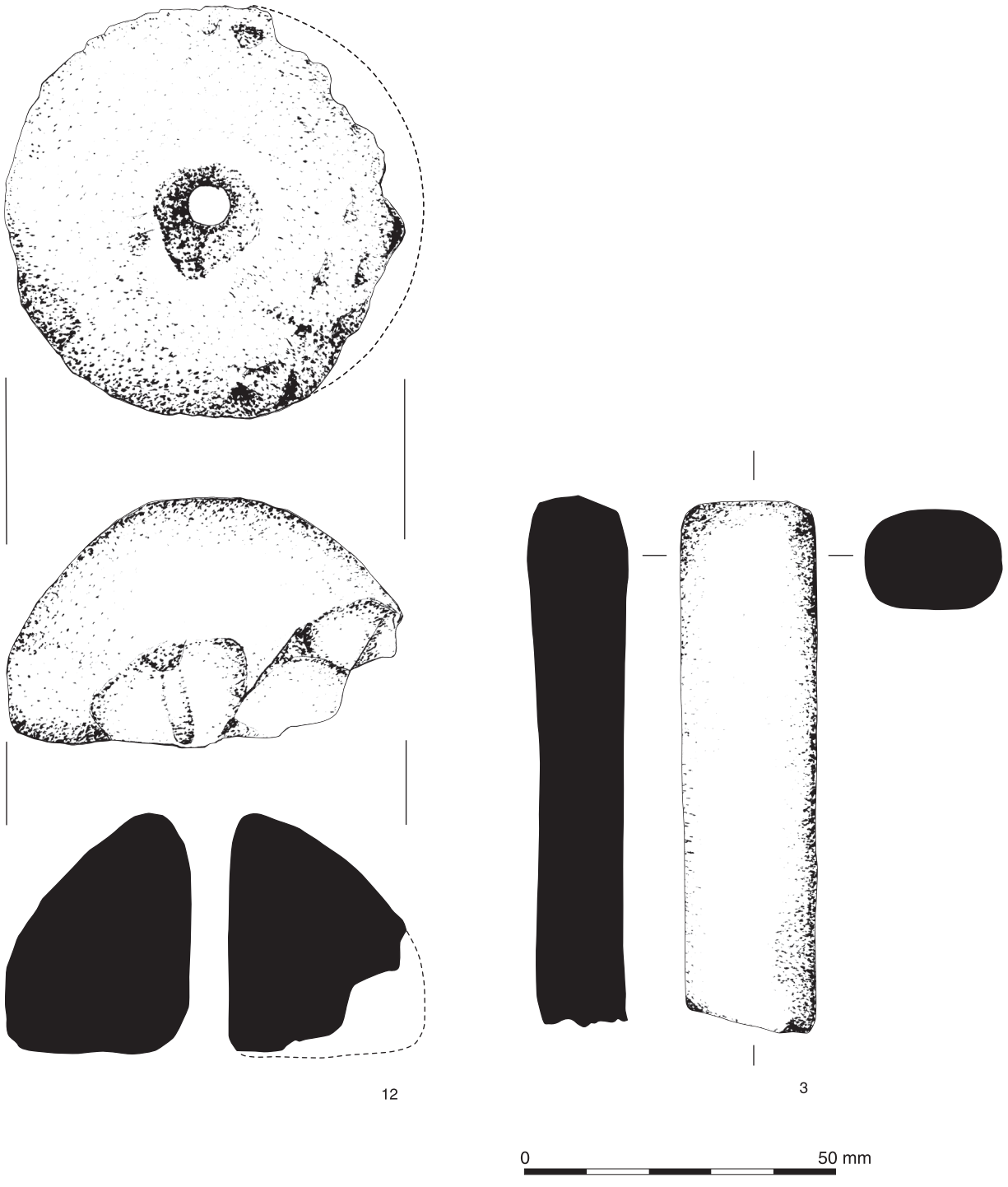


Fig. 5.50 Other worked stone

A single probable spindle whorl (SF 2006) was recovered from context 12065 Fig. 5.50.12). Although this is on the large side at 66 mm diameter, it falls well within the maximum diameter suggested for spindle whorls at Danebury of 100 mm (Brown 1984, 423). The weight of the spindle whorl is perhaps more significant than the size, for it is the weight which affects the material being spun. This whorl weighs in at 148 g which is substantially heavier than medieval whorls from Winchester where the heaviest stone whorl weighed 101 g (Woodland 1990, 217). Although heavy whorls would have been useful for spinning coarser yarn or for doubling or plying the yarn (ibid., 218), it is possible that this weight had another function altogether, perhaps as a net sinker. A fragment of a single shale object (SF 1158) was also found (10624) but is too damaged for more than a small piece of spiral decoration to be made out.

Catalogue of worked stone (Fig. 5.50)

Whetstones

1. (*not illustrated*) **Central fragment of primary rectilinear whetstone**. Kentish Rag. Both ends are very worn and all four long faces are worn and slightly concave. Rectangular cross section. Measures >55 mm long x 18 x 15.5 mm. Context 10507. Surface find associated with ditch 10506.
2. (*not illustrated*) **Central fragment of primary rectilinear whetstone**. Kentish Rag. Elongate whetstone with rectangular cross section and quite square edges. Slightly worn on all faces, two being convex and two faces both have a long groove longitudinally along them which predates the whetstone breaking. Measures 51 mm remaining length x 16.5 x 13 mm. Context 10507. Surface find associated with ditch 10506.
3. **Elongate primary whetstone.** Kentish Rag. Broken at one end and worn. Oval cross section but bevelled across both edges. Measures > 83 x 21 x 14 mm. Context 12835, SF 3155. Rubble layer/ collapse/late surface within building 10840. Mid 4th century or later.
4. (*not illustrated*) **Natural pebble whetstone**. Fine grained micaceous siltstone. Large elongate pebble used extensively on one edge as we whetstone. Some polish. Measures 180 x 63-77 x 25-40 mm. Context 12843, SF 3154. Possible wall collapse in building 10840. 4th century+.
5. (*not illustrated*) **Rectilinear whetstone, probable secondary**. Micaceous fine grained cream sandstone, quite sparkly. Single edge only has been well used as a whetstone. This edge is flat but curved along the length. Measures 60 x 30-32 x 13 mm. Context 8158. Area G.
6. (*not illustrated*) **Elongate primary whetstone**. Fine grained brown sandstone. End fragment has been used along the two edges to make these slightly concave and the face slightly bevelled. Sub-rectangular section. Measures >50 x 15-18 x 12 mm. Context 11146, SF 1448.
7. (*not illustrated*) **Secondary slab whetstone**. Very fine grained sandstone/siltstone. Slab used as a whetstone on one face and mostly on one edge. Other edges are broken. Measures 102 x 42 x 29 mm. Context 12643. SF 2758.
8. (*not illustrated*) **Secondary slab whetstone**. Fine grained pinkish brown slightly micaceous sandstone. Slab used as a whetstone on one face (some scratches/groove) and mostly on one fairly concave edge. Measures 140 x 74 x 22 mm. Context 11146. SF 1436.
9. (*not illustrated*) **Secondary whetstone**. Fine grained pinkish brown slightly micaceous sandstone. Slab used as a whetstone on one face (some scratches/groove) and mostly on one edge which is fairly concave. Measures 140 x 74 x 22 mm. Context 11146. SF 1436.

Selected other worked stone

10. (*not illustrated*) **Tessera**. Pale cream coloured fine grained slightly micaceous sandstone. Slightly rectilinear cube with one smoothed face. Measures 29 x 24 x 21 mm. Context 10739. Finds reference for silty soil located below and to the west of 10738.
11. (*not illustrated*) **Possible crude pot lid**. Fine grained dark brown iron rich quartz sandstone. Flat worked piece with rounded edges, heavily burnt, shaped and rounded on upper surface but fairly rough and flat under. Pot lid? Measures >100 x >78 x 18 mm. Context 11172. Mixed fill of dumped mortar and topsoil within robber cut, 4th century.
12. **Large spindle whorl**. Jurassic fine grained shelly limestone.75% remains of flat-bottomed bun shaped whorl. Biconical perforation measuring 7 mm wide at narrowest point in middle to 14 mm at each surface. Not perfectly smoothed but nicely worked all over. Measures 66 mm diameter x 37 mm high. Context 12065, SF 2006.
13. (*not illustrated*) **Bead**. Shale. Small fragment, broken on all 4 edges. One face is plain, the other is decorated with twists. Measures 10 x 6 x 3 mm. Context 10624. SF 1158.
14. (*not illustrated*) **Pot boiler and rubber**. Fine grained slightly quartzitic sandstone pebble used as a potboiler (cracked and also very burnt). Naturally smoothed original faces but one is worn slightly concave and has probably been used as a processor. Context 11203. Fill of robber trench, 4th century.
15. (*not illustrated*) **Possible rubber**. Fine grained slightly micaceous sandstone. Broken pebble with one smoothed and slightly polished surface. Very burnt stone and slightly cracked from use as potboiler. Measures >54 x 75 x 45 mm. Context 10668. Surface find.

Discussion

Slabs of stone appear to have been widely used in the settlement for flooring and probably for roofing. Two of the slabs with suspension holes were found associated with the shrine and may indicate a stone, or partial stone roof to a structure such as the entrance-way. The majority of the stone slabs are made of Jurassic limestone and although a very specific source has not been pinpointed for this stone, none appears to have been imported any distance to the site.

The remainder of the worked stone assemblage is fairly small and is mostly indicative of general

domestic activity. The single spindle whorl (SF 2006) is the only stone object that provides evidence for industry of any kind. Although nine whetstones were found, this is a fairly small assemblage for a settlement of this size and none of the examples found is particularly noteworthy. Whetstones are common finds on Roman sites and are generally made from Kentish Rag (as are three examples from Higham Ferrers) or other objects reused (as are four examples here).

ARCHITECTURAL AND SCULPTURAL STONE

by Peter Davenport with a contribution from Martin Henig

Catalogue of architectural and sculptural stone

Eleven fragments of architectural stonework were recovered during excavations. Five of them are parts of dwarf columns or colonnettes of a type well known on high status domestic sites or public buildings in Roman Britain. Two are pieces of building stone, one of them notable merely for its size, which in its present form may even be cut down from a larger block. The remaining two others are pieces of sculpture, of contrasting styles.

1-2. **Two fragments of a shaft of a colonnette** (Fig. 5.51.1-2). These two pieces represent a cylinder split lengthways approximately into two halves. The break is rough but quite straight and may be the result of deliberate fragmentation of the shaft for re-use. As the ends are broken off as well, there is no surviving evidence of chisel or wedge marks. The original finish was smooth and regular, probably achieved on a lathe. The shaft has a slight taper from an estimated full diameter of 0.20 m at one end to 0.205 m at the other. The taper is straight, not an entasis. Both fragments have been broken across at each end and have surviving lengths of 0.37 and 0.38 m. The stones are a good quality oolitic Cotswold limestone, and were recovered from ditch 12294 (Plot A/B division boundary 13010 flanking the north side of building 11370). The two blocks do not now fit together, due to damage, but are almost certainly two parts of the same length of colonnette, representing about 33% of the original shaft length.

3. **Capital and abacus broken from the head of a colonnette** (Fig. 5.51.3). Slightly smaller in scale than Nos 1 and 2. The column diameter below the capital is 0.16 m and the abacus width and top capital moulding diameter are the same at 0.22 m. The height of the capital and abacus is 0.1275 m. The capital mouldings consist of two cymas separated by a bead; a bead appears at the top of the shaft, but has an angled or keel profile. The intricate multiple mouldings are indicative of lathe work and indeed the whole colonnette must have been at least finished on a lathe. The square socket on the head (0.05 m square and 0.045 m deep) may have been the location for the metal or hard wood centre point of the lathe. However, as the socket shows clear signs of chiselling on two adjacent edges to remove what was in it, it seems very likely that, whether or not it served in the turning process, it was also used to house a lead-seated iron (or wood or bronze?) pin to aid construction, salvaged for scrap when the colonnette was removed from its position. The capital is cut from oolitic limestone slightly more vesicular than that used for Nos 1 and 2. This may be the result of acid ground conditions rather than the original stone character. The capital shows extensive remains of creamy whitewash, especially on the capital mouldings. It has worn off the abacus and most of the shaft, but some remains to show the shaft was also whitewashed. It was recovered from context 10735, the short western wall of the inner shrine precinct. SF 1225.

4. **A colonnette minus the capital and abacus** (Fig. 5.52.4). This has most of the base surviving (all of the profile), one side having been roughly flattened back to the shaft. The fresh condition of the scar suggests this was done during excavation, although older, weathered damage is visible on the same side on the shaft. The shaft, surviving to a height of 0.41 m, has a diameter, where broken, of 0.17 m and of 0.20 m where it joins the integral base. The latter is 0.216 m high. There is no obvious entasis, merely a taper. The base is, in essence, an attic base of two tori separated by a filleted scotia. The shaft joins the upper torus via a cavetto and another fillet. There is a trace of a further fillet on the base of the lower torus. Each torus has a mid line channel, barely more than an incised groove and two more occur in the scotia just above and below the fillets separating it from the tori. Two more similar grooves mark the junction of the base and shaft. The colonnette is cut from a fine grained oolitic limestone, identical to Bath stone, and is clearly lathe turned. It is curiously flat and unplastic and while technically highly finished, is very wooden and linear with very little play with the mouldings, which remain shallow and very restrained. The base has a square recess for a lathe centre point and/or fixing pin, 52 mm square. This shows evidence for removal with a chisel or similar. The piece was recovered from layer 8285 (well 8278) in Area G. SF 401.

5. **Upper part of the shaft of a colonnette with integral necking moulding** (Fig. 5.52.5). The column diameter below the capital is 0.155 m and where the shaft is broken, the diameter is 0.168 m. A maximum length of 0.39 m survives. The maximum diameter at the moulding is 0.18 m and the raised disc on the top is 0.155 m. The slight nature of the moulding and the raised disc set back on its top surface implies that it is meant to support a separate capital. This is more usual with larger columns. The moulding is 0.04 m in height with a maximum projection of 0.125 m. The moulding starts with a fillet at the necking under a cyma merging up into a half round. There is a suggestion

Fig. 5.51
Architectural stone

Fig. 5.52 Architectural stone

of a groove at the junction of the cyma and half round, but this may be damage. The colonnette is well proportioned and carefully finished, probably on a lathe. This is despite the fact that it has been cut from a very coarse, shelly oolite, which nonetheless appears to have been hard and cohesive enough to allow the basic shape to be cut accurately. The stone has suffered ancient damage and erosion, quite possibly while *in situ*, as it would not have been very resistant to frost. However, while none survives, it is possible that the column was heavily coated with whitewash which would have disguised the stone and increased its frost resistance. The piece was also recovered from well 8278 in Area G. SF 402;

6. **Cuboid block of very shelly and coarse oolite**. A finer grained stone than No. 5. The shells, which are generally small and not filled with sediment, contribute to the vesicular character of the stone. This has fractured along one of the natural beds visible in the face of the stone. Despite the coarse material, the stone is capable of taking a level surface and has been carefully and smoothly worked. It is currently 0.21 m wide and 0.24 m tall and 0.14 m thick. It is broken on all faces except the front and rear, although the right hand face has been smoothly recut, not quite at right angles to the rest of the block. This face has half of a square section hole in one end which may be a remnant of a wedge hole to split the original block. The front face has what appears to be the corner of a recessed panel a little less than 0.02 m deep in the front face. The edges of this are not at right angles to the face but slightly splayed. Narrow flat chisel marks are visible in the recessed panel, including a strip that seems unfinished with not all the material removed. The left-hand stile of the panel is not flush with the rest of the stone face, but cut so as to taper gently into the recess. The rear face is flat but roughly finished. The block may well be part of a wall with shallow panelled recesses. These may have held bas-reliefs. The tapered side frame of the stile of the supposed panel, in fact, may be part of the contents of a panel; an altar base or side of a building or piece of furniture are possibilities. This piece was found in the water-logged lower sediments (context 8279) of well 8032 in Area G. SF 3195.

7. **Large trapezoidal (almost triangular) block of oolite.** This may be part of a broken rectangular block, 0.54 m x 0.33 m. There is no well-finished face, although the best is probably the short length at right angles to the shorter face before the block angles to the rear. This may be a joint face. The 0.33 m-long face is adze or chopper finished and the two long faces are merely broken and crudely worked flattish. One of the flat sides has the edges worked level and the centre slightly hollowed as if for a vertical joint. This is obscured by heavy secondary working with a punch or gouge, diagonal to the block. Such working is also visible on the opposite face. This is probably a large block from a monumental wall. The piece is from context 12924, a rubble layer deriving from the demolition of the monumental wall within the outer precinct. SF 3194.

8. **A piece of laminar wall stone**. Broken or unworked on all sides, 0.37 m x 0.27 m x 0.07-0.10 m. Piece of wall rubble from context 8199 in well 8032, Area G. SF 400.

9. **A large piece of fine-grained oolite**. 0.51 m x 0.29 m x 0.17. The upper face of this is smooth and rounded for about 0.10 m of the thickness. The rest of the block's thickness is roughly broken away. The finished stone gives the impression of being the result of deliberate carving, but is very worn as a result of re-use in a stone rubble floor. The overall impression is of the torso of a quadruped, perhaps with shoulders represented by the wider part of the swelling. It could, perhaps, be a bovid. A small leaf shape and some wave-like hollows over what in this interpretation would be the haunches, may represent flora and drapery in front of the body. While this interpretation may be optimistic, there is little doubt that the block has been deliberately sculpted. The broken edges are presumably the points where the ground of the bas-relief has been broken away. Holes in the side of the block in or just above this zone may be evidence of the breaking up process, or later re-use. The piece was from context 11008, a floor surface within the northern end of building 10810. SF 3197.

Fig. 5.53 Limestone relief panel from the shrine

10. **A flat piece of naturally laminated oolite.** (Fig. 5.53). 0.35 m x 0.28 m x 0.12 m. This piece of stone was found facing downwards within an enclosure wall (12923) immediately south of the main shrine enclosure. It is distinguished by a very crude carving of a small, nude, male figure in shallow relief. A rough, saucer-like depression has been very crudely cut in the face of the stone and in a reserved area in the centre a figure with legs apart in a conventional striding pose and arms out wide has been delineated. The surface of the stone has not been flattened prior to the commencement of carving, although there are some indications of narrow, flat chisel-working here and there on the surface. The figure is 0.19 m high. It gives the impression of being extremely crudely and roughly worked, although the work has clearly been left unfinished and, in addition, has suffered later damage. The right leg from knee to above the hips into the torso, has an area of well-finished stonework, and another similar area can be seen in the inside left leg. This contrasts with the clearly broken-away front of the right leg, for example. Male genitals are also schematically represented. The central torso area has three small and deep chips knocked out of a flattened area, suggesting, to the imaginative, a shield or even a cuirass with an embossed decoration in the form of a face of some kind. The head is over-sized and the cheek area is much exaggerated. An enclosing helmet is possibly intended. It has also been suggested that this may be an attempt to show an animal head worn as a hood. This, and the enlarged left arm, which could be meant to represent a club, would imply that this figure was meant to be Hercules (see below). The series of radiating scratches around the head may simply represent working, or they may be an attempt to show radiating sun rays, as they do not occur elsewhere on the carving. This piece was incorporated within shrine outer precinct wall 12923. SF 3196.

Discussion

Little can be said about the fragments of broken shaft (Nos 1-2), except that its original height, as far as it can be broadly estimated from the diameter and taper, falls within the normal range for dwarf columns in Roman Britain: 0.81 m to 1.21 m (Blagg 2002, 145). However, it can be noted that most dwarf columns have an entasis on the shaft, often quite exaggerated (eg the examples from Bath, Cunliffe 1969, plate LXXVIII). This is completely absent on fragments 1 and 2 and 4.

The capital (No. 3) is not of a size to have originally been part of 1 and 2. It appears to be of Blagg's type IVa, although the central fillet or ovolo is rather large (ibid., 129), and is similar to a local example from Yarwell (Woodfield, 1978, 77 and fig. 2), although that column has a necking moulding, for which there is no evidence on the present example. Most of the examples of this group are known from the south-west, but one from Leicester and another from North Leigh in Oxfordshire (Blagg 2002, 132), as well as the Yarwell example, show that this find is within the wider geographic spread of this type. The base and shaft fragment is of a distinctive type, which were it not clearly lathe-turned, and technically accomplished, might be thought, in its provincial and unsophisticated style, to be of Saxon date. It follows, in outline, the "civilian" type of Blagg (ibid., 108), where the cavetto makes the transition from shaft to base, the torus mouldings are bordered by fillets and medial grooves are applied to the tori. However, except for the cavetto, these elements are reduced to the merest of projections and simple linear incisions in this example. Despite its competence, it is as if the craftsman was working from descriptions, not actual examples or drawings, and knew nothing of proportions. Other examples from Towcester (Woodfield 1978, fig. 2) show capitals with comparable shallow mouldings, which as a style seem to owe more to lathe-turned furniture than architectural tradition. Fragment 5 is classically proportioned and well executed. Its rough stone is all the more odd for this.

It is noticeable that all the shaft fragments have been broken off to lengths between 0.37 and 0.41 m. This suggests deliberate reduction for re-use in a wall or footing of that width. Examples of dwarf columns or colonnettes are not generally closely datable, though most come from later Roman contexts, such as later villas, but are never *in situ*; they may, therefore, be considerably older than the contexts in which they are found, a situation which may apply at Higham Ferrers. With the exception of No. 4, the columns are rather classically correct, suggesting an accomplished or well-informed mason or client. The strong possibility of the existence of relief sculptured panels, represented by Nos 6 and 9, fits in well with this view. Such things are probably more likely in earlier Roman contexts in Britain, but they are not unparalled later.

The crude relief figure carving seems to have been a private venture, very probably a lunchtime recreation, and not meant for public display. This is especially clear in the failure to dress the surface of the stone flat before beginning. Alternatively, it is possible that the figure was prepared as a private offering to the god or goddess of the shrine. Nonetheless it shows awareness of more sophisticated and technically better models, especially in the pose and the probable use of symbolic accoutrements and may well have been rather better when new, if still amateur, as it has certainly suffered damaged since completion.

Martin Henig has commented on the piece as follows:

The oolitic limestone relief depicts a nude male figure standing or perhaps walking to the left. His body is full frontal, his legs apart, his right arm is raised and his left somewhat lowered though bent at the elbow. The genitals are only schematically indicated. Only the initial stages of carving have been carried out with a broad chisel, and apart from

a triangular-shaped nose and slight hollows for the eyes the only detailing is some fine grooving around the head indicative of hair or a nimbus.

The importance of the sculpture is that it may well be a trial or apprentice piece, albeit unfinished, which attempts to portray a nude male figure such as Hercules (see Huskinson 1994 no. 8 from Water Newton, Hunts). The only other example of an unfinished carving is a piece from Cirencester likewise depicting a nude figure but carved in the round (Henig 1993b, no.148). The rough detailing is close to the non-professional tradition represented by the image of the goddess Regina from Lemington near Dorn (ibid., no. 94), the phallic head found near Broadway (ibid., no. 156) or the mounted warrior from Margidunum, Notts (Huskinson 1994, no. 30). These all display wedge-shaped noses and pecked-out eyes. The blocking out of these figures is rather less ambitious, however.

It is probable that the stone was rejected or left over from building. The first stage in working it may be represented by the chiselling on the reverse where the sculptor was trying to get to grips with handling the chisel before getting on to the real business of carving. It is difficult, considering the location of the site, not to recall the Roman sculpture from Stanwick. This group is highly accomplished and clearly the work of a team of sculptors. Initial thoughts suggested that they came from a mausoleum near a villa but it must be borne in mind the possibility that they came from a sanctuary. Certainly the rider god represented by one of the fragments and perhaps the Minerva would be more at home as 'religious' sculptures. The monumental mortared structure immediately outside of the sanctuary at Higham Ferrers was probably dismantled and robbed at the end of the shrine's use in the later 3rd century, and it is not impossible that building material and any possible associated sculpture could have been transported to nearby Stanwick.

CERAMIC BUILDING MATERIAL

by Cynthia Poole

The excavation produced 745 fragments of Roman ceramic building material weighing 99,781 g. Tile forms are quantified and summarised in Table 5.32. Roofing material dominates the identified elements of the assemblage from the two areas (main excavation area and Area G) accounting for over 70% of the tiles found, and possibly nearly 90% as the majority of plain tiles are almost certainly the central sections of tegulae. Bricks account for most of the remaining 10%, with box flue and some possible tessera barely represented. The term 'tile' is used throughout the report when referring in general terms to all ceramic building material from the site; it is qualified if referring to a specific form or function.

Fabric

Two broad fabric groups and twelve individual fabrics were originally assigned during the assessment (Edgeley-Long in OA 2004b) and a further category added at the analysis stage. The two broad classes are shell-tempered and sand-tempered; these form equal proportions by count, but by weight the shelly fabrics (65%) form a higher proportion than the sandy (35%). The results of analysis suggest that with the sandy fabrics diagnostic characteristics are not clear cut and the types form a continuum representing differences in the geological substrate, which might vary over short distances, and need not represent different sources or production centres.

Group 1: Shelly fabrics

Fabric B: Colour: Reddish brown, orange, yellowish red, reddish yellow; some with reduced grey core; light-mid grey on base of reference sample. Inclusions: high density (40-50%) of coarse pale grey platy shell fragments 0.2-5 mm,

Table 5.32 Quantification of ceramic building material by tile forms and main fabric groups

	Sandy fabrics		*Shelly Fabrics*		*Total*		*Total*	
Form	*Nos.*	*Wt (g)*	*Nos.*	*Wt (g)*	*Nos.*	*%*	*Wt (g)*	*%*
Tegula	39	10740	178	43047	217	29.13	53787	53.91
Imbrex	183	9128	70	8130	253	33.96	17258	17.3
Ridge?	0	0	3	265	3	0.4	265	0.27
Box	1	50	2	1147	3	0.4	1197	1.2
Brick	8	6742	1	435	9	1.21	7177	7.19
Plain/brick	9	1735	0	0	9	1.21	1735	1.74
Plain/teg	7	845	53	6834	60	8.05	7679	7.7
Plain tile	74	4182	61	5271	135	18.12	9453	9.47
Tessera	2	36	1	12	3	0.4	48	0.05
Unidentifiable	53	1182	0	0	53	7.11	1182	1.18
Total	376	34640	369	65141	745	100	99781	100
%	50.5%	35%	49.5%	65%				

average c 0.5-1 mm, densely packed. Occasional stone grits: scattered lumps of limestone [R] up to 20 mm. Rare lumps of ?grog (subrounded) *c* 1-2 mm. Hackly texture. Reference sample: (10584).
Forms: tegula, imbrex, box, tessera
Equivalent to Redlands Farm Fabric A

Fabric F: Colour: buff-light yellowish brown surface; reduced dark grey core (in the assessment colour was used as a main means of distinguishing between feabrics B and F). Inclusions: high density (40%) of pale grey platy fossil shell fragments 0.2-4 mm, average *c* 0.5-1 mm; possibly a higher proportion of fine shell in this fabric compared to B. Shell, densely packed. Grey buff clay silt pellets (rounded) 2-13 mm. Fine hackly texture. Reference sample: (10769).
Forms: tegula, imbrex, ?ridge, brick

Fabric D: The fabric is similar to, but not typical Fabric B: it seems to be a variant. It contains frequent grey very rounded and highly polished ?limestone grit 2-3 mm and larger cream limestone fragments *c* 5-8 mm. A lot of voids are present, where shell has leached out but very little evidence of surviving shell fragments. Reference sample: (10621). Only one example present.
Form: imbrex
Fabric G: Same as fabric B. Reference sample: (10739)

Group 2: Sandy fabrics

Fabric A: Colour: red, orange, yellowish red; core: reddish brown, grey or light grey. Matrix: Very fine sandy-silty clay, faintly or diffusely finely laminated clay with paler streaks. Inclusions: Buff-cream silty clay pellets (low density) fine-medium sand size (<0.5 mm). Red iron oxide grains. Frequent fine medium quartz sand (clear, white) (subangular) <0.2 mm, rare grains up to 0.5 mm, mostly clear quartz, rare dark sand grains. Coarse inclusions: rare cream rock grits ?limestone (subrounded-rounded) up to 7 mm. Very rare silty clay pellets *c* 2 mm. Buff silty clay pellets 1-3 mm. Reference sample: (10739)

Variant A /L: orange sandy clay matrix with granular texture. Diffusely laminated. occasional quartz sand and red Fe oxide grains. Frequent silty clay pellets [rounded] cream buff, orange 0.5-5 mm
Forms: tegula, imbrex, brick, box, tessera

Fabric C: Colour: red – orange. Matrix: very hard uniform clay fabric with some large angular voids in the clay. Inclusions: high density of quartz sand (clear, white) (subangular-rounded) *c* 0.3-0.7 mm, well sorted. Coarse inclusions: none. Reference sample: (10507)
Form: plain tile

Fabric H: Same as fabric C. Reference sample: (10507)

Fabric J: Colour: uniform red throughout. Matrix: clay matrix slightly porous with elongate voids. Hard. Inclusions: infrequent mica silt. High density of fine – medium quartz sand (angular-rounded), clear/white, poorly sorted. Coarse inclusions: none.
Moulding Sand: two distinctive types were associated with this fabric, but not necessarily present on all examples of this fabric. Moulding sand 1 (on ref sample): coarse gritty sand including white grains of ?calcite and limestone and clear quartz 0.5-2 mm. The same moulding sand occurred fabric K. Moulding sand 2: a well sorted quartz moulding sand: clear/brown, medium subrounded-subangular. Plus rare-occasional rounded cryptocrystalline limestone (?chalk). Reference sample: (11159)
Form: imbrex
Only the reference sample was identified as this fabric at assessment, but subsequently an additional eight samples were identified.
Equivalent to Redlands Farm Fabric D.

Fabric K: Colour: Reddish yellow, light-mid orange surface; reduced light-mid-dark grey core and main body of clay. Matrix: dense fine silty clay matrix faintly laminated, with scattered elongated pores/voids 1-10 mm. Inclusions: rare quartz grains (rounded) medium. Diffuse red iron rich clay pellets. Coarse inclusions: very rare stone grits *c* 1 mm. Moulding sand: On reference sample: coarse gritty sand including white grains of ?calcite and limestone and clear quartz 0.5-2 mm. Not necessarily present on all examples of this fabric. Same moulding sand on reference samples as fabric J. Reference sample: (10507)
Form: tegula, imbrex
Only the reference sample was allocated to this fabric at the assessment, but subsequently an additional fourteen samples were identified as this (previously fabric A).

Subgroup: Sandy micaceous

Fabric E: Colour: slightly mottled yellowish red, reddish yellow, reddish brown, yellowish brown. Matrix: micaceous silty clay. Inclusions: moderate density of medium quartz sand (rounded-subrounded) (brown grains) <0.5 mm, mostly *c* 0.2-0.5 mm, occasionally up to 1 mm. Coarse inclusions: Frequent red Fe oxide grains 0.3-0.5 mm. Reference sample: (10666)
Form: tegula

Fabric L: Colour: Light orange – brown surfaces; brown core; grey mottles in core. Matrix: Fine micaceous clay matrix. Very mixed; hackly texture. Inclusions: High density of quartz sand; rare mica sand. Coarse inclusions: Micaceous clay pellets (rounded); coarse red/maroon iron oxide clay pellets (subrounded) up to 8 mm. Uncommon unwedged clay (subangular) up to 4 mm. Reference sample: (10739) There was a variant with little or no mica in matrix.
Form: tegula, brick
Only the reference sample was allocated to this fabric at the assessment, but subsequently an additional three samples were identified as this (previously fabric A).

Fabric M: Colour: Orange-red. Matrix: evenly mixed sandy clay, possibly slightly micaceous (v fine) occasional voids and pores. Inclusions: very high density of fine sand: quartz <1 mm, occasional coarser sand and fine silt/clay

pellets, Coarse inclusions: frequent cream sandy clay pellets (rounded) 1-5 mm and red Fe oxide clay pellets 0.5-3 mm Reference sample: (10219)
Only one example of this fabric was identified.
Form: tegula
Fabrics E, L and M may all be equivalent to Redlands Farm fabric F.

Fabric I: fired clay fabric of mixed sand and shell. Equivalent to Redlands Farm Fabric G.

Most of the fabrics were used to produce a variety of forms. The only fabric that may have been used more exclusively is J, which was only used for imbrices. However if this is the same as Fabric D at Redlands Farm (Pringle 1997) it was used for a wider variety of forms there. Of the sandy fabrics E, L and M form a sub-group utilising micaceous clay and it is possible these should be regarded as a single fabric type. A similar limited range of fabrics was noted at Stanwick (Pringle unpubl) where the two main fabrics were a shelly variety and sandy with silty clay pellets together with a small number of other sandy fabrics. The pattern suggests that tile was being sourced from a relatively small number of local production centres. The shelly fabric B was noted to contain fragments of bryzoa, indicating a Jurassic source (Edgeley-Long in OA 2004). The site lies at the junction of the Lias clays and Oolitic Limestone of the Jurassic system, with the Northamptonshire Sands and Ironstone outcropping on the site together with the Upper Estuarine Series Silts and Clays on the extreme eastern edge of the site. The Upper Estuarine Series has been used up to the present day for brick and tile production, as has the Oxford Clay which outcrops about 2-3 km east of the site. Tiles were produced in a shelly fabric at Harrold, Bedfordshire, which lies 10 km to the south of the site, during the late 2nd century and late 3rd to mid 4th centuries (Brown 1994). However, suitable clays were readily available in the Nene Valley and it is possible there were production sites closer than Harrold utilising the Oxford Clay and the clays of the Upper Estuarine Series.

Forms

Tegulae

Tegulae were produced in a standard manner utilising moulds, which formed the upper and lower cutaways. One near-complete tile was found, which measured 354 mm long by 265 mm wide at the bottom of the tile (increasing to >275 mm towards the top) by 15 mm thick. Another partial tile measured 388 mm long, by >185 mm wide by 20 mm thick. For most pieces the only complete dimension was thickness, which measured between 10 and 30 mm with most measuring 15-24 mm. Flange and cutaway types are referred to using the type series developed by the writer and illustrated in the data file.

Intact flanges were present on 71 records of tegulae out of 90, the remainder being damaged or deflanged. The flange forms represented were rectangular (type A and B) and curved (types D, E, F) in profile (Fig. 5.54). Type A flange sizes ranged from 11-30 mm wide by 41-53 mm high. Type B measured 12-25 mm wide by 49-50 mm high. Type D measured 15-30 mm wide by 33-52 mm high. One complete type D flange measured 28 mm wide by 50 mm high at the tile base decreasing to 15 mm wide by 44 mm high at its top. Type E measured 20-25 mm wide by 40-48 mm high. The two type F flanges measured 20-26 mm wide by 40-46 mm high and 35 mm wide by 50 mm high. All height measurements are the external height of the flange. The unusually thin flanges appear more frequently amongst the shelly fabrics.

A total of 58 cutaways at the tile corners were recorded. Of these 32 were upper cutaways made at the top end of the tile and 26 lower cutaways made at the bottom of the tile. The object of these features is to facilitate the close fit of the overlapping tiles to ensure that the roof is weatherproof. All the upper cutaways were of type A2, formed by the removal of the whole flange to the same level as the body of the tile leaving a straight vertical face truncating the flange. Almost all were made in the tile mould, whilst just two were knife cut. The moulded cutaways measured 17-30 mm long, whilst the knife-cut ones were 42 and 50 mm long. A common feature with a high proportion of the upper cutaways was that an additional small wedge-shaped area of the flange had been roughly knocked off to extend it, usually for no more than about 15 mm.

The lower cutaways were limited to three types. The majority were type A3, in which a rectangular section from the outer side of the flange was removed for its full height and about half its width (11-18 mm wide) for a length of 38-57 mm. All had been formed by the tile mould. This type is sometimes combined with a C1 cutaway to form a composite type. The C1 cutaway takes the form of a triangular wedge cut from the lower outer angle of the flange. These were all knife cut and measured 18-40 mm wide by 20-32 mm deep and 47-60 mm long. Only three of this type were recorded alone and in all cases the preservation of the tile was such that it was not possible to judge whether an A3 cutaway had also been present. A single oddity consisted of an A3 type with an L-shaped profile, where the lower part of the cutaway undercut the tile. This was incomplete so its full size and shape did not survive, but it appeared to have been made entirely in the mould in a single operation.

A third type, the A3a, was similar to the A3, but differed in that it widened from top to bottom. Only two were recorded: one measured 2-10 mm wide by 44 mm long and the other 10-15 mm wide by 52 mm long. One of these had a chamfer to the top angle of the upstanding end of the flange and the whole cutaway and chamfer had been created by the tile mould. From the same feature (hearth 11147) came

Table 5.33 Tile cutaway forms present and Warry equivalents

Cutaway form	*Warry equivalent*	*Date range proposed by Warry*	*Site Phase*
C1	B6	AD 100-180	Phase 5
A3	C4	AD 160-260	Phase 5 (one in phase 6)
A3 / C1 composite	C5	AD 160-260	Phase 5 (one in phase 4)
A3a	D1	AD 240-380	Phase 5

another tile (Fig. 5.54.3) which had an A3 cutaway on one side possibly with a chamfer and an A3a cutaway with a moulded chamfer on both its lower cutaways. This seems to be an intermediate type perhaps representing a period of change in the design of cutaways.

The cutaways can be equated with the types designated by Warry (2007, 44) (Table 5.33). Warry has suggested a development of cutaway types, which represent improvements in functionality, and has provided a broad date range for the periods in which they were produced. The tile from hearth 11147 with differing cutaways may date to the period of overlap of Warry's type C and D, which is dated to AD 240-260.

Although it appears that there may be four different types of cutaway it is likely that there was in fact just one dominating the assemblage (Warry's type C5) the others being partial examples of this, with only his D1 variety representing a different type. The implications of the dating are discussed below in relation to the structures.

There were three tegulae which had holes drilled through sometime after firing. All were similar, positioned against the flange and apparently at some distance from the tile edge (190 mm and 285 mm where this survived). They measure 6-16 mm wide at their narrowest, surrounded by an upper cone 18-25 mm wide and usually with a wider flake scar on the underside up to 50 mm wide. The holes appear to be a modification related to reuse of the tiles rather than their primary function. Two of these tegulae were reused in hearth 11147 (Fig. 5.54.3 and 4) and one in grave 8123. Both these contexts were assigned to Phase 5.

Tegulae were made in fabrics A, B, E, F, K, L and M and the proportions reflect those of the whole assemblage. A small number had signature marks (described below).

Imbrices

No complete tiles were found but one measured over 340 mm long by *c* 170-180 mm wide by 70 mm increasing to >90 mm high and 15-19 mm thick. Complete profiles survived from the ends of two tiles from context 12604 and they may represent either end of a single tile. One measured 132 mm wide by 53 mm high and 16-19 mm thick and the other 148 mm wide by 63 mm high by 17-19 mm thick. There were a number of other examples where width or height could be measured or estimated: most widths ranged from 120 mm to 150 mm plus a couple estimated at *c* 190 mm. Heights ranged from *c* 80-110 mm. For the remainder the only complete measurement was thickness, which ranged from 10 to 23 mm with a mode of 16 mm for sandy fabrics and 13-19 mm with 14-15 mm forming the mode for shelly fabrics.

Apart from the distinctive moulding sands found on the imbrices made in fabrics J and K, already noted above, several of the tiles made in fabric J also had distinctive ribbing from finger smoothing longitudinally along the apex of the tile. All the fabric J imbrices were found associated with a single building, 10860.

Ridge tile?

Two contexts produced fragments of a similar unusual form, which may be a form of ridge tile (Fig. 5.55.6) The type appears to have a semi-circular profile with a curvature equivalent to 280 mm diameter and similar in form to an imbrex, but rather than being open the surviving end was closed off with a flat face of clay. The fragments are small and it is impossible to assess whether the tile tapered, or to give any indication of length. No parallels have been found, but it is suggested it could have been used as the final ridge tile at the end of the gable or may have been a ridge tile or imbrex made with an integral plain antefix. All the fragments came from the shrine area.

Bricks

Bricks formed a very small proportion of the assemblage with only seven definite examples and a further seven examples classified as flat/brick. All except one were made in sandy fabrics, predominantly A with a few in K and L. The single brick in shelly fabric F was noticeably thinner (26 mm thick) than the others which ranged from 35-44 mm thick. The flat/brick category was separated mainly on the basis of their thickness which ranged from 29-38 mm.

The small quantity of brick suggests that it was not being used for any major construction in walls or floors, but was used for minor features such as hearths, ovens or corn driers. A group of bricks was concentrated in context 8033, fill of pit 8035 in building 8019 the northern enclosure. One of these had a distinctive loop signature. The other bricks were found in general soil or occupation layers (11007, 12374) within two of the buildings; sooting on their surfaces may indicate they had been used in hearths.

Box tile: tubulus and tubulus cuneatus

Only three examples of box flue tile were identified, all with evidence of combing. The better preserved pieces each presented large areas of one of the combed faces. The largest of these (12984) also had combing on both side faces, of which only the very edges survived (Fig. 5.55.9). Combing on all faces is usually indicative of a voussoir, though the piece is not sufficiently well preserved to substantiate this with evidence of tapering dimensions. The box tiles were made in fabric A and B.

All the box flue tiles were recovered from the main settlement area, in two ditches (11573, 12938) and building 10820 (12984). The small quantity of the form and its scattered distribution indicate that it was not used in any heating system, but had probably been brought in (from elsewhere within the settlement or possibly from the Redlands Farm villa) for recycling for use as brick in floors, hearths or oven structures.

Tesserae

Three small cubes derived from larger tiles may have been deliberately shaped to form tesserae. They are typical in shape and size measuring 18-28 by 20-29 mm wide by 18-22 mm thick and weigh 10-26 g; two have a trapezoidal and one a rectangular shape. Two were from Phase 4 contexts and one from Phase 5, all associated with the shrine. The only argument against them being tessera is the absence of any evidence of tessellated floors: it would be stretching the evidence to its limits to propose the existence of a tessellated pavement within the shrine on the basis of three possible tesserae. An alternative interpretation, that tesserae were being manufactured, for the villa at Redlands Farm for example, is equally unlikely as one would have expected the distinctive waste debris from tessera production to be present.

Flat tile

Most of the remaining tile was classified as flat tile (or unidentified if extremely fragmentary). A distinction will be found in Table 5.33 between plain/tegula and plain/brick, based on other hints of typical characteristics of the specific forms in combination with thickness. The similarity in general characteristics and finish and thickness suggests that most of this category derives from tegulae, though imbrices must also have formed some proportion. Thickness ranged from 10-38 mm with the greatest proportion concentrated between 13 and 24 mm. Flat tile was a useful source of building material being selected from any type which could provide flat slabs suitable for use in ovens, corn driers and hearths, for use as floors, walls or kerbs, bridging flues or baffles/vent/stokehole covers for controlling air flow.

Markings

The only deliberate markings found within the assemblage were signature marks and combing, though three tegula had finger tip depressions from handling before firing such as one from 8033 (pit 8035), which had three finger tip impressions on the flange.

Signature marks

Only eight tiles had evidence of signatures. All but one occurred in Phase 5 contexts. The most common form was the curved finger groove forming part of a semicircular hoop occurring in combinations of one, two and three grooves. All were incomplete and occurred on tegulae. The double hoop occurred three times, the other two once each. One complete example of a horseshoe shaped signature (Fig. 5.54.3) made with three finger grooves and a fourth showing intermittently ran from the lower edge of a tegula from the hearth 11147. Two examples of a more unusual type were found, one on a brick from the clay lined pit 8035 associated with building 8019 and one on a tegula from ditch 10700, both made in the same fabric (A), suggesting they were made by the same tiler or at least production centre. This signature took the form of a circular loop, whereby the 'tails' crossed one another and extended beyond the circle (Fig. 5.54.1-2).

Combing

All examples of combing occurred on box flue tiles (eg Fig. 5.55.7-9). The two best preserved examples came from ditch 11750 and a layer overlying ditches to the north of building 11370. Both were made with a coarse-toothed comb, one with 8 teeth and one with 16 teeth, 40 mm and 75 mm wide respectively. One tile had a cross pattern formed by two bands running diagonally from corner to corner. The other had two bands of combing: one, relatively straight, probably ran parallel to one of the tile edges, the other at right-angles formed a series of sinuous curves, probably infilling the space between bands of straight combing. On the tile fragment from the fill (11573) of ditch 11750 can be seen an S-shaped groove and the edge of a second forming one side of a band of sinuous curving combing running parallel with the tile edge.

Discussion

Tile production

There is a limited range of tile fabrics and forms, suggesting that the assemblage derives from a small number of tileries, with the bulk of material coming perhaps from just one. The fabrics broadly divide into shelly and sandy groups, with the latter probably representing as few as three tileries. The shelly group has been divided into two types but

though it is possible that this represents two different clay sources and therefore production sites, no clear-cut differences in the fabrics could be discerned apart from colour, which is a result of the firing and manufacturing process. It could be argued that this in itself might indicate different tileries, but equally the same manufacturer may have deliberately produced tiles in different colours for decorative effect. There is a possibility that the two colours may have been used in combination to create a decorative effect on the shrine. The similarity of flange and cutaway types suggests that the shelly fabric group is coming from the same source.

Similar fabrics were found at Stanwick (Pringle n.d.(a)) and at Redlands Farm (Pringle n.d.(b)). The equivalent types amongst the Redlands Farm material have already been noted in the fabric descriptions above. At Redlands Farm the micaceous fabric was more common, though the same shelly and sandy wares still predominated. The ubiquitous shelly fabrics derived from the Jurassic Lias associated with local clay sources were used over the lifetime of the site, suggesting that the same sources were exploited over a long period of time. The variety of sandy fabrics suggests that tiles may have been supplied by at least three tileries and that the one producing in fabrics J and K may have specialised in imbrices. A similar subdivision of shelly and sandy fabrics was found at Bancroft villa and mausoleum, Milton Keynes, but here there was additionally a distinctive pink grog-tempered ware (the same as the pottery fabric PNK GT, see Timby above). Higham Ferrers is on the easternmost edge of its distribution, which is centred on Towcester (Phil Mills pers. comm.) and its absence at Higham Ferrers is not surprising.

Structural use of ceramic building material

The ceramic building material has been utilised in two quite distinct ways. One is as a primary structural element in buildings and the second is for minor structural features within buildings (or possibly in the open). This is strongly reflected in the individual assemblages relating to each building.

The majority of the ceramic building material was found in Phase 4 and 5 contexts, which could be taken to reflect the fact that the early buildings were circular structures and unsuitable for ceramic roofing. However in the later phases the use of tile for roofing appears to have been strictly limited and the change from circular buildings in Phase 3 to rectangular buildings in Phases 4 and 5 did not herald a change to roofing with ceramic tiles. The only area that produced tile in sufficient quantity to suggest use as roofing is the shrine (see below), though it could be argued that two other buildings (8019 and 10860) may have had ceramic roofs.

Table 5.34 Quantification of tile forms from the shrine (by weight)

	Weight (g)	*%*
Tegula	10995	41.8
Tegula/flat	2659	10.1
Flat	4843	18.4
Imbrex	7266	27.6
Ridge?	265	1.0
Brick	244	0.9
Tessera?	48	0.2
Total Weight	26320	

Phase 4: the shrine

The main structure relating to the shrine appears to have been a monumental entrance and it is this rather than any shrine building that was roofed with tile. Its vicinity produced the largest quantity and greatest variety of tile associated with a single structure. Tegulae comprise *c* 70% of the group by weight (ie the combined categories of tegula, tegula/flat and flat in Table 5.34) compared to nearly 28% of imbrices. These proportions are about right to represent a roof, and the difference in proportions is accounted for by the difference in weight between the two forms and the fact that slightly fewer imbrices than tegulae are used on a roof. The proportions are very similar to the estimates by Brodribb (1987, 11-12) based on tiles from Beauport Park, where the proportions by weight work out as 76% tegulae and 24% imbrices for a 15 m^2 section of roof. The proportion of tile by weight for Bancroft mausoleum (Zeepvat 1994) is similar, with 70% tegulae and 30% imbrices.

Both the tegulae and imbrices from the shrine were made in a mixture of sandy and shelly fabrics suggesting they came from a variety of sources, possibly even representing recycling of materials from other buildings in the area, especially if the community was not especially wealthy. However the tegula cutaway types associated with this structure (Warry (2007) type C4 and C5) indicate a production date for the tile of AD 160-260. The main period of deposition of artefacts within the shrine is the later 2nd century and 3rd century, suggesting that construction of the shrine took place at the beginning of the production period for this cutaway form. If this was the case it would suggest that the tile was not recycled from another source, but bought new.

Different tile types and colours may have been used in combination for decorative effect. The ceramic roof would have made this structure stand out from the domestic buildings and the unusual form of possible ridge tile, perhaps the base of some sort of finial, indicates that some care had gone into the selection of roofing materials.

The presence of the three possible tesserae from the area of the shrine is probably fortuitous, as there was clearly no evidence of a tessellated pavement associated with the area. However, they may indicate the presence of another structure with such a floor in the vicinity.

Phase 4: Building 10860

In the demolition and robbing deposits of building 10860 were found 2453 g of imbrex, nearly all made in fabric J; a further 3416 g of the same imbrex type occurred in the soil layers over both building10860 and the later structure 11370. It is assumed that all the imbrex relates just to the earlier building, whilst the variety of flat tiles appears to relate to the later building and is discussed below.

This concentration accounts for almost all of the distinctive fabric J imbrices and indicates that these may have been sourced specifically for use in this building. The absence of tegulae suggests that they may have been put to some other use than roofing, though there is no evidence of other non-standard uses, for example as pilae or vents in hypocausts, as supports for the projecting shelf in corn driers or as lining of drains. The possibility of the use of these imbrices for their primary purpose as roofing should be seriously considered. It would be possible for the building to have been roofed exclusively with imbrices in the Laconian system, still commonly found in present-day Italy and Spain, though such an arrangement was probably unusual. Brodribb (1987) has suggested that ribbing running along the apex, such as occurs on these tiles, was possibly intended as a decorative effect.

Phase 5: Building 8019

This building was set in an enclosure on the north side of the settlement. It had been heavily robbed and the majority of the ceramic building material directly associated with it came from a 4th-century clay lined pit (8035), which had been backfilled with tile and limestone blocks, which both included some burnt material. Dating evidence for the building is poor, but it is likely to be contemporary with ditches 8290 and 8295, which started to fill during the late 3rd-4th century. The types of cutaways found on the tegulae are nearly all the same as those found on the shrine 10930 and date to AD160-260. However there was also a single tile with a later cutaway form (Warry (2007) type D1), which is assigned a production date of AD 240-380.

Compared to the shrine building, the tile is all made in the shelly fabric except for one piece, indicating a single source for the material. The overall quantities are similar to the shrine, but in contrast to that building the proportion of tegulae (70%) to imbrices (6%) does not reflect the normal proportions for a roof (as discussed above). Even if material from the whole of Area G is taken into account, the proportions do not alter significantly and require some explanation. One possibility is that a higher proportion of the imbrices was recycled elsewhere. As the building was heavily robbed this suggests that it was being used deliberately as a source of building materials.

Alternatively, most of the group, which comes from the dump in pit 8035 does not represent debris from the roof of the building at all, but has come from some other structure or was used in some other manner within the building. One use might have been as flooring, but usually in such circumstances the tiles are deflanged, whilst another possible use could have been as part of the flues of a hypocaust or corn drier. The evidence of sooting on some of the tiles and burning on some of the associated limestone blocks adds credence to such a possibility. This building also produced a high proportion of the bricks found on site, and these clearly represent some constructional activity other than roofing. Bricks were commonly used as flooring over hypocausts, but this is patently not the case here, although the number present would be consistent with spanning the flue of an oven or corn drier. The character of the assemblage from this building has more in common with all the minor groups from the domestic houses, with the emphasis on varieties of flat tiles, except in respect of the concentration of material in one place. From the quantities involved one would expect there to be evidence of a large structure such as a corn drier, but in the absence of any such evidence on the site it may be that the tile indeed derived from the roof of the building, although some doubt must remain.

Use of brick and tile in minor structures

There are no other groups of tile of sufficient size or character to suggest that they formed a structural part of a building. All the remaining material, whether occurring within buildings or individual features such as wells, waterholes or ditches, presents a similar character. It consists predominantly of tiles that could be reduced to flat slabs – tegulae (though very few of these appeared to be deliberately deflanged), brick, box tile and unidentified flat tile. Varieties of flat tiles are frequently used as flooring over the flues of corn driers, as hearth surfaces or oven floors, as kerbs for hearths, and for controlling airflow through flues and vents. It is likely that most of the material from the domestic buildings was being used in this manner.

In a number of the buildings the tile is directly associated with hearths or ovens. The earliest evidence was found in Phase 3 contexts in the interior of buildings 10920 and 11340, domestic circular structures from the roadside settlement. In the latter building a highly vitrified tile was found associated with a hearth or oven base. Tile is also directly associated with ovens or hearths in several of the Phase 4-5 buildings.

Particularly notable is the use of tegulae to create the base of an unusual form of oven (11198) in building 10810 (see Plate 4.21). This had a base of two tegulae packed with clay, possibly as insulation, and further tegula*e* were set on edge to form

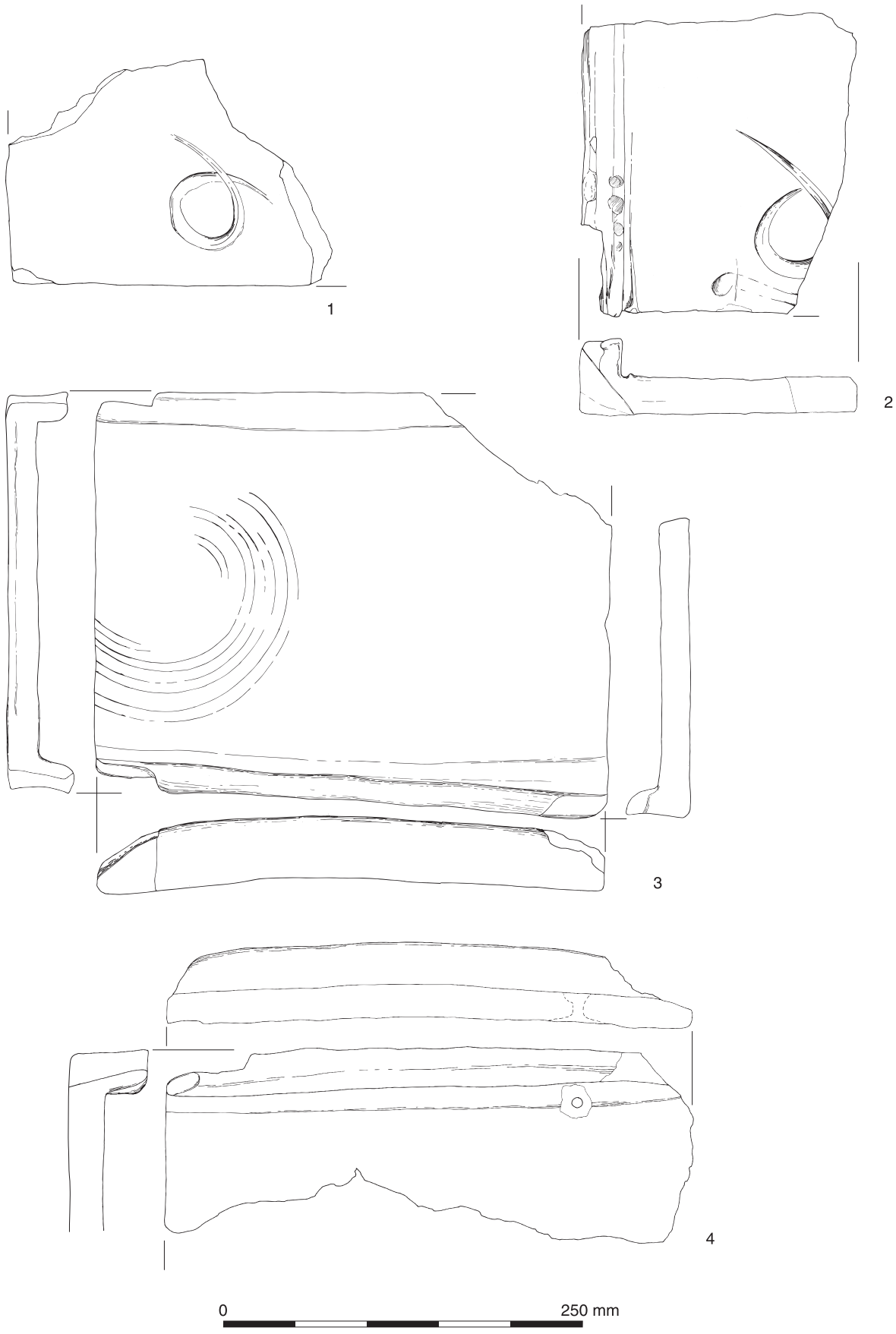


Fig. 5.54 Ceramic building material

the walls on three sides. It is possible that the superstructure was also insulated, though no evidence of this survived, and may imply it was used as a bread oven. Also of interest are the imbrices found in feature 11625 in building 10850, which has been interpreted as an oven flue. In character it is similar to corn drier flues and the imbrices may support such an interpretation as imbrices have been found used as supports for the rear shelf of a corn drier at Grateley villa, Hampshire.

A quite different manner of use for two large slabs of tegula found in grave 8123 was as a headrest and footrest for the corpse laid in the grave. A similar arrangement was found in a grave at Canterbury (Rady 2001, 5) where a tile was found close to the very poorly preserved skull of a Roman burial.

Conclusions

The distribution of the tile shows distinct differences in its use between the domestic settlement and the 'public' building. The use of ceramic tile to roof the shrine entrance contrasts with the domestic buildings reflecting not only differences in status, but perhaps also the degree of Romanisation of the structures. Though the domestic buildings in the later phases were rectangular and could have been roofed with tile, the fact that they were not may reflect a conservative tendency in the population or the economic status of the inhabitants. The cost of tile may have been a prime consideration as the settlement does not appear to be overly wealthy and any economic surplus was concentrated on the communal building, the shrine. The general absence

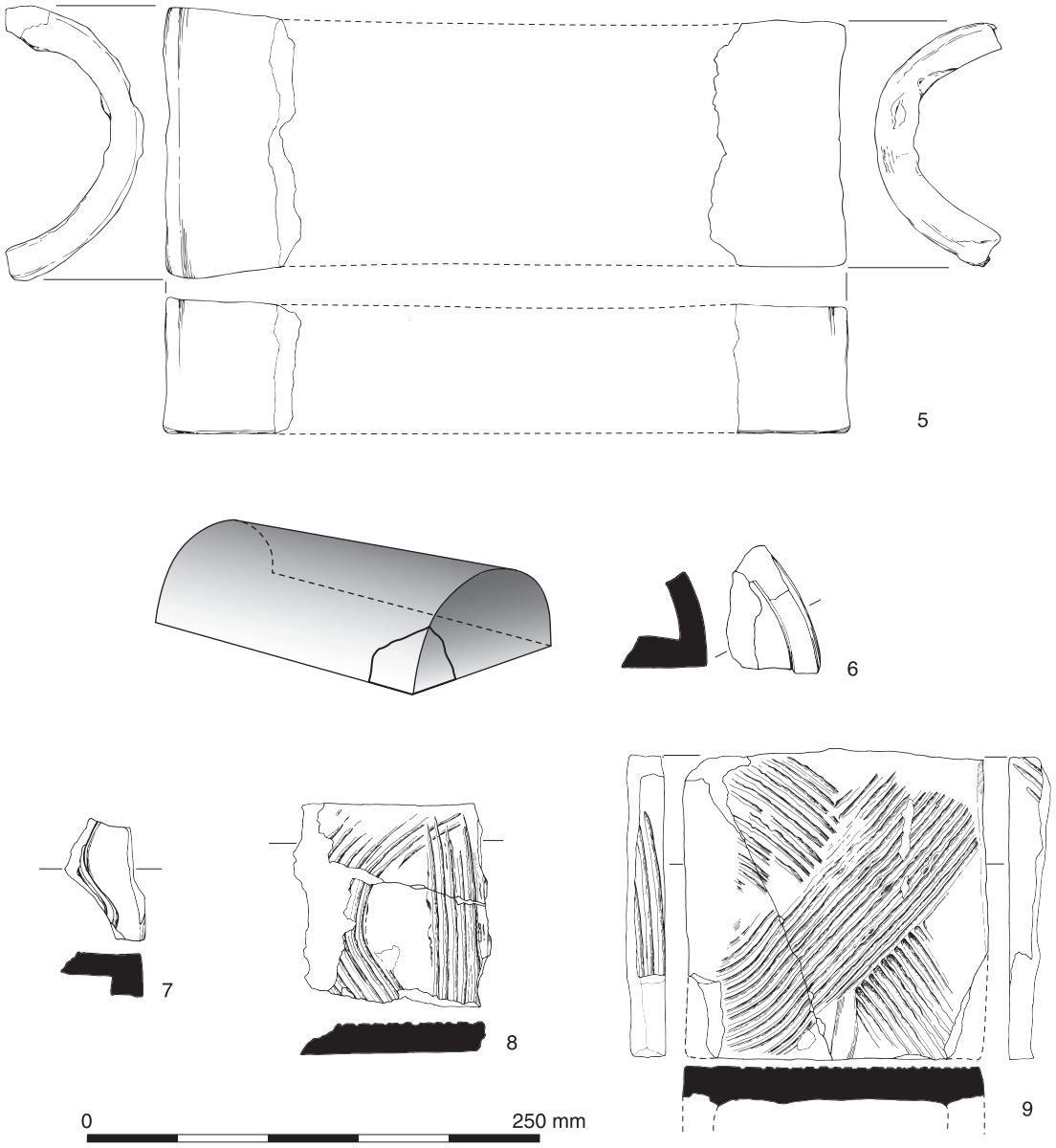


Fig. 5.55 Ceramic building material

of tile in building construction raises the question of where the community obtained the material for the minor structures in which tile was used. The obvious source is the nearby villa of Redlands Farm, which used the range of forms found at Higham Ferrers. However whether this represents some formal relationship between the settlements, such as the employment of the Higham Ferrers population on construction or agricultural work for the villa that enabled them to make use of unwanted materials from the villa (with or without permission), or the unofficial filching of tile, is impossible to tell.

Catalogue of illustrated tiles (Figs 5.54-5)

1. Brick with loop signature mark. Context 8033, clay-lined pit 8035 in building 8019.
2. Tegulae with type A flange and cutaway type (Warry 2007). Loop signature mark on surface and fingerprints from handling on flange. Context 10506, plot boundary ditch 10700.
3. Tegula with type D/E flanges and lower cutaways type A3 and A3a (Warry 2007). Three/four finger hoop signature mark. Context 11198, hearth 11147 in building 10810.
4. Tegula with type D flange and type A3 lower cutaway. Hole drilled beside flange post-firing. Context 11199, hearth 11147 in building 10810.
5. Imbrex: two ends of imbrex, possibly both ends of the same tile. Length is hypothetical. Context 12604, lower fill of oven 11625 in building 10850.
6. Ridge tile? Corner fragment of curved tile. The reconstruction of a ridge tile with one enclosed end (not to scale) shows the position the fragment is thought to represent. Context 10769, robber pit of shrine inner entrance.
7. Flue tile (?tubulus) with fragment of curved combing. Context 11573, boundary ditch 11750.
8. Flue tile (?tubulus) with two bands of combing. Context 12938, building 10910.
9. Flue tile (?voussoir) with one complete face with combing in the form of a cross and fragments of combing on both side faces. Context 12984, building 10820.

FIRED CLAY *by Cynthia Poole*

A small quantity of fired clay was recovered amounting to 177 fragments weighing 6959 g.

Fabrics

The fabrics are similar to the ceramic building material fabrics and form part of the same series. Sandy fabrics A and L were used for fired clay, though often they were more variable and not so well defined as those used for tile. Fabric B was generally finer than in the tile, with the shell fragments being predominantly *c* 1-2 mm.

Fabric I was a mixed shelly and sandy fabric, used exclusively for fired clay. This was a sandy clay, poorly mixed and mottled with reddish clay pellets or fragments, occasional-moderate amount of shell/limestone grit 1-5 mm, a low density of medium quartz sand and occasional coarse grog fragments 10-27 mm.

Normally, fired clay utilises clay sources locally available on or close to the site. The Upper Estuarine Series of the Great Oolite that outcrops in the area could have provided suitable clays and the Northamptonshire Sands the sandy element. The shelly fabrics are likely to derive from other Jurassic deposits such as the Oxford Clay, which occur in the locality.

Forms

Hearth or oven floor

This material was found in five contexts, one of which was the fill of a hearth and the remainder ditch fills. All were made in a sandy or mixed sandy and shelly clay fabrics (I and A). All examples had a single flat smooth well-finished surface, fired grey and ranged in thickness from 22 to 35 mm. The opposite side was invariably rough and irregular sometimes with clear impressions of stones or gravel indicating that this was a surface that had been laid over a stone foundation or directly on an underlying layer of stones or stony soil. No fragments retaining an edge were found so the overall shape of the floor is unclear. Nor is it possible to say whether this a hearth floor, complete in itself, or the floor of a more complex structure such as an oven in which case the floor may have been continuous with the walls. The absence of any edges may point to the latter possibility.

Oven plate

There are five examples of plain oven plates. Some have only one surface preserved and could technically be hearth floor, but their general characteristics are similar to the better preserved examples. These are rectangular or polygonal: three corner fragments have angles of *c* 97-100 degrees. The edges are usually straight and flat, although the lower angle may be curved and corners may be rounded. Organic impressions may be present, either sporadic straw stems or a dense covering of hay/grass impressions. On one (Fig. 5.56.1) a perfect impression of a spikelet of 6-row barley (*Hordeum vulgare*) with a few segments of rachis internodes is preserved. No complete examples or dimensions were obtained except for thickness, which ranges from 10 to 33 mm with considerable variations within a single plate. The largest surviving pieces came from context 12859, a hearth fill. This plate was rectangular and the joining fragments indicate a width greater than 350 mm. One edge is much thicker than the other (30 and 10 mm) suggesting that it had a wedge shaped cross-section. The reason for this is unclear, but it may have stood on edge as a cover for a vent or stoke-hole, rather than lying flat.

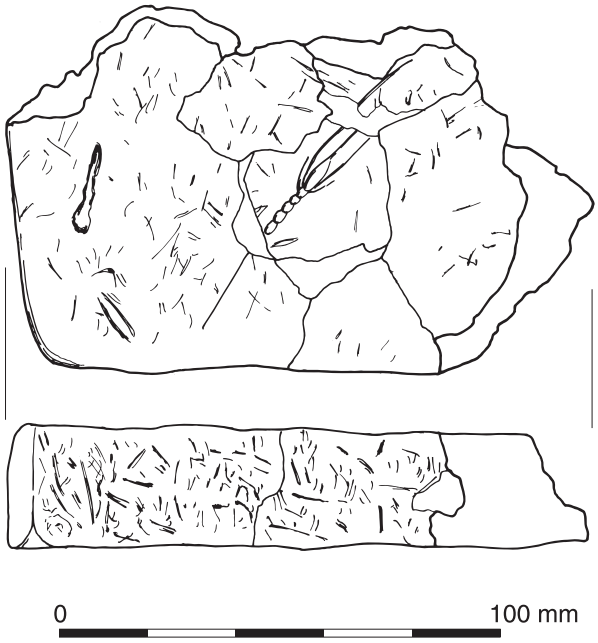


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Fig. 5.56 Fired clay

A single example of a perforated oven plate (Fig. 5.56.2) came from the fill of shallow oval pit 11576 within building 11340. Only a small portion of the plate was preserved and it was very fragmented. None of the perimeter survived so it is not possible to judge whether this was built integrally with a superstructure or was a portable oven plate. It was about 26 mm thick, though much of the underside had flaked off. Parts of five cylindrical perforations pierced the plate vertically and two were set 50 mm apart. The perforations measured 20-40 mm in diameter apart from one that may have been *c* 60 mm.

Oven furniture

Two examples of oven furniture were found. Both had a plano-convex surface and probably formed part of cylindrical objects such as a fire-bar or pedestal. One had a diameter of *c* 35-38 mm and the other *c* 50 mm: such a size suggests they may be firebars, though some other sort of small support is possible. One was found in an occupation layer (12945) in building 10830 in association with a fragment of oven plate and the other in the fill of a waterhole (11006).

Discussion

There is a neat division of fired clay forms between periods. The only fired clay deposited in Phase 3 (2nd century) was the perforated oven plate associated with building 11340, although this building did continue in use into Phase 4. All of the hearth floors are from Phase 4 contexts (late 2nd-3rd centuries), whilst the plain oven plates and oven furniture occurred in Phase 5 contexts (late 3rd-4th centuries). It would be satisfying to see these as clear cut developments in design of ovens or hearths, but such a small assemblage is not a sound basis for such an assertion.

However, the difference in phase does indicate that these elements derive from different structures. The perforated plate within pit 11576 suggests that this sub-circular hollow was the base of an oven probably for cooking or baking. Only one hearth floor was found *in situ*, in building 10850 as part of a square hearth 12602, where it had been laid over a foundation of stones, which had also been burnt. All the fragments of hearth floor are likely to have derived from similar structures. A later structure 11625 within the same building as hearth 12602 contained part of an oven plate in the fill. The construction of this feature was similar to a corn drier and it is possible that the plate found in the fill was part of the drying floor. The presence of the rectangular oven plate in the fill (12859) of hearth 12860 also suggests that it formed part of a more complex structure. The feature is described as being lined with potsherds and the fill as consisting of burnt clay, which suggests the collapse of some sort of superstructure. This could be interpreted as a domestic cooking structure or a small grain drying oven.

Oven plates of rectangular or polygonal form are commonly found in the East Midlands. Several were found on the nearby site of Redlands Farm (Pringle n.d.(b)) made in a similar fabric (G) to fabric I. They are described as hand made bricks, hearth bricks or possible mud bricks, but are clearly fragments of oven plate. They were found in phases IIa (later 2nd century) and IIc (mid 3rd–4th century), in the latter case associated with a hearth. Similar oven plates have been found in Roman contexts at Stanwick (Poole unpubl) and at Sites 4 and 8 on the Great Barford Bypass (Poole 2007).

Catalogue of illustrated fired clay (Fig. 5.56)

1. Fired clay polygonal oven plate: the surfaces are covered with organic impressions including a well preserved spikelet of barley. Context 11489, boundary ditch 11940.
2. Fired clay perforated oven plate. Photographs show the fragments both in plan view and cross-section. Context 11575, shallow pit in building 11340.

Chapter 6: Ecofacts and Environmental Evidence from the Roman Period

THE HUMAN SKELETAL REMAINS

by Annsofie Witkin

Introduction

The human skeletal remains relating to the Roman settlement comprised three cremation burials, 38 articulated skeletons and disarticulated remains from a minimum of seven individuals. The three cremation burials were very small because of truncation by post-Roman ploughing. The inhumation burials comprised 22 adults and 16 subadults. The adults consisted of 9 males, 11 females and 2 unsexed individuals. All the neonates were associated with buildings, whereas the adult burial ritual was very varied and included gender-based groups as well as isolated burials along boundaries.

The majority of the disarticulated remains were redeposited but the remains of a minimum of three individuals had been deposited in a well near building 8019 in Area G. All articulated and disarticulated remains date from the mid to late Roman period (Phases 4 and 5).

Methodology

Skeletal remains

The human skeletal and cremated remains was analysed according to the recording standards set out in IFA paper number 7 (Brickley and McKinley 2004). Completeness was scored using four categories, namely poor (0-25%), fair (26-50%) good (51-75%) and excellent (76-100%). Skeletal preservation was scored using the same scale ranging from poor (near complete destruction of the cortical surface) to excellent (cortical surfaces of the bones preserved).

The skeletal inventory of the articulated remains was recorded pictorially and in tables. The disarticulated remains were recorded as to which side and part of the bone was present. Dental inventory was recorded following the Zsigmondy system. Dental notations were recorded by using the universally accepted recording standards and terminology (after Brothwell 1981).

The remains were sexed by using a combination of cranial, pelvic and metrical data. The features used were chosen from Standards (Buikstra and Ubelaker 1994) and Workshop (1980). Each observable feature on the cranium and pelvis was scored on a five-point scale (probable female, female, probable male, male and unknown). The overall score from the observed features provided the basis for the assigned sex.

The age of the subadult remains was estimated by using the long bone length (Scheuer *et al.* 1980; Hoppa 1992), epiphyseal fusion (Chamberlain 1994) and dental development (Moorees *et al.* 1963). The age of adults was assessed by using the degenerative changes of the auricular surface (Lovejoy *et al.* 1985) the pubic symphyses (Todd 1920; 1921; Suchey and Brooks 1990), dental attrition (Miles 1962; Brothwell 1981) and cranial suture closure (Meindl and Lovejoy 1985).

Adult stature was calculated by inserting the measurements of complete long bones into regression formulae for white males and females (Trotter 1970) The bones from the leg were favoured over those of the arm since these carry the least error. The remains were examined for abnormalities of shape and surface texture, and instances of pathological conditions were recorded.

Cremated bone

The cremated bone from each context was passed through a sieve stack of 10, 5 and 2 mm mesh size. The bone from each sieve was weighed and calculated as a percentage of the total weight of the cremation. This allowed the degree of fragmentation to be calculated. The degree of fragmentation may indicate if the cremated bones were further processed after the body was burnt.

In each of the sieved groups, the bones were examined in detail and sorted into identifiable bone groups, which were defined as skull (including mandible and dentition), axial (ribs, vertebra and pelvic elements), upper limb and lower limb. This may show deliberate bias in the skeletal elements collected for burial. Each sample was weighed on digital scales and details of colour and largest fragment and, where possible, the presence of individual bones within the defined bone groups was recorded.

The estimation of age of a cremated individual is dependent upon the survival of particular skeletal elements indicative of age. In cremations of adult individuals, cranial suture closure (Meindl and Lovejoy 1985), degenerative changes to the auricular surface (Lovejoy *et al.* 1985) and pubic symph-

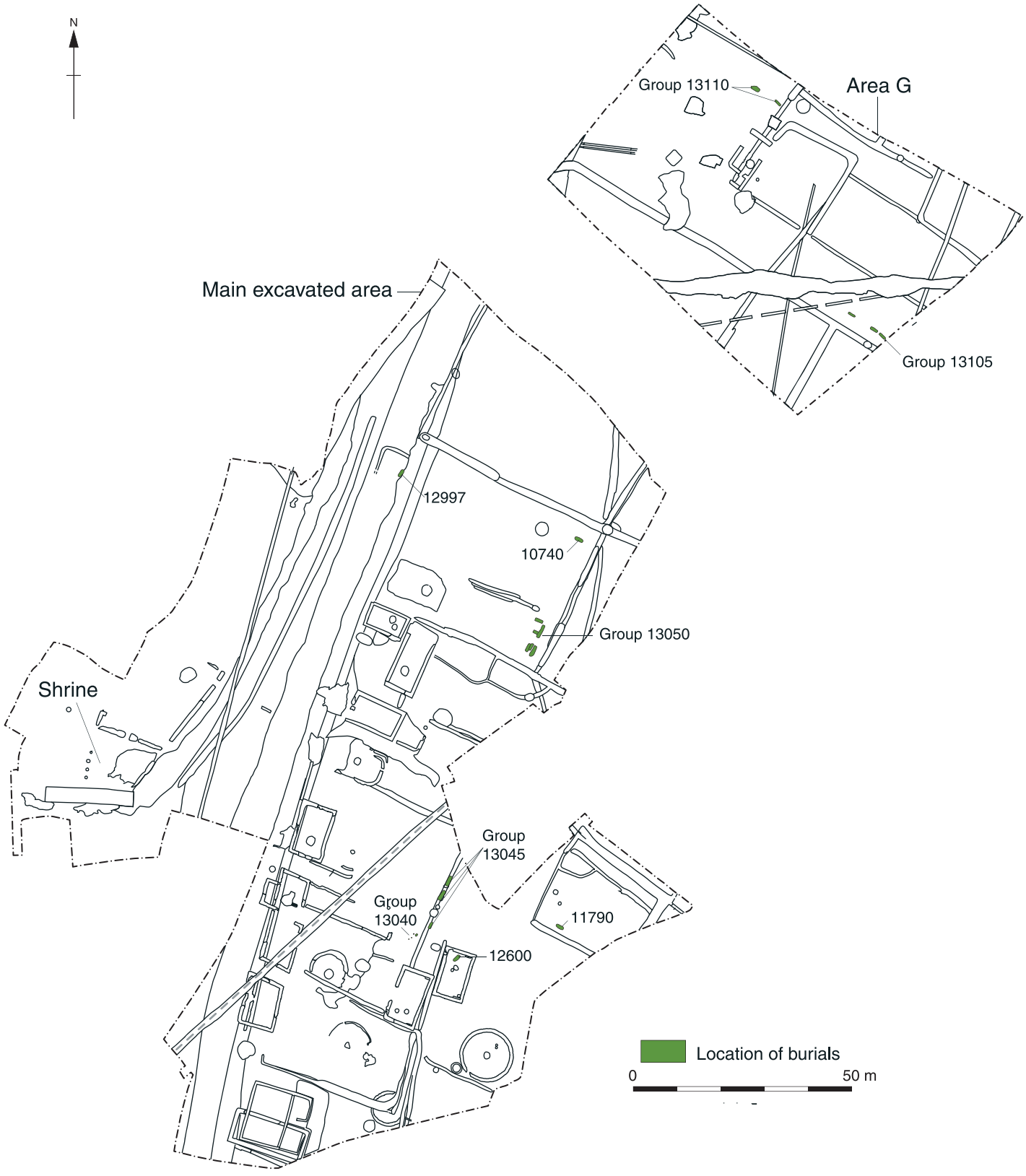


Fig. 6.1 Location of burials within the site

ysis (Suchey and Brooks 1990) may be used as a general guide.

Provenance (Fig. 6.1)

The three cremation burials (10912, 10931 and 10933) were located close together west of boundary ditch 12880 (burial group 13040). A burial of a young child (skeleton 10927) was also in this group, located between the cremation burials and the ditch.

There were three discrete clusters of inhumation burials. Five adult individuals (skeletons 10922, 10954, 12656, 12686 and 12727) were located within a 2nd-century boundary ditch (12880) behind the roadside settlement (burial group 13045). Two discrete clusters of inhumation burials were situated in the south-eastern corner of boundary ditches 11270 and 12970 (burial group 1350). The southern group consisted of three adults (skeletons 10794, 10938 and 10951) and there were five burials (four adults and one neonate) in the northern group (skeletons 10791, 10947, 12814, 12816 and 12902).

Six adult inhumations formed part of two linear arrangements within excavation Area G. Three skeletons (8018, 8155 and 8261) were situated near the northern edge of the excavation, just south of ditch 8291 (burial group 13110), while three further inhumations (8012, 8128 and 8131) were adjacent to ditch 8294 in the south-eastern part of the area (burial group 13105).

Four adult inhumation burials were isolated but associated with various features. Skeleton 10734 (burial 10740) was situated in the north-western corner of an enclosure formed by ditches 10690 and 11170. Skeleton 11775 (burial 11790) was situated alongside enclosure ditch 13060, skeleton 12599 (burial 12600) was located near the northern wall within structure 10900 and skeleton 12999 (burial 12997) was situated on the western side of the road, sealed by gravel pavement 13020.

One burial of a young child (skeleton 12742) was located near structure 10920. The remains were located within a pit (12826). Because of heavy truncation it is not clear if the human remains had been placed within the pit or the grave cut into the upper fill. All neonatal burials (skeletons 10876, 11389, 11642, 11687, 11782, 11808, 11815, 12613, 12757, 13011 and 13012) as well as one burial of a young child (12120) were situated within structures. Their location is summarised in Table 6.8.

Cremation burials

Condition of the bone and disturbance

The pits containing cremated bone deposits (10912, 10931 and 10933) were very shallow. Bone fragments were showing on the surfaces of the features, and fragments had also been scattered around the pits. The features had been truncated by ploughing which together with rain wash had caused the spread of the bone fragments. It is very likely that most of the bone within the three deposits has been lost through post-Roman ploughing. No charcoal was present amongst the cremated bone. The deposits are therefore likely to represent burials rather than redeposited pyre material. The cremated bone from the burials was slightly chalky (eroded) and very little trabecular bone was recovered; both largely reflective of the acidic burial environment.

Demographic data and pathology

The remains represented a minimum of three adult individuals, all of unknown sex (Table 6.1). The only pathological lesion present was porosity on a parietal fragment from deposit 10912. The lesion is indicative of anaemia but it was not active at the time of death.

Pyre technology and ritual

The burnt bone in all three burials comprised dark grey and black as well as white fragments (Table 6.1). The variable colour is indicative of poor oxidisation. It is not possible to discern the direct reason for the colour variations but the position of the body on the pyre, tending of the pyre, duration of the process as well as the temperature of the fire may all cause colour variations (McKinley 1994, 82-84).

The weight of the deposits varied from 10 g to 226 g (Table 6.1) and the largest fragment – from cremated bone deposit 10912 – measured 34.6 mm. Moreover, *c* 70% of all bone from this deposit was recovered from sieve fraction size 5 mm and below. The low weights of the burnt bone deposits and the small size of the individual fragments are indicative of post-Roman disturbance rather than deliberate manipulation of the remains. All the burials were also unurned, which would also have made the bone more susceptible to fragmentation.

Fragments from all skeletal areas were identified in burial 10912 and there was no evidence of any preference or exclusions of body parts.

Table 6.1 Summary of Roman cremated human remains

Context number	*Weight*	*Colour*	*MNI*	*Age*	*Sex*	*Pathology*
10912	226 g	White, dark grey and black	1	Adult	Unknown	Porotic hyperostosis
10931	27 g	Dark grey	1	Adult	Unknown	
10933	10 g	White and dark grey	1	Adult	Unknown	

Table 6.2 Preservation and completeness of human remains

Preservation	*Number of individuals*	*Completeness*	*Number of individuals*
Destroyed	2.6% (1/38)	Destroyed (<25% complete)	13.2% (5/38)
Poor	23.7% (9/38)	Poor (25%-50% complete)	26.3% (10/38)
Fair	7.9% (3/38)	Fair (51% complete)	5.3% (2/38)
Good	63.2% (24/38)	Good (50%-75% complete)	26.3% (10/38)
Excellent	2.6% (1/38)	Excellent (76-100% complete)	28.9% (11/38)

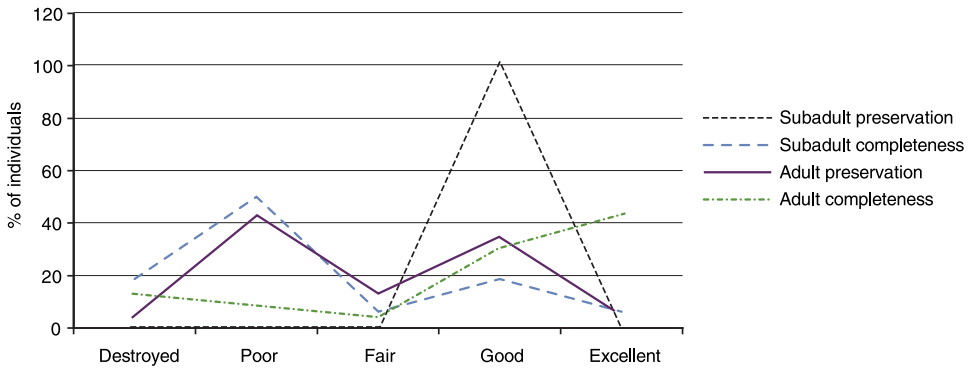


Fig. 6.2 Human bone: adult and subadult preservation and completeness comparison

Inhumation burials

Preservation and completeness

The preservation of the bone was generally good with 66% of the articulated skeletons either well or excellently preserved. Twenty-four percent of the inhumations were poorly preserved with considerable flaking and erosion of the cortical surface (Table 6.2).

The completeness of the articulated skeletons was generally good and 60% of the inhumations were more than 50% complete. Only 13% had less than 25% of the bones surviving. Seventy-eight percent of the adults were more than 50% complete compared to only 31% of the children. The preservation of all of the children was good, however, compared to the adults, only 52% of which had above average preservation (Fig. 6.2). This marked difference in preservation and completeness between the adults and the children is due to the soil matrix and excavation techniques. Most of the children were neonates and were buried in shallow graves within or near buildings. The natural soil within these areas was very silty with a more neutral soil condition. Moreover, the soil in the occupation areas where these graves were situated would probably have had a high organic component, which would have further promoted neutral soil conditions thereby aiding good preservation. However, the grave cuts containing the neonates were very shallow and were hard to detect; the relatively low figure for completeness is therefore likely to be a consequence of accidental discovery in the course of the excavation. The majority of the adult graves were dug through the Northamptonshire Sands and Ironstone where soil conditions had an adverse effect on the bones; many of the more fragile bones of the torso did not survive.

Table 6.4 Summary of dental disease

	Caries
Permanent teeth (adults only)	10.5% (39/370)
Per individual (adults only)	84.2% (16/19)
Roman national prevalence (per tooth)	7.5% (2179/29247)

Table 6.3 Age and sex of articulated skeletal remains

	Neonate	*Infant*	*Young child*	*Older child*	*Adolescent*	*Young adult*
	0-1 m	2-12 m	1-5 yrs	6-12 yrs	13-18 yrs	18-25 yrs
?M/M						2.6% (1/38)
?F/F						0% (0/38)
?	34.3% (13/38)	2.6% (1/38)	5.3% (2/38)	0% (0/38)	0% (0/38)	0% (0/38)
Total	34.3% (13/38)	2.6% (1/38)	5.3% (2./38)	0% (0/38)	0% (0/38)	2.6% (1/38)

Demography

The articulated inhumation burials comprised 38 individuals of which 22 (58%) were adults and 16 (42%) were children (Table 6.3). The adults comprised 11 males, 9 females and 2 unsexed individuals. There is a slightly higher number of males within the assemblage, but considering the small sample size this is not significant. A total of 34.2% of the whole assemblage lived to an age greater than 40, and of the aged adults, 65% survived to an age greater than 40.

The mortality profile of the assemblage indicates that the main mortality peaks occurred in the neonate age group and amongst the mature adults. The largest proportion of males died as mature adults whereas females died as prime adults. Though a high infant mortality is expected, children aged 1-18 are underrepresented and there are no young females. It therefore appears that the individuals buried within the excavation area are not representative of the population as a whole.

Stature

The female stature range was between 1.50 m and 1.62 m with an average of 1.57 m and the male stature range was between 1.68 m and 1.72 m with an average of 1.70 m. The marked difference in stature between the sexes is notable as it is more common to have an overlap of stature ranges between the sexes. The difference is, however, probably a consequence of the small sample size rather than any real sexually dimorphic difference.

The national mean stature for males and females in the Roman period was 1.69 m and 1.59 m respectively (Roberts and Cox 2003, 396). The mean statures of the Higham Ferrers sample indicate that the males were slightly taller and the females were slightly shorter than the national average. However, considering the small sample the stature difference is not considered to be significant.

Dental pathology

The main categories of dental disease are summarised in Table 6.4. The prevalence of dental disease per tooth was based on the permanent dentition only. There was no dental disease present on the few deciduous teeth present within the assemblage. In addition, the prevalence of dental disease per individual only incorporates the adults with dentition present. The Romano-British prevalence is taken from the summaries provided by Roberts and Cox (2003).

Caries

Dental caries is a destruction of the enamel caused by the production of acid from bacteria present in dental plaque and is therefore considered to be an infectious disease (Hillson 1996, 269). The cavities are commonly found in areas where food is likely to get trapped such as on the biting surfaces of the premolars and molars, between the teeth and along the cemento-enamel junction (CEJ). When the cavities are present at the CEJ this may often be a consequence of periodontal disease (ibid., 275).

The caries prevalence of permanent dentition was calculated by using the total number of affected teeth expressed as a percentage of the total number of teeth observed. A total of 16 adults (84.2% of the 19 adults with surviving dentition) had carious lesions present. These included 8 males and 7 females. A total of 10.5% (39/370) of the permanent dentition was affected by caries (Table 6.4).

The mean caries rate as total number of teeth affected in the Roman period was 7.5% and per individual it was 17.7% (Roberts and Cox 2003, 130-132). The rate per individual at Higham Ferrers is significantly higher than the national average, but again this is likely to be due to the small sample size. The rate for the total number of teeth is within the normal range of the time period.

Ante-mortem tooth loss	*Calculus*	*Abscesses*	*Periodontal disease*	*Hypoplasia*
15.1% (55/363)	56.2% (208/370)	2.7% (10/363)	-	26.5% (98/370)
63.2% (12/19)	100% (19/19)	31.6% (6/19)	63.2% (12/19)	78.9% (15/19)
14.1% (5042/35762)	43.4% (1702/3923)	3.9% (970/24995)	-	9.1% (437/4796)

Prime adult	*Mature adult*	*Ageing adult*	*Adult*	*Total*
26-40 yrs	Over 40 yrs	Over 50 yrs	Over 18 yrs	
5.3% (2/38)	21% (8/38)	0% (0/38)	0% (0/38)	28.9% (11/38)
7.9% (3/38)	5.3% (2/38)	7.9% (3/38)	2.6% (1/38)	23.7% (9/38)
2.6% (1/38)	0% (0/38)	0% (0/38)	2.6% (1/38)	47.4% (18/38)
15.8% (6/38)	26.3% (101/38)	7.9% (3/38)	5.2% (2/38)	100% (38/38)

Ante-mortem tooth loss

The aetiology of ante-mortem tooth loss is multifactoral in its origin (Lukacs 1989, 265). The accumulation of calculus may lead to periodontal disease which would eventually lead to the loss of the tooth. The formation of a peri-apical abscess (caused by severe attrition or caries) and trauma may also cause premature exfoliation.

The prevalence of ante-mortem tooth loss was calculated by using the total number of teeth lost ante-mortem as expressed as a percentage of the total number of *in situ* teeth, tooth roots and empty sockets present. Unerupted and partially erupted teeth, loose teeth and teeth believed to be congenitally absent were excluded. Twelve adults (63.2%) comprising seven males and five females had ante-mortem tooth loss. A total of 15.1% teeth (55/363) had been lost ante-mortem (Table 6.4).

The national average of ante-mortem tooth loss for the time period was 8.3% in 481 individuals and 14.1 % of all observed teeth (Roberts and Cox 2003, 135). The per-tooth rate is very similar to that of Higham Ferrers.

Dental calculus

Dental calculus is formed by mineralised plaque which accumulates on the base of living plaque deposits (Hillson 1996, 225). It is a common pathological condition and is generally related to poor oral hygiene. The deposits are generally seen on the teeth nearest the saliva glands.

The prevalence of calculus was based on the total number of affected teeth expressed as a percentage of the total number of teeth observed. All of the adults (19 individuals, including 10 males and 8 females) with surviving dentition had calculus deposits. Calculus deposits were recorded on 56.2% (208/370) of all the permanent teeth observed (Table 6.4). This is slightly higher than the national average of 43.3% (Roberts and Cox 2003, 131).

Dental abscesses

Abscesses can have many causes; bacteria may enter the pulp cavity through dental caries, excessive attrition or trauma to the crown. An abscess can also occur when a periodontal pocket is formed. When bacteria accumulate in the pulp cavity an inflammation starts which can track to the apex of the root. As the pressure builds up from the continuous accumulation of pus, a hole (sinus) is formed on the surface of the jaw which allows the pus to escape (Roberts and Manchester 1995, 50). It is at this advanced stage that the abscess is visible and recorded archaeologically.

The prevalence of dental abscesses was calculated by dividing the total number of abscesses into the combined total of teeth lost ante-mortem, teeth lost post-mortem and *in situ* permanent dentition. Six (31.6%) adults (four males and two females) had dental abscesses present and 2.7% (10/363) of all sockets observed had an abscess.

The mean rate of individuals with dental abscesses for the Roman period is 10.7% and the average number of teeth affected by abscesses from a total of 22 Roman sites is 3.9% (Roberts and Cox 2003, 135-137). Again, the prevalence per individual is much higher in the Higham Ferrers assemblage than the national average. However, the rate per tooth is comparable to the national average.

Periodontal disease

Periodontal disease is commonly caused by the accumulation of calculus between the teeth and the soft tissue. This causes inflammation of the soft tissue, gingivitis, which may lead to inflammation of the bone. The inflammation of the bone causes horizontal bone loss and subsequent exposure of the roots of the teeth. The inevitable loss of the tooth would eventually follow (Roberts and Manchester 1995, 56).

A total of 12 (63.2%, six males and six females) of the 19 adults with some dentition preserved had vertical and/or horizontal reduction of the alveolar margin. The national Roman average was 29.3% (Roberts and Cox 2003, 261) which is much lower than at Higham Ferrers. This partly reflects the small sample size and the fact that a high proportion of the adults there were individuals aged over 40 years.

Enamel hypoplasia

Hypoplastic lines, grooves or pits on the enamel surface, are formed during periods of growth arrest during the development of the tooth crown. These bouts of growth arrest have been linked to periods of childhood diseases, weaning and malnutrition (Hillson 1996, 166-167). The prevalence of enamel hypoplasia was calculated in the same way as the prevalence of calculus.

Enamel hypoplasia was recorded on 15 (39.28%) adults, (9 males, 5 females and 1 unsexed individual). Of all teeth observed, 26.5% (98/370) displayed hypoplastic lines. This is greater than the nation average of the Roman period which was 9.1% but the figures reported from various sites ranged from 5.6% to 29% (Roberts and Cox 2003, 140) and the prevalence at Higham Ferrers is within this range.

Dental anomalies

A variety of dental anomalies can be found within the human dental arcade. These include impacted teeth, congenitally absent teeth (agenesis), supernumerary teeth and the retention of deciduous teeth. The only dental anomaly recorded in this assemblage was agenesis. However, without the aid of x-rays, teeth recorded as not present may in fact be impacted. The figures given here are therefore crude. Three (8.93%) adults (1 male and 2 females) had teeth recorded as not present. Within the whole of the assemblage, six teeth were recorded as not present; all of these were third molars.

Masticatory and extra-masticatory wear

Three of the adult males had damage consisting of slight chipping of the occlusal margins. The damage was situated on the molars rather than the anterior dentition which is consistent with a heavy masticatory function (Larsen 1997, 267). The teeth affected were four mandibular first molars, one maxillary first molar and one maxillary second premolar. The chipping had occurred on either the bucco-distal or mesio-distal edges. One male (skeleton 10951) had heavy wear on the anterior maxillary dentition and all the molars had been lost ante-mortem. This wear pattern is likely to be due to the anterior dentition taking on the function of mastication normally carried out by the molars.

Slight chipping of the occlusal margins of the anterior dentition was present on nine adults (2 females and 7 males) and the chips were present on 14 teeth (6 maxillary teeth and 8 mandibular teeth) (Table 6.5). The tooth damage can be due to heavy masticatory functions as well as extra-masticatory activities

Three individuals (one female, one male and one unsexed adult) had small notches present at the mesial and/or distal margins of one or more teeth (Table 6.5). The notches were clearly produced by an extra-masticatory function but it is difficult to ascertain the direct cause. However, ethnographical studies indicate that notches can be formed by pulling thin cords of animal tendons across clenched anterior teeth in order to soften and moisten sinew; notches may also be indicative of processing of plant materials (Larsen 1997, 260).

One female (skeleton 10734) had very unusual extra-masticatory wear to the mandibular anterior dentition. This comprised a continuous polished groove across the middle of the buccal surface of the incisors and the canines. The groove was also angled up towards the occlusal surface at the distal edges of the canines. It appears that this individual may have used her teeth for processing sinew or plant material. However, rather than pulling the matter between her anterior dentition, the material was pulled across her front teeth. She was not partaking in this activity at the time of her death since medium sized calculus deposits were situated on top of the groove on the central incisors.

Skeletal pathology

All the pathological lesions present were observed on the adult individuals. Due to the small sample size, only gross prevalences were calculated, based on the articulated adults.

Degenerative joint disease

Joints are subjected to wear and tear throughout life. This gradual deterioration of the joint surfaces is therefore common in older individuals. The changes that take place are new bone formation on the joint margins or on the surface, and porosity. When the cartilage within the joint has worn away, the bone to bone contact causes the bone to be polished, or eburnated. Eburnation is an important criterion for the diagnosis of osteoarthritis in skeletal remains. The aetiology is multifactoral but increasing age, genetic predisposition, lifestyle and environmental factors such as climate all play a part in the development of osteoarthritis.

Eight individuals (three males and five females), some 36% of the adult population, had osteoarthritic changes. Six of these, plus a further three males and three females (55% of the adult population), had other evidence of degenerative changes. Most of these degenerative changes were situated on the joints of the upper limb (Fig. 6.3). Though the

Table 6.5 Summary of extra-masticatory wear

Skeleton number	*Sex*	*Age*	*Location*	*Tooth/teeth affected*	*Lesion type*
8155	Female	MA	Mandible	Left lateral incisor	Small chip
10734	Female	PA	Mandible	Left and right canines, lateral and central incisors	Continuos polished groove across the center of the buccal surface
10794	Male	YA	Maxilla	Right central incisor	Small chip
10922	Male	MA	Maxilla	Left central incisor	Small chip
10938	Male	MA	Mandible	Right lateral incisor, both central incisors	Small chips
10954	Female	PA	Maxilla	Left lateral incisor	Small chip
12599	Male	MA	Maxilla	Right canine	Small chip
12727	Female	AA	Maxilla	Central incisors	Bucco-lingual notches
12814	?	PA	Mandible	Lateral and central incisors	Small chips
12814	?	PA	Maxilla	Right lateral incisor	Bucco-lingual notch
12816	Male	MA	Mandible	Left canine	Notch
12902	Male	PA	Mandible	Left canine	Small chip
12902	Male	PA	Maxilla	Right lateral incisor	Small chip
12999	Male	PA	Mandible	Right central incisor, left lateral incisor	Small chips
12999	Male	PA	Maxilla	Right lateral incisor	Small chip

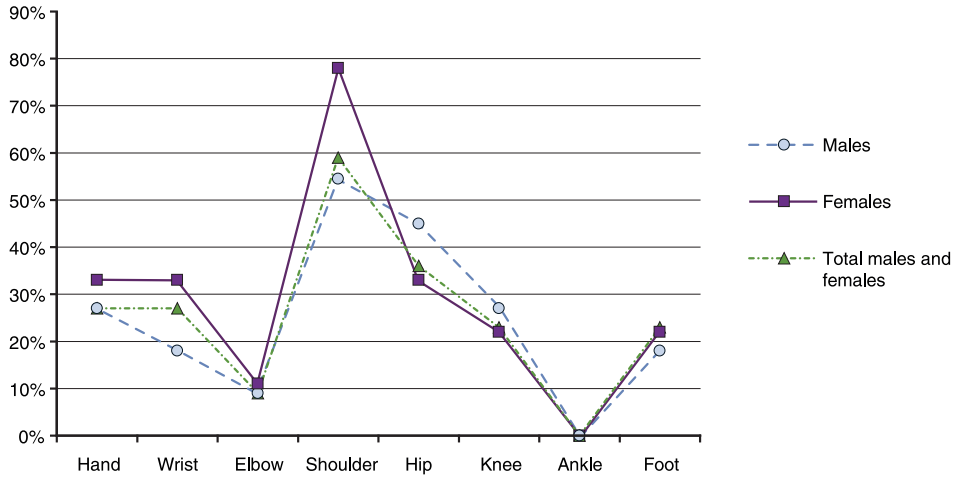


Fig. 6.3 Human bone: prevalence of degenerative joint disease, including osteoarthritis

patterning of degenerative joint disease in the skeleton is generally the same for males and females, it appears that a greater proportion of females had degenerative changes in their arms and a higher proportion of males had degeneration in their hips and knees (Fig. 6.3). This is possibly related to occupational differences. Spinal degenerative change was observed on 42 vertebral elements and was most common on the cervicals.

Schmorl's nodes are indentations on the vertebral bodies which are generally most common in the lower thoracic and lumbar regions. These are caused by the herniation of the intervertebral disc through the end plates and are in effect pressure defects (Rogers and Waldron 1995, 27). Eight individuals had Schmorl's nodes. The majority of these were male (five males and three females) which may suggest that males had a heavier work load.

Trauma

Fractures are either caused by an acute injury to the bone, an underlying disease or repetitive stress (Roberts and Manchester 1995, 68). Nineteen fractures were present amongst nine adults (41%) who consisted of six males, two females and one unsexed individual. All fractures were healed and longstanding. Eight of the lesions were caused by acute injury and five were situated in the lower legs or the feet, two fractures were present on the manual digits and one individual had a longstanding fracture of the clavicle (skeleton 12599). Two of the fractures are likely to have been caused by repetitive stress since these were situated on the articular surfaces of the upper thoracic region. The majority of the fractures were present on an elderly female (skeleton 12599). These consisted of a fractured femoral hip, fractured sacrum and eight intra-articular fractures on the tarsals and the metatarsals. All were secondary to osteoporosis since the underlying aetiology had weakened her bones considerably.

Soft tissue trauma recognised in palaeopathology involves the formation of new bone at sites of muscle tears, usually at ligament or muscle insertion points. One adult male (skeleton 10951) had a syndesmophyte present on the origin of the collateral ligament of the right femur, indicating that this individual once sustained a painful knee injury though it was healed at the time of death.

Osteochondritis dissecans is caused by the collapse of the joint and has generally an underlying traumatic aetiology (Roberts and Manchester 1995, 87). The lesions involve the separation of a necrotic bone fragment from the joint surface. The fragment may remain loose in the joint, become reabsorbed or heal back onto the defect. One adult male (skeleton 8128) had one osteochondritis dissecans present on the head of the right talus. It is likely that the lesion was related to the healed intra-articular fracture present on the bone.

Infectious disease

The most common non-specific infection present within the assemblage was periostitis which is an inflammation of the periosteum, the lining of the bones. The bone involvement can occur by the extension from a soft tissue infection, osteomyelitis or osteitis, or it can be a generalised disease. Apart from being caused by infection, it may also be a consequence of trauma, haemorrhage or chronic skin ulcers (Aufderheide and Rodríguez-Martín 1998, 179). Nine male and four female adults (59%) had periostitis. The majority of the lesions were healed and only two individuals, both males (skeletons 10794 and 12902), had active lesions. The lesions were most frequently situated on the tibiae and the fibulae and were usually bilateral. This is a common location since the shin bone lies close to the skin and can therefore be easily subjected to minor trauma (Roberts and Manchester 1995, 130). One individual (skeleton 12902) had active periostitis on the visceral surfaces of three left ribs. This

may be indicative of pulmonary tuberculosis but could equally have been caused by a non-specific chest infection.

Maxillary sinusitis was observed on four individuals (two females and two males). The aetiology is multifactoral and may be caused by allergies, smoke and upper respiratory tract infections (Roberts and Manchester 1995, 131).

One adult female (skeleton 12656) had clear evidence of having suffered from tuberculosis. The primary lesion was situated on the right pubic ramus and had caused extensive bone destruction. The infection had subsequently spread haematogenously throughout the body and extensive new bone formation was observed on the shaft of left ulna and right fibula, the visceral surface of six left ribs and the spinal processes of four mid thoracic vertebrae. The location of the primary lesions indicates that the infection was contracted by the intake of infected meat or milk and caused by the tuberculoid strain *Mycobacterium bovis*. This strain affects primarily cattle and is then spread secondarily to humans through digestion (Roberts and Manchester 1995, 137).

Metabolic disease

Cribra orbitalia and porotic hyperostosis are caused by anaemia (iron deficiency). The aetiology of anaemia is multifactoral and it is impossible to discern the direct cause of the lesions but includes an iron deficient diet, parasitic infection, chronic disease and excessive blood loss (Roberts and Manchester 1995, 166-167). Eight adults (36%) – four females and four males – had cribra orbitalia and/or porotic hyperostosis. All lesions were healed and longstanding.

Two females, skeletons 11775 and 12656, had lesions consistent with osteoporosis. The condition is generally subdivided into two types. Type one affects menopausal females and is characterised by primarily trabecular bone loss with fractures of the vertebra and distal radius. Type 2 affects both genders over the age of 60 and features both cortical and trabecular bone loss with hip and vertebral fractures (Aufderheide and Rodríguez-Martín 1998, 314). Both females at Higham Ferrers had very light bones. Skeleton 11775 had a fractured femoral neck and was aged over 50. This may indicate that she was suffering from type 2 osteoporosis. It is not possible to say which type skeleton 12656 was suffering from since the condition was diagnosed from the first lumbar vertebral body which was concave (codfish vertebra), a collapse caused by thinning trabecular bone.

Conclusion

Overall, the range, type and frequency of pathological conditions broadly conform to the expected pattern for Roman populations of this date and type. Tuberculosis is rare for this period and the present case, if confirmed, is among the earliest examples that have been published from Britain to date (Roberts and Cox 2003, 120). Other examples have been identified from rural and urban sites (for example, Alington Avenue, Dorchester; Ancaster; Poundbury; Queensford Mill; Tolpuddle Hall and Winchester) and tend to be focused in the the south and east of England (Roberts and Buikstra 2003, 132).

The disarticulated remains

Provenance

Nine disarticulated human bones came from excavation Area G. Four were from layer 8004 (a general reference for finds from the spoil in this area) and five were from well 8278. A further five disarticulated bones were from the main roadside settlement. Two of these were from ditch fills (11539 and 12935, from Phase 3 enclosure 12310/12880), and three were from layers, 12691 (shrine interior soil layer), 12945 (internal occupation soil within building 10830), and 12961 (occupation soil in building 12900).

Condition and completeness

The majority of the fragments had evidence of post-mortem damage consistent with the bones having been redeposited. The bones from well 8285 were, however, in very good condition but with recent post-mortem breaks which had occurred during the excavation.

Quantification, age and sex

The neonatal bones from layers 12835 and 12945 and the three bones from ditch fills 11539 and 12935 the surface of the shrine (12961) are likely to have derived from earlier burials which had been disturbed and redeposited. Moreover, the adult unstratified remains (8004) may be part of skeleton 8261 since this burial was so heavily truncated. The disarticulated remains therefore represent a minimum number of seven individuals. These consisted of four adults (one male and one female), two subadults and one neonate (Table 6.6).

Burial ritual

Location of the adult burials in the landscape

The burials at Higham Ferrers consisted of small clusters, linear groups as well as isolated burials along boundary ditches, typically at the back of the roadside settlement. This pattern is not unusual and is often associated with small rural settlements and villas (Esmonde Cleary 2000). Overall, the relationship between the burials and the settlement can be seen as being concentrically ordered (Parker-Pearson and Richards 1994, 10). The burials of the neonates were generally within the buildings and

Table 6.6 Summary of disarticulated human remains

Context number	*Feature type*	*Skeletal element*	*Side*	*Age*	*Sex*	*Comment*
8004	Unstratified	Tibia	Right	Juvenile (13-18 years)	?	Near complete
8004	Unstratified	Radius	Right	Adult	?	Distal half
8004	Unstratified	Ulna	Right	Adult	?	Distal half
8285	Well fill	Femur	Right	Adult	Male	Proximal half
8285	Well fill	Femur	Left	Adult	Female?	Proximal half
8285	Well fill	Femur	Left	Juvenile (13-18 years)	?	Near complete
8285	Well fill	Humerus	Left	Adult	Female?	Near complete
8285	Well fill	Fibula	Left	Adult	?	Distal half
11539	Ditch fill	Vertebra	-	Subadult		
12691	Surface from sanctuary	1st metacarpal	-	Adult	?	Partial bone, superior side only
12835	Surface of structure 10830	Femur	Right	35-36 wks	-	Near complete bone
12935	Ditch fill	Manual phalanx	-	Adult	?	Part of one of the skeletons within the ditch
12945	Occupation layer	Cranial fragments	-	Neonate	-	

therefore closest to the settlement space and the living. Further away were the young children and the three main burial clusters and on the outer ring were the isolated burials. Interestingly, the two most distant burials were females (skeletons 10734 and 11775). The organisation in terms of proximity to the settlement may allude to notions of pollution, with the burials furthest away being the most polluted or dangerous. The neonates may not only have been unthreatening to the living but may even have needed protecting.

All graves were located in or near boundaries. The burials can be seen as being situated within activity areas demarcated by these boundaries. This suggests that the disposal of the dead was integrated with other land-uses and activities rather than set apart in a separate domain (Esmonde Cleary 2000, 132). Their close proximity to contemporary boundaries is therefore not a coincidence but rather a deliberate placement. Its meaning is, however, harder to discern. The very least that can be said is that it suggests a recurring encounter of the living with the dead (Pearce 1999, 151). The burials may suggest that ancestors were used to legitimise claims to land and as such the dead would have had an active role in the lives of the living. A physical boundary can also be seen as a liminal space. The association with boundaries may therefore help to constrain the possible influence of the dead (Esmonde Cleary 2000, 138). That the burials were adjacent to contemporary boundaries may signify that as long as the physical boundaries were maintained, the liminal boundary was intact and the living was protected from the dead, conversely the boundaries may be there to protect the dead from malignant forces.

Discrete burial clusters may be interpreted as family groups. However, the inhumations (skeletons 10922, 10954, 12656, 12686 and 12727) in ditch 12880 were mainly females. Only the latest burial was male (skeleton 10922). This gender-based pattern was repeated in the two other groups in the south-eastern corner of boundary ditches 11270 and 12970. The southern group were all males (skeletons 10794, 10938 and 10951) and there were three males, one female and a child in the northern group (skeletons 10791, 10947, 12814, 12816 and 12902). This burial pattern does not indicate typical family grouping. However, it has been suggested that male groupings may represent kinsfolk organised on a patrilinial basis and the female burials could therefore represent women related by marriage or a matrilinial grouping (Davison 2000, 235). However, social status, wealth, occupational position, and religious beliefs may also to some extent account for the gender based burial pattern (Quensel-von-Kalben 2000, 217). The spatial organisation by gender is not unique and a study on rural sites from Hampshire with four or more burials found that groups of burials were biased towards either males or females (Pearce 1999, 156). Moreover, there is also evidence from the large urban cemetery at Lankhills that contemporary burials of males and females were separated on the basis of gender (Clarke 1979,126).

Aspects of adult funerary ritual

Abundant domestic pottery sherds, including samian ware, were present within the backfill of the female burials in ditch 12880, with the pottery being restricted to the grave fills rather than the ditch fill.

Table 6.7 Summary of adult burial ritual

Skeleton number	*Cut number*	*Orientation*	*Body position*	*Coffin*	*Grave goods*
8012	8010	NW-SE	Supine	Possibly	Ceramic vessel
8018	8016	SW-NE	Supine	None	None
8128	8123	SE-NW	Supine	Possibly	Ceramic vessel (SF 676) and tiles placed by the skull and feet (SF 677 and 678)
8131	8132	NW-SE	Supine, decapitated	Present	Coin (SF 686)
8155	8154	NW-SE	Supine	None	None
8261	8301	Unknown	Unknown	Unknown	Unknown
10734	10732	NW-SE	Supine	None	Copper alloy finger ring with glass intaglio (SF 1226), bone pin (SF 1227)
10791	10792	E-W	Supine	Present	None
10794	10795	SW-NE	Supine	Present	3 iron keys (SF 1317-19), shoes (hobnails)
10922	10923	NNE-SSW	Supine	None	None
10938	10937	SW-NE	Flexed, right side, decapitated	None	Shoes (hobnails)
10951	10949	SW-NE	Supine	None	None
10954	10956	SW-NE	Prone	Present	None
11775	11774	E-W	Supine, decapitated	Present	Beaker
12599	12597	SW-NE	Supine	None	None
12656	12654	NE-SW	Prone	None	None
12686	12684	SSW-NNE	Supine	None	None
12727	12726	SW-NE	Flexed, left side	None	Copper alloy bracelet (SF 2934)
12814	12811	NE-SW	Supine	Present	Glass vessel fragment (SF 3004)
12816	12813	NE-SW	Supine	Present	None
12902	12839	E-W	Supine	Present	Ceramic vessel
12999	12997	NNE-SSW	Supine	None	None

The backfill of the isolated burial of skeleton 11775 also contained frequent pottery sherds. This could symbolise the importance of the women within the domestic sphere, although it may of course express a more elusive religious belief.

The distinctive features of the burial ritual at Higham Ferrers are summarised in Table 6.7. The orientation of the burials was predominantly roughly north-south or south-north, which is quite a common pattern (Pearce 1999, 155-156). However, there are variations in the orientation and the close relationship of burials with other features such as boundaries has a strong influence on the burial orientation.

All but four of the adult inhumations were supine, two individuals had been buried flexed (skeletons 10938 and 12727) and two were prone (skeletons 10954 and 12656). Prone burials occur sporadically throughout the Roman period but become more common in the 4th century (Philpott 1991, 71).

Coffins

Coffin nails were present in the graves of seven skeletons (8131, 10794, 10954, 11775, 12814, 12816 and 12902). A further two (skeletons 8012 and 8128) had one or two nails within the burial which may indicate the presence of a coffin (Table 6.7). An equal number of males and females had been interred in coffins. The evidence for the use of wooden coffins in the late Roman period is widespread in Britain, and from a sample of 3459 burials, 54% had evidence for the presence of a wooden coffin (O'Brien 1999, 13).

Grave goods

Overall, grave goods are usually rare in late Roman burials (ibid., 21). The grave goods present can be divided into two groups, personal effects (clothing and jewellery) and domestic artefacts such as ceramic vessels. Two males were buried with footwear (skeletons 10794 and 10938). The majority of burials with footwear are found in south central England and are most commonly associated with villas and other minor rural settlements though quite a few examples have been found at urban sites such as Lankhills (Philpott 1991, 167; A Boyle pers. comm.). Burials with hobnails become more common in the 2nd and 3rd centuries but the vast majority of examples date to the 4th century. This rite may have mirrored current fashions in footwear but is more likely to have been associated with a belief such as in the individual's need for shoes in the afterlife (Hope 1999, 59).

Two females (skeletons 1074 and 12727) were buried wearing jewellery which comprised a ring and a bracelet respectively. Bracelets were the most common form of jewellery either worn or placed in

the female graves at Lankhills, for example (Quensel-von-Kalben 2000, 223).

One male, skeleton 10794, was buried with three large iron keys which had been placed on the chest area. Though quite unusual, other instances of such an occurrence are known from sites at Old Ford, Chatham, and Kelvedon (Black 1986, 222). The key was an attribute of Epona, who may have been invoked to aid the dead buried with such an object (ibid.). It is, however, very rare that a burial can be linked with a specific deity (Alcock 1980, 50). Keys can also be seen as a symbol of hope in the face of death (Black 1986, 222),or perhaps as status symbols, denoting wealth and power.

Ceramic vessels were present in four burials (skeletons 8012, 8128, 11775 and 12902). These are likely to have contained food offerings. The glass fragment with skeleton 12814 may be an accidental inclusion or it may possibly represent the symbolic inclusion of a high status artefact.

Decapitation burials

Three skeletons (8131, 10938 and 11775) were decapitation burials. They were all adults and comprised one male and two females. Although widely distributed in time and space, decapitation burials are most commonly found in small rural cemeteries from the 3rd century onwards, with most examples dating to the 4th century (Philpott 1991, 78). In a sample of 87 decapitation burials that could be sexed, Philpott (ibid., 79) found a slight predominance of females over males (51:36).

The placement of the cranium in the burial varies but the vast majority are placed below the hips and most commonly between the legs, knees and feet (ibid., 78). The crania in the two female burials at Higham Ferrers were placed between the lower legs, while that of the male skeleton (10938) was placed in the stomach area. This individual was flexed on his left side and the cranium was nestling in the space created by the drawn up legs and the left arm which was draped across the top of the skull.

Skeletal evidence is generally considered to suggest that the removal of the head was carried out post-mortem (Philpott 1991, 80). No cut marks were seen on the Higham Ferrers examples, but many of the bones were fragmented and/or missing at the regions where the marks could have been present. It is therefore not possible to say how these specific individuals were decapitated, although there is nothing to suggest that this was not in line with the widely observed pattern.

Neonatal burials

A specific group of burials which merits a separate discussion is the neonates. All were associated with buildings and are summarised in Table 6.8. All neonates were aged between 33 and 42 weeks and the majority were aged between 37 and 40 weeks, which is indicative of being full term. The main locations for these burials were in or near a corner of the building and alongside a wall. The presence of infants within buildings is common and it has been noted that only infants were buried within the city walls in Winchester (Esmonde Cleary 2000, 135).

The presence of 13 neonates at the settlement may appear to be a substantial number and it may be tempting to suggest dramatic interpretations such as infanticide in which infants were selected, killed and buried surreptitiously for whatever reason (Scott 1991, 110). Mortality rates from the Roman period are clearly not available, though comparable population statistic figures from the Model West provide a guide to an approximate structure of pre-industrial populations (Pearce 2001, 129). This model provides a mortality rate in the first year of *c* 16-37%. At face value, the neonatal burials at Higham Ferrers amount to 36% of the total inhumations, but this crude figure cannot be taken as a simple reflection of the pattern suggested by the Model West life table. On the one hand, taphonomic factors such as grave depth and diagenesis may have resulted in the complete loss of infant burials. On the other hand, the adult burials are far too few to represent the complete population and many individuals are likely to have been buried elsewhere, perhaps in a more formal cemetery. Equally, the present figures take no account of the chronological range of the settlement. Nevertheless, they do suggest that the mortality rates are within the normal ranges for a pre-industrial society and there is nothing to warrant any other explanation.

The location of the infant burials indicates that a separation between the living and the dead was not needed. This may be due to the infant not having developed a definite social persona, which would have warranted exclusion from the domain of the living. Alternatively, the lack of a social persona may also have meant that infants could be buried with minimal amount of ritual (Esmonde Cleary 2000, 135-136). The location of the burials does, however, suggest a purpose and infant burials appear to have often been used to inaugurate construction or terminate the use of buildings (Pearce 2001, 127).

Disarticulated remains

It is relatively unusual to find disarticulated fragments of adult burials within Roman contexts since adults normally received formal burials. All the adult and subadult bones at Higham Ferrers were from layers and feature fills and may have derived from disturbed burials.

Disarticulated remains from three individuals were recovered from well 8278, just north of the possible temple in Area G. Wells from settlements as well as temples have been found to contain human remains and these have usually formed part of a greater structured deposit which also included animal remains, building material, coins, pottery

Table 6.8 Summary of the location of neonatal burials

Skeleton number	*Feature number*	*Feature type*	*Location*
10876 (fill no.)	10810	Structure	Robber cut of south-west wall
10947	12900	Structure	Grave cut to the rear of the building
12372 (fill no.)	10830	Structure	Soil deposit overlying building
11389	10870	Structure	South-east of entrance
11642	10880	Structure	Alongside southern wall, near south-eastern corner
11687	10880	Structure	Alongside eastern wall, near south-eastern corner
11782	11370	Structure	North-eastern corner
11808	10870	Structure	Near the northern wall
11815	10870	Structure	Near the northern wall
12120	10850	Structure	Alongside western wall near north-western corner
12613	None	None	Isolated on far southern side of excavation area
12757	12900	Structure	NE interior corner
13011	10830	Structure	Near southern wall
13013	10830	Structure	Near southern wall

and metal vessels (Esmonde Cleary 2000, 138). The wells may be perceived as liminal spaces between the underworld and above ground. As such the shafts could have functioned as points or portals for communication with the deities and the structured deposits therefore take on a ritualistic aspect. On a more basic level, there is also a more obvious sexual connotation of the well shaft penetrating the earth, raising the possibility that they were therefore connected to sexuality and fertility (ibid.).

ANIMAL BONE *by Lena Strid*

Introduction

The animal bone assemblage from the Roman settlement comprises 16,157 refitted fragments, from securely dated contexts. The assemblage can be divided into three chronological phases: early Roman (Phase 3, mid-late 2nd century), mid Roman (Phase 4, late 2nd-late 3rd century) and late Roman (Phase 5, late 3rd-4th century).

The bones were recovered through hand collection during excavation and from wet-sieved bulk samples (processed using a 500^2 m residue mesh). Almost all of the recorded bones derive from hand-retrieved contexts; only 4.2% were extracted from sieved samples. A full record of the assemblage, documented in a Microsoft Access database, can be found with the site archive.

Methodology

The bones were identified at Oxford Archaeology using a comparative skeletal reference collection, as well as osteological identification manuals. All the animal remains were counted and weighed, and where possible identified to species, element, side and zone. Sheep and goat were identified to species where possible, using Boessneck *et al*. (1964) and Prummel and Frisch (1986). They were otherwise classified as 'sheep/goat'. Wild boar was distinguished from domestic pig by size (see Johnstone and Albarella 2002, 33), using domestic pig measurements from the ABMAP database as a comparison (http://ads.ahds.ac.uk/catalogue/specColl/abmap/). Ribs and vertebrae, with the exception for atlas and axis, were classified by size: 'large mammal' representing cattle, horse and deer, 'medium mammal' representing sheep/goat, pig and large dog, and 'small mammal' representing small dog, cat and hare. The condition of the bone was graded on a 6-point system (0-5) using criteria stipulated by Lyman (1996), grade 0 equating to very well-preserved bone and grade 5 indicating that the bone had suffered such structural and attritional damage as to make it unrecognisable.

Modern breaks were disregarded when calculating the total number of fragments. The minimum number of individuals (MNI) was calculated on the most frequently occurring bone for each species, using Serjeantson's (1996) zoning guide, and taking into account left and right sides, as well as epiphyseal fusion. For the calculation of the number of identified fragments per species (NISP) all identifiable fragments were counted, although bones with modern breaks were refitted. The weight of bone fragments has been recorded in order to give an idea of their size and to facilitate an alternative means of quantification.

For ageing, Habermehl's (1975) data on epiphyseal fusion were used. Three fusion stages were recorded: unfused, in fusion, and fused. In fusion indicates that the epiphyseal line is still visible. Cattle horn cores were aged according to Armitage (1982), using texture and the appearance of the horn core surface. Tooth wear was recorded using Grant's tooth wear stages (Grant 1982), and correlated with tooth eruption (Habermehl 1975), as well as the wear rate of the mandibular M3 (Benecke 1988, in Vretemark 1997), in order to estimate an age for the animal(s). Due to the very broad age ranges

for pigs classified by Benecke, O'Connor (1988) was substituted for this species. Sex estimation was carried out on cattle metapodials and pelves, sheep pelves, and pig mandibular canine teeth, using data from Boessneck *et al*. (1964), Mennerich (1968), Prummel and Frisch (1986), Schmid (1972) and Vretemark (1997). Measurements were taken according to von den Driesch (1976), using digital calipers with an accuracy of 0.01 mm. Large bones were measured using an osteometric board, with an accuracy of 1 mm. Withers' height of dog and horse were calculated using Harcourt (1974) and May (1985) respectively.

Table 6.9 Number of identified animal bones by major chronological phase

	Early Roman	*Mid Roman*	*Late Roman*
Cattle *(Bos taurus)*	49	248	368
Sheep/goat *(Ovis aries / Capra hircus)*	264	2354	1199
Sheep *(Ovis aries)*	7	118	105
Goat (Capra hircus)		1	1
Pig *(Sus domesticus)*	33	293	304
Horse *(Equus caballus)*	13	38	71
Dog *(Canis familiaris)*	20	63	49
Cat *(Felis catus)*	1	1	1
Red deer *(Cervus elaphus)*		2	2
Roe deer *(Capreolus capreolus)*		2	1
Wild boar *(Sus scrofa)*		9	1
Hare *(Lepus europaeus)*		4	1
Rabbit *(Oryctolagus cuniculus)*		4	
Rodents and shrews *(Rodentia* and *Sorex* sp.*)*		19	
Domestic fowl *(Gallus gallus)*	2	29	43
Goose *(Anser anser/ Anser domesticus)*		1	3
Duck *(Anas sp.)*		5	4
Mallard *(Anas Platyrhynchos)*		2	3
Pigeon *(Columba* sp.*)*		2	1
Lapwing *(Vanellus vanellus)*		1	
Crow *(Corvus corone)*		5	
Rook *(Corvus frugilegus)*		5	1
Raven *(Corax corax)*		2	4
Indeterminate corvids		21	1
Small passerine		1	
Frogs and toads *(Rana* sp. and *Bufo* sp.*)*		23	3
Carp *(Cyprinius carpio)*			1
Eel *(Anguilla anguilla)*			1
TOTAL	375	3253	2168

The assemblage

The Roman assemblage consisted of 16,157 fragments, of which 5796 (35.9%) could be determined to species (see Table 6.9) and 3604 fragments were considered completely unidentifiable. The rest of the unidentified fragments consist mainly of long bone shaft fragments, vertebrae and ribs, assigned to small, medium-sized and large mammal respectively. The bones were in good condition, with little burning and some gnawing from carnivores and rodents (see Tables 6.10-12).

Of the 4047 sheep/goat bones, 230 could be identified as sheep and 2 as goat. It is therefore assumed that the majority of the sheep/goat bones in the assemblage derive from sheep (cf. Maltby 1981, 159-160); and "sheep" is used throughout the report. The goat bones comprised one metacarpal and one metatarsal.

The dominant species in all Roman phases at Higham Ferrers is sheep, regardless of quantification method. This is in stark contrast to the usual

Table 6.11 Number of gnawed animal bones

	Gnawed bones	*%*
Early Roman	11	0.1%
Mid Roman	160	1.8%
Late Roman	159	2.6%
Total	330	2.0%

Table 6.12 Number of burnt animal bones

	Burnt bones	*%*
Early Roman	80	6.9%
Mid Roman	29	0.3%
Late Roman	41	0.7%
Total	150	0.9%

Table 6.10 Preservation level of animal bones

	N	*0*	*1*	*2*	*3*	*4*	*5*
Early Roman	1157		3.4%	64.6%	30.3%	1.6%	0.1%
Mid Roman	8962	0.01%	0.8%	58.0%	40.1%	1.1%	
Late Roman	6037	0.01%	0.4%	68.2%	26.5%	1.3%	0.01%
Total	16157	0.01%	2.1%	62.3%	34.3%	1.2%	0.0%

pattern for Romanised sites in Britain which are usually dominated by cattle and pig, whereas sheep tend to be dominant at 'native' sites (see Maltby 1981, 163; Hamshaw-Thomas 2000:passim). As Higham Ferrers is situated in an area of relatively dense population and just 4.5 km from a Roman town (Irchester), a non-Romanised population seems implausible. However, a similar species ratio to that observed in Higham Ferrers was found at the Harlow, Chelmsford and Uley temple sites (Legge and Dorrington 1985; Luff 1992; Levitan 1993), although the predominance of sheep at Harlow and Chelmsford was not explained by the authors. Uley is interpreted as having been mainly a shrine to Mercury whose sacrificial animals were the goat and the cockerel, an interpretation also confirmed by the archaeological finds (Woodward and Leach 1993, 333). No such specific cult focus has been found at Higham Ferrers. Apart from temple activity, the predominance of sheep may also be related to an intense focus on dairy production in the area, the young lambs being surplus (see below).

Both meat-bearing and non meat-bearing bones of cattle, sheep and pig were present in the assemblage, indicating that these species were slaughtered, butchered and eaten in the area.

The meat-providing domestic mammals

Cattle

Cattle were mainly represented by rather young individuals. The dental age estimation show a consistently high percentage of cattle younger than 2.5 years (see Fig. 6.4a). However, as the number of ageable cattle jaws and bones is rather low in Phases 3 and 4, these figures must be used with care. The bone fusion evidence is consistent with the dental age estimation, in that both young and subadult cattle are present. Of the sixteen cattle in the 0-1 years interval, five were very young, with the first permanent molar either erupting or with very little wear (wear stage b). As this tooth erupts at 5-6 months of age (Habermehl 1975, 84f) it would equate to 5-7 month-old calves.

Both male and female cattle pelves were found in the assemblage (see Table 6.13). Using Mennerich's index, all four measureable metacarpals (late Roman Phase 5) were found to be within the range of bulls and oxen (Mennerich 1968, 11, 35, in Vretemark 1997, 48). Since only ten cattle could be sexed, little can be said regarding any cattle husbandry focus on males or females. The measurable cattle bones are about the same size as bones from other Roman sites in Britain. The size differences may reflect different ratios of cows, bulls and bullocks, as well as cattle of different ages.

Table 6.13 Cattle sex estimation

	Male	*Female*
Early Roman	-	-
Mid Roman (n:4)	50%	50%
Late Roman (n:2)	50%	50%
Total (n:6)	50%	50%

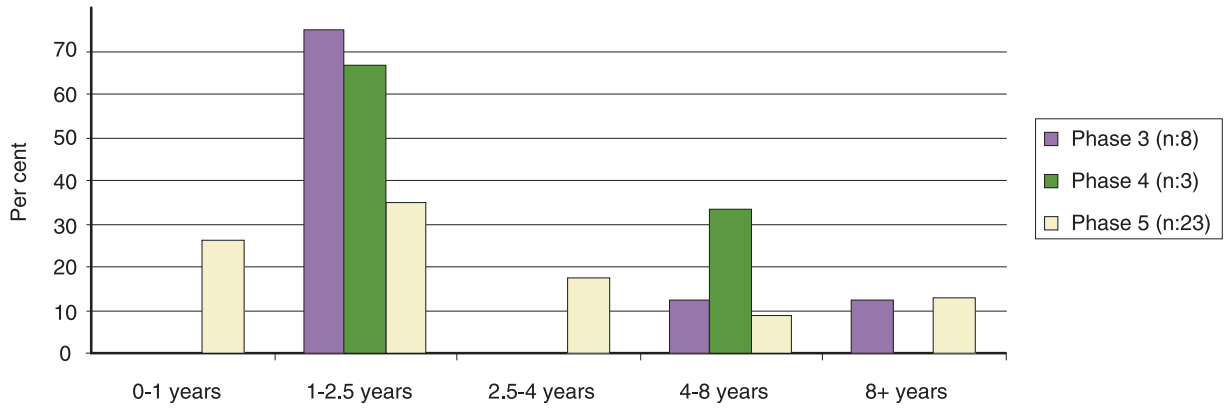
Butchery marks were found on several cattle bones, in all three phases. Cut marks deriving from skinning occurred on six first phalanges. Most butchery marks were associated with dismemberment, and were found proximally, mid-shaft and distally on long bones, as well as on pelvis (ilium, acetabulum and ischium), calcaneus, atlas and the articular process of the mandible. Other butchery marks were associated with severing of horn cores from the skull and extraction of marrow from long bones. It is possible that the longitudinal splitting of long bones may also be connected to boneworking, particularly for bones deriving from contexts containing other waste demonstrably derived from this activity.

Pathological conditions were found on seven cattle bones, mostly from the lower legs and feet. One mandible displayed extra bone growth on the ramus, suggesting periostitis. Other infections were found – woven bone growth on a distal tibia and bone absorption of the proximal joint surface of a metatarsal. Four phalanges displayed enthesophytes on muscle attachment sites. This may be caused by using the cattle for traction, and/or by the cattle walking on very soft or hard surfaces (Clutton-Brock 1979,147; Higham *et al.* 1981, 354-355).

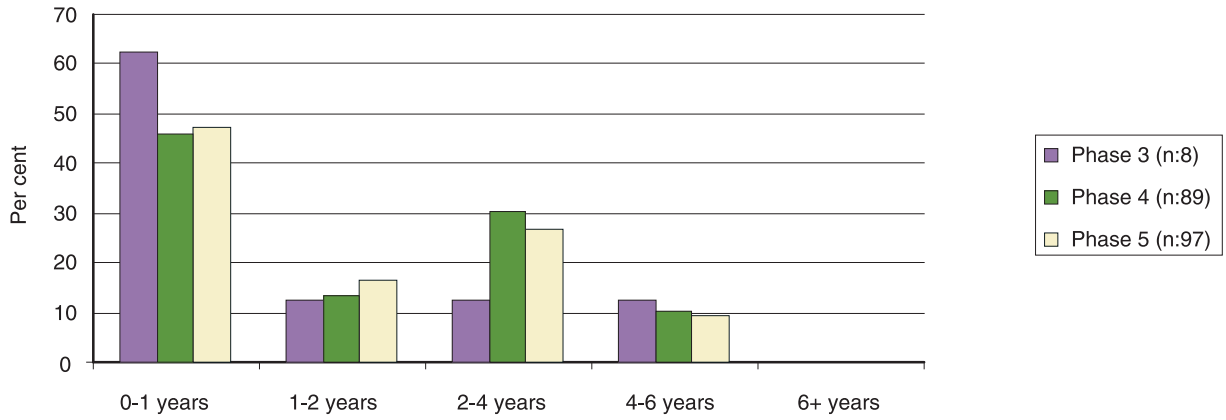
Sheep

The sheep slaughter patterns are very similar for all three Roman phases, peaking at 0-1 years and 2-4 years (see Fig. 6.4b). Of the 92 sheep in the 0-1 years interval, 61 (66%) were very young, with the first permanent molar either erupting or very little worn (wear stage b). As this tooth erupts at 3 months of age (Habermehl 1975, 120) it would be equivalent of 2-4 month old lambs. The bone fusion is consistent with the dental age estimation, in that both young and subadult animals are present in large numbers, and adult animals are present in smaller numbers.

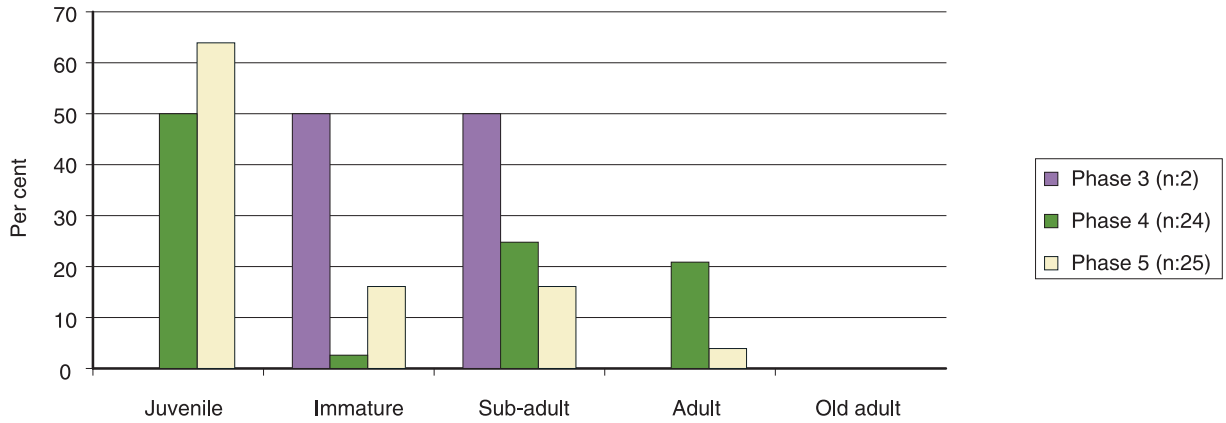
The majority of the sheep in the assemblage were ewes (see Table 6.14). This may be interpreted as a sheep husbandry regime focussing mainly on milk production, with secondary utilisation of meat and wool production. In a flock specialising in wool production, there would be far more wethers, as they yield a heavier fleece (Clutton-Brock 1976, 382). A flock dominated by young ewes would provide a constant supply of lambs, while each individual would yield some shearings of wool before being slaughtered for meat. The young males were either exported elsewhere to be raised for meat or wool, or were slaughtered before their secondary sexual characteristics developed.



a. Cattle



b. Sheep/goat



c. Pig

Fig. 6.4 Dental ageing of main domestic species

The measurable sheep bones are somewhat larger than sheep bones from other Roman sites in Britain. This is unusual, as in a flock with a majority of ewes, smaller sheep would be expected. It is possible that the Higham Ferrers sheep were of a larger breed, or that they benefited from better nutrition. O'Connor suggests that sheep from Romanised areas in the south of England were larger than ones from more peripheral less-Romanised areas, likely due to Roman introductions of larger breeds (O'Connor 1988, 97). As Higham Ferrers is situated in central Britain, the existence of larger Roman sheep in the herds would not be implausible. Similar large maximum measurements were found at Elms Farm (Johnstone and Albarella 2002, 190-192).

In all phases, most sheep were horned. However, several horn cores were very small. Only three hornless sheep were found: two in the mid Roman phase (Phase 4) and one in the late Roman phase (Phase 5). Finds from southern England indicate that hornless sheep were very rare in Iron Age and early Romano-British deposits, and began to occur more frequently later in the Romano-British period. This may indicate a difference in breed, with native British sheep being mainly horned, and introduced Roman breeds being mainly hornless or only having very small horns. The gene for hornlessness is dominant while the gene for small horns is recessive (Maltby 1994, 94; Föreningen gutefåret 2006). Breeding these sheep into native sheep flocks would likely change the appearance of the flocks fairly quickly. There are also some suggestions that these hornless sheep were somewhat larger than native sheep (Maltby 1994, 94).

Several sheep bones displayed butchery marks. Cut-marks associated with skinning were found on one first phalanx. Two pelves displayed chop marks on the pubis, suggesting a division of the carcasses into halves. Evidence of sagittal division was also found on a skull fragment. However, the vast majority of butchering marks on sheep bones were associated with dismemberment. These mostly occurred proximally, mid-shaft and distally on long bones, as well as on pelvis (ilium), astragalus and atlas. Cut-marks indicating filleting occurred on long bone shafts, a pelvis and a mandible. There is some evidence suggestive of marrow extraction. Bones, particularly metapodials, radii and tibiae, had frequently been split longitudinally. This feature was particularly prevalent in the assemblage from a bone dump (12913) immediately outside building 11370. However, as this context contained plenty of boneworking waste, probably resulting from pin manufacture, it is possible that these bones instead represent waste from this activity.

The 14 pathological sheep bones were mainly affected by infections and trauma. Woven bone growth was found on four long bones and one mandible. One case of bone absorption at the tooth row also occurred. Trauma was demonstrated by two healed fractures; on a humerus and a metatarsal respectively, and as haematoma on two metapodials. Three long bones and one phalanx displayed exostoses on muscle attachment sites, suggesting enthesophytes rather than infections.

Pig

The pig dental eruption and attrition data show a widespread slaughter age pattern consisting of juvenile, immature, subadult and adult pigs, with some focus on juvenile pigs (see Fig. 6.4c). The bone fusion evidence is consistent with the dental age estimation, in that both young and subadult animals are present.

In contrast to the sheep, the pig assemblage displayed a considerable bias in favour of boars (see Table 6.15). A predominance of boar is common in most Roman sites in Britain and north-western continental Europe (Luff 1982, 263), and has been interpreted in terms of the slaughter of surplus young boars (Johnstone and Albarella 2002, 31). Bengt Wigh further extrapolates on this, writing that as sows yield less meat, surplus sows would be slaughtered early, before the eruption of the permanent canines at 6-9 months (Wigh 2001, 80).

The measurable pig bones are somewhat larger than pig bones from other Roman sites in Britain. Unfortunately, as no measurable bones from late fusing elements could be measured, there is a possible margin of error regarding not fully grown individuals.

Most butchery marks on pig bones were associated with dismemberment. These mostly occurred proximally, mid-shaft and distally on long bones, as well as on pelvis (ischium), calcaneus, atlas and the articular process of the mandible. Three mandibles were split in left and right halves at the incisive area. Cut marks on a mandibular ramus further

Table 6.14 Sheep sex estimation

	Male	*Castrate*	*Female*
Early Roman (n:4)	25%	-	75%
Mid Roman (n:30)	13.3%	16.7%	70%
Late Roman (n:6)	16.7%	-	83.3%
Total (n:40)	15%	12.5%	72.5%

Table 6.15 Pig sex estimation

	Male	*Female*
Early Roman	-	-
Mid Roman (n:10)	90%	10%
Late Roman (n:6)	100%	-
Total (n:16)	93.8%	6.2%

indicate the utilisation of cheek meat. Cut marks suggesting filleting were found on a pelvis and on the shafts of long bones.

Pathologies occurred on six pig bones. Haematoma was found on a metapodial and a tibia. More severe trauma was displayed by a dislocated shoulder blade, which was very deformed. Infections had occurred on two mandibles. One had woven bone growth at the incisor area and the other mandible displayed a large abscess, with subsequent pathological bone growth, from the deciduous fourth premolar (dp4) down to the root canal, and from the root canal to the buccal side of the mandibular horizontal ramus. Enthesophytes were found at the proximal articulation of a lateral metapodial.

Other domestic mammals

Horse

The great majority of the horse bones derived from adult horses, which is consistent with other Romano-British sites (Locker 1990, 208; Johnstone and Albarella 2002, 34; Maltby 1993, 329-330; Luff 1999, 205). The measurable horse metacarpals are within the same size range as metacarpals from other Roman sites in Britain. Withers' heights of 1.294 m and 1.318 m respectively were calculated from these two bones. This is the equivalent of a modern day Icelandic pony.

Butchering marks occurred on eight horse bones. A calcaneus (Phase 4) displayed cut marks indicating disarticulation of the lower leg. Three metapodials (Phase 3) and one radius (Phase 4) had been chopped longitudinally, suggesting extraction of marrow or utilisation of the long bones as raw material for boneworking. This is likely also the case for two Phase 4 metapodials, one of which was split longitudinally into small pieces, and the other – a metatarsal – which had had parts sliced off supradistally. An ulna (Phase 4) was chopped through the shaft, which may suggest that the meat of the leg or the marrow of the radius was utilised for food – either for humans or for dogs (see Johnstone and Albarella 2002, 34).

Tarsal bones were found fused to a metatarsal in the late Roman (Phase 5) assemblage. This was interpreted as spavin, a disease associated with heavy traction and/or walking on hard surfaces (Baker 1984, 253).

Dog

The dog remains comprise four semi-articulated individuals (one juvenile dog in Phase 3, one subadult and one juvenile dog in Phase 4 and one adult dog in Phase 5), and 79 disarticulated bones. Of the disarticulated bones, 13 derived from juveniles, including one neonatal dog. One femur was very slender and thus similar to fox, but it could not be identified as such with certainty. Withers' heights of *c* 300 mm could be calculated on a humerus and an ulna from Phase 5. The Romano-British dog population displays a large variation in size (*c* 200-700 mm in withers' height), and the Higham Ferrers bones are within the range of small Roman dogs (see Harcourt 1974, 167), similar in height to a modern day small spaniel or terrier.

One dog skull in Phase 5 displayed cut marks behind the orbits, indicating the utilisation of dog skins. Skinning marks on Romano-British dogs are rarely noted, and the utilisation of dog skins seems to have been more common in the Iron Age (Maltby 1996, 23-24).

Seven dog bones, all Phase 5, displayed pathological conditions. Six belonged to an articulated animal. This dog was very old, judging by the heavy wear on its teeth. It had infections of the root sockets of P3-M1 in the left and right lower jaws. Its left radius and ulna were fused at the upper part of the bone shaft – likely a badly healed fracture – with subsequent lipping distally as well as at the elbow joint. The left humerus was also affected by lipping. All three bones had smooth woven bone growth, indicative of infection. The hind leg was also affected, with exostoses and a spot of eburnation on the proximal joint surface of the right tibia. A disarticulated ulna displayed an abscess mid-shaft.

Cat

The cat remains comprised one bone in each of the three Roman phases. A very small number (or complete absence) of cat bones is usual for Roman sites in Britain and on the continent (Luff 1982:265). No cut marks were found on the bones.

Wild mammals

The wild species in Higham Ferrers comprised red deer, roe deer, wild boar, hare and rabbit as well as amphibians, rodents and insectivores. The scarcity of wild fauna is consistent with contemporary sites in Britain and continental Europe (Luff 1982, 268-283), indicating that hunting provided an insignificant part of the diet. The presence of amphibians and voles suggest that areas adjacent to the site included wetlands and open grassland.

Deer

Red deer and roe deer were identified in the assemblage, along with four antler fragments from unidentified deer species. Red deer and roe deer are native to Britain, whereas fallow deer were introduced. While the present fallow deer population derives from animals introduced by the Normans, and there was only a small introduction of fallow deer in the Roman period (Sykes 2004; Sykes *et al.* 2006), it is therefore more likely that the unidentified antlers are of red deer. The red deer remains consisted of meat-bearing limb bones, indicating that they were utilised for venison. The roe deer remains consisted of non meat-bearing lower leg bones, but it is assumed that this species was eaten as well. Two deer antlers were sawn off and smoothed, suggesting that they functioned as handles of some kind.

Table 6.16 Epiphyseal closure of wild boar

Phase	*Bone*	*N*	*Unfused*	*Fusing*	*Fused*
Mid Roman	Humerus d	1			1
Mid Roman	Radius p	1			1
Mid Roman	Metacarpal d	2	2		
Mid Roman	Metatarsal d	1	1		
Late Roman	Metapodial d	1			1
Mid Roman	Radius d	2	2		
Mid Roman	Ulna p	1	1		

Wild boar

Almost all wild boar remains were found in Phase 4. They seem to derive mainly from subadult individuals, judging by epiphyseal fusion evidence (see Table 6.16). However, this ageing method must be used with care, as research has shown variations between populations (Bull and Payne 1982, 70; Bridault *et al*. 2000, 15f; Magnell 2006, 43). Wild boar is rare on Roman sites in Britain, as well as on Roman and non-Roman sites in north-western Europe (Luff 1982, 268-283). No wild boars were found at the reference sites, but were possibly present at Colchester (Luff 1982, 127). A cut mark at the proximal end of a metacarpal suggests skinning, or possibly disjointing of the foot. Pathological changes were found on three bones. Two metacarpals displayed woven bone growth, and one metacarpal displayed massive bone growth along its entire shaft. Both of these changes suggest infection, possibly osteoperiostitis (Baker and Brothwell 1980, 64-69).

Lagomorphs

The scanty amount of bones from hares in Higham Ferrers is consistent with contemporary assemblages, in which they are rarely found, and then in small numbers. While hares are native to Britain, rabbits are commonly regarded as being introduced by the Normans (Yalden 1999, 158-159). As the few rabbit bones in Higham Ferrers derive from contexts near the topsoil, it is likely that they are intrusive. Since the numbers of lagomorph remains are so low, little can be discerned regarding hunting strategies. All hare and rabbit remains derived from adult individuals.

Birds

The bird species comprised fowl, goose, duck (probably including mallard) pigeon, crow, rook, raven and lapwing. It is uncertain whether the goose and duck bones derive from domestic or wild birds, as it is very hard to distinguish between greylag goose and its descendant the domestic goose, as well as between domestic duck and mallard. Many of the corvid bones were either crow or rook, but could not be securely identified to species. Small corvids, such as magpie and/or jackdaw were also present.

Domestic fowl is the most common species, as at other Roman sites (Maltby 1981, 161). Most fowl were adults, or subadults; only a few juveniles were present. In six of the seven tarsometatarsi it was not possible to determine sex, as only the proximal or very distal parts of the bone had survived. The remaining tarsometatarsus displayed a spur, and would thus derive from a cockerel or a capon. Medullary bone, which would positively identify female birds, was not observed. The domestic fowl were about the same size as fowl from other Roman sites in Britain. The number of measured bones, both at Higham Ferrers and at the comparative sites, is small and few conclusions can be drawn regarding size changes over time (cf Johnstone and Albarella 2002, 38). The presence of duck/mallard and goose is common on Roman sites in Britain (see Albarella 2005); they were kept/hunted for their eggs and feathers as well as for their meat.

It is uncertain whether the pigeon bones derived from the stock dove (Columba oenas) or rock pigeon (Columba livia) as these species are of similar size. Dovecotes were usually placed on the roof of buildings, according to Roman authors (Rivet 1982, 207), and would thus elude archaeological discovery.

Ravens have been connected to the Mithras cult (Macready and Sidell 1998, 114) and have been found in small numbers on some Romano-British Mithraea and other temple sites (Levitan 1993, 263; Macready and Sidell 1998, 209; Luff 1999, 220). However, as ravens and other corvids are scavengers, they may have been attracted to the site for more secular reasons.

Lapwing was the only wader in the assemblage, a probable indicator of opportunistic wildfowling. Waders occur fairly frequently in Roman assemblages (Johnstone and Albarella 2002, 41), but only constituted a small part of the diet.

Butchery marks were found on five fowl, one duck and one mallard bone. The marks derived from the disarticulation of the carcass as well as from the removal of meat. It is likely that most, if not all other species in the assemblage were eaten (Parker 1988, 201-202). Pathological conditions were found on a domestic fowl ulna, which displayed a mis-aligned healed fracture mid-shaft.

Fish *by Rebecca Nicholson*

The only fish species in the Roman assemblage are eel (Anguilla anguilla) and carp (Cyprinius carpio), the latter represented by a single large spine. The scarcity of fish is typical for Roman rural sites, as is the complete absence of marine taxa. The eel bones indicate some limited fishing in nearby rivers, probably with the use of traps or by spearing. The carp bone is a particularly unusual find for a Roman site: carp were introduced to Britain, probably in the Middle Ages. Unfortunately the provenance of the bone is not completely secure, and it seems likely to be a later intrusion.

Animals from the shrine

Almost 4400 bones were recovered from the shrine (see Table 6.17), which was dated to the mid Roman period (Phase 4). While most species were found in similar qualities to those found in the contemporary non-votive deposits (also shown in Table 6.17), large mammals, notably cattle and horse, were less common in the shrine contexts. It would seem likely that among the main meat-providing animals, sheep and pig were the preferred sacrificial animals, though this finding is not conclusive as the number of identified large mammal bones was fairly low across the site as a whole in the mid-Roman period. Animals absent at the shrine included goat, cat, red deer, goose, duck, lapwing, small mammals and fish. All these species were only present in small numbers in the mid-Roman non-votive contexts, so their absence is probably of little significance. The similarity in species composition between shrine contexts and secular contexts was also found at Folly Lane (Locker 1999, 243). In contrast, the species composition at temple sites such as Elms Farm (Johnstone and Albarella 2002, 50) and Uley (Levitan 1993, 259), showed marked differences between votive and secular contexts.

As no articulated remains were found and only 3.6% of the bones were complete, it is believed that the animal remains mainly derive from food offerings. Butchery marks occurred with the same frequency as in the contemporary non-votive contexts. One bone had evidence of burning, which may indicate that the food was not prepared by

Table 6.17 Quantification of animal remains from the shrine area and settlement (phase 4) (by NISP, MNI and weight)

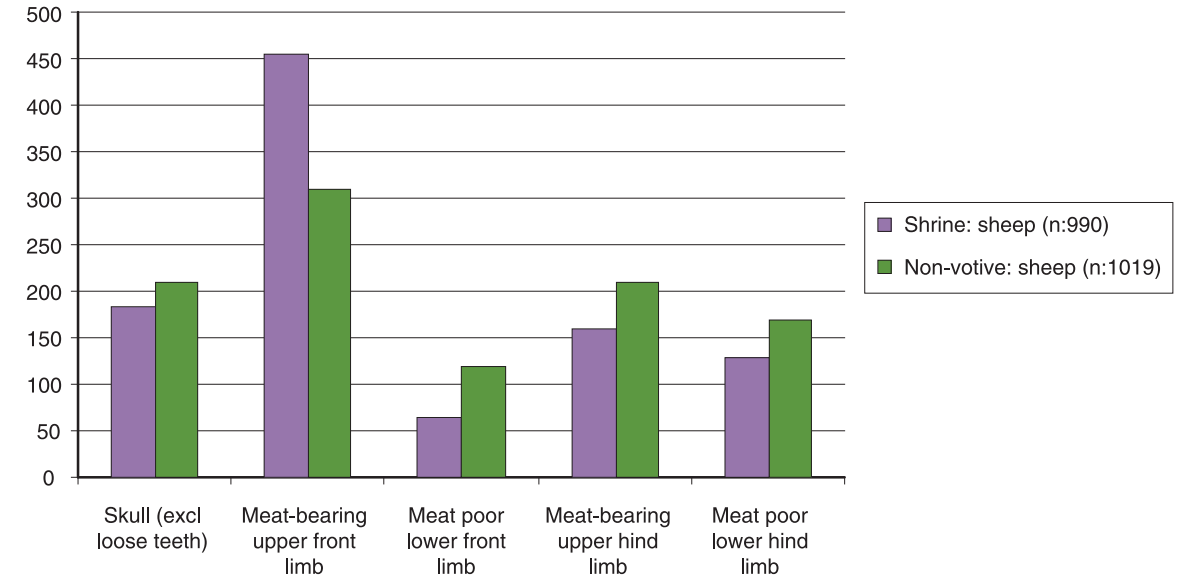
	Shrine			*Settlement (phase 4)*		
	Total NISP	*MNI*	*Weight (g)*	*Total NISP*	*MNI*	*Weight (g)*
Cattle	77	3	1637	172	5	9083
Sheep/goat	1305	79	7346	1159	46	9695
Sheep	50	-	405	70	-	1190
Goat	-	-	-	1	-	13
Pig	133	8	1337	163	8	2864
Horse	6	1	378	32	2	2547
Dog	39	2	85	25	3	235
Cat	-	-	-	1	1	0
Deer	3	-	15	2	-	14
Red deer	2	1	204	-	-	-
Roe deer	2	1	17	-	-	-
Wild boar	2	1	22	6	1	200
Leporidae	1	-	13	-	-	-
Hare	2	1	2	2	1	6
Rabbit	1	1	1	3	1	6
Domestic fowl	12	2	15	18	3	28
Duck	4	1	2	3	1	8
Goose	-	-	-	1	1	5
Pigeon	2	1	0	-	-	-
Lapwing	-	-	-	1	1	0
Passerine	1	1	0	-	-	-
Crow	3	1	3	2	1	0
Rook	5	2	4	-	-	-
Raven	1	1	1	1	1	0
Corvid	16	-	6	5	-	4
Bird	49	-	12	23	-	15
Rat	1	1	0	-	-	-
Water vole	1	1	0	-	-	-
Bank vole	-	-	-	3	1	0
Frog/toad	7	1	2	16	-	0
Fish	-	-	-	1	-	0
Microfauna	-	-	-	365	-	1
Small mammal	3	-	2	6	-	2
Medium mammal	1497	-	3279	1423	-	3800
Large mammal	228	-	1476	584	-	6349
Indeterminate	900	-	1557	990	-	2170
Total	4353	110	17821	5078	77	38235

roasting. Articulated remains were found at the Brigstock temple in Northants (Greenfield 1963, 261) and at Elms Farm (Johnstone and Albarella 2002, 51-52), and butchered remains were common at Harlow, (Legge and Dorrington 1985, 122-123), Chelmsford (Luff 1992, 122-123) and Elms Farm (Johnstone and Albarella 2002, 49-52).

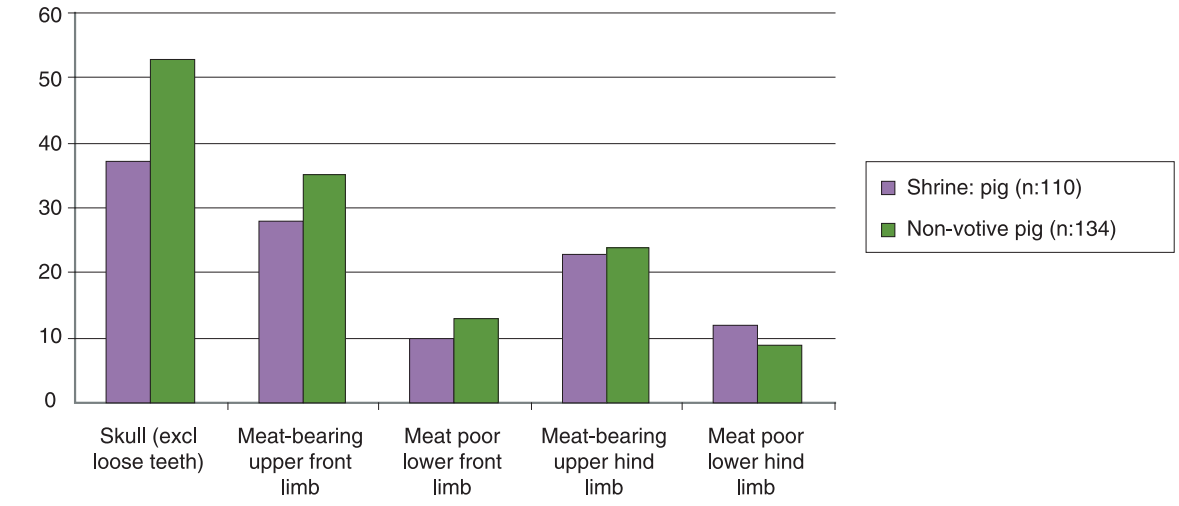
The animal remains at Higham Ferrers were deposited in layers within the main shrine area and in layers associated with a stone platform surface and a wall immediately to the south. Dog gnawing occurred on less than 2% of these bones, indicating that dogs were rather successfully prevented from entering the shrine area.

The body part representation of sheep and pig mainly follow the pattern in the non-shrine contexts (see Fig. 6.5). The exception is the meat-bearing upper front limb of sheep, which were much more frequent among the shrine contexts, and pig skulls, which were more frequent among the non-shrine contexts.

Luff argues that the relatively large frequency of metapodials and other non meat-bearing bones of sheep in Ivy Chimneys could be connected to tanning or boneworking. Such bones were scarce in the temple contexts of Harlow and Chelmsford (Luff 1999, 222). It would seem as if the Harlow and Chelmsford bones mostly represent food offerings in the form of discrete cuts, or as if meat-poor body parts were removed from the temple area after the sacrifice. At Higham Ferrers, sheep humeri and radii are vastly over-represented, and this might be



a. Sheep



b. Pig

Fig. 6.5 Body part representation of sheep and pig

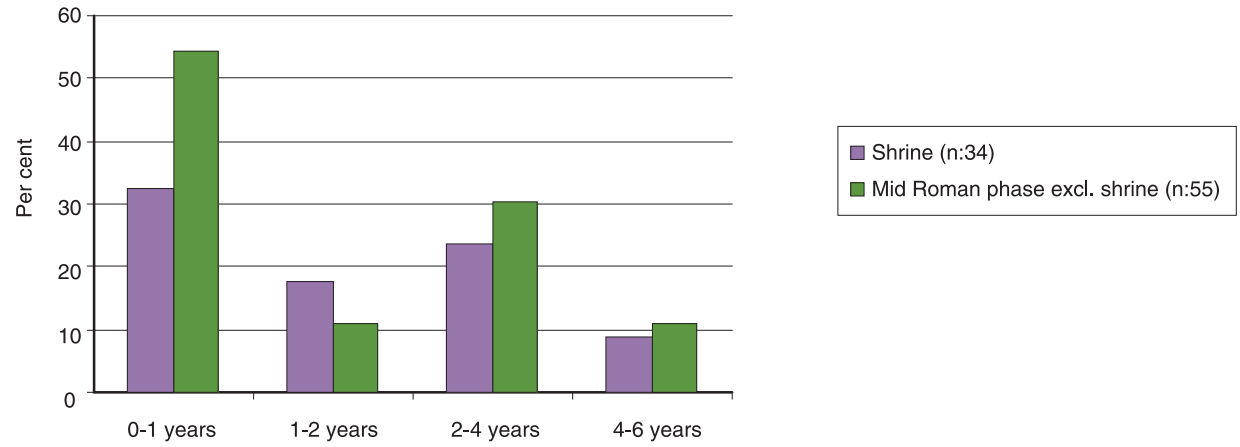
evidence of offerings of discrete cuts of meat. It is not clear whether the metapodials were deposited as waste from the manufacture of bone pins – many of which were found in the shrine – or if they represent a whole sacrificed sheep of which every part, including marrow, was used in the festivities.

Although the age structures of sheep and pig are similar for all the Phase 4 contexts, there are relatively fewer juvenile sheep and relatively more juvenile pigs associated with the shrine (see Fig. 6.6). It is clear that the sheep and pig offerings at Higham Ferrers were of prime meat animals, but there are insufficient ageing data from the cattle assemblage to characterise the slaughter pattern. However, both juvenile and subadult/adult cattle are present.

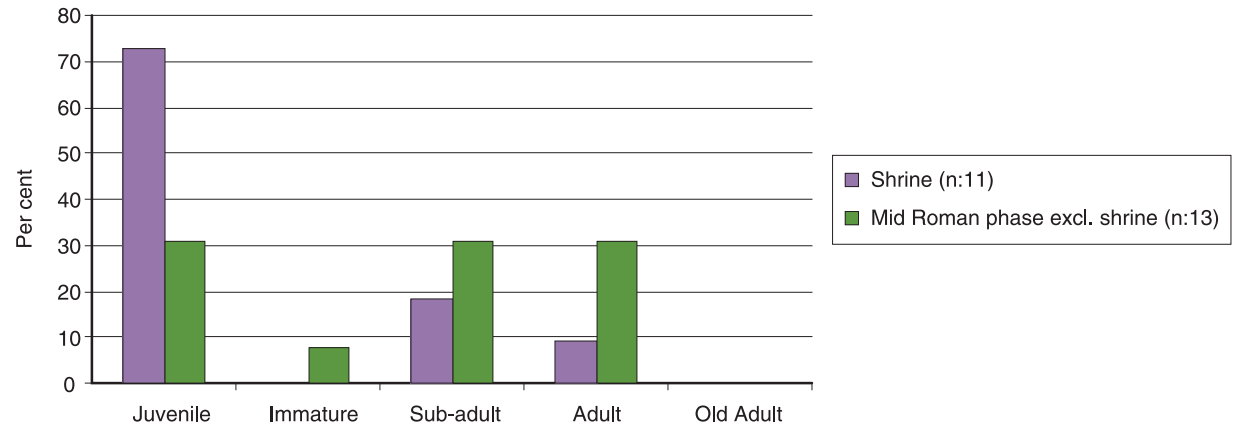
At the Higham Ferrers shrine sheep slaughter mostly occurred in the 0-1 year and at 2-4 year age ranges (see Fig. 6.6a). There appear to have been similar numbers of 3-4 month old lambs and the slightly older lambs. This suggests the absence of time-specific festivities focussed on a certain sacrificial animal. A very narrow time frame for sheep slaughter was found at the temple sites of Harlow, where almost all sheep had been slaughtered at 3-4 months of age, and Great Chesterford, where almost all sheep were either newborn lambs or 6-8 month old lambs (Legge *et al.* 2000, 153-154). These narrow time frames have been interpreted as related to slaughter for specific festivities, rather than everyday rituals (ibid.).

The sacrificial slaughter of adult and older sheep also occurred at Folly Lane (Locker 1999, 341), Elms Farm (Johnstone and Albarella 2002, 50-51) and Ivy Chimneys (Luff 1999). It remains unknown whether this was because adult sheep were more valuable than young lambs, and thus more appropriate to be sacrificed, or, in the case of the old sheep, less valuable and thus more economically useful as sacrifices.

It was not possible to compare the age of sacrificed pigs from other shrines, as there were either



a. Sheep



b. Pig

Fig. 6.6 Age structures of sheep and pig

not enough data in the comparative assemblages to render a comparison useful, or the votive contexts from these sites were not singled out in the ageing analyses.

The dog remains consisted of 30 bones from the hind part of an adult semi-articulated dog and 8 disarticulated bones. All dog bones were found in the layer within the shrine, and it is possible that some of the disarticulated remains derive from the semi-articulated dog. Butchery marks were absent, and it is therefore unlikely that the dog was intended as a food offering. Articulated and semi-articulated dogs have been found in ritual contexts at Ivy Chimneys (Luff 1999, 217), Elms Farm (Johnstone and Albarella 2002, 52), Folly Lane (Locker 1999, 335-336), and Uley (Levitan 1993, 262). In Greco-Roman religion, dogs were associated with the healing deity Asklepius, the hunting goddess Diana, and the war god Mars (Toynbee 1973, 101, 122-123; Simoons 1994, 237). Cicero also suggests that dogs, especially black ones, were appropriate sacrifices at funerals (Henig 1984, 193).

The remains of domestic fowl recovered at the shrine consisted of the larger bones from the wing and legs. As no attempt was made to identify bird vertebrae, ribs, skull fragments and phalanges to species, it is not unlikely that entire fowls were sacrificed. Bird skull fragments were, however, absent in the shrine contexts. As bird foot phalanges were present, the absence of skull fragments may be due to taphonomic loss. Fowl were a common sacrificial animal in the Roman period (Johnstone and Albarella 2002, 50) and examples include both temple sacrifices (Woodward and Leach 1993, 333) and grave offerings (Harman 1985, 279; Lauwerier 1993). According to Toynbee, sacrifices to lares, guardian spirits of house and fields, consisted of fowl (Toynbee 1973, 257).

Many of the other bird species retrieved from the shrine were associated with deities: Pigeons were sacred to Venus, while ravens were associated with several gods: Apollo, Mithras, and the Celtic god Lugus, who was also associated with Mercury (Toynbee 1973, 259-275). The corvids may have used the temple for scavenging or have been sacrificed; either as holy animals in themselves (see above) or as food offerings.

Worked bone

Work waste and pre-fabricates of bone pins were found in the southern area of the site (see Scott, Chapter 5). The waste mainly comprised long bone shaft fragments from large and medium-sized mammals. The worked bone dump (context 12913) also contained a large number of sheep metapodials and meat-bearing long bones that were split down the middle. It is not known whether these were related to boneworking or marrow extraction. Bone pins and prefabricates were also found at the temple site at Harlow (Gobel 1985b, 99-100).

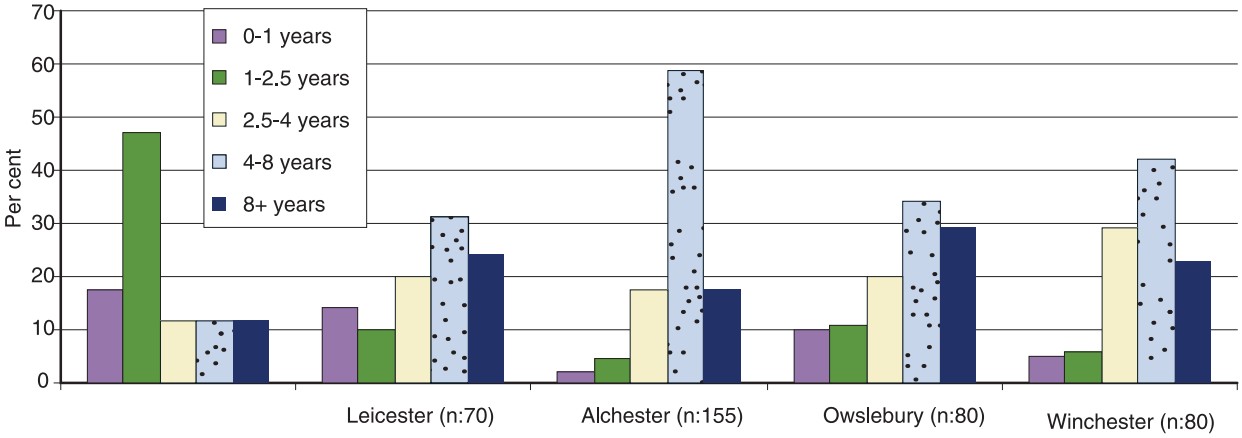
Animal utilisation

There is little indication of changes in animal husbandry during the three phases of Higham Ferrers. Pig is somewhat more common than cattle in Phase 4, but the differences in NISP and MNI are not so great as to depose the far larger cattle as the more important meat provider of the two. Using body weight figures from O'Connor (1991), the 10 cattle in Phase 4 would have yielded 2750 kg meat, whereas the 116 sheep and 15 pigs would have yielded 4350 and 127.5 kg respectively. These figures are calculated on adult animals, and as a large number of the sheep are very immature, one must reduce the sheep body weight proportionally. Despite pigs having a higher proportion of meat on their carcasses than sheep, they remain the least important meat provider. As the number of sheep is greatly reduced in Phase 5, cattle becomes the main meat provider, with sheep coming a close second.

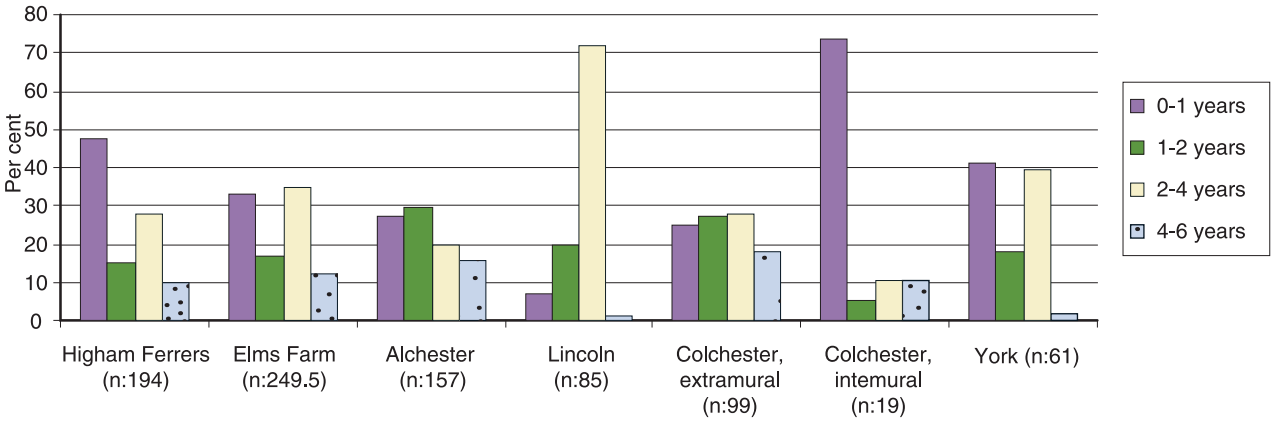
The numbers of ageable cattle mandibles in Phases 3 and 4 and the numbers of ageable sheep and pig mandibles in Phase 3 were very small, and it would therefore not be advisable to discuss any changes in slaughter ages for this phase in an intra-site comparison. Small differences in sheep and pig slaughter age patterns have been observed between Phase 4 and 5, but as the number of jaws in each age range is rather small, the perceived changes may be due to issues of representativity, rather than actual changes in animal husbandry strategies.

There is an unusually high number of young cattle at Higham Ferrers. The cattle remains in larger towns like Alcester, Lincoln, York and Exeter are dominated by adult and elderly cattle (Maltby 2001, 279; Dobney *et al.* 1995, 86; O'Connor 1988, 85; Maltby 1979, 31). The small town at Elms Farm is dominated by subadult and adult cattle (Johnstone and Albarella 2002, 68), whereas the rural settlement Owslebury is dominated by adult and elderly cattle, but with a large presence of immature and subadult cattle (Maltby 1994, 88). None of these sites has such a large percentage of 1-2.5 year old cattle as Higham Ferrers (see Fig. 6.7a). While the very young calves may have been killed, thus releasing milk for human use, the 1-2.5 year-old cattle would already have been weaned. We must therefore look to other possibilities to explain the high number of this age range at Higham Ferrers.

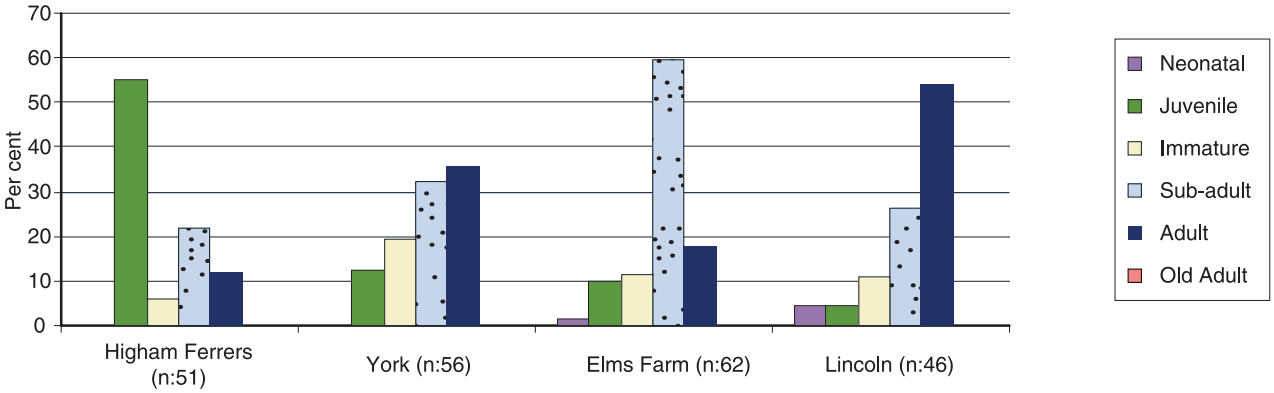
It has been suggested that inhabitants in smaller towns had livestock and fields outside the towns (Maltby 1994, 85). It would thus be possible for the Higham Ferrers inhabitants to have sold off their surplus adult and elderly cattle to larger urban markets rather than keeping them for themselves. The younger cattle in the assemblage might represent animals killed for local consumption, perhaps as a way to conserve resources for winter. Alternatively, the younger cattle were sold to Higham Ferrers from the surrounding countryside, and the adult and older cattle were either eaten at the farms, or sold to larger towns (see above). It is not possible to tell which of



a. Cattle



b. Sheep/goat



c. Pig

Fig. 6.7 Ageing comparison of major domestic species

these two options may have been the most likely without accessing data from several local and regional comparative assemblages.

The predominance of young sheep suggests a connection to dairy production in the area. Columella (*c* AD 4-70) recommended that young lambs should be killed immediately in order to reserve the milk for cheese production (*De re rustica*, VII, 3, 13, in O'Connor 1988, 88). This is very similar to the modern day sheep and goat husbandry in Turkey (Payne 1973), and it would not be unreasonable to suggest that the same strategy could have been used in Roman Britain. As most lambs at Higham Ferrers were not killed straight after birth, lamb meat would likely have had some economic significance. The surviving lambs yielded some shearings of wool and most were slaughtered for meat at 2-4 years of age.

The sheep assemblages most similar to Higham Ferrers are those from York and Elms Farm (see Fig. 6.7b). The high proportion of lambs in York has been interpreted as a surplus of animals from dairying flocks (O'Connor 1988, 88). Unfortunately, no sexing was carried out on sheep in York, so it remains unknown whether the assemblage displayed a predominance of ewes, similar to that in Higham Ferrers. The sheep assemblage in Elms Farm has been interpreted as representative of lambs slaughtered for meat, the adult sheep being used for secondary products and then slaughtered for mutton in their prime (Johnstone and Albarella 2002, 26). Similar interpretations have been put forward for Alcester, Leicester and Colchester (Maltby 2001, 285; Gidney 1999, 313-315; Luff 1993, 68-72). Intra-site differences were found in Colchester, where the extramural site focussed on adult sheep and the intramural site focussed on lambs (Luff 1993, 71-72).

The sex composition of sheep flocks may be used to discern husbandry strategies. Ewes are necessary for breeding and dairy production, while wethers are preferable for wool production because they have heavier fleeces. The predominance of ewes is consistent through all Roman phases of Higham Ferrers, and suggests a possible focus on dairy production. Sex estimation of sheep was not carried out in the comparative assemblages.

An intersite comparison of pig slaughter patterns suffers from difficulties in comparing the various ageing methods used by the researchers. Only at three sites were pigs aged using the same method as at Higham Ferrers (see Fig. 6.7c). The four sites show very different slaughter patterns; the only thing in common being the absence of elderly pigs and the small to non-existent number of neonatal pigs. The lack of elderly pigs probably indicates either a rapid turnover of breeding animals, or that none of these sites specialised in pig breeding for the meat market. If pigs were bred locally, one would expect a high neonatal mortality, but as neonatal bones are fragile, these may have been lost through taphonomic processes. It is therefore not certain whether pigs were kept in back yards by the Higham Ferrers inhabitants, or if all pigs in the assemblage had been brought on the hoof to the town. Based on the differences in pig slaughter ages between Elms Farm and Lincoln, Johnstone and Albarella have argued that consumption demands varied across the country (Johnstone and Albarella 2002, 31), a view supported by the great variation in slaughter ages between the Higham Ferrers and York assemblages.

The predominance of male pigs in Higham Ferrers suggests that sows were more likely than boars to be slaughtered before the age of one, when the sexually distinctive canine teeth erupt. According to Wigh (2001, 80), sows require more food/weight than boars, and it would thus be economical to slaughter the surplus sows early, leaving the greater part of the food supply to the boars. Another possibility is that the sows were kept for breeding replacements on farms, and that the boar predominance seen in Higham Ferrers and several other sites (Luff 1982, 63) represents boars fattened for the urban markets.

The utilisation of other animals differs very little from other contemporary sites. Game and domestic poultry were of relatively low dietary significance.

There is very little difference in butchery patterns between the three phases of the Higham Ferrers assemblage. Most vertebrae showed an intact neural arch, but some vertebrae were divided in half sagitally, probably by using a heavy knife/cleaver. A few vertebrae were divided in half paramedially, that is to say between the dorsal spine and the transverse process. The vertebral column was later divided into several parts. As most vertebrae were not split, it is likely that most butchery at Higham Ferrers took place on the ground or in semi-suspension. Sagittal splitting of vertebrae would, on the other hand, require suspension of the carcass (Seetah 2006, 111). Several ribs displayed chop marks, which were most frequently placed at the rib joint and on the body of the rib. The ribs were sometimes divided into three parts, sometimes into two. Most chop marks on limb bones occur mid-shaft, although the ends of the bones are also represented. Longitudinal butchering for marrow extraction also occurred. No evidence for the Roman practice of hooking cattle scapulae for curing or smoking was found in the assemblage. The lack of perforations on the blades (cf O'Connor 1988, 82-84, plate 3) may, however, be explained by the heavy fragmentation of scapula blades making possible perforations difficult to distinguish from pre- or post-depositional breakage. Butchery marks on horse bones suggests that their meat have been utilised, but it is unknown whether this was for human or animal consumption.

Most of the pathological conditions in the assemblage are related to muscle strains and/or infections. Pathological bones were somewhat more common in the late Roman phase, although to such a small extent that it would imply little changes in

animal husbandry and animal keeping conditions.

In common with the secular deposits of mid-Roman date, the shrine at Higham Ferrers was dominated by sheep remains, although almost all other species seen in the contemporary non-votive contexts were present at the shrine. The sheep were mostly 0-1 and 2-4 years of age at death, thus representing prime meat animals. As evidenced by butchering marks and disarticulation, most animal remains found in the shrine seems to have been from food sacrifices. An exception to this is the semi-articulated remains of a dog. Many of the species found in the votive contexts have traditionally been associated with Roman deities, but at Higham Ferrers there is no clear evidence from the bone assemblage to suggest a focus on one specific deity, as has been suggested, for example, for the shrine at Uley (Levitan 1993). While the shrine assemblage is dominated by sheep, the dominance is less clear-cut than at the Harlow and Great Chesterford shrines (Legge and Dorrington 1985; Luff 1992) and in contrast with those two sites there is no clear evidence for seasonal slaughter, which may imply that sacrifices took place all year-round, rather than only during specific festivals.

Conclusion

The evidence presented here suggests that there were no significant developments in animal husbandry practices during the three Roman phases at Higham Ferrers. Even the animal bone assemblage from the shrine diverges only a little from the general pattern. This appears to contrast with the conclusions drawn from bone assemblages from Alchester and Elms Farm (Maltby 2001, Johnstone and Albarella 2002), but is in agreement with findings from the southern sites of Fishbourne (Grant 1971) and Portchester (Grant 1975). As may be also the case at Fishbourne and Portchester, it appears that any cultural or environmental changes which occurred throughout the Roman period in the Higham Ferrers area had little effect on animal husbandry, or were not significant enough to be reflected in the animal bone assemblage.

MACROSCOPIC PLANT REMAINS (EXCLUDING CHARCOAL) AND INSECTS

by Mark Robinson

Introduction

Bulk sampling was undertaken for charred plant remains (CPR) from the non-waterlogged contexts of the site (76 samples in total). Bulk samples were also taken for waterlogged remains from the well bottoms (5 samples). The samples were processed and their potential assessed. Although remains were present in around half the Roman CPR samples, the concentrations were low and these assemblages mostly comprised poorly preserved grain. The assessment identified nine samples from late Roman contexts for detailed analysis (4 CPR and 5 waterlogged), in addition to the CPR sample from the early Bronze Age collared urn, discussed in Chapter 2. Charred remains from earlier Roman (Phase 3-4) contexts which were analysed at assessment level are also included in the discussion.

The samples

Sample 412, Context 8779, Well 8032 (Phase 5: Late Roman).
The lower fill of a well – waterlogged macroscopic plant remains and insects.

Sample 413, Context 8285, Well 8278 (Phase 5: Late Roman)
The lower fill of a well – waterlogged macroscopic plant remains.

Sample 605, Context 10578, Waterhole 10589 (Phase 5: Late Roman).
A dump of burnt material comprising the upper fill of the waterhole – charred plant remains.

Sample 606, Context 10581, Waterhole 10589 (Phase 5: Late Roman).
A dump of highly burnt material within the upper fill of the waterhole – charred plant remains.

Sample 607, Context 10584, Waterhole 10589 (Phase 5: Late Roman).
A dump of ashy material in the upper fill of the waterhole – charred plant remains.

Sample 619, Context 10643, Pit 10642 (Phase 5: Late Roman).
A layer of ash and charcoal in the pit – charred plant remains.

Sample 682, Context 12716, Well 12885 (Phase 5: Late Roman).
A waterlogged layer in the well, above Sample 683 – waterlogged macroscopic plant remains.

Sample 683, Context 12716, Well 12885 (Phase 5: Late Roman).
A waterlogged layer in the well, above Sample 684 – waterlogged macroscopic plant remains.

Sample 684, Context 12716, Well 12885 (Phase 5: Late Roman).
A waterlogged layer in the well, below Sample 683 – waterlogged macroscopic plant and insect remains.

Methodology

Charred plant remains

The samples were floated onto a 0.3 mm mesh using a flotation machine. The dried flots were scanned under a binocular microscope for charred remains. Those flots selected for detailed analysis were subsampled using a riffle box if they contained a very high concentration of remains, and sorted under a binocular microscope. The remains picked out were identified and the results given in Table 6.18, nomenclature following Clapham *et al.* (1987).

Table 6.18 Charred plant remains

		Number of items			
	Feature	10589	10589	10589	10642
	Context	10578	10581	10584	10643
	Sample	605	606	607	619
	Sample volume (litres)				
	No. items / litre				
GRAIN					
Triticum spelta L.	spelt wheat	6	24	5	6
T. dicoccum Schübl. or *spelta* L.	emmer or spelt	35	162	22	42
Triticum sp. - short grain	wheat	-	11	-	6
Hordeum sp. (hulled)	hulled barley	1	-	-	5
Hordeum sp.	barley	-	-	-	1
cereal indet.		122	250	6	87
Total grain		164	447	33	147
CHAFF					
Triticum spelta L. - glume	spelt wheat	43	533	17	2979
T. dicoccum Schübl. or *spelta* L. - glume	emmer or spelt	420	988	38	1182
Hordeum vulgare L. - rachis node	six-row barley	-	-	-	1
Hordeum sp. - rachis node	barley	-	1	-	3
cereal sprout		-	1	2	6
Total chaff items		463	1,523	57	4,171
OTHER CULTIVATED SEEDS					
Linum usitatissimum L. flax		1	-	-	-
FRUIT STONES AND NUT SHELLS					
Crataegus cf. *monogyna* Jacq.	hawthorn	-	-	-	-
Corylus avellana L. - nut shell frags	hazel	1	-	-	-
Quercus sp.	oak	-	-	-	-
Total items		1	0	0	0
WEED SEEDS					
Ranunculus cf. *repens* L.	creeping buttercup	-	1	1	-
Cruciferae indet.		2	-	-	-
Agrostemma githago L.	corn cockle	-	-	1	-
Cerastium sp.	mouse-ear chickweed	2	1	-	-
Stellaria media gp.	chickweed	-	1	-	-
Atriplex sp.	orache	1	-	-	-
Vicia or *Lathyrus* sp.	vetch or tare	15	-	-	-
Ononis sp.	restharrow	3	-	-	1
cf. *Medicago lupulina* L.	black medick	-	2	6	-
cf. *Trifolium* or *Medicago* sp.	clover, medick etc	12	8	-	-
Polygonum aviculare agg.	knotgrass	2	2	1	-
Fallopia convolvulus (L.) Löv.	black bindweed	4	-	-	-
Rumex sp. (not *acetosella agg*.)	dock	18	2	1	6
cf. *Anagallis arvensis* L.	scarlet pimpernel	2	-	1	-
Lithospermum arvense L.	corn gromwell	-	5	1	-
Hyoscyamus niger L.	henbane	1	-	-	-
Veronica hederifolia L.	ivy-leaved speedwell	-	-	-	-
Odontites verna (Bell) Dum.	red bartsia	3	2	2	-
Plantago niger L.	great plantain	1	-	-	-
P. lanceolata L.	ribwort plantain	7	9	-	-
Galium aparine L.	goosegrass	2	7	-	-

Table 6.18 (continued) Charred plant remains

Sambucus nigra L.	elder	1	-	-	-
Anthemis cotula L.	stinking mayweed	14	-	1	-
Eleocharis S. *Palustris* sp.	spike rush	-	2	5	-
Carex sp.	sedge	1	1	4	1
Bromus cf. *secalinus* L.	chess, brome grass	2	4	-	6
Avena sp.	oats	-	5	1	-
Gramineae indet.	grass	7	27	-	14
weed indet.		15	16	25	5
Total weed seeds		115	95	50	33

Waterlogged macroscopic plant remains

A sub-sample of 1 kg from each of the waterlogged samples was washed over onto a 0.2 mm mesh to extract the organic remains. The flots were sorted in water using a binocular microscope. The remains discovered were identified and the results given in Tables 6.19-20, nomenclature following Clapham *et al.* (1987).

Waterlogged insect remains

From the samples selected for insect analysis, any insect remains in the sub-samples sorted for macroscopic plant remains were picked out. Additional sub-samples from these samples were washed over onto a 0.2 mm mesh to recover the organic remains which were then subjected to paraffin flotation to extract insect fragments. This gave a total of 3 kg analysed from each sample. The paraffin flots were washed in detergent and similarly sorted in water under a binocular microscope for insect remains. The remains were identified and the minimum number of individuals for each species in each sample calculated. The results are given in Tables 6.21-2, nomenclature for Coleoptera following Kloet and Hincks (1977). The results for Coleoptera are also displayed in Figure 6.8 by species groups as percentages of the minimum number of terrestrial individuals. The species groups used follow Robinson (1991, 278-81). Not all the Coleoptera have been placed into these categories.

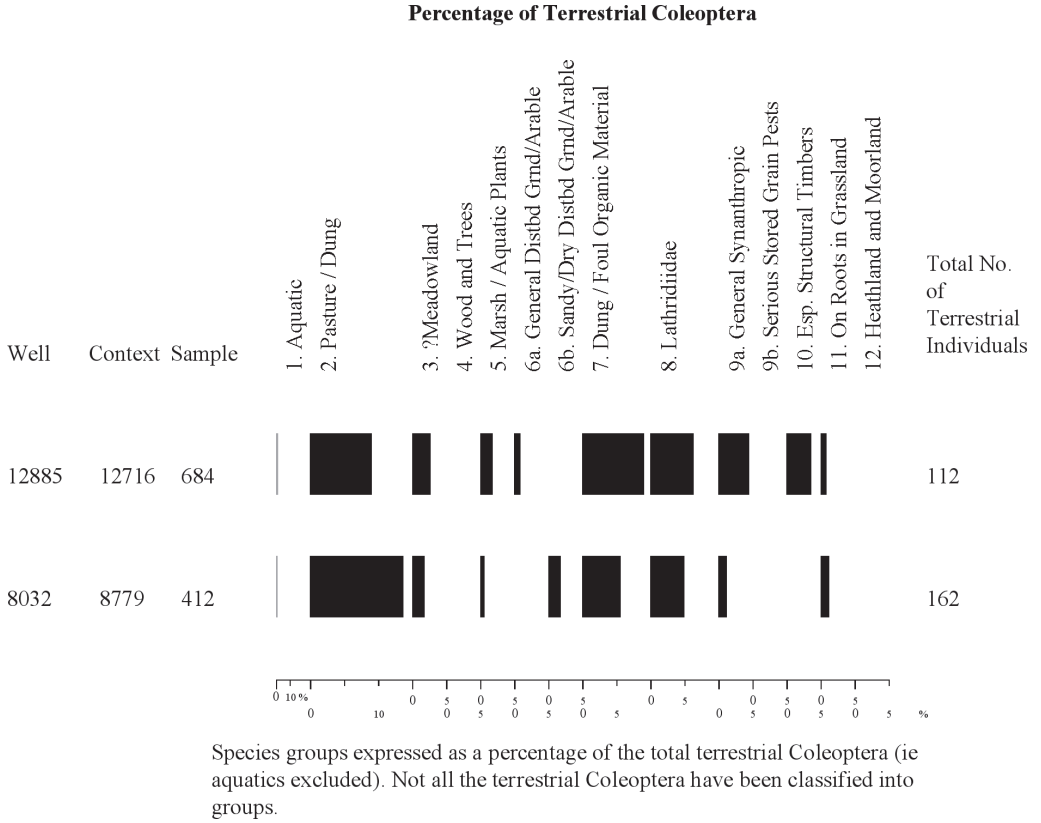


Fig. 6.8 Species groups expressed as a percentage of the total terrestrial coleoptera (ie aquatics excluded) from late Roman wells

Table 6.19 Waterlogged seeds

		Number of seeds				
	Well	8278	12885	12885	12885	8032
	Context	82856	12716	12716	12716	8779
	Sample	413	684	683	682	412
Ranunculus cf. *acris* L.	meadow buttercup	6	3	2	3	1
R. cf. *repens* L.	creeping buttercup	14	6	4	2	2
R. cf. *bulbosus* L.	bulbous buttercup	5	-	2	-	1
R. parviflorus L.	smaller-flowered buttercup	-	1	-	-	-
R. flammula L.	lesser spearwort	-	-	1	-	1
R. S. *Batrachium* sp.	water crowfoot	-	1	2	-	-
Papaver argemone L.	prickly-headed poppy	-	1	-	2	3
P. rhoeas tp.	field poppy etc	-	1	-	1	-
P. somniferum L.	opium poppy	-	1	2	-	6
Chelidonium majus L.	greater celandine	-	1	-	-	-
Fumaria sp.	fumitory	1	1	-	1	1
Brassica rapa L. ssp *sylvestris* (L.) Jan.	wild turnip	-	-	1	-	-
Brassica nigra L.	black mustard	1	1	5	2	13
Brassica sp. ?cultivar	? cultivated brassica	-	-	1	-	11
Coronopus squamatus (Forsk.) Asch.	swine-cress	2	-	-	-	3
Capsella bursa-pastoris (L.) Med.	shepherd's purse	1	1	-	-	7
Reseda luteola L.	dyer's rocket	-	-	-	2	-
Silene cf. *latifolia* Poir.	white campion	-	-	1	-	-
Agrostemma githago L.	corn cockle	3	-	2	-	-
Cerastium cf. *fontanum* Baum.	mouse-ear chickweed	-	12	-	5	2
Stellaria media gp.	chickweed	5	17	16	8	4
S. graminea L.	stitchwort	-	4	2	2	3
Arenaria sp.	sandwort	-	-	-	1	-
Spergula arvensis L.	corn spurrey	-	1	1	1	-
Montia fontana L.	blinks	-	6	1	1	-
Chenopodium album L.	fat hen	4	1	3	2	5
Atriplex sp.	orache	40	17	7	9	6
Malva sylvestris L.	common mallow	-	-	1	1	1
Linum usitatissimum L.	flax	-	1	1	1	14
L. catharticum L.	fairy flax	-	1	2	13	2
Medicago lupulina L.	black medick	-	-	1	-	1
Filipendula ulmaria (L.) Max.	meadowsweet	43	1	2	1	3
Rubus fruticosus agg.	blackberry	-	-	2	-	-
Potentilla cf. *erecta* (L.) Räu.	tormentil	-	1	-	-	-
P. cf. *reptans* L.	creeping cinquefoil	1	-	-	5	1
Agrimonia eupatoria L.	agrimony	1	-	-	-	-
Aphanes arvensis L.	parsley piert	-	-	-	-	2
Crataegus cf. *monogyna* Jacq.	hawthorn	-	-	-	-	1
Anthriscus caucalis Bieb.	bur chervil	-	1	1	4	1
A. sylvestris (L.) Hof.	cow parsley	-	-	1	-	-
Scandix pecten-veneris L.	shepherd's needle	1	-	-	-	-
Coriandrum sativum L.	coriander	-	-	-	1	-
Oenanthe pimpinelloides gp.	water dropwort	2	1	-	-	-
Aethusa cynapium L.	fool's parsley	-	1	-	-	2
Foeniculum vulgare Mill.	fennel	-	-	-	-	1
Conium maculatum L.	hemlock	-	1	-	2	4
Apium graveolens L.	celery	-	1	-	1	1
A. nodiflorum (L.) Lag.	fool's watercress	-	-	-	1	-
Heracleum sphondylium L.	cow parsnip	-	-	-	-	1
Torilis sp.	hedge parsley	-	-	-	-	3
Daucus carota L.	wild carrot	-	-	2	2	1
Polygonum aviculare agg.	knotgrass	22	24	25	47	20
P. persicaria L.	redshank	1	-	-	-	1
P. lapathifolium L.	pale persicaria	-	1	-	-	-
Fallopia convolvulus (L.) Löv.	black bindweed	-	1	1	-	1

Table 6.19 (continued) Waterlogged seeds

Rumex acetosella agg.	sheep sorrel	7	1	-	1	-
R. crispus L.	curled dock	-	1	-	-	194
R. obtusifolius L.	broad-leaved dock	3	-	-	-	3
R. conglomeratus Mur.	sharp dock	4	-	-	-	-
Rumex sp.	dock	33	6	9	4	10
Urtica urens L.	small nettle	11	20	36	6	4
U. dioica L.	stinging nettle	261	27	23	81	70
Corylus avellana L.	hazel	1	-	-	-	-
Primulaceae indet.		-	-	-	1	-
Fraxinus excelsior L.	ash	-	-	1	-	-
Hyoscyamus niger L.	henbane	4	1	3	2	2
Linaria vulgaris Mil.	common toadflax	-	-	-	-	1
Rhinanthus sp.	yellow rattle	9	2	-	1	-
Odontites verna (Bell.) Dum.	red bartsia	-	8	1	12	1
Mentha cf. *aquatica* L.	water mint	-	-	-	-	1
Satureja hortensis L.	summer savoury	-	-	1	-	-
Prunella vulgaris L.	selfheal	12	2	4	5	1
Ballota nigra L.	black horehound	2	1	1	1	-
Lamium sp. (not *album*)	dead-nettle	1	-	-	-	-
Galeopsis tetrahit agg.	hemp-nettle	-	-	-	1	-
Glechoma hederacea L.	ground ivy	1	1	-	-	-
Verbena officinalis L.	vervain	-	-	-	-	1
Plantago major L.	great plantain	1	-	1	-	1
Galium sp. (not *aparine*)	bedstraw	-	1	-	-	-
Sambucus nigra L.	elder	2	1	1	3	1
Valerianella locusta (L.) Lat.	lamb's lettuce	3	1	1	-	-
V. dentata (L.) Pol.	lamb's lettuce	-	-	-	1	-
Senecio sp.	ragwort	5	2	-	-	2
Pulicaria sp.	fleabane	-	1	-	-	-
Anthemis cotula L.	stinking mayweed	3	5	-	15	9
Tripleurospermum inodorum (L.) Sch.	scentless mayweed	1	1	-	-	2
Achillea sp.	yarrow	-	-	-	-	1
Leucanthemum vulgare Lam.	ox-eye daisy	-	1	1	3	-
Carduus sp.	thistle	4	-	-	-	4
Cirsium sp.	thistle	1	-	2	2	-
Onopordum acanthium L.	cotton thistle	-	-	1	-	1
Centaurea cf. *nigra* L.	knapweed	-	2	3	-	1
Lapsana communis L.	nipplewort	-	-	-	-	3
Hypochoeris radicata L.	cat's ear	-	1	-	-	-
Leontodon sp.	hawkbit	13	6	4	8	1
Picris hieracioides L.	rough ox-tongue	2	-	-	-	-
Sonchus oleraceus L.	sow thistle	-	1	4	-	-
S. asper (L.) Hill	sow thistle	1	1	3	-	1
Taraxacum sp.	dandelion	1	-	-	-	-
Alisma sp.	water plantain	-	2	-	-	1
Juncus articulatus gp.	creeping rush	-	-	30	-	-
J. effusus gp.	tussock rush	-	-	10	-	-
Luzula sp.	woodrush	-	-	-	1	-
Eleocharis S. *Palustres* sp.	spikerush	1	-	-	1	-
Schoenoplectus lacustris (L.) Pal.	bulrush	1	-	-	-	-
Carex spp.	sedge	3	2	8	3	3
Glyceria sp.	flote grass	-	-	-	1	-
Bromus S. *Eubromus* sp.	brome grass, chess	-	1	-	-	1
cereal indet.		1	f	-	-	1,f
Gramineae indet.	grass	-	12	11	15	5
Total		545	222	251	289	456

f = fragment

Table 6.20 Other waterlogged macroscopic plant remains

			Number of items or presence				
		Well	8278	12885	12885	12885	8032
		Context	82851	12716	12716	12716	8779
		Sample	413	684	683	682	412
Bryophyta indet.		moss	+	+	-	-	-
Pteridium aquilinum (L.) Kuhn.	- frond frag	bracken	4	5	-	-	1
Camelina sp.	- capsule frag	gold-of-pleasure	-	-	-	-	2
Linum usitatissimum L.	- capsule frag	flax	1	1	2	1	10
Vicia or *Lathyrus* sp.	- pod frag	vetch, vetchling etc	6	2	1	3	-
Vicia or *Lathyrus* sp.	- tendril	vetch, vetchling etc	1	1	-	-	-
Trifolium sp.	- flower	clover	1	6	4	-	-
Trifolium sp.	- calyx	clover	2	2	3	2	-
Rubus sp.	- prickle	blackberry	-	1	-	-	-
Crataegus or *Prunus* sp.	- thorn	hawthorn or sloe	1	-	-	1	-
Rumex sp.	- stem	dock	4	1	-	-	7
Centaurea nigra L.	- bract	knapweed	-	-	-	-	2
*Triticum spelt*a L.	- glume	spelt wheat	38	2	-	1	9
T. dicoccum Schübl. or *spelta* L.	- glume	emmer or spelt	20	-	-	-	14
Bud scale			-	-	1	-	1
Deciduous leaf frag.			-	-	-	1	-
Leaf abscission pad			-	-	2	1	-

+ present

Results and interpretation

Phases 3-4: 2nd-late 3rd century

The evidence from these phases was restricted to charred remains, and their concentration was low. Almost half the samples contained remains but only three contained more than ten items and none was thought worthy of detailed analysis. The results of assessment showed that both *Triticum spelta* (spelt wheat) and hulled *Hordeum* sp. (hulled barley) were used in the settlement. A sample from context 11251, a damp layer in building 10870, contained at least 40 seeds of *Lithospermum arvense* (corn gromwell), an arable weed, and rather smaller quantities of cereal grains. *Lithospermum* seeds have a high silica content in their seed coat so tend to survive burning when other remains are fully oxidised, so this need not imply a preponderance of *Lithospermum* growing amongst the cereals.

Phase 5: late 3rd-4th century

Both waterlogged and charred evidence was available from this phase. The samples from the three late Roman wells contained relatively high concentrations of well-preserved seeds and other macroscopic plant remains. Many of the seeds were from plants of relatively nutrient-rich disturbed ground, such as *Brassica nigra* (black mustard), *Stellaria media* gp. (chickweed), *Urtica urens* (small nettle) and *U. dioica* (stinging nettle). There were also many seeds from *Polygonum aviculare* (knotgrass), an annual weed which is favoured by trampling and *Atriplex* sp. (orache), an annual of a range of disturbed habitats. There were seeds of several plants which show a strong association with settlements: *Chelidonium majus* (greater celandine), *Papaver somniferum* (opium poppy) and *Hyoscyamus niger* (henbane). These plants probably characterised the various sparsely vegetated and neglected areas of the settlement. The insects reflected similar conditions. Carabidae (ground beetles) were well-represented. They included *Harpalus rufipes* from Species Group 6a and *Amara apricaria* from Species Group 6b. Together, these two species groups comprised 3% of the terrestrial Coleoptera in sample 412 from well 8032. Both are associated with disturbed ground habitats where there are some annual weeds but there is not dense vegetation at ground level. This includes arable land, but in the case of Higham Ferrers the beetles were probably from the area of the settlement itself. Many of the phytophagous insects were species which feed on disturbed and waste-ground vegetation, including several species of leaf beetle from the genus *Phyllotreta* which feed on members of the Cruciferae such as shepherd's purse and black mustard. There were several nettle-feeding insects, for example the bug *Heterogaster urticae* and the beetles *Brachypterus urticae*, *Apion urticarium* and *Cidnorhinus quadrimaculatus*.

Although some of the seeds of potential grassland plants were from taxa which also grow in waste-ground habitats, for example several species of *Rumex* (dock) and it is argued below that seeds of grassland plants were imported in hay, there do seem to have been some areas of pasture within the

Table 6.21 Coleoptera

	Min. No. Indiv		
Phase	8	8	
Well	12885	8032	
Context	12716	8779	Species
Sample	684	412	Group
Carabus sp.	1	1	
Leistus spinibarbis (F.)	1	-	
Nebria brevicollis (F.)	1	1	
Notiophilus sp.	-	1	
Clivina collaris (Hbst.) or *fossor* (L.)	1	-	
Trechus obtusus Er. or *quadristriatus* (Schr.)	1	-	
T. micros (Hbst.)	3	2	
Bembidion properans Step.	3	2	
B. guttula (F.)	1	1	
Pterostichus anthracinus (Pz.)	-	1	
P. cf. *cupreus* (L.)	-	1	
P. madidus (F.)	1	-	
P. melanarius (Ill.)	1	1	
Calathus fuscipes (Gz.)	1	2	
C. melanocephalus (L.)	1	1	
Amara apricaria (Pk.)	-	2	6b
A. bifrons (Gyl.)	-	1	6b
Amara sp. (not above)	2	4	
Harpalus rufipes (Deg.)	1	2	6a
Harpalus S. *Ophonus* sp.	1	3	
H. affinis (Schr.)	-	1	
Helophorus aquaticus (L.) or *grandis* Ill.	1	-	1
H. rufipes (Bosc.)	2	1	
Helophorus sp. (*brevipalpis* size)	1	2	1
Cercyon analis (Pk.)	-	1	7
C. haemorrhoidalis (F.)	1	3	7
C. melanocephalus (L.)	1	-	7
C. unipunctatus (L.)	1	-	7
Megasternum obscurum (Marsh.)	4	4	7
Cryptopleurum minutum (F.)	-	1	7
Onthophilus striatus (Forst.)	-	1	
Hister bissexstriatus F.	-	1	
Choleva or *Catops* sp.	-	1	
Thanatophilus rugosus (L.)	-	1	
Silpha obscura L.	-	1	
Lesteva longoelytrata (Gz.)	-	2	
Omalium sp.	1	-	
Coprophilus striatulus (F.)	1	2	
Platystethus cornutus gp.	3	8	
P. nitens (Sahl.)	-	3	
Anotylus sculpturatus gp.	3	1	7
Stenus sp.	1	1	
Rugilus sp.	1	-	
Gyrohypnus angustatus Step.	1	-	
G. fracticornis (Müll.) or *punctulatus* (Pk.)	1	3	
Xantholinus linearis (Ol.)	1	1	
X. longiventris Heer	-	1	
X. linearis (Ol.) or *longiventris* Heer	1	1	
Philonthus spp.	3	2	
Gabrius sp.	1	-	
Staphylinus olens Müll.	1	2	
Tachyporus sp.	2	2	
Tachinus sp.	1	1	
Aleocharinae indet.	3	6	
Geotrupes sp.	1	2	2
Aphodius contaminatus (Hbst.)	2	1	2
A. fimetarius (L.)	1	-	2
A. foetidus (Hbst.)	1	1	2
A. granarius (L.)	4	15	2
A. cf. *sphacelatus* (Pz.)	1	2	2
Aphodius sp.	-	1	2
Oxyomus sylvestris (Scop.)	2	-	
Calyptomerus dubius (Marsh.)	1	-	
Simplocaria maculosa Er. or *semistriata* (F.)	1	1	
Athous haemorrhoidalis (F.)	-	1	11
Agriotes cf. *acuminatus* (Step.)	-	1	11
Agriotes sp.	1	-	11
Cantharis sp.	-	1	
Stegobium paniceum (L.)	1	-	9a
Anobium punctatum (Deg.)	4	-	10
Tipnus unicolor (P. & M.)	4	-	9a
Ptinus fur (L.)	-	2	9a
Malachius sp.	1	-	
Brachypterus urticae (F.)	-	2	
Omosita colon (L.)	1	-	
Rhizophagus parallelocollis Gyl.	1	-	
Cryptophagidae indet. (not *Atomaria*)	1	2	
Atomaria sp.	-	3	
Orthoperus sp.	-	2	
Olibrus sp.	-	1	
Subcoccinella vigintiquattuorpunctata (L.)	-	1	
Lathridius minutus gp.	4	2	8
Enicmus transversus (Ol.)	1	3	8
Corticariinae indet.	2	3	8
Anthicus antherinus (L.)	2	-	
A. floralis (L.) or *formicarius* (Gz.)	-	1	
Donacia or *Plateumaris* sp.	-	1	5
Chrysolina oricalcia (Müll.)	-	1	
Phyllotreta atra (F.)	2	4	
P. nigripes (F.)	1	4	
P. nemorum (L.) or *undulata* Kuts.	-	1	
P. vittula Redt.	1	1	
Longitarsus spp.	3	5	
Crepidodera ferruginea (Scop.)	-	1	
Podagrica fuscicornis (L.)	1	-	
Chaetocnema concinna (Marsh.)	1	2	
Chaetocnema sp. (not *concinna*)	-	2	
Psylliodes sp.	1	1	
Apion malvae (F.)	1	-	
A. urticarium (Hbst.)	-	1	
Apion spp. (not *malvae* or *urticarium*)	2	1	3
Phyllobius roboretanus Gred. or *viridiaeris* (Laich.)	-	1	
Sitona hispidulus (F.)	-	1	3
S. sulcifrons (Thun.)	-	1	3
Sitona sp.	1	-	3
Hypera punctata (F.)	-	1	
Notaris acridulus (L.)	1	-	5
N. scirpi (F.)	1	-	5
Cidnorhinus quadrimaculatus (L.)	-	1	
Ceutorhynchus erysimi (F.)	-	2	
Ceuthorhynchinae indet. (not above)	-	1	
Baris sp.	1	-	
Tychius sp.	-	1	
Gymnetron pascuorum (Gyl.)	2	-	
Total	112	162	

\+ present, ++ many

settlement. Scarabaeoid dung beetles of Species Group 2 comprised 9% of the terrestrial Coleoptera in sample 684 from well 12885 and 13.8% of the terrestrial Coleoptera in sample 412 from well 8032. The most numerous species was *Aphodius granarius*. These beetles live in the individual droppings of medium and large-sized herbivores on pastureland. They do not commonly occur in middens or dung heaps. However, the chafer and elaterid beetles of Species Group 11 only comprised around 1% of the terrestrial Coleoptera in these two samples, so it is thought unlikely that there were large open expanses of grassland at the site. It is possible that the areas of pasture were relatively small but there were high concentrations of animals on them.

There was little evidence for woodland or scrub from the waterlogged remains. Beetles from Species Group 4 were absent. There was a single seed of *Fraxinus excelsior* (ash) in sample 682 from well 12885 and thorns of *Crataegus* or *Prunus* sp. were present in a couple of the samples. There were few seeds of *Rubus fruticosus* agg. (blackberry) and *Sambucus nigra* (elder), shrubs which rapidly colonise neglected areas around settlements. It is possible that there were a few isolated trees in the settlement and that some of the boundaries had thorn hedges along them. However, trees and bushes do not seem to have been major features of the settlement.

Insects which are associated with a wide range of foul decaying organic remains including manure heaps, Species Group 7, were not unusually abundant given that there was evidence for animal droppings on pasture. Members of this group, such as *Megasternum obscurum* and *Anotylus sculpturatus* gp., comprised 9.1% of the terrestrial Coleoptera in sample 684 from well 12885 and 5.6% of the terrestrial Coleoptera in sample 412 from well 8032 (Table 6.21). Doubtless some of these beetles were living in refuse generated by the settlement. Members of the Lathridiidae (Species Group 8), beetles which feed on surface mould on old hay, straw etc were, at around 5.5% of the terrestrial Coleoptera, quite abundant. As noted below, there is evidence of hay from the site. They also occur in such habitats as thatch and animal bedding.

Evidence for buildings was given both by woodworm beetles which infested the structural timbers (Species Group 10) and various other indoor synanthropic beetles (Species Group 9a). Sample 684 from well 12885 was perhaps adjacent to a building or had refuse from inside a building dumped into it. *Anobium punctatum* (woodworm beetle) comprised 3.6% of the terrestrial Coleoptera while members of Species Group 9a comprised 4.5% of the total. These included *Tipnus unicolor* (spider beetle), which sometimes feeds on grain-processing residues, stable debris and human food debris in kitchens, and *Stegobium paniceum* (bread beetle), a minor pest of dry farinaceous products. The serious grain pests of Species Group 9b were, however, absent. This would suggest that long-term storage of large quantities of grain was not occurring in the vicinity of the wells.

The wells are likely to have supplied very clean water until refuse began to be dumped into them. Very few aquatic insects were found in them and it is thought that these water beetles were individuals which accidentally fell in rather than representing the faunas of the water. A few beetles which tend to occur in dark voids underground, such as *Trechus micros*, perhaps lived on the sides of the shafts.

The only other habitats suggested on the site by the plant or insect remains were minor. For example, a few carrion beetles such as *Thanatophilus rugosus* and *Omosita colon* were found in the well samples but at a level of abundance that need imply no more than an occasional dead wild bird or mammal at the settlement.

The macroscopic plant remains gave much evidence for activities at the settlement. Cereal processing was represented by both carbonised and waterlogged remains. Although the concentration of carbonised cereals was low in the majority of the late Roman samples, four rich assemblages were found. Three were from the backfill of waterhole 10589 (contexts 10578, 10581 and 10584) and one from pit 10642 (context 10643). All contained remains from the de-husking and cleaning of *Triticum spelta* (spelt wheat). Charred glumes predominated in pit 10642, with grain and weed seeds comprising less than 5% of items. The samples from waterhole 10589 contained higher proportions of grain and weed seeds but chaff was still the most abundant category of remains in each sample. Context 10584 also contained many macroscopic silica remains of wheat chaff. These result from combustion under fully oxidising conditions and although the organic component is lost, the silica phytoliths in the chaff can become welded together by the heat (Robinson and Straker 1991).

Table 6.22 Other waterlogged insects

		Min. no. indiv.	
	Phase	8	8
	Well	12885	8032
	Context	12716	8779
	Sample	684	412
Forficula auricularia (L.)		1	2
Heterogaster urticae (F.)		1	-
Scolopostethus sp.		-	1
Aphrodes bicinctus (Schr.)		1	2
Aphrodes sp.		-	1
Stenamma sp.	- worker	2	-
Myrmecina graminicola (Lat.)	- worker	-	1
Lasius niger gp.	- worker	-	1
Hymenoptera indet.	-	1	
Melophagus ovinus (L.)	- puparium	-	1
Diptera indet.	- puparium	1	1
Diptera indet.	- adult	2	-

Much chaff must have been burnt to give rise to this deposit. It is likely that de-husking material was either being burnt as fuel or for waste disposal. The waterlogged plant remains in sample 413 from well 8278 and sample 412 from well 8032 also included glumes from the de-husking of spelt wheat.

Triticum spelta was the only wheat that could be identified with certainty from the site although it is possible that there was a little *T. dicoccum* (emmer wheat) amongst the less closely identifiable remains. Both context 10581 and context 10643 contained some short wheat grains which raises the possibility that a free-threshing variety of *Triticum* (rivet or bread-type wheat) was also being cultivated. However, some of these grains showed the angularity which is characteristic of hulled wheat. In the absence of any rachis fragments of free-threshing wheat, it is probably safer to regard these grains as being from a short-grained form of *T. spelta* growing amongst the spelt crop. There was a slight presence of hulled *Hordeum vulgare* (six-row hulled barley) in some of the charred samples but the proportion of barley was so low that it need only have been growing as a volunteer in the spelt fields. However, it is thought likely that barley would have been grown as a crop in its own right. In contrast, although a few charred grains of *Avena* sp. (oats) were noted, they have been placed in the weed category because wild oats were considerably more common in Roman Britain than cultivated oats.

The charred weed seeds were mostly from typical arable weeds such as *Vicia* or *Lathyrus* sp. (vetch or tare), *Rumex* sp. (dock) and *Anthemis cotula* (stinking mayweed). The occurrence of seeds of *Galium aparine* (goosegrass) suggests that at least some of the crops were autumn-sown. Two of the samples from waterhole 10589, however, contexts 10578 and 10581, also contained charred seeds of grassland plants including cf. *Trifolium* or *Medicago* sp. (clover or medick) and *Plantago lanceolata* (ribwort plantain). While it is possible that their presence was the result of bringing grassland into cultivation, given the evidence for hay being brought to the settlement, it is thought more likely that they were from burnt hay. It is likely that some of the waterlogged seeds were also from weeds growing amongst the cereal crops. It is not easy to distinguish them from the weeds of other disturbed habitats although *Agrostemma githago* (corn cockle) and *Scandix pecten-veneris* (shepherd's needle) are very closely associated with arable cultivation.

The charred remains gave evidence strongly biased towards cereal cultivation because heat was used in the dehusking of grain and perhaps the hardening of grain prior to milling. There was only a single charred seed of another crop, *Linum usitatissimum* (flax). In contrast, flax seeds were found in four of the five waterlogged samples and flax capsule fragments were present in all of them. These remains are likely to have resulted from the crushing of the capsules to extract the edible oil-rich seeds. It is uncertain whether the flax plants were rippled (had their capsules removed) at the site of cultivation and the stems sent elsewhere for retting (soaking to release the fibres which are spun into linen) or whether the entire plants were brought to the settlement for processing. In addition to flax capsules, sample 412 from well 8032 also contained a couple of capsule fragments of *Camelina* sp. (gold-of-pleasure). This weed is very closely associated with flax cultivation. In Continental Europe it became domesticated as an oil crop in its own right but there is no evidence that it was anything other than a weed of flax in Roman Britain.

The waterlogged remains (Tables 6.19 and 6.20) included seeds of various culinary herbs and spices: *Satureja hortensis* (summer savoury) in sample 683 from well 12885, *Coriandrum sativum* (coriander) and *Apium graveolens* (celery) in sample 682 from well 12885, and *Foeniculum vulgare* (fennel) in sample 412 from well 8032. The celery was probably cultivated for its aromatic seeds rather than its leaf petioles. Sample 412 also contained seeds of what is believed to be a cultivated species of *Brassica*. The seeds were larger than those of *B. nigra* (black mustard), which were also present in the sample, and had a black surface with low cell walls rather than the reddish-brown surface with high cells of *B. nigra*. The seeds were also larger than those of *B. rapa* spp. *sylvestris* (wild turnip) and did not have the elongate rectangular cells on the surface that characterise *B. oleracea* ssp. *sylvestris*. It is thought most unlikely that *B. oleracea* ssp. *oleracea* (wild cabbage) would have grown at the site since it is a wild plant of maritime cliffs. This leaves the various cultivars of *B. oleracea* (cabbage, kale etc), *B. napus* (rape, swede) and *B. rapa* (turnip), any of which would have been a plausible crop.

Remains of cultivated fruit were absent although a single nut shell fragment of *Corylus avellana* (hazel) was found. A couple of the plants which have already been noted as possible colonists of waste ground, *Papaver somniferum* (opium poppy) and *Brassica nigra* (black mustard) could also have been cultivated for culinary purposes. Doubtless some of the long list of wild plants in Table 6.19 were put to medicinal usage.

Much wild plant material was brought to the settlement. All three wells contained frond fragments of *Pteridium aquilinum* (bracken) which was perhaps imported for animal bedding. All the waterlogged samples also showed a hay meadow floral element, including seeds of *Filipendula ulmaria* (meadowsweet), *Rhinanthus* sp. (yellow rattle), *Leucanthemum vulgare* (ox-eye daisy) and *Centaurea* cf. *nigra* (knapweed). There were also pod and tendril fragments of *Vicia* or *Lathyrus* sp. (vetch, vetchling etc), flowers and calyces of *Trifolium* sp. (clover) and bracts of *Centaurea nigra* (knapweed). Many of the other seeds of grassland plants, for example *Ranunculus* cf. *acris* (meadow buttercup), *Stellaria graminea* (stitchwort), *Leontodon* sp. (hawkbit) and *Carex* spp. (sedge), could have been brought in amongst hay rather than from plants

which grew locally. The occurrence of species of damp ground amongst the hay meadow flora such as *F. ulmaria* suggests that the hay had been cut from a rather wetter location than the ironstone ridge and had perhaps been derived from the floodplain of the River Nene. It is uncertain whether the material from the wells represented old hay which had been discarded into them or dung from animals which had been fed on hay.

The insect evidence raised the possibility that wool was being processed at the site. A puparium of *Melophagus ovinus* was found in sample 412 in well 8032. It is a wingless fly that is an ectoparasite of sheep. The adults glue their puparia onto the fleece of the host. Perhaps wool was being cleaned prior to spinning.

Discussion

The results from the mid Roman period (Phases 3-4) fell into the usual Roman pattern of an arable economy based on the cultivation of spelt wheat and hulled barley. Unfortunately, the evidence from this period was very limited.

Considerably more evidence was available from the late Roman period (Phase 5). The results suggested that the settlement at Higham Ferrers had much open ground between the buildings. Some was trampled ground or had weeds growing on it but there were also small enclosures with domestic animals. It is also possible that there were horticultural plots. The synanthropic insects were appropriate to a Roman settlement but they did not comprise a full urban fauna, which was perhaps because of the scale of the open areas. The settlement was engaged in a range of activities related to the later stages of agricultural processing. Spelt wheat was being de-husked and flax seeds extracted. It is possible that the de-husking of wheat was a centralised activity rather than being undertaken on a small scale at a household level. The importation of hay to the settlement suggested a relationship with the floodplain of the Nene. The range of cultivated plants used at the site, including the culinary herbs, was probably typical for rural settlements of this date in the region. No examples were found of plants that could not have been grown locally, unlike the larger towns where such imported exotics are usually present. It was noticeable that although charred plant remains were very sparse in the majority of the samples, there were a few with a very high concentration of remains. What was perhaps most significant about the late Roman phase of Higham Ferrers, was the good preservation of the plant and insect evidence.

THE WOOD CHARCOAL *by Dana Challinor*

Introduction

Seven samples were selected for analysis following assessment; a single sample from a Bronze Age cremation pit (10002), discussed in Chapter 2, and six samples from various Romano-British features (hearths 11036 and 11809, posthole 11498, construction cut 12237, layers 11975 and 11252), that are reported on here. The assessment had shown that the preservation of charcoal at the site was very good and would enable an examination of the selection of fuelwood in the mid to late Roman period.

Methodology

Fragments of charcoal >2 mm were considered for identification. Most of the samples were very rich in charcoal so were consequently divided and a percentage of the whole examined. The charcoal was fractured and sorted into groups based on the anatomical features observed in transverse section at x10 to x45 magnification. Representative fragments from each group were then selected for further examination using a Meiji incident-light microscope

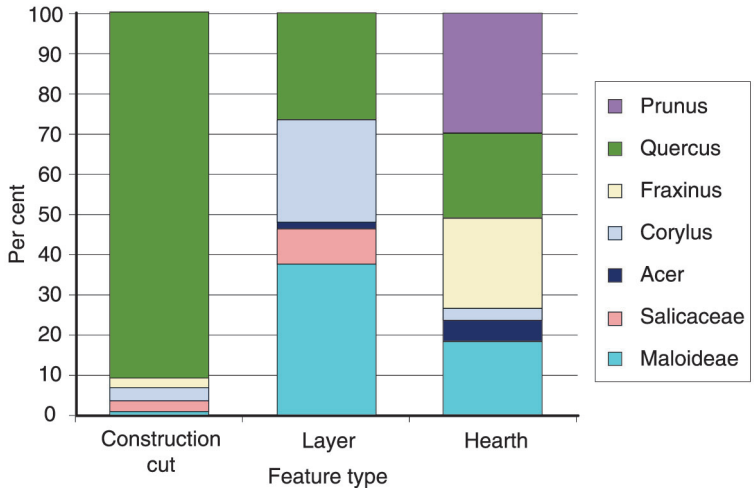


Fig. 6.9 Percentage of charcoal taxa by feature type (based upon fragment count)

at up to x400 magnification. Identifications were made with reference to Schweingruber (1990), Hather (2000) and modern reference material. Classification and nomenclature follow Stace (1997). The maturity of the wood was assessed where the condition of the wood permitted it. None of the roundwood pieces was complete enough to allow age calculations.

Results and discussion

The results of the analysis by fragment count are given in Table 6.23. Seven taxa were positively identified; *Quercus* sp. (oak), *Corylus avellana* (hazel), *Populus/Salix* (poplar/willow), *Prunus spinosa* (blackthorn), Maloideae (hawthorn, apple, service etc), *Acer campestre* (field maple) and *Fraxinus excelsior* (ash). The taxonomic level of identification varies according to the biogeography and anatomy of the taxa. The indeterminate fragments are likely to represent additional specimens of taxa positively identified in the sample.

The assemblages from the Romano-British period are generally very mixed, so it is immediately striking that, although oak is present in all samples, it is notably dominant in the construction cut samples (Fig. 6.9). Posthole and construction cut samples are often problematic since the provenance of the charcoal is frequently unclear, unless there is evidence of *in situ* burning. The assemblage from posthole 11498 is useful, therefore, being entirely composed of *Quercus*, since it supports the on-site suggestion that the deposit represented the remains of a burnt post. Certainly *Quercus* is likely to have been the main timber used for structural purposes, and is well documented at other Roman sites (Murphy 2001). The *Fraxinus* and *Corylus* from 12237 would also have been appropriate for structural purposes, and are suitable for management practices. The Salicaceae family consists of *Salix* spp. (willow) and *Populus* spp. (poplar), which are difficult to distinguish anatomically. Both generally have structural and artefactual uses; poplar was utilised for beams in medieval buildings and willow has many uses for basketry, cordage etc (Gale and Cutler 2000). Neither makes particularly good fuelwood unless well seasoned or converted to charcoal (*ibid.*). Both trees prefer damp grounds and probably grew in the Nene floodplain, so would have been an available resource. Although it is not possible to comment further on these samples, it is at least plausible that they represent structural remains rather than domestic hearth debris.

The remaining Romano-British samples came from various deposits associated with buildings, all of which are likely to represent the remains of domestic debris, although 11252 may also contain structural remains. Like the construction cut sample 12237, there is a quantity of *Populus/Salix* in the 4th-century deposit 11252. In general terms, the fuelwood used for domestic hearths would have been sourced from the local landscape, although the possibility that wood from broken artefacts or structural remains was also re-used as fuel should not be discounted. Moreover, the nature of the deposits (layers and hearths) examined means that multiple burning events may be represented. Certainly, it would be erroneous to assume that these samples provide a complete picture of domestic fuelwood selection or of the woody composition of the local environment. Nonetheless the results from Higham Ferrers are consistent with those from other sites of comparable date, where a variety of wood fuels are used.

Table 6.23 Results of the charcoal analysis from Romano-British contexts (r=roundwood; s=sapwood; h=heartwood)

	Feature type	*Hearth*		*Construction cut*		*Layer*	
	Phase	*2nd Century*		*2nd Century*	*3rd Century*	*Late 2nd/ Early 3rd Century*	*4th century*
	Feature number	11036	11809	11498	12237	-	-
	Context number	10967	11810	11499	12240	11975	11252
	Sample number	618	664	654	677	667	634
	% flot identified	50	25	6.25	25	100	3.125
Quercus sp.	oak	11	37r	167hs	103hs	2	57hs
Corylus avellana L.	hazel		6		11r		55r
Populus/Salix	poplar/willow				8		19r
Prunus spinosa L.	blackthorn	66r					
Maloideae	hawthorn etc	24	17r		2	77r	6
Acer campestre L.	field maple		12r				4
Fraxinus excelsior L.	ash	1	49rh		6		
Indeterminate		7	4		4	2	5
Total		109	125	167	134	81	146

At Gravelly Guy, Oxfordshire, Gale suggests that a combination of wood from managed trees and local hedgerow or scrub species was utilised for fuel (Gale 2004). While it was not possible to identify management practices from the charcoal, many of the samples from Higham Ferrers produced narrow roundwood fragments and the tree species identified (oak, ash, hazel, maple) are all suitable for pollarding or coppicing. Since the insect and plant evidence (see Robinson above) are indicative of hay meadows and open grassland, at least in the valley below, it seems likely that a local environment of managed stands of trees and hedgerows within a field system provided the wood required for domestic fuels (and other uses). Certainly, *Fraxinus* and *Prunus* do not thrive in dense woodland. It has not been possible to comment on any temporal differences in the samples, since so few were examined.

Conclusion

The evidence from the Romano-British charcoal is consistent with the interpretation of an open landscape, although there is no suggestion that was any shortage of oak or ash in this period. It does seem likely that the tree resources were managed appropriately. The selection of fuel in this period is consistent with collection practices for domestic use at similar sites; a variety of woods was gathered from the vicinity of the settlement.

MICROMORPHOLOGICAL ANALYSIS

by M G Canti

Micromorphological analysis was carried out on two layers of interest (10843 and 10842), located immediately downslope of a building (10800), and overlying a gravel path (10841), parallel with the settlement's axial road. The lower layer (10842) was a distinct orange-red colour and sealed the path surface. Above that was layer 10843, a distinct dark grey brown silt extending over, and infilling, the terrace of the former pavement area. It contained large quantities of occupation debris and other inclusions comprising animal bone, pottery, fragments of limestone and ironstone, occasional charred plant remains, as well as numerous iron artefacts including domestic items.

The aim of the micromorphological analysis was to contribute towards establishing the origins of the upper soil layer (10843), any modifications it may have experienced relating to the use or abandonment of the site, and whether it was reworked at all with 10842.

Methodology

Two tins of soil were collected from the section. They were then dried in air, impregnated with crystic resin under vacuum and allowed to set before being thin sectioned by the Department of Environmental Science, University of Stirling. The slides were examined using polarised (transmitted) and reflected light at a range of scales.

Results

The two slides are substantially similar, being composed of soil derived from the underlying rocks of the Oolitic limestone (upslope), the Estuarine series and the Northampton Sand with ironstone, all from the lower Jurassic. The basic soil material is a roughly equal mix of sand silt and clay, strongly reworked by soil fauna to produce a microfabric composed of silt-sized organo-mineral pellets. These are randomly distributed, remaining separated in some parts of the slide, and coalesced in other parts to form an undifferentiated mass. Within this basic fabric, there are various inclusions, such as limestone, flint and ironstone. The slide of 10842 contains slightly more >0.25 mm fragments of flint (18) and limestone (23) than 10843 which contains about 11 of each. Both slides contain similar contents of ironstone (around 16 fragments each), and charcoal (1 fragment each). 10842 contains a decaying bone fragment and some other unidentified decaying organic material. Slide 10843 contains a large mortar fragment and two patches of calcium carbonate crystals arising from a biological process, perhaps crushing of earthworm granules or root decay.

Overall, however the slides do not show microscopic differences reflecting the field scale differences noted on site. It seems most likely that the relationship between the two deposits has been blurred at this location by biological mixing. Both slides show almost complete reworking of the fine fabric into organo-mineral pellets by microscopic organisms, as well as a number of calcium carbonate earthworm granules which testify to activity by the larger earthworm species. At sampling time, it was noted that the boundary between the two layers was marked by some of the vertical stripes that are produced when the burrows of these larger species infill (Canti 2003). Such action would draw some of the material from 10843 down into 10842. This mixing would be untraceable under the microscopic scale since the gross colour differences between the two deposits are only visible at the field scale.

Chapter 7: Discussion of the Roman Settlement and Shrine

by Alex Smith

INTRODUCTION

The Roman settlement at Higham Ferrers is one of a number of high status and/or major nucleated sites situated along the Nene Valley between the towns of Irchester and Titchmarsh (see Fig. 7.8 below). Most of these valley sites (with the major exceptions of Redlands Farm and Stanwick) have yet to be properly investigated and so their exact nature and development remain unknown (Parry 2006, 72-91), but it is clear that this region was fully integrated into the economic, political and social structure of the Roman province.

Excavations at Higham Ferrers from 2001 to 2003 revealed only the northern part of the Roman settlement, with the consequence that we do not have a full understanding of its origins, scale, development and economy. Nevertheless, substantial parts (*c* 3 ha) of the site were excavated, including 18 buildings, which formed a 'domestic core', along with outlying enclosure systems, small cemeteries and a shrine complex. In all but the earliest phase (Phase 3), these elements seemed to be focused entirely around the north-south road going through the site, which shifted location slightly throughout the settlement's long existence. This road, which may have continued right along the eastern side of the Nene Valley (see below), was probably a key stimulus in the physical, economic and social growth of the site. The public shrine in particular would have benefited immeasurably from the flow of traffic along the road, and indeed may owe much of its elaboration—which is in some way incongruous with the remainder of the settlement—to this factor.

What follows in this chapter is an account of the spatial organisation and development of the roadside settlement and shrine, along with discussion of the apparent economic basis, social structure and ritual practices of the communities using the site. The significance of a site such as Higham Ferrers lies ultimately in its relationship with the local and regional settlement and land-use pattern. In this respect we are fortunate that the site lies immediately south of the Raunds Area Project, an intensive area (*c* 40 sq km) of archaeological survey including fieldwalking, magnetometer survey, cropmark analysis and excavation, which has identified a large number of Roman settlements both in the Nene Valley itself and on the Boulder Clay plateau to the east (Parry 2006; see Fig. 7.9 below). The relationship of Higham Ferrers with the sites identified in the Raunds Area Project, together with other sites in the region, will be discussed towards the end of this chapter.

SETTLEMENT ORGANISATION AND DEVELOPMENT

Settlement origins

The Iron Age settlement discussed in Chapter 3, which lay *c* 370 m to the north-east of the Roman site, produced ceramic dating evidence which suggests that it did not continue into the latter part of the late Iron Age. This would leave a considerable chronological gap (*c* 100 years) between the end of occupation here and the earliest occupation at the Kings Meadow Lane site, which ceramic and coin evidence indicate to be in the early 2nd century AD. There are indications, however, that the landscape was not abandoned at this time, but that the focus of occupation shifted to another location, possibly to the east, where an Iron Age and early Roman settlement has been partially investigated just over *c* 1 km from the Higham Ferrers site (Mudd 2004; OA 2004a). There is evidence for a reduction in activity at this location from the early 2nd century AD (with occupation ceasing from the later 2nd century), possibly coinciding with the establishment of the settlement at Higham Ferrers, which may have been better positioned along the road going from Irchester in the south through the Nene Valley to Stanwick, *c* 3 km to the north, and beyond.

The establishment of a roadside settlement at Higham Ferrers in the early 2nd century would certainly correlate with the broader picture of change in the Nene Valley, with villas like Redlands Farm being established and Stanwick being transformed at about this time (Parry 2006, 152, 170; see below). However, some caution must be exercised, as the excavation examined what was probably only the northern periphery of the settlement, and this could represent expansion from an earlier 'core' area of occupation to the south. Nevertheless, a small excavation (20 m by 18 m) undertaken by Mr E Greenfield in 1960 on a site *c* 200 m south of the 2001-3 excavations did reveal a couple of buildings, the earliest of which was dated to the late 1st or

Fig. 7.1. Outline of the earliest (Phase 3) Roman settlement

early 2nd century (Meadows 1992, 82). On balance, this suggests that the settlement is indeed likely to have been first established around 60 years or so after the Roman conquest. While the origins of the Kings Meadow Lane sequence might have been slightly later, the difference is not likely to have been great.

The earliest settlement (Phase 3)

The earliest features of the Roman settlement to be uncovered during the 2002-3 excavations comprised three stone-footed roundhouses, two of which were accompanied by wells (Fig. 7.1). The largest building (10920) lay *c* 60 m east of the north-south roadway, near to the southern boundary of a substantial (though shallow) rectangular enclosure, while the remaining two (10910, 11340) to the west and south-west were seemingly unenclosed. It is likely that the enclosure was constructed later than the roundhouse and associated well, and may have been part of a wider network of boundaries to the east and north-east (including enclosure 13080), mostly revealed by geophysical survey. However, the dating of these boundaries is uncertain (see Chapter 4) and they could well relate to the next phase (4) of settlement expansion.

The significance of boundaries within and around settlements has been highlighted by authors such as Hingley (1990) and Bowden and McOmish (1987), who suggested that they may have acted as indicators of social status rather than as defensive emplacements. Certainly the enclosure ditches (12880, 12310) surrounding 10920 were not of a defensive nature, and—assuming there was not some other archaeologically imperceptible barrier—there was a 20 m gap in the south-western corner, which was presumably the entranceway. The size of the entranceway and the possible internal waterhole (11991) suggests that the enclosure (together with enclosure 13080) may have had an agricultural function, as a corral for livestock, although there was no evidence for means of closing off the opening in the enclosure that would have been required by such use.

There are some indications that the ditches surrounding building 10920 did have a non-utilitarian character, in that both produced large quantities of finds (along with a subadult human vertebra) within single fills dated to the later 2nd century, possibly representing 'closure deposits' with a ritual aspect. They were also the focus for inhumation burials in a later phase, while a small contemporary cemetery of three cremation burials and one inhumation was located just to the west of ditch 12880.

It remains uncertain if building 10920 was enclosed as a symbol of social exclusion and status, although it was the largest of the circular structures. However, the nature of the associated finds assemblage does not indicate any status distinction, and indeed it is building 11340 that has produced an unusually large collection of samian pottery (19.4% of total assemblage), which along with a possible miniature votive shield and possible ritual pits, suggests that it was this building that may have been of higher status or served some sort of specialised function (see below).

All three buildings are, however, likely to have been primarily domestic structures, with evidence of internal hearths/ovens in two of them (that in 10910 had probably been truncated). The differences in building construction suggest that they were not all built as one phase, and unlike the others, building 11340 probably continued in use into the 3rd century (Phase 4). It is likely that they represent the piecemeal expansion of settlement from the south, and in this respect their circular form is quite interesting. The single excavation *c* 200 m further south revealed a rectangular building of approximately contemporary date or possibly even earlier (late 1st/2nd century AD; Meadows 1992, 82). It may therefore be the case that rectangular structures lay at the central core of the settlement and roundhouses occupied marginal locations, a pattern which has been highlighted on other settlements within the Nene Valley (Taylor 2001, 50). It has been suggested that these peripheral circular buildings may have represented secondary households or had ancillary agricultural/craft activity roles in the larger settlements (ibid., 51-2).

The western boundary of the roundhouse group comprised a roadside ditch, which probably ran the length of the settlement. In contrast to later structures, none of the roundhouses seemed to be focused upon the road, with the nearest of them (11340) being over 20 m east of it, and with entrances (where discernible) facing south-east. A projection of the road southwards places it approximately in line with the buildings revealed in the small 1960s excavation, although no obvious road was picked up, so the arrangements of the buildings here remain unknown.

Settlement expansion and development (Phase 4)

The later 2nd century heralded the start of major changes in the excavated part of the settlement, as two of the three roundhouses were abandoned and/or dismantled and the settlement expanded northwards along the axis of the main road (Fig. 7.2). It may be significant that the only roundhouse to remain in use was the one nearest to the road (11340), while all but one of the newly established buildings were rectangular masonry-footed structures.

There appears to have been an increased emphasis on physical definition of space from this time, with a number of plot divisions being tentatively identified, possibly part of an ongoing shift to spatial segregation of domestic and productive activities identified by Taylor (2001, 51). The main settlement (in this area at least) was still restricted to the eastern side of the road, and the gravel

Fig. 7.2. Outline of settlement expansion and development (Phase 4)

pavement constructed along its length is testimony to the road's perceived importance. Construction of this pavement appears to have been a collective effort, suggesting some level of municipal administrative control within the settlement, which influenced its spatial organisation. The main north-south road was also re-metalled and probably widened at this time, with a branch road heading into the valley to the south-west (although the extent and origins of this road remain uncertain). It is quite likely that the shrine itself, which was established during this phase to the west of the road, was also part of the 'municipal' redevelopment of the settlement, especially given the monumental nature of some of its architecture (see below for discussion of shrine).

Seven different plots (A-G) were identified fronting onto the roadside pavement (see Chapter 4, Fig. 4.11), of which at least four had evidence of masonry buildings in this phase. As already pointed out in Chapter 4, these plots may bear little relation to actual property boundaries at the time, but nevertheless they do indicate an increasing desire or need to clearly differentiate zones within the newly expanded settlement. Of particular importance is the apparent division between 'public space' such as the roadway, pavement and even possibly the shrine exterior, and 'private space', formed by barriers (buildings or walls) along most of the plot frontages, with enclosed areas behind. This appears to mark a distinct contrast with the more open settlement of Phase 3, in this part of the settlement at least.

The chronology of the buildings and boundaries in Phase 4 is such that it is impossible to say with any certainty whether the settlement expanded as a single planned episode, or in a more a piecemeal fashion. However, on balance it would seem that the gravel pavement, newly metalled road and basic plot divisions occurred as part of the same developmental impetus (along with the shrine), while development within the plots themselves may have been undertaken on a more ad hoc basis. The buildings and plots have already been described in detail in Chapter 4, and so the discussion here will only account for their overall spatial organisation, function and development.

Plot A in the southern part of the site was only partially revealed, as boundaries and buildings were seen to continue further south. The rear boundaries of this plot cut through the middle of roundhouse 10910, thereby providing a clear break with the earlier phase of settlement, although the well associated with this structure continued to be used, presumably out of convenience. The original rectangular masonry building (10860) in this plot was the only structure of this phase to have its narrow side fronting onto the roadside pavement, thereby not having maximum use of the 'street frontage'. This may have been the reason why it was also the only building that was soon largely demolished and rebuilt on an approximately perpendicular alignment (11370). Such a radical change can perhaps be seen as an indication of the importance of the road in the social and economic environment of the settlement.

Building 10860 contained no floor surfaces or other indication of function, although it was quite unusual in that it may have had a tiled roof made completely of imbrices (see Poole, Chapter 5). No other buildings apart from religious structures had ceramic tile roofs, but there is nothing else to suggest that this building had a ritual function. Building 10860's replacement (11370), which was clearly partitioned and had two additional annexes, contained a hearth and an oven structure with charred food remains, thus indicating its domestic nature. Cool (2006, 51) has recently pointed out that rooms with both hearths and ovens would have enabled a wide range of cooking practices to be carried out, and were often part of large houses belonging to the upper classes. However in this instance, there is nothing else to indicate that the building was of high status, and indeed, a dump of worked bone waste just outside the building suggests that bone working was practised here, although it is impossible to say whether this activity was restricted to any one of the internal areas defined by partitions. The area to the rear of the building contained a well-defined metalled 'yard', with access presumably through a side passage between the building and the plot B boundary.

Plot B (*c* 20 by 40 m) was unusual in that it incorporated the only surviving building from the earlier phase (circular building 11340) and indeed for most of Phase 4 this was the only structure within the plot. This building was demolished at some point in the 3rd century. Prior to the construction of building 11620, a limestone wall stretched across most if not all of the roadside frontage, possibly to enable privacy for the area behind, most of which (apart from circular building 11340) was kept quite clear. There was no water source within this plot, although the earlier well 12340 behind it remained in use. The differences between this plot and those to the north and south are quite pronounced and may have something to do with the 'special function' that has been suggested for building 11340 (see above and *Ritual and religion* below). This suggestion is supported by the presence of a possible ritual pit (12826) located just beyond the eastern boundary of the plot.

Building 11620 was built at some point in the 3rd century, but it remains uncertain if it was ever contemporary with building 11340. As no floor surfaces or internal features were revealed in this building, its function – though presumed to be domestic – must remain unknown.

In contrast to plot B, plot C (*c* 25 by 50 m) contained evidence for up to six buildings within this phase, making it one of the densest concentrations of structures within the excavated part of the settlement. Three buildings (10850, 10880 and 11630) forming an L-shaped complex seemed to be built together as a coherent unit fronting onto both

the roadside and a probable 'lane' aligned eastwards towards the rear of the plot. The only circular building to be built in this phase lay within an internal courtyard, which was at least partially paved/metalled, formed by this L-shaped complex together with two rectangular buildings to the rear. The water source for these buildings was a well (12885) within the courtyard.

All the buildings within the L-shaped complex as well as the circular building are likely to have been primarily domestic in nature, with at least one hearth encountered in all except 10850 (the hearth/ovens within this building were assigned a late Roman date). This latter building had a large jar set into the floor, possibly for storage, while further large fragments of storage vessel were found in a pit just to the north. Another jar was found set into the ground immediately north-east of the circular building.

It is very difficult to see any differences in terms of function or status between the 'L'-shaped complex and the circular building. Infant burials were found within both and the ceramic and finds assemblages do not show any major differences. Building 10850 contained storage vessels and quernstone fragments, while building 10880 also contained quern fragments, along with two copper alloy votive leaves, highlighting the integration of domestic and religious spheres (see below). Circular building 10870 contained a spindle whorl and modest amounts of pottery but no finds of any great significance, and it is assumed to be domestic in nature. Its entrance faced eastwards towards the rectangular buildings at the far end of the plot. One of these buildings (10900) was positioned behind the eastern boundary ditch that ran the length of the settlement, suggesting that it was not part of the main 'domestic core' of buildings, but instead associated with the larger field and paddock enclosures extending to the east. The building contained minimal pottery, along with quern fragments, bone-working waste and a hearth, and it is quite possible that it had domestic, craft-working and agricultural functions. Building 10980, built slightly later, was of almost identical size and construction and presumably served a similar 'ancillary' function.

Plot C effectively marked the northern limit of the main 'domestic core' of the settlement at this time, with just one certain building (10810) of Phase 4 lying beyond this point. Nevertheless, the plot boundaries (D to G) still seem to have been laid out during the 3rd century, and there is some evidence for a structure with a hearth within plot D. Little can be said about this possible building, except that it was associated with fragments of wild boar bone, which are otherwise restricted to the shrine. As this plot seemingly opens out onto a zone opposite the monumental shrine entrance, it is possible that the structure was in some way associated with the religious precinct, although this interpretation is very tentative.

Plot E to the north of this had no evidence for any activity during this phase and may well have been used for agricultural/horticultural purposes. Plot F contained a single rectangular building (10810) set back 12 m from the roadside pavement, along with a large waterhole (12955) and a possible cesspit or latrine (10804). Building 10810 was one of the few buildings on site with definite evidence for an entrance threshold, in this case facing westwards across the gravel pavement and road to the shrine beyond. The building was physically partitioned, the northern and southern rooms being of quite different character. The worn uneven limestone surface in the northern room incorporated a well-used stone-lined drain, which must have been integral to the room's function. The fact that the room was subsequently extended northwards in timber may suggest that this was in fact a byre for livestock (or was later used as such), a possibility supported by its position adjacent to two 'pen' type enclosures built during the later Roman period (see below). The unpaved southern room in building 10810 contained an embedded coarse ware storage jar and a central hearth, and was clearly the domestic side of the building. Finds included a reasonable number of hairpins in addition to coins and nails. As with the other domestic plots, water was supplied from a waterhole to the rear of the building.

North of this plot, the site remained largely empty, aside from field boundaries, two wells and a small cemetery. The extent of this presumably agricultural field system is not known, although the geophysical survey to the east of the settlement revealed a large group of rectilinear enclosures stretching back at least 200 m (see Chapter 4 Fig. 4.1). The nature of the agricultural economy at the site is discussed below.

Final expansion and decline of the settlement (Phase 5)

The roadside settlement continued to expand northwards throughout the 3rd century and into the 4th century, with little or no apparent hiatus in activity (Fig. 7.3). However, a major change during this phase is the near abandonment of the shrine by the end of the 3rd century, and, perhaps related to this, the deterioration of the main north-south road and gravel pavement. It is unlikely that it was a lack of roadway traffic that led to this decline, as the deep wheel ruts in the late surface testify, but it would seem that whatever 'municipal' resources went into creating and maintaining the shrine, road and pavement were no longer present. Instead there seems to have been more emphasis on the individual development and maintenance of plots, as seen by the laying down of discrete areas of stone paving along the road frontage of specific buildings in the settlement. This general situation is seen in many larger urban settlements (eg Verulamium; Niblett 2001), with public buildings declining at the expense of increased embellishment of townhouses, but it is not often witnessed within smaller settle-

Fig. 7.3 Outline of final phase (5) of settlement

ments such as Higham Ferrers. Interestingly, the major exception to urban municipal decline is the establishment of walled boundaries around towns, and the one later embellishment at Higham Ferrers outside the plots and agricultural field systems, is the provision of a new roadside ditch (and bank?), which possibly also defined the western settlement boundary and northern entrance. To the south of this proposed entranceway, the plots along the eastern side of the road continued to develop through into the late Roman period, and the development of these is summarised below.

Building 11370 in plot A underwent internal alterations in the late Roman period (new flooring and posthole partition), but no major changes occurred until its demolition at some point in the 4th century. As with other buildings in the site, the exact date of demolition is uncertain, but the overall ceramic and coin sequence does not suggest much activity beyond the mid 4th century.

The organisation of plot B changed considerably during this phase, with rectangular building 11630 probably going out of use in the late 3rd/early 4th century, not too long after it was built. However, a paved area was constructed along the road frontage on the western side of this building, which points at some occupation continuing beyond the period when the roadside pavement was no longer maintained. It is possible that the interior of this plot remained largely open for most of the 4th century, although there is evidence for two smaller structures of unknown function.

The overall layout of the building complex within plot C appears to have remained little altered into the late Roman period, although it is possible that a number of buildings (10880, 11630 and 10900) went out of use, or perhaps saw a change of use to a non-domestic function. The only major structural alteration was the western extension on building 10850, which projected across the old gravel roadside pavement, with an external paved surface abutting it. The building's interior was also refloored in stone, with postholes, a hearth and a possible corndrier inserted, possibly indicating change to a more agricultural or industrial function, especially as very few 'domestic' finds were recovered, aside from a dump of pottery in pit 12698.

Circular building 10870 clearly continued in use for some time, with a series of stone floor surfaces being laid out, and distinct radial divisions of space being set out around a central focal hearth. Finds distribution was limited to the better preserved northern floor surfaces and included toilet articles, jewellery, a sewing needle and an agricultural tool. This building was clearly still a functioning domestic space, with the radial divisions hinting at segregation of activities, although there is nothing in the finds distribution itself to suggest this. Building 10870 was cut by ditch 11530 at some point in the 4th century, which probably had the effect of creating an open courtyard, with 'ancillary' building 10890 still functioning along the eastern boundary. Indeed this building was actually extended in this phase, although as with most other plots, there is little to suggest much activity beyond the mid 4th century.

The previously unoccupied plot D to the north had building 10840 constructed along its western side facing the road, with an ironstone wall to the north blocking access into the area behind, thus creating a definite boundary between what seems to have been public and private space. The building was clearly domestic in nature with a well-built hearth/oven and large quantities of finds including personal ornaments, tools and household items recovered from occupation and destruction deposits. Two sunken pottery vessels in the floor by the western wall were probably used for culinary storage purposes, as were similar vessels from elsewhere on the site. A lift key and a slide key indicate the need for security. Some 43 coins were found within this building, and although these included 4th century issues (up to AD 360), most were of late 3rd century date, and were thought to represent a hoard. The high number of coins from this period (along with two 2nd century issues), together with the number of personal items recovered, means that the assemblage as a whole is quite similar to that of the shrine, which lay directly opposite. As building 10840 was constructed around the same time as the shrine's near abandonment, it is possible that some of the material here represents objects selected from the shrine area. However, none of the objects is of a specific religious nature and so the purpose of this selective curation – if genuine – remains unknown, although it may be relevant that there was a tentative association between this plot and the shrine during the previous phase (see above).

The building may have been one the latest occupied on site, as a late internal surface layer contained quantities of late Roman pottery along with mid 4th-century coins. A small group of five adult inhumation graves was cut into the earlier eastern boundary ditch of the plot; one of these gave a radiocarbon date of the later 4th/early 5th century, commensurate with the late dating of the building along the plot frontage.

Two buildings (10820 and 10830) were constructed in previously unoccupied plot E, both aligned NW-SE with their shorter sides facing the road and with a metalled pathway between them leading to the rear of the plot. Access along this pathway was seemingly controlled by a gateway, thus restricting entry into the 'private space' behind. The alignment and position of these buildings suggest that they were constructed at around the same time, although they were of slightly differing form, with 10830 having unusual rounded corners, very similar to a late Roman building discovered in the 1960s excavation further south (Meadows 1992, 84-5). Both buildings had entrances fronting the roadside, with areas of well worn, defined pitched limestone paving indicating heavy

traffic, presumably leading to and from the road.

Building 10820 to the north had a clearly divided interior, with two rooms of differing function. The main room to the front contained a hearth and was most probably domestic in nature, while the rear room, which was added at a later date (early-mid 4th century), seems to have been a specialist workshop, maybe associated with ironworking, as it was one of the few buildings on site to contain smithing waste, albeit in small quantities.

The original back (east) wall of this building was aligned with the east wall of the earlier structure 10810 in plot F to the north, suggesting some consistency in their planning, and the north wall of building 10820 would have formed the southern boundary of the courtyard in plot F, which faced onto the road (see below). There is therefore a possibility of some connection between the occupants of the two buildings; maybe they belonged to a common kin group. The back wall of building 10830 in plot E was also upon the same alignment and can be viewed as part of the same architectural and possibly even social group. The interior of this building contained two hearths and considerable amounts of domestic debris, thus indicating its likely function.

Both buildings may have continued to function into the latter half of the 4th century but are unlikely to have continued until the end of the Roman period.

Plot F was developed in this phase to form an open courtyard facing the road, framed by building 10820 of plot G to the south, building 10800 to the north and original building 10810 to the east (Plate 7.1). This 'public' space was not seen in any other plot in the settlement, although it still contrasted with the 'private' space to the rear of the buildings, part of which now contained enclosures probably used to pen livestock. The northernmost building (10800) was one of the smallest on site (36 m sq) and despite the presence of hearths may not have been domestic in nature, as there was an almost complete lack of any finds. A storage or even a commercial function has been postulated, but evidence is lacking. The building faced onto the courtyard and it can perhaps be viewed as a separate 'room' of the main building 10810, which continued in use, as evidence by a later floor surface associated with 4th-century pottery and coins. However, the quantity of late Roman material was not as great as in the two buildings in plot E to the south, suggesting that occupation was shorter lived.

A single large rectangular building was constructed in the most northerly plot (G) in the later 3rd or 4th century. Although only its short axis faced the roadway, the scale of the building (100 m sq) and narrowness of the plot ensured that it covered most of the road frontage, with the exception of what was probably a pathway along its

Plate 7.1 View facing north-west over buildings 10820, 10810 and 10800 towards the Nene Valley

southern wall leading to the rear of the plot. The building's construction method differed from that of others in the settlement, and it appeared to have an unusually large entrance directly onto the old gravel pavement, although no additional paved areas were noted, in contrast to the situation in buildings further south. It seems likely that the building was domestic in nature, although its size, construction methods and large entrance do mark it out as 'special' in some way. The small cemetery at the rear of the plot continued in use, with the eastern ditch (11270) being recut.

Assuming that ditches 10700/10960 marked the northern boundary of the main settlement, then an open area (24 by 48 m) south of this boundary and north of plot G may represent communal space, possibly for the use of livestock upon entering the settlement. The presence of a substantial waterhole (10589) here would support this interpretation.

The rectilinear enclosure system extended beyond the main settlement. A substantial enclosure (*c* 75 m sq) just to the north was devoid of features, and was clearly integrated with further boundary ditches continuing on the same alignment to the east of the excavated area, as revealed in the geophysical survey. It would seem that each settlement plot probably had a network of large and small enclosures to the east, used for differing agricultural purposes (see below). Enclosure systems were also revealed extending to the north and it is likely that the overall area of agricultural land associated with the settlement was quite substantial. A single masonry building in this area of northern enclosures is suggested as a possible temple building and is discussed below, although there is always the possibility that it was for agricultural use. Other areas of paving in the vicinity may represent hardstanding for more insubstantial buildings, while two wells contained enough domestic material in the 4th-century backfill (pottery, animal bone, leather shoes etc) to hint at occupation in this area, lying *c* 100 m north of the main settlement. Two groups of burials also suggest habitation in the vicinity. None of the features in this area need date any later than the mid 4th century.

The end of the Roman settlement

The roadside settlement of Higham Ferrers was certainly in decline from the mid 4th century onwards, although it is uncertain how far occupation extended towards the end of that century. The latest radiocarbon date from one of the inhumation burials was cal AD 345–430 (UB-5215, 1649 ±20), while only two coins were dated after AD 378, and only minimal quantities of later 4th-century pottery were present. It is unlikely that this pattern merely represents settlement contraction, as dating evidence from the single excavation further south within the presumed heart of the settlement indicates that occupation there had also ceased by about the mid 4th century (Meadows 1992, 85). The settlement was probably not suddenly abandoned, but more likely declined over a period of up to 40 or 50 years to such an extent that by the end of the century there may have been little more than a handful of families living within the now mostly deserted and overgrown remains of a once thriving settlement. It is unlikely that any sustained occupation continued far into the 5th century. This is somewhat different to the situation at Redlands Farm villa *c* 1.5 km to the north, which only appears to go into decline at the end of the 4th century, while at Stanwick the largest corridor villa itself was not built until around AD 375 (Parry 2006, 152, 170; see below).

The Saxon occupation of the Higham Ferrers area is discussed in another volume (Hardy *et al*. 2007), but it is worth briefly summarising the earliest elements here. The earliest Saxon occupation can be dated to approximately the mid 5th century, probably at least 40 to 50 years after the final abandonment of the Roman settlement. These may have been small groups of possibly first-generation immigrants making their way up the Nene Valley to a suitable location, with the higher Boulder Clay areas apparently being ignored (Parry 2006, 94). An alternative view often advanced is that such groups represent indigenous population who have undergone a cultural change, thereby indicating an underlying ethnic continuity (see Ward-Perkins 2000 for general overview of this debate). In reality it is likely that there were many different communities with contrasting cultural identities at this time, but it is unlikely that there was ever any strict division of population along ethnic grounds. Whatever the case, there clearly was a substantial element of disruption at Higham Ferrers during the late and early post-Roman period, with little to suggest the inhabitants of the 4th-century settlement were the direct ancestors of the 5th-century population in the area.

Dating evidence from the first sunken-featured buildings at Higham Ferrers suggests that they initially ignored the now ruinous Roman settlement, establishing their community on cleared land further up the dry valley to the south-east. The sunken featured buildings located in the Roman settlement must have represented expansion into the deserted site, with one lying within the shrine precinct and another adjacent to building 10800. It has been commented upon (Hardy *et al*. 2007) that the location of these sunken featured buildings on either side of the road may suggest that this feature was still in use, perhaps connecting further early Saxon settlements along the Nene Valley (see below). A small scatter of Saxon pottery from Greenfield's excavation to the south (Meadows 1992, 88) suggests activity across the settlement during this period, but not apparently on any great scale, and possibly deriving from stone-robbing rather than re-occupation.

MORPHOLOGY, ECONOMY AND SOCIAL STRUCTURE

Archaeological classification of Romano-British settlement types, from major urban centres and 'small towns' to villas and farmsteads, can be based upon various factors, including morphology, scale, status and economy. King (this vol.) has already highlighted some of the problems inherent with such categorisation, along with the difficulties in making subsequent inter-site comparisons (in this instance between coin assemblages). With sites such as Higham Ferrers, the difficulties are compounded by the apparent differences in material culture between the shrine (see below) and adjacent settlement, but even when the settlement is viewed separately, it may not be readily clear 'what type of site it was'. For instance, can the economy of Higham Ferrers be characterised as a rural agricultural producer economy or an 'urban' consumer economy, and is there evidence for any intrasite social hierarchy? The settlement has in the past been classified as a 'small town' (Taylor 2001, 57), although admittedly this was prior to analysis of the current excavation data, which as we shall see below does not readily support such categorisation. However, it must be said that the definition of such sites is somewhat problematic (and has received much attention; eg Johnson 1975; Rivet 1975; Burnham and Wacher 1990; Burnham 1995; Millett 1995; Booth 1998), especially as many settlements within this general category have little or no evidence on matters such as economy and social structure. Be that as it may, it is the character of the settlement at Higham Ferrers that is important, rather than the label that is attached to it. Aspects of the site plan can be used to shed some light on this. In broad terms the site appears to belong to the simple road junction frontage category of Burnham's morphological scheme (Burnham 1987, 159-160) – on the (unproven) assumption that at least some activity was associated with the south-west trending subsidiary road as well as the main north-south road. As well as the roads themselves, features such as the roadside pavement and monumental shrine suggest a degree of 'municipal' planning, but this contrasts with the arrangement of the other buildings, which is very informative. While there is a reasonable density of buildings, particularly in Phase 5, their relationship to the road is striking, in that most of the buildings on the road frontage lie parallel to it, rather than end on. This arrangement is unusual in a developed 'small town' context, in which the 'end on' arrangement of strip buildings is much more characteristic. Local examples occur at Ashton (ibid., 177) and Durobrivae (eg Mackreth 1995, 149, fig. 13.1), where this pattern is seen in relation to the minor streets as well as the major road. Interestingly, the rather limited evidence from Irchester suggests a less organised pattern of buildings (Burnham and Wacher 1990, 143), perhaps comparable to that seen at Higham Ferrers itself. Burnham (1987, 176-178) has characterised the 'spacious plots', a description which applies to most if not all of the plots defined at Higham Ferrers, as agricultural in nature '..likely, therefore, to be most common at settlements close to the village:town threshold' (ibid., 178). The layout at Higham Ferrers is strongly reminiscent of that at sites such as Catsgore (Leech 1982, eg 8, fig. 5) and the simple character of many of the buildings at the two sites is also comparable (ibid., 30, fig. 20). These similarities support the interpretation of Higham Ferrers as having a largely agricultural emphasis, although the absence of 'corn driers', a feature in a number of the Catsgore buildings, is notable.

The overall environmental evidence from Higham Ferrers presented in Chapter 6 provides another angle on the character of the settlement, and it also suggests a far closer comparison with rural agricultural settlements than to urban sites. Most of the environmental evidence came from late Roman samples in the wells and so we do not have a detailed impression of economic development over the 250 years or so of occupation at the settlement. However, a generalised account does provide a good overview which helps us to understand the nature of the site.

The overall economy was based upon a mixed arable and pastoral regime, although the ratio between the two could not easily be determined. Crops (mainly spelt wheat and hulled barley along with flax) were almost certainly cultivated to some extent in the immediate vicinity on the upper valley slopes. It appears that long-term storage of large quantities of grain was not occurring on site, or at least not in the vicinity of the wells, although the settlement was engaged in a range of activities related to the later stages of agricultural processing. It has been suggested by Robinson (see Chapter 6) that some of these activities (eg the de-husking of wheat) were at least partially centralised rather than always being undertaken on a small scale at a household level (there is for example at least one quern fragment which suggests a mechanically operated mill. See Shaffrey Chapter 5), and no doubt any surpluses (if any existed) would have been sent to the major markets nearby such as Irchester, or used as taxes. This has important social connotations, suggesting a collective element, which is discussed further below. Also of economic importance to the settlement—though probably more in terms of subsistence—was horticulture, and it is likely that much of the space around (and specifically to the rear of) the buildings was given over to the growing of crops such as cabbage, swede and turnip, as well as culinary herbs like summer savoury, coriander, celery and fennel.

There is ample evidence that hay was brought into the settlement, most probably from hay meadows located down on the lower terraces and floodplain of the Nene Valley, just 150-200 m further west. Hay would have been an important resource for the winter feeding of animal herds, and it seems

likely that it was cultivated by the occupants of the settlement. The management of livestock would have been of fundamental importance within the integrated agricultural economy of the settlement. The insect evidence indicated a relatively open area, with a few isolated trees and thorn bushes, and with buildings interspersed with small areas of pasture (and vegetable plots) which contained high concentrations of animals. It is probable that some of the smaller enclosures such as those in plot F were used for such purposes, with the dung then being removed for manuring the arable crops.

The beetle evidence suggests the presence of medium and large-sized herbivores, and this is borne out by the animal bone assemblage, which indicated a fairly typical Roman rural pastoral regime dominated by sheep and then cattle, with smaller quantities of pig. There were no significant developments noted in animal husbandry practices during the three Roman phases, although the number of sheep was reduced in the later Roman period, while cattle became more common. The overall dominance of sheep is quite different to that of urban or military sites (Dobney 2001, 36) where cattle usually predominate, and this again serves to emphasise the rural nature of the settlement. A predominance of ewes and lambs suggests an emphasis on dairy production, although meat consumption and wool production was also a likely concern. The latter activity is also indicated by insect evidence from well 8032 to the north of the main settlement, where an ectoparasite associated with sheep fleeces was found, suggesting that wool was being cleaned prior to spinning (see Robinson, Chapter 6). It must be remarked, however, that only a single spindlewhorl was recovered from the settlement.

Despite the overall dominance of sheep, cattle would also have been of significant economic importance, especially in the later Roman period. The unusually high number of young cattle (but not very young calves which might indicate dairying) at the site may be due to the inhabitants selling surplus adult and elderly animals to larger urban markets, with younger cattle being kept for local consumption, perhaps as a way to conserve resources for winter (see Strid, Chapter 6). The only other domesticate of significance in the settlement is pig, which gradually increased in importance from the early (8.8%) to late (14%) Roman period, though still remaining a relatively minor component of the diet. It is likely that pigs were kept in small numbers within the settlement plots, and may have had a special significance, as pig meat was highly esteemed within the Roman diet (Dobney 2001, 36).

The overall evidence indicates a fairly open settlement with a number of buildings interspersed with horticultural plots and small paddocks, surrounded to the north and east by arable fields and with a trackway leading westwards off the main road down to hay meadows on the Nene floodplain. The faunal remains (insects and vertebrates) did not indicate an urban environment, while the range of cultivated plants used at the site was typical for rural settlements of this date in the region, with no examples of imported exotic plants which are usually present in the larger towns.

It is clear that the main economic impetus of the settlement was agricultural, although the establishment of the shrine in the later 2nd century may well have brought further economic benefits for the community, in terms of catering for the needs of 'pilgrims' at the site (see below). Other evidence for economic activities is strictly limited. Very small-scale metalworking occurred, mainly concentrated in late Roman contexts and in particular in building 10820, while small quantities of slag and coal were recovered from a quarry pit in Greenfield's excavations further south (Meadows 1992, 85). It is perhaps surprising that there is so little evidence for iron smithing, and no evidence for iron smelting at all, given that Higham Ferrers lies in close proximity to a significant number of ironworking sites in the Nene Valley (Schrüfer-Kolb 2004, 42). In particular, Schrüfer-Kolb's survey of ironworking in the East Midlands suggests that primary iron production (ie smelting) is concentrated in unwalled small towns (in which Higham Ferrers is grouped), whereas walled small towns were more associated with smithing (ibid. 114-5). As discussed above, Higham Ferrers does not fall readily into any of the 'small town' categories, which may partially explain the lack of evidence for ironworking.

Other economic activities included boneworking, which was practised during Phases 4 and 5. It may be that further types of craftworking occurred in unexcavated parts of the settlement, although it is unlikely that these were ever more than local crafts providing for the needs of the community, with the possible exception of the production of 'token rings' made for offering at the shrine (see below).

The socio-economic organisation of the agricultural settlement is hinted at by the environmental and material evidence, along with the form and layout of the excavated site, although unfortunately the chronological development is not always that clear. The settlement was established at a time when individual farmsteads up on the Boulder Clay plateau were in decline (see below), and may possibly represent the start of centralisation of the agrarian economy, with large scale processing and distribution of agricultural produce. A collective approach is suggested by the roadside pavement linking the newly established plots, and the building of a monumental shrine. However, was this a collective of essentially independent households, or was there a higher landowner (eg at Redlands Farm villa) with powers influencing the settlement's inhabitants?

Within the excavated settlement, there is little to indicate the differential display of wealth or status, at least in terms of architecture or archaeologically visible material culture. Although it is acknowledged that status and wealth can be displayed in

many different ways, this settlement was established within an area populated with villas and small towns, and so it can be assumed that the inhabitants operated within the same social milieu, with recognisable means of expression of status.

The most obvious shift which may have dictated social change is from the open roundhouses of Phase 3 to the roadside plots and rectangular buildings of Phase 4, although in terms of associated material culture, there was little change except in quantity of objects. Certainly we cannot say that the rectangular buildings were more 'Romanized' than the circular structures, and indeed it is one of the latter type of structure (11340) that had the highest concentration of fine ware samian pottery on site. With the possible exception of 10860, none of the buildings appears to have had a tiled roof or any architectural embellishments, in distinct contrast to the shrine and possible northern temple, with most being simple one-roomed dwellings with central hearths and compacted earthen floors (although a number had paved surfaces). There was some increase in physical differentiation throughout the phases, although in only a few cases (a possible byre in building 10810 and metalworking shop in building 10820) could this be related explicitly to function. This increased segmentation is noted at other settlements (Taylor 2001, 51), and may be linked in the case of the Higham Ferrers site with the apparent erosion of central organisation in the later Roman period (see above).

One socio-economic factor not yet discussed is that of the use of slaves within the settlement, as indicated by the recovery of two shackle fragments in Phase 4 and 5 contexts (Cat. nos 58-9; see Scott Chapter 5). Such a 'fetter' type of shackle (designed to clasp around the ankles) is the most common type of slave restraint in Roman Britain, with a concentration in East Anglia and parts of the East Midlands (Thompson 1993, 148). It remains uncertain how far the presence of such shackles indicates the widespread use of slaves on agricultural estates, but it is most likely that they had some role in the agrarian regime (ibid., 149).

Purely from the evidence of the excavated settlement, therefore, there is nothing to suggest anything other than an agricultural community of socially homogenous families (some at least with probable dependent slaves) practising collective farming and with some effort put into creating and maintaining municipal elements within the site, at least until the later Roman period. However, it is of course also possible that people of higher status resided elsewhere in the unexcavated parts of the settlement, or even that Higham Ferrers represents a community of agricultural workers within the territory of a nearby villa such as Redlands Farm (see below). The major factor against Higham Ferrers being just a simple satellite agricultural settlement is the presence of a substantial shrine across the road from the main core of domestic buildings, which will now be discussed.

RITUAL AND RELIGION

Aspects of ritual and religion pervaded all areas of Roman life, and so it should come as no surprise that objects and deposits that may be regarded as votive in nature should be found across the settlement. However, the quantity of these votive deposits is more than would be expected from the northern periphery of a typical non-villa agricultural settlement, and this must be due to the presence of a substantial and partially monumental shrine in immediate proximity.

The shrine

Location and chronology

The shrine at Higham Ferrers was situated across the road from the main settlement and appears to have been deliberately segregated from this domestic zone, with the road itself acting as an outer boundary (Fig. 7.4). It was positioned on the very edge of the valley side just before it dipped quite sharply down towards the river Nene (Plate 7.2), and as such would have formed a highly visible landmark within the valley, possibly even intervisible with the town of Irchester *c* 4 km to the south-west (Lawrence, pers. comm.).

High visibility is quite typical of Roman temples in Britain, where such sites may have acted as geographical and spiritual points of reference within the landscape (Smith 2001, 150). It may not be a coincidence that the shrine also lay adjacent to the single Bronze Age cremation burial on site (aside from the ring ditch *c* 300 to the east), although whether this had any influence on the location of the shrine would obviously depend upon whether the burial mound (if one had ever existed) was still visible at this time. However, such association between Roman religious practice and earlier monuments is well established (Williams 1998), with a Bronze Age barrow at Stanwick, for example, being the focus for ritual deposition in the Roman period (see below), and an entire shrine complex at Snow's Farm Haddenham being positioned in relation to an earlier round barrow (Evans and Hodder 2006).

The shrine is dated by coins and ceramics to the later 2nd and 3rd centuries, the time when the settlement layout to the east was radically altered. However, there remains the possibly that a cult focus existed in the vicinity before this time, as all of the brooches within the shrine were of a 1st-century AD date (see below). There are reports of Iron Age and early Roman coins being recovered by metal detectorists further up the valley to the north (on the opposite side of the road to Area G; Lawrence pers. comm.), but this remains unsubstantiated.

It is uncertain whether all components of the shrine were constructed at the same time, or if they represent a sequence of development. The divergent alignments of the inner and outer precinct may suggest the latter (see below).

Structural organisation

The shrine was characterised by a distinct boundary wall along three of its sides, while the fourth—which faced west towards the river—was apparently left open, apart from a short (*c* 4 m) section in the south-west corner, which terminated in a slight (0.5 m) eastern in-turn. Although it is possible that a boundary of some kind did exist along the remainder of this side (eg turf wall), it may have been the break of slope itself which acted as the temenos limit, as has been suggested for three sides of the temple at Henley Wood in Somerset (Watts and Leach 1996; Smith 2001, 92). Interestingly, despite the lack of a perceptible physical boundary on this side, some control over entry into the shrine must have been exercised, as only 2% of the animal bones within the precinct (which were not apparently buried) showed signs of gnawing, implying that dogs were successfully kept out.

The distinct boundary on the settlement side furthered the segregation of the shrine from the domestic core, while the open western view suggests a cult with strong associations with the river. Ritual deposits within riverine contexts are not uncommon in Britain (eg Fitzpatrick 1984; Bradley 1998; Booth *et al.* 2007, 208), with a 'ceremonial object' being recovered from the River Nene near Peterborough (Green 1975). In a number of temples, such as at Nettleton in Wiltshire (Wedlake 1982) and Bourton Grounds in Buckinghamshire (Green 1966), natural waterways formed an integral part of the cult site, and were clearly a religiously significant landscape feature (Smith 2001, 150).

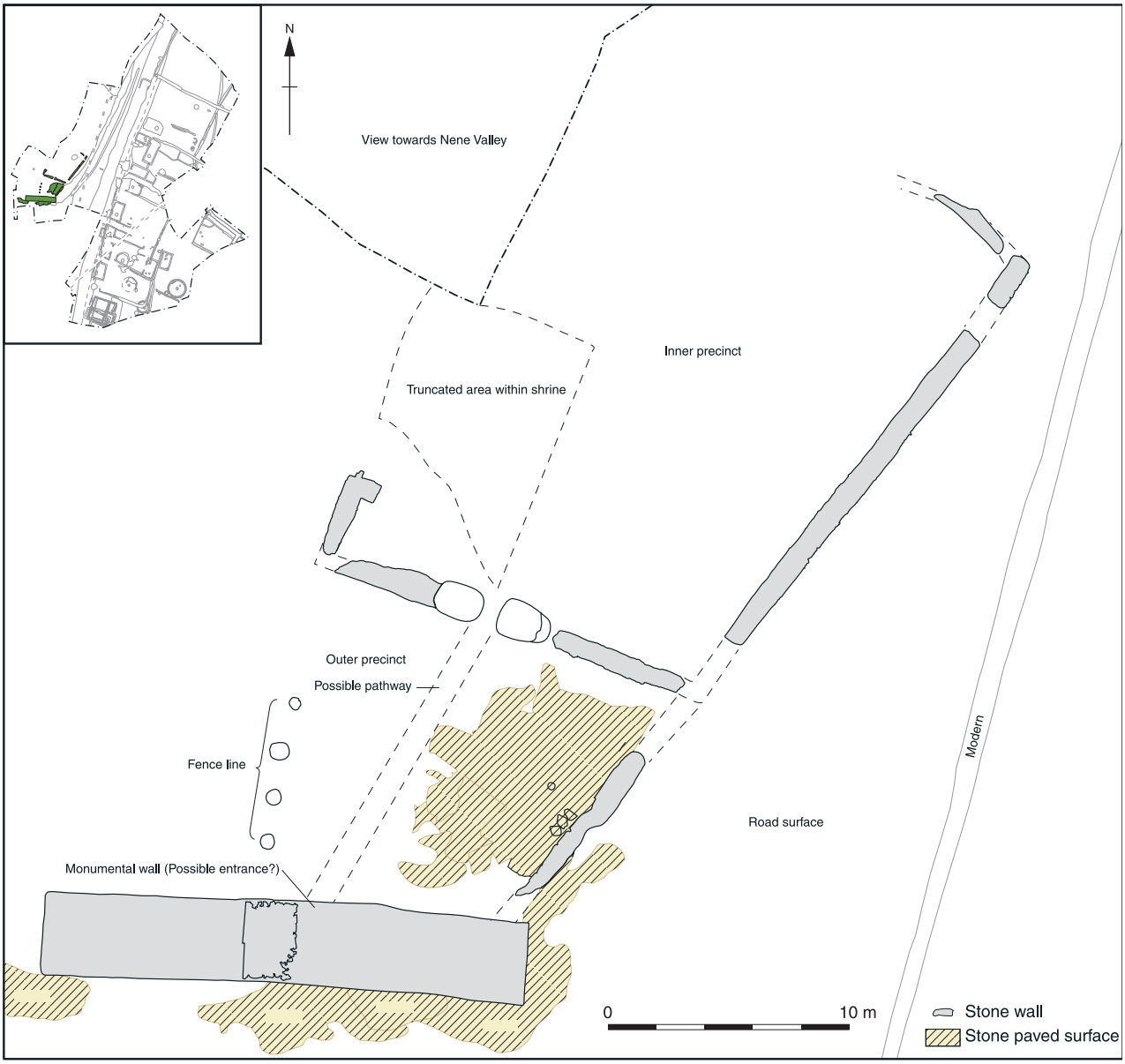


Fig. 7.4 The shrine

Plate 7.2 View facing south-west from the eastern shrine wall across to the Nene Valley

Plate 7.3 Pitched stone foundations of the monumental shrine 'entrance'

Plate 7.4 Artist's reconstruction of the monumental entrance to the shrine

The religious complex was divided into an inner precinct, within which lay most of the associated finds but no actual structure, and an outer annexe to the south. The lack of a shrine building is not too problematic as it was the boundary and cult focus/altar which were the most important physical aspects of a religious complex (Turner 1979, 15; Barrie 1996, 148), and the distribution of finds shows that some kind of cult focus certainly existed at Higham Ferrers (see below).

Perhaps the most remarkable aspect in terms of the shrine's physical structure is the huge (20.5 by 3.6 m) pitched limestone foundation, which formed the southern boundary of the annexe to the shrine (Plate 7.3). The scale of this feature is incongruous not only within the wider settlement, but also within the shrine itself, where the only feature having even a loosely comparable element of monumentality was the entrance into the main enclosure, *c* 14 m to the north. The remaining precinct walls were just *c* 1 m in width. Such incongruity highlights the possibility that the southern boundary wall was of a different phase than the rest of the shrine, which is also suggested by its divergent alignment with the inner precinct wall. An earlier origin is not out of the question, especially as there are significant numbers of 1st-century AD brooches within the shrine (see below). There is even the possibility that the initial monumental structure was reduced in size (from 20.5 to 12 m) when it was incorporated into the later 2nd century shrine, as the remaining limestone foundations are aligned with the western boundary (fenceline and wall) of the temenos. However, this is far from certain, and indeed it could be argued that the presence of such a monumental construction would be even more incongruous within the context of the earlier phase 3 settlement (or even pre-settlement), and so unfortunately its dating must remain uncertain.

As the monumental boundary was significantly robbed, its exact form and function are also uncertain, and it may have had more than one structural phase (see above). Colonnette fragments (Plate 7.4) and a concentration of ceramic tile in the shrine area may hint at some degree of architectural embellishment, though these could have come from the inner entrance. The width of the wall could easily have encompassed substantial niches, possibly for pieces of religious sculpture. Aside from the small relief panel, which is unlikely to have derived from this structure, the only fragment of masonry sculpture from site was a bas relief possibly representing the torso of a quadruped (SF 3197), found reused in a floor surface in building 10810 (see Davenport, Chapter 5). However, there is no way of knowing whether or not this derived from the shrine.

It can be presumed because of the substantial foundations that the structure was of a significant height. Its very location on the edge of the escarpment leading down into the Nene Valley suggests that a prominent and dramatic visual presence was a fundamental part of its *raison d'etre*, and it would almost certainly have been visible from as far as Irchester to the south-west. This prominence, and possibly the quality of the building stone, may explain why this monument had been so thoroughly robbed.

There are no ready parallels for such a structure within a rural Roman religious context in Britain, and interpretation purely on the basis of the surviving foundations is extremely speculative. It was undoubtedly monumental, but the sort of monument involved is less clear. The dimensions of the foundation give a length:width ratio of 1:5.6. A comparison with data from a selection of Roman arches (Table 7.1), including Verulamium, suggests that this ratio is more typically in the range 1:2.2 to 1:3.5; moreover the foundations, where noted, are usually in the form of independent blocks for the main piers, in the manner of the smaller foundations defining the entrance into the inner precinct at Higham Ferrers, which might plausibly have carried a small arch. It should be noted, however, that as reconstructed the later 2nd-century 'Riverside' arch at London had a length:width ratio of *c* 1:6.3 (Blagg and Gibson 1980, 153-7), so the Higham Ferrers proportions are not entirely unparalleled in monuments of this type. Reconstruction of the monument as an arch still seems improbable, however, and a more linear monument, though perhaps incorporating one or more relatively small openings, may be more likely.

On balance, its position alone would suggest that it represented the outer entranceway into the shrine complex, although as already mentioned, the actual opening(s) may not have been that large. Entrances into religious sites are often embellished to some degree since it is at this point that the journey from

Table 7.1 Comparison of Higham Ferrers monumental structure with known Roman arches

Name	*Date*	*Height*	*Width*	*Depth*	*W;D ratio*	*Foundations*
Riverside arch, London	?later 2C	?8.0	7.6	1.2	1:6.3	none
Verulamium S	late Antonine		14.1	4.3	1:3.3	Block for each pier
Arch of Titus, Rome	late Flavian	15.4	13.9	6.18	1:2.2	Block for each pier
Arch of Trajan, Benevento	Trajanic		14.35	6.20	1:2.3	Block for each pier
Arch of Constantine, Rome	4C	21.0	25.7	7.4	1.3.5	?
Higham Ferrers	*?2C*		*20.5*	*3.6*	*1:5.6*	*only foundation*

Plate 7.5 Colonnette fragment (SF 1225) within western wall of the shrine

the profane into the sacred begins (Barrie 1996). Of the 26 known entrances from major Roman temple complexes in Britain, 17 show evidence for monumentality (Smith 2001, 151; note that since this study a monumental temenos entrance has been excavated at Frilford (Kamash *et al.* forthcoming). The degree of embellishment is usually far more in character with the rest of the complex than at Higham Ferrers, but nevertheless it does highlight the complete emphasis on frontality, also often seen in Roman temple sites (Stambaugh 1978, 569).

Rituals were sometimes performed as part of the entry procedure into the temple site (eg finds outside Woodeaton temenos entrance, Goodchild and Kirk 1954; the altar outside the porch of the triangular temple at Verulamium, Wheeler and Wheeler 1936; etc.), and the group of small finds from the area to the south of the probable entrance (on the branch road leading down into the valley) may represent such activity. These finds were of a similar character to those inside the inner shrine area, and include a number of brooches, hairpins, toilet articles and hobnails, in addition to an iron key and a terret ring from a cart. The latter object may indicate the use of wheeled transport along the road leading down from the main settlement towards the valley bottom. There is some evidence for a paved area immediately south of the probable entrance, but it is uncertain how extensive this was.

Internally, the division of the complex into an inner and outer precinct is also paralleled at a number of other temples such as Hayling Island (King and Soffe 1998) and Harlow (France and Gobel 1985), representing levels within a journey into the increasingly sacred areas of the shrine. The 'outer' precinct at Higham Ferrers was at least partially paved (Plate 7.5) and defined on the western river-facing side by a line of four substantial postholes, presumably representing a physical barrier. Compared to the inner precinct (see below), finds were minimal (aside from destruction deposits, which included 4th-century coins), and it may have been that this area was deliberately kept clear – perhaps an assembly point before entering the second monumental entranceway into the inner temenos.

The votive assemblage

The inner precinct was characterised by a dense concentration of objects, the majority of which would appear to be ritual deposits. The nature of the finds has already been commented upon in Chapter 5, with the animal bone discussed in Chapter 6. Here we will examine their overall character and distribution within the shrine, and discuss the nature of the ritual activity that led to their deposition.

It is very clear that the assemblage of objects from the shrine not only differed from the settlement in terms of quantity, but also in terms of typology, which is presumably reflective of the type of the cult at the site. As already highlighted in Chapter 5, the assemblage, which includes large quantities of personal items (especially jewellery items: brooches and rings) and coins, is quite typical of those found associated with temples and shrines (Smith 2001, 155), with objects representing specific offerings to the deity. In a recent study of votive objects from the Snow's Farm shrine at Haddenham on the fens in Cambridgeshire, the preponderance of jewellery (albeit in a small assemblage) was taken as an indication of a healing aspect to the cult, by comparison with assemblages from Lydney Park and Nettleton Shrub (Evans and Hodder 2006, 368). While this may admittedly be somewhat over-simplistic, a healing aspect to the cult is certainly possible, strengthened by the presence of hairpins and dog bones (see below), both of which have associations with healing cults.

All of the brooches within the shrine were of 1st-century AD form and are therefore likely to have been at least 100 years old prior to deposition. Although these may have been deliberate archaic offerings, similar to deposits made in other temple sites in Britain (ibid., 156), there remains the possibility of an earlier religious focus on site, from which these brooches may have derived (see above).

The rings include a quantity of simple cast flat rings which were probably made and sold at or near the shrine specifically as votive offerings, as has been suggested for similar examples found at Uley (Bayley and Woodward 1993). These rings, together with the coins, may hint at a commercial aspect to the cult (see below).

Some of the objects show signs of deliberate breakage, including a bone pin whose stem was broken and partially split (Cat. no. 293; Fig. 7.5), possibly as part of the ritual. Another example shown in Figure 7.5 depicts a brooch (Cat. no. 184) whose pin has been deliberately detached and wrapped around the bow. The deliberate mutilation of objects in sacred contexts is a widespread phenomenon in Iron Age and Roman Britain, sometimes interpreted as a way of ritually 'sacrificing' the object to make it more appropriate for the deity (Green 1995, 470).

These personal and monetary offerings may either be in the anticipation of divine aid (nuncupatio) or more likely in fulfilment of the vow (solutio), both of which required specific rituals (Derks 1995). The two styli and three seal box lids may well have been connected with the *nuncupatio* ritual, as has been suggested for temple sites in north-east Gaul (ibid., 121). Further evidence for the nuncupatio ritual may be seen with the rolled lead sheets. At first thought to be curse tablets (appeals to a deity to punish perpetrators of a crime until reparation is made) such as those found in quantity at Bath (Tomlin 1988) and Uley (Woodward and Leach 1993), only one sheet was found to contain text, although this was not identifiable. However, blank lead sheets have been found in quantity at Uley and they may have served as 'verbal curses', perhaps for the non-literate, or else it is also possible that such sheets were in fact inscribed with ink which has since disappeared (Tomlin, pers. comm.).

The more specific 'votive' objects found in the shrine may also have been offerings, although they could have been priestly paraphernalia (eg the cult spearhead) or temple decoration (eg votive leaves). More unusual within religious contexts (especially in the absence of an obvious shrine building) are the large numbers of iron nails (see Scott, Chapter 5), which could conceivably have been part of simple wooden structures within the inner precinct, to which offerings would have been attached. The large number of hobnails would have been well suited for making such attachments and this might explain both their presence and similar distribution (see Fig. 7.7a). Alternatively, the hobnails may represent ritual offerings of actual shoes, as these personal objects are thought to preserve the imprint of the soul, and their deposition in ritual contexts was an established practice throughout the prehistoric and Roman period across Europe (van-Driel Murray 1999, 135).

In addition to the metal and bone objects from the shrine, there are other classes of material that emphasis its special nature. The large pottery assemblage included a high proportion of samian ware and several unusual vessels including a glazed sherd, imported Moselle ware, a lamp

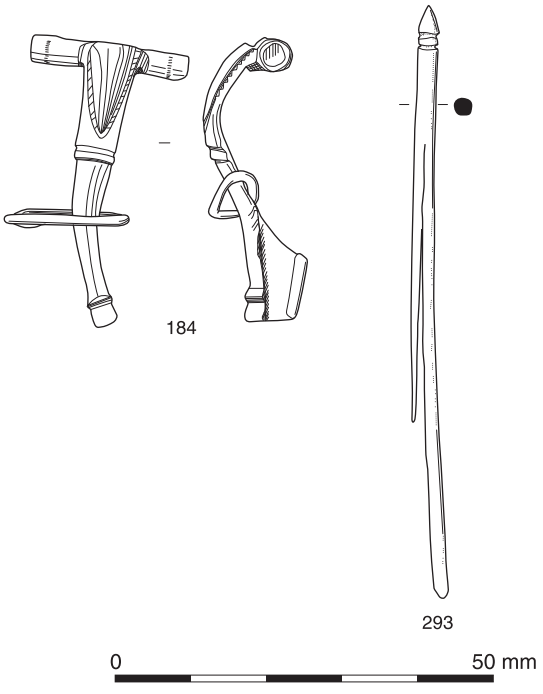


Fig. 7.5 Examples of deliberately damaged objects from the shrine

chimney and a relatively high number of colour-coated beakers (see Timby, Chapter 5). This assemblage was certainly different from that of the main settlement, and may have been used in temple rituals, with the fine wares being part of the accoutrements of ritual feasting and drinking. It has been suggested that a greater emphasis on drinking vessels (flagons/beakers/cups) as opposed to 'eating' vessels (dishes and bowls) within shrine assemblages is indicative of a higher degree of Roman influence (including urban temples), with ceremonies focused upon acts of presentation rather than consumption (Evans and Hodder 2006, 407). Interestingly, the only good quality glass drinking vessel from the site also came from the shrine (see Cool, Chapter 5).

Almost 4400 animal bones were recovered from the shrine interior, nearly all of which are likely to have derived from ritual sacrifice and probable feasting (see Strid, Chapter 6). Unlike the animal bone from some other rural temples such as Uley and Harlow, there was no great discrepancy between religious and secular assemblages, but this might have been because these other temples were located in areas removed from contemporary habitation, whereas the Higham Ferrers shrine was part of a larger settlement site. Nevertheless, it is clear that there was some selectivity within the shrine as large mammals, notably cattle and horse, were less common, with sheep and pig being the preferred sacrificial animals. The age and limb selection of these species indicate that there was a preference for prime cuts of meat. These cuts may have been brought into the shrine as specific food offerings, or else were the remains of sacrificed animals subsequently used in ritual feasts (with the remainder of the animal being removed). Other animals which may have been sacrificed include dog, domestic fowl, wild boar and a range of different wild birds. As pointed out in Chapter 6, many of the birds had special associations with particular deities, but they do not occur in enough quantity to be able to assign the name of any god or goddess to this shrine.

Overall, there would seem little within the votive assemblage as a whole to determine the exact nature of the cult, and the site may have been dedicated to a local deity of place (local spirit) or of the river itself, perhaps conflated with a Roman god. The possibility of healing and commercial aspects to the cult has been commented upon above, with the latter being particularly appropriate given its location within a settlement on a road junction. The most common conflated Roman deities in Britain are Mars (with a strong healing element) and Mercury (commerce), and although such associations here remain entirely hypothetical, they are certainly not out of the question.

In terms of the distribution of finds within the inner precinct, it was apparent from a fairly early stage of excavation that distinct patterns were emerging. Most of the finds came from the lower parts of a thin layer of silty soil which spread across much of the interior, suggesting that the finds lay upon the Roman ground surface. Because of this, it may be expected that the finds recovered were only a fraction of the original number, and that post-depositional movement was a significant factor. However, the silty soil layer, which was a post-occupation deposit, seems to have remained fairly undisturbed, thus preserving the final location of the finds *in situ*, and presenting a reasonably accurate picture of the distribution pattern across the shrine interior. The only exception is an area (*c* 8.5 x 5.5 m) of recent truncation in the south-west part of the precinct to the left of the shrine entrance, where some objects may have been removed, thus distorting the pattern (Fig. 7.4). However, there does appear to be a genuine discrepancy between the concentration of finds on the eastern side of the shrine, and their relative paucity on the open western side. This is particularly striking in the far south-western corner of the precinct, where the preserved silty soil produced no finds at all (Fig. 7.6).

The concentration of finds in the eastern side of the precinct, as displayed in Figure 7.6, indicates the presence of a specific 'offering zone', where it was

Fig. 7.6 Distribution of all finds on the western side of the road

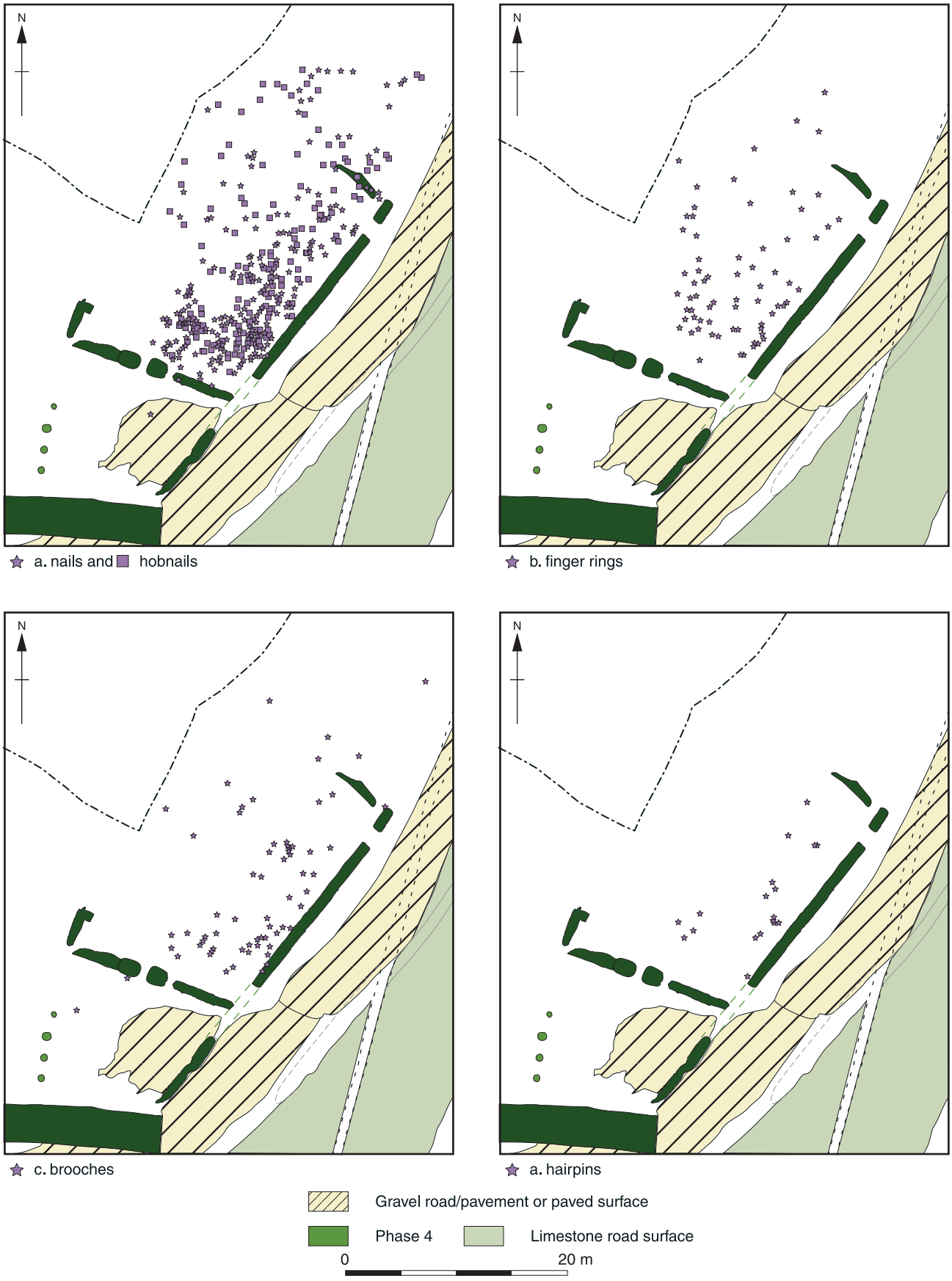


Fig. 7.7 Distribution within shrine of a) nails and hobnails b) finger rings c) brooches d) hairpins

appropriate for votive objects to be displayed. Such zones are often found in temple sites where excavation recording has been meticulous enough, with the most prominent places for display/deposition being within the temple cella around the cult image and along the boundaries of the sanctuary (Smith 2001, 154-5). While there is obviously no temple structure in this instance, the Higham Ferrers finds do clearly concentrate in the south-eastern area of the precinct, and in particular around an area *c* 3 x 2.5 m which is virtually free of any finds. No evidence for any feature was found in this space, though it must represent the site of a cult focus of some kind, perhaps an altar or image/statue that required no foundation. The eastern boundary wall was also a focus for artefact deposition, with objects being perhaps attached to the wall itself. Certainly rubble from the wall lay above many of the finds along its length.

As with most Roman temples where distribution analysis has been conducted, there was no clear evidence for segregation of different votive types, although there were some differences in their distribution (Fig. 7.7). Finger rings (Fig. 7.7b) for example have a more widespread distribution than brooches (Fig. 7.7c) and hairpins (Fig. 7.7d), which are more restricted to the southern and eastern areas. However, much of this patterning may be due to chronological factors, with brooches for example being mostly of early date (see above) and possibly deposited before many of the finger rings. All the votive leaf fragments came from the general mass of finds around the cult focus, while the ceremonial spearhead was found in the far north-east of the shrine, probably because it was not a votive offering.

As far as use of space within the inner precinct is concerned, it seems that the vast majority of the objects were displayed/deposited in the eastern half (and it is probable that the original number of objects was far greater), and therefore it is unlikely that this area was also used for gatherings of large crowds and for feasting. These activities may have been confined to the western side overlooking the river, or even have been located in the outer precinct, with access to the inner precinct being more restricted. In this respect the inner precinct may have effectively acted as a temple building, in housing the cult focus and displaying the votive gifts, while the main public ceremonial activity took place outside.

Association with the settlement

The question remains as to how this whole shrine complex was integrated with the rest of the settlement. Its establishment (not withstanding the uncertain date of the monumental outer entrance) at the same time as the complete reorganisation of the settlement (or at least the northern part of it) implies intimate links between the two, and if the creation of the roadside pavement and plot divisions were part of some municipal activity, then conceivably the shrine was too. It would have been a considerable undertaking, although despite the monumentality of the entranceways the shrine itself need not have been of any great architectural sophistication. The maintenance of the site was presumably borne by the inhabitants of the settlement, probably supplemented by donations to the shrine by external visitors, though this activity seems to have ceased by the start of the 4th century. There is some evidence for limited use after this date, but it is likely that much of the shrine became derelict and overgrown, with the stone probably being re-used elsewhere. However, that fact that the deposits in the shrine interior appear to have been relatively undisturbed may suggest that there remained a 'taboo' on entering this area for some time.

Other ritual within the settlement

Despite the strict division between the shrine complex and the settlement, there is also evidence for ritual activity in the latter area, in the form of structured deposits and votive items. The integration of religion within everyday life was well-established, both within Iron Age and Roman traditions. Structured pit deposits have been studied extensively in Iron Age contexts (eg Hill 1995), while Scott (1991) has argued that the persistence of the practice of such deposition into the Roman period implies a continuity of underlying belief systems.

Table 7.2 Potential ritual deposits within the settlement

Feature	*Context*	*Interpretation*
Pit 11482	Within building 11340	Pit containing 'watering can' ceramic vessel buried under a roughly stacked group of limestone slabs, partly sealed by a large slab at floor level.
Pit 11576	Within building 11340	Stone filled pit with broken up oven plate.
Well 8278	Area G	Backfill of well containing pottery, a leather shoe, a fragment of a limestone colonnette and five human bones
Pit 126 98	Within building 10850	Pit tightly packed with 3 kg of 3rd-century pottery
Pit 12826	Adjacent to ditch 12310	Stone-lined pit packed with animal bone, 18.5 kg of early 3rd-century pottery, vessel glass and a bone pin
Ditch 12880	Enclosure around building 10920	Concentration of pottery and animal bone in deliberate backfill - a closure deposit?

The instances of possible ritual deposition at Higham Ferrers have been summarised in Table 7.2, although this does not include the instances of pottery vessels sunk into the ground as these may have had a more utilitarian function. In addition, two votive leaves and a model votive axe were recovered from settlement contexts, hinting at the occurrence of private domestic shrines within households, even if the objects themselves had been taken from the shrine complex.

A number of other structures revealed during the excavations could possibly be interpreted as shrines, although the evidence is far from conclusive. In Area G to the north of the main settlement, the single rectangular masonry building 8019 stands out as unusual in many respects and has been tentatively interpreted as a temple, dating to the later Roman period. It was located *c* 120 m beyond the northern-most building in the settlement and does not appear to have been domestic in nature, its only internal feature comprising an unusual clay-lined pit filled with burnt stone, ceramic building material, pottery and animal bone. Limestone colonnette fragments were recovered from a nearby well, and together with the ceramic roof tile (if both came from this structure) point to a building of some architectural pretension, probably precluding an agricultural or industrial function. Nevertheless the modest finds assemblage from this area as a whole (to the east of the road at least) is very different from the southern shrine and so a religious interpretation must remain inconclusive.

Finally, the large number of small finds recovered from the area to the north of main shrine should be remarked upon (Fig. 7.6). The northern shrine wall does not seem to have acted as a barrier to the deposition of objects and so it must remain possible that the whole western side of the road in this area was sacred to some degree, possibly with small roadside shrines set up. One such shrine could be the truncated foundations of a structure (12456), *c* 35 m north of the main complex, as this represents the only other known structural element on this side of the road.

THE SETTLEMENT IN ITS LOCAL AND REGIONAL CONTEXT

The Roman settlement at Higham Ferrers lay within a densely populated river valley, connected by roads to a string of villas, farms and other nucleated sites between the small towns of Irchester and Titchmarsh (Fig. 7.8; see below). The wider region was also well settled during the Roman period, although there were no major urban centres, with Leicester being over 50 km to the north-west and Verulamium over 60 km to the SSE. The town of Water Newton (Durobrivae) 32 km to the north-east was also clearly of considerable wealth and importance, being regarded as one of the great industrial centres of Roman Britain, in terms of associated pottery industries that were in large-scale production from the late 2nd century (Fincham 2004). The town was surrounded by many villas – presumably the residences of those living off the industrial wealth – and there are suggestions that it may have actually been a civitas capital (Burnham and Wacher 1990, 90).

This part of the East Midlands has seen a number of archaeological syntheses in recent years (Taylor 2001; Taylor and Flitcroft 2004; Parry 2006; Taylor 2006), which is testament to the wealth of evidence for Roman settlement, landscape features, agriculture and industry. Nevertheless, there is still an acknowledged admission that only a small proportion of the archaeological remains has been recorded to any significant degree (let alone publicly disseminated), with the corollary that much of the relationship between settlement and landscape remains poorly understood (Taylor 2006, 143, 159).

The region in the Roman period is generally characterised by intensively occupied rural landscapes (Taylor and Flitcroft 2004, 63), with much apparent continuity from the Iron Age in terms of basic settlement location and agricultural economy. However, there is evidence for some settlement dislocation during the later Iron Age or early post-conquest period in the middle Nene Valley area, for example at Wollaston and Raunds (ibid., 73), while more gradual reorganisation and change was certainly noted in the 2nd and 3rd centuries (Parry 2006, 72).

Settlement form and distribution

As noted above, Higham Ferrers lies between the small towns/major settlements of Irchester and Titchmarsh, with the former lying just 4 km along the Nene Valley to the south-west. While only limited excavation has occurred within and around Irchester, it clearly had later Iron Age origins and was a flourishing settlement by the end of the 1st century AD (Burnham and Wacher 1990, 145). However, it was probably not recognisable as a town until the construction of earthwork defences in the later 2nd century (ibid.; for the date see Woodfield 1995, 133-5), around the same time as the settlement re-organisation at Higham Ferrers. The masonry defensive walls may perhaps be dated to the late 3rd or 4th century but could have been contemporary with the earthwork (ibid.). The overall development of Irchester is less than well known, as is the case with other possible small towns/large settlements in the local area such as Titchmarsh, Kettering and Duston. Although excavation has been minimal, there was clearly an important settlement at Titchmarsh, located over an extensive area at the junction of major road systems and occupied throughout the Roman period (Curteis *et al.* 1998-9; Fig. 7.8). The presence of a cemetery, masonry buildings, tesserae, painted wall plaster, a stone capital and a rich artefact assemblage attests to the significance of the site (including

a probable religious element – see below), although its classification as a small town must remain somewhat uncertain until further investigation.

At Ashton, between Titchmarsh and Water Newton, an extensive roadside settlement and cemetery was located, with an emphasis on ironworking (Burnham and Wacher 1990, 279). In some ways the development mirrored that of Higham Ferrers, with the earlier settlement layout remodelled by the later 2nd century in the form of well-defined plots with strip buildings and wells fronting onto a main road (ibid.). In contrast with Higham Ferrers, however, the settlement continued until at least the early 5th century and the population included a sizeable Christian element (see below).

Such urban or 'semi-urban' places as those mentioned above probably acted as local commercial, industrial, administrative and possibly even religious centres (see below), with the vast majority of the population living in smaller rural farms and settlements.

The most extensive area of detailed archaeological survey in the region lies immediately north of Higham Ferrers, studied in the Raunds Area Project, which not only includes the Nene Valley but also the clay uplands to the east (Fig. 7.8-9; Parry 2006). A range of Roman settlement forms has been noted within this area, including villas, farms and groups of farms, with all the four villas and most of the larger nucleated sites restricted to the valley. These settlements are largely characterised by groups of enclosures bounded by ditches and/or walls, some of which contained buildings (ibid., 74). One of the few sites to have been comprehensively excavated is Stanwick, 4.5 km north of Higham Ferrers, which had enclosures and stone buildings spread over 11 ha. and field boundaries over 28 ha. (Neal 1989; Crosby and Neal forthcoming; Plate 7.6). Occupation had continued from the Iron Age, with changes to settlement layout from the 1st century AD, so that by the 2nd century the buildings were arranged in rectangular plots with associated tracks. Earlier timber roundhouses were largely replaced with masonry circular buildings, and in some cases with rectangular structures, both timber and masonry. Although rectangular buildings eventually became more common at Stanwick, it seems that—as at Higham Ferrers—both forms co-existed throughout most of the existence of the settlements, probably because of the deeply established traditions of circular building seen in this part of Northamptonshire (Keevill and Booth 1997, 42). However, Taylor (2001, 52) has pointed out that

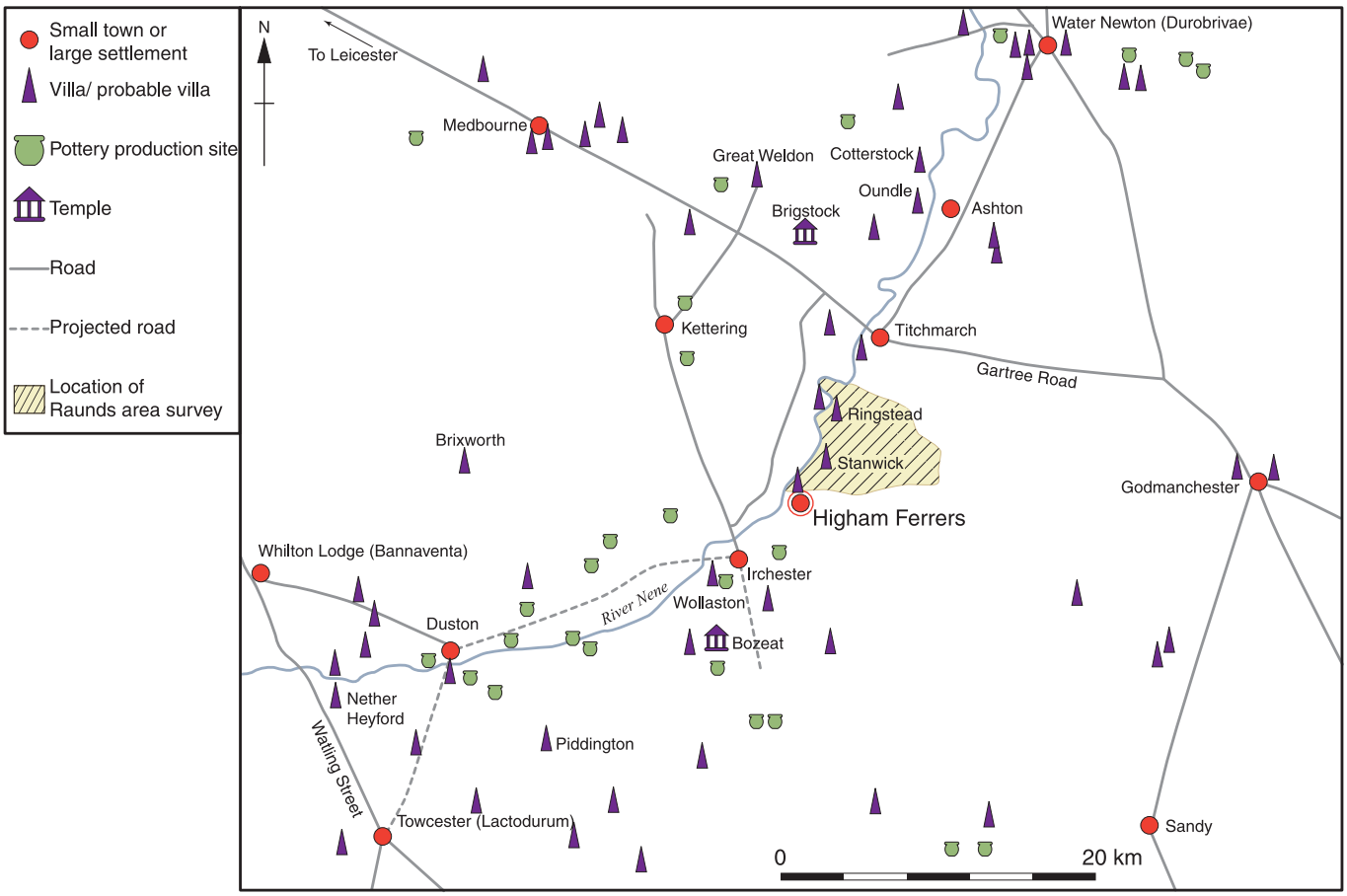


Fig. 7.8 Higham Ferrers in its regional Roman context

within larger settlements, roundhouses tended to be secondary in position and status compared to the main row-type houses.

Despite the great extent of occupation at Stanwick, the picture is that of an agricultural village comprised of a number of individual family units, and it was not until the mid 3rd century that any buildings of recognisably higher status were constructed. One of these was a substantial stone aisled building, which later developed into an ornate winged corridor villa from the mid 4th century. The rise of this building seemed to correspond with a decline in the surrounding building complexes, suggesting a major economic and social shift within the site (see below).

Other major Raunds settlements within the valley included the villas at Redlands Farm (Plate 7.7), South Woodford and Ringstead, along with a largely unexcavated site (including enclosures and masonry strip buildings) at Mallows Cotton (Parry 2006; Fig. 7.2). All of the villas appear to have been established at approximately the same time as Higham Ferrers in the later 1st or 2nd century, while ceramic evidence from Mallows Cotton and the smaller valley sites suggest a similar date. It appears that occupation in the valley intensified during this period, with the Raunds survey indicating major settlements on the east side of the valley every 1.6 km – 1.7 km, possibly with a similar pattern on the western side (eg at Crow Hill; ibid., 76). This concentration along a prime communication route (see below) is probably due in part to increased social and economic integration with the newly established/expanded larger settlements at Irchester, Titchmarsh and beyond.

The Raunds Area Project has also shown that settlement on the Boulder Clay to the east was more intense than previously thought although, with the exception of Laundes in the far east, these sites seem to have been more in the nature of small dispersed farmsteads (ibid.). They were generally located on prominent positions along the watershed overlooking tributary valleys, and look to have been arranged upon a series of trackways, some of which probably linked to the main valley communication routes. A few of these plateau settlements had origins in the Iron Age, while others seem to have been established in the early Roman period.

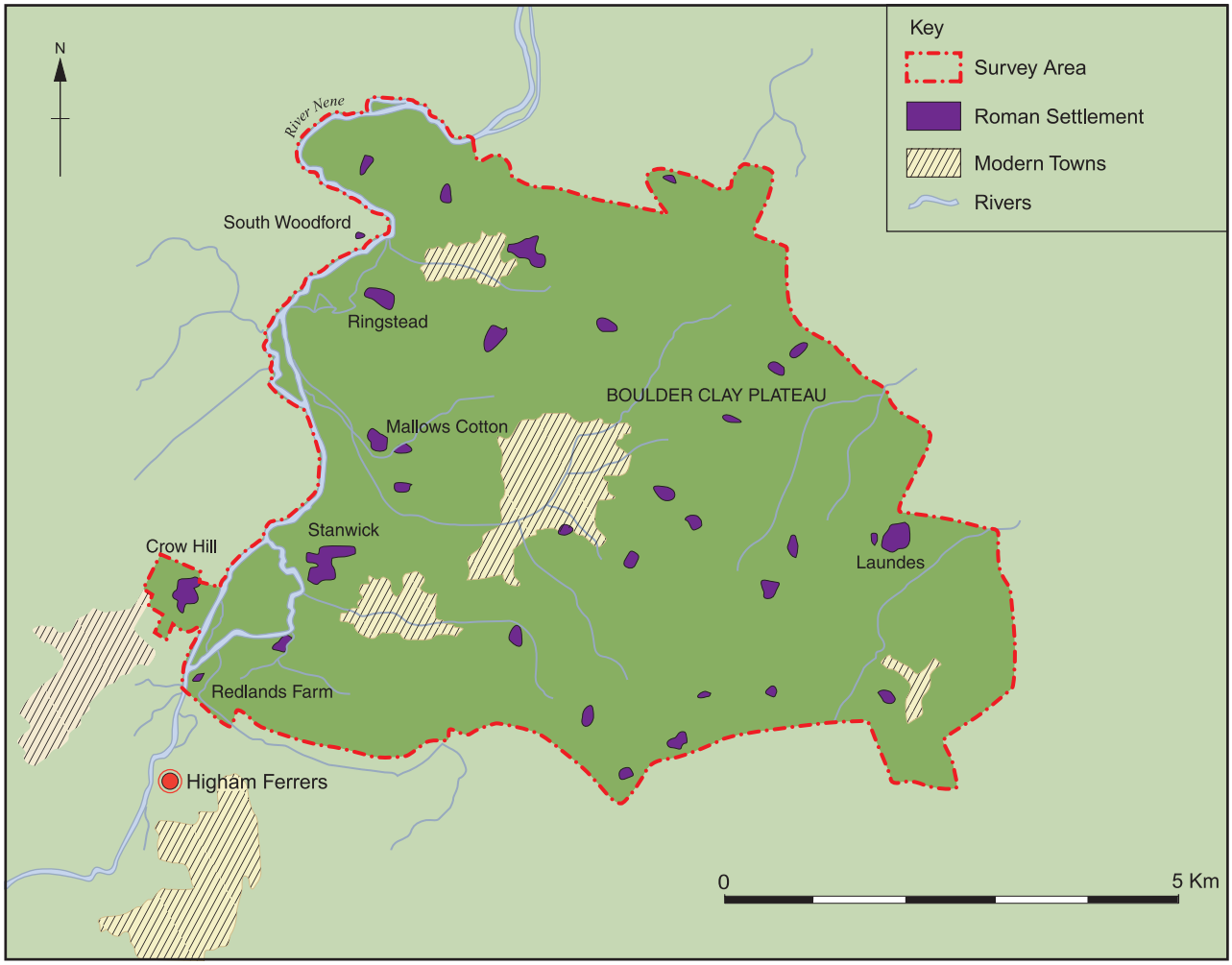


Fig. 7.9 The Raunds Area Survey

Plate 7.6 View of paving within shrine 'outer precinct' looking east towards the settlement

However, there appears to have been a gradual decline in settlement numbers during the 2nd and 3rd centuries (ibid., 80), at around the same time as intensification of occupation in the valley, and it is hard to see how these could not be connected in some way. Did this represent some kind of collective consolidation of holdings, with families relocating to larger settlements (like Higham Ferrers) to take advantage of wider economic (and social?) networks? The situation is undoubtedly not this simple and could reflect a multitude of factors, but similar trends of settlement abandonment and nucleation are seen elsewhere in the region at sites such as at Brigstock (Foster 1988) and Medbourne (Liddle 1995, 87), while in wider terms the dynamic nature of the settlement pattern has been emphasised (Taylor 2001, 58-9; 2007, 112-3).

Agriculture, power and control of resources

The primary economic resource in the region around Higham Ferrers would undoubtedly have been agricultural land. Analysis of pottery scatters (from manuring) within the Raunds Area Project indicates how intensively exploited this land was, with arable obviously being a major component of the regime (Parry 2006, 82). All the valley and clayland settlements were surrounded by pottery scatters, with certain 'blank' areas probably indicating zones of permanent pasture or woodland, and hay meadows being cultivated along the banks of the River Nene. To the south of Irchester at Wollaston there is also evidence for significance areas of viticulture within the Nene Valley (Meadows and Brown 2000), which may have been a considerable economic resource for the local land owners. All of this suggests a very carefully managed agricultural framework in the region, with little or no 'space' between land of different settlements. However, the Raunds Area Project did note some decline in the use of arable land in the clay plateau from the later 2nd century onwards, which is probably linked to the settlement decline in this area (Parry 2006, 83). It is perhaps unlikely that land was actually abandoned from this time, but greater emphasis may have started to be placed on less intensive pastoral activity.

Whilst we may have some idea of the types of agricultural activity, we have far less knowledge on matters such as land ownership, estate boundaries, and economic hierarchy of settlements. The villas within the valley were surely the centres of agricultural estates, but the boundaries of these estates remain unknown. The apparent gap in settlement along the upper valley sides noted in the Raunds Survey may indicate that the larger valley sites' agricultural territories extended this far eastwards (Parry 2006, 76), while control of hay meadows in the valley floor may have given them significant economic advantages. Unfortunately the relation-

Plate 7.7 Overall view of excavations at Stanwick, with River Nene beyond (© English Heritage)

Plate 7.8 Excavations of the villa at Redlands Farm with River Nene beyond (© English Heritage)

ship between villa and non-villa valley settlements is very difficult to discern, so that we do not know for example whether the occupants of Redlands Farm villa (Plate 7.8) had any control over the nearby Higham Ferrers settlement (eg in relation to the provision of workers for the villa estate), or if they were both totally independent. The regular spacing of major sites along the valley may suggest the latter.

At Stanwick the emergence of a villa in the later Roman period is seen as possibly representing the rise in importance of one particular family among others within the agricultural settlement, but other possibilities are acknowledged (Parry 2006, 84). The scale of investment in the 4th-century villa certainly indicates substantial wealth, although whether this derived from increasingly monopolistic control of agricultural resources or from other sources remain unknown. Other, even larger, villas in the Nene Valley include Cotterstock (Upex 2001) to the north-east and Piddington (Friendship-Taylor 1999) to the south-west (Fig. 7.8). The villa at Cotterstock has had only very limited excavation but may have been a large courtyard villa comparable others further south in Britain such as Bignor in Sussex and North Leigh in Oxfordshire. It is suggested that the wealth of this villa derived from agricultural land and ironworking, with a possible link to the nearby industrial settlement at Ashton (Upex 2001, 89).

Some of the Nene Valley villas such as Ringstead (Jackson and Parry 2006) and Stanwick lay in peripheral locations within larger settlements, although the relationship between villa and settlement is not always clear (see discussion on Stanwick above). The settlements may have acted as market centres, possibly controlled by the villa owners, and even as foci of tax collection, which may account for the very high number of coins from Stanwick (see King, Chapter 5). Roadside settlements like Higham Ferrers may also have been local market centres, although the major markets would undoubtedly have been within the towns such as Irchester, where goods from further afield (eg pottery, quernstones etc) may have been traded (Burnham and Wacher 1990, 147).

Communications

There are two major roads in the region around Higham Ferrers – Watling Street to the south-west and Gartree Road to the north-east (Fig. 7.8). Neither of these follows the line of the Nene Valley yet it is clear that there was at least one road that did traverse the upper western side of the valley, seemingly linking with Gartree Road just north-west of Titchmarsh. The string of villas and nucleated settlements along the lower flank of the eastern valley side suggests that another road lay on this line, possibly that which was picked up by geophysical survey running ENE away from Irchester Roman town (Taylor 2000, 9). This was presumably the main north-south road that was the focus of settlement at Higham Ferrers, also picked up at Redlands Farm and Stanwick (Parry 2006, 81). Although it was not traced further north than this, it is highly likely to have continued through to Mallows Cotton, the villa at Ringstead and the town at Titchmarsh beyond.

Permanent and well maintained communication routes must have been of paramount importance for the economic welfare of the valley's main settlements, and there is some evidence of major engineering to help effect this. Part of a metalled road was revealed raised upon an earthwork across the Nene floodplain leading towards Irchester (Keevill and Williams 1995), while evidence for a timber bridge across the Nene was found at Aldwincle, just north of Titchmarsh (Jackson and Ambrose 1976). As to the actual use of the river itself for transport, there is no evidence, and it remains uncertain whether it was actually navigable as far as Irchester (Parry 2006, 81).

Religion

Excavations at Higham Ferrers were important not only in terms of investigating the social and economic development of a roadside settlement, but also in terms of the integration of religion into the lives of the inhabitants, both within the domestic sphere and of course with the monumental roadside shrine. There are very small numbers of excavated temples or shrines within the region, and one of these, at Bozeat south of Irchester, is not altogether convincing in its interpretation (Hall and Nickerson 1970). One of the few more convincing examples within a 20 km radius of Higham Ferrers is at Brigstock, north-west of Titchmarsh (Greenfield 1963). Two buildings possibly formed part of a larger religious complex *c* 2 km north of Gartree Road; a large circular structure contained most of the votive finds and was probably the main shrine (Smith 2001, 76). The votive assemblage at Brigstock was similar to that from the shrine at Higham Ferrers, being dominated by coins and personal items, with a smaller number of specifically ritual items, including pole tips which may be akin to the ceremonial spear head. The site was clearly a public shrine, like Higham Ferrers, but there is little evidence for its overall structure or context, since the nearest excavated settlement is the villa at Great Weldon, *c* 4 km to the north-west (Smith *et al.* 1990).

Much nearer to Higham Ferrers, a number of potential shrines have been excavated within the Stanwick settlement (Neal 1989; Crosby and Neal forthcoming). A Bronze Age barrow in the north-east of the site appears to have been the focus for ritual deposition within the Roman period, when a gravel path was constructed around it. Two other possible shrines comprising small rectangular buildings (one with an apse) lay within an enclosure at the junction of two trackways, perhaps at the

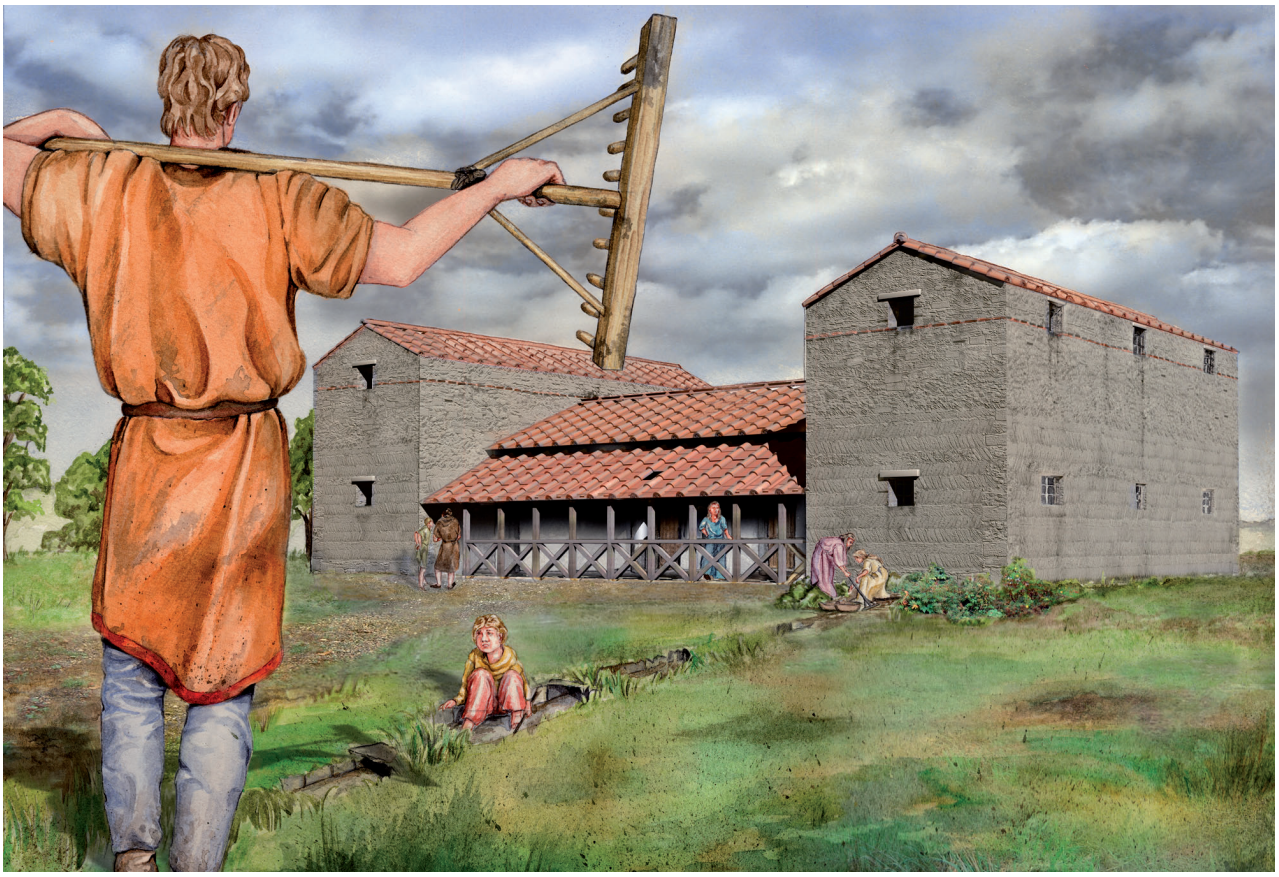


Plate 7.9 Artist's reconstruction of the villa at Redlands Farm

focal point of the site. A number of pieces of highly accomplished religious sculpture, including one of the goddess Minerva, were re-used in later features at Stanwick, all of which point to the presence of a shrine of some importance at the site.

It is likely that comprehensive excavation within urban contexts and smaller roadside settlements like Higham Ferrers and Stanwick will produce a great deal more information on Roman religious practices in this region. At least one Romano-Celtic temple is known within Irchester (though not properly excavated; Burnham and Wacher 1990, 146), while Titchmarsh is thought to have contained a significant religious element, based primarily upon the rich finds assemblage (Curteis *et al.* 1998-9, 175). The relationship and hierarchy (if one existed) between the shrine at Higham Ferrers and others in the region remain unknown. In a recent study of the shrine at Haddenham, Cambridgeshire, it was suggested that it may have been 'administered' from a larger sanctuary within the fens, with priests travelling out to the minor shrines for seasonal festivals (Evans and Hodder 2006, 410). Whilst a similar situation could have occurred in the Nene Valley, not enough is yet known about most of the sacred sites in this area.

There is considerable evidence for a Christian presence within the Nene Valley during the 4th century, with for example two lead tanks (one with a Chi-Rho symbol) being recovered from a well at Ashton (Guy 1977). A probable managed Christian cemetery of over 170 E-W oriented burials was also excavated just south-east of this town pointing to a sizeable population (Frere 1984, 300-1; Petts 2003, 144). Perhaps the most famous group of Christian objects to be found in Britain is the hoard discovered in a ploughed field at Water Newton (Durobrivae), comprising nine vessels, a number of silver votive plaques and a gold disc, many bearing Chi-Rho symbols and early Christian inscriptions (Painter 1977; 1999).

It is most likely that an early Christian population co-existed with pagan worshippers, although this not to say that pagan and Christian interaction was always harmonious. The Brigstock shrines continued in use at least until the end of the 4th century, while a significant number of very late Roman boundary burials (including decapitation and shoe burials) existed at Ashton, indicating that pagan and Christian traditions were maintained alongside each other.

The apparent abandonment of the shrine at Higham Ferrers by the start of the 4th century is too early to suggest any association with a Christian presence, and if the interpretation of the building to the north of the site as a possible temple is accepted, pagan worship may have continued there until the overall decline of the settlement.

The end of Roman occupation in the region

It has already been observed that settlement on the Boulder Clay, at least, had declined significantly by the late Roman period, but the situation within the Nene Valley was somewhat different. All the Raunds Area Project valley settlements on the east side of the valley had evidence for thriving late Roman occupation, although interestingly at those two sites on the west bank (South Woodford and Crow Hill) this was not the case. As discussed above, occupation at Higham Ferrers appears to have declined drastically from the middle of the 4th century, while the villas at Ringstead, Stanwick and Redlands Farm along with the settlement at Mallows Cotton all appear to have survived until at least the end of the century. Indeed the main winged corridor villa at Stanwick was not even established until the mid 4th century, while four stone buildings at Mallows Cotton were dated to the late 4th century (Parry 2006, 182).

It is most likely that the settlements in the Nene Valley and surrounding areas were affected by the great social, political and economic changes of the late empire, but unfortunately the lack of available excavated evidence precludes any detailed analysis at this stage. The exact fate of settlements whose ceramic and coin evidence continue to the end of the Roman period is also notoriously difficult to determine. It is unlikely that with the breakdown of centralised provincial authority in the early 5th century, the grand villas could have been maintained for very long, but what of the general population? Was there a general decline and abandonment of settlement at this time? The distribution of early-mid Saxon pottery in the Raunds area was distinctly different from the late Roman pattern, with the Boulder Clay area being particularly sparsely populated, probably indicating much woodland regeneration (Parry 2006, 94). Instead, occupation seems concentrated in the Nene Valley, although in most cases this did not exactly correspond with areas of late Roman settlement.

Early Saxon occupation is attested at Crow Hill, but this probably just implies the reuse of existing earthworks rather than continuity of occupation, especially as there is little evidence for late Roman activity at this site (Parry 2006, 94, 150). At Redlands Farm, the final abandonment of the villa, probably in the 5th century, was attributed to rising water levels and flooding (ibid., 153), though three possible early Saxon sunken-featured buildings were located *c* 80 m to the south-east, and may have been contemporary. There is some evidence for continuity of occupation at Stanwick, with late modifications to the villa (an oven and postholes cut through mosaic floor), a small group of 5th- to 6th-century burials along the outer courtyard wall and two buildings possibly of similar date beyond the villa area (Crosby and Neal forthcoming). Judging from the principal concentration of early-middle Saxon pottery, the main area of occupation at this time lay to the north-east of the excavated Roman settlement (Parry 2006, 171), but a light scatter of pottery did indicate limited occupation (and probable stone robbing) of the Roman buildings.

From these examples, and indeed Higham Ferrers itself, there is certainly evidence for a degree of settlement dislocation at some point in the 5th century, although there does not appear to have been wholesale abandonment of the Nene Valley, and in a wider perspective the Anglo-Saxon settlement of the region may well have initially taken place within a late Roman framework. Continuity of occupation into the post-Roman period has been demonstrated in villas at Brixworth (Woods 1972), Nether Heyford (Brown and Foard 2004, 78), and possibly at Oundle near Ashton (Maull and Masters 2005) and Wootton Fields near Duston (Chapman *et al.* 2005). Slightly further afield at Orton Hall Farm in the lower Nene Valley, a large farmstead with a number of aisled buildings was seemingly taken over in working condition by Anglo-Saxons in the 5th century (Mackreth 1996). In addition, early Saxon cemeteries have been discovered outside the towns/major settlements of Duston and Kettering (Kennett 1988), suggesting some continuity of occupation at or near these centres.

The transition from late Roman to Saxon in this region was undoubtedly complex and piecemeal, and is still not well understood. However, with further excavation and analysis of sites like Higham Ferrers that span this transition, we may gain a greater insight into this pivotal period in British history.

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