EAA 99

Excavations at Melford Meadows, Brettenham, 1994: Romano-British and Early Saxon Occupations

East Anglian Archaeology

Oxford Archaeological Unit, 2002

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by Andrew Mudd

with contributions from
Leigh Allen, Alistair Barclay,
Paul Booth, Angela Boyle,
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Fiona Roe, Lindsay Rollo, Chris Salter
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Cover illustration
Cemetery during excavation
Photo: Oxford Archaeological Unit

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Summary

In the spring of 1994 an archaeological excavation was undertaken by the Oxford Archaeological Unit on one hectare of land at Melford Meadows just outside Thetford (Fig. 1). The excavation examined part of a Romano-British and early Saxon settlement occupying a low sandy ridge on the left bank of the River Thet.

The Romano-British element of the site is interpreted as low status buildings and associated enclosures possibly belonging to a farmstead. The settlement appears to have lain outside, and to the north of, the excavated area. The fact that the excavation only investigated a part of the larger site means that statements about size and status must be made with due caution. Occupation probably started in the late 1st century but appears to have been light until the later 3rd and 4th centuries and to have ceased at the end of the 4th century. A small peripheral cemetery showed evidence of a range of burial practices characteristic of the late Roman period, including multiple burials and decapitations. The cemetery may be complete.

The early Saxon occupation started in the 5th century, and appears to have ended in the late 6th or 7th century. In common with many early Saxon settlements, its form and extent remain unclear. The excavation only investigated a part of the site, but the main area of occupation appears to have been concentrated to the south of the Roman site and probably extended beyond the excavation area. A scatter of sunken-featured buildings (SFBs), pits, hollows and hearths were examined but no post-built structures were identified. Cultural remains were not prolific but loomweights, and perhaps surprisingly, iron smelting

residues, indicate some of the activities practised. The economies of both periods appear to have been based upon mixed farming. In the Roman period charred cereal remains and millstone fragments suggest that crop-processing was important. A significant collection of animal bones associated with the early Saxon occupation indicated a dominance of cattle and it is possible that there was an increased emphasis on pastoralism in the 5th century.

Résumé

Au cours du printemps 1994, Oxford Archaeological Unit a entrepris des fouilles sur un hectare de terres à Melford Meadows, qui se situe juste à l'extérieur de Thetford (Fig. 1). Les fouilles ont porté sur une partie des implantations de la période romano-britannique et de la première période saxonne, qui occupaient une crête sablonneuse de faible hauteur sur la rive gauche de la rivière Thet.

L'analyse de la partie romano-britannique du site tend à montrer qu'il s'agit de bâtiments dénotant un statut social peu élevé, auxquels sont associées des enclos appartenant peut-être à une ferme. L'implantation semble s'être étendue vers l'extérieur et vers le nord de la zone fouillée. Comme les recherches n'ont porté que sur une partie d'un site plus large, il convient de formuler les hypothèses relatives à la taille et au statut social des maisons avec toute la réserve nécessaire. L'occupation a probablement commencé à la fin du premier siècle, mais elle est apparemment restée limitée jusqu'à la fin du troisième siècle et pendant le quatrième siècle. Elle n'a cessé qu'à la fin du quatrième siècle. Un petit cimetière situé à la périphérie a conservé des traces de différentes pratiques funéraires caractéristiques de la période romaine tardive, ce qui inclut de nombreuses sépultures et décapitations. Il est possible que le cimetière soit complet.

L'occupation de la première période saxonne a débuté au cinquième siècle et semble s'être terminée à la fin du sixième ou au septième siècle. Sa forme et son étendue restent obscures, ce qui est le cas de nombreuses implantations de cette période. Les fouilles n'ont porté que sur une partie du site, mais la zone principale de l'occupation s'est apparemment concentrée sur le sud du site romain et s'est probablement étendue au-delà de la partie fouillée. Quelques bâtiments dispersés, au plancher situé en contrebas, ont été identifiés de même que des fosses, des parties creuses et des foyers, mais aucun bâtiment construit par la suite n'a pu être identifié. On a trouvé peu de vestiges culturels en dehors des poids pour métier à tisser et, de façon assez surprenante, de résidus de fer fondu, ce qui indique quelques-unes des activités pratiquées sur le site. L'économie de ces deux périodes reposait apparemment sur la culture et l'élevage. Des restes de céréales carbonisés et des fragments de meules suggèrent que les cultures étaient importantes pendant la période romaine. Un ensemble considérable d'ossements animaux associés à l'occupation de la première période saxonne indique la prédominance du bétail et il est possible que les activités pastorales aient revêtu une grande importance au cinquième siècle.

(Traduction: Didier Don)

Zusammenfassung

Im Frühjahr 1994 unternahm die Oxford Archaeological Unit eine Ausgrabung auf einem Hektar Land bei Melford Meadows direkt außerhalb von Thetford (Abb. 1). Untersucht wurde ein Teilbereich einer romisch-britischen und frühen angelsächsischen Siedlung auf einer niedrigen Sandanhöhe am linken Ufer des Flusses Thet.

Die einfachen Gebäude und zugehörigen Einfriedungen, die möglicherweise zu einem Gehöft gehörten, wurden als römisch-britisches Element der Stätte interpretiert. Der Wohnbereich lag wahrscheinlich außerhalb der Grabungsstelle, und zwar in nördlicher Richtung. Sämtliche Angaben zu Größe und Status sind mit Vorsicht zu behandeln, da die Ausgrabung nur einen Teil einer größeren Stätte berührte. Die Besiedlung begann wahrscheinlich gegen Ende des 1. Jahrhunderts und war bis ins späte 3. und 4. Jahrhundert leicht, bevor sie am Ende des 4. Jahrhunderts offenbar zum Erliegen kam. Ein kleines, an der Peripherie befindliches Gräberfeld enthielt Hinweise auf diverse, für die römische Spätzeit typische Bestattungspraktiken wie Mehrfachbestattungen und Enthauptungen. Das Gräberfeld ist möglicherweise komplett.

Die frühe angelsächsische Besiedlung begann im 5. Jahrhundert und endete anscheinend im späten 6. oder im 7. Jahrhundert. Wie bei vielen Siedlungen der angelsächsischen Frühzeit blieben Form und Ausdehnung unklar. Die Grabung untersuchte zwar nur einen Teil der Gesamtstätte, dennoch lag der Besiedlungskern, der möglicherweise über die Grabungsgrenzen hinausreichte, offenbar südlich der römerzeitlichen Siedlung. Es wurden etliche verstreut gelegene eingetiefte Grubenhäuser sowie Gruben, Vertiefungen und Herdstellen untersucht, jedoch keinerlei Pfostenstrukturen identifiziert. Die Ausbeute an Kulturresten war relativ gering. Webgewichte und vielleicht überraschenderweise Rückstände aus Eisenschmelzprozessen deuten auf einige der praktizierten Aktivitäten hin. Die Basis der wirtschaftlichen Tätigkeit beider Perioden bildeten offenbar Ackerbau und Viehzucht. Aus der römischen Zeit stammende verkohlte Getreidereste und Mühlsteinfragmente legen den Schluss nahe, dass der Getreideverarbeitung große Bedeutung zukam. Eine mit der frühen angelsächsischen Besiedlung in Verbindung gebrachte ansehnliche Tierknochensammlung deutet auf das Vorherrschen von Rindern hin. Möglicherweise nahm der pastorale Charakter im 5. Jahrhundert zu.

(Übersetzung: Gerlinde Krug)

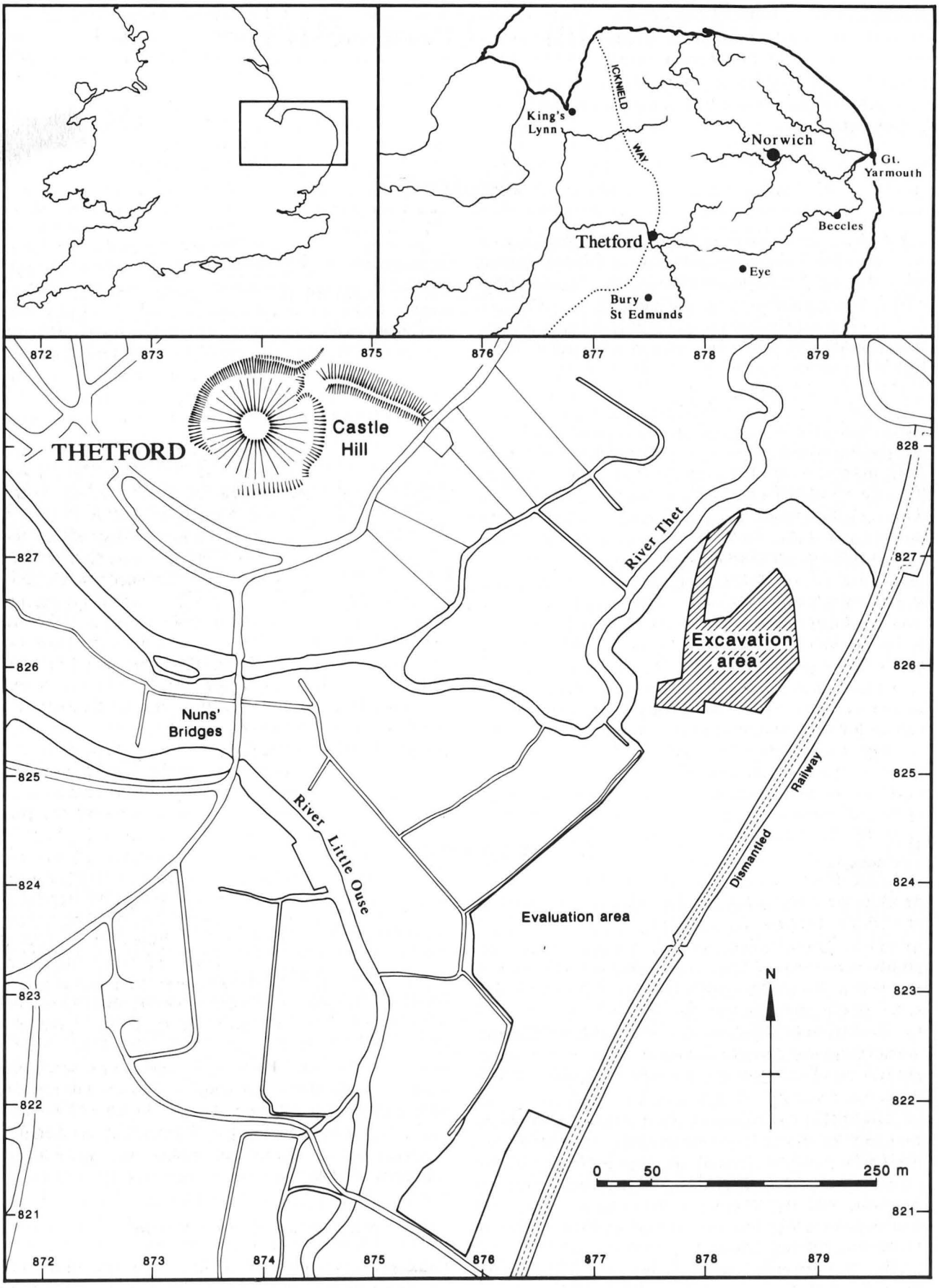


Fig. 1 Location of excavation

Chapter 1. Introduction

I. Introduction

The excavations at Melford Meadows took place within the context of PPG16 as part of a structured programme of developer-funded archaeological investigation. The area of excavation comprised one hectare of site SMR 17269, a site of late Roman occupation known from casual finds of coins, located on the left bank of the River Thet just south of Melford Bridge (NGR TL 878826). This was part of a plot of nearly nine hectares which was subject to an application for residential development submitted to Breckland District Council in 1993 (Application No. 3/93/0059). An archaeological field evaluation was required in advance of determination of the application. The evaluation was undertaken by the Oxford Archaeological Unit (OAU) in September and October 1993 on behalf of Savills (property consultants) acting for the landowner and to a brief set by Norfolk Museums Service. It took the form of a systematic surface collection, including a metal-detector survey, followed by trial trenching (OAU October 1993). The evaluation indicated the presence of the predominantly late Roman occupation at the northern end of the field, with early Saxon material coming mainly from the central area (see below, Chapter 1, V), in the light of which an area excavation was considered appropriate as mitigation.

Originally, an excavation of the entire early Saxon and Roman occupation was considered to be the most suitable archaeological response. However, the expense of this strategy was in danger of compromising the viability of the development and negotiations between Savills, the OAU and Norfolk Museums Service through the winter of 1993/4 resulted in a revised proposal, formulated in a brief by Norfolk Museums Service (final revision February 1994), whereby the two main areas of Roman and early Saxon occupation would be taken out of the development and preserved *in situ*, while an area of about one hectare between these foci of occupation would be 'preserved by record' through excavation. The line of the proposed access road from the north-west would also be excavated. The discovery of a Romano-British cemetery in the south-west corner of the site was unexpected and was the subject of further negotiations which led to further topsoil stripping to expose the complete cemetery, and the excavation of the graves (although additional features exposed were excluded from the specification).

The excavation, and the post-excavation work leading to final publication, were conducted to a detailed project design stipulating the aims and methods of the investigation. The excavation was seen as offering a relatively rare opportunity for examining, albeit on a modest scale, fragments of late Roman and early Saxon settlement and the relationship between the two, with particular reference to the origins of Thetford. The excavation strategy included a metal-detector survey which was carried out prior to and during topsoil stripping. It also stipulated the sampling level for features which was to be 50% by volume of negative features, 10% of linear features, and 100% of structures and specialised features such as ovens. In March 1994 the land was acquired by Abbey New Homes Ltd and the excavations took place over seven weeks in April and May.

After the excavation, a post-excavation assessment and publication proposal, following the guidelines proposed by English Heritage in their recommendations for post-excavation assessment (*Management of Archaeological Projects* 1991; Appendix 4), were prepared for and subsequently approved by Norfolk Museum Services (OAU December 1994). This report completes the work stipulated in the project design. The site archive, research archive and finds are deposited with the Norfolk Museums Service Acc. No. 17269 BRT 93.

II. Geology and topography

The site lies in the Breckland region on a low sandy terrace ridge at 12–13m OD above the River Thet. There was a marked scarp down to the narrow floodplain on the western side while the dismantled LNER Bury and Thetford railway line defined the eastern edge of the field. The land was slightly undulating, a fact which in the area examined by excavation could be attributed to a relatively modern feature which may have been a sand quarry, and a largely infilled Roman waterhole. Deposits within the waterhole were not waterlogged and the water table was not encountered anywhere. That the land had been ploughed in recent times was verified from numerous aerial photographs, although at the time of fieldwork the field had been under pasture.

The superficial geology of the Breckland around Thetford largely comprises Pleistocene deposits of Chalk-sand drift, with sands and gravels on both the river terraces and 'uplands'. Holocene blown sand and peat deposits occur on the terraces and in the valley bottoms respectively (Corbett 1973). It is uncertain whether the sand at Melford Meadows was of Pleistocene or Holocene origin, but there was no evidence of wind-blown sand over archaeological deposits, as had occurred at West Stow which occupied a very similar topographic position (West 1985, 9). The generally dry and sometimes acidic nature of the Breckland soils imposes agricultural limitations on the region. Corbett (1973) estimates that about 50% of the region is covered by soils unsuitable for agriculture (although two-thirds of the Breckland is actually agricultural land). The 'upland' and terrace sands and gravels are the areas least suitable for agriculture, while the slope soils which have developed on the Chalk-sand drift are generally more advantageous. The site therefore appears not to have been located on agriculturally favourable land.

III. Archaeological background

Melford Meadows lies just outside the modern town of Thetford on the south side of the River Thet near to its confluence with the River Little Ouse. Thetford was a town of major importance in the late Saxon period, possessing a mint and defences (Dunmore with Carr 1976; Dallas 1993). Its growth was undoubtedly influenced by its location at the confluence of the Little Ouse and Thet,

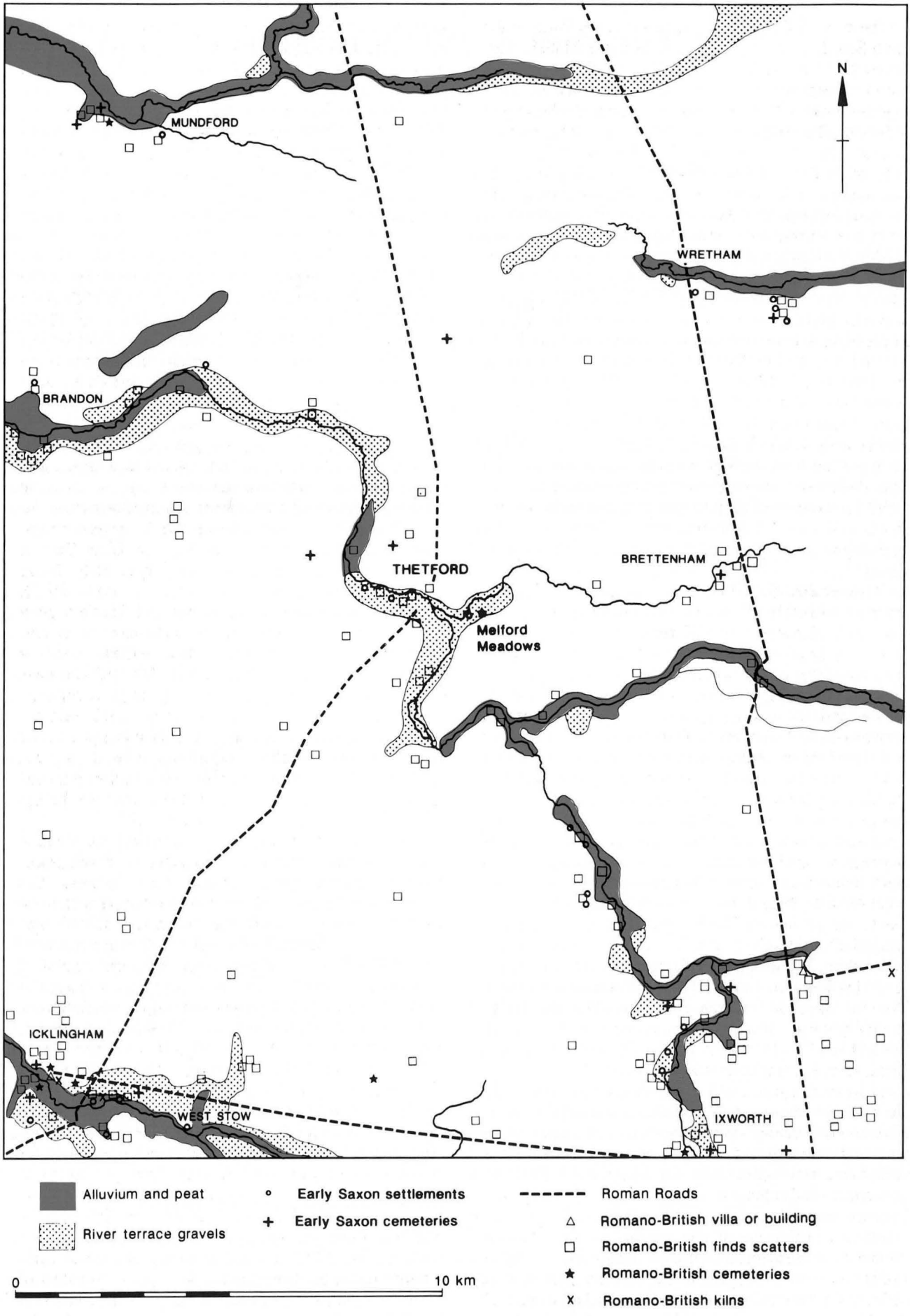


Fig. 2 Romano-British and early Saxon sites in the Thetford area. Information from Norfolk and Suffolk SMRs. Stray finds not included.

and the availability of a water route via the Wash to the North Sea. It is also at the point where the Icknield Way crosses the Thet and Little Ouse (Fig. 1). This land route, important since prehistoric times, follows a narrow chalk ridge between the Fens to the west and boulder clay region to the east. The Icknield Way is thought to have crossed the Little Ouse and Thet at Nuns' Bridges which lies 400m west of Melford Meadows (Fig. 1). However, the importance of this route in the Roman period is uncertain. The general absence of Roman settlement along much of its length has been observed by West (1990, 111), although Gregory had earlier noted settlement close to the line of the Icknield Way on its northern stretches (Gregory 1982, 360–6). There is some suggestion that the Icknield Way originally ran along the Fen edge, the present route being a post-Roman distortion caused by the presence of the Saxon town at Thetford. However, this view is not altogether accepted (Gregory 1982, 354). On the opposite side of the river at Thetford, the motte and bailey castle at Castle Hill was remodelled from an Iron Age fort (Gregory 1992a), while 2.5km to the north, still on the Icknield Way, the important late Iron Age religious centre was sited on the eminence of Gallows Hill (Gregory 1992b). These hint at the importance of this crossing and routeway in the pre-conquest period and would support the idea of a routeway whose importance persisted beyond the Roman period.

Romano-British sites are well-represented in south-west Norfolk and north-west Suffolk, including the Breckland, although most information concerning them comes from surface collections, including metal-detector finds, and it is uncertain what the distribution of these finds means in terms of settlement density and development (Davies and Gregory 1991, 79; fig. 7). It has long been recognised that the Romano-British settlement pattern in East Anglia is unusual for southern England in the rarity of what can clearly be defined as towns. Gregory (1982) has also suggested that there was a lack of substantial villages and wealthy villas, and a preponderance of farmsteads or small agglomerations of farmsteads, but this may reflect a problem in defining the nature and extent of these unenclosed sites. Gurney (1995b) has drawn attention to the large size of some of these unenclosed sites and to the problem of defining a settlement hierarchy. Mildenhall, Icklingham and Ixworth/Pakenham lying in an arc about 15km south of Thetford, are large sprawling sites, Icklingham and Pakenham being classified by Plouviez as small 'towns' (Plouviez 1995). Another relatively large local centre lies 5km to the east at Brettenham. The Methwold-Feltwell-Hockwold group of villas, or villa complexes, lies on the Fen skirtland to the north-west (Gregory 1982, 367–71; Silvester 1991, 91). The nearest of these settlements, that at Weeting, lies about 10km away. The main north–south Roman road, Peddars Way, ran about 5km to the east of Thetford. Roadside settlements grew up at river crossings along this route at Brettenham and at Saham Toney, 20km north of Thetford. Gregory notes the apparent failure of roads to attract substantial local centres and this is suggested as reflecting the lack of an urban-based economy in the region (Gregory 1982). However, this again may reflect problems of defining the role and status of settlements. Nonetheless, it should not be assumed that this state of affairs implies a degree of impoverishment in the region and any understanding of the Romano-British settlement pattern needs to take into account the large numbers of coins and coin and metalwork hoards found, including hoards of late Roman date (Davies and Gregory 1991, 86; Johns and Potter 1983). Hoards and finds such as these are normally to be found in the wealthier areas of late Roman Britain. The late Iron Age and early Roman temple site at Gallows Hill to the north was apparently reused. Its form in the late Roman period is somewhat uncertain but large quantities of late Roman finds from the hilltop include the 'Thetford treasure' and up to three coin hoards (Johns and Potter 1983).

In Thetford itself, Dunmore with Carr (1976, 8) have remarked upon the general absence of Roman occupation but this now needs to be modified in the light of findings on the west side of the town at Brandon Road (SMR 24849) and at St Nicholas Street (SMR 1134) on the northern side of the river. At Brandon Road occupation spanning the early Roman to mid Saxon periods has been indicated. This adds to the work of Knocker and Davison in the Red Castle area not far away (SMR 5756). Here 1st-century Roman occupation was followed by 6th- to 9th-century settlement possibly related to a crossing at Ditchingford. More recently, the excavations at Redcastle Furze (SMR 24822) have shown a similar sequence. An extensive spread of middle Saxon activity covering some 800m or more on the south bank of the Little Ouse is indicated, with perhaps more intermittent early Saxon activity (Gurney (ed.) 1991; Andrews 1995, 26–7). Davison (B.K. 1967) has suggested that Thetford grew from an amalgamation of early Saxon hamlets adjacent to fords across the Little Ouse. This remains a likely possibility, to which the occupation at Melford Meadows adds some credence. However, any early occupation relating to the Nuns' Bridges ford to the south-west has not come to light. According to a manuscript map of *c.*1770 the name 'Melford' (apparently also at one time 'Millford') derives from an earlier watermill which used to be located a short distance upstream from the bridge (Bodleian Library, MS Gough Norfolk 45).

While the overall distribution of Roman sites is now reasonably well known, the trajectory of development through into the Saxon period remains unclear. The regional picture shows that the Anglo-Saxon settlement pattern differed from the Roman one in a number of ways. Although there are fewer known Anglo-Saxon settlements than Roman ones, this may represent a differential of survival and discovery of sites rather than a decline in population in the post-Roman period. Although fieldwork in south-east Norfolk (Davison, A. 1990) and north-east Norfolk (Wade 1983) does suggest a contraction of settlement, Scull (1992) makes the point that a comparison of Romano-British and Anglo-Saxon cemetery evidence would suggest an increase rather than a decrease of population from the former to the latter. A major contrast with the Romano-British period is the lack of evidence for Saxon settlement on the Fen edge. The distribution of Anglo-Saxon sites is riverine, with the densest concentration of sites and finds on the lighter soils. Melford Meadows, like West Stow, is typical in this respect. The distribution of known Roman and early Saxon sites in the Breckland within a *c.*10km radius of Thetford is shown on Figure 2. On the claylands it is possible that there was a contraction of settlement in the post-Roman period as Davison has indicated. Detailed work in south-east Suffolk also indicates Anglo-Saxon

Fig. 3 a) Surface collection: Roman and early Saxon pottery; b) surface collection: worked flint; c) location of trial trenches; d) metal-detector finds before topsoil removal

sites absent on the boulder clay, but there is some suggestion that settlement contraction took place in the late Roman, rather than post-Roman period (Newman 1991, 22; Newman 1992, 30–1)

At the local level, the frequency of finds of early Saxon material adjacent to Romano-British settlement has been commented on (Scull 1992; Williamson 1993, 67–8) but is difficult to interpret. That the early Saxon settlement pattern was to some extent structured by the Romano-British one is likely, but whether this resulted from some degree of co-existence, a taking over of existing agricultural arrangements, or something more coincidental relating to local topography, is one of the more intractable problems of this period.

IV. Evaluation results

The evaluation comprised fieldwalking followed by trenching (OAU 1993). The fieldwalking exercise recovered over 233 sherds of pottery, including five sherds of early Saxon date and one post-medieval sherd. The remaining pottery is of Romano-British date and produced a marked concentration in the north part of the site (Fig. 3a). The overwhelming bulk of the material is of later Roman date and of local origin. The small group of Saxon pot was located near the centre of the field (Fig. 3a). Tile was also recovered in fieldwalking, but none was identified as Romano-British. The bulk of the 179 sherds comprise small fragments, and the only diagnostic pieces are post-medieval. Worked flint was found widely but with a concentration in the northern area and a lesser concentration in the centre of the field (Fig. 3b). The struck flint comprises 127 pieces including 113 flakes and blades, three cores and one core fragment. There are also seven retouched pieces, one core rejuvenation flake and two pieces of irregular waste. The technology is characterised by hard-hammer flaking suggesting a Bronze Age date. The metal-detector survey did not recover any items of significance (Fig. 3d).

Following fieldwalking nineteen trial trenches were excavated. On the basis of the results of the surface collection exercise these were concentrated towards the north end of the site (Fig. 3c). Trenches 11 and 12 revealed a small number of possible early Saxon features including part of a large sub-rectangular hollow which may have been a sunken-featured building (SFB) (in Trench 11). In the north part of the field a number of Romano-British features were located in Trenches 1, 2, 4, 6, 7, and 19 and particularly in Trenches 3 and 18. Pits, post-holes and post-hole alignments and linear features were revealed. There was also a possible stone building foundation in Trench 18. The distribution of features confirmed the results from fieldwalking, with the greatest concentration at the northern end of the field. Eighty-three sherds of pottery were recovered including eighty Romano- British sherds and three early Anglo-Saxon sherds. The bulk of the Romano-British pottery (sixty-five sherds) comprises reduced course wares possibly from the Wattisfield potteries. Oxfordshire and Much Hadham fine wares, and Nene Valley colour-coated ware and Oxfordshire colour-coated ware are also represented. The pottery is predominantly of 3rd/4th-century date. The finds from the trenching include just eight pieces of struck flint — seven flakes and blades and a blade core — which are probably of Bronze Age date. At the southern end of the field the trenching revealed few features and no datable material.

V. Excavation methods

Before topsoil stripping a metal-detector survey was conducted in the productive area of surface collection in the northern area. This resulted in the recovery of just four coins and a fibula fragment (Fig. 3d). However, a further forty unstratified metal finds, including twenty-five coins, were recovered by detector from the spoil heaps during stripping, and from this it seems that the site had not been exhaustively 'worked over' by collectors contrary to the impression gained from the pre-excavation prospection.

The site selected for excavation included much of the area covered by the concentration of Romano-British finds as far south as evaluation Trench 7, but omitted the main concentration around Trenches 3 and 18. The topsoil was machine-stripped to the natural sand over the whole site under archaeological supervision. Over the higher parts of the site, 0.25–0.3m of modern ploughsoil directly overlay the natural sand but hollows in the natural sand tended to be filled with a lighter brown sandy loam. This was particularly deep (up to 0.6m) off the edge of the terrace on the north-western and south-western margins of the site. It appeared to seal all archaeological features where relationships were evident and was interpreted as medieval/post-medieval ploughsoil and hillwash. However, in certain areas it was unclear whether an undisturbed 'B' soil horizon had not been preserved in pockets, particularly on the eastern side of the site, where this subsoil (or something very similar) reached a depth of 0.5m within apparently natural hollows. However, this area was archaeologically sterile. The undulating stripped surface is indicated on a contour plan (Fig. 4). The steep- sided hollow on the south-west edge of the site (87780/82610) was found to be modern and was left partly unexcavated.

After being stripped, the site was cleaned with hoes and shovels and then planned. The site grid was based on the OS national grid from survey points established using an EDM. Figure 5 is a plan showing all the main features revealed. The natural sand was much disturbed by moles and rabbits. Locally this was severe enough to make archaeological interpretation nearly impossible. As well as post-Saxon disturbances, it was apparent that the natural sand was riddled with mottles and irregular 'gullies' which were cut by archaeological features. These disturbances presumably resulted from the activities of burrowing animals and contained light brown relatively compact soil which was generally distinguishable from the fills of archaeological features. For this reason it is considered unlikely that many archaeological features remained concealed among these disturbances and, with particular relevance to the early Saxon occupation, that evidence of post-built structures was missed. However, it should be noted that Structure 4 (Fig. 5) of the Romano-British occupation was only recognised from the regularity of its outline, the character of the gully fills being indistinguishable from that of the surrounding animal activity.

Fairly large quantities of pottery were recovered during machine stripping (context 2001). This came largely from the area of the northern enclosures, although

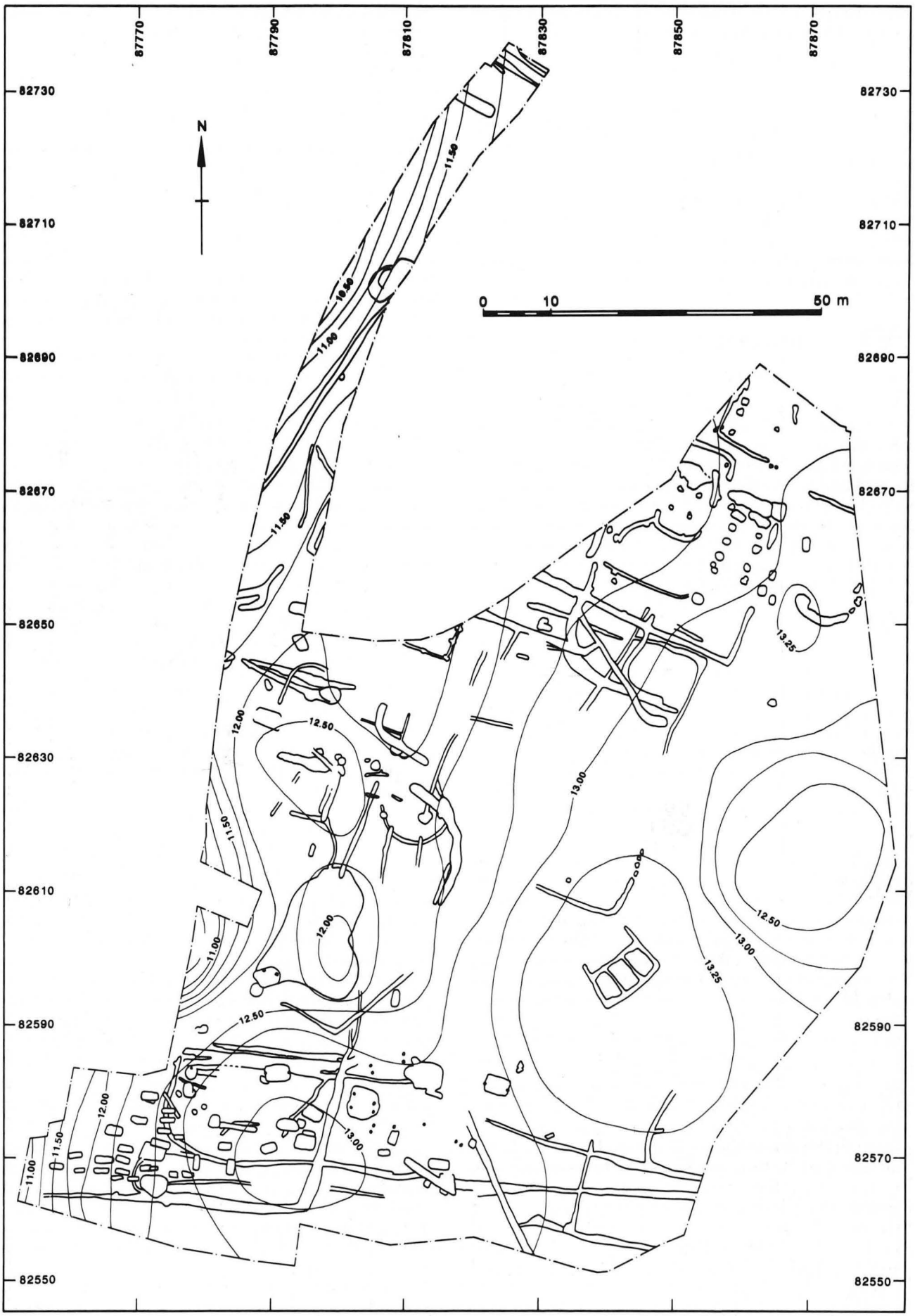


Fig. 4 Site plan with contours. Scale 1:1250

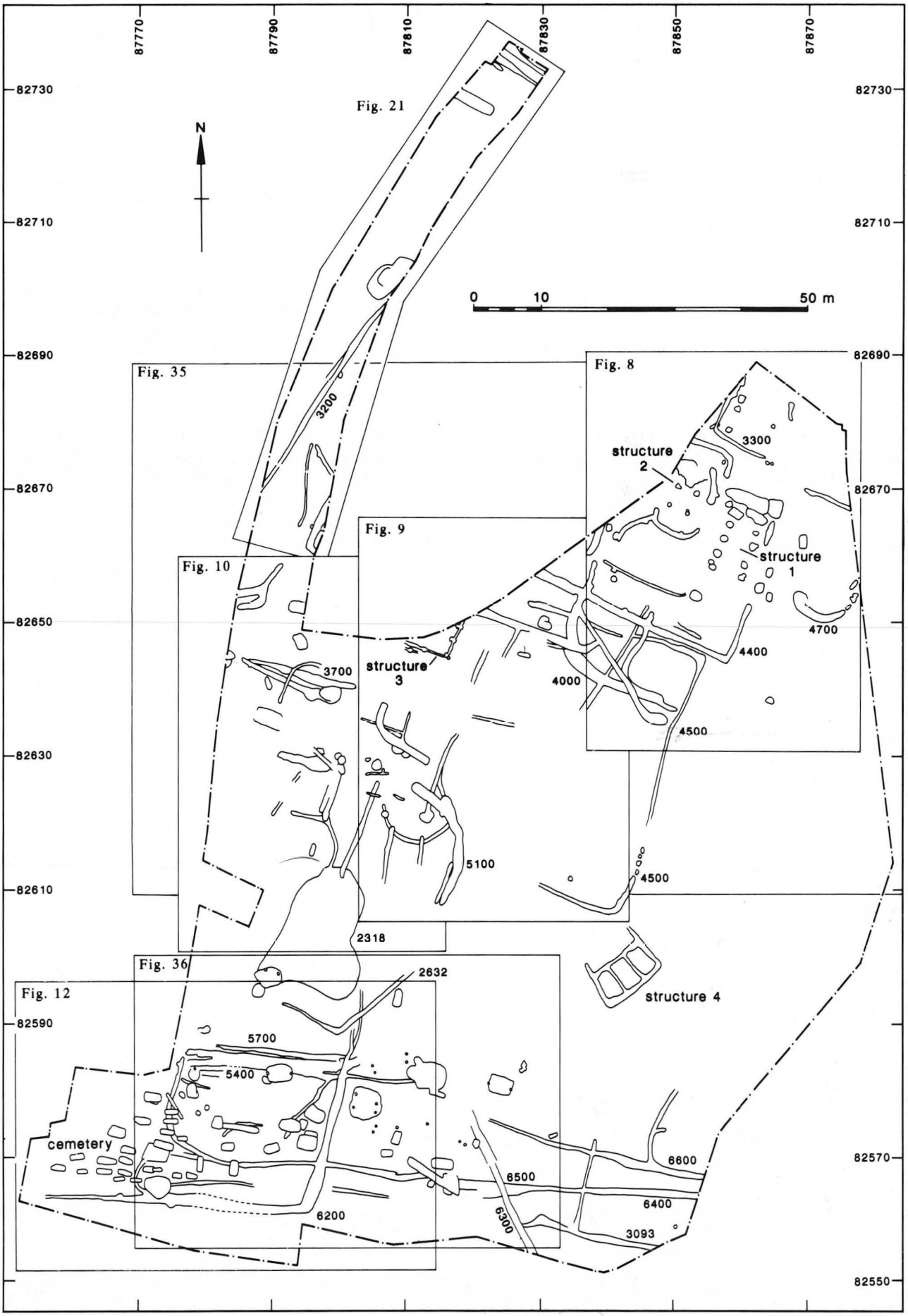


Fig. 5 Site plan: main features from Roman and early Saxon periods. Scale 1:1250

Key to sections

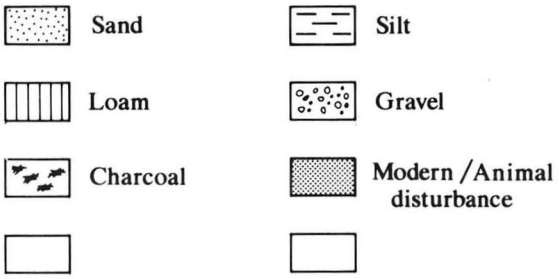


Fig. 6 Key to conventions used in sections

finds were also sporadically recovered from elsewhere (Chapter 3, II 'Unstratified pottery').

Features were excavated as necessary to investigate form, examine relationships and to maintain the sampling level. Sunken-featured buildings, where they could be identified in advance, were excavated in quadrants, with an effort made to excavate their fills in section with the post-holes. However, this was not always possible as post-holes were sometimes discovered only after the removal of the overlying fills.

VI. Layout, date and phasing

Occupation of the site is divided into two broad periods, the Roman from the 1st to 4th centuries, and the early Saxon, which was largely of the 5th and 6th centuries. There is no evidence that the occupation extended beyond the 7th century but precision is not possible. These occupations are described separately in this report. A large quantity of worked flint, indicating Neolithic and Bronze Age occupation, was also recovered from all phases of the investigation, but no prehistoric features were recognised and this material is treated only in a summary fashion (Chapter 5, VII).

Figures 7, 13, 14, 19, 22 and 34 show the phasing of the site based upon artefactual and stratigraphic evidence. The dating evidence, together with feature descriptions, is presented in some detail in the following chapters. The phases can be summarised as follows:

Phase 1: Romano-British, late 1st and 2nd century (Fig. 7).
Phase 2: Romano-British, 2nd to 3rd century (Fig. 13).
Phase 3: Romano-British, late 3rd to 4th century (Fig. 14).
Phase 4: Romano-British, late 4th century (Fig. 19).
Unphased Romano-British features (Fig. 22).
Phase 5: early Saxon (Fig. 34).

Chapter 2. Romano-British Occupation

I. Introduction

The Romano-British occupation comprised several phases of ditched enclosures and associated features. Traces of four buildings or structures of post or beam-slot construction were found. In addition, curving gullies or ditches were identified which might have defined places where buildings once stood although no direct evidence for structures was found. A shallow waterhole was also investigated and a small, late, inhumation cemetery of twenty-two graves which was located to the south of the excavated settlement. It is clear that only the southern edge of this settlement was exposed, confirming the results of the evaluation. For the Romano-British period, the pottery evidence, supported to some extent by the coins and other artefacts from both the evaluation and excavation, indicates that the major occupation was in the later 3rd and 4th centuries. There was a small amount of earlier material and an occupation starting in the late 1st century is indicated. The site thus has a relatively long chronology, but although 2nd- and 3rd-century pottery is present, it is uncertain whether the site was continuously occupied. The pottery evidence could accommodate light or intermittent occupation during the 2nd and 3rd centuries, followed by a burst of activity in the later 3rd and 4th centuries. However, the site layout does suggest modifications within a more or less stable pattern, and continuity of occupation is a preferable interpretation from this point of view.

The evidence is presented by phase with the level of description and discussion necessary to an understanding of the site. For more detail the archive can be consulted. Four broad phases of occupation have been identified in the northern part of the site. The ditches in the southern area, thought to be peripheral to the main settlement, show three stratigraphic phases of activity: Phase 1, Phase 2/3 and Phase 4. The phasing is based largely upon the spatial distribution of features and a few key relationships, and these are summarised in the appropriate phase. A small, organised cemetery occupied the south-west corner and this is discussed in detail in Chapter 3.

The paucity of finds and the amount of apparent mixing and redeposition of material means that the dating of the activity and phases, particularly in the southern area, is somewhat insecure. A number of features which can be dated to the Romano-British occupation but cannot easily be assigned to a phase, are discussed as a group towards the end of this chapter (Section VI). Finally, it is worth noting that some intrusive Saxon pottery sherds are found in otherwise secure Romano-British contexts. The loose friable character of the natural sand and the processes of weathering as well as animal activity must account for these sherds which for the most part are very small.

II. Phase 1 (late 1st–2nd century)
(Fig. 7)

The pottery dating suggests that the earliest occupation in Phase 1 was located in the north part of the site and dated to the late 1st century, whereas occupation in the south part of the site seems to date from the 2nd century. The only evidence of 1st-century occupation in the south part of the site are two pits (2417 and 2687). Phase 1 perhaps lasted until the end of the 2nd century.

The evidence for occupation at this phase was somewhat truncated by later features. In the north-east part of the site, ditches 4500 and 2061 formed what appear to be a series of rectilinear enclosures orientated NNE to SSW (Fig. 8). There were no datable finds from the fills of either 2061 or 4500; the latter produced only four undiagnostic greyware sherds. To the north-east of these enclosures was a length of gully (4700), which, although much disturbed by animal burrows, undoubtedly formed an arc and has been interpreted as a possible eaves-drainage gully encircling a roundhouse. It could have enclosed a structure with a maximum diameter of about 7.5m perhaps with an entrance towards the north-west. The pottery associated with this feature comprises three sherds of early 2nd-century jars and four undiagnostic sherds and indicates that it was probably a Phase 1 structure and not part of the main phase of occupation dated to the late 3rd and early 4th centuries. In its form, as well as its early date, it is similar to gully 5000 to the south-west.

Outside the south-east corner of the enclosures formed by 2061 and 4500 was Structure 4 (Figs 7 and 11 and Pl. I) which was located in an area otherwise devoid of features. It was sub-rectangular in plan and divided into three equal compartments. The main body of the building measured between 9m and 10m long and 5.5m and 6m wide. The long outer walls were curiously bowed and the short end walls extended beyond the building line on the north-west side by between 2m and 2.7m. The foundation trenches were steep-sided and flat-based. The bottoms of the slots were approximately level (at 12.92 to 12.94m OD) but it appears that some sections were dug slightly deeper or shallower. The foundations for the internal partitions were at their deepest at the centre and were quite shallow where they met the outer walls (Fig. 11). There was normally evidence of a weathering cone, and sometimes other disturbances. The colour of the soil filling the foundation trenches was light grey and indistinguishable from the general disturbances caused by burrowing animals, and the structure was only recognisable from its regularity. The fills were homogeneous throughout. The only finds are greyware sherds from contexts 2703 (segment 2731) and 2718 (segment 2773) and a tiny Saxon sherd (2g) from 2724 (segment 2731). The latter is probably intrusive.

Two features of the building in particular need to be noted. First, and perhaps the most curious aspect of its construction, were its parallel and curving long sides. The south-east wall, at 10m long, was about a metre longer than the north-west wall. It is possible that curving timbers were the only ones available in a suitable scantling and while these might have been cut and jointed to form an approximately straight wall plate, this might have resulted in an unacceptable loss of rigidity. The second feature was the extension of the short end walls forward of the building line. This might suggest that the roof extended out on the north-west side to form a covered area along the side of the building.

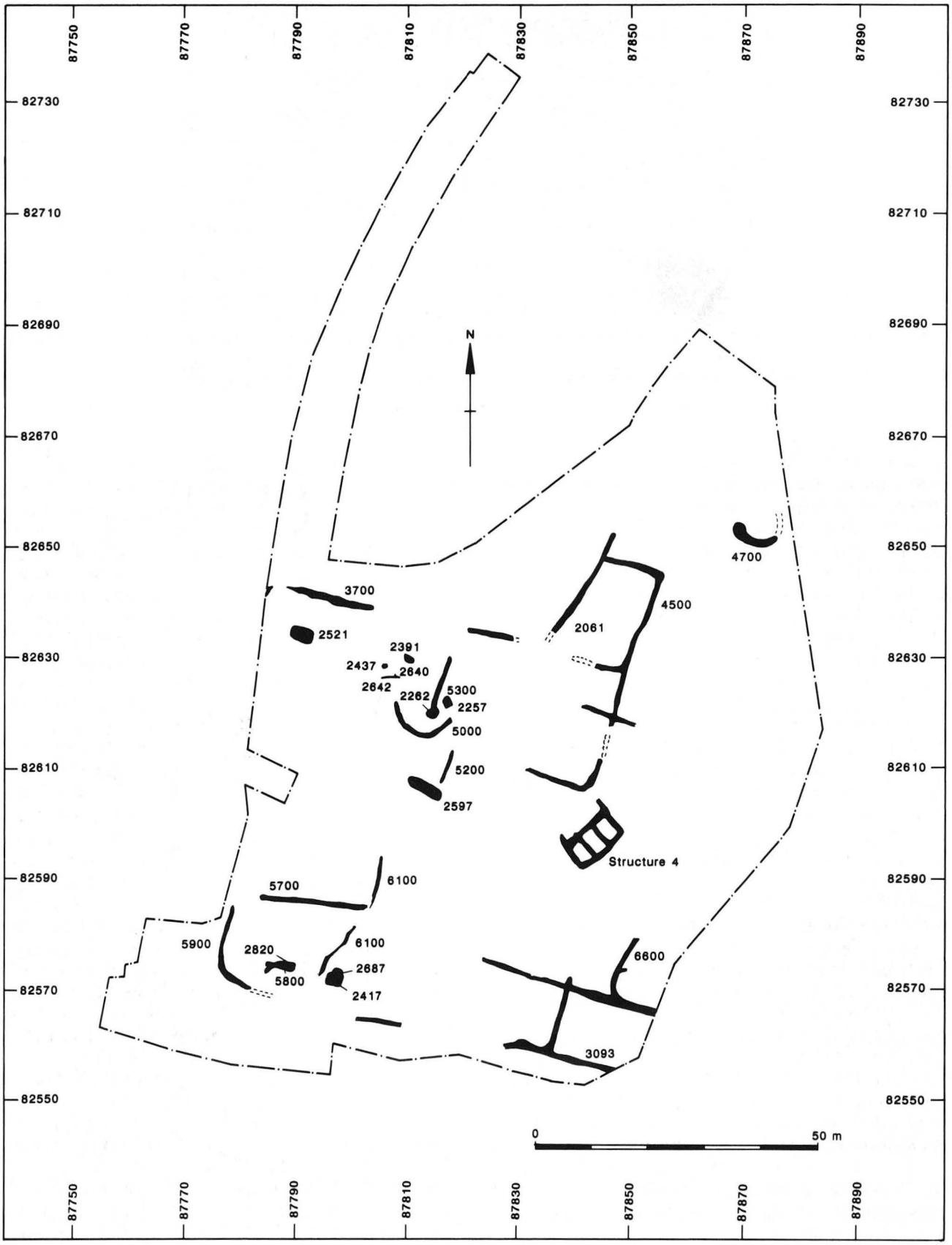


Fig. 7 Phase 1: late 1st and 2nd centuries. Scale 1:1000

The remains are interpreted as the foundations for a timber-framed building with posts tenoned to a base-plate. The absence of evidence for the upright posts argues against a post-in-trench construction. There was no surviving trace of a base-plate, except perhaps for a dark humic soil at the base of slot 2773 (context 2719). Additionally, there were possible impressions of a base-plate in some of the excavated sections, for instance in the north-east corner and along the north-east side were impressions suggesting that two timbers abutted but did

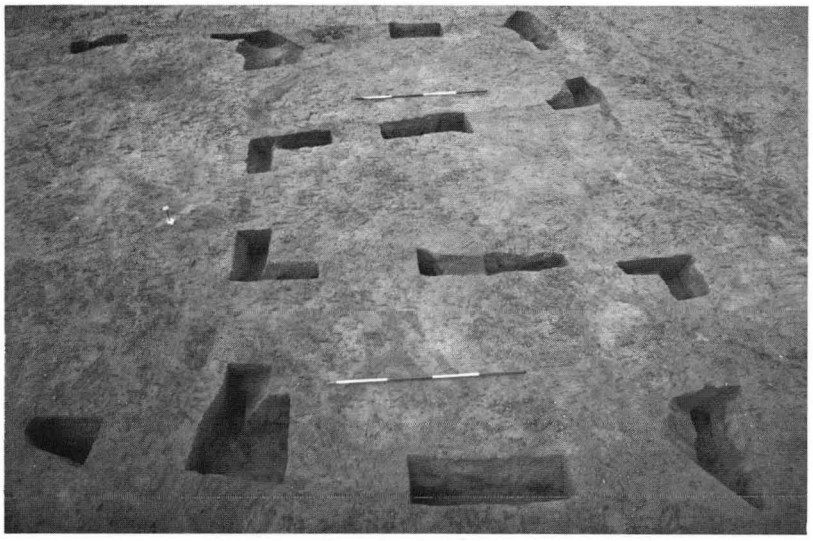


Plate I Structure 4

not join. There is certainly a good body of evidence for timber-framed sill beam construction in the Romano-British period. Well-preserved sill beams excavated *in situ* come from Periods 6 and 8 (broadly 2nd century) at Castle Street, Carlisle (McCarthy 1991). These were not set in foundation trenches but laid directly on the ground. Presumably foundation trench construction such as at Melford Meadows would have given additional rigidity. However, if the evidence of beams abutted rather than jointed at the corners is interpreted correctly, a certain amount of the advantage of timber framing would have been lost. It can be noted that the internal partitions clearly respected rather than directly joined the outer walls (Fig. 11 B and C), and it is possible that the building was actually part-framed, with the posts set on short lengths of timber (Goodburn, D. pers. comm.). This would suggest that the curving walls were deliberately designed.

Although the function of the building is unclear, if the recovered shape of the building is significant, it may indicate some special use. In the context of a small farming establishment it is most plausibly interpreted as an out-building for storing hay or crops or, alternatively, as a stable or byre for housing animals. Building 3 at Bancroft villa, Buckinghamshire, is dated to the late 1st/late 2nd centuries and was of similar form and dimensions albeit constructed on stone footings (Williams and Zeepvat 1994, 143). It was set apart from the main villa buildings and, although there was no clear evidence as to its function, it was suggested that it might have been a granary of 'military type' (Morris 1979, 33, fig. 29). However, there seems little reason to site a granary away from the main centre of the settlement, which it is suggested was to the north.

The dating evidence for the building is very limited, but its location at the point where ditch 4500 forms a right-angle corner suggests that the two features might have been contemporary.

To the west of ditches 2061 and 4500, the evidence for structures and features was more fragmentary, with little obvious pattern. The evidence consisted of a group of features that were stratigraphically early and/or could be dated to the 2nd century. Gully 5000 (Fig. 9) was thought to be the earliest feature in this area but no finds were recovered from it. Like gully 4700 it described an arc and has been interpreted as an eaves-drainage gully around part of a circular structure. There were no associated post-holes but a circular structure of about 9m diameter could have been accommodated within the curve of the gully. It may have been contemporary with, or have preceded, ditch 5200 (Fig. 9) and feature 2597 (Fig. 10), which have a reasonably secure 2nd-century dating. Ditch 5200 was probably a boundary ditch for an enclosure, but 2597 was a wide elongated but shallow pit rather than a ditch or gully. The terminal (segment 2588) of 5200 produced fifteen pottery sherds including five pieces of a poppy beaker and this suggests a date no later than mid 2nd century; pit 2597 contained nine sherds of 2nd-century pot and undiagnostic sherds of greyware.

Ditch 3700 (Fig. 10) to the north-west of 5000 appears to have formed part of a boundary in conjunction with ditch 2061. It probably formed part of WNW–ESE enclosure system. One excavated segment (2130) of ditch 3700 produced three sherds of an Antonine jar type; another segment produced no pottery but was cut by pit 2030, which contained seven sherds of a late 1st/early 2nd-century bowl of 'Belgic' type. Gully 5300 was a very shallow feature but may have formed a division within the enclosure system; it produced no datable finds. The spatial relationship between ditch 5300 and curvilinear feature 5000, if the latter was part of a roundhouse, suggests that they were not contemporary. The likelihood is that ditch 5300 was later in date than feature 5000 and this fact suggests some development during the phase. Other features in this area comprised a number of pits (2257, 2262, 2391, 2437, 2521) and small shallow ditches or gullies (2640, 2642) which survived in short segments. Of the pits, only 2521 was of any size. Its upper fill contained two sherds from a bowl of 'Belgic' type. With the exception of pit 2437, which contained large sherds from jars of 2nd-century forms, the dating evidence from the other features was limited. Pit 2257 produced three greyware sherds, a tegula fragment and a sherd of Saxon pottery which may be intrusive; pit 2262 contained no finds; and pit 2391 produced an unworn sestersius of Crispina (AD 180–92) (Chapter 5, I 'Coins', No. 6), and late 3rd/4th-century pottery which may have been derived from ditch 3800, which cut 2391. The purpose of the two short lengths of gully — 2460 and 2462 — is uncertain and they contained only undiagnostic sherds and bone.

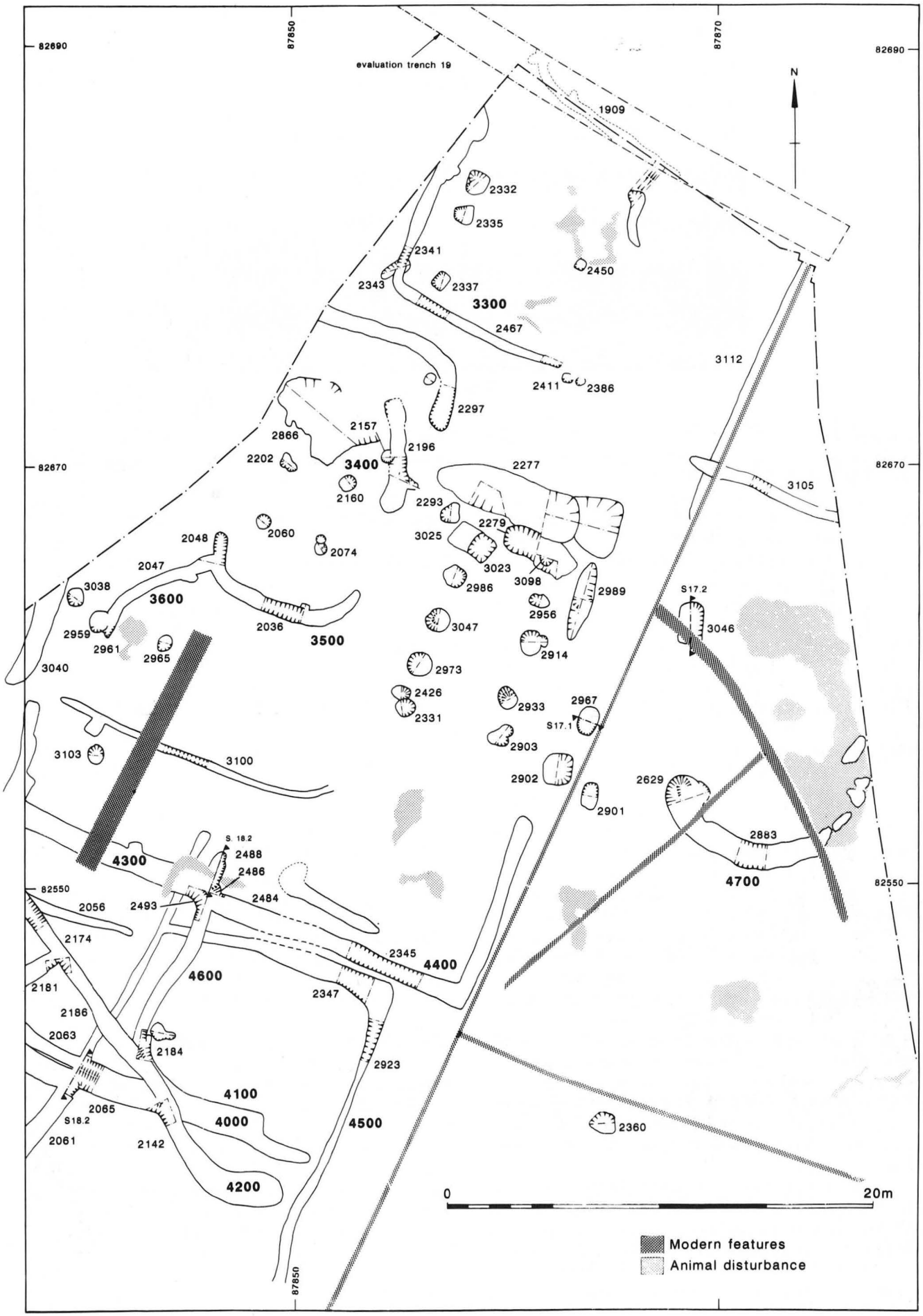


Fig. 8 Roman features: north-east area. Scale 1:250

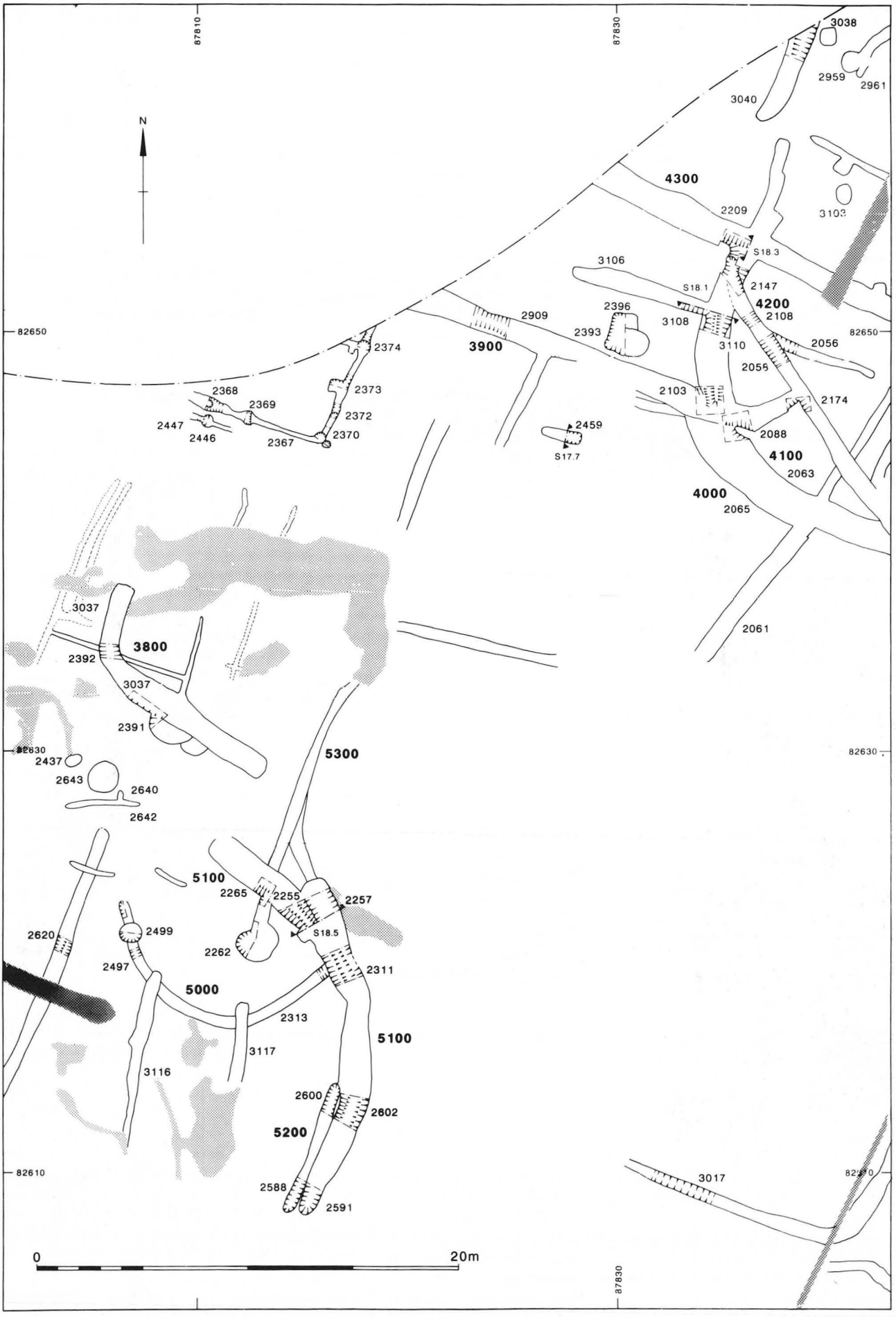


Fig. 9 Roman features: central area. Scale 1:250

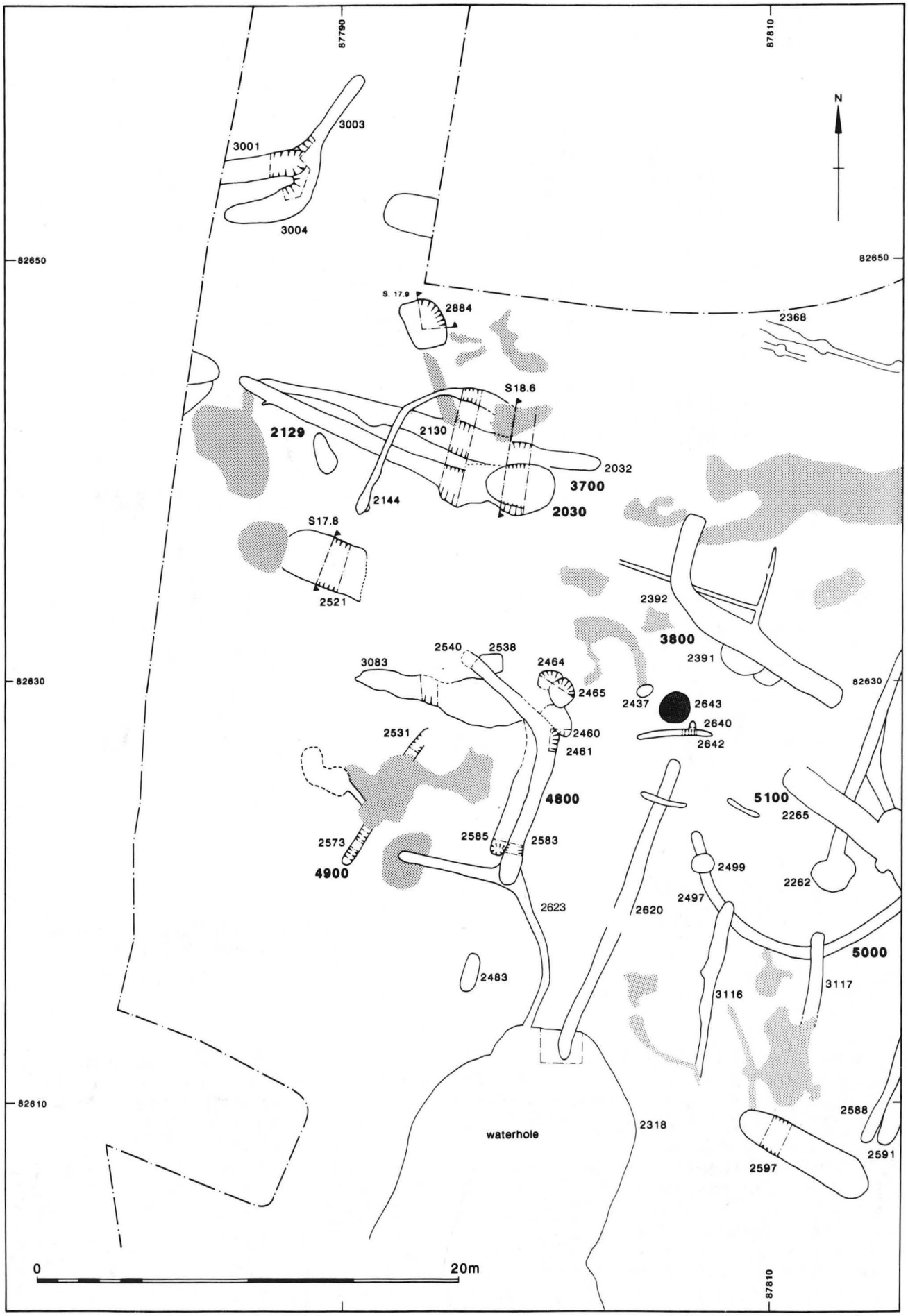


Fig. 10 Roman features: western area. Scale 1:250

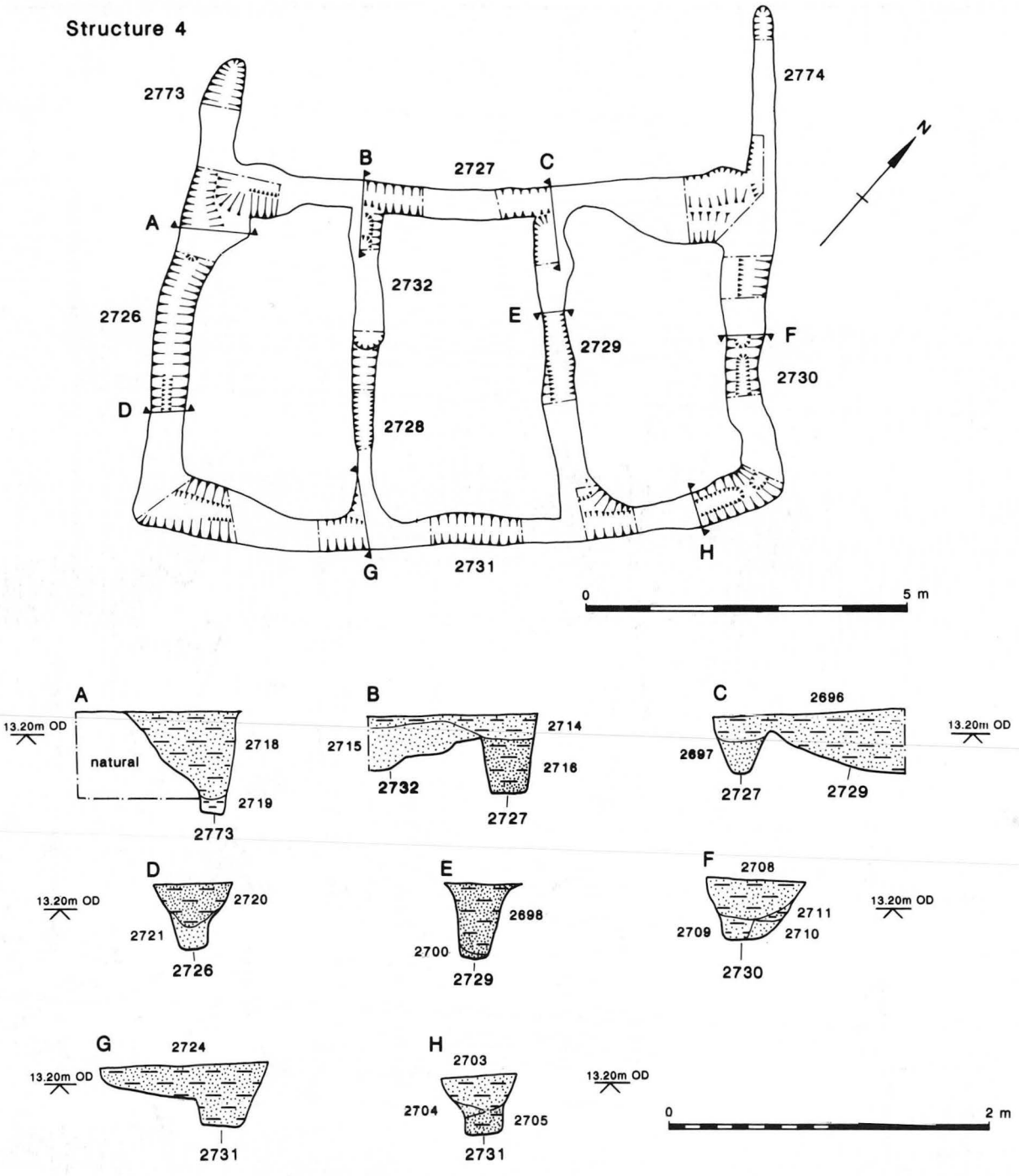


Fig. 11 Roman Phase 1: Structure 4. Scale 1:100; section 1:40

In the south part of the excavation area there were early ditches — 5700, 5900, 6100, 3093, 6600 — (Figs 7 and 12), which appear to have defined rectangular enclosures aligned WNW to ESE. Ditches 5700 and 5900 may have formed parts of one east-west enclosure. Ditch 5700 (Segments 2240, 2303 and 2871; Figs 18.7 and 18.8) was the earliest of four phases of east-west ditch. It was very shallow (0.2 to 0.24m) and lacked clear terminals. The only dating evidence was from segment 2871 and comprises sherds from a reversed-S shaped bowl and a sherd of imitation samian of Dragendorf form 37 (Fig. 55.20) which give a *terminus post quem* of the early 2nd century. A tiny sherd of Saxon pottery from segment 2303 is likely to be intrusive. Ditch 5900 was very shallow (0.1 to 0.15m deep) and without finds. To the east ditches 3093 and 6600 formed further enclosures on the same alignment in the south-east corner of the site. Both were shallow and produced no finds from the excavated segments.

The precise function of ditch 6100 (Fig. 12), which appears to have crossed diagonally the enclosure defined by ditches 5700 and 5900 and to have extended to the north, is not clear. It was a shallow and irregular (maximum 0.11m depth) and ran north-east from under early Saxon 'hollow' 2429 (Fig. 36), into the intersection of ditches 5400 and 6200 and then continued south-west. It is thought likely to have continued as a faint trace running towards waterhole 2318. There were no finds and its dating is uncertain; segment 2802 was recorded as

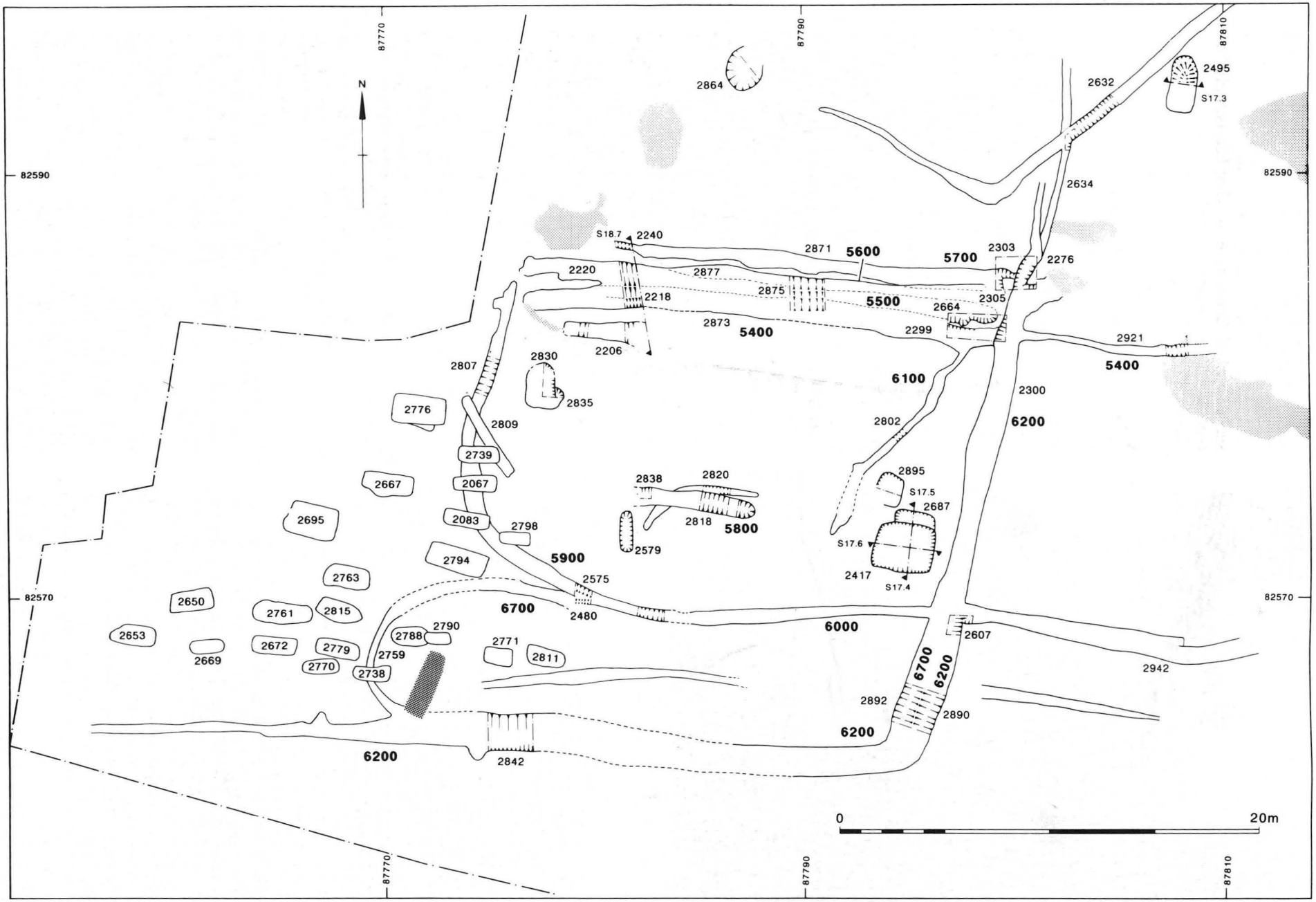


Fig. 12 Roman features: southern area. Scale 1:250

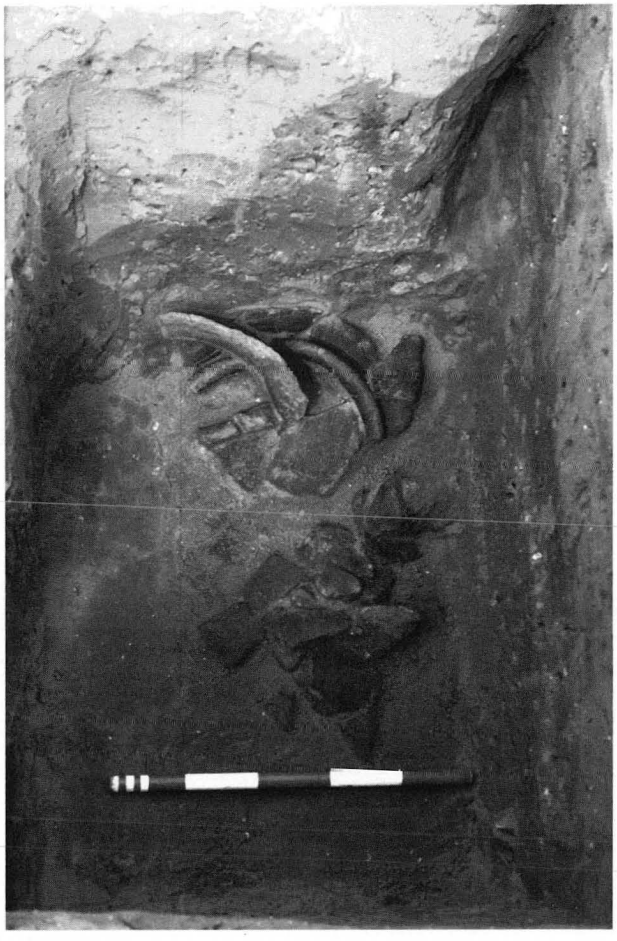


Plate II Smashed pot in Pit 2417

cutting the possible early Saxon pit 2806 (Fig. 36), but the degree of overlap was small and the relationship is ambiguous. The feature could belong to a later phase but its alignment as well as its exiguous character make an early date seem more likely.

In addition to the ditches there were two Romano-British features, a large rectangular pit 2417 and a smaller pit 2687 largely truncated by 2417. Pit 2417 had vertical sides and a flat bottom (Fig. 17.4, 17.5 and 17.6). A substantially complete 1st-century storage jar had been broken *in situ* on the floor of the pit (Fig. 54.1 and Pl. II) and this was sealed by the lowest fill (2665) and then by thin lenses of sand. The succeeding layer, 2420, which contained dumps of darker charcoal-rich soil, also contained some pottery, including a 1st-century sherd. The upper fill, 2419, contained two small Saxon sherds and five undiagnostic greyware sherds. It is possible that there was a early Saxon feature cut into the upper fill (Fig. 17.6). The function of the pit remains unclear, but it seems most likely that it was used for storage, and may have been lined with timber or wattle, although no traces of wood survived and the occasional concentrations of charcoal, particularly in fill 2420, could not be interpreted in those terms. The storage jar may have had votive significance. There is an example from a probable 1st-century context at Redcastle Furze, Thetford, where a cattle skull was placed in the north-west corner of a sub-rectangular pit (Andrews 1995, fig. 8). Little survived of the second pit (2687), but enough to indicate that it was probably sub-rectangular.

The only other Phase 1 features in this area were a short length of ditch (5800) and a curving gully (2820). Ditch 5800, which cut gully 2820, was 0.48m deep with steep sides and a rounded base. The only dating evidence was a single sherd of 'Belgic-type' bowl of late 1st/early 2nd-century date from upper fills (2816) of 5800. Gully 2820 produced no datable finds.

III. Phase 2 (2nd–3rd century)

(Fig. 13)

The main features in the northern area were ditches 4000 and 4100. The latter was a curving feature that perhaps dates to the 3rd century. It was replaced by ditch 4000 which was on a nearly identical alignment (Figs 8 and 9) but which cut ditch 3106. Both 4000 and 4100 had rounded profiles. Pottery evidence, though sparse, suggests a 3rd-century *terminus post quem* for their filling. Superficially the ditches do not appear to relate in any clear way to either the earlier or later enclosures. However, although ditches 4000 and 4100 cut the Phase 1 ditch 2061, they do not cut the main Phase 1 ditch 4500, which may have continued in use. Ditches 4000 and 4100 may have been dug to create a new enclosure within an existing enclosed landscape. Ditches 3106, 2056 and 4600 may very well have formed sub-divisions of the new system replacing Phase 1 ditch 2061. Ditches 3106 and 2056 were on the same alignment and may have been parts of a single feature. Pottery from ditch 4600 includes a large sherd of samian form Dragendorf 32 and suggests a late 2nd-century date for its infilling. Continuity within the landscape is suggested by the fact that the later Phase 3 ditch 4400 was clearly laid out to respect the line of 4500 (Fig. 8). It is probable that 4500 continued in use even after associated features such as 2061 (Phase 1) and 4000 and 4100 (Phase 2) had been given up. Further support is provided by two facts. Firstly, the Phase 4 ditch 4300 continues the line of 4500 westward and perhaps replaces part of it, and, secondly, another Phase 4 ditch (4200) was laid out diagonally across the angle formed by 4500 and 4300 (Fig. 19).

To the south-west of enclosure ditch 4500, the major feature was ditch 5100, which seems to have formed part of a new enclosure (Fig. 9). It contained two fills comprising a dark grey-brown soil over lighter sandier fill. The lower fill produced few finds but these include four sherds of mid 2nd-century date. The upper fill produced late 3rd/4th-century pottery and probable fragment of millstone (context 2604). The dating of this material together with the 2nd-century end date of Phase 1, implies that Phase 2 was of long duration. It is possible that 5100 was quite a stable feature in the landscape and was repeatedly cleaned out over a long span of occupation or recut on the same alignment after a period of abandonment.

The form of 5100 gives little clue to its function. It presumably demarcated an area of activity. Ditch 3800 from its location and alignment was probably part of the same system. The two ditches had similar profiles and fills. There were few diagnostic finds from 3800, but these included a single sherd from a plain rimmed dish of 3rd-century date. North-west of ditch 3800 was a linear feature 2129 which produced no diagnostic finds, but which appeared from its alignment to have been part of the same enclosure. They replaced ditch 3700 on a slightly

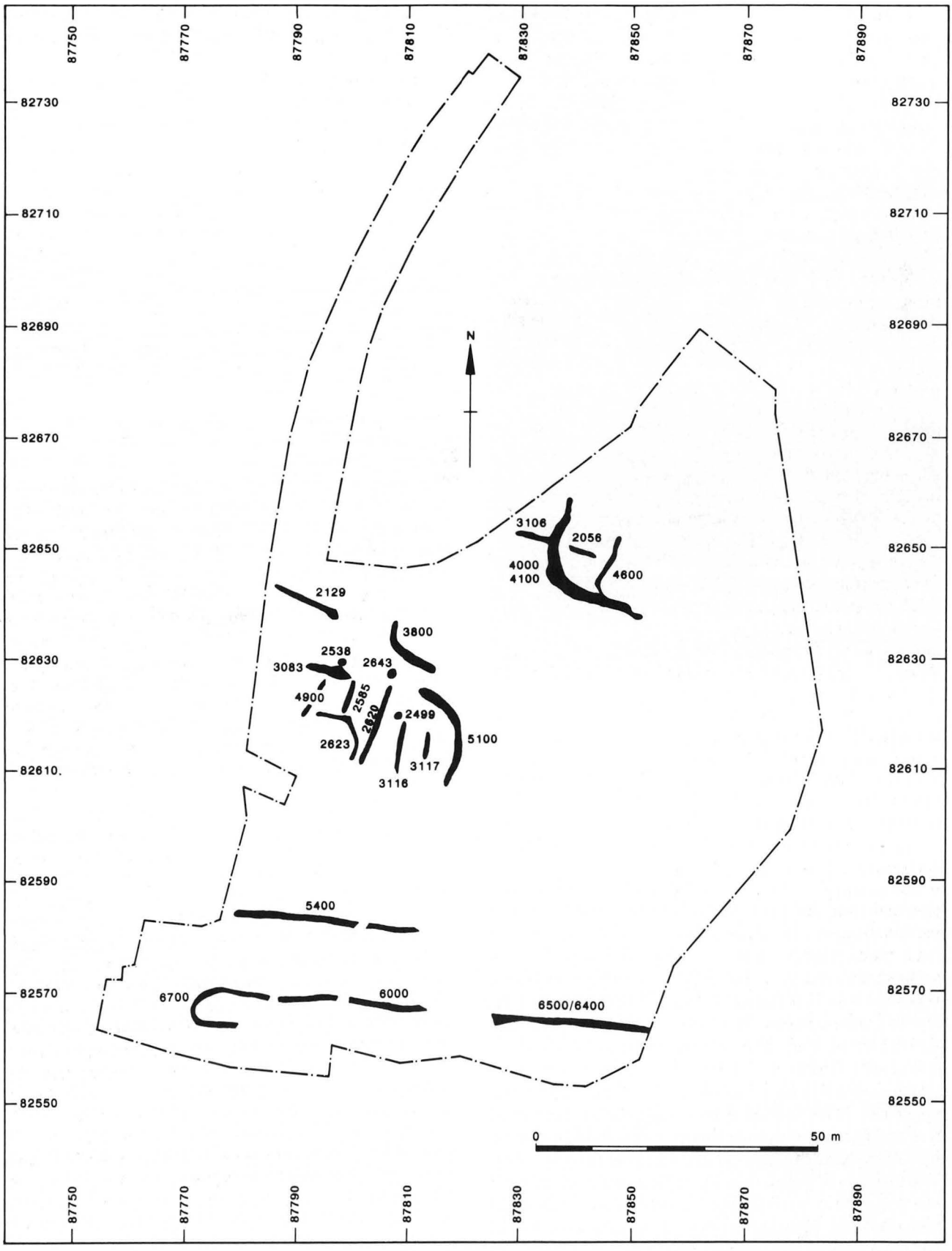


Fig. 13 Phase 2: late 2nd–3rd centuries. Scale 1:1000

different alignment. Gully 2620 (Fig. 9) may have been contemporary and formed a sub-division within the enclosure formed by 5100; it produced a single sherd of pottery which suggests a mid 3rd-century or later date. To the west of 2620 was a curving gully 2623 which contained ten sherds of a Horningsea jar, a sherd of a bowl of 2nd/3rd-century date (Fig. 56.30) and a single Saxon sherd. The latter is quite large (22g) and may have been deposited when the gully was still open. There were a few other contemporary features including a number of ditches or gullies all on a similar alignment to 2620. These were 3116 and 3117, which were only barely definable as dark soil stains, 2585 a short length of ditch, and 4900 an insubstantial gully cut by a Saxon pit 2534. None produced any diagnostic finds, and none were of demonstrable structural significance. Other features included an irregular linear feature 3083, which produced no finds, a flat-based sub-rectangular pit 2538, which lay north of 3083 and which contained no finds, and a patch of burnt flints 2643, possibly a small hearth.

The chief concentration of domestic debris came from just south of ditch 3800. Here a layer of dark soil 2004, up to 0.2m thick, contained a large quantity of pottery, some of the sherds being quite large and unabraded (average sherd weight 45.56g). The pottery suggests a date range for the occupation from the early 2nd century to the early Saxon period. Below this layer, which was excavated by machine, was a patch of similar dark material, 2390, which was hand-excavated (Fig. 23). Layers 2004/2390 are thought likely to represent the remains of a midden and therefore adjacent to occupation, rather than an 'occupation layer' at the focus of activity. The evidence suggests an area of domestic occupation, perhaps associated with a sequence of small cottages. Layer 2004 appears to have sealed the north end of the linear feature 5100 and layer 2390 sealed feature 2620 and the possible hearth 2643, and therefore the midden deposits date perhaps to Phase 3 or 4, rather than 2.

In the south part of the site there was evidence for enclosures, but the dating of the second phase in this area is insecure in part because of the small quantities of finds recovered and the difficulties of recording relationships. However, there is slight evidence for continuity of occupation, albeit at a low level, from the 2nd century through to the late 3rd or 4th centuries. For this reason, it is not realistic to make a meaningful distinction between Phases 2 and 3 in this part of the site. There is evidence that the field system seen in Phase 1 is modified in Phase 2 but then continues in use largely unchanged through Phase 3 and into Phase 4. The Phase 1 ditch 5700 was succeeded by ditch 5400 and then by 5600 on the same alignment. The latter is almost totally truncated by the final version of the boundary 5500 in Phase 4. Ditch 5400 (Fig. 18.7) was quite substantial at the western end (segment 2218, 0.54m deep), but was much shallower to the east. There were no diagnostic finds from the east end. Segment 2218 (Fig. 18.7), dug in section with the later ditch 5500 (segment 2220) and the early Saxon feature 2166, was disturbed by a modern feature and yielded no reliable dating evidence. Saxon pottery was recovered from the upper fill of 2220 suggesting that ditch 5500 may have been later in date. The pottery recovered from a further section through ditches 5400 and 5500 (segments 2873 and 2875) included seven sherds of late 3rd/4th-century jar apparently from ditch 5400 (segment 2873) which would appear to be out of place in this assemblage but could have been derived from ditch 5500 (segment 2875).

To the south of 5400 and approximately parallel were ditches 6000 and 6700. Ditch 6000 was shallow and cut the Phase 1 ditch 5900. Its western end had an unclear relationship with 6700 due to the presence of grave 2794 and SFB 2797 (Fig. 36), but the two ditches are considered likely to be the same feature. The combined ditches would have formed a small enclosure. On approximately the same alignment as 6400 and 6500 (Fig. 13) in the south-east corner of the site. Only traces of these ditches were found, but they are likely to be contemporary with 6000. The gap between 6000 and 6400/6500 may have been an entranceway. Ditch 6500 was barely traceable and was less than 1m north of 6400 and presumably one ditch was a replacement for the other. No finds were recovered.

IV. Phase 3 (late 3rd–4th century)

(Fig. 14)

This phase witnessed the establishment of a rectilinear enclosure in the north-east part of the site. Ditch 4400 defines the main area of activity in the late 3rd or 4th century in the northern area. The south-east corner of the enclosure is defined by ditch 4400 and to the north, an indistinct feature (3112), is interpreted as a continuation of the east arm of 4400. The gap between 4400 and 3112 can be interpreted as an entrance (Fig. 8). A single diagnostic sherd was recovered from ditch 4400 and gives a late 3rd/4th-century date. There were no finds from 3112. There were a number of features within the enclosure including a ditch (3300) and two structures. The latter could have been contemporary, but it is suggested that Structure 1 belongs to Phase 3 and that Structure 2 replaced it in Phase 4.

The interpretation of ditch 3300 in the extreme northern part of the site is not straightforward. The feature was narrow, almost vertically sided and flat-based. It was 0.35–0.4m deep and contained a single conspicuously dark silty fill. The northern edge of the excavation area was much disturbed by animal burrows and modern intrusions. The form of the ditch strongly suggests that it might have held timbers and may have been a beam-slot, but the open south-east side makes it less than convincing as a structural feature. It is more likely to be a subsidiary enclosure within the larger enclosure delineated by 4400 and 3112. Although it would have been appropriate for a palisade there was no evidence for posts. Pottery from the ditch suggests a late 3rd/4th-century date which would make it contemporary with Structure 1 and/or Structure 2 to the south. A concentration of post-holes around the terminal of 3300 suggests that this boundary was maintained. Only post-holes 2386 and 2411 are thought to be contemporary with the ditch on stratigraphic grounds, although each may have been recut. Probable post-medieval post-holes were also present in this area (Fig. 48).

Within the angle of 3300 there were three pits 2332, 2335 and 2337 thought likely to be contemporary (Fig. 8). The fill of 2335 contained some charcoal and slag but was without other finds. Pit 2337 contained six undiagnostic Romano-British sherds. It may be significant that five of the six fragments of millstone from the site came from pits 2332 and 2337. They were found as packing in the pits,

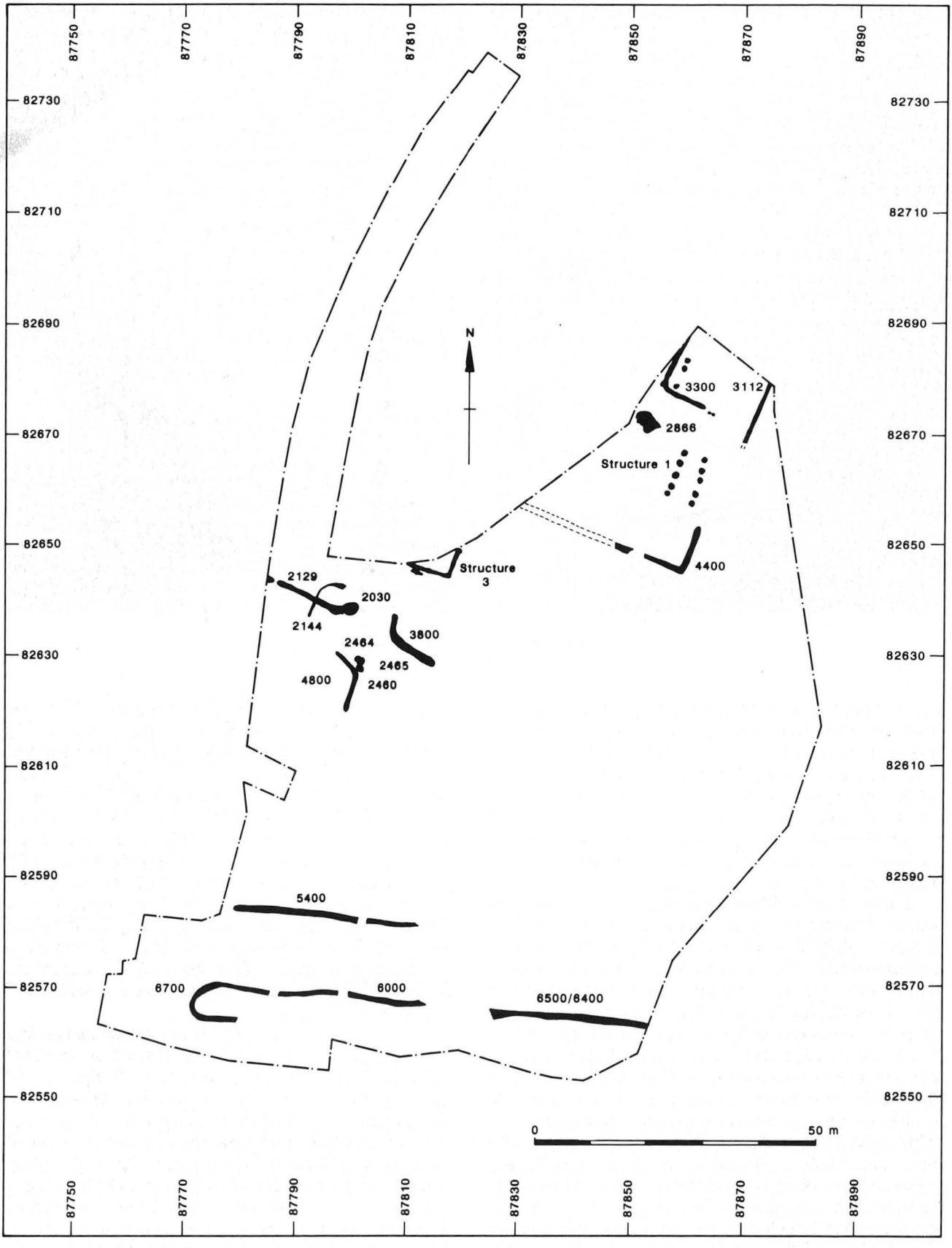


Fig. 14 Phase 3: late 3rd–4th centuries. Scale 1:1000

Plate III Structure 1 before excavation

but it is possible that the millstones had originally been used in this area. No positive identifications of manually-driven Roman mills are known to the author and little can be added to this speculation. However, it is intriguing to note that a building interpreted as a mill-house at Orton Hall Farm contained little but three irregularly-spaced 'bases' in a line against a wall, and that evidence for an opposing wall was lacking (Mackreth 1996, 72; fig. 47).

South of the enclosure defined by ditch 3300 and within the main enclosure there were two features. An irregular shallow depression 2866, which produced Romano-British pottery consistent with a late 3rd/4th-century date, and post-built structure (Structure 1) (Figs 8 and 15 and Pl. III). This consisted of two lines each of five large post-holes (features 2903, 2331, 2933, 2973, 3047, 2914 (2917), 2956, 2986, 3025 and 3098) enclosing a trapezoidal area measuring about 10 × 5m. Within the rows the post-holes were spaced precisely 2m apart (centre to centre), except for the second and third pair from the south which were 2.5m apart (assuming 2914 to be the main post here and 2917 a supporting addition). The distance between the rows was 4.5m at the southern end, narrowing to 3.5m at the northern end. The post-holes were oval or circular, 0.6 to 1.1m in diameter and generally 0.4 to 0.7m deep (although 2956, at 0.24m, was unusually shallow). The group as a whole was characterised by fills containing moderate quantities of flint nodules, which was unusual on this site. A small pit (2426) adjacent to 2331 was of uncertain date. All but 2331, 2933, 2903 and 3098 revealed possible traces of a post-pipe defined by a slightly darker or stone-free fill positioned centrally or to one side of the pit. While these were suggested in section only, the frequency of this observation suggests that the flinty soil acted as packing around the post, albeit considerably disturbed presumably by the removal of the post. The pottery evidence from the post-holes suggests a 3rd/4th-century date for the structure. Post-holes 2331 (fill 2330), 2933 (fill 2934) and 3047 (fill 3048) produced undiagnostic Romano-British sherds. On the other hand, post-hole 2973 (fill 2982) produced seventeen sherds of a jar of possible Horningsea type datable to the 3rd/4th century, and post-hole 2914 (fill 2915) included a sherd from a probable late 3rd/4th-century storage jar. Post-hole 2986 (fill 2987) included a sherd from a Lower Nene Valley mortaria of late 3rd/4th-century date, and post-hole 3025 (fill 3024) included a colour-coated flanged bowl of similar date.

The form of the structure defined by these post-holes was quite clear and could be interpreted as an aisled building, albeit a small one (Morris 1979, figs 35–41). Although there was no trace of the aisles, the form and dimensions of the structure are quite similar to examples from Orton Hall Farm where there was clear evidence of outer walls (Mackreth 1996). Structure 1 is closely comparable to the smaller barns at Orton Hall Farm (Barns 2, 3 and 4), although the bay widths and overall length of Structure 1 were smaller. It is notable that, while the two lines of post-holes were quite straight, the structure as a whole was trapezoidal, rather than rectangular, and narrowed towards the northern end. It is unclear exactly what this implies in terms of the method of construction, but, contrary to what might be expected, it seems unlikely each truss was completely assembled on the ground before erection, unless the tapering shape of the structure was planned. A more *ad hoc* method of construction seems

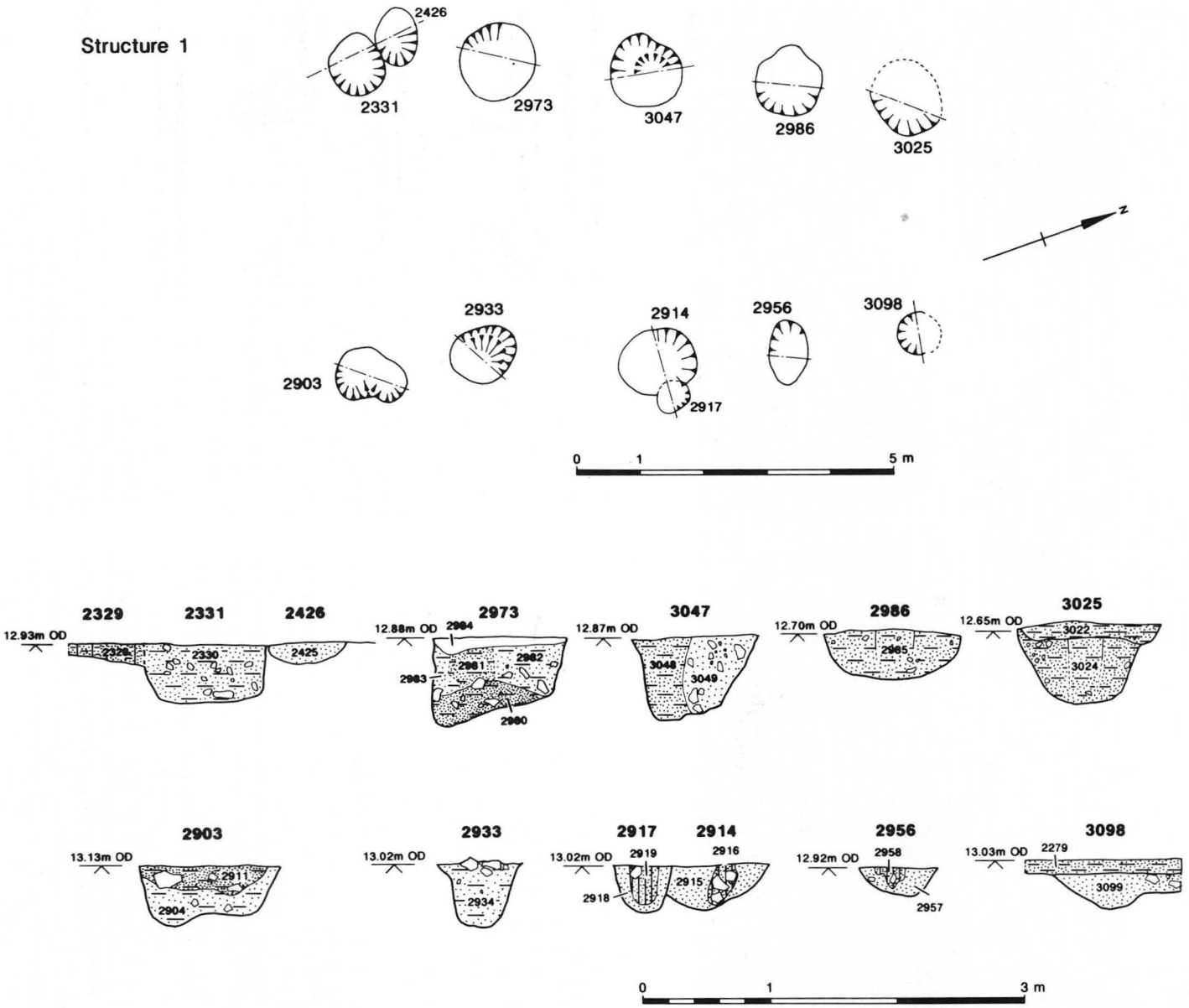


Fig. 15 Roman Phase 3: Structure 1. Scale 1:100; section 1:50

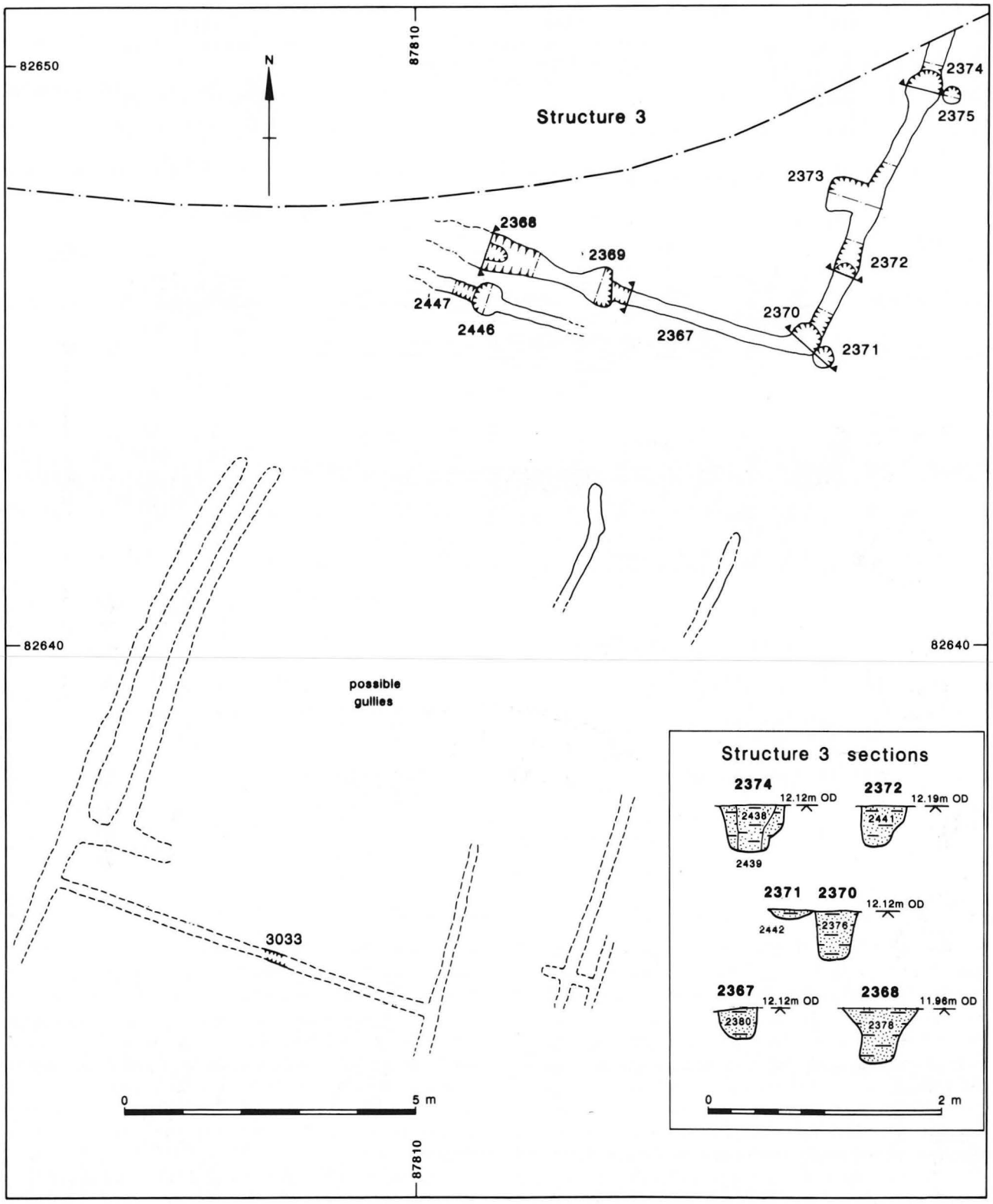


Fig. 16 Roman Phase 3: Structure 3. Scale 1:100; section 1:50

likely. It can also be noted that there is a variation in the width of the bays: while most bays are 2m wide, the third bay from the north is wider. In the absence of evidence for outer walls, little further speculation on the form of the structure can be attempted. Depressions 2277 and 2989 appear to enclose the northern end of the structure and may have been associated with it, although they contain later finds and are described below (see Section V, Phase 4). Feature 2989 may have been on a wall line, or have been an eaves-drip feature, but 2277 is more likely to have been a surface or flooring at the northern end. Certainly the flat and quite firm base to this depression suggests a surface, perhaps of timber (or robbed stone), since otherwise activity is likely to have resulted in a more diffuse churning and rutting of the subsoil. It is likely to have served as a hard standing at the entrance.

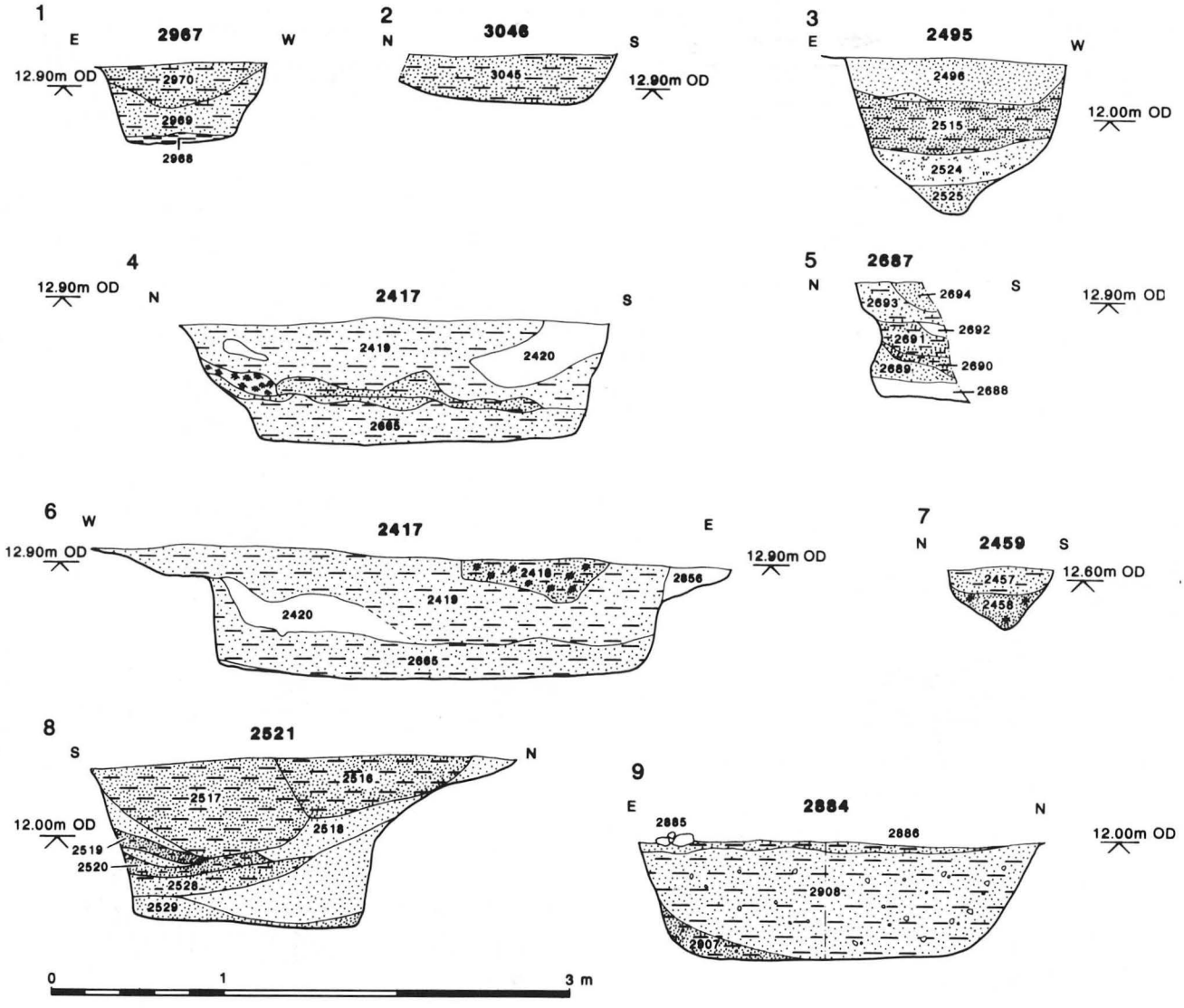


Fig. 17 Roman features: pit sections. Scale 1:40

Aisled buildings appear to have had a wide range of possible functions (Morris 1979, 64), but there was no evidence to indicate whether this example was associated with a habitation or craft/industrial activities. It is probably best interpreted as a barn, probably for storing crops or hay. It is less likely to have been a granary, where off-ground storage is considered vital, because the posts appear to be too widely spaced to provide the necessary support. The structure was positioned adjacent to the entrance of the enclosure formed by ditches 4400 and 3112. The dating evidence suggests that they could have been contemporaneous. While the building may be seen therefore as blocking the entrance, it is possible that the entrance was positioned specifically to provide controlled access to the structure. At Barton Court Farm (Abingdon, Oxfordshire), two six-post structures were positioned alongside the enclosure entrance in order to facilitate loading and unloading (Miles 1986, 30).

To the south-west of the main enclosure and Structure 1, the corner of another structure was located at the edge of the excavation. Structure 3 (Figs 9 and 16) comprised a narrow gully 2367 with post-holes, 2368, 2369, 2370, 2372, 2373 and 2374, spaced along it at irregular intervals. The gully was between 0.25 to 0.30m wide and 0.25m deep with vertical sides and a flat base. A single sherd of late 3rd/4th-century Horningsea storage jar was recovered. The post-holes were quite clear circular features slightly wider than the gully and 0.4 to 0.45m deep. Post-holes 2369 and 2373 were shallower than the others post-holes and post-holes 2368 and 2370 yielded undiagnostic scraps of pottery. Two features, 2371 and 2375, outside the line of the gully, were possibly post-holes for bracing posts although both were very shallow.

Despite the difficulties of observing and excavating these features it is clear that the gully and post-holes represent traces of a timber structure. A likely reconstruction would involve a series of upright posts set in a foundation trench with wattle or planking infill. The alignment of the gully and post-holes would indicate that any infill would have been jointed to the posts. Although this carpentry technique is known in the period (Goodburn, D. 1991), a simpler solution would involve wattles woven between the uprights and a waterlogged construction of this type has been recorded at Castle Street, Carlisle (Building 1090). Although the Melford Meadows construction appears to lack sufficient posts for a wall of woven wattles, the variable size and irregular spacing of

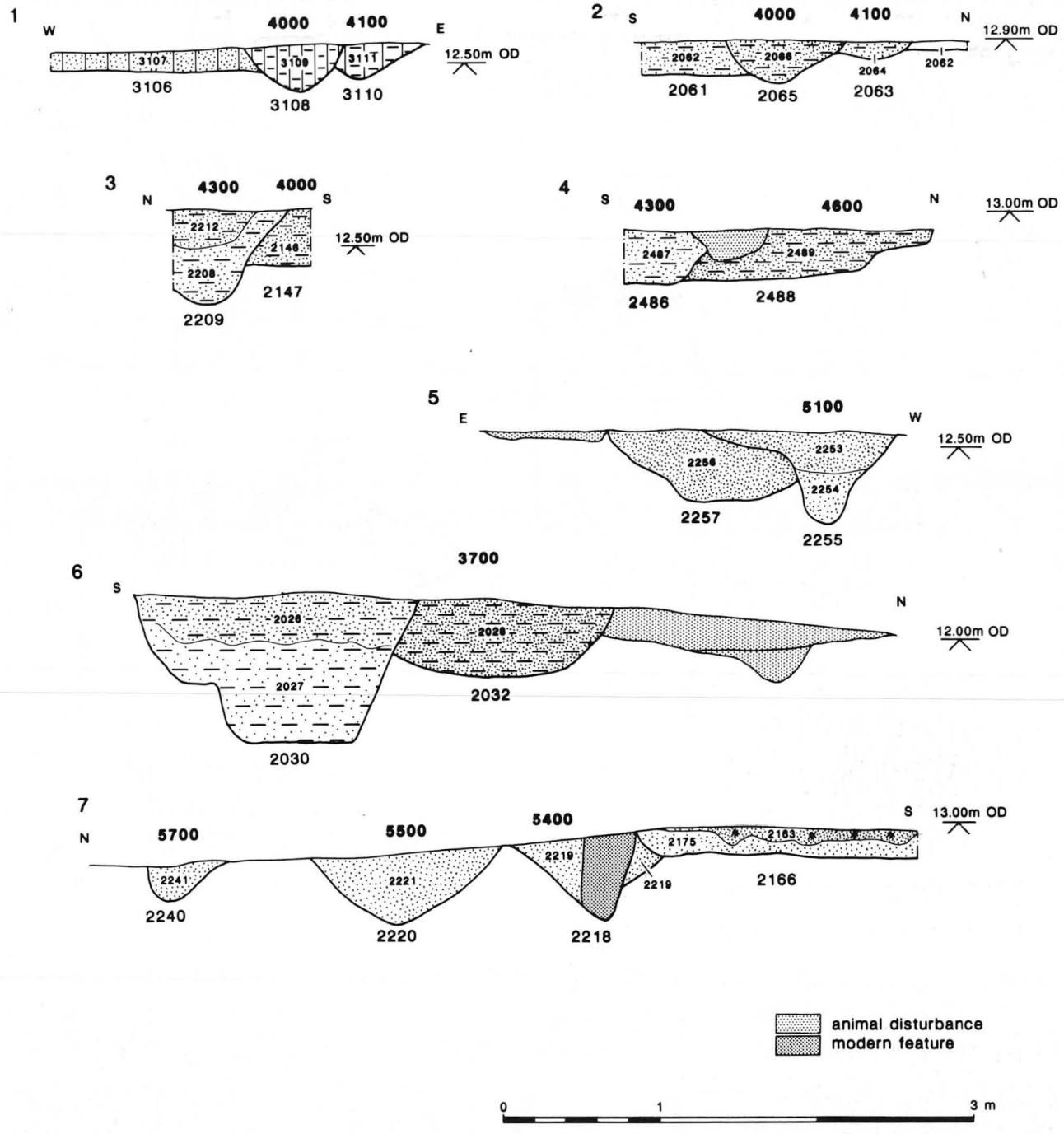


Fig. 18 Roman features: ditch sections. Scale 1:40

Building 1090 at Castle Street may provide an explanation for this apparent shortage (McCarthy 1991, fig. 40). An alternative suggestion is that gully 2367 was a beam-slot holding a base-plate for a timber-framed building. In this case earth-fast posts would have been redundant, but the post-holes were quite shallow, penetrating just 0.15m below the base of the gully, and may represent the tenons of uprights jointed to the base-plate but penetrating below the level of the base- plate. However, this reconstruction fails to account for why the posts were wider as well as deeper than the beam-slot and seems, on the whole, a less likely interpretation.

South of Structure 3 were traces of gullies aligned similarly to the structure based on 2367 (Fig. 16). A post-hole and short section of gully (2447) just south of 2367 were examined and hinted at another building here. Further south, gully 3033 (Fig. 16) was excavated in section with ditch 3037/3800, but their relationship was not clearly established. Gully 3033 possibly cut ditch 3037/3800. A number of parallel traces of gullies were located, but generally too disturbed and insubstantial to excavate. They could not be closely dated and have been treated as unphased, but could belong to Phase 3 or 4 (Figs 9 and 16).

To the south-west of Structure 3 there were traces of occupation, but no real pattern can be discerned. Some features, such as ditches 2129 and 3800 appear to have continued in used from Phase 2. A large oval or

Fig. 19 Phase 4: late 4th century. Scale 1:1000

sub-rectangular pit 2030 (Figs 10 and 18.6) was cut into the end of ditch 2129. Two Saxon sherds were recovered from the upper fill (2026). These are of reasonably large size (23g combined) but are thought likely to be intrusive, particularly in view of the amount of animal disturbance in this area. Five greyware sherds were also recovered which were large enough to suggest they were not residual (average weight 60.6g). The lower fill (2027) contained

seven late 1st/early 2nd-century sherds (Fig. 55.16) which are interpreted as redeposited from ditch 2032. The dating of the feature is clearly tentative but it is thought most likely to belong to the 4th century. Also cutting 2129 was a narrow gully (2144) with a V-shaped profile. Its date is uncertain, but it was clearly the latest in a series of intercutting features. Although much disturbed by animal activity, the dark nature of the fill suggested that it was an archaeological feature.

Gully 4800 (Fig. 10), which was to the south-west of 3800 and south of 2129, possibly formed two sides of an enclosure. The gully was steep-sided and flat based, which would suggest it was a beam-slot, except that it was not rectangular in plan. It contained Oxford Colour-Coated ware and a sherd of imitation samian of Dragendorf form 38 (Fig. 56.25), and was cut by features containing Saxon pottery (Fig. 35: pit 2463 and gully 2542). A cluster of oval pits (2460, 2464 and 2465), was recorded in this area and may have had some connection with the partial enclosure formed by 4800. Pit 2464 contained greyware sherds, while pit 2465 contained eight sherds of late 3rd/4th-century Horningsea jar. Features from Phase 2 which continued in use in Phase 3 were either replaced during or at the end of Phase 3 by the features assigned to Phase 4 and described below (Section V). It seems clear that there was continuity of occupation, albeit at a low level. The continuity is even more marked in the south part of the site where the enclosures described in Phase 2 continue in use until the end of Phase 3.

V. Phase 4 (late 4th century)
(Fig. 19)

The final phase of Romano-British occupation suggests a marked break with the previous occupation. The enclosure in the north-east corner appears to have been abandoned, and Structure 1 replaced by a new feature defined by curving ditches and a concentration of post-holes (Structure 2). To the south of this feature was a sequence of ditches, 4300, 4200 and 3900 (Figs 8 and 9). Ditch 4300 may have been a direct replacement for 4400 but offset to the west. It was the most substantial ditch in this area and clearly a major boundary delimiting the main focus of occupation to the north. Ditch 4200 may have defined an annexe to the south. This was respected by 3900, which formed a dog-leg abutment and may have formed a narrow enclosure contemporary with 4300, or replaced 4300 as the boundary to the main area of settlement (Fig. 19). Saxon pottery from ditches 4200 and 3900 may suggest that these late ditches were open in the early Saxon period, and that the Saxon occupation was influenced by the 4th-century settlement layout.

Structure 2 (Fig. 20 and Pl. IV), which lay to the west of its predecessor Structure 1, was defined by ditches to the north and south. The ditch at the north end, 2297, contained a late 3rd/4th-century sherd (Fig. 56.23) among less diagnostic finds. The western terminal lay outside the excavation area. A similar ditch at the south end, 3500, yielded few diagnostic sherds but these suggest a late 3rd/4th-century infill. The ditches are interpreted as a drainage features marking the southern end of a rectangular or sub-rectangular building. The distance between the terminals of ditch 3500 was about 6m and gives an indication of the maximum width of the building. The north and south ditches were of similar form and clearly paired. A building up to about 12m long could have been accommodated between the ditches. There was no specific arrangement of post-holes to indicate a building of this length. Attached to ditch 3500 was a small curving gully 3600, which may have defined a small enclosure or annexe next to Structure 2. Two sherds of 4th-century date (Fig. 56.37) were recovered from its fill. Its terminal was cut by a shallow pit 2959.

Towards the southern end of the area defined by ditches 2297 and 3500, a number of post-holes were found. It is clear that several phases of post-holes are represented, but the only pattern that could be discerned with any confidence was a simple square setting of four post-holes spaced 3m apart. These post-holes (2060, 2074, 2160 and 2202) were circular or oval in plan but varied in profile. Post-holes 2060 and 2202 were vertical-sided, 2160 was shallow but had a possible post-pipe (2161) and post-hole 2074 was oval with a sloping bottom. The only finds were a piece of Millstone Grit quern from post-hole 2060 (fill 2059) (see Chapter 5, VI 'Worked Stone'), and a probably intrusive Saxon sherd in post-hole 2160. There was no direct stratigraphic relationship between the post-holes and the ditches, but the positioning of the two elements strongly suggests that they formed parts of a single structure. Although there is no evidence for its function, this was presumably another agricultural building. It may be interpreted as a raised store for grain or hay although its form would be of Iron Age type (Morris 1979, 31) and somewhat unusual in a Romano-British context. Two similar structures were found at Spong Hill, where they were dated to the late 2nd to early 3rd century (Rickett 1995, 32 and figs 47 and 52). It is interesting to observe a shallow irregular depression at the northern end of this four-post structure (feature 2866) which mirrors the situation with Structure 1. Again it is not certain whether it was contemporary with the structure, but there is no intrinsic reason why it should not have been, and in that case may also be interpreted as an area that gave access to the structure. Between the four-post structure and the east end of ditch 2297 there was a shallow elongated pit or gully 3400. The pottery recovered included a sherd of Oxford mortarium of 4th- century date, which is consistent with the dating evidence from the other ditches. The pit or gully 3400 was cut by five post-holes, some of which appeared to be modern (Fig. 48), although some may have been of 4th-century date.

The interpretation of the pits found around Structure 1 (Phase 3) is uncertain. Features 2277 and 2989 may have been related. They formed clear north–north-east to south–south-west and east–south-east to west–north-west alignments around Structure 1. Although their location in respect of Structure 1 is probably significant, the pottery from the features suggests a 4th-century date and it is possible that they post-date Structure 1. Feature 2279, which had a dark fill similar to 2277, clearly truncated post-hole 3098 of Structure 1. A number of other pits were found in the area of Structure 2. Pit 2293 was a small, rather irregular pit which contained amongst other items an iron socketed spearhead (Fig. 51.4; s.f.118), and an undiagnostic pot sherd. Pit 3023 was a sub-rectangular pit, 2m long, cut into the top of post-hole 3025 (Structure 1). Five sherds of Romano-British pottery were recovered, including a piece of Horningsea-type jar which would indicate a late 3rd/4th-century *terminus post quem*. The

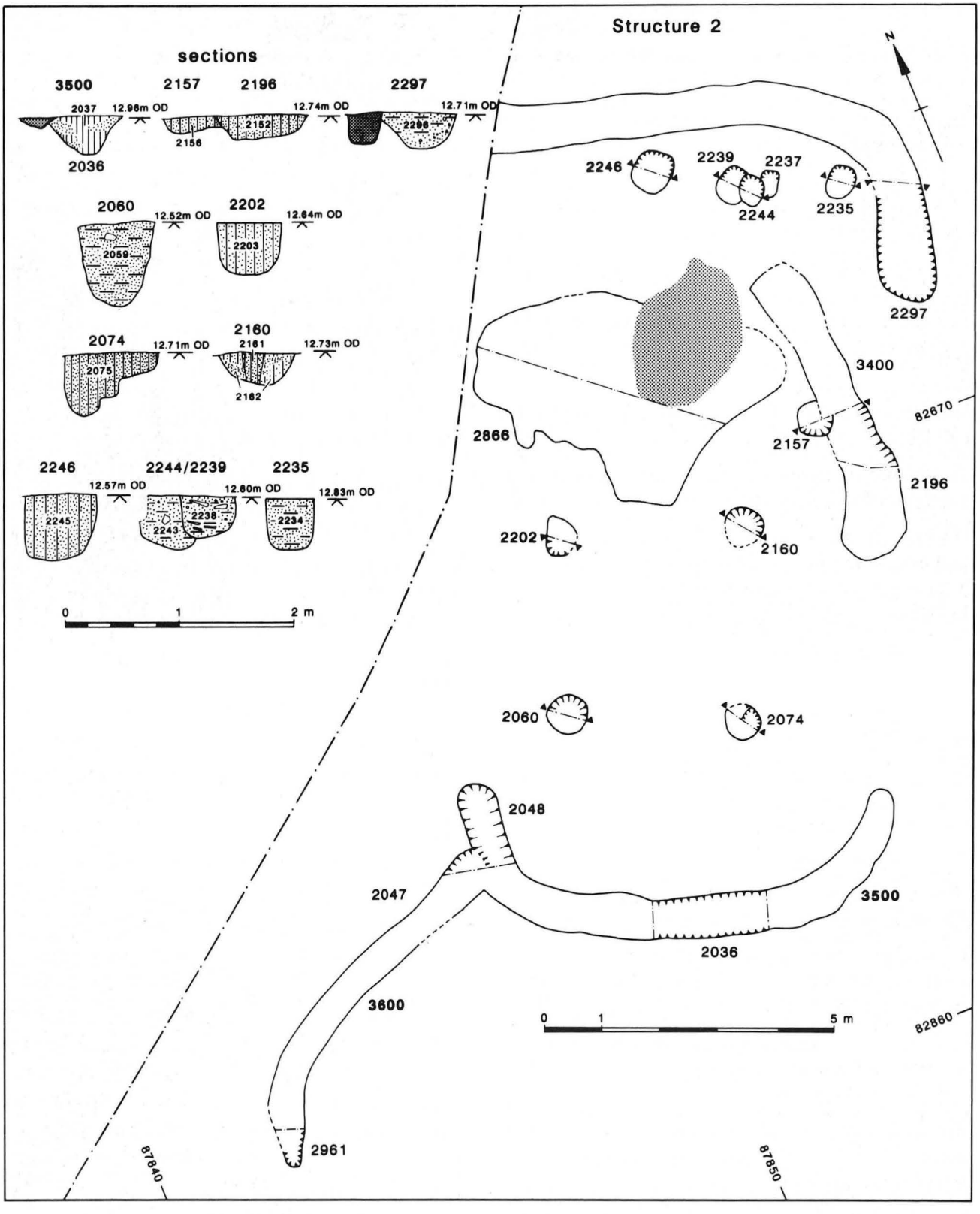


Fig. 20 Roman Phase 4: Structure 2. Scale 1:100; section 1:50

form of the feature suggests that it might be an early Saxon pit.

To the south and west of Structure 2 and its associated ditches and enclosures there is little clear evidence for features in Phase 4 and it is possible that some features continued in use from Phase 3. For example the dating evidence for ditch 4800 suggests that it may not have been backfilled until the mid 4th century. The finds include a coin of Constantinopolis dated AD 330–7 (Chapter 5, I 'Coins', No. 49).

In the long narrow strip running north from the north-west corner of the site a number of features were located. There is little dating evidence and most of the features cannot be phased in relation to the rest of the site.

Plate IV Structure 2

However a small number of features is assigned to Phase 4. Ditches 2054, 2102, 3001 and 3003 are dated by associated pottery to the later phases of the occupation (Figs 19 and 21). Ditch 2102 contained a small 4th-century sherd and was cut by ditch 2054. Feature 3001 was substantial ditch terminal which contained a burial 3005 (Fig. 32 and Chapter 3). Pottery from the lower fill (3002) of the ditch suggested a late 3rd/4th-century date and the assemblage from the upper fill (2925) included pottery suggesting a mid or even late 4th-century deposit (Fig. 55.6). An antler core was also recovered (Fig. 51.5; s.f.238). Ditch 3003 was flat-bottomed and contained abundant pottery of late 3rd/4th-century date.

In addition to the ditches a large mortar deposit (2008), in a shallow cut (2007) is also assigned to Phase 4. The mortar showed some signs of burning. This was cut by a shallow feature 2011 filled with sand and gravel (fill 2012). Cut into this was another shallow feature (2009) which contained a large quantity of Romano-British pottery (Fig. 55.8) (fill 2010), and two post-medieval sherds which are probably intrusive. There is much animal disturbance. There was little reason to doubt that the mortar surface was of Romano-British date, although it was uncovered directly under the modern topsoil and, perhaps surprisingly, had not suffered plough-damage. Its function is unclear and it was not associated with any structural features in the trench. It was relatively thick and may have served as a footing for a structure or as a surface for some industrial purpose. The interpretation of features 2009 and 2011 is similarly not straightforward. The fact that they were dug to the same depth as 2007 suggests some association. They may well have been dug to rob out part of this, or a related structure. If so the post-medieval pottery must be considered intrusive for the robbing is more likely to have been a late Romano-British or early Saxon activity.

In the south part of the site the last of the main east-to-west ditches, 5500, is assigned to Phase 4. It marked the northern edge of the rectangular enclosure in this part of the site. It truncated and largely removed ditch 5600 which itself succeeded 5400. Ditch 5600 may have belonged to Phase 3 or 4. The ditch was only clearly visible in one section (segment 2871). The upper fills of 5500 produced four fragments of Saxon pottery, and residual 1st/2nd-century Romano-British pottery. The lower fills produced sherds of Horningsea jars of late 3rd/4th-century date. To the south was ditch 6200 which formed both the south and east edges of an enclosure which contained a small inhumation cemetery, described and discussed in detail in Chapter 3. There were only two diagnostic finds from 6200: a sherd of a late 3rd/4th-century flanged bowl and a tiny sherd of early Saxon pottery (1g). The southern arm of this ditch was relatively broad and shallow, its eastern arm extended to ditch 2632 in the north.

The position of the cemetery at the margin of settlement is typical of the Romano-British period. The cemetery consisted of twenty-two graves aligned east-to-west and containing up to twenty-six inhumations. These are discussed more fully in Chapter 3. A range of young and mature adults of both sexes was buried here, presumably representing individuals from the 4th-century settlement. The burial rites showed some variability and included decapitations and multiple burials. There were up to ten decapitations, a high proportion of the burials in

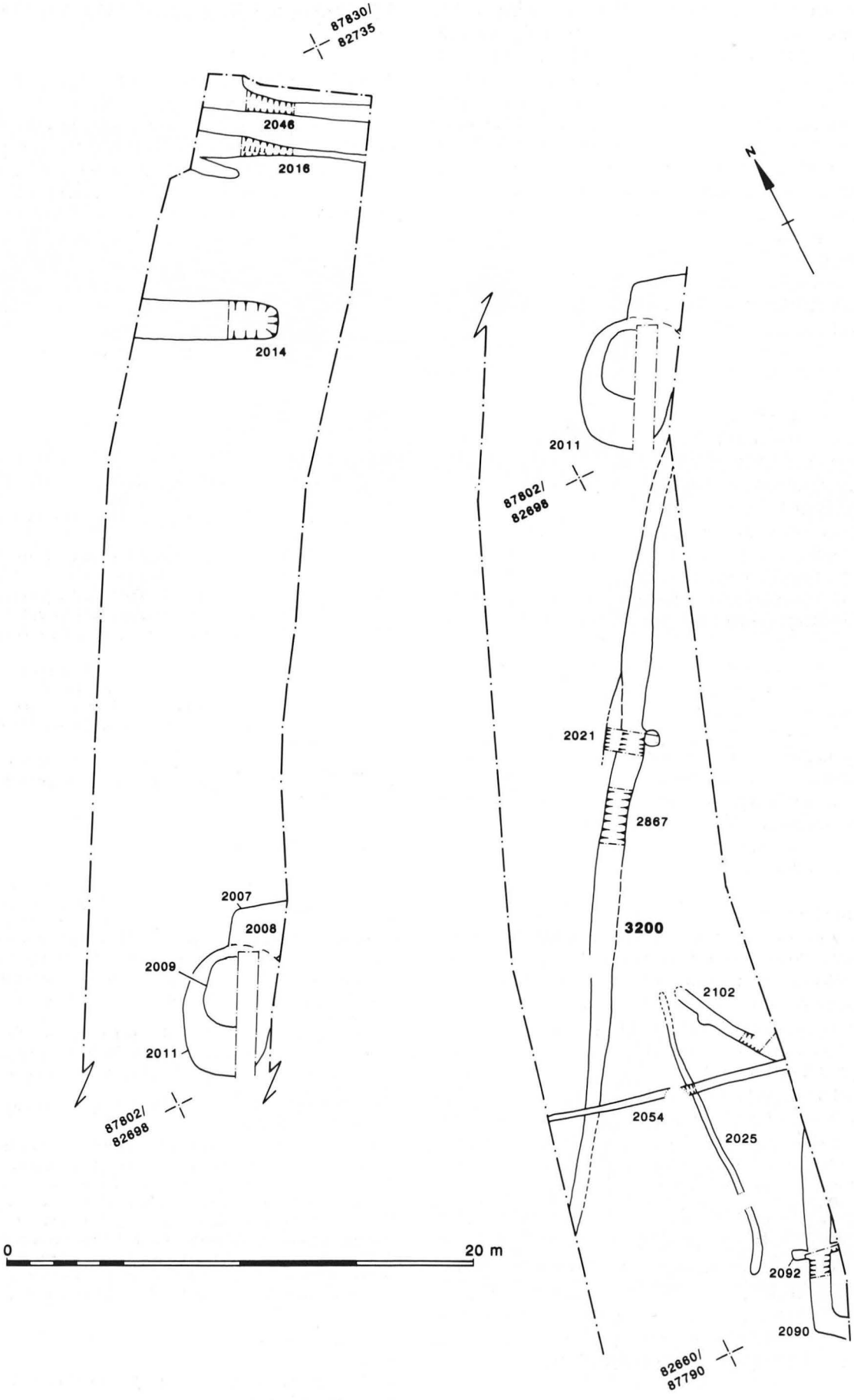


Fig. 21 Roman features: north-west extension. Scale 1:250

national terms. The significance of this is unclear, but it may mean that the practice was particularly popular locally, or that the cemetery was perhaps used for a restricted group of individuals. There was evidence of wooden coffins in a number of the graves, with grave-goods, hobnail boots and personal ornaments present in a few cases. The range of practices was fairly typical of late Roman rural burial and no special significance can be attached to them. Few conclusions can be drawn, both because of the small size of the cemetery and because the bone preservation was so poor, many skeletons only surviving as soil stains. However, it seems that women were more often buried with the head to the east rather to the west, and tended to be associated with the more complex rites including decapitation. This tendency is not apparent nationally (Philpott 1991, 79) and, if correct, may be of no more than local or regional significance.

To the east of the cemetery was a small deposit of cremated bone within a charcoal-lined pit (2579, Fig. 12). This is thought likely to have been part of the cemetery and such cremation rites would not be out of place in a Romano-British funerary context particularly as the pit was suggestively grave-shaped. It was slightly narrower than the other pits and unique in having a wood charcoal lining (2581); this layer contained two fragments of cremated bone, eleven undiagnostic Romano-British sherds and fragments of a copper alloy cable bracelet (not illustrated). The main fill (2580) was a relatively clean sand which contained an undiagnostic sherd. There was no suggestion of *in situ* burning and it was thought that the burnt wood was brought in for deposition with the cremated remains. The upper fill may represent deliberate infilling. On balance this is thought to represent a funerary rite and the feature is discussed more fully below in Chapter 3, but it is possible that the incorporation of the calcined bone and cable bracelet fragments in the charcoal deposit was fortuitous. The feature could possibly be early Saxon, although in a settlement context this seems less likely.

Around the cemetery were traces of other boundaries. To the north was 2632 which was aligned north-east to south-west, with a return at the south-west end. Just south of this ditch was a large pit, 2495, which was presumably contemporary with the cemetery as it contained a relatively large assemblage of pottery mostly of 4th-century date. This comprised twenty-six sherds from the upper fill (2496) mostly datable to the 4th century, and three sherds of late 3rd/4th-century date from the middle fill (2525). The lowest fill produced no diagnostic finds. The pit was, however, at some distance from the cemetery in a somewhat isolated position. It might have been used for storage, although a latrine would be another possibility. Deep latrine pits have been identified from a number of sites at the margins of settlement and close to field boundaries (*e.g.* Barton Court Farm, Oxfordshire, Miles 1986, 30; Spong Hill, Norfolk, Rickett 1995, 40–1). The final feature in this part of the site was further ditch, 6300, aligned north-west to south-east. It may have been intended to create a wide entrance between it and ditch 2632. A small Saxon sherd was the only find.

VI. Unphased Romano-British features
(Fig. 22)

A number of features recovered in the excavation could not be assigned to a specific site phase, although many were clearly of Romano-British date and these are described below by area and discussed where appropriate. The features comprise a good number of pits in the northern part of the site where the main evidence for occupation and structures was located. To the south there are smaller numbers of pits and ditches which cannot be phased, in an area which has mainly produced evidence for distinctive patterns of enclosures and in Phase 4 the late Romano-British cemetery. It can be seen that the distribution of the unphased features broadly mirrors the distribution and concentrations of the phased Romano-British features.

Features in northern area
(Figs 8 and 9)

Pits and post-holes in area of Ditch 3300
(Fig. 8)

2235 — sub-rectangular post-hole or pit, 0.44m deep. Its single fill contained two iron nails.
2237 — square post-hole or pit with vertical sides, 0.17m deep. Without finds. Cut by 2244.
2239 — oval in plan and 0.36m deep. The latest in a group of three here (with 2244 and 2237). Contained two undiagnostic greyware sherds.
2244 — sub-rectangular post-hole or pit, 0.48m deep. No finds. Cuts 2237.
2246 — circular post-hole or pit, 0.6m deep with vertical sides. Its single fill contained a greyware bodysherd. Perhaps associated with 2235, 2237, 2239 and 2244 and aligned with ditch 2297 (Phase 4: Structure 2).
2343 — oval pit cut by ditch 3300 (Phase 3). It was 0.22m deep with a rounded base. No finds.
2450 — squarish pit, 0.48m broad and 0.29m deep with vertical sides. A possible post-hole, but containing only an abraded fragment of undiagnostic pot.

Pits to the east of Structure 1
(Fig. 8)

There was a scatter of pits to the east of Structure 1. Some of these contained Saxon pottery and are described in Chapter 4. Others contained Romano-British pottery or were without finds and these are described below. The pits tended to be quite small and sub-rectangular or sub-circular in plan, without any evident distinction between those containing Saxon pottery and those without. It is of course possible that all, including those with Romano-British finds, belong to the early Saxon occupation.
2360 — isolated sub-circular and shallow pit with a rounded base to the south of the main group. The upper fill was black and contained abundant oak charcoal and overlay a lighter grey sand. A tiny Romano-British sherd came from the upper fill.
2901 — oval pit with steep sides and a flat base, 1.1 m long, 0.7m wide and 0.2m deep. No finds.
2902 — sub-rectangular feature with moderately steep sides and a flat base. It was 1.1m long, 0.8m wide and 0.3m deep. No finds.
2967 — oval, flat-based pit with steep sides (Fig. 17.1). The basal fill (2968) was a thin, dark humic soil which may have been the remains of a lining. The upper fills, 2969 and 2970, were lighter in colour. Two undiagnostic Romano-British sherds came from 2968 and 2970.
3046 — sub-rectangular, flat-based pit cut by a modern gully (Fig. 17.2). It had a single homogeneous fill and contained a small late 2nd/early 3rd-century sherd and two small undiagnostic Romano-British sherds.

Pits south of Structure 2
(Fig. 8)

2852 — very shallow pit (0.8m) badly truncated located near the end of ditch 3100, without diagnostic finds.
2959 — sub-circular feature, 0.4 m deep, cutting Phase 4 ditch 3600 (segment 2961). The pottery assemblage suggested a late 3rd/4th-century deposit date, and this should be pushed into the mid 4th-century since ditch 3600 is likely to be of 4th-century date.

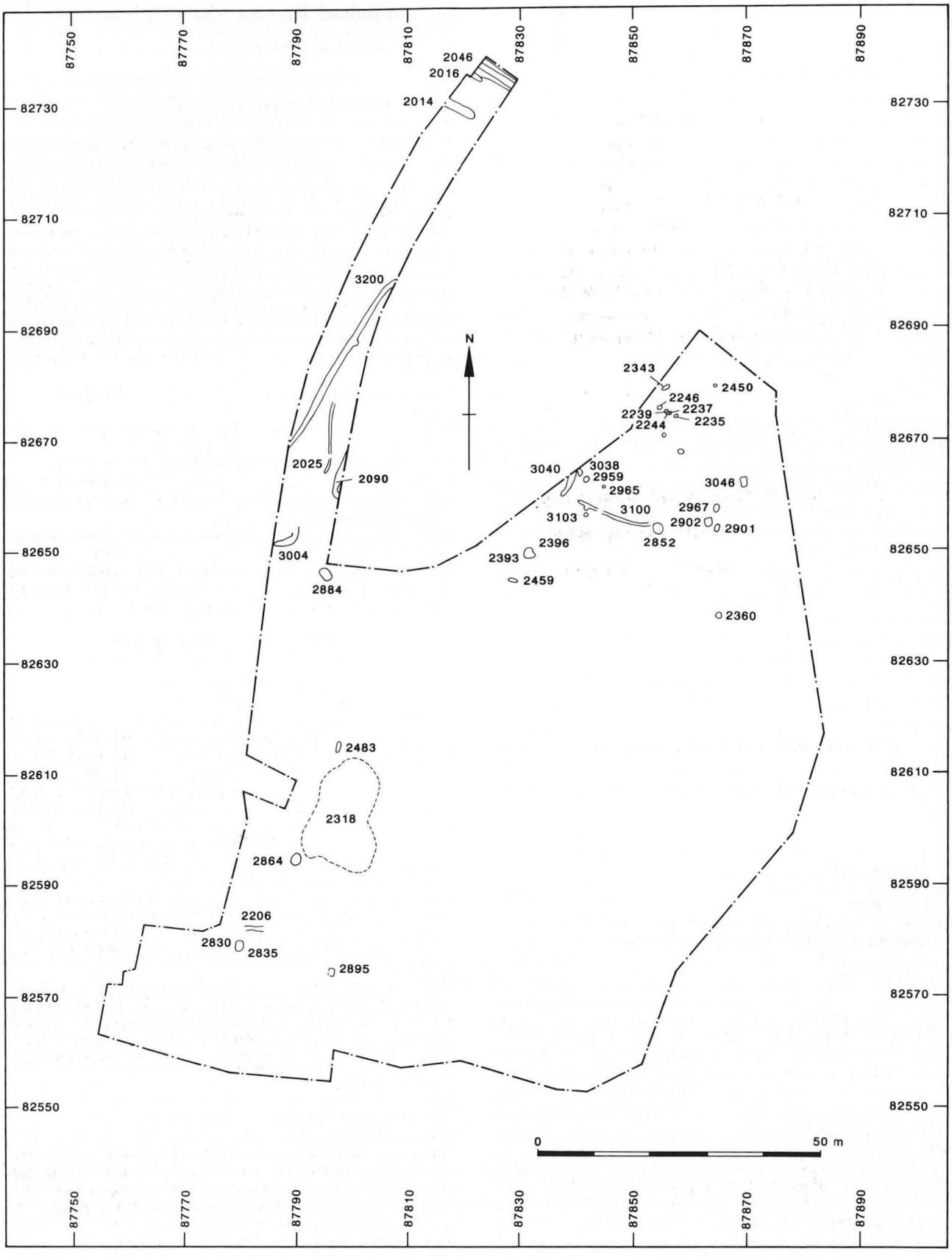


Fig. 22 Unphased Roman features. Scale 1:1000

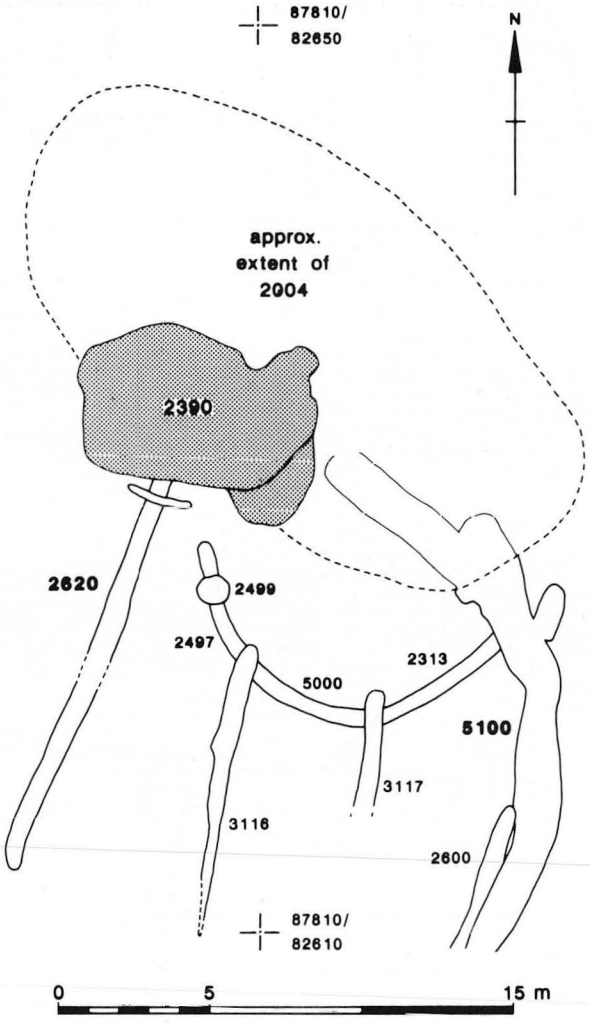


Fig. 23 Layer 2390: central-western area. Scale 1:250

2965 — oval? pit, 0.5m deep but rather disturbed by burrows. One undiagnostic Romano-British sherd.
3038 — squarish pit, 0.5m deep. Seven Romano-British sherds came from fills 3039 and 3084.
3103 — circular pit or post-hole, 0.34m deep. Contained three fragments of rotary quern (Chapter 5, VI 'Worked Stone', 16–17).

Ditches south of Structure 2
(Fig. 8)
3040 — Terminal of ditch aligned approximately north to south to the south-west of Structure 2. One undiagnostic Romano-British sherd.
3100 — Narrow ditch or gully running from west-north-west to east-south-east within the large Phase 3 enclosure ditch 4400. No finds.

Pits in area of Ditch 3900
(Fig. 9)
Three pits were located to the north and south of ditch 3900 (Phase 4). There is no reason to think they were associated with SFB 2033, and the lack of Saxon pottery from any of them, while it was quite plentiful from the SFB and nearby oven 2225, would suggest a Romano-British date for them.
2393 — oval pit 2.1m long, 1.32m wide and 0.27m deep with a flat base. It cut pit 2396. Its upper fill was dark and its lower fill black, suggesting fire debris, but there was no indication of *in situ* burning. No finds.
2396 — heavily truncated by pit 2393 but with a squarish northern end. It was 0.22m deep with a flat base. Mid-brown fill with no finds.
2459 — narrow, rectangular pit (Fig. 17.7). Its upper fill, 2457, was dark and contained a sherd of burnt samian of form Dragendorf 18/31 (Chapter 5, VIII: 'Romano-British pottery', No. S14) and four undiagnostic sherds. The lower fill (2458) was black and charcoal-rich (soil sample 13) with some cereal remains (Chapter 6, II 'Plant remains', Table 23). The shape of the pit is quite distinctive and although there was no indication of a lining or *in situ* burning, and the charcoal may have been deposited as backfill, it is possible that the feature was a type of low-firing oven/fire pit.

Features in the north-west extension
(Fig. 21)
A small number of ditches was located in the north-west extension of the site. There was little coherent patterning in this area, but the majority were broadly aligned east to west, with the notable exception of ditch 3200. The evidence suggests that there was not a great density of features in this part of the site.
2014 — terminal of a ditch 1.4m wide. Possibly two intercutting ditches. It was 0.3m deep, but had undoubtedly been truncated. It contained modern glass as well as a single sherd of 'Belgic- type' bowl of late 1st/early 2nd-century date, and a fragment of rotary quern of Millstone Grit (fill 2013) (see Chapter 5, VI 'Worked Stone'). The orientation of the ditch suggested that it was Romano-British (although possibly not early) but it had clearly suffered some modern disturbance.
2016 — ditch with steep sides and rounded base, but only 0.12m deep. No finds.
2025 — narrow sinuous gully cut by Phase 4 ditch 2054 and early Saxon pit 2020.
2046 — ditch with steep sides and a rounded base and 0.47m deep. Light brown fill (2049). Single undiagnostic greyware sherd.
2090 — ditch 0.4m deep with moderately sloping sides and a rounded base. Possibly parallel to 3200 (unphased) and with a right-angled corner.
3004 — Similar to the Phase 4 ditch 3003, but without diagnostic finds. Its relationship with 3003 was unclear.
3200 — V-profiled ditch 0.6m deep running north-east to south-west for 35m. Its excavated sections were without finds. It was filled with a light brown soil which had been somewhat disturbed by animal burrows. The ditch was stratigraphically early in the local sequence. The clean nature of the fill suggests an absence of nearby occupation.

Features in the central, western and southern areas

Features in the central and western area
(Figs 9, 10, 16 and 23)
To the south of Structure 3 there was limited evidence of features. There were slight traces of linear features on the same general alignment as Structure 3 and these have been tentatively assigned to Phase 3 (Section IV above). Further south was a spread of material (2004 and 2390) possibly from a midden. This material could not be confidently assigned to a Phase but probably belongs to Phase 3 or 4, although it could have had its origins as early as Phase 2 (Section III above). The Romano-British occupation in this area can be broken down into three phases on the basis of pottery and other evidence. More substantial features are two unphased pits 2483 and 2884.
2483 — sub-rectangular feature or pit 1m long, 0.72m wide and 0.42m deep with flat base, located just north of the waterhole (2318). No finds. Its proximity and alignment parallel to ditch 4800 may indicate that it was a Phase 3 feature (late 3rd/4th-century), but it may equally be a Saxon feature.
2884 — sub-rectangular isolated pit north of ditches 3700 and 2129 just near the north-west extension to the site (Fig. 17.9). There was a deposit of unburnt flint nodules (2885) in a lens of greyish silty sand (2886) on the surface of this feature. They may have been unconnected with the pit. The pit seemed to have been deliberately backfilled with homogeneous gravelly sandy silt (2908). No finds.

Features in the southern area
(Figs 12 and 24)
The southern area generally seems to have been marginal to settlement. The largest unphased Romano-British feature — a waterhole 2318 (Fig. 24) — is found in this area. It was located north of the southern group of enclosures and comprised a wide depression with a small pit (2322) cut into the base. There was no waterlogged material from this pit and no trace of a lining although its deposits were noticeably damper and the retrieved carbonised remains were better preserved (Chapter 6, II 'Plant Remains'). The pottery was exclusively Romano-British throughout and this suggests it was not in use in the early Saxon period. The fact that SFB 2172 (Fig. 36), which is probably of 5th-century date, cut the upper fill of the waterhole supports this view. It is unclear when the feature was first dug but it appears to have gone out of use in the late 3rd to 4th century and was finally infilled in the mid to late 4th century.

It is uncertain whether the waterhole made use of a natural hollow in the land or whether the hollow was deliberately created, but given the proximity of the River Thet *c.*50m to the west, it seems unlikely that it

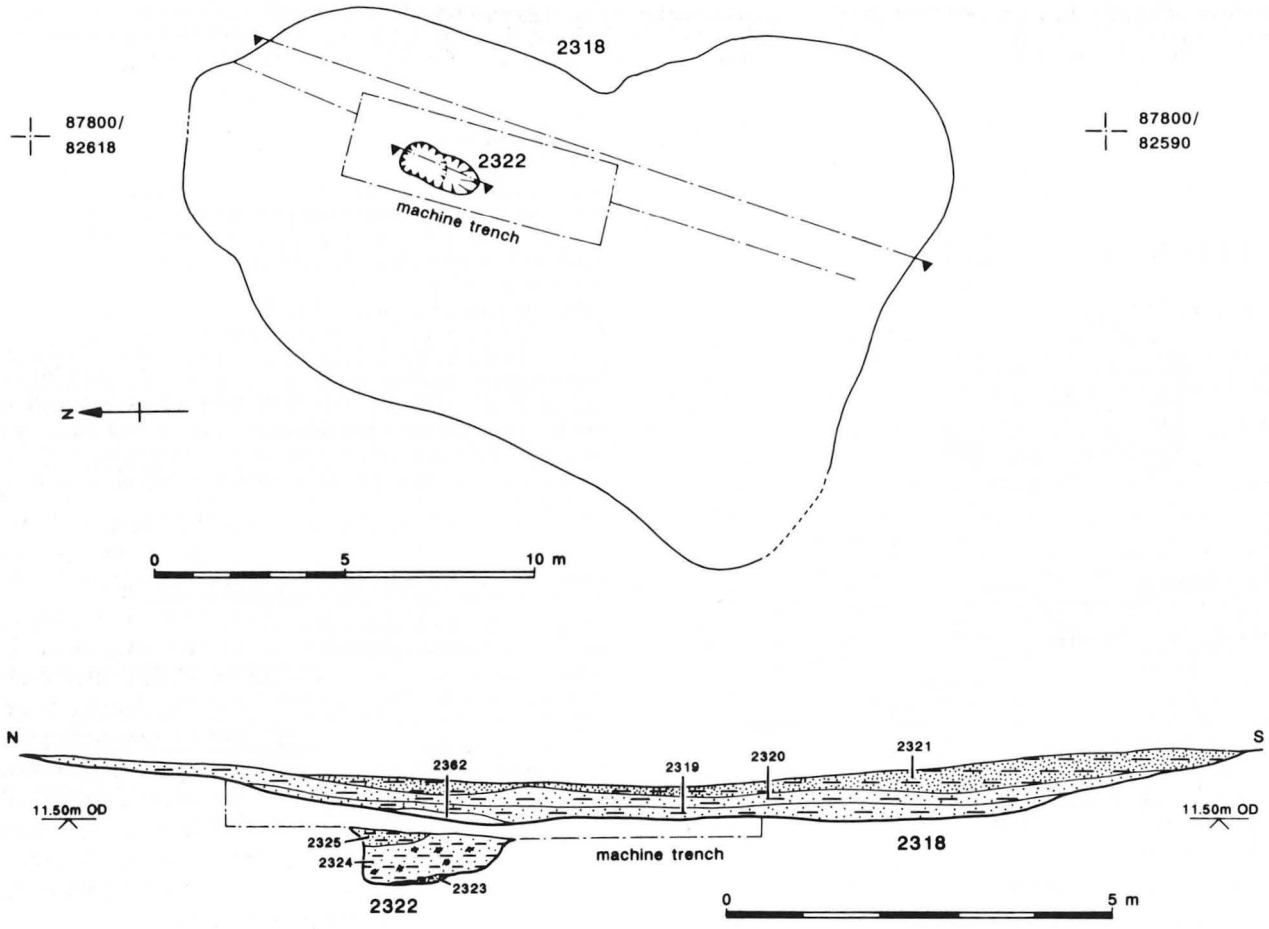


Fig. 24 Waterhole 2318: plan (scale 1:200), section (scale 1:100)

would have been deliberately dug. It may have begun as a natural hollow which was utilised as a small simple waterhole, and which was eroded by drinking animals and perhaps by digging to combat the instability of the sand and to reach a falling water table. Large, shallow depressions are a feature of some Romano-British sites and are commonly interpreted as ponds or sometimes as crew-yards for overwintering cattle (*e.g.* Mackreth 1988; Williams *et al.* 1996). The feature at Melford Meadows appears to be both narrower and deeper than would be expected from a crew-yard and the interpretation is not convincing in this instance.

From the earliest phase there appear to have been enclosures bounded by ditches in the southernmost part of the site. In the latest phase a small cemetery occupied the south-west corner of the site and cut through enclosure ditches of the earlier phases (Fig. 12). There is limited evidence for features other than ditches. A small number of unphased pits 2830, 2835, 2864 and 2895 are thought to be probably Romano-British.

2318 (including **2322**) — probable waterhole approximately 20m long, 15m across and about 1m deep below the surface of the surrounding sand, with a small sub-rectangular pit 2322 in the base (Figs 10 and 24). The depression was investigated initially by a machine-excavated trench which was subsequently extended and cleaned by hand. The sides of the feature sloped gradually. At the bottom of the hollow was pit 2322 which had vertical sides except to the south where it was slightly stepped. The main fills (2325 and 2324) of the pit were greyish brown silty sands with frequent charcoal flecks and contained pottery with a consistent late 3rd/4th-century date range. The lowest fill (2323) was a dark, slightly humic and damp deposit, although not waterlogged. The hollow 2318 was filled with about 0.5m of light to dark brown slightly silty sands with moderate quantities of pottery (fills 2319, 2320 and 2321). The pottery was a mixture of 2nd- to 4th- century types throughout with a mid-to-late 4th-century *terminus post quem* provided by sherds of Oxford Colour-Coated Ware from context 2321. There was no indication of a stratified sequence of pottery and the fills probably represent a deliberate infill after the feature had gone out of use, and much of the pottery is therefore residual.

2206 — short length of ditch south of 5400 at its west end; 0.6m wide, 0.18m deep.

2830 — sub-rectangular pit, 2.3m long, 1.4m wide and 0.63m deep with steep to vertical sides and a flat base. It was cut by Saxon gully 2833. The upper fill (2831) contained five undiagnostic Romano-British sherds, and the lower fill (2832), which was charcoal-rich, contained some cereal remains (Chapter 6, II 'Plant Remains', Table 23; soil sample 25), and five Romano-British sherds.

2835 — shallow pit (0.17m deep), largely truncated by 2830 but possibly circular in plan. Only a few flints were recovered. It is possible the feature was prehistoric.

2864 — sub-circular pit cut by SFB 2172. It was 0.56m deep with steep sides and a rounded base. The lower fill (2863) contained a single flint, and the upper fill (2862) contained seven undiagnostic Romano-British sherds as well as flints. The number of Romano-British sherds and the fact that the pit was cut by an early Saxon SFB, perhaps suggests that the feature belongs to the Romano-British occupation.

2895 — shallow, sub-rectangular pit, 1.4m square and 0.22m deep. It yielded no finds but was cut by shallow feature 2429 (Fig. 36) which contained 5th-century pottery.

Chapter 3. The Romano-British Cemetery

by Angela Boyle

I. Introduction

The small inhumation cemetery, located in the south-west area of the site on the periphery of the settlement, comprised up to twenty-six individuals in twenty-two graves (Fig. 12). A further adult female (3005) was located in a ditch terminal (3001) on the western side of the site away from the cemetery. A single deposit of cremated bone (2579), which is likely to be Roman, was also recovered from a pit (2579) near the inhumation cemetery. Aspects of these burials are discussed below. The detailed information on skeletons, coffins, grave cuts and associated grave-goods is presented in the grave catalogue and the graves are illustrated in Figures 25–32.

Grave No.	*Skeleton No.*	*Presence and Completeness*	*Age*	*Sex*
2067	2123	V. poor, skull and femora	Ageing	M
	2149	V. poor, skull only, broken in antiquity	10–15 y	–
2083	2122	V. poor, skull and legs	18–25 y	F
2667	2758	V. poor, skull and legs	Mature	?
2669	2671	Very poor, fragmentary legs only	Mature	?
2672	2674	V. poor, skull and legs	Adult	?
2680	2736	Poor, skull and feet only	Adult	?
2683	2682	Stain only		
2695	2749	Stain only		
	2766	Poor, skull and legs only	Ageing	M?
2738	2743	Preservation poor, skull, legs, right calcaneus	Mature	M?
	2765	Poor, skull only	Ageing	F??
2739		No surviving stain or bone		
2761	2845	Poor, femur fragments and staining	Adult	M
2763	2787	V. poor, legs only	?	?
2770	2769	Poor, skull and legs, atlas fragment	Ageing	F?
2771		No surviving stain or bone		
2776	2859	V. poor, skull and legs	Young adult	F
2779		No surviving stain or bone		
2788	2827	V. poor, tibia	Ageing	F?
2790	2795	V. poor, fragmentary skull and staining	Subadult	
2794	2793	Poor, skull and legs only	Ageing	F?
2798	2800	Very poor	Adult	M?
2811	2813		Adult	F?
	2828/ 2858	Poor, skull, femur shafts and staining	Adult	?
2815	2844	Poor, legs and feet only	Adult	?
3001	3005	Poor	Ageing	F?

Table 1: skeletal details

II. Human bone analysis

Preservation

Preservation of the skeletal assemblage was uniformly very poor. Soil type is well known as an influential factor in bone preservation, and in general this is worse in acid conditions of the sort which prevailed at Melford Meadows. The inorganic matrix of bone is dissolved by the acids present in the soil (Henderson 1987, 46). Two individuals were indicated only by the presence of a stain: 2682 (grave 2683) and 2749 (grave 2695). In a further three graves neither bone nor stain survived (graves 2739, 2771 and 2779). It is possible that these graves were never occupied or that the bodies were exhumed, but it is considered just as likely that the bone had dissolved. Skeletons recovered during excavations at Brandon Road in nearby Thetford were in comparably poor condition: 'frequent loss of vertebral bodies, long bone ends and much of the outer surface of long bone shafts (had occurred)' (Stroud 1993, 168). The skeletal assemblage is therefore of limited value as a contribution to population studies of the period. However, it is a useful addition in terms of the evidence for burial practice.

Age and sex

Given the extremely poor survival of the skeletal material, assessments of age and sex should at best be seen as tentative. The sex of the adult individuals was based on standard morphological data (Workshop 1980). In keeping with current practice no attempt was made to sex the subadult skeletons. Adult age estimation was based on degree of dental attrition (Brothwell 1981, 72). Poor preservation precluded metric analysis as there were no complete bones. There were five ageing probable female adults (2765, 2769, 2793, 2827, 3005), two ageing probable male adults (2123, 2766), three mature adults of unknown sex (2671, 2674, 2758), one mature adult male (2743), two adult males (2800, 2845), one adult female (2813), three adults of uncertain sex (2736, 2828=2858, 2844), two young adult females (2122, 2859), two subadults (2149, 2795) and one individual (2787) who was too poorly preserved for any assessment to be made. Skeletal details are summarised in Table 1.

Pathology and discontinuous traits

The recorded frequency of pathology and discontinuous traits, both dental and skeletal, is unlikely to reflect the true incidence because of the extremely poor preservation. Vertebral degeneration was noted on the few surviving vertebrae of skeletons 2766 and 2827. Additionally, marked attrition of surviving molars was present in the case of 2766 and also skeleton 2743. Skeletons 2743 and 2769 had heavy calculus deposits on surviving dentition. An odontome was noticed on the left floor of the nasal bone of skeleton 2793 while skeleton 2845 exhibited spina bifida occulta of the first sacral body.

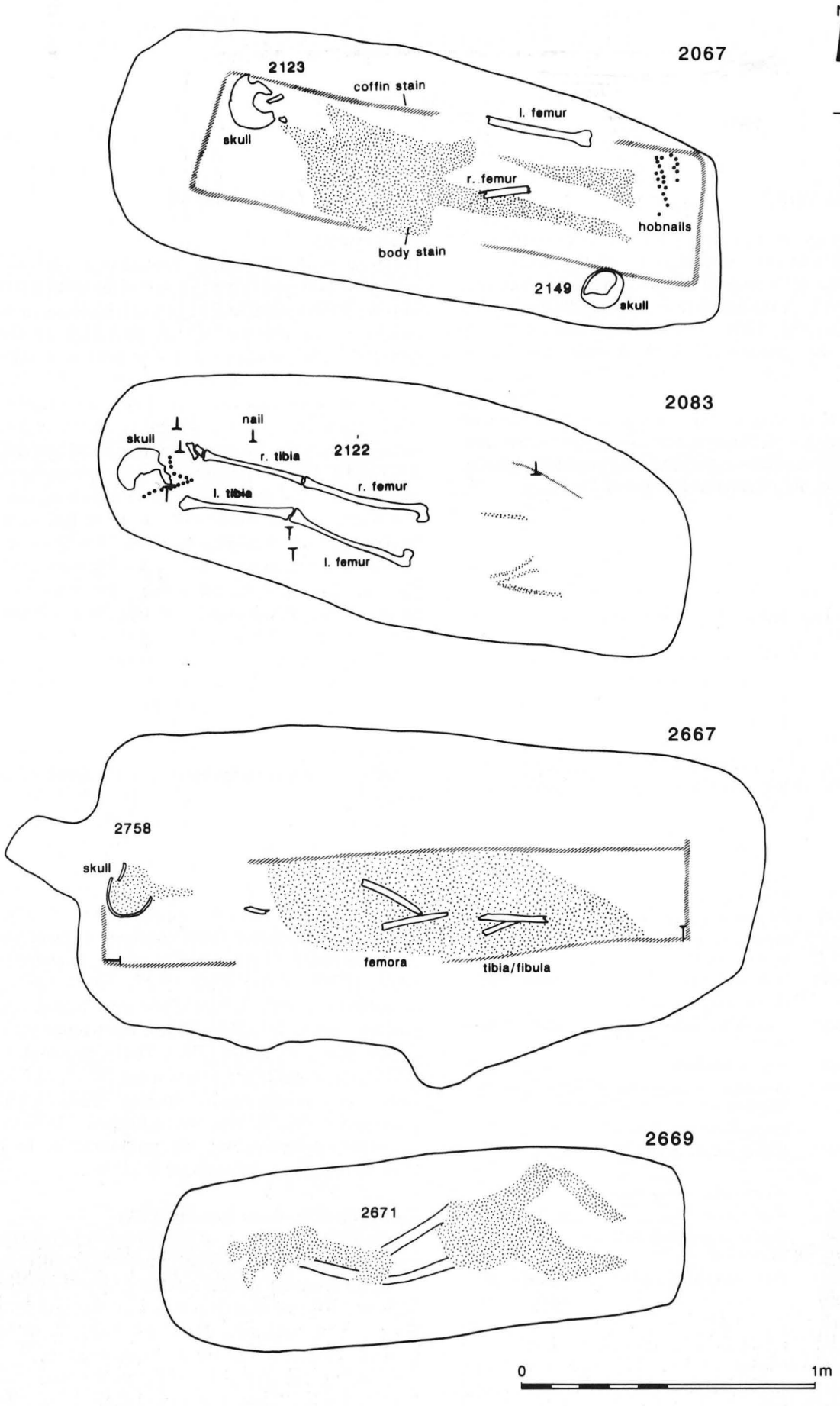


Fig. 25 Graves 2067, 2083, 2667, 2669. Scale 1:20

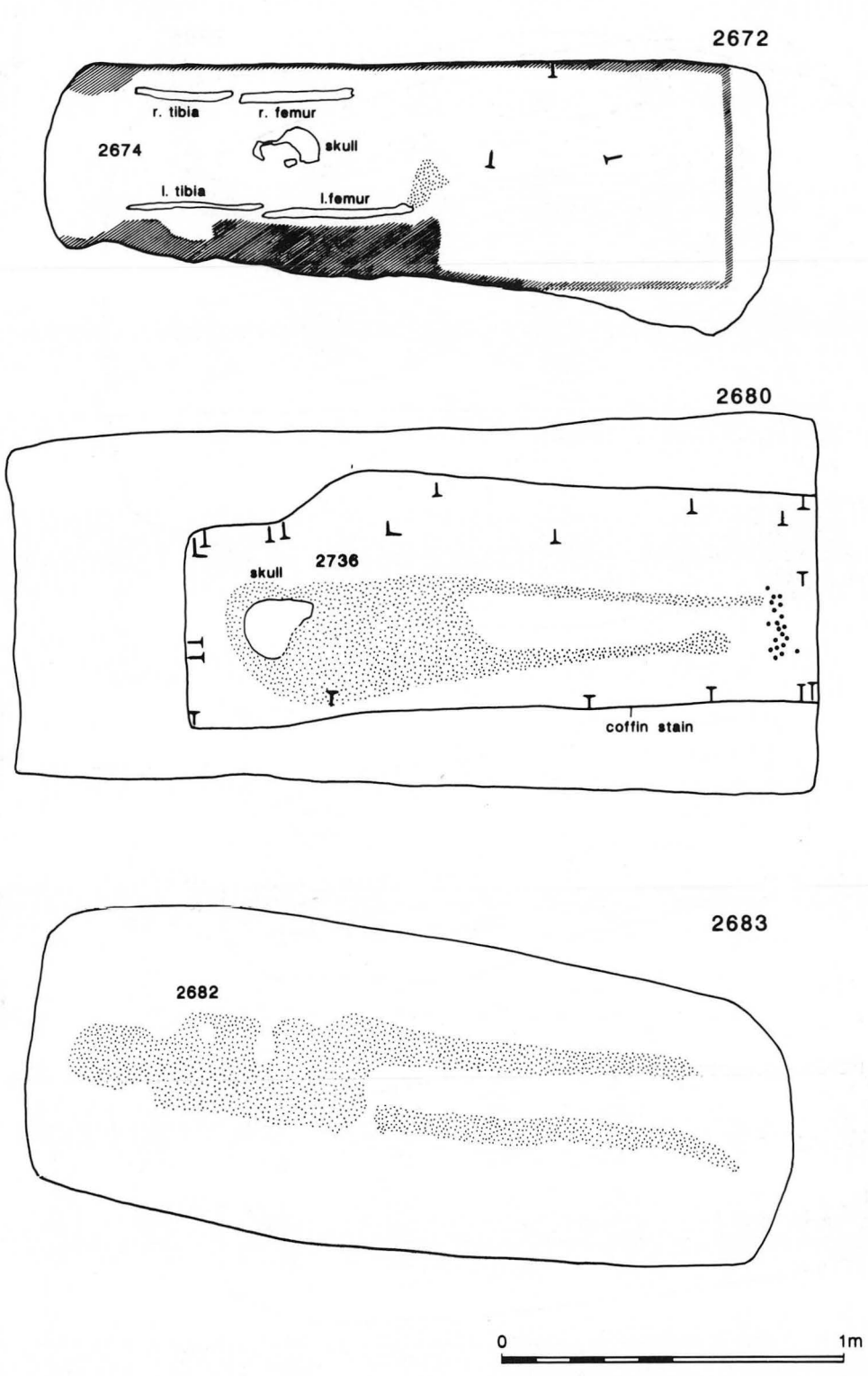


Fig. 26 Graves 2672, 2680, 2683. Scale 1:20

III. Burial rites

Decapitation

There is evidence to suggest that up to ten individuals may have been decapitated (2122, 2149, 2671, 2674, 2765, 2769, 2787, 2793, 2813 and 2828=2858). In four cases the skulls had been placed at the knees (2674, 2769, 2793 and 2813) and in two instances the skull was located at the feet (2122 and 2766). Skeleton 2122 (grave 2083) was a young adult female whose skull lay between her ankles. Skull 2149, which appeared slightly charred, was located outside and above the wooden coffin containing skeleton 2123 (grave 2067). It may be envisaged that skull 2149 was thrown into the grave after the lowering of the coffin. Skull 2149 may have belonged to an individual who had been decapitated, although since the mandible was missing, it is possible the skull had been exhumed. Skeletons 2671 (grave 2669) and 2787 (grave 2763) were represented largely by staining, but there was no staining in the region of the skull which was

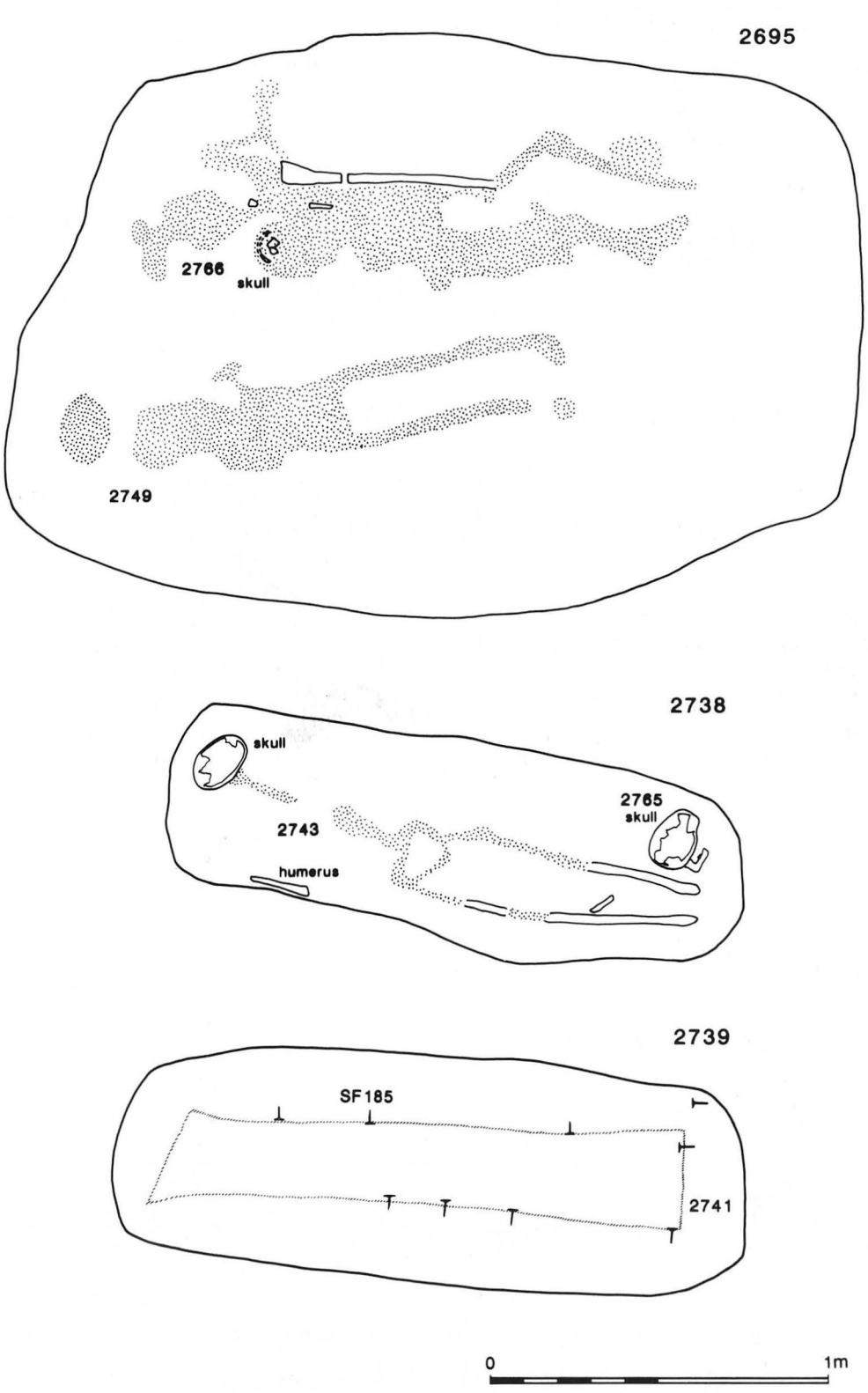


Fig. 27 Graves 2695, 2738, 2739. Scale 1:20

normally the best-preserved part of the skeleton. This may suggest that the skulls of these individuals were buried elsewhere.

Skeleton 2674 (grave 2672) was a mature adult of unknown sex whose skull had been placed between the knees. The skull of skeleton 2765 (grave 2738) had been buried between the feet of a second skeleton (2743) buried in that grave. Skeleton 2769 (grave 2770) was an ageing adult female whose skull and mandible had been placed behind the knees.

Grave 2811 was extensively disturbed by animal activity and the skeletal remains (2813, 2828=2858) were partially disarticulated. It is therefore not possible to determine whether a true example of decapitation is indicated. Three skeletons were identified during excavation though it is quite possible that only two are

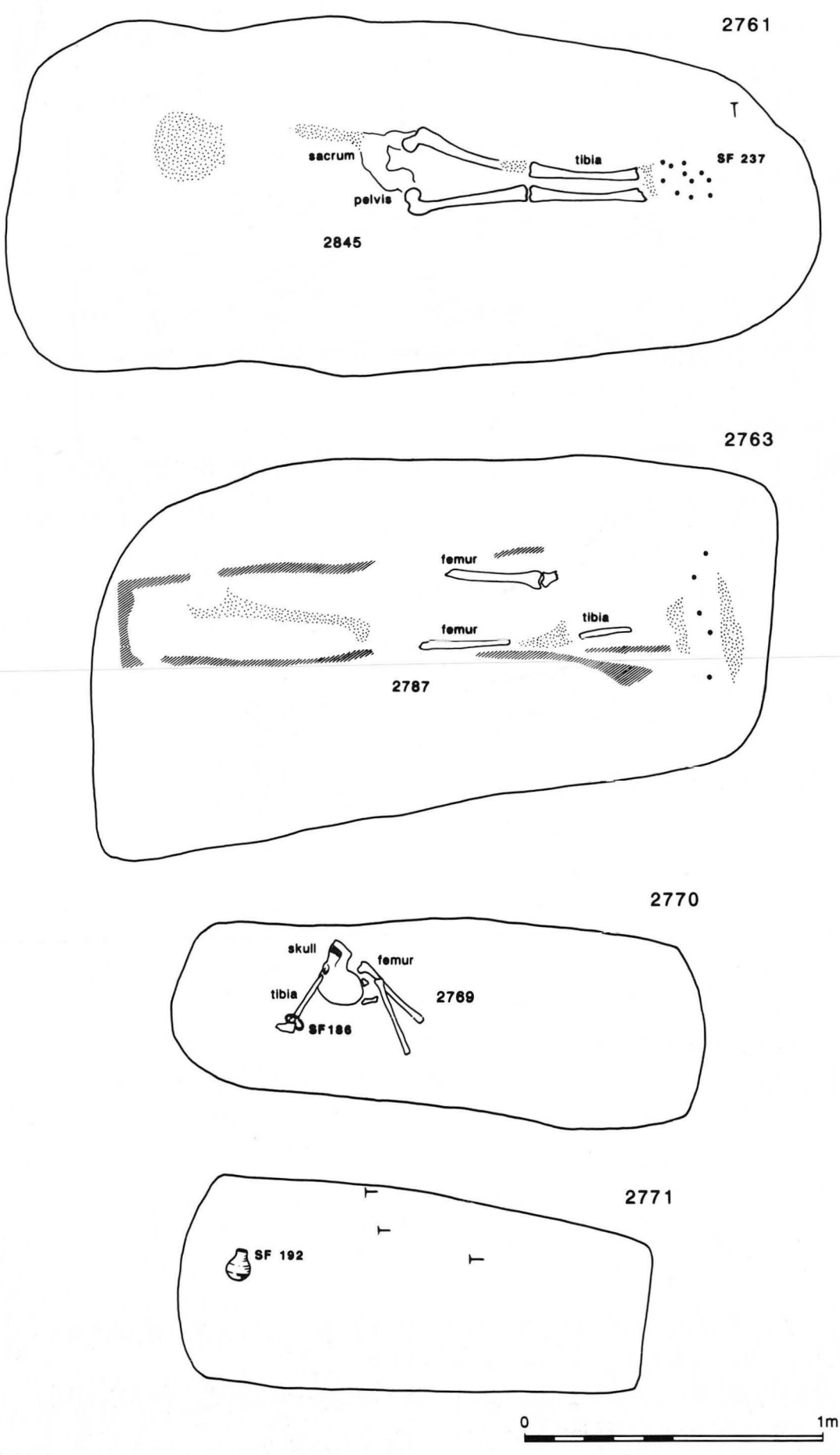


Fig. 28 Graves 2761, 2763, 2770, 2771. Scale 1:20

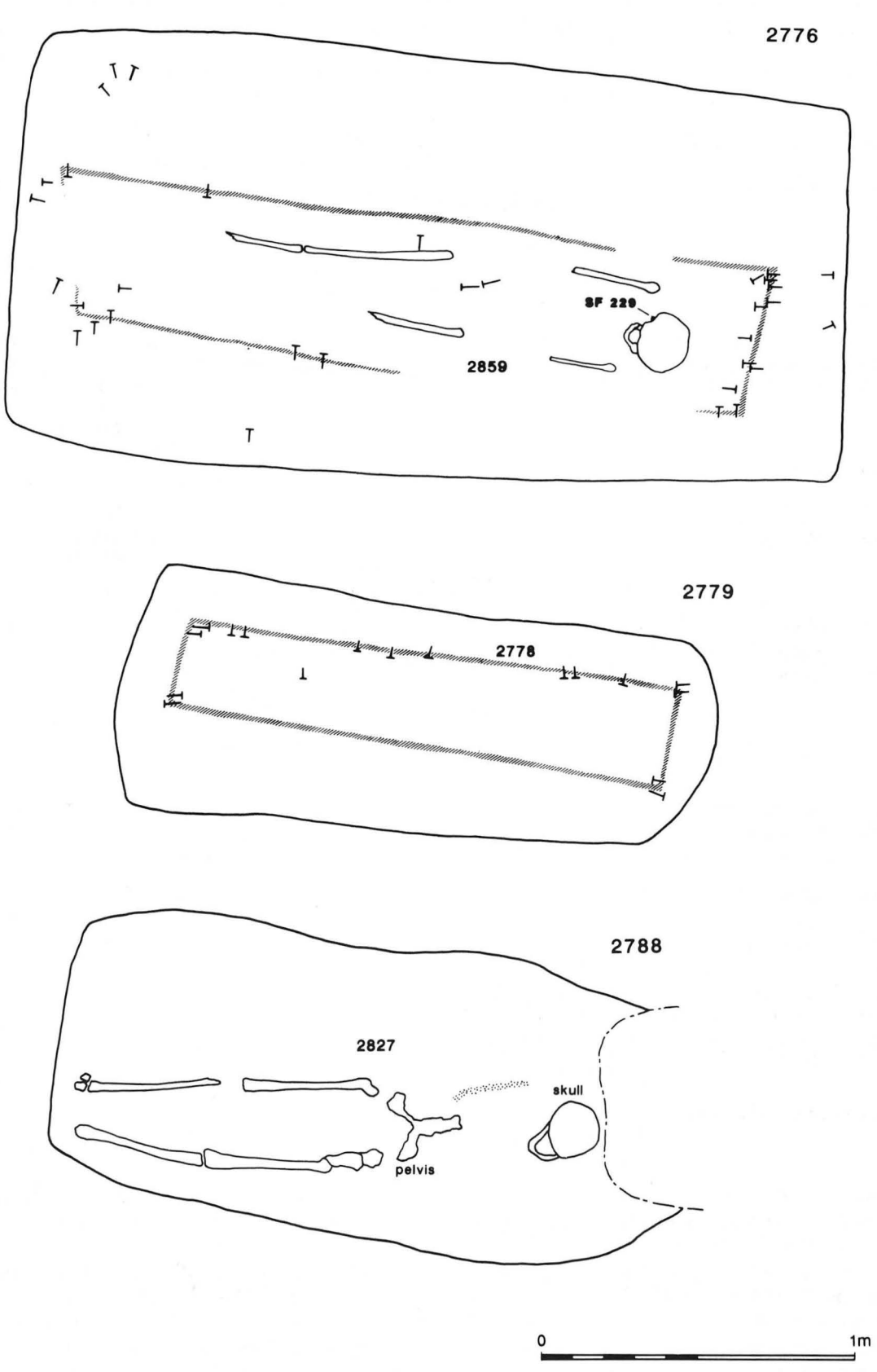


Fig. 29 Graves 2776, 2779, 2788. Scale 1:20

represented, if 2828 and 2858 can be taken to belong together.

The most common position for the skull when decapitated is between the knees and legs. Philpott cites thirty-five examples out of 123 decapitated burials and a further nineteen examples of skulls buried between the feet. At least two of the categories of decapitation as identified by Philpott (1991, 77) are represented at

Grave No.	*Skeleton No.*	*Body Position*	*Coffin*	*Decapitation*	*Grave Goods*	*Multiple*	*Orientation*
2067	2123	Supine extended, head facing N	Stain		Hobnail boots	Charred skull outside coffin	W–E
	2149	Located above coffin		Charnel skull			
2083	2122	Supine extended, head facing N. Arms by sides	Nails, fe	Skull placed between ankles	Hobnail boots		E–W
2667	2758	?supine extended	Stain, 2 nails fe Organic dump above stain				W–E
2669	2671	Not discernible		Possible decapitation			E–W
2672	2674	Legs extended	Stain, nails fe	Skull placed between knees			E–W
2680	2736	Not discernible, head facing W	Stain, 19 nails fe		32 hobnails		W–E
2683	2682	Supine extended, head facing W					W–E
2695	2749	Supine extended				2 skeletons, probably originally 2 grave cuts	W–E
	2766	Supine extended	Stain	Skull placed between feet			E–W
2738	2743	Probably supine					W–E
	2765	[skull only]		Skull 2765 lies between feet of 2743		Probably disarticulated	
2739	–		Stain, fe nails or fittings				
2761	2845	Probably supine extended			Hobnails		W–E
2763	2787	Supine extended	Stain	Possible decapitation	Hobnails		
2770	2769	Probably crouched, legs flexed		Skull placed between the knees	Copper alloy anklet		
2771			3 nails fe		Pottery vessel		
2776	2859	Supine extended, left arm by side, right on pelvis	Stain, 23 nails fe		Earring		?E–W
2779			Stain, 17 fe nails				
2788	2827	Supine extended					E–W
2790	2795	Supine extended					W–E
2794	2793	Probably supine extended	Stain, fe nails	Yes	Pottery dish and bowl		W–E
2798	2800	Not discernible			6 glass beads		W–E
2811	2813	?prone		?skull at side of legs		Yes	E–W
	2828	[skull only]		Possible decapitation			
	2858	much disarticulation and animal disturbance					
2815	2844	Probably supine extended	Stain, nail fe				E–W
3001	3005	Possibly crouched, right arm flexed			Bracelet		W–E

Table 2: aspects of burial practice

Melford Meadows: the head is placed in the grave but usually lower down the body and often close to the feet or legs; the head is missing or buried separately nearby. The third category (the head is replaced at the neck in the correct anatomical position) is difficult to detect and is very much dependent on bone preservation as it can only be detected by the presence of cut marks on the vertebrae.

This type of burial does not appear to be confined to any particular age or sex group: at Barrow Hills, Oxon., the victims were both males and females aged from 17 to 50 years (Chambers and Boyle forthcoming); at Lankhills men, women and children were affected (Watt 1979, 344). At Melford Meadows the evidence is fragmentary but it seems that women were more frequently decapitated. The cemetery is also unusual in the high proportion of decapitations (35%), which averages around 6% nationally (Philpott 1991, 80 and table 15). Regional comparisons appear to be few. The distribution of decapitation burials is sparse in East Anglia (Philpott 1991, table A24 and fig. 23), and many sites are poorly recorded. At Dales Road, Whitton, Ipswich, six cases of decapitation were reported from the later Roman cemetery, all of them females. Unfortunately, the total number of burials was not reported and the significance of this statistic is unclear. However, the cemetery appears to have been quite large and also well-ordered with graves in rows aligned with the feet towards the east 'in nearly every case' (Moir and Maynard 1931). At Mundford two 4th-century decapitation burials were reported, an apparently deformed young man with the skull placed between the feet, and an old woman with the skull to the left of the feet (Philpott 1991, table A24). An unsexed

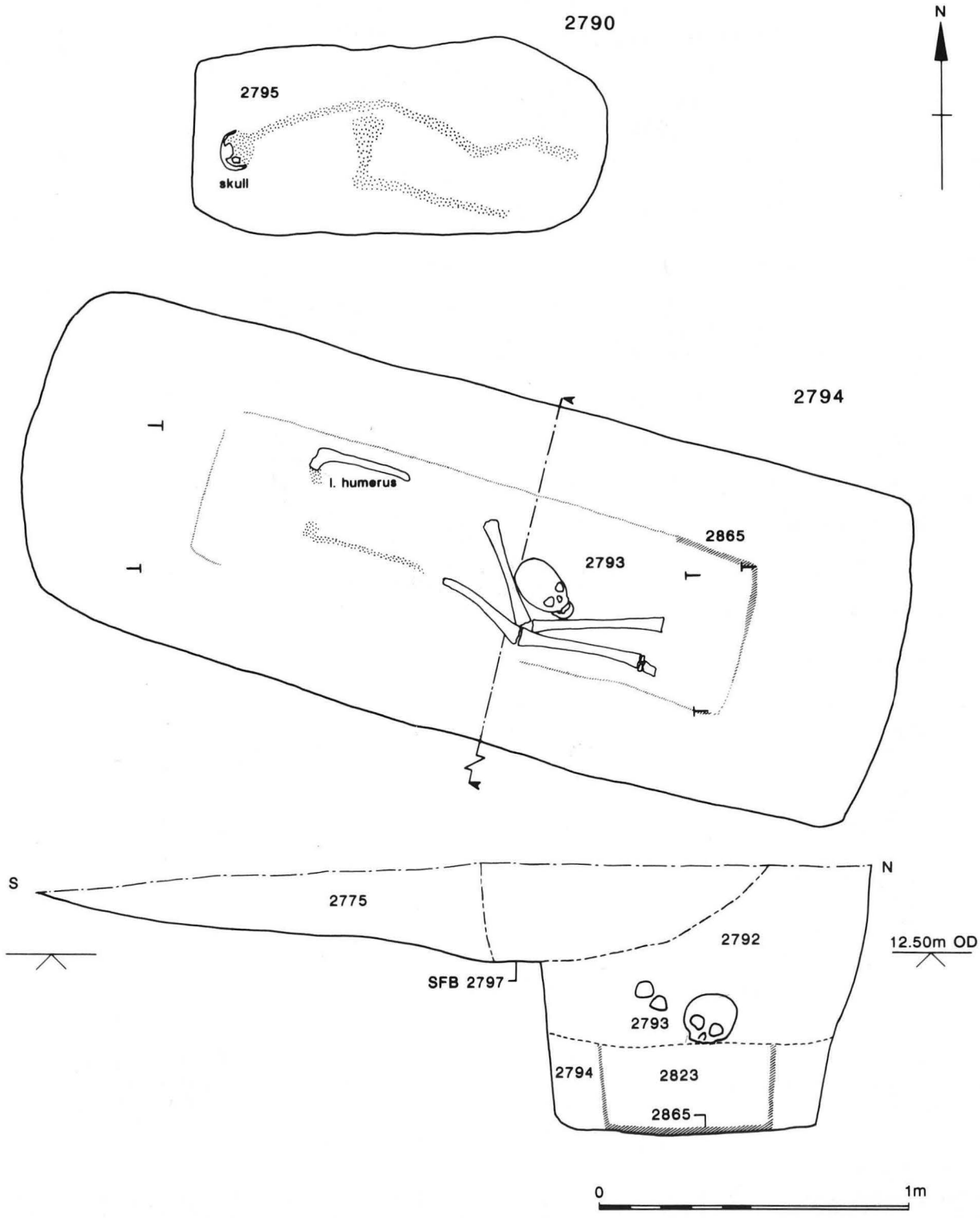


Fig. 30 Graves 2790, 2794. Scale 1:20

burial from Helmingham, Suffolk was decapitated and the head replaced in the correct anatomical position (Philpott 1991, table A24). Burials in the Cambridge region are more plentiful and have been assessed by Liversidge (1977). Two particularly large and long-lived cemeteries at Litlington and Guilden Morden appear to show a very low proportion of decapitations. Two are reported from Guilden Morden, both women and one possibly lame from rheumatoid arthritis. The skulls had been placed at the feet in one case and in the lap in the other. Skulls were apparently missing from several other inhumations. One man had been buried prone with arms crossed 'as if bound' and the skull severed, though in its correct position. A small ordered cemetery of eight individuals at Orton Longueville, Cambs., included one old woman decapitated with the skull at the foot of the grave. The cemetery, which was associated with a small farmstead, probably dated to the 2nd century (Dallas 1975).

Decapitated burials occur in both rural and urban cemeteries, although they are rather more common in the

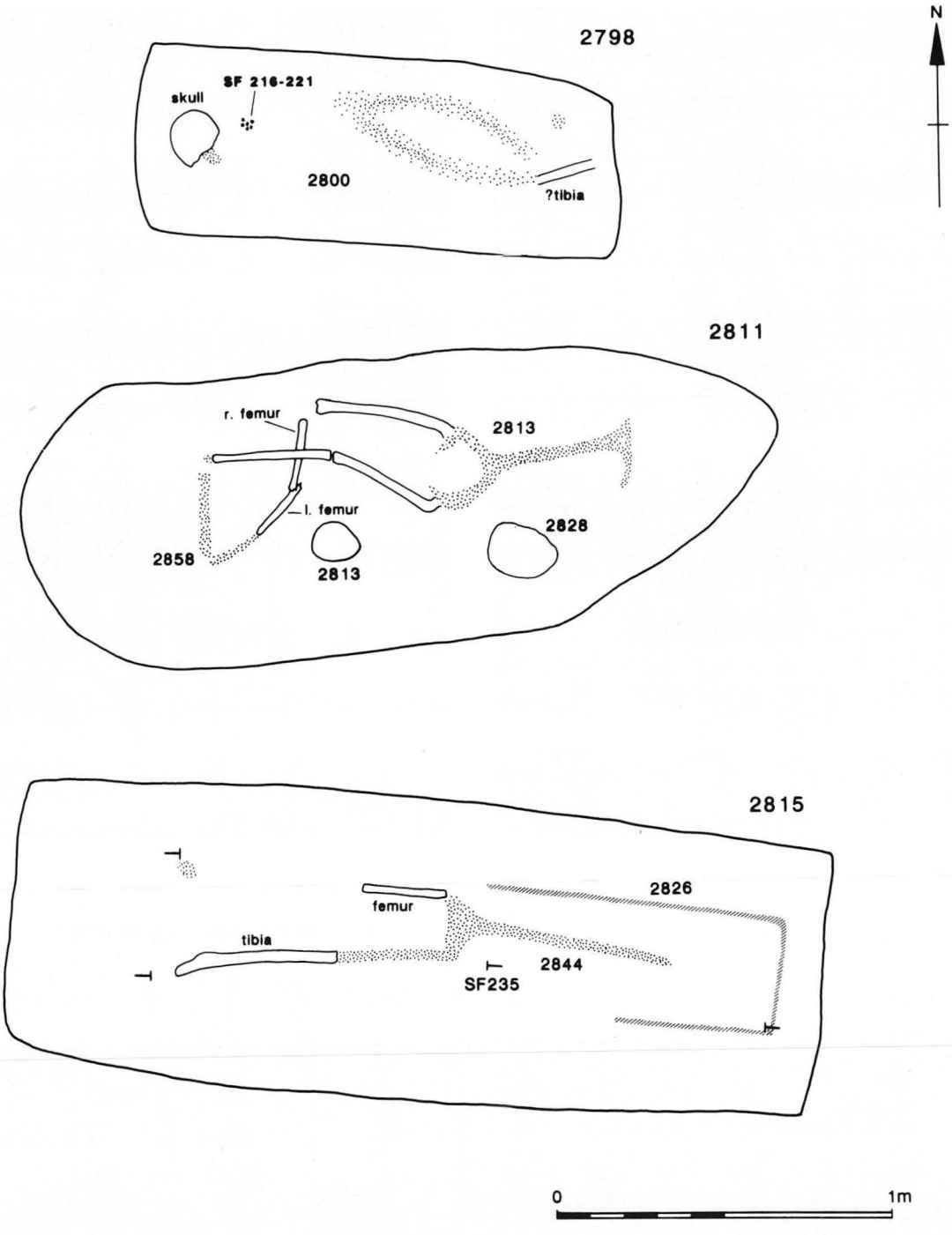


Fig. 31 Graves 2798, 2811, 2815. Scale 1:20

former and are believed to have originated as a native rite (Philpott 1991, 83). A survey of the practice in the Oxfordshire region (Harman *et al.* 1981) has shown that decapitation and prone burial were not uncommon amongst the late Romano-British cemeteries of the Upper Thames; indeed, almost a quarter of the recorded examples for the whole of Britain derive from this area (amalgamation of data from Harman *et al.* 1981; Philpott 1991).

The reasons for decapitation as a funerary rite have been examined by Philpott (1991, ch. 16) with inconclusive results. Some traditional explanations, for example that the recipients of this rite were criminals, sacrificial victims or outcasts, now seem highly unlikely. It is clear that whatever the reasons for decapitation, the individuals involved in a number of cases appear to have retained the right to an otherwise outwardly normal burial. Philpott comments that although grave furniture is not common in decapitations, where it does occur it is broadly consistent with the wider patterns of 4th-century grave furnishings (1991, 83) and there is little evidence that the rite was associated with low status.

Body position

Due to the poor preservation it was very difficult in the majority of burials to determine body position with any certainty. The most popular burial position appears to have been supine and extended with fifteen probable examples

Plate V Grave 2776 showing coffin

Plate VI Grave 2794 decapitation

Plate VII Grave 2811 complex burial

(2122, 2123, 2674, 2682, 2743, 2749, 2758, 2766, 2787, 2793, 2795, 2827, 2844, 2845 and 2859). Two individuals lay on their right sides (2769, 3005). Both are ageing adult ?females. The position of skeleton 2769 is not entirely certain as it is based largely on the degree of flexion of the legs. The individual (3005) buried in the ditch terminal was lying on her right side, possibly crouched with arms flexed and legs semi-flexed. A comparable crouched burial from Little Spittle, Ilchester (Leach 1982, 88) described as 'slightly anomalous' (Philpott 1991, 71) lay on its side in the upper fills of a ditch. One individual appears to have been buried in a prone position (2813). The body position of the remaining individuals could not be determined (2671, 2736, 2800, 2828=2858).

Supine extended burial was by far the most common burial position by the 3rd and 4th centuries (Philpott 1991, 71). The prone burial (2813) is of particular interest because of its possible association with the practice of decapitation. Grave 2811 contained the remains of two individuals (2813 and 2828=2858) and in both cases the skulls were displaced from the correct anatomical position (Pl. VII). At least twelve burials in Roman Britain are both decapitated and prone (Harman et al. 1981, 160, 170–3; Philpott 1991, 74) and include examples from Cassington and Stanton Harcourt, (both Oxon.) and Lankhills, Winchester.

Orientation

Note: the position of the head is always given first. It was possible to determine the orientation of twenty-one skeletons with variable degrees of certainty. Twelve individuals were oriented west-to-east (2123, 2682, 2736, 2743, 2749, 2758, 2787, 2793, 2795, 2800, 2845, 3005) and nine were oriented east-west (2122, 2671, 2674, 2766, 2769, 2813, 2827, 2844, 2859).

Watts is of the opinion that 'the accumulation of evidence from many parts of the Roman Empire makes it clear that Christians favoured west-east orientation, although it is certain that not all Christians of the Roman period were buried with heads to the west' (1989, 380). In her definition of factors identifying Christian cemeteries Watts identifies west-to-east orientation as an indicator of maximum weighting (1991, 53) and the *absence* of decapitation as an indicator close to the maximum ranking (Watts 1991, 58). She further notes that of all the west-to-east cemeteries she analysed only two were reported as having decapitated burials (Watts 1991, 59). The occurrence of both practices at Melford Meadows might be seen as an example of the strong prevalence of local traditions in a rural environment against a background influence of Christianity. However, Philpott (1991, 240) concludes that there is nothing distinctive about Christian burials and that many practices which have been traditionally seen as Christian, including west-to-east burial, ordered cemeteries and the absence of grave-goods, can occur independently of Christianity.

Coffins

There was evidence to indicate that eleven individuals were buried within wooden coffins. Staining was present in ten graves (2067, 2667, 2672, 2680, 2739, 2763, 2776 (Pl. V), 2779, 2794 (Pl. VI) and 2815). Variable numbers of iron nails were also found in ten graves (2083, 2667, 2672, 2680, 2739, 2771, 2776, 2779, 2794 and 2815) and possible iron coffin brackets were recovered from graves 2680 and 2739.

Grave 2794 (Fig. 30 and Pl. VI) is somewhat problematic as the bones of the only associated skeleton (2793) were located outside and above the coffin. This may indicate that a further skeleton was originally placed within the coffin but had completely decayed. The sequence of events concerned with the burial of 2793 is not easy to establish. The two most obvious alternatives, that the burial was placed on top of the coffin, or that it was a somewhat later insertion into the grave, are both flawed. If the burial had been placed on top of the coffin it would be expected to have collapsed to the base of the grave when the coffin rotted, and it therefore seems likely that the grave had been at least partly infilled before the insertion of the burial. The alternative, that the burial was an insertion at a later date, seems more plausible, but a curious aspect of this is that the skeleton was, as far as can be judged from the fragmentary evidence, placed quite precisely within the frame of the earlier coffin. It is furthermore clear from the section that the coffin had not collapsed, but retained much of its original form before the skeleton was inserted on top of it. An explanation which appears to account for this is that the grave and coffin had been left open and infilled with sand and the skeleton laid on top of this. This need not have taken place long after the original coffin burial and was possibly as part of the same burial rite. This would also account for the absence of a grave recut and the fact that the fills inside and outside the coffin were indistinguishable.

IV. Grave-goods

Earring

(Fig. 33.2)

This object was located by the right ear of the adult female (burial 2859) within grave 2776 (Fig. 29). Earrings are not common finds in graves and Philpott concluded that this must be due to their fragile nature (1991, 152) since Allason-Jones argued (1989, 2) that they were commonly worn in Roman Britain. This is contrary to previously accepted arguments that they were not common. For example, Crummy (1983, 50) suggested that they may have been genuinely uncommon probably because the preferred material was stable precious metal (to prevent the pierced ear from going septic) so casual loss would have been rare. Also the fragility of copper alloy and white metal may have hindered identification. A total of twelve examples from graves are quoted by Philpott (1991, 152) who summarises the temporal and spatial distribution as follows:

> The distribution shows an overwhelming concentration in cemeteries at Romanised centres, legionary fortresses (Chester), *coloniae* (York, Colchester, London) and civitas capitals (Dorchester, Dorset) and in a few small towns (Kelvedon, ?Dunstable) and other minor settlements (Chatham, Sittingbourne). The date range encompasses almost the whole span of introduced inhumation in Roman Britain, from the 2nd to the mid 4th century, the decline in furnishing leading to a dearth of datable later 4th-century burials.

A very similar pair of earrings was recovered from the Roman cemetery in the grounds of St John's Abbey, Colchester (Crummy 1983, 50, fig. 53, no. 1798). Corrosion products attached the earrings to a skull which was found in the backfill of a 3rd/4th-century grave. In the opinion of Crummy (1983, 50, no. 1798) the skull no doubt derived from a disturbed adjacent grave of similar date.

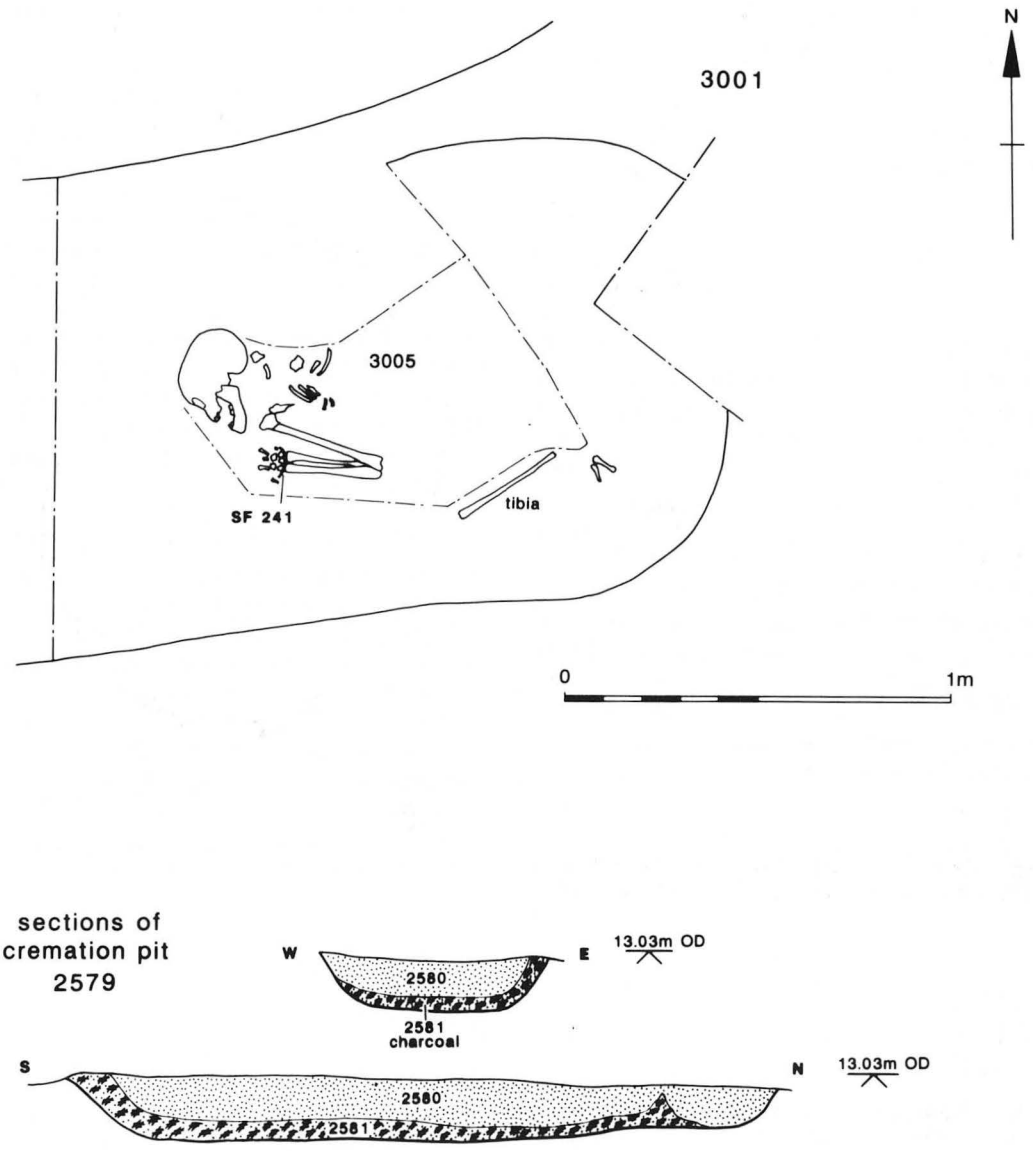


Fig. 32 Burial 3001, cremation pit 2579 (sections). Scale 1:20

Beads (Fig. 33.4)
Six short cylindrical beads of opaque green glass accompanied the burial of an adult ?male (grave 2798) and were located in the region of the neck and upper torso (Fig. 31). Beads such as these are very common in late Roman necklaces. Many examples are cited by Guido (1978, 95 fig. 57, no. 5, schedules 208–12). Examples were present in grave 438 at Lankhills which was coin dated to AD 361 (Clarke 1979). In general they occur in 3rd- and 4th-century Roman contexts although they are also a feature of many Anglo-Saxon grave-good assemblages (Guido 1978, 95–6).

Bracelets
Inhumation 3005 (Fig. 32) was wearing a wrist bracelet (Fig. 33.3) while inhumation 2769 (Fig. 28) was wearing an ankle bracelet (Fig. 33.1). A third bracelet, made from two strands (too fragmentary for illustration), was associated with a deposit of cremated bone in pit 2579 and is similar to a four-strand example from Gorhambury (Neal *et al.* 1990, 122). Both of the other examples can be paralleled there too. The assemblage at Gorhambury contains bracelets of the type commonly represented on Roman sites and most come from 3rd/4th-century contexts.

Overall, bracelets are the second most common class of personal ornament in Romano-British cremations and most examples date to the 2nd century, when they often appear together with rings and beads (Philpott 1991, 129). Although bracelets were commonly seen in association with inhumations from the mid 1st to late 3rd century, the great increase in site finds indicates that there was a great expansion in popularity in Roman Britain in the late 3rd and 4th centuries (Crummy 1983, 37; Barford and Hughes 1985, 151; Philpott 1991, 143).

The largest assemblage in the country derives from Lydney Park, Gloucestershire and 'most of them may safely be ascribed to the period of intensive occupation in the latter part of the 4th century' (Wheeler 1932, 82–3, fig. 17). The second largest group of bracelets comes from Lankhills where ninety-four copper alloy examples from 4th-century contexts were found (Clarke 1979, 301).

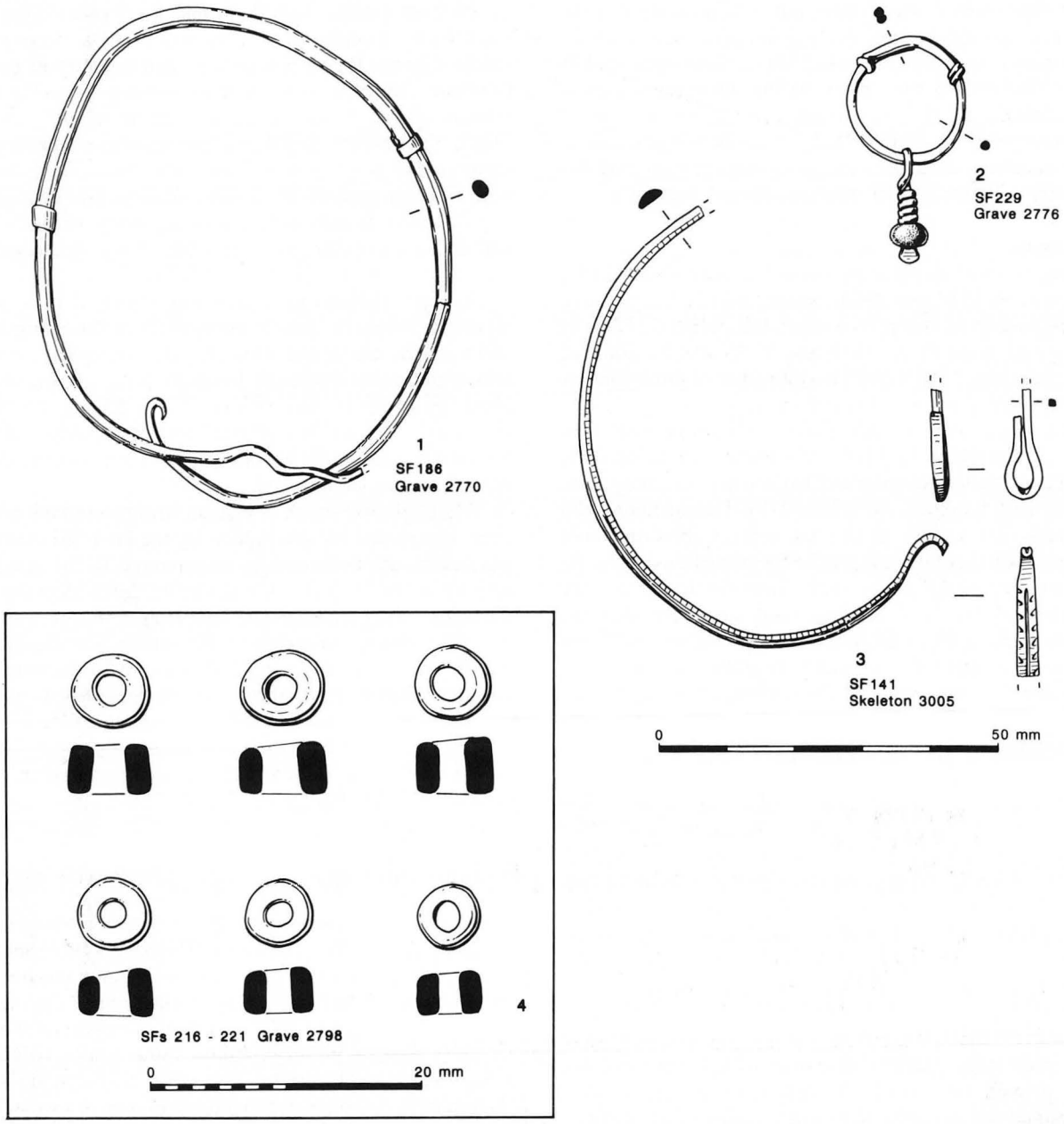


Fig. 33 Finds: grave-goods. Scale 1:1

Clarke devised an elaborate scheme of classification for the assemblage and each of the examples from Melford Meadows can be paralleled there. The two-strand cable bracelet associated with the cremation deposit in pit 2579 corresponds to his type A1a with four examples at Lankhills (Clarke 1979, 302, table 34) and numerous examples from sites around the country including Gadebridge Park (Neal 1974, figs 61, nos 164–9 and 65, nos 233–40), Leicester (Kenyon 1948, fig. 83, no. 7), Portchester (Cunliffe 1975, 203, no. 26) and Shakenoak (Brodribb *et al.* 1971, fig. 49, no. 100). The copper alloy bracelet worn on the left ankle of skeleton 2769 corresponds with Lankhills type C while the bracelet on the left wrist of skeleton 3005 equates to Lankhills type D (Clarke 1979, 302, table 34). Type C is a solid bracelet with a square or circular cross-section while type D is a strip bracelet with a D-shaped or rectangular cross-section and continuous repetitive decoration.

Clarke has defined a group of female burials with worn personal ornaments, either bracelets or anklets or very occasionally finger-rings, which appeared to have been 'carelessly disposed' and ranged in date from the 2nd to the 4th century (1979, 365). It is tempting to place skeleton 3005 in this category, buried as she was, in the terminal of a ditch.

Pottery vessels

Pottery vessels were present in two graves (2771 and 2794). The vessel in the otherwise empty grave 2771, was a miniature funnel-necked beaker typologically of 4th-century date (Fig. 56.46). The vessels in grave 2794 were broken and sherds were scattered both inside and outside of the coffin. This may have occurred through

post-depositional disturbance, but it is possible that the vessels were deliberately broken and discarded when the coffin was inserted. One vessel was a plain-rimmed dish (Fig. 56.44) of a type made in the 4th-century kiln at Wattisfield Hall. The other, a lower Nene Valley colour-coated bowl (Fig. 56.45), was of a type made at Stibbington with a date range in the early to mid 4th century (Chapter 5, VIII 'Romano-British pottery').

Hobnails

Hobnails were located at the feet of five individuals (2122, 2123, 2736, 2787 and 2845). Skeleton 2122 was a young adult female who had been decapitated, skeleton 2123 was an ageing adult ?male skeleton, 2736 was an adult of uncertain sex, 2787 was a possible adult of uncertain sex and skeleton 2845 was an adult male.

Hobnails show a marked concentration on rural sites in central southern England and are scarce on urban sites, with the notable exceptions of Colchester (Crummy *et al.* 1994) and Lankhills (Clarke 1979). Inhumations with hobnails are known in the 1st century, become more numerous in the late 2nd and 3rd centuries though by far the majority of datable examples occur in the 4th century (Philpott 1991, 167). It has been suggested that the overwhelming rural distribution and relative scarcity in the major towns indicates that hobnail burial in the south was largely a native rite (Philpott 1991, 171).

V. Multiple and disarticulated burials

Four graves contained examples of multiple and/or disarticulated burials. Grave 2067 contained the skeleton of an ageing adult ?male (2123) in a coffin and a skull (2149) which had been placed outside the coffin at the feet of 2123. Grave 2738 contained the skeleton of an adult male (2743) and the skull of an adult female (2765) which had been placed between the feet of the male. Grave 2695 was an extremely large grave cut containing two adults (2749, 2766) one of whom (2766) was a probable decapitated male. It is considered possible that there were two intercutting graves rather than a single large one but this proved impossible to demonstrate. Grave 2811 contained the partially disturbed remains of at least two adult individuals (2813 and 2828=2858) both of whom may have been decapitated.

An association between multiple burial and the practice of decapitation has been noted elsewhere (Philpott 1991, 82): a considerable proportion (of decapitations) are buried in the same grave pit as one or more bodies, either simultaneously or after an unknown period. Such an association appears to be present at Melford Meadows.

VI. The cremation

(Fig. 32)

A single deposit of undated cremated human bone was recovered from a sub-rectangular pit (feature 2579). It comprised two fragments of well calcined bone one of which was identifiable as human skull, probably adult. The pit had a charcoal lining (2581) which measured up to 0.10mm in thickness. The secondary fill (2580) was mixed sand and charcoal. Two fragments of a cable bracelet were recovered from the charcoal lining. The bracelet is described in more detail in the gazetteer.

Philpott (1991, 45) identifies three main types of unenclosed cremation, one of which is 'a deposit of calcined bones together with a limited quantity of grave furniture, usually one or two pottery vessels, but occasionally a mirror or an item of jewellery'. At St Stephen's cemetery, St Albans, ten cremations were found consisting of pits with a uniform black charcoal fill mixed with fine calcined bone. Several shallow pits contained fragments of calcined bone and burnt pottery sherds of 1st- and 2nd-century date, together with what is described as cremation debris (Frere 1987, 329–30).

A charcoal-lined pit containing cremated bone was recorded from the Saxon occupation at Mucking and additionally contained two largely complete grass-tempered bowls (Hamerow 1993, 20, pit q). A similar pit identified at Spong Hill (Rickett 1995, 55, fig. 84) also contained cremated human bone and charcoal as well as both Roman and early Saxon pottery. It was thought to be early Saxon or later in date.

Although over much of Roman Britain, cremation had been superseded by inhumation by the later 3rd century, cremations are occasionally encountered in the late 3rd and 4th centuries, and a thin scatter has been identified in the south-east, particularly in East Anglia (Philpott 1991, 50). The charred cranium (2149) which was deposited outside the coffin in grave 2067 is also of some note. At Guilden Morden, Cambs., a charcoal-lined grave contained part of a charred skeleton with the skull missing. It was speculated that this 'might represent some transitional stage between the rites of cremation and inhumation' (Liversidge 1977, 34).

VII. Chronology

The dating of the cemetery is based on a combination of evidence derived from associated grave-goods, from the range of burial practice and from the relative phasing of the site layout. Pottery vessels of 4th-century date were recovered from graves 2771 and 2794. Occasional sherds of early Saxon pottery within some grave fills are considered likely to be intrusive through animal disturbance. Although in general earrings have a wide date range, the example from Brettenham is analogous to a pair from a presumed 3rd/4th-century context at Colchester (Crummy 1983, 50). The glass beads are common in 4th-century contexts while bracelets, known in the 1st and 2nd centuries, see an explosion in popularity during the 4th century.

Decapitation, a rural practice of native origin, seems to have developed by the last decade of the 3rd century but became more common in the 4th. Where decapitations are associated with datable artefacts in urban cemeteries, most can be placed in the second half of the 4th century, and Clarke concludes that the rite spread from rural to urban sites during the 4th century (1979). The distribution of hobnailed footwear in graves, which is more widespread during the 3rd century in the south-east, also has a strong concentration over the same area as decapitation. Prone burial appears to be more common in rural or small town cemeteries in the 4th century, though used apparently for unusual burials as early as the 1st century. On balance then, the evidence suggests that the cemetery was in use certainly during the 4th century with a possible commencement of activity in the second half of the 3rd century.

VIII. Grave catalogue

Dental notation as follows:

c	caries
a	abscess
e	erupting
x	ante-mortem loss
/	post-mortem loss
-	tooth and socket absent

Grave 2067 (Fig. 25) (87770/82570 W–E 2.00 × 0.83 × 0.76m)
Rectangular grave with smooth near-vertical sides and a flat base. Grave contained a coffin stain, a skeleton (2123) and a charnel skull (2149). The charnel skull lay outside the coffin in the backfill (2068) of the grave. Grave was cut through a linear feature (cut 2210 of ditch 5900). Skeleton lay in a supine extended position apparently facing north (although there may have been movement post mortem). Hobnails located at feet.
Preservation was extremely poor, only skull and femora survived.
Ageing adult ?male.

1 *Hobnails* (s.fs 76–82, 84–94, 103) 2069: 120 iron hobnails, condition poor, head D. 10–12mm, lengths 8–16mm.
2 *Pottery*: one sherd recovered from grave fill (2068), early Saxon date and presumed intrusive. One Roman sherd from fill 2069 within coffin. Skull 2149: skull cracked in antiquity, no mandible and no surviving dentition.

Subadult. Apparently slightly charred.

Grave 2083 (Fig. 25) (87774/82575 E–W 2.2 × 1 × c.1m)
Sub-rectangular grave with vertical sides which slope into U-shaped base. Grave contained skeleton (2122). Grave was cut through a linear feature (cut 2210 of ditch 5900). Skeleton lay in a supine extended position with skull between ankles/feet. Staining suggested that left arm was flexed across chest. Hobnails located at feet. No coffin stain but some nails present. Preservation was extremely poor, only skull and legs survived. Young adult female.

1 *Hobnails* (s.fs 73–5, 95–102, 120): thirteen clearly identifiable hobnails, the remainder have corroded into unidentifiable fragments.
2 *Pottery*: three Roman sherds from upper fill 2084.

Grave 2667 (Fig. 25) (87772/82576 W–E 2.3 × 1.1 × 0.3m)
Oblong grave with vertical sides and a flat bottom contained skeleton (2758). Presence of coffin indicated by staining and the presence of two nails. A large dump of organic material was present immediately above the coffin stain. Skeleton was extended and probably supine. Preservation very poor, skull and legs. Adult of unknown sex.

1 *Nails* 2668 (s.fs 177–8): two iron coffin nails, flat round heads, square-sectioned stem, wood remains. L. 47 and 65mm.
2 *Pottery*: two Roman sherds from fill 2668.

Grave 2669 (Fig. 25) (82568.6/87764.5 E–W 1.75 × 0.58 × 0.12m)
Sub-rectangular grave with steep sides and fairly flat bottom. Grave contained skeleton (2671). Body position not discernible. There was no apparent staining in the vicinity of the skull and this may suggest that the individual was decapitated and the skull buried elsewhere. Preservation poor, fragmentary legs only. Adult of unknown sex.

Grave 2672 (Fig. 26) (87765.6/82568.8 E–W 2.15 × 0.80 × ?m)
Truncated, rectangular grave with near-vertical sides and flat base. Grave contained skeleton (2674), coffin indicated by staining and nails. Decapitated burial, skull placed between knees, legs extended. Preservation poor, fragmentary legs and skull only. Adult of unknown sex.

1 *Nails* (s.fs 160–62). 2673: three iron nails, shafts only; one rounded cross-section, two square-sectioned; L. 33, 34 and 71mm.

Grave 2680 (Fig. 26) (87763/82571 W–E 2.2 × 1.00 × 0.5m)
Sub-rectangular grave with vertical sides and flat base. Grave contained skeleton (2736). Coffin indicated by nails and a dark-brown stain which measured *c.*1.8m in length and 0.7m in width. Body position not discernible. Hobnails at foot end. Preservation poor, skull and feet only. Adult of unknown sex.

1 *Hobnails*: thirty-two iron hobnails, condition poor.
2 *Coffin nails and fittings* 2679 (s.fs 154–9, 163–73, 175–6): two L-shaped iron brackets with wood traces (s.fs 154–5); seventeen iron nails, flat round heads, square-sectioned stems, L. 26–74mm.
3 *Pottery*: four Roman sherds from upper fill 2678.

Grave 2683 (Fig. 26) (87760/82570 W–E 2.3 × 0.9 × 0.65m)
Sub-rectangular grave with near-vertical sides and flattish bottom. Evidence for the skeleton survived as fairly distinct stain only (2682). Body may have been supine extended.

Grave 2695 (Fig. 27) (87769/82575 W–E 2.5 × 1.8 × 0.30m)
Sub-rectangular grave, steep sides to east, gently sloping from west, flat/concave base. There were two skeletons (2749 and 2766). Evidence for the skeleton 2749 survived as a stain only, west-to-east, the body possibly supine extended. Skeleton 2766 comprised skull and leg fragments and vertebrae within a general area of staining. Skull was placed between feet at west end. An area of black staining which lay over the skeletons may represent a coffin/coffins.
2766: east-to-west, preservation poor, skull and legs only.
Ageing adult, possibly male.
Osteophytosis of first and second cervical vertebrae
Marked attrition of both molars (45+ years)

-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Grave 2738 (Fig. 27) (87772.32/82567.22 W–E 1.75 × 0.6 × 0.1m)
Sub-rectangular grave with near-vertical sides and flat bottom. Grave contained skeleton (2743) and 'disarticulated fragments' (2765). Probably supine extended. Skull 2765 lay between feet of 2743.
2743: preservation poor, skull, legs, right calcaneus.
Adult ?male.
2765: preservation poor, skull only.
Ageing adult ?female.

-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	6	5	4	3	2	1	1	2	3	x	5	/	x	x
													c	a	a

Heavy calculus, marked attrition of anterior dentition

Grave 2739 (Fig. 27) (87775.5/82579.3 W–E 1.9 × 0.7 × 0.6m)
Sub-rectangular grave with vertical sides and flat bottom. Coffin indicated by staining (2741) though no evidence for skeleton. Some iron staining along edges of coffin stain and iron fragments.

1 *Iron fragments* 2741: (s.fs 179–85) nine iron nails, two without 'small find' numbers, all incomplete, no surviving heads, both rounded and square-sectioned, L. 22–49mm. A possible bracket is represented by a corroded fragment with much wood attached (s.f.185).

Grave 2761 (Fig. 28) (87768.22/82570.15 W–E 2.60 × 1.2 × ?m)
Oval grave with vertical sides which slope at west end. Contained skeleton (2845) which is probably supine extended. Hobnails at foot end. Preservation poor, pelvis and femur fragments only.
Adult ?male. *Spina bifida occulta* of first sacral body.

1 *Hobnails* (s.f. 237) 2762: 98 iron hobnails.

Grave 2763 (Fig. 28) (87770/82572 W–E 2.3 × 1.35 × 0.32m)
Sub-rectangular grave with vertical sides and flat bottom. Coffin staining. Grave contained skeleton (2787). Supine extended. Hobnails at foot end. There was no apparent staining in vicinity of skull and this may suggest that the individual was decapitated and the skull buried elsewhere. Preservation very poor, legs only.
?Adult.

1 *Hobnails* (s.fs 187–94) 2764: at least five iron hobnails, preservation very poor.
2 *Pottery*: two tiny sherds recovered from grave fill (2764), early Saxon date and presumed intrusive.

Grave 2770 (Fig. 28) (87769/82567.7 E–W 1.8 × 0.6 × 0.25m)
Sub-rectangular grave with vertical sides and a flat bottom. Contained skeleton 2769. Legs semi-flexed, skull and mandible placed behind the knees. Skeleton wearing copper alloy ankle bracelet. Preservation poor, skull and legs only, atlas fragment.
Ageing adult ?female.

											e					
-	-	-	5	x	3	2	1	1	2	3	4	/	x	-	-	
-	7	6	5	4	3	/	/	1	2	3	4	5	x	-	-	

Heavy calculus on posterior surface of lower incisors, canines and premolars.
1 *Ankle bracelet* (s.f.186). Two conjoining fragments, slip knot fastening, circular cross-section which thins towards knot, max D. 2.5mm. There are two flattened small spirals around the bracelet which is bent and distorted (Fig. 33.1).

Grave 2771 (Fig. 29) (87776.0/82568.7 E–W 1.6 × 0.7 × 0.33m)
Sub-rectangular grave with near-vertical sides and a flat bottom. No skeleton or staining. Extensive animal disturbance.
1 *Pottery vessel* (s.f.192) (Fig. 56.46): miniature bead-rimmed funnel-necked beaker in grey micaceous fabric. Probably a product of the Wattisfield area industry. Typologically 4th century.
2 *Pottery*: four sherds recovered from grave fill (2772), Anglo-Saxon date.
3 *Nails*: three nails in grave (s.fs 190, 191 and 196).

Grave 2776 (Fig. 29, Pl. V) (87774.4/82579.45 E–W 2.65 × 1.4 × 0.87m)
Rectangular grave with vertical sides and flat bottom. Extensive animal burrowing on southern edge. Coffin staining and nails. Skeleton (2859) supine extended, left arm by side, right arm on pelvis. Earring adjacent to right ear. Preservation very poor, skull and long-bones only.
Young adult female.

8	7	6	5	4	3	2	-	-	-	3	4	5	6	7	8
8	7	6	/	/	-	-	-	-	-	3	4	5	6	7	8

Medium calculus, slight hypoplasia.
1 *Earring* (s.f.229) (Fig. 33.2). Complete copper alloy and glass earring. It comprises a copper alloy wire slip-knot ring. Suspended from the hoop is a short length of wire twisted into a suspension loop and carrying a gold-in-glass globular bead.
2 *Coffin nails* (s.fs 195, 214, 222–4, 236): at least twenty-three iron nails, flat round heads, round and square-sectioned stems, corrosion and preserved wood, L. 32–68mm.
3 *Pottery*: one Roman greyware sherd recovered from upper fill of grave (2777), and one from within coffin (2785).

Grave 2779 (Fig. 29) (87770/82568.6 E–W 1.9 × 0.75 × 0.4m)
Sub-rectangular grave with near-vertical sides and flat bottom. Coffin (2778) indicated by staining and iron nails. No indication of skeleton.
1 *Coffin nails* (s.fs 197–213); at least sixteen iron nails, flat round heads, square-sectioned stems, wood remains attached, L. 25–75mm; one L-shaped coffin bracket.
2 *Pottery*: two Roman sherds from grave fill (2796), and one of early Saxon date, presumed intrusive.

Grave 2788 (Fig. 29) (87774/82569.1 E–W 2 × 0.9 × 0.5m)
Rectangular grave with near-vertical sides and flat bottom. Cut by grave 2790. Contained skeleton (2827) in supine extended position. Preservation extremely poor, skull and legs only.
Ageing adult ?female.

–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	8

Osteo-arthritis of articular facets of sixth cervical vertebra
1 *Pottery*: one Roman sherd from fill 2789.

Grave 2790 (Fig. 30) (87773.9/82569.1 E–W 1.4 × 0.66 × 0.5m)
Sub-rectangular grave with vertical sides and flat base. Contained skeleton stain (2795) in supine extended position. Preservation very poor, fragmentary skull only.
1 *Pottery*: two sherds recovered from grave fill (2791), early Saxon date, presumed intrusive.

Grave 2794 (Fig. 30 and Pl. VI) (E–W 2.9 × 1 × 0.9m)
Rectangular grave with near-vertical sides and flat bottom. Cut by SFB 2797. Coffin indicated by staining (2865) and nails. Skeleton (2793) probably supine extended, legs semi-flexed, located above coffin. Decapitated. Preservation of skeleton poor, skull, left humerus and legs only.
Ageing adult ?female.
Stature: 1.54 m

					c?							c?			
-	x	x	5	4	3	/	x	/	/	3	4	5	x	7	-
x	7	6 c?	x	4	3	2	1 ac ?	/ a?	2	3	4	5	x	7	-

Odontome in left nasal floor near centre line
1 *Pottery vessel* (Fig. 56.44): plain-rimmed dish in grey micaceous fabric, product of Wattisfield area industry, made in 4th-century kiln at Wattisfield Hall (form 14); typologically also of 3rd-century date. From coffin fill 2823.
2 *Pottery vessel* (Fig. 56.45): lower Nene Valley colour-coated bowl; RPNV 85; such bowls made at Stibbington; early/mid 4th century. From coffin fill 2823.
3 *Coffin nails* (s.fs 227, 230–3): five iron nails, flat round heads, stems have square cross-sections, corrosion, preserved wood, L. 33–9mm.

Grave 2798 (Fig. 31) (87778.6/82573.5 E–W 1.4 × 0.6 × 0.20m)
Sub-rectangular grave with vertical sides and fairly flat base. Contains skeleton (2800), animal disturbance. Body position not discernible. Preservation very poor, skull and legs only
Adult ?male.
1 *Beads* (s.fs 216–21) (Fig. 33.4). A group of six opaque green glass beads, all are short straight-sided cylinders. Max. diameters 3–3.5mm, max. thickness 2mm, max. width of perforation 1.5mm, max. Ht. 4.5–6mm.
2 *Pottery*: one Roman sherd and two tiny early Saxon sherds recovered from grave fill (2799), presumed intrusive.

Grave 2811 (Fig. 31 and Pl. VII) (87780.3/82568.7 E–W 2.4 × 0.85 × 0.20m)
Cut, pointed at the eastern end probably as a result of extensive animal disturbance. Sides near-vertical. Grave probably contained two skeletons (2813) and (2828/2858). Skeleton 2813 was oriented east-to-west and probably decapitated with skull placed at side of legs. The position of the legs indicated that it was prone. Overlay 2858 whose position was uncertain but possibly flexed on left side and possibly associated with skull 2828.
2813: preservation poor, skull and legs.
Adult ?female.
2828=2858: preservation poor, skull and femora.
Adult of unknown sex.
1 *Pottery:* one Roman sherd and one tiny early Saxon sherd from fill (2812), presumed intrusive.

Grave 2815 (Fig. 31) (87769.5/82570 E–W 2.4 × 0.9 × 0.5m)
Rectangular grave with steep/vertical sides and a flat bottom. Extensive animal disturbance, particularly at eastern end. Coffin stain (2826) and associated iron nail. Planks and coffin structure visible. Skeleton 2844 probably supine extended. Preservation poor, legs and feet only.
Adult ?male.
1 *Coffin nails* (s.fs 225, 226, 228 and 235), s.f.235 is a possible iron coffin nail but the shape is unclear due to corrosion.

Skeleton 3005 (Fig. 32) (87788.5/82653.85 E–W)
Inhumation in terminal of ditch 3001, lying crouched on right side, arms flexed, hands on chest. Legs possibly semi-flexed. Bracelet on wrist. Animal disturbance. Preservation poor, skull, arms, legs, torso.
Ageing adult ?female.

1 *Bracelet* (s.f.241) (Fig. 33.3): three copper alloy fragments. Two are curved with D-shaped cross-section, max. T. 3.5mm. Decoration comprises central incised line with series of notches at each side. A third fragment has hooked end. A fourth hooked fragment has square cross-section, max. T. 1.5mm. This is part of a second unrelated object.

Cremation Pit 2579 (88778/8257 N–S 1.9 × 0.6 × 0.17m)
Sub-rectangular pit containing wood ash, ?flint and human bone in fill (2580). Charcoal lining (2851) has a thickness of 0.02–0.10m. No evidence for *in situ* burning.

1 *Bracelet* (2581) (too fragmentary for illustration): incomplete two-strand cable bracelet, two fragments, each comprising two strands of wire twisted together. Max. T. 3mm, L. 14mm and 40mm. Cannot determine how bracelet would have been fastened.

Chapter 4. Anglo-Saxon Occupation

I. Introduction
(Fig. 34)

Early Anglo-Saxon occupation (Phase 5) on the site was established probably around the middle or later half of the 5th century. The archaeological evidence for the settlement comes from a loose scatter of sunken-featured buildings (SFBs) together with a few hollows, pits, and ovens (Figs 35 and 36). No post-built structures were identified. Most of the 5th-century dating evidence came from the southern part of the excavation, particularly SFBs 2172 and 2222, with other SFBs in this area more generally datable to the 5th–6th centuries on ceramic grounds. In the northern area SFB 2033 was probably slightly later in date (6th–7th centuries). This suggests there may have been a shift northward during the life of the settlement but other features in the northern area provided insufficient material to support this. The absence of Ipswich ware indicates that the occupation here ceased before the early 8th century.

II. Sunken-featured buildings

Form
All nine excavated SFBs were oval to sub-rectangular in shape and had single posts at each end (Type A: Two-post in the West Stow classification; West 1985, 113–21). Ahrens (1966) has offered a different classification and interprets single posts centrally placed at the ends of SFBs as gable-posts. As a means of classification the West Stow system devised by Stanley West is more useful. Differences in the depths of the post-holes found in different SFBs might imply some variation in construction, and this is discussed later ('Construction'). Little can be said about the unexcavated or incompletely excavated SFBs, 2797 and 2821, except that excavation of the eastern end of 2797 failed to reveal a gable-post and it is possible that this SFB was a post-less form (Type D). All the SFBs had a very similar orientation with the long axis aligned approximately east-to-west. Individual SFBs, except for 2797 and 2821 which were not fully investigated, are illustrated in Figures 37–44.

Two 'hollows', 2329 in the northern part of the site and 2429 in the southern part, are more irregular in plan and profile than the recognised SFBs, but might be interpreted as a class of post-less SFB, or some other less regular form. Such interpretations have been placed upon quite nebulous hollows at Pennyland (Williams 1993; SFBs 10 and 11) although more regular post-less SFBs have also been excavated (*e.g.* SFB 8 at Pennyland). Ten percent of the SFBs at West Stow were of the Type D post-less variety and it is clear that such a form might be expected from Melford Meadows.

Dimensions
The lengths of the SFBs varied between 3m and 4.5m (average 3.86m) and their depths between 0.25m and 0.9m below the level of the stripped sand. The dimensions are presented in histogram form (Fig. 49). The size range from Melford Meadows is similar to those from West Stow and Mucking in the earlier Saxon periods, and there is no indication that variations in size have a chronological significance. The site lacks the larger 7th-century forms over 4.5m long which have now been identified from a number of sites (Farley 1976; Hamerow 1993, figs 6 and 8).

Internal features
There were few internal features to aid our understanding of the function or construction of the buildings. Several additional possible post-holes were investigated but all were considered to be animal disturbances. There were no hearths, although some burnt clay from SFB 2222 might have been derived from a hearth. Of interest in SFB 2595 was the shallow gully running across a slight platform at the eastern end of the pit (Fig. 44; feature 2627). Features such as this are commonly interpreted as emplacements for upright looms (*e.g.* Mucking: Hamerow 1993, 17). Eighteen SFBs at Mucking had floor slots which have been interpreted as loom emplacements, and many of these were associated with weaving equipment (Dixon 1993, 136). However, this interpretation ignores the realities of weaving using a warp-weighted loom (Hoffman, 1964, 29–55; fig.2). The loom was a complex machine, which was set up not vertically but at an angle of about 70° in use, and therefore post-holes would not be necessary to secure its base. Height was important to provide a reasonable weaving area, after due space was allowed for the loomweights at the bottom and for clearance at the top of the loom. The weaver stood when using the loom, and sometimes stood on a bench. Two burnt SFBs at West Stow are instructive. SFB 3 was a two-post structure with a number of secondary posts for the walls, but no internal posts or slots. There was much carbonised wood and large numbers of loomweights, the latter concentrated in the eastern half of the structure (West 1985, 16 and fig. 35). SFB 15 was another two-post structure, within which two layers of charred planks were found with loomweights sealed between (West 1985, 23 and fig. 71). The concentration of loomweights and their distribution in both SFBs strongly suggest their use as weaving sheds. Neither structure produced evidence for internal post-holes or slots. At Melford Meadows no loomweights were found in SFB 2595 and therefore some other interpretation of the slot must be suggested.

Floor ledges in SFB 2595 (Fig. 44) and also in 2033 (Fig. 37) have parallels elsewhere. Examples have been reported from Mucking (Hamerow 1993, GH 65, fig. 64 among others) and Pennyland (Williams 1993, SFB 2 in particular), while in Thetford these features have been found on sites at Brandon Road (Dallas 1993, SFB 2) and Redcastle Furze (Andrews 1995, SFB 1528). Such ledges have been interpreted as remnant floor levels protected from wear by the restricted access at the sides of the pit because of the low eaves (Farley 1976; Rahtz 1979). This is an unlikely interpretation, particularly at Melford

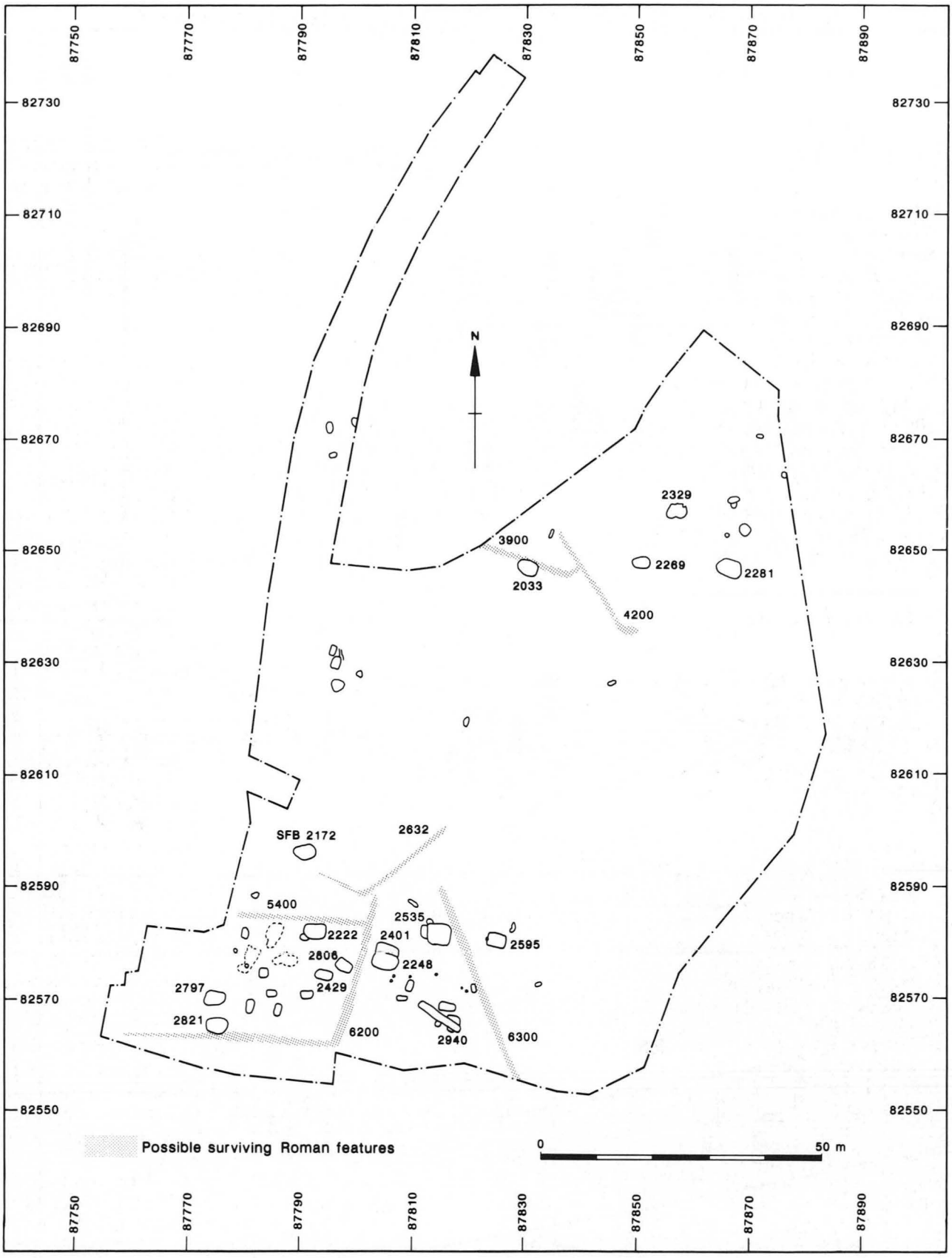


Fig. 34 Phase 5: early Saxon settlement. Scale 1:1000

Meadows where any ledge in the sandy soil would rapidly crumble away. No instances of trampled floors were found at Melford Meadows. In the case of 2595 the ledge is located at the eastern end of the pit. In SFB 2033 a ledge is present on one side only and may indicate an asymmetrical roof. Trampled central floors have been

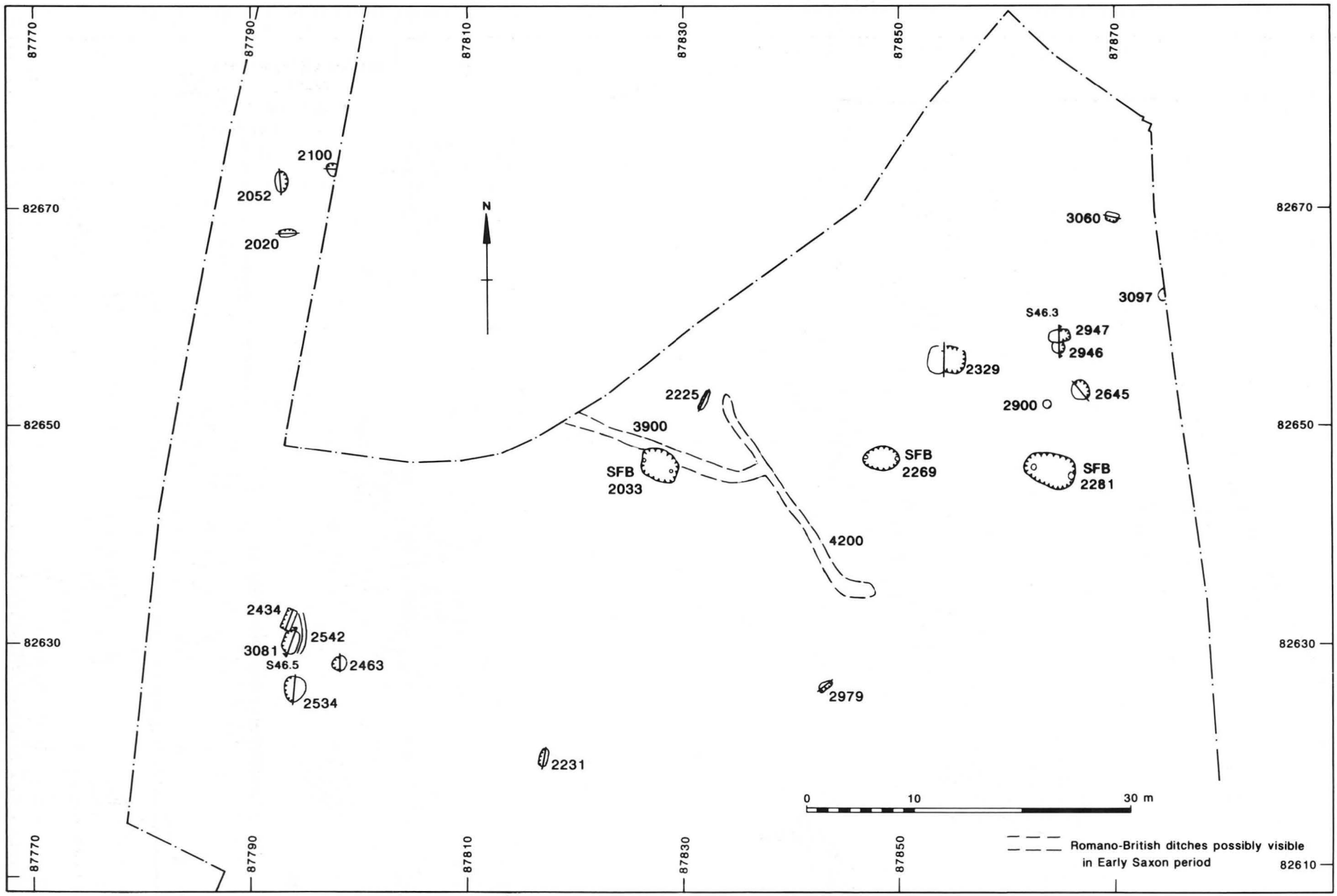


Fig. 35 Early Saxon features: northern area. Scale 1:500

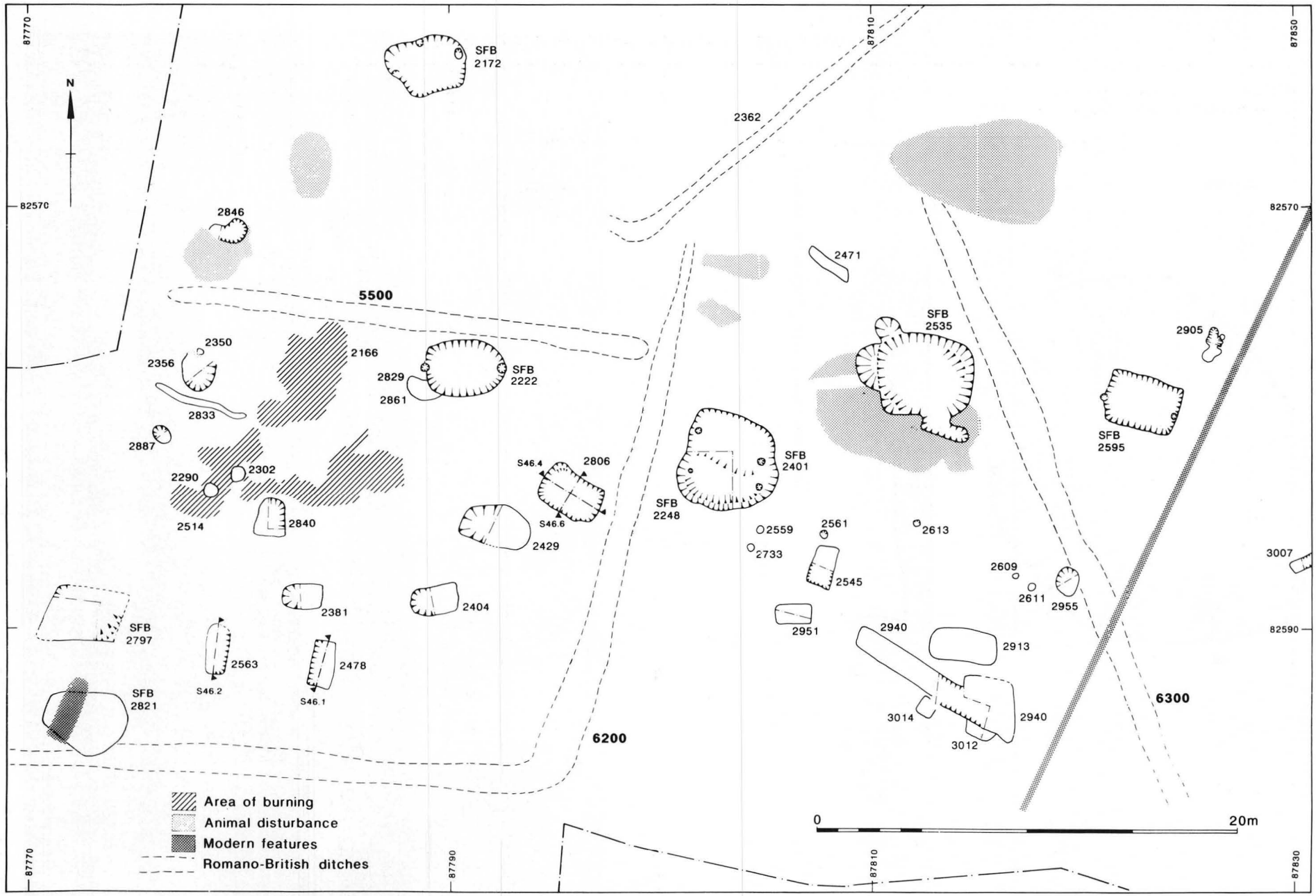


Fig. 36 Early Saxon features: southern area. Scale 1:250

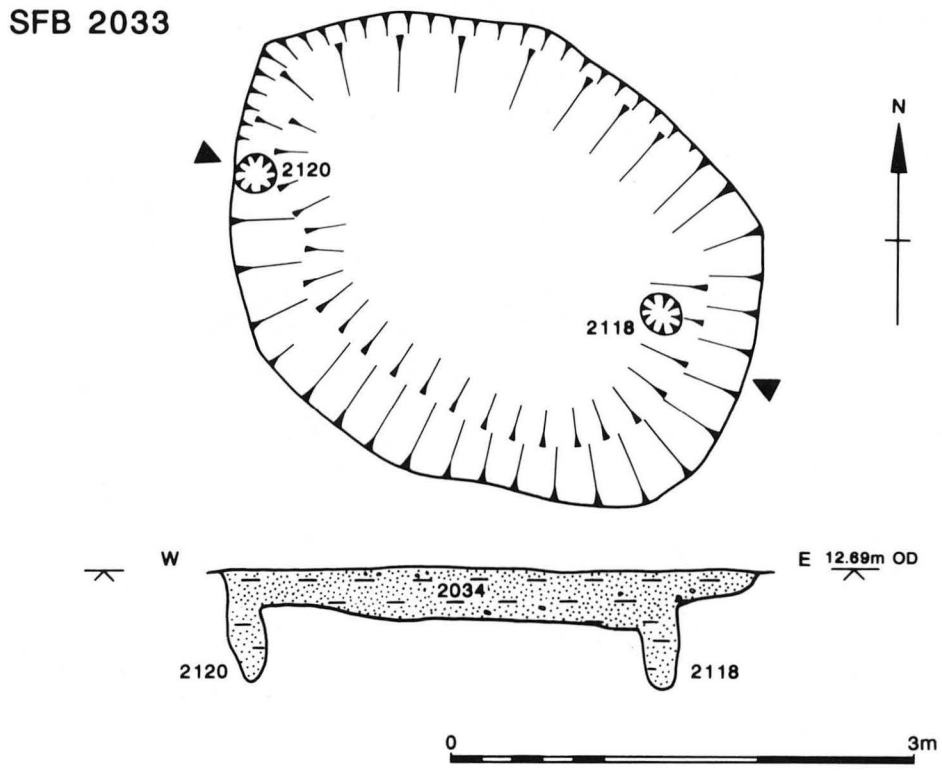


Fig. 37 SFB 2033. Scale 1:50

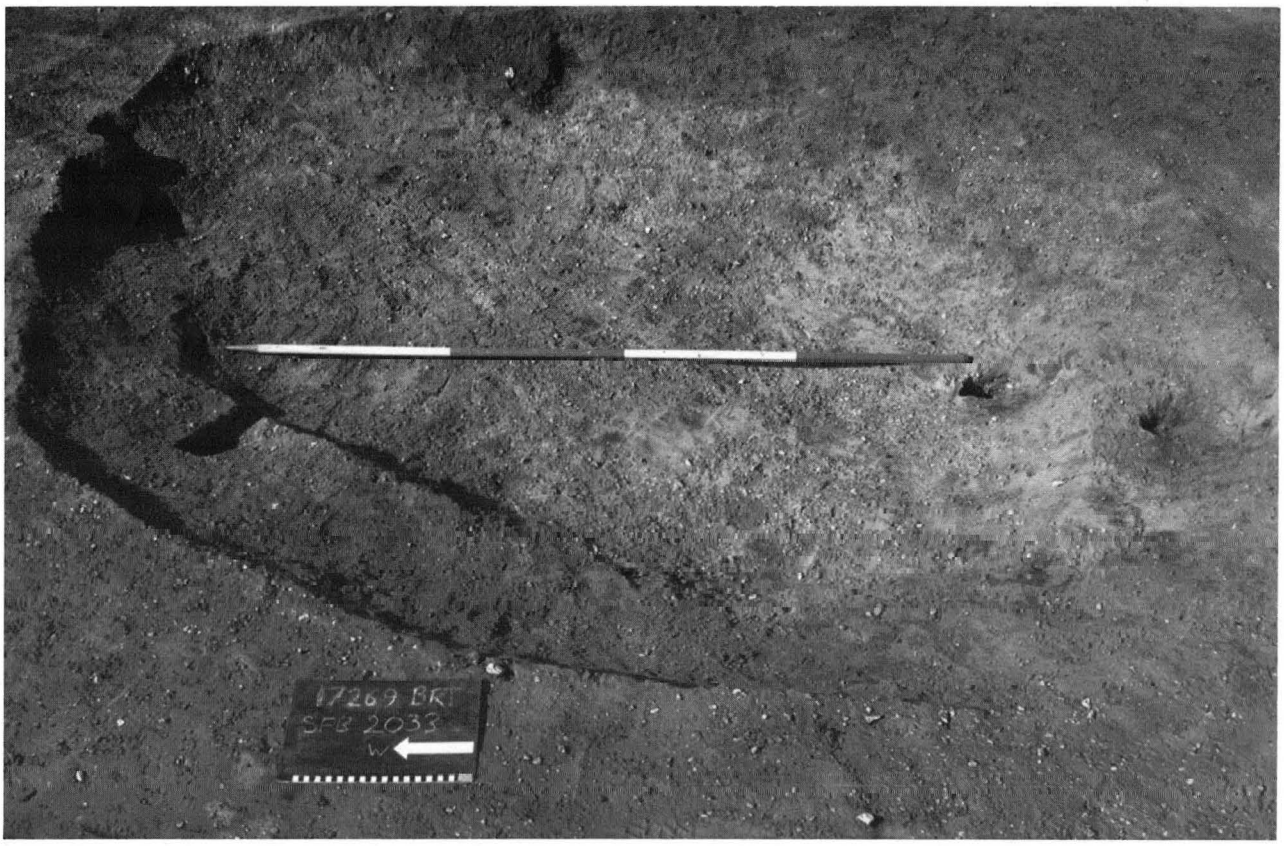


Plate VIII SFB 2033

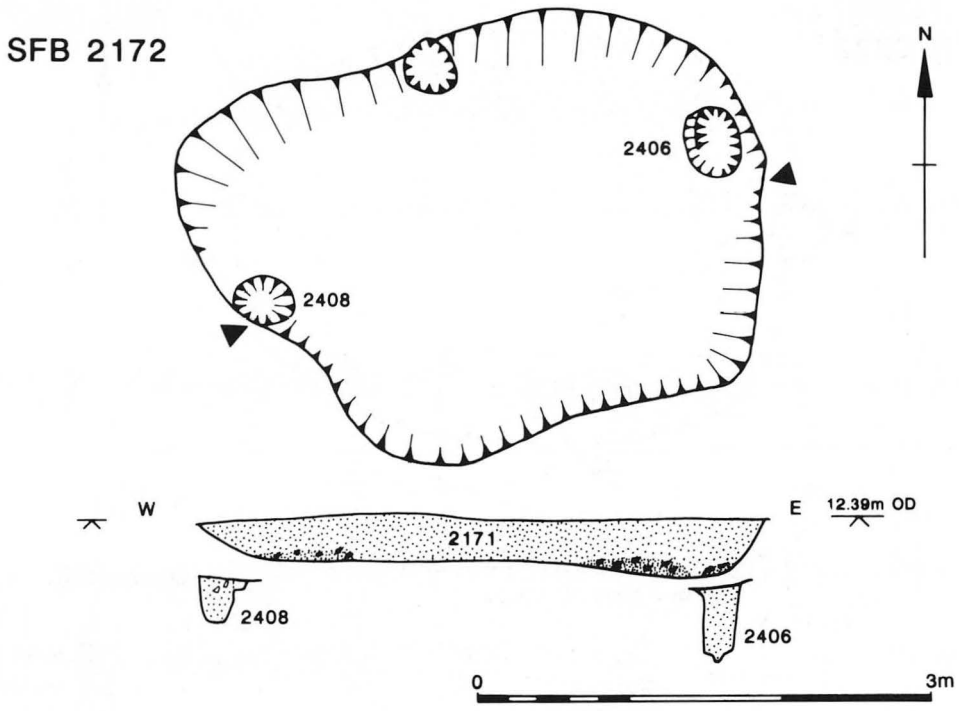


Fig. 38 SFB 2172. Scale 1:50

associated with and contrasted to untrampled ledges at Mucking (Hamerow 1993, 11) and at Pennyland (Williams 1993, SFB 1).

Entrances

The positions of entrances are notoriously difficult to recognise in SFBs and the absence of evidence for them is one of the arguments against the idea that the pits were normally occupied (West 1985, 117). At Melford Meadows, as at other sites, one would have expected an entrance to have left some trace on the edge of the feature, whether or not a hard threshold and wooden steps were employed. Areas of erosion at the western end of SFBs 2269 (Fig. 41) and 2281 (Fig. 42) were noted but were thought more likely to be animal disturbances. Both 2172 (Fig. 38) and 2535 (Fig. 43) were also heavily disturbed. Erosion at an entrance would be a possible explanation for such disturbance and has occasionally been suggested as in case the south-west corner 'entrances' of SFBs 8 and 9 at Pennyland (Williams 1993). However, this seems an unlikely explanation, particularly on deeper pits, where some weather protection to stop the pit being flooded would surely have been required.

Construction

The method of construction and the original form of SFBs has been considered by many authors with little consensus of opinion. The arguments will not be rehearsed here although some comments are warranted from the evidence at Melford Meadows. The SFBs were not exceptionally well-preserved and, as mentioned above, there were few internal features. It can be stated from the outset that no firm conclusions were reached regarding the purpose of the sunken area, whether occupation was directly on the pit floor, or whether building took place above a sub-floor cavity. Evidence for and against both methods of construction was found.

The presence of the slot in 2595 is perhaps the strongest evidence that the floor of the hollow was the actual occupation surface in this instance. A possible 'occupation layer' (2593) was also recorded which was cut by the slot, and probably by the western post-hole (2625) (Fig. 44). It seems highly likely that the soft, sandy nature of the geology, already noted, would have made it impossible to occupy the hollow for any length of time without it having some sort of floor and lining, presumably of timber or wattle. In this, and in most of the other SFBs, the edge between the fill and sand geology was quite sharp with little indication that the surface of the sand had been exposed and trampled, an observation also made at West Stow in support of argument for a floor covering to the pit (West 1985, 118). The lower darker fill in 2595 might well have incorporated the remains of rotted flooring of some kind. Preserved plank floors have been recorded in SFBs at Wijster, north central Holland (where the geology is also sandy), apparently sometimes covering only the central part of the floor (van Es 1967, Huts 83, 86 and 90). The exceptional evidence from Wijster, comparable to some extent to the detail from Upton (plank and stake pit lining and a prepared earthen floor; Jackson *et al.*1969, 206–10, 213–14), gives an indication of the range of features which might be expected on well preserved sites. The difficulty with the evidence from Wijster is that the SFBs have been severely truncated leaving only the very lowest portions of the pits and in some instances only patterns of post-holes. The Upton feature is probably not a true SFB. The SFBs from Melford Meadows, and from most other British sites, lack the traces of lining such as wall plank or wattle impressions around the edge of the pit. In this context, the pieces of fired clay with wattle impressions from SFBs 2172 and 2222 should noted. However, the quantities of material are small and the location of the burnt material in SFB 2222 suggests it may be from a hearth rather than from the lining of the pit.

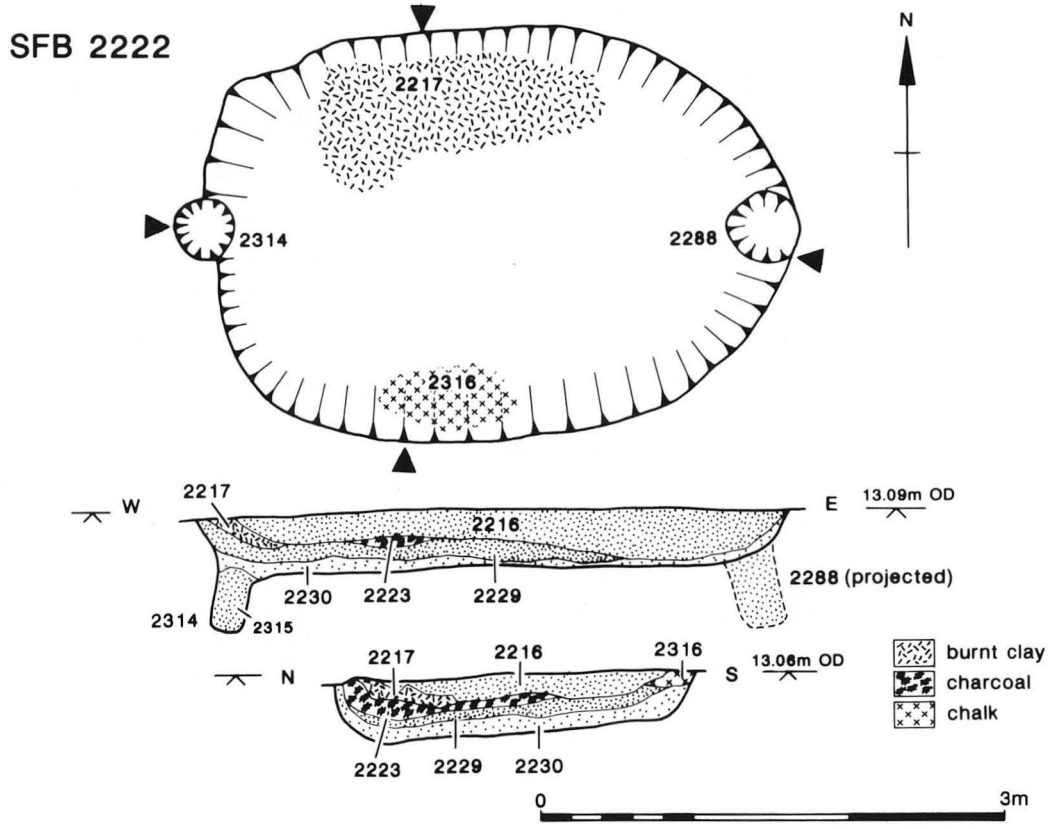


Fig. 39 SFB 2222. Scale 1:50

The end posts provide the only indication of how the superstructure might have been designed. Traditionally, a tent-like building with rafters reaching the ground or supported on stub walls has been envisaged. Dixon has recently shown that a tent or bivouac style structure would not, in fact, have required posts at all, and suggests that the standard design for two-post buildings is more likely to have included cob walls supporting the roof timbers (Dixon 1993, figs 14 and 17). This design would counter the problem of low rafters around the edges of the hollow and effectively increase the living space within the building. However cob walls might be expected to leave substantial traces.

The depth of the post-holes was generally between 0.4m and 0.5m below the base of the hollow, although those in 2281 (Fig. 42) were 0.65m deep and the smallest of the SFBs, 2269 (Fig. 41), had an appreciably shallower pair (0.25m and 0.3m). It is assumed that they were sufficiently stable to be load-bearing. SFBs 2535 (Fig. 43) and 2401 (Fig. 40) had unusually shallow post-holes. Those belonging to 2535 were 0.14m and 0.22m deep and it is not certain that they were real features. Those of 2401 were even shallower (0.12m and 0.2m). Although most SFBs do have post-holes, the fact that some have shallow post-holes or no discernible post-holes, lends support to the reconstruction suggested for two-post SFBs at West Stow (West 1985, 121 and fig. 289). This is based on a frame that did not need to be fully earth-fast and it is possible that these SFBs had much in common with the post-less type as far as construction is concerned. Dixon (1993) illustrates several types of sunken building where gable-end posts are superfluous.

West (1985, 116–21) argues for suspended floor construction on the basis of the often small size of SFBs, together with the variable relationship between the pit edge and post-holes, and the often gradual slope of the sides which would have made any form of effective internal lining difficult to achieve. SFB 2269 (Fig. 41) was the smallest of the structures at Melford Meadows and exhibits these characteristics. Regardless of the size of the hollow at the contemporary ground surface, the sloping sides would have resulted in an area at the base of the pit of only 2.76m^2 (smaller than any of the examples from West Stow). Certainly, a bivouac type construction would have left virtually no room to stand upright. The relationship of the post-holes to the pit edge is inconsistent and rather unclear at the western end, perhaps due to animal disturbance. The western post-hole is not on the long axis of the sunken area which suggests that the sunken area might not define the true shape of the building. However, if the pit were to represent a sub-floor cavity within a building, its size and the angle of the sides would be of reduced significance.

Generally, there was little or no evidence of the *in situ* collapse of any overlying structure in the fills of the SFBs, as was found at West Stow, although the presence of fired clay with wattle impressions in SFBs 2172 and 2222 may be suggestive. The more complex of fills in SFB 2222 (Fig. 39) could be interpreted as the remains of a standing structure and deserve some consideration. The fills included a large patch of burnt clay (2217) at the junction of the upper and lower fills of the hollow. This is similar to examples from West Stow which, it was argued, indicated a hearth on a suspended wooden floor which had collapsed, sealing sub-floor rubbish accumulation (West

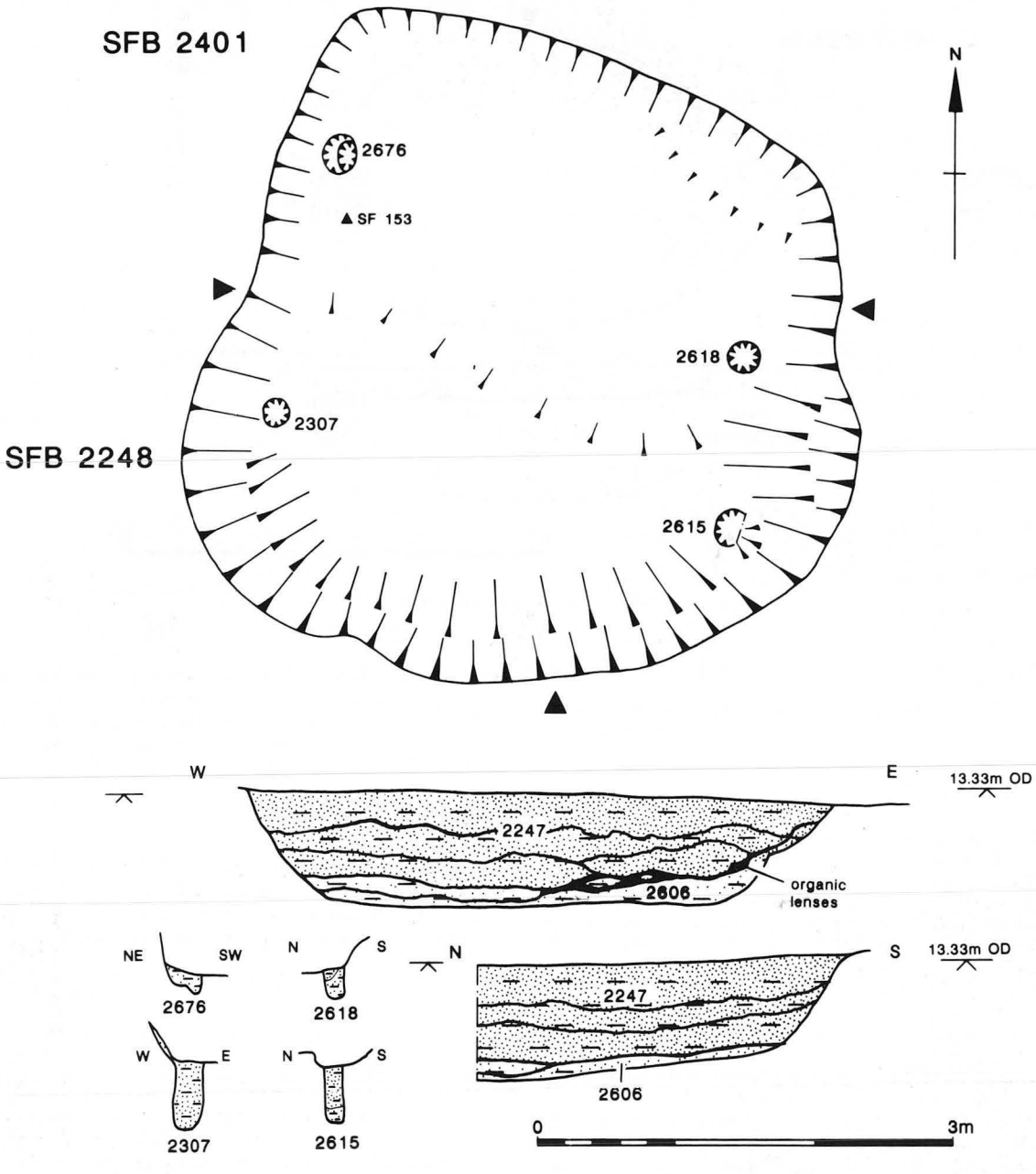


Fig. 40 SFBs 2248 and 2410. Scale 1:50

1985, 117–21). The area of burnt clay lay on the northern side of SFB 2222 and its size (2.3m × 0.9m) is likely to have related directly to the SFB rather than being dumped material brought in. It seems large for a hearth, and the broken nature of its surface suggests that it is more likely to have been a collapsed wall, despite the absence of wattle impressions. However, four SFBs from West Stow had burnt clay deposits in an identical position and of similar or slightly smaller size (SFBs 6, 27, 44 and 49), and these were interpreted as hearths. The area of rammed chalk (2316) opposite the hearth may have been a threshold, and it is paralleled by SFB 44 from West Stow. It can be noted that, in contrast to two of the examples from West Stow, there was no indication that the hearth or threshold overlapped the edge of the pit at Melford Meadow, but then this would not be expected since no contemporary ground surface had survived.

Beneath the burnt clay in SFB 2222, was a soil layer (2223), which was noticeably darker than the others. It included abundant flecks of charcoal and might have been the remains of decayed charred wood. Its location, which was largely restricted to the area beneath the burnt clay although extending beyond it, would indicate some association, and it might have represented the level of the collapsed floor or wall. If so the layers underneath would have resulted from *in situ* accumulation. The fact that both the lower fills of 2222 appeared to seal the fill of post-hole 2314 would indicate that they had not accumulated around the post, but in this type of soil which does not hold its form well this observation needs to be interpreted with caution. At West Stow there is some suggestion that material accumulated around posts during use of the buildings and that the posts subsequently rotted *in situ*. The lowest fill (2230) of 2222 was more mottled with sand and there was some suggestion of animal disturbance.

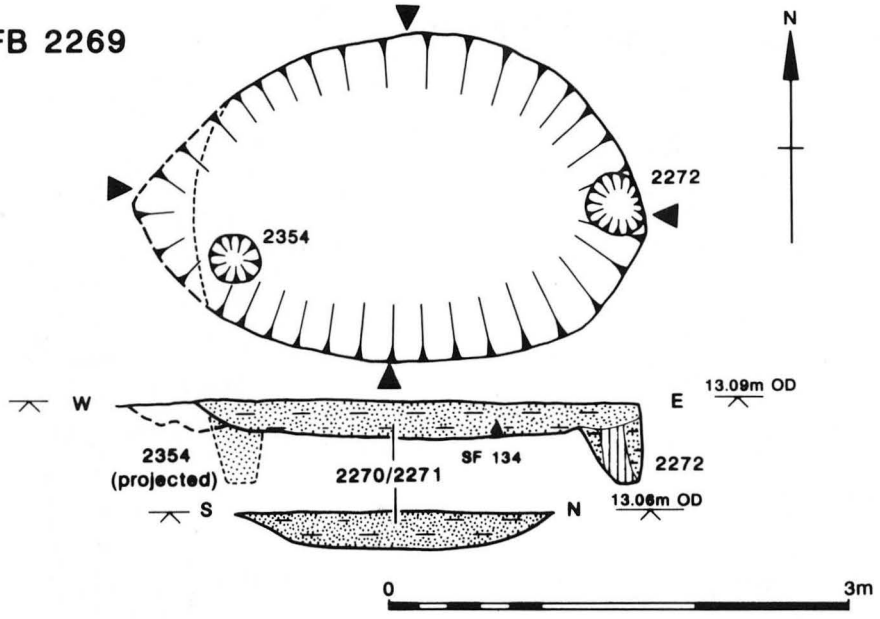


Fig. 41 SFB 2269. Scale 1:50

Description

All the SFBs, which were investigated fully, were completely excavated by hand after initial sectioning, either by the excavation of opposing quadrants or through longitudinal sections.

SFB 2033 (Figs 35, 37 and Pl. VIII)
Two-post sub-oval feature, 3.5m long (posts 2.8m between centres) and 2.9m wide. There was some disturbance by animal burrows but the form of the feature was generally distinct and the moderately sloping edges clear. A shallow ledge was evident on the southern and eastern sides. The central part reached a depth of 0.35m. The post-holes (2118 and 2120) were similar in form, 0.25m in diameter and 0.5m deep, and would have been suitable for holding upright posts.

The feature contained a single fill (2034) of fairly compact dark grey-brown slightly silty sand. Among the abundant finds was half a lugged, shouldered bowl (Fig. 58.23) found fractured *in situ* centrally on the base of the feature. This layer looks like an *in situ* silting deposit rather than a deliberate fill. The post-holes also contained single homogeneous fills similar to 2034. Only 2120 was excavated in section with the rest of the SFB and there was no evidence for infilling prior to the removal of the post, which may have rotted *in situ*. It is suggested that infilling took place, probably deliberately and rapidly, either after the post rotted or was removed.

Finds
Saxon pottery: 75 sherds (5th–6th century)
Romano-British pottery: 14 sherds
Raw clay loomweights: 23+ fragments representing 3 or more loomweights.
Cu alloy: S.f.108 (Fig. 45.3); paper clip rivet for repairing sheet metal vessels, formed from copper alloy strip, bent and folded. Max. thickness 0.5mm.
Iron: S.f.68 (not illus.); unidentifiable lump of corroded iron.
S.f.70 (not illus.); nail with flat round head and square-sectioned stem. Surviving L. 35mm.
S.f.83 (not illus.); two fragments of wire, circular cross-section, one fragment is curved. L. 41 and 67mm, T. 4mm.
S.f.107 (not illus.); incomplete nail, very corroded.
S.f.111 (not illus.); unidentified fragment.
Iron slag: 48.3g hearth lining; 217g smithing slag.

SFB 2172 (Figs 36 and 38)
Two-post type, irregular/ovoid in shape, 3.5m long (posts 3.3m between centres), 2.5m wide and 0.38m deep. The feature cut layer 2321 of the waterhole 2318 and was difficult to define. It was much disturbed by burrows and there was a shallow depression in the northern edge which is probably the result of animal activity. The post-holes 2406 and 2408 show that it had been an SFB. 2406 was deep (0.5m) but quite narrow (0.22m), while 2408 was far less clear and relatively shallow (0.28m). The single fill (2171) was a friable dark grey-brown sand with charcoal-rich lenses. It yielded a large quantity of finds which can probably be interpreted as rubbish deposited with the backfill after the SFB went out of use.

Finds:
Saxon pottery: 94 sherds (including s.f.106 [Fig. 57.4], miniature pot)
Romano-British pottery: 20 sherds
Raw clay loomweights: 3 fragments representing 2 or 3 weights.
Fired clay: 6g (one fragment with wattle impression)
Shale spindle-whorl: S.f.105 (Fig. 45.7); complete, biconical. Max. D. 38mm, max. T. 12mm, D. of perforation 8.5mm.

SFB 2222 (Figs 36 and 39)
Two-post type, between oval and sub-rectangular in shape, 4m long (posts 3.7m between centres), 2.6m wide and 0.38m deep with steep sides, a flat base and sharp breaks of slope. The post-holes (2288 and 2314) were very similar, about 0.22m wide and 0.38m deep. The holes themselves sloped inwards about 12° from the vertical, but they could easily have held vertical posts up to 0.16m in diameter.

This SFB exhibited the most complex sequence of fills. The upper soil (2216) was a lightly compacted brownish silty sand with relatively large amounts of burnt clay and burnt stones. This overlay, on the northern edge, a patch of orange mottled burnt clay (2217) up to 0.1m thick sloping towards the centre. A fragment of clay from 2216 had a wattle impression, but most of the clay was unstructured, without a clear surface and it was unclear whence it derived. It measured approximately 2.3m E–W × 0.9m N–S. On the opposite side of the feature was a patch of compacted rammed chalk within a greyish sandy matrix (2316). The burnt clay overlay a deposit of dark silty organic soil with abundant charcoal flecks (2223) measuring about 1.46m N–S × 1.75m E–W. The lower fills were grey-brown sand (2229) over a more mottled basal layer (2230). This appeared to seal the browner fill of post-hole 2314 (fill 2315), although this was far from clear.

Finds
Saxon pottery: 2216 — 25 sherds; 2223 — 2 sherds; 2229 and 2230 — 11 sherds
Romano-British pottery: 2216 — 2 sherds; 2217 — 1 sherd; 2229 and 2230 — 6 sherds
Fired clay: 2216 — 392g (1 fragment with wattle impression).
2217 — sample only
2223 — 250g
Raw clay: 2229 — tiny fragment
Cu alloy: 2216, s.f.121 (not illus.); fragment of wire, circular cross-section, hooked at one end. T. 1.5mm.

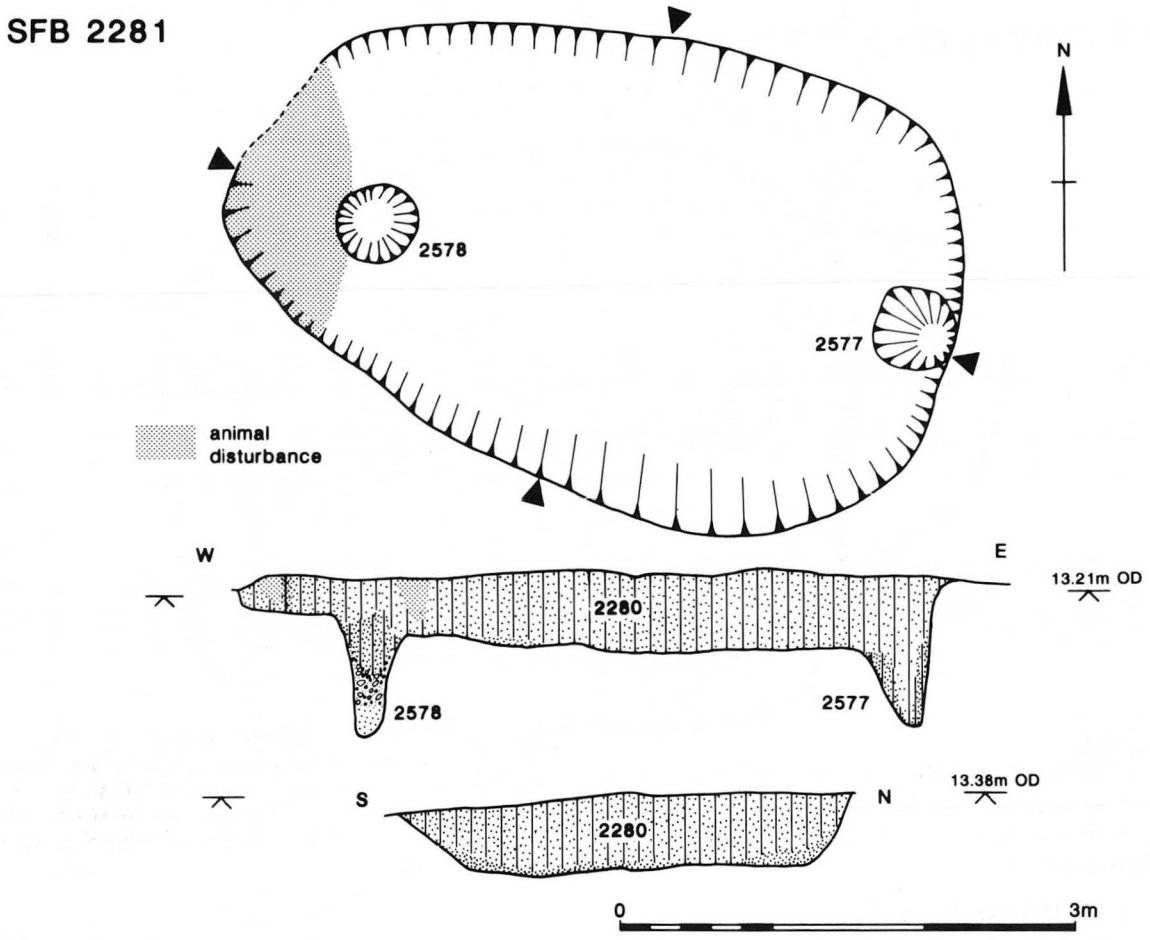


Fig. 42 SFB 2281. Scale 1:50

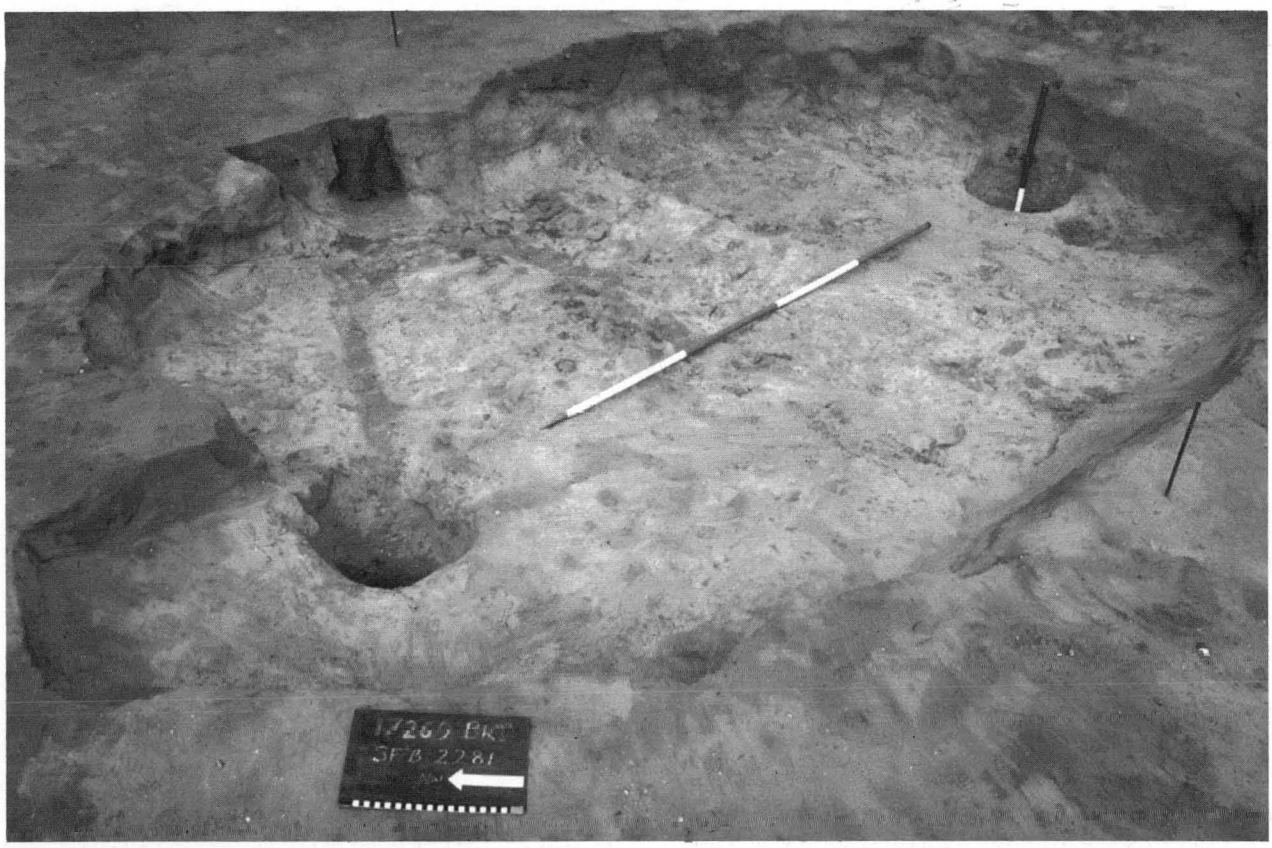


Plate IX SFB 2281

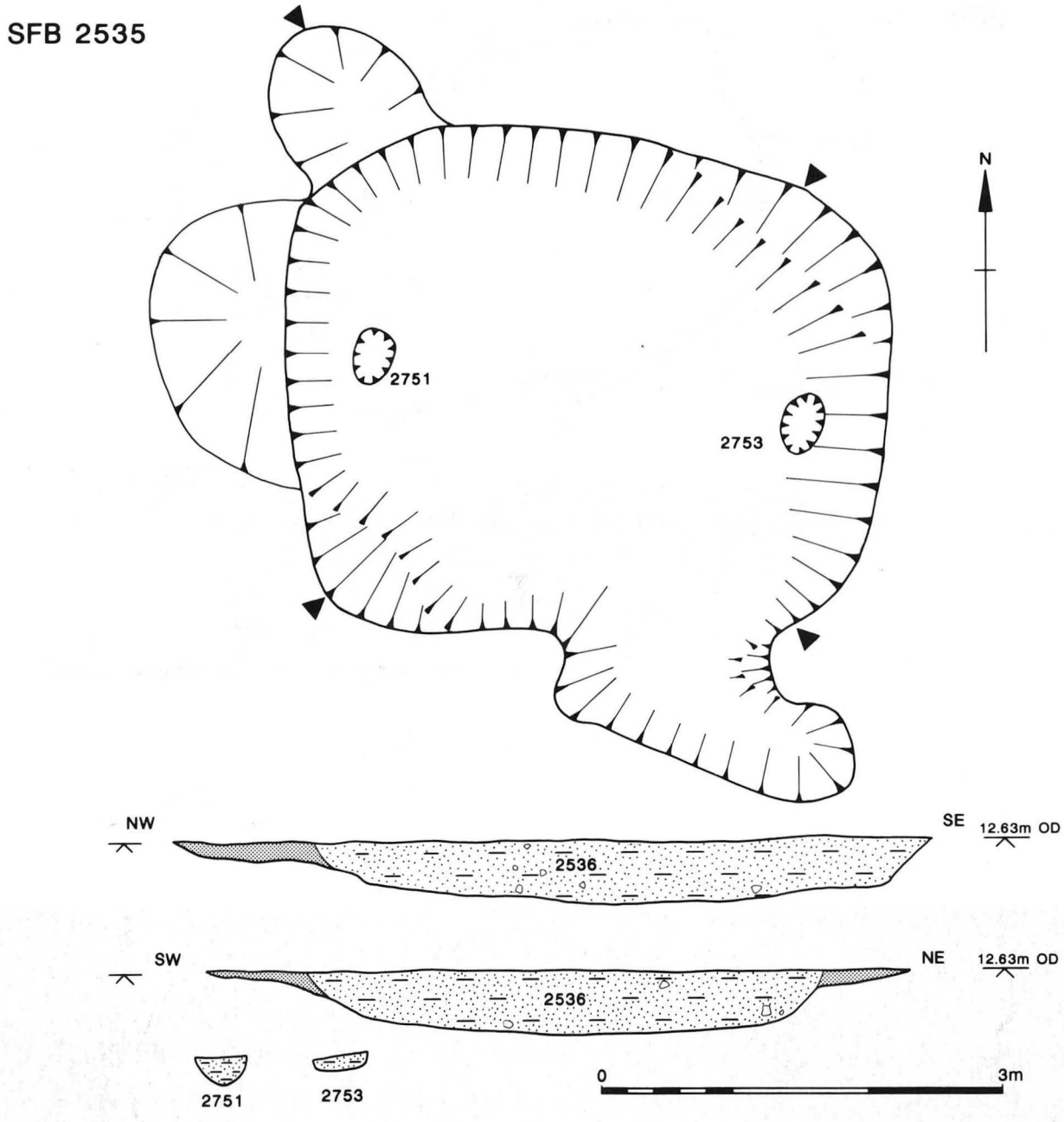


Fig. 43 SFB 2535. Scale 1:50

S.f.141 (Fig. 45.1); wrist clasp comprising rectangular plate, with two small rivet holes close to one edge, and small inset cut out on the opposite edge. There is a cast solid raised rib decorated with three slightly raised and wider blocks. The rib is cast not applied and therefore belongs to Hines type B19 (1984, pl. 2.1, B19). L. 25mm.

Iron: 2223, s.f.122 (not illus.); nail with flat round head and square-sectioned stem. Surviving L. 47mm.

2230, s.f.126 (Fig. 45.2); incomplete knife blade, missing haft and tip, straight edge and curved back. Max. surviving L. 76mm, W. 18mm.

2317, s.f.138 (not illus.); probable nail, corroded and incomplete.

Iron slag: 2229; 24.1g smithing slag.

Glass: 216, s.f.110 (not illus.); single translucent green fragment, almost certainly from a mould-blown prismatic bottle of common 1st and 2nd-century type. Vertical usage scratches on the outer surface frequently occur on such vessels, probably resulting from storage in crates. However, it is just possible that this is a piece of cast window glass of the type used throughout the 1st to 3rd centuries.

Worked Bone: 2216 (not illus.); two fragments of bone/antler, one a fragment of a composite comb, the other probably a blank for the side-plate of a comb.

SFB 2248 (Figs 36 and 40)

Two-post type, sub-rectangular in plan, 4.5m long (posts 3.3m between centres), 3.0m wide and 0.82m deep. This feature cut SFB 2401. The northern SFB (2401) was slightly deeper and probably earlier than SFB 2248. The associated post-holes were not seen in section with the main fill of the SFB. The feature was steep-sided and flat-based, and because of its depth it is possible that it may have been lined, although there was no direct evidence for this. The two post-holes (2307 and 2615) were vertical and clear but quite narrow. They had similar depths of about 0.4m and widths of 0.15m.

The main fill (2247) of 2248 was indistinguishable from the fill of 2401 and comprised a friable grey-brown sandy silt. Thin darker brown humic layers (2605) were observed in section and are interpreted as relating to rotted organic deposits within the backfill. These were very irregular and could not be traced in plan. The lower fill (2606) was a rather more yellowish brown sandy silt.

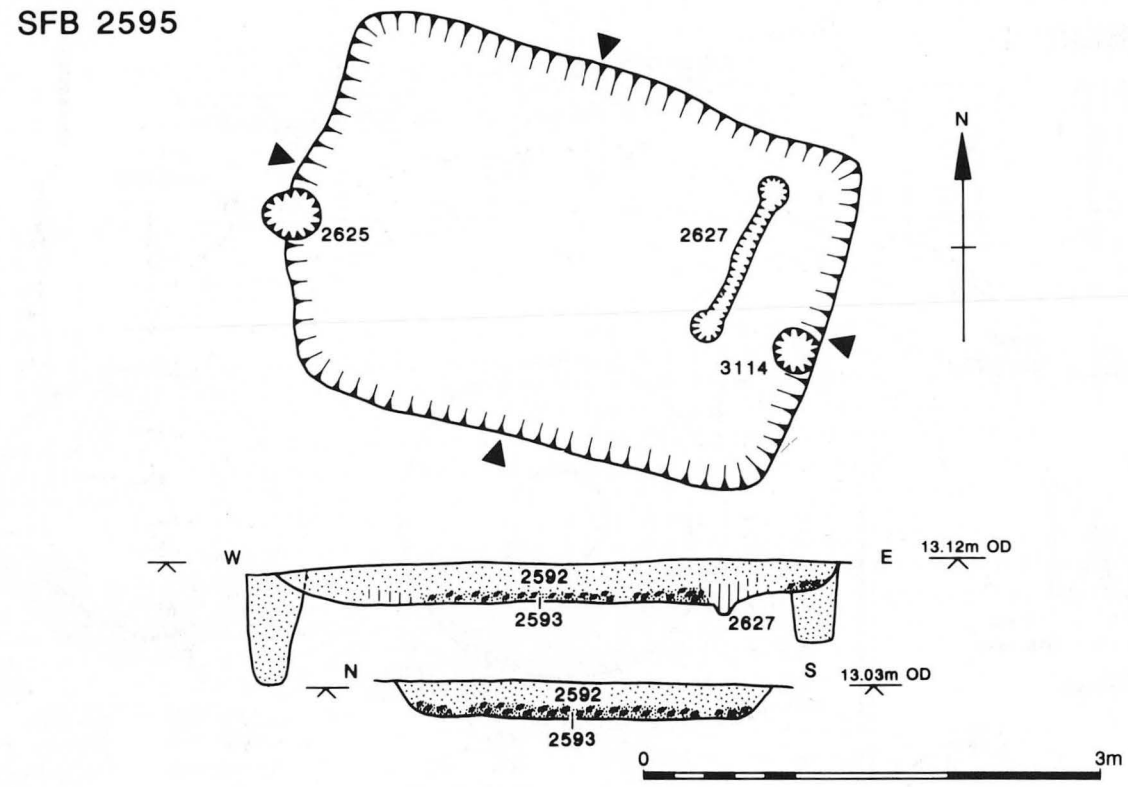


Fig. 44 SFB 2595. Scale 1:50

Plate X SFB 2595

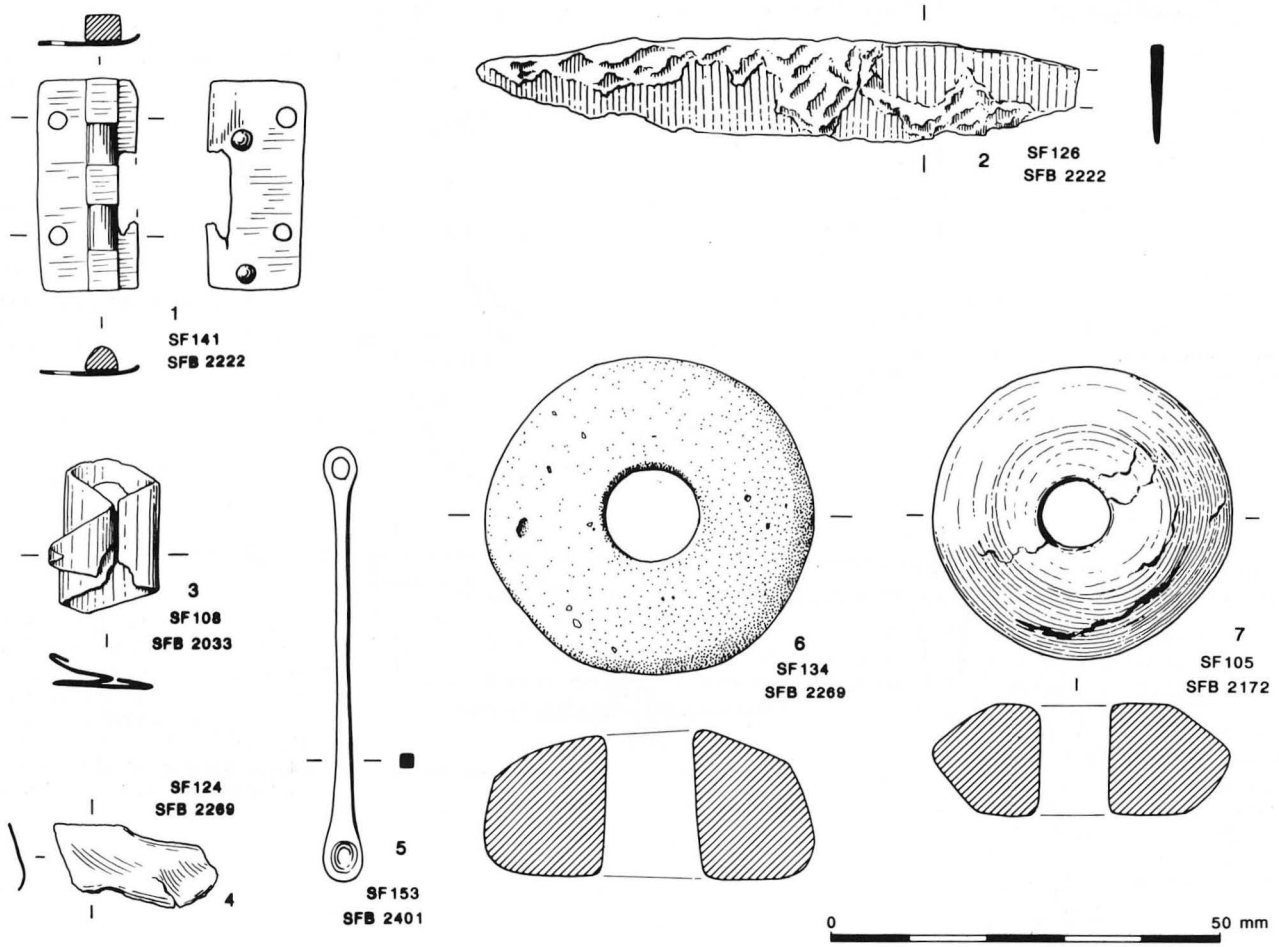


Fig. 45 Finds from SFBs. Scale 1:1

Finds
Saxon pottery: 17 sherds
Romano-British pottery: 6 sherds

SFB 2269 (Figs 35 and 41)
Two-post oval feature, 3 to 3.3m long (posts 2.5m between centres) and 2.1m wide. It had gently sloping sides and a flattish base reaching a depth of 0.25m. The western end was probably overdug into an area of disturbance, but otherwise the edges of the feature were quite clear despite having been dug into two Romano-British enclosure ditches. The eastern post-hole (2272) was sectioned in relation to the rest of the SFB and was found to be the more substantial of the two post-holes (0.3m deep). It contained traces of a possible post-pipe (2273) 0.16m in diameter. The western post-hole (2354) was slightly offset from the central axis of the SFB and was 0.25m deep. The shallowness of the SFB suggests that it was not lined.

The feature was filled with a homogeneous friable grey-brown silty sand (2270 and 2271). The fill contained notably large quantities of iron slag and appeared to seal the fills of post-hole 2272. This shows that the SFB was infilled after going out of use. The relationship of post-hole 2354 to the edge of the feature is unclear. Its location eccentric to the east–west axis of the feature suggests that the sunken area does not define the shape of the building to which the post-holes relate. The sunken area is, in any case, very restricted and it seems likely that a suspended floor covered it.

Finds
Saxon pottery: none
Romano-British pottery: 29 sherds
Fired clay: 4g
Cu alloy: S.f.124 (Fig. 45.4); fragment of copper alloy strip, bent and distorted. L. 20mm, max. T. 0.5mm.
S.f.125 (not illus.); two fragments which may be unrelated. One is slightly curved with a circular cross-section, max. thickness 1mm. The second looks like a much eroded pin, rounded head, shaft has fine circular cross-section, max. T. 1mm. D. of head 2.5mm.
Iron: S.f.123 (not illus.) nail with flat round head and square-sectioned stem. Surviving L. 35mm.
S.f.142 (not illus.) unidentifiable lump.
(not illus.) possible nail, badly corroded.
Iron slag: 299.8g hearth lining; 625.5g smithing slag; 7.7g metallic iron.
Stone spindle-whorl: S.f.134 (Fig. 45.6); complete, plano-convex. Max. diameter 40mm, max. thickness 18mm, max. width of perforation 11mm. Three of the eighty-eight spindle-whorls recovered at West Stow were of stone. Eleven distinct shapes, including plano-convex, were discerned but it was concluded that the styles were of no chronological significance (West 1985, 139).

SFB 2281 (Figs 35, 42 and Pl. IX)
Two-post type, oval in plan as excavated but may have been rather squarer originally, since there appeared to be animal disturbance at the western end. Length 4.6m (posts 3.7m between centres), width 2.9m and depth 0.5m (0.4m at western end). Edges very ragged at top but distinct lower down showing steep, in places almost vertical, sides and flat base. The post-holes (2577and 2578) were very similar to each other and had been dug to the same depth (0.65m).

The fill (2280) was a friable grey sandy loam with darker patches. It seemed originally to have been a uniform deposit but had been considerably mixed by burrowing animals and some cleaner sandy patches had been introduced. The post-hole fills were similar to 2280 suggesting that the whole feature had been infilled after being dismantled, although the amount of animal disturbance makes this interpretation tentative.

This was one of the deeper SFBs and, notwithstanding the amount of animal activity, the edges were quite sharp with very little evidence of slumping. It seems probable that the pit had been lined to retain the sides although there was no evidence for this. Wattle lining seems more

likely than planking given the shape of the feature. Charred remains from the fill consisted mostly of wood charcoal (Table 24). It is possible that this had derived from the burning of the structure.

Finds
Saxon pottery: 5 sherds
Romano-British pottery: 28 sherds
Fired clay: 40g
Iron: S.f.16 (not illus.); two possible nail stem fragments. L. 20mm and 30mm.
S.f.145 (not illus.); very bent, square-sectioned nail stem.
S.f.151 (not illus.); square-sectioned nail stem. Surviving L. 54mm.
S.f.152 (not illus.); corroded nail, probably flat round head with square-sectioned stem, slightly bent. Surviving L. 64mm.
Iron slag: 60.6g hearth lining; 11.9g smithing slag.
Glass: S.f.15 (not illus.); rim fragment of a bowl, jar or cup of blue-green glass. Rim fire-rounded and thickened, and turned slightly inward. This could represent any of a wide range of Romano-British vessel types of the 1st to 3rd centuries.

SFB 2401 (Figs 36 and 40)
Two-post type, sub-rectangular, 4m long (posts 3.2m between centres), 2.5m wide and 0.9m deep. Aligned WNW–ESE. The two post-holes, 2676 and 2618, were insubstantial; 2618 being the deeper at 0.2m. It was steep-sided and flat-based and considered likely to have been lined, although there was no evidence for this.

SFB 2401 was earlier than SFB 2248; the upper fills of the two SFBs could not be distinguished and were excavated as one layer. The lower fill of 2401, 2666 (not in section), was a rather compact mottled grey/brown sandy silt with charcoal patches. It was about 0.6m deep and interpreted as a possible occupation layer. It was distinguishable from the yellow sandy lower fill, 2606, of 2248. Layer 2666 was recorded as sealing post-hole 2676 which indicates that it did not accumulate while the post was in use, although given the friable nature of the soil this is not certain. It also seems unlikely that the SFB had no floor. There was no indication of edge-erosion and the SFB was presumably deliberately infilled shortly after it went out of use.

Finds
Pottery: none
Cu alloy: 2666, s.f.153 (Fig. 45.5); complete ear scoop. Rounded scoop, stem has square cross-section which flattens towards head-end, circular perforation. A similar example from Colchester (Crummy 1983, 60; fig. 64.1900) was thought to be post-Roman, and can be compared to Anglo-Saxon examples from Wheatley and Barrow Hills, Radley, Oxfordshire and Marston St Lawrence, Northamptonshire (MacGregor and Bolick 1993, 219–20, nos 37.16, 37.19 and 37.21). A complete toilet set with similar ear scoop was found at Wally Corner, Berinsfield (Boyle *et al.*, 1995, 89–90; fig. 64: grave 54, 4). L. 57mm, D. of stem 5mm.

SFB 2535 (Figs 36 and 43)
Two-post? type, irregular sub-rectangle in plan, 4.5m long (posts 3.2m between centres) and 3.7m wide. It was 0.5m deep with 45° sides and a flat base. It initially appeared as a larger roughly circular patch of very dark soil withir. an area of dark mottled soil, probably caused by animal disturbance. It was examined by quadrants.

It was unclear how far the extremely ragged edges could be attributed to the use of the SFB and how much was the result of more recent disturbances. The single fill 2536 was a quite homogeneous dark silty sand and the areas of disturbance had soils indistinguishable from this. The irregular edges and shallowness of the sides might be taken to indicate that the SFB was used unlined. The sharp distinction between the fill and the edges of the feature suggests that the feature was kept clean and backfilled immediately after going out of use. The post-holes 2751 and 2753 were quite insubstantial, just 0.2m and 0.12m deep respectively, and not entirely convincing. Charred remains from the fill consisted mostly of oak, although some cereals were also present (Tables 23 and 24; sample 21).

Finds
Saxon pottery: 22 sherds
Romano-British pottery: 19 sherds
Fired clay: 13g

SFB 2595 (Figs 36, 44 and Pl. X)
Two-post? type, sub-rectangular, 3.6m long (posts 3.4m between centres), 2.5m wide and 0.25m deep. Base flattish but with a shallower ledge in the north-east corner. The SFB was unique for this site in having a shallow gully (2627) running across the ledge, shaped like a dumb-bell and generally 0.1m deep but slightly wider and deeper at the ends. The interpretation of this feature is unclear. For reasons discussed above, it is unlikely that it was anything to do with a weaving loom, and there were no loomweights from this feature. The western post-hole (2625) was clear and quite substantial (0.53m deep), but the eastern post-hole (3114) was a more doubtful feature in an area of animal disturbance. It was recorded as 0.5m deep.

The SFB was excavated by quadrants. There was an upper and a lower fill, the soils from each quadrant being numbered individually resulting in four context numbers per layer. The upper fill (2492, 2555, 2557 and 2592) was a moderately compact loamy sand which probably represented the backfill of the pit. This overlay a more compact darker sand (2505, 2593, 2556 and 2558) which was interpreted as a possible occupation layer. This layer was recorded as cut by gully 2627 and by post-hole 2625 (not in section), which suggests that it had accumulated during the life of the building. It is possible that it incorporated rotted flooring of some kind.

Finds
Saxon pottery: upper fills — 24 sherds; lower fills — 29 sherds
Romano-British pottery: upper fills — 1 sherd
Fired clay: upper fills — 15g
Iron slag: upper fill — 50.8g possible smelting slag

SFB 2797 (Fig. 31)
Type? Sub-rectangular, 3.4m long and 2.5m wide. This lay within the cemetery extension to the site and was not completely excavated. However, the eastern and northern sides were sectioned in order to excavate the underlying grave (2794). The SFB had gradually sloping sides and a somewhat rounded base reaching a maximum depth of 0.3m. No post-hole was revealed at the eastern end. The absence of a gable-end post-hole makes this an untypical SFB. The saucer-shaped profile was also untypical, but animal disturbance had damaged the edges and made them somewhat indistinct.

Finds
Saxon pottery: 5 sherds

SFB 2821 (Fig. 36)
Type? Oval? in shape, *c.*4m long and *c.*2.9m wide. This lay within the cemetery extension and was unexcavated. A section through it was examined by shovelling out an intrusive modern trench. The pit was 0.38m deep with moderately sloping sides and a flattish base.

Finds
Raw clay loomweights: 7 fragments representing 2 weights.
In addition to the SFBs there were two irregular hollows which can be dated to the early Anglo-Saxon settlement and may have been SFBs.

Hollow 2329 (Fig. 35)
An irregular oval shape, 3.5m long and 2.5m wide. It was without clear edges and had an irregular base reaching 0.3m deep. It was quarter-sectioned in relation to adjacent features and not fully excavated. The single fill (2328) was a dark brown silty sand containing a great deal of animal bone. Of particular interest was the presence of iron smelting slag together with a piece of metallic iron (Chapter 5, IV 'Metalworking residues').

The feature may have been an SFB, but it very irregular. It also appeared to be cut by post-hole 2331 of Structure 1 (Phase 3). The quantity of Saxon pottery recovered (7 sherds), while outnumbered by Romano-British pottery, strongly suggests that the feature was Anglo-Saxon. It is probably best interpreted as a rubbish pit.

Finds
Saxon pottery: 7 sherds
Romano-British pottery: 11 sherds (1 sherd late 3rd–4th century)
Cu alloy: S.f.135 (Fig. 51.1) toothed plate, complete. Function uncertain. L. 23.5mm, T. 1mm.
S.f.136 (Fig. 51.2) fragment of curved strip, rectangular cross-section.
Iron slag: 35.9g hearth lining; 80.8g smelting slag; 21.1g metallic iron.

Hollow 2429 (Fig. 36)
A roughly sub-rectangular hollow with a shallow V-shaped cross profile. It was half-sectioned in relation to gully 2431 which it cut. It was 3.4m long, 1.7m wide and at most 0.25m deep. It was aligned east-to-west but there was no indication that it was related to a structure and it was not interpreted as an SFB. However, its size and orientation are certainly suggestive and it may be a type of SFB without posts or the usual profile.

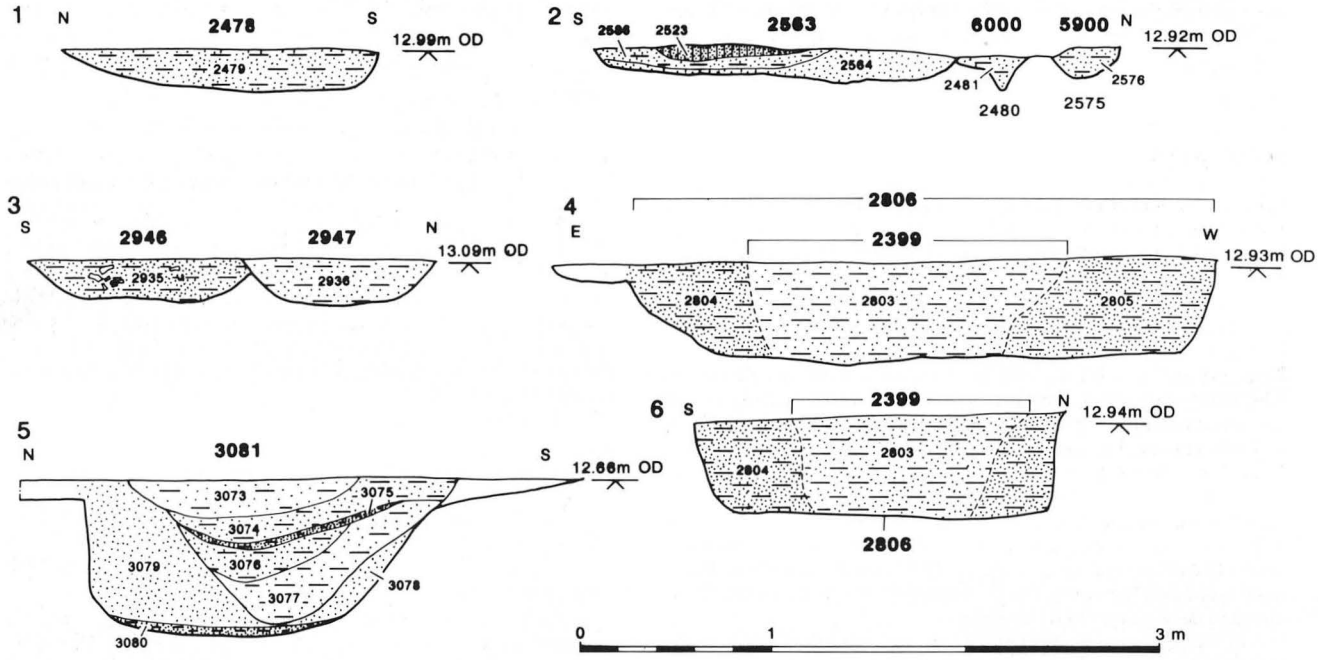


Fig. 46 Early Saxon features: sections. Scale 1:40

The feature contained a concentration of animal bones, which included fragments from three horse skulls. The charred plant remains included small amounts of barley (Table 23; sample 17).

Finds
Saxon pottery: 118 sherds
Romano-British pottery: 1 sherd
Fired clay: 3g
Iron slag: 9.3g hearth lining; 110g smithing slag; 22.5g smithing/smelting slag.

III. Pits

Discussion

Of the seventy or so pits on the site, thirty-two have been ascribed to the Anglo-Saxon occupation, although their dating is frequently insecure. Generally the exclusive presence of Romano-British pottery in the pit has been taken as an indication of a Romano-British date, except where stratigraphic and other evidence suggests that the pottery is residual, or where an undated pit is in a predominantly Romano-British area of the site. However, this may be misleading. It is intuitively thought that the tentatively dated pits are more likely to be Anglo-Saxon than Romano-British, although, of course, this is impossible to verify.

There were no groups of pits with good assemblages of pottery. A comparable situation was reported at West Stow and resulted in the difficulty of dating pits (West 1985, 55). At Mucking certain pits did yield good assemblages, but it seems that these belonged to the 6th–7th centuries rather than earlier (Hamerow 1993, 20) and might be of a specific class of pit which were filled with rubbish in the same way as the SFBs. At Pennyland the thin scatter of pits yielded little in the way of finds and were thought to have been backfilled relatively soon after excavation (Williams 1993, 92).

In common with other Anglo-Saxon sites, there was no clear evidence as to the function of the pits. However, it does seem that a group of shallow, sub-rectangular, flat-based pits can be isolated as a distinct class. These are 1.5 to 2m long, about 1m wide and less than 0.3m deep and are discussed and listed separately. The pits are very similar to a class of rectangular pits from West Stow (West 1985, 55; fig. 7) which, for lack of clear dating evidence, were thought to be possibly Anglo-Saxon. There were some suggestions of lining. At Mucking, a rectangular pit was reported as containing traces of wooden planking (Hamerow 1993, 20). Pits of very similar form and dimensions were found at Wijster (van Es 1967, 177), many with traces of wooden constructions standing in them. They were interpreted as storage pits containing wooden casings, or in examples where the organic staining was oval in shape, basketwork. There seems no reason why the Melford Meadows and West Stow features should not be interpreted in the same terms. The grouping of these features in rows, often along boundary fences, was a feature of Wijster, and it can be seen that the main group of pits at West Stow are also aligned on an early phase of boundary ditch (West 1985, fig. 7, WD6). The grouping of these pits at the southern edge of the site on an approximately east-to-west alignment at Melford Meadows may have a comparable significance.

A thin scatter of shallow, sub-rectangular pits was also found in the northern area (pits 2947 and 3060) and the central part of the site (pit 2434: Fig. 35). A few which were tentatively assigned to the Romano-British occupation (3046, 2902: Fig. 8; and 2483: Fig. 10) may be Anglo-Saxon. However, there do seem to be a number which are more securely Romano-British (2459: Fig. 9; 2538: Fig. 10; and 2830: Fig. 12) and this form of pit does not seem to be exclusively Anglo-Saxon. Rectangular pits with flat bases have been reported from the Iron Age phases at West Stow (West 1990, 12) where they may account for one third of the Iron Age pits, although the dating is insecure in some cases.

A class of larger, flat-based, sub-rectangular pit can also be suggested. Pits 2913 and 2806 (Fig. 36) are similar

in size and form to SFBs but contain no indication of an internal structure. Their fills are clean, which suggests that they were not used for rubbish disposal, unlike most of the SFBs.

Description

Sub-rectangular pits in southern area (Fig. 36)
These pits were about 2m long and 1m wide. Saxon pottery was recovered from just three of them (2545, 2563 and 2840), but they appear to be of a type and are all more likely to be Anglo-Saxon than Romano-British in date. They were examined by half-section. There were also some larger and smaller pits of similar form.

2563 (Fig. 46.2) — 1 Romano-British greyware sherd; 1 Saxon sherd; **2381** — no finds; **2404** — no finds; **2478** (Fig. 46.1) — no finds; **2545** — 1 Saxon sherd; **2840** — 3 Saxon sherds; **2951** — no finds; **3007** — no finds; **3021** (not on plan) — animal bone, 1 fragment fired clay and 112g of iron smelting tap slag.

Other pits in southern area (Fig. 36)
2356 — circular, 1 Romano-British sherd and 3 Saxon sherds; **2829** — oval, 1 Romano-British greyware base and 1 Saxon sherd from upper fill (2850), no finds from lower fill; **2846** — sub-rectangular badly disturbed by burrows, 7 early Saxon sherds, animal bone (including one rabbit bone), a small quantity of fired clay, charred plant remains (Table 23; sample 26) contained wheat and weeds; **2887** — shallow, no finds; **2905** — irregular pit or animal disturbance; **2913** — large sub- rectangular, 1 Saxon sherd; **2955** — circular, no finds.

Possible early Anglo-Saxon pits in southern area (Fig. 36)
2399 (Fig. 46.4) — oval, 2 small Saxon sherds; **2806** (Fig. 46.4) — rectangular, flat-bottomed, no finds, similar to pit 2417 (Phase 1) which contained a substantially complete 1st-century storage jar; **3012** — sub-rectangular, no finds; **3014** — sub-rectangular, no finds.

Pits in central-western area (Fig. 35)
2434 — sub-rectangular, no finds; **2463** — small circular, 3 Romano-British sherds (3rd/4th-century), 3 Saxon sherds; **2534** — circular, 3 Romano-British sherds, 9 Saxon sherds, tiny fragment of hearth lining iron slag also found.

Possible Anglo-Saxon pits in central-western area (Fig. 35)
3081 (Fig. 46.5) — sub-rectangular with vertical to steep sides, 3 Romano-British sherds from upper fill (3073).

Pits in northern area (Fig. 35)
2100 — uncertain shape, 1 large Saxon sherd (108g) from upper fill (2896); **2900** — possible fire-pit, 1 Saxon sherd from upper fill; lower fill charcoal rich; **2946** (Fig. 46.3): circular, 2 Saxon sherds, copper alloy wire fragment (Fig. 51.3; s.f.240) and animal bone; **2947** (Fig. 46.3) — sub-rectangular or oval, 1 small Romano-British sherd and animal bone; **2979** — oval, with much animal disturbance around the edges,1 Romano-British sherd and 15 early Saxon sherds; **3060** — oval , 3 small Saxon sherds; **3097** — sub-square, containing thick layers of charcoal and burnt flint, but no indication of *in situ* burning, 1 Saxon sherd.

Possible Anglo-Saxon pits in northern area (Fig. 35)
2020 — oval, round-based, 1 tiny undiagnostic Romano-British sherd; **2052** — oval, round-based, 3 undiagnostic Romano-British sherds; **2645** — possible pit of uncertain shape cutting the terminal of Romano-British gully 4700, 2 Saxon sherds; (cut 2629).

IV. Areas of burning

Discussion
In the south-west corner of the site were spreads of dark soil containing charcoal (Fig. 36; 2166, 2514 and unnumbered spread). These were superficial or in slight hollows. These spreads covered a roughly triangular area just south of the Romano-British ditch 5500. Hollow 2166 lay south of 5500, to its south-west was 2514, which was found with a shallow bowl-shaped hearth (2290) and a shallow pit (2302). To the south-east was a very thin unnumbered spread.

The burnt material consisted largely of grass and weeds with some oak (Tables 23 and 24; sample 5), suggesting perhaps the site of bonfires for disposing of waste matter, rather than the material being a product of crop-cleaning or other domestic or industrial use. It is unclear whether this is something which would have been practised on a regular basis, but it is worth bearing in mind that, given the truncation of the early Anglo-Saxon ground surface, these hollows would originally have been deeper, and possibly more extensive than recorded, so are likely to have resulted from several episodes of burning. The 'hearth' may indicate that cooking was also practised here. Some animal bone was found in context 2166.

Description

Hollow 2166
Shallow irregular feature, approximately 4m north-to-south and 2m east-to-west. Filled with a very dark loose sand with charcoal (2165), over a lighter brown sand (2175), which may well have been natural sand stained by leached charcoal. Excluding this lower fill the maximum depth of the feature was probably just 0.2m.

The feature almost certainly cut ditch 5400 (section 2218: Fig. 18.7) although the relationship was somewhat obscured by a modern intrusion. Twenty-six sherds of Saxon pottery were recovered with animal bone. It was interpreted as a bonfire area which must have occupied a shallow pit in order to have survived later truncation. The irregularity of the pit would suggest that it was formed in an *ad hoc* manner, perhaps by raking out, rather than being deliberately dug. The charred remains included a large proportion of grass seeds, presumably from burning herbaceous vegetation.

Hearth 2290
A roughly circular patch of burnt clay (2268) about 0.75m in diameter filling a shallow pit (0.5m). No finds.

Pit 2302
A very shallow elongated pit, 0.6m long, not fully defined and filled with dark grey sand flecked with burnt clay (2289). The only finds were some animal bone.

Hollow 2514
Shallow irregular feature, approximately 4m north-east-to-south-west and 2m north-west-to-south-east. Filled with a dark sand which was much disturbed by animal holes (2288) and thought probably to represent burnt material raked out from hearth 2290. It was apparently cut by pit 2302.

V. Ovens
(Fig. 47)

Discussion
Three ovens (2225, 2231 and 2471) of approximately similar oval form and dimensions were identified. They probably all belonged to the same period of occupation, although there was no dating evidence to support this view. They are not close to particular structures and their distribution relates only in a general way to areas of occupation (Figs 35 and 36) and, of itself, provides no indication of their date. The only finds recovered were five Saxon sherds from 2225 and a scrap of Romano-British greyware from 2471. The Saxon pottery is considered to be reasonable evidence of a Anglo-Saxon date, despite certain problems of intrusive material on this site. The absence of Romano-British pottery from 2225 may also be significant, given its location among Romano-British ditches. Oven 2231 was thought to post-date ditch 5100 stratigraphically, but it was so badly damaged that this relationship was unclear.

There was nothing to suggest the purpose of these ovens, but a domestic function seems likely. Metal

residues were absent, although other Anglo-Saxon features yielded iron slag from both smithing and smelting activities (Chapter 5, IV 'Metalworking residues'). Oak charcoal presumably indicates the fuel used. These ovens do not seem to be characteristic features of early Anglo-Saxon sites. 'Cooking hearths' comprising patches of burnt clay or stone without structural form have been identified at West Stow both within and outside identifiable structures (West 1985, 57–8). Of particular note is SFB 18 at West Stow, which contained a circular oven possibly with a clay dome (West 1985, 24 and fig. 81). At Mucking simple bowl-shaped pits appear to have been the typical form (Hamerow 1993, 20). An oven built into the side of a sunken-featured building was recorded at Puddlehill (Matthews and Hawkes 1985, 69; Building 3). This was of approximately similar form and dimensions to the examples from Melford Meadows and was interpreted as a baking oven.

Description

Oven 2225
Oval in plan, 2.1m long, 0.8m wide and up to 0.3m deep at the south end. The north end had a shallower slope and appears to have been the stoke-hole. There was some burnt clay lining present, but generally burnt clay was mixed into the main fill which was a grey-brown sand with patches of charcoal. The charcoal was identified as oak (Table 24; sample 4). Five small sherds of Saxon pottery were found. Located between ditches 3106 and 4300 in the northern area (Fig. 35) and aligned north-to-south.

Oven 2231
Irregular sub-rectangular patch of dark grey soil and reddish and yellow baked clay. It was about 1.7m long north-north-east to south-south-west, 0.7m wide and up to 0.18m deep, but without a clear form and obviously much disturbed. The main fill (2287) was a grey ashy soil with some clay which appears to have been *in situ* lining. There were no finds. Located just east of ditch 5100 (Fig. 35; cut 2311) and probably overlying the edge of that feature.

Oven 2471
Keyhole-shaped and 2.16m long, 0.85m wide and up to 0.27m deep. The fire chamber was at the south-east end and was lined with burnt clay on the sides and end (but not on the base). The wider and shallower stoke-hole was at the north-west end. The main fill of the feature (2470) was a dark grey charcoal-rich soil which had patches of reddish and yellow soil, presumably derived from the lining or superstructure. A single sherd of Romano-British greyware was recovered. The best preserved of the ovens, it was located in the southern area (Fig. 36).

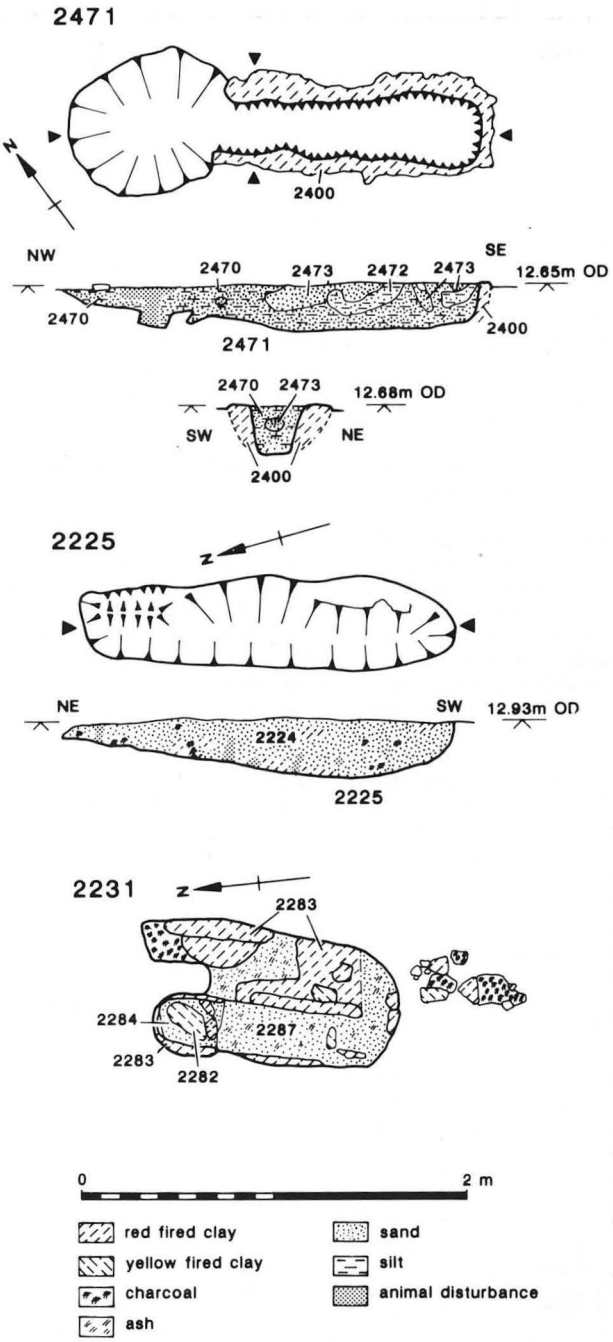


Fig. 47 Early Saxon ovens. Scale 1:40

VI. Other features
(Fig. 35)

A small number of probable Anglo-Saxon gullies and ditches were identified. Their function is uncertain. In the south part of the site there was a small number of post-holes which yielded Saxon finds and these are listed below. Other Anglo-Saxon post-holes could obviously be present. There were no alignments suggesting buildings or fence lines.

Both the gullies and ditches and the post-holes are located in areas of Anglo-Saxon occupation and in the case of the ditches adjacent to Anglo-Saxon pits.

Description
(Figs 5, 35 and 36)

Gully 2542 (Fig. 30)
Small gully, 0.16m deep, running approximately north-to-south on a slight curve for 4m. Located in the central western area of the site not far from pits 2534 and 2463 which are probably also Anglo-Saxon. Its south terminal was not seen clearly but must lie close to where the section was dug. Three Saxon sherds and one Romano-British sherd were recovered. It was recorded as cut by gully 2540 (=4800; Fig. 10), but the provenance of the pottery suggests that this relationship should be reversed.

Gully 2833 (Fig. 36)
Shallow gully running west-north-west to east-south-east for 4.5m. It was located in the south-west area of the site just south of pit 2356 and cut the upper fill of pit 2830. The gully was 0.17m deep with a rounded profile and yielded four Saxon sherds.

Ditch 2940 (Fig. 36)
A length of ditch, or perhaps a long pit, aligned north-west- to-south-east and cutting ditch 6000 (Phases 2 and 3) in the south part of the site. It was 8.5m long with markedly square terminals. It was up to 0.4m deep with almost vertical sides and a flat base. Its single fill yielded a small

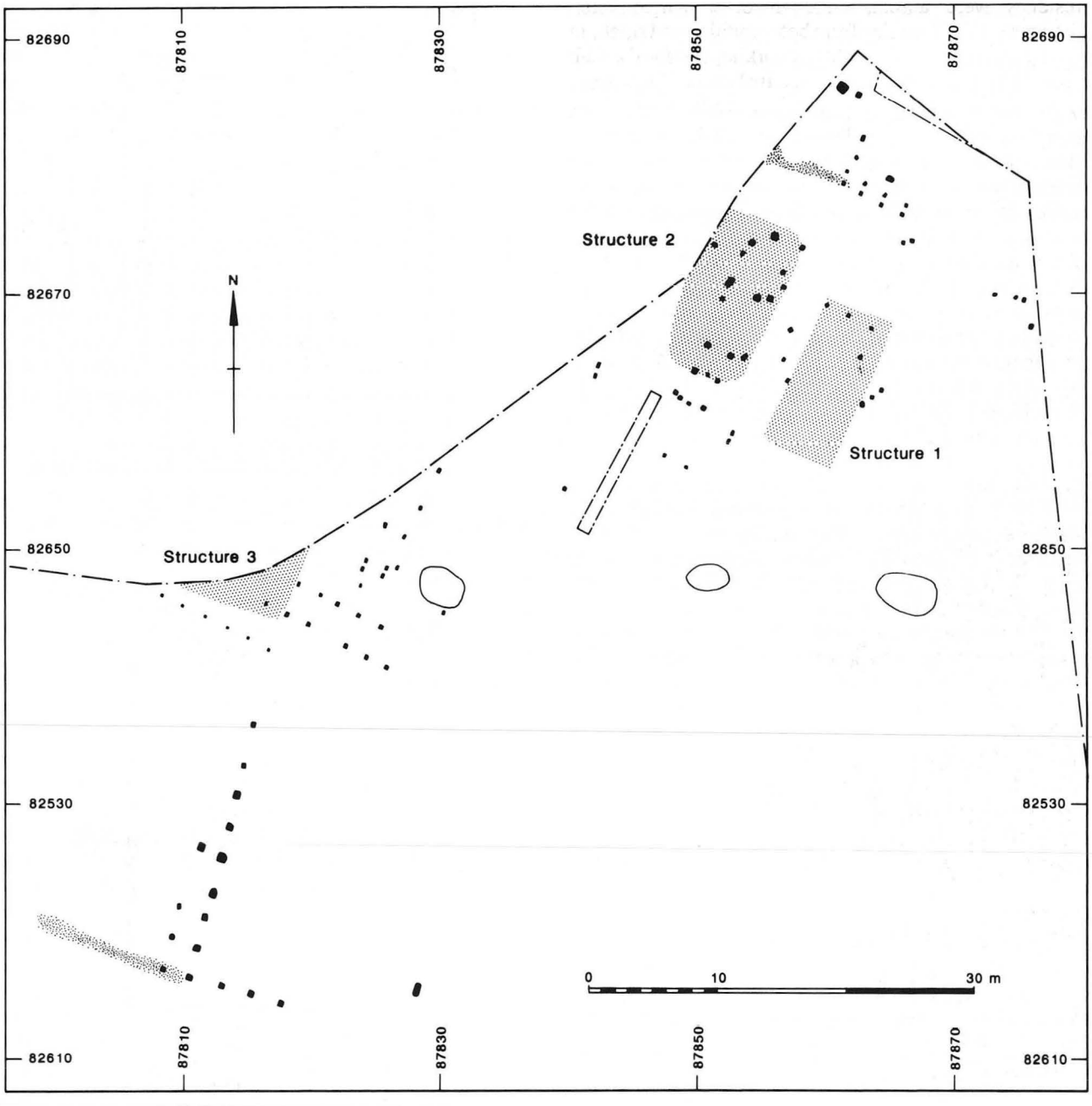


Fig. 48 Post-medieval features. Scale 1:500

Saxon sherd. Apart from the pottery, it is considered more likely to be Saxon than Roman because it is a relatively late feature of singular form and orientation which does not appear to be related to the Romano-British layout.

Probable Anglo-Saxon post-holes (Figs 5 and 36)
2350 — located north of pit 2356 and may be part of the pit separated by animal disturbance; depth 0.14m; **2559** — located south of SFB 2248 with **2561** and **2733**; depth 0.11m with traces of burning, suggesting that it might be the remains of a hearth; 47 Saxon sherds; **2561** — with **2559** and **2733** south of SFB 2248; contained burnt clay; depth 0.2m; **2609** — possible shallow post-hole, 0.07m deep; with **2611** and **2613**; **2611** — depth 0.15m, diameter 0.54m; contained charcoal; with **2609** and **2613**; **2613**: 0.20m deep with a fill containing burnt flints. Forms a possible group with **2609** and **2611**; **2733** — with **2559** and **2561**; depth 0.32m; 2 Saxon sherds; **3019** (not on plan) — black fill suggests *in situ* burning; depth 0.6m deep; **3044** (not on plan) — possible post-hole; charcoal-rich fill; depth 0.5m.

VII. Post-medieval features
(Fig. 48)

In the northern part of the site there were a number of features which were ascribed a post-medieval date. These included a slit-trench full of 20th-century rubbish, but more enigmatic are groups and alignments of post-holes. They have been assigned a post-medieval date with varying degrees of confidence, as there are few finds and no clear dating evidence. They tended to be sharply rectangular in plan with vertical sides and flattish bases, although not invariably of this form, and occasionally Romano-British post-holes had a similar character. While these post-holes clearly cut Romano-British features, including the late ones, it is possible that some of the

post-holes and alignments could be very late Romano-British or even Saxon. This was particularly because they were grouped in areas of Romano-British activity. In the area of Romano-British Structure 2, for instance, they were particularly dense and appeared to respect the northern gully associated with that group of features. Other clusters and alignments were not exclusive. The coincidence of location may not be entirely fortuitous since the areas of Romano-British occupation were intensively searched for post-holes and possible structures. This may have introduced a small element of bias. Some of the features contained Romano-British pottery, as would be expected. The only post-medieval sherd came from within the area of Structure 2. A nearby post-hole contained a fragment of post-Roman brick or tile, as did a post-hole from near Structure 3. Of possible significance was the use of a large piece of abraded (plough-damaged?) slag as a post-base in the area of Structure 2. Of more significance as dating evidence was the observation that two of the post-holes north-west of SFB 2033 appeared to be cutting the remnant of a probable medieval plough-furrow. This was the only place where an observed relationship between these post- holes and the earlier ploughsoil is considered to be reliable. Elsewhere the evidence was inconclusive.

The function of these post-holes is unknown. In some cases they form probable fence lines but elsewhere appear to be without pattern. Early OS maps and the aerial photographic collection of the National Monuments Record were examined without throwing light on this question.

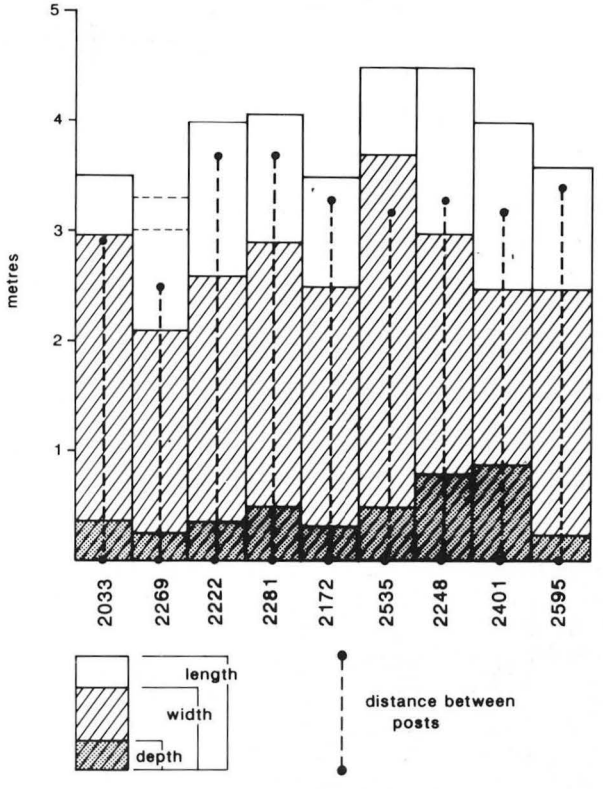


Fig. 49 Histogram of SFB dimensions

Chapter 5. The Finds

I. Coins
by Paul Booth

Thirty-two Roman coins were recovered during the excavation. With two exceptions they were assignable to the late 3rd and 4th centuries. All but three of the coins from the excavation were recovered from topsoil or unstratified contexts, most with the aid of a metal-detector. The condition of the coins was variable; two coins, of later 3rd or 4th-century date on the basis of their size, were totally encrusted and since they were unstratified it was not felt that cleaning to facilitate identification was justified. The late 3rd-century coins were generally in poorer condition than those of the 4th century, as a consequence of which distinction between regular and irregular issues was difficult.

A further sixty-five coins from the site, all found with the aid of a metal detector, are recorded in the Norfolk Sites and Monuments Record. These were listed by Tony Gregory in 1981, and the opportunity has been taken here to incorporate his identifications into a consolidated coin list for the site.

Identification of late Roman coins was based principally on *Late Roman Bronze Coinage* (LRBC), with relevant volumes of *Roman Imperial Coinage* (RIC) used for periods before AD 324. Coins from the 1994 excavation are indicated with an asterisk in the catalogue below. In the case of these coins the identification is followed by the context and small find numbers.

1. Tiberius. Plated denarius. PONTIF MAXIM. AD 14–37. RIC I 3.
2. Claudius I. As. CONSTANTIAE AVGVSTI SC. AD 41–54. RIC I 68.
3. Titus as Caesar. As. VICTORIA SC. AD 77–8. RIC II 778.
4. Faustina II. As. SAECVLI FELICIT. AD 146–75. RIC III 1666.
5. Commodus. Denarius. Rev illegible. AD 180–92.
6*. Crispina. Sestertius. CONCORDIA. AD 180–92. RIC III (Commodus) 665. (2361) s.f.137.
7. Caracalla. Denarius. MARTI PROPVGNATORI. AD 213–17. RIC IV i 307.
8*. Severus Alexander. Denarius. Emperor. AD 224. RIC IV ii 44. (2001) s.f 16.
9. Gordian III. Antoninianus. LAETITIA AVG N. AD 241–3. RIC IV iii 86.
10. Valerian. Antoninianus. ?Irregular. PROVIDENTIA AVGG. AD 253–60. RIC V i 112.
11. Claudius II. Antoninianus. AEQVITAS AVG. AD 268–70. RIC V i 14.
12. Claudius II. Antoninianus. Rev illegible. AD 268–70.
13. Claudius II. Antoninianus. Irregular, rev illegible. AD 268–70.
14. Claudius II. Antoninianus. CONSECRATIO. *c.*AD 270. RIC V i 261.
15. Tetricus I. Antoninianus. Rev illegible. AD 270–3.
16–18. Tetricus I. Antoniniani. Irregular, rev illegible. AD 270–3.
19–20*. Tetricus I. Antoniniani. Irregular, rev illegible. AD 270–3. (2000) s.fs 12 and 14.
21. Tetricus I. Antoninianus. Irregular, DIIVG. AD 270–3.
22*. Tetricus II. Antoninianus. SPES. AD 270–3. Possibly irregular. (2001) s.f.38.
23. Carausius. Antoninianus. PAX AVG. AD 287–93. RIC V ii 121.
24. Carausius. Antoninianus. PROVIDEN AVG. AD 287–93. RIC V ii 377.
25. Carausius. Antoninianus. HERC DEVSENIENSI. AD 287–93. RIC V ii 800.
26. Carausius. Antoninianus. SALVS AVG. AD 287–93. RIC V ii 994.
27. Carausius. Antoninianus. PAX AVG, mm illegible but London. AD 287–93.
28. Carausius. Antoninianus. TEMPORVM FELICITAS mm illegible. AD 287–93.
29. Carausius in the name of Diocletian. Antoninianus. PAX AVGGG. AD 287–93.
30. Emperor illegible. Antoninianus. AEQVITAS AVG.
31*. Emperor illegible. Antoninianus. Standing figure. Later 3rd century. (2001) s.f.45.
32–33. Unidentifiable antoniniani.
34*. Unidentifiable antoninianus. (2001) s.f.32.
35–38*. Probable barbarous radiates, Later 3rd century. (2001) s.fs 17–19 and s.f.30.
39. Constantine I. Follis. PRINCIPI IVVENTVTIS, Trier. AD 307–8. RIC VI 781.
40. Constantine I. Follis. BEATA TRANQVILLITAS, mm illegible. AD 320–1.
41*. Constantine II. Follis. CAESARVM NOSTRORVM VOT X, mm uncertain, but Ticinum. *c.*AD 320–1. (2001) s.f.64.
42–43*. Constantine I. Folles. BEATA TRANQVILLITAS VOTIS XX. *c.*AD 321–3. 42 is RIC VII (Trier) 342. (2001) s.fs 40 and 65.
44. Constantine I. Follis. PROVIDENTIAE AVG, mm illegible. AD 324–30.
45. Constantine I. GLORIA EXERCITVS (2 standards), Trier. AD 330–5. LRBCI 43.
46*. Constantine I. AE3. GLORIA EXERCITVS (2 standards). *c.*AD 330–7. (2001) s.f.43.
47. House of Constantine. CONSTANTINOPOLIS, Trier. AD 330–5. LRBCI 59.
48–49*. House of Constantine. AE3. CONSTANTINOPOLIS. *c.*AD 330–7. 48 (Trier) is LRBCI 66. (2001) s.f.39 and (2582) s.f.147.
50. House of Constantine. VRBS ROMA, Trier. AD 330–5. LRBCI 70.
51. Constantine I. GLORIA EXERCITVS (1 standard), Lyons. AD 337–41. LRBCI 247.
52-53*. Constantius II. AE3/4. GLORIA EXERCITVS (1 standard), Trier. *c.*AD 335–41. LRBCI 94 and 132. (2001) s.fs 33 and 29.
54. Constantius II. GLORIA EXERCITVS (1 standard), Aquileia. AD 335–7. LRBCI 676.
55*. ?Constantine II. AE4. GLORIA EXERCITVS (1 standard), Trier. *c.*AD 337–41. *cf.* LRBCI 107. (2001) s.f.42.
56–59. House of Constantine. GLORIA EXERCITVS (1 standard), mm illegible. AD 335–41.
60. Helena. PAX PVBLICA, mm illegible. AD 337–41.
61. Constans. VICTORIAE DD AVGGQNN, Trier. AD 341–6. LRBCI 133.
62. Constans or Constantius II. VICTORIAE DD AVGGQNN, mm illegible. AD 341–6.
63. Constans. FEL TEMP REPARATIO, Aquileia. AD 346–50. LRBCII 882.
64–5. Constantius II. FEL TEMP REPARATIO, Lyons. AD 346–50. LRBCII 201 and 206.
66. Magnentius. VICTORIAE DD NN AVG ET CAE, Lyons. AD 351–3. LRBCII 229/231.
67*. Magnentius. AE2. VICTORIAE DD NN AVG ET CAE, mm illegible. AD 351–3. (2001) s.f.27.
68–70. Constantius II. Irregular. FEL TEMP REPARATIO (fallen horseman). *c.*AD 353–60.
71*. Constantius II? AE4. Irregular. ?FEL TEMP REPARATIO. *c.*AD 353–60. (2000) s.f.13.
72. Valentinian I. AE3. GLORIA ROMANORVM, Lyons. *c.*AD 364–7. As LRBCII 286. (2001) s.f.21.
73. Valentinian I. SECVRITAS REIPVBLICAE, Arles. AD 364–7. LRBCII 481.
74. Valens. AE3. SECVRITAS REIPVBLICAE, Lyons?. AD 364–7. ?LRBCII 277. (2001) s.f.20
75. Valens. Siliqua. VRBS ROMA, Trier. AD 367–75. RIC IX 27e.
76. Valens. SECVRITAS REIPVBLICAE, Lyons. AD 367–75. LRBCII 340.
77. Valens. SECVRITAS REIPVBLICAE, Arles. AD 367–75. LRBCII 528.
78*. Valens. AE3. SECVRITAS REIPVBLICAE, mm illegible. AD 364–78. (2001) s.f.41.

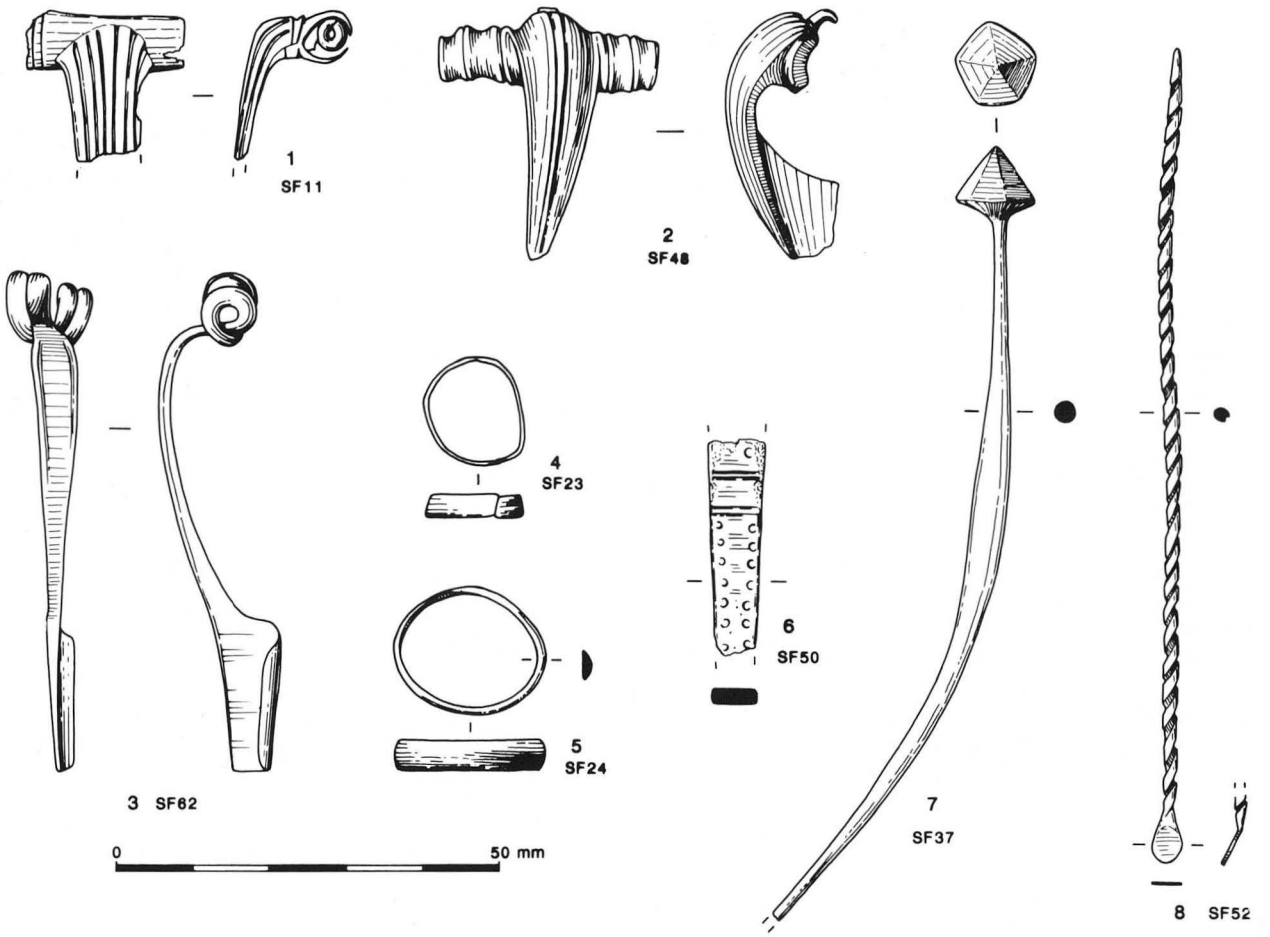


Fig. 50 Finds: Romano-British unstratified. Scale 1:1

79*. Valens. AE3. GLORIA ROMANORVM, Aquileia. *c.*AD 367–75. ?As LRBCII 1033. (2001) s.f.44.
80. Gratian. GLORIA ROMANORVM, Siscia. AD 367–78.
81–82*. Gratian. AE3. GLORIA NOVI SAECVLI, Arles. *c.*AD 367–75. (2000) s.f.15 and (2001) s.f.31.
83–86. House of Valentinian. SECVRITAS REIPVBLICAE, mm illegible. AD 364–78.
87*. House of Valentinian. AE3. SECVRITAS REIPVBLICAE. *c.*AD 364–78. Pierced. (2001) s.f.46.
88. Valentinian II. VICTORIA AVGGG, mm illegible. AD 388–92.
89. Honorius. SALVS REIPVBLICAE (1), Nicomedia, Antioch or Alexandria. AD 393–5.
90. Arcadius. VICTORIA AVGGG, Lyons. AD 394–5. LRBCII 395.
91*. AE2. Standing figure. Probably 4th century. Rolled up. (1826) s.f.1.
92–93*. Encrusted. Later 3rd/4th century. (2001) s.fs 28 and 49.
94–97. Unidentifiable 3rd/4th century.

The vota coin of Constantine II (No. 41) is of interest. This combination of obverse and reverse legend appears to be noted only as an irregular issue (Bruun in RIC VII, 380). This was the only coin in the assemblage minted at Ticinum (although only the lower part of the mintmark was legible). There were also single specimens from Siscia and an eastern mint (Nicomedia, Antioch or Alexandria). Otherwise the 4th-century coins assignable to mints were from common sources: Trier (9, plus the silver siliqua No. 75), Lyons (7) and Arles and Aquileia (3 each). The heavy emphasis on coins of the 4th century is typical of rural sites in the area (*cf.* Davies and Gregory 1991, 76, 78 and 101). Coin 87, which is pierced, probably indicates reuse of this piece in the post-Roman period, though this cannot be certain since the coin was not from a stratified context.

The sixty-five coins recorded in the Norfolk SMR reflect broadly the pattern established by the 'excavated' pieces. Most notable in this collection are the few coins which extend both ends of the chronological range (Nos 1–3 and 88–90). The three last, late 4th-century issues of Valentinian II, Honorius and Arcadius, contradict an observed characteristic of coin lists in Norfolk (Davies and Gregory 1991, 78) where issues after AD 378 are commonly completely absent, as in the small collection from the excavation.

II. Copper alloy finds

by Angela Boyle

The finds from graves are catalogued in Chapter 3 above, and the early Saxon finds from SFBs and possible SFBs, or hollows, are catalogued in Chapter 4 above.

Brooches

Three copper alloy brooches were recovered, all of them unstratified.

Figure 50

1. Incomplete brooch belonging to the Langton Down group. Only upper third survives. Fine tooling marks are present on the reverse of the bow which is ribbed and rounded at its head. The spring is encased and the casing decorated at either end by a pair of vertical grooves. The pin does not survive. A similar example from Baldock derived from an early 1st-century context (Stead and Rigby 1986, 113). (2000) s.f.11 unstratified.

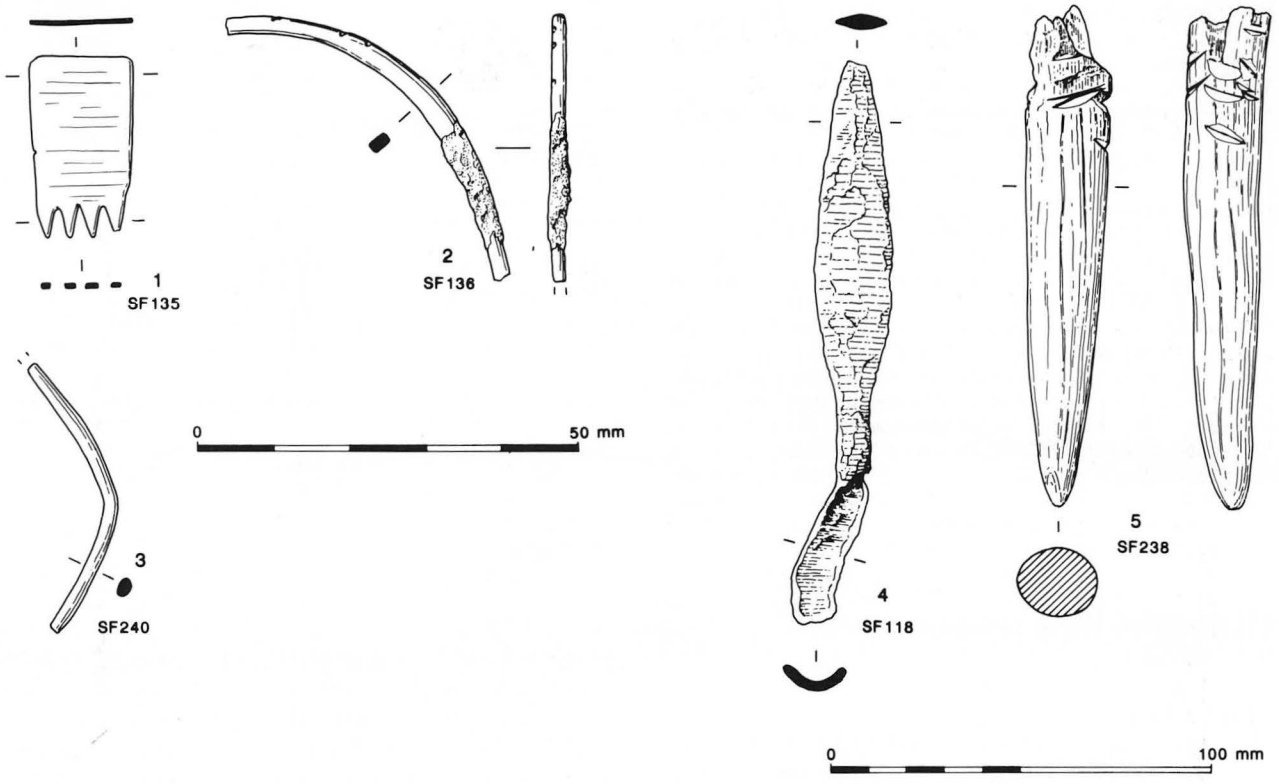


Fig. 51 Finds: early Saxon non-SFB contexts. Scale 1:2

2. Incomplete brooch belonging to the Polden Hill or Dolphin group of the 1st and 2nd centuries. Casing is decorated with a series of vertical grooves, three on each side. Bow has two central grooves on either side running its full length. Reverse hook held separate spring and pin in place. Fine tooling marks present on the rear of the brooch. Pin and spring do not survive. Slight damage to solid catch-plate. (2001) s.f.48 unstratified.
3. Incomplete Nauheim Derivative of late La Tène date. Bow is decorated with two incised lines, one at either side running its full length. Brooch has 4-coil spring with internal chord and solid catch-plate. Pin does not survive. Crummy has argued that these brooches are very common, with a mainly southern distribution and a date range which is predominantly pre-Roman, dying out in the pre-Flavian period (Crummy 1983, 7). (2001) s.f.62 unstratified.

Other unstratified Romano-British copper alloy objects

Figure 50

4. Ring. Plain closed band, max. diameter 14mm, max. thickness of band 2.5mm. (2001) s.f.23
5. Ring. Plain closed band, max. diameter 20mm, max. thickness of band 3.5mm. (2001) s.f.24
6. Fragment of decorated copper alloy strip. Decorated on one side by eight pairs of parallel incised circles and two incised parallel lines. L. 27mm, W. 5mm, max. T. 1mm. Fragment is broken at both ends. (2001) s.f. 50
7. Near complete copper alloy hair pin, missing tip. Head is pyramid shaped and decorated with five incised lines. Similar to one found at Baldock (Stead and Rigby 1986, 131). (2001) s.f.37
8. Incomplete copper alloy ligula with flattened spoon-shaped end. Twisted spiral shank. L. 108mm. This object has a close parallel at West Stow (West 1985, fig. 229.25). (2001) s.f.52

Early Saxon copper alloy finds from non-SFB contexts

Figure 51

3. Copper alloy wire, curved with oval cross-section, max. T. 2.5mm. Possibly a bracelet fragment. Pit 2946 (2945) s.f.240, Phase 5.

III. Iron objects

by Angela Boyle

The iron objects from Romano-British contexts comprise mainly nails. A number of iron objects were unstratified but probably Romano-British in that they come from the settlement areas. These are listed below, but not illustrated. Post-Roman finds, unidentifiable lumps and unstratified nails are omitted from the report. Iron objects associated with the graves are listed in the cemetery catalogue.

Figure 51

4. Spearhead. Socket broken and distorted, plain leaf shaped blade, flat tip damaged. Surviving blade L. 100mm, socket L. 45mm. Feature 2293 (2292) s.f.118, Phase 4.

There are also nails and nail fragments, all with square-sectioned stems. They came from the following contexts: **Post-hole 2159** (2124), s.fs 114–16, unphased; **post-hole 2164** (2163), s.f.113, unphased; **ditch 2174**, (2173) s.f. 129, (Structure 4200) Phase 4; **post- hole 2192** (2193), s.f.112, unphased; **pit or post-hole 2235** (2234), s.fs 132–3, Romano-British unphased; **pit or post-hole 2246** (2245), s.fs 130–1, Romano-British unphased; **feature 2277** (2228), s.f.117, Phase 3 or 4; **pit 2293** (2292), s.f.127, Phase 4; **pit 2495** (2496) s.f.144, Phase 4; **feature 2597** (2596, s.f.150), Phase 1; **ditch 2664** (2274) s.f.128, (Structure 5500) Phase 4; **pit 2830** (2832), s.f.234, Romano-British unphased;

Unstratified iron objects (not illustrated)

Spearhead. Flattened leaf-shaped blade, closed socket with one rivet. Socket is rather irregularly made and very thick as compared with the blade width which is 28mm. L. 166mm. (2001) s.f.10.

Swivel ring. Ring is of circular cross-section with expanded bezel with circular piercing, D. 38mm, max. T. of ring 3.5mm, W. of bezel 18mm. (2001) s.f.22.

Knife blade, complete, with rod tang centrally placed. The back is straight and the edge curved, but the blade form is uncertain. L. 135mm, W. of blade 20mm, L. of blade 89mm. (2001) s.f.26.

Pair of very large *shears*, only one damaged blade survives. Curved edge and sharply curved back. Much of spring survives. L. 220mm, W. of blade 30mm. (2001) s.f.35.
Two *iron sheet fragments.* Max. T. 2mm. (2001) s.f.36.
Buckle, incomplete rectangle of rectangular section; one side is of circular section with a probable sheet metal roller. (2001) s.f.55.
Ring with remains of looped bar attached. Circular cross-section. Possibly part of a bridle bit. D. 6mm, T. 10mm. (2001) s.f.58.
Eight *sheet fragments*, originally joining. Max. T. 2mm. (2001) s.f.61.
Strap or binding, formed from sheet with a slightly tapering rounded end where single nail or rivet with large flat head. The other end is broken. Bent at a right angle and forms a corner reinforcement or strapping. W. 18mm, L. 57mm. (2001) s.f.63.
Unstratified group of corroded fragments. (i) One collar, broken open, D. 50mm, Ht 34mm. A similar example at Baldock which derived from a 4th-century context was described as probably a binding placed around the end of a haft to prevent its being split by the insertion of a tang (Stead and Rigby 1986, 160, no. 586). Other examples are known from Verulamium (Manning 1972, 182, fig. 69, 125) and Silchester (Reading Museum). (ii) Possible awl, flattened cross-section, curved on one side, tapers at both ends, L. 53mm, W. 5mm. (iii) Possible hook, very corroded and distorted. (iv) Complete punch, one end hooked, the other a flattened point, square cross-section. L. 118mm, T. 13mm. Unstratified.

Debris type	*Roman/ possibly Roman*	*Saxon SFBs*	*Saxon 'hollows'*	*Saxon pits*	*Weight (g)*
Hearth lining		133.4			133.4
Hearth lining/slag		275.3	45.2	1.4	321.9
Smithing slag	250.0	879.5	132.5		1262.0
Smelting slag		**50.8**	**80.8**	**112.0**	243.6
Metallic iron		19.5	**21.1**		40.6
Total weight (g)	250.0	1358.5	279.6	113.4	2001.5

Debris associated with primary iron production in bold

Table 3: Period distribution of metalworking debris class by weight

IV. Metalworking residues

by Chris Salter

Introduction

The small quantity of metalworking debris recovered (2kg), would normally be considered insignificant. Such small quantities of material are not usually considered worthy of further study as they are thought to be what is described as a typical background spread of slag associated with many domestic sites where a small amount of simple forging has occurred. However, the attitude of the Material Science-based Archaeology Group is that all metalworking debris from a site should at least be examined, classified, and weighed, as inter-site comparisons are impossible unless this minimal amount of data is recorded. In addition to this minimal macroscopic classification and quantification, it has been found that sampling and exampling all the atypical, and a small proportion of the standard, material can repay the time and cost involved. Some of the most interesting and valuable archaeological data have been discovered by accident during these more extensive examinations. Eight samples were cut and polished from this small collection of material. This proved extremely useful as it confirmed the presence of material associated with primary iron production (smelting or the following bloom-working stage) which would not have been possible from an external examination alone.

The chronological distribution of metalworking debris

All the debris examined was consistent with iron-working activity. The presence of residual Romano-British debris in the Saxon contexts leads to some uncertainty over the date of the metalworking activity. However, following the suggested site phasing, the context data have been reduced to four units: Romano-British/possible Romano-British contexts, Saxon sunken-featured buildings, Saxon 'hollows', and Saxon pits. The detailed slag classification used in the initial identification has been reduced to six classes. These condensed data are presented in Table 3. This table shows that the majority of the slag came from Saxon contexts. Some smithing slag was found in Romano-British or possible Romano- British contexts, but the largest piece from this category was heavily abraded suggesting that it had been redeposited after a period in the ploughsoil and the feature was therefore more likely to be post-Roman. As this sample represented a large proportion of the slag from Romano-British/possible Romano-British contexts it is thought likely that the Romano-British iron-working activity was extremely limited or non-existent.

The typological distribution of metalworking debris

The association of simple blacksmithing slags with settlement sites is not surprising in societies where repair and maintenance of tools, and possibly the production of iron artefacts, was carried out locally by either a resident or itinerant blacksmith. Much more unexpected was the presence of a small quantity of debris from primary iron production on such a site. Primary metal production appears to be a much more specialised craft and limited to those locations where suitable ores and fuels were available. An iron-smelting site usually would have several hundred kilograms of slag distributed around the furnace location. Thus, identification of primary metal-production debris on a site with such a limited amount of slag is normally extremely dubious, as secondary iron-working processes produce material that externally looks very similar to that from primary iron production. Thus, this site with only two kilograms of slag would be classified initially as a smithing site even though a few pieces of tap-slag-like material were recovered. However, in this case, the sampling and examination under the optical microscope of the tap-slag-like material and the furnace slag showed that they had compositions and cooling histories compatible with iron smelting. In addition, the irregularly-shaped fragment of iron (Lab No. 473) lends support to the theory that these slag samples came from iron smelting or associated primary iron production processes. This sample was of a more or less uniform near-eutectoid steel composition (0.75–0.8 % wt Carbon), which had been moderately quickly cooled, but had no distinct working direction with a small lump of glassy slag still attached. Experimental work by Crew and Salter (in press) has shown this is exactly the sort of sample that one can get during the initial processing of the raw bloom immediately after

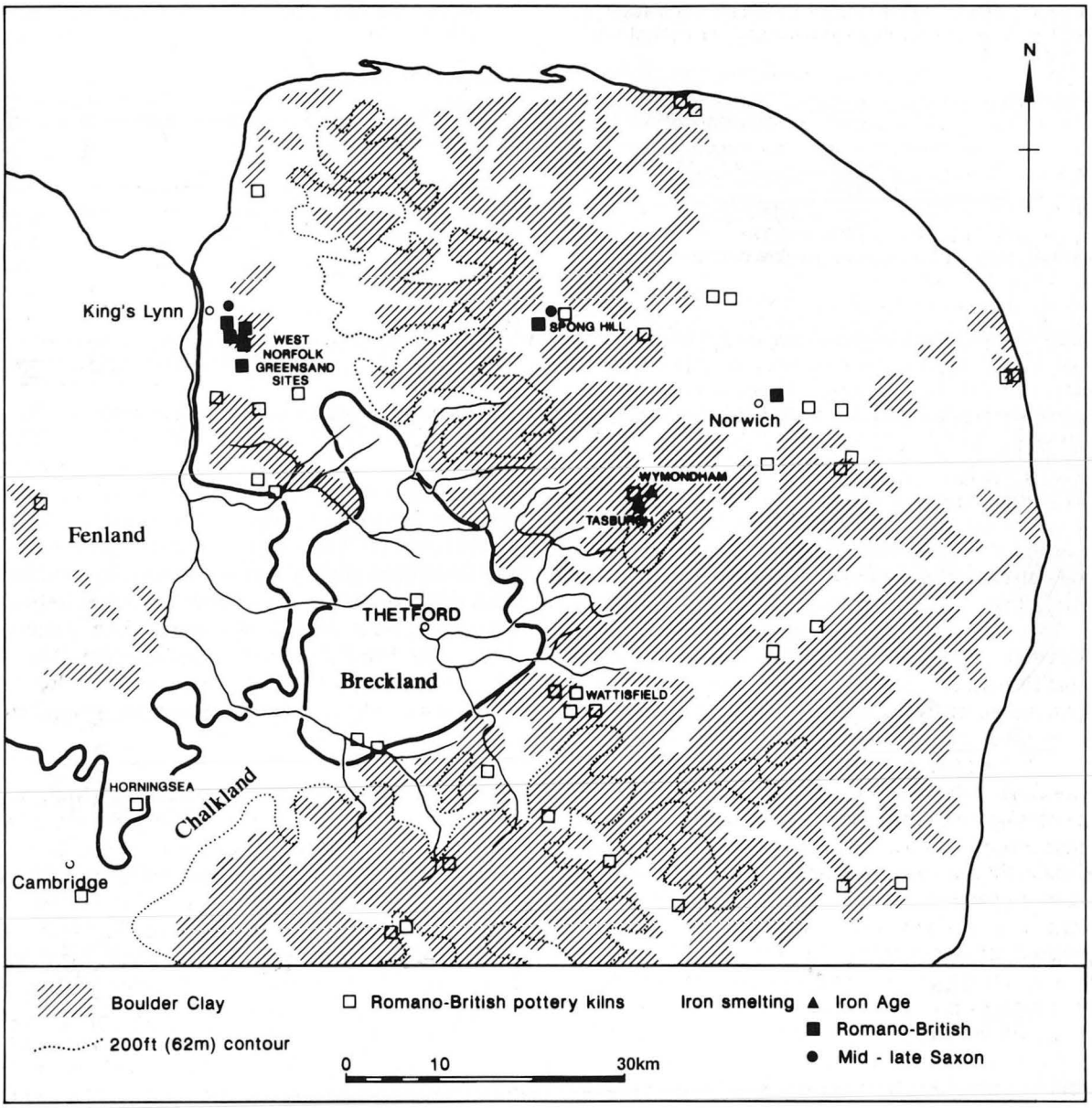


Fig. 52 Map of East Anglia: selected sites

smelting. Their experiments have shown that carbon content of the iron decreases during the subsequent working of the raw bloom into a tradeable billet or other form of stock bar. These later working processes give bloomery iron its highly directional slag inclusion and elemental distributions which were absent in this sample. Thus, it is likely that this was a fragment from the edge of the raw bloom (*i.e.* lump uncleaned and relatively little forged metallic iron and slag removed from the smelting furnace at the end of the smelting operation) that was lost during the initial cleaning and forging of the bloom. The composition of the metal, with nearly 0.2 weight percent phosphorous, puts the metal into the moderate to high phosphorous compositional group. This is compatible with the use of bog or hard-pan type iron ore to produce the metal, although the phosphorous content was not as high as one weight percent predicted by Tylecote (1968) for the metal found on the north Norfolk smelting site at West Runton.

Discussion

Given the minimal total amount of slag recovered, and the even smaller amount of primary iron-production debris, it is likely that only a small redeposited part of a much larger local slag deposit has been sampled. On the other hand it could be argued that the smelting and smithing slags might have been brought onto the site as hardcore from a relatively distant site and then redistributed. It is considered unlikely, however, that slag would have been moved more than a few hundred metres for this purpose during the early Saxon period. Transport from an unknown smithing site is commonly invoked to explain such slag distribution as it is likely that smithies were common and hence likely to be fairly closely spaced. However, at present we do not have the field evidence to support such a hypothesis. This is due to the relatively poor recording of smithing sites in the published archaeological record (only 264 sites in the Oxford database were definitely recorded as smithing sites, against 893 smelting sites.

However, many of the hundreds of unclassified slag-bearing sites are likely to be smithies rather than bloomeries). Also, the recording of slag recovered during fieldwalking has been very poor or non-existent due to the fact that it is virtually impossible to date an isolated lump of slag. The distribution of iron-smelting sites is better recorded as in these cases the slag occurs in rather more obvious heaps which, even after ploughing, are noticeable. Indeed, in some regions of Britain the ancient iron industry has been sufficiently intense in some periods for it to attract specific research interest. In particular, the Weald, North Yorkshire Moors and the Northamptonshire ironstone region have been studied by individuals or local groups. More recently attention has been turned to the Blackdown Hills, Exmoor and the Forest of Dean. Outside these areas a lack of fieldwork rather than an absence of sites is probably the cause of a blank region on the map, and hence the absence of sites in the parts of Cambridgeshire and Suffolk close to Thetford does not indicate that such sites do not exist here.

The known sites in Norfolk are associated either with the once extensive areas of mining pits of the north coastal ridge, typified by the site at West Runton (Tylecote 1967), or the west Norfolk Greensand sites, although there is also a distribution of less intensive activity scattered across the county. The nearest known possible iron-smelting site to Melford Meadows is at Tasburgh, 26km distant, which is probably of middle to late Saxon date (Bayley 1992, 46–7). The Romano-British activity of the west Norfolk sites are over 35km distant. Given the improbability that slag would have been imported over these sorts of distances, it seems likely that there was an early Saxon iron-smelting site close to Melford Meadows, probably within a few hundred metres.

Conclusion

The quantity and nature of the secondary iron-working activity is perfectly normal for material from redeposited contexts on rural settlements of the Roman or early Saxon periods. Other iron-working sites have been reported from the Thetford area (Bayley 1984, 107) but all this material was identified as smithing debris and moreover comes from the late Saxon or later periods. The evidence of smelting activity at Melford Meadows is slightly surprising considering the location of the site in relation to the other bloomery iron-smelting sites within the region (Fig. 52). Given the distance of known smelting sites from Thetford, it is highly unlikely that slag was imported from any of these sites, and it seems likely that there was an undiscovered early Saxon iron-smelting industry in the Thetford/Brettenham area. The underlying solid geology is Chalk, which is not an immediately obvious source of iron ore, but the overlying sandy drift deposits could have developed bog-type ores. Unfortunately, it is beyond the scope of this study to identify the possible areas of ore formation, although the location of such a site would be of immense interest as Saxon smelting sites are relatively rare and early Saxon ones especially so.

V. Miscellaneous Romano-British small finds

by Angela Boyle

Figure 51

5. Antler core, very slightly flattened at its tip. A series of cut marks appear at the other end, presumably made when the core was detached from the animal. Feature 3001 (context 2925) s.f.238, Phase 4.

Small finds (not illustrated)

Waste fragment, possibly tin or pewter. (2001) s.f.47 unstratified.

Glass bead, blue opaque annular. D. 10mm, T. 4.5mm, D. of perforation 3.5mm. Blue annular beads are found from the 6th century BC, are common in Roman contexts, and appear regularly in the 5th and 6th centuries AD (Guido 1978, 67). It is impossible to determine whether this example derives from the Roman or Anglo-Saxon phase of activity on the site. (2001) s.f.69 unstratified.

VI. Worked Stone

by Fiona Roe

Description

The main material used at this site for querns and millstones was Millstone Grit, and there are fragments from eighteen contexts. Of these nine pieces are from Roman contexts, none of them earlier than a late 3rd to 4th century time range. A source for this stone near Sheffield would have been about 110 miles away by a direct route, and an arduous journey seems probable, in particular for the millstone (Nos 11, 12 and14), which when complete would have had a diameter of around 0.81m. There are six coarsely grooved fragments from this millstone, with grooves that average 18mm across, compared to the narrower grooves cut on a lava quern fragment (No. 10), which average 12mm in breadth.

It is impossible to be certain whether or not the four quern fragments and single millstone fragment of Millstone Grit from Anglo-Saxon contexts may be residual material from the previous Roman occupation of the area. The quern fragments are all relatively small, too small in fact to possess any diagnostic features, suggesting that they may all be redeposited.

There are considerably fewer finds of Niedermendig lava, amounting to pieces from five contexts, all but one Roman, and with the same late 3rd to 4th century time span. There are three rotary quern fragments and further small weathered pieces. One piece of rotary (No. 10) has a grooved grinding surface. There is one rotary quern fragment made from Spilsby sandstone (No. 16), of queried Romano-British date. By contrast with the Roman lava and Millstone Grit querns, which are all of the Roman disc type, this quern of local material has a relatively greater depth. The mainly coarse-grained Spilsby sandstone originates in Lincolnshire, but may have been acquired from erratic material, since boulders have in the past been recorded in Norfolk and Suffolk (Ussher *et al.*1888, 88). In addition to the quern and millstone pieces, three rubbers came from the excavations, and for these pebbles or cobbles from Pleistocene Drift were utilised. One (No. 1) is from a possible 2nd-century context, and two are late Romano-British finds (Nos 6 and 15), though always with the possibility that they were in use at some earlier date. There are also a number of burnt pebbles from various contexts and a large block of calcareous sandstone (No. 30), which was unstratified, and has a square socket.

Discussion

The same two main quern materials were also recorded from the Roman site at Fison Way, Thetford, where fragmentary Millstone Grit came from a late Roman context, and fragments of lava from early to late Roman contexts (Gregory 1992b, 148). A similar pattern can be seen on a wider regional basis. Millstone Grit was the main

quern material at a 2nd- to 3rd-century Roman site at Wimpole, Cambridgeshire, though lava was also used (Horton *et al.* 1994, 34). At the late Roman villa at Great Staughton, Cambridgeshire, Millstone Grit was used for querns and additionally for a millstone 0.81m in diameter (Greenfield *et al.* 1994, 48). Millstones have been quite frequent finds on Roman sites in this general area, and one of Millstone Grit with a diameter of *c.*0.9m was found at King Harry Lane, Verulamium (Stead and Rigby 1989, 51). A worn millstone fragment, again made from Millstone Grit, has also been recorded from King's Hedges, Cambridge, and this has a thickness of 64mm, similar to the Brettenham fragments. This site has also produced a rubber made of quartzitic sandstone from the Drift, and a rotary quern of Spilsby sandstone. At Spong Hill, Norfolk, there was a preponderance of lava fragments, though some Millstone Grit also occurred, from late 2nd to early 4th-century contexts (Buckley 1995, 85).

Millstone Grit and lava are also known from Roman sites over a wider area and have occurred, for instance, at Verulamium (Goodburn and Grew 1984, 80; Stead and Rigby 1989, 50), Baldock (Stead and Rigby 1986, 177) and Gorehambury (Neal *et al.* 1990, 160) in Hertfordshire and again at Lincoln, where Spilsby sandstone was also found in Roman contexts (Roe forthcoming). At Colchester only lava was recorded, and here it seems to have arrived at an early date, with a number of finds from 1st and 2nd-century contexts (Buckley and Major 1983, 75). There appears to be a possible chronological difference between the Roman use of Millstone Grit and of lava, and the utilisation of Millstone Grit may on the whole be somewhat later than the use of lava (Buckley 1995, 86). If so this would account for the greater amount of Millstone Grit at Melford Meadows, and also at Great Staughton, another late Roman site. There is a need however for reasonably securely dated finds of both Millstone Grit and lava from Roman sites, and this is always a problem with objects of stone, since they can so easily be redeposited.

Catalogue

In the following catalogue information is presented in the order; description, type of stone, feature and context number, small find number (if appropriate), and phasing.

Early Roman

1. Rubber fragment; igneous rock, probably diorite, from Drift? 2nd century? Pit 2521 (2516) Phase 1.

Later or unspecified Roman

2. Rotary quern, seven weathered fragments, max. depth at rim 42mm; Niedermendig lava. Romano-British midden layer (2004) s.f.1, Phase 3 or 4.
3. Small rotary quern fragment, disc type, reused as point sharpener and possibly as whetstone; Millstone Grit; probably Romano-British. Ditch 2014 (2013) unphased Romano-British.
4. Small quern fragment; Millstone Grit; post-hole associated with Structure 2, 3rd–4th century. Post-hole 2060 (2059) (Structure 2) Phase 4.
5. Small rotary quern fragment with traces of narrowly grooved grinding surface; Millstone Grit. Post-hole in area of Structure 2 but may be modern. Post-hole 2159 (2124) unphased.
6. Slab with one worn surface, rubber?; quartzitic sandstone from Drift. Post-hole 2159 (2124) unphased.
7. Quern fragment? Millstone Grit; probably late 3rd–4th century. Hollow 2866 (2215) Phase 4.
8. Rotary quern fragment, disc type, D. 0.4–0.46m; Millstone Grit. Pit 2277 (2228) Phase 4.
9. Rotary quern fragment, disc type, possibly upper stone, vertical tooling around circumference, D. *c.*0.4m, depth at rim 50mm; Niedermendig lava. From pit 2322 within waterhole 2318. Pit 2322 (2325) s.f.140 unphased Romano-British.
10. Rotary quern fragment, disc type, lower stone, grooved grinding surface, D. *c.*0.46m, depth at rim 39mm; Niedermendig lava; late 3rd–4th century, post-hole associated Structure 1. Post-hole 2331 (2330) (Structure 1) Phase 3.
11. Millstone, four fitting fragments, coarsely grooved, D. *c.*0.81m, depth up to 60mm. Post-hole 2332 (2333) Phase 3.
12. Millstone fragment, traces of coarse grooves, depth 60mm; Millstone Grit. Post-hole 2337 (2338) Phase 3.
13. Quern (or millstone?) fragment, weathered; Niedermendig lava. Ditch 2462 (2453) (ditch 4800) Phase 3.
14. Probable millstone fragment, coarsely grooved grinding surface, depth at rim *c.*40mm; Millstone Grit. Ditch 2591 (2589) (ditch 5100) s.f.148, Phase 2.
15. Rubber fragment? one worked surface; sandstone, probably Greensand from Drift? Ditch 3003 (2924) Phase 4.
16. Rotary quern fragment, possible trace of hopper, max. depth 60mm; Spilsby sandstone. Post-hole 3103 (3102) s.f.243, unphased Romano-British.
17. Rotary quern fragment, probable lower stone, disc type, D. *c.*0.46m, depth at rim *c.*38mm, joins s.f.245; Millstone Grit. Post-hole 3103 (3102) s.f.244, unphased Romano-British.
18. Rotary quern fragment, probable lower stone, as above, traces of pitted grinding surface, joins s.f.244. Post-hole 3101 (3102) s.f.245, unphased Romano-British.

Saxon/possibly Saxon

19. Fragment with worn surface; igneous rock, from Drift?; some residual Roman material found. SFB 2033 (2034) Phase 5
20. Small quern fragment; Millstone Grit; possibly Saxon. Pit 2052 (2050) Phase 5.
21. Small burnt quern? fragment; Millstone Grit. Bonfire area 2166 (2165) Phase 5.
22. Small quern fragment; Millstone Grit. SFB 2172 (2171) Phase 5.
23. Probable quern, small fragment with three worked surfaces; Millstone Grit. SFB 2248 (2229) Phase 5.
24. Possible millstone, weathered fragment, depth *c.*70mm; Millstone Grit, coarse-grained, pebbly. probably Saxon. Oven 2471 (2470) Phase 5.
25. Small quern fragment; Millstone Grit; possibly Saxon. Pit or hollow 3023 (3022) Phase 4 or 5.

Unstratified

26. Small rotary quern fragment; Millstone Grit. (2001).
27. Small rotary quern fragment; Millstone Grit. (2001).
28. Small quern fragment? Burnt; Millstone Grit. (2001).
29. Rotary quern fragment, weathered, disc type, D. *c.*0.46m, depth at rim 35mm; Niedermendig lava. (2001).
30. Large block with cement adhering and square socket in centre; light coloured calcareous micaceous sandstone, Greensand? (2001).

VII. Worked Flint

by Philippa Bradley

Introduction

Five hundred and twelve pieces of worked flint and 177 pieces of burnt unworked flint were recovered from fieldwalking, evaluation and excavation. All of the material was recovered from Roman or later features. The assemblage has therefore been treated as a single unstratified group. The flint is summarised in Table 4a, selected pieces are described in the catalogue and illustrated in Figure 53. Further details about the assemblage may be found in the archive.

Raw material

The flint is mostly dark brown to black with a smooth brown, grey or white cortex. Cortication is generally light, but occasionally pieces exhibit quite heavy cortication. One or two pieces, for example an opposed platform blade core from context 2812, exhibit two phases of cortication, indicating use and possibly re-use of nodules which have

been lying around for some time. Many pieces were abraded and sand-glossing was also noted. The condition of the assemblage would be consistent with it lying around on the surface prior to its inclusion into deposits of Roman, Saxon and later date. Apart from one or two pieces of iron-stained flint, probably deriving from local glacial deposits, the assemblage is good quality chalk flint. Two possible flakes of Grimes Graves floorstone were tentatively identified amongst the assemblage although this material is not easily recognised macroscopically especially in a non-cortical state (Healy 1991, 33; Saville 1981, 2). The two flakes in question are much larger than other pieces in the assemblage measuring 160 × 60mm and 95 × 75mm respectively. The slightly smaller piece has a thick creamy cortex which is characteristic of mined floorstone from Grimes Graves, Weeting with Broomhill (Saville 1981, 1). Although, as Healy points out, floorstone-like flint can be found on the surface (Healy 1992, 145).

Technology and dating

All stages of the reduction process are represented in the assemblage although chips and irregular waste may perhaps be under-represented. No stone percussors were found. There is some limited evidence for controlled flaking; blades, blade-like flakes and blade cores were recovered from all phases of work on the site. Some of the blades were hard-hammer struck and may not have been intentional products. However, previous parallel blade scars were noted on the dorsal face of some flakes. Soft-hammer struck flakes were recovered from the fieldwalking and excavation. A single core rejuvenation flake (tablet) was recovered from the fieldwalking (collection unit J/70). The blade cores were all opposed platform types which had been carefully and systematically worked (Fig. 53.1). Platforms were frequently abraded between knapping episodes, abraded platform edges were also noted on some flakes, blades and blade-like flakes. The more carefully produced debitage is likely to be of Mesolithic or earlier Neolithic date. As no diagnostic Mesolithic forms were found it may perhaps be more likely that this blade component is earlier Neolithic in date. However, it is very difficult to distinguish earlier Neolithic material from later Mesolithic flintwork on the debitage alone.

The majority of the assemblage, however, is characterised by unsystematic, mostly hard-hammer flaking. Hinge fractures and other accidents of debitage were commonly noted. Cores were generally unsystematically worked although many have been quite well reduced (Fig. 53.2; Table 4b). There was little evidence for core preparation or maintenance amongst this material and a Bronze Age date would not be out of place.

Retouched forms are mostly fairly undiagnostic and include scrapers (for example, Fig. 53.3), a piercer (Fig. 53.4), and miscellaneous retouched pieces (Table 4c). A chisel arrowhead was recovered from topsoil (2001) and is of later Neolithic date (Fig. 53.5). Chisel arrowheads have frequently been associated with the Woodlands sub-style of Grooved Ware (Green 1984, 33). The scrapers are neatly retouched, are generally on thin blanks and are probably of Neolithic or earlier Bronze Age date. The backed knife and the very worn serrated flake may also be of this date. One or two blades and blade-like flakes appear to have been used. One piece has a long point and has been fairly roughly retouched. This artefact can be paralleled locally at Grimes Graves (Saville 1981, 123, fig. 65, F245–F248). Saville (1981, 68) has shown that points such as these are more common in the middle Bronze Age assemblage at Grimes Graves.

Burnt and calcined flint was recovered from all phases of fieldwork. Some large fragments weighing between 100–250g were recovered. A concentration of burnt flint was recorded during the fieldwalking (Transect L). Burnt unworked flint was concentrated in the south-western part of the site, particularly the area of the cemetery where approximately forty-six pieces were recovered. Across the rest of the site burnt flint is fairly thinly distributed.

Discussion

The assemblage is typical of the East Anglian Breckland in both composition and raw materials (Healy 1984a, 83, 99). The single diagnostic retouched form dates to the later Neolithic. The remaining pieces could all also be of later Neolithic or early Bronze Age date apart from the piercer with a long point which may be mid Bronze Age. Some of

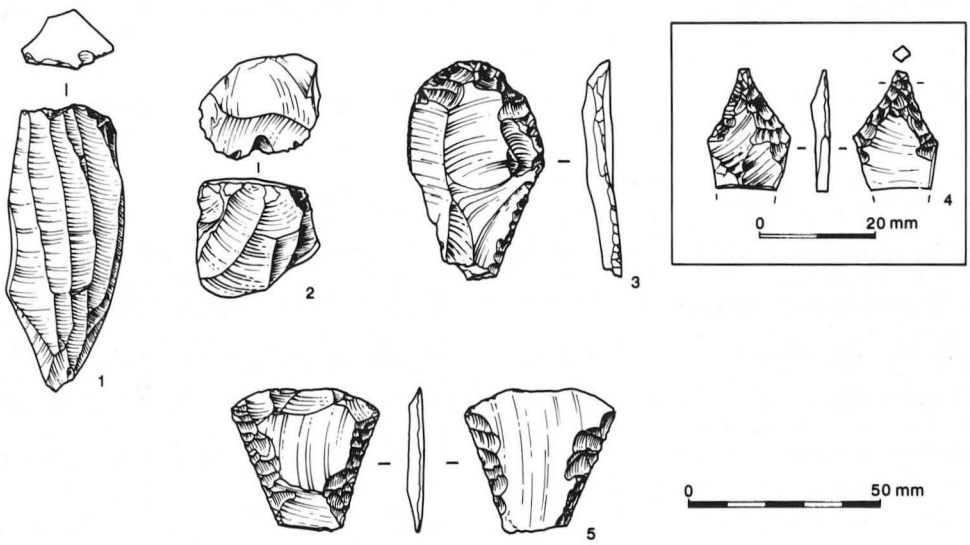


Fig. 53 Worked flints. Scale 1:2

Flakes	*Blades, blade-like flakes*	*Irregular waste*	*Chips*	*Cores, core fragments*	*Retouched forms*	*Total*	*Burnt unworked flint*
363*	79	15	21	21	13	512	177

* Including one core rejuvenation flake (tablet)

Table 4a: assemblage composition

Opposed platform blade core	*Single platform flake core*	*Multi-platform flake core*	*Tested nodules*	*Core fragments*	*Total*	*Average weight complete excavated cores N=8 (g)*
5	5	1	6	4	21	45.37

Table 4b: core typology

Scrapers	*Backed knife*	*Serrated flake*	*Piercers*	*Miscellaneous retouched flakes*	*Chisel arrowhead*	*Total*
5 (four end and side — one is burnt, one side)	1	1	2	3	1	13

Table 4c: retouched forms

the less controlled debitage may be contemporary with this piece. Retouched pieces account for only 2.5% of the assemblage, scrapers being the most common type. The main activities on site may therefore have been knapping. However, the recovery of small chips and irregular waste was low (Table 4a) although post-depositional processes and artefact recovery methods may account for this.

Only a few contexts produced any quantity of flint and although no prehistoric contexts were identified some concentrations were noted. Seventy-three pieces of worked flint and forty-six pieces of burnt unworked flint came from grave contexts in the south-western area of the excavation. This partly overlaps with the concentration of worked flint from the fieldwalking in the northern part of the development area (Fig. 3b). A second scatter of both worked and burnt unworked flint was recovered from the central part of the development area. The position of the earlier prehistoric activity at Melford Meadows, close to the River Thet, seems to mirror the situation in the county (Healy 1984a, 126).

Relatively few sites in the vicinity have produced flintwork through recent excavations compared to the vast collections amassed from the Breckland during 19th and early 20th centuries (Healy 1984a, 126). Locally the flint assemblage may be compared with the excavated material from Fison Way, Thetford where Neolithic and Bronze Age flintwork was found together with Beaker and Biconical Urn (Healy 1992, 143). Neolithic and later flintwork was also recovered from sites excavated by Captain Knocker, and from Site 1092 excavated by the Norfolk Archaeological Unit (Healy 1984b, 114, table 4). Chiefly Mesolithic flintwork was recovered from the excavations at Redcastle Furze (Andrews 1995, 7, 98–99) but subsequent work at the site produced later flintwork. Grimston Ware and Neolithic flintwork including a leaf-shaped arrowhead were found in a pit at Brettenham (Healy 1984a, 81–2, figs 5.3–5.4, tables 5.1–5.2). The excavations at Grimes Graves produced vast quantities of later Neolithic flintwork associated with Grooved Ware. Subsequently mid Bronze Age knapping centred on the use of previously struck flint and the rejected topstone which originally had been excavated by the later Neolithic miners (Saville 1981, 2). At West Stow, Suffolk, later Mesolithic, Neolithic and early Bronze Age flintwork was recovered. Here the Neolithic and early Bronze Age material seems to have been focused around a ring-ditch (Pieksma and Gardiner 1989, 46 and 59). At Middle Harling, later Neolithic flintwork, Fengate and Peterborough Ware were recovered (Healy 1995, 37). Early Neolithic Bowl pottery was also recovered from this site (Healy 1995, 45). Later Neolithic flintwork associated with Peterborough and Grooved Ware was found at Honington, Suffolk, and the same site also produced Deverel Rimbury pottery (Fell 1951, 30, 34).

Illustrated catalogue

Figure 53

1. Opposed platform blade core. Weight 59g. Pit 2020 (2017) Phase 5.
2. Single platform flake core. Weight 24g. Grave 2667 (2668) Phase 4.
3. End and side scraper, invasively retouched. Scraping angle 45–55°. Fieldwalking (unit K/150).
4. Point, probably a piercer. Retouch confined to edges of the object. Proximal break, tip damaged. Pit 2417 (2420) Phase 1.
5. Chisel arrowhead, broken at base. Slight damage to primary edge. Sand-glossed. (2001) s.f.59 unstratified.

VIII. Romano-British pottery

by Lindsay Rollo

Introduction

(Tables 5–8)

The Roman pottery from the site at Melford Meadows, Brettenham, was fully catalogued using the fabric and form type series devised by Suffolk County Council's Archaeological Unit. Three methods of quantification were employed (rim EVEs (Orton, Tyers and Vince 1993, 21); sherd count; and sherd weight; hereafter always quoted in that order). In addition the minimum number of individual vessels was calculated for the mortaria report, as this count is the most commonly used method of quantification for this class of vessel. A copy of the full archive is deposited, together with the pottery, with the Norfolk Museums Service.

An overall total of 28.34 EVEs (2839/59.189kg) was recovered in the course of excavation, of which 2127/50.176kg was Roman (Saxon pottery not quantified by EVE). This total can be broken down further to show the amounts of unstratified and stratified material and, within the stratified group, to distinguish between samian, undiagnostic coarsewares and diagnostic coarsewares (Table 5). The latter category is further classified into chronologically diagnostic material. Three ceramic phases can be identified: early Roman — late 1st to late 2nd century, middle Roman — mid/late 2nd century to late 3rd century; and late Roman — late 3rd to ?late 4th century. These do not equate directly to the structural phases.

The stratified diagnostic coarsewares were subject to more detailed analysis and dated according to the broad chronological groups listed above (Table 6). Form categories 1 to 8 follow the Suffolk Archaeological Unit's type series; forms 17 onwards are broader, chronologically less diagnostic categories awarded by this author. Where possible, all coarsewares have been classified using these codes; the only time other type-series have been employed is for intra-provincially traded wares (*i.e.* Lower Nene Valley and Oxfordshire colour coats) where vessel forms have no direct equivalent in the SAU's scheme.

The stratified material was also classified by fabric (Table 7). The category descriptions for the local regional wares are based on fabric colour, and macroscopic determination of the presence and frequencies of quartz and/or silver mica, shell, or grog. Constraints of time and funding did not allow for more detailed fabric analysis and it is doubtful if any such further research would have proved profitable, given the present unpublished state of much of the kiln evidence for the industries which are suspected/known to have provided the bulk of the material.

Overall the Roman pottery from selected Romano-British and Saxon features and feature groups occurs sparsely and displays a small average sherd weight (Table 8). These data are used below as supporting evidence for certain conclusions about the nature of the Roman pottery from the site.

Description	*R EVE*	*Count*	*Weight (kg)*
Roman pottery			
Samian, stratified	0.23	8	0.140
Diagnostic coarseware*, stratified	18.88	641	33.579
Undiagnostic coarseware, stratified	#	703	4.467
Total stratified	19.11	1352	38.186
Total unstratified (inc samian)	9.23	775	11.990
Total, Roman pottery	28.34	2127	50.176
(Stratified diagnostic~, typologically ERom)	3.55	84	15.182
(Stratified diagnostic~, typologically MRom)	1.12	45	0.651
(Stratified diagnostic~, typologically LRom)	7.75	183	7.391
Non-Roman pottery	#	712	9.013
Total site pottery	**28.34**	**2839**	**59.189**

* includes broad form categories, *i.e.* bowl, jar *etc.*
~ includes only assignable forms, *i.e.* Suffolk Type Series types *i.e.* from cleaning layer 2001
\# information not available

Table 5: quantification summary

Problems of interpretation

(Table 9)

It was known from the 1993 evaluation that the main focus of occupation in the Roman period lay to the north of the area designated for further investigation. The excavation revealed shallow ditches and gullies grouped into three spatially distinct complexes. The structural evidence suggested agricultural rather than domestic use in the Roman period. Many features were stratigraphically isolated pits and post-holes and such evidence as existed for domestic activity — for example the midden deposit (2004) in the central area and the pit (2417) with the complete storage jar *in situ* in the southern area — could not be clearly assigned to a structural phase. The best interpretation of the excavated evidence for most of the Roman period is that it comprised a sequence of in-field enclosures in the immediate southern hinterland of the settlement.

As might be expected, the quality of the Roman pottery recovered from these complexes reflects their status. Ceramics were sparsely distributed throughout the features with generally a low average sherd weight (see Table 8). The material was not noticeably abraded, suggesting that sherds had not been subject to prolonged movement through the soil profile. However, their generally small size and lack of reconstructable profiles (especially for forms more vulnerable to fragmentation — *i.e.* jars rather than bowls/dishes) argue that they had been recycled from secondary deposits and subjected to several stages of cultural transformation from the systemic to the archaeological and from one archaeological context to another (Schiffer 1976, 27–41).

Problems in dating such fragmented material were compounded by the apparent longevity of the coarseware forms in East Anglia and the lack of useful exotic 'marker' wares in some periods. The prolonged currency of forms could be more apparent than real: a reflection of the low status of many of the published sites available for comparison such as Scole (small town) (Rogerson 1977), Brampton (small town) (Green 1977) and Denver (rural) (Gurney 1986); and of the lack of good dated groups in published excavation reports: *e.g.* Brancaster (Hinchliffe with Green 1985) and Burgh (Martin 1988). The lack of useful imports was particularly noticeable at Melford Meadows for the period up to the later 3rd century. The only notable exotic recovered was samian ware; no pottery was present in the early period from the large industry at Colchester (either colour-coated wares, mortaria or BB2); and only very small amounts of material which might have been produced at Pakenham and the Lower Nene Valley in the middle period.

Considered as secondary refuse, following Schiffer (1976, 30), most of the pottery from the excavation is probably residual in its context. However, it is more difficult to estimate the degree of chronological residuality for certain groups of material. Specifically, the general impression gained during cataloguing was that relatively little material was present which dated typologically to the

Form	*R EVE*	*Count*	*Weight (kg)*	*Description*	*Cat No.*	*Parallel*
SAU1.7	0.15	1	0.002	straight, narrow necked flagon	NDS	Rogerson 1977, fig 75.48
SAU2	–	4	0.324	narrow-mouthed jar or flagon	41	
SAU2.1	0.70	9	0.157	bottle, everted rim, rounded body, vs cordons, neck, base and body decorated	NDS	Rogerson 1977, fig 76.63; fig 78.114
SAU3	–	5	0.063	beaker	NDS	
SAU3.3	–	3	0.049	indented beaker	NDS	
SAU3.8.1	–	5	0.117	poppy beaker, globular with upright rim	NDS	Rogerson 1977, fig. 75.51, 64, 68
SAU3.10.1	0.58	15	0.424	beaker/jar with high shoulder, simple everted rim and vert. burnished line decoration	40	
SAU3.14	1.00	1	0.178	miniature funnel-necked beaker	43	
SAU4	0.37	10	0.246	medium-mouthed jar	NDS	
SAU4.1	0.38	3	0.067	medium-mouthed jar with high shouldered profile	9	
SAU4.5	1.50	10	0.602	medium/wide-mouthed jar, globular, short neck, rolled mostly undercut rim	10	
SAU4.6	1.43	11	0.455	medium/wide-mouthed jar, globular, short neck, rolled undercut rim, with grooves or burnished lines at base of neck	11, 12, 13	
SAU4.8	0.22	2	0.024	medium-mouthed jar, globular, everted rim, hollowed/projection underneath	NDS	Rogerson 1977, fig 82.199–201
SAU4.12	1.20	17	0.313	slack-profiled medium-mouthed jar, squared/undercut rim, rilling	14	
SAU5	0.55	9	0.188	wide-mouthed jar/bowl	NDS	
SAU5.1/5.2	0.24	25	0.300	carinated jar/bowl, heavily cordonned	15, 16	
SAU5.4	0.49	31	0.495	rounded jar, reverse-s profile, 1 or 2 grooves mid body	17	
SAU5.5	0.05	2	0.122	wide-mouthed storage jar with flange below rim	7	
SAU5.7	0.31	7	0.149	wide-mouthed jar/bowl, short neck, thickened rim	NDS	West with Plouviez 1976, fig. 43.48, 50
SAU5.11	0.10	1	0.060	wide-mouthed jar/bowl, high shoulder, everted rim	18	
SAU5.12	–	3	0.026	wide-mouthed jar/bowl, straight sides, decorated bands, everted rim	NDS	West with Plouviez 1976, fig. 41.15; Rogerson 1977, fig. 81.191, 194
SAU6.3	0.07	1	0.005	carinated bowl, flattish, out-turned rim	NDS	Rogerson 1977, fig 76.69, 72
SAU6.12	–	2	0.035	copy of samian form 18/31	NDS	Smedley & Owles 1960, fig 40.a
SAU6.14	0.35	3	0.064	copy of samian form 38	NDS	Rogerson 1977, fig 77.101
SAU6.15.1	0.15	1	0.221	copy of samian form 36/deep segmental bowl	20	
SAU6.17	0.89	19	0.499	straight-sided, flanged-rim bowl	22, 23, 24, 26	
SAU6.17.5	0.12	1	0.026	straight-sided bowl, flange-rim with wavy-line decoration on upper surface	25	
SAU6.18	1.15	19	0.385	straight-sided bowl/dish with triangular/rounded/d-shaped or flat-topped rim	27, 28, 29, 30, 31	
SAU6.19.1/2	1.42	14	0.521	bowl/dish, plain rim, straight sides nearly upright or splayed	32, 33, 44	
SAU6.19.3	0.18	4	0.107	bowl/dish, upright straight-sided with external groove(s) below rim	34, 35, 36, 37	
SAU6.21	0.11	4	0.026	open bowl, curved-sided with internal offset, incurving rim, flat/footring base	NDS	Rogerson 1977, fig. 76.83, 86
SAU7	0.50	13	0.546	see mortaria report	NDS	
SAU8.1	0.13	1	0.051	lid	19	
17	1.24	100	17.561	storage jar	1, 3, 4, 6	
18	0.24	67	4.974	large jar	2, 5, 8	
19	0.26	9	0.045	small jar	NDS	
20	1.46	110	1.859	jar	NDS	
21	0.12	13	0.369	bowl	38, 39	
23	0.15	66	1.012	closed form	NDS	
24	–	11	0.475	open form	21	
indet	0.12	4	0.044		46	
RPNV 85	0.90	1	0.196	small bead-rimmed bowl with footring, external white-painted arc decoration	NDS	
Young C55	–	2	0.124	imitation samian form 37	45	Young 1977, fig. 60 *passim*
Young C78	0.05	2	0.073	necked bowl with out-turned rim and full, curved body	NDS	Young 1977, fig. 63 *passim*
TOTAL	**18.88**	**641**	**33.579**			

* *i.e.* quantification excludes material from general cleaning levels, Layer 2001, although some of illustrated examples may be from that context
NDS = No Drawn Sherds
SAU Suffolk Archaeological Unit Type Series

Table 6: quantified form type series from stratified features*

middle period of the Roman era (mid/late 2nd century to late 3rd century), and what was present could be interpreted as residual in later contexts. Various exercises were performed in an attempt to calibrate this perceived residuality.

In the absence of comparable datasets from other published excavations, relative factors for residuality had to be calculated from within the dataset using the site phasing scheme (Table 9). Supporting evidence for sherd size was gleaned from material which would otherwise be recognised as residual on typological grounds alone: *i.e.* the average sherd weight, excluding storage jars whose high counts skew the figures unacceptably, for typologically early material (late 1st to late 2nd century) in stratigraphically late contexts was 9g as opposed to average sherd weight of 26g for typologically late material (late 3rd century or later) from the same contexts. Following Tomber (1991, 60) average sherd size was calculated for the same material using rim percentages: the score for early material in late contexts was 6.5%, whilst for late material from late contexts it was 12%. Tomber (1991) used an absolute score of 10% or less of a rim circumference as an indicator of residuality. By this criterion 75% of early rims in late contexts were residual, as opposed to 23% of late rims. These three measurements: average sherd weight, average sherd size and absolute percentage surviving rim, were then used to assess the possible residuality of all material, excluding storage jar fragments, typologically dated to the middle period of the Roman era and from excavated contexts. The average sherd weight was 14g; average sherd size 7.4%; and 75% of the rim sherds represented less than 10% of their total circumference. Without testing these results for their statistical significance and bearing in mind that some of the datasets are very small, nonetheless the clustering of the three counts towards the lower ends of their relative scales provides some objectively quantified evidence that all this pottery could be chronologically residual.

Chronology

The pottery evidence supports a start-date in the late 1st/early 2nd centuries for Roman activity on site. It is probable that some at least of the material of this period arrived on site as a result of occupation, although only vestigial traces of this are left in the archaeological record. For the reasons outlined above, it is possible to argue from the ceramic evidence that very little happened directly on site from the end of the 2nd century until the end of the 3rd century. The bulk of the diagnostic later pottery suggests a final period of use or exploitation from the later 3rd century onwards. How far into the later 4th century this activity extended cannot easily be gauged. The best chronological marker for the later history of the Roman settlement is offered by the presence of Oxfordshire wares: current opinion is that those classes that were traded into East Anglia (mortaria and colour-coated wares) did not appear until the 4th century and probably not until the mid 4th century (Darling and Gurney 1993; West with Plouviez 1976; see also large collection from Burgh Castle, Johnson 1983, dated to the mid 4th century). The quantity recovered from Brettenham was not great but does argue for continuation of activity into the second half of the 4th century.

There is little evidence amongst the later Roman pottery to suggest any ceramic overlap with Saxon material culture. Also, no compelling evidence was forthcoming for deliberate selection of conspicuous pieces of Roman pottery as has been observed at West Stow (West 1985, 85), and the two instances of large sherds of Roman greywares recovered from Saxon features (Table 8, pit 2829 and SFB 2595) are probably fortuitous. Comparison of the averages for sherd size and weight for Roman pottery from Saxon features with the figures for average sherd size and average sherd weight from the features forming the three nuclei of activity in the Roman period, show that the former are definitely lower than for the northern and central nuclei but match the pattern for the southern nucleus (Table 8). This suggests that the magnitude of depositional activity in the Roman period was less in the south, the enclosures furthest away from the occupation focus to the north of the excavated area. As a direct concomitant of this observation, it is reasonable to suggest that, even if there was some chronological overlap in activity on site in the Roman and Saxon periods, it would be difficult to detect here in the area of maximum spatial overlap, as the Roman inhabitants were not using this part of their land for domestic purposes.

Code	*Fabric*	*R EVE*	*Count*	*Weight (kg)*
GM	Grey, micaceous	5.57	568	9.177
GMF	Grey, micaceous, fine	4.92	321	3.625
GX	Grey, coarse	2.42	180	4.019
GF	Grey, fine	0.16	17	0.180
GG	Grey, grogged	1.00	2	13.224
RF	Red, fine	–	9	0.046
RX	Red, coarse	0.20	9	0.081
RC	Red, colour-coated	–	1	0.002
OXM	Oxidised, micaceous	–	17	0.282
OXMF	Oxidised, micaceous, fine	0.20	5	0.051
SG	Shell-gritted	1.28	72	1.903
WF	White/Buff, fine	–	1	0.002
WC	White/Buff, colour-coated	–	1	0.007
WX	White/Buff, coarse	0.15	6	0.110
MH	Much Hadham red fabric	0.15	8	0.035
PKM	Pakenham	–	4	0.102
OXF	Oxford (mortaria)	0.18	4	0.067
LNV	Lower Nene Valley (mortaria)	0.12	6	0.413
HORN	Horningsea	0.37	54	3.098
LNVcc	Lower Nene Valley colour-coated	1.72	44	1.201
OXFcc	Oxford colour-coated	0.34	9	0.277
SACG	Central Gaulish samian	0.33	7	0.132
SAEG	East Gaulish samian	–	1	0.008
MISC	Miscellaneous	–	6	0.144
TOTAL		**19.11**	**1352**	**38.186**

* excluding Layer 2001, general cleaning

Table 7: quantification of stratified* Roman pottery by fabric

Patterns of trade and site ceramic status

The ceramic evidence from the site indicates that Melford Meadows was a low-status open rural site throughout its history. Analysis of the vessel forms present (Table 6) shows that true tablewares (*i.e.* beakers, flagons, samian forms and their imitations) are vastly outweighed by coarse kitchen and storage forms. As reported above, the excavated area yielded little evidence for ceramic imports

F/Group No.	*Per/Loc*	*R EVE*	*R Count*	*Av Rim Size*	*Count*	*Weight (kg)*	*ASW*
3700	RomanC~	0.26	2	0.13	8	0.11	0.014
3800	RomanC~	0.05	1	0.05	9	0.080	0.009
4800	RomanC~	1.13	10	0.11	31	0.596	0.019
5100	RomanC~	1.33	11	0.12	35	0.666	0.019
5200	RomanC~	0.05	2	0.02	15	0.274	0.018
2129	RomanC~	–	–	–	1	0.093	0.093
2597	RomanC~	0.17	9	0.02	23	0.207	0.009
2231	RomanC~	–	–	–	1	0.001	0.001
2257	RomanC~	–	–	–	3	0.063	0.020
2642	RomanC~	0.25	2	0.12	4	0.042	0.010
2463	RomanC~	–	–	–	3	0.018	0.006
2542	RomanC~	–	–	–	1	0.012	0.012
3300	RomanN	0.04	1	0.04	31	0.435	0.014
3400	RomanN	0.04	1	0.04	11	0.062	0.006
3500	RomanN	0.23	3	0.08	18	0.208	0.012
3600	RomanN	0.27	2	0.14	4	0.095	0.023
4400	RomanN	0.10	2	0.05	10	0.042	0.004
2277	RomanN	0.17	3	0.06	16	0.210	0.013
2279	RomanN	0.08	1	0.08	5	0.103	0.021
2297	RomanN	–	–	–	7	0.189	0.027
2866	RomanN	0.26	2	0.13	12	0.262	0.022
2989	RomanN	–	–	–	6	0.076	0.013
3023	RomanN	–	–	–	5	0.075	0.015
5400	RomanS^	0.12	1	0.12	15	0.072	0.005
5500	RomanS^	0.17	2	0.09	25	0.202	0.008
5600	RomanS^	–	–	–	4	0.035	0.009
5700	RomanS^	0.41	2	0.21	10	0.598	0.060
5800	RomanS^	–	–	–	3	0.023	0.008
6000	RomanS^	–	–	–	1	0.003	0.003
6200	RomanS^	–	–	–	5	0.018	0.003
2417	RomanS^	–	–	–	7	0.039	0.006
2033	SaxSFB	0.23	2	0.12	14	0.120	0.008
2172	SaxSFB	0.77	4	0.19	20	0.256	0.013
2222	SaxSFB	0.10	1	0.10	5	0.132	0.026
2248	SaxSFB	0.05	2	0.02	12	0.061	0.005
2269	SaxSFB	0.05	1	0.05	29	0.128	0.004
2281	SaxSFB	0.07	2	0.04	28	0.263	0.009
2535	SaxSFB	0.25	3	0.08	19	0.196	0.010
2595	SaxSFB	–	–	–	1	0.038	0.038
2821	SaxSFB	–	–	–	1	0.003	0.003
2356	SaxPit	–	–	–	1	0.001	0.001
2829	SaxPit	–	–	–	1	0.075	0.075

* excluding storage jar material
C~ Roman ditch complex, central area,
N Roman ditch complex, northern area
S^ Roman ditch complex, southern area

Table 8: average sherd size and average sherd weight for selected Roman and Saxon features*

in the early and middle periods: no Colchester wares; little samian or imitation samian, even though West Stow (eleven miles away) and the Wattisfield area (eight miles away) were producing varieties of 'London ware' from the late 1st to the mid 2nd century. There were only two West Stow/Wattisfield stamped wares recognised from site, unfortunately unstratified (Fig. 56.41 and 42) (EVE 23/sherd count 2/sherd weight 15); no mortaria which have to date before *c.* AD 250; and only a small amount of Lower Nene Valley (EVE 0/sherd count 4/sherd weight 12) and Pakenham (EVE 0/sherd count 2/sherd weight 53) products.

Sometime after AD 250, and probably from the late 3rd century, imported wares became more common. Lower Nene Valley colour-coated wares are the most common fineware import (EVE 172/sherd count 27/sherd weight 1133 — of which 90/1/196 represents an almost complete vessel from a grave: Fig. 56.45) followed by Oxfordshire colour coats (14/13/222) and a small amount of material which probably came from the Much Hadham area (15/8/33). No diagnostically late Pakenham (Smedley and Owles 1960) products have been recognised, although it is possible that the Pakenham material assigned to the early/middle period of the site's history actually belonged in this phase. This patterning in the relative frequencies on site of Lower Nene Valley, Oxfordshire and Hadham wares is similar to that noted at Hockwold-cum-Wilton (Gurney 1986, 82) and Brancaster (Hinchliffe with Green 1985) and reinforces Gurney's observation (1986, 82) that differences existed in the pattern of supply of late

F No.	*Group*	*F Type*	*R EVE*	*R Count*	*Count*	*Weight (g)*	*ARS*	*ASW*
2009		Pit	–	–	2	0.016		
2014		Ditch	0.04	1	1	0.031		
2297		Ditch	–	–	1	0.010		
2465		Pit	0.13	1	1	0.024		
2914		Post-hole	–	–	1	0.003		
2959		Pit	0.04	1	1	0.010		
2048	3500	Ditch	–	–	1	0.002		
2220	5500	Ditch	–	–	1	0.003		
2664	5500	Ditch	–	–	3	0.019		
2875	5500	Ditch	0.05	1	2	0.010		
TOTAL			**0.26**	**4**	**14**	**0.128**	**0.07**	**0.009**

* excluding storage jar material

Table 9a: typologically early pottery* from stratigraphically late features

F No.	*Group*	*F Type*	*R EVE*	*R Count*	*Count*	*Weight (g)*	*ARS*	*ASW*
2009		Pit	0.06	1	3	0.110		
2102		Gully	–	–	1	0.006		
2297		Ditch	–	–	1	0.046		
2367		Gully	–	–	1	0.055		
2495		Pit	0.15	1	11	0.142		
2866		Depression	0.20	1	2	0.086		
2959		Pit	0.23	2	3	0.068		
2986		Post-hole	–	–	1	0.030		
2989		Pit?	–	–	2	0.046		
3001		Ditch	0.06	1	4	0.248		
3003		Ditch	0.18	2	2	0.035		
3023		Pit?	–	–	1	0.050		
3025		Post-hole	–	–	1	0.022		
2196	3400	Ditch	–	–	1	0.010		
2047	3600	Ditch	0.27	2	2	0.088		
2148	4200	Ditch	–	–	1	0.008		
2209	4300	Ditch	–	–	1	0.010		
2486	4300	Ditch	–	–	1	0.008		
2345	4400	Ditch	0.05	1	1	0.006		
2540	4800	Ditch	0.35	2	3	0.058		
2276	6200	Ditch	–	–	1	0.003		
TOTAL			**1.55**	**13**	**44**	**1.135**	**0.12**	**0.026**

* excluding storage jar material
ARS Average Rim Size
ASW Average Sherd Weight

Table 9b: typologically late pottery* from stratigraphically late features

finewares to the east and west of the Anglian region (*cf.* Burgh Castle: Johnson 1983 and Caister-on-Sea: Darling and Gurney 1993).

However, the most interesting imported pottery present on site in the late Roman period does not belong in the fineware category but comprises storage jars from Horningsea (Evans 1991; Walker 1912; Hughes 1902). The products from this centre have been found on sites in the Fens (*e.g.* Grandford: Potter and Potter 1982; Denny Abbey: Christie and Coad 1980) and up into the Lower Nene Valley (*e.g.* Orton Hall Farm: Mackreth 1996) from contexts dating throughout the Roman period. Few examples have been recorded previously from East Anglian sites and such as have been published (West with Plouviez 1976, fig. 42.40) appeared in early to mid 4th-century contexts. A wider date range from the late 3rd century onwards has been suggested (Plouviez, J. pers. comm.) which, however, is still confined when compared with the much wider chronological distribution of the material elsewhere outside East Anglia.

Most of the shell-gritted pottery occurred as jar forms. In the absence of easily recognisable chronologically diagnostic forms, very little material could be assigned a date but this was all late (72/8/161). No shell-gritted pottery was recovered from early phased features. These two, admittedly tenuously quantified, facts support observations published elsewhere (Gurney 1986, 83; West with Plouviez 1976, 91; Rogerson 1977, 193) that this material appears more commonly on East Anglian sites in the later Roman period. No definite provenance for the fabric has been identified so far, and the two most obvious sources, the Lower Nene Valley or the kilns at Harrold, Bedfordshire (Brown 1994), still remain the best candidates, although the Lower Nene Valley might be

F No.	*Group*	*F Type*	*R EVE*	*R Count*	*Count*	*Weight (kg)*	*ARS*	*ASW*
2004		Midden?	0.20	2	4	0.158		
2009		Pit	0.10	1	1	0.023		
2172		SFB	0.05	1	2	0.048		
2281		SFB	–	–	1	0.003		
2318		Hollow	0.17	2	6	0.125		
2391		Pit	–	–	2	0.015		
2411		Post-hole	0.07	1	1	0.011		
2415		Pit	0.03	1	1	0.010		
2463		Pit	–	–	1	0.009		
2495		Pit	–	–	3	0.026		
2535		SFB	0.07	1	1	0.015		
2632		Ditch	0.12	1	1	0.033		
2642		Gully	–	–	1	0.004		
2643		Hearth?	–	–	1	0.002		
2931		Furrow	–	–	1	0.004		
2973		Post-hole	–	–	1	0.004		
2467	3300	Ditch	0.04	1	1	0.014		
2151	3400	Ditch	–	–	1	0.001		
2196	3400	Ditch	–	–	1	0.007		
2088	3900	Ditch	–	–	1	0.013		
2103	3900	Ditch	–	–	1	0.007		
2086	4000	Ditch	–	–	2	0.003		
3110	4100	Ditch	–	–	1	0.011		
2142	4200	Ditch	0.05	1	1	0.006		
2174	4200	Ditch	–	–	2	0.015		
2209	4300	Ditch	–	–	1	0.002		
2345	4400	Ditch	0.05	1	1	0.007		
2255	5100	Ditch	–	–	1	0.005		
2602	5100	Ditch	–	–	1	0.004		
2588	5200	Ditch	0.05	1	1	0.002		
2875	5500	Ditch	0.12	1	1	0.064		
TOTAL			**1.12**	**15**	**45**	**0.651**	**0.07**	**0.014**

* excluding storage jar material
ARS Average Rim Size
ASW Average Sherd Weight

Table 9c: pottery* dated typologically to the middle Roman period

more favoured, as the shell-gritted vessels could have been one facet of the increased importation of Lower Nene Valley wares apparent from the mid/late 3rd century onwards.

The majority of the coarse wares from Melford Meadows throughout its history were made in the Wattisfield area and are easily distinguished by their silver mica content. This is found in varying amounts and some late Wattisfield kiln material has hardly any mica (Plouviez, J. pers. comm.). The selection published here is by no means representative of all the types recovered from the site but concentrates instead on those types which have definitely been identified amongst the (unpublished) products of various Wattisfield area kilns. The next commonest coarseware fabric group comprises the quartz-tempered fabrics for which no one source can be suggested. The kilns at Brampton and in the Nar Valley are theoretically possible suppliers as all lie within a 30-mile radius of the site, although Brampton is only just within this limit. None of the forms occurring in these fabrics is in itself characteristic of any particular source and, in the absence of comprehensively published kiln groups from at least two of the candidates little more can be said.

1993 Evaluation

A small amount of material (EVE 86/sherd count 92/sherd weight 1410) was recovered during the 1993 evaluation of the site. In nature and composition the collection produced nothing markedly different from the excavated material. A basic ceramic archive has been completed for this component and is lodged with the supporting records for the site report.

Samian pottery

The following catalogue is based on comments made by Mark Wood. The bulk of the samian is of 2nd-century date and from Central Gaul. Two South Gaulish vessels could possibly date to the late 1st century, and two vessels are tentatively assigned to East Gaul and therefore could date as late as the first half of the 3rd century. The most common forms are dishes/bowls (Dr 18/31 and Dr 31) but cups (Dr 33 and Dr 64) are also present. There is an unusual variant of Dr 32, very shallow and flat-bottomed, more like a platter than a dish (No. S16 below). It is interesting to note that two vessels from the South Gaulish factory at Montans are present on site. Manufacture of samian began at Montans at about the same time as it started at La Graufesenque but it continued well into the

2nd century, and some of its late products found their way to Britain. However, the fabrics of Montans South Gaulish from Melford Meadows are not typical of the latest products and it is possible that they could have been made in the late 1st century (Nos S4 and S9).

(The catalogue number is followed by description and provenance and phasing.)

S1. Form 18/31R-type, rouletted basesherd; 120–50 AD; Central Gaul. (2001) unstratified.

S2. Form 31, plain base and bodysherd; second half 2nd century; Central Gaul. (2001) unstratified.

S3. Early Form 18/31, beaded rimsherd, late Flavian–early Trajanic; very pale. fabric typical of Montans, Southern Gaul. (2001) unstratified.

S4. Form 18/31R. beaded rimsherd, Hadrianic–Early Antonine; Central Gaul. (2001) unstratified.

S5. Form 33, plain rimsherd; 2nd century; Central Gaul. (2001) unstratified.

S6. Form 18/31, plain bodysherd; Hadrianic–Antonine; Central Gaul. (2001) unstratified.

S7. Possibly Form 31R, beaded rimsherd; small and undiagnostic, late 2nd to mid 3rd century; possibly Eastern Gaul. (2001) unstratified.

S8. Early Form 18/31, beaded rimsherd; late Flavian–Early Trajanic; very pale fabric typical of Montans, Southern Gaul; not the same vessel as S3. (2001) unstratified.

S9. Form 37 with ovolo of *Cinnamus ii*, decorated bodysherd; Antonine; Central Gaul. (2001) unstratified.

S10. Form 33 rim, chip; 2nd century; Central Gaul. (2001) unstratified.

S11. Platter form, chip; 2nd century; Central Gaul. (2001) unstratified.

S12. Form 38, flange fragment; second half 2nd to 3rd century; Eastern Gaul. (2009) unstratified.

S13. Form 38 in micaceous fabric, footring/base; second half 2nd century; Central Gaul. Waterhole 2318 (2321) unphased Romano-British.

S14. Form 18/31, beaded rim sherd, burnt; Hadrianic–Early Antonine; Central Gaul. Pit 2459 (2457) unphased Romano-British.

S15. Squat Form 32 variant (Ludowici Ta), rim sherd; late 2nd century; Central Gaul. Ditch 2488 (2489) (ditch 4300) Phase

S16. Possible Form Dechelette 64, beaded rimsherd; 2nd century; Central Gaul. Pit 2534 (2532) Phase 5.

S17. Possibly Form 38 flange, chip; (not from same vessel as S12 or S13), 2nd century; Central Gaul. Post-hole 2914 (2915) (Structure 1) Phase 3.

S18. Form 18/31, beaded rimsherd; Hadrianic–Early Antonine; slightly overfired; Central Gaul. Pit 2959 (2960) unphased Romano-British.

Mortaria

Of the thirteen individual vessels recovered from the excavation seven are definitely from the Lower Nene Valley (mid 2nd to 4th century); another one is probably from the same area and may be an earlier product; and four are imports from the Oxfordshire area (4th century). As the foregoing figures show there is not much evidence for mortaria use on site before the mid 3rd century. Further refinement of the broad dates given for later Lower Nene Valley products is impossible. However, three out of the four Oxfordshire vessels are, typologically, only commonly produced in the 4th century. The fact that Oxfordshire mortaria are not found in any quantity on other sites on the western borders of East Anglia before that period (Denver — occupation mainly 3rd-century — no Oxfordshire mortaria; Hockwold-cum-Wilton — late 1st to late 4th-century — 1 Oxfordshire mortarium; Icklingham — Oxfordshire mortaria first occur in early/mid 4th-century levels, rising to 50% of material from mid 4th-century levels) suggests that the entire suite of Oxfordshire vessels is of 4th-century date. If all the contexts containing mortaria are phased together, then there is some evidence from the incidence of roughly equal proportions of Lower Nene Valley and Oxfordshire products to suggest that the latest phase of Roman activity should last at least until after the middle of the 4th century.

(The catalogue number is followed by description and provenance and phasing.)

M1. Base, hard, 2.7YR 6/5 light reddish-brown fabric, fine fracture, few visible inclusions including some silver mica, sub-visible clear quartz grains, very sparse sub- rounded white and iridescent orange/brown particles 1mm. Trituration grit abundant fine iron slag. Well worn. Scorched after fracture. Probably made in the vicinity of the Lower Nene Valley and possibly an earlier product than the rest of the material from that industry present on site. (2001) unstratified.

M2. Oxfordshire colour-coated rim; Young 1977, C100, 300–400. (2001) unstratified and pit 2495 (2496) Phase 4.

M3. Lower Nene Valley reeded-flanged, late 3rd–4th century; well worn black iron slag trituration grit; fabric 2.5YR 6/6 light red. (2001) unstratified.

M4. Oxfordshire white colour-coated bodysherd; probably Young 1977, WC7, 4th century in East Anglia. (2001) unstratified.

M5. Lower Nene Valley rim, Hartley 1996 Type 40 — hammer-head with underside of flange welded into body, late 3rd–4th century. (2001) unstratified.

M6. Oxfordshire white colour-coated rim; Young 1977, WC7, probably 4th century in East Anglia. Ditch 2047 (2041) (ditch 3600) Phase 4.

M7. Lower Nene Valley body and base with well-worn black iron slag trituration grit; sandwich fabric 10R 64 pale red — 5YRe 8/2 pinkish-white — 10R 6/4 pale red. Post-hole 2177 (2176) modern.

M8. Oxfordshire rim fragment; red (10R 5/8) fabric. Ditch 2196 (2197) (ditch 3400) Phase 4.

M9. Lower Nene Valley flanged rim fragment, well-worn black iron slag trituration grit; white-bodied; late 3rd–4th century. Post-hole 2200 (2201) modern.

M10. Lower Nene Valley bodysherd with brown (7.5YR 5/4) wash internally and externally; relatively unworn black iron slag trituration grit; hard, white fabric; late 3rd–4th century. Ditch 2209 (2212) (ditch 4300) Phase 4

M11. Oxfordshire white colour-coated bodysherd; probably Young 1977, WC7 and 4th century in East Anglia. SFB 2248 (2247) Phase 5.

M12. Lower Nene Valley bodysherd; white bodied with thin reddish-yellow (5YR 7/6) wash internally and externally; worn black iron slag trituration grit; scorched after fracture; late 3rd–4th century. Hollow 2989 (2990) (Structure 1) Phase 3 or 4.

M13. Lower Nene Valley reeded-flange fragment; fabric 2.5YR 6/6 light red with wash of same colour; late 3rd–4th century. Hollow 2989 (2990) (Structure 1) Phase 3 or 4.

M14. Lower Nene Valley convex-curved, grooved flanged rimsherd, Hartley 1996 Type 36; AD 250–350. Pit 2426 (2425) Phase 3.

M15. Lower Nene Valley colour-coated bodysherd; white bodied, internally 10YR 3/3 dark brown, externally 5YR 5/6 yellowish-red; late 3rd–4th century. Hollow 2429 (2430) Phase 5.

M16. Oxfordshire colour-coated rimsherd; Young 1977, C97; 240–400 but probably 4th century in East Anglia. Ditch 2540 (2539) (ditch 4800) Phase 3.

M17. Lower Nene Valley bodysherd; fabric 5YR 8/4 pink with 5YR 6/6 reddish-yellow wash internally and externally; well-worn black iron slag trituration grit; late 3rd-4th century. Post-hole 2986 (2985) (Structure 1) Phase 3.

Catalogue of illustrated material

Bibliographic abbreviations used in the following catalogue:

Beech Tree Farm	unpublished typescript of kiln excavations from
Wattisfield area	in archives of Suffolk Archaeological Unit
Hinderclay	unpublished typescript of kiln excavations from Wattisfield area in archives of Suffolk Archaeological Unit
Wattisfield Hall	unpublished typescript of kiln excavations in archives of Suffolk Archaeological Unit

Figure 54

1. Storage jar in reduced fabric with grog and silver mica inclusions; local product of the Wattisfield area kilns. Complete but smashed *in situ*. Typologically 1st century. Pit 2417 (2419) Phase 1.
2. Storage jar in quartz-gritted fabric (see Evans 1991, 35 for detailed description, although note: present example contains clear, glassy quartz grains which 'sparkle' noticeably under light). Product of

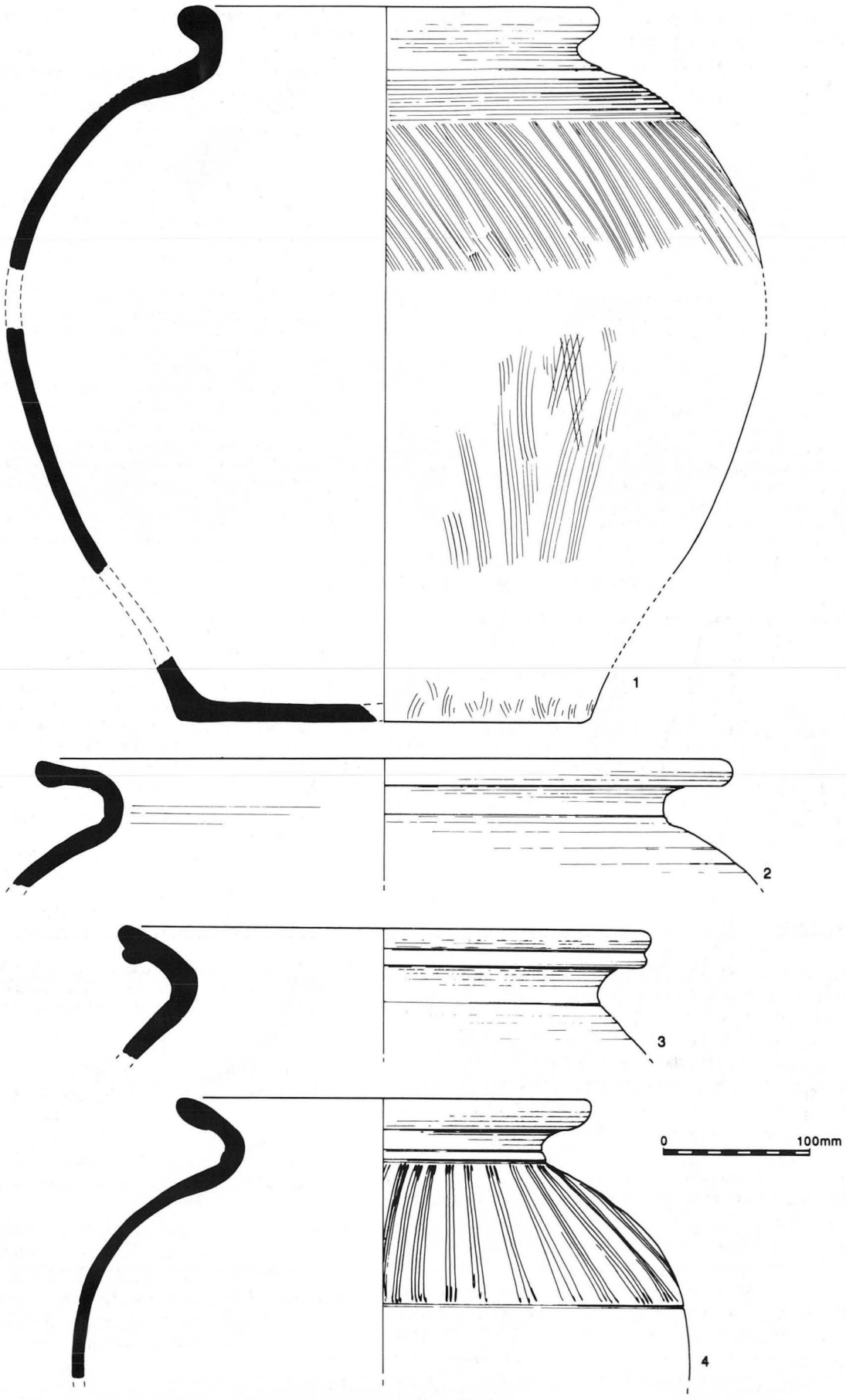


Fig. 54 Roman pottery. Scale 1:4

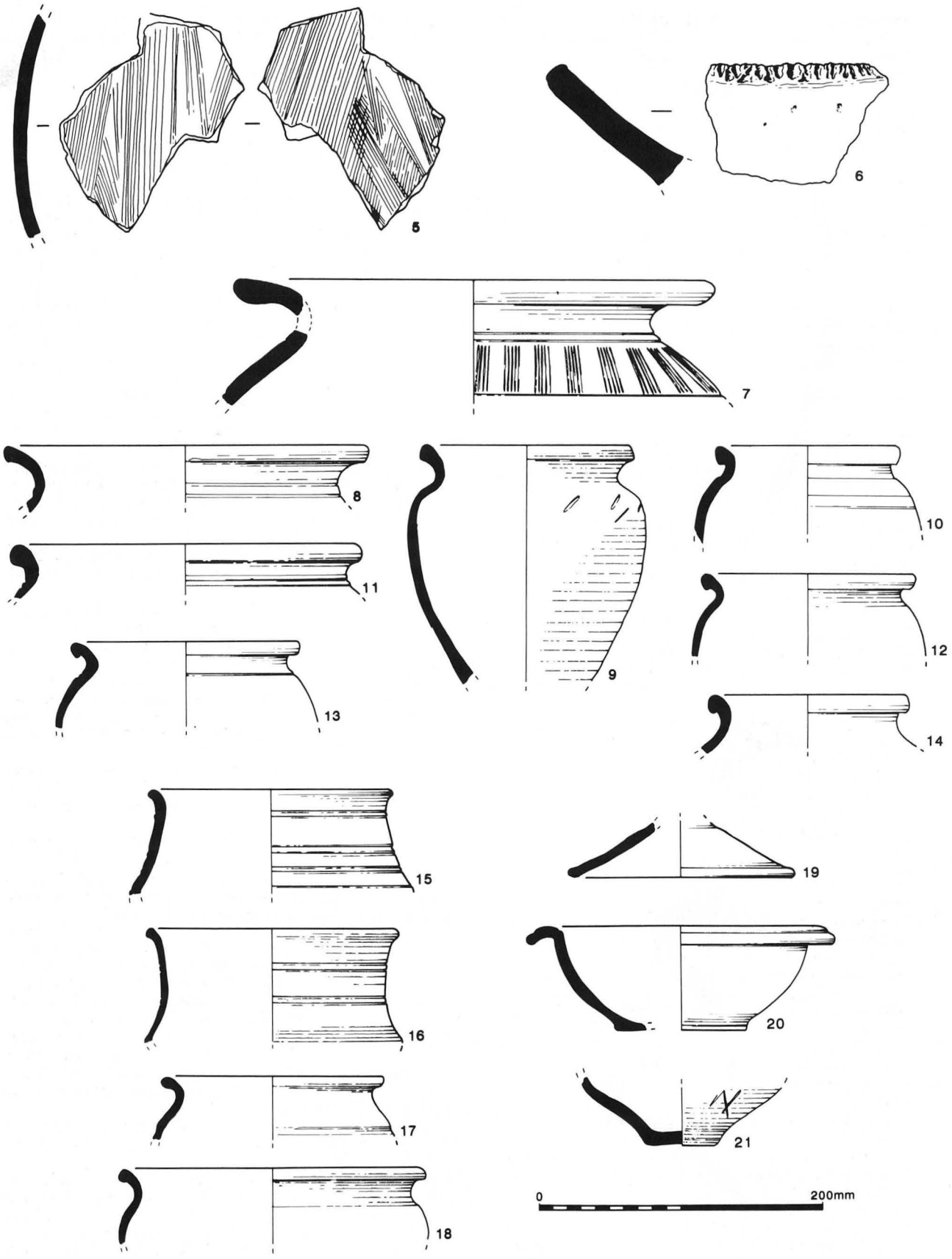


Fig. 55 Roman pottery. Scale 1:4

Horningsea kilns near Cambridge. Imported into East Anglia from late 3rd century onwards. Midden deposit 2004 Phase 3 or 4.

3. Horningsea storage jar, see No. 2 above for fabric and dating. (2001) unstratified.
4. Horningsea storage jar, see No. 2 above for details of date and fabric. Rim burnished externally and internally. The neck cordon and clusters of vertical grooved lines over the shoulder are characteristic of the type. Good parallel published from Arbury Road, Cambridge (Hartley 1955, figs 5 and 7). Ditch 2468 (2469) (ditch 5400 or 5500 before excavation) Phase 2, 3 or 4. 5.

Figure 55

5. Bodysherds from Horningsea storage jar showing visible wipe marks on internal and external surfaces which feature on most of the lower profiles of Horningsea vessels recovered from Brettenham. See comments on No. 2 above for details of date and fabric. (2001) unstratified.
6. Bodysherd from slab-built shell-gritted storage jar clearly exhibiting finger-impressed 'keying' along edge to facilitate bonding with neighbouring section. Shelly storage jars are known to have been produced at kilns near Lakenheath in the 4th century. Ditch 3001 (2925) Phase 4.
7. Horningsea storage jar. See comments No. 4 above. (2001) unstratified.
8. Cavetto-rimmed jar with basal neck cordon. Similar jar forms were produced at Horningsea and fabric matches that of storage jars illustrated above. Evans (1991, 35) notes the presence of a grey slip/wash on many of the jars he examined from the kiln site. Pullinger and White (1991, 64, 49) illustrate an example with black slip on the rim internally from Hinton Fields, Teversham. Pit 2009 (2010) Phase 4.
9. Quartz-tempered, cavetto-rimmed jar with diagonal, rusticated ridges on shoulder. Externally sooted. Product of Nar valley industry (see Gurney 1986, 76–7 for general fabric descriptions). Rusticated jars of this type are generally dated to the 3rd century in East Anglia (see Hinchliffe with Green 1985, fig. 57, 100.14 for example from Brancaster). Context 2001, unstratified.
10. Medium-mouthed jar/cooking-pot with squared rim, globular body and offset at base of neck. Heavily sooted. Fabric similar to Horningsea jars illustrated above. See Green 1977, fig. 36, 229 for parallel from late 4th century occupation spread at Brampton. Midden deposit 2004 Phase 3 or 4.
11. Medium-mouthed jar in reduced, quartz-gritted fabric with multiple grooves at base of short neck. Similar in form to examples collected from fieldwalking exercise over the kilns at Pentney in the Nar Valley (M. de Bootman, pers. comm.). Ditch 3001 (2925) Phase 4.
12. Medium-mouthed jar with undercut rim, short neck with basal grooves and globular body in grey micaceous fabric. Product of Wattisfield area industry. See West with Plouviez 1976, figs 43 and 45 for example from 3rd/early 4th-century contexts at Icklingham. Midden deposit 2004 Phase 3 or 4.
13. Medium-mouthed jar with undercut rim and basal neck grooves in grey micaceous fabric. Product of Wattisfield area industry. See Rogerson 1977, fig. 82, 198 for an example from late 3rd/4th-century levels at Scole. Ditch 2602 (2604) (ditch 5100) Phase 2.
14. Shell-gritted jar with hooked/undercut rim. See No. 13 above for details of date. SFB 2172 (2171) Phase 5.
15. Carinated, grooved 'belgic' bowl in grey micaceous fabric. Product of Wattisfield area industry. See Rogerson 1977, fig. 77, 100 for an example from Pit 510 at Scole of Trajanic/Hadrianic date. Pit 2521 (2516) Phase 1.
16. Carinated, cordoned 'belgic' bowl in grey micaceous fabric. Product of Wattisfield area industry. See No. 15 above for details of date. Pit 2030 (2027) Phase 3.
17. Reverse-s profiled bowl/jar with shoulder grooves in grey micaceous fabric. Product of Wattisfield area industry. See West with Plouviez 1976, fig. 42, 36 for parallel from early/mid 4th-century context at Icklingham. Midden deposit 2004 Phase 3 or 4.
18. Fine, reduced fabric with few visible inclusions. Late 'reverse-s' profiled bowl. See Rogerson 1977, fig. 82, 221 for parallel from late 3rd/4th-century levels at Scole. Ditch 2468 (2469) (ditch 5400 or 5500 before excavation) Phase 2, 3 or 4.
19. Lid in fine grey micaceous fabric. Product of Wattisfield area industry. Typologically early. See Rogerson 1977, fig. 77, 102–4 for examples from Pit 510 at Scole of Trajanic/Hadrianic date. Midden deposit 2004 Phase 3 or 4.
20. Segmental bowl with curved flange/rim in fine grey micaceous fabric. Product of Wattisfield area industry. A good parallel comes from a Trajanic/Hadrianic context at Scole (Rogerson 1977, fig. 76, 74). Ditch 2871 (2870) (ditch 5700) Phase 1.
21. Open vessel with incised 'x's on external surface of lower profile, made after firing — owner's mark. Ditch 2341 (2342) (ditch 3300) Phase 3. 22.

Figure 56

22. Bead-and-flanged bowl with high bead in grey micaceous fabric. Product of Wattisfield area industry, this form was made in the 4th-century kiln at Wattisfield Hall (Form 1). See also Rogerson 1977, fig. 81, 181 for a parallel from Well II at Scole (mostly 3rd-century). Pit 2322 (2324) (waterhole 2318) unphased Romano-British.
23. Bead-and-flanged bowl in grey micaceous fabric with deliberate mark on flange made before firing. Product of Wattisfield area industry, this form appears amongst the products of Kiln 7 from Foxledge Common (Form 5). See also Rogerson 1977, fig. 82, 224 for a parallel from late 3rd/4th-century levels at Scole. Ditch 2297 (2296) (Structure 2) Phase 4.
24. Bead-and-flanged bowl with rather stubby flange. Fabric predominantly quartz-gritted with some silver mica. Probably a local product. The author knows of no illustrated parallel. Typologically mid 3rd/4th-century. (2001) unstratified.
25. Bead-and-flanged bowl with inscribed wavy line on flange in grey micaceous fabric. Product of Wattisfield area industry, this form was made at the 4th-century kilns at Wattisfield Hall and Hinderclay (Form 4 and Form 3 respectively). Ditch 2540 (2539) (ditch 4800) Phase 3.
26. Lower Nene Valley colour-coated bead-and-flanged bowl. Typologically late with very rounded angle between base and wall; 4th century. Ditch 3001 (2925) Phase 4.
27. Rounded-rimmed bowl in grey micaceous fabric. Product of Wattisfield area industry. Parallels for the form can be cited from contexts dating from mid Antonine through to the early 4th century. Waterhole 2318 (2320) unphased Romano-British.
28. Bowl in grey micaceous fabric with 'beaked'/triangular rim. Product of the Wattisfield area industry. A good parallel comes from Brancaster (Hinchliffe with Green 1985, fig. 61, 133.1) dating mainly to the 3rd century. Waterhole 2318 (2320) unphased Romano-British.
29. D-rimmed bowl in grey micaceous fabric. Product of Wattisfield area industry. See Rogerson 1977, fig. 82, 220 for a good parallel from late 3rd/4th-century contexts. Pit 2322 (2325) (waterhole 2318) unphased Romano-British.
30. Triangular-rimmed bowl in grey micaceous fabric with three notches on rim made after firing. Product of Wattisfield area industry, typologically mid 2nd/mid 3rd-century. See Rogerson 1977, fig. 78, 123 for a good example from pit 144 at Scole, dated to the Antonine period. Ditch 2632 (2633) Phase 4.
31. Bowl with curved/flattened rim in fine grey micaceous fabric. Product of Wattisfield area industry, this form was made at the 2nd/3rd-century kiln at Beech Tree Farm (Form 3). See also parallels from late 3rd/early 4th-century pit C at Brampton (Green 1977, fig. 35, 190) and mid/late 3rd-century kiln at Homersfield (Smedley and Owles 1959, fig. 30,e). (2001) unstratified.
32. Plain-rimmed dish in grey micaceous fabric. Product of Wattisfield area industry, this form was made in the 4th-century kiln at Wattisfield Hall (Form 14). Typologically also 3rd-century (see Smedley and Owles 1959, fig. 30c for an example from the mid/late 3rd-century kiln). Depression 2866 (2215) Phase 4.
33. Plain-rimmed dish in Lower Nene Valley colour coat. Howe *et al.* 1980, 87, dated late 3rd/4th-century. Pit 2959 (2960) unphased Romano-British.
34. Plain-rimmed, straight-sided dish/bowl with external cordon defined by deep grooves in grey micaceous fabric. Product of Wattisfield industry, the form was produced in the 4th-century kiln at Wattisfield Hall (Form 6). See also similar forms from mid 4th-century levels at Burgh Castle (Johnson 1983, fig. 42, *passim*). (2001) unstratified.
35. Plain-rimmed bowl with two deep external grooves below rim in quartz-gritted reduced fabric. Probably a local product, despite absence of silver mica (Plouviez, J. pers. comm.), the form can be paralleled amongst the products of the 4th-century kilns at Hinderclay and Wattisfield Hall (Form 7 and Form 6 respectively). See also examples from late 3rd/4th-century deposits at Scole, (Rogerson 1977, fig. 82, 215); and 3rd/early 4th-century contexts from Denver (Gurney 1986, fig. 77, 409). Hollow 2329 (2328) Phase 5.

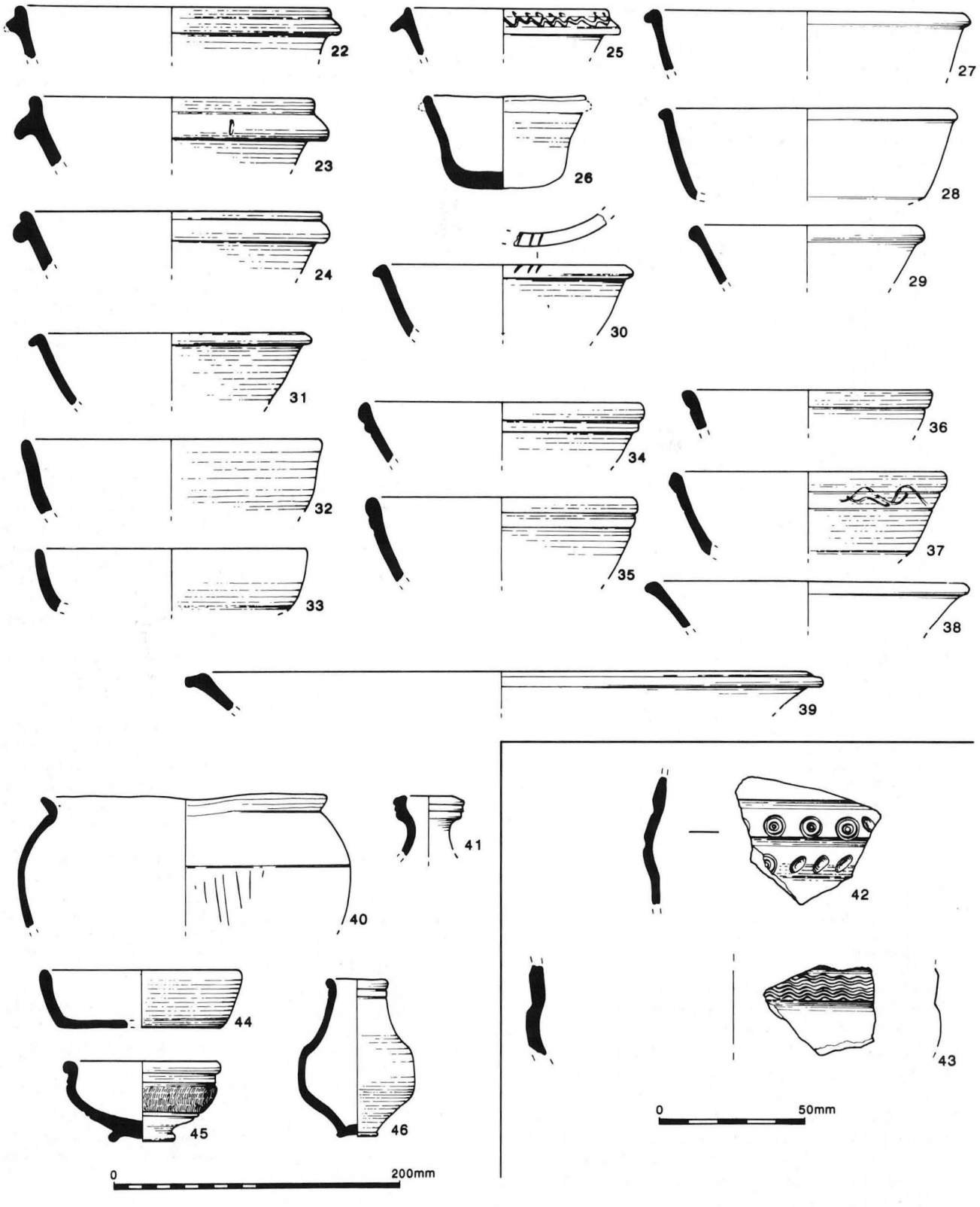


Fig. 56 Roman pottery. Scale 1:4; Nos 42–43 at 1:2

36. Plain-rimmed bowl with external groove well below rim in fine grey micaceous fabric. Product of the Wattisfield area industry, the form was made in the 4th-century kilns at Wattisfield Hall and Hinderclay (Form 5 and Form 6 respectively). Post-hole 2366 (2365), post-medieval?
37. Deep bowl with external double groove below rim and incised wavy-line decoration in grey micaceous fabric. See No. 35 above for details of date and provenance. Ditch 2047 (2041) (ditch 3600) Phase 4.
38. Straight-sided bowl/dish with expanded rim in grey micaceous fabric. Product of Wattisfield area industry, the form was made in the 2nd/3rd-century kilns at Beech Tree Farm (Form 4). SFB 2535 (2536) Phase 5.
39. Very large flanged/grooved-rimmed bowl in reduced quartz-gritted fabric. Probably a local product: a good parallel exists amongst the material from 3rd/early 4th-century levels at Icklingham (West with Plouviez 1976, fig. 41, 16). (2001) unstratified.
40. Jar/beaker in fine grey micaceous fabric. Typologically early/mid 2nd-century. See pit 144 at Scole (Antonine date) for a good parallel (Rogerson 1977, fig. 78, 121). Ditch 2591 (2590) (ditch 5100) Phase 2.
41. Cupped/ring-neck flagon in fine white fabric. Possibly a West Stow product (West 1990, 76–7, fig. 57) dating late 1st/mid 2nd-century. (2001) unstratified.
42. Bodysherd from beaker in oxidised, highly micaceous fabric. Possibly a Wattisfield area product. Ring-stamp decorated ware was definitely produced there on beaker forms (Rodwell 1978, 256) and the technique of decorating with impressed dimples is also attested in East Anglia (at West Stow), although no actual example from the Wattisfield area kilns is known to the author. (2001) unstratified.
43. Bodysherd in fine grey micaceous fabric with unusual combed wavy-line decoration. Product of Wattisfield area industry. No illustrated parallel known to author. Ditch 2102 (2101) Phase 4.

Grave-goods

44. Plain-rimmed dish in grey micaceous fabric. See comments on No. 32 above. Grave 2794 (2823) Phase 4.
45. Lower Nene Valley colour-coated bowl: Howe *et al.* 1980, 85. Such bowls were made at Stibbington, Kiln W, 64 in early/mid 4th century. Grave 2794 (2823) Phase 4.
46. Miniature bead-rimmed, funnel-neck beaker in grey micaceous fabric. Probably a product of the Wattisfield area industry although no illustrated parallel is known to the author. However, see Johnson, 1983, fig. 38, 19 for a painted Lower Nene Valley colour-coated example from Burgh Castle. Typologically 4th-century. Grave 2771 (2772) Phase 4

IX. Early Saxon pottery

by Catherine Underwood-Keevill

Introduction

The early Saxon pottery assemblage comprised 680 sherds weighing 8.763kg. The majority of the assemblage occurred in SFBs and 'hollows', although 100 sherds were present in post-holes and pits. The assemblage from Melford Meadows represents one of the largest of the period from the Thetford area and appears comparable (on fabric grounds) with material from Brandon Road (Dallas 1993, 124), Brunel Way (Andrews and Penn 1999) and Redcastle Furze (Andrews 1995, 101), although the lack of detail in the fabric descriptions at those sites makes close comparison somewhat difficult.

Methodology

The pottery was divided into fabric groups on the basis of the main rock and mineral inclusions present based upon the Peacock system (Peacock 1977). All observations were undertaken both macroscopically and with the aid of a ×10 magnifying glass, while the definition of the type series was undertaken with a ×30 microscope. The fabrics have been divided into groups and each fabric coding is based upon the main inclusion and its size range. (Thus a fine tempered quartz fabric would be Q1, and coarse and very coarse quartz tempered fabrics would be Q4 and Q5). A prefix AS has been added in this case to denote the period. All descriptions refer to the type sherds within the type series. Slight variations within the fabric types do occur. The fabric type series and the illustrated vessel form series have been retained for reference purposes and form part of the site archive.

Fabrics

Sand-tempered wares

ASQ1 A hard, light grey fabric with a dark grey core, sometimes with oxidised light orange-pink patches. Very fine to fine white and clear sub-angular quartz with occasional moderately coarse rounded limestone voids visible, especially on the surface. This fabric type has a well-burnished finish and the wall thickness tends to be regular. The fabric appears in most contexts on the site and it is probable that it was in use for a long period. Vessel types appear to be mainly globular jars with pinched, out-turned and in-turned rims, rounded out-turned rims and upright flat-topped rims.

ASQ10 A hard, dark grey fabric with hackly laminated fracture. Very fine white, sub-rounded quartz and fine to moderate elongated voids (probably vegetable/organic additions). Highly burnished surface and similar vessel types to fabric ASQ1.

ASQ2 A soft dark grey fabric with red-brown core. Abundant fine, clear quartz, common fine to medium white sub-angular quartz, occasional fine to medium angular orange flint and medium well-rounded white quartz. This fabric type has a fine burnished surface and it is the most common fabric on the site (25% by sherd number). It is equivalent to Type 1, sandy with quartz sand at Brandon Road (Dallas 1993, 124). Main vessel types are biconical and shouldered jars and bowls with incised line decoration, linear chevron zones, stamped decoration with chevron zones, and incised concentric circles (*e.g.* Figs 57.1 and 57.6).

ASQ20 Soft fabric with light grey to buff-pink exterior surface, dark grey core and dark grey interior. Abundant fine to medium well-rounded clear and orange-red quartz; common very fine to fine mica on surface and well-rounded medium white and clear quartz. The surfaces are wiped on the exterior and burnished on the interior. Vessel types appear to be wide-mouthed forms and bowls.

ASQ3 Soft fabric with light orange to light brown/light grey exterior and interior, and a light grey core. Abundant clear sub-angular quartz, common medium sub-angular white and orange-white quartz, medium-coarse rounded quartz, and occasional coarse angular white-grey flint. Appears to be a coarse version of ASQ20. Vessel types are thick-walled with incised thick grooves on the neck, and a smoothed or wiped finish in preference to burnishing.

ASQ4 Hard fabric with dark grey exterior, red-brown to grey interior and core. Abundant medium sub-angular clear quartz, common medium white-orange quartz sandstone, medium-coarse quartz sandstone and occasional coarse sandstone, limestone and flint. Vessels have a highly burnished exterior. Types include globular jars with flat-topped inturned and upright rims.

ASQ5 Hard fabric with orange oxidised patches and dark grey core. Coarse to very coarse white quartz sandstone, and medium clear sub-angular quartz. Very few examples of this fabric were recorded and no vessel types could be established. All examples are lightly burnished.

Organic-tempered wares

ASV1 Fine, soft micaceous fabric with common fine to medium thin vegetable striations visible on the surface and in the fracture. Most sherds are finely burnished. Two inturned rim sherds of jars were recorded.

ASV4 Soft fabric with pink-orange exterior, and dark grey interior and core. Moderate to coarse organic/vegetable matter including oval seed-cases and coarse blunt-ended impressions. Fine striations are common. Occasional coarse to very coarse flint. Vessel types include thick-walled vessels with smoothed and partially burnished exterior, rounded bases, upright, inturned and outturned rims of globular jars, and an upright-rimmed bowl. Most of the examples of this fabric were from SFB 2033.

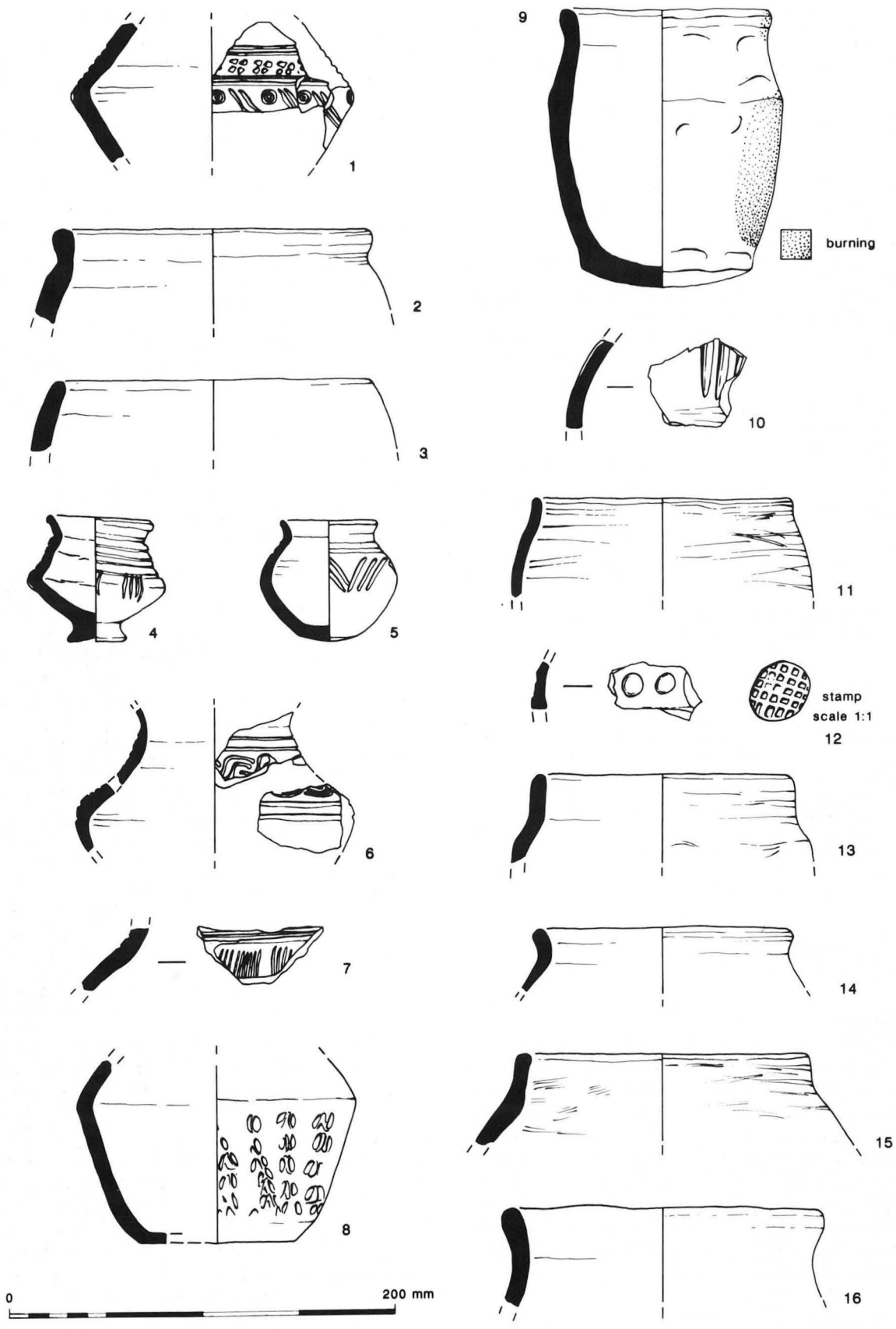


Fig. 57 Early Saxon pottery. Scale 1:3

Fabric	*Sunken-featured Buildings*								*Hollows*		*Other Features*		
	2033	**2172**	**2222**	**2248**	**2280**	**2595**	**2535**	**2775**	**2329 (north)**	**2429 (south)**	**north**	**south**	**central**
ASQ1	2, 40	26, 152	5, 91	9, 76		9, 71	2, 25				3, 7	1, 4	4, 28
ASQ10	9, 53	7, 34	4, 20	3, 24	1, 15	4, 23				1, 3	4, 9	6, 35	
ASQ2		25, 191	4, 29	3, 21		4, 36		3, 64		2, 78	2, 2	49, 155	
ASQ20	8, 340		3, 19	3, 18		6, 32	2, 10					28, 167	1, 13
ASQ3		16, 842	1, 29	7, 165		11, 112	2, 117		3, 35				7, 37
ASQ4	5, 193		8, 568	3, 94		10, 46	3, 17			113, 1266			
ASQ5		3, 12	2, 13				2, 43						
ASV1	1, 5							2, 26			1, 1	5, 31	15, 155
ASV4	26, 718	13, 161				1, 16	2, 144		2, 3	1, 76			
ASV5		1, 14				1, 2					1, 23	1, 14	1, 4
ASLV	1, 8										3, 119		
ASL3	12, 176	3, 14	2, 16			4, 135	8, 126		1, 5	1, 8	1, 5	2, 8	1, 2
ASL4			9, 133		4, 54						2, 9	1, 21	
TOTALS	64, 1533	94, 1420	38, 918	28, 328	5, 68	50, 473	21, 482	5, 90	6, 43	118, 1431	17, 175	93, 435	29, 239

Table 10: early Saxon pottery: quantity of pottery by fabric for all early Saxon features (no. of sherds, weight g)

ASV5 Soft fabric with a red-brown-grey exterior and grey interior, with dense coarse elongated linear voids of possible grass/straw additions. The vessel types are thin-walled and probably coil-built. Only wall sherds and bases survive and include angled bases, those with a definite base angle, round-bottomed vessels and possible carinated sherds.

ASLV Limestone and organic-tempered fabric. Common, medium-sized, round voids and limestone, and elongated organic/vegetable matter voids. Vessels comprise thick- walled pots/storage jars with heavily wiped surfaces.

Limestone-tempered wares

ASL3 Soft, dark grey, highly vesicular fabric. Common, moderate to coarse limestone voids with occasional fine voids. The fabric is used in the construction of flat-based vessels, shouldered vessels and those decorated with incised grooves.

ASL4 Soft, dark grey to black fabric with occasional coarse rounded limestone, fine limestone, coarse clear and white subangular quartz sandstone, and abundant fine to moderate clear angular quartz and fine mica. Decoration and surface finish is limited to partial burnishing and also partially rusticated, finger-pinched detail on both globular and shouldered vessels.

Discussion

(Table 10)

The majority of the pottery occurred in sunken-featured buildings (329 sherds, 5.476g). Distributions of fabrics and vessel types were examined for the individual SFBs in order to understand variations between different buildings and the possible implications in terms of establishing a relative sequence of buildings. Table 10 shows the distribution of fabric types for the SFBs and other early Saxon features.

The whole assemblage is dominated by the sandy wares (72% of the site total) as are the SFB groups (63% of total pottery from such structures). The latter group contained a high proportion of fine sandy wares ASQ1, ASQ10, ASQ2 and ASQ20 and the moderate sandy ware ASQ3, although it also had the majority of the organic/vegetable-tempered ware ASV4 and limestone-tempered ware ASL3 from the site. The quantitative analysis suggests that some fabric types may be associated with individual SFBs, although the associations are not exclusive.

The largest group of fabric ASQ2 (25 sherds, 191g) occurred in SFB 2172. The assemblage included a stamped sherd and another bearing incised chevron design. Myres noted that the latter technique tended to be an early attribute, but examples are known from the 6th century (Myres 1977, 45). The miniature biconical jar with a slashed carination (Fig. 57.4), can be paralleled with a vessel dated to the 5th century at West Stow (West 1985, 148–9). Generally, the assemblage would appear to be of later 5th- or early 6th-century date.

SFB 2222 contained large quantities of fine sandy wares. These included fragments of decorated vessels in fabric ASQ2 (Figs 57.6 and 57.10), a deep grooved and incised line decorated sherd (Fig. 57.7) and a miniature shouldered jar with incised chevrons in Fabric ASQ1 (Fig. 57.5), and a rusticated sherd (Fig. 57.8). Parallels for the incised vessels (Myres 1977, 45; Hamerow 1993, fig. 104.10) suggest that they are probably of a similar date to those from SFB 2172. It is of note that there were no organic-tempered sherds present in SFB 2222, although such material was present in SFB 2172. The concentration of sherds with early decorative traits in these SFBs thus suggests that the sandy fabrics ASQ2 and ASQ3 were commoner during the early occupation of this site. This should be treated with caution, however, and cannot be used as evidence for giving similar dating to such fabrics at other sites unless there is other evidence, such as early decorative techniques, to support it. The different fabric emphases in the buildings may be the result of cultural rather than chronological factors (*cf.* Blinkhorn 1993, 247; Blinkhorn 1997).

The range of fabric types in SFBs 2172 and 2222 was similar to those in SFB 2033, although the emphasis shows some differences. The dominant fabric types (by number of sherds) in 2033 were the organic-tempered ASV4 and the limestone-tempered ASL3, although the few sherds of ASQ20 and ASQ4 which were present had a larger mean weight, suggesting that the fabric types had some chronological overlap. The ASV4 assemblage included fragments of lugged vessels with upright rims (Fig. 58.23), flaring-rim jars, necked bowls with semi-bead rims, and upright-rimmed globular jars. The limestone-tempered ware was mainly fragments of thick-walled vessels with rounded bases. The marked increase in the occurrence of

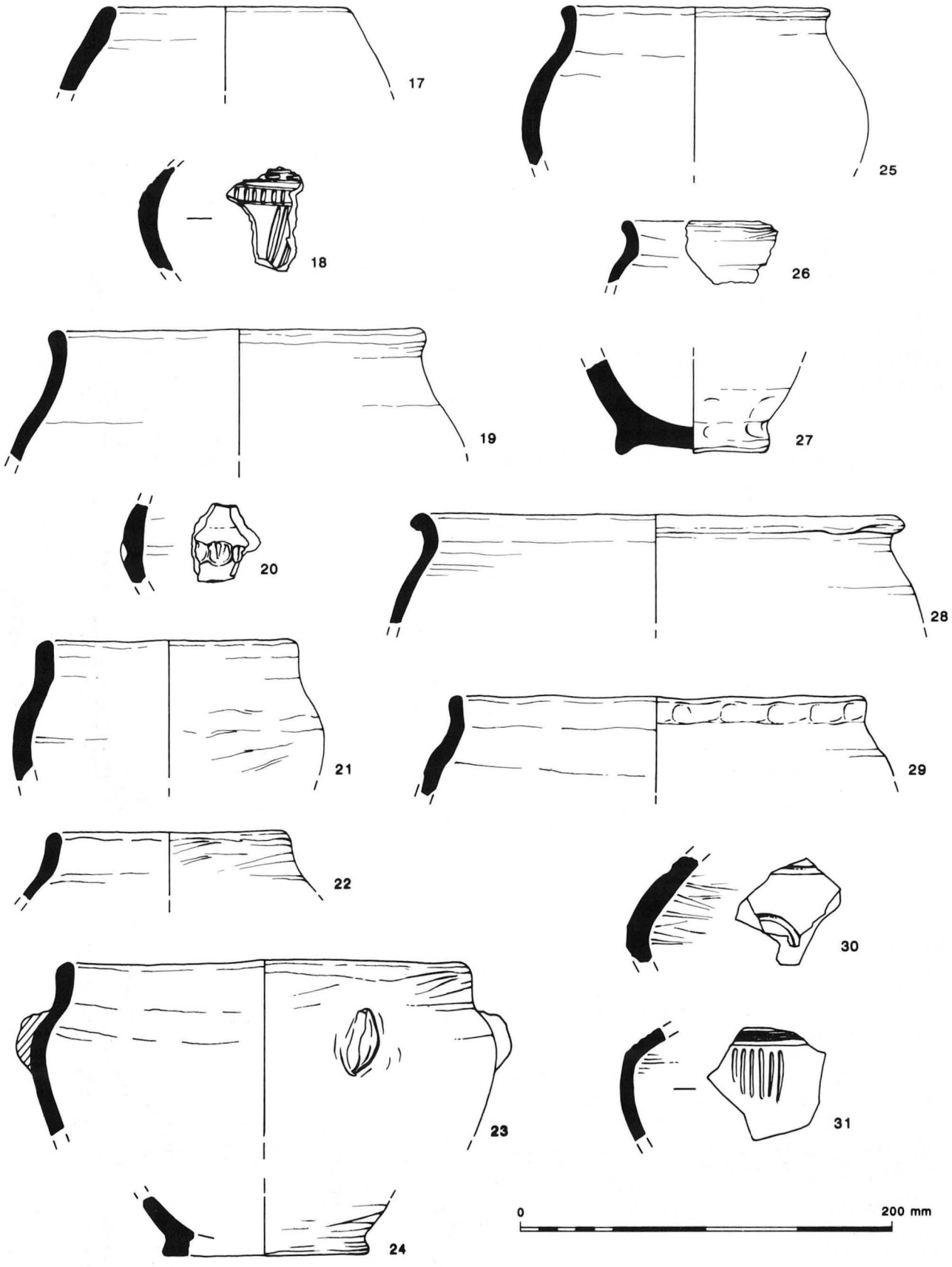


Fig. 58 Early Saxon pottery. Scale 1:3

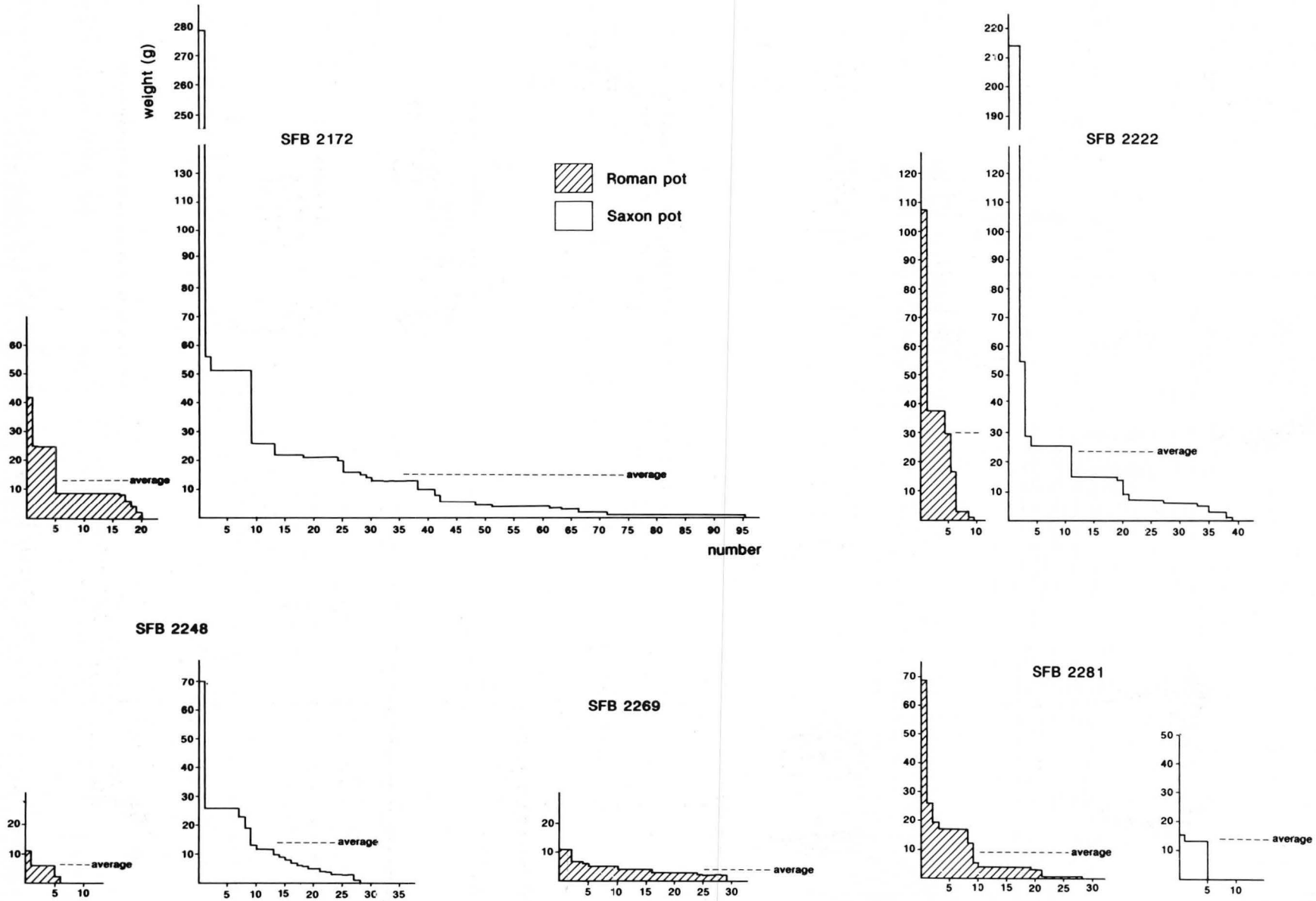


Fig. 59 Sherd histograms

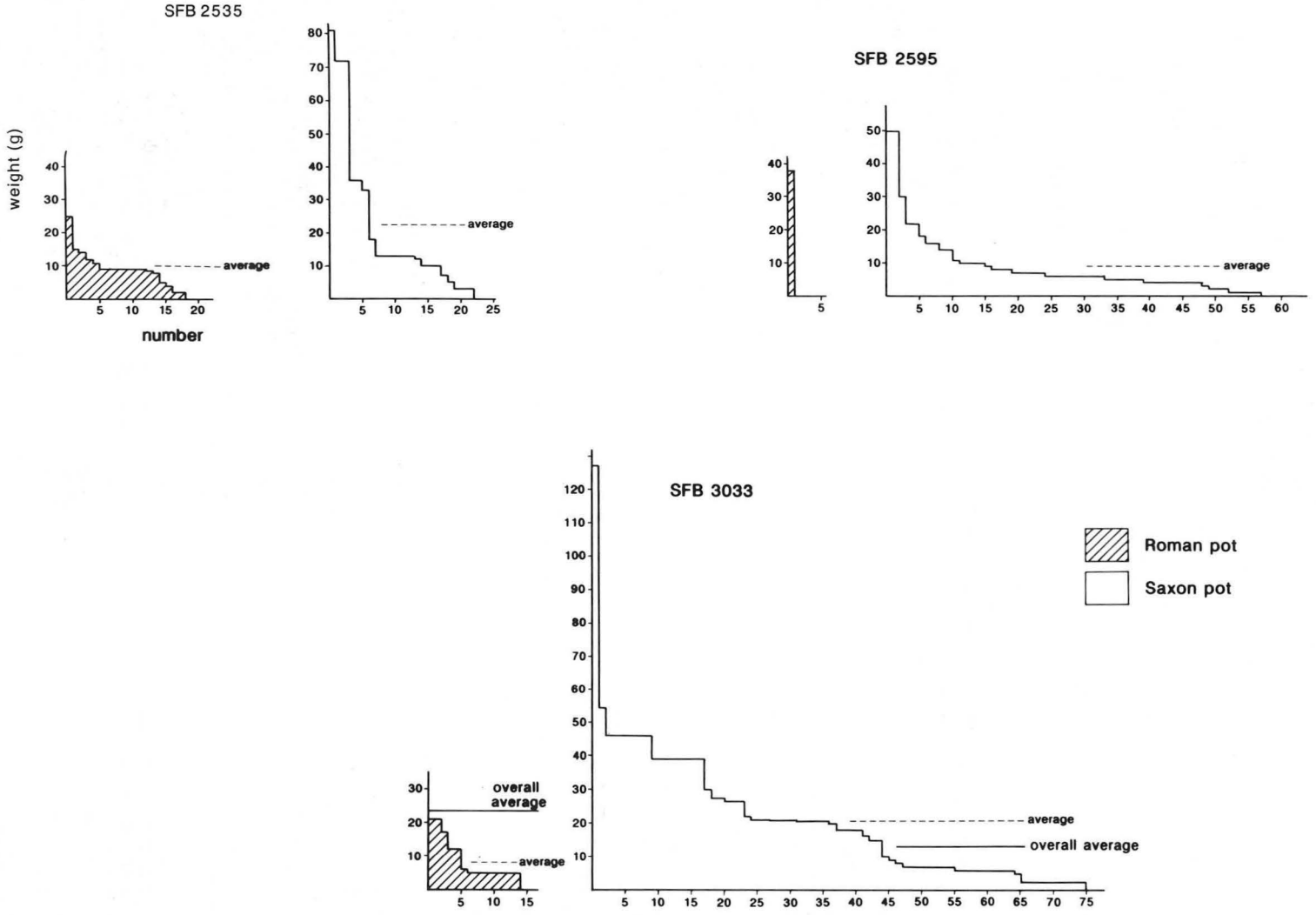


Fig. 60 Sherd histograms

organic-tempered undecorated sherds is similar to the developments in the 7th century at Mucking, although in the case of that site, the use of organic tempered material was virtually to the exclusion of all other fabric types. It was also noted at Mucking that rims became shorter and more upright through time. This suggests that SFB 2033 is later in date than the two structures discussed previously.

The pottery from SFB 2248 was limited to sandy/fine sandy wares ASQ1, ASQ10, ASQ2 and ASQ20, and moderate to coarse wares ASQ3 and ASQ4. A single stamp-decorated sherd (Fig. 57.12) is probably of 6th-century date, although the technique was occasionally used in the 5th century. SFBs 2535 and 2595 contained a few large sherds of limestone-tempered ware (ASL3), although both sand- and organic-tempered sherds of comparable size also occurred. Rouletted, incised line and chevron decorated sherds in ASQ5 and ASL3 were present, which again suggests a date of the later 5th- or earlier 6th-centuries.

It is difficult to date the rest of the structures. SFB 2269 did not contain any Saxon pottery, and SFB 2281 yielded only five sherds. The general paucity of pottery in the other features in the northern part of the site meant that it was not possible to carry out any other meaningful comparisons with the assemblage from SFB 2033.

The group of pits, gullies and charcoal spreads in the southern part of the site contained mainly sandy wares, including ASQ2 and ASQ4, but also small quantities of limestone- and organic-tempered wares in 'hollow' 2429 and pit 2399. Pits in the middle of the site contained mainly sherds in fabrics ASQ1, ASQ20 and ASV3.

In general, the fabric types are similar to those found at Brandon Road, Thetford, especially in the high proportion of sand-tempered wares present. A 6th/7th-century date was suggested for the Brandon Road pottery (Dallas 1993, 124), although there are no chronologically diagnostic sherds from the site. At Redcastle Furze, the chronology of the early Saxon pottery assemblage is treated with caution (Andrews 1995, 24 and 101) due to the small number of decorated sherds present. The preponderance of linear decoration and a single bossed sherd suggest a date in the later 5th or early 6th century, although this must be treated with caution, but the presence of later 5th/early 6th-century material at Melford Meadows at least shows that there was activity in the Thetford area at that time.

Catalogue of illustrated material

Figure 57

1. Fabric ASQ2. SFB 2172 (2121).
2. Fabric ASV4. Exterior sooting. SFB 2172 (2171).
3. Fabric ASQ3. SFB 2172 (2171).
4. Fabric ASQ3. SFB 2172 (2171).
5. Fabric ASQ1. SFB 2222 (2216).
6. Fabric ASQ2. SFB 2222 (2216).
7. Fabric ASQ1. SFB 2222 (2216).
8. Fabric ASL4. Exterior sooted from base to shoulder. SFB 2222 (2229).
9. Fabric ASQ4. Coil built with regular horizontal indentations on interior. SFB 2222 (2229).
10. Fabric ASQ2. SFB 2555 (2595).
11. Fabric ASQ1. Sooting on exterior and burnt residue on interior. SFB 2248 (2247).
12. Fabric ASQ3. SFB 2248 (2247).
13. Fabric ASQ4. Finely burnished on neck exterior and interior. SFB 2248 (2247).
14. Fabric ASQ1. Internal residue. SFB 2248 (2247).
15. Fabric ASQ4. External sooting. SFB 2535 (2536).
16. Fabric ASL3. External sooting. SFB 2535 (2536).
17. Fabric ASQ3. Trace of internal burnt residue. SFB 2535 (2536).
18. Fabric ASL3. SFB 2535 (2536).
19. Fabric ASL4. Exterior sooting. SFB 2281 (2280)

Figure 58

20. Fabric ASQ10. Trace of internal residue. SFB 2281 (2280)
21. Fabric ASV4. Heavy exterior sooting. SFB 2033 (2034)
22. Fabric ASQ1. SFB 2033 (2034).
23. Fabric ASV4. SFB 2033 (2034).
24. Fabric ASQ1. SFB 2248 (2247).
25. Fabric ASQ2. Sooted exterior upper part. Hollow 2429 (2430).
26. Fabric ASQ4. Burnished interior and exterior. Hollow 2429 (2430).
27. Fabric ASV4. Hollow 2429 (2430).
28. Fabric ASL3. Exterior sooting patches. Post-hole 2200 (2201).
29. Fabric ASQ3. (2001) unstratified.
30. Fabric ASQ3. (2001) unstratified.
31. Fabric ASQ2. (2001) unstratified.

X. Ceramic building material

by Leigh Allen

Introduction

A total of 8270g of ceramic building material was recovered from the excavations at Melford Meadows, 4262g (51.5%) of which was medieval or later in date and has not been analysed or recorded in detail. The remaining 4008g (48.5%) is Roman and comes mainly from 3rd- and 4th-century contexts.

Methodology

Each fragment of tile was examined macroscopically with a × 20 hand lens to identify the fabric type. The fragments were assigned to a tile type category (*tegulae, imbrices, tubuli*, plain tile or brick) (Brodribb 1987, 36–41). The thickness of the tiles was recorded where a complete thickness existed, tiles with no distinguishing characteristics or measurable thickness were assigned to the miscellaneous category.

Results: tile types

Four different types of tile were identified, *tegulae, tubuli*, plain tiles and bricks:

Tegulae were identified by the existence of a flange or a groove at the base of the flange. There were four fragments of tegulae in the assemblage weighing 1146g (28.6% of the total Roman material) the thickness of the four examples ranged between 25mm and 30mm, two had flanges with heights measuring 50mm and 55mm. Both flanges were of the same construction with a gently sloping inside edge, one example had the remains of a cut-away at one end where the tiles would have overlapped on the roof.

Tubuli were identified by the presence of a key for plaster or remains of the perforation in the side through which the air would have passed. There were three fragments weighing 322g (8% of the total Roman material). Measurable thicknesses ranged between 14mm and 22mm. The keys were all simple combed patterns made with combs with more than five teeth.

Plain tiles; three fragments of plain tiles were recovered weighing 203g (5.1% of the total Roman material). They have no distinguishing features. However, the thickness of the first fragment is 20mm and this is too thin for a floor tile and therefore could be from a *tubuli*. The other two have thicknesses of 25mm and 30mm and could come from *tegulae*.

Bricks; nine fragments of large brick were recovered weighing 2156g (53.8% of the total Roman material). Thicknesses ranged between 35mm and 52mm. There are no complete dimensions, however these fragments probably originated from floor or bonding tiles *i.e. Lydions, pedalis* or *sesquipedalis*.

There were also 181g (4.5% of the total Roman material) of miscellaneous fragments.

Results: fabric types

Two distinct fabric types were distinguished.

1 Reddish-pink with variable degrees of streaks and swirls of white clay as well as abundant very fine quartz, abundant grog and frequent mica inclusions.

2 Reddish-orange sandy with abundant very fine quartz and mica inclusions and occasional fragments of grog.

Fabric 1 was predominant, comprising 97% of the total Roman material.

XI. Fired clay and clay objects

by Alistair Barclay

Introduction

A total of 374 fragments of fired and unfired clay weighing approximately 5.8kg was recovered from thirty-eight excavated contexts. Table 11 gives a summary of fired clay by phase. The assemblage includes fired clay of Roman and Saxon date (Tables 12 and 13), and a few fragments from unphased contexts (Table 14). The assemblage is characterised by amorphous fragments of fired clay. Featured fragments are few and manufactured surfaces and wattle impressions are rare. The only diagnostic objects are a small group of unfired Saxon loomweights (Table 15).

Fabrics

Seven fabrics are identified. Fabrics 2, 5 and 7 occur in both Roman and Saxon contexts. Fabrics 3 and 6 are probably Roman and fabric 4, and possibly also fabric 1, are Saxon.

1 Hard with few or no inclusions.

2 Hard with up to 5% subround chalk fragments (mm) and rare angular flint and coarse sand.

3 Hard with common shell platelets

4 Soft with up to 15% fine (sometimes leached) shell and/or burnt organics.

5 Hard with 5% coarse sand and 5% organics.

6 Hard with common grog or clay pellets and rare coarse sand.

7 Hard with common coarse sand (mm).

Roman

The excavated contexts produced a total of 99 fragments (1693g) of fired clay (Table 12). Most are amorphous fragments, although some have surfaces, in a range of fabrics. The shelly fabric (3) could be pottery rather than fired clay. The fired clay is likely to indicate either domestic or industrial activity.

Saxon

The excavated contexts produced a total of 235 fragments (2776g) of fired clay and 32 unfired fragments (1092g) (Table 13). Some of the fired clay is of the same character as material recorded from Roman contexts and was presumably from the same local source. The small quantity of clay in Fabric 7, from a rabbit-disturbed pit, could represent redeposited Roman material, but the material in Fabrics 2 and 5 is undoubtedly Saxon. The assemblage contains a small quantity of unfired clay loomweights and structural clay which has been fired reddish-brown.

Unfired clay loomweights

The fills from three sunken-featured buildings contained at least six but probably more complete and fragmentary loomweights (summarised in Table 15). The clay weights are of typical annular form and are unfired. This form is characteristically Saxon and the weights are no doubt contemporary with the buildings. No complete or fragmentary fired clay loomweights are present. They are relatively small with a diameter range of 75mm to 90mm and a thickness range of 25mm to 40mm. The complete examples range in weight from 98g to 224g. However, had the weights been fired their size and weight may have been reduced.

Structural clay

Two contexts, 2171 (SFB 2172) and 2216 (SFB 2222) contained fired clay with wattle impressions. The fragment from 2216 has one smoothed surface and one large wattle impression (diameter 25mm). Both fragments have been oxidised to a reddish-brown colour. It is possible that these two fragments along with numerous other similar pieces derive from oven linings or structures. Alternatively, these fragments could derive from wall daub which had been burnt.

Phase	*Fabrics*							*Totals*
	1	*2*	*3*	*4*	*5*	*6*	*7*	
Unstratified and Unphased	1, 8	9, 108						10, 116
Saxon	12, 331	157, 2118		53, 280	11, 33		2, 14	235, 2776
Roman		70, 1612	14, 66		7, 5	7, 6	1, 4	99, 1693
Total	13, 339	236, 3838	14, 66	53, 280	18, 38	7, 6	3, 18	344, 4585

Table 11: summary of fired clay fabrics by phase (no. of sherds, weight g)

Context	*Fabric*	*Number, weight (g)*	*Comment*
2034 (SFB 2033)	1	1, 8	
		20+, 500	SF 72: fragments from more than 1 annular loomweight.
		2, 224	SF 109: 2 fragments probably from the same weight.
2171 (SFB 2172)	4	4, 6	Structural clay with single wattle impression.
		3, 168	SF 119: fragments from 2 or 3 annular loomweights.
2216 (SFB 2222)	2	22, 392	Structural clay with wattle impressions.
2217 (SFB 2222)	5	2, 4	
2223 (SFB 2222)	4	39, 230	Some fragments with smoothed surfaces.
	5	7, 20	
2229 (SFB 2222)	5	1, 7	Unfired clay.
2271 (SFB 2269)	4	2, 4	
2280 (SFB 2281)	4	8, 40	
2536 (SFB 2535)	1	1, 2	
	2	1, 11	
2555 (SFB 2595)	2	1, 15	
2822 (SFB 2821)		7, 200	Seven fragments forming 2 complete loomweights
2430 (Hollow 2429)	1	1, 1	
	5	1, 2	
2562 (post-hole? 2561)	1	1, 40	
2847 (pit 2846)	7	2, 14	
2283 (oven 2231)	1	8, 280	oven lining
2285 (oven 2231)	2	8, 106	lining/collapsed oven structure
2224 (oven 2235)	2	99, 996	oven lining
2470 (oven 2471)	2	25, 106	oven lining
3042? (pit 3021)	2	1, 492	
Total		267, 3868	

Table 13: summary of fired and unfired clay from early Saxon contexts

Context	*Fabric*	*Number, weight (g)*	*Comment*
2004 (midden layer)	2	5, 76	
	3	2, 4	pottery?
2037 (ditch 2036, Str. 2)	3	2, 56	Miscellaneous object fragment: pottery?
2309 (ditch 2331, Grp. 5100)	5	7, 5	
2319 (well 2318)	3	6, 3	pottery?
2321 (well 2318)	3	4, 3	pottery?
2456 (pit 2465)	2	5, 62	
2481 (ditch 2480, Grp. 6000)	6	7, 6	
2496 (pit 2495)	2	20, 364	
2832 (pit 2830)	2	5, 34	
2870 (gully 2871, Grp. 5700)	2	1, 7	
2982 (post-hole 2973, Str. 1)	7	1, 4	
2911 (post-hole 2903, Str. 1)	2	1, 47	
2455 (pit 2464)	2	8, 142	
2515 (pit 2495)	2	16, 290	
2926 (ditch 3004)	2	4, 578	
2952 (pit 2953, ditch 6300)	2	5, 12	
Total		99, 1693	

Table 12: summary of fired clay from Roman contexts

Context	*Fabric*	*Number, weight (g)*
2001	1	1, 8
2610 (post-hole 2609)	2	8, 104
2906 (animal disturbance? 2905)	2	1, 4
Total		10, 116

Table 14: summary of fired clay from unstratified and unphased contexts

Context	*S.F. No.*	*No. of loomweights*	*Weight (g)*	*Approx. diameter (mm)*	*Thickness (mm)*	*Comments*
2034	72	1+	500	–		20+ fragments from more than one weight.
	109	1	224	90 × 75	40	Two fragments probably from the same weight.
2171	119	1/2	186	85	30	Two fragments from one or two weights.
	119	1	82	75	30	Half a weight.
2822		1	102	75	30	Four refitting fragments forming a complete weight.
		1+	98	75	25	Three fragments forming almost complete weight.
Total		6+	1192			

Table 15: summary of all unfired annular clay loomweights

Discussion

The assemblage of fired clay is perhaps of typical character for a settlement site in that the majority of fragments are of oxidised appearance and amorphous in shape. This material is probably the debris from ovens and hearths used in domestic and industrial activities. At least some of this material could come from burnt wall daub, although wattle impressions are rare. The only two fragments of structural clay with impressions came from Saxon contexts, both SFBs, but it is unclear whether this was debris from house walls or ovens/hearths.

No fired clay objects were recovered from either the Roman or Saxon contexts. However, a number of unfired clay loomweights were recovered from the fills of three sunken-featured buildings. The annular form of these weights is characteristically early Saxon. Unfired clay loomweights have been found on a number of settlement sites (Hamerow 1993, 68). Interestingly the Brettenham weights are on the whole much smaller in size than the fired clay weights from Mucking, their range of diameters falling at the lower end of the scale (Hamerow 1993, figs 44–5).

XII. Worked bone

by Adrienne Powell and Kate M. Clark

Two pieces of worked bone were found in the fill (2216) of SFB 2222.

1. Tooth-plate (terminology follows MacGregor 1985) from a compound comb, comprising flat, roughly rectangular piece; one of the long sides had been filed straight to sit parallel with another plate. The teeth are broken off short, but shallow grooves are visible around their bases, probably from finishing-off processes. On the other short side are the remains of what must have been the back of the comb, a smoothed rim, rounded in cross-section, at an acute angle to the straight long edge, with an incised groove 1mm in from the edge. The second long side is broken, but the remnants of a drilled hole with some iron staining on the inner surface show where an iron rivet was used to secure the side-plates and tooth-plates of the comb. It was not possible to be certain, but the piece appeared to be bone rather than antler, although antler was the preferred raw material for combs. This fragment probably came from a comb of either the round-backed or triangular-backed types, such as those from Caistor St Edmund, Norfolk (Myres and Green 1973), and West Stow (West 1985). L. 45mm, W. 16mm, T. 3mm. SFB 2222 (2216).
2. Smoothed rectangular segment of antler, or bone of an unidentified large mammal, with saw marks on the short sides. L. 70–3mm, W. 16–19mm, T. 6mm. From its thickness, it is probably a blank for the side-plate of a comb (MacGregor 1985; West 1985, figs 231.10 and 251.2). SFB 2222 (2216).

Chapter 6: Zoological and Botanical Evidence

I. Animal bones

by Adrienne Powell and Kate M. Clark

Introduction

A total of 4079 bone fragments was examined, 225 of which belonged to an intrusive modern burial of a very young calf, less than one month old. In addition 742 bone fragments could not be assigned to either Romano-British or early Saxon phases with confidence. The analysis of the remaining 3114 fragments (both sieved and hand recovered) form the basis of this report (Table 16). Of this material, 22% was identified to species overall. Where fragments were impossible to identify to species, they were categorised as 'large mammal' (horse-, cattle- and red deer-sized), 'small mammal' (sheep/goat- and pig-sized) or 'unidentified'. The results are summarised in Table 16. The proportion of identifiable material was comparable in both the Romano-British and early Saxon sub-assemblages at 25% and 24% respectively. Very little burnt bone was observed in the assemblage, although it was slightly more frequent in the early Saxon material. Similarly, very few butchery marks or signs of carnivore or rodent gnawing were observed.

Romano-British bone

Out of 493 fragments in total, only 121 were identifiable to species. These belonged almost entirely to the four main domestic animals: horse, cattle, sheep/goat and pig. Table 17 gives the number of identified specimens (NISP), minimum number of individuals (MNI) and anatomical distribution of the remains of these species.

Fragments of cattle dominate this assemblage at 66% of the NISP of main domesticates. Sheep/goat remains are far less frequent at 18%. Only one bone, a right calcaneus, was identified to sheep, using the criteria of Boessneck (1969) and Payne (1985), and no goat bones were identified. Horse remains were relatively frequent (12%) and pig infrequent (4%). When minimum numbers are considered, sheep/goat increase their representation dramatically compared to cattle which decrease, although cattle are still the best represented species. Pig is also more visible on the basis of MNI.

The small number of fragments involved makes discussion of the frequency of the various anatomical elements impossible for horse, sheep/goat and pig. However, the evidence for cattle suggests all parts of the carcass were present, with any discrepancies such as absence of phalanges accounted for by differential fragmentation, survival and recovery.

Wild species were represented by two fragments of red deer (*Cervus elaphus*). A single first phalanx from a cat was present, but it was not possible to determine whether it belonged to domestic or wild cat (*Felis silvestris*).

Ageing information for this part of the assemblage is sparse. Tooth wear was recorded after Grant (1982), and attribution to wear stages and respective ages was based on Halstead (1985) for cattle and Payne (1973) for sheep/goat. Loose lower third molars and deciduous fourth premolars were included, but only where their attribution to mandibles with empty sockets could be ruled out with confidence. Epiphyseal fusion data is given in Table 18a–d. Timing of epiphyseal fusion is based on Silver (1969).

		Horse	*Cattle*	*Red deer*	*Sheep/goat*	*Pig*	*Dog*	*Cat*	*Bird*	*Rabbit*	*Large mammal*	*Small mammal*	*Unident.*	*Total*	*% ID*
Hand-recovered	Romano-British	14	78	2	20	5	0	1	0	0	54	11	287	472	25
	Early Saxon	52	286	3	130	46	6	0	8	6	478	96	1167	2278	24
	Roman/Saxon?	19	68	0	27	2	0	0	1	1	78	16	265	477	25
	Sub-total	85	432	5	177	53	6	1	9	7	610	123	1719	3227	24
Sieved samples	Romano-British	0	0	0	1	0	0	0	0	0	6	0	14	21	5
	Early Saxon	50	5	0	10	2	0	0	0	0	67	4	205	343	20
	Roman/Saxon	1	3	0	1	0	0	0	0	0	0	6	254	265	2
	Sub-total	51	8	0	12	2	0	0	0	0	73	10	473	629	12
Total		136	440	5	189	55	6	1	9	7	681	133	2192	3854	
Modern Burial (1)			225												

Table 16: animal bone; summary fragments count

Element	*Horse*	*Cattle*	*Sheep/ goat*	*Pig*	*Total*
Horn-core	0	6	0	0	6
Skull	0	3	1	0	4
Maxilla	0	2	0	0	2
Mandible	2	2	3	1	8
Loose Teeth	4	17	6	2	29
Atlas	0	1	0	0	1
Axis	0	1	0	0	1
Scapula	0	1	0	0	1
Humerus	1	4	0	1	6
Radius	1	5	4	0	10
Ulna	0	1	0	1	2
Pelvis	0	1	0	0	1
Femur	0	4	0	0	4
Tibia	2	6	2	0	10
Astragalus	1	4	0	0	5
Calcaneus	0	5	1	0	6
Carpal	0	2	0	0	2
Tarsal	0	2	0	0	2
Metacarpal	1	4	1	0	6
Metatarsal	0	4	3	0	7
Lat. Metapodial	1	0	0	0	1
Phalanx I	1	1	0	0	2
Total	14	76	21	5	116
% Main Domestics	12	66	18	4	
M.N.I.	1	4	3	1	

Table 17: animal bone; number of identified specimens from Romano-British contexts

The dental data for cattle are only three loose M_3s and one mandible — the former came from adult animals and the latter from a very old individual (Halstead's Stage I). The fusion evidence for cattle indicates the presence of some juveniles, although there is no evidence for very young animals.

The sheep/goat dental data consist of one mandible at six to twelve months (Payne's Stage C) and three mandibles at six to eight years (Stage H). There was no evidence for the presence of juvenile animals in the fusion data, however, there were only two bones where the state of fusion could be determined. There was no ageing information from the pig remains.

The ageing information from the horse remains was as sparse as for the other three taxa. However, an unfused distal tibia shows the presence of an animal less than two years old, and a loose maxillary M^3 gives an age of fifteen to sixteen years based on Levine's crown height figures (1982), showing that older working animals were also present.

There was no sexable material in the Romano-British assemblage. Two examples of pathological material were present, both on horse remains. The first is a mandibular P_3 or P_4 with abnormal and excessive wear on the distal side of the tooth, such that the biting surface slopes downward mesio-distally at *c.*45°. Although age estimation from crown height would not be reliable in this case, the degree of wear suggests that the tooth probably came from an old adult. The second case is a first phalanx with hyperostosis at the sites of tendon attachment posteriorly, probably due to repeated minor trauma or age.

Age (Months)	*Unfused*	*Fused*	*Indet.*	*Total*
7–10	0	1	1	2
12–18	0	5	5	10
24–36	4	9	1	14
36–42	4	0	25	29
Total	8	15	32	55

Table 18a: cattle fusion data; Romano-British

Age (Months)	*Unfused*	*Fused*	*Indet.*	*Total*
6–10	0	0	4	4
13–16	0	0	0	0
18–28	0	1	5	6
30–42	0	1	7	8
Total	0	2	16	18

Table 18b: sheep/goat fusion data; Romano-British

It is difficult to draw conclusions about the animal husbandry of this period based on this assemblage, other than to say that cattle and caprines appear to be the most commonly exploited species.

Early Saxon bone

Out of a total of 2621 fragments, 604 were identified to species. Table 19 shows the NISP, MNI and distribution of skeletal elements for the four main species.

Fragments of cattle, as in the Romano-British material, were the most numerous, although at the lower level of 50% of the NISP. Sheep/goat fragments were more numerous than in the Romano-British assemblage, but were still outnumbered by cattle at 25%. Only ten of the 140 fragments could be identified as sheep, and only one as goat. Pig bones were also more frequent than in the Romano-British material, but were still a relatively small (8%) proportion of the NISP. The remains of horse were unusually frequent at 18%; at West Stow, the only contemporary East Anglian site with a sizeable assemblage, horse was only 2% overall.

With the calculation of MNI figures, the rank order of species is the same, however the visibility of pig increases to 15% at the expense of cattle, although cattle still dominates the assemblage. Horse occurs at an even higher level (19%).

The frequency of the various anatomical elements of cattle is consistent with the presence of complete carcasses on site originally. There is no discrepancy in the representation of fore- and hind-limbs, and the low incidence of carpals, tarsals and phalanges may be explained by differential survival and recovery. The greater frequency of distal long bones (radius, tibia and metapodials) compared with proximal long-bones (humerus and femur) may be due to the greater identifiability of the former to species in fragmentary material.

Although sheep/goat and, especially, pig remains occur in smaller numbers than cattle, the distribution of

Age (Months)	*Unfused*	*Fused*	*Indet.*	*Total*
12	0	0	1	1
24–30	0	0	0	0
36–42	0	0	2	2
Total	0	0	3	3

Table 18c: pig fusion data; Romano-British

Age (Months)	*Unfused*	*Fused*	*Indet.*	*Total*
9–12	0	0	0	0
13–24	1	3	1	5
36–42	0	2	2	4
Total	1	5	3	9

Table 18d: horse fusion data; Romano-British

their skeletal elements is likewise consistent with the initial presence of complete carcasses.

With the horse material, the situation is different: horse is represented by skull fragments to a much greater degree than the other species: 80% of the horse NISP, as opposed to 52%, 61% and 67% in cattle, sheep/goat and pig, respectively. Post-cranial material yielded a calculated MNI for horse of only two. The difference is mainly due to the occurrence in pit 2946 of a large concentration of equine loose teeth and cranial fragments. From these it was possible to reconstruct mandibles from at least two individuals, and maxillary cheek tooth rows from three animals. Estimated ages based on crown heights of the maxillary teeth were eight to thirteen years for one animal, eleven to fifteen years for the second, and more than nineteen years for the third. The teeth from one mandible gave an estimated age range of eight to eleven years, while an M_3 from the other suggested twelve to thirteen years. One of these animals was a male, indicated by the presence of a canine tooth. The fill of this pit must represent a single disposal event. Apart from the three horse skulls, it contained only five fragments of cattle (scapula, mandible and three loose maxillary teeth), one sheep/goat tooth fragment, a fragment of humerus which could not be identified beyond 'large mammal', and numerous 'large mammal' skull fragments which were probably horse, but given the presence of the cattle teeth and the lack of diagnostic features, it was impossible to be sure.

The SFB fills and pit and hollow fills have been compared in terms of the taxa and anatomical elements present (Figs 61a and b). In order to have adequate sample sizes, horse, cattle and 'large mammal' were amalgamated. This assumes that the three groups were treated and disposed of similarly. When they were examined separately, the resulting patterns were similar in general, although the trends were more marked. Sheep/goat, pig and 'small mammal' fragments were similarly amalgamated for this comparison.

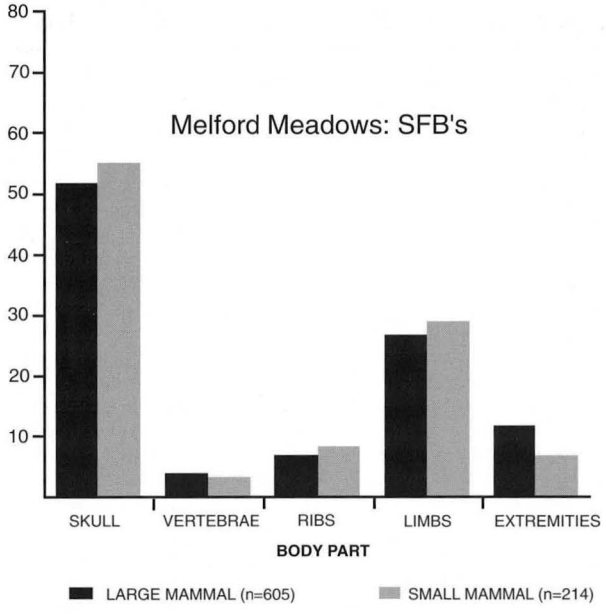
Element	*Horse*	*Cattle*	*Sheep/ Goat*	*Pig*	*Total*
Horn-core	0	1	1	0	2
Skull	6	12	0	2	20
Maxilla	18	10	0	7	35
Mandible	7	34	8	10	59
Loose Teeth	51	94	76	13	234
Atlas	0	2	0	0	2
Axis	0	1	0	0	1
Scapula	1	4	9	1	15
Humerus	0	8	9	3	20
Radius	4	14	6	1	25
Ulna	0	5	1	1	7
Pelvis	3	6	3	0	12
Femur	6	8	3	3	20
Tibia	2	13	9	2	26
Fibula	0	0	0	1	1
Astragalus	0	6	2	0	8
Calcaneus	1	5	0	1	7
Carpal	0	2	0	0	2
Tarsal	0	5	0	0	5
Metacarpal	0	22	5	1	28
Metatarsal	0	17	7	0	24
Metapodial	0	6	0	1	7
Phalanx I	2	7	1	0	10
Phalanx II	1	6	0	1	8
Phalanx III	0	3	0	0	3
Total	102	291	140	48	581
% Main Domestics	18	50	24	8	
M.N.I.	5	10	7	4	

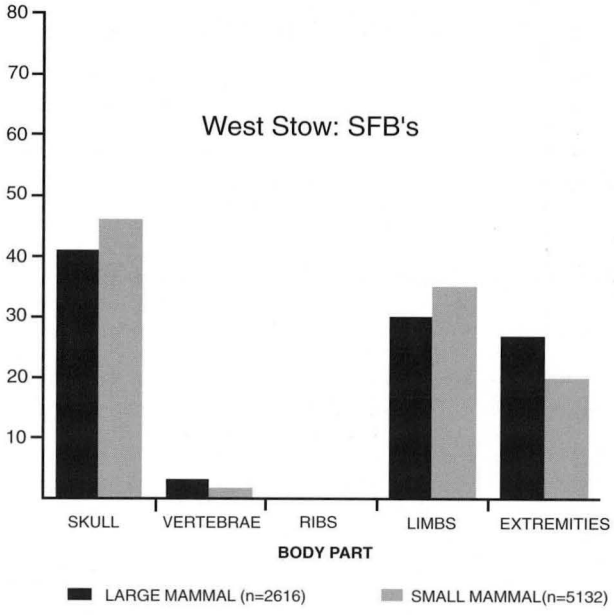
Table 19: animal bone; number of identified specimens from early Saxon contexts

The graphs show differences in the nature of the contents of SFBs and pits. Body part representation is similar for large and small mammals in the SFBs: high proportion of skull fragments, long-bone fragments frequent, extremities, ribs and vertebrae infrequent to rare. The slightly lower frequency of small mammal extremities, compared to large, was probably due to their smaller size and hence decreased chances of survival and recovery. In contrast, small mammal skull fragments appear to be under-represented in pit fills compared to large mammal skull fragments. However, the far smaller sample size for small mammals could give a misleading impression.

Figures 62a and b are graphs of similar calculations for the West Stow material. In this case large mammal is horse and cattle only, and small mammal includes only sheep/goat and pig. The two graphs are remarkably similar, although the marked discrepancy between small mammal limb bone fragments and extremities is greater in the pits than SFBs. It is possible that conditions for the preservation of small bones were better in the latter.

The West Stow graphs also strongly resemble the graph for the Melford Meadows SFBs in general shape. The differences in the proportions of skull fragments and extremities at the two sites is probably more related to the inclusion of 'large mammal' material in the Melford Meadows figures than differences in fragmentation, disposal or retrieval. When the two graphs of pit contents are compared, the body part distribution of small





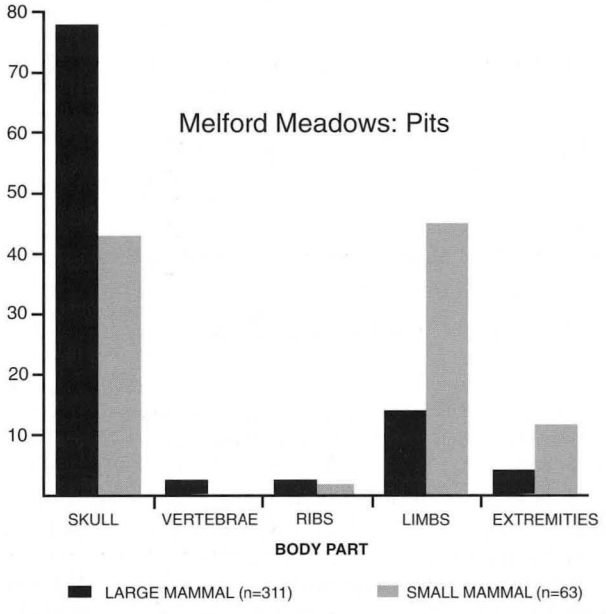


Fig. 61 Animal bones: comparison of (a) SFBs and (b) pits, Melford Meadows

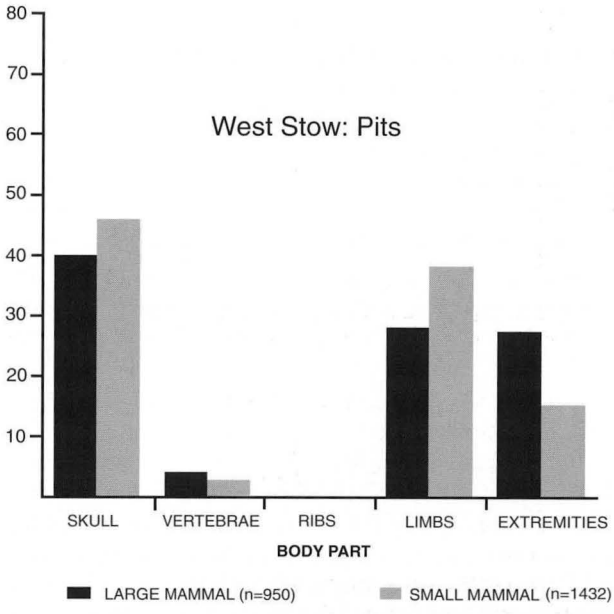
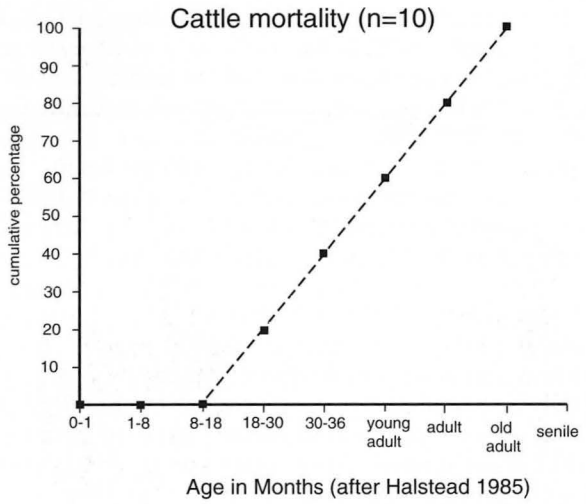


Fig. 62 Animal bones: comparison of (a) SFBs and (b) pits, West Stow

mammals can be seen to be similar in both. Hence it was not that skull fragments from small mammals were under-represented in pits at Melford Meadows, but that those from large mammals were over-represented. It appears that the main difference between the SFBs and pits at this site was the preferential disposal of the heads of cattle and, most noticeably, horses in pits.

Dog was represented by six fragments of bone. These were all recovered from the same context (SFB 2248, fill 2247), and although it is not possible to say that they definitely came from one animal, their relative sizes are compatible with an origin in the same individual. It is possible to estimate the length of the third metacarpal, and from this to calculate the approximate shoulder height of the animal (Clark 1994). The estimated height of the dog is approximately 0.51m, and the other measurements suggest an animal of the build of a greyhound, although it is significantly shorter. The mandibular carnassial of this animal is very worn, and abnormally overworn on the buccal side suggesting a malocclusion with the corresponding maxillary tooth. This could be due to damage to the upper tooth, or to an abnormality in conformation whereby the upper dentition overlapped the lower teeth.

Wild mammals formed only a very small proportion of the early Saxon bone. There were three fragments of red deer (*Cervus elaphus*): a fragment of antler, a right distal humerus and a right tibia shaft fragment. The six rabbit bones (*Oryctolagus cuniculus*) were undoubtedly intrusives deriving from the modern burrowing activity on the site.



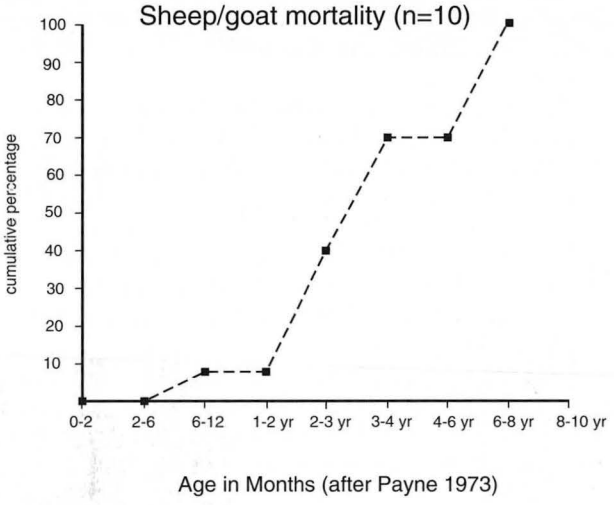


Fig. 63 Animal bones: (a) cattle mortality, (b) sheep/goat mortality

There were only eight bird bones present in the early Saxon assemblage. Two of these belonged to domestic fowl (*Gallus gallus*), one, a right tarsometatarsus, shows a spur scar and so almost certainly belonged to a male bird. Both the proximal and distal ends of this bone were broken, so it was not possible to obtain length measurements. However visual comparison suggested that, although more gracile, it was approximately the same length, or a little shorter than, the corresponding bone of a Rhode Island Red reference specimen. The other six bird bones were goose, probably domestic goose (*Anser anser*), although they could not definitely be separated from other species of *Anser* on metric criteria (measurements after Bacher 1967). Finds of domestic goose are typical of early Saxon settlements.

Ageing and sexing

There is more ageing evidence for the early Saxon assemblage than for the Romano-British assemblage, but still not extensive enough or suitable for a detailed interpretation of husbandry practices as reflected in the ages at death of animals. The major evidence was for cattle; Figure 63a is a graph of the dental data. Juveniles, adults and old adults were present, but no mandibles or teeth from animals younger than eighteen months. In contrast to the dental data, the fusion evidence (Table 20a) has a few unfused bones from animals less than eighteen months old, as well as from older juveniles. However, there was still no evidence for the presence of very young animals. This may be a true representation of the situation at the site. Remains of calves are interpreted as evidence for intensive milk production, so this may suggest that intensive milk production was not an important component of the economy. However, the bias of the small sample size, and, considering the friable nature of much of the bone, differential survival cannot be discounted. Four sexable pelves all derive from female animals.

Age (Months)	*Unfused*	*Fused*	*Indet.*	*Total*
7–10	0	8	2	10
12–18	3	19	13	35
24–36	7	10	35	52
36–42	6	7	48	61
Total	16	44	98	158

Table 20a: cattle fusion data, early Saxon

Age (Months)	*Unfused*	*Fused*	*Indet.*	*Total*
6–10	1	9	17	27
13–16	0	1	0	1
18–28	2	4	15	21
30–42	0	0	31	31
Total	3	14	63	80

Table 20b: sheep/goat fusion data, early Saxon

Age (Months)	*Unfused*	*Fused*	*Indet.*	*Total*
12	2	4	0	6
24–30	4	0	0	4
36–42	3	0	12	15
Total	10	3	12	25

Table 20c: pig fusion data, early Saxon

Age (Months)	*Unfused*	*Fused*	*Indet.*	*Total*
9–12	0	2	0	2
13–24	0	5	7	12
36–42	0	4	15	19
Total	0	11	22	33

Table 20d: horse fusion data, early Saxon

Figure 63b is a graph of the dental data for sheep/goat. There is evidence (one mandible) for slaughter at a younger age for caprines than for cattle, with most deaths occurring between two and four years of age, and a large proportion surviving up to eight years. The fusion evidence is poor, but there is one unfused bone from an animal less than ten months old, which corroborates the dental data. There was a single sexable pelvis which came from a ram.

The stages and estimated ages of the pigs, based on mandibles and teeth, follow Maltby (1979). The evidence indicates slaughter of animals in their first and second years, with none killed in the first six months. Some animals survived into the third year. Sexing was based on the canines (Schmid 1972), three were male and three female.

The ages of the horse remains found in pit 2946 have already been discussed above. In addition, a right maxillary tooth row found in a post-hole in SFB 2222 gave an age range of ten to thirteen years based on crown heights, and another, left, upper tooth row from a fill of the same SFB gave an age of ten to eleven years from the P^2. Several left skull fragments came from the same fill, and possibly they and the right maxilla came from the same individual. No unfused, juvenile bones were present, but two juvenile teeth (P_2/P_3 and P_4) occurred in SFB 2269. The teeth showed some wear, but the P_4 showed no wear on its distal margin, indicating that the M_1 had not yet erupted. According to Sisson and Grossman (Getty 1975), this tooth erupts between nine and twelve months of age, so these teeth belonged to a foal below that age.

Butchery

Table 21 shows the distribution across the species of butchery marks, divided into chop and knife cut marks. Butchery evidence was uncommon and mostly occurred on cattle bones and bones identified only to 'large mammal' (which were probably cattle). Chopmarks and knife cuts were roughly equal in occurrence. The one horse bone which was marked was a calcaneus with a knife cut in the area of the distal astragalus facet, probably representing disarticulation of the metatarsal from the rest of the leg.

Measurements

Measurements were taken after von den Driesch (1976). However, there were very few measurable bones from this assemblage due to the high degree of fragmentation. Table 22 summarises what metrical data have been recovered.

Species	*Romano-British*		*Early Saxon*		
	Chop	*Cut*	*Chop*	*Cut*	*Worked*
Horse	0	0	0	1	0
Cattle	4	0	9	6	0
Sheep/Goat	0	0	0	2	0
Pig	2	0	0	0	0
Small Mammal	0	0	1	0	0
Large Mammal	0	0	6	5	1
Unidentified	1	0	0	2	0
Total	7	0	16	16	1

Table 21: animal bone; butchery

Howard's (1963) Bd × 100/GL index when applied to a pair of complete cattle metacarpals, suggested they came from females (a value less than thirty is probably a cow), and probably from the same animal given their occurrence in the same context and congruence in measurements. Use of Fock's factor for calculating withers height, as recommended by von den Driesch and Boessneck (1974), gave a figure of 113.3cm. This is well within the range of the cattle from West Stow (Crabtree 1990). A comparison with middle Saxon cattle in the Animal Bone Metrical Archive Project (ABMAP) database (Centre for Human Ecology 1995), which includes mainly material from southern Britain, showed that these metacarpals were very slightly shorter than the mean greatest length, differed little from the mean proximal breadth, but were narrower distally than the mean. Other cattle metacarpals were not complete enough to allow measurements other than on the proximal end. The proximal breadth of these metapodia was at, or below the mean for the ABMAP material.

The overall picture for the cattle from this site is of a variable population, containing both large and small animals, which falls within the range both of the early Saxon West Stow, and the middle Saxon ABMAP material.

Fewer measurements were available for sheep/goat, some of these are also shown in Table 22. The breadth of trochlea of the single humerus is close to the mean for West Stow and ABMAP caprines. However, the height of the trochlea at the centre (HTC) for this bone is at the maximum of the ABMAP range. The distal tibia breadth was variable, but again within the ranges of early Saxon West Stow, and the ABMAP database for the middle Saxon period.

Measurable pig bones were also few. The distal breadth and trochlear breadth of the humerus fall within the range of the ABMAP data. Of the two measurable M_3s, one was much longer than the other, raising the possibility of the presence of wild boar. However, they are both within the length range for the domestic pigs at West Stow (Crabtree 1985), and of the length and breadth ranges of the ABMAP domestic pig teeth, although they are relatively narrow for their lengths.

Pathology

There was a small amount of pathological material. A bovine left centroquartal with associated tarsal 2+3 (context 2217) showed pitting and slight proliferation of bone at their anterior congruence, indicating infection, possibly following minor soft tissue injury. A left bovine metacarpal (context 2223) exhibited a cleft *c.*10mm in length on the medial articular surface, extending across the site of the fossa. This was probably a congenital subchondral defect. The most impressive example of pathology was a left distal horse radius (context 2280) which had extensive proliferation of disorganised bone posteriorly, and probably anteriorly also although here the bone is much abraded. This lesion suggests serious infection; the bone may actually have sustained a fracture, but the condition of the fragment is too poor for conclusions to be drawn.

Discussion

The small quantity of bone from Romano-British contexts makes detailed consideration of possible continuity with the early Saxon period impossible, and comparison with

			ABMAP	*West Stow*			*Melford Meadows*
				Phase 1	*Phase 2*	*Phase 3*	
Cattle	Radius						
	Bp	Mean	72.84	74.00	74.10	–	70.60
		Min.	60.90	65.20	62.80	–	
		Max.	94.10	88.40	86.00	–	
	BFp	Mean	66.66	68.40	67.70	–	64.80
		Min.	50.20	59.80	57.90	–	
		Max.	83.00	80.30	77.70	–	
	Tibia						
	Bd	Mean	57.20	56.00	56.00	57.30	67.70
		Min.	48.30	50.80	50.50	52.00	
		Max.	68.40	67.40	65.50	68.50	
	Metacarpal						
	GL	Mean	190.10	183.00	187.00	184.30	188.80
		Min.	163.10	170.80	176.90	–	188.80
		Max.	219.00	194.70	198.20	–	188.80
	Bp	Mean	54.10	53.70	52.60	51.30	51.4 (N=6)
		Min.	41.30	46.40	46.30	51.20	46.00
		Max.	66.80	63.60	61.20	51.30	54.60
	Bd	Mean	57.60	53.60	55.40	53.10	54.05 (N=2)
		Min.	41.70	48.80	49.20	–	53.90
		Max.	71.80	62.60	68.80	–	54.20
Sheep/Goat	Humerus						
	BT	Mean	27.60	28.30	27.70	27.80	27.20
		Min.	22.90	25.10	24.50	26.10	
		Max.	33.80	32.00	31.90	29.40	
	HTC	Mean	12.50	–	–	–	13.60
		Min.	11.50	–	–	–	
		Max.	13.50	–	–	–	
Pig	M3						
	L	Mean	30.58	32.90	31.20	–	32.15 (N=2)
		Min.	26.70	30.00	28.40	–	29.10
		Max.	35.00	37.00	33.20	–	35.20
	Br	Mean	16.84	–	–	–	14.85 (N=2)
		Min.	14.50	–	–	–	14.20
		Max.	20.40	–	–	–	15.50
	Humerus						
	Bd	Mean	38.13	38.60	40.00	39.70	36.60
		Min.	34.00	34.10	38.30	–	
		Max.	43.90	43.60	41.80	–	
	BT	Mean	30.84	–	–	–	32.10
		Min.	29.20	–	–	–	
		Max.	36.60	–	–	–	

Table 22: animal bone; selected measurements

contemporary sites difficult. However, a brief discussion is warranted since animal bone from sites of this period in Thetford, and in the Breckland region overall, is rare and generally poorly preserved because of acid, sandy soil conditions (*e.g.* O'Connor 1992).

The species representation at Melford Meadows, with cattle being the dominant species present, is similar to other East Anglian Romano-British assemblages, for example Scole (Jones, G. 1977) and Brancaster (Jones, G. 1985 and Jones, R. *et al.* 1985), although at the latter site, the later Romano-British bone from the 1977 excavations shows cattle being replaced by sheep/goat as the most numerous species and pig becoming much more important. A similar trend can be observed in the Romano-British bone from West Stow (Crabtree 1990), where sheep/goat and pig increase in importance compared to the Iron Age, and cattle decrease to second place slightly below sheep/goat. This trend continues into the Saxon period at West Stow.

Early Saxon bone assemblages are also rare in East Anglia, and generally poorly preserved. At Witton (Jones, R.T. 1983) only teeth survived in any numbers, and at the

Brandon Road site in Thetford (Jones, G. 1993) the recovered faunal assemblage was mainly late Saxon and early medieval, with only fifty-three identified fragments of early Saxon bone, which were mainly cattle. The bone from West Stow is the only sizeable contemporary assemblage from a settlement in East Anglia, or the Breckland in particular, and the bone assemblage from Melford Meadows, although relatively small, is larger than any other published early Saxon assemblage in southern England except West Stow and Portchester Castle (Grant 1976).

At West Stow, sheep/goat were the dominant species, and increasingly so through time (Crabtree 1990). This dominance is characteristic of several later Saxon sites in East Anglia, for example, middle Saxon North Elmham (Noddle 1980) and Sedgeford (Clutton-Brock 1976), and even late Saxon Thetford, where although cattle dominated the NISP counts at Brandon Road and Site 1092, sheep had a slightly greater MNI (Jones, G. 1984; Jones, G. 1993). However, at middle Saxon Ipswich (Crabtree 1994) and late Saxon Norwich (Cartledge 1983), both urban sites, cattle were the main domestic species (from NISPs), as at several Saxon sites in other parts of southern England: Portchester (Grant 1976), Ramsbury (Coy 1980) and Walton, Aylesbury (Noddle 1976).

The dominance of cattle at Melford Meadows is the major difference between that site and West Stow. Pig, although low in the fragment count at Melford Meadows, is little different to West Stow when minimum numbers are considered. The difference in the importance of sheep and cattle between the two sites is more notable in that they occur in similar environments in the Breckland: sandy high points on river terraces, not suited to arable farming, particularly during this period (Murphy 1983), and Crabtree (1990) has noted that sheep '... would have been ideally suited to the Breckland, since they could be grazed on the slope and upland areas which are less suitable for cattle and pigs.' It is possible that the inhabitants of Melford Meadows were not exploiting similar areas near their settlement.

For the early Saxon material, which is the major part of this bone group, there are so few comparable assemblages both geographically and temporally that to draw conclusions would be unwise. However, it is the rarity of the assemblage that makes it significant, and as further sites of this period are analysed the more the data from Thetford will be assimilated.

II. Plant remains

by Mark Robinson

Introduction and results

During the excavation of the Romano-British and early Saxon settlement at Melford Meadows, Brettenham, thirty samples, mostly of twelve litres, were taken for the analysis of charred plant remains. The samples were floated onto a 0.5mm mesh, dried and scanned to assess their potential for detailed analysis. Following the assessment of the flots and the elimination of some contexts of doubtful date, ten flots were fully analysed for charred plant remains excluding charcoal, four from Romano-British contexts and six from early Saxon contexts. The results are given in Table 23. These samples were from a variety of contexts including a waterhole, (not waterlogged), an oven, pits and SFBs. Charcoal was analysed from a more limited number of contexts, two of Romano-British date, four of early Saxon date but including all the ovens, hearths and sunken-floored buildings. The results are given in Table 24. Other charred plant remains were absent from samples 4 and 18.

Interpretation of the Romano-British flots

The two assemblages from waterhole 2318 (unphased Romano-British), samples 6 and 11, were mixed, with high concentrations of grain and chaff from at least three cereal species. Weed seeds were present but in lower concentrations. The chaff included both glume bases of spelt wheat and rachis segments of rye and barley. Allowing that chaff is more vulnerable than grain to complete combustion, the remains probably represented the mixed waste from the de-husking of spikelets of spelt wheat (which still retained their awns) and the threshing of ears of rye and barley. One of the barley grains had sprouted but otherwise those grains with intact embryos were ungerminated, so the activities were probably related to the extraction of grain for milling rather than part of a brewing process. It is possible that the material had been used as fuel rather than simply discarded into a fire.

The charred remains from the possible oven 2459 (fill 2458, sample 13: unphased Romano-British) and the much smaller assemblage from pit 2830 (fill 2832, sample 25: unphased Romano-British) comprised mostly grain, with about 10% weed seeds in sample 13. It might be thought that these assemblages were different in origin from the remains from the waterhole. However, the charred grain from samples 13 and 25 was in poor condition and little of it could be attributed to species. This was probably a result of both the conditions of combustion and the fact that the remains were from shallower deposits than the waterhole which would have experienced repeated wetting and drying and perhaps frost action. These factors would perhaps have caused the complete destruction of any chaff.

The cereals from the Romano-British waterhole are of particular interest. Grain and chaff of *Triticum spelta* (spelt wheat) were well represented as might be expected for a Romano-British settlement. The occurrence of *Hordeum vulgare* (six-row hulled barley) was also typical. However, there were also a few grains and a significant presence of chaff of *Secale cereale* (rye). A very slight presence of rye has been recorded from some other Romano-British sites in the Brecklands of Suffolk (Murphy 1984, 17). A significant find of Romano-British rye has also been made recently at Ellesmere Road, Shrewsbury, on the sandy soil over the gravels of the River Severn (Robinson 1995). Although rye probably did not become a major crop throughout much of England until the late Saxon or medieval periods, it is possible that rye was grown in the Roman period in those regions with large areas of infertile free-draining sandy soils. It would probably have been at a competitive advantage over wheat and barley on such soils without heavy levels of manuring.

The Romano-British weed seeds included a few species characteristic of free-draining light soils, such as *Scleranthus annuus* (annual knawel), but there was also a small wet-ground element, with seeds of *Ranunculus cf. flammula* (lesser spearwort) and *Carex* sp. (sedge). A shoot of *Calluna vulgaris* (heather) had presumably been derived from acid soil but the weed seeds did not suggest

			Number of Items									
			Roman				Early Saxon					
	Sample		6	11	13	25	5	16	17	21	24	26
	Context		2323	2323	2458	2832	2165	2280	2430	2536	2850	2847
	Context type		well	well	oven	pit	hearth	SFB	pit	SFB	pit	pit
	Sample volume (lt)		1.5	1.5	12	12	12	12	12	12	12	12
Cereal Grain												
Triticum spelta L.		spelt wheat	23	7	-	-	-	-	-	1	-	-
Triticum sp.	short free-threshing grain	rivet or bread wheat	-	-	-	-	-	-	-	1	1	-
Triticum sp.		wheat	82	16	3	-	-	-	-	1	-	1
Secale cereale L.		rye	4	4	-	-	-	-	-	-	-	-
Hordeum vulgare L.	hulled	six-row hulled barley	1	-	-	-	-	-	-	1	-	-
Hordeum sp.	hulled	hulled barley	5	2	-	-	2	-	1	1	-	-
Hordeum sp.		barley	10	3	1	1	-	1	2	2	-	-
Avena sp.		oats	3	-	-	-	-	-	-	-	-	-
cereal indet.			171	57	129	5	7	4	9	17	2	4
Total cereal grain			229	89	133	6	9	5	12	24	3	5
Cereal Chaff												
Triticum spelta L.	glume bases	spelt wheat	52	64	-	-	-	-	-	1	-	-
T. dicoccum Shubl. or *spelta* L.	glume bases	emmer or spelt wheat	84	69	1	-	1	-	-	-	-	-
T. dicoccum Shubl. or *spelta* L.	rachis	emmer or spelt wheat	5	24	-	-	-	-	-	-	-	-
Secale cereale L.	rachis	rye	22	40	-	-	-	-	-	-	-	-
Triticum or *Secale* sp.	awn fragments	wheat or rye (estimated totals)	140	180	-	-	-	-	-	-	-	-
Hordeum sp.	rachis	barley	13	23	-	-	-	-	-	-	-	-
Secale or *Hordeum* sp.	rachis	rye or barley	83	58	-	-	-	-	-	-	-	-
Avena sp.	awn fragments	oats	28	75	-	-	-	-	-	-	-	-
Total chaff excluding awn fragments			259	278	1	0	1	0	0	1	0	0
Weed Seeds												
Ranunculus cf. *flammula* L.		lesser spearwort	1	-	-	-	-	1	-	-	-	-
Silene cf. *vulgaris* (M.) Gk.		bladder campion	13	1	-	-	-	-	-	1	-	-
Scleranthus annuus L.		annual knawel	1	-	-	-	-	-	-	-	-	1
Chenopodium album L.		fat hen	7	5	2	-	-	-	-	-	-	2
Chenopodiaceae indet.			2	-	4	-	-	-	-	1	-	2
cf. *Medicago lupulina* L.		black medick	-	-	-	-	5	-	-	-	-	-
Polygonum aviculare agg.		knotgrass	-	1	-	-	9	-	-	-	-	1
P. persicaria L. or *lapathifolium* L.		persicaria	-	-	-	-	1	-	-	-	-	-
Fallopia convolvulus (L.) Löve		black bindweed	-	-	6	-	35	-	1	1	-	1
Rumex acetosella agg.		sheep's sorrel	1	-	-	-	-	-	-	1	-	4
Rumex sp. (not *acetosella*)		dock	-	-	-	-	2	1	-	-	-	1
cf. *Veronica* sp.		speedwell	-	-	-	-	11	-	-	-	-	-
Rhinanthus sp.		yellow rattle	-	-	-	-	1	-	-	-	-	-
Plantago cf. *lanceolata* L.		ribwort plantain	-	-	-	-	1	-	-	-	-	-
cf. *Arctium* sp.		burdock	-	-	-	-	1	-	-	-	-	-
cf. *Iris* sp.		flag	-	-	-	-	1	-	-	-	-	-
Eleocharis S. Palustres sp.		spike rush	-	1	-	-	1	1	-	-	-	-
Carex sp.		sedge	2	2	-	-	-	-	-	-	-	-
Bromus sp.		brome grass	-	1	-	-	-	-	-	-	-	-
Gramineae indet.		grass	2	-	-	-	187	-	-	-	-	-
weed seeds indet.			6	3	3	-	90	3	-	4	-	12
Total weed seeds			35	14	15	0	346	6	1	8	0	24
Other Plant Remains												
Papaver hybridum L.	capsule lid	poppy	1	-	-	-	-	-	-	-	-	-
Silene sp.	capsule teeth	campion	-	3	-	-	-	-	-	-	-	-
Calluna vulgaris(L.) Hull	shoot	heather	1	-	-	-	-	-	-	-	-	-

Table 23: charred plant remains (excluding charcoal)

		Roman			*Early Saxon*		
Sample		13	18	4	5	16	21
Context		2458	2515	2224	2165	2280	2536
Context type		oven	pit	oven	hearth	SFB	SFB
Sample volume (lt)		10	12	12	12	12	12
Pomoideae indet.	hawthorn *etc.*	+	-	-	-	+	-
Corylus avellana L.	hazel	-	+	-	-	+	+
Quercus sp.	oak	-	+	+	+	+	+++

\+ present
++ some
+++ abundant

Table 24: charcoal

a full acid ground flora. The many awn fragments of *Avena* sp. (oats) from the waterhole samples probably represented wild oats rather than another cereal crop. The charcoal from the Romano-British contexts was unexceptional.

Interpretation of the early Saxon flots

All the early Saxon assemblages listed in Table 23 contained relatively small quantities of rather badly preserved cereal grains and little or no chaff. Such a pattern is typical for the period. While this was perhaps in part due to a reduced level of agricultural activity on the site during the early Saxon period and poor preservational conditions for the remains, it could also have resulted from changed crop processing procedures. During the Romano-British period, parching was needed to de-husk the hulled spelt wheat that was grown. Threshing waste would have been present in close proximity to the fire. In the Saxon period, with the rise in importance of free-threshing bread-type wheat, it is possible that cereals only came in contact with heat at the stages of cooking and perhaps the drying of grain prior to milling. Charring of cereal remains would only be due to accidents with cleaned grain.

Seeds of a similar range of arable weeds to those from the Romano-British samples, such as *Scleranthus annuus* (annual knawel) and *Silene cf. vulgaris* (bladder campion) were found in some of the early Saxon flots. Sample 5, from an area of burning 2166 (fill 2165), differed from the others in that it had a much higher concentration of 'weed' seeds. Some were from potential arable weeds such as *Fallopia convolvulus* (black bindweed) and *Polygonum aviculare* (knotgrass). Many of the unidentified weed seeds were possibly from the Polygonaceae. The majority of the weed seeds, however, were small grass seeds. There were also seeds of grassland plants such as *Rhinanthus* sp. (yellow rattle) and *Plantago cf. lanceolata* (ribwort plantain). It seems more likely that these weed seeds resulted from the burning of grassy herbaceous vegetation rather than crop cleaning waste.

Most of the early Saxon cereal grains identified were *Hordeum* sp. (barley) and one could be attributed to *Hordeum vulgare* (six-row hulled barley). *Triticum* sp. (wheat) was also present. The general trend over most of England except the south-west was for the rapid replacement of spelt wheat with free-threshing wheat at the start of the Saxon period. Two grains from the site were of free-threshing character (bread or rivet wheat) but one grain was of *Triticum spelta* (spelt wheat). Two *T. spelta* — type glume bases were found. It is uncertain whether these remains represented the continuation of spelt cultivation into the early Saxon period or whether they were residual from Romano-British activity on the site. There is possible evidence that spelt remained in use in the region at least until the 5th century (Murphy 1984, 17).

The charcoal from the early Saxon samples was mostly *Quercus* sp. (oak) but Pomoideae indet. (hawthorn, apple *etc.*) and *Corylus avellana* (hazel) were also used as fuel.

Chapter 7. General Discussion

I. Romano-British settlement

Dating

The limited extent of the excavation and the fact that the area containing the main concentration of evidence for the Romano-British settlement was not investigated, clearly prevents any ambitious interpretation of the site, but the results of fieldwork do merit integration within the wider picture which is beginning to take shape on both regional and more local levels.

The nature and extent of the 1st-century activity at Melford Meadows is uncertain, but there is a limited amount of pottery which might suggest some occupation albeit slight. Three 1st-century brooches, one possibly pre-Roman, were recovered but not from stratified contexts. Given the possibility that some Romano-British metalwork may have been collected by the early Saxon settlers little weight can be attached to these with regard to the date of the site's origin. However it should be noted that none of the copper alloy finds of Romano-British date are from Saxon features (Section II 'Early Saxon settlement'). Phase 1 features 4700 and 5000 may indicate the presence of circular structures of pre-Roman or 'native' form dating to the 1st century or slightly later (Fig. 7) and the earliest sub-rectangular enclosures may be associated with these structures. Elsewhere in Thetford there is slight evidence for 1st-century occupation. At Brandon Road (Dallas 1993, 7) circles of post-holes may have represented the sites of up to ten circular buildings of varying dimensions. Little more can be said about this phase of activity which was succeeded by early Saxon sunken-featured buildings. At Redcastle Furze the Romano-British remains comprised a number of pits and ditches and two circular post-built structures. The pattern of shallow ditches is similar to the early enclosures from Melford Meadows (Andrews 1995, fig. 5). The dating evidence was quite sparse, but it has been suggested that occupation of the Redcastle Furze/Brandon Road area was limited to the middle part of the 1st century and that abandonment might be connected with instability following the suppression of the Boudiccan revolt (Andrews 1995, 10). There is, however, nothing to indicate that the Melford Meadows structures were this early and a post-rebellion establishment of occupation seems more likely. There was no evidence of Iron Age occupation, although continuity from Iron Age to Romano-British settlements, as revealed at Spong Hill (Rickett 1995, 147–9), is thought to be the usual pattern in Norfolk (Williamson 1993, 43).

Form and extent

The evaluation showed that the Romano-British occupation was concentrated at the northern end of the development site (Chapter 1; Fig. 3a). The area with the greatest concentration of Romano-British material, which centred on evaluation Trenches 3 and 18, was not further investigated. In the excavation the densest occupation and structural evidence was found at the northern edge of the site and clearly extended beyond the northern limits of the excavation. It is also worth noting that the bulk of the unstratified Romano-British pottery from the excavation was found on the northern part of the site in the area with the most features. The excavation thus confirmed the evaluation results which suggested that the main focus of occupation lay at the north edge of the excavation and beyond the unexcavated area to the north.

The settlement does not appear to have been enclosed, although in the north-west extension to the site a long ditch 3200 (though unphased) may have formed a boundary on the west, or river, side of the settlement at a relatively early date (Figs 21 and 22). Whether or not this was the case, the occupation was certainly less intensive on the eastern and western sides of the excavated site, and does not seem to have extended onto the floodplain itself. It is likely that the east-west extent of the settlement was more or less defined within the area examined, and in any one phase measured less than 100m (and more probably 70 to 80m) across. The extent to which the settlement extended to the north is not known.

The ditches and groups of post-holes in the northern area represented enclosures and agricultural outbuildings rather than dwellings. No evidence for a domestic residence was revealed, although these are often difficult to recognise. Ceramic building material was sparse from all phases of fieldwork, but three unstratified fragments of box flue tile, four *tegulae* and three fragments of flat tile suggest the presence of a more substantial Romanised building, possibly a dwelling, in the vicinity, although there was insufficient material to be sure of this. It should be noted that part of a possible flint building foundation was found in evaluation trench 18. On the whole, the pottery and other finds suggest a site of relatively low status. However, as has been stressed, the main focus of settlement was almost certainly to the north of the excavation, and any characterisation of the status and nature of the site has to be tempered with caution.

In the rest of the excavation, there was intermittent evidence for enclosures and much of it was difficult to interpret. It included evidence for enclosures and for deposits (2004 and 2390) of possible midden material, together with a waterhole (2318) (Figs 22–4). At the south edge of the site there was more coherent evidence for enclosures and in the latest phase an enclosure defining a small cemetery with lines of graves aligned east-to-west. There were also indications of occupation in this area but its nature remains unclear, partly due to the relatively dense concentration of early Saxon features.

The pattern of development at Melford Meadows suggests changes within a relatively stable framework throughout the Roman period. The most intense occupation took place in the late 3rd and 4th centuries, and the site was abandoned in the 4th century, although the precise date cannot be reliably estimated. Coins of Valentian II, Honorius and Arcadius identified from earlier collections in this field, suggest that occupation may have continued into the last decade of the 4th century. The coin evidence generally is typical of rural Romano-British sites with late 3rd- and 4th-century issues dominant but with a marked fall-off after *c.*AD 370 (Davies and Gregory 1991, figs 6 and 18–19). This

widespread phenomenon, taken together with the large numbers of late Roman hoards, presumably relates to general economic instability, but it is unclear what effect this would have had on the functioning of minor settlements and the precise reasons for the abandonment of occupation at Melford Meadows are therefore unclear.

Unstratified pottery

From the site as a whole there were 2130 sherds of Romano-British pottery weighing 50,186g, giving an average sherd weight of 23.56g (Chapter 5, VIII 'Romano-British Pottery', esp. Table 5). The unstratified pottery (context 2001) made up 23.9% of the total (775 sherds), and had an average sherd weight of 15.46g, the smaller size reflecting, no doubt, the effects of post-depositional processes including modern ploughing. The derivation of the unstratified material is not entirely clear.

Often, where pottery scatters have been plotted in relation to subsurface features, the distributions do not correspond closely and it has been suggested that the scatters are derived from ploughed out middens adjacent to the habitation sites (*e.g.* at Shiptonthorpe, Taylor 1995, 48; fig. 5.9; Spong Hill, Gurney 1995a, 62–5). This seemed a likely source of the unstratified pottery from Melford Meadows, particularly as it is a site generally lacking features that could be interpreted as rubbish pits, and where middening might therefore be expected. Layer 2390 (Fig. 23) is interpreted as the largely unploughed remains of a midden surviving beneath a plough-disturbed soil which comprised similar midden material (2004). However, since most of the unstratified material came from the north of the site where the main enclosures and most of the features were concentrated, it is more likely that much of the pottery was derived from the later truncation of features. It is instructive to note that sherd sizes from the enclosure ditches were also small (average weight 14.51g, 406 sherds), indicating mixing and redeposition. The same conclusion was adduced from the composition of the pottery assemblage (Chapter 5, VIII 'Romano-British pottery'). It is not easy to distinguish the pottery found in the ditches from that found in the ploughsoil in terms of their characteristics, and it seems probable that the pottery from both sources ultimately derived in large part from the redeposition of midden deposits like 2004 and 2390. The contrast in sherd size with the material from the relatively undisturbed midden deposits, 2004 and 2390, is illuminating. The average weight of sherds from these deposits is 45.56g.

The date range of the unstratified material from 2001 reflects the date range of the finds assemblage as a whole. There is early pottery, including over half the samian, and there is no evidence either from these deposits, or most of the later features, that there was a general episode of dumping and site clearance at the end of the Romano-British occupation, as has been suggested at Spong Hill (Rickett 1995, 40–1). A possible exception is the waterhole which appears to have been rapidly filled towards the end of the 4th century so that, by the time the pit for the early Saxon SFB 2172 was dug, the ground had been made level.

Cemetery

The cemetery in the south-west corner of the excavation was apparently located at the margins of the settlement and can be dated in broad terms to the 4th century. It was presumably used by the inhabitants of the settlement. The limited number of graves (twenty-two) suggests that it was used for only a short time. It is possible that it was used for a longer period by a restricted social group; the abnormally high number of decapitations among the burials may imply that the cemetery was used selectively. Grave-goods were sparse and not closely datable and it was not possible to establish any sequence of development. It may be reasonable to assume that the cemetery spread westwards down the slope, in which case it is possible that the only cremation — in pit 2579 — was the earliest burial.

Economic basis

The economic evidence relating to the Romano-British occupation is unexceptional in its range and quality and is best interpreted as evidence for a small, unspecialised, mixed farming settlement. The charred plant remains (Chapter 6, II 'Plant Remains') were not well preserved, except within the waterhole which, although not waterlogged, provided a relatively damp and stable environment resulting in the preservation of both grain and chaff, as well as weed seeds. It is suggested that the assemblage came largely from the threshing of grain. Spelt wheat, barley and rye were the predominant cereal crops. Spelt wheat was the major species, but of particular interest was the slight, but significant, presence of rye (Table 23), a cereal which is particularly suited to the dry Breckland soils. It is generally sparsely represented at Roman sites in the Breckland (Murphy 1985, 104) although indicated in this period by pollen evidence from Hockham Mere (Sims 1978), and its presence at Melford Meadows is significant but not surprising.

The presence of quernstones supports the suggestion of an arable basis to the settlement. The recovery of fragments of probable millstone may indicate cereal processing on a larger scale in the vicinity, but since no structural evidence was found it is uncertain how milling would have been powered, whether, for instance, using water-power or animal traction in a 'donkey mill'. Mackreth (1996, 225) has suggested that a mill would only have been needed for flour production beyond normal domestic needs. There may well have been grain storage facilities, although Structures 1, 2 and 4 were more likely to have been used for storing unprocessed crops or hay rather than grain. Structure 2 might be interpreted as a four-post raised store for grain.

Stock was presumably kept although the animal bone assemblage was too meagre for husbandry practices to be inferred and it is of course possible that this reflects only meat consumption and that animals were actually raised elsewhere. Cattle were the dominant species, followed by sheep/goat with pig and horse also present. As well as providing meat and, in the case of cattle, milk, it is possible that animals were important in maintaining the fertility of the fields. Murphy (1985, 108) considers that manuring would have been of critical importance on Breckland soils. The dominance of cattle bones over those of sheep/goat is perhaps surprising in the Breckland, although the assemblage is similar to others in East Anglia, such as Scole (Jones, G. 1977) and Brancaster (Jones, G. 1985; Jones, R. *et al.* 1985). It is possible that cattle, as well as horses, were used for traction in the fields. It is unclear whether animals would have used the waterhole and, on the whole, it seems unsuited to large numbers of them. In

any case, water as well as grazing near the River Thet would have been readily available. Bones of red deer hint that hunting had its place in the economy of the settlement.

There was little indication of craft or industrial activities. A small quantity of iron smithing slag from Romano-British contexts suggests some iron-working in the vicinity, but no more than a small domestic practice typical of this type of site. The range and quantity of iron objects was unremarkable and just what would be expected from a rural Romano-British site. In contrast to the evidence from the early Saxon occupation, there was an absence of loomweights or other signs of weaving.

Imported pottery became particularly common from the later 3rd century onward (Chapter 5, VIII), with Lower Nene Valley colour-coated wares most common, and smaller quantities of fine wares from the Oxford and Much Hadham kilns also present. The majority of coarse wares appear to have been quite local (particularly from the Wattisfield industry), although a significant quantity of Horningsea jars was present, probably mostly dating to the 4th century. The range of pottery sources shows that there were extensive trade contacts eastward in the later Roman period. It is unclear whether this represents a re-orientation of trade routes from the earlier Roman period since there were relatively few finds of this date. Quernstones of Millstone Grit and Niedermendig lava indicate even more distant contacts. It is unclear how or by what routes these would have reached the site, but they indicate the use of extensive trade networks which made imported products available to quite minor rural settlements at this time.

The Romano-British settlement at Melford Meadows was probably engaged in mixed farming on a modest scale. The extent to which settlements at this time were socially and economically interdependent, and the nature of their interrelationships, is a complex question and beyond the scope of this report, but it seems reasonable to assume that it was linked with surrounding settlements and a market at the small town at Brettenham. From the surviving archaeological evidence, it is difficult to determine the significant aspects of the settlement's economy, and it is unclear whether the settlement had a specialised function within the wider regional economy.

II. Early Saxon settlement

Form, extent and location

The early Saxon settlement is represented by a scatter of eleven SFBs, two irregular hollows, a number of pits, charcoal-rich spreads suggesting bonfire areas, three small oval ovens, and two curving gullies of unknown significance. Although a few possible post-holes were found, no post-built structures were identified. The features were divided between two areas, suggesting the possibility that there were two foci of occupation. The majority of early Saxon features, including most of the SFBs, were found in the south-west corner of the site within an area defined by the Phase 4 Romano-British ditches (Fig. 36). The evaluation suggested that early Saxon occupation had probably extended for at least 200m further south, although nothing is known of its nature or precise extent. The early Saxon features to the north were fewer and more scattered. There is no suggestion that the limits of the settlement to the north or east were defined (Fig. 35). On the western side the floodplain of the River Thet can reasonably be assumed to mark the limit of settlement.

The SFBs appear to have been sited in the areas of late Roman occupation, both in the south, particularly on the site of the cemetery, and in the north, while ignoring the largely blank space in between. There are hints that the Romano-British boundary ditches had some residual influence upon the pattern of the early Anglo-Saxon settlement, and it seems that banks or hedges might still have been visible. Such seems to have been the situation at Mucking in its earliest phase (Hamerow 1993, 86). It is possible that some of the SFBs (2033, 2222, 2401 and 2821) were deliberately sited in relation to still extant boundaries. The presence of small quantities of Saxon pottery in some of the 4th-century ditch fills hints that the ditches might not have been completely filled up. This suggestion has to be tempered with caution because there was undoubtedly intrusive Saxon pottery in a number of Romano-British features. Individual cases have been discussed in Chapter 2, but here it can be noted that thirty-six sherds (286g) of Saxon pottery are thought to be intrusive, representing 5.2% (3.2%) of the assemblage. This may include genuinely misdated features, but animal disturbance probably caused a degree of redistribution, as can be gauged from the fact that the intrusive material includes twelve Saxon sherds from Romano-British graves. This is approximately the same amount as the redeposited Roman pottery from these features. The indications are that the Romano-British settlement had been abandoned by the time of the first Anglo-Saxon occupation here.

Settlement structure

There is no obvious structure to the scatter of Anglo-Saxon features. Some of the SFBs are approximately aligned, but it is unclear whether they were in use at the same time, and there is generally no suggestion that their mutual relationships were significant. The possible exception is the relationship between SFBs 2401 and 2248. The replacement of SFB 2401 by another SFB in an almost identical position and of very similar dimensions may indicate that the location was considered important, and hints at a settlement design which is not otherwise apparent.

It is sometimes suggested that SFBs served as ancillary buildings to post-built structures and had specific functions, being used either for storage or for practising crafts such as weaving. At West Stow SFBs appeared to be loosely grouped around post-built halls (West 1985, 168), but at Mucking the picture is less clear (Hamerow 1993, 86–9). It is not clear what significance attaches to the fact that post-built structures were apparently absent from Melford Meadows. It may be explicable in terms of subsequent erosion. It was notable how, towards the higher central part of the site, the Romano-British enclosure ditches became shallower and more fragmentary and it is possible that post-holes in this area would have been lost. Mention has been made of the difficulties caused by animal disturbances, but it is considered unlikely that these would have completely obscured alignments of post-holes, particularly as several, without pattern, were found in the southern area. Both Redcastle Furze and Brandon Road, Thetford, lacked post-built structures in the early Saxon phases (Andrews 1995, 24; Dallas 1993, 13–14). At West Heslerton, Yorkshire, large scale excavations are reported to have found a zone of the early Anglo-Saxon settlement with over fifty SFBs but no post-built structures, and it is suggested that this represents an area

specifically devoted to craft and industry (Powlesland 1990, 37). The absence of post-built structures at Thetford may be genuine, or it may simply reflect the limited scale of the excavation.

There is little information to indicate the functions of the individual SFBs at Melford Meadows. The purpose of the slot found in SFB 2595 is unclear, but the idea that it may have held a warp-weighted loom is probably untenable, since such a setting would have been unnecessary. The finds from within the backfilled SFBs include loomweights, spindle-whorls and ironworking residues, but while these indicate a range of crafts, the materials were scattered among the SFBs without suggesting specific foci of activity. Part of the problem may be that most of the finds can be considered secondary refuse. Nevertheless, it seems reasonable to assume that the material represents dumps from the immediate vicinity.

Finds assemblages

The assemblage of 680 early Saxon sherds had an average weight of 12.90g. This smaller sherd size *vis à vis* the Romano-British pottery (23.56g) is clearly due to its greater fragility. Nearly half this pottery (313 sherds) came from SFBs. Although the size of sherds was variable, both within and between the SFBs, the average sherd weight (16.22g) was relatively high, suggesting that, unlike the material from the Roman ditches (average sherd weight 14.51g), the majority of the Saxon pottery was deposited soon after use.

A quantification of the pottery in the SFBs is presented in the descriptions of individual structures (Chapter 4, II 'Sunken-featured buildings') and shown graphically in Figures 59 and 60. There were 126 Roman sherds from SFBs. Their distribution between structures varies greatly, from a single sherd in SFB 2529 (1.85% of the pottery from the feature) to twenty-nine sherds in SFB 2269 (100% of pottery). In most cases there was more early Saxon than Romano-British pottery, but the example of SFB 2269 makes it clear that the exclusive presence of Roman pottery was no guide as to the feature's actual date. However, it is also clear that the size of Romano-British sherds in the SFBs (with the curious exception of SFB 2595 which contained just one large sherd) is generally small (average weight 10.91g). In the case of SFB 2269 the average weight was 4.41g. This suggests that the size of sherds is a better indicator of residuality than the number of sherds, a point made in the Roman pottery report (Chapter 5, Section VIII). This rule of thumb has been applied to all features of equivocal date, although there are obviously questions about its applicability where the quantity of pottery is small.

The distribution of Roman pottery in SFBs also makes clear that there is no hint of re-use by the Saxon inhabitants. The sherd sizes are not distinguishable from random residual material. Nor is there any suggestion of a preference for particular forms or parts of the vessel, in contrast to the situation found at West Stow where an unusually large proportion of rims and bases were recovered from SFBs.

The number and range of metal and other non-ceramic finds from the excavation was small, and remarkable only because of their relatively small numbers and limited range of types. The figures presented for West Stow (West 1985, table 60) show, in crude terms, an average of about eight non-ceramic small finds per SFB, and include relatively large numbers of finds such as bone combs, spindle-whorls and beads, which are barely represented at Melford Meadows. The average number of non-ceramic small finds from the nine fully-excavated SFBs at Melford Meadows was about three. This figure excludes slag as well as loomweights and pottery. The reason for the difference between the two sites is unclear, but may reflect the relative status of the settlements, or in the case of Melford Meadows, the status of the excavated part. At Redcastle Furze, Thetford, although there was considerable variation between the SFBs, they were generally lacking in finds (Andrews 1995, 17).

The twenty-two copper alloy objects, excluding coins, from Melford Meadows can be divided typologically, although many were too fragmentary to be identified with confidence. Twelve objects are typologically Romano-British, only two objects are certainly early Saxon, and one, the paper clip rivet from SFB 2033 (Fig. 45.3) is a medieval and post-medieval type. The remaining objects are fragmentary and not readily identifiable. It may be noted that ten copper alloy objects were derived from early Saxon features — nine from SFBs and one from an early Saxon pit. The objects from Saxon features include two early Saxon objects, a wrist clasp and an ear scoop, one medieval or post-medieval object, the paper clip rivet, and seven objects of uncertain date. The latter include a small fragment which may be part of a Roman-British bracelet, found in an early Saxon pit. All but four of the twelve Romano-British objects were unstratified. The stratified finds were from graves.

The evidence of the copper alloy objects provides little support for the idea that the early Saxons deliberately selected and retained Romano-British objects. The iron objects and nails tend to be evenly distributed between early Saxon and Romano-British features. It should be noted that the only two fragments of Roman vessel glass came from SFBs but the sample of finds is too small support the contrary argument. A single coin (No. 87 p.72 above) has a perforation which is characteristic of Saxon re-use, but no coins came from early Saxon contexts. This contrasts with the situation at West Stow, where about one-third of nearly 300 Roman coins were recovered from SFBs (West 1985, table 60). It therefore seems that there was very little deliberate collection of Roman artefacts by the early Saxons at Melford Meadows.

Dating

The pottery can generally be dated to the 5th and 6th centuries, with 6th/7th-century wares also present. It is unclear how early in the 5th century the settlement began, partly because of the difficulty of dating early Saxon pottery closely, and partly because of a lack of diagnostic types. However, the lack of early Anglo-Saxon pottery types such as faceted carinated bowls and grooved wares, which were present at West Stow and Mucking, suggests that there was little activity at the site before the second half of the 5th century. SFBs 2172 and 2222 yielded pottery of this general date and the concentration of such wares in the southern part of the site suggests that this is the earlier part of settlement and that there may have been a northwards shift over time. However, since many of the features yielded only very small groups of undiagnostic pottery, it can be no more than a tentative suggestion. The absence of Ipswich ware, a reliable middle Saxon

chronological marker on East Anglian sites, indicates that occupation did not extend beyond the end of the 7th century. In general the dating evidence suggests that the occupation of the site lasted from the second half of the 5th century until sometime before the early 8th century. Given the relative sparseness of early Anglo-Saxon features, particularly in the northern area, a short occupation within this general date range would seem appropriate and it is possible that the occupation did not extend much beyond the end of the 6th century.

A 5th-century occupation appears to be earlier than those at Brandon Road and Redcastle Furze, Thetford, which are suggested as starting in the 6th century (Andrews 1995, 24). These sites at Thetford may belong to a settlement spreading for 200m or more along the south bank of the Little Ouse, possibly centred on a ford near Red Castle (Andrews 1995, 22–4). The extent of the Melford Meadows settlement is difficult to estimate. The evidence from evaluation and fieldwalking suggested a focus of occupation in the central part of the field, fading out towards the north. The excavation has demonstrated that the settlement was more extensive and that this interpretation is no longer tenable. It is possible that the settlement was spread out along a large part of the terrace here but only fortuitously located in one or two places by excavation. There is no evidence that the settlement lasted beyond the end of the 7th century. The scattered evidence for middle Saxon occupation in Thetford has been discussed recently by Andrews in relation to the Redcastle Furze site. Here settlement of the 8th to 9th century possibly relates to an expansion of settlement along the south bank of the Little Ouse, extending for some 850m. However, there does not seem to have been continuity from the earlier layout and a 7th-century hiatus is suggested (Andrews 1995, 26). The Melford Meadows and Thetford evidence conforms to a pattern typical of Norfolk and other areas of the country where 'the decisive break in the pattern of settlement seems to have occurred in the 7th century, rather than at the end of the Roman period' (Williamson 1993, 90–1). However, based on the settlement evidence from Mucking, Hamerow has warned against the danger of confusing a continual process of shifting settlement with a single event, particularly where excavations are on a small scale, since any partial examination of a shifting settlement will produce finds mostly of one period of occupation (Hamerow 1991, 12). With particular reference to surveys in Norfolk, she also warns that the dating of sites may be misleading due to a reliance on Ipswich ware as a chronological marker for the middle Saxon period, without considering the longevity of the ware, its patterns of distribution, and the possible presence of earlier, much more friable pottery. Both these points have obvious relevance for Melford Meadows.

Economic basis

The economic evidence from the early Saxon occupation is of some interest both in comparison with the Romano-British evidence and in relation to other early Saxon sites. The economy of early Saxon settlement like its Romano-British predecessor was based upon mixed farming, although the evidence tends to suggest less emphasis on the arable component. The charred plant remains (Chapter 6, II 'Plant remains') were sparse and contrast with the Romano-British samples in the general paucity of cereal remains. This may indicate a reduction in the amount of arable production, or may reflect poor preservation. It can be noted (Table 23) that most of the Roman charred plant remains came from the particularly favourable environment of the waterhole (2318), whereas no such deposit was available for the early Saxon period. Alternatively the small amount of preserved cereal grain and the very limited quantities of chaff may be the consequence of changes in crop processing as a result of the introduction of free-threshing wheat. This is present for the first time at Melford Meadows in the early Saxon period, and is typical of early Saxon sites (Chapter 6, II 'Plant remains'). Rye was probably cultivated, as it was in the Roman period. Although there was no archaeological evidence for it at Melford Meadows, it was present at West Stow in the early Saxon period (Murphy 1985, 103–4). Its cultivation would have been appropriate at Melford Meadows for the reasons noted above (p.108). It is possible that the charred plant evidence from early Saxon features does not present a full picture.

Quern fragments are present in six early Anglo-Saxon features. The number of fragments shows a marked reduction in comparison with the Romano-British occupation. As far as can be judged these are of the same form as those found in Romano-British contexts, and all but one are of Millstone Grit. It is most likely that they were residual Romano-British pieces, but there is a slight possibility that the querns were contemporary imports to the early Saxon settlement. If this were the case, it would be very important for understanding early Saxon trading connections, but unfortunately the evidence is not conclusive. Milling will have taken place on site somewhere, but not necessarily within the excavated area.

The animal bone assemblage, while not especially large, is reasonably well preserved and regionally significant (Chapter 6, I 'Animal bones'). Animal bones are rather more plentiful in the early Saxon features than in Roman ones. Again, it is unclear whether differences in disposal patterns or factors affecting preservation may have played a part. Of the species represented, cattle (50%) were the most numerous followed by sheep/goat (24%). The dominance of cattle at Melford Meadows is perhaps surprising in that its environment is similar to that at West Stow where sheep predominated (Crabtree 1985; 1989), but the pattern is similar to both Spong Hill (Bond 1995, 142) and Redcastle Furze (Wilson 1995, 123). It should be noted that the bone assemblage from West Stow is much larger than that from Melford Meadows. It is suggested that sheep would been ideally suited to the Breckland and that the slope and upland areas in particular would have been less suited to cattle and pigs (Crabtree 1989, 106). It is clear both from West Stow and Melford Meadows that mixed animal husbandry was practised, with cattle a substantial component. Indeed, at West Stow cattle were the most important source of meat, representing 70% of the meat source (Crabtree 1989, 26; fig. 15), despite a lower representation in the bone assemblage. At Melford Meadows, as at West Stow, the evidence points to a broadly based subsistence strategy with both cattle and sheep used for milk and meat, and wool and hides undoubtedly also exploited.

Husbandry practices at Melford Meadows cannot be reliably inferred, but the evidence of the cattle bones suggests that both old and juvenile cattle were being slaughtered. The absence of very young animals may suggest that dairying was not practised, but there are

obvious preservation biases against the survival of bones of calves. Horses were surprisingly well represented but many of the bones came from a single deposit of cranial fragments in pit 2946 (Fig. 35). It is unclear whether horses would have been slaughtered for consumption or whether they died from other causes. They were all mature animals and may have been killed for consumption at the end of their working lives. There were signs of butchery on one horse bone. There is clearer evidence from West Stow (Crabtree 1989, 106) and Spong Hill (Bond 1995, 146) that horses were butchered for human consumption in the early Saxon period. The sheep/goat herds would presumably have been important both for wool and meat. Three fragments of red deer indicate that wild animal resources were exploited but were of minor significance. Antler was the preferred raw material for manufacturing combs, although one of the two comb fragments from the site may have been made from bone (Chapter 5, XII 'Worked bone').

The animal bone evidence suggests an increased emphasis on pastoralism, and is supported by pollen evidence from elsewhere. The pollen sequences from Hockham Mere and Seamere in the Breckland appear to show increased pastoralism at the expense of arable farming (Murphy 1984, 15), while at Micklesmere near Pakenham there is evidence that cereal farming decreased quite substantially in the post-Roman period while grassland persisted (Murphy 1994, 37). A similar picture emerges from the pollen sequence at Diss Mere in the south-east claylands, where open pasture dominated until the middle Saxon period when cereal pollen began to increase, and where late prehistoric land divisions appear to have survived into the medieval period, implying use throughout the Saxon period (Williamson 1993, 59). The evidence from Melford Meadows of a pastoral emphasis to the early Saxon occupation can therefore be fitted into this regional trend.

Meadowland on the valley floor would have been of prime importance for grazing cattle, but in view of the relatively limited extent of this resource in Thet valley, it seems likely that the early Saxon inhabitants did not confine themselves to exploiting their immediate environment, but possibly herded cattle quite widely along the river floodplains as well on the terraces and valley slopes. The area that the people of Melford Meadows exploited is not known, but it is probable that resources at some distance away were available to them. At West Stow it was suggested that the forested areas of the central clay belt were used for pannage for pigs, and it is clear that woodland animal resources were exploited at both Melford Meadows and West Stow, although in a minor way.

The first written evidence for East Anglia indicates that by AD 600 early Saxon society was complex and sophisticated with a royal dynasty and many kinds and conditions of people and with land organised around quite large territories (Penn 1993, 36). It may be reasonable to suppose that territorial aristocracies were operating earlier, and it seems likely that the settlement at Melford Meadows took place within this social context. While there is evidence that population densities were lower in the 5th and 6th centuries, it is possible that the pioneering self-sufficiency of the early Saxon settlement and agriculture has been overemphasised (*cf.* Crabtree 1989, 87; Murphy 1994, 24). On the basis of the evidence at Orton Hall Farm in Cambridgeshire, Mackreth (1996, 237) has argued for a degree of continuity in territorial organisation from Roman to Saxon. While there is some evidence that in Suffolk the early Saxon settlement pattern reflects the Romano-British pattern, the situation is much less clear in Norfolk. It has been suggested that generally major Romano-British settlements continued to function as 'central places' well into the 5th century, their status being marked by the presence of early Saxon cremation cemeteries which served as central burial grounds for valley-based tribal territories (Arnold 1988, 48; Williamson 1993, 67). Brettenham, 5km to the east of Melford Meadows, is a possible example of such a 'central place' which might fit this model (Williamson, 1993, 67) but its relationship to the both the Romano-British and early Saxon settlements at Melford Meadows is uncertain in the present state of knowledge. Pagan Saxon cemeteries have also been located closer to Melford Meadows, at St Mary's Church, Thetford, and Brunel Way, north of the river, and either of these — or an as yet unidentified site — might have served as a burial place for the inhabitants of Melford Meadows.

The presence of clay loomweights and spindle-whorls is typical of early Anglo-Saxon settlement sites and shows that spinning and weaving were practised as domestic crafts. Iron smithing residues are also common and suggest small-scale iron-working. However, the presence of probable smelting slag is noteworthy. Its distribution, which was exclusively in early Anglo-Saxon features (Table 3), indicates that it was not residual from the Romano-British occupation. Smelting slag is rare in early Anglo-Saxon contexts but there are regional examples (Bayley 1983). Smelting slag was not present at West Stow, but was found at Mucking where its occurrence was on a relatively small scale. Just as at Mucking, there is no evidence of *in situ* smelting at Melford Meadows, and in both cases it is unclear where the furnaces might have been located (Hamerow 1993, 17). The ovens at Melford Meadows showed no evidence of having been used for metalworking. At West Heslerton, metalworking furnaces 'of the beehive type' have been reported (Powlesland 1990, 39) although it seems they might have been used for secondary working. The evidence from Melford Meadows suggests that both smithing and smelting were carried out on a small scale to satisfy local needs, although it is possible that smelting slag was scavenged from a nearby Romano-British site. If early Saxon iron smelting is represented, Melford Meadows is unlikely to be unusual in this respect. It is probably more surprising that so little smelting evidence for this period has been discovered, given the known technical achievements of Saxon metalworkers, but this is clearly an area in which more research is required. It is possible that smelting residues have simply not been recognised. Salter (Chapter 5, IV 'Metalworking residues') notes the difficulty of distinguishing smithing from smelting residues upon casual visual inspection. The ores were probably extracted fairly locally, although the source is unknown, but it is possible that raw materials were acquired from further afield. However, there is little evidence for long distance trade by the 5th century and it seems probable that the Saxon settlers made use of local resources. The pottery will have been locally made. The quernstones found in early Saxon contexts are probably re-used Romano-British objects.

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