ESSEX

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THE TRANSACTIONS OF
THE ESSEX SOCIETY FOR ARCHAEOLOGY AND HISTORY

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ESSEX ARCHAEOLOGY AND HISTORY

THE ESSEX SOCIETY FOR ARCHAEOLOGY AND HISTORY

The Society was founded in 1852 as the Essex Archaeological Society

Its objects are:
(1) To promote and encourage the study of the archaeology and history of the historic county of Essex.
(2) In furtherance of the above to publish the results of such studies in *Transactions* and to disseminate information on matters relating to archaeology and history in Essex through appropriate media.
(3) To organise conferences, lectures, and visits for the benefit of members and interested members of the public; to educate the wider community in the historical and archaeological heritage of Essex; to co-operate with other bodies on matters of common interest and concern.
(4) To provide library facilities for Society members and approved members of the public.

Publications

The articles in its *Transactions* range over the whole field of local history. Back numbers and offprints are available; list and prices on application to the Librarian.

Members receive a quarterly *Newsletter* covering all aspects of the Society's activities, news of current excavations and fieldwork, and items of topical interest.

The Library

The library is housed at the Hollytrees, High Street, Colchester, and is extensive. It aims to include all books on Essex history, and has many runs of publications by kindred Societies. Members may use the library on any weekday during museum opening hours (10-1, 2-5, Saturdays, October to March, closes 4 p.m.) on presentation of a signed membership card.

Membership

Application should be made to the Hon. Membership Secretary for current rates.

Articles for Publication are welcome and should be set out to conform with the Notes for Contributors, of which offprints are available. They should be sent to the Hon. Editor.

A list of officers, with addresses, will be found in this volume.

Subscribing Societies in Essex

Billericay Archaeological and History Society; Brain Valley Archaeological Society; Castle Point Archaeological Society; Colchester Archaeological Group; Essex Society for Family History; The Friends of Historic Essex; Great Bardfield Historical Society; Halstead and District Historical Society; Haverhill and District Archaeological Group; Ingatestone and Fryerning Historical and Archaeological Society; Maldon Archaeological Group; Saffron Walden Historical Society; Southend-on-Sea and District Historical Society; Waltham Abbey Historical Society; West Essex Archaeological Group; Woodford and District Historical Society; Chigwell School.

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Cover illustration: Tilbury Fort from the Thames: an early 18th-century engraving by Johannes Kip (1653-1722). 1988 marks the 300th anniversary of the accession of William III. Kip's engraving reflects the complexities of Anglo-Dutch relationships: an English military installation, built in response to Dutch raids up the Thames, to the designs of a Dutchman, Sir Bernard de Gomme, and depicted here by a Dutch engraver who had settled in Westminster (reproduced by kind permission of the County Archivist).

The Society is grateful to the Essex History Fair Trust Fund for a generous grant towards the cost of producing this volume.

Essex Archaeology and History 19 (1988), 1-14

A Late Bronze Age settlement on the boulder clay plateau: excavations at Broads Green 1986

by Nigel Brown

Summary

An unenclosed Late Bronze Age settlement was investigated prior to mineral extraction, on the edge of the boulder clay plateau of central Essex. The site consisted of a scatter of pits and post holes around a small rectilinear structure, measuring 4m by 2m. Five unurned cremations were also present. Material recovered included a typical later Bronze Age flint assemblage and pottery, which indicate a date early in the first millennium B.C. Metalwork finds have long indicated Late Bronze Age activity on the Essex claylands. However, this is the first settlement of the period to be excavated on the boulder clay. Its peripheral position may indicate exploitation of the boulder clay by settlements on the fringe of the claylands.

Introduction

A watching brief was maintained on topsoil stripping during August and September 1986 at the Redlands Aggregates quarry at Broads Green. The site lies on the edge of the boulder clay plateau 1.5km west of the Chelmer Valley and 500m south of a small stream, a tributary of the River Chelmer. The Springfield Lyons Late Bronze Age (LBA) enclosure (Buckley and Hedges, 1987) lies 6.5km to the south east (Fig. 1). The area stripped was restricted to O.S. Field No. 5922 centred on TL 6855 1222, a total of 1.88 hectares (4.65 acres). The topsoil stripping was carried out in such a way that the natural boulder clay subsoil was clean enough to afford recognition of features over some 60% of the cleared area. Even in this area it is probable that only the larger features could be seen. Most of the features comprising the small rectilinear structure (Fig. 3) were only visible after the area had been hoed and trowelled. Despite these limitations some 40 features were recorded, concentrated in the south-west quarter of the stripped area (Fig. 2).

The excavated features

Structure I: Features F22, 30, 43, 17, 40, 18, 19, 39, 28, 41, 44, 29, 30, 31 form a rectilinear structure approximately 4m long and 1-2m wide (Fig. 3). The structure combines free standing posts, with post-in-slot and beam-slot construction. There appears to have been some rebuilding of the east wall, as indicated by the cutting of F18 by F40 (Fig. 4). The slot F19 may have replaced, or been replaced by, postholes F17, F18 and F40. There was little sign of distinct postpipes. However the steep-sided profiles of many of the features may indicate the posts were not removed but rotted *in situ*.

Cremations: Five unurned cremation burials were recovered. Two 40m south east of structure 1, two 25m south and a further single cremation 85m north east of structure 1 (Fig. 2). Each burial consisted of cremated bone placed in a small, steep-sided flat-bottomed pit.

Other features: Four isolated postholes were recorded, one (F4) with a packing of large flints. Fifteen pits were recorded. These fall into two groups; shallow scoops and deeper features with basin-like profiles. This broad division into two groups is similar to that noted on the LBA site at Aldermaston Wharf, Berkshire (Bradley *et al.* 1980). At Aldermaston, the larger pits were interpreted as storage pits and the scoop-like pits as shallow gravel quarries. Similar functions may be attributed to the Broads Green pits; the larger ones (e.g. F3, 7, 12, 16 Fig. 4) seem likely to be storage pits. The scoops (e.g. F10, 11, 34 Fig. 4) may be the result of extraction of boulder clay for use as wall daub, potting clay etc.

The finds

Pottery

A total of 336 sherds weighing 2.482kg was recovered. The pottery was recorded using the system devised for a number of assemblages in Essex (full details in archive). Fabrics present are:

A. Flint, S, 2, well sorted.
B. Flint, S-M, 2, well sorted.
D. Flint, S-L, 2, poorly sorted.
F. Sand, S-M, 2-3, with addition of occasional L flints.
G. Sand, S, 3.
I. Sand, S-M, 2-3.
O. Quartz and flints, S-L, 2, poorly sorted.

Where size of inclusions is represented:
S = less than 1mm diameter.
M = 1-2mm diameter.
L = more than 2mm diameter.
And density of inclusions by:
1 = less than 6 per cm².
2 = 6-10 per cm².
3 = more than 10 per cm².

Fabrics containing tempers other than crushed burnt flint (fabric F, G, I, O) occur very rarely (Fig. 6). These four fabrics are only represented by 7 sherds weighing 67g. This predominance of flint-tempered fabrics is common amongst LBA assemblages in south-east Britain and typical of such material in Essex. Body sherds occasionally show vertical finger-smearing of the exterior, bases are invariably flat, sometimes joined to the body of the vessel in such a way as to produce a slight protruding foot. One sherd (Fig. 5, 4) may show signs of slab building, the fractured lower edge shows a longitudinal seam and there is a row of very faint finger impressions just above the break on the exterior, presumably the result of joining two slabs. The vessel subsequently broke along the join. The rim

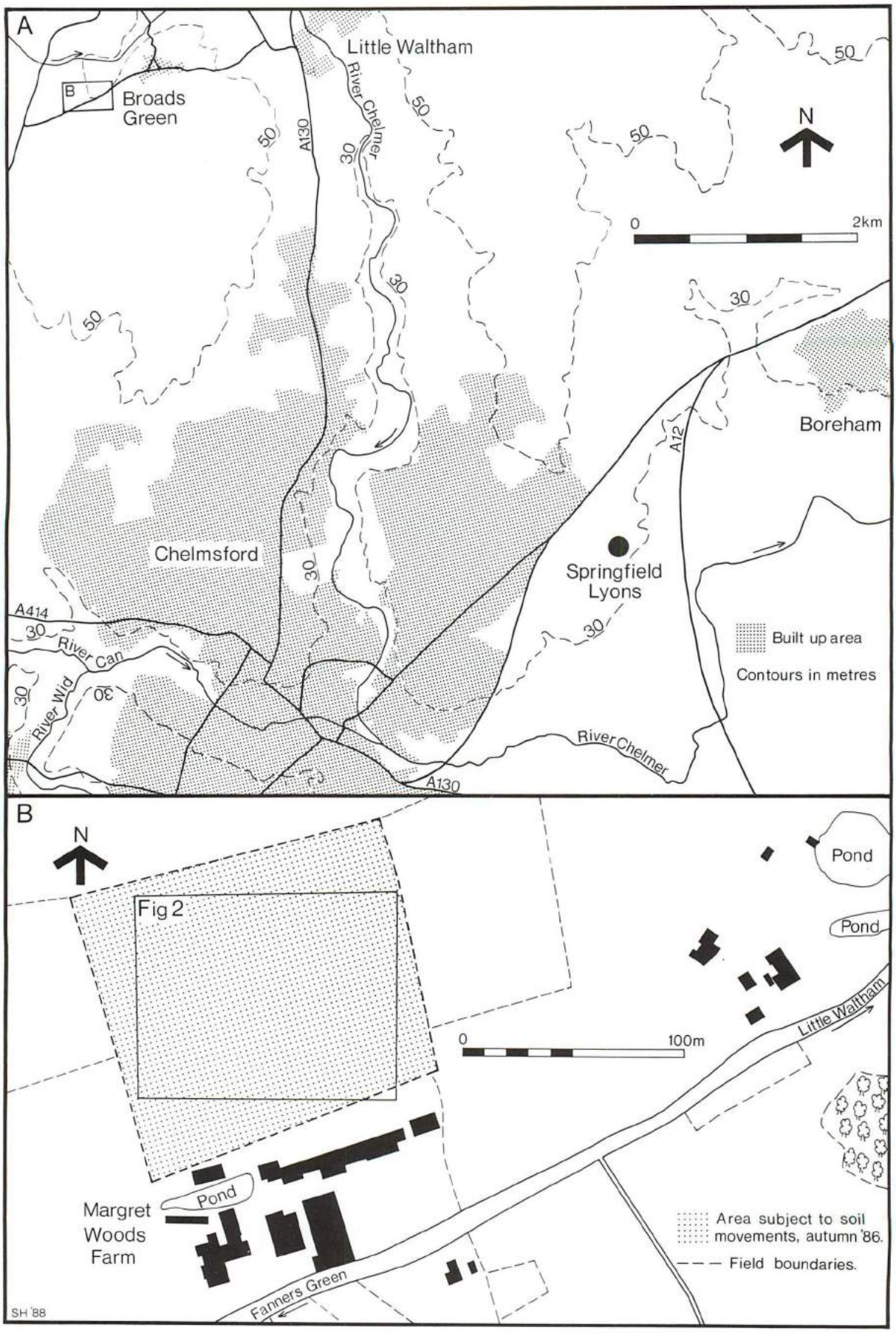

Fig. 1 Broads Green. Site location.

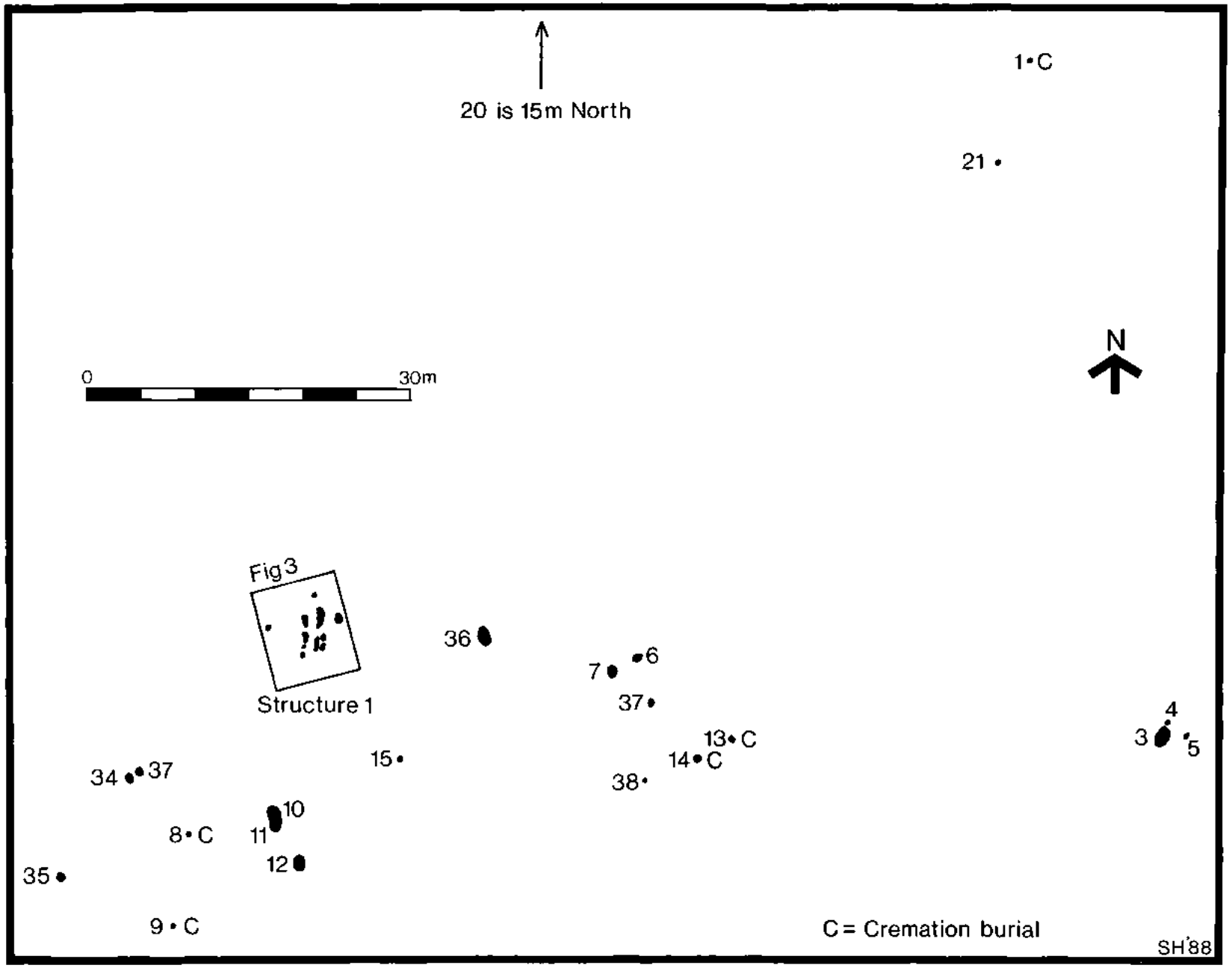

Fig. 2 Broads Green. Plan of excavated features.

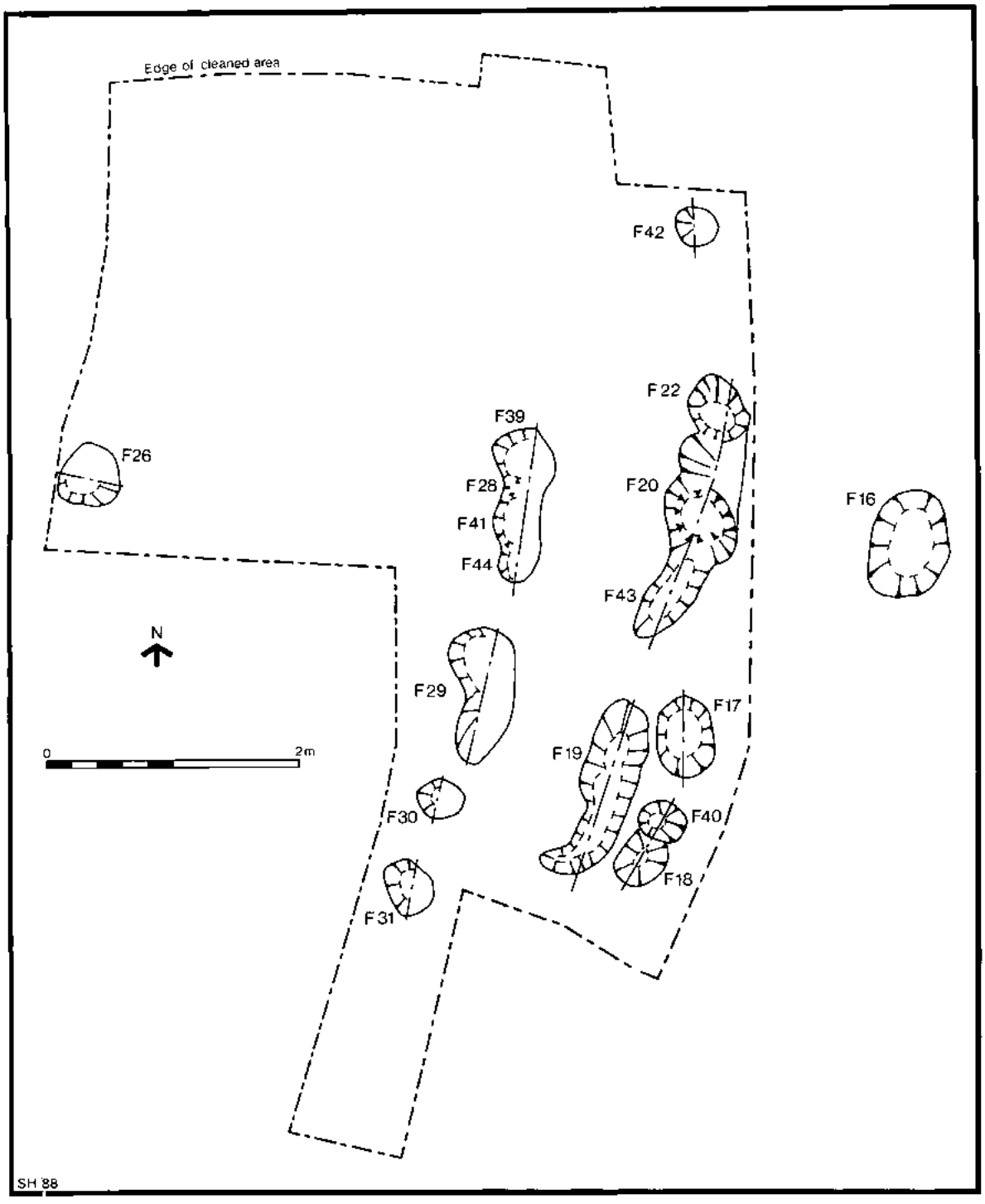

Fig. 3 Broads Green. Detailed plan of rectangular structure.

of this vessel was simply formed by bending over and pinching in the top of the upper slab, producing a pronounced thinning of the vessel wall towards the rim and leaving faint finger impressions on the exterior, below the rim.

The majority of the pottery (215 sherds weighing 1.645kg) was recovered from the 14 features of structure 1 and the possibly associated pit F16. Most of this pottery is unabraded and large sherds from F22, 29 and 43 (Fig. 4-7) were lying in near vertical positions, indicating they had been incorporated in the packing around the uprights. It is uncertain whether this was incidental or an act of deliberate deposition.

Of the diagnostic sherds most are derived from features associated with structure 1, (Fig. 5.2-11, 13). The plain hemispherical bowls (Fig. 5.12, 13) and simple jar forms; hooked rimmed (Fig. 5.4, 6), biconical (Fig. 5.5), round bodied with short upright rim (Fig. 5.7) and bucket shaped (Fig. 5.10, 11) are appropriate to an early Post-Deverel-Rimbury plain ware assemblage (Barrett 1980) indicating a date in the 10th-9th centuries B.C. The apparently frequent use of finger-tip impressions on the top of jar rims is probably a reflection of the Deverel-Rimbury ancestry of the pottery, rather than an indication that it belongs to a later decorated assemblage. Two sherds, both from F19, are rather different; one (Fig. 5.2) may be the rim of an angular bowl, the other has fine complex combed decoration on the exterior (Fig. 5.3). These sherds would be appropriate to a later decorated assemblage (Barrett 1980). As noted above, there is some evidence for the rebuilding of the east wall of structure 1; these two sherds may indicate that the slot F19 is a late addition to the structure.

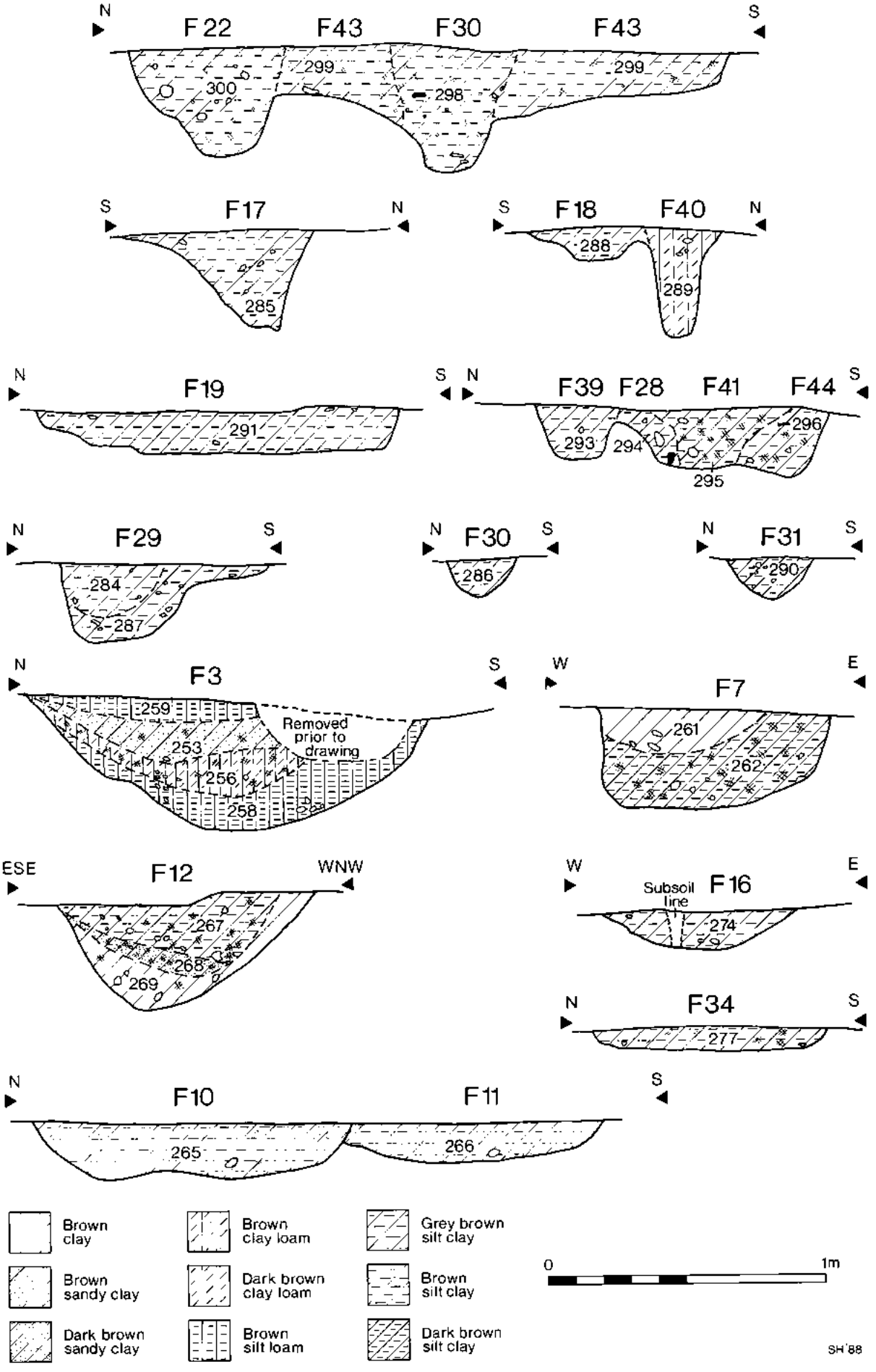

Fig. 4 Broads Green. Sections.

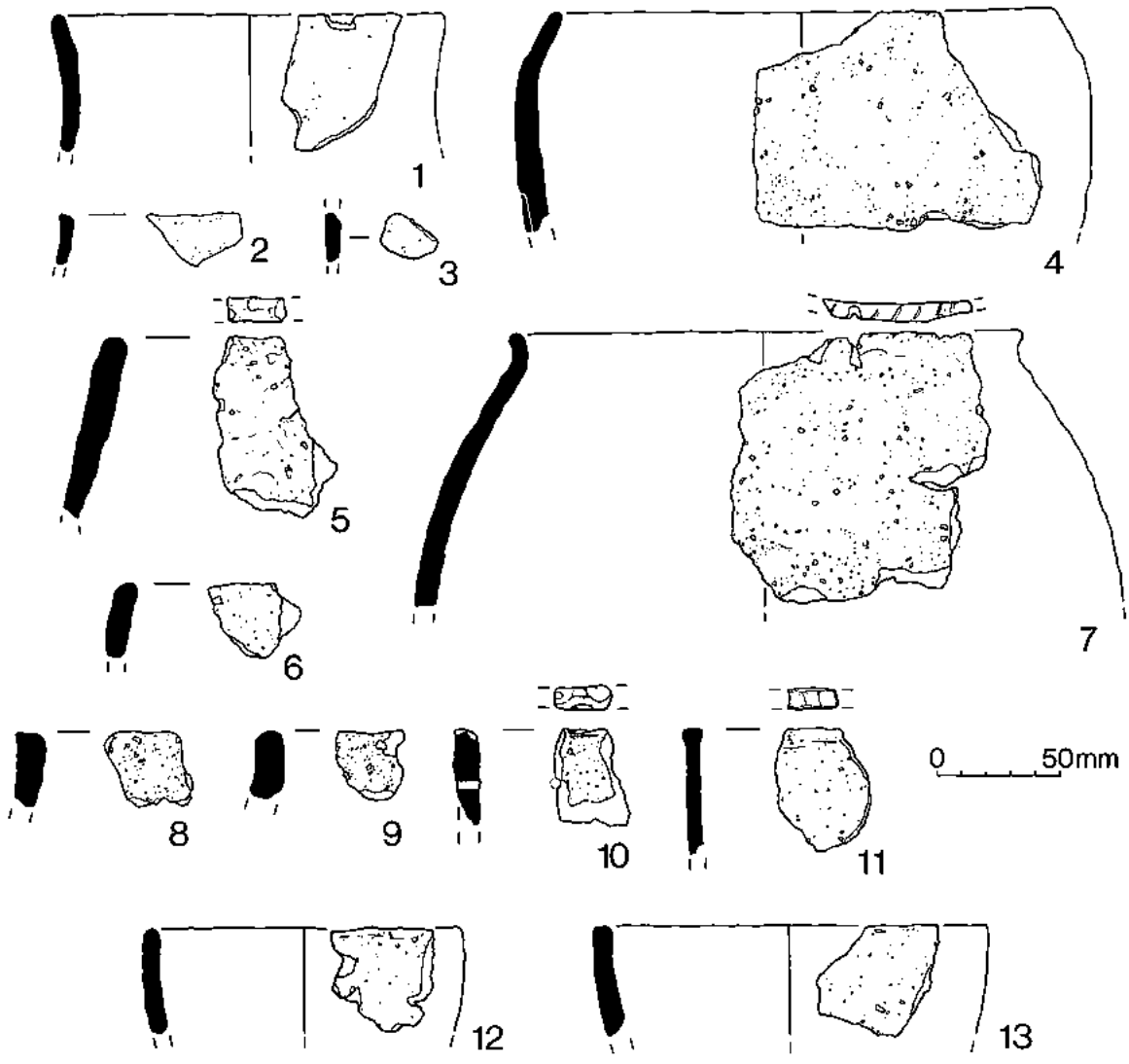

Fig. 5 Broads Green. Prehistoric pottery.

The Flint

by R. Holgate

A total of 123 humanly-worked flints were recovered during the excavation (summarised by context in archive).

The raw material consists of dark grey-brown and brown nodular flint with occasional cream cherty mottles. Cortex was present on 83 pieces; this was largely fairly thick and unabraded, and is consistent with the small flint nodules found in abundance in the boulder clay at the site. It is highly likely that all the flint worked on the site was obtained within its immediate environs. A fair proportion of flint contains few flaws and is of a reasonable quality for flaking. Blue-white patination occurs on 27 pieces.

Two blades and one single platform blade core, with abraded butt and striking-platform edges respectively, are either Mesolithic or earlier Neolithic in date. The remainder of the assemblage largely consists of flakes and blades with wide butts and unabraded butt edges; these were struck from cores with stone percussors. All the cores have one striking platform only and unabraded platform edges; there are several incipient cones of percussion visible close to the platform edge adjacent to flaked surfaces, resulting from failed attempts to detach flakes from the core. The implements comprise simple cutting, scraping and piercing tools, which again were probably fashioned with stone percussors. The assemblage, as a whole, is typical of those found on later Bronze Age domestic sites in South-East England.

Fired Clay

by H. Major

A small quantity of largely undiagnostic fragments of fired clay were recovered from the excavated features (details in archive).

Copper Alloy

A small disc (9 mm diameter, weight less than 1 g) was recovered from F43. One surface is flat the other convex, both are rough and irregular. The object does not appear to be deliberately manufactured and may simply be an inadvertently solidified droplet.

Bone

by O. Bedwin

A small quantity of cattle, sheep and pig bone was recovered from the excavated features (details in archive).

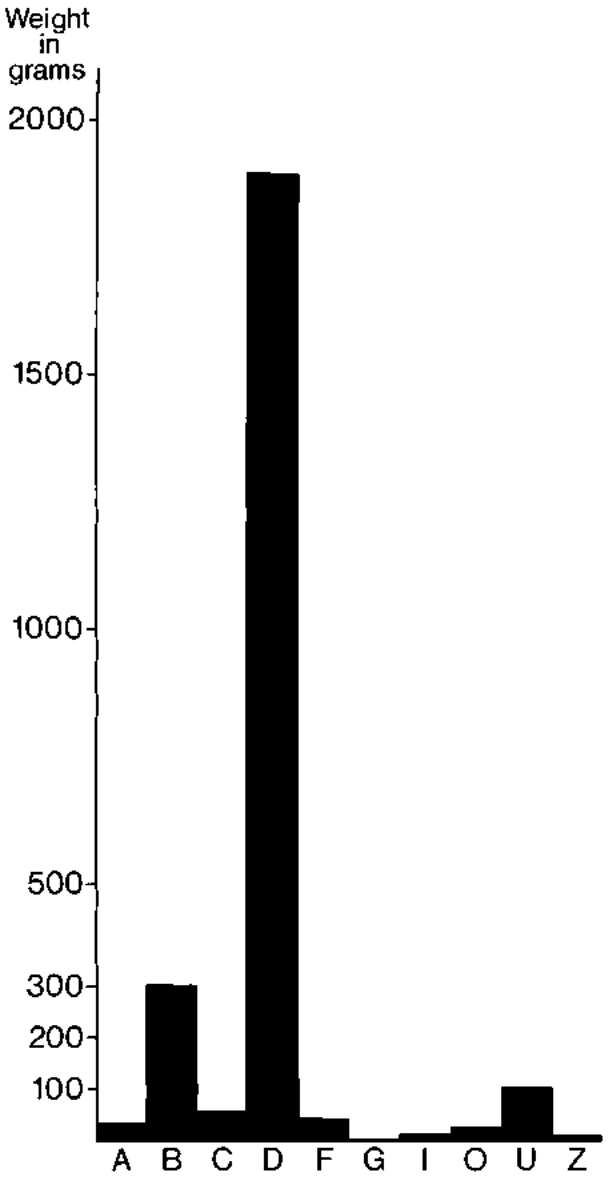

Fig. 6 Broads Green. Histogram showing prehistoric pottery by fabrics.

Discussion

There is considerable evidence for widespread LBA occupation along the gravels fringing the rivers and estuaries of Essex (Robertson 1976; Jones and Bond 1980; Buckley, Brown and Greenwood 1986; Brown forthcoming; Wymer forthcoming) and there are strong indications of agricultural intensification at this time (Wilkinson forthcoming; Murphy forthcoming). Hitherto there has been no actual LBA settlement evidence from the Essex boulder clay areas, although finds of bronzes from the claylands are not uncommon (Needham and Burgess 1980; Rodwell and Rodwell 1986). Extensive fieldwalking of a boulder clay area in connection with the Stansted Project has revealed only one LBA settlement (Brooks pers. comm.) situated close to the edge of the Stort Valley, a location comparable to Broads Green. We may therefore speculate that the boulder clay areas were exploited, from sites located on the edges of the clay areas and related to the extensive LBA settlement of the river valleys.

The evidence from Broads Green is in many ways similar to that recovered from open settlements on gravels (Bradley *et al.* 1980). The small quantity of animal bone derived from pig, sheep and cattle, and the presence of storage pits, presumably for grain, seem to indicate a mixed farming economy at Broads Green; the small fragment of copper alloy may indicate bronze working. The evidence is too slight for any certainty and larger scale excavation, (including a programme of flotation) is clearly required, to ascertain whether such sites were specifically adapted to exploit a clayland environment.

The presence of cremation burials at Broads Green is of some interest. The Late Bronze Age in southern Britain is characterised by the lack of a recoverable burial rite. The Broads Green burials might therefore predate the occupation. If the cremations and occupation are contemporary they may indicate some survival of the cremation burial practices of the Middle Bronze Age into the LBA. (The LBA site currently being excavated at Stansted also includes cremation burials; H. Brooks, pers. comm.).

The small rectilinear structure is unusual. In Essex a variety of post-built round houses are known from a number of LBA sites (Buckley and Hedges, 1987; Bond forthcoming; Brown forthcoming). Evidence for rectilinear buildings is confined to simple four-post structures, and one possible longhouse at Lofts Farm (Brown forthcoming). Elsewhere in southern Britain the Broads Green structure may be paralleled by two small buildings at Poundbury, Dorset possibly used for livestock (Barrett and Bradley 1980). In view of the large quantity of pottery recovered from it, such a function for the Broads Green structure appears unlikely. As noted above some of the pottery associated with the building may have been deliberately deposited, and a ritual function is possible. The Broads Green structure may be compared to the wooden structure at Bargeroosterveld, Drenthe (Waterbolk and Van Zeist 1961). Had such a structure been built on a dryland site subsequently subjected to ploughing, the surviving archaeological evidence might well have resembled that recovered at Broads Green. The Bargeroosterveld structure, however, produced no pottery.

Acknowledgements

The fieldwork was carried out by C.P. Clarke, with help from N. Brown, A. Gray and K. Parry. Thanks are due to Redland Aggregates for their co-operation. The illustrations are by S. Godbold and S. Holden.

Author: Nigel Brown, Essex County Council Archaeology Section, Globe House, New Street, Chelmsford CM1 1LF.

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Late Iron Age enclosures at Kelvedon: excavations at the Doucecroft site 1985-86

by C.P. Clarke

Summary

Excavations at the northern end of modern Kelvedon produced the first evidence for Middle Iron Age settlement in the town. Two enclosures of Late Iron Age origin (first half of the first century A.D.) were also located. Within one was a contemporary round house. Although one of the enclosures continued in use just into the early Roman period and there is evidence too of a round house of that date, this is best interpreted as the tail-end of the Iron Age occupation. By contrast, the Roman town (Canonium) was laid out on a completely new site to the south.

A small amount of residual Neolithic/Early Bronze Age flintwork suggests occassional exploitation of local gravels as raw material, rather than permanent settlement.

Introduction

Iron Age and Roman settlement at Kelvedon was situated on a gravel and brickearth terrace overlooking the River Blackwater and its floodplain. (This terrace is also the location of the modern village). Roman settlement took the form of a small town on the Chelmsford-Colchester road. The town had its origins in the first century A.D., and was provided with earthwork defences in the later second century (Fig. 1; Rodwell 1988). Late Iron Age settlement was extensive, having been recognised in Eddy's trenches D and J (Fig. 1; Eddy 1982), but is difficult to categorise. The excavated evidence could be interpreted as a single very large settlement sprawling along the terrace, or as one or more small communities showing a high degree of settlement mobility in the century or so before the Roman invasion. A further point of interest is the discovery of both round and rectangular houses in broadly contemporary late Iron Age contexts (Fig. 1; trenches D and J).

Because of the extensive Iron Age and Roman deposits, which have survived fairly well (apart from the modern High Street frontage), the Essex County Council Archaeology Section has maintained a long-term programme of monitoring development in the town. Watching briefs and excavations have been carried out as appropriate, the latter being strongly supported by grants from the Historic Buildings and Monuments Commission (hereafter HBMC).

The Doucecroft excavation which forms the subject of this report was designed to examine the extent of late Iron Age occupation. The discovery of late Iron Age enclosures, with round houses, makes the known spread of settlement at that time even more extensive (Fig. 1). An unexpected outcome was the first firm evidence of middle Iron Age occupation.

Background to the excavation

The excavated area (centred on TL 862 191, SMR no. TL 81/68, site code KL4), previously a nursery garden, was examined prior to housing development (Fig. 1). Three separate planning applications were involved, all containing archaeological conditions for excavation prior to development. Excavations were undertaken over two seasons, from mid March to early May 1985 (Areas A-D), and early April to early May 1986 (Areas F-H); Area E was a watching brief in a narrow pipe trench in June 1985 (Fig. 3). Excavations were directed by the writer for ECC Archaeological Section and the HBMC; work in both seasons was financed by the HBMC. In both seasons site manpower was increased at times by personnel from the Manpower Services Commission team based in Braintree.

The 1985 excavations were mounted on an emergency basis when chance inspection of the site by the writer in early March found that machining of Area A (a roadway) had commenced in breach of the archaeological condition; this had caused partial destruction of features in the north-eastern half of the trench. The positions of Areas A and D were determined by groundwork associated with the housing development; Area D was not fully stripped of topsoil and recording of features in this part of the site was restricted to three hand-cleaned slot trenches.

The excavated area lies at the top of a gravel and brickearth terrace between the alluvium of the Blackwater basin and the heavy boulder clay of central and northern Essex. The subsoil in Areas A, F and H was sand and gravel. In Areas B and C this was overlain by a thin layer of patchy brickearth, which in Areas E and G increased in thickness to at least 0.8m. Brickearth over sand and gravel in the north-western extremity of the excavated site (Area C) was overlain by a deep layer of redeposited grey clay from the adjacent railway cutting.

In the south-western part of Area A, and all other areas except D and E, topsoil ranging in depth from 0.16m in the south-east to 0.56m in the north-west was machined off to the surface of the subsoil prior to manual cleaning. The recording system in both seasons was based on ECC context sheets: context numbers were assigned for fills in a series 1-311, for features in a series 5000-5157, and for segments in a series 10000-10044.

The original site archive and all finds are located in the Castle Museum, Colchester (accession no. 60.1985), and a copy of the archive is lodged with the Essex County Council Archaeological Section, Planning Department, County Hall, Chelmsford, Essex.

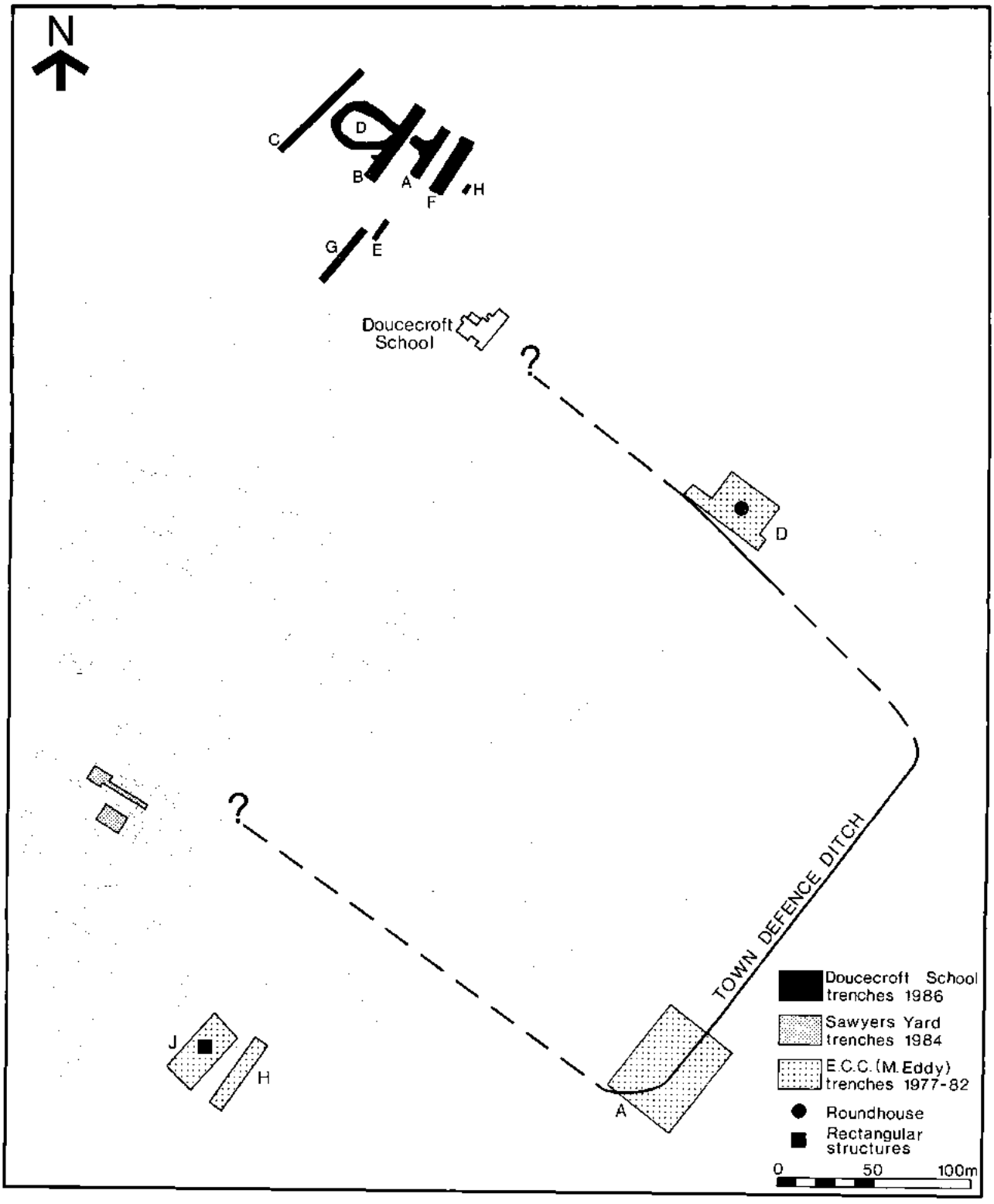

Fig. 1 Location plan showing positions of Doucecroft site; Trenches A, D, H, and J (Eddy 1982); and Sawyers Yard (Clarke 1985).

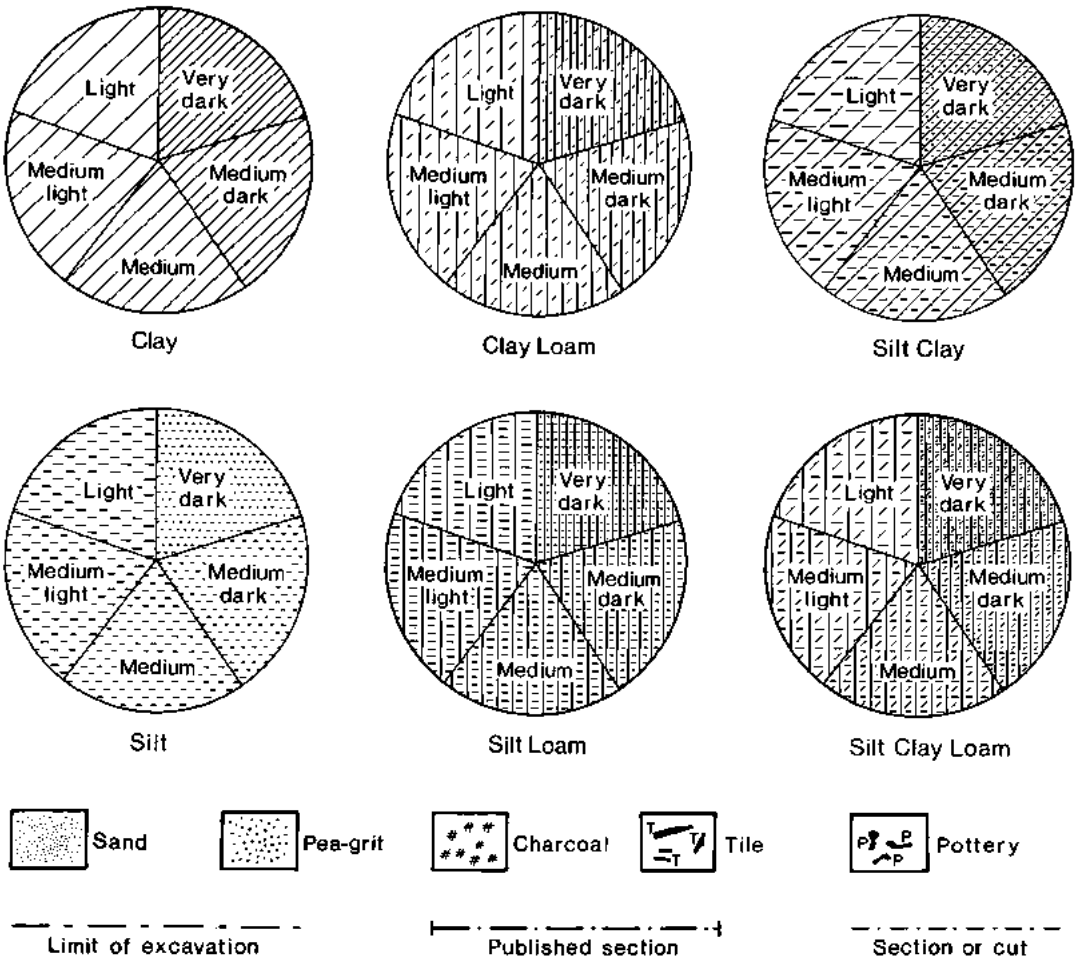

Fig. 2 Conventions for plans and sections.

The excavations

The site has been phased as follows (Phase plans for Periods II-V, Figs. 4-8):

Period I	Neolithic / Early Bronze Age
Period II	Middle Iron Age
Period III	Belgic
Period IV	Late Belgic / Early Roman
Period V	Early Roman
Period VI	Post-Roman

Phasing of the site is problematic. Period I is characterised by flintwork, but problems occur for Period II onwards, particularly so for Period IV. The problem is basically one of dating, involving the general lack of pottery from the site where many of the features produced only a small handful of sherds, if any, and datable artefacts were otherwise absent. Much of the property recovered from secure contexts was clearly residual. The site was also quite severely disturbed by later (post-medieval) features and other late disturbances, and this together with the difficulties sometimes associated with the similarity of adjacent gravel fills in intercut features makes the danger of intrusion of occasional sherds into pottery groups a significant one. The third problem is the inherent difficulty in closely dating the pottery produced in the first 60 years or so of the first century A.D.

Thus, some features can definitely be assigned Period III (Belgic) dates, but the majority of late Belgic and *c.*conquest period (Period IV) features can only be given a very general date, even though there are in some places clearly at least two stratigraphical phases within the period (e.g. ditches 5101-2 in Areas A and F, themselves cut by the Period V palisade slot, 5087). Over the excavated site as a whole it is not always possible to interrelate major features. In some instances it is possible to surmise the contemporaneity of some features through their alignment and other characteristics; in general, the phasing of the site, particularly for some features assigned to Periods III and IV, should be treated with caution.

Period I: Late Neolithic / Early Bronze Age

Occupation during the Neolithic / Early Bronze Age is represented by an assemblage of 124 flints (Martingell, below). None of the pottery recovered could be assigned to Period I, and none of the undated features need to be any earlier than Middle Iron Age. The features described in Period II below might be of Period I date, but with firmer evidence for settlement near the site during Period II, are more likely to be later.

Period II: Middle Iron Age

Middle Iron Age pottery and flint-tempered sherds of a general prehistoric date were recovered as residual material in features of all periods, indicating settlement nearby. Although no features of unequivocal Period II date were identified, several of the excavated features (below) may well belong to this period, though it is not impossible that some or all are of Period I date.

Ring-ditch 5001 (Fig. 4; section 108, Fig. 10)

This was a curvilinear ditch of level-bottomed, wide, flat profile. Its dimensions in the south-eastern section of Area A were *c.*1.55m wide and 0.36m deep. There were no finds. If the complete plan of this feature was circular, its diameter was *c.*12m.

Ditch 5058 (Fig. 3; section 507, Fig. 10)

This was visible in a test segment through the base of the topsoil in the south-west of Area D. For the short distance over which it was visible, it was a fairly regular feature up to 1.2m wide and 0.43m deep, filled with homogenous brickearth silt. Its fill contained a few fragments of flint-tempered pottery and six pieces of flint waste, including a rolled axe-sharpening flake (below).

The poor dating evidence does not exclude the possibility of a Middle Iron Age date for the feature; only the axe-sharpening flake is clearly residual. It is likely, on the basis of its orientation, that the ditch is not contemporary with the southern side of the Belgic Enclosure B of the next period, and the lack of Period III or later pottery makes it unlikely to be later than Period II.

Pit 5060

This oval pit on the south-eastern edge of Area B was a steep-sided, flat-bottomed feature, 0.36m wide and 0.19m deep. The silt forming the homogenous fill of the feature contained a few sherds of flint-gritted pottery; it was cut by ditch 5026 of the Period IV phase of Enclosure A, but the lack of Belgic pottery might indicate a date earlier than Period III also, especially in view of its proximity to known Belgic features.

Period III: Belgic

The only feature definitely attributable to the Belgic period is ditch 5032 forming the boundary of Enclosure B. The assignation of ditches 5024/5103 and 5004 in Enclosure A is, on balance, likely to be correct, as is that of Roundhouse 3.

Enclosure B (Fig. 5)

Part of Enclosure B was recorded in Areas B and D; the south-western corner of the enclosure was excavated, and the south-eastern corner may have been present where ditch 5032 appeared to begin turning northwards on the very edge of Area B; if so the south-eastern side of the enclosure was *c.*21m long. The behaviour of the ditch in the south-western corner (below) suggests a possible entrance immediately north-west of the corner. The south-western side was recorded in a cleaning slot through the base of the topsoil in Area D, *c.*13m north of the definite south-western corner, as a less substantial feature than in Area B; the ditch was not definitely located north of this point, though a gravelly spit across the Period II ditch 5058, *c.*25m north-west of the corner, may have been 5032 cutting the fill of the earlier feature. The more westerly of the two ditches located in Area C, 5055, may have been a continuation of the same feature *c.*40m north-west of the known corner. No internal features were recorded because the topsoil was inadequately cleared by the building contractors.

Ditch 5032 was of wide, flat, U-shaped profile (sections 408 and 410; Fig. 10) except in Area C as 5055 (section 506; Fig. 11). The width of the ditch along the northern edge of Area B was *c.*1m, and where excavated ranged from a minimum of 0.5m (section 506), to a maximum of 1.5m on the corner (section 408). Depth varied between 0.14-0.34m; maximum depth at the northern edge of Area B, where the profile up to the base of the topsoil was visible, was 0.56m. On the north-western side of the corner the ditch became markedly shallower and narrower, perhaps approaching a terminal (process of butt-ending).

The stratigraphy was clearest at the south-western corner where a gravel primary silt filled the bottom two thirds of the ditch, overlain to the surface by a backfilled deposit of less pebbly silty clay loam; in places there were indications of a tertiary fill very similar in all respects to the secondary, probably representing a slight change in the source of the backfilled material. The upper fill was rich in charcoal; both fills, especially the upper, contained burnt pebbles. Rubbish disposal at this point supports the hypothesis of an entrance to the immediate north-west.

Finds from the primary fill comprised roughly equal quantities of MIA and Belgic sherds (36 in all), four fragments of vitrified material (deriving from highly fired brickearth), an iron nail and three fragments of cattle bone. Artefacts in the overlying backfilled deposits were more numerous, comprising 25 sherds of MIA and 120 sherds of Belgic pottery, abundant quantities of vitrified material and burnt clay, four iron objects, and a few animal bone fragments. Excavation elsewhere in the ditch produced small quantities of the same materials.

Enclosure A

The sequence of ditches on the north-western side of Enclosure B are more fully described in Period IV below; the earliest ditch in the sequence, 5024/5103, may belong to Period III, giving a Belgic date for the origin of the enclosure. Within the area defined by Enclosure A, ditch 5004, pit 5002 and Roundhouse 3 are also of probable Belgic date.

Ditch 5004/5067/5115 (Figs. 5 and 9; sections 1101 and 1701, Fig. 10)

This was located in Area A in 1985 (as 5004), and in Area F in 1986 (as 5067/5115); it is referred to below by the single number 5004. The ditch was a fairly deep feature of irregular U-shaped profile (section 1101 and 1701), its bottom falling in level *c.*1.26m from northwest-southeast. Width was in the range 2.0-2.8m, widest at the northern side of Area F; depth at the same points was in the range

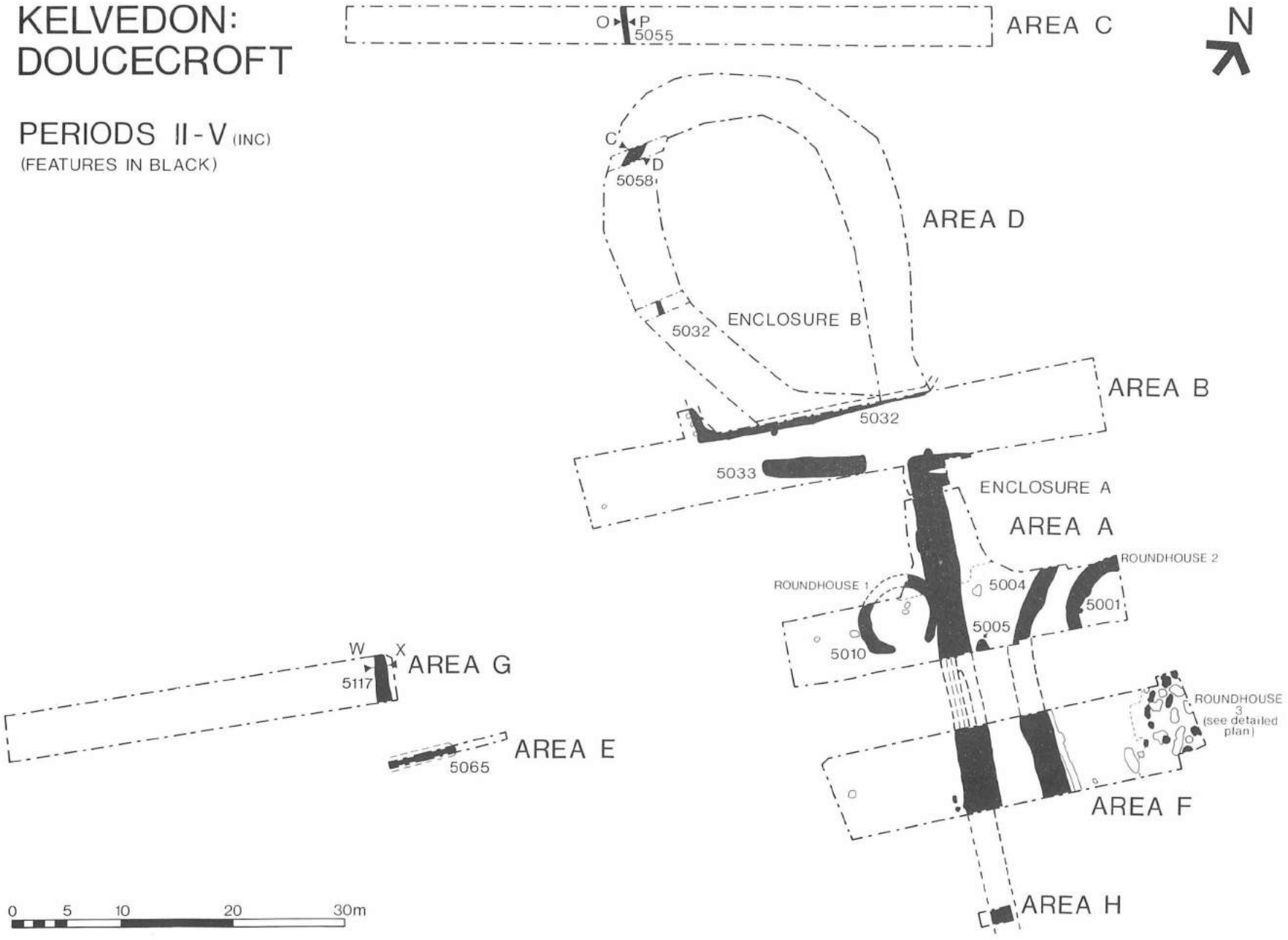

Fig. 3 Middle Iron Age (Period II) — very early Roman (Period V), all features.

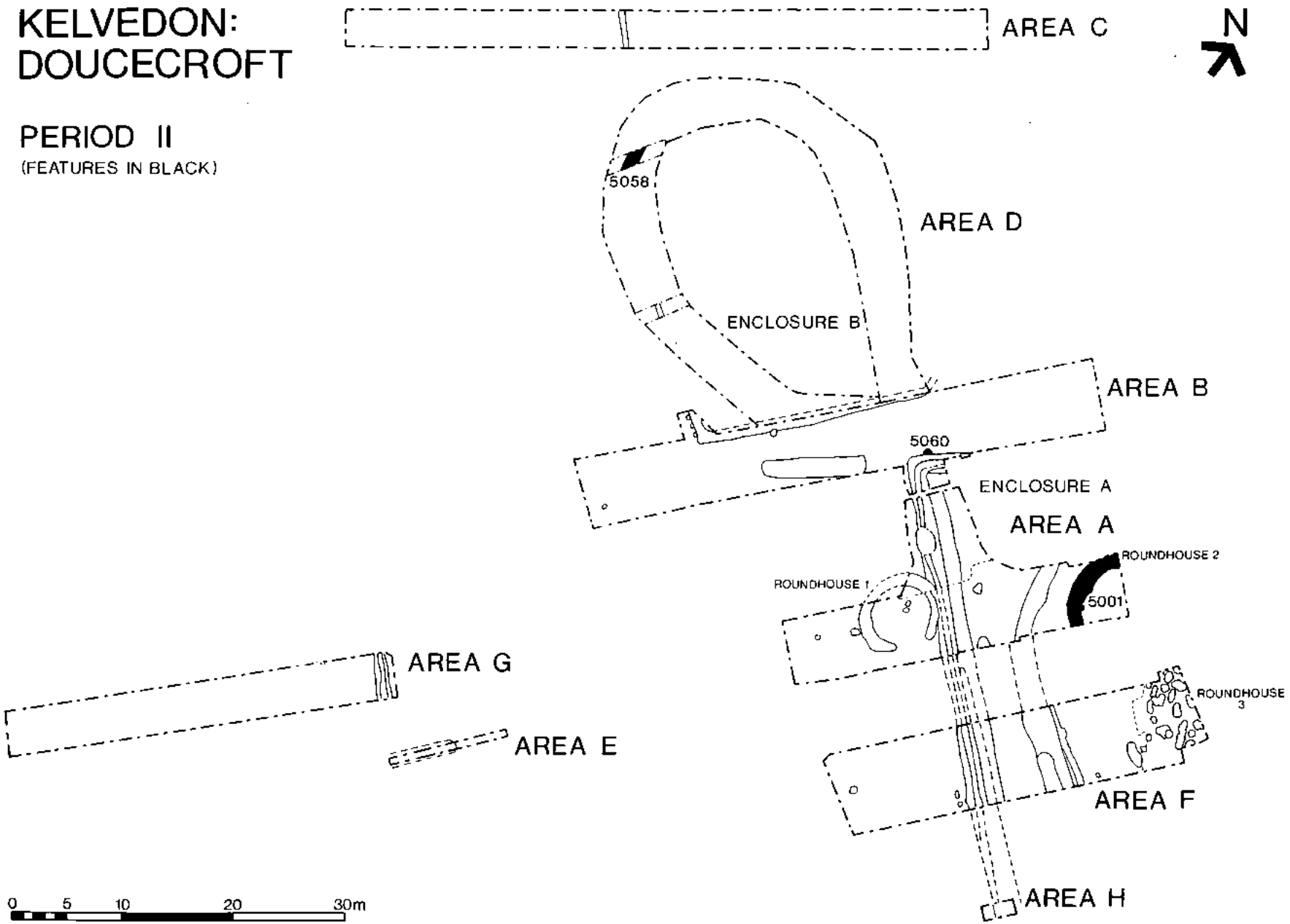

Fig. 4 Phase plan for Period II.

0.84-0.93m. The fills were sandy and silty loams, usually relatively pebble-free in the upper layers; there was no indication of deliberate infilling.

Finds were infrequent. The ditch in the segment on the northern side of Area F (section 1701) produced merely two Belgic sherds from the primary silt 229, and 13 fragments of burnt clay from the upper fills. The more southerly segment in Area F (section 1101) produced a handful of Belgic sherds, six pieces of burnt clay and a fragment of cattle bone, all from the secondary and tertiary fills. The segment in Area A produced three sherds of grog-tempered ware of pre- or post-conquest date, 14 fragments of burnt clay and ten of vitrified material, and three fragments of pig bone from the secondary silt, while a single piece of a probable clay loomweight was recovered from the primary silt. The datable finds suggest a Belgic date for the infilling; if the three sherds from the segment in Area A are post-conquest in date they may be intrusive, or may indicate that the ditch was still silting up in the conquest period. The presence of significant quantities of burnt clay and vitrified material in the secondary fill in the north-east provides a direct link with the material in the secondary fill of the Belgic Enclosure B ditch 5032 to the west; these materials are only common in Period III features and this strenthens the assignation of a Period III date to 5004. Similarly, the burnt pebbles in fill 221 in the central segment (section 1701) may link with the burnt pebbles in 5032. The presence of burnt clay but no vitrified material in the Area F segments may indicte that this burnt clay is daub, possibly from the nearby Roundhouse 3.

Pit 5002 (Fig. 5; section 101, Fig. 10)
This was an irregular oval pit of maximum surviving depth 0.10m; an estimated 0.20m was machined off. The fill was extremely charcoaly, and burning of the sides and bottom of the pit indicate use as a hearth. The fill produced 14 fragments of burnt clay and ten of vitrified material, three fragments of pig bone, and three sherds of grog-tempered ware of pre- or post-conquest date. It is assigned a probable Period III date for the same reasons as the nearby ditch 5004 (above), and was cut through the fill of the adjacent undated (Period II ?) ring-ditch 5001.

Roundhouse 3 (Fig. 12)
The southern edge of the roundhouse was located at the north-eastern end of Area F; the trench was extended to the north-east as far as possible, to expose about half of the original plan. The whole area was pitted with features, most of them undated; the plan of the roundhouse itself appears to have been a single ring of post holes and slots (Fig. 12), the diameter of the structure being *c.*7m. Some of the internal features may have been contemporary though there is nothing in their distribution to suggest that they were parts of the structure. The post-holes belonging to the roundhouse were generally steep-sided, flat-bottomed features of roughly oval plan, ranging in depth from 0.23-0.45m; they were filled with homogenous sandy loams. Two features, 5078 and 5079, were adjacent, near vertically sided flat-bottomed slots, ending in post-holes 5086 and 5085 respectively, the post holes sharing the same fills as the slots and being separated from one another by a narrow ridge of natural gravel. In the area inside and immediately around the roundhouse the natural subsoil, here consisting of small gravel pebbles in pea grit and sand, was covered by common large pebbles up to *c.*0.25m diameter; although pebbles of a similar size did occur elsewhere over the natural they were relatively rare, and their occurrence in quantity in and around the structure suggest they are the remains of a deliberately laid surface, 5108.

Dating evidence for the structure was poor. Five of the nine features making up the structure contained pottery: the fill of slot and post-hole 5078/5086 contained Belgic pottery from both features, slot and post-hole 5079/5085 contained Belgic pottery and a single early Roman sherd from each feature, and post-hole 5084 contained Belgic pottery from the surface and a single sherd of Belgic or *c.*conquest period date from the fill. A small post-hole cutting the fill of a structural post-hole in the north of the structure contained a single sherd in pre- or post-conquest grog-tempered fabric, as did one of the internal features. The internal pit 5114 produced a sherd of Belgic pottery. The significance of the two early Roman sherds from 5079/5085 in otherwise Belgic groups is uncertain. A group of Belgic sherds from the surface of these features came from a single pot, suggesting that the Belgic material is not residual; this increases the probability of the Roman sherds being intrusive, and the overall impression is that the structure is likely to be of Belgic date.

Ditch 5117
This was located at the north-eastern end of Area G. It was of uniform, rounded profile (section 1608, Fig. 11) ranging in width at surface from 0.78-1.23m, and in depth from 0.41-0.44m; the bottom fell some 0.12m from south to north.The loam fills were primary and secondary silts of roughly equal depths.

The primary silt contained pottery of Belgic and MIA (or earlier) date, and the secondary silt a small group of Belgic pottery with a single sherd of *c.*conquest period date.

Ditch 5065
This ditch, which was aligned approximately at right angles to ditch 5117, was sectioned longitudinally in the pipe trench Area E. It was recorded over a distance of 6.1m, but its south-western terminal was not located. It was at least 0.4m wide, possibly originally in the order of 1m, and its maximum observed depth was 0.44m. The fill was an homogenous silt loam representing redeposited brickearth subsoil. A single sherd of Belgic pottery was recovered from the section.

Period IV: Late Belgic / Early Roman
This consists of the ditch sequence in Enclosure A, ditch 5033, and a few scattered post-holes and pits. The date range for the period from the pottery is *c.*conquest date to *c.*A.D. 60. As stated above, the inherent difficulties of

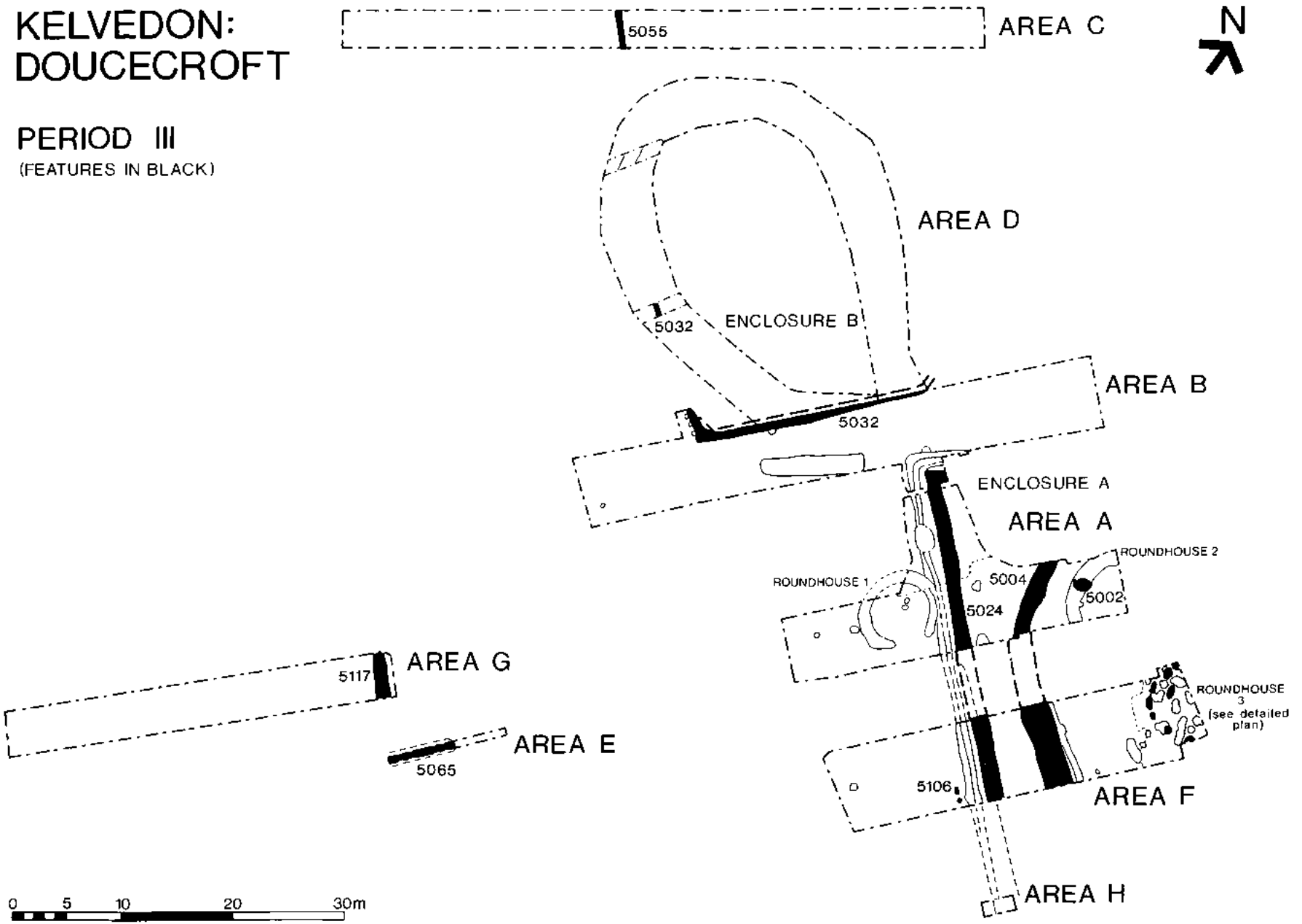

Fig. 5 Phase plan for Period III.

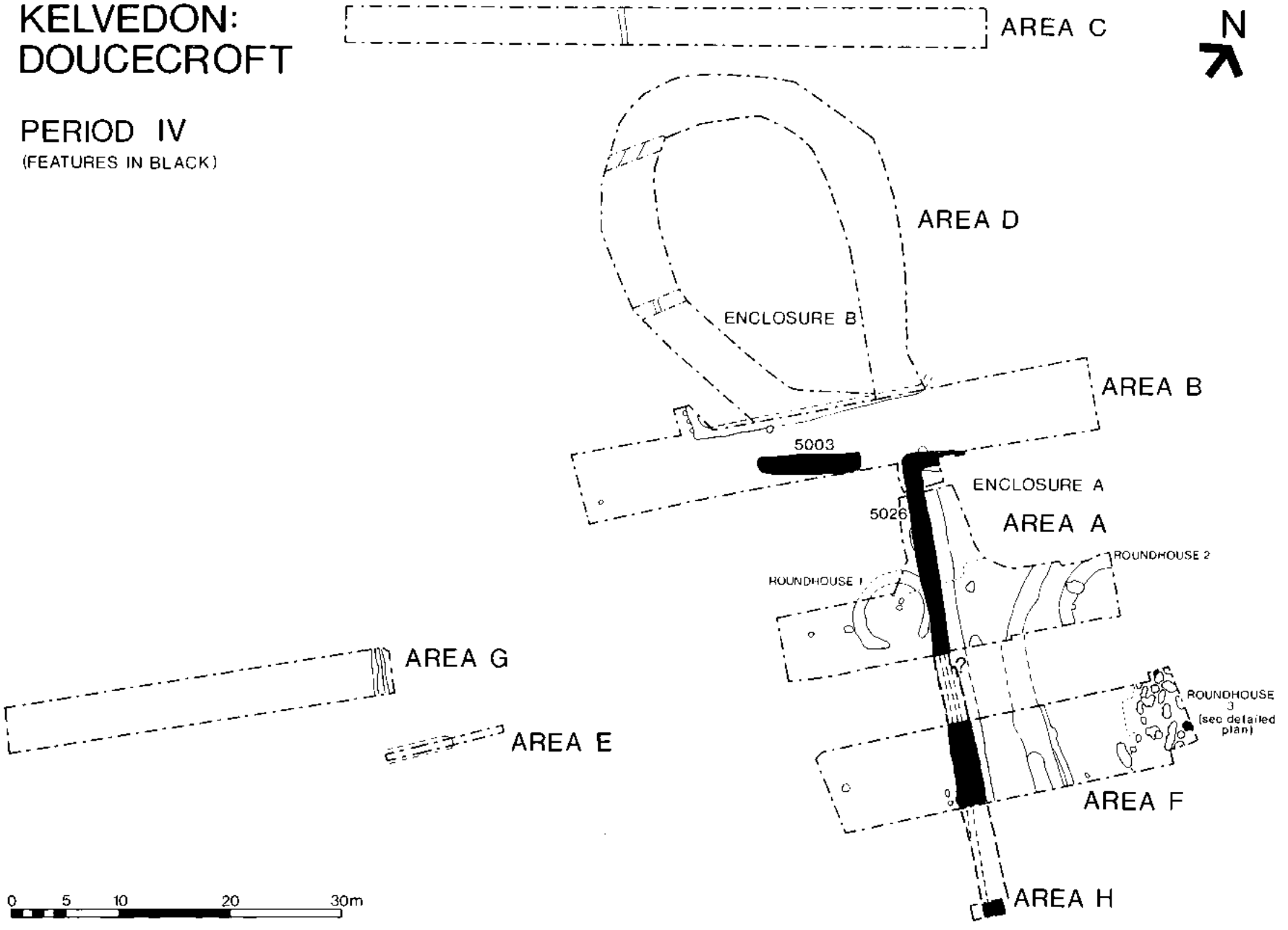

Fig. 6 Phase plan for Period IV.

dating coarse pottery of this period, combined with low sherd counts in most features, has meant that close dates, particularly for phases 2 and 3 in Enclosure A, cannot be established.

Enclosure A

Enclosure A was located in Areas H, F, A and B. Only part of the south-western side, which was at least 42m long, and the north-western corner of the enclosure were present within the excavated site. The enclosure was of four distinct stratigraphical phases in Area F (section 1401, Fig. 11) though only three were recognised in Areas B and A; the earliest of these is probably Belgic and the latest early Roman (i.e. Periods III-V; all component features are described below). The ditches in all phases were completely infilled before being recut. Where features were intercut, fills were difficult to distinguish from one another during excavation, even though fairly clear in section. This may have led to finds from adjacent fills becoming wrongly attributed; in general, however, the numbers of sherds from most fills are so low that they are of limited reliability anyway.

Phase 1: ditch 5024/5103

(Although described here, this is probably a Period III feature). The earliest phase in the sequence was represented by 5103 in Area F (section 1401, Fig. 11) and 5024 in Area A/B (section 510, Fig. 11). Where its original width could be reliably estimated, it lay within the range 1.4-1.8m; original depth varied from 0.3-0.7m, being shallowest at the north-west corner of the enclosure and deepest on the southern edge of Area A. The level of the bottom fell overall *c.*1.25m from the south-west to the north-west corner where the ditch was shallowest. The profile was consistently of flat bottomed U-shape, the angle of the sides usually being fairly shallow. Fills consisted of basically sterile sand and silt loam. The bottom of the ditch was usually covered by a thin layer of primary silt; pebble concentrations in the overlying secondary and tertiary fills in some segments suggested that they may have been backfilled, these pebbly fills occasionally going right down to the floor of the ditch.

Dating evidence is sketchy. It is clearly the stratigraphically earliest phase in the sequence. Only five sherds were recovered from the primary fill, all from the corner of the enclosure where the ditch was undisturbed by later features (fill 107 in 5024, section 510, Fig. 11); all were of Belgic date. Belgic pottery was also recovered in significant quantities from the tertiary fill in Area F (fill 181 in section 1401, Fig. 11). Apart from these groups, only half a dozen or so sherds were recovered from the secondary and tertiary fills, mainly of *c.*conquest period date, though the backfilled secondary fill 192 (section 510) produced a possibly intrusive sherd of post-conquest date. Its place in the stratigraphical sequence of the enclosure, and the predominance of Belgic pottery in the fills tends to indicate a Belgic date, with the occasional later sherds being intrusive.

Phase 2: ditch 5102

Two phases of enclosure ditch later than 5024/5103 and predating the palisade slot 5087 were identified in Area F, and only one (5026) in Areas A and B. It is possible that one of the ditches terminated between Areas F and A, or that the phase 3 ditch cut away all or most of its phase 2 predecessor rendering it invisible. Ditch 5026 in Area A produced no datable finds so does not affect the dating of phases 2 and 3. In general, the precise alignment of the corner of the enclosure relative to the Period IV ditch 5033 appears to indicate a contemporary origin for 5033 and phase 2 of the enclosure.

Ditch 5102 was of uneven, flat-bottomed, U-shaped profile with irregular sides; original width was *c.*1m, and depth varied within the range 0.53-0.62m. The bottom rose *c.*0.25m to the north-west within Area F. Primary, secondary and tertiary loamy fills were present in roughly equal proportions in the north-west of Area F (section 1401, Fig. 11), and primary and secondary only in the south-east, also in similar quantities; there was some indication in both segments that the secondary fill was backfill.

The primary fill contained a group of Belgic pottery with a residual MIA sherd and a grog-tempered sherd of *c.*conquest date, and the secondary fill a single Belgic sherd, another grog-tempered sherd, and a group of pre-Claudian sherds of pre *c.*A.D. 60 date.

Phase 3: ditch 5101

Ditch 5101 was the latest, and largest, in the enclosure's sequence. It was of U-shaped profile, rounded at the bottom in places and flat in others, with fairly irregular sides. Recorded width was in the range 1.48-2.01m, and depth 0.62-0.82m, deepest in the north-west of Area F (section 1401); the bottom rose 0.10m from south-east to north-west. In the more southerly segment a primary silt of sandy silty loam covered part of the bottom of the ditch to a thickness of some 0.10m; the overlying fill, distinguishable only by colour, rose to the surface of the feature and formed the only fill in the northern segment (fill 195 in section 1401, Fig. 11). The fill, which was virtually sterile, was unevenly distributed in the ditch; it appears to have silted in from the inside of the enclosure, and the western side of the ditch is likely to have been still partially open in places before the phase 4 palisade slot was dug.

Dating material was restricted to three sherds, of MIA and grog-tempered ware of pre- or post-conquest date from the primary fill, and a single sherd of Belgic pottery from the main fill. For general dating considerations see phase 2 and Discussion.

Phase 4: palisade slot 5087/5025/5027

(Note that although described here as the final phase of the enclosure sequence, the palisade is probably Period V). The palisade slot was cut through the fill of ditch 5101 from the surface; there was some indication that 5101 was not completely infilled along its more southerly edge suggesting incomplete silting from the north-east section 1401). The palisade slot was a continuous feature along the recorded

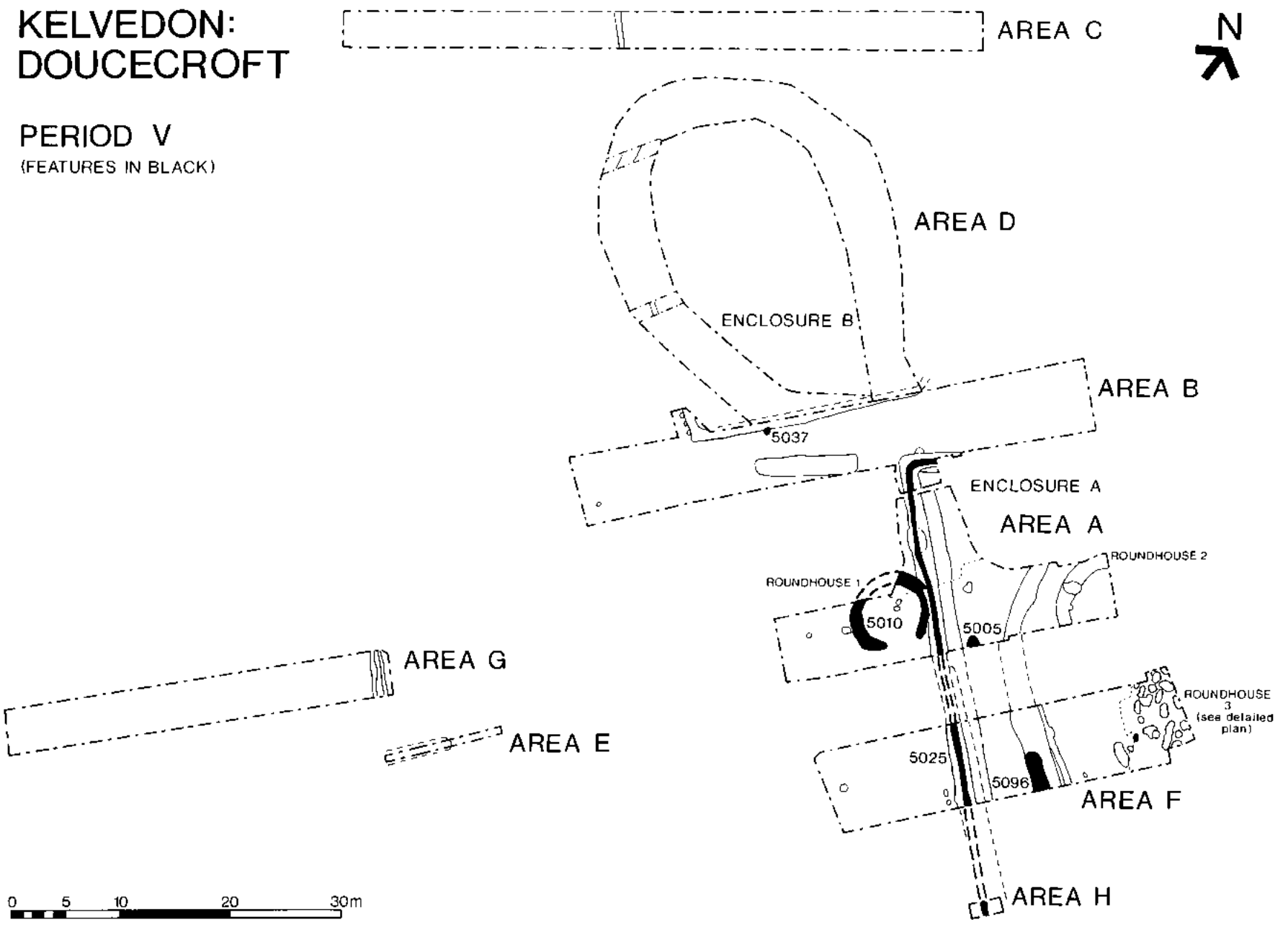

Fig. 7 Phase plan for Period V.

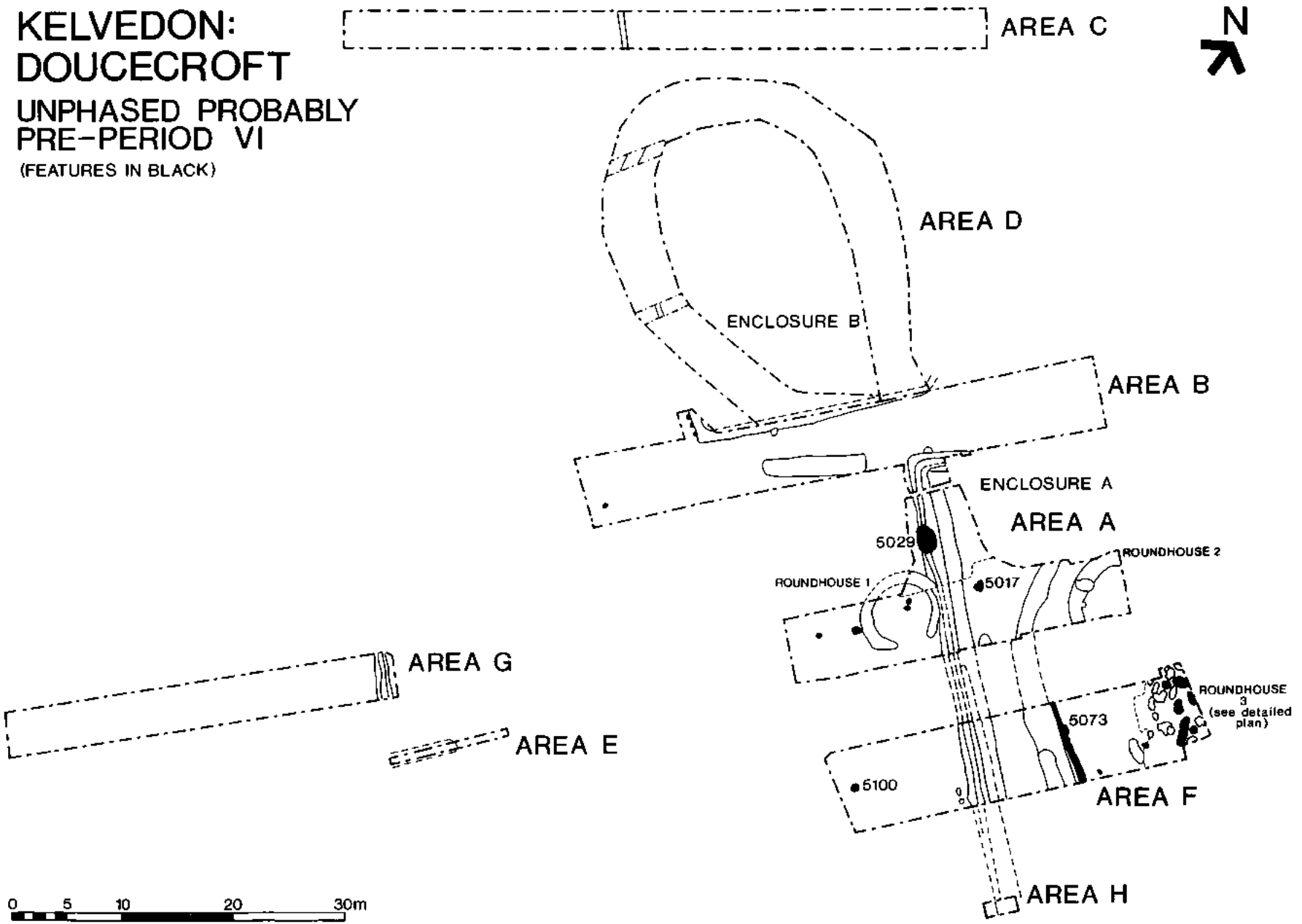

Fig. 8 Phase plans unphased but probably pre-Period VI features.

course of 5101/5102, though levelling deposits over the top obscured it from the surface. The feature was of rapidly changing variable profile, sometimes indistinct in section, but usually steep to near vertically-sided with flat or rounded base (sections 510 and 1401, Fig. 11). Width at the top of the slot was in the range 0.5-0.9m, usually around 0.7m, and width at bottom was 0.04-0.30m; depth from the top of the recut was in the range 0.23-0.56m.

The characteristic steepness of the sides suggests a palisade slot rather than a gully. The fill was uniformly a very pebbly clay loam, sandy in places, filling at least the bottom two thirds of the slot and in places filling it completely. Except on the corner of the enclosure (section 510) the fill of the slot was covered by levelling deposits similar to the lower fill of the slot, and this in turn was capped by further deposits to the level of the contemporary ground surface. The very pebbly primary fill of the slot may represent post-packing material, and the earliest levelling layer may be redeposited primary fill following extraction of the posts. The uppermost levelling tended to be rather less stoney. A redeposited cremation burial was found at the interface of the fill of the slot and the earliest levelling deposit in the southern segment of Area F. This consisted of a spread of pottery and calcined bone over an area *c.*1.0 x 0.3m. There were only 15 fragments of cremated bone present; the pot associated with the bone (Fig. 16 No. 11) had, from the distribution of sherds, evidently been whole or in large pieces when thrown into the ditch; the burial was definitely redeposited, and not in its original location.

The slot is the latest phase in Enclosure A but dating evidence is again sketchy. About 110 sherds were recovered from the primary fill; these were predominantly of grog-tempered ware of pre- or post-conquest date, but the assemblage included *c.*20 Roman sherds of definite post-conquest date from the primary fill (context 144) of the slot in Area H. The vessel containing the redeposited cremation, from the interface of the fill of the slot and the levelling deposits, which must be residual, is of *c.*conquest date. The levelling deposits contained only five sherds, the latest of these of Belgic or early Roman date.

Ditch 5033

5033 was a well defined feature, with square terminals. The profile (e.g. section 405, Fig. 11) was consistently steep-sided, the northern side tending to be steeper than the southern, and flat bottomed; the south-western terminal was abrupt. The bottom of the ditch rose in the excavated segments *c.*0.19m from the east towards the excavated terminal. There were three main fills where excavated, a primary silt (fill 74 in section 405), a secondary fill (66) and a tertiary fill (69). The primary silt, a pebbly silt loam, indicates silting from the southern side of the ditch where there may have been a bank. Fill 66, a relatively pebble-free layer of silt clay loam at the bottom of the topmost third of the profiles, may represent a buried soil. The tertiary fill of sandy clay loam may have been backfilled. Finds were common at the top of the primary fill and in the buried soil; no finds were recovered from the tertiary fill. Apart from pottery, finds from the primary fill were an iron object (probably a nail), two lumps of burnt clay similar to those from the Belgic ditch 5032, a fragment of cattle bone and ten pieces of struct flint (mainly waste), while the buried soil produced a flint flake and a fragment of horse bone.

Dating material comprised a total of 25 sherds from the primary fill, nearly all of these from the interface with the buried soil; 13 were Belgic, and the remainder grog-tempered wares of pre- or post-conquest date. The buried soil, context 66, produced 15 sherds of Belgic and grog-tempered wares. The commonness of Belgic pottery in the primary fill may indicate an early Period IV date of origin for the feature.

Other features

Other features comprised two small post-holes in the vicinity of Roundhouse 3; both contained a single sherd, one of grog-tempered ware and the other in a Romanising fabric.

Period V: Early Roman

Features assigned a Period V rather than a Period IV date contained Roman pottery in circumstances where intrusion was unlikely, and were usually stratigraphically post Period-III or IV. The presence or absence of Roman pottery as the sole dating criterion is rather dangerous, but features of indisputably Period IV date (e.g. ditch 5033) never contain Roman material, and the sequence in Enclosure A (above) would seem to be impossibly rapid without the site continuing beyond the middle of the first century, after which Roman wares might be expected to occur abundantly. Nevertheless, the dated Roman phase appears not to have continued beyond *c.*A.D. 70, or a little later, though it is observed that there are no finds from some stratigraphically late features, notably the roundhouse which appears to be later than the levelling over the pallisade slot.

The Period V palisade slot in Enclosure A is described above; the levelling over the top seems to have immediately followed disuse of the slot.

Ditch 5096 (section 1101, Fig. 10)

Ditch 5096 was located in the southern side of Area F where it was cut through the fill of the probable Period III ditch 5004; within the excavated segment the profile of 5096 was very irregular, changing from a truncated V-shape 1.45m wide and 0.68m deep, to a flat bottomed U-shape 1.35m wide and 0.46m deep; the level of the bottom rose 0.22m within the 2.5m length of the segment. The ditch was clearly in the process of terminating, and was not visible in the segment at the northern side of the trench; the exact position of its terminal was not identified between the two segments.

Fills comprised a thin primary silt of sandy loam, *c.*0.12m thick and entering the ditch from the southern side (not occurring in the published section 1101), overlain by a loamy secondary fill. The middle of the ditch was filled with a mixed, dumped, deposit of sandy loam which in places contained lumps of burnt and raw boulder clay and

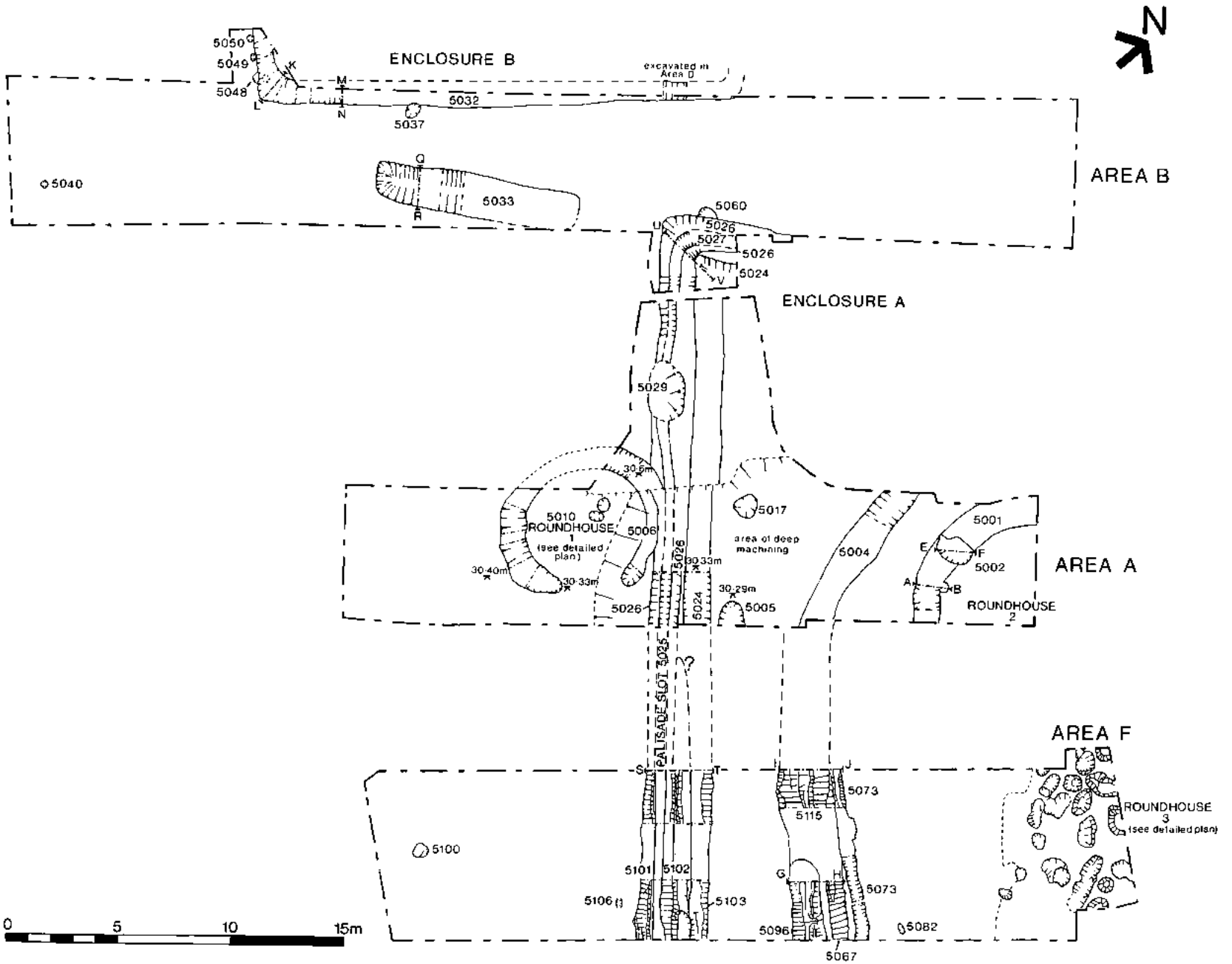

Fig. 9 Areas F, A and B. Lines of features in north-eastern half of Area A may be distorted due to uneven and deep machining.

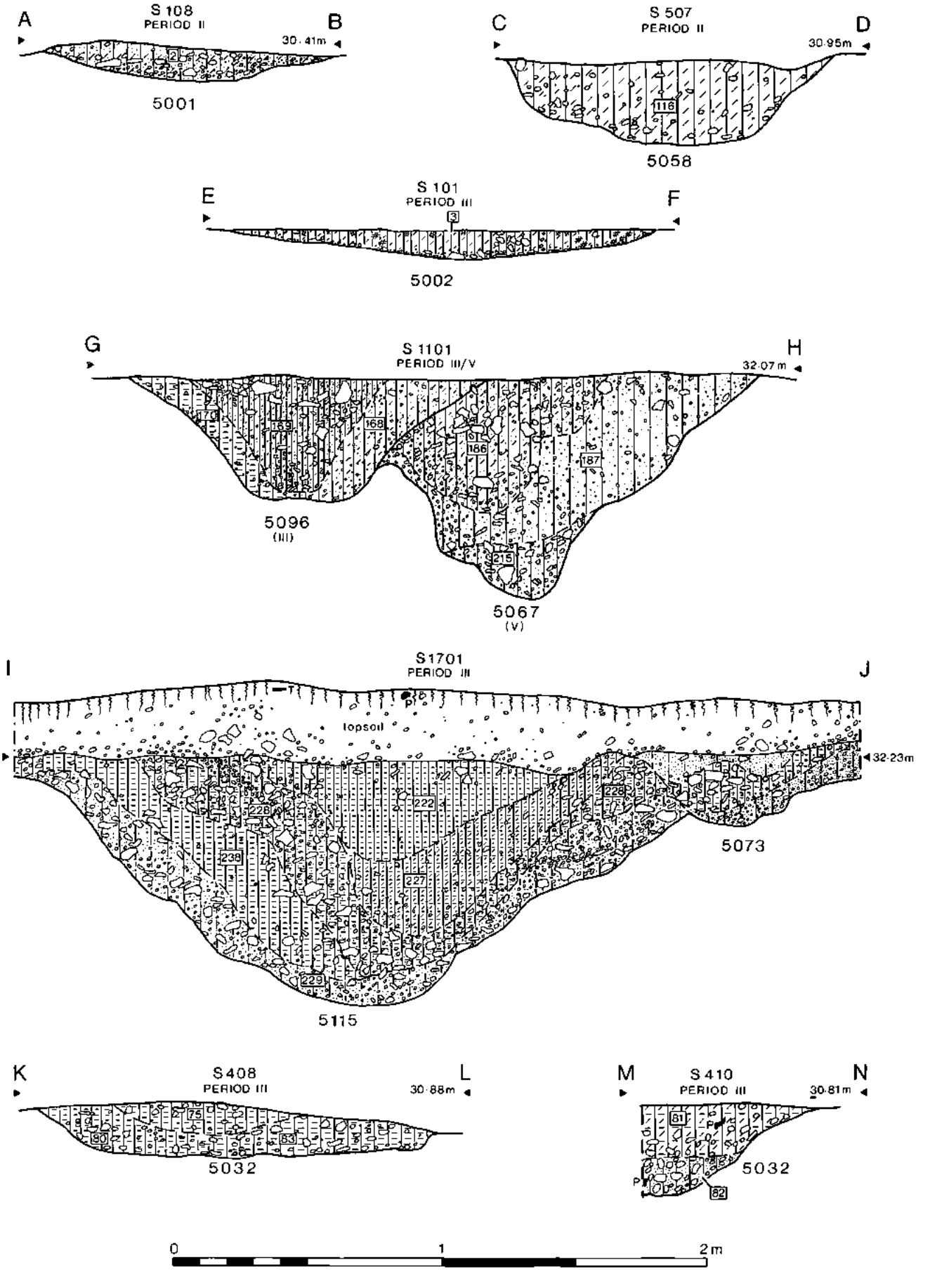

Fig. 10 Sections.

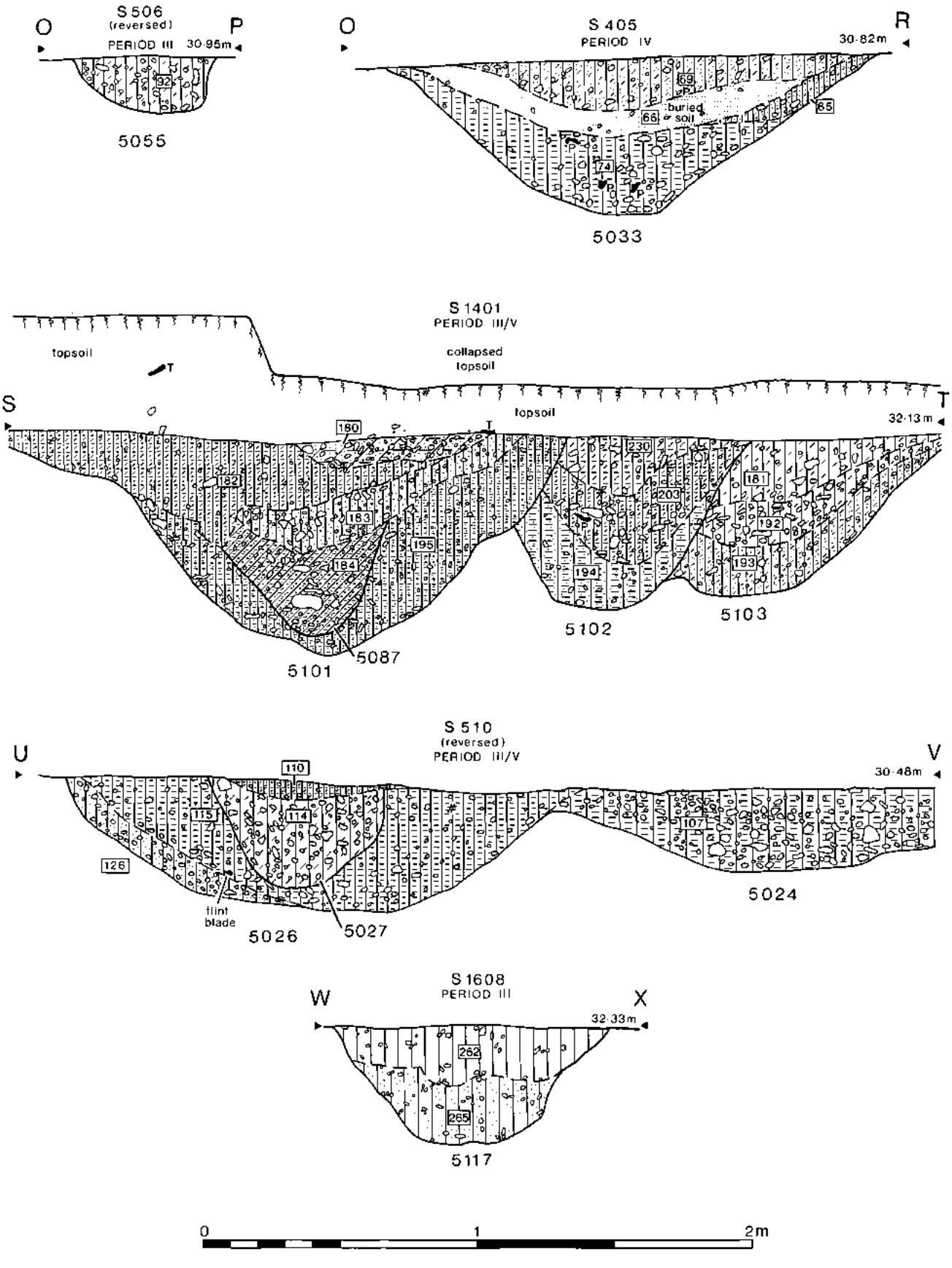

Fig. 11 Sections.

concentrations of Belgic pottery. The sides of this tertiary fill were very steep in places and it is not impossible that this represents the fill of a recut.

The excavated primary silt contained no finds. The secondary fill (168/170 in section 1101) produced a quantity of Belgic sherds and a single Roman sherd and a fragment of Roman tile, and several flint flakes. The backfilled tertiary deposit (fill 169) contained a group of Belgic pottery and part of a pre-Claudian butt-beaker made before *c.*A.D. 60, waste flint, and two fragments of animal bone. The Belgic material is clearly residual, probably coming from the fill of the earlier ditch 5004.

Roundhouse 1 (Fig. 13)

Roundhouse 1, in Area A, was cut through the outer edge of the ditch fills forming the sequence in the side of Enclosure A; the north-eastern side of the structure, including the area of intersection, was severely damaged by machining. The palisade slot was not visible from the surface, but it is likely that the roundhouse cut through the levelling deposits characteristically overlying the fill of the slot and known to sometimes extend right up to the outer edge of the ditches (e.g. section 1401, Fig. 11); if this is true in this part of Area A, then the roundhouse is stratigraphically later than the palisade slot and subsequent levelling. It can be said that the roundhouse is probably later than the Period V palisade slot, and definitely later than the Period IV ditch 5026.

Roundhouse 1 was rather oval in shape, of external diameter 6.5-7.8m, with an east-facing entrance surviving to a width of 2.5m; the overly deep machining of the eastern side of the structure led to the loss of the upper part of most of gully 5006 and its terminal, which petered out; the entrance was probably originally narrower than planned. The opposing terminal, of gully 5010, was abrupt and definite. Where the gullies survived undamaged, they were fairly steep-sided, flat-bottomed features, irregular in places; there was a tendency for the bottom of the gullies to fall slightly towards the gully terminals (*c.*0.17m from the highest to lowest points). The gullies were filled with an undisturbed pebbly clay-silt, becoming stonier towards the bottom. No obviously contemporary features were located.

The only finds from the fill of the gullies were a flint scraper (Fig. 14) and a waste flake. On stratigraphical grounds a date later than the very early Roman palisade slot is assigned. In spite of the lack of internal dating evidence, there is no reason to assume that the roundhouse is later than early Roman.

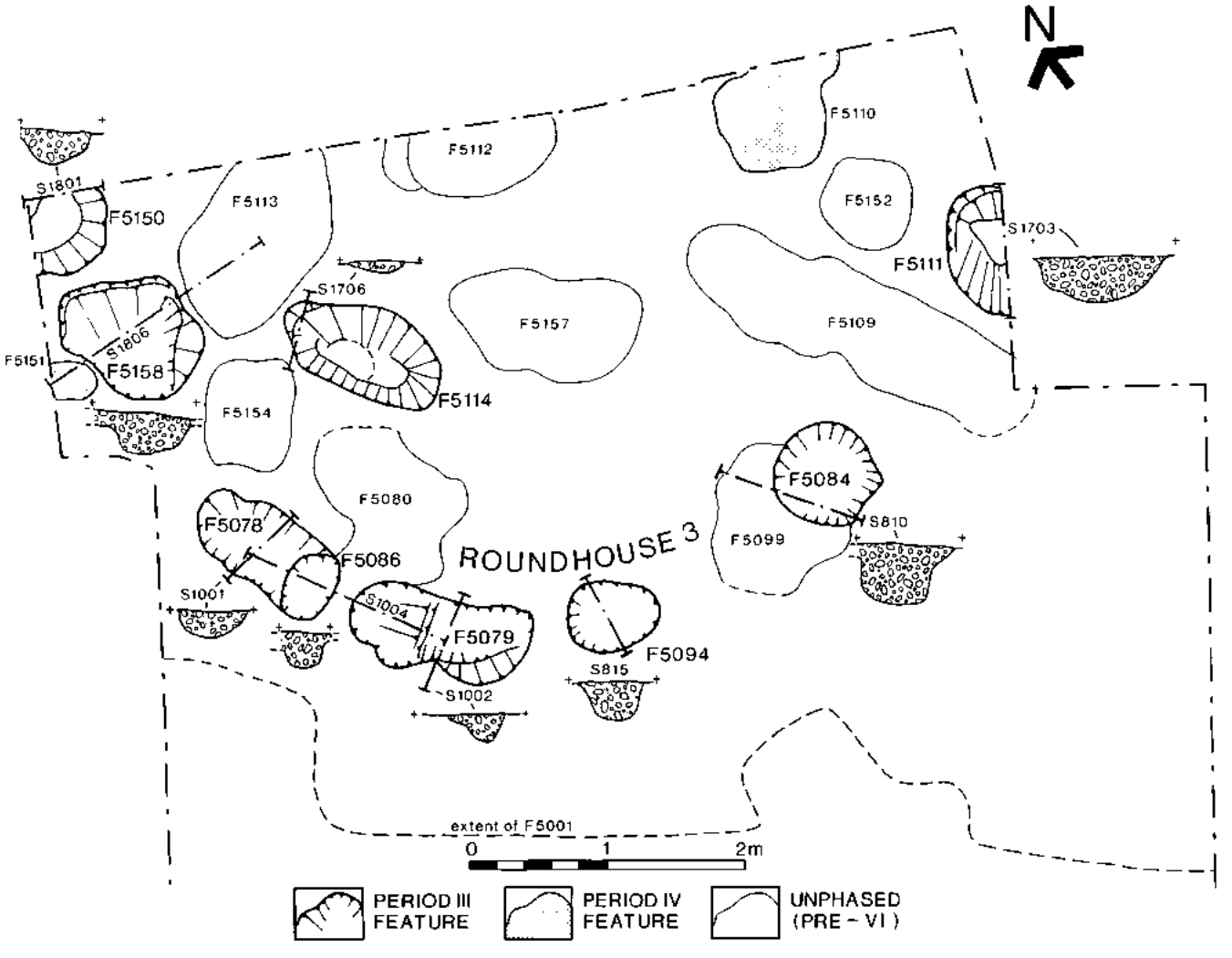

Fig. 12 Roundhouse 3 (Period III).

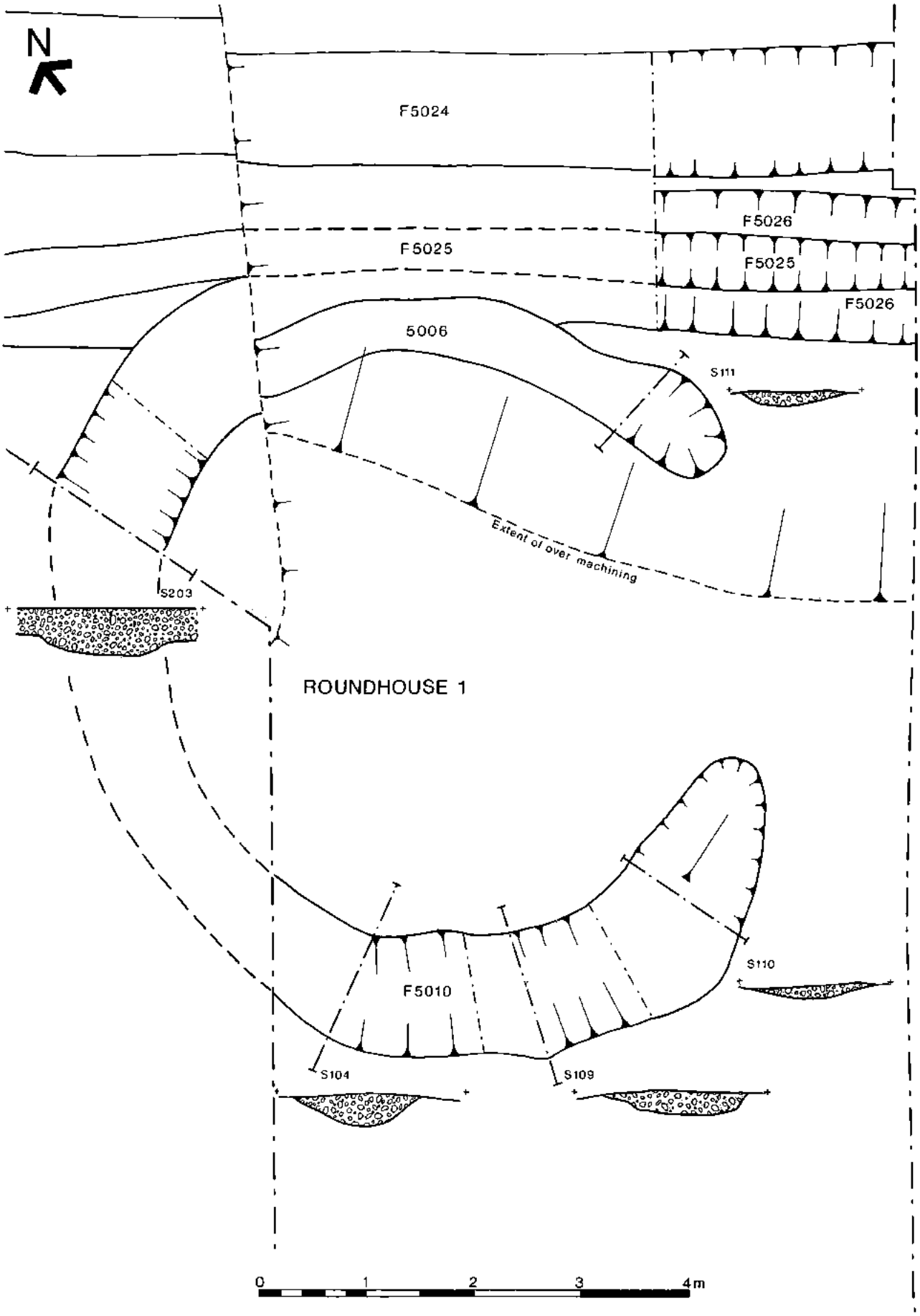

Fig. 13 Roundhouse 1 (Period V). Palisade slot not visible from surface.

Other features

Scattered features comprising two post-holes and a pit also contained small amounts of Roman material.

Period VI: Post-Roman

Evidence of exploitation of the site after the early Roman period is restricted to *c.*30 post-medieval pits and other features, none of them structural or of any importance. The small assemblage of randomly distributed medieval pottery (11 sherds) recovered was, with the possible exception of a sherd in a small post-hole, residual in post-medieval and modern features. Most of the post-medieval and later disturbance can be attributed to seventeenth century and later activity to the rear of contemporary structures along the High Street, and the subsequent use of the land as a nursery garden.

The artefacts

The following notes on tile and brick, iron objects, and vitrified material and burnt clay are based on archival descriptions of the finds by Hilary Major. The report by Hazel Martingell on the lithics assemblage from the site is followed by her general 'Note on Certain Thick-sectioned Flakes From Kelvdon', an example of which is represented in the material from this site.

The only illustrated finds are flint from this site (Fig. 14.1-8) and from this and other Kelvedon sites (Fig. 15.1-5), and pottery from Periods III, IV and V contexts (Fig. 16).

Iron

Thirteen iron objects were recovered from features of probable Roman or earlier date. All are complete or partial nails with the possible exception of three small corroded unidentifiable fragments, and a roughly rectangular plate fragment measuring 40x20x2 mm. The nails are square shafted, 31-62+ mm long, with round or oval heads of 11-16 mm diameter where surviving. These finds are distributed by Period as follows: Period III, three nails plus the three fragments, all from the secondary fill of ditch 5032 except one nail from the primary fill; Period IV, two nails, both from ditch 5033, one of them from the primary silt; Period V, four, from palisade slot 5027 (two nails plus the plate fragment) and post-hole 5037 (one nail); and uncertainly dated, one nail.

Lithics (Figs 14 and 15)

by Hazel Martingell

An assemblage of 124 pieces of flint was recovered. It is classified as follows: flakes, 85; blades, 7; blade/flakes, 2; cores, 5 (see 'Note on Certain Thick-sectioned Flakes From Kelvedon' below); thinning flakes, 3 (e.g. Fig. 14.1); notch spalls, 1; waste pieces, 3; bashed lumps, 1; retouched pieces, 7 (e.g. Fig. 14.2, 3); scrapers, 3 (Fig. 14.4-6); notch pieces, 6 (e.g. Fig. 14.7); cortex backed knife, 1 (Fig. 14.8).

All finds are probably residual, with the possible exception of five flakes from the fill of Period II ditch 5058. The assemblage is very similar in character to those from other Kelvedon sites, representing a general utilisation of the river gravels in the Neolithic and Bronze Age, and possibly later. The predominance of waste pieces represents a knapping site rather than a habitation area.

Note on Certain Thick-sectioned Flakes From Kelvedon (Fig. 15)

A feature of the lithic collections from Kelvedon sites are certain thick-sectioned flakes (Fig. 15 shows material from Doucecroft, no. 1, and the previously excavated sites KL D, no. 2, and KL F, nos 3-5; Eddy 1982). The impression of thickness is given by the deep cones of percussion on these short, often squarish, flakes; they also tend towards a sinewy profile and usually have broad and wide platforms.

Two cores from which this type of flake has been removed have come from Kelvedon sites Doucecroft and Eddy's trench D. These cores are very similar to each other, the difference in appearance being due to the shape and size of the original nucleus. The (unstratified) core from Doucecroft (Fig. 15.1) has been randomly prepared over the dorsal surface with a long platform formed by flake removals at 45 degrees to this surface. A lateral flake has been removed from the lower part of the ventral surface, possibly to determine the length of the flakes, and finally two of these deep flakes have also been detached from this surface. This appears to have been a quite deliberate process as there are no incipient cones on the platform which would suggest careless or ill-considered hammer techniques. The core from KL D (Fig. 15.2; Eddy, 1982) is similar in all respects except that the dorsal surface is unknapped and retains the original cortex.

The only cores remotely similar to these I have seen before are the cores that are produced by the detaching of a certain type of gun-flint blank. These have always been of good quality black flint and have therefore a more controlled appearance. It is possible that some of these cores and flakes represent an amateur attempt to produce gun-flints. If this is not the case, then some other activity, probably agricultural, which necessitates the production of pieces of this type (Fig. 15.3-5) must be sought. Further research is needed before more can be said about these pieces which also occur on other sites (e.g. nos 3-5 on Fig. 15 from Eddy's trench F).

Pottery (Fig. 16)

The Middle Iron Age, Belgic and Early Roman Periods (Periods III-V)

by David Gurney

The pottery assemblage from Period II to Period IV is largely composed of small groups of fragmented sherds. Many of the excavated features produced only a few scraps of pottery, much of the pottery came from contexts in which it was clearly residual (largely due to the frequent recutting of linear features), and the site was badly affected by post-medieval and later disturbances. These factors combine to leave little worthy of detailed analysis or illustration; what dating evidence has been provided by the ceramic assemblage has been integrated into the period descriptions above. The dating/phasing of the pottery which was used as the basis for the excavation report was carried out by Catriona Turner, and the present writer concurs with her conclusions.

The following catalogue is confined to the few restorable vessels from the site. Detailed quantification and analysis of the whole assemblage, in this instance, has not been considered justifiable, given the fragmented nature of the pottery, and the problems of residuality and phasing referred to above.

Catalogue (Fig. 16)

No 1. Small ovoid jar with tapering everted rim and thick walls. Hand-made. Soft very dark grey fabric with sparse quartz inclusions, rough yellowish-brown surfaces. Probably Middle Iron Age and residual. Four sherds. Primary fill 87 of ditch 5032 (Period III).

No. 2 Coarse bead-rim jar with internal rim thickening. Hard very dark grey flint and grog-tempered fabric with red surfaces. Rim burnished externally with some sooting, and upper body covered with light near-vertical scoring or striation. A very common form that covers the whole of the first century A.D. 20 sherds. Secondary fill 81 of ditch 5032 (Period III).

No. 3 Jar with beaded rim, slight neck and gently curving body. Hard dark grey fabric with fine to medium sparse quartz. Burnished externally. Middle Iron Age; residual. One sherd. Secondary fill 81 of ditch 5032 (Period III).

No. 4 Bowl with sloping sides and a plain rim. Very crude and lumpy; hand-made. Hard sandy very dark grey fabric with moderate quartz, and reddish-brown surfaces. Six sherds; three burnt after fracture. Middle Iron Age; residual. Secondary fill 85 of ditch 5032 (Period III).

No. 5 Narrow-mouthed squat bowl with rippled or corrugated shoulder. Hand-made. Hard fairly dense fabric with a little quartz and grog, burnished externally with a 'soapy' feel. Deep stabbed decoration. ?Middle Iron Age; ?residual. Three sherds. Fill 108 of ditch 5032 (Period III).

No. 6 Narrow-necked jar with slight bead rim. Dark brown grog-tempered fabric; dark grey internal surface and black well burnished rim

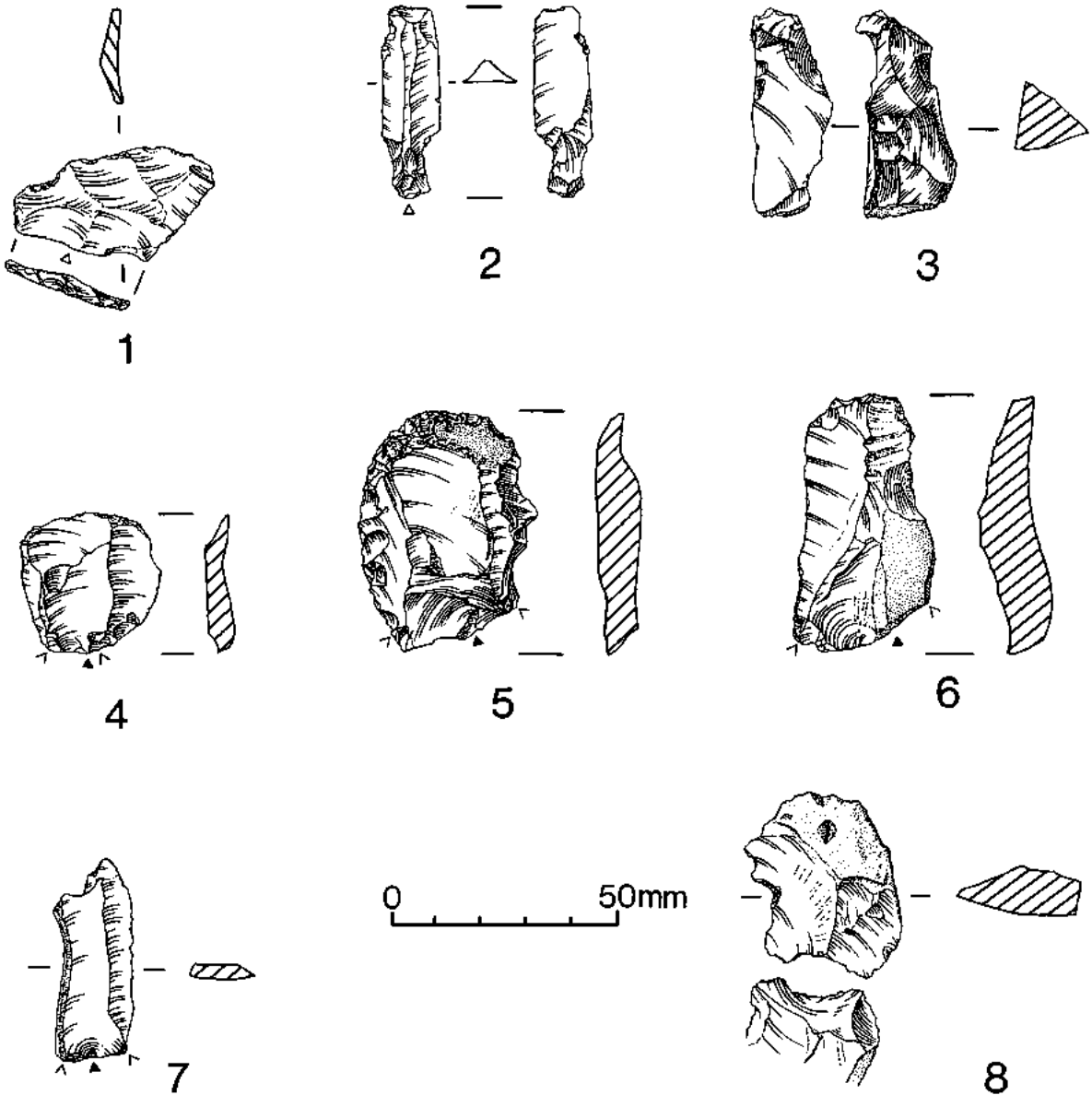

Fig. 14 Flint from Doucecroft site.

and external surface. Belgic. Three sherds. Tertiary fill 181 of ditch 5103 (Period III).

No. 7 Neckless globular jar with bead rim. Coarse grey grog-tempered fabric with dark grey pimply surfaces. Lower body knife trimmed with vegetable markings. *Cam.* form 259, A.D. 10-65. Six sherds. Primary fill 198 of ditch 5102 (Period IV).

No. 8 Rilled jar with bead rim. 'Sandwich' fabric of grey core, reddish-brown margins and pimply dark grey surfaces. Grog-tempered. Lower body knife trimmed with vegetable markings. *Cam.* form 260A, a common form and generally post-conquest (cf Rodwell 1987, Fig. 24, No. 162). 21 sherds. Fills 65, 66, 74 of ditch 5033 (Period IV).

No. 9 Butt-beaker with offset neck and decorated with light stabbing. Grey fabric with matt red surfaces (cf *Cam.* fabric T.R.4; Hawkes and Hull 1947, 204). *Cam.* form 119A, post-conquest. Six sherds. Upper fill 96 of ditch 5026 (Period IV) or palisade slot 5027 (Period V).

No. 10 Bowl with an offset neck and single cordon on the shoulder. Greyish-brown grog-tempered fabric with reddish margins and dark grey surfaces. Rim burnished internally and externally to just below the shoulder. *Cam.* form 221. A basic Belgic form with a long life, and very similar to a vessel found at Kelvedon by Campen and illustrated by Thompson (1982, Fig. 50b, 1470). 62 sherds. Fill 34 of palisade slot 5027 (Period V).

No. 11 Large plain rim jar. Hard grey grog-tempered fabric with reddish-brown margins and dark grey surfaces. Knife-trimmed lower body. The hole in the base could be deliberate (cf Rodwell 1987, Fig. 19, No. 94). 86 sherds. Fill 211 in top of palisade slot 5087 (Period V).

Post-Roman (Period VI)

by Helen Walker

0.6 kg of post-Roman pottery was recovered. Only 11 sherds are medieval and most of these are residual in features containing 17th century or later pottery. The distribution across the site appears to be random, although they are absent in Area H. The assemblage is too small to suggest occupation during the medieval period.

The entire post-medieval period is represented by pottery dating from the 15th/16th centuries to the 20th. Red earthenwares are the most frequent. These were mainly produced during the 16th-18th centuries with little change in fabric (Jennings 1981, 157) and can usually only be dated when diagnostic forms or finishes (e.g. black glazing) are present. By the late 16th-17th centuries many vessels (at least in Chelmsford) had an internal or overall plain lead glaze (Cunningham 1985, 2). Other wares found stratified date to the 18th and 19th centuries. Again, there is not enough pottery to demonstrate occupation of the site.

Tile and brick

A total of ten fragments of possible and probable Roman tile, in a hard reddish-brown fabric, were recovered from seven contexts. Of these, all but three came from recent features or were unstratified; of the remainder, one possible fragment came from a Period IV post-hole, and the other two from the fill of Period V ditch 5096 and from the fill of the Period V palisade slot 5075 respectively. Post-medieval tile was fairly common in Period VI features.

Burnt clay and vitrified material

Vitrified material is almost invariably associated with finds of burnt clay in the excavated contexts at this site, and is probably a function of the burnt brickearth and not an indicator of metal working. It consists occasionally of light grey vesicular material (probably highly fired brickearth, cf. the material from North Shoebury, Essex in Wymer, forthcoming), or usually more highly vitrified material often fused onto pieces of burnt clay. Vitrified material and burnt clay are described together below because they are probably two by-products of a single type of activity.

The vitrified material assemblage consists of 112 fragments, weighing a total of 1.336kg, distributed by period as follows: Period III, 98 fragments (87% of total) at 1.115kg; Period IV, 4 fragments (4%) at 51g; Period V, 1 fragment (1%) at 22g; Period VI, 1 fragment (1%) at 68g: undated, 8 fragments (7%) at 40g.

The assemblage of burnt clay consists of 145 fragments, weighing a total of 852g, distributed by period as follows: Period III, 99 fragments (68% of total) at 506g; Period IV, 19 fragments (13%) at 100g; Period V, 21 fragments (14%) at 235g; Period VI, 5 fragments (4%) at 8g; and undated, 1 fragment (1%) at 3g.

Most of the burnt clay consists of small fragments of undiscernible purpose, probably mostly derived from burnt daub. The larger parts of both assemblages came from a total of five Period III (Belgic) contexts, a high proportion of them from the secondary fill of the Enclosure B ditch 5032 at the south-western corner of the enclosure. Eighteen fragments of burnt clay in a fine buff fabric from the secondary fill of this ditch, some with slightly curving surfaces, appear to be burnt brickearth, probably from a hearth. Some 35 fragments of vitrified material from the same deposit, some fused to baked clay, appear to represent oven or hearth lining; one has the edge of a perforation of *c.*20mm diameter. The Period III ditch 5004 also produced significantly high quantities of burnt clay and some vitrified material; one fragment of burnt clay from the primary silt of this feature, in a hard light brown sandy fabric, has one roughly flattened face with part of a groove *c.*13mm wide running at an angle to it, and is probably part of an Iron Age triangular loomweight. A further nine fragments of burnt clay, from the secondary fill of the same ditch, in a fine cream fabric, join to form thin 'sherds' and may represent burnt brickearth from a hearth. The relatively small quantity of vitrified material from this feature in Area F may indicate that it represents burnt daub, possibly from the nearby Roundhouse 3. The material from later contexts was not particularly significant and, since nearly all was stratified in contexts cut through Period III features, may well be residual.

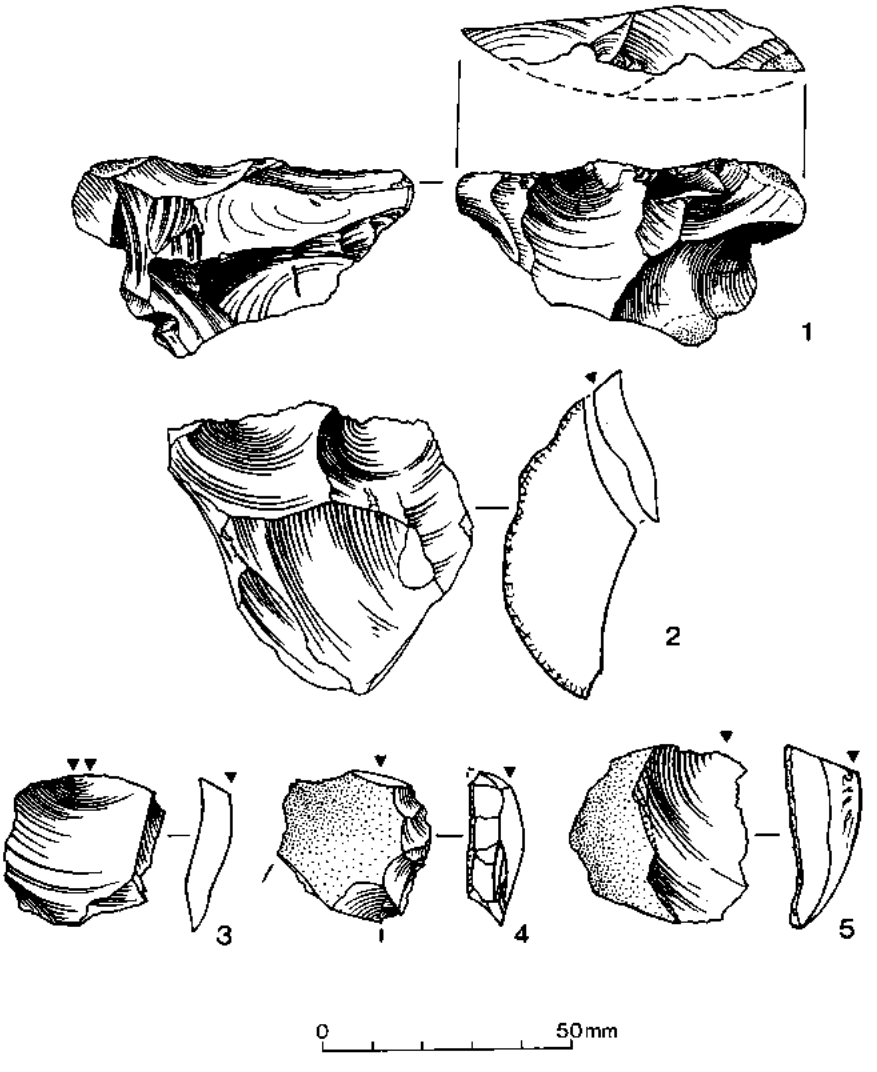

Fig. 15 Thick sectioned flakes from Kelvedon. No. 1 from Doucecroft (context 151), No. 2 from Trench KL D (Feature 253), No. 3 from KL F (F.59), No. 4 from KL F (F.3), No. 5 from KL F (F.2). Trenches KL D and KL F were excavated by Eddy (1982).

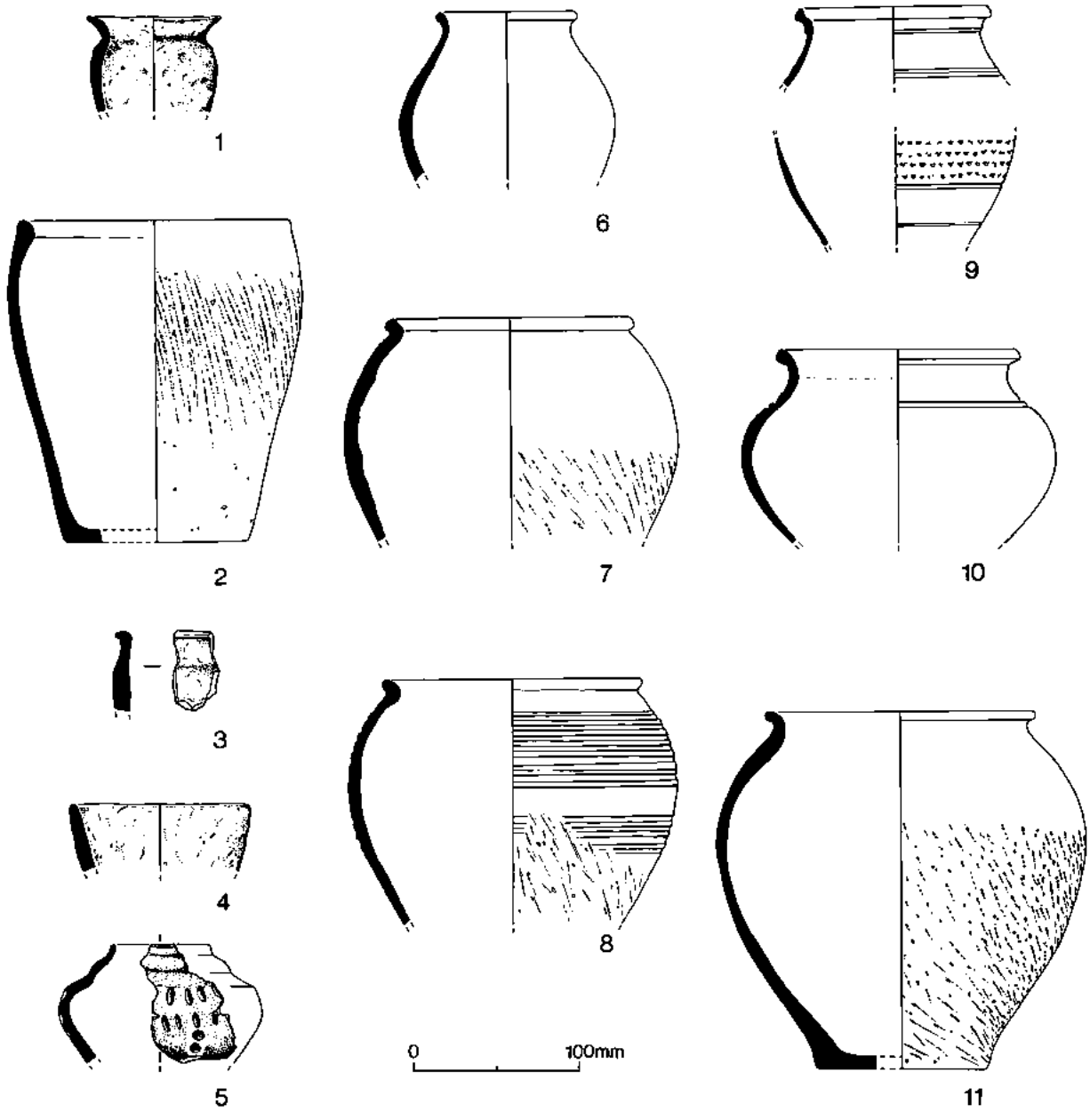

Fig. 16 Period III-V pottery.

Five sherds of probable or certain salt briquetage were recovered, four of them from the later fills of the Period III ditch 5004, and the fifth from the Period IV Enclosure A ditch, where it may be intrusive from the probable Period III ditch. Larger quantities of briquetage have previously been recovered from Kelvedon during excavations in 1977 (Eddy in prep.).

Animal bone

by Owen Bedwin

A total of 49 small fragments of animal bone and teeth were identified, with four indeterminate fragments. Of the 49 identified, 29 were teeth, indicating poor conditions on site for the preservation of bone. Apart from the acidity of the soil, the domestic use of the site, involving much trampling and frequent re-cutting of ditches, as resulted in this material being very fragmentary and abraded.

The species identified were as follows: *Ovis* (sheep), 13 fragments; *Bos* (cattle), 29 fragments; *Sus* (pig), 4 fragments; and *Equus* (horse), 3 fragments.

Fragments representing all of these species were recovered from probable Period III contexts, all except *Sus* from Periods IV and V contexts, and all except *Equus* from Period VI contexts. The overall size of the assemblage, and the fragments themselves, were too small for any conclusions to be drawn about diet or the economy of the site.

Discussion

Period I

The flint assemblage suggests exploitation of the local gravels as raw material, rather than permanent settlement.

The only evidence of Neolithic settlement in Kelvedon recognised is a probable four-post-structure *c.* 1 km to the south-west (Eddy 1982, 5, Fig. 4).

Period II: Middle Iron Age

The Middle Iron Age and flint-tempered pottery and possible Period II features indicate settlement on, or very close to, the excavated site. As such, this is the first clear indication of Middle Iron Age settlement from the town.

However, the general impression from the scarcity of features attributable to this phase suggests that the settlement area barely encroaches upon the sampled area. The distribution of features and pottery suggests that the centre of the MIA settlement probably lies to east of the excavated site.

The most significant of the excavated features is the probable ring-ditch, 5001, which may be the wall trench of a roundhouse of estimated diameter *c.* 12m (Roundhouse 1); if this feature does represent a roundhouse, its diameter and the size of its wall trench puts it within the range for Group B structures at Little Waltham dated to the mid third to late second centuries B.C. (Drury 1978a, 14). Ditch 5058 may represent a contemporary field boundary.

Periods III-IV: Belgic — *c.*Conquest date

The evidence for Late Iron Age settlement in Kelvedon has been summarised (Eddy 1982) as follows:— the principal component was a spinal boundary ditch between the probable area of settlement and the floodplain of the River Blackwater (the line of the ditch being followed by the southern boundary of the Roman town); there was a rectilinear field system of at least three phases on the western side of the later Roman town; there were two rectangular timber structures of Late Iron Age date in the vicinity of, and possibly contemporary with, the second phase of the field system, and a single roundhouse of probable Late Iron Age date on the eastern side of the Roman town. Eddy 1982, 6-10). He states that it is as yet difficult to establish the nature of the settlement or of zones within the area of occupation.

The Doucecroft site has produced the first evidence for Late Iron Age enclosures in the town. Both appear to be contemporary, and one at least has an associated internal roundhouse (Roundhouse 3); the presence of burnt clay without associated vitrified material in the two more southerly segments of ditch 5004 may be burnt daub from this structure.

Enclosures A and B are almost certainly both of Belgic origin. No distictively first century B.C. pottery forms were recognised, so it must be assumed that the Belgic phase began around the beginning of the first century A.D. From the outset the major features, the two enclosures and the field system represented by ditches 5065 and 5117 in Areas E and G (Fig. 3), are laid out on a common southeast-northwest/northeast-southwest alignment. The persistence of this orientation and continued use of Enclosure A throughout the subsequent Periods IV and V indicates the later periods to be essentially a development of the same site. During this development the most enduring feature is clearly Enclosure A, which on the basis of the dating for ditches 5024/5103 and 5004 was bivallate in Period III and univallate thereafter. The multiple recutting of the Enclosure A ditches in the span Period III-V is difficult to explain, but was a definite aspect of the enclosure.

There is little evidence relating to the nature of the site or its economy during the Late Iron Age. The presence of Roundhouse 3 in Enclosure A from Period III on, and the abundant pottery from the Enclosure B ditch at the corner may indicate domestic occupation in both enclosures. The inadequate topsoil stripping in the driveway, Area D, made it impossible to establish whether or not structures were present within the area defined by Enclosure B. The burnt clay from the Period III features thought to come from hearths may be associated with domestic or possibly industrial activity; the possible crucible rim from the Enclosure B ditch is of interest in this respect. Further evidence of activity on the site during Period III is present in the loomweight fragment from ditch 5004. The possible rectilinear field system presumably represents arable farming associated with the settlement during at least the earlier part of the first century A.D. The very poor preservation of faunal remains (Bedwin, above), characteristic of sites in the town, makes it impossible for any conclusions about diet or economy to be drawn therefrom.

Period IV sees the demise of Enclosure B, but the remodelling of Enclosure A, possibly after some backfilling in the outer ditch. Enclosure A in its new form was univallate; ditch 5033 is clearly related to the enclosure, and perhaps represents the north-western side of an attached adjacent enclosure whose south-western side was not present in the sampled area, the gap between the Enclosure A and ditch 5033 an entrance. If a second enclosure was present here, then the wide entrances to the enclosure which would have to have been present at both ends of 5033 probably indicate that it was associated with stock management. The field system to the south-west appears to have fallen out of use at the end of Period III. The only evidence for burials during the Late Iron Age was in the form of a redeposited cremation in a ceramic vessel from the Period V palisade slot.

Roundhouse 3 at Doucecroft is of probable Belgic date. Rodwell (1978) has argued that rectangular houses are introduced by the Belgae. It seems rather unlikely that the rectangular structures at Kelvedon represent a settlement of incursive Belgae, while the settlement on the north-eastern side of the town area sampled by the Doucecroft excavations is a pre-existing Middle Iron Age settlement which coexisted with the western site after its foundation.

Period V: Early Roman

There was no sign of the defence ditch forming the north-eastern side of the Roman small town *Canonium* in Areas E or G, *c.*80m north-west of the High Street, and a similar absence during the groundwork observed by the writer in 1986 associated with the construction of a swimming pool to the rear of the Doucecroft School. It is thus most unlikely that the town boundary extended this far. This is confirmed by the general paucity of features at Doucecroft or in the grounds of the school where a watching brief on house footings only *c.*20m north of the High Street bore no evidence of Roman features (M.R. Eddy, pers. comm.). This evidence, combined with a similar picture from excavations in 1984 at Sawyers Yard on the other side of the town (Fig. 2; Clarke 1985, 114) strongly suggests that the north-western side of *Canonium* lies on the south-eastern side of the High Street. If the High Street follows the line of the Roman road it must have been external to the area of the town itself.

Roundhouses of early Roman date have been recognised with increasing frequency on Essex sites and elsewhere. Drury (1978b, 76) has suggested that they represent the persistence of a vernacular house form into the Roman period at progressively lower social levels. Examples of early Roman roundhouses of wall trench construction have been recorded at Mucking (Jones 1974, 188) where, Drury has suggested, they may represent shepherds' huts. Sites outside the county include that at Gorhambury, Herts., where the early villa structure was overlain by a roundhouse (Neal 1978, 37-40). Neal cites further examples of early Roman roundhouses at Rudston, Yorks; Winterton, Lincs; and Great Weldon, Northants.

The Period V Roundhouse 1 at the Doucecroft site is perhaps best seen in this context of the survival of an archaic form of building tradition. The almost complete absence of Roman tile suggests that the area of the excavated site lies well away from tiled Roman structures, and the virtual lack of Roman material at all indicates that the area is probably very marginal to the Roman settlement. The Roman features which do occur appear to represent the latest phase of an Iron Age settlement which probably persisted until *c.*A.D. 70, rather than the earliest phase of the Roman.

It seems likely that the Doucecroft site remained essentially a native Iron Age settlement which was abandoned in the early Roman period and does not represent the progenitor of the Roman settlement *per se.*

Conclusion

The main results of the excavation were as follows:—

a) the identification of an area of hitherto unrecorded middle Iron Age settlement

b) the uncovering of further evidence of late Iron Age settlement, occupation ending a decade or two after the Roman conquest. The existence of late Iron Age settlement has now been demonstrated on three widely spaced sites in Kelvedon, namely Doucecroft and Eddy's trenches D and J (Fig. 1). The distances between Doucecroft and Eddy's two trenches are 300 and 500 metres respectively. On each of these sites, the surviving elements (ditches, gullies, post holes and pits) represent the basic repertoire of features usually found on dryland sites of that date. Because of the distances between the three sites, it is impossible to do more than link them in the most general way. There is no question that the late Iron Age landscape in the Kelvedon area was tightly organised, a major feature being rectangular or square ditched enclosures, some of which delineate settlement areas, others defining fields. What cannot at present be resolved is whether the ditches of Eddy's trenches D and J, and Doucecroft, belong to a single settlement plus its associated farmland, or represent two or more settlements and their farmland.

An additional complication is the presence of both round and rectangular houses. Although Eddy's excavations are so far published in only interim form (Eddy 1982), it would appear that round and rectangular structures were broadly contemporary in Kelvedon. If a chronological difference between these two building traditions cannot be established, then alternative explanations must be sought, on the basis of status, function or ethnicity. It is evident, therefore, that more excavation is needed in the intervening areas between Doucecroft and Eddy's trenches D and J before we can begin to approach a full understanding of late Iron Age settlement in the area.

Acknowledgements

Both seasons of excavation were financed by grants from the Historic Buildings and Monuments Commission, who have also met the costs associated with post-excavation work and publication.

The backbone of the excavation team was formed by members of the Essex County Council Archaeology Section, to whom I offer my thanks. I am especially grateful to Hilary Major for helping with the recording and supervising in 1985, when climatic and other factors made work at times exceedingly difficult. I also express my thanks to Nick Lavender, who supervised the excavation of Area G in 1986. Mr. Dennis Taylor of Braintree District Council aided the excavation by agreeing to allow members of the MSC team currently employed on sites in Braintree to help at the Doucecroft site when required; I am grateful to John Bakewell for facilitating this, and to Martin Smoothy for helping with the supervision of these staff.

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Author: C.P. Clarke, 24 Vaughan Close, Rayne, Essex.

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On the outskirts of Roman Chelmsford: excavations at Lasts Garage, 1987

by Steven Wallis

with contributions by O. Bedwin, H. Major, H. Walker and C. Wallace

Excavations at the southern edge of the Roman town of Caesaromagus have revealed traces of short-lived occupation dating from the late 1st and 2nd centuries. Of particular interest is a ritual horse burial. The site seems otherwise not to have been built up until the 19th century when it formed part of Crompton's electricity supply works.

Introduction

The construction of sheltered housing on the Lasts Garage premises at the corner of Moulsham Street and Queen Street threatened an area on the outskirts of the Roman town of *Caesaromagus* (TL 7055 0609; Fig. 1). The site is outside the area enclosed by the Roman defences (Drury 1975, 170), but sufficiently close to have been affected by outlying settlement and activity. On the other side of Moulsham Street (the former Roman London-Colchester road) cremations and traces of occupation were found on the site of the St. John's Service Station in excavations carried out in 1965,[1] but otherwise little is known about the extent of settlement on the edge of the town.

Two trenches (A and B) were excavated in the former corner showroom, and a third (C) on the Moulsham Street frontage (Fig. 1). The sequence revealed is described below, together with a short account of the industrial buildings which occupied the site. No evidence for Roman occupation was found by the watching brief maintained as the sheltered housing development proceeded, but this might simply be due to the circumstances in which the work was carried out. The site archive and finds are deposited at the Chelmsford and Essex Museum (site code CF18).

The excavations

Geology

The natural subsoil is a post-glacial brickearth or yellowish-brown silty clay, probably an overbank deposit of the Can, which on borehole evidence is at least 20m deep. The surface of the brickearth sloped down slightly to the north-west, from about 30.72m OD in trench C to about 30.37m OD in trench A. This is doubtless to be accounted for by the site lying within the shallow valley of the river Can.

Phase 1

Overlying the natural brickearth, there was a layer of light brown silty loam 100-200mm thick. This is probably equivalent to buried soil horizons found on other excavations in the Chelmsford area (e.g. Drury forthcoming; Milton forthcoming). It contained pottery not later than the early 2nd century, with plentiful 1st century material.

Phase 2

Towards the Moulsham Street frontage, the buried soil had been altered by traces of occupation, being darker brown with a reddish tinge (134, Fig. 2). Pressed into its surface were daub fragments and flecks of charcoal and burnt clay, particularly towards the south. Associated with this debris was a slot running approximately west-east (117, Fig. 2). It was at least 2m long, 300-400mm wide and 250mm deep. Its edges were slightly irregular, perhaps because of robbing. This served either for a cill beam, or else, in view of its depth, was a post-setting trench. As such, it points to the existence of a building. The slot was filled with material similar to the soil (116) that subsequently built up across the whole site. The latest pottery in its fill dated from the second and third quarters of the 2nd century A.D., indicating that the building represented by it fell into disuse towards the end of that century. The occupation layer (134) contained pottery mainly of the early to mid-2nd century, the latest sherd being a fragment of late Antonine samian.

Approximately contemporary with the proposed building and close to it, were two small pits (127, 144) of uncertain function, and a horse burial (124; Fig. 2) set in an L-shaped pit 1.15m deep. The latter had a primary fill formed by the slumping of the sides of the pit, above which there was a dark-greyish brown silty clay with much charcoal, daub and pottery containing the skeleton of a young horse. This was aligned north-south, with the head to the south, and lying on its right side. *In situ*, it was 1.7m long and 1.2m high. The left foreleg was slightly forward of the right and was broken at the knee. The front hooves had been removed before burial. Pottery from the pit fill indicated a late 1st or early 2nd century date. That from a levelling layer over the pit, which also sealed pit 127, was possibly as late as early Antonine.

Also assignable to this period are a pit (14) and a complex of cut features (139, 140, 142) collectively numbered 119 (Fig. 2), which were filled mainly by the overlying soil layer. Very few finds were recovered from them and it is thought that they were brickearth quarry pits. The pottery was datable from the late 1st to early 2nd centuries A.D.

In trench C against the Moulsham Street frontage, a small feature (308) contained pottery datable to perhaps as

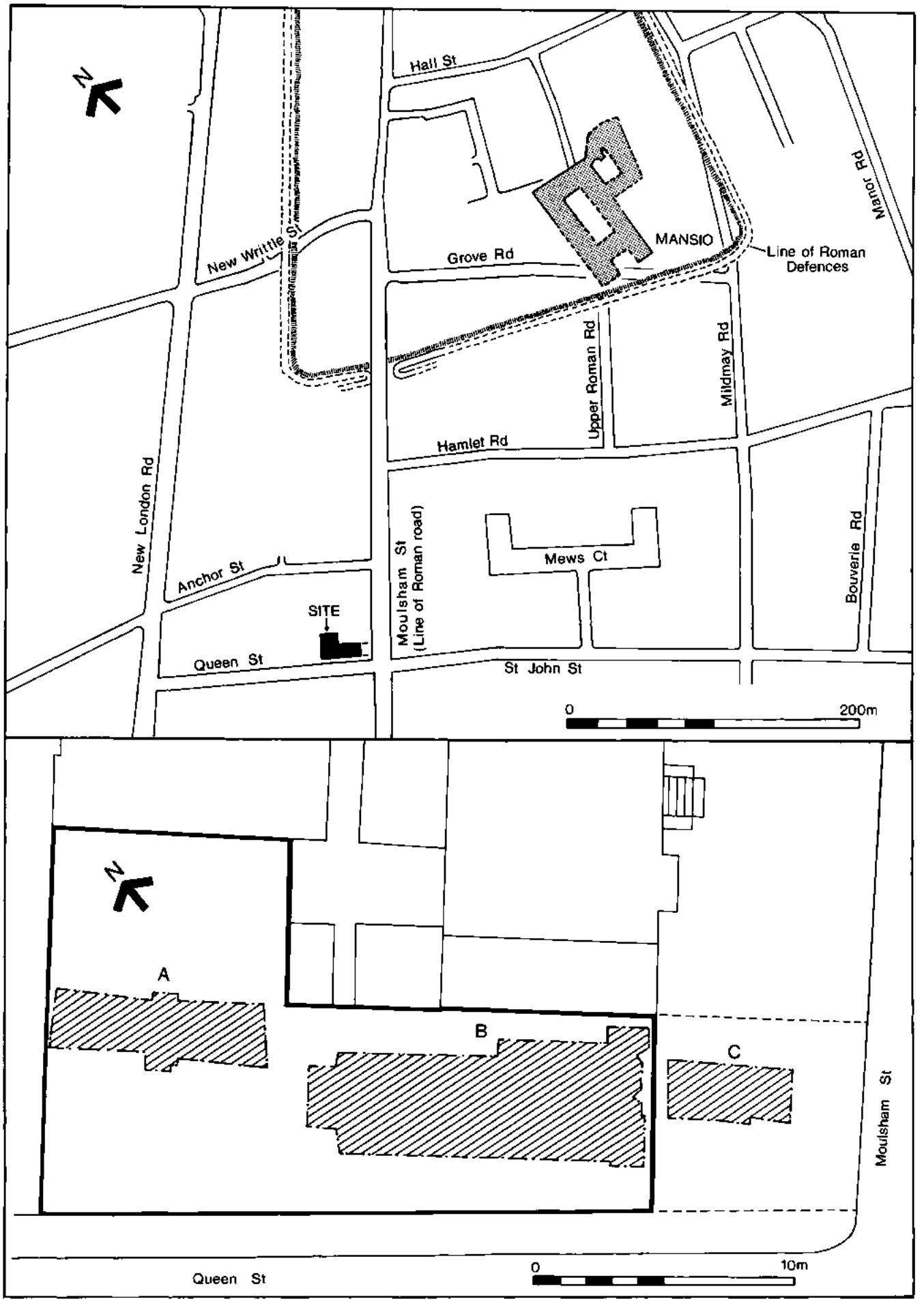

Fig. 1 Map showing the location of the site and the excavated areas.

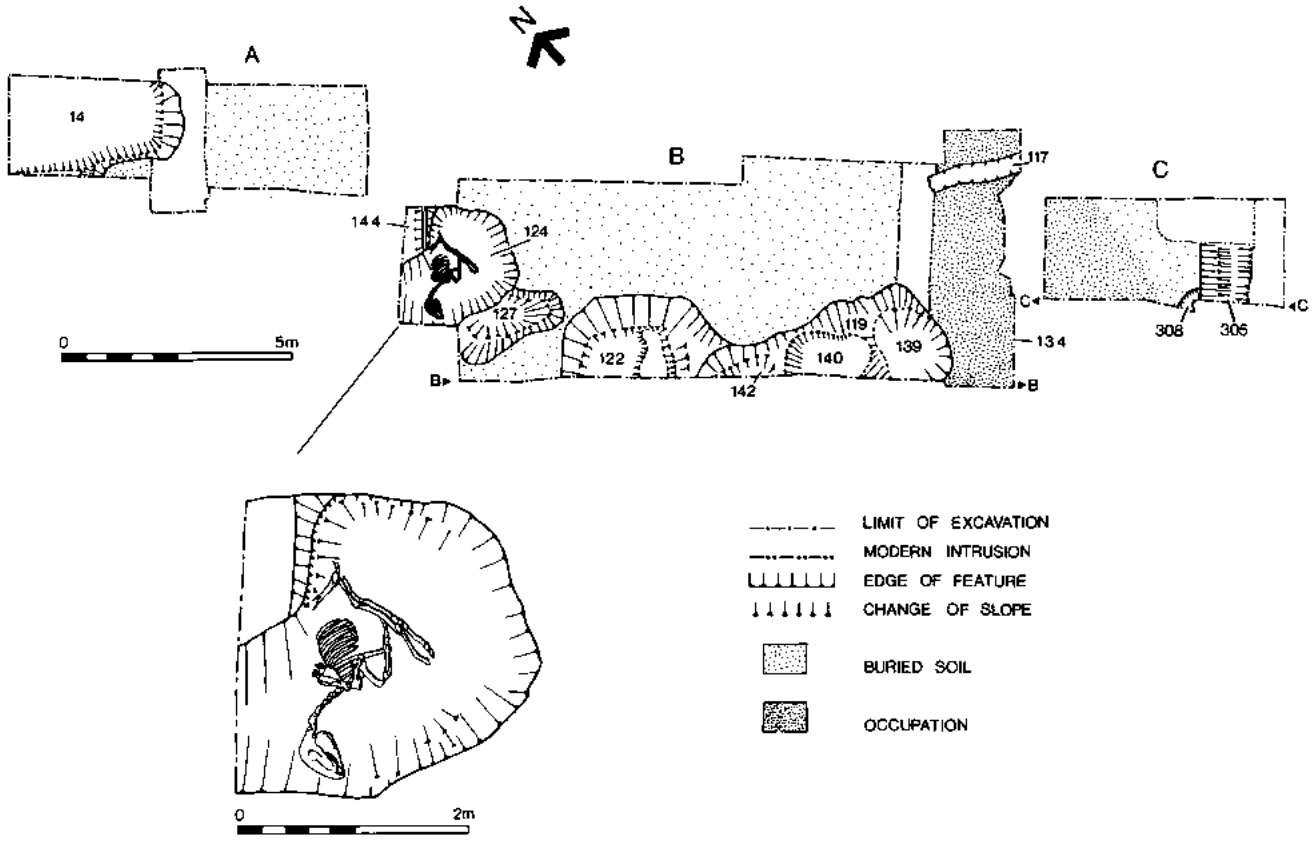

Fig. 2 Plan of principal archaeological features, with horse burial inset.

late as the early 2nd century. This was cut by a ditch (305) running north-south at the east end of the trench. Although truncated to the east, this feature seems originally to have had a U-shaped profile, and was 0.75m deep and at least 1.1m wide. It is in the right position to have been a roadside ditch.

Phase 3

The period 2 occupation was succeeded by a soil build-up (116) across the entire site. This dark greyish-brown silty loam was identical to the fills of 14 and 117, and the upper fills of 119. Excavation of the layer in spits indicated that it began to accumulate in the 2nd and 3rd centuries. The latest pottery is of *c.*A.D. 350-60. Late shell-tempered ware, which became prominent after that date (Going 1987, 115), is absent both from this layer and the features assigned to this phase. The discovery *in situ* of a number of hobnails from a shoe suggest that the area was waste ground or pasture, apparently undisturbed by ploughing.

The only activity detected in this period was a squarish pit (122) which contained pottery datable to the late 3rd or early 4th century, and must therefore have been cut from some level within the soil layer. As its lower fill was a dark greyish-brown silty loam containing pottery, bone, tile, and charcoal, it may have been a rubbish pit. The roadside ditch went out of use in this phase, its upper fills containing pottery of the late 3rd to mid-4th centuries.

The presence of medieval and post-medieval sherds in the soil layer show that this general picture remained unchanged until relatively recent times. The earliest map of the town, that made by John Walker in 1591,[2] shows the site to be vacant, lying at the southern edge of ribbon development down Moulsham Street.

The 19th and early 20th centuries

Preserved and incorporated in the sheltered-housing development is a 19th century double-fronted house in white brick, with added bay windows. This is depicted on the tithe map of 1843,[3] where it is the most southerly of the buildings flanking this side of Moulsham Street. The 1st edition OS map surveyed in 1874 shows it surrounded by attractive gardens, which included the excavated showroom site. To the north and west were the Anchor ironworks, which had expanded from a relatively small workshop shown on the tithe map. This was the premises of T.H.P. Dennis & Co., a firm of hydraulic engineers specialising in the manufacture of valves for hot water systems. The firm was joined in 1875 by Col. R.E.B. Crompton who was to pioneer the manufacture of electricity supply equipment (hence the later change of name to the Arc Works as indicated on the 1895 OS map).

Crompton later moved the business to the Writtle Road (now Marconi's factory), and the premises were used from 1902 by Clarkson Ltd for the manufacture of steam buses and trams (Booker 1974, 16-17, 97, 210, 212). Some remains associated with these works were found in the excavations, including a narrow gauge railway in trench A. To the west of the showroom there was a large tram shed which although listed could not be accommodated in the design of the sheltered housing and was demolished.

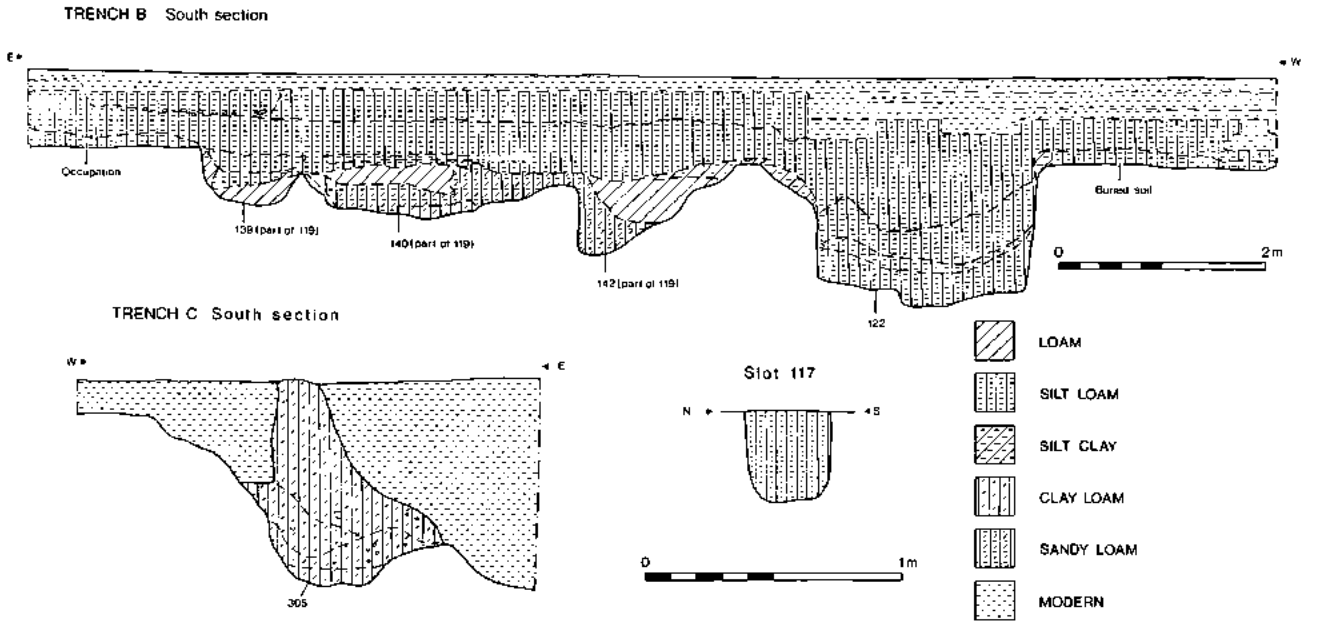

Fig. 3 Sections of principal archaeological features (refer to Fig. 2 for location).

The finds

Roman pottery

by Colin Wallace

The layers above the natural brickearth, the fills of Roman (and post-Roman) features, and the soil layers all produced Roman pottery which has been examined in the light of the conclusions developed from the material from the earlier excavations in Roman Chelmsford published by Going (1987, chap. II, III, XII). No groups were worth quantifying,[4] and the assemblage has nothing to add to Going's study apart from two samian stamps. These are illustrated here as a contribution to the corpus of samian stamps from Chelmsford.

Both stamps are from the fills of the horse burial. One is on a Central Gaulish form 33 cup stamped by the potter Vitalis iii from Lezoux and of early Hadrianic date (Fig. 4, No. 1). The other is by a South Gaulish citizen potter, L. Cosius Virilis of La Graufesenque, on a form 18 platter, *c.*A.D. 80-110 (Fig. 4, No. 2). Fuller accounts of these two pieces will appear in the report to be published on the 1987 excavations at the Godfreys site in Moulsham Street.

Medieval and post-medieval pottery

by Helen Walker

Sixty-seven medieval and later sherds were found in the soil layer and post-Roman contexts. The diagnostic pieces are fully described in the archive. Three sherds are medieval and the rest are datable to the 17th-20th centuries. One merits illustration (Fig. 5), the rim and neck of a costrel with pierced lugs. It has a dark mottled green glaze, with glaze also on the inside of the neck. The rim and lug are abraded. The vessel is made in one piece rather than with a separately applied neck. It is in a fine brick-red fabric, superficially similar to Mill Green ware (Pearce *et al.* 1982). However, this form is not known in Mill Green ware and the fabric has therefore been classified as Mill Green-type ware. The piece may be assigned to the late 13th or 14th centuries.

Roman small finds

by Hilary Major

The most interesting of the copper alloy artefacts are described below and illustrated in Fig. 6. None of the other small finds were noteworthy, apart from an iron stylus which will be described in a future report on finds from Chelmsford.

1. Pin, with a roughly biconical head with a small knob on the top. The edge of the upper cone is decorated with grooves perpendicular to the edge. Phase 2. SF26.
2. Pin, with small ovoid head above two reels. Phase 2. SF29.
3. Pin, with a globular head with moulding below. Phase 2. SF30.
4. Bracelet, terminals missing. A five-strand cable bracelet. Phase 3, probably 4th century. SF8.
5. Plate fragment, possibly a decorative element from a box. The original shape is uncertain. Phase 3. SF14.
6. Loop with one arched side; the opposite straight side has a small circular perforation. The purpose of this object is uncertain. It may be a strap fitting or belt slider, but this does not account for the perforation. Phase 3. SF17.
7. Stud with turned over shank; the head is discoidal with concentric moulding. The edge is damaged. Phase 2. SF32.

Roman coins

by Andrew Hobley

Of the nine Roman coins found, six were legible (one 1st century, three 2nd century, one 3rd century, and one 4th century); and three were illegible (two 1st/2nd century, and one 4th century). All the coins were from the soil layer that built up subsequent to the 2nd century occupation. The worn condition of the 2nd century coins suggests that they were lost in the very late 2nd or early 3rd century, and the lack of late 3rd and 4th century coins implies that there was little or no activity on the site at that period.

The horse burial

by Owen Bedwin

The horse skeleton (Fig. 2) was virtually complete, missing only the third phalanges from the two fore-limbs. The skeleton was fully articulated, with the exception of a gap of several centimetres between the right humerus and radius. There was no sign of pathology, nor any indication of butchery marks. The removal of the two front hooves had been neatly done at the joint. Age at death was 3-4 years, based on dentition and the fusion of the long bone epiphyses. Observation on site showed no damage to the skull, making it unlikely that the animal had been poleaxed.

As excavated, most of the skeleton was intact. When lifted, however, almost all the bones fragmented. Of the long bones, only one metacarpal and one metatarsal remained whole. The skull, scapulae, pelvic girdle and ribs all suffered severely.

Interpretation of this single burial in an apparently suburban context is difficult, the crucial consideration being, was it ritual or not? Artefacts within the pit or nearby, and the position of the pit relative to other contemporary features, are not of much help, so interpretation rests on the skeleton itself.

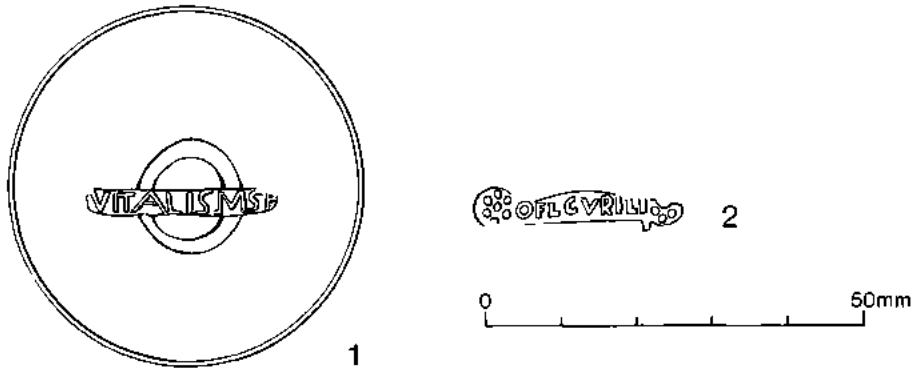

Fig. 4 Samian stamps.

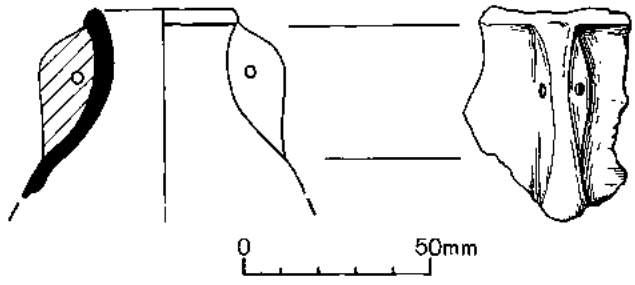

Fig. 5 Late medieval costrel neck and rim.

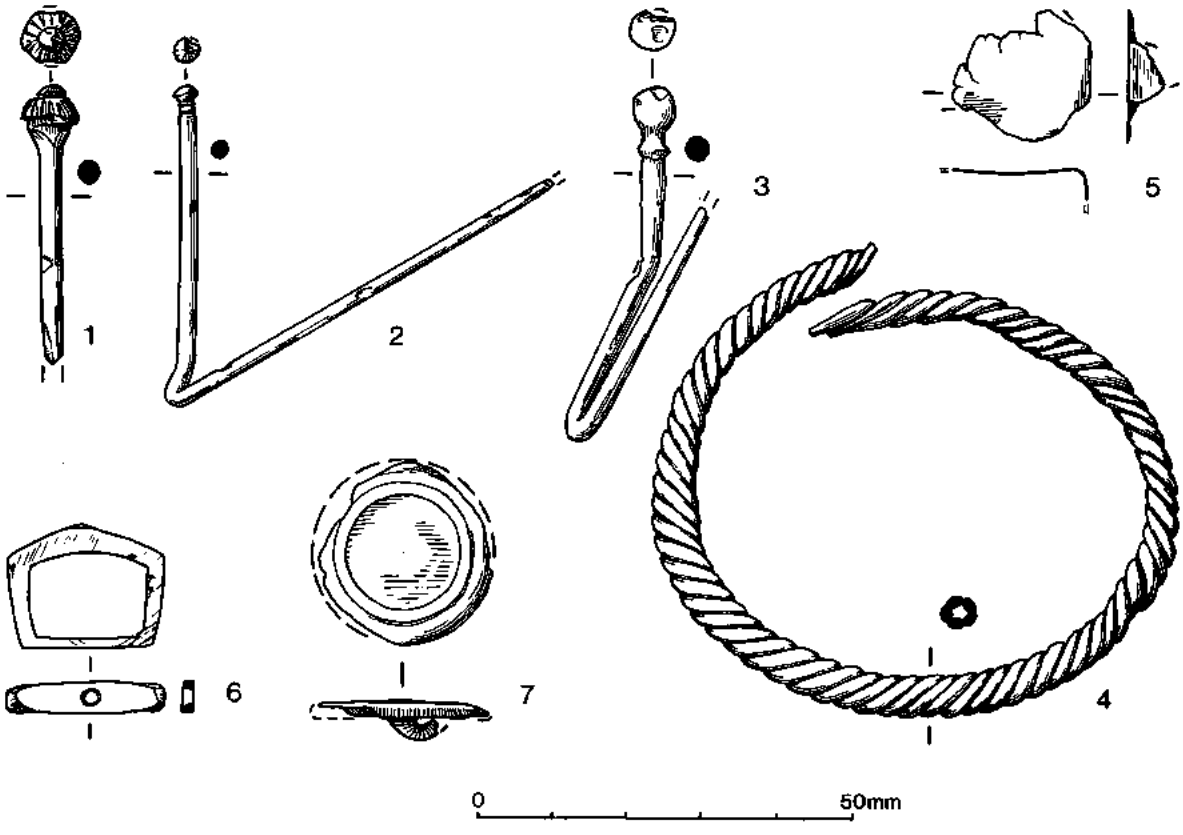

Fig. 6 Roman copper alloy small finds.

It may be easiest to approach this question by looking at alternative hypotheses:

1. That the horse died of natural causes, i.e. old age, failure of a vital organ, or an infectious disease.
2. That the horse injured itself irreparably, and was put down.

The first seems unlikely. Old age can be ruled out since the animal was only 3-4 years old. If infectious disease was the cause, would the corpse have been buried so close to the town and the London-Colchester road? Although the Romano-British population would have been unaware of bacteria and viruses, they would have observed the rapid spread of certain types of disease through groups of domestic animals and humans. It therefore seems more probable that if infectious disease was the cause of death, the corpse would either have been burnt or removed elsewhere well away from human or animal contact. Further, assuming that the populations was aware of the infectiousness of disease, would the two front hooves have been removed?

There are also strong arguments against death resulting from the failure of a vital organ. The burial of a whole corpse (the front hooves excepted) would have been, in economic terms, very wasteful. The flesh could have been eaten, and some of the long bones (the cannon bones especially) could have been used for bone implements. Since most of the corpse could have been utilized in this opportunistic fashion, why were just the front hooves removed if organ failure were the cause of death?

As for injury resulting in the horse being put down, this also seems unlikely. As excavated, none of the long bones had any ancient breaks. The gap of several centimetres between right humerus and radius does seem to have been an original feature of the burial. There was no sign from excavation that this could have been a post-depositional change (e.g. rabbit disturbance causing movement of one bone relative to another). However, the gap seems to be too wide for a dislocation, being so big as to imply the lower part of the fore-limb being more-or-less torn away from the upper part. A more likely explanation is that this occurred when the corpse was being manhandled into the burial pit. If this had been done clumsily, the weight of the corpse might have fallen on this joint and torn it apart. So if breakage or dislocation of one of the legs can be ruled out, the second explanation becomes untenable. Equally, the arguments about the wastefulness of such a burial noted in the previous paragraph also apply.

If all these considerations are accepted, we arrive by a process of elimination at a ritual killing as the preferred explanation. Ritual deposits of horse bones, especially, though not exclusively, involving skulls, are known from elsewhere in Roman Chelmsford and a number of other sites (Luff 1982). The importance of horses in Celtic ritual is well known from sites such as Danebury in Hampshire (Grant 1984), where complete skeletons, skulls and articulated limbs have been found. The horse burial at the Lasts Garage site therefore serves to underline the persistence of Celtic religious beliefs and practices well into the Roman period.

Discussion

Activity began on the site in the late 1st or early 2nd century, presumably with the southward expansion of *Caesaromagus* along the London road. A building was represented by a scatter of occupation debris, and a slot marking the position of either a cill beam or a post-setting trench. Too little was seen of this building to make it possible to say very much about it, but as Rodwell (1975, 88) cautions, insubstantial remains do not necessarily indicate an impermanent or insignificant structure. Approximately contemporary with this building, but unrelated to it stratigraphically, were several brickearth quarry pits, some cut features of uncertain function, and a possible ritual horse burial. All this activity was short-lived, terminating by the end of the 2nd century. It may be that external areas were abandoned when the defensive bank and ditches were constructed around the central part of the town in the late 2nd century. Even though the defences were razed after only a few decades, the town may not have fully recovered from the upheaval occasioned by them. What is not at present clear, and can only be determined by future excavation, is whether the occupation was scattered or fairly continuous ribbon development along the London road. A soil layer subsequently built up across the site, apparently undisturbed until recent times apart from a 4th century rubbish pit, which might indicate nearby occupation. On the street frontage, a probable roadside ditch was found. Since it cut an earlier feature containing finds as late as the early 2nd century, it must have belonged to a later phase of the road which had either grown wider or been realigned.

Acknowledgements

Thanks are due to the site developers. McCarthy and Stone Developments Ltd for allowing access for excavation, and for making a contribution towards the cost of the work. Thanks are also due to the excavation team which included D. Bell, S. Eddleston, A. Green, B. Harrison, M. Ingram, N. Lavender, N. Nethercoat, K. Parry, A. Rogers, K. Smith, and P. White. I am grateful to D. Bell and M. Ingram for their assistance in post-excavation work, to P. Allen and D.D. Andrews for advice in the preparation of this report, and to C. Going, H. Walker and C.R. Wallace for spot-dating the pottery. The illustrations are by A. McGhie and N. Nethercoat.

Author: Steven Wallis, ECC Archaeology Section, Globe House, New Street, Chelmsford CM1 1LF.

Notes

1. Unpublished excavations by D. Gareth Davies. Information from Carol Cunningham. See also Drury forthcoming.
2. Reproduced in Edwards and Newton 1984, plate VII.
3. Essex Record Office D/CT 72.
4. I am indebted to Chris Going for the initial spot-dating and much subsequent advice; and to Brenda Dickinson for preliminary information on the samian stamps.

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Roman Coggeshall: excavations 1984-85

by C.P. Clarke

Summary

Two excavations in Coggeshall have identified the east and south sides of a substantial early Roman enclosure. Occupation of the enclosure began in the first century A.D. There was a sudden and major decline from before the middle of the second century, lasting through the third, and finally a resurgence in the early fourth century. The site was probably abandoned at the end of the fourth century. No building was located, though a substantial Roman building is postulated for the middle of the north side of the enclosure (near the church of St. Peter-ad-Vincula). The economic basis of settlement seems largely to have been cattle-rearing.

The first occupation in the area was some form of open settlement in the Late Bronze/Early Iron Age. The earliest post-Roman settlement noted in the excavations dated to the 13th century. A small flat lava quernstone (upper stone) from an early post-medieval pit may be the first mustard quern to be identified from a well-dated context in Essex.

The report ends with a summary of the complete sequence of archaeological evidence from Coggeshall and the surrounding area, with emphasis on the Roman period.

Preface

This report deals with excavations undertaken in 1984 at the site of the new primary school (the St. Peter's School site), and in 1985 on the northern edge of East Street to the south of the school (the East Street site). These areas are denoted A and B respectively on Fig. 1.

These two excavations represent the first archaeological excavation in the town. Two other sites have been examined after the work described here, firstly at Queen Street (C on Fig. 1) in October 1985 (Clarke 1986) and secondly on the site of the old fire-station in the Market Place (D on Fig. 1) in 1986 (Andrews 1987).

The finds and archives for the St. Peter's School and East Street sites are both deposited in the Castle Museum, Colchester (accession nos 222.1984 and 113.1985 respectively). A second copy of the archives is in the Essex SMR.

It was decided to incorporate the two sites into a single report for several reasons. They are closely related topographically and archaeologically; secondly, cross-referencing between the two sites is simplified by this format. Lastly, the two sites together sample the archaeological record of all periods from the Mesolithic through to the present day, with the exception of the Middle and Late Iron Age and Saxon periods. This broad sampling by period provides, in the context of the lack of previous work within the town, an opportunity to summarise previous finds and to put forward a broad phasing model for the town which can be further defined and modified in the light of further research.

Both site reports are conventional excavation reports, and are followed by general considerations about the archaeology and development of Coggeshall and the surrounding countryside. This synthesis of excavation results and summary of the archaeological background is followed by general conclusions and recommendations of priorities for future work within the town. Acknowledgements and bibliographies for both sites are combined at the end.

Use of the term 'Period' as a descriptor in the site phasing in the excavation reports has been avoided to allow room for future use of this term in an overall phasing scheme for the town. If such a scheme is adopted in the future it should ease the cross-referencing of site data, and encourage the development of a coherent model for the development of settlements by period within the town.

Excavation at St. Peter's school came about in 1984 after groundwork exposed archaeological deposits in the playing field area (below). Development of the East Street site the following year provided the opportunity to examine the settlement area closer to Stane Street. A different recording system was used at each site; these are described in the respective introductory sections. Both excavations were directed for Essex County Council Archaeological Section by the writer. Excavations were funded by ECC; for the East Street site extra manpower was available from a Manpower Services Commission project in Braintree.

Editor's note

The descriptions and discussion of excavated features in this report are fuller than is customary nowadays. That is because this is the first full report on medium to large-scale excavations in Coggeshall, and the problems peculiar to the variable local geology, and to the nature of the Roman deposits need to be fully explained. Secondly, further excavation in or near the Roman settlement at Coggeshall is inevitable (e.g. Flook, this volume, 000). It is hoped that the thorough descriptions and discussion in this article will enable future excavation reports to be briefer by referring to this one.

St. Peter's School

Introduction

Investigation (centred on TL 8548 2288, ECC SMR no. TL 82/63) commenced with the observation of features during a watching brief which had been made a condition of

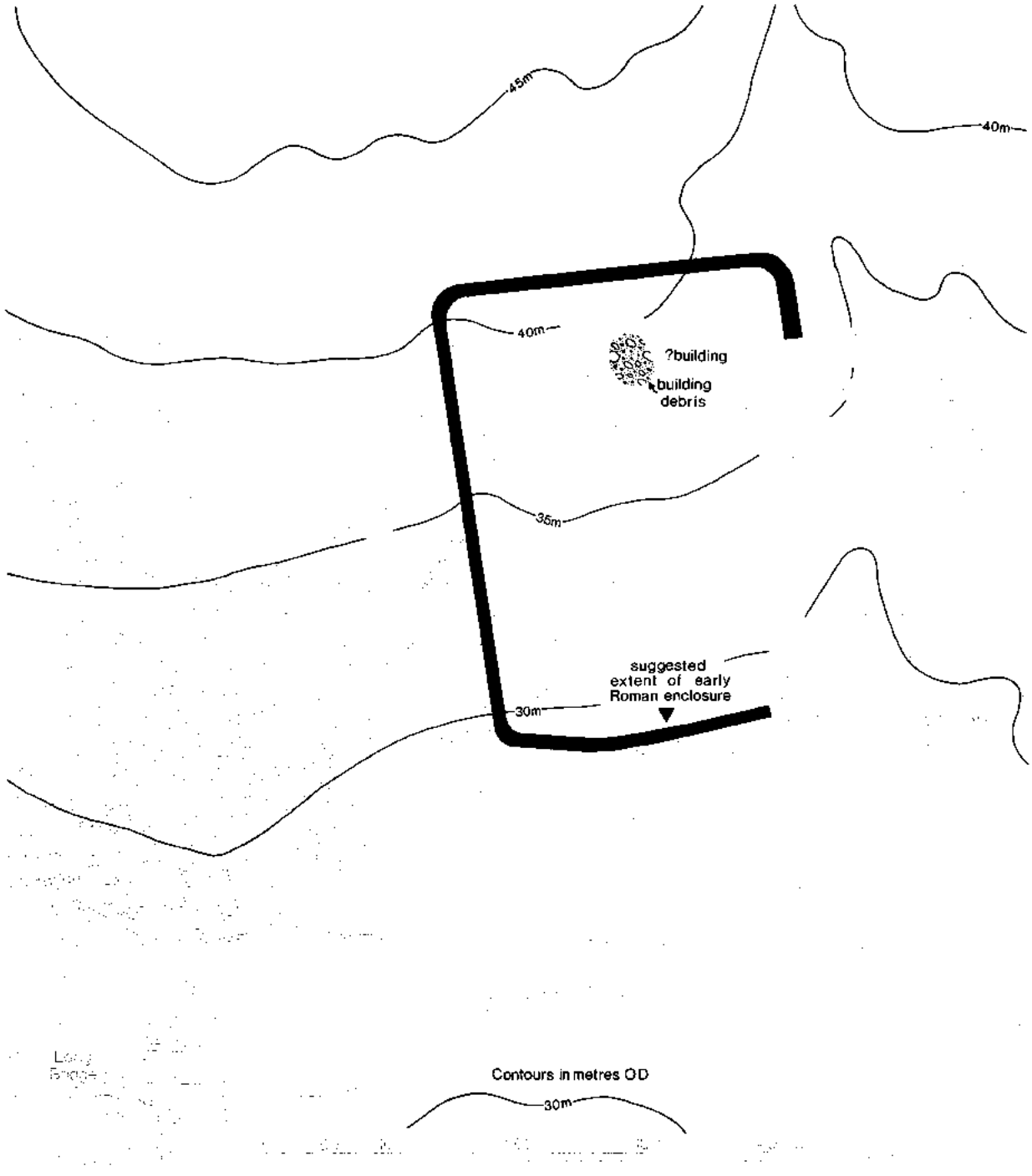

Fig. 1 Coggeshall. Site Location.

the planning consent for the new school and associated works. The excavations were undertaken in two stages, firstly of Area 1 (Figs 1 and 3) in June 1984, which was being levelled for a playing field, and secondly in September of the same year, of Areas 2 and 3 which were being levelled for a playground and the new school itself respectively. A machine-dug slot trench in the east of Area 2 gave further information about certain features. The entire field containing Areas 1-3 was grassed and in use as a sports field before groundwork began.

The excavated areas lay on a moderate slope towards East Street and the Blackwater floodplain to the south; the level of the ground surface fell a maximum of some five metres from the highest to lowest points in the sampled site. This presented a problem for the archaeological work, since most of the groundwork was a levelling operation, and the progressively greater removal of archaeological deposits by the machines above the cut and fill lines could not be prevented under watching brief conditions. Features above this line were therefore partially or wholly lost, while the

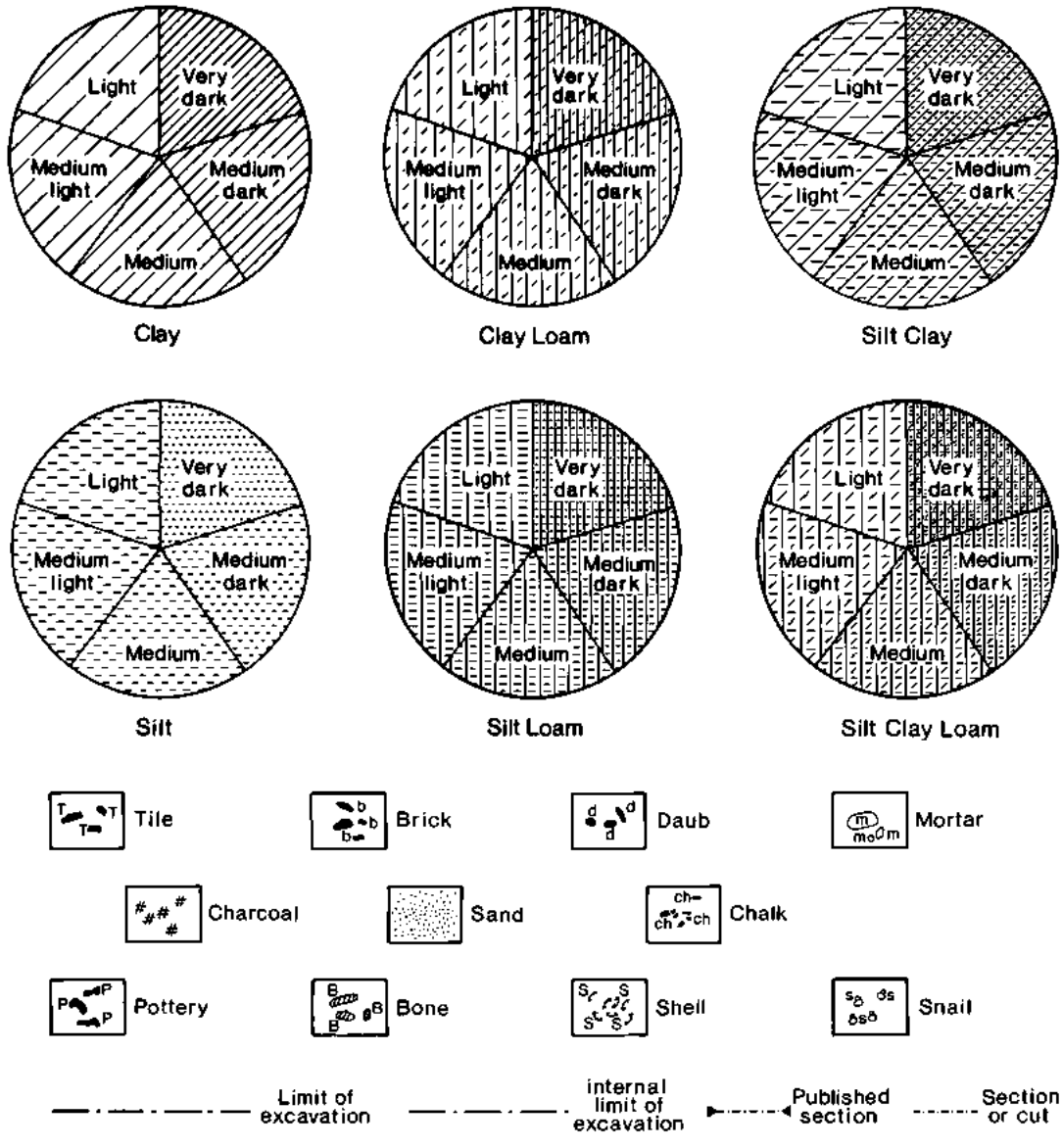

Fig. 2 Coggeshall. Conventions used in plans and sections.

areas below it were never fully cleared of topsoil. The most serious loss was in the northern part of Area 2 and the western part of Area 3 where a maximum of nearly two metres of soil and subsoil was removed before effective archaeological recording could take place. Once this necessary groundwork had been completed, the contractors were in all respects very helpful.

The subsoil was chalky boulder clay, overlain in parts of the northern part of Area 2 and in Area 3 by uneven deposits of fine yellow sand which in places shelved steeply downwards in veins into the boulder clay. In the southern portion of Area 2 the sand and boulder clay were capped by brickearth.

The principal objective of the excavation was to sample, record and date all features. This was by and large achieved, though ideally longer stretches of the ditches would have been sampled. The recording was based on a sequence of feature numbers in a range 1-76; segments were labelled using Roman numerals, starting at I for each feature; fills were numbered in Arabic numerals, starting at 1 for each feature or segment. Thus F.30 II L2 refers to layer 2 in segment II through feature 30 (a gully).

The excavations

Phasing for the site is as follows (Fig. 4):

Phase 1	Mesolithic
Phase 2	Neolithic / Early Bronze Age
Phase 3	Late Bronze Age / Early Iron Age
Phase 4	Roman
4.1	Later first — mid-second century A.D.
4.2	Later second century
4.3	Earlier third — early fourth century
4.4	Mid — late fourth century
Phase 5	Post-medieval
Phase 6	Modern

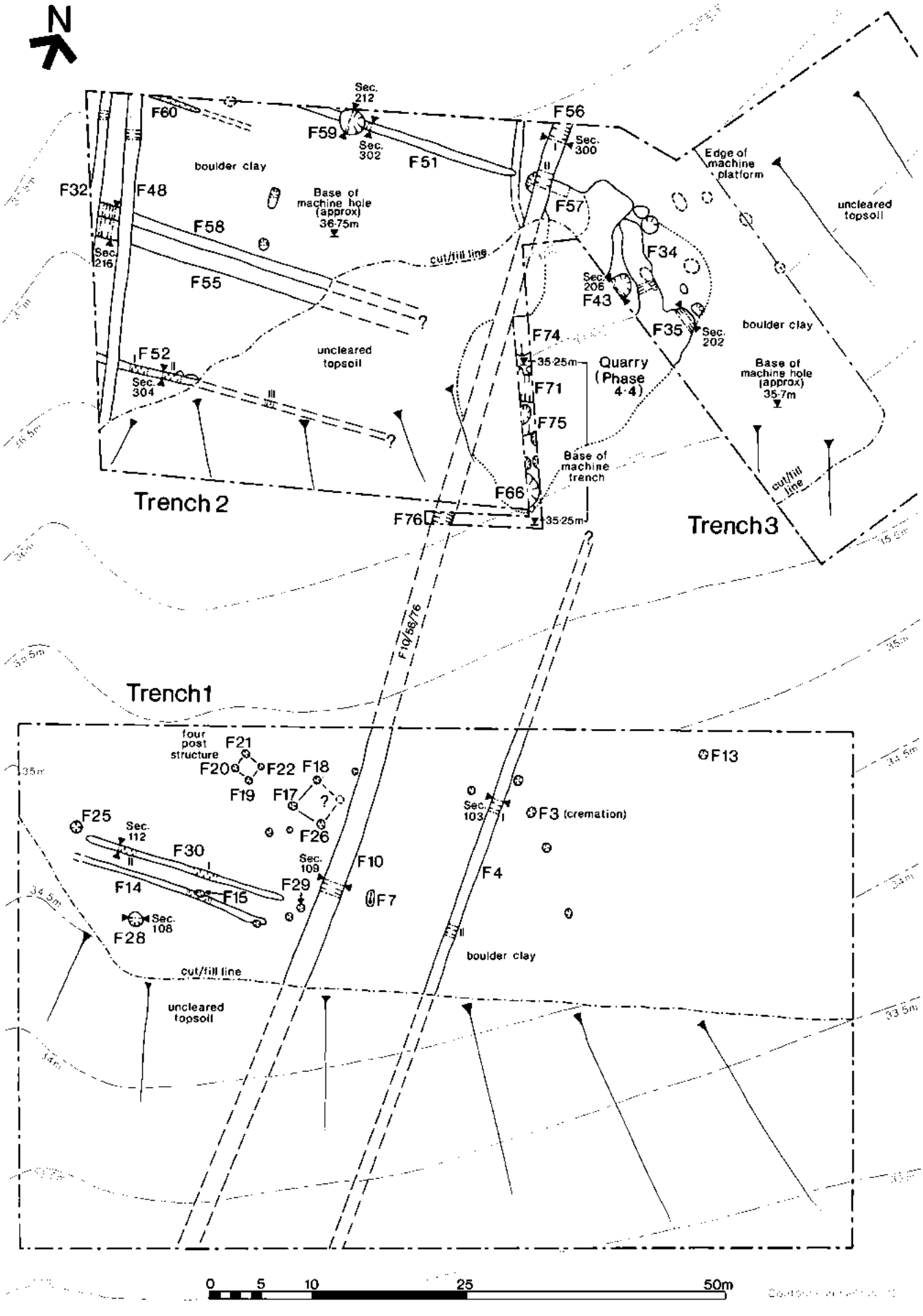

Fig. 3 Coggeshall. St. Peter's school site — detailed plan.

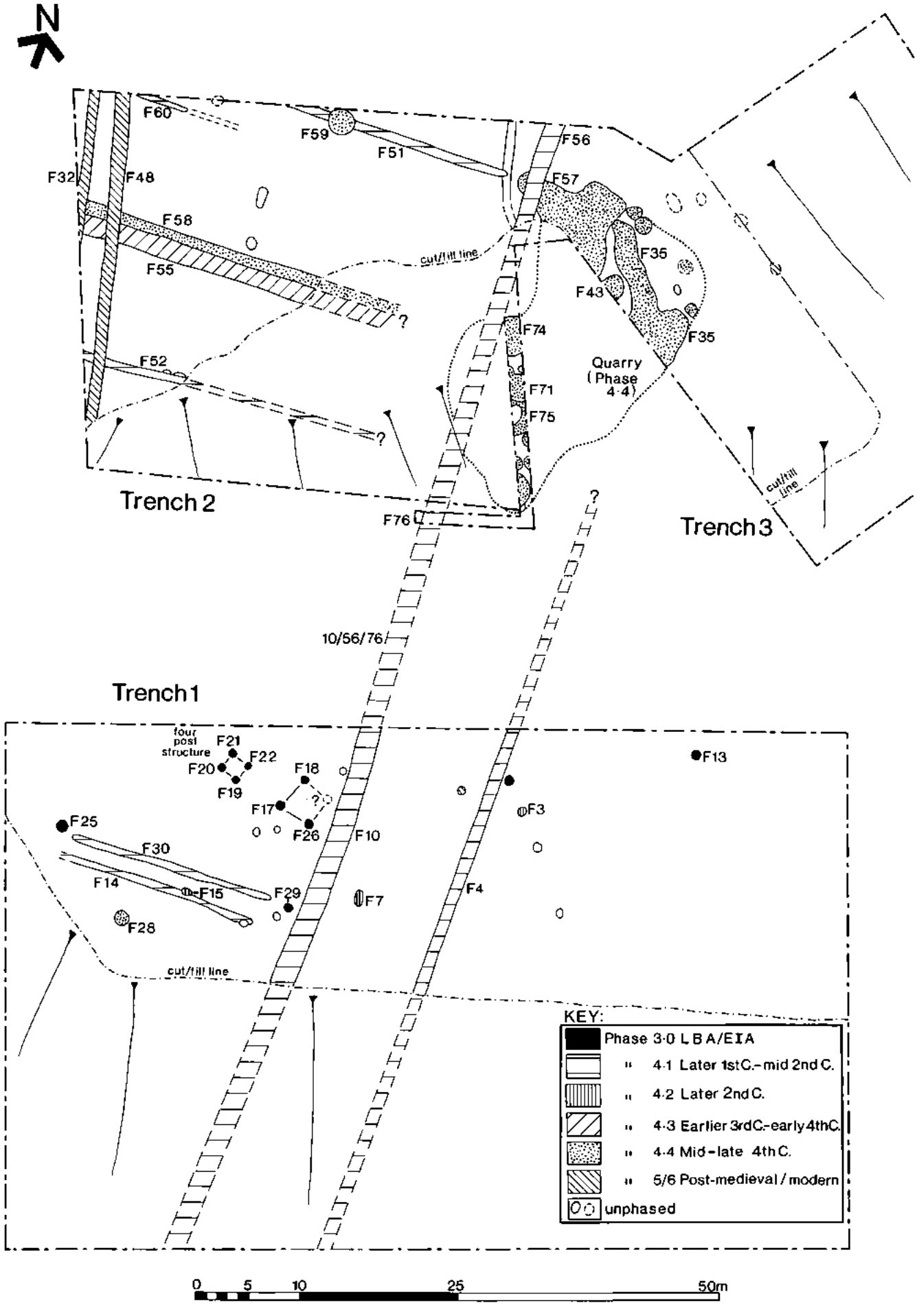

Fig. 4 Coggeshall. St. Peter's school site — phase plan.

The phasing is generally secure. A few Roman features could not be assigned to a particular subphase of Phase 4, and a few other features are undated. In the main, dating evidence from the ceramic assemblages is good since the features tended to have been backfilled with refuse containing abundant pottery sherds. The internal dating evidence always supported the broad phasing established from the stratigraphy.

Phases 1 and 2: Mesolithic and Neolithic / Early Bronze Age (Figs 3 and 4)

With one possible exception, no features datable to Phases 1 or 2 were identified. Of the 68 struck flints recovered one is possibly Mesolithic and the remainder Neolithic or later (below). Most of the flint was unstratified or residual in Roman features.

Post-hole F.29 in Area 1 might belong to Phase 2; the only find was a single sherd of Beaker pottery from the bottom of this feature.

Phase 3: Late Bronze Age / Early Iron Age

Phase 3 occupation was represented by two small, adjacent four-post structures and three pits, all in Area 1; a further four undated pits in the same area may be contemporary. Most of the later prehistoric pottery came from Area 1, about half being residual or unstratified. The remainder was residual in later contexts in Areas 2 and 3.

Four-post structure A

This four-post structure, comprising post-holes F.19, 20, 21 and 22, was located in the north-west of Area 1. It was nearly square, with sides of 1.80-1.90m between centres of adjacent post-holes. The area delineated was *c.*3.25m².

The post-holes were visible from immediately below the topsoil, clearly defined against the natural boulder clay subsoil as circular areas of pale orange-grey fill of redeposited boulder clay with diameters in the range 0.36-0.40m, surrounding darker areas representing the tops of the post-pipes. All post pits were circular, near vertically sided holes with flattish bottoms; the southern side of F.21 had a slight ledge at half its depth. Depths were in the range 0.15-0.18m.

The post-hole fills were similar except that the post-pipes in F.19, 20 and 22 were more charcoally than F.21. The charcoal content in the post-pipes may indicate the burning down of the structure though the natural clay in the immediate vicinity showed no sign of having been burnt.

? Four-post structure B

This possible four-post structure lay on the same alignment as F.19/20/21/22 to its immediate west. The three located features (F.17/18 and 26) were rather dissimilar in size and shape; all were circular in plan, between 0.45-0.8m diameter. The excavated features were of steep-sided or shallow U-shaped profile, surviving to a maximum depth of 0.3m; F.18 survived to a depth of only 50mm. However all had similar fills of mixed orange and grey clay loam containing occasional small pebbles and charcoal flecks, and all produced sherds of LBA/EIA pottery. Ditch 1 had probably removed the fourth post-hole.

The three surviving features form an approximate right-angle which, together with their association with structure A, suggests a second four-post structure. Its sides would have measured *c.*3.2-3.3m (p-h centre-centre), giving an area 10.25-10.89m².

Pits

Three pits, F.2, 13 and 25, in the general vicinity of the four-post buildings, were small, shallow and roughly circular in plan, ranging in diameter from 0.62-0.38m; depths ranged from 0.12-0.16m. Fills were clay loam.

Finds comprised a single sherd of pottery and a fragment of *Ovis* bone in F.2, and 15 sherds in F.13. A few prehistoric sherds from F.21 were noted on site, but these disintegrated when moved.

Pits, F.16, 23, 24 and 31, contained no finds and may be of prehistoric origin.

Dating of Phase 3 features

Structure A is dated by two abraded sherds from a slack-shouldered jar from post-hole 21, and structure B by nine sherds of prehistoric pottery each from F.17 and 26, and a further three from F.18. Pits 2 and 13 produced one and 15 sherds of prehistoric pottery respectively.

Phase 4: Roman (Figs 3 and 4)

Roman occupation is divisible into four subphases as follows:—

Phase 4.1

Phase 4.1 features consisted exclusively of linear features which were laid out on a north-south / east-west plan, and consisted essentially of a major ditch on a north-south alignment (F.10/56/76, henceforth referred to simply as F.10) with a parallel secondary ditch on its eastern side (F.4). The two together formed a trackway, with the larger ditch being approached at right-angles from the west by a series of straight gullies (F.14, 30, 52, 60) and a ditch (F.51). The two gullies in the west of Area 1, F.14 and 30, were coterminous near the major ditch, and clearly formed a short stretch of trackway.

The stratigraphy of the Phase 4.1 features had much in common. Apart from the primary silt in the gullies, which contained virtually no finds, the features were clearly backfilled though there was some indication that this may have been a fairly gradual process. Ditch F.10 and gully F.4 were sealed by a layer of pebbles of diameter up to 100mm, some burnt, perhaps representing the base of the post-medieval ploughsoil. Both features contained large amounts of animal bone in their top fills. The secondary fills of gullies F.30, and 52, and the surviving fill of F.60 included large quantities of oyster and mussel shell, and this deposit was also observed in the upper fill of ditch F.10. All the features, except ditch F.10 in the segments in Area 2, contained much pottery, and it was clear that the vessels had often been in very large pieces when deposited into the ditch and gullies. The sides and bottoms of the ditch and

gullies were weathered, with characteristically poor distinctions between the primary silt deposits and natural subsoil, suggesting that the gullies were left open for some time. Phase 4.1 features appear after a period of silting to have been infilled with deposits originating from a common source. The whole system must therefore have been abandoned at the same time.

Ditch F.10 and gully F.4

The width of ditch F.10 ranged from 1.6m in the south to an estimated 2.3m in the north, where its upper half had been machined off but was visible in section (S.300; Fig. 5). Its depth varied from 0.62m to 1.00m. The profile in the north was very flat-bottomed (S.300; Fig. 5), but more irregular and U-shaped in the southern two segments (e.g. S.109). The visible portions of the ditch were in a straight line and it is unlikely that the ditch terminated or turned below uncleared topsoil.

Infilling in the south consisted of primary silt (L3 in S.109; Fig. 5), secondary silt (L2), sealed by tertiary backfill (L1) capped by a layer of pebbles. Pottery was abundant in the upper part of the primary silt and secondary silt as well as in the backfilled L1, suggesting that the feature had been used for rubbish disposal while silting before completely infilling with rubbish at the end of the phase. A more or less solid layer of animal bone was present in the central and eastern part of the tertiary fill at a depth of 0.15-0.20m. This layer was observed during machining to continue to the northern edge of Area 1.

The infilling of the ditch in the northern side of Area 2 was less fully recorded because of the machining, but appears to have followed a broadly similar pattern to that in the south. A thin layer of primary silt (L6 in S.300) was overlain by a deep secondary silt (L4) which contained abundant animal bone and Roman pottery. The main difference was the absence of the backfilled layer constituting the tertiary fill in the south (S.109), the stratigraphical position of which appears to have been occupied by a buried soil (L3 in S.300). This stable profile was sealed by a dump of Roman building debris (visible in section only, L2 in S.300), sealed by silt (upper part of L2 in section S.300) and overlain by redeposited topsoil of probable post-medieval date (Phase 5, below). The dump of Roman building debris occurred as a layer *c.*0.25m thick, packed solid in its lower 0.15m. It consisted mainly of roof tile, but also included mortar, floor tile and animal bone in a matrix of friable, charcoaly dark grey clay loam. Finds were fragmentary, but large *tegula* and *imbrex* fragments were fairly common with large mortar chunks also present.

Gully F.4 lay parallel to ditch F.10 on its eastern side. It was not visible in Area 3 where it may have been machined away. It was of variable width within the range 0.50m to 1.35m, and of variable profile, 0.53m deep in the northern segment, decreasing to 0.35m in the southern. The maximum excavated width (S.103; Fig. 5) was unusually large and appears to have resulted from severe erosion of the western side.

The gully was naturally silted nearly to the surface, though the primary and secondary silts could be distinguished from one another only by feel; the difference was not visible in section (e.g. L1 in S.103). The frequent occurrence of snail shells thoughout the fill, and the presence of much pottery in the upper silt indicate a pattern of continuous rubbish disposal during the silting episode, as

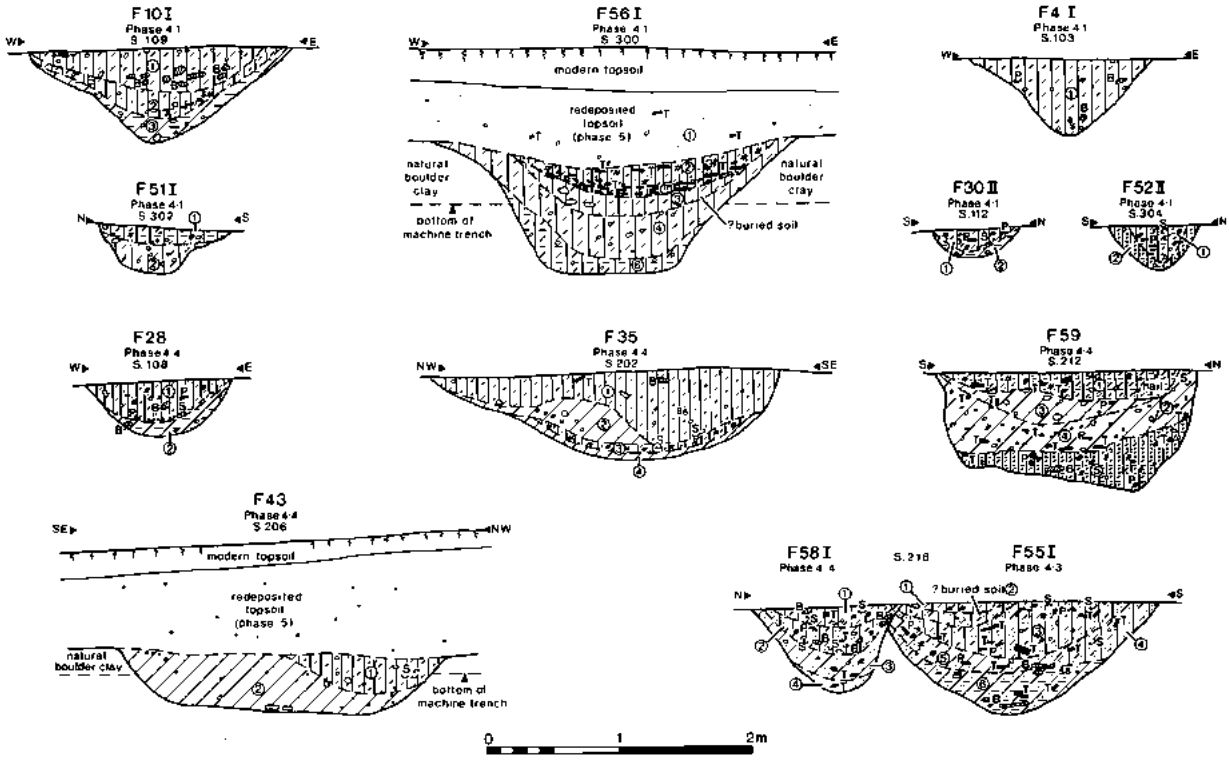

Fig. 5 Coggeshall. St. Peter's school site — sections. Refer to Fig. 3 for positions of these sections.

was also observed in the adjacent ditch F.10. Animal bone was very common in the upper silt. In places the silt was capped by the same pebbly layer as the top of F.10.

Ditch F.51

This ditch in the north of Area 2 approached ditch F.10 at right-angles. Machining during the levelling of this area had removed the top 0.40m of fill in the west and an estimated 0.15 in the east; although the narrowing of the feature in plan is therefore more pronounced than would probably have been the case had the feature survived intact, the butt-end of the ditch *c.*2m from F.10 appears to be genuine, with the ditch gradually becoming narrower and shallower over a distance of some 10m; there was no indication from the segment through F.10 opposite the terminal of F.51 that the two ditches joined. The estimated original dimensions in the west were 1.45m wide and 0.80m deep; at the eastern terminal the estimated original width at the top was 0.75m.

In the excavated segment *c.*0.40m of fill had been machined away. Finds from the top 0.40m were collected from the trench section, where the ditch fill was a mixed grey and brown clay loam containing much tile, pottery and bone; this may have been backfilled from the south. As excavated the feature was of fairly irregular, flattish-bottomed profile (S.302; Fig. 5). The excavated fills, below the backfilled tertiary deposit visible in the machine section, comprised layers of primary and secondary silt containing occasional finds, mainly pottery and bone.

Trackway 14/30

The trackway was on an east-west alignment *c.*19.5m long approaching ditch F.10 at right angles from the west, with an entrance gap 3.2-3.6m wide. Track width narrowed from east to west from *c.*2.0 to 1.5m. Both terminals of F.30 were clear. Those of F.14 were approximate but the gully definitely stopped short of ditch F.10; its western terminal was probable.

Both features were of similar, wide U-shaped profile. The history of both gullies was similar (e.g. S.112=F.30 II; Fig. 5), with primary silt (L2) forming a thin layer in the bottoms of the gullies overlain by a backfilled layer of rubbish (L1), except near the lower eastern terminals where the gullies had silted up. There were no finds from the primary silt in either feature. Rubbish infill in both gullies included abundant pottery and charcoal, particularly in the western terminal of F.14. At the western end of F.30 a dense layer of oyster and mussel shell was present towards the bottom of the backfilled layer at a depth of 100-180mm. Snail shell was present throughout the backfilled L1, probably indicating that this infilling of the gullies was not achieved in a single episode.

Gully 52

The gully approached ditch F.10 at right-angles; it ran below intervening uncleared topsoil but its line was confirmed by a slot trench halfway across the uncleared stretch. By analogy with gullies F.14 and 30 and ditch F.51 it would have terminated to the west of ditch F.10. In the west little or nothing was thought to have been machined off the top. The feature was visible as a narrow, diffusely edged, greyish brown strip 0.40-0.60m wide; the excavated gully was consistently of regular U-shaped profile, depth within the range 0.18-0.32m (S.304; Fig. 5). It contained an upper backfilled deposit of domestic refuse (L1 in S.304) over an unevenly distributed layer of primary silt (L2). Finds, mainly of oyster and mussel shell and pottery, were abundant in the surface fill and throughout L1; the pottery tended to occur in patches as complete but broken vessels.

Gully or palisade slot F.60

This feature was located only in the north-west of Area 2 adjacent and parallel to ditch F.51. As with F.51, *c.*0.4m had been machined away, and the very bottom only survived, as a strip of fill usually 0.35-0.40m wide and 10-20mm deep (maximum 50mm). F.60 was visible for 4.25m; its original length is unknown, but by analogy with contemporary linear features on the same alignment it may have continued nearly as far as ditch F.10, though it would have to have been less than *c.*0.15m deep not to have survived near the eastern terminal of F.51.

It was not possible to establish the original size and shape of F.60 from the machine section with any certainty because of later disturbance in section. However the feature appears to have been a flat-bottomed gully with nearly vertical sides to about halfway up the feature, the sides then flattening out to rise to the surface at an angle of about 45 degrees. The original dimensions of the feature were thought probably to be in the order of 0.75m wide at top, 0.30-0.40m wide at bottom, and 0.35-0.45m deep.

The fill in the bottom of the machine trench was a mixed grey and brown, soft, friable clay loam with large lumps of admixed boulder clay containing many pebbles to maximum 220mm, with common charcoal and occasional fragments of burnt flint. Finds of tile and oyster shell were common; a fragment of probable window glass and two iron objects were also recovered from the fill. The brown fraction in the matrix looked and felt very organic and may well have been rotted wood.

The shape of the feature in the machine section suggests that it may have been a palisade slot rather than a gully. The abundant pebbles in the bottom of the feature may have been packing, with the boulder clay fill at the sides of the feature representing redeposited natural clay packing around the palisade timbers.

Phase 4.1: dating

The overall plan of features assigned to Phase 4.1 suggests that they are of contemporary origin. The common aspects of their stratigraphy (above) suggest that the whole system subsequently fell into disuse at the same time, with the features then being used for rubbish disposal. Phase 4.1 features were cut by other Roman features in only two cases: gully F.14 was cut by a cremation (F.15) assigned to Phase 4.2, and ditch F.51 by a pit (F.59) assigned to Phase 4.4.

Absolute dating depends on the pottery. Small amounts

of pottery were recovered from the primary silt of Phase 4.1 features. This material is consistently datable to the first or early second century. The pottery from the secondary silt in ditch F.10 is of similar date. The backfilled deposits constituting the latest episode in the infilling of most Phase 4.1 features contained similar pottery to that in the silts. The latest sherds were two from the secondary silt in ditch F.51, both datable to sometime between the early second and mid-third century, and a group from the top of gully 52. The latter group might be of third or fourth-century date; however the pottery and other finds from this feature are so clearly consistent with those from other Phase 4.1 features that if the pottery does not represent an early incidence of the form in question it must be intrusive. The pebbly layer occurring in patches above ditch F.10 and gully F.4 is dated on the basis of two fragments of post-medieval tile to Phase 5.

The absence of Late Iron Age pottery from the site suggests that the system is unlikely to have originated before *c.*A.D. 60. The pottery evidence suggests that the primary silting episode was probably complete by the early second century though the two sherds from F.51 might be slightly later; stratigraphic data suggests that the secondary silting phase was fairly gradual. The backfilling episode seems unlikely to have been much later than the silts, and there is no reason to suppose that it took place any later than the mid-second century at latest.

Phase 4.2

Following the backfilling of the Phase 4.1 ditches and gullies, three scattered burials were interred in the southern part of the sampled area. One of these was an inhumation burial (F.7), and the second and third (F.3 and 15) cremations. The burials, which were all in Area 1, were not grouped. No further burials were observed during the close watch kept during topsoil clearance; however the deepest of the burial features survived to a depth of only 0.17m, and it is possible that other shallow burials were destroyed by ploughing or machining. The bone from the burials is described in the finds report below.

Inhumation burial F.7

The grave was a steep-sided flat-bottomed rectangular pit of maximum depth 0.10m, aligned SSW-NNE. This contained the supine extended inhumation burial of an infant, head towards the SSW. The skeleton was badly decomposed and crushed, but it was clear that the infant had been buried with the hands lying on top of one another over the lower chest area, the left leg straight, and the right leg bent at the knee with the right foot towards the area of the left foot. Estimated original length of burial is *c.*0.70m.

There was no trace of a coffin. The inhumation was accompanied by two miniature pottery vessels. The first, a flask (Fig. 9.19), was disturbed and broken in half by the box-scraper but had probably been interred in the fill of the grave in the area above the head; the second, a flask or flagon, was buried on the right hand side of the body slightly below the right knee.

Cremation F.3

The burial pit was a circular bowl-shaped pit 0.46m in diameter and 0.10m deep. The cremation burial itself survived as abundant small calcined bone fragments contained in a matrix of friable dark grey clay loam containing much charcoal (to 40mm diameter) and a few small pebbles, some burnt; this fill was visible from the surface as an inner area 0.30m across. Sixteen complete and partial nails recovered from the edges of this fill indicate that the cremation had been deposited in a wooden box, which, judging from the assortment of nails, had been carelessly constructed. The fill of the pit was otherwise redeposited natural clay. There were no recognisable grave goods, but a *Bos* tooth was present among the calcined bone.

Cremation F.15

The cremation was interred in a pit of probable oval plan aligned east-west, 0.75 x 0.40m in extent, and 0.17m deep. The pit was cut through the fill of gully F.14, and slightly deeper than it. The burial consisted of abundant small fragments of cremated bone in a matrix of mixed grey and brown clay with occasional charcoal fragments, the bone fragments becoming less frequent towards the bottom of the pit. The cremation represents the burial of a child or adolescent, and possibly also that of an infant (see Human Remains, below). A single glass bead from the fill of the burial pit may represent grave goods, or may be redeposited from the fill of the gully.

Phase 4.2: dating

The two ceramic vessels from grave F.7 are not closely datable, though they may be of first or second-century date (Turner 1986, 44, fig. 3.3). The only stratigraphic data comes from the cremation F.15, which cut the fill of the Phase 4.1 gully, F.14.

It is likely that the burials represent part of a mixed cremation and inhumation cemetery and are more or less contemporary. If this is so, the fact that F.15 cut gully F.14 means that the burials must be assigned a date later than Phase 4.1. The stratigraphy and the possible early date of the pottery from the inhumation suggest that the burials were taking place soon after the end of Phase 4.1, and therefore probably belong to the second half of the second century. This date derived from the site data is in agreement with the general dating for cemeteries of this kind elsewhere in south-east England (see Discussion of the School Site, below).

Phase 4.3

Only one of the dated features can be assigned to this phase, ditch F.55. In the west this feature ran below the edge of Area 2, and in the east below uncleared topsoil. The ditch was sampled only in the west of Area 2. The northern side of the ditch was cut away by the Phase 4.4 gully F.58 (S.216); its estimated original width was 2.10m. It was of wide U-shaped profile, of maximum depth 0.84m.

The history of the ditch was fairly clear; a period of primary silting (lower half of L6 in S.216) during which occasional tile and mortar fragments and animal bones

found their way into the ditch was followed by a period of secondary silting (upper half of L6), when rubbish deposition was greater but not intensive. Natural sand and topsoil then slumped into the ditch from the south (L4); this may represent bank material. Finds from L4 were few, consisting mainly of large tile fragments and lumps of mortar from the interface with L3 above. The period of silting was followed by an episode of intensive primary refuse disposal, filling the ditch nearly to the surface (L5 and 3). In L5, pottery and tile were very common; at least three pots were thrown into the central southern part of ditch, rims down; joins between pottery sherds and other finds from L5 with the overlying L3 indicates that these two deposits resulted from a single episode of backfilling. In general finds were concentrated in the lower part of the deposit (L5), though were still abundant in the overlying L3. Animal bone and edible mollusca were very poorly represented from the ditch as a whole. Finally a turfline seems to have formed (L2) followed by the deposition of a thin layer of topsoil (L1).

Phase 4.3: dating

The primary and secondary silt contained no closely datable material. The backfilled material (L5 and 3 respectively) contained large groups of pottery, the latest sherds datable to the range mid-third century plus to mid-fourth century at latest; this was the latest material from the ditch. F.55 was cut by the Phase 4.4 gully F.58, datable to the later fourth century.

The pattern which emerges is of silting, presumably during the first half of the third century. The backfilling must have taken place sometime after *c.*A.D. 250, and the ditch must have been filled by the middle of the fourth century at latest. To allow for an interval between the complete infilling of F.55 and the digging and backfilling of gully F.58 in the late fourth century, it would seem likely that F.55 was full by, perhaps, the end of the first quarter of the fourth century.

Phase 4.4

Phase 4.4 features comprised a gully, F.58, two pits (F.28 and 59) and a probable quarry. Gully F.58 was cut through the northern side of the Phase 4.3 ditch F.55, which had filled to the surface before F.58 was dug; the line of F.55 may have been marked by a residual bank on its southern side. The pits and gully contained similar backfilled deposits even though they were 80m apart.

Gully F.58

Gully F.58 was recorded over the same distance as ditch F.55, and sampled with it (S.216; Fig. 5). The gully was very steep sided U-shaped profile, with a maximum surface width 1.10m, 0.20m at the bottom and maximum surviving depth of 0.64m.

The feature was cut through sand and boulder clay subsoils, and the bottom fills were difficult to distinguish from natural. However, the infilling of the ditch appears to have consisted of primary (L4 in S.216) followed by secondary (L3) silts, overlain by two deposits of backfilled material (L1 and 2). The primary and secondary fills were poorly distinguished from one another and from natural, being nearly sterile redeposited subsoil; no finds were recovered from the primary silt L4, and material from the secondary silt L3 comprised only a few fragments of tile from the lower part of the fill. The upper fills are part of a single episode of backfilling, with occasional joins between finds from both layers.

Finds within L1 and 2 were extremely common, consisting of building debris, in the form of roof and box-flue tile, mortar, daub, stone and tile *tesserae*, and probable flagstone fragments, and of domestic refuse represented by large quantities of edible mollusca forming a solid layer at the bottom of L1, mainly oyster but including mussel, whelk and cockle, and animal bone.

Pit F.28

Pit F.28 was a circular, steep-sided, bowl-shaped pit with a gently rounded bottom, of maximum depth 0.39m. Its surface dimensions were 1.08 x 1.15m. Infilling consisted of a period of silting (L2 on S.108; Fig. 5) followed by the deliberate infilling of the top 70% of the feature with mainly domestic refuse, though the fill included significant quantities of daub. Two hobnails presumably represent footwear. Oyster and mussel shells were very common, forming a solid layer at the bottom of the fill. Lack of weathering of the pit sides and the angle of many of the finds suggest that it was rapidly infilled. No finds were recovered from the primary silt.

Pit F.59

Pit F.59 (S.212; Fig. 5) was located in the north of Area 2, where it was cut through the fill of the Phase 4.1 ditch, F.51. The excavated feature was a near-vertically sided pit with very uneven bottom. Its sides were uneven and slightly undercut in lower half, possibly as a result of collapse of the lower sides from flooding. As sampled, the pit was roughly circular, 1.90-2.15m in diameter, surviving to a depth of 0.74-0.92m. Approximately 0.40m of subsoil and fill had been machined away here; the original dimensions of the feature are estimated at *c.*2.20m diameter and 1.10-1.40m deep.

The method of infill was very clear; the primary fill (L5 on S.212) is probably a silt, but the general abundance of finds in the redeposited subsoil forming the fills above L5 probably indicates backfilling. Finds were similar from all layers, consisting mainly of tile, including box-flue from the backfilled deposits, and animal bone. Artefacts were least common in the primary fill.

The pit, dug into boulder clay subsoil, would have retained water, and it is also estimated (see 'Quarry Area', below) that the bottom of the feature was approximately on the same level as the present day water table; the pit may therefore have been intended to collect and retain water.

The Quarry Area

The 'quarry' was represented by a series of very irregular hollows in the bottom of the Area 3 machine platform and in the slot trench in the south-east corner of Area 2. Up to 2m of redeposited soil and previously undisturbed subsoil

had been removed during groundwork for the platform, and it was clear from the machine sections in the north and west of Area 3 that the natural fall in the Roman ground surface had been interrupted here by a large, fairly level but irregularly bottomed depression, with an estimated original extent of at least 30 x 35m. Today's topography, a regular south-easterly fall of the ground, results from infilling with topsoil in Phase 5 (below), sealing the quarry area (S.206 = F.43 in western section of Area 3; Fig. 5). The cutting of one of the hollow features into this original slope in the ground surface indicates a natural origin for the depression. The fall to the base of this depression from the original ground surface in the Area 3 sections was 0.80m over a distance of 3.5m.

At least 0.5m of fill had been machined off the tops of the hollows in places. The hollows survived below the machine platform to a maximum depth of 0.65m (S.202 = F.35; Fig. 5). Unless the patches of fill remaining in the bottom of the machine trench represented the bottoms of originally vertically sided pits, which is at variance with the impression gained during machining and visible in the trench sections (e.g. S.206), the recorded fills would have joined above the machined level. It is probable that the bottom of the quarry was originally very uneven, comprising principally two large sub-rectangular hollows, with the other features representing lesser undulations in the bottom.

Several of the hollows were sampled. The features tended to be very irregular in plan and profile. Deposits of burnt grain in F.35 (S.202) and F.71 in the Area 2 slot trench do not suggest that the hollows had been used as grain storage pits, and there was no sign of burning *in situ*. Significant quantities of daub were also recovered from this context. The greater depth of underlying fills in F.71 may suggest that the hollow had been silting up for some time before deposition of the grain.

Phase 4.4: dating

This is derived mainly from the pottery in pit F.28 and gully F.58, the backfilled deposits of which were extremely similar in character, and probably represent different locations for a single episode of rubbish disposal. The backfilled deposits in both features contained sherds of late fourth-century date (e.g. Nos. 32-3, Roman Pottery below). The latest material from pit F.59 is not more closely datable than generally third or fourth century; however the pit is assigned to Phase 4.4 rather than Phase 4.3 because the finds within it, although from a different matrix, are much more similar to those of definite Phase 4.4 contexts than to those from the Phase 4.3 ditch F.55. Datable material from the quarry features was almost entirely absent though a single sherd from F.74 is datable to the late fourth century; the same general comments made about the dating of F.59 also apply to quarry features. It is possible however that pit F.59 and the quarry were first dug before the beginning of Phase 4.4.

The phase, at least as represented by gully F.58 and pit F.28, therefore commenced sometime after the filling of ditch F.55 (i.e. after a probable date of the end of the first quarter of the fourth century (above)). Backfilling then occurred at some point in the late fourth century.

Phases 5 and 6: Post-medieval and modern

The only significant activity visible was the dumping of enormous volumes of soil, mainly in the area formerly occupied by the late Roman quarry and in the northern half of Area 2, sealing Roman features (e.g. S.206 and S.300; Fig. 5). The greatest recorded depth of the deposit was *c.*1m, over the quarry, and this gradually petered out over Area 1 and in the west and presumably southern part of Area 2. The soil left below the cut-and-fill line in Area 2 was part of this deposit rather than modern topsoil.

Phase 5 and 6 features were infrequent, consisting of a track of late date (F.32 and 48) and a few small pits of no consequence.

Phases 5 and 6: dating

No closely dated material was recovered from the redeposited soil, though pegtile was common in section and various iron items of definite and probable post-medieval date were recovered from the deposit during machining; an early post-medieval date is assumed. The deposit was probably cut in the north-west corner of Area 2 by trackway F.32/48 which contained pottery of probable late 18th-century date.

The artefacts

The following notes on metalwork, non-building stone, glass, burnt clay and daub, and Roman building materials are based on archival descriptions by Hilary Major. The note on the marine mollusca is based on archival descriptions by Mr. Dennis Tripp.

In general the finds reports are as short as possible. However the small assemblage of prehistoric pottery is published in full since it is a useful basis for future study of prehistoric pottery from the town, and the Roman pottery is also worth publishing in some detail. Roman tile is also treated thoroughly since this is the first excavated assemblage from the town; this should help in the dating of major structures in the settlement even though they are unlikely to be excavated in the foreseeable future.

Metal objects

Lead

Two lead fragments, both probably from window cames, were recovered from the fill of the Phase 5 ditch F.48.

Iron

A total of 50 iron objects were recovered from stratified contexts, 40 of these complete or partial nails. Of the nails, 18 came from the wooden box containing the cremation burial F.3 (below). The 50 objects were distributed by phase as follows: three came from Phase 4.1 contexts (one nail, one probable bolt head and one L-shaped head from a fastener); 18 came from Phase 4.2 contexts (all nails from cremation F.3); nine came from Phase 4.3 contexts (all nails from ditch F.55); 15 came from Phase 4.4 contexts (six nails, two hobnails both from pit F.28, and a stud, two plate fragments and a probable hinge fragment from the backfill in the gully F.58); one came from an unphased Roman context (a rivet head); and four came from Phase 5 contexts (a gouge, two plate fragments and a spike). In addition, two horseshoes and various nails, all of definite or pro-

bable post-medieval date, were recovered from the redeposited topsoil dumped during Phase 5.

The nails recovered from the fill of the cremation pit F.3 represent the remains of a wooden box in which the burial had been interred. The nails consist of eight complete and seven substantially complete examples, and three head fragments, representing an original total of between 15 and 18. All have round heads and square shafts; lengths of the complete examples are in the range 31-53mm (one incomplete nail also measures 53mm long), and head diameters are in the range 10-14mm. Two of the longer pieces are bent, and one incomplete fragment has traces of mineralised wood on the shaft. Hilary Major sums up the group as 'a non-homogeneous group of nails; looks like the carpenter just grabbed a handful!'.

Other nails all have square or rectangular shafts and square, rectangular or round heads, complete nail lengths in the range 36-94mm.

Non-building stone

The flint (Fig. 6)

by Hazel Martingell

A total of 68 worked flints was recovered. These comprise: 4 cores; 1 core rejuvenation flake; 52 flakes (7 patinated); 4 retouched flakes; 1 blade; 6 scrapers (1 patinated); 2 notched pieces (slightly patinated); 1 denticulate; and 1 piercer/awl. Scrapers are illustrated on Fig. 6. 1-4 (from F.10 I L1, F.17, F.28 L1 and F.59 L2 respectively).

The flint material was probably taken from the local clays and consisted of small, often thermally split, pieces. All of the material is probably residual. The patinated scraper (from the Phase 3 pit, F.17) (Fig. 6. 2) is probably the earliest artefact, and could be Mesolithic (Phase 1). The remaining five scrapers are possibly Neolithic (Phase 2), and could be later; this would also apply to the remaining retouched pieces, four flakes, two notched pieces, the piercer/awl and the denticulate.

Other non-building stone

Fragments of non-building stone apart from struck flint were recovered from Phase 4.1, Phase 4.3 and Phase 4.4 contexts. Fragments of lava, none with original surfaces but probably representing quernstones, came from one Phase 4.1 context (ditch F.10 I L1, twelve pieces), and from two Phase 4.4 contexts (pit F.59 L1, seven small fragments; and the surface of quarry hollow F.34, two fragments).

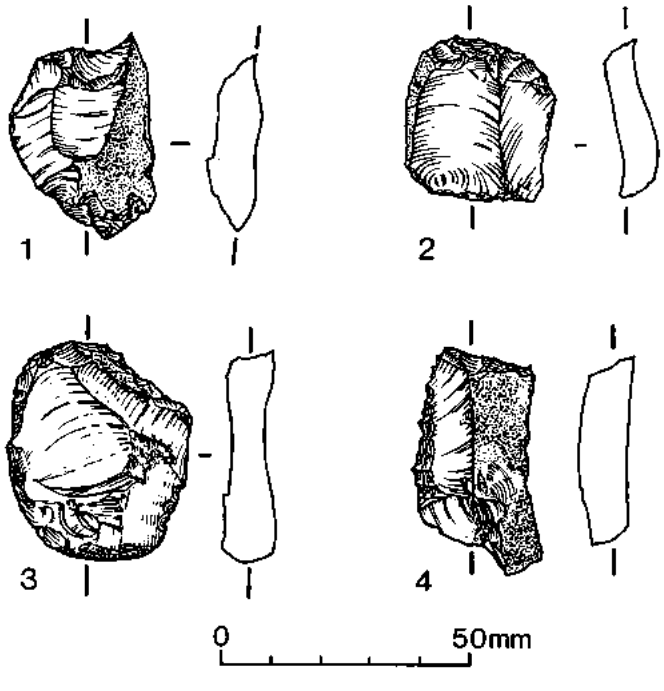

Fig. 6 Coggeshall. St. Peter's school site — flintwork.

Apart from the probable quernstone fragments, a possible whetstone is represented by two joining fragments of burnt sandstone from L3 and 5 in Phase 4.3 ditch F.55, and a probable millstone-grit rubber from L1 in Phase 4.4 ditch F.58.

Glass

Four fragments of glass were recovered, from Phase 4.1, Phase 4.2 and Phase 4.4 contexts. Phase 4.1 gully F.60 and Phase 4.4 quarry hollow F.34 both produced single fragments of thin flat light green glass, probably window glass. The secondary fill of Phase 4.4 pit F.28 contained part of an unidentified vessel, also in thin light green fabric. Finally, the fill of the pit containing the Phase 4.2 cremation F.15 contained a fragment of blue glass bead, probably of rectangular or square section; this may be a bead deliberately interred with the cremation, or have been redeposited from the fill of the Phase 4.1 gully F.14.

Ceramics

Prehistoric pottery

by Nigel Brown

Earlier prehistoric pottery is represented by the single Beaker sherd from F.29.

The flint and sand-tempered fabrics of the rest of the material are appropriate to a Late Bronze Age or Early Iron Age date. Changes in fabric types between the LBA and EIA are common. Needham and Longley (1980, 413) demonstrate, for a number of Surrey sites, an increase in the use of sand temper in the LBA until it predominates in the EIA. A similar pattern occurs in Essex at the Springfield Lyons enclosure (Brown and Buckley 1984-5, 107). The presence of occasional rounded chalk fragments in the pottery from Coggeshall probably indicates local production, as chalk fragments occur in the local boulder clay.

Sherds of thin-walled vessels with smoothed surfaces indicate the presence of fine wares. The rim sherds from F.10 (Fig. 7.1) and F.51 probably derive from bowls with slightly flared rims. The shoulder sherd from F.13 (Fig. 7.2) is clearly part of a tripartite carinated bowl typical of the LBA/EIA. The ledge-like carination, rather crudely produced in the Coggeshall example, can be paralleled at Runneymede (Longley 1980, 68), and occurs in Essex in the assemblage of EIA Darmsden/Linton style pottery from a well at Rook Hall Farm, Little Totham (Adkins *et al.* 1984-5). The footring base from F.18 (Fig. 7.4) appears typical of EIA examples. Similar examples occur at North Shoebury (Brown, forthcoming), Root Hall Farm, and amongst the later pottery from the Orsett causewayed enclosure (Barrett 1978, 286-7, fig. 41 no. 49). The rims of coarse jars from F.21 and F.52 (Fig. 7.5) can be widely paralleled in LBA and EIA contexts. Of particular interest is the sherd with finger pinched decoration from F.17 (Fig. 7.3). Multiple rows of finger impressions, or all-over finger tip rustication occur regularly as a minor element in East Anglian LBA/EIA assemblages (Cunliffe 1968, 179; Harding 1974, 136). In Essex, they occur amongst the LBA pottery from the enclosure ditch at Springfield Lyons (Brown, in prep.), in the small assemblage from Langdon Hills (Brown and Buckley 1984-5), in EIA contexts at North Shoebury (Brown, forthcoming), and amongst a large assemblage of Darmsden/Linton style pottery from a well at Lofts Farm, Heybridge (Brown, in prep.)

The small quantity of pottery from Coggeshall is best regarded as part of a domestic assemblage, of the mid-1st millennium B.C., accidentally incorporated in the fills of contemporary or near contemporary features, or as a residual element in Roman contexts. A precise date is impossible, but the assemblage was probably in use between 700 and 400 B.C.

*Catalogue of prehistoric pottery (*signifies illustrated sherd: Fig. 7)*

F.2: One somewhat abraded body sherd, interior missing; dense fine flint and sand temper.

F.4 I L1: One small somewhat abraded body sherd; medium density flint grit.

F.4 II L1: One small body sherd; dense small to medium flint grit and some sand.

F4 II L2: a) Five small abraded body sherds; medium density small flint grit; *b)* One abraded body sherd; dense sand with occasional small flint grit.

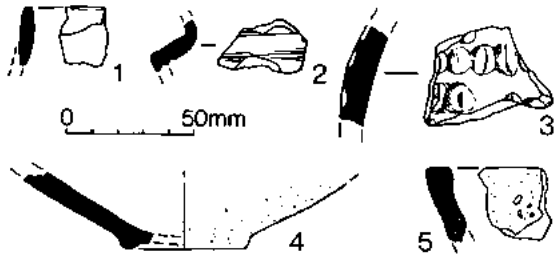

Fig. 7 Coggeshall. St. Peter's school site — prehistoric pottery.

F.7: One small abraded body sherd; sparse small to medium flint grit.

F.10 I L1: a) *One abraded rim sherd of thin-walled vessel, slightly flared flat-topped rim; sparse small flint and some sand. Also 1 abraded body sherd from same vessel; *b)* Two somewhat abraded body sherds; some fine sand with sparse small to medium flint grit; *c)* One somewhat abraded body sherd with part of a shallow horizontal groove on the exterior; large flint grits and coarse sand; *d)* One abraded body sherd; dense coarse(?) sand and small to medium flint grit.

F.10 I L3: a) One small abraded body sherd; medium density small flint grit; *b)* Two very abraded body sherds; dense ill-sorted sand and small and medium quartz and flint.

F.13: a) *One body sherd of sharply carinated tripartite bowl, smooth surfaces, the exterior surface of the shoulder has been roughly rolled over to produce a ledge-like carination. There is a deep groove on the interior above the shoulder; small flint and fine sand; *b)* Fourteen small body sherds; dense, ill-sorted sand and small and medium quartz and flint.

F.14 I L1: a) Two abraded body sherds; medium density small to medium flint grit; *b)* One very abraded flat-topped rim sherd with a slight finger impression on the top of the rim; dense small flint grit.

F.15: Six very small abraded flint-tempered body sherds.

F.17: a) Three abraded body sherds; dense small to medium flint grit; *b)* One abraded body sherd, smooth surfaces; largely temperless fabric, some fine sand and small flint grit; *c)* *One body sherd, possibly from above the shoulder of a large coarse jar. 2 rows of horizontal finger-pinched decoration survive on the exterior, with a possible trace of a third. Possible trace of 'sooty' deposit on interior. Medium density ill-sorted small to medium quartz and flint temper; *d)* One body sherd with trace of single finger-tip impression surviving; medium density small and medium flint grit; *e)* Three very small flint-tempered chip sherds.

F.18: a) *Two lower wall and base sherds probably from carinated bowl, the base has a distinct footring. Surfaces slightly abraded, smoothed where surviving; dense small to medium flint grit; *b)* One abraded body sherd; sparse small flint grit.

F.21 L2: Two abraded sherds of slack-shouldered jar, flat-topped rim slightly expanded; dense sand with medium density small and large flint and chalk.

F.26: a) Four abraded body sherds; medium density flint grit: *b)* One somewhat abraded body sherd of thin-walled vessel; dense small to medium flint grit with occasional chalk and quartz; *c)* Four small abraded flint-tempered chip sherds.

F.29: One slightly abraded thin-walled body sherd; sparse well-sorted small flint grit. The exterior has comb impressions apparently forming part of a lozenge pattern although there is considerable overlapping of the rows of impressions, making the pattern unclear.

F.30 I L1: One abraded body sherd; medium density small to large flint and occasional quartz temper.

F.35 L1: Two very abraded chip sherds; fine dense sand temper.

F.51 I L3: Abraded slightly flared rounded rim, dense fine sand temper with occasional small flint.

F.52 II L1: a) Four abraded body sherds; dense sand and flint temper; *b)* *One abraded slightly expanded flat-topped rim sherd with part of a single finger-tip impression on top of the rim; dense sand, coarse flint and occasional quartz; *c)* One abraded thin-walled sherd of ? round shouldered bowl; dense fine sand and small flint grit.

F.55 L5: One very abraded body sherd; dense sand and occasional chalk temper.

F.66 L2: a) One abraded ? shoulder sherd of jar. Dense small to medium flint and sand temper *b)* One abraded body sherd with smooth exterior; dense sand temper.

F.66 L3: Two abraded body sherds; dense small to medium temper and some sand.

F.76 L1: a) One abraded body sherd; dense small to medium flint grit; *b)* One abraded body sherd; sparse small and medium flint grit.

Roman Pottery
by David Gurney

Introduction

Approximately 27kg of pottery were quantified in a style similar to that devised by Going (1987) for Chelmsford, and where possible fabric and form numbers have been cited as in the *Mansio* report.

Most of the pottery (60% by weight) came from features of Phase 4.1, and several near-complete vessels are represented. Phase 4.2 has only two vessels, both from an inhumation (F.7). The pottery in Phase 4.3 comes from a single ditch (F.55) (22% by weight). Phase 4.4 (17% by weight) includes vessels from the Nene Valley and Oxford potteries.

The catalogue is arranged by subphase, and within each subphase by feature and layer.

The fabrics

The fabrics are listed using the system devised for Chelmsford (Going 1987). For the incidence of fabric by subphase, see Table 1.

2 Nene Valley Colour-Coat (Nos 30, 33)
3 Oxfordshire Red Colour-Coat (No. 34)
4 Hadham Oxidised Red wares (No. 32)
21 Miscellaneous oxidised red wares (No. 13)
27 Colchester buff wares (Nos 6, 9, 23, 37)
31 Unspecified buff wares (Nos 14, 20)
34 Fine Romanising wares (No. 15)
39 Fine grey wares (Nos 11, 12, 24)
41 Black-Burnished 2 (Nos 1, 25)
44 Storage jar fabrics (No. 16)
45 Romanising grey wares (Nos 2, 4, 7, 8, 17, 18)
47 Sandy grey wares (Nos 10, 22, 26-9, 31, 35, 36)
50 ? South-Essex shell-tempered ware (No. 3)
51 Late 'shell-tempered' ware
55 All amphorae (? all South Spanish Dressel 20s)
60 All samian (Nos 5, 21, 38)

Table 1: Incidence of Roman pottery fabrics by phase

PHASE	4.1		4.2*		4.3		4.4	
Fabric	Wt (g)	%	Wt (g)	%	Wt (g)	%	Wt (g)	%
2	—	—	—	—	—	—	268	6
3	—	—	—	—	20	<1	152	3
4	—	—	—	—	—	—	50	1
21	148	<1	—	—	360	6	185	4
27	728	4	—	—	43	<1	348	8
31	201	1	50	?	23	<1	119	3
34	58	<1	—	—	—	—	—	—
39	344	2	—	—	865	14	276	6
41	47	<1	—	—	357	6	26	<1
44	6982	43	—	—	8	<1	1124	25
45	6729	41	—	—	—	—	163	4
47	534	3	—	—	4332	72	1019	22
50	406	2	—	—	—	—	16	<1
51	—	—	—	—	—	—	165	4
55	170	1	—	—	—	—	652	15
60	4	<1	—	—	3	<1	3	<1
?	—	—	?	?	—	—	—	—
Totals	16351	—	50+	—	6011	—	4566	—

*see Catalogue (No. 19)

Vessel types

The following illustrated vessels have corresponding types from Chelmsford (Going 1987):

No. 1 (Chelmsford type B4.2), No. 2 (H1.1), No. 3 (G5.1), No. 7 (G44.1), No. 10 (B4.2), No. 11 (H1.3), No. 12 (H1), No. 13 (H1.1), No. 15 (K3), No. 16 (G44), No. 17 (G44), No. 18 (G10.2), No. 22 (G44.5), No. 24 (B6.2), No. 25 (G9.3), No. 26 (E6), No. 28 (G45.1), No. 29 (G45.1), No. 30 (C8.1), No. 34 (C8.1).

Catalogue of Roman pottery: descriptions of illustrated vessels (Figs 8-10)

PHASE 4.1

No. 1 Deep, flat-rimmed dish/bowl. Black Burnished Ware 2. Fine mica visible on surface. Close-set burnished lattice decoration. Also (not illustrated), a base scrap with chamfer. Mid second century. Four sherds. F.10 I L1.

No. 2 Globular beaker with short everted rim. Romanising grey ware; reddish-brown with brown surfaces. First century. One sherd. F.10 I L1.

No. 3 Ledge-rimmed jar. South-Essex shell-tempered ware. A sherd from the shoulder has graffito incised before firing (for further examples and discussion see Jones 1972, Jones and Rodwell 1973 (Fig. 5, No. 24), Drury and Rodwell 1973 (Fig. 17, No. 103), Going 1987 (102, Fig. 49, Nos 1-9)). The fabric and type was produced at Mucking kilns I, II and VI (Jones and Rodwell 1973, 22) and possibly at Gun Hill (Drury and Rodwell 1973, 82-4). It occurs mainly in south Essex from the mid-first to early second century, and the ledge-rimmed jars with graffiti are typically pre- to early Flavian. 59 sherds. F.10 I L1.

No. 4 Necked jar. Romanising grey ware; reddish-brown fabric, black surfaces. Burnished neck and rim, and stabbed decoration on the shoulder. 26 sherds. F.10 I L1.

No. 5 (not illustrated). Two samian rim sherds, almost certainly from the same vessel. Form 27g, South Gaulish. Mid- to late first century. F.10 I L1.

No. 6 Mortarium. Brownish-cream fabric with a little quartz and red-brown tempering. No trituration surviving. East Anglia, probably Colchester (similar to Hawkes and Hull 1947, Fig. 53, No. 33; ? Flavian). Three sherds. F.10 I L1.

No. 7 Necked, high shouldered jar. Romanising grey ware; grey core, reddish-brown margins, black surfaces. First to second centuries. 45 sherds. F.10 I L3.

No. 8 Jar base with a single central perforation. Romanising grey ware; reddish-brown core, black surfaces. 27 sherds. F.4 L1.

No. 9 Mortarium. Brownish cream fabric with a little quartz and red-brown tempering and occasional chalk particles. No trituration surviving. East Anglia, probably Colchester (similar to *Cam.* 497, Hull 1963, Fig. 66, No. 12). Six sherds. F.4 II L1.

No. 10 Deep bowl. Sandy grey ware; light grey core, reddish-brown margins, dark grey surfaces. One sherd. F.51 I L1.

No. 11 Globular beaker with short everted rim. Stabbed decoration on the shoulder. Fine grey ware. First century. One sherd. F.14 L1.

No. 12 Beaker with tall everted rim. Decorated with pairs of lightly incised vertical lines on the body. Fine grey ware. First century. 62 sherds. F.52 I L1.

No. 13 Beaker with short everted rim. Oxidised red ware (? Colchester). 63 sherds. F.52 II L1.

No. 14 Flagon. Four-ribbed handle. Buff ware. 13 sherds. F.52 II L1.

No. 15 Lid. Fine Romanising ware; grey core, reddish-brown margins, dark grey surfaces. One sherd. F.52 II L1.

No. 16 Storage jar, with a high stabbed shoulder. Storage jar fabric; grey-brown with red surfaces. A common form from the first to the fourth century, this example probably first century. (cf. Wickenden 1986, Fig. 16, No. 23). 121 sherds. F.52 I L1.

No. 17 Storage jar, with a high stabbed shoulder. Romanising grey ware; grey core, reddish-brown margins, dark grey surfaces. Probably first century. 67 sherds. F.52 I L1.

No. 18 Cordon-shouldered jar. Romanising grey ware; grey core, reddish-brown margins, dark grey surfaces with brown patches. Burnished externally, apart from the shoulder which is decorated with vertical burnished lines and a zone mid-way down the body. Five perforations in the base, made after firing, probably for use as a strainer. First to early second century. 95 sherds F.52 II L2.

PHASE 4.2

No. 19 Flask. Complete until broken by box-scraper. Not seen by the present writer, but recorded as 'coarse ware with grey external surface; the internal surface is coated with a cream-coloured deposit containing black inclusions' (Turner 1986, 43, Fig. 3.3). F.7 L1.

No. 20 (not illustrated). Small flagon or flask. Unspecified buff ware. 60 minute sherds and a footring base. F.7 L1.

PHASE 4.3

No. 21 (not illustrated). Samian Form 40 rim. East Gaulish, probably Trier. Late second and third centuries. F.55 L3.

No. 22 Small storage jar. Sandy grey ware. Stabbed decoration on the shoulder. A medium sized version of Going's (1987) Type G44.5. Eight sherds. F.55 L4.

No. 23 Mortarium. Fine cream fabric with a little quartz and red-brown tempering and flint. Trituration grit of quartz and flint some on the flange. East Anglia, probably Colchester. F.55 L4.

No. 24 Bead and flanged bowl. Fine grey ware. Later third and fourth centuries. Six sherds; complete except for base. F.55 L5.

No. 25 Jar with everted rim. Black-Burnished Ware 2. Fine mica visible on the surface. Decorated with burnished obtuse lattice. Patches of carbonised deposit internally and externally. Third to early fourth centuries. 12 sherds. F.55 L5.

No. 26 Necked bowl-jar. Sandy grey ware. A long-lived form. One sherd. F.55 L5.

No. 27 Necked jar with slightly cupped rim. Sandy grey ware. 36 sherds. F.55 L5.

No. 28 Storage jar. Sandy grey ware. Stabbed decoration on the shoulder. Burnished rim, neck and upper body. Probably second and third centuries. 38 sherds. F.55 L5.

No. 29 As 28. 40 sherds. F.55 L5.

PHASE 4.4

No. 30 Flanged bowl imitating samian Form 38. Nene Valley Colour-Coated Ware; cream fabric with a reddish-brown colour-coat. Fourth century. Two sherds. F.58 L1.

No. 31 Neckless jar with a cupped rim. Sandy grey ware. ? Residual. One sherd. F.58 L1.

No. 32 Small squat bowl with bosses between the neck and a horizontal groove. Hadham red ware; light red with a slightly darker slip. Probably late fourth century. One sherd. F.58 L2. [A sherd from a similar vessel in the same fabric was also found in F.74 L1 (not illustrated)].

No. 33 One-handled flagon with pinched spout. Nene Valley Colour-Coated Ware; orange-brown fabric, dark brown colour-coat. The wide, tall cylindrical neck is typical of the form in the later fourth century. One sherd. F.28 L1.

No. 34 Flanged bowl imitating samian Form 38. Oxfordshire red-colour-coated ware. Young 1977, Type C51. A.D. 240-400+, here probably mid to late fourth century. Four sherds. F.28 L1.

No. 35 Straight-sided bowl. Sandy grey ware with a very rough 'Rettendon'-style finish. ? Early to mid-fourth century. One sherd. F.28 L1.

No. 36 Necked jar with grooving on the shoulder. Sandy grey ware. One sherd. F.66 L1.

No. 37 Mortarium. Soft fine textured brownish-cream fabric with a little quartz and red-brown tempering. Quartz and flint trituration grits. East Anglia, probably Colchester. ? Residual. One sherd. F.71 L1.

No. 38 (not illustrated). Samian body sherd. ? Form 37, Central Gaulish. Decorated; bead-row border, single plain festoon and small plain circle. F.59 L1.

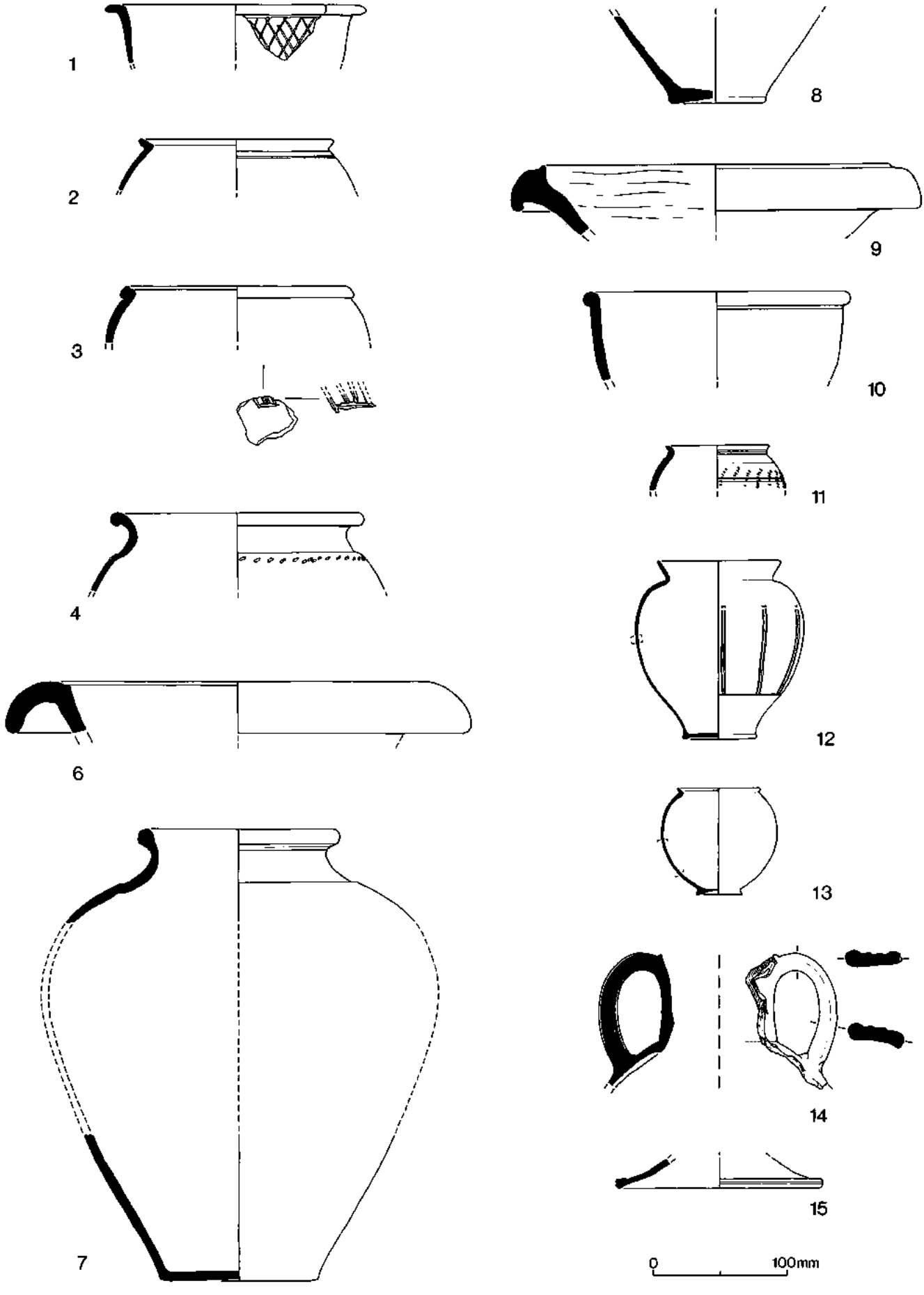

Fig. 8 Coggeshall. St. Peter's school site — Roman pottery. The neck diameter of No. 14 is conjectural.

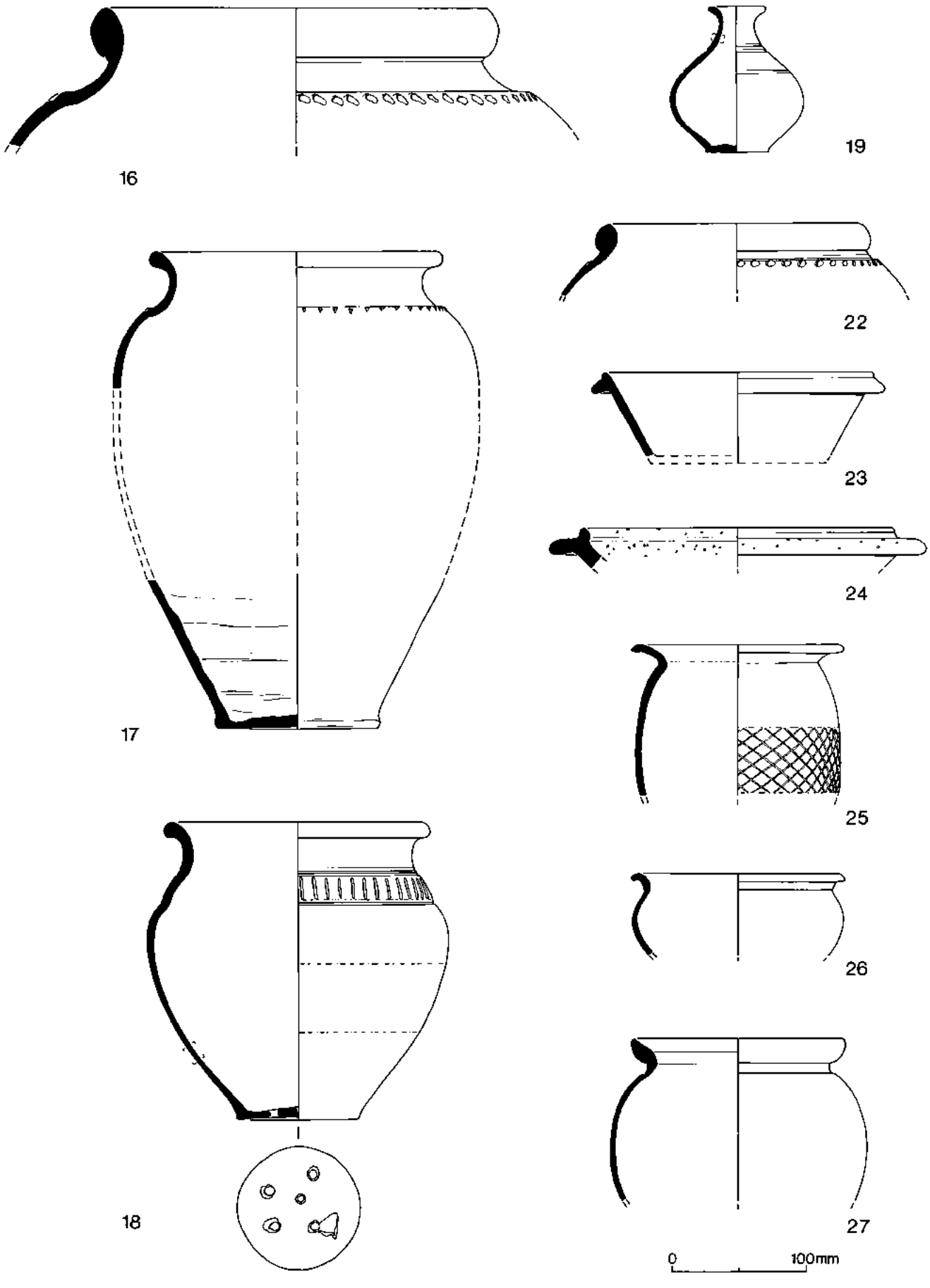

Fig. 9 Coggeshall. St. Peter's school site — Roman pottery.

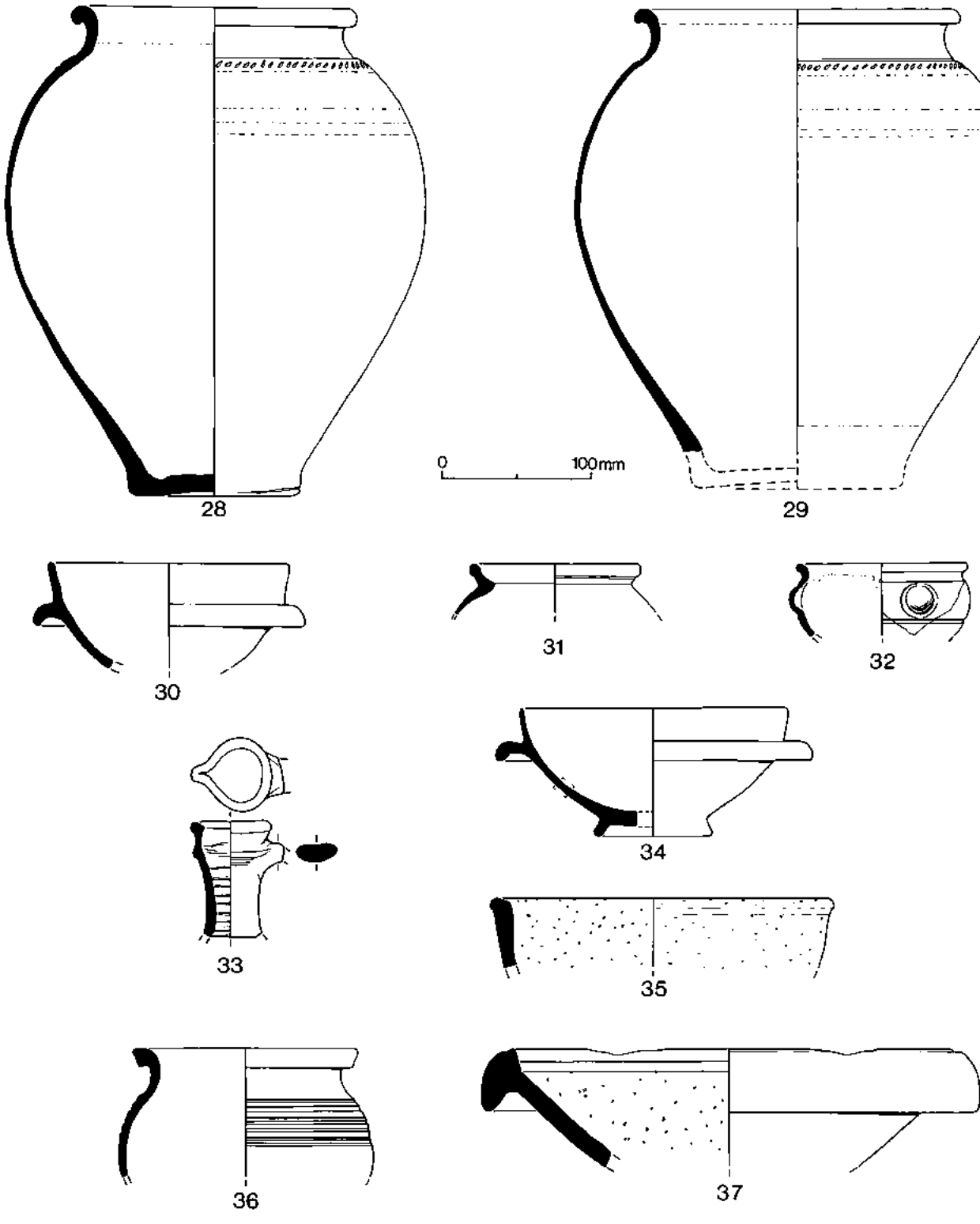

Fig. 10 Coggeshall. St. Peter's school site — Roman pottery.

Discussion

During Phase 4.1, the upper fills of F.52, and to a slightly lesser extent, F.10 and F.14, were used for the disposal of a relatively small number of near-complete vessels. Catalogue Nos 12, 13, 16, 17 and 18 account for no less than 408 sherds with a combined weight of 9kg, 55% by weight of the subphase assemblage. The commonest wares are grey and storage jar fabrics, both prolific in the area in the first century. There are small amounts of sandy grey ware, ? South-Essex shell-tempered ware and fine grey ware; buff and oxidised wares and Black-Burnished 2 are also represented. Two mortaria probably come from the Colchester kilns, and the buff and oxidised wares probably originate from the same source, only 10 miles (16km) to the east.

Apart from one South Gaulish samian sherd and one amphora sherd there are no imports, and imported fine wares represented at *Caesaromagus* (Chelmsford) are absent. The ledge-rimmed jar (No. 3) should be noted; the distribution of the type (with graffito) (Jones 1972, 338, fig. 2) includes Dunmow, Felsted and Colchester (Going 1987, 102), and now Coggeshall can be added to the list. Two vessels (Nos 8 and 18) have perforated bases, which may have been used as strainers. The BB2 dish / bowl (No. 1) has fine mica visible on the surface (cf. No. 25), and

this has also been noted on sherds at Colchester (R. Symonds, pers. comm.). This may be a characteristic of vessels from a particular production centre, but has not yet been proved.

Phase 4.2 has only two vessels, both with the infant inhumation F.7. One flask (No. 19) appears to have been complete and positioned above the head, and the other (No. 20, not illustrated) was positioned by the right knee. Flasks are commonly found with burials in Essex, in Antonine cremations and with third century or later inhumations. Dating evidence for the type is generally poor, and no typology has been attempted (Jones and Rodwell 1973, 31).

The assemblage in Phase 4.3 derives from a single ditch, F.55, and most of this from a backfilled layer (L5). As with Phase 4.1, a small number of vessels are represented and there are many joining sherds (Nos 24-9). Whereas Romanising grey wares and storage jar fabrics dominate the assemblage in Phase 4.1, here, in Phase 4.3, the bulk of the pottery is in sandy grey wares. There probably replaced the earlier wares by the mid-second century, and they peak in the third century (Going 1987, 9). The proportion of fine grey wares is higher than in 4.1 and may be related to a revival during this period (Going 1987, 8). Other fabrics represented include samian (No. 21, East Gaulish Form 40), a mortarium (No. 23), Black-Burnished 2 and oxidised red and buff wares.

In Phase 4.4 there are roughly equal amounts of sandy grey wares and storage jar fabrics. At Chelmsford, the latter appear to be very poorly represented in the early fourth century, making a comeback towards the end of the century (Going 1987, 9). Other wares present include Nene Valley colour-coated wares (Nos 30, 33), and after Hadham wares, Nene Valley products appear to be the commonest fine ware in the region in the late fourth century. The pinched-spout flagon is a characteristically late form, and the type occurs in the Stibbington Well deposit (Howe *et al.* 1980, Fig. 6, No. 66), and at Great Casterton (Perrin 1981, 451). Oxford red colour-coated wares (No. 34) and Hadham red wares (No. 32) are also present, the former not reaching the area in any measure until the mid-fourth century, and the latter only becoming prominent in the later fourth century.

Burnt clay

A small amount of burnt clay (637 g) was recovered. Of this, 66.9% was 'daub', a poorly mixed fabric with chalk inclusions. Daub is here defined as material deriving from a structure, e.g. oven, hut or hearth, and each fragment therefore has at least one external surface.

Apart from two small fragments of burnt clay and a single piece of daub from post-hole F.19 in four-post structure A, all the burnt clay came from Phase 4.1 and Phase 4.4 deposits, and all the daub came from Phase 4.4 contexts.

Of the daub, two thirds came from one context, F.28 L1. The quarry hollow F.35 also produced significant quantities of daub (24 fragments weighing 85 g), and this, found in association with burnt grain, may represent debris from a corn drying kiln. Only two fragments of the daub assemblage have any diagnostic features; a fragment from F.58 L1 has a flat, smoothed surface, and one from F.71 L2 has a smooth, curved surface.

The remainder of the burnt clay consists of sandy fabrics or fairly pure burnt clay, with no indication of their use.

Roman building materials

Tile

by Hilary Major

Method

1138 tiles (whole or fragmentary) were examined, weighing a total of 95.4 kg. Six fabric groups were distinguished. Where measurable, a range of thickness is given for each group, and any other features such as deliberate markings and pawprints are recorded.

Fabric

Six fabrics were recorded as follows:

A A hard orange or red fabric, sometimes with a grey core (depending on how well fired it was). Fairly sandy, with occasional inclusions of small stones.

B As Fabric A, but includes fairly common chalk fragments and stones.

C A fairly hard, but sometimes rather friable fabric with sparse stone and sand inclusions, but fairly common little red specks (ironstone particles?). Usually a reddish-brown colour, but can be orange or pale brown.

D A fine cream fabric with fine sandy inclusions.

E As Fabric A, but with common sand.

F A fine buff or pale brown fabric similar in texture to Fabric D.

The majority of the tile is in a range of orange or red fabrics typical of other sites in the area, e.g. Kelvedon. Little attempt has been made to subdivide this group (Fabric A) since both colour and density of inclusions can vary in a single tile. Fabrics B, C and E are all related to A, but do appear to be distinct on the basis of their inclusions. Fabrics A and B together form 79% of the identified fabrics.

Fabrics A, B, C and E are probably all of local manufacture, although the ?ironstone inclusions in C suggest a different clay source for these tiles, though not necessarily of non-local origin. A small amount of tile (1% of the total by weight) is of non-local origin (Fabric D). Tile of this type was also found in small quantities at Kelvedon, and it is similar to examples found at other places such as Verulamium and London. The source of these tiles has not been located, but they may be made from Gault clay.

Fabric	Wt (kg)	% by wt.
A	74.8	78.4
B	0.9	1.0
C	0.9	9.9
D	1.3	1.3
E	1.2	1.2
F	0.4	0.4
unspecified	7.4	7.8

Tile types

Where fragments could not be definitely identified as *tegulae* or *imbrices* they were classified as 'tile' or, if over 32 mm thick, as floor tile. It is likely that most of the tile came from *tegulae* or *imbrices*.

Tegulae were the most common class by weight, although less numerous than tile or spall. Two *tegulae* have complete flange edges measuring 433 mm (F.55 L5) and 406 mm (F.57 L1). Thickness varies from 16 to 30 mm, although the thickness is usually variable within the same tile. Some of the *imbrices* have a very pronounced narrow ridge at the apex of the tile, which may have been characteristic of a particular tilery. *Imbrex* thickness varies from 8 to 24 mm, and is generally thicker at the edge of the tile.

Some of the floor tile has mortar adhering on one side, but none has mortar on both sides, which might be expected to occur on hypocaust *pilae* or bonding tiles in walls. This indicates their use in floors. Their thickness is up to 40 mm, although some spall is thicker than this.

Twelve fragments of combed box-flue tile were found, none of any size. There is little indication of any combing patterns. Two definite, and two dubious, *tesserae* were found, of which three were from the Phase 4.4 gully fill F.58 L2, and one from the Phase 5 redeposited topsoil.

Type	Number	Wt. (kg)	% by wt.
Tegula	169	35.6	37.3
Imbrex	155	14.3	15.0
'Tile'	432	33.1	34.7
Floor tile	33	5.6	5.9
Spall	305	4.6	4.8
Combed tile	12	0.7	0.8
Tessera	4	0.1	0.1
(Pegtile	28	1.2	1.3)
	1138	95.4	99.9

General details of the distribution of the fabrics within the tile types are given below (see table in 'Distribution by context and phase').

Markings on tile

'Signatures' on *tegulae* are fairly common. These consist of a single, double or triple arc drawn with the fingers on the edge of the tile. They are common on other sites, and apparently cannot be related to particular periods or tileries.

Markings on *imbrices* are unusual. A piece of *imbrex* from F.59 L4 is incised with an arc bisected by a straight line. One piece of tile from F.74 L1 has an incised cross on the sanded side. Two tiles have paw prints, probably of cats since they are clawless (from F.55 L4 and F.59 L2; Phase 4.3 and 4.4 respectively).

Other features

Some fragments from the Phase 5 redeposited topsoil have splashes of salt glaze on them, sometimes on broken surfaces. A few pieces were overfired, in one case partly vitrified (also from the redeposited topsoil), but these are not necessarily wasters, and there is no evidence for a nearby tile kiln.

Distribution by context and phase

Sixty six contexts contained tile. Of these, only 20 contained more than 2kg. Considered as a proportion of a complete tile (a *tegula* may weigh 7-8kg) this is not very much. The largest groups came from the Phase 4.4 pit F.59 L4 (10.6kg or 11% of the total by weight), and the topsoil redeposited over the 'quarry' area in Phase 5 (10.3kg). The Phase 4.3 ditch F.55, taken as a whole, contained 16.2kg (17%).

The following table gives a general idea of tile types and the fabrics in which they occur in Roman contexts by phase on a simple presence or absence basis; no tile was recovered from Phase 4.2 contexts except for a single (probably intrusive) spall from cremation F.15. 'x' signifies the presence of tile:

Table 2: Roman tile types and fabrics by phase

Type/	*Phase 4.1*						*Phase 4.3*						*Phase 4.4*					
Fabric	*A*	*B*	*C*	*D*	*E*	*F*	*A*	*B*	*C*	*D*	*E*	*F*	*A*	*B*	*C*	*D*	*E*	*F*
Tegula	x	-	x	-	-	-	x	-	x	-	-	x	x	x	x	x?	-	-
Imbrex	x	-	x	-	-	x	x	-	-	-	-	-	x	-	x	-	-	x
'Tile'	x	x	x	-	-	-	x	-	x	x	-	x	x	-	x	x	x	x
Floor tile	-	-	-	-	-	-	-	-	-	-	-	-	x	-	x	x	-	-
Combed	-	-	-	-	-	-	-	-	x	-	-	-	x	-	x?	-	x	-
Tesserae	-	-	-	-	-	-	-	-	-	-	-	-	x	-	-	-	-	-

The above table can be qualified by commenting that tile is absent in the primary silting episode in Phase 4.1 contexts, and first appears in the secondary silting and backfilling phases. Tile indicating the presence of a building of any sophistication (i.e. with a hypocaust, *tesserae* or floor tiles) does not occur before Phase 4.3, and even then the evidence is restricted to a single fragment of box-flue tile from the backfilled L5 in ditch F.55. The remainder of these types come from Phase 4.4 and post-medieval contexts. Nearly all of the floor tile and all of the *tesserae* are in Fabric A. All of the *tesserae* stratified in Roman contexts are from the backfill in gully F.58. A large amount of Roman tile, including floor tile, combed tile and a *tessera*, as well as later pegtile, was also recovered from the Phase 5 redeposited topsoil. Pegtile was recovered from Roman features in two instances, firstly two fragments from the pebbly fill representing the base of the Phase 5 redeposited soil or post-medieval ploughsoil at the top of ditch F.10, and secondly a single fragment intrusive into the top of gully F.14.

Mortar

An assemblage of 33 pieces of mortar weighing a total of 1.4kg was recovered from Roman contexts; the only other mortar from the site comprises two fragments from a modern post-hole.

The mortar is of two fabrics, distinguished on the basis of their inclusions:

Fabric A: Very sandy with small chalk and stone fragments up to *c.*20mm diameter. Varies in colour from off-white to buff.

Fabric B: Contains common grog / baked clay fragments (usually orange or red) up to *c.*15mm diameter. Also has common sand, small chalk fragments and small stones. Usually varying shades of pink.

In all, 28 fragments weighing 787g (57.8%) are Fabric A, and five fragments weighing 575g (42.2%) are Fabric B. The mortar, all of which came from Area 2, was distributed by phase and fabric as follows: Phase 4.1, 4 fragments of Fabric A at 55g; Phase 4.2, nil; Phase 4.3, 15 fragments of Fabric A at 397g and 2 fragments of Fabric B at 515g; Phase 4.4, 9 fragments of Fabric A at 335g and 5 fragments of Fabric B at 60g.

The mortar from the Phase 4.1 context (from the backfill over the buried soil in the northern part of ditch F.10/56/76, S.300; Fig. 5), the only incidence of mortar prior to Phase 4.3, is exceptionally chalky and may represent a different fabric from the rest of Fabric A. Otherwise Fabric A first occurs in the primary silt of the Phase 4.3 ditch F.55, and both Fabric A and B (the earliest occurrence of B) in the overlying buried soil in the same feature.

In one case (from the backfilled L5 in the Phase 4.3 ditch F.55) the two fabrics appear to have been used on the same wall, with Fabric B on top of Fabric A. Three pieces of mortar had a thin plaster wash on the surface (all from Phase 4.4 contexts) and one had a red wash painted directly onto the surface of the mortar (also from the Phase 4.3 ditch fill F.55 L5).

Building Stone

Three fragments of ? mudstone which have mortar adhering were recovered from the secondary silt in the Phase 4.1 ditch F.56 (I L4). The remaining fragments of non-building stone came from the backfilled deposits in the Phase 4.4 gully F.58: these comprise a possible flagstone fragment in sandstone, a grey stone *tessera* probably in grey limestone (20 x 28 x 20mm) and a further two, slightly irregular, fragments of grey limestone which may also be *tesserae*.

Zoological evidence

Human bone

by David H. Szondy

Three burials were examined, an inhumation (F.7), and two cremations (F.3 and F.15). All are of Phase 4.2 date. The bone is summarised below; further details if required are present in the site archive. There was no evidence of pathological change in any of the bone.

Inhumation F.7

Identifiable bone fragments of this sample include the left humerus, several ribs, four deciduous molars, two deciduous incisors, and a number of cranial segments. All are of human origin, belonging to an infant.

Despite the survival of enough fragments of the left humerus to estimate the bone's length at 95mm, there are not available tables or formulae for the estimation of stature from infant longbones. However, on the Johnstone scale of development (Bass 1971, 116) the bone length gives an age of (1 year ± 6 months). This conclusion is supported by the level of development of the cranial fragments, and the type and level of development of the deciduous teeth. Comparison with tables of known dental development, however, point to the younger age estimate.

Cremation F.3

This sample of very comminuted bone produced the fragments of seven teeth, composed of three molar roots of possible human origin, one bovine incisiform crown showing considerable wear, one unidentified and badly damaged crown, and two unidentified roots.

The site data seems to clearly indicate the burial of a human, and in the light of this it is probable that the three molar roots are of human origin.

Cremation F.15

The identifiable bone fragments from this sample include a fragment of cranial vault and the detached epiphysis of a right ulna. Both are of human origin. In addition, there is the head of a small femur and what may be an immature tibia; these are so small and incomplete that it is difficult to say whether they belong to a human infant or animal. Minimum number analysis indicates at least two individuals.

The detached epiphysis from the identified human remains indicate an age at death for the individual of ten to fifteen years.

The animal bone

by Owen Bedwin

A total of 319 fragments of animal bone and teeth were identified, of which 307 came from dated contexts (listed in Table 3). The fragments were in good condition, and most were unabraded, suggesting food debris which had been disposed of in pits and ditches.

The bulk of the material (i.e. 303 fragments out of the 307 from dated contexts) was Roman. Cattle predominated throughout the Roman period, with 78.5%, followed by sheep / goat (11.2%), horse (6.5%) and pig (3.1%). There was one fragment each of dog and domestic fowl. Within the Roman period, there may have been some variation in relative proportions of the main species, but only in Phases 4.1 and 4.4 (later first — mid-second century, and later fourth century) were there sufficient fragments for comparison to be reasonably reliable (Table 3). The percentages for *Bos* were 87% and 61% respectively in these two phases, figures which strongly suggest an economy based on cattle rearing. The 87% in Phase 4.1 is remarkably high and derives from the 'more or less solid layer of animal bone' in the tertiary fill of F.10. This is hardly a typical deposit, and such a high percentage may be misleading. No bones belonging to red or roe deer were present, indicating that hunting provided a minimal contribution to the diet. The remains of horse, especially the few teeth, suggest that these animals were at least 10 years old at death, implying the use of horse as a draught animal, making little or no contribution to the diet.

There was a small amount of calcined bone from context 5 (unphased Roman). The fragments were so comminuted that it was impossible to identify the species.

In general, the figures in Table 3 compare well with the material from Roman Braintree (Luff 1976), about 10 km (6 miles) away, with cattle predominant, and pig present in small amounts.

Table 3: List of animal bones by phase

PHASE	cattle	sheep /goat	pig	horse	dog	dom. fowl	*Totals*	Unident.
3	—	1	—	—	—	—	1	2
4.1	166	18	—	6	—	—	190	—
4.2	—	—	—	—	—	—	0	—
4.3	12	—	—	—	—	—	12	—
4.4	66	18	9	13	1	1	108	1
5	—	—	—	—	—	—	0	1
6	2	—	—	—	—	—	2	—
Totals	246	37	9	19	1	1	313	

Marine mollusca

A total of 418 fragments of edible marine shellfish were recovered (Table 4 below). All came from Roman contexts; ten fragments from unphased Roman features. Edible mollusca occurred almost exclusively in Phase 4.1 and 4.4 contexts, usually in deposits of domestic refuse, Where complete valves were present the proportions of upper and lower halves per context tended to be approximately equal, with lower halves being consistently slightly more abundant (55% overall). Oyster was predominant throughout.

Table 4: List of Edible mollusca by phase

PHASE	oyster	mussel	cockle	whelk	*Totals*
4.1	120	10	1	—	131
4.2	—	—	—	—	0
4.3	2	—	—	—	2
4.4	263	4	2	6	275
Undated	9	1	—	—	10
Totals	394	15	3	6	418

Discussion

The following discussion is specific to the school site. The broader implications of the results of this excavation are addressed at the end of this paper ('The School and East Street sites: a synthesis').

Phase 1: Mesolithic

There is no definite evidence for this Phase, apart from a single flint scraper. This artefact, which is only of possible Mesolithic date, was found in a Phase 3 post-hole.

Phase 2: Neolithic / Early Bronze Age

This is represented in the lithic assemblage, some of which can be assigned a possible Neolithic date, but may be later (The Flint, above), and by a single sherd of Beaker pottery.

The Beaker sherd was only slightly abraded, and since it was the only find from F.29 it is possible that the post-hole represents a contemporary feature, with the sherd being accidentally incorporated into its fill.

Phase 3: Late Bronze Age / Early Iron Age

Clear evidence of occupation is present in the form of four-post structures A and B, the associated pit group in Area 1, and pottery. There was apparently an absence of contemporary features in Areas 2 and 3; in spite of the possible loss of features in these parts of the site from deep machining, the general impression that they never existed there is strengthened by the fact that the scatter of LBA/EIA pottery found as residual in later features all over the sampled site was markedly concentrated in Area 1. No structures apart from the four-posters were visible, and there was no evidence of an enclosure. The structures were single phase, and the number of pits does not imply a lengthy period of occupation. The position of the southern periphery of the settlement is unknown, but it may be significant that the associated pits lay in a rough line on an east-west axis, and showed no sign of continuing into the unsampled area to the south. The East Street site to the south produced no evidence for contemporary settlement. The numbers of sherds recovered from the post-holes and contemporary pits may indicate that domestic structures lie close by; these might be in the uncleared ground between Areas 1 and 2.

Gent (1983) has recently demonstrated the likelihood that four-post structures functioned as granaries, most frequently occurring on enclosed sites and least frequently on unenclosed settlements in the LBA/EIA — LIA period. The definite four-post structure, A, and the probable structure, B, differ considerably in size, with floor areas of 3.25 m² and an estimated *c.* 10.5 m² respectively. This puts one structure towards either end of the usual size range of this type of building of 3 - 12 sq m (Gent 1983, 245).

Evidence relating to economy is virtually absent. Cultivation of cereal crops or legumes is inferred from the presence of the four-post structures, and the presence of at least sheep/goat is indicated by the faunal remains. The pottery (above) probably represents part of a domestic assemblage.

The evidence points to a small unenclosed farming settlement lying in the northern half of Area 1 and to its immediate north. The settlement was short-lived, sometime in the period between 700 and 400 BC.

Phase 4.1: Roman.
Later first — mid-second century AD

The origin of the Roman site in Phase 4.1 is characterised by a striking degree of orderliness and planning. The major feature, the north-south ditch F.10, was large relative to the recorded contemporary features, and must have acted as a base feature in determining the line and positions of the gullies approaching it from the west. These factors and the absence of contemporary features to the east make it likely that the ditch F.10 and its associated gully F.4 represent an eastern boundary to the settlement area and external trackway. The general line of the ditch was presumably determined by topographical factors. Its function as a drainage ditch in the poorly drained boulder clay subsoil must have been an important one, though the gullies approaching from the west appear not to have drained into it.

The ditch and gully system is incompletely recorded, and further gullies may be present in the land between Areas 1 and 2. Ditch F.51 was fairly substantial and may have subdivided the area west of F.10 into two major enclosures. Gullies F.14 and 30 are clearly a short stretch of trackway. The function of the gullies F.52 and F.60 is unclear, and they could represent either field or property boundaries. All of the Phase 4.1 features show a remarkable uniformity throughout their period of use, not only in their origin as integral parts of a single system, but also in their history of silting followed by backfilling. All these features were infilled at the same time, though there is some indication that the infilling of the northern portion of ditch F.10 was interrupted for long enough to allow the formation of a soil, while infilling in the southern part of the ditch continued to the surface.

No contemporary structures were present within the sampled area. Roman building materials were absent from the primary silts of the features belonging to this subphase, but become relatively frequent in the secondary silts and backfill in the deeper features, and in the backfill in the gullies. Such evidence as there is for a structure or structures in Phase 4.1 is limited to roof tile (fragments being recovered from nearly all features), and mortar and stone with mortar adhering (small groups, from the late backfill and secondary silts respectively in the northern part of ditch F.10/56/76). The matrix of the backfill was burnt, suggesting clearout after a fire. The mortar is extremely chalky for its fabric type (see Mortar, above), and represents either an exceptionally early incidence of the fabric or, perhaps more likely, a distinct fabric occurring in very low quantities. A possible fragment of window glass was found in the excavated fill of gully F.60.

Artefactual evidence for agricultural activity is lacking. Cattle forms an exceptionally high proportion of the animal bone assemblage (87% of the bone from this subphase), and suggests cattle rearing; the lack of wild animal bone indicates its virtual absence from the diet.

It is clear from the unabraded condition of most of the pottery from the backfilled deposits belonging to the end of this subphase (Roman Pottery, above), the average sherd size, and the observation that several pots had obviously been thrown away in more or less complete condition, that the backfilled material is primary refuse; its source cannot be far away from the excavated features. This interpretation is reinforced by the presence of large quantities of food waste from the same deposits.

The abandonment of the Phase 4.1 system at a stroke is a definite indicator that the demise of the system was associated with a radical change in land use, probably after a fire had affected the main building. The homogenous nature of the levelling deposits suggest that they had a common source, and the mere fact of infilling of the features implies continued occupation. This major change in the site's organisation may indicate a change in status, possibly associated with new constructional activity at the source of the primary refuse deposits.

Phase 4.2: Roman. Later second century

The next discernible episode is the use of Area 1 for burial. Only three burials were recorded. The fact that these are of a mixed inhumation and cremation group does not necessarily imply that they are not contemporary (Black 1986, 216); indeed the later second century-date assigned to the group on stratigraphical and internal grounds (above) is entirely consistent with the date range for mixed cemeteries of this kind.

The main problem with the Coggeshall group is its small size. It may represent a few scattered burials which are coincidentally close to one another, rather than a cemetery as such. However this is unlikely, for a number of reasons. The burials appear to be contemporary, and the implication of the absence of human remains elsewhere on the site is that the area in which the burials were found was selected for this purpose. Further, the burials recorded are unlikely to represent the original total; the grave features were extremely shallow and an unknown quantity could therefore have been destroyed by ploughing. The burials may well have extended beyond the cleared area, perhaps to the south.

Such evidence for age and sex as there is (Human Remains, above) suggest that the inhumation F.7 is that of an infant of about one year old. In spite of the fact that the general under-representation of infant burials in Roman cemetery sites has been taken to indicate careless disposal of their remains associated with religious beliefs (Harman *et al.* 1981, 148), it is obvious from the furnishing in this grave that the burial was far from careless. The evidence that cremation F.15 may represent the remains of an adolescent and infant might be taken to suggest that these are the remains of an adolescent girl and her baby. The burial in a box, albeit a rudely constructed one, of the cremation F.3 is taken to remove all reasonable doubt that this represents the burial of a human.

Phase 4.3: Roman.
Earlier third — early fourth century

This was represented only by ditch F.55. Its alignment was precisely the same as that of the Phase 4.1 gullies which must have been filled to the surface at least some 75 years earlier, and were presumably grassed over by the time F.55 was dug. There is therefore no reason why these earlier gullies should have determined the line of F.55.

The internal stratigraphy of the feature is significant mainly because the backfilled deposits are primary refuse, with pots being thrown into the gully more or less whole, as in the Phase 4.1 gullies. This must indicate that domestic structures lay nearby. The main difference between this refuse and that of Phase 4.1 lies in the rarity of animal bone and of edible mollusca. This may have no significance beyond relating to the function of the building or part thereof from which the refuse was taken. Building materials in the form of mortar and tile were fairly abundant in the fills from the primary silt onwards; overall the ditch produced 17% by weight of the tile assemblage for the site.

Two particular aspects of the building materials are significant. Mortar appeared in the deposits for the first time (except for the four fragments from the top of the Phase 4.1 ditch F.10); one of the 17 fragments recovered has a red wash directly over the surface of the mortar. A single fragment of box-flue tile was also found, both finds coming from the buried soil L5, whence they had probably sunk from overlying backfill. These finds hint at the existence of a building of some sophistication. It is worth commenting that the finds came from a very small sample of the ditch fills (only a 1m segment); the same kinds of material were probably abundant in the ditch as a whole.

Phase 4.4: Roman. Mid — late fourth century

Gully F.58 again followed the east-west orientation of features established in Phase 4.1. Ditch F.55 of the preceeding subphase was fully infilled before F.58 was dug, and the line of the latter followed F.55 so precisely that it must have been determined by it, possibly following the line of a residual bank on the south side of F.55. The features assignable to Phase 4.4 are infrequent (the gully, two pits and the quarry) and well spread out, and are clearly on the fringe of the settlement.

The similarity of the backfilled deposits in gully F.58 and pit F.28 again indicates a methodical infilling of open features over a fairly extensive area (the two features are 65m apart) at the end of the phase (i.e. post *c.*AD 360). This is again primary refuse but is particularly important because the presence within these deposits of roof and box-flue tile, mortar, stone and tile *tesserae*, floor tiles, probable flagstone fragments, and plastered mortar definitely indicate the existence of a major, sophisticated structure nearby.

The functions of gully F.58 and pit F.28 are uncertain. The bottom of the nearly vertically sided pit F.59 may have been below the water table (below), and thus the feature may be a shallow well or water hole; it would anyway have retained water.

The very large and irregular hole in the north-east of the excavated site presumably represents a quarry. The natural subsoil in Area 3 was boulder clay, though it is possible that in places sand interdigitated with the upper boulder clay, as it was observed to do in the west of Area 2; the irregularity of the hollows in the bottom of the machine trench may have been a result of following veins of sand into the boulder clay. The determining factor for the depth of the hollows may have been that the deposits being quarried ran out, though it is also possible that the quarry was abandoned at this level due to flooding. The deposits in the bottom of the hollows suggest gradual infilling, but were broadly similar in content to other Phase 4.4 deposits except in the virtual absence of pottery; they contained occasional fragments of box-flue tile, floor tile, mortar with an off-white wash, and window glass. The extent and date of origin of the quarry is impossible to establish, but its origin may antedate the beginning of Phase 4.4.

In the assemblages of material representing food remains, there is a greater variety than in previous phases. The edible mollusca comprise oyster (the commonest), mussel, cockle, and whelk, and the animal bone includes representatives of all the species found on the site, including the only examples of pig, dog and domestic fowl.

The deposits of burnt grain present in some of the quarry hollows (e.g. S.202) showed no sign of being burnt *in situ*, and the fact that some of the animal bone and oyster from these and stratigraphically adjacent fills are also charred suggests that the grain was disposed of after being accidentally burnt elsewhere. The presence of a relatively large quantity of daub in F.35 L3 may represent the remains of an oven, the whole suggesting a kitchen fire.

Although the latest identifiable features prior to the post-medieval period belong to this phase, the methodical infilling indicated by the distribution of the deposits of primary refuse demonstrates continued occupation of the settlement after the date of infilling, that is to say beyond an earliest possible date of the later fourth century. No finds dateable to the fifth century or later were recovered, though this may simply reflect the position of the sampled areas relative to the nucleus of occupation.

Phases 5 — 6: Post-medieval and modern

Phase 5 was represented only by the dumping of an enormous volume of soil over the area of the late Roman quarry. The later finds from the deposit date the episode to the earlier post-medieval period. The presence of relatively large quantities of Roman tile suggests that the soil came from a point close to a Roman structure or structures. The nature and general date of the deposit suggest that it was connected with new building nearby, possibly in the area of, or for, the church. The field sampled by Areas 1-3 is named 'Sheepcoats' on a map of 1731 by T. Skynner (ERO [D/DU] 19/2); this and surrounding fields appear to have been in use at that time as pasture, and there is no firm evidence that this area has ever been ploughed. It is however possible that the pebbly layer sporadically capping ditch F.10 and gully F.4 in Area 1 was the base of a post-medieval ploughsoil, but this is questionable since the layer might have been the edge of the soil dump.

The only features datable to Phase 5 were the very late post-medieval track ditches F.32 and 48 in Area 2, and probably also one small pit in Area 3. Modern features (Phase 6) consisted of a few minor post-holes and a field ditch crossing Area 1 on a WNW-ESE alignment. The area is currently turfed.

East Street site

Introduction

Excavation of three small trenches was undertaken in July and August 1985 (Figs 11 and 12). The field containing the trenches, which had been pasture since at least the beginning of this century, continues the gentle southerly slope towards the Blackwater floodplain encountered on the school site. Subsoil was gravel capped by a layer of brickearth up to 0.6m thick in Area C, and up to 0.15 -0.5m deep in Area B; the level of top of the gravel was observed to undulate in Area B.

The principal objectives of the excavation (centred on TL 8544 2264, ECC SMR site no. TL 82/63) were to ascertain whether or not the main early Roman north-south ditch F.10 and parallel gully F.4 continued into this area (Area C), and to sample the archaeological deposits on the north side of East Street (Stane Street) in the hope that these might help to clarify the nature of the settlement (Areas A and B). The strategy of excavation was to sample, record and date all features encountered. This was successfully achieved though a number of features failed to produce datable finds. The ECC recording system, based on that recommended by the HBMC, was used. Blocks of context numbers were allocated within the following ranges: 1-100, fills visible in section only; 101-499, excavated fills; 500-999, features; and 1000-1499, segments.

Severe root disturbance of the natural brickearth in Area A had caused the merging of some fills with the natural subsoil, and naturally infilled features in particular were sometimes extremely difficult to see, even after cleaning and in favourable conditions. This factor led to the unavoidable loss generally of up to 0.30m of disturbed natural and fills below the base of the overlying soils. Original depths of features could usually be estimated by reference to the nearest trench sections.

The Excavations

The site is phased as follows (phase plan, Fig. 12):

Phase 1.1	Neolithic and Bronze Age
1.2	Iron Age
Phase 2.1	Early Roman (later first - second century)
2.2	Late Roman (mid - late fourth century)
Phase 3.1	Earlier medieval (earlier 13th - earlier 14th century)
3.2	Late medieval ? (late 15th - early 16th century)
Phase 4	Post-medieval (mid-16th to later 17th century)
Phase 5	Modern (18th century plus)

In general terms, the phasing of the site is clear. There is some degree of uncertainty about the date range for the Roman ditch 507; the case for a Phase 2.1 ditch recut in Phase 2.2 is argued below. Phase 3.2 is poorly represented in the record, and may not in fact represent a distinct phase at all; its identity is maintained because its component features contain the only evidence we have for late 15th-century activity on the site. Phase 5 (modern) is not considered below.

Phase 1: Prehistoric

Prehistoric occupation (Phases 1.1 and 1.2) is represented only by the lithic assemblage and residual pottery.

Sixty nine pieces of struck flint were recovered, all residual or unstratified; most are assignable to the Neolithic — Late Bronze Age range (Phase 1.1). A denticulate knife, from a probable Roman context, may be of Beaker date.

Nine fragments of prehistoric flint-tempered pottery of uncertain date were found, seven of these from the early Roman gully 520, and two from the unphased gullies 504/505.

The Late Iron Age is represented by a single Belgic sherd from the Roman ditch 507, and possibly also by three sherds in a Romanising fabric from the Phase 2.1 gully 520.

Phase 2: Roman

Roman features comprised a ditch visible mainly in Area B (507), a parallel gully (520), and a further ditch (565) in Area C. 507 and 565 may be parts of the same feature. Gullies 504 and 505 may also be of Roman date.

The phasing of gully 520 to the early Roman period (Phase 2.1) is secure, as is that of ditch 565 to the late Roman period (Phase 2.2). The phasing of ditch 507, however, is problematical (below); it is certain that the ditch was infilled in the late fourth century, but there are indications (below) that this material was the fill of a Phase 2.2 recut, and that the ditch was of Phase 2.1 origin.

Gully 520

This sinuous feature, lying parallel to ditch 507 on its northern side, was a steep-sided, flat-bottomed feature, varying in surviving surface width within the range 1-1.6m. The estimated original depth of the gully was in the range 0.9m in the east to 0.7m in the west; the bottom fell some 0.15m from west to east. Infilling in both segments was by natural silting, with a small amount of concurrent refuse disposal; this tended to be slightly more frequent in the primary fill, and to a lesser extent in the secondary fill, in the western segment, where a deposit of charcoal, daub and other burnt material was present (context 188 in S.303; Fig. 13).

Ditch 507

Ditch 507 was sampled at three points: in Area A, where all but the bottom 0.25m had been cut away by the Phase 4 disturbance 560 (S.600; Fig. 13); in the eastern half of Area B (segment 1002, S. 301; Fig. 13), where the ditch was most fully recorded; and in the western half of Area B, intended to enable comparison with the stratigraphy in segment 1002. The line of the ditch was straight in Area B, but the evidence from the segment in Area A suggests that the ditch was beginning to turn northwards.

The width of the ditch on the surface was in the range 2-2.3m; the maximum overall depth was 1-1.1m, with the bottom gradually falling 0.3m between the west of Area B and Area A. The shape of the full profile in segment 1002

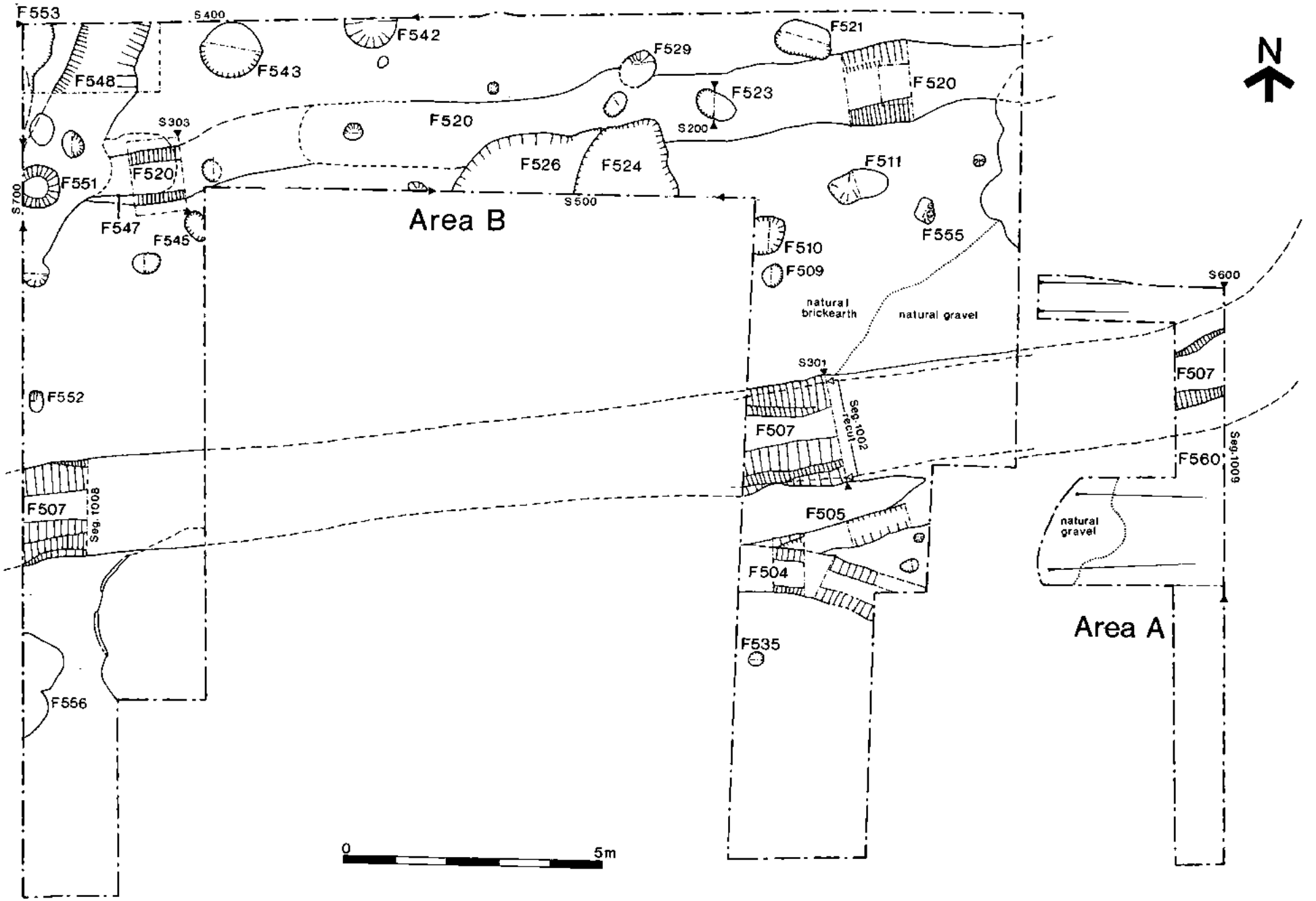

Fig. 11 Coggeshall. East Street Site — detailed plan. (Note Area C is shown only in Fig. 1).

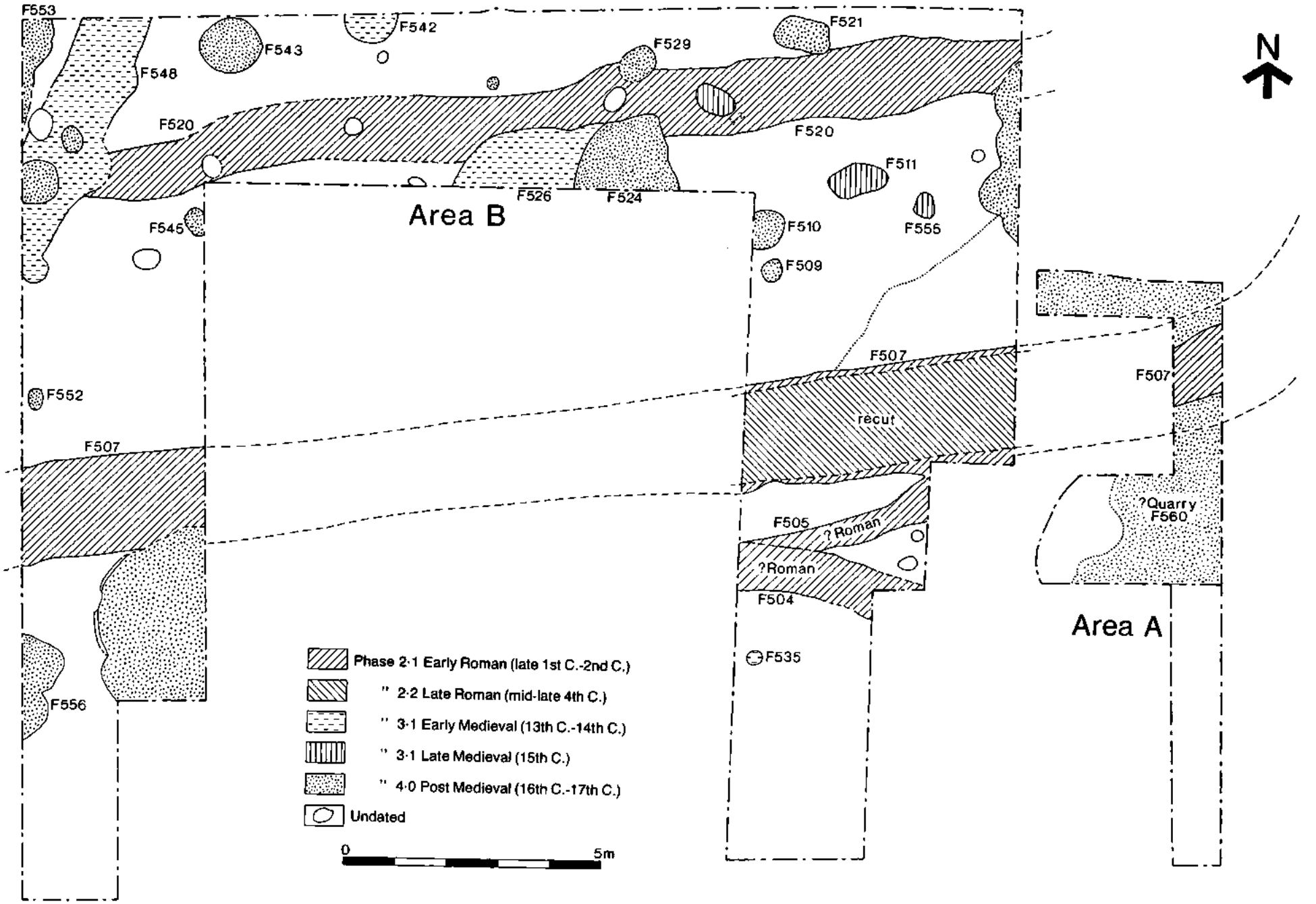

Fig. 12 Coggeshall. East Street Site — phase plan.

and in the west of Area B was similar (S.301; Fig. 13) though the sides in the western segment were very much more eroded and fairly gradual. In segment 1002, most fills had a marked tendency to merge in section, but there was nevertheless a suggestion in section (S.301; Fig. 13) that the upper fills in the centre of the ditch occupied a recut of irregular, wide U-shaped profile, 1.9m wide and 0.5m deep. This interpretation of the section is to a large extent confirmed by the distribution of finds, fills belonging to the probable earlier and later groups of fills (i.e. from the original ditch and the recut) having much in common with one another, and the two groups generally containing different types and quantities of finds. There is also a contrast in pottery dates from the two groups (below). The similar width of the recut to that of the original ditch would have meant that the fill of the latter would have been barely visible from the surface.

The deposits in the probable recut were backfill, with the possible exception of the surface fill, 106 (S.301). The finds were characterised by relatively large quantities of pottery, tile, iron, nails, slag, daub, and animal bone. The primary fill of the ?recut, sandy loam 127, may have been bank material backfilled from the south. The overlying fill 119 contained abundant evidence of burning. The fills which may belong to the original ditch contained pottery (in much lower quantities than above), a single fragment of Roman tile from fill 134 (?intrusive from 127), and animal bone. Fill 133 was superficially similar to 119.

There was no sign of the probable recut in Area A, where it would have been cut away, or in the segment in the west of Area B, though in the latter case a line of pebbles towards the top of the profile may be equivalent to fill 125 in S.301. However, the finds from the fills in these segments bore much in common with those from the earlier fills in segment 1002, except in the presence of two fragments of slag in the western segment; there was no clear sign of the late Roman backfill in either, and the pottery dates from these fills are consistent with those from the earlier fills in segment 1002 (below).

The evidence from segment 1002 is strongly indicative of a recut; however the possibility cannot be entirely discounted that the late fills represent no more than a localised backfilling of an already partially infilled ditch, and that the difference in the upper and lower fills merely reflects their source.

Ditch 565

This ditch was recorded in a slot section at the northern edge of Area C (Fig. 1). The feature was almost impossible to see in section where its fill of redeposited subsoil merged into the natural brickearth. Its existence was confirmed by occasional finds, and by the fact that the bottom just cut the top of the gravel underlying the brickearth. Separate fills could not be identified, and the fill was excavated in two spits. The eastern side of the ditch was cut away by a large modern pit, but as far as could be established 565 was a ditch of rather irregular, wide U-shaped profile, of estimated original width *c.*2.9m, and 0.84m deep.

Gullies 504/505

These two gullies lay on the south side of ditch 507 in Area A. 504 cut 505; both were naturally silted gullies of steep-sided fairly flat-bottomed profile, 0.95m wide and 0.63m deep, and 0.53m wide and 0.38m deep respectively. While they are clearly not contemporary, both are assigned a probable Roman date from their finds, which consisted of occasional fragments of prehistoric and Roman pottery, Roman tile, and nails.

Phase 2: dating

Phase 2.1

Gully 520 produced a handful of early Roman sherds, and a few tile fragments from the upper fills in the eastern segment; recognisably late material of any kind was absent. Closely datable pottery from the lower fills in ditch 507 in segment 1002 was lacking, but no definitely late Roman material was present. The absence of late material was also true elsewhere in 507, with the possible exception of fragments of possible fourth-century date from Area A (?intrusive from the Phase 4 disturbance 560), and the impression of an early date is reinforced by a coin of Vespasian (69-79 AD) from the top of fill 134, and occasional sherds of definite early Roman date from other contexts. Tile was also virtually absent from these fills. Ditch 565 in Area C produced a single sherd, from the top 0.3m of fill, dated to the later first to mid-second century.

The suggested contemporaneity of gully 520 and the earlier phase of ditch 507 is to some extent supported by their common alignment and their morphological similarities, though 507 was rather wider. A close date range for the phase cannot be established; the presence of very low quantities of Belgic and Romanising pottery from certain and probable Phase 2.1 contexts may mean that the origin of the features lies not very long after the start of the first century AD. A terminal date for the phase would appear to be somewhere in the mid to later second century.

Phase 2.2

The definite Phase 2.2 fills in ditch 507 in segment 1002 are securely dated by their pottery to the late fourth century. There is no evidence to suggest that the Phase 2.2 ?recut of ditch 507 dates from any earlier than the later fourth century.

Phase 3: Medieval

This period was represented by seven features, five of which belonged to Phase 3.1, four to Phase 3.2. All except one feature were in Area B.

Phase 3.1

Features assignable to Phase 3.1 comprised a gully, two pits and a post-hole in Area B, and a single post-hole in Area C.

Gully 548

Gully 548, in the north-western corner of Area B, was a sinuous feature of estimated original width 1.5-2.0m. The

southern terminal of the gully was just within Area B. The excavated feature was flat-bottomed, generally with steep sides in the northern segment, though these were very irregular and sometimes of a shallow gradient on the eastern side. The terminal was steep-sided. The original depth of the feature in S.400 (Fig. 13) was *c.*0.74m. There was an overall fall in the bottom of the gully from north to south of 0.20m.

The gully was cut through natural brickearth and was poorly defined. Infill was brickearth silt, the primary and secondary phases being evident in S.400 (176 and 169 respectively). There were no finds from the gully terminal. Finds in the primary silt in the northern segment were rare, consisting of only two oyster shells and one chicken bone; the secondary silt was more prolific in finds, producing a group of medieval pottery, oyster shell and animal bone, as well as residual Roman material.

Pits 526 and 542; post-holes 535 and 562

Pit 526 was a large, probably oval, steep-sided, flat-bottomed pit dug through brickearth into the top of the underlying gravel (S.500; Fig. 13) and through the southern side of the early Roman gully 520. The fill of 526 was redeposited brickearth bearing no obvious signs of backfilling, and consisted of a thin primary silt (context 158) occurring in patches around the bottom of the pit, a secondary silt (151) forming the main fill, and a tertiary silt (49) which was only recorded in section; context 49 contained occasional small burnt pebbles. Both of the excavated fills contained medieval pottery, oyster shell and animal bone, most from the secondary silt, with a small amount of residual Roman material presumed to have come from the fill of gully 520.

Pit 542, on the northern edge of Area B, was of probable original diameter 1.4m and depth 0.54m; it had a truncated U-shaped profile. Fills consisted of a thin layer of primary silt (141 in S.400: Fig. 13) overlain by a backfilled deposit (context 137) to the surface. The primary silt contained oyster, animal bone and a piece of floor tile. Finds in the backfill were common, comprising much pottery, oyster and a little animal bone. Finds were concentrated in the lower part of the fill, where the matrix was also more charcoaly than above and contained occasional burnt pebbles.

Post-hole 535, in the south-east of Area B, was a small vertically sided post-hole 0.25mm deep. Post-hole 562 in Area C was an irregularly sided feature of U-shaped profile.

Phase 3.1: dating

A total of 122 sherds was recovered from the fills of gully 548, pits 526 and 542 and post-hole 562; quantification of these by fabric (Table 5) suggests a date range for the phase of 13th to earlier 14th century. A date in the mid-13th century is suggested for the backfilling of pit 542. Post-hole 535 is dated to this phase on the slender basis of a single sherd of earlier medieval pottery. Gully 548 and pit 526 were both cut by Phase 4 features.

Phase 3.2

Features assigned to Phase 3.2 comprised two pits and a pair of adjacent stake-holes (555), lying in a row in the

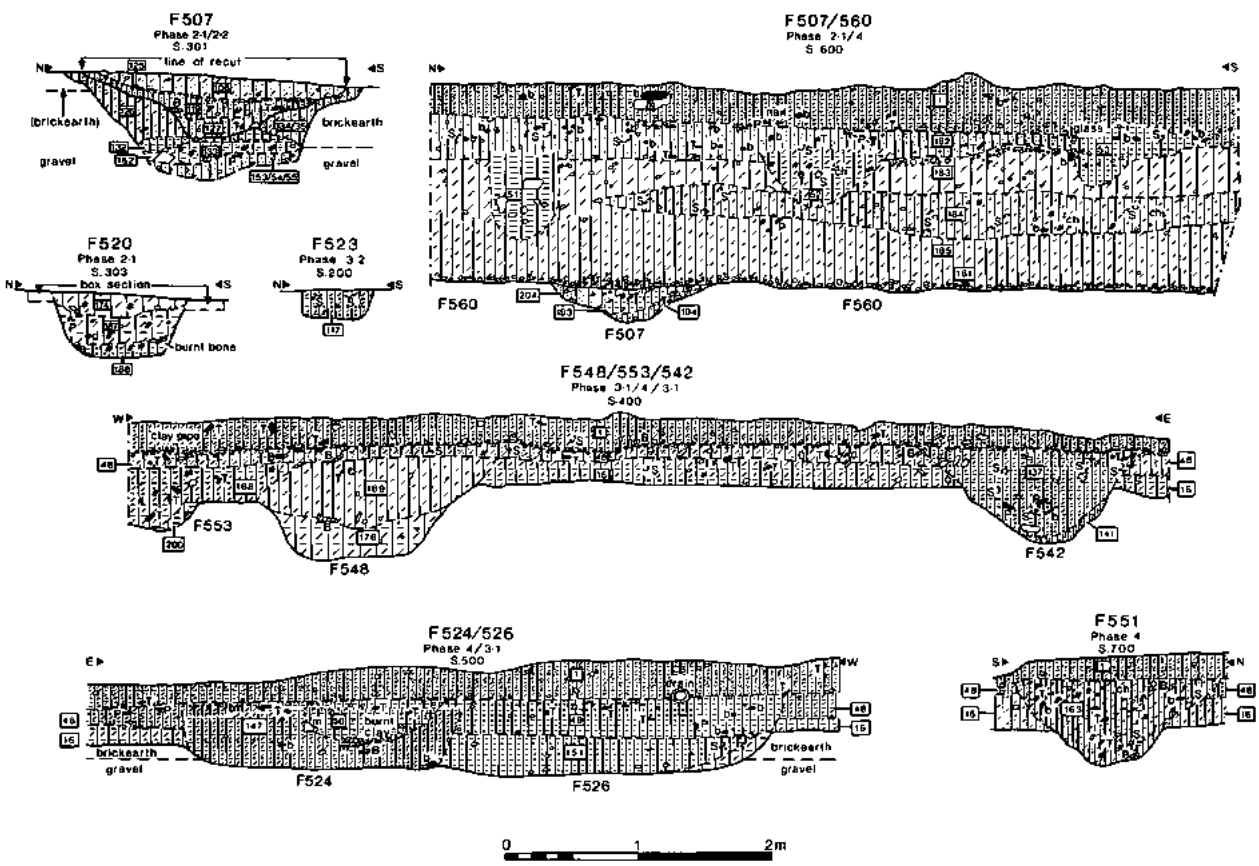

Fig. 13 Coggeshall. East Street Site — sections. Refer to Fig. 11 for positions of these sections.

north-east of Area B. Both pits, 511 and 523, were shallow, very steep-sided flat bottomed features surviving to depths of 75mm and 200mm respectively. Pit 523 (S.200; Fig. 13) was backfilled, as was probably also the case for 511. The finds were similar to those from Phase 4 features.

The phase may be illusory. However with the possibility that the features do represent a distinct but very poorly represented phase, it is appropriate to preserve its identity in order to emphasise the possibility of late medieval occupation.

Phase 3.2: dating

This is based on the presence of a few sherds in Fabrics 21 and 21B which were not found in association with other fabrics (Table 5 for details of 523 and 555); in all other respects the finds were similar to those from Phase 4 features. It may be that this restricted incidence of Fabrics 21 and 21B in these features is entirely coincidental, and in reality they belong to Phase 3.1 or 4. On the basis of the pottery alone, a 15th to early 16th-century date is assigned.

Phase 4: Post-medieval

Phase 4 was represented by a very large disturbance (560), three (probably four) post-holes and eleven pits; the large pit in the south-west of Area B was not excavated due to lack of time and its obvious date. All of the identified features were in Area B except 560, which was mainly in Area A. Detailed descriptions of representative features are given below, with general comments and reference to other features where necessary.

Disturbance 560

Disturbance 560 was sampled by the slot trench Area A. The western edge of 560 was visible along the north-eastern side of Area B, and the feature appeared to be petering out in the southern part of Area A; there was no indication of the positions of its northern and western edges and the top of the feature was therefore more than *c.*5m east-west and 12.5m north-south. It was cut to a maximum recorded depth of 1.2m below the base of the topsoil (S.600; Fig. 13); it bottomed out on natural gravel, into which it appeared to have been cut though there was no data to prove that the natural gravel at this depth in Area A had not originally shelved down some 0.8m from its level in the east of Area B and been overlain by brickearth. The gravel bottom of the feature was level and flat except in the northern arm of Area A where it rose towards Area B from the bottom of the slot trench at an angle of *c.*5 degrees, the angle of slope gradually increasing to about 30 degrees near Area B.

The feature could not have been of natural origin since it cut away most of the Roman ditch 507 (S.600). The bottom of the hole appeared to have been metalled even though it overlay natural gravel; the pebble layer (context 181) was distinct from the natural sandy gravel below, and fragments of brick and other material were commonly incorporated into the surface with the pebbles. Furthermore layer 181 was unusually deep over the fill of ditch 507, apparently as a result of resurfacing after sinkage of the original surface into the top of the ditch (not clear in section).

The feature was backfilled to the surface, apparently in a single levelling operation, with a series of deposits containing much post-medieval material.

Pits

Pit 524, in the central portion of Area B, was a large, shallow, steep-sided and flat-bottomed feature of a similar depth to the Phase 3.1 pit 526, whose fill it cut (S.500; Fig. 13). It was filled with redeposited natural brickearth (context 147) overlain by a backfilled deposit of loam (50) containing burnt material. The upper fill may represent a later feature; a shallow spit survived below the level of machining and any finds would have been amalgamated with those from 147.

Pit 551 was one of a group of pits in the north-west of Area B cut through the fill of the Phase 3.1 gully 548 (S.700; Fig. 13). These features tended to be fairly shallow, with profiles similar to that of 551. The pit was backfilled to the surface.

Pit 553 was also cut through the fill of gully 548 (S.400); it varied from the other pits in that it was irregular and probably naturally silted to the surface.

In general the picture of infilling is very similar. A few of the pits contained primary silt of varying depth, which in some cases filled them to the surface (pits 510, 524 and 553); where the features were not already full they were backfilled, this fill in some cases (e.g. 551) being the only fill present. Finds from the primary silts were usually absent, and where present consisted of occasional sherds, tile fragments etc. The backfilled material was basically homogeneous over the whole of Area B, and contained much medieval and later pottery, and other domestic debris. Unusual finds were contained in the secondary fill of pit 543, which produced much daub, and in the top of the backfilled 163 in pit 551 which produced a small lava quernstone (report below).

Buried soil

The features in Area B were sealed by a buried soil, context 48; its thickness was usually within the range 0.17 - 0.20m. It was clearly differentiated from the topsoil, but root disturbance and worm sorting made the bottom of the layer extremely poorly distinguished from the underlying fills and natural brickearth. However, it appeared to overlie the fills of both the Phase 3 and Phase 4 features, though there is a slight possibility that it may have been cut by the Phase 4 features. Occasional finds were visible in section; these were commoner towards the top of the layer, and included oyster, tile fragments, a few pieces of clay pipe etc.

Phase 4: dating

Dating is based on ceramics. Sherd quantifications (Table 5) suggest that most of the features had gone out of use by perhaps the later 17th century; the comparatively late date for the fill of pit 524, possibly into the 18th century, may be accounted for by intrusive material (see above). The features appear to be broadly contemporary, though the fact that some were partially silted before the backfilling suggests they may be of slightly earlier origin. Pottery dates for

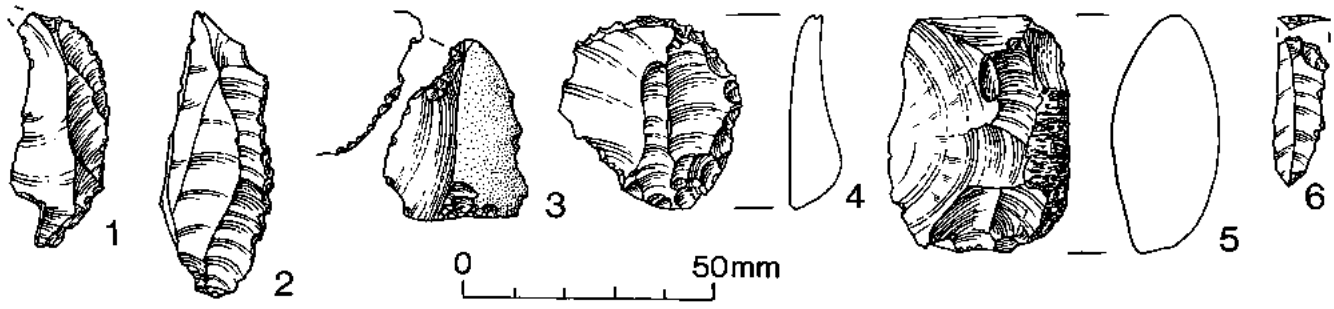

Fig. 14 Coggeshall. East Street Site — flintwork.

the silts were consistently late 16th to early 17th century.

The overall range for the phase would therefore appear to be approximately mid-16th to later 17th century. However, the possibility that some features assigned to Phase 3.2 (above) may be earlier representatives of Phase 4 features should not be overlooked.

The artefacts

The finds reports below are as condensed as possible. The description of the coin is based on Dennis Barrett's identification; the reports on the Roman and later building materials, metalwork, stone, and burnt clay are based on archival descriptions and notes by Hilary Major. The note on the marine mollusca is based on identifications by Mr. Dennis Tripp.

The only materials treated at any length are the Roman pottery, and the medieval and post-medieval pottery; the latter is the only group of medieval material so far recovered from the town, and the second published group of post-medieval pottery (for the first, see Walker 1986).

Metal objects and metalworking

Coin

Ae AS of Vespasian. Reverse Equity. RIC 557A. SF 1, from context 106 in ditch 507 (segment 1002); probably Phase 2.1.

Iron

A total of 29 iron objects were recovered from stratified, dated contexts; 25 (86%) are nails. Iron objects were distributed by phase as follows: Phase 2.1, one (one nail); Phase 2.2, twelve (eleven nails and fragments, one unidentified fragment, all from the backfill in ditch 507 in segment 1002); Phase 3.1, two (two nails); Phase 3.2, one (one nail); Phase 4, thirteen (ten nails including one horseshoe nail, one small blade fragment, one bar fragment and one small box fitting or similar). All of the Phase 2.2 iron came from the backfill in ditch 507 in segment 1002.

Metalworking

Very small amounts of slag were recovered from Roman and later contexts. These were distributed as follows: Phase 2.1, four fragments (one from the top of gully 520, two from ditch 507 in segment 1008, one from ditch 507 in segment 1009); Phase 2.2, four fragments (all from the backfill in ditch 5007 in segment 1002); Phase 3.1, one fragment (from post-hole 562); Phase 3.2, nil; Phase 4, two fragments (one from disturbance 560, one from pit 551).

Non-building stone

The flint

by Hazel Martingell (Fig. 14)

A total of 69 worked flints was recovered, all residual. The assemblage comprises: 4 cores; 46 flakes (1 patinated); 3 retouched flakes; 3 blades (1 patinated); 1 retouched bladelet; 1 denticulate knife, 1 scraper; 3 notched pieces; 2 notch spalls; 1 bifacial piece; and 4 fragments.

Representative pieces are illustrated on as follows: blade with retouch on right distal edge, utilised (No. 1); denticulate knife (No. 2); flake with alternate retouch on left margin (No. 3); scraper (No. 4); bifacial piece (No. 5); bladelet with fine retouch on both margins to point at bulbar end, possibly used as a drill/piercer (No. 6).

The flint material is similar to that from St Peter's School (above). The dates for most of the assemblage come within the Neolithic - Late Bronze Age. The most interesting pieces are: i) the denticulate knife (from the probably Roman gully 505), which could be associated with the Beaker period, and ii) the pointed bladelet (from the Roman ditch 507); this is not a microlith, but is most likely to be a drill piece on the basis of the wear on its margins.

Other non-building stone

Three pieces of worked stone were recovered, two from Roman contexts (Nos 1 and 2) and one from a post-medieval pit (No. 3). Hilary Major describes these below.

1. Fragment of millstone grit, 22mm thick; one side has a smoothed area, and the other face may have been dressed. Possibly a reused quern fragment. Context 125, ditch 507 (in segment 1002); Phase 2.2.

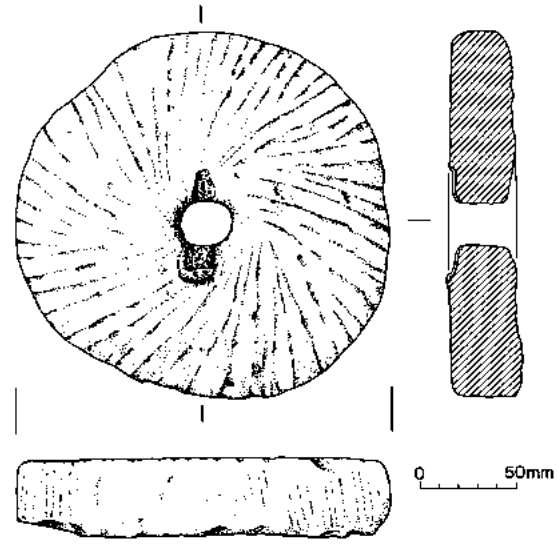

Fig. 15 Coggeshall. East Street Site — post-medieval (?) mustard quern.

2. Fragment of Roman lava quernstone. Context 119, ditch 507 (in segment 1002); Phase 2.2.
3. Complete lava upper stone (Fig. 15); the top surface is roughly dressed with two small non-perforating holes near the edge for a handle fitting. The flat grinding surface is harp-dressed and has an irregular wear pattern, being very worn round part of the edge. The central hole has two opposed recesses in the grinding surface, which retain fragments of the lead seating for an iron rynd. There are traces of tooling on the edges of the stone. Dr. D. Williams of Southampton University kindly examined the stone and confirmed it as being Niedermendig lava.
Diameter *c.*190 mm; diameter of central hole 23 mm; thickness 25-38 mm. Context 162, pit 551; Phase 4.

The quernstone belongs to a type of small, flat lava quern epitomised by *c.*22 examples in Colchester Museum, mostly unprovenanced. It is the first example from a well-dated archaeological context in Essex and confirms the type as being early post-medieval. Querns are listed in many household inventories from Essex (e.g. in Steer 1969) and two specific types are mentioned: mustard querns and malt querns. The small size of this quernstone suggests that it may have been used for grinding mustard rather than malt, although the latter cannot be ruled out.

The ceramics

Prehistoric pottery

Nine sherds of flint-tempered pottery were recovered. Seven of these came from the secondary and tertiary silts in the early Roman gully 520, and two from the unphased gullies 504/5.

Roman pottery

by David Gurney

Introduction

Approximately 4.5 kg of pottery was recovered; 2.9 kg came from ditch 507, 0.4 kg from other Roman features and 1.2 kg was residual. Ditch 565 and gully 520 contained small amounts of later first to mid-second century pottery (Phase 2.1), and the few sherds from the lowest fills of ditch 507 could be of similar date (fills 126, 135, 133, and 152). Above these, fills 106, 125, 119, and 127 all contained dumped material of late fourth-century date (Phase 2.2), including Hadham and Oxford wares, and this group is illustrated (Fig. 16). There are joining sherds between fills 106 and 127, and 125 and 119.

Catalogue of Roman pottery from ditch 507 (East Street Phase 2.2): descriptions of illustrated vessels

No. 1 Hemispherical bowl imitating samian Form 38 with a downturned pointed flange. Oxfordshire red colour-coated ware. (Young 1977, type C51). Going 1987, fabric 3, type C8 2.1. AD 240-400+. Five sherds, from fills 106 (four) and 127 (one).

No. 2 Shallow dish with an out-turned rim, upturned at the tip, imitating samian Form 36. Cabled decoration on the rim. Hadham oxidised red ware. Going 1987, fabric 4, type B10 1.1. Three sherds, from fills 119 (two) and 125 (one).

No. 3 Bowl with footring and double ring stamp decoration. Going 1987, fabric 19; very similar to fabric 4 and perhaps also from the Hadham kilns. Probably late first - early second century. Fill 119.

No. 4 Bead and flange bowl. Sandy grey ware. Going 1987, fabric 47, form B6. Fourth century. Fill 119.

No. 5 Bowl-jar with bead rim, concave neck and rounded body. Fine grey ware. Going 1987, fabric 39, form E5. Mid-third to mid-fourth century. Fill 119.

No. 6 Jar with out-turned rim. Late shell-tempered ware. Going 1987, fabric 51, probably form G27. AD360/70 - 400+. Fill 127.

No. 7 Rimless shallow dish with convex side walls. Hadham oxidised red ware. Going 1987, fabric 4; the form (Going B1) in red ware is not represented at Chelmsford, but is known elsewhere in Hadham grey ware (Johnson 1983, Fig. 40, No. 100). Fill 127.

No. 8 Necked jar. Hadham oxidised red ware. Going 1987, fabric 4. Three sherds. Fill 127.

No. 9 Jar. Sandy grey ware. Going 1987, fabric 47. Fill. 127.

Discussion

The pottery recovered from the East Street site belongs to Phase 2.1 and 2.2 (equivalent to Phases 4.1 and 4.4 on the St Peter's School site). Ditch

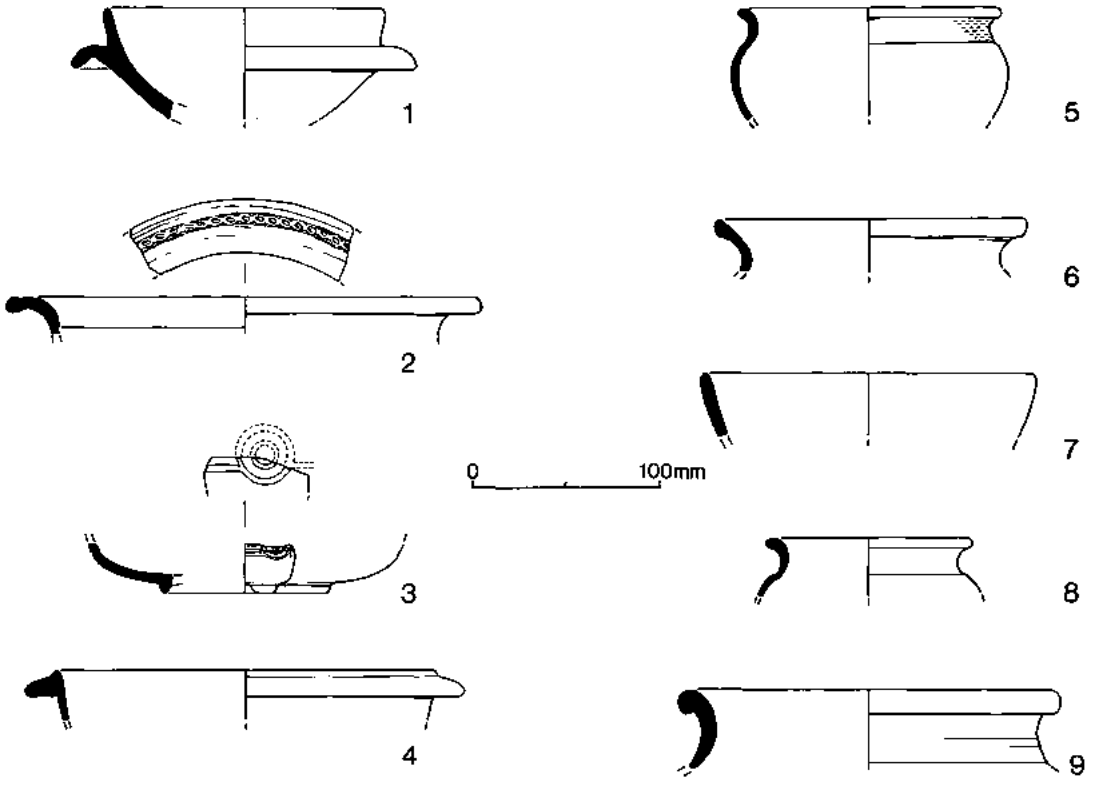

Fig. 16 Coggeshall. East Street Site — Roman pottery.

565, gully 520 and probably also the original ditch 507 belong to Phase 2.1, with small amounts of fragmented and abraded pottery being recovered from their fills. Two scraps of late first-century South Gaulish samian were also recovered, from ditch 507 and gully 520. The Phase 2.1 pottery contrasts strongly with the Phase 4.1 material from the St Peter's School site (above), where features were used for the disposal of a number of near-complete vessels.

The upper fills of ditch 507 (i.e. the fills of the probable recut) contained pottery of late fourth century-date (East Street Phase 2.2), which is probably contemporary with the latest pottery from the St Peter's School site (school site Phase 4.4). The illustrated pottery includes form/fabric combinations typical of the later fourth century, with a surprisingly large number of vessels in Hadham red ware (Nos 2, 7, 8). This fabric was widely distributed after *c.*AD 270-80, and does not occupy a prominent place in assemblages until late in the fourth century.

Medieval and post-medieval pottery
by Helen Walker

Summary
About 3.65kg of pottery (355 sherds) was recovered. The overall date range for this material is 13th - 18th century. Only pits 526 and 542 at the northern end of Area B, and gully 548 in the north-western corner, are of medieval date. Post-medieval pottery was distributed widely but sparsely throughout the site, much of it dating from the late 16th or 17th centuries. Sherds of residual medieval pottery often occurred with the post-medieval material.

Method
The pottery has been recorded using a system of classification already in use for other post-Roman pottery in Essex (Cunningham 1985a, 1-4). Her fabric numbers are quoted in this report. The quantified pottery is shown in Table 5. Sherds from cleaning contexts and fills containing five sherds or less have not been included unless the pottery is of intrinsic interest. The total sherd numbers for each fabric from the entire site are given at the bottom of Table 5.

Table 5: Medieval and post-medieval pottery from the East Street site
Sherd numbers and fabrics from selected features by Phase order (fabric totals for entire site at bottom)

Context details			Fabrics																Sherd	
F. no.	F. indent.	Fill	20	22	22B	36	21	21A	21B	40	40bg	42	45	45D/E	45F	46	48	50	Total	Date range
526	pit	151*	28	-	-	-	33	-	-	-	-	-	-	-	-	-	-	-	61	13th - 14th century
526	pit	158	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	
542	pit	137*	34	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	35	? mid-13th century
548	gully	169	11	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-	15	late 13th or 14th century
562	post-hole	207*	2	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	4	late 13th - 14th century
523	pit	116*	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	?15th century
523	pit	117*	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	
555	stake-holes	178	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	15th or early 16th century
510	pit	108	3	-	-	-	1	-	-	6	-	-	-	-	-	-	-	-	10	mainly late 16th or early 17th century
524	pit	146*	2	-	5	-	5	1	-	-	-	-	-	-	-	-	-	-	13	13th - 18th century
524	pit	147*	17	2	1	-	9	-	5	14	-	-	1	-	-	-	1	-	50	
551	pit	163	1	-	-	-	9	-	-	31	4	-	-	-	-	1	-	-	46	mainly 17th century or later
553	pit	168	-	-	-	-	6	-	-	4	-	-	-	-	-	-	-	-	10	from later 16th or 17th century
560	hollow	103*	2	-	-	-	-	-	-	15	-	1	-	1	-	-	-	-	19	560 infill mainly 17th century
560	hollow	104*	-	-	-	-	1	-	-	10	-	-	-	-	-	-	-	-	21	560 infill mainly 17th century
560	hollow	184	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	2	560 infill mainly 17th century
560	metalling	181	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	2	metalling 181
Site total (all contexts)			124	3	6	1	75	7	7	107	14	2	2	1	1	2	2	1		

Notes for Table 5:

Illustrated pieces

Vess. No.:	Fabric	Context	Feature
1	36	137	pit 542
2	20	137	pit 542
3a + 3b	20	137	pit 542
4	21A	169	gully 548
5	20	169	gully 548
6	22	147	pit 524
7	21	147	pit 524
8	21B	147	pit 524
9	40	104	hollow 560
10	40	168	pit 553

*

151	join with sherd from 137. Rouen-style decoration on jug in Fabric 21
137	join with sherd from 151
207	abraded sherds
116/117	slip-painted, splashes of clear glaze
146/147	pit 524 Cuts fill of pit 526
103/104	104 may be slighly earlier than 103

The fabrics

The list below follows a chronological order. For descriptions of Fabrics 20, 21 and 22 see Drury (forthcoming). For Fabrics 21A and 21B see Drury (forthcoming) and Cunningham (1982, 365, 367, 371).

Fabric 20: the medieval coarse wares. End of 12th - 14th century. Forms present: curfew (No. 2); jug rim; unidentified vessel with faceted base (No. 3); and five cooking pot rims (e.g. No. 5 below).

Fabric 22: Hedingham ware. End of 12th - end of 13th century. Forms present: jug rim from cleaning of Area C: paralleled by one from King John's Hunting Lodge, Writtle, Essex (Rahtz 1969, Fig. 52.15a); also body sherds from ?jugs (e.g. No. 6).

Fabric 22B: a coarser version of Fabric 22. Forms present: body sherds, probably from jugs.

Fabric 36: London-type ware. 13th or early 14th century. This fabric is fully described by Pearce *et al.* (1985, 2-3). Forms present: body sherd from a jug (No. 1).

Fabric 21: Sandy orange wares. Late 13th - 16th century. Forms present: part of a cistern; two jar rims (e.g. No. 7); and fragments from two jugs.

Fabric 21A: Colchester ware. End of 13th and 14th century. Forms present: rim of a baluster jug (No. 4).

Fabric 21B: Colchester slip-painted ware. 15th or early 16th century. Forms present: two jugs (e.g. No. 8).

Fabric 40: Post-medieval red earthenwares. 16th century onwards. Many examples have an all-over or internal clear glaze; in Chelmsford such glazing was current in the later 16th or 17th century (Cunningham 1985a, 1-2). Forms present: fragments of four jars, three pancheons (e.g. No. 10); three bowls, three cups (e.g. No. 9) and a dish. *Black glazed ware (Fabric 40bg):* a variant of Fabric 40 with a thick all-over black glaze, dating from the 17th century (Cunningham 1985b, 71). Forms present: two tyg bases.

Fabric 42: Southern white wares. A sandy off-white to buff fabric (Cunningham 1985a, 2); examples here have an internal plain lead glaze giving a yellow colour. Frequent in the 17th century. Forms present: base of dish.

Fabric 45: Stoneware. Forms present: body sherds only.

Fabric 45 D/E: Frechen/Cologne stoneware, 16th - 17th century (Jennings 1981, 116-19). Forms present: body sherd.

Fabric 45 F: Westerwald stoneware. Mid 17th and 18th century (Draper 1984, 33). Forms present: body sherds with cobalt blue glaze.

Fabric 46: Tin-glazed earthenware. Mainly 17th to late 18th century (Draper 1984, 26). Forms present: two rims from plates/dishes.

Fabric 48: Porcelain etc. Forms present: one footring base of Chinese porcelain, ?dish (Fabric 48A); and one Staffordshire-type ironstone ?chamber pot (Fabric 48D; from a cleaning context).

Fabric 50: Staffordshire-type slipware. Late 17th and throughout 18th century (Jennings 1981, 104). Forms present: body sherd, probably from a cup.

The pottery (earliest features first)

The numbering below corresponds with that on Fig. 17. Details of contexts are given as notes below Table 5.

1) Part of a jug. Fabric 36; thick dark green pitted glaze; stamped applied strips, perhaps of the highly decorated style (Pearce *et al.* 1985, 29-30). This type has been found in Thames waterfront deposits datable to the mid-13th century (Pearce *et al.* 1985, 19).
2) Curfew. Fabric 20; reddish-brown, fire blackened internally; ?finger printed decoration; hollow handle with heavier tempering than rest of vessel; ventilation hole beside handle.

3a) Faceted base of unidentified vessel, perhaps a copy of a metal form. Fabric 20; reddish-brown surfaces and grey core; fire-blackened externally on base and lower sides; handle attachment scar shown.

3b) Rim, probably from the same vessel as 3a. Fabric 20; fire-blackened beneath and inside rim.

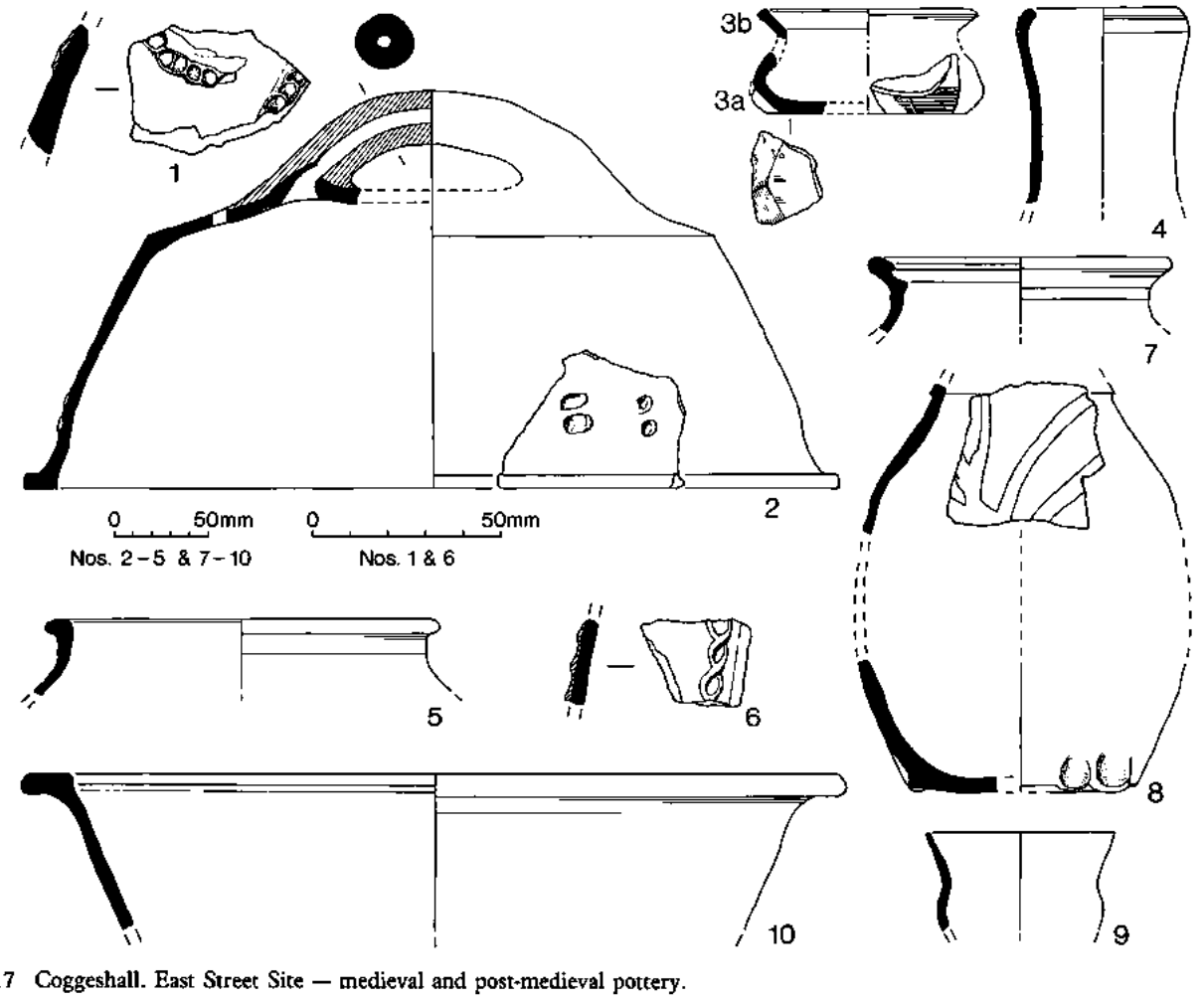

Fig. 17 Coggeshall. East Street Site — medieval and post-medieval pottery.

Not illustrated: sherds from a jug showing Rouen-style decoration, a chevron pattern painted in cream-slip with slip dots in the intervening panels. Fabric 21; partial clear glaze. Rouen-style decoration was copied in Hedingham ware and in London-type ware in the early to mid-13th century (Pearce *et al.* 1985, 19); however the glaze and fabric indicate that the vessel may have more in common with the slip-painted wares of the late 13th and 14th centuries. *Context 151 (pit 526).* Joins between 151 and 137 indicate that the pits 526 and 542 were open at the same time.

4) Rim of jug. Fabric 21A; mottled green glaze overlying a coating of cream slip. Perhaps a copy of a Mill Green ware baluster jug (cf Pearce *et al.* 1982, fig. 6).
5) Cooking pot rim. Fabric 20; grey-buff; external blackening.
6) Jug sherd. Fabric 22; mottled green glaze; twisted applied strip decoration.
7) ?Jar. Fabric 21; traces of decayed, plain internal glaze.
8) Jug. Fabric 21B; unglazed.

Not illustrated: Colchester slip-painted ware (Fabric 21B) jug rim, comparable to one found at Colchester Castle (Cunningham 1982, fig. 30.52), but this example has a band of slip beneath the rim instead of slip-dashes on the rim. *Context 178 (stake-holes 555).*

9) Rim of cup. Fabric 40; pale fabric with an all-over plain glaze, probably from a standing cup with a pedestal base, Cunningham type E3 (Cunningham 1985a, 4). At Moulsham Street, Chelmsford these are dated 15th - 16th century (Cunningham 1985b, 71), but this example occurred with mainly 17th-century pottery.
10) Pancheon. Fabric 40; partial internal plain lead glaze, late 16th -17th century.

Building materials

Burnt Clay

Small amounts of burnt clay (four fragments weighing 45g) and daub (58 fragments weighing 280g) were recovered from Roman and post-medieval contexts. (For the distinction between burnt clay and daub, see St Peter's School report, above.)

The burnt clay all came from the Phase 2.2 backfill in ditch 507 (segment 1002); it is in a poorly fired mottled cream and orange fabric with no surfaces.

Daub came from two Phase 2.1 contexts: a) from the primary fill of gully 520 (31 fragments weighing 120g) — fine, poorly fired fabric, varying in colour from orange to cream to dark grey, all very abraded though some bears traces of original surfaces, probably wall daub; and b) from the surface of the western segment through ditch 507 (three fragments weighing 85g) — granular cream and orange fabric with moderate sand inclusions, one fragment bearing traces of wattling. The rest of the daub (24 fragments weighing 75g) came from the upper fill of the Phase 4 pit 543; these are all daub 'rendering' in a sandy orange fabric, *c.*8mm thick and having traces of plaster or whitewash on their outer, flat surface.

Mortar

Mortar was recovered from three Phase 4 contexts; primary silt of pit 524, secondary fill of pit 543, primary fill of pit 551.

Brick and tile

A total of 33.8kg of brick and tile was recovered. No attempt was made to categorise the tile by fabric. In the case of Roman tile, the sample was too small to produce any meaningful results, and in the case of the post-medieval tile, there was little variation in fabric. Some of the *imbrex* fragments are similar in fabric to the post-medieval tile, the main difference being that the post-medieval tile is usually (but not always) sanded on both sides, whereas the *imbrices* are generally sanded on one side only.

Roman tile occurred in four Phase 2.1 contexts. Of these incidences, two are fragments and may well be intrusive. Otherwise, a single piece of roof tile came from a probable Phase 2.1 fill, in the western segment through ditch 507; and the tertiary silt in the eastern segment through gully 520 produced six fragments in a cream fabric, but these are incomplete and may be incomplete amphora sherds. The same context produced a possible floor tile fragment in a gritty orange fabric, but this may be fired clay from an oven lining or similar.

The Phase 2.2 backfill in the top of ditch 507 produced common fragments of roof tile, as well as five pieces of combed box-flue tile (from context 106, S.301), and occasional fragments of floor tile from contexts 106 and 119 (S.301). In Area C, a few tile fragments came from the top 0.30m of fill of ditch 565. Residual fragments of box-flue tile were also found in gully 548 and the metalled surface 191 in 560, and some 40 fragments of Roman roof tile were recovered as residual finds from all over Areas A and B, with a further 23 from the surface of Area C.

No roof tile was recovered from Phase 3.1 deposits. However the primary silt of pit 542 contained the corner of a floor tile, 28mm thick, with a slight chamfer on one edge and bearing traces of mortar on the sides and bottom. The tile was examined by Mike Wadhams, who confirmed the possibility of a 13th-century date for the piece.

Pegtile and other post-medieval tile first appeared in Phase 3.2 contexts, in small amounts, becoming abundant in Phase 4 deposits.

Bone object

by Hilary Major

Turned bone spindle whorl. Plano-convex; flat side inscribed with four rough concentric circles; convex side inscribed with two concentric circles round the edge, and a collar round the central hole. Diameter 33mm; hole diameter 7mm; height *c.*10mm. Context 127, ditch 507 (segment 1002); Phase 2.2.

Bone spindle whorls are not particularly common from Roman contexts, the commonest type being made from pot-sherds. A similar spindle whorl came from a late third or fourth-century context at Richborough (Bushe-Fox 1949, 147 No. 221).

Zoological evidence

The animal bone

by Owen Bedwin

A total of 207 animal bone and teeth fragments were identified. The fragments were generally in good condition. By contrast to the St Peter's School site, there was in addition a substantial number of small, unidentifiable fragments, often rather worn. However, these were not distributed evenly throughout the phases, or across the site. Out of the 110 unidentified fragments, 87 came from Phase 2.2 (late Roman) contexts within ditch 507 (Table 6). This deposit therefore distinguished itself from all the other Roman levels on the East Street site (and the St Peter's School site) in having a mass of small, worn bone fragments. It would seem that this was a very disturbed dump deposit; it was either derived from very worn material (e.g. from a floor or cobbled surface) or was subject to considerable mixing and breakage during the process of dumping (or both). From adjacent fills within this Roman ditch came left and right horse *maxillae*, probably from the same animal. A number of the unidentified fragments in the Phase 2.2 recut probably derived from the skull(s) and long bones of a horse(s). This suggests that the recutting of the ditch (Phase 2.2) may have disturbed a horse burial in the silted-up Phase 2.1 ditch.

As regards the proportions of animal bones within the Roman and medieval phases (Table 6), these are not very helpful. The maximum number of identified bones from a single phase is only 74, and these were from the Roman ditch 507, which has already been noted as an unusual deposit. For this reason, and the fact that numbers overall are low, it would be unwise to base sweeping generalisations on them, or to make much of the differences between the medieval and Roman periods.

Table 6: List of animal bones by phase

PHASE	cattle	sheep /goat	pig	horse	dog	dom. fowl	*Totals*	Unident.
2.1	13	10	—	6	—	—	29	5
2.2	27	35	12	—	—	—	74	87
3.1	11	13	1	6	—	3	34	
3.2	1	2	4	—	—	—	7	
4	24	22	11	—	1	—	58	17
5	4	—	1	—	—	—	5	1
Totals	80	82	29	12	1	3	207	110

Marine mollusca

A total of 248 complete and fragmentary oyster shells were recovered. Only one of these came from a Roman (Phase 2.2) context; the remainder were distributed in roughly equal numbers between Phase 3.1 (three features), Phase 3.2 (two features) and Phase 4 (eight features). There were marked concentrations in the Phase 3.1 pit 542 (60 shells, or 24% of the site assemblage), the Phase 3.2 pit 511 (27%), and the Phase 4 pits 524 and 551 (16% and 13%).

Some of the oyster from the Phase 4 pit 524 was burnt. A few cockle shell fragments were also found in two Phase 4 features.

Discussion

The following discussion is specific to the East Street site. For the broader implications of the results of the excavation, see 'The School and East Street sites: a synthesis' below.

Phase 1: Prehistoric

Phase 1.1: Neolithic and Bronze Age

The flintwork provides a very wide date range, virtually incapable of subdivision. However the denticulate knife, of possible Beaker association, may represent a single fixed point within the whole of the Neolithic and Bronze Age. The presence of cores, and waste flakes (67% of the assemblage by number) represent manufacture of flint tools in the sampled area, and in the absence of identifiably contemporary pottery, the assemblage seems best regarded as representing brief episodes of occupation perhaps associated with exploitation of the natural gravel flint.

Phase 1.2: Iron Age

The residual sherds of prehistoric pottery may belong to the LBA/EIA, and are probably associated with this phase of occupation at the school site (above, school site report, Phase 3). Evidence for Late Iron Age occupation is confined to sherds of Belgic and Romanising pottery, but this evidence is slightly more tangible in that these sherds tended to be concentrated in early Roman features. The inference might be drawn from this that the early Roman site is a development of a terminal Iron Age one, though the link is a very tenuous one.

Phase 2: Roman

The early Roman (Phase 2.1) features consisted solely of a pair of unequally sized parallel ditches running adjacent to the present line of East Street (Stane Street). The relationship between the earlier phase of 507 and gully 520 on the East Street site with ditch F.10 and gully F.4 on the school site (above) is not entirely certain, but they may be the same features. Ditch 507 appeared to turn northwards where cut away by the post-medieval disturbance 560 in Area A at the East Street site, and ditch 565 in Area C may well be the same ditch directed towards the school site; the small amount of datable material from 565 is consistent with this interpretation. The distance between the sites makes it possible to identify these features with one another; if the ditches do represent the same features, the positions of the larger and smaller ditches relative to one another change (i.e. the larger feature at the school site, F.10, was the inner ditch, while the larger one at the East Street site, 507, was the outer); however their size and morphology could have varied considerably within the 170 m or so between the two sites, and they have not necessarily crossed over. The presence of only one ditch in Area C of East Street (a trench designed to test for the presence or absence of F.4 and 10) may simply mean that the western feature (F.10) was outside the trench.

The fills in the Phase 2.1 features mainly represent silts, with little incidence of rubbish disposal and minor episodes of backfilling. The finds do not indicate intensive activity nearby, though the burnt deposit and wall daub in the primary silt of the western segment through gully 520 presumably resulted from cleaning up after a fire in a minor structure somewhere in the area. A fire, possibly the same incident, is also represented in the charcoaly deposit towards the bottom of segment 1002, where the impression is that the ditch was abandoned and partially backfilled after its primary silting phase. The abandonment of the ditch is confirmed by the disposal of a dead horse in the ditch at the backfilled level. The subsequent natural silts must have come at least nearly to the surface before the recut in Phase 2.2. No terminal date for the subphase can be defined beyond a probable date in the mid or later second century. The rarity or absence of Roman tile or primary refuse deposits in Phase 2.1 fills strongly suggests that the focus of Roman occupation is well away from this area.

The late Roman period (Phase 2.2) is represented by the recut in ditch 507. This was definite only in segment 1002, with a slight suggestion in the western segment in Area B. The original extent of the recut is unknown; ditch 565 in Area C is probably the same feature as the original ditch 507 and ditch F.10 on the school site, and there is no evidence that the ditch turned northwards along the line of the original 507. It is therefore likely that the recut travelled parallel to the road, extending beyond the western end of Area B, and continuing in a straight line to the east of Area A without turning north towards the school site. The backfilled deposits in the recut ditch contrast with the fills in the original feature; the relatively large and varied assemblages of faunal remains (presumably food debris), pottery and iron, together with quernstone fragments and a spindle whorl imply that a focus of fourth-century settlement is nearby. Floor tile, box-flue and roof tile indicate a contemporary major structure; moreover, the presence of significantly large amounts of roof tile as well as some box-flue tile as residual finds in Area B suggests the incorporation of a surface scatter of material into the fills of later features. The structure from which the tile derived is probably close to the excavated area, but is unlikely to be the source of the building debris found in F.58 at the school site some 250 m to the north. This conclusion is supported by the fact that the finds from 507 and F.58, both of structural debris and other material, differ in type and general character; it seems extremely unlikely that the deposits in the two ditches have the same point of origin.

Phase 3: Medieval

The Phase 3.1 (13th-earlier 14th century) features constitute the first record through excavation of medieval activity within the town. Domestic occupation in the vicinity of Area B is represented by food debris and pottery from nearly all of the features assigned to this subphase. Backfilling was apparent only in pit 542, where the upper fill contained a concentration of oyster shell (70% of the subphase assemblage) with other finds in a charcoaly matrix. The pottery from pit 526 (61 sherds) indicates refuse disposal, but the low concentration of sherds suggests this was a gradual process.

There were no structural features within the sampled area though their presence nearby is implied by a single fragment of early 13th-century floor tile from pit 542. Gully 548 had silted naturally, and the low concentration of finds suggests a field boundary rather than a gully delineating a house plot. The large, irregular pit 526, dug through brickearth which bottomed out just below the surface of the natural gravel, may have been a brickearth pit. The overall impression is one of land in multiple usage adjacent to domestic structures of 13th-century date.

Phase 3.2 is enigmatic. The three features assigned to the subphase may be of late medieval date, but the subphase may be illusory, with the features in fact belonging to other phases.

Phase 4: Post-medieval

Features belonging to this phase are broadly contemporary, though partial silting before backfilling suggests that some features may be slightly earlier than others. The presence of mortar only in pits 524, 543 and 551 suggests contemporary backfill for these features.

The very large disturbance in Area A, 560, is enigmatic. It was definitely a cut feature of some kind since the pebble layer at the bottom of the hole appeared to have been deliberately laid over the surface of the gravel into which it was cut. This interpretation was reinforced by the apparent resurfacing where the original surface had sunk into the bottom fill of ditch 507. However, the gradual slope up to the surface of the bottom, and the absence of delineating features such as walls makes interpretation as a cellar or undercroft untenable. It seems equally unlikely that the metalling was part of a sunken road because of the clear evidence from ditch 507 that 560 was a cut feature, not the result of erosion as might be expected for a sunken way. There was no sign of a continuation of the feature in Area 1 of the school site. The conclusion is drawn that the feature may be the base of a quarry.

The remaining features consist of pits and post-holes. As in previous phases, there is ample evidence for structures and domestic occupation in the vicinity though structural features apart from a few minor post-holes are not present within the sampled areas.

Later activity is sparsely represented. However, maps of 1639 by Samuel Parsons (ERO [D/DOP] P1) and of 1731 by T. Skynner (ERO [D/DU] 19/2) show the extant houses on the south side of East Street opposite Areas A and B, as well as houses immediately to either side of Area B on the northern side of the road. It is clear from the map that the northern side of Area B would have been within the garden areas of these structures, and the buried soil observed to overlie the features here is taken to be a garden soil.

The School and East Street sites: a synthesis

The following discussion integrates the main conclusions from the school and East Street sites. Where information about contemporary settlement within the town and its vicinity is available from previously recognised sites and finds (Fig. 18), this is taken into consideration. The position of Coggeshall on the Roman road system, and the number of sites of Roman date known within the area, allows the excavated sites to be more firmly placed within the context of the contemporary landscape. This aspect is briefly addressed after the synthesis of excavations for the Roman settlement (see 'Roman Coggeshall: an overview', below).

Topography

The dominant feature of the local topography of Coggeshall is its location within a sheltered valley on a gentle south-facing slope down to the floodplain of the River Blackwater. The area of the town is bounded to the immediate east by a stream draining into the Blackwater, and to the west by a further tributary, Robin's Brook, these water courses defining three sides of an area approaching 1 sq km in extent (Fig. 19). The present town covers the western half of this naturally defined area; the excavated areas lie in its south-eastern corner. The geology of the valley side comprises a wide variety of subsoils including boulder clay, brickearth, sand and gravel (Fig. 19). A springline exists on the valley slope on the eastern side of the present town.

Earlier prehistoric

The evidence for earlier prehistoric occupation is restricted to casual finds of lithic material; no occupation sites have been recognised. No palaeolithic finds have been made in the immediate vicinity of Coggeshall, though several hand-axes have been found at Kelvedon, and material of possible Mesolithic date is restricted to the scraper from the school site (above). Later flints from the excavated sites are not generally closely datable within the Neolithic-Bronze Age; however a core and a trimming flake from the 1985 excavation in Queen Street (C on Fig. 1) are probably early Neolithic (Martingell 1986, 150), and some of the material from the school site may also belong to the Neolithic. In the vicinity of Coggeshall, Neolithic axeheads have been recovered from Vicarage Field 400m west of the Market Place (SMR no. TL82/63) and from the southern bank of the Blackwater 2km west of Coggeshall.

A total of 142 pieces of struck flint have been recovered from the three excavations undertaken in the town to date, none from obviously contemporary features. Ninety-nine of these (70%) are unretouched flakes; cores and other debitage are present in all three assemblages. The most likely interpretation is that the flint represents sporadic short-term occupation of the valley side, possibly from as early as

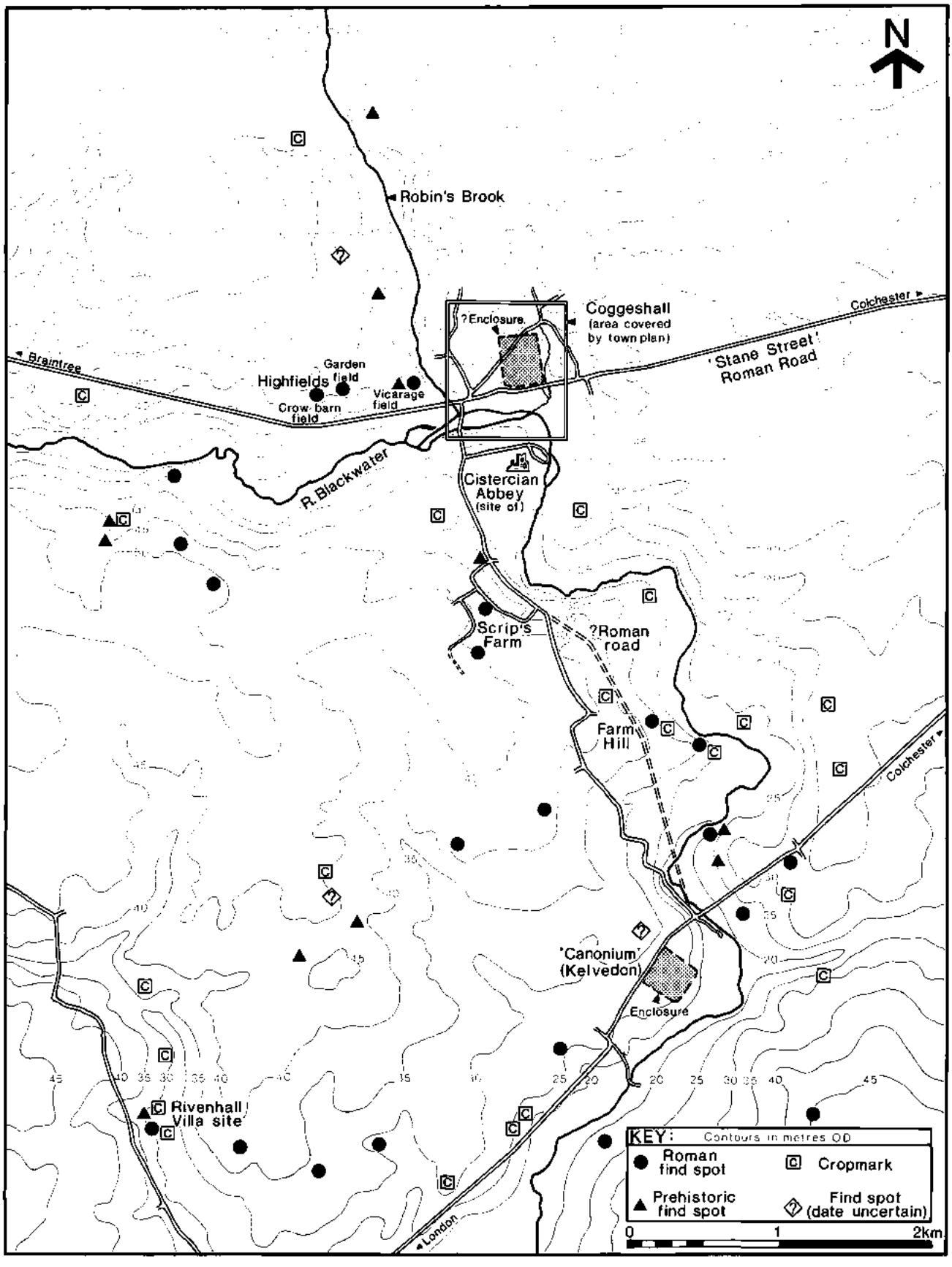

Fig. 18 Coggeshall. Gazetteer of sites and finds in Coggeshall and the surrounding area. The Abbey is shown, but otherwise all sites and finds are pre-medieval.

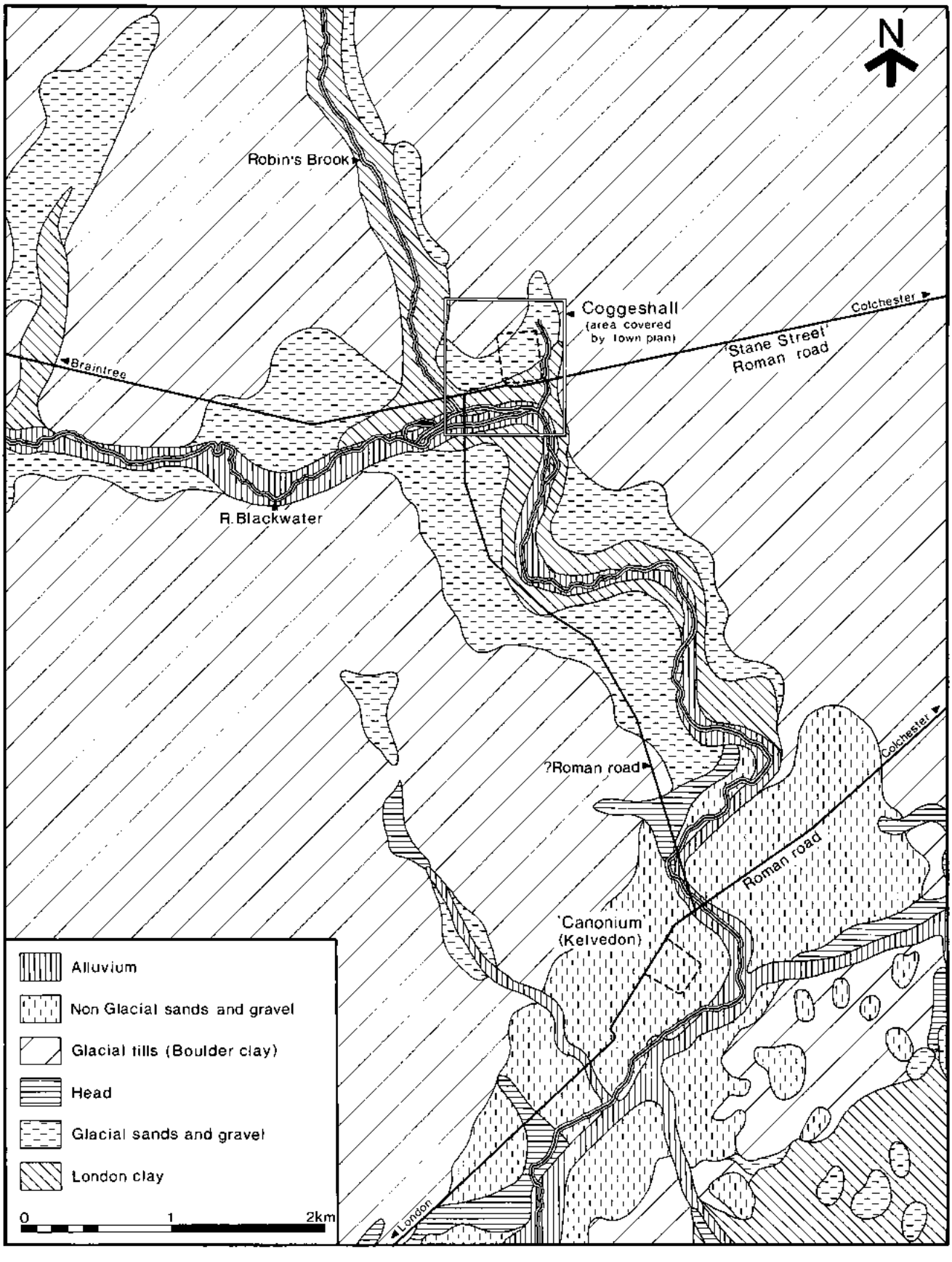

Fig. 19 Coggeshall. Geology and topography in the Coggeshall-Kelvedon area of the Blackwater valley. Map covers same area as Fig. 18.

the Mesolithic, and certainly throughout the Neolithic and Bronze Age.

Later prehistoric

Beaker occupation is attested at both the school and East Street sites, at the former by a sherd in a post-hole which produced no later material and may be contemporary, and at the latter by a flint denticulate knife of possible Beaker association. These finds may indicate the presence of a domestic site close to the sampled areas.

In the vicinity of Coggeshall (Fig. 18) Beaker material has also been found at Kelvedon (coarse ware sherds), where their presence in a pit probably indicates a domestic site (Eddy 1982, 5; Couchman 1980, fig. 15), and at Rivenhall (two sherds of rusticated beaker; Hedges 1980, 33). If the Coggeshall finds represent a domestic settlement, the location of the site follows the general riverine distribution of inland EBA sites in Essex (Couchman 1980, 40). Later Bronze Age activity is represented by two socketed bronze axes found 2.5km west of Kelvedon.

The earliest evidence for permanent settlement at Coggeshall consists of the LBA/EIA four-post structures and pits recorded at the school site. These appear to represent a short-lived unenclosed farming site (above).

Settlement of broadly contemporary date is poorly represented in the area (below). This lack of known sites cannot be taken as a reliable indication of their presence or absence; finds of pottery in small quantities as residual material from excavations (e.g. at Kelvedon; Eddy 1982, 6) indicate activity at locations where contemporary settlement sites have yet to be identified.

In the vicinity of Coggeshall, there is evidence of significant activity north of the Blackwater in the form of a flat-bottomed ditch 10m wide and 1.5m deep, dated by pottery to the Early Iron Age (SMR no. TL82/4); this may form part of a substantial earthwork. Broadly contemporary occupation is also attested some 5.5km (3.5miles) south-west of Coggeshall by flint-gritted pottery with wasters at Rivenhall (Drury 1980, 52).

There is no known Middle Iron Age occupation in the area and a similar lack of evidence for Late Iron Age settlement. The late Belgic and Romanising pottery from the East Street site (above) cannot be taken to indicate settlement. The lack of evidence for Late Iron Age occupation tends to suggest that the deviation of Stane Street to the south of Coggeshall is to follow the line of the Blackwater rather than skirt a pre-existing settlement.

Roman

The existence of a Roman site near the church of St. Peter-ad-Vincula has been recognised for some time. Roman tile is visible in the fabric of the church; findspots are concentrated in an area to the immediate west and south-west of the church. The VCH (1963, 89) refers to finds of wall foundations, Roman roof tile including 'five *imbrices* in pale buff clay' and *tesserae* extending beneath the road into the garden of 'The Lawn' (now the Brooklands Convalescent Home) on the south side of Church Street. Finds of box-flue tile have also been made opposite 'The Lawn', to the rear of the Woolpack Inn and below the inn itself when a new floor was laid (ECC SMR no. TL/63) and floor tile, tile and pottery have been recovered from the allotments west of the church. The churchyard verger reports that graves in the northern part of the churchyard cut through a deposit of charcoal, and that Roman tile is commonly found during grave digging (pers comm).

Beaumont (1890, 8-9) quotes Weever's description of a mausoleum, 'Adjoining to the Rode called Coccill-way, which to this towne leadeth, was lately found an arched vault of brick, and therein a burning lampe of glasse covered with a Romane tyle some 14in square, and one urne with ashes and bones, besides two sacrificing dishes of smooth and polished red earth, having the bottom of one of them with faire Romane letters inscribed COCCILL.M' (Weever 1631). The stamp on the samian dish may be COCCILI.M, probably that of a Banassac (Lozère, France) potter (VCH 1963, 90).

It is clear from the excavations that the school site is close to the nucleus of the settlement area in the vicinity of the church, while the East Street site is peripheral to areas of intense activity except during the latest phase of the Roman period. However the Roman phases elucidated at the school site, particularly the earliest and latest (Phases 4.1 and 4.4 respectively, which are also represented to the south as East Street Phases 2.1 and 2.2), are clearly representative of major changes in the nucleus of the settlement area.

The conclusions about trade and economy are of a preliminary nature. Evidence for agriculture is, as is frequently the case, limited mainly to aspects of the archaeology which suggest that particular areas of land were not under the plough at a given time. The finds themselves are of limited value in assessing the economic status of the site; there is an extraordinary lack of coinage, items of personal adornment and the like, usually so characteristic of assemblages of Roman material.

The main conclusion about the nature of the settlement is that a villa site rather than a small town or settlement is represented. The economy of the villa establishment appears to have been based, at least at the time of its foundation, on cattle rearing.

School site Phase 4.1/East Street site Phase 2.1 (later first-mid second century)

The earliest phase of the Roman settlement appears to have been set within a very large double-ditched enclosure, represented by ditch F.10 and gully F.4 on the school site, and ditch 507 and gully 520 on the East Street site, the two pairs of features being linked by ditch 565 in East Street Area C (see excavation reports, above). The south-eastern corner of the enclosure was identified at the East Street site, where the southern side of the enclosure was also observed to run adjacent to East Street. The pronounced kink in the line of East Street some 200m west of the East Street site (Fig. 18) may reflect the northward turn of the south-western corner of the enclosure. If this is so, then the breadth of the enclosure is some 270m, and the length north-south greater than 280m. The position of the nor-

thern side is unknown, but since the area delineated by the settlement boundary in Phase 4.1 at the school site/Phase 2.1 at the East Street site appears to have been observed throughout the Roman period except for quarrying activities, the original northern side of the enclosure would have been, judging from the position of the building(s) recorded in the area of the Woolpack and from the evidence from the excavations (below), on the northern side of Church Street; this would make the length of the enclosure at least 365m.

The incidence in excavated features of primary refuse deposits suggests that the site of the principal structure(s) tended not to shift during the Roman period. The area excavated at Queen Street (C on Fig. 18), 80m west of the probable line of the western side of the enclosure, is clearly outside the area of the Roman settlement (Clarke 1986, 150). The Phase 4.1 enclosure was therefore probably rectangular, measuring perhaps some 365m north-south by 270m east-west, and enclosing an area of at least 9.85ha (24acres). This is a similar size to the areas of the small towns at Kelvedon (*Canonium*) and Chelmsford (*Caesaromagus*). A major building probably occupied the central part of the northern end.

The paucity of evidence for Late Iron Age occupation suggests that this is a *de novo* Roman foundation of the later first century A.D., perhaps from *c.*A.D. 60; it may well be post-Boudicean. The size of the enclosure and the degree of planning of its interior indicate both a carefully organised laying-out of the site (presumably functionally determined), and also large financial backing for the project. The East Street trenches did not establish whether or not the gully system recorded at the school site extended as far as the road (the original project design included a long north-south trench up the western side of the field, but practical constraints prevented this being dug). The implications of the subdivision of the interior of the main enclosure by the gully system are uncertain; the system could represent either house plots or fields. It is suggested below that these land divisions may be associated with the rearing of cattle.

A radical change in the organisation of the site towards the middle of the second century is clearly shown in the archaeological record by abrupt abandonment of the Phase 4.1 site. The enclosure ditches at the school site were backfilled, and fell into a state of neglect near the road where a dead horse was left to rot in the silting ditch. Moreover, the features subdividing the interior of the enclosure were backfilled at the same time as the enclosure ditches. This demonstrates the abandonment of the entire system at a stroke, for reasons unknown, in the earlier part of the second century. A major change in the site's economic basis is implied. The circumstances behind these events seem also to have resulted in a very marked contraction in the size of the settlement (Phase 4.2, below). The use of primary refuse deposits to infill the features shows continuity of settlement at the nucleus of the settlement.

A number of factors suggest that the arrangement of the internal boundaries within the enclosure related to livestock breeding. The observed fact that the east-west aligned gullies inside the enclosure at the school site stopped short of the major ditch F.10 indicates that they cannot have been intended primarily as drainage features. The gullies cannot have terminated against a bank for F.10, as is shown by the coterminous butt-ending of the trackway gullies F.14 and 30 which would have rendered 14/30 useless as a track; the bank for F.10 must therefore have been outside the enclosure, within the external trackway between F.10 and F.4. There would have been a tendency for flooding to occur at the eastern terminals of the cross gullies, and this suggests that the internal subdivisions of the enclosure at this point were neither property divisions nor arable fields; in the former case rudimentary bridge structures of planks would probably have been sufficient to allow pedestrian access from one plot to another while the gullies drained into the main ditch and thus avoided the inconvenience and waste of flooding of the ends of the plots, and in the latter case ploughing would have been hindered by the avoidable waterlogging of the heavy clay soil. The tentative conclusion from this is that the gaps between the gully terminals and the ditch represent a series of entrances linking areas of pasture, laid out in such a way as to allow the efficient control of stock. The internal divisions of the main enclosure in this part of the settlement area may thus be designed to segregate parts of a herd of livestock; presumably the effectiveness of the relatively slight gullies as obstacles to the free movement of animals would have been enhanced by hedges surmounting the banks, or by other archaeologically invisible means. A more definite note is added to the argument by the suggestion from the exceptional predominance of *Bos* in the faunal remains for the phase (87% of bone from the subphase), that cattle were being bred.

A substantial building is known to have existed in this phase, but further indications of wealth in the settlement are conspicuous in their absence. In common with other phases, the deposits of primary refuse in Phase 4.1 contexts produced no finds implying a prosperous population; this may simply reflect the purpose of the building or part thereof from which the debris was taken. However, the impression of a low level of wealth also comes from the pottery assemblage from the school site, where imported pottery is virtually absent. There is no imported (Fabric D) tile from this subphase. The large quantity of edible marine mollusca from the Phase 4.1 contexts indicates imports of foodstuffs from the coast, the Blackwater estuary being the nearest source, though this may not represent a direct trading link.

School site Phase 4.2 (later second century)

Disintegration of the original Roman site, and change of use of the formerly enclosed area is emphasised by the cemetery overlying the enclosure ditches in Phase 4.2 at the school site and the absence of other features. This decline at the school site is mirrored at East Street where there were no traces of contemporary activity. The cemetery is presumably at some distance from the focal point of the settlement, and implies either a change in the position of the nucleus, or a contraction in size of the settlement and diminution in its importance. The suggestion from later subphases is that the site's principal structure(s) tended not to vary in position through the Roman period, and this regression away from the school site is therefore more likely to be a result of con-

traction, a likelihood reinforced by the evidence for continuity of occupation in the main building shown by the backfilling at the end of Phase 4.1. No firm data is available for this phase and its elucidation is likely to depend on the excavation of the Phase 4.1 main building.

School site Phase 4.3 (earlier third-early fourth century)
Phase 4.3 is represented on the school site by a single feature, ditch F.55, whose origin appears to be earlier third century. Contemporary activity is absent to the south, at the East Street site. The Phase 4.1 ditches and gullies were presumably level after the backfilling episode, and invisible when ditch F.55 was dug; there may therefore be a topographical feature outside the excavated site which influenced the line of F.55, and possibly that of the Phase 4.1 enclosure before it. Building materials in the primary silt of this feature again indicate the presence of a major structure from very early in the phase; this may have had a hypocaust and painted walls (see site specific discussion for the school site, above). The red wash on the mortar from the backfill in the upper half of F.55 can hardly be taken to indicate a sumptuously decorated building; the fragment of box-flue tile needs to be treated with a certain amount of caution, though there is no reason why a building with a hypocaust should not have been in existence during the third to early fourth century.

The early fourth-century primary refuse in the ditch indicates that a nucleus of occupation is nearby. Detailed conclusions about activity on the site cannot be drawn from the limited data available from a single feature. However the presence of a ditch within the excavated site seems to imply increased activity which perhaps mirrors a degree of revival of the flagging economy suggested by the previous phase. This general conclusion is to an extent supported by the evidence from the assemblage of building debris from the ditch of substantial improvements to, or possibly replacement of, the main structure. The presence of occasional fragments of imported (Fabric D) tile is noted, as is the increase in the proportion of fine wares in the Phase 4.3 ceramic assemblage.

School site Phase 4.4/East Street Phase 2.2 (mid-late fourth century plus)
This phase is characterised by a resurgence of activity in the earlier to mid-fourth century. Features once more encroach into the area of the school site, and on the East Street site a new ditch is dug beside the road. The late fourth-century backfilled deposits filling features to the surface testify to the existence of a sophisticated major building. The abundance of floor and box-flue tile, the relative frequency of mortar Fabric D, and the presence of *tesserae* in the backfilled deposits belonging to the end of this phase suggest that the structure from which this debris came is the same building as that observed to lie beneath the road between the Woolpack and 'The Lawns' (above) 100m west of the school site.

This revival is mirrored near to the road with the East Street site Phase 2.2 recut of ditch 507, and the concentration of refuse in the ditch fill. The recut of the ditch is not simply a redefinition of the southern side of the early Roman enclosure since it continued past its south-eastern corner without turning northwards; it may indicate the appearance of an entirely new enclosure close to the road at the beginning of the subphase. The presence of box-flue tile in fourth-century deposits at the East Street site combined with the evidence that box-flue tile was lying around on the contemporary ground surface (East Street discussion, above) suggests that there was a second major structure in the later fourth century near to the road.

Quarrying is evident over the eastern side of the original early Roman enclosure at the school site, possibly indicating a change in emphasis in the economy. Arable farming in the vicinity of the quarry is unlikely because of the presence of the occasional pits to the east, perhaps suggesting use of this part of the site for light grazing. The finds from the backfilled primary refuse deposits on both sites are lacking in rich finds, but the ceramic assemblages contain a higher proportion of fine wares than in previous subphases. Imported (Fabric D) tile is relatively common.

The final date of occupation of the site is unknown. The methodical backfilling of features at both the school and East Street sites shows continuity of use of the main buildings, possibly after a fire, and apparently again followed by contraction of the settlement area. The latest coin from Coggeshall, which may have come from the town area, is of Theodosius (A.D. 379-95). Some of the pottery form/fabric combinations from the deposits belonging to the end of this phase were still being produced in the fifth century, but the general date for the backfill more in keeping with the coin is indicated by the ceramic assemblage as a whole, providing a *terminus post quem* for continued occupation of the late fourth century.

Roman Coggeshall: an overview

Coggeshall lies on the north side of Stane Street some 15km (9.5 miles) west of Colchester, *Camulodunum* on the principal route from the *colonia* to St. Albans, *Verulamium*. The Roman small town at Kelvedon *Canonium*, is situated 4km (2.5 miles) to the south, on the southern side of the road connecting Colchester with London. As well as this potentially favourable positioning on the major road system, it is likely that a minor road linked Coggeshall and Kelvedon (Fig. 18), appearing to follow the course of the modern road in the north, and in the south the line of a footpath on high ground at the edge of the Blackwater floodplain (SMR no. TL82/30). Waterlogged oak timbers found in association with finds of possible Roman date during reconstruction of the bridge over the Blackwater to the south of the town in *c.*1855 are mentioned by Beaumont (1890, 9), suggesting the presence of a ford there. It is also possible that a further route, marked by the line of the existing road, and findspots of Roman material along its course, existed between Coggeshall and the Roman settlement at White Colne 6km (3.75 miles) to the north, the latter lying on a road between *Camulodunum* and the Roman settlement at Halstead. The natural advantage of Coggeshall's location relative to the River Blackwater and other water courses and mineral resources has already been stated (above); the Blackwater

must have afforded considerable potential as a riverine route to the coast 20km (12.5 miles) to the south-east.

Within the area shown in Fig. 18, findspots of Roman pottery and building debris are fairly common. Three of these, (Highfields House, Scrip's Farm and Farm Hill), all lying in the Blackwater Valley, almost certainly represent villa sites; also included is the Rivenhall villa.

Dale (1863, 12-13) refers to the existence of a large cremation cemetery, covering an area of some three acres, in Crow Barn and Garden Fields west of Highfield House on the north side of Stane Street *c.*1km to the west of the present centre of Coggeshall, and finds of roof and box-flue tile, 'brick' and querns, apparently from near the cemetery site. Beaumont (1890, 8) states that much Roman 'brick' was removed from Crow Barn Field and used for the repair of farm buildings; he also cites the existence of earthworks beside the drive leading to Highfield House.

The second of the probable villa sites is at Scrip's Farm, 1.5km to the south of Coggeshall, where abundant finds of Roman pottery, building materials and coins with a date range of first to late fourth century, mainly late Roman, have been recovered over a wide area (SMR no. TL82/29). The third site, Farm Hill, lies 2.5km SSE of Coggeshall. The presence of roof and box-flue tile, *tesserae*, pottery, and half of the drum of a pillar clearly indicate the presence of a substantial building, presumably a villa (SMR no. TL82/33).

The Coggeshall site therefore appears to be one of a series of villas in this stretch of the Blackwater Valley, all favourably situated on the river and Roman road systems. The Coggeshall site is of later first-century origin, and the surface finds from Scrip's Farm suggest that this villa, at least, is of broadly contemporary origin and demise. The evidence from Coggeshall suggests a first-century villa whose economy appears to have been based, initially at least, on cattle rearing, presumably becoming more diversified in the later Roman period. Finds of Roman pottery from around Coggeshall suggest that the Blackwater Valley must have been intensively exploited agricultural land.

Medieval and post-medieval development

No early medieval finds are known from Coggeshall and vicinity, with the possible exception of a probably ninth or tenth-century lava quernstone, thought to have been found 'near Coggeshall'.

Later medieval activity in Coggeshall must have some relationship with the Abbey, founded in 1140, less than 1km to the SSE of the present town centre. Limited excavation of the site, confined mainly to the extant buildings, was undertaken by Gardner (1955). Consideration of the brickwork from the Abbey led him to the conclusion that the bricks were being manufactured locally during the 12th and 13th centuries, probably at Tilkey (tile-kiln), a few hundred metres north-west of the present market place, where the remains of a kiln containing bricks similar to those in the Abbey buildings were recorded in 1845.

The earliest medieval features so far recorded through excavation in the town comprise those at East Street (Phase 3.1), of early 13th to early 14th-century date, and house plot traces of a similar date from the site of the old-fire station in the Market Place 450m to the west (D on Fig. 1) (Andrews 1987). From this, it is apparent that houses were in existence at least along part of East Street, and in the Market Place, from the early 13th century, and that cultivation and perhaps brickearth extraction were occurring along the northern side of East Street. There was no evidence for medieval occupation at the Queen Street site (C on Fig. 1; Clarke 1986).

There is direct evidence to support a suggestion that the original nucleus of the medieval town was in the area of the church (Petchey 1980, 113), though this possibility cannot be discounted, especially as the church dates from *c.*1105. Settlement along East Street may well reflect a desire to profit from increased trade along the main roads in the early 13th century (Petchey 1980, 113), whether this occupation represents a settlement which had migrated from the north or not. On the whole, however, the focal point of medieval settlement might be expected, in view of the granting of charters for a fair and a market in 1250 and 1256 respectively to the monks of the Abbey, to be in the vicinity of the Market Place, at least from the mid-13th century.

The late medieval period saw increasing prosperity as a wool town, with a related expansion of the settlement. A number of the houses in Church Street and in the Market Place are of late 15th or early 16th-century date, and the church of St. Peter-Ad-Vincula was rebuilt in this period. The extant structures on the south side of East Street opposite the excavated site are shown on the Samuel Parsons map of 1639 (ERO [D/DOP] P1) and the 1731 map of T. Skynner (ERO [D/DU] 19/2) as elements in short rows of houses on either side of East Street, now absent on the north side of the road.

Within the archaeological record of the early post-medieval period, two activities are noteworthy. First, the probable quarrying seen in the large hollow at the East Street site, and secondly, of greater significance, the massive volume of soil deposited over the north-eastern part of the school site filling the natural depression in the area of the late Roman quarry to the surface. The only reasonable interpretation for this is that it results from soil moving associated with levelling for building nearby. The general locality, and the presence of much Roman building debris in the soil, suggest that it came from the northern end of Church Street in the area of known late Roman buildings. It may result from levelling for the church structure itself (if this is so, it implies that the Roman material may come from a different building from the one known to underlie the road to the immediate south-west).

Conclusions

1. Sporadic activity on the valley side during the Mesolithic and Neolithic, probably associated with the availability of flint.
2. The probable existence of a Beaker site in the vicinity of the sampled areas.
3. A short-lived farming agricultural settlement at the school site in the LBA/EIA. This may indicate settle-

ment and land use in the Blackwater Valley characterised by a high degree of geographical mobility.
4. The establishment of a *de novo* villa site within a very large, planned enclosure, in the later first century; economy probably based on cattle rearing. One of a series of villas in the Blackwater Valley close to Coggeshall.
5. Collapse of the villa before the mid-second century and disuse of the enclosure, with a later second century cemetery overlying the enclosure ditches.
6. Continued occupation during the third and early fourth centuries, but apparently on a much reduced scale.
7. Resurgence of the villa economy from the mid-fourth century, with a sophisticated structure in the area of the Woolpack Inn, and probably a second major structure nearer East Street.
8. Probable late fourth (?early fifth century) demise of the villa.
9. No Saxon settlement.
10. Settlement along part of East Street and in the area of the Market Place in the early 13th century, probably connected with the foundation of the Abbey in 1140 and increased trade along the road from the early 13th century.
11. Rapid growth of the town from the late 15th century with increasing prosperity from the wool trade. This reflected in the archaeology by the dumping of enormous volumes of soil at the school site, probably resulting from levelling work preceding the reconstruction of the church or other building(s).

Research priorities

The area to the west of the excavated sites, at present a recreation ground in the south and a large garden in the north, may never have been ploughed and offers considerable potential for archaeological work should development ever occur. The LBA/EIA settlement area may extend into this grassed area, which also almost certainly overlies approximately half of the area thought to lie within the early Roman enclosure. Much of the western half of the enclosure area is also undeveloped.

A general watch needs to be kept for traces of prehistoric occupation in all periods, particularly for LBA/EIA and Late Iron Age sites. For the Roman period, the probable line of the early Roman enclosure boundaries needs to be confirmed, as does that of the late Roman ditch running parallel to East Street. Any opportunity to sample the interior of the enclosure by excavation should be taken in order to elucidate the nature and development of the site; this is particularly important for the more northerly part of Church Street, where the type and date of the Roman structures known to exist in this area, and activity in their environs, might be ascertained. Any work in the vicinity of the churchyard and allotments to the west is likely to clarify the extent of Roman occupation.

For the medieval period, excavation in the vicinity of the church may recover evidence for the early medieval settlement nucleus which might exist there and this area is where Roman structures might be expected. Development within the Market Place should also be preceded by excavation as this is likely to recover further evidence for the development of the medieval settlement. A watch for further 12th and 13th-century brick kilns should also be kept on groundwork at Tilkey.

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Author: C.P. Clarke, 24 Vaughan Close, Rayne, Essex CM7 8TW.

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The Anglo-Saxon cemetery at Prittlewell, Essex: an analysis of the grave-goods

by Susan Tyler

Summary

Early Saxon burials were recorded at Prittlewell, near Southend-on-Sea, mostly during road construction in 1923 and the digging of railway cuttings in 1930. The cemetery produced a large number of weapons, including 17 spears and 6 swords. X-radiograph analysis of the swords has shown 5 to be pattern-welded. Jewellery included 2 pendants, one inset with garnets. The grave-goods point to a date range of A.D. 500-700 for the cemetery. They include a small group of distinctively Kentish material which may indicate small-scale movement of people across the river Thames and/or increased trading links between Essex and Kent during the seventh century.

Introduction

Location of cemetery and relationship to other sites (Fig. 1)

The Early Saxon Cemetery at Prittlewell, near Southend, is situated adjacent to Prittle Brook on its eastern slope at NGR. TQ 8784 8739. (On the Essex County Council Sites and Monuments Record, this is site no. TQ 88/3). To the west of the Brook is Prittlewell Priory (primarily fifteenth century) and the remains of the earlier (twelfth century) Cluniac Priory of St. Mary's. A possible settlement at NGR. TQ 8800 8745, evidenced by the finding of two fired clay loomweights during excavations at the nearby Sewage Works in 1909 (Pollitt 1923, 97-8), may be associated with the cemetery. One km to the north-east of the cemetery at Temple Farm, NGR TQ 8800 8830, a sunken featured building and Early Saxon finds of glass, pottery and bone have recently been discovered. Some 0.75 km to the south at NGR TL 8762 8784 is St. Mary's Church which has a seventh-century arch (Taylor and Taylor 1965, 499-500). Nearby a 'ring of baked clay', presumably a Saxon loomweight, was found during shop extensions in 1933 (Pollitt 1935, 61). There are indications, therefore, of several Anglo-Saxon settlements along the course of Prittle Brook.

The excavations (Fig. 1D)

Early Saxon objects had been recovered from the area during the nineteenth century (including a spearhead recovered from a railway cutting in 1887), mostly preserved in the collection of the local antiquarian Mr. Philip Benton.

The cemetery was identified during the cutting of a sewer trench in 1923; subsequent road construction unearthed further graves which were recorded by the staff of the Southend Public Libraries and Museum under the direction of the then Curator Mr. William Pollitt. A catalogue of burials and grave-goods was published in the *Southend-on-Sea Antiquarian and Historical Society Transactions* Vol. 1 Pt. II (Pollitt 1923, 93-141). In 1930 further grave-goods were found during the digging of railway cuttings to the north of the 1923 excavations (Pollitt 1923, 93-141).

The nature and size of the cemetery

It is evident that we are dealing with a substantial cemetery of which only a fraction has been investigated. The 1923 excavations identified 16 certain and 11 possible inhumations, plus other objects which may have come from additional graves. The nineteenth century and 1930 finds were well to the north of the 1923 site, and help to demonstrate the extent of the cemetery. The fragmentary nature of the evidence must be borne in mind when assessing the site and in particular the significance of the grave-goods. The apparent imbalance of male to female burials and the large number of weapons recovered need not indicate a 'warrior' cemetery; it is far more likely that the fraction of cemetery investigated represents the male sector, such groupings are not uncommon in Early Saxon cemeteries.

Catalogue of inhumations

Notes on catalogue

The grave descriptions have been compiled from records housed in the Central Museum, Southend-on-Sea and from the published report on the excavations in *Trans Southend-on-Sea and District Antiq. and Hist. Soc.* 1923 Part II Vol. 1 by W. Pollitt.

Inhumation 1

Burial:	Body in sitting position (skull *c.* 30 cm below ground surface).
Grave-goods:	None, but broken *spearhead* found near grave.

Inhumation 2

Grave:	Cut through during construction of sewer trench in 1923; no further details.
Burial:	Orientated WSW to ENE.

Grave-goods (Fig. 2)

1. Iron *spearhead*	SM Acc. No. 159/23. Complete leaf-shaped blade; long narrow shank; narrow slit enclosed socket. Swanton's Type D2. Rivet in position, passing through socket. In fairly poor condition: damage along blade edges and to end of socket. Replaced wood in socket. Length 472 mm; max. width of blade 28.5 mm.

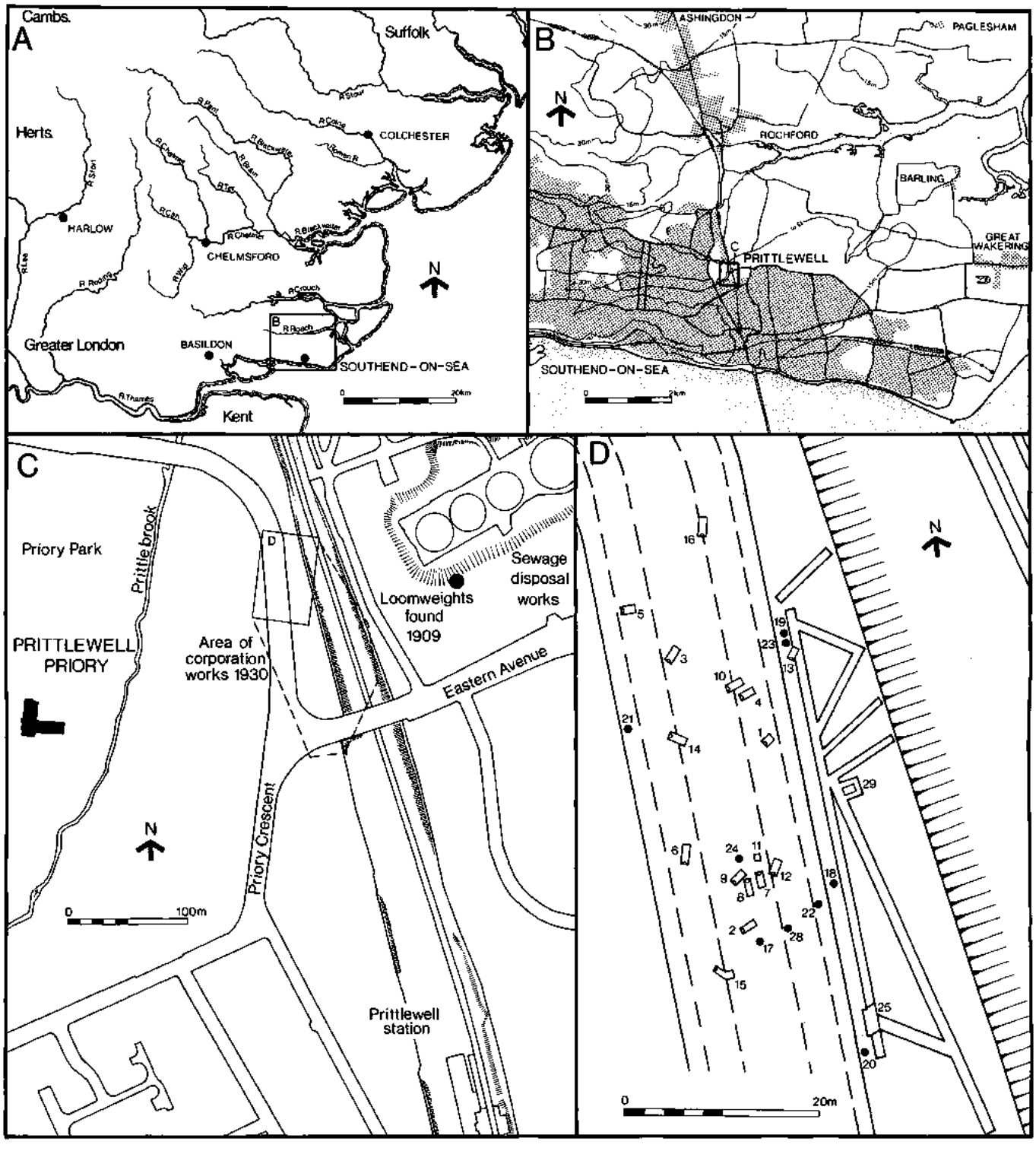

Fig. 1 Prittlewell: Site Location (A, B, C) and plan of cemetery (D).

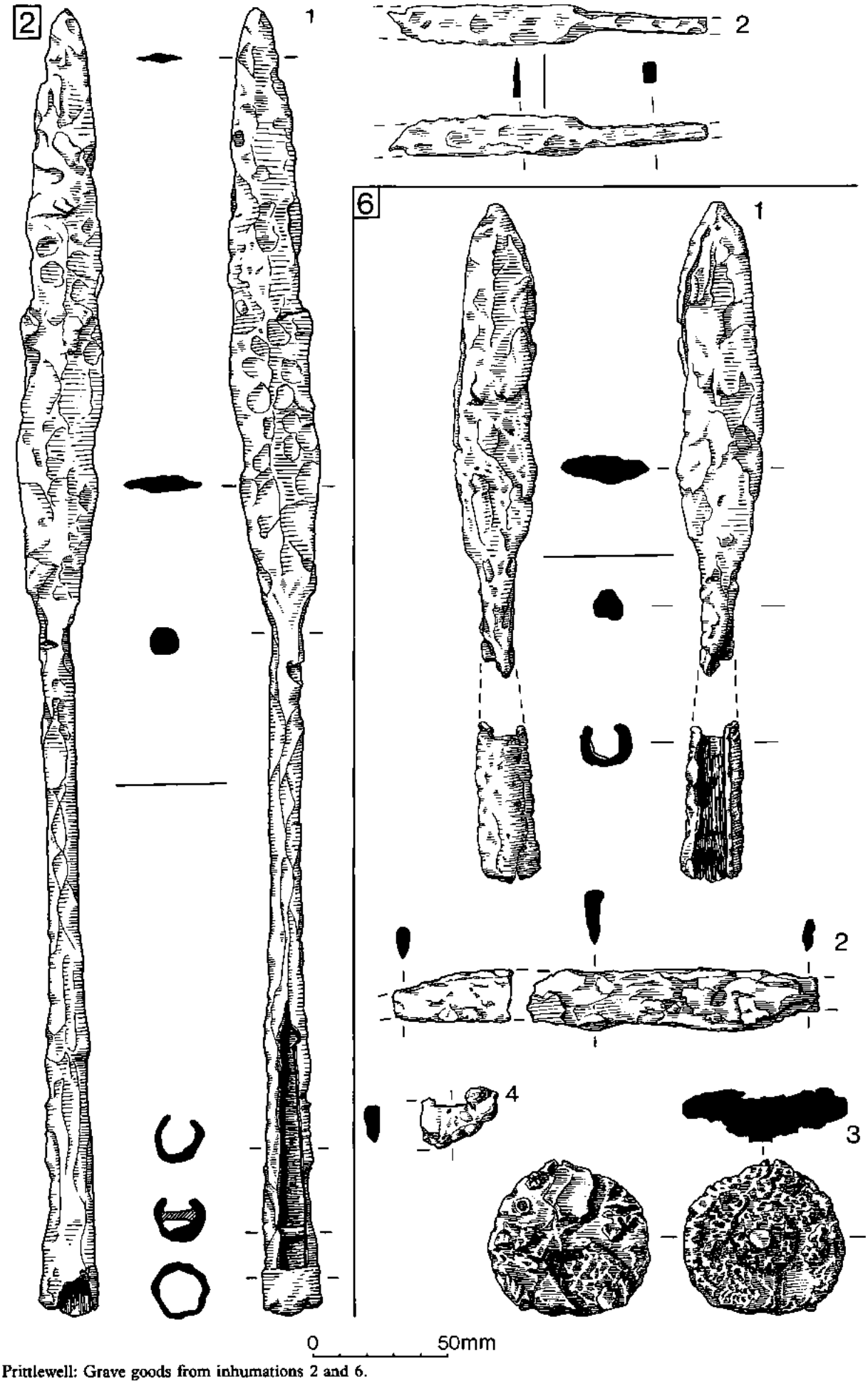

Fig. 2 Prittlewell: Grave goods from inhumations 2 and 6.

2. Iron *knife* — SM Acc. No. 159/24. Straight back; cutting edge incurving to point. Evison's type 2. In fair condition; part of tang and tip of blade missing. Length 118mm (incomplete); max. width of blade 15mm; max. thickness of blade 3mm.

Inhumation 3

Burial: Orientated SW to NE. Lying on back. 'Pillow' burial; head turned to right shoulder. Mouth wide open and skull smashed in. Skeleton too far decayed to move. Spear placed on left side of body; Shaft apparently resting in elbow-joint; spearhead level with top of skull; shaft decomposed but traceable in clay subsoil (complete length *c.* 1.83m). Knife on right side near waist.

Grave-goods (Fig. 3)

1. Iron *spearhead* — SM Acc. No. 159/25. Angular blade; short solid shank. Swanton's type E3. In poor condition; end of socket and tip of blade missing. Length: 360mm max. width of blade 44mm.
2. Iron *knife* — SM Acc. Nos. 159/26 (blade and tang), 159/36 (tip of blade). Back and cutting edge incurve to point. Evison's type 1. In poor condition; end of tang missing. Length 195mm (incomplete); max. width of blade 21mm; max. thickness of blade 7mm.

Inhumation 4

Burial: Orientated WSW-to-ESE. Leg-bones only.

Inhumation 5

Burial: Orientated W-to-E. 'Pillow' burial; face turned to right shoulder. Knife between left forearm and body. Skull is probably that of a woman; vault (from forehead to occiput) only; partly deformed by earth pressure but no doubt very narrow; length 188mm; width *c.* 135mm; index 72.

Grave-goods (Fig. 3)

1. Iron *buckle* — SM Acc. No. 159/28. Oval loop. Complete with pin but badly corroded. Height 42mm; max. width across loop 23mm; length of pin 31mm.
2. Iron *spearhead* — SM Acc. No. 159/27. Angular parallel-sided blade, Swanton's type E2. Socket broken off at shank. In poor condition. Length (incomplete) 155mm; max. width of blade 28mm. Max. thickness 11mm.

Inhumation 6

Burial: Orientated SSW-to-NNE. Lying face down. Spearhead near skull, shield boss near waist.

Grave-goods (Fig. 2)

1. Iron *spearhead* — SM Acc. No. 159/29 leaf-shaped blade, short solid shank, broadly cleft socket. Swanton's Type C3. In extremely poor condition, very corroded; in two pieces. Substantial replaced wood in socket. Length *c.*240mm; max. width of blade 31mm; max. diam. of socket 22mm; max. thickness of blade 14mm.
2. Iron *knife fragment* — SM Acc. No. 159/30. Back incurving to the point, straight cutting edge. Evison's type 4. In very poor condition, tip missing. Length 45.5mm (incomplete); max. width 20mm tapering to 10.5mm.
3. Iron *flat disc-headed rivet* — SM Acc. No. 159/34. Traces of copper alloy plate. Very corroded. No evidence of wood remains but Pollitt's report says "to which wood adhered". Max. diam. 59.5mm; max. height 16mm.
4. Iron *firesteel fragment* — SM Acc. No. 159/32. One flattened circular terminal and part of adjacent plate. Traces of replaced leather on one side. Length (incomplete) 32mm. Max. width 19mm.
5. *Shield boss* — 'Broken'. Height 72mm (without button); diam. 122mm. Described in Pollitt's report but not located by author.

Inhumation 7

Burial: Skeleton. Orientated N to S. Tanged knife or dagger, found on left of body, near waist.

Grave-goods (Fig. 5)

1. Iron *seax* — SM Acc. No. 159/35. Complete. Straight back with incurving cutting edge; Evison's type 2. One side of blade exhibits a handle-stop at junction of blade and tang. The blade profile is asymmetrical, the surface with no handle-stop appears flatter than the surface with the handle-stop. Tang has a cocked-hat type pommel. No wood remains. Length 332mm (blade 202mm; tang 130mm); max. width of blade 25mm.

X-radiograph analysis — The radiograph shows that the blade and tang were wrought from a single rod of iron with the handle-stop and pommel welded on. The blade shows no evidence of a composite nature or inlay.

Inhumation 8

Burial: Skeleton. Orientated N-to-S. Spear on left of body; spearhead near shoulder.

Grave-goods (Fig. 4)

1. Iron *spearhead* — SM Acc. No. 159/36. Long parallel-sided blade. Swanton's Type E3. *c.*50% of cleft socket corroded away, in poor condition. Wood traces in socket. Length 360mm; max. width of blade 23mm; max. diam. of socket 19mm; max. thickness of blade 7mm.

Inhumation 9

Burial: Orientated SW to NE. Skeleton, head and shoulders only. 'Pillow' burial. Body cut away during making of sewer trench. Skull of a woman, probably more than 50 years old. Strong wide jaws, short face, rather flat nose, palate wide and shallow. All teeth present and healthy. Max. length of skull 181mm; max. width 135mm; cephalic index 74.5

Inhumation 10

Burial: Orientated WNW-to-ENE. 'Pillow' burial.

Inhumation 11

Burial: Fragments of skeleton found. No traces of orientation.

Inhumation 12

Burial: Skeleton. Orientated SSW-to-NNE.

Inhumation 13

Burial: Skeleton. Orientated SW to NE. Body lying on right side in crouching attitude with knees up. Face turned over right shoulder.

Inhumation 14

Burial: Skeleton. Orientated WNW to ESE. Body in the gravel.

Grave-goods (Fig. 3)

1. *Handle* — SM Acc. No. 159/37. Rectangular with looped ends over which are suspended two round-headed rods (ends broken off) projecting at right angles to the handle. In extremely poor condition, surfaces flaking. Length (incomplete) 75mm. Height 45mm.
2. Iron *rod* — SM Acc. No. 159/37. One end upturned, other end broken off. Rectangular in cross-section. In extremely poor condition. Length (incomplete) 78mm; width 11mm.

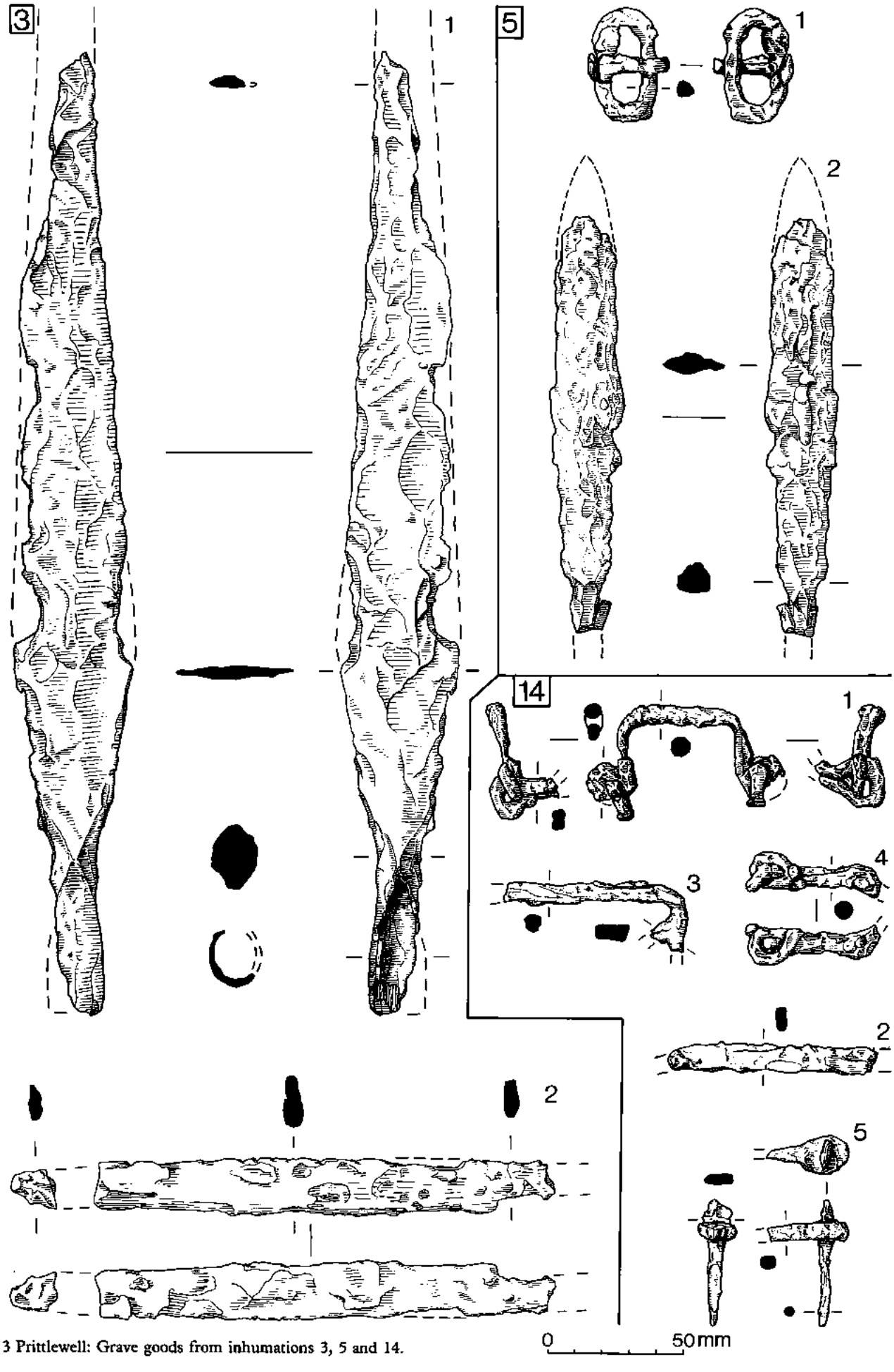

Fig. 3 Prittlewell: Grave goods from inhumations 3, 5 and 14.

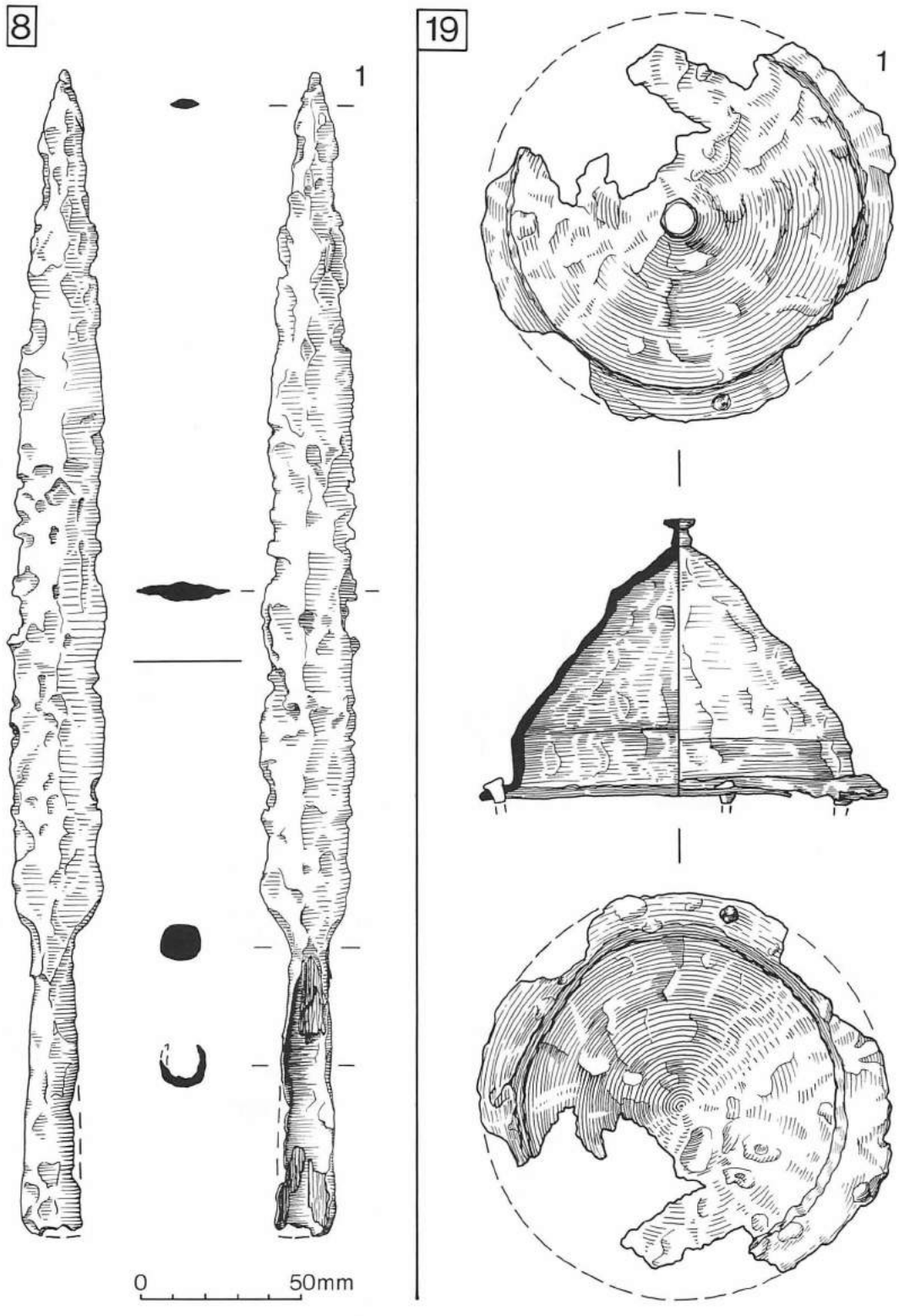

Fig. 4 Prittlewell: Grave goods from inhumations 8 and 19.

3. Iron *rod* — SM Acc. No. 159/37. One end upturned and divided into two prongs. Circular in cross-section. In very poor condition, surfaces flaking. X-radiograph shows little metal surviving. Length 69mm. Max. thickness 8mm.

4. Iron *rods* — SM Acc. No. 159/37. Two fused together. Rod with looped end, tapered nail passing through, in position. Length of nail 48mm. Length of rod (incomplete) 48mm.

5. Iron *rod* — SM Acc. No. 159/37. Both ends looped. X-radiograph shows semi-circular piece of iron looped through one end and a broken-off rod of iron in the other. Length 50mm. Max. width of loop 15mm. Max. thickness of rod 8mm.

6. *Bone comb fragment* — Three teeth remaining. Length 20mm; width 1.5mm. Not illustrated.

7. *Bone fragment* — 45mm × 20mm *c.*1mm thick. Not illustrated.

Inhumation 15

Burial: Skeleton. Orientated W-E. Body bent at waist and head to N.W.

Inhumation 16

Burial: Skeleton. Orientated SSW to NNE. Lying on back with knees drawn up; arms flexed and away from body. Shield boss found on body which was *c.*91cm below surface. Vase of blue glass found in gravel beneath grave. Bones of horse near burial.

Grave-goods (Fig. 5)

1. Iron and copper alloy *Convex disc-headed rivet* — SM Acc. No. 159/40. Disc-head is iron, shank is copper alloy. No evidence of silver or copper alloy plating. Faint traces of wood on edges of underside. Max. diam. of disc-head 55mm; height 15mm.

2. Iron *shield boss fragment* — SM Acc. No. 159/40. Less than 25%. Convex cone and slightly carinated waist. Replaced wood on undersurface of flange. In very poor condition. Height and diameter not determinable. Max. thickness of walls 8mm.

3. Iron *fragment* — SM Acc. No. 159/40. Possibly part of shield hand-grip. Replaced wood on undersurface.

4. Iron *rivet* — SM Acc. No. 159/40. Replaced wood on undersurface. Max. diam. 22mm.

Grave-groups with no definitely attributable grave

'Although almost certainly connected with burials, there was not sufficient proof of graves in connection with the following objects'. The numbering has followed Pollitt's in that it runs on directly from the inhumations.

Grave-group 17 (Fig. 5)

1. Iron *sword-blade* and *buckle* — SM Acc. No. 159/42. Tang and adjacent part of blade missing. Double-edged. Replaced leather and wood on both sides of blade; wood only along edges and in all instances is over replaced leather. A vertical line on one piece of leather may be a tooling mark or crease. The wood grain runs parallel to the blade. Small iron *buckle* adhering to blade towards tang and roughly equidistant from cutting edges. D-shaped. Replaced leather cover (?from strap). Blade and buckle in poor condition, very corroded. Blade in two pieces (which join); edges badly chipped. Length of blade 545mm; max. width 50mm; max. thickness 14mm; of buckle 17mm; max. width 11mm.

X-radiograph analysis — (Fig. 17.B). The X-radiographs show the blade to be pattern-welded with three piled bars (*c.*5-7 rods per bar) with alternately straight and twisted sections. Cutting edges have been applied either side of this core. Width of central core 20mm; each bar *c.*5-7mm. The individual rods are not very clear on the X-radiographs which in places show an apparent double image. This may mean that the blade has a central core of six piled bars, welded in pairs back to back. The cutting edges showed no structural detail.

2. *Iron sword* — *c.*50% with tang. SM Acc. No. 159/43. Double-edged. Replaced leather and wood on tang and blade. Wood grain running parallel with the blade. In very poor condition, cutting edges badly corroded. Length (incomplete) 320mm; max. width of blade 42mm; max. thickness of blade 9mm; max. thickness of tang 6mm.

X-radiograph analysis — (Fig. 17.B). This sword has the same method of blade manufacture as sword no. 159/42; the blade is pattern-welded with three or possibly six piled bars with cutting edges applied either side of this core. As on 159/42 the individual rods are unclear and show a double image suggesting that the central core is of six piled bars, welded in pairs back to back. The bars show considerable lateral distortion. The cutting edges are extremely corroded and the radiographs show no structural detail.

3. *Sword point* — Length (incomplete) 93mm, width 36mm. Max. thickness 10mm.

Grave-group 18 (Fig. 6-7)

1. Iron *spearhead* — SM Acc. No. 159/46. Leaf-shaped blade with short solid shank and broadly-cleft socket. Swanton's Type C2 or C3. Very badly corroded; edges damaged; tip missing. Wood traces in socket. Length 238mm; max. width of blade 26mm.

2. Iron *shield boss* — SM Acc. No. 159/47. Convex sides disc-headed terminal, uncarinated shoulders; fairly narrow flange. Two rivets projecting through flange, ends broken off. Very corroded and covered in lacquer. No wood traces visible. Height 90mm; max. diam. 145mm; length (incomplete) of projecting rivet 9mm.

3. Iron *sword* — SM Acc. No. 179/45. Double-edged. End of tang broken off, although Pollitt's report says "the tang was passed through a washer and then beaten over to provide a cap". Very heavily corroded and lacquered; in three pieces with tang broken off. Mineralised wood traces from the scabbard adhering to both sides of blade, in particular along the blade edges and on both sides of the tang. Traces of a smooth covering/lining, which may be leather, visible both on top of the wood and underneath it. Length *c.*740mm (length of tang 112mm, length of blade *c.*628mm); max. width of blade 52mm.

X-radiograph analysis — (Fig. 17.A). The radiograph showed slight evidence for pattern-welding.

Grave-group 19 (Fig. 4)

1. Iron *shield boss* — SM Acc. No. 159/48. *c.*30% missing. Fairly tall boss with straight sloping sides, slight carination at shoulder; narrow flange with two rivets in position passing through flange, ends broken; small flat-topped terminal covered in silver plate. Very badly corroded. Height 85mm; max. diam. 129mm; max. thickness of walls 4mm.

Grave-group 20 (Fig. 7)

1. Iron *shield boss* — SM Acc. No. 159/49. *c.*50% missing. Slightly convex dome, small disc-headed terminal, uncarinated shoulders; narrow flange. No rivets visible. No wood traces. Very corroded. Height 72mm; max. diam. 120mm.

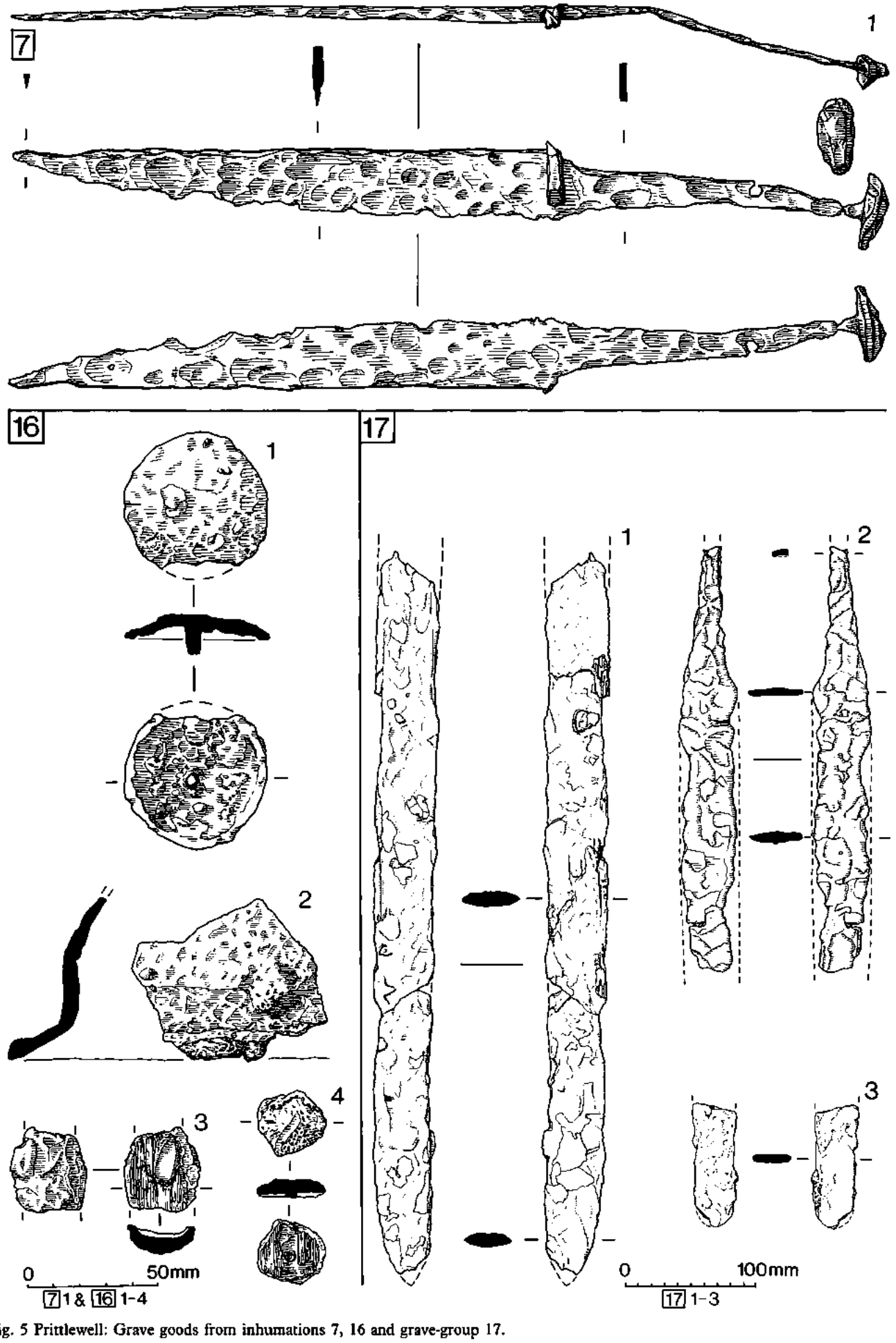

Fig. 5 Prittlewell: Grave goods from inhumations 7, 16 and grave-group 17.

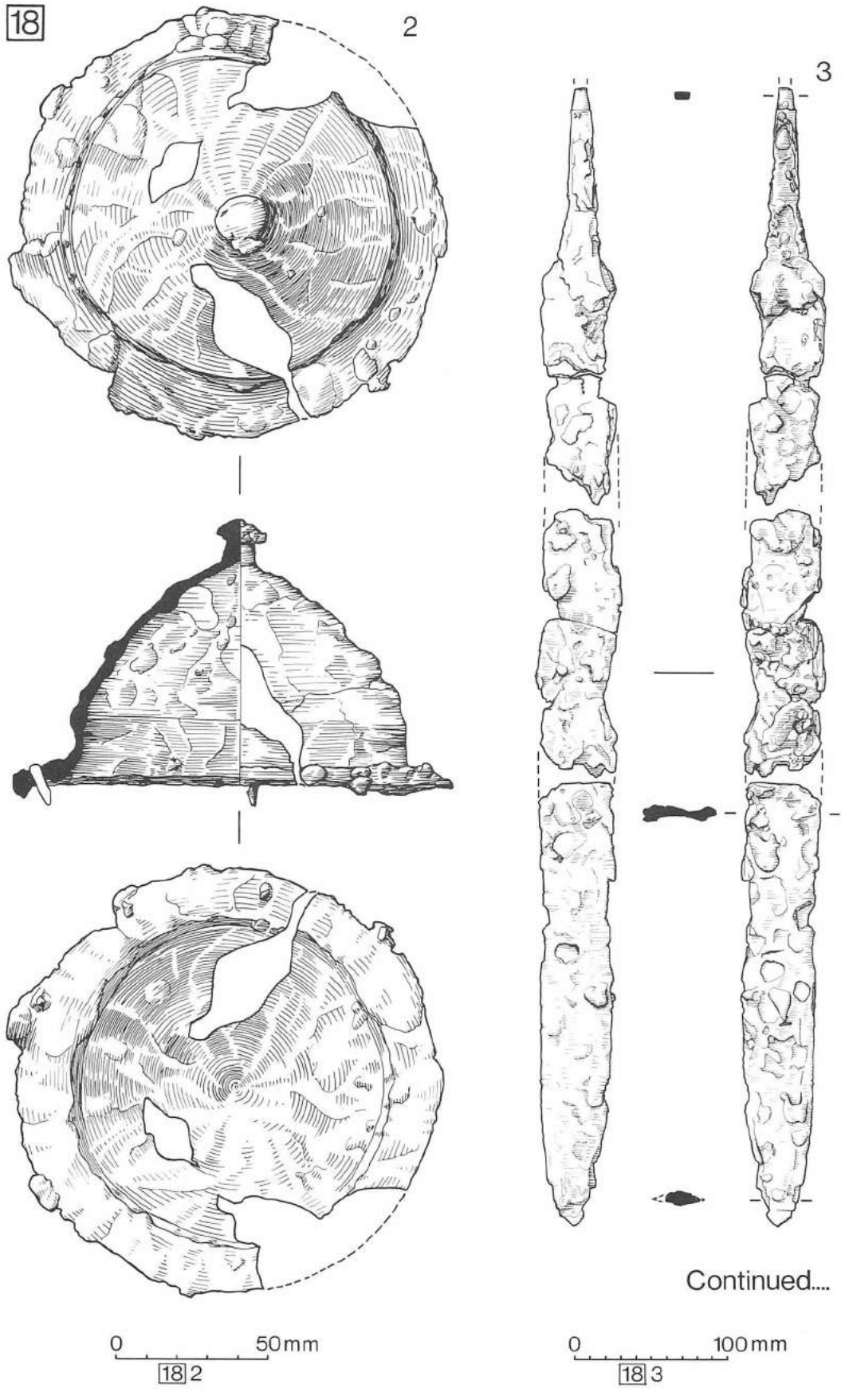

Fig. 6 Prittlewell: Grave goods from grave-group 18.

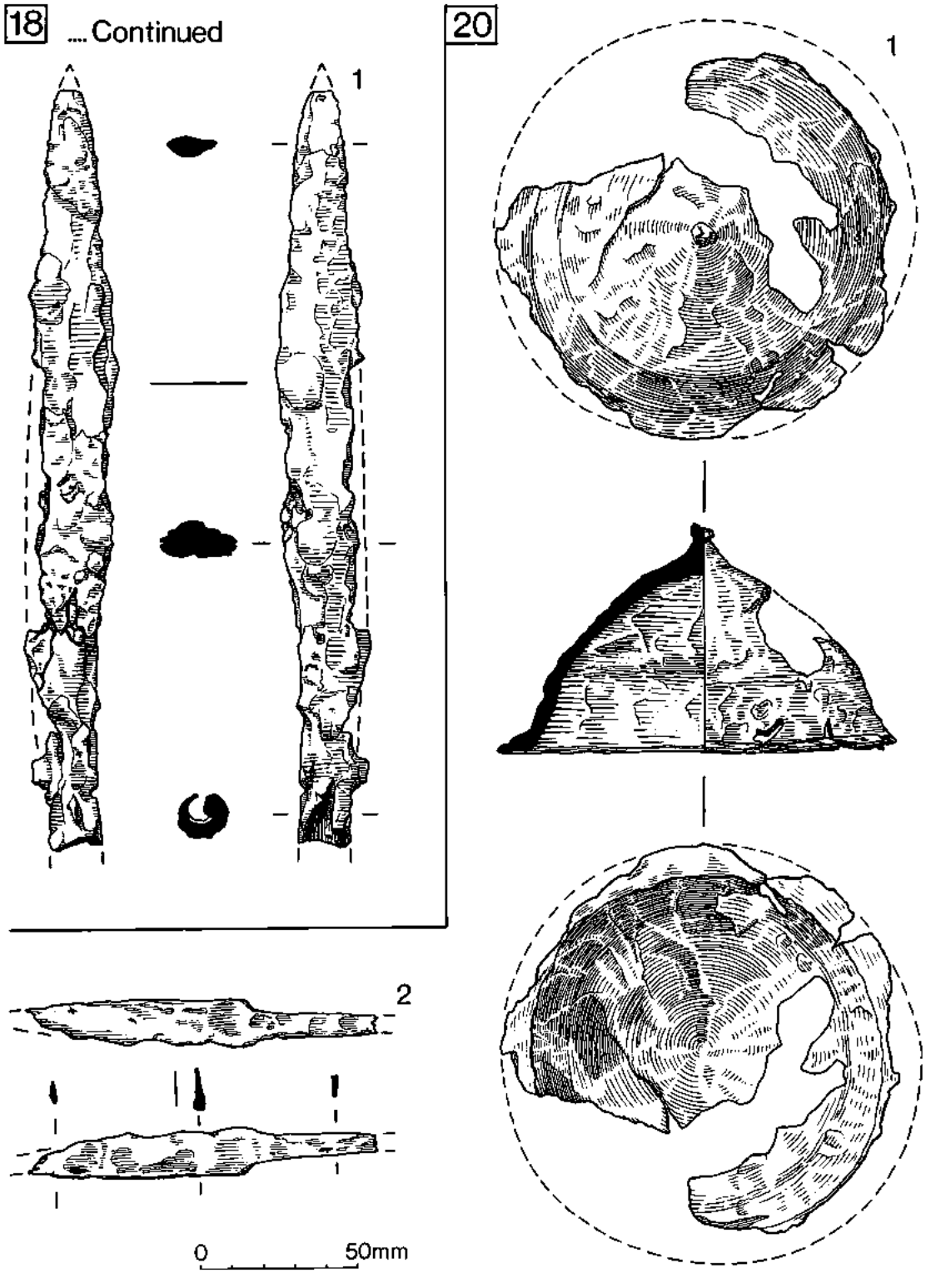

Fig. 7 Prittlewell: Grave goods from grave-groups 18 and 20.

2. Iron *knife* — SM Acc. No. 159/50. Part of blade and most of tang (*c.*50%) missing. Very corroded; difficult to distinguish cutting edge from back. Length (incomplete) 107 mm; max. width of blade 23 mm; max. thickness 10 mm.

Grave-group 21 (Fig. 8)

1. Iron *shear blade* — SM Acc. No. 159/51. Straight cutting edge, incurving back. One surface of blade flat, other surface stepped. Tang rectangular in cross-section. Length 120 mm; max. width of blade 28 mm; max. thickness of blade back 10 mm.

Grave-group 22 (Fig. 8)

1. Iron *spearhead* — SM Acc. No. 159/52. Blade bent at right angles to socket at shoulder (Pollitt's report states that the spearhead was bent when found). Leaf-shaped blade, long narrow shank, broadly cleft socket. Swanton's Type D3. In poor condition; end of socket damaged. Length 195 mm (blade 85 mm); max. width of blade 20 mm; max. thickness of blade 4.5 mm.

2. Iron *spearhead* — SM Acc. No. 159/53. Angular parallel-sided blade, long narrow shank, short cleft socket. Swanton's Type F2. Wood traces in socket. Length 257 mm (blade 120 mm); max. width of blade 26 mm.

Grave-group 23 (Fig. 8)

1. Iron *spearhead* — SM Acc. No. 159/54. Short angular blade, long solid slender shank, cleft socket with rivet in position. Swanton's Type F3. In fair condition. Wood traces in socket. Length 340 mm (blade 120); max. width of blade 23 mm; max. thickness of blade 6.5 mm; max. diam. of socket 19 mm.

Grave-group 24 (Fig. 8)

1. Iron *implement* — SM Acc. No. 159/55. Long, narrow parallel-sided, blunt-edged implement with broken-off projection one end. Tip missing. Length 229 mm; max. width 11 mm; max. thickness 4.5 mm.

Grave-group 25 (Figs. 9-10)

Burial: 'The sword was laid with the point to the NNE; the spear being across it and with its point, slightly elevated, to the S.W. The shield had rested on its edge to the W. of the other weapons, the centre of the boss being over the hilt of the sword and *c.*45.7 cm above the level on which the sword rested. The angle of the boss showed that the weapons had been laid in a narrow trench, and that the shield stood almost upright (i.e. at an angle of about 60 degrees from the ground), with its edge near the guard of the sword. Excavations to some distance round the weapons and also beneath them failed to expose any human remains'.

1. Iron *sword and buckle* — SM Acc. No. 179/1. Double-edged; edges parallel for *c.*75% of length. Pieces of wood adhere to both sides of the blade; some leather adhering to outside of wood; wood traces are mostly along the edges of the sword and towards the point and on the tang which is almost completely covered with wood, the grain running longitudinally along the handle and then transversely at its junction with the blade. A lump of corrosion on the blade some 268 mm from its point was shown by x-radiograph to be a kidney-shaped scabbard buckle. In four very corroded pieces. Length 905 mm (blade 800 mm); max. width of blade 60 mm.

X-radiograph analysis — The radiograph showed the apparent 'lump of corrosion' to be a kidney-shaped buckle decorated with a notched edge, no silver or copper alloy wire inlay was visible. Approximate dimensions: Height *c.*38 mm; width *c.*28 mm. The radiograph also showed the blade of the sword to be pattern-welded (Fig. 17.A). The chevron-effect of the pattern welded blade was very indistinct, perhaps because of the extremely corroded state of the sword.

2. Iron and tin or silver *flat disc-headed rivet* — SM Acc. No. 179/2. ? Scabbard fitting. Iron rivet with white metal plate, *c.*75% of plate still intact. Point of rivet broken off. Substantial wood remains on undersurface of disc-head. Max. diam. 30 mm; length (incomplete) 7 mm.

3. Iron and tin or silver *flat disc-headed rivet* — SM Acc. No. 179/2. ? Scabbard fitting. Iron rivet with white metal plate, *c.*75% of plate intact. Substantial wood on undersurface consists of two strata with wood grains running in opposite direction. Max. diam. 30 mm. Length (incomplete) 10 mm.

4 to 12 — 9 small copper alloy *studs* some with remains of silver or tin plate on their heads. All circular, flat-headed with tapering broad-ended shaft.

4. Copper alloy *stud* — SM Acc. Nos. 179/2. Traces of reddish-brown ?paste on head upper surface. Complete. Max. diam. of head 8 mm; length 11.5 mm.

5. Copper alloy *stud* — Shaft broken off. *c.*75% of upper surface of head covered with silver or tin plate. Wood remains cover *c.*50% of undersurface. Max. diam. 8.5 mm.

6. Copper alloy *stud* — Complete. *c.*25% of upper surface covered with silver or tin plate. Max. diam. 8 mm; length 10.5 mm.

7. Copper alloy *stud* — Complete. *c.*75% of upper surface covered with silver or tin plate. Wood traces on undersurface and shaft. Max. diam. 8 mm; length 11 mm.

8. Copper alloy *stud* — Part of shaft broken off. Upper surface covered with silver or tin plate. Max. diam. 8 mm; length 6 mm.

9. Copper alloy *stud* — Complete. *c.*90% of upper surface covered with silver or tin plate. Max. diam. 7 mm; length 8 mm.

10. Copper alloy *stud* — Complete. Shaft to one side of head. Upper surface silvered or tinned. Max. diam. 7 mm; length 11 mm.

11. Copper alloy *stud* — Upper surface badly pitted, two small pieces of silver or tin plating survive. Pointed shaft circular in cross-section. Max. diam. 7 mm; length 4.5 mm.

12. Copper alloy *stud* — Complete. *c.*90% of upper surface silvered or tinned. Short pointed shaft to one side of head. Max. diam. 6.5 mm; length 6 mm.

13 to 16 — Four rectangular scabbard mounts with silvered or tinned upper surfaces. Pollitt's report states that "the grips were along the centre of the sheath, lying at regular intervals across the blade".

13. Copper alloy *scabbard mount* — Complete. Rectangular upper plate with silvered or tinned upper surface, two rivets pass through it and into lower retaining plate. *c.*75% of silver/tin plate remains. Wood traces on upper surface of retaining plate. Upper plate: length 22.5 mm; width 7 mm; thickness 2.5 mm. Retaining plate: length 19 mm; width 6.5 mm. Gap between two plates 5 mm.

14. Copper alloy *scabbard mount* — As 13 but rivets broken off and retaining plate missing *c.*90% silver/tin plate surviving. Length 23 mm; width 6.5 mm; thickness 2 mm.

15. Copper alloy *scabbard mount* — As 14. *c.*75% of silver/tin plate survives. Length 20 mm; max. 5 mm; thickness 2 mm.

16. Copper alloy *scabbard mount* — As 14. *c.*50% of silver plate survives on upper surface. Length 20.5 mm; max. width 6 mm; thickness 1.5 mm.

17. Iron and silver wire *buckle* — Oval buckle-loop decorated with stripes of inlaid silver wire. Pin has basal shield decorated with horizontal lines of inlaid silver wire. No visible textile or leather although Pollitt's report states "the impression of some finely-woven material remained on the underside of the buckle". The buckle was 'about one foot from the point of the sword, at the edge of the scabbard'. Length: 34.5 mm; max. width (of loop and tongue) 23.5 mm.

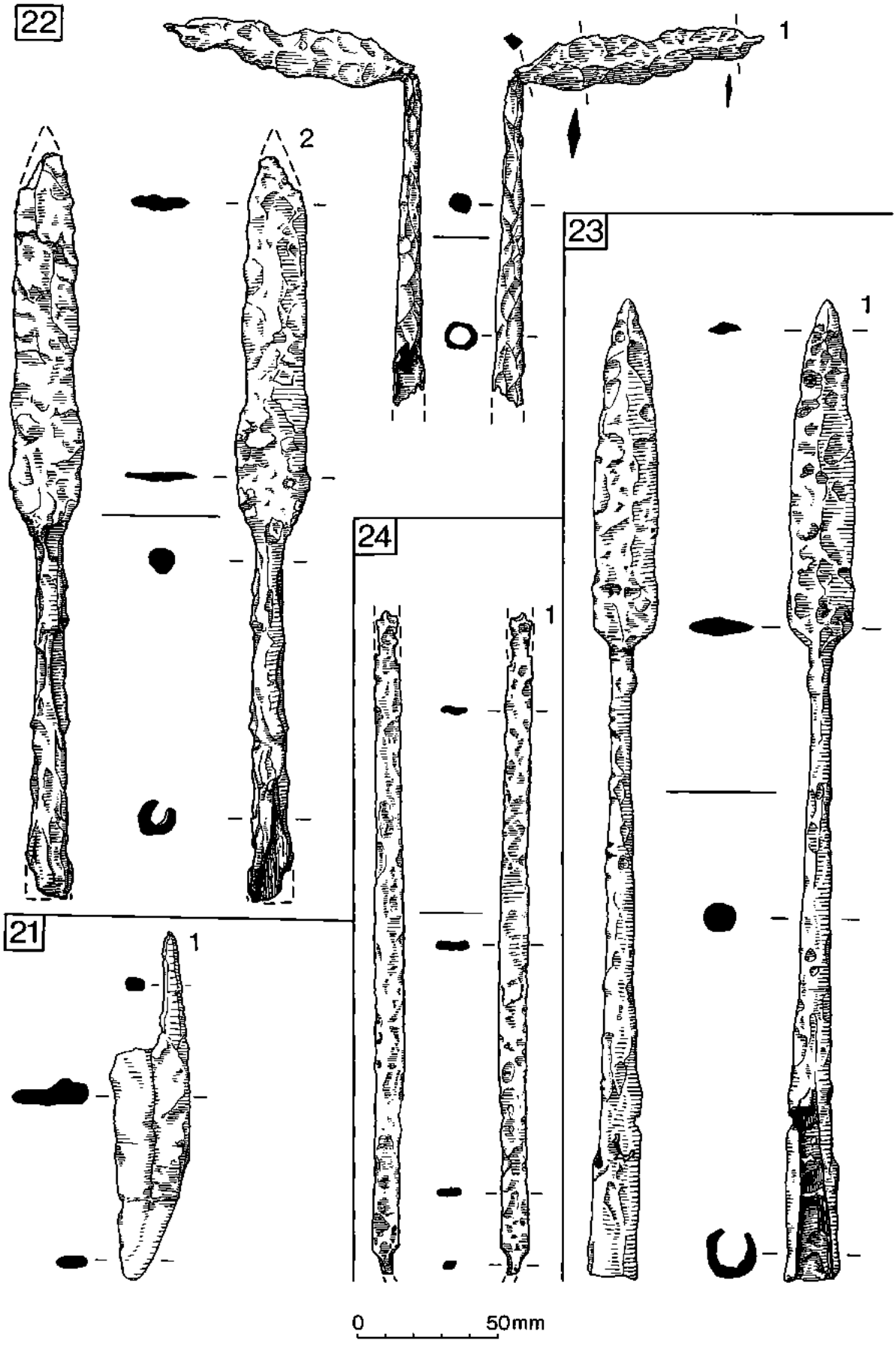

Fig. 8 Prittlewell: Grave goods from grave-groups 21, 22, 23, 24.

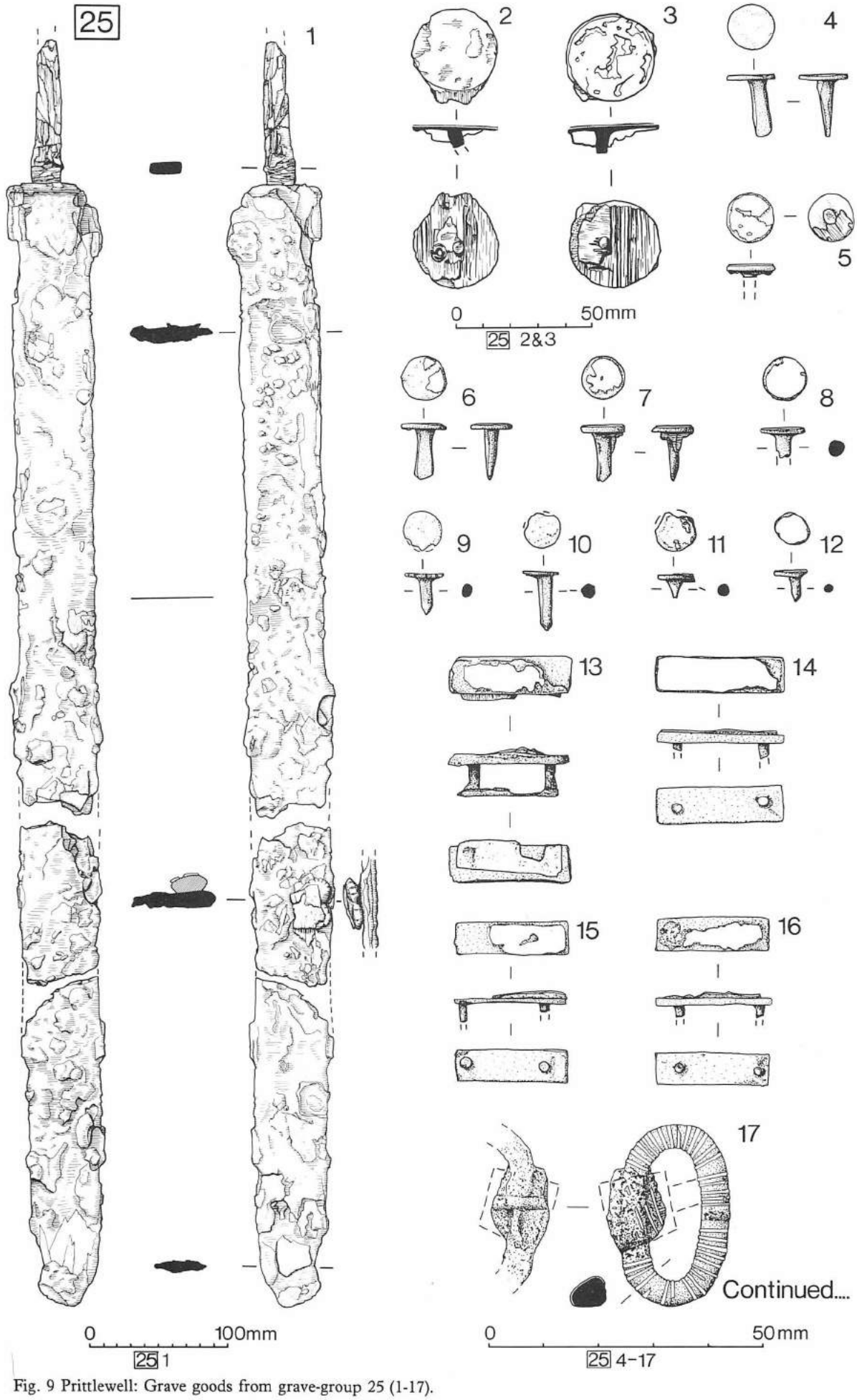

Fig. 9 Prittlewell: Grave goods from grave-group 25 (1-17).

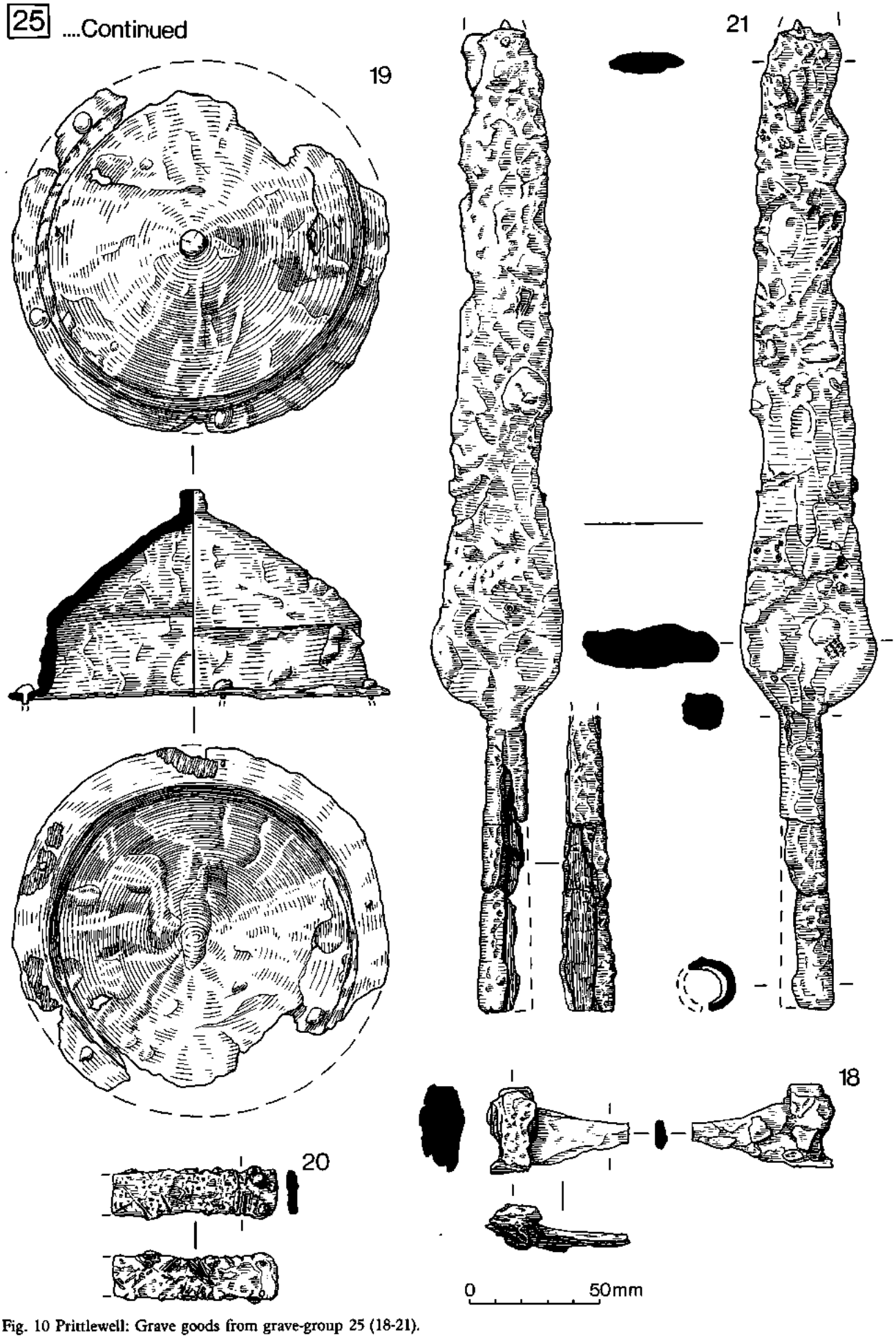

Fig. 10 Prittlewell: Grave goods from grave-group 25 (18-21).

18. Iron *tang fragment* — No wood or textile traces. Very corroded. Does not join onto 1.

19. Iron *shield boss* — SM Acc. No. 179/7. *c.*75% complete. Slightly convex dome, slight carination at shoulder, fairly narrow flange pierced by four small dome-headed rivets, ends of rivets broken off. Terminal obscured by corrosion. Wood traces on underside of flange. Height 77mm; max. diam. 140mm; max. thickness of walls 5mm.

20. Iron *hand-grip* — SM Acc. No. 179/7. Short grip in two pieces, *c.*50% missing. One rivet in position. Both surfaces covered in mineralised textile, undersurface also has wood and leather around the rivet. Length (incomplete) 61mm; max. width 16mm.

21. Iron *spearhead* — SM Acc. No. 179/3. Long fairly slender blade, angular cross-section. Swanton's type E3. Immediately above the angle the blade is assymetrical, perhaps distorted by corrosion. In three pieces, tip of blade missing. Mineralised textile on blade immediately above shank. Length 368mm (blade 255mm); max. width of blade 50mm.

Grave-group 26 (Fig. 13)

1. Iron *spearhead* — SM Acc. No. 179/5. Leaf-shaped blade with very short shank and fairly long cleft socket. Swanton's type C1 or C2. Very corroded. Length 184mm (blade 112mm); max. width of blade 28mm; max. diam. of socket 20mm; max. thickness of blade 9mm.

Grave-group 27 (Fig. 11)

1. Iron *spearhead* — SM Acc. No. 179/4. Long, slender, angular blade, parallel-sided for *c.*75% of its length; short neck, short cleft socket. Swanton's type E4. Mineralised wood in socket. Length 412mm (blade 376mm).

X-radiograph analysis — The radiograph showed no evidence of pattern-welding on the blade but longitudinal lines were visible, perhaps suggesting composite manufacture.

2. Iron *shield boss fragments* — Listed in Pollitt's report but not located.

3. Iron *knife blade fragment* — Listed and illustrated in Pollitt's report but not located. Back and cutting edge incurving to point. Evison's type 1. Length (incomplete, blade only) 114mm; max. width of blade 18mm; max. thickness 6mm.

Grave-group 28 (Figs. 12-13)

Grave-goods not assignable to a specific group or inhumation

1. Iron *spearhead* — SM Acc. No. 159/56. Leaf-shaped blade; short solid neck merging into blade, broadly cleft socket. Swanton's type C2. Substantial wood in socket. Length 220mm (blade 167mm); max. width of blade 28mm; max. thickness of blade 10mm; max. diam. of socket 24mm. Found near inhumation No. 1.

2. Iron *spearhead* — SM. Acc. No. 159/57. Long parallel-sided blade; cleft socket; rivet in position. Swanton's Type G2. In poor condition; in two pieces which do not join. Replaced wood in socket. Length *c.*355mm (incomplete), blade 240mm; max. width of blade 25mm; max. diam. of socket 20mm; max. thickness of blade 5mm.

3. Iron *spearhead* — SM Acc. No. 159/58. Swanton's type H1. Fullered blade, concavity confined to one wing. Asymmetrical blade — one side is leaf-shaped the other has a pronounced 'winged' profile, perhaps the result of corrosion. The shank has an oblong section at its junction with the blade and then widens into an oval cross-section and ? cleft socket. No wood traces in socket. Length 178mm (blade 126mm); max. width of blade 46mm.

4. Iron *object* — SM Acc. No. 159/59. Slightly tapering rectangular bar; perforated one end; slightly curved in profile. Length 112mm; max. width 24.5mm; max. thickness 4mm.

5. Iron *shear blade* — SM Acc. No. 159/60. One surface flat, other stepped. Back incurves to point; cutting edge slightly concave ? worn. Tang rectangular in cross-section. Length 153mm (blade 115mm); max. width of blade 29mm; max. thickness of blade 7mm.

6. Pottery *spindle whorl* — Fashioned out of base of ?Roman wheel-turned vessel. Disc-annular. Max. diam. 24mm.

7. Iron *spearhead* — SM Acc. No. 159/29. Broad leaf-shaped blade, short thick shank, part of socket broken off. Wood in socket. Swanton's type C2 length (incomplete) 200mm; max. width of blade 39.5mm; max. thickness of blade 13.5mm.

8. Iron *knife* — Mentioned in Pollitt's report but not located. Length: 95mm; max. width of blade 19mm.

9. Iron *girdle hanger* — Mentioned in Pollitt's report but not located.

10. Iron *sickle blade fragment* — Extremely corroded. Length 132mm; max. width of blade 36mm. (Not illustrated).

Objects found in 1930

The following objects were retrieved in 1930 during the digging of railway cuttings; some can be grouped into likely grave assemblages:

Grave-group 29 (Fig. 13)

1. Iron *sword*. SM Acc. No. 425/1. Two pieces which do not join; tang and part of blade missing. Double-edged. Replaced wood over replaced leather along edges. Length of blade pieces 415mm and 160mm (approx. 75% of complete blade); max. width 64mm; max. thickness of blade 20mm.

X-radiograph analysis (Fig. 17.C)

The X-radiographs show five piled bars (*c.*5-7 rods per bar) with alternately straight and twisted sections. Cutting edges applied either side of this core. Width of central core 32mm; each bar *c.*5-7mm. The sections of twisted rods show a double image suggesting that the core could be of ten piled bars welded in pairs back to back. The cutting edges were apparently each of a single piece of iron.

2. *Shield Boss*. Not located.

3. *Spears*. Not located.

Grave-group 30 (Fig. 14)

1. Gold *pendant*. SM Acc. No. 405/1. Pale gold. Channelled suspension loop in position. Circular backplate. Outer edge of segmented gold wire inside of which is a series of roundels of segmented gold wire with central gold droplets. Inside this is a circular gold wire with diagonal incisions cut by the circular terminals of a four-pointed star motif. The four panels between the arms of the cross are infilled with heart shapes (one per panel) and S-shapes (7-9 per panel) of segmented gold wire. These comprise: the centre of the cross is a circular cell (garnet missing) outside of which is a circular band of keystone-shaped cells (9) set with garnets (4 missing). The arms of the cross are each divided into three cells, making 12 cells set with garnets (7 missing). The 4 points of the cross terminate in round cloisons, three of which contain garnets; in the other a piece of gold foil is in position. Gaps are visible where the arms of the cross abut the central device. Outer beaded wire is one piece; single join. Some garnets missing but otherwise in good condition, little sign of wear. Back plain. Max. diam. 34mm. Max. thickness 5mm.

2. Squat *biconical pot*. SM Acc. No. 403/1. Everted flattened rim. Maximum girth of pot towards base. Upper body decorated with four concentric corrugations; lower body with three shallowly incised lines. Uniform light reddish-buff throughout. Sparse quartz-sand in-

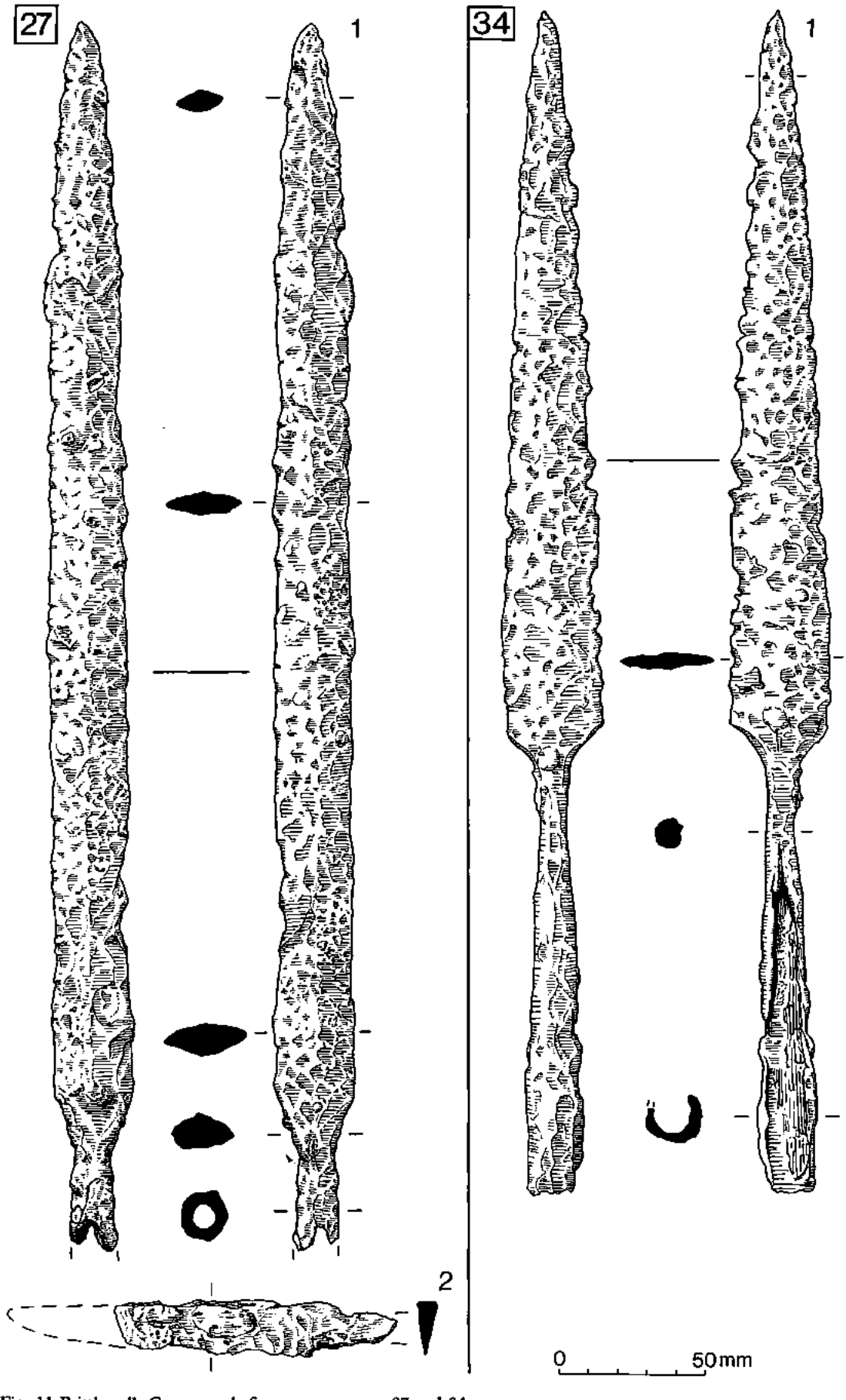

Fig. 11 Prittlewell: Grave goods from grave-groups 27 and 34.

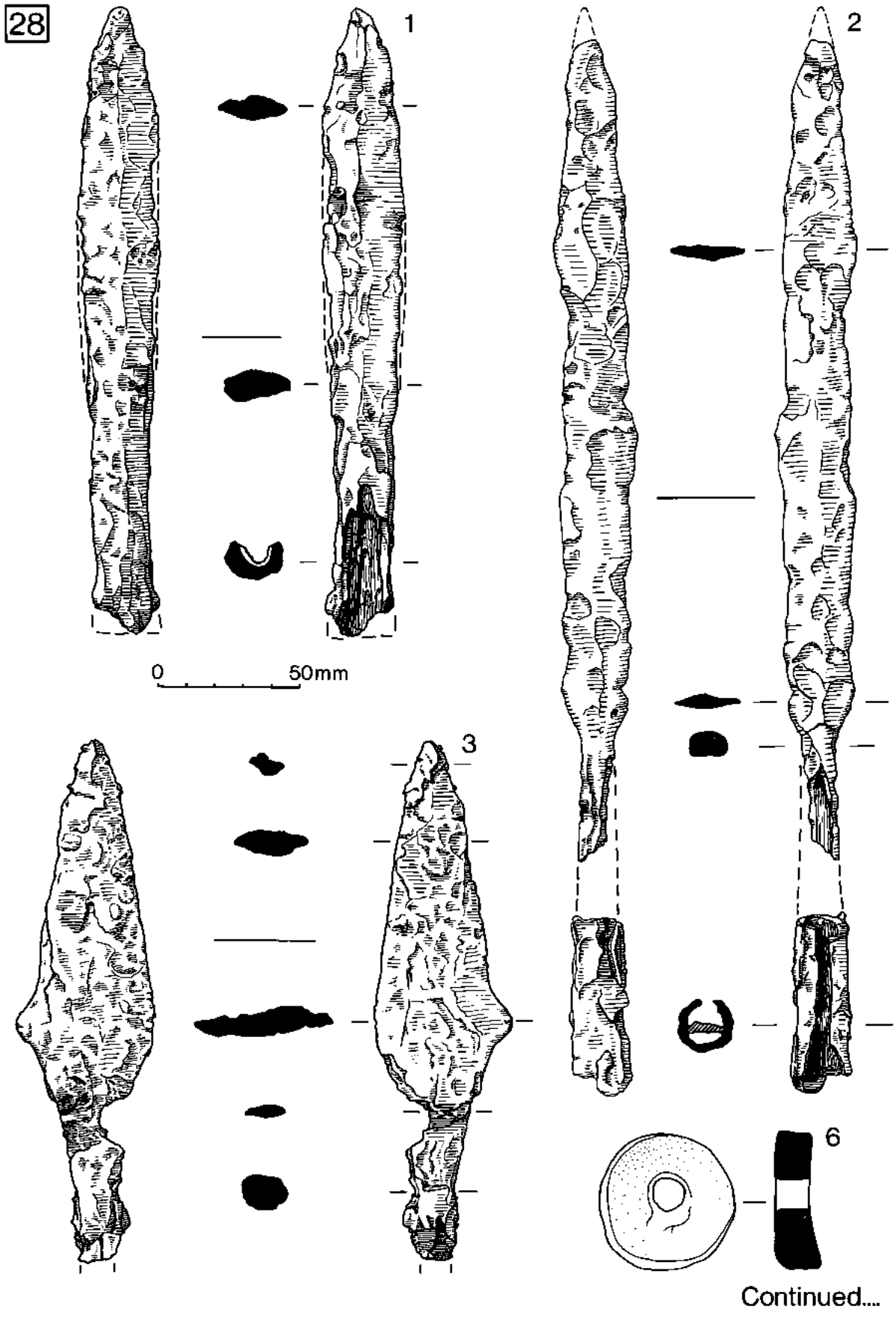

Fig. 12 Prittlewell: Grave goods from grave-group 28 (1, 2, 3, 6).

clusions, sparse grog. Outer burnished. Height 99 mm; rim diameter 93 mm; base diameter 47 mm; max. girth 91 mm. Not illustrated. (Evison 1979, 80 fig. 16.a).

3. *Biconical pot*. SM Acc. No. 404/1. Everted flattened rim. Maximum girth of pot towards base. Upper body decorated with four concentric corrugations. Uniform light reddish-buff throughout; quartz sand inclusions. Outer burnished. Height 99 mm. Diam. of rim (external) 88 mm; diam. of base 48 mm; maximum girth 98 mm. Not illustrated. (Evison 1979, 80 fig. 16.b).

Grave-group 31 (Fig. 14)

1. Gold *bracteate*. SM Acc. No. 414. Rich yellow. Outer edge of nicked gold wire. Chanelled suspension loop, in position. Stamped design comprising (described outer to centre): multiple zigzag design; concentric beaded border; six 'running legs' with face masks in between; central boss with outer ridge. Some signs of wear: nicks on outer edge of gold wire worn away in places. Max. diam. 30 mm. Max. thickness 1.5 mm.
2. *Bottle*. Hand-made. Globular body; base flattened. Tubular neck, flaring slightly at top, rim missing. Two concentric panels of decoration bordered by three incised double chevrons. Dark grey, outer burnished black. Abundant large vegetable temper. Height 122 mm. Base diam. 35 mm. Diam. at top 30 mm. Max. girth 91 mm. Not illustrated. (Evison 1979, 86 fig. 16).

Grave-group 32 (Fig. 14-15)

1. Gilded copper alloy *saucer brooch*. SM Acc. No. 427/1. Cast in one. Gilded on front and back. Decoration comprising: central flat meerschaum roundel; circular ridge outside this. Outside this is a panel of decoration incorporating three equidistant keystone garnets within keystone-shaped ridge and beaded border along outer edge; in between the garnets each space is infilled with a human face-mask, an S-shape, dots and wedges. Pin missing; pin attachment and catchplate complete and in position. *c.*50% of edge chipped. No textile. Max. diameter 67 mm (rim flange 16 mm). Thickness (at centre) 4 mm. Pin hinge (length) 9 mm. Pin catchplate (length) 7 mm.
2. Gilded copper alloy *saucer brooch*. SM Acc. No. 427/2. Cast in one. Gilded on front and back surfaces. Decoration as on (9) but dimensions of decorative elements differ slightly. Pin missing; pin attachment and catchplate complete and in position. *c.*15% of edge chipped; most of meerschaum from central roundel missing. Replaced bead string and very small fragments of replaced textile on back. Max. diameter 65 mm (rim flange 16 mm). Thickness (at centre) 4 mm. Pin hinge (length) 11 mm. Pin catchplate (length) 8 mm.
3. Amber and glass *beads*. SM Acc. No. 427/3.
    1. White opaque glass. Short barrel. Max. diam. 6.4 mm.
    2. White opaque glass with translucent pale blue undulating crossing inlay. Short barrel. Max. diam. 8.1 mm.
    3. Red opaque glass with marvered (smoothed level with the surface on a flat stone slab) opaque white undulating crossing inlay. Short barrel. Max. diam. 7.5 mm.
    4. Pale blue opaque glass. Cylinder. Max. diam. 7.8 mm.
    5. Amber. Irregular. *c.*50% missing. Max. diam. 13 mm.
    6. White opaque glass. Short barrel. Max. diam. 8.1 mm.
    7. Yellow opaque glass. Cylinder. Max. diam. 6.5 mm.
    8. White opaque glass with marvered translucent blue undulating crossing inlay. Max. diam. 8.1 mm.
    9. White opaque glass with opaque ?brown undulating crossing inlay (most fallen out). Max. diam. 16.4 mm.
    10. White opaque glass. Cylinder. Max. diam. 8 mm.
    11. Opaque yellow glass with marvered opaque red undulating crossing trails with central dots. Short barrel. Max. diam. 10 mm.
    12. Opaque white glass with marvered translucent pale blue undulating crossing trails. Short barrel. Max. diam. 10.1 mm.
    13. Amber. Irregular. Max. diam. 5.3 mm.
    14. Rock crystal. Multi-faceted (18 faces). Max. diam. 31 mm.
    15. Amber. Irregular. Max. diam. 2.7 mm.
    16. Opaque white glass with marvered translucent pale blue undulating crossing trails. Short barrel. Max. diam. 9.1 mm.
    17. Translucent pale green glass with marvered yellow opaque glass undulating crossing trails with central dots. Short barrel. Max. diam. 8.6 mm.
    18. Opaque white glass. Short cylinder. Max. diam. 8.1 mm.
    19. Amber. Irregular. Max. diam. 20 mm.
    20. Opaque white glass with marvered translucent pale blue glass undulating crossing trails. Short barrel. Max. diam. 9.2 mm.
    21. Opaque yellow glass. Short cylinder. Max. diam. 7.4 mm.
    22. White opaque glass with marvered brown opaque glass undulating crossing trails (most of brown glass missing). Max. diam. 8 mm.
    23. Amber. Irregular. Max. diam. 13.2 mm.
    24. Opaque white glass. Short barrel. Max. diam. 7.2 mm.
    25. Red opaque glass with opaque marvered yellow glass undulating crossing trails with central dots. Short barrel. Max. diam. 7 mm.
    26. White opaque glass with translucent marvered blue glass undulating crossing trails. Short barrel. Max. diam. 9 mm.

Grave-group 33: Objects found in 1930 but not assignable to a specific group or inhumation (Fig. 16)

1. Bone *comb*. Five fragments of a double-sided composite comb comprising: one fragmentary tooth segment with three surviving teeth one side and ten teeth the other side (teeth ungraduated, rather coarse); max. width 52.8 mm (teeth 20 mm long). One end piece (fragmentary) with rivet hole; length 46.8 mm; max. width 19 mm. One small fragment ? part of end piece; length 18 mm; max. width 7 mm. Two incomplete connecting plates (semi-circular slightly flattened convex in profile); upper (curved) surface decorated with panels of incised lines and ring-and-dot ornament; each piece has a rivet hole near one end around which is iron staining; back plain; lengths: 67.3 mm and 73.7 mm; widths 21 mm tapering to 18.4 mm and 20.6 mm tapering to 18 mm; thickness both 2.2 mm.
2. *Pot*. SM Acc. No. 438/4. Part of lower body. *c.*35%, of a very crude hand-made pot. Extremely uneven walls (thickness varies around diameter from 10 mm to 18 mm). Soft fabric tempered with abundant vegetable matter. Outer buff/brown with reddish-brown patches. Core patchy buff/brown, reddish-brown, grey-black. Inner reddish-brown. Finger impressions on inside of base at junction of body walls and base. Base diameter 134 mm. Max. diameter 186 mm. (Not illustrated).

Group 34: Spearhead found in 1887 (Fig. 11)

1. Iron *spearhead*. British Museum Acc. No. 92, 11.4, 16. Angular, straight-sided blade; short solid shank; open cleft socket; lozengiform in cross-section. Swanton's type E3. In fair condition. Replaced wood in socket. Length 401 mm; max. width of blade 34 mm; thickness 7 mm.

Discussion

Weapons

Spears

This discussion uses Swanton's classification of spearheads (Swanton 1973 and 1974) with refinements based on recent work on Upper Thames examples (Dickinson 1976). The predominant spearhead form at Prittlewell (with six examples recovered) is a leaf-shaped blade with a lentoid section and an open, broadly-cleft socket separated from the blade by a short solid shank; this is classified by Swanton as Series C, types C2 and C3, many of which are found in seventh-century contexts, although fifth and sixth century contexts have also produced them. The second most common spearhead from Prittlewell (with five examples recovered) is Swanton's Series E; this type has blade sides

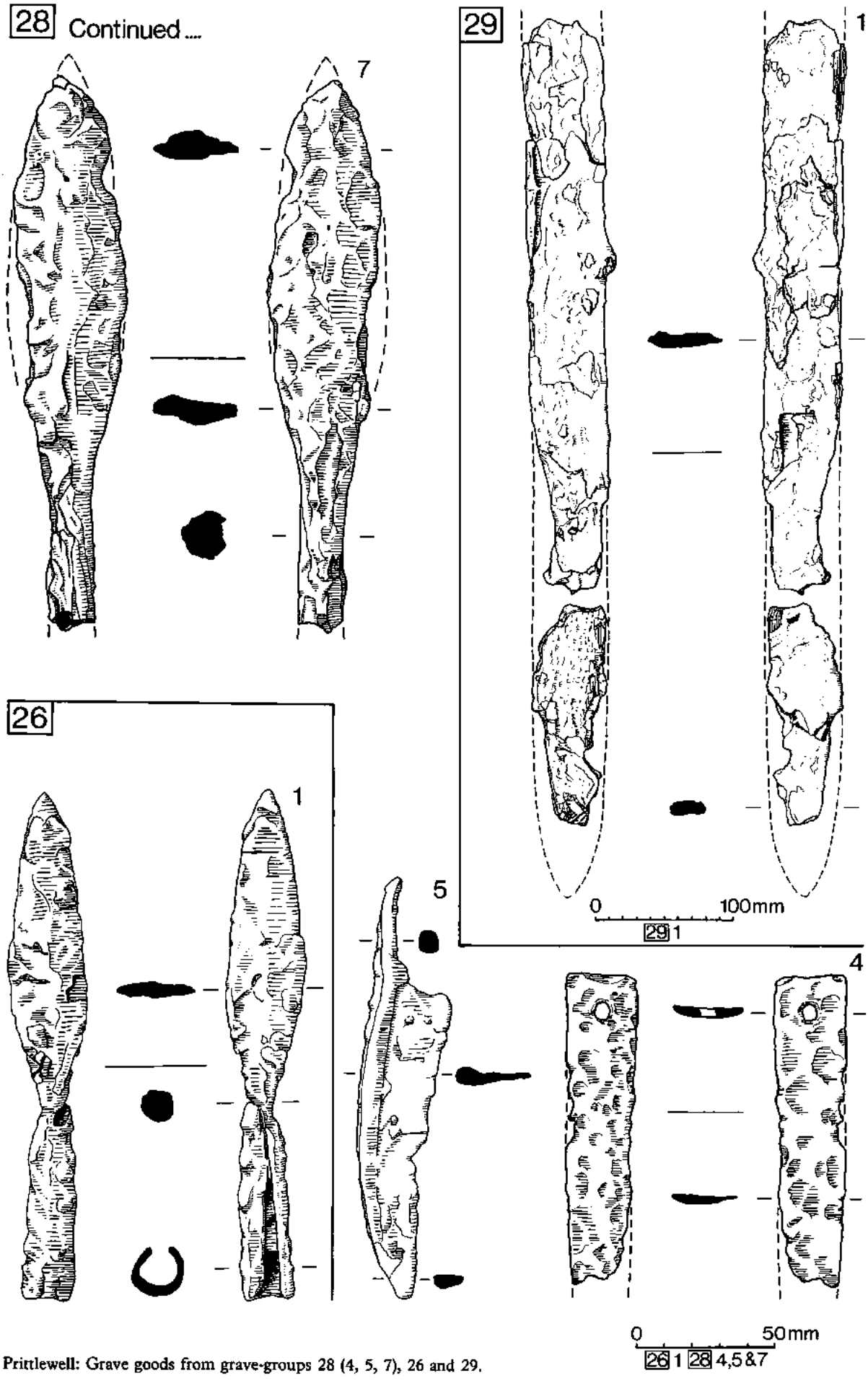

Fig. 13 Prittlewell: Grave goods from grave-groups 28 (4, 5, 7), 26 and 29.

which are straight and lozengeiform in cross-section. Within this series type E3 predominate at Prittlewell; a type which developed during the sixth century and was common during the seventh. The other forms present in the Prittlewell grave-goods are Swanton's types C1, C3, D3, E2, E4, F2, F3, G2. At Prittlewell the grave-goods associated with the spears are, with the exception of grave 25, not closely datable: knives, shield bosses and fittings, swords and a firesteel. The grave-goods from inhumation 25 (a shield boss, sword and scabbard fittings and a silver inlaid iron buckle) have recently been discussed by Welch (1983, 130-1) who suggests that the assemblage belongs in the early sixth century. The most likely date range for the Prittlewell spearheads is therefore *c.*A.D. 500-700.

Shields

Seven shield bosses were recovered from the Prittlewell cemetery; two (described as fragmentary in Pollitt's Report) are now unlocatable. The bosses can be classified, using the classification devised by Evison (1963) and modified by Dickinson (1976) and Welch (1983), as follows: those from graves 16, 18 and 20 fit most comfortably into Group 6 (dating to the late sixth to early seventh centuries) and those from graves 19 and 25 belong to Group 3 (dating to the sixth and perhaps into the seventh centuries but earlier in Kent).

All of the Prittlewell bosses have convex or straight-sided cones with small disc-headed apices, straight or very slightly carinated walls, narrow flanges with small round-headed rivets. This form contrasts markedly with the low, concave or straight-sided shield bosses with large disc-headed apices and rivets recovered from Essex cemeteries dating from the fifth century, such as Springfield Lyons, grave 2674 (Tyler, 1987) and Mucking, grave 243 (unpublished drawing).

Objects associated with the Prittlewell bosses confirm their sixth to seventh century date range. One spear, of a form which developed in the sixth century and was common in the seventh (Swanton's type E3: a long, narrow, angular blade) is associated with the Group 3 boss from grave 25; this assemblage has been discussed by Welch (1983) who puts it in the sixth century. The grave 25 shield boss is the only one to have a hand-grip associated with it. The incomplete grip is of the short-grip type and has replaced wood and textile along most of its length. Several graves with bosses also contained disc-headed rivets: graves 6, 16 and 25; these are presumably shield-board fittings, although those from grave 25 are comparatively small and may belong to the sword scabbard.

X-radiograph analysis of some of the bosses did not elucidate their method of construction.

Swords

The cemetery produced fragments of six swords all from probable graves. Three swords came from grave 17 (SM Acc. Nos 171/2, and 3), one each from graves 18 (SM Acc. No. 179/45) and 25 (SM Acc. No. 179/1) and one from subsequent excavations in 1930 (SM Acc. No. 425/1). The surfaces of the swords were studied using a binocular microscope with a x30 magnification and areas of replaced leather and wood (the grain of which was clearly visible) were noted. Most of the replaced wood occurred along the cutting edges of the blades where it would have touched the wood and leather scabbard. Wood occurred both over and underneath the leather; presumably the scabbards were of wood with an internal leather lining and external leather covering. Only that from grave 25 has scabbard fittings: silver studs and rectangular-headed double rivets (the latter Pollitt recorded as 'along the centre of the sheath, lying at regular intervals across the blade'). These fittings are both decorative and functional; serving both to decorate the sheath and to secure its composite parts. The absence of any decorative fittings (either for sheath or hilt) from the other swords suggests that they were removed before burial; alternatively they may not have been retrieved during the necessarily hurried excavations.

Three swords (17/1, 2 and 3) apparently belong together although Pollitt could not be certain that they came from a grave. Two of these are substantially complete and they vary greatly in size (17/1 and 2); the smaller can probably best be described as a form of short-sword or seax (as suggested by Wright 1982).

All the substantially complete swords were x-rayed and all were found to be pattern-welded. The swords can be classified using a classification devised by Lang for swords in the British Museum's collection (Lang pers. comm.). Of the five swords examined three (17.1 and 2 and 29.1) show a complex arrangement of alternate twisted and straight bars (two have three bars and one five) forming a central core to which the cutting edges were attached (Lang's types B2b and F). The other two swords (18.3 and 25.1) have a simpler arrangement with only two bars twisted in opposite directions for most of the length of the blade to give a chevron pattern on the blade surface (Lang's type A). Double-images and criss-crossing on the x-radiographs suggests that the blade cores are constructed of two sets of bars, one set forming each surface, possibly welded onto a central plain core strip or else directly to each other (this cannot be ascertained without metallographic examination of transverse sections of the blades). This same method of construction was postulated for a sword from Spong Hill, Norfolk (Gilmour 1984, 160-163). Several other Essex swords have patterns and can be grouped as follows (using Lang's groupings): one from Broomfield is type B2a with two layers and one from Great Chesterford is most probably type B1 although the radiograph is unclear. The largest number of swords from an Essex site (6) came from Mucking, cemetery two; none of these, however were pattern-welded (Jones and Jones 1975, 179-180). Across the river Thames in Kent several sites have produced swords with patterns of the same construction as the Prittlewell blades: one example from Faversham, Kent has a group B2b blade (B.M. Acc. No. 83 12-13 621); another from Riseley, Horton Kirby, Kent grave 86 (Hilton 1980) has a type A blade.

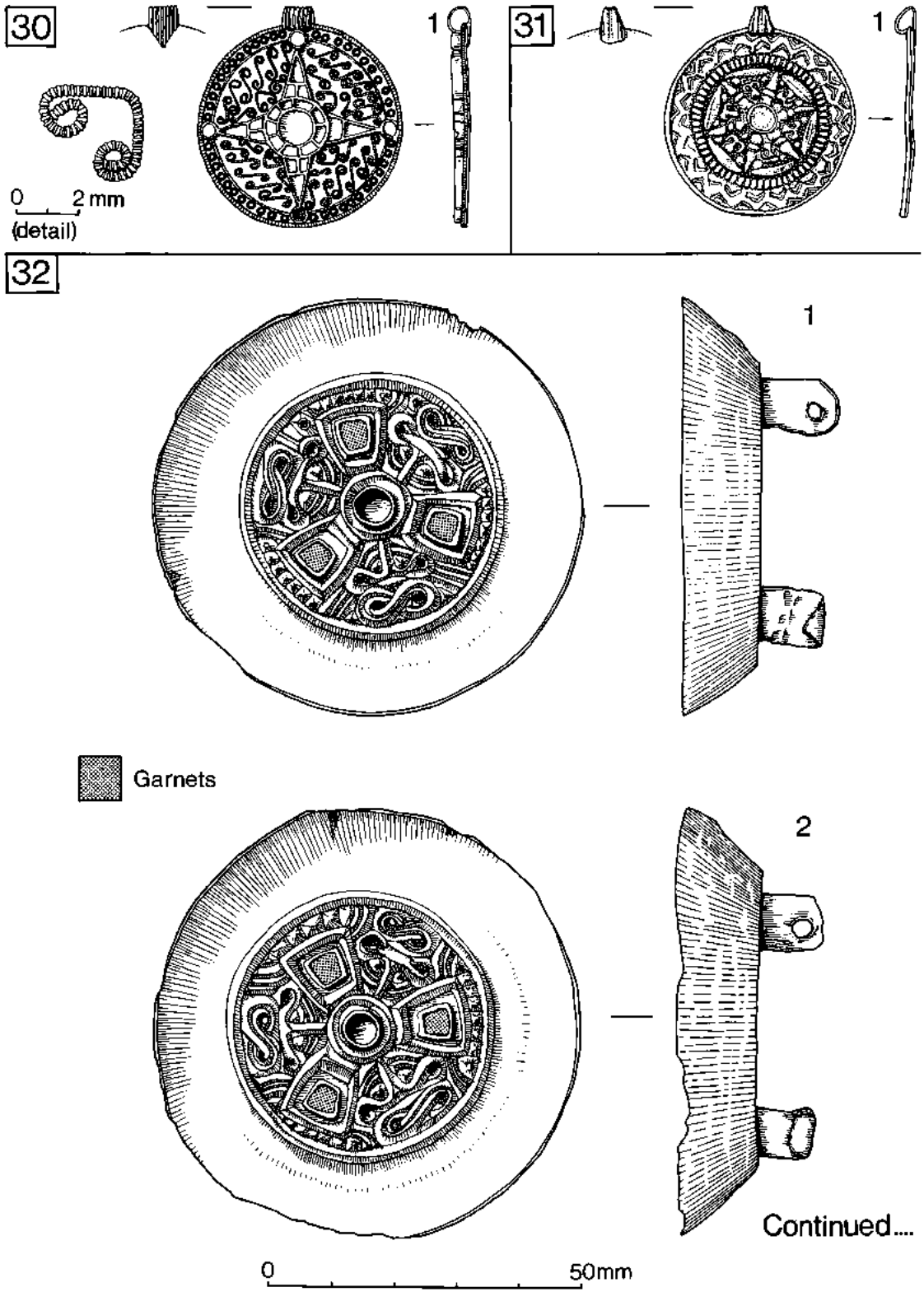

Fig. 14 Prittlewell: Grave goods from grave-groups 30, 31 and 32 (1 and 2).

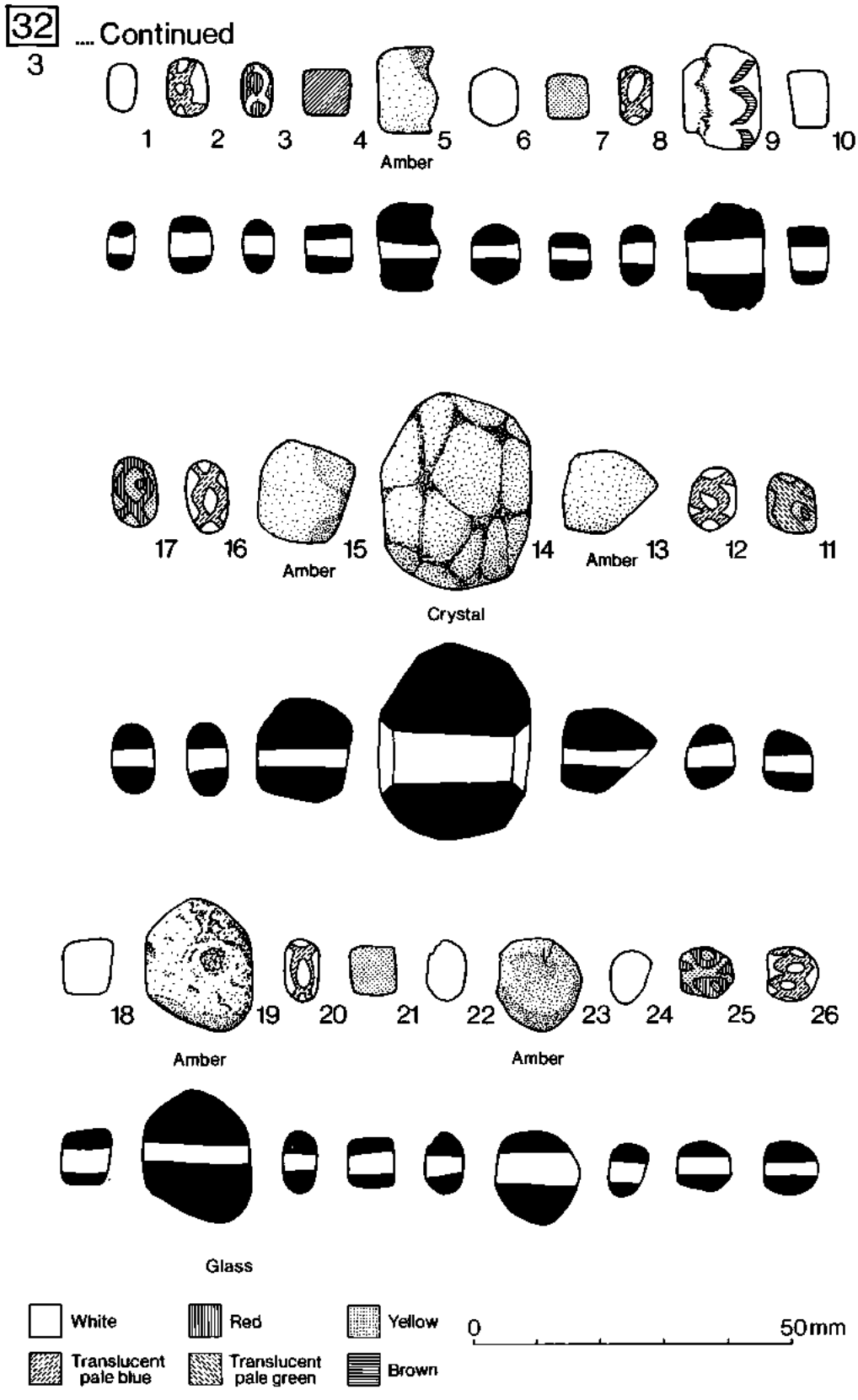

Fig. 15 Prittlewell: Grave goods from grave-group 32 (3).

Jewellery

Pendants

The two pendants (Fig. 14) exhibit techniques of craftsmanship generally regarded as Kentish: gold decoration executed in gold filigree including tiny roundels and inset garnets on one and repoussé decoration on the other. The repoussé pendant has a design which could be seen as a 'running leg' motif, a device common on late fifth and sixth-century saucer brooches. Several theories exist regarding the origins of the 'running leg' design: it may have derived from a Roman motif either of a cross formed of two, intertwined loops (Leeds 1913, 48) and a swastika (Cook 1958, 72-3) alternatively it may have evolved from the four-scroll design commonly found on saucer and applied brooches. Whatever the origins of the device its occurence on the Prittlewell pendant along with stylized human faces suggests a comparatively early date of manufacture. It is thought that gold was not generally available for use in the manufacture of personal ornaments until the end of the sixth century and then only to any great extent in Kent (Hawkes *et al.* 1966, 99). Given the proximity of Prittlewell to Kent, it is plausible that the pendant was manufactured either at the end of the sixth century or the beginning of the seventh in Kent and that it then found its way across the Thames into Essex. Its date of deposition at Prittlewell, however, may have been well into the middle of the seventh century as it shows some signs of wear.

The garnet set pendant is undoubtedly a seventh-century product. Although no precise parallels exist for it, one can find parallels for some characteristics. The device of a four-pointed cross set with semi-precious stones occurs on pendants from Kentish burials including one from Riseley, Horton Kirby, Kent grave 56 (Hilton 1980) and one from Sibertswold Down, grave 172 (Hawkes *et al.* 98-138). An approximate date of mid-seventh century for the Sibertswold pendant's manufacture derives from its association with coin pendants belonging to the second quarter and middle of the seventh century (Hawkes *et al.* 1966, 112-3). By analogy with the Sibertswold dating the Prittlewell garnet-set pendant may well have been buried around the middle of the seventh century, in particular as it shows little wear and was therefore deposited early on in its life.

Saucer brooches

The cast gilt copper alloy saucer brooches are unusual in that they each exhibit three inset keystone garnets with a central roundel of meerschaum. There is however nothing remarkable about the range of chip-carved decoration that surrounds them: three stylized faces, S-shapes, wedges and beaded edges which serve to fill in the areas between the garnets. All of these motifs are commonplace on brooches manufactured during the period A.D. 450-650. The large size of these brooches and the use of garnets could be seen as indicative of a fairly late date of manufacture, perhaps during the second half of the sixth century or first half of the seventh. They certainly share characteristics with seventh-century composite keystone-garnet disc brooches which began to be produced in Kent during the last quarter of the sixth century (Avent 1975, 7).

Analysis of saucer and disc brooches in Upper Thames Valley cemeteries (Dickinson 1982, 21-50) has demonstrated that superficially similar pairs are by no means identical. The Prittlewell brooches are certainly not identical: both the size and number of individual elements incorporated in the design varies considerably. The precise method (or methods) of saucer brooch manufacture employed during the period A.D. 400-750 is not yet fully understood (Dickinson 1982, 21-50); the Prittlewell brooches suggest that not only different moulds but different models must have been used to create superficially identical pairs of brooches.

Beads

The necklace of polychrome glass and amber beads, with a single large faceted rock crystal bead forming the centre piece, is very rich in appearance as befits the saucer brooches it accompanies. Of the 26 beads in the necklace, 20 are glass; with an almost equal number of plain beads (9) to decorated (11). The decoration is of criss-crossing, undulating lines and dots, in all but one case the translucent glass is marvered into the opaque glass bead body. In addition to glass, two natural substances are shaped into beads: five amber beads are rather crudely shaped, but the large crystal bead is carefully furnished with 18 facets. The dating of the necklace is difficult; the absence of plain translucent blue glass annular beads (a type popular in the sixth century) suggests a seventh- or late sixth-century date (Cook 1981, 81-3).

Bone comb

The comb is of the double-sided composite form with incised dot-and-circle decoration. The form and decoration are common devices on Early Saxon combs and can be paralleled in numerous cemetery and settlement contexts.

Buckles

Five buckles occurred in inhumations at Prittlewell — three associated with swords (two actually adhering to sword blades). Three forms are present: oval loop (three examples); D-shaped loop (one) and kidney-shaped loop (one). The buckle from grave 25 (no. 17) has a flattened loop with regularly spaced inlaid transverse wires; the pin has a rectangular basal plate with a series of parallel horizontal inlaid silver wires. The dating of silver wire inlaid iron buckles has been discussed by Evison (1955, 18-20) and Welch (1983, 94-7). Welch suggests that such buckles were manufactured within the fifth century although some may not have been buried until the early sixth (Welch 1983, 97). The objects deposited in the Prittlewell burial along with the inlaid iron buckle include a kidney-shaped buckle (adhering to the sword blade); this association can be interpreted as indicative of a late fifth-century burial.

Domestic utensils

Knives

Using Evison's classification devised for the Dover: Buckland cemetery, the Prittlewell knives are types 1, 2 and 4 (Evison 1987, 113). The predominance of type 2 (six examples) and the presence of type 4 the latter considered by Böhner to be a seventh century form, (Böhner 1958, 214) complies with the sixth to seventh century date range for much of the other metalwork.

The knife from grave 7 (Fig. 5) is of particular interest in that its tang is complete and has a 'cocked hat' pommel. Its length (332mm) is sufficient to classify it as a seax (Hawkes 1973, 188).

Pottery

Four pottery vessels were recovered from the Prittlewell cemetery. One is an extremely crude hand-made pot in a soft fabric with abundant vegetable temper. Of the other three vessels, two are wheel-thrown imports and one is an imitation of a wheel-thrown pot. The Prittlewell wheel-thrown vessels have been published and classified by Evison as her group 3e 'Biconical bowls, tall, upper part longer than lower part and corrugated'. One other Essex example of this type is recorded: that from Old Heath, Colchester (Evison 1979, 16 fig. 26a). Evison points out that, although more widely spread than other wheel-thrown imports, most still come from Kent. Essex pots could have been relayed through Kent or brought direct by the same Continental ships that called at Kentish ports. The Prittlewell wheel-thrown jars were found next to one another and with the garnet-set seventh century gold pendant; the Kentish affinities to all three objects suggests that the burial was that of a Kentish woman.

Hand-thrown imitations of wheel-thrown bottles are rare and have been discussed by Evison (1979, 18-22) who suggests that the Prittlewell bottle might be a miniature copy of a bottle type found in Kent, at Margate and Dover (Evison) 1979, 19 fig. 11a and 6). The imitation bottle was associated with the gold repoussé pendant whose Kentish affinities have already been discussed.

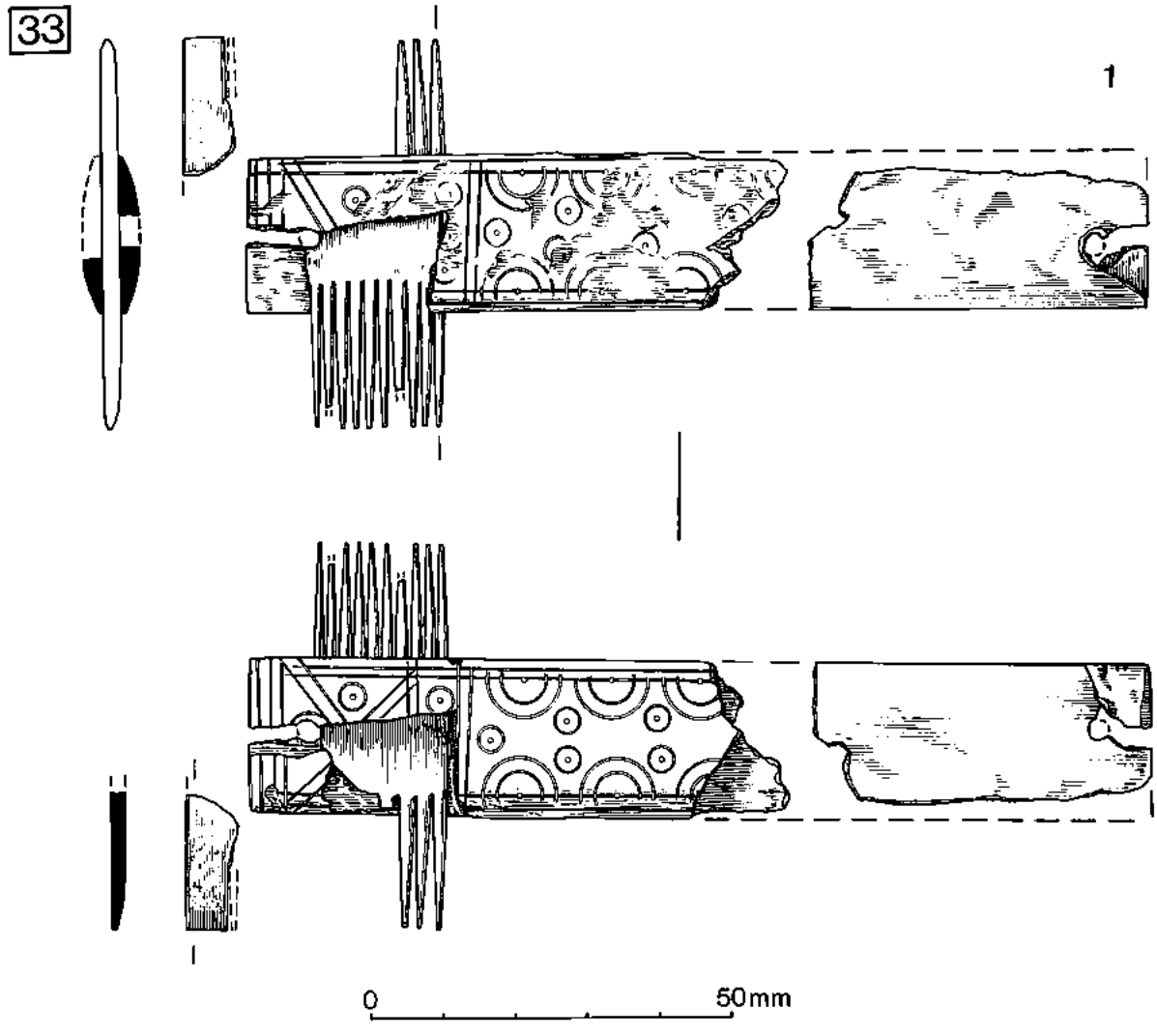

Fig. 16 Prittlewell: Grave goods from grave-group 33.

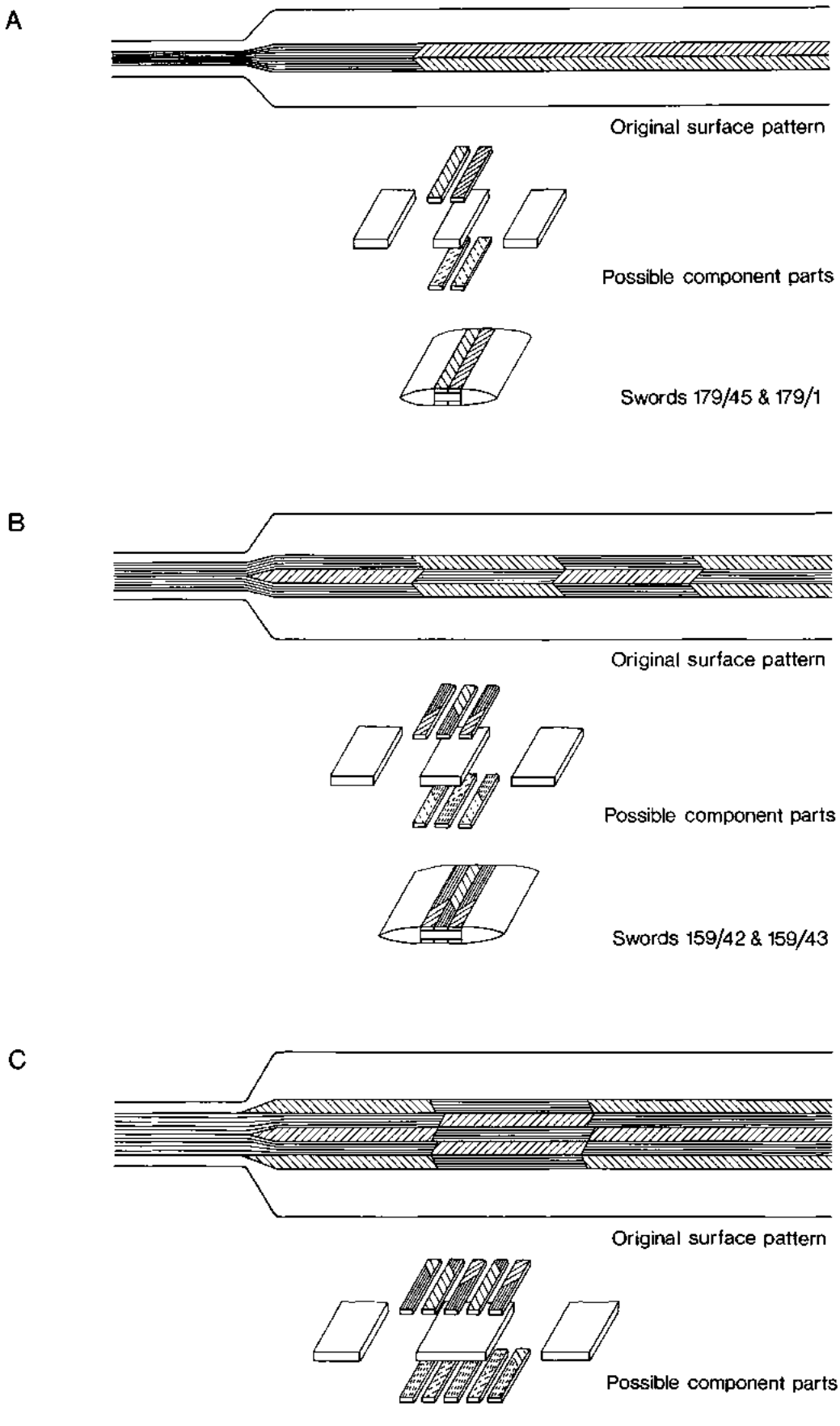

Fig. 17 Prittlewell: Swords; simplified conjectural diagrams to demonstrate construction, based on X-radiographs.
A. 179/45 (grave-group 18.3) and 179/1 (grave-group 25.1)
B. 159/42 (grave-group 17.1) and 159/43 (grave-group 17.2)
C. 425/1 (grave-group 29.1)

Conclusions

It is evident at Prittlewell that we are not dealing with a complete cemetery nor, necessarily, a representative section of one. Any conclusions must bear this in mind. The incomplete nature of the investigations precludes any meaningful statistical analysis of burial practices and groupings within the cemetery.

Nonetheless, the grave-goods point to a date range for the cemetery *c.*A.D. 500-700, which is somewhat later than Early Saxon funerary evidence from other sites in south Essex such as Mucking, Thurrock (Jones and Jones 1975) and North Shoebury (Wymer, forthcoming) which date from the fifth century.

With the exception of the distinctive Kentish material, the artefacts are similar to grave-goods from cemeteries sited along both sides of the Thames and its tributaries in North-west Kent, Surrey and the Upper Thames Valley. The presence of Kentish material may be explained by a small-scale movement of people across the Thames in the seventh century or simply increased trading links at that time.

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Author: Susan Tyler, Archaeology Section, Hertfordshire County Council, County Hall, Hertford.

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Essex Archaeology and History **19** (1988), 117-153

Excavations on the north side of Sun Street, Waltham Abbey, Essex 1974-75: Saxon burials, precinct wall and south-east transept

by P.J. Huggins

with contributions by K.N. Bascombe, R.M. Huggins and Glenys Putnam

Summary

Small scale rescue excavations and site watching were carried out, prior to and during car park construction, in the back gardens on the north side of Sun Street, in an area now known to be within the south-east corner of the monastic precinct. The lines of the precinct wall were established and three buttresses of the south-east transept of the monastic church were seen.

Part of a Christian inhumation cemetery was investigated. This was shown to have been in use in the Middle Saxon period and extended at least to the early 11th century. The cemetery is taken to be part of that beginning, in the second half of the 7th century, near the present church where a timber church is now known to exist. One of the burials contained a copper-alloy plate with incised decoration of addorsed snakes of Ringerike style.

Other finds included stray mesolithic flints, a Bronze-Age arrowhead, a range of pottery groups, 13th-century tile-laying waste, a Madonna statue of c.1380 and part of a 15th-century lime kiln; the latter is suggested to be associated with vellum and/or parchment manufacture. A skeletal analysis is included. There is a full documentary survey.

1 Introduction

Rescue excavations were undertaken by Waltham Abbey Historical Society from 1974 to 1977, before and during car park construction in the back gardens (TL 382006) of the properties on the north side of Sun Street (Pl. 1A; Figs. 1 and 2). Salvage recording also took place during the works. Previous consideration (Huggins 1970, App. 7) had suggested that these gardens were within the monastic precinct of the Augustinian Abbey, but the exact position of the boundary hereabouts was not known.

The gardens were enclosed within walls of various construction and it was hoped to date these and to trace the extent of, and date, the burials known to lie in the area. It was also hoped to establish the nature of any pre-monastic occupation.

2 Documentary Survey

by K.N. Bascombe

The place-name *wealdham*, from which Waltham derives, is considered (Huggins, R.M. 1975, 201) to be a Saxon appellative name used as a general term to describe a royal administrative centre, within a forest, in areas of primary Anglo-Saxon settlement, in the period 450-500 A.D. It gave its name to the Hundred of Waltham; hundreds being first mentioned in the reign of Edmund, 939-46 (Jewell 1972, 48).

The recorded history of Waltham began with an account, written about 1177 by a canon of Waltham, of its ownership by Tovi in the reign of Cnut, 1016-35 (Stubbs 1861, 9); Tovi was described as first in all England after the king, his *stallere*, and standard-bearer (*vexillifer*). Besides Waltham, Tovi is known to have owned estates at Reading, Berkshire; Enfield, Edmonton and Lambeth, London; Cheshunt, Mimms and Hitchen, Hertfordshire; Kelvedon, Loughton and Alverton, the latter is now part of Loughton, all in Essex; and at Montacute, Somerset (Stubbs 1861, 4-11) and probably elsewhere. A crucifix found at Montacute was brought to Waltham, by Tovi, and enshrined in the church there during the reign of Cnut. On the basis of the statement that 'previously there was nothing in the place save Tovi's hunting lodge' (*antea nichil erat in loco nisi vile domicilium ad succurrendum cum causa venandi accederet illuc heros ille* (Stubbs 1861, 9)), it had been assumed that Tovi in fact built the church, but this is nowhere expressly stated.

Tovi appointed two presbyters to serve God, with other clerks, in the church (Stubbs 1861, 13). After his death, his son Athelstan is stated to have forfeited Waltham to the crown, so that Tovi's grant of that estate to the church cannot have been fully effective (Bascombe in Huggins 1976, 7).

The town of Waltham is said (Stubbs 1861, 10) to have been founded by sixty-six persons who followed the crucifix on its journey from Montacute to Waltham. In 1066 Domesday Book records (VCH 1903, 446) that Waltham is a large manor of forty hides with eighty villeins, twenty-four bordars, six serfs and twenty rent-paying tenants (*censarii*), as well as probably five sokemen and their men. By 1086 the serfs had increased to seven in number, the rent-paying tenants to thirty-six and the sokemen to probably nine and there were three mills rather than one. The increase in both *censarii* and mills probably relates to the needs of the college newly founded by Harold Godwinsson for a dean and twelve canons.

Little information relevant to the site of the present excavations seems to be available until the refoundation by Henry II in 1177 (VCH 1907, 167), of Harolds's collegiate foundation of *c.* 1060, as an Augustinian priory, elevated to an abbey in 1184. Among the various Pipe Roll entries detailing expenditure on the works at Waltham during this period are mentions[1] of 26s 8d for the removal of barns in 1177-8 to enlarge the canons' *curia*, and of £20 for buying land in 1179-80 for the same purpose.[2] It is not at present clear to whom this land belonged. Certainly the crown held the manor at this time; between 1176-1184 it was farmed (VCH 1965, 156-7) by Aucher the Huntsman, after 1178 in association with William Napier, but the account of the manor stood at £100 throughout this period and the land in question does not therefore seem to have formed part of the manor. Land worth 17s 1d per annum in Waltham, granted[3] to the canons in 1177-8, does however seem to have been parcel of the manor since it was subsequently included in the account for £100.[4]

Although the topographical detail of these Pipe Roll entries may never be resolved, it seems clear that a substantial enlargement of the canons' *curia*, i.e. the abbey precinct in some sense, took place shortly after the refoundation in 1177 when the change from a college of secular canons to regular canons necessitated conventual buildings and an extension of the church. As the area of the present investigation is known, from previous excavations (Charlton 1939, 330 and Colvin 1963, 88-9), to be immediately south of this great new extended church, it may have been part of the

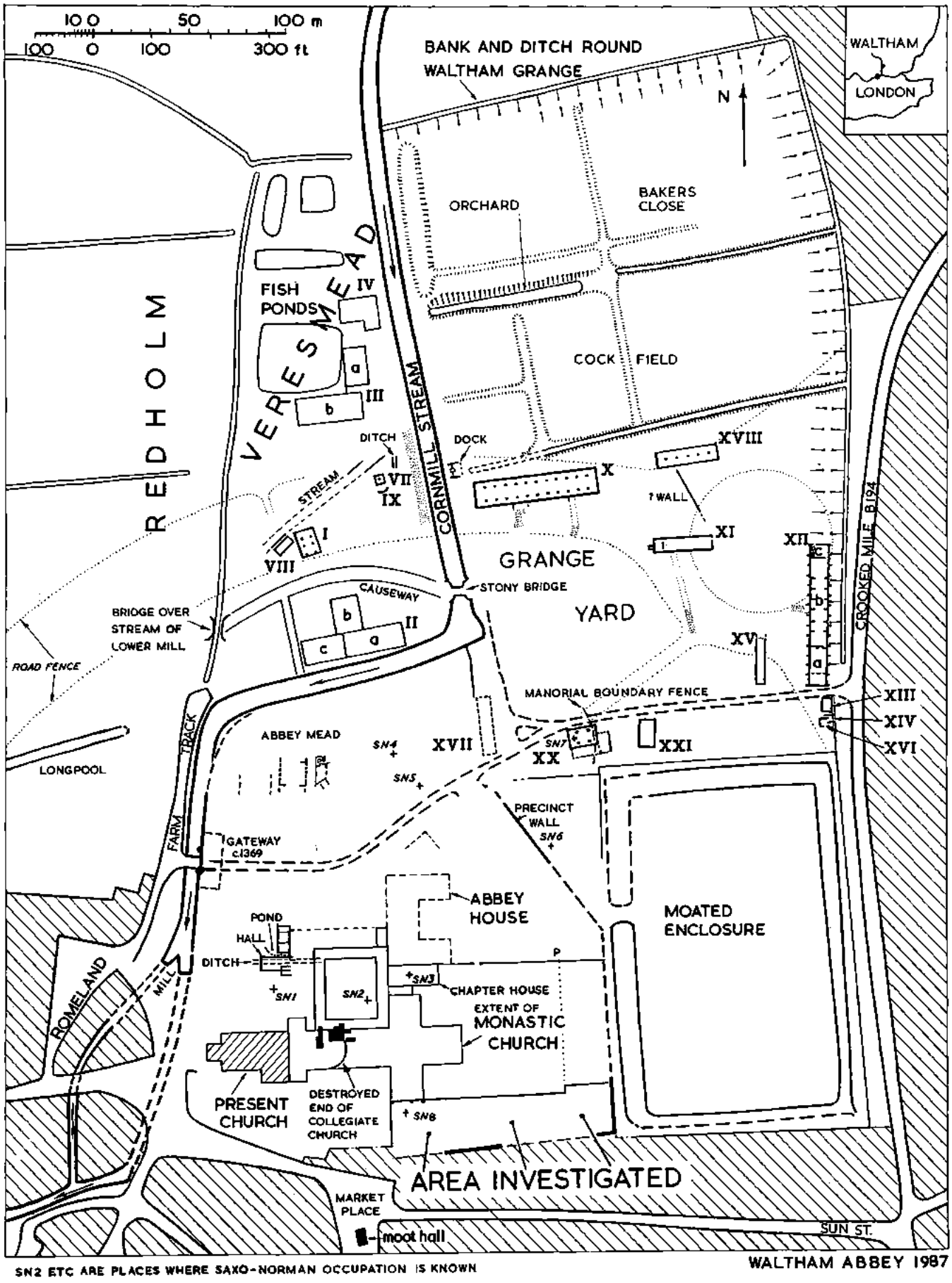


Fig. 1 WALTHAM ABBEY, ESSEX
Map of the monastic precinct, grange and adjacent areas; the area investigated is south east of the monastic church.

land acquired at this time. The southern boundary of this land is not parallel to, and therefore probably not contemporary with, Sun Street, which, with the Market Place, may not have been laid out in its present form before the grant to the canons (Dugdale 1830, 65) of the manor of Waltham Holy Cross and the 'market of that manor' in 1189.

The last Pipe Roll entry for work at Waltham following Henry II's refoundation occurs in 1183-4, and relates to the supply and carriage of twenty-five cartloads of lead, presumably for roofing. No positive indication that the work was completed is given; however a boatload of marble was brought from Purbeck to Waltham Abbey in 1229[5] which suggests that building or re-building was in progress then. The earliest charter[6] for the Augustinian foundation at Waltham appears to be that of 'King Henry son of King Henry', i.e. Henry son of Henry II, given at Argentan and dated by Eyton (1878, 218) about September 1177. The confirmatory charter[7] was given at Winchester, according to the same authority (Eyton 1878, 224) at Christmas 1178 (Eyton's argument for this date would bear re-examination and a date in July 1178 seems possible). Dedication of the conventual church is recorded (Paris 1889, 433) in 1242.

In 1369 the abbey was granted[8] licence to surround its precinct with a wall. However, an earlier reference to a stone wall north of Sun Street, then East Street, occurs in 1322,[9] where a property abutting south on East Street is said to be bounded on the north by a stone wall 'where the abbot and convent have eight feet outside the wall'. This suggests a wall set back by this distance from the actual precinct boundary, possibly to accommodate a ditch or to ensure the Sun Street occupiers did not extend their buildings up against the wall, also possibly to facilitate repairs. Collation of this document with a medieval survey of the town[10] suggests that the property in question lay near the west end of Sun Street. Traces of a 'wall' running east to west were claimed in 1954 (Anon 1952-4, 212-3) in a position 'a few feet from the Sun Street building line'. A position eight feet north of the established precinct wall line, as seen at Site 6 in the present excavation, would lie within a large parallel ditch there; this 'wall' is thought to be a misinterpretation of whatever was seen. If the wall recorded in 1322 lay eight feet north of the established precinct wall as seen at Site 6, it must have been destroyed when the ditch was dug. The archaeological dating evidence hardly allows the 1322 wall and the established precinct wall to be one and the same. A 15th-century reference to disturbances at Waltham records that 'having broken the close of the abbot of Waltham' an assault occurred; whether this involved the throwing down of the wall such as that seen at Sites 2 and 6 is not known.

References of 1531 and 1555 quoted by Winters (1888, ix-x) refer to a 'new cemetery' lying north of a property on the north side of East Street (Sun Street on Fig. 1). This property was considered by Winters to be the White Horse Inn (Fig. 2) at the west end of the street. However, a deed[12] of 1446 makes it clear, at that date, that the new cemetery lay north of a property almost at the east end of East Street and therefore formed at least part of the present moated enclosure (Fig. 1).

Since the dissolution of the abbey in 1540, its buildings, with the exception of the parish church, which is part of the church of Harold's foundation, have been almost totally demolished. Little evidence is available on the progress of this work. An abortive proposal for elevation of the church to cathedral status (VCH 1907, 170) no doubt preserved it for a few years, but in 1544 there is a mention of stripping of lead from the abbey buildings. King Henry VIII last visited Waltham in 1542, some demolition appears to have been in progress by 1543. When Sir Anthony Denny acquired the site of the abbey in 1547 'empty ground' was mentioned in the grant (Bascombe in Huggins 1976, 80). In 1556 the central tower of the Romanesque church of Harold's foundation collapsed, and in 1556-8 a new tower was built at the west end of the remaining portion of the building (Fuller 1840, 274). It seems probable that the eastern parts of the church, Henry II's extensions, had already been largely demolished by this time. In 1562 the demolition of a wall in the abbey is expressly mentioned (Fuller 1840, 276).

The next datable event in the history of the abbey site is the construction of the Abbey House from the ruins by Sir Edward Denny, grandson of Sir Anthony, about 1590 (Musty 1978, 167). A poem written in 1589 records only ruins, walls, walks and monuments (Cussans 1870, 23). A few years later, between 1592 and 1603, tidying-up operations in the abbey area are mentioned (Farmer 1735, 25, quoting Fuller's 'Worthies of England'). The only view of the Abbey House, as built by Edward Denny, has been reproduced elsewhere (Huggins 1972, Pl. 1A) and suggests that the southern end of the precinct had already by this time, in the 1590's, been cut off from the rest and subdivided by north to south boundaries into what were presumably gardens for the Sun Street properties. A recently published plan by Isaac de Caus, datable between 1604 and 1626 (Harris and Tait 1979, Pl. 89), of the gardens attached to the Abbey House indicates that, if so, this portion of the precinct had been re-absorbed into the grounds. This plan also shows a wall running northwards to point P (Fig. 1) and, faintly, a continuation southwards to the abbey precinct wall (probably seen at Site 13), but nothing is shown on the line of the brick wall F88 (Fig. 2).

It has been alleged (Musty 1978, Para. 4.3b) that the 'abbey buildings' were demolished in 1671. Certainly the Abbey House and estate were remodelled *c.*1690 for Samuel Wake Jones and *c.*1730 for his nephew Charles Wake Jones[13] (Farmer 1735, 159); the two surviving gate piers in the wall extending east from the Chapter House (Fig. 1) are typical of the former date. The south-east corner of the precinct, bounded on the north by a brick wall F88, pierced by a wooden-framed doorway, lately renewed, which is out of line with the rubble wall F15 further west, was traditionally known as the 'kitchen garden', presumably of the Abbey House in its last phase (information from Mrs. J.M. Jupp of Waltham Abbey, derived from her mother Mrs. E.M. Walsham, 1886-1967). However, with the demolition (Muilman 1771, 157-8) of this house in 1770, this area would again have been leased out; a map by Crawter (Waltham Abbey Historical Society Collection) of 1825

A

B (Photos: J.H. Littlefair)

Plate 1 WALTHAM ABBEY, ESSEX, MONASTIC PRECINCT

A View to the west of the area investigated. In foreground, the south-east corner of the precinct wall being conserved (1977).

B View to the west after the completion of the car park. On the left, the back of the Sun Street properties lie along the line of the precinct wall; centre, wall F33; far right, remains of the 'tower' buttress of the south-east transept of the monastic church (1979).

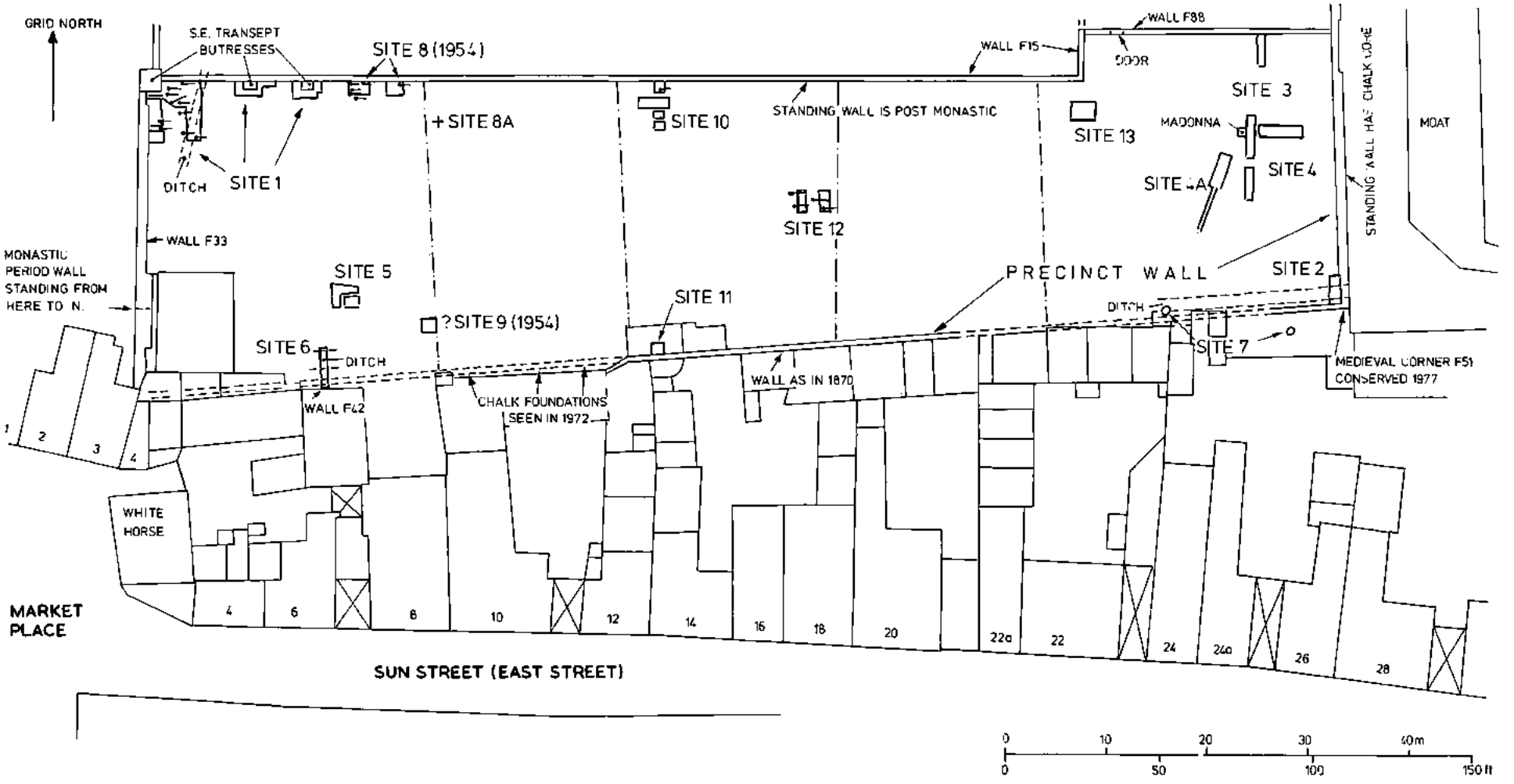


Fig. 2 WALTHAM ABBEY, ESSEX
Plan of the north side of Sun Street including the area investigated which is within the monastic precinct, showing Sites 1 to 13.

shows the southern end of the precinct divided into four holdings which were subsequently sub-divided. Some at least of these plots were still held on lease from the lord of the manor well into the 20th century (documents in WAHS Collection). In the early 1970's this land was acquired by the Waltham Holy Cross U.D.C. and its successor in title, the Epping Forest D.C., and has now been laid out as a car park so that Sun Street could be pedestrianised.

3 General discussion

This report is of small-scale excavations undertaken to answer specific questions in a third of a hectare area within the south-east corner of the monastic precinct. The area was investigated at Sites 1 to 13, the location of the sites and the position of the actual trenches are shown in Fig. 2. The unusual step is taken of including this general discussion before giving the detailed evidence in the belief that it will be easier for the reader to gain an overall view of the archaeology revealed by the investigations; only a few major references are given at this time so as not to interrupt the text too much.

(a) Middle Saxon use of site, *c.*650-870 A.D.

Evidence of Middle Saxon occupation was limited to a pit at Site 6 and, probably, the early features at Site 4. The population was buried in rows of earth-cut graves, part of the Middle Saxon cemetery was discovered at Site 1. The graves contained a few grit-tempered and grass-tempered pottery sherds in their fill. This suggested a Middle Saxon date while the absence of shell-tempered pottery in the grave fill indicated a date before *c.*850 A.D. The more precise closing date of 870 A.D. used in the heading above is a historical reference, in the Anglo-Saxon Chronicle, to the Danish sacking of Christian establishments in Essex. The position of this cemetery suggested the liklihood that a contemporary church existed to the north or west under or near the present parish church. Later excavations (Huggins, unpublished [1]) in 1985/6 showed that there were timber and stone predecessors to the present church and that the same site has continued in use. A radiocarbon date for a burial found in these later excavations establishes the cemetery, now under part of the present nave, back to the 7th century.

The simple un-coffined inhumations can be compared with the nearby Middle Saxon cemetery at Nazeingbury (Huggins 1978) where there is now a documentary reference of *c.*700 A.D. to the establishment of a house of God (Bascombe 1987). Nazeingbury came to an end about the time of the Danish invasions but the cemetery at Waltham was still in use as a burial ground in later centuries.

(b) Late-Viking phase, *c.*1020 A.D.

The single find, in a grave at Site 12, to suggest a late-Viking presence is the copper-alloy plate (App. 8/1) with a design in the Ringerike style, dated to the late 10th or early 11th century. If it is associated with Tovi's possession of the estate the date would narrow to *c.*1020-30 A.D. The plate is taken to support the previous interpretation of a turf-walled hall of Norse or 'colonial Viking' style some 140 m to the north west (Huggins 1976).

(c) Saxo-Norman and early medieval occupation

The small ditch F9, at Site 1, is typical of Saxo-Norman occupation found to the north in Abbey Mead (Musty 1978) and under the forge (Huggins 1972). Presumably the need to drain storm water from the area of timber buildings was predominant. The ditch was probably filled *c.*1177 as the land was acquired or prepared for monastic building. The pit F24, cut by the middle buttress of the transept of the monastic church, showed that rubbish burying was still taking place there in the early 13th century.

Pottery (App. 1) and the copper-alloy plate (App. 8/1) in a grave at Site 12 suggest that the cemetery was in use certainly to the late 10th century and, possibly, a little later.

(d) Monastic buildings

The main extent of the monastic buildings (Fig. 1) was known by 1939 (Colvin 1963, Fig. 16). The only remains seen in the present excavation were of the three buttresses of the south wall of the south-east transept of the monastic church (position shown in Fig. 1); the discovery of the 'tower' buttress at the south-west corner was unexpected. Pottery in the pit F24 cut by the central buttress shows that this part of the monastic church was built in the 13th century, probably only a decade or so before the dedication of 1242.

(e) Monastic precinct walls and boundary ditch

The line of the precinct wall along the south and east sides of the area investigated was established and the south-east corner was found to exist above ground, it has been conserved as a feature in the car park. The ditch, just inside the south wall of the precinct, passes under the east wall and was presumably the boundary there before the precinct wall was built *c.*1370. The 'stone wall' of 1322 is not understood.

(f) Industrial activities of the Monastic period

A small group of glazed floor tiles (App. 2), found at Site 5, are thought to be waste from the re-laying of a pavement in the monastic church. The lime kiln at Site 4A, and other evidence, may represent the manufacture of vellum and/or parchment. This latter activity confirms the supposition that no cemetery existed here in the monastic period.

(g) Post-Dissolution activities

The careful burial of the mutilated Madonna statue (App. 4; Pl. 4) at Site 4 is seen as the act of the pious following its desecration at the Reformation. It gives valuable evidence of the costume of a fashionable lady of *c.*1380, and shows that the laws of perspective were applied to such work at this time. The garden walls on the north side of the site were all shown to be of post-Dissolution date. At the west end the wall was built over the demolished buttress foundations rather than directly on top of the transept wall foundations.

The documentary research has followed the use of the area as kitchen gardens, first for the Abbey House, and later for the Sun Street properties.

4 The excavations

The excavations began in 1974 when the gardens were derelict and continued in 1976 when deep trenching was only permitted in areas which were to be landscaped. In 1977, during the car park construction, site watching and salvage work continued.

For ease of explanation the area is here divided into thirteen Sites (Fig. 2). Sites 2-4 were dug in 1974, Site 1 in 1976 and Sites 4A and 5-7 in 1977. For completeness the 1954 trenches are included as Sites 8, 8A and 9 and independent trenching by W.F.G. Walker and P. Penfold is indicated as Sites 10-13.

4.1 Site 1 (Plans, Fig. 3; Sections, Fig. 4; Views, Pl. 2)
Object: To date the standing walls at the north west and to see if the cemetery existed there. After the corner buttress of the south-east transept of the monastic church was recognised, the foundations of the two other buttresses were investigated.

4.1(a) Pre-monastic features

A loam F10 was found over one metre below the present ground level, this represented the ground surface when the transept was built (see sections, Fig. 4). Seventeen graves for Christian inhumation burials were seen which had been dug through this loam and the underlying sandy loam F11 and mostly just cutting into the natural clay below. The only finds in the graves were a few sherds of Saxon grass-tempered and grit-tempered pottery (see F28, Para. 4.1f); further sherds of these wares were found in the surrounding soils F10 and F11. The east to west orientation of the graves (Fig. 3; Pl. 2C) and the lack of grave goods suggests they were Christian burials. Some burials were disturbed by the buttress foundations and some were cut through by the ditch F9, itself filled at the beginning of the monastic period. The absence of shell-tempered pottery, which is common after about 850 A.D. in Essex, in the grave fill, suggested a Middle Saxon date for the burials. A radiocarbon date (Har-2209, 1977) of A.D. 810±70 for grave 8 is

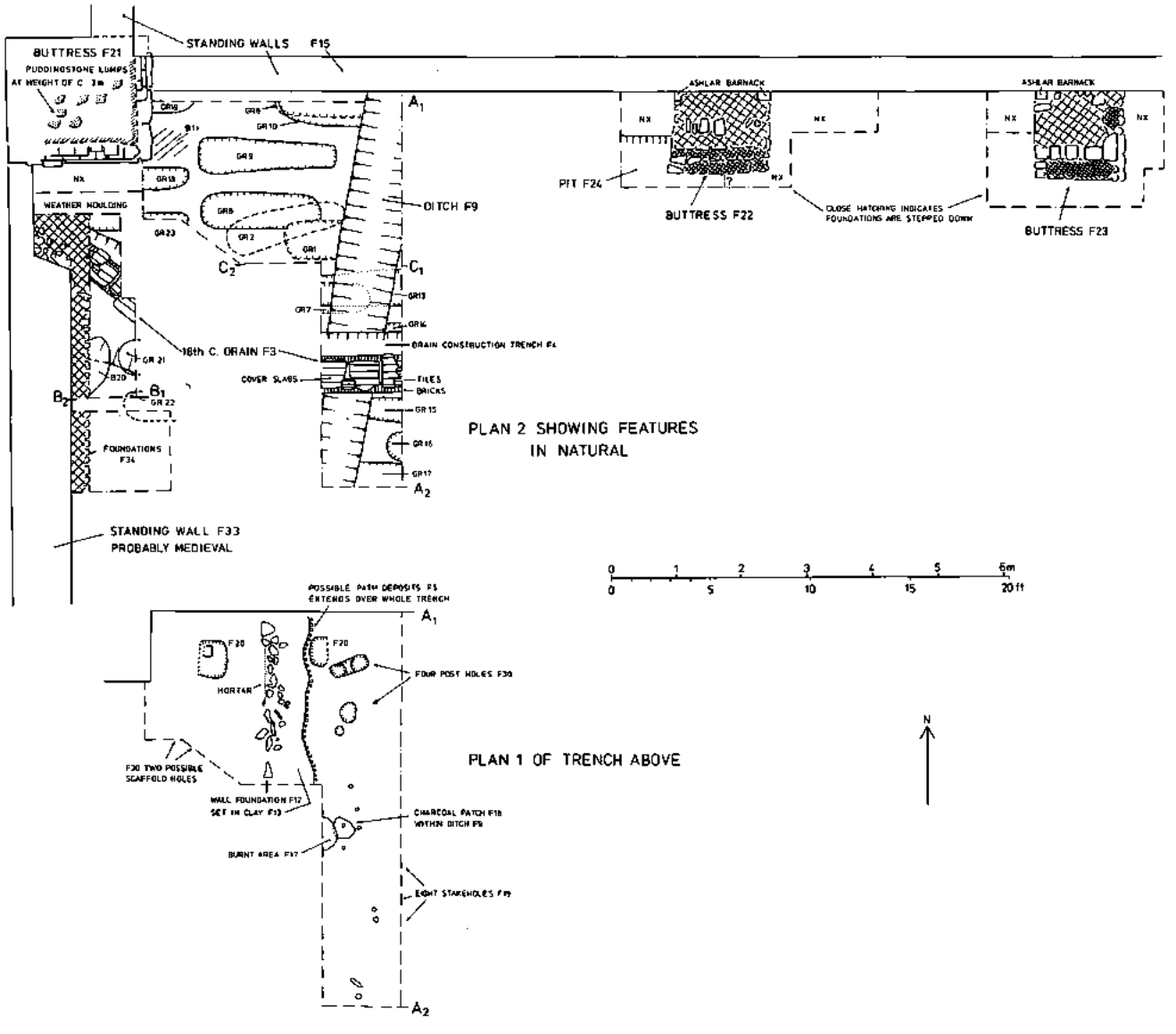


Fig. 3 WALTHAM ABBEY, MONASTIC PRECINCT, 1976-7
Site 1: plans of excavated features. The three buttresses are of the south-east transept of the monastic church.
GR = grave, B = re-deposited burial.

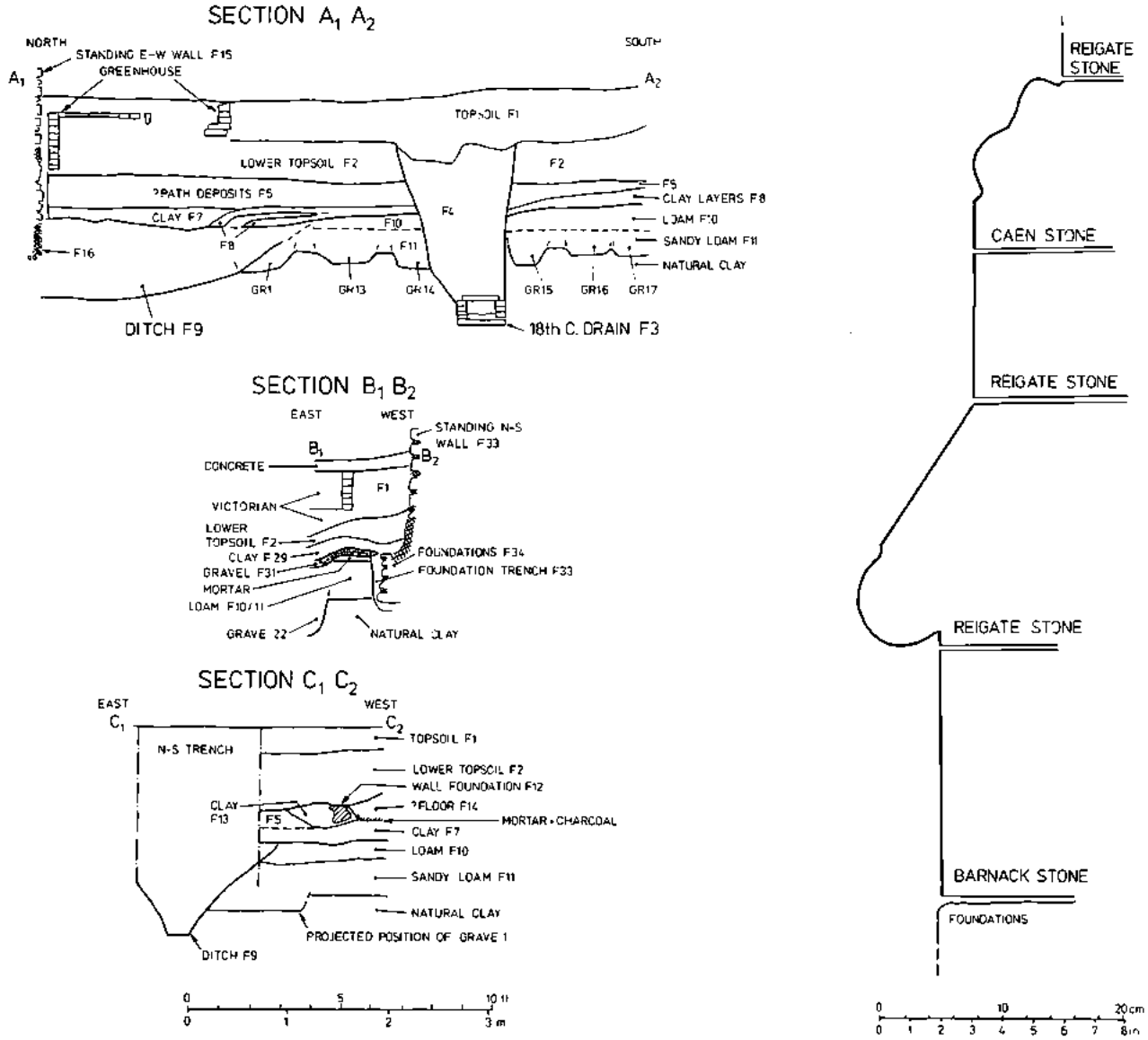


Fig. 4 WALTHAM ABBEY, MONASTIC PRECINCT, 1976-7
Site 1: sections A_1A_2, B_1B_2 and C_1C_2 (for location see Fig. 3); and profile of the weather moulding of buttress F21.

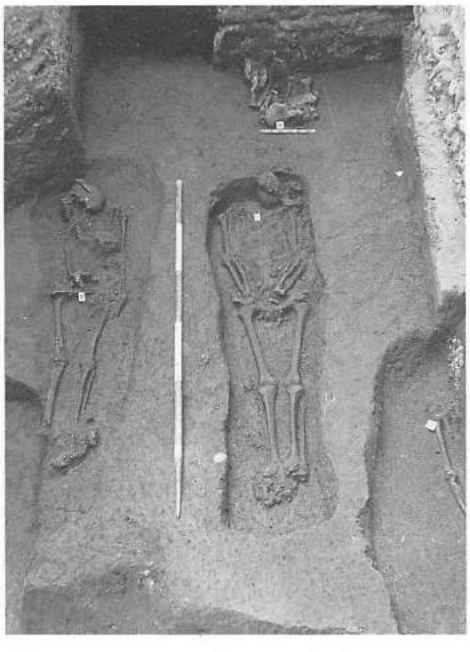
discussed in App. 13d. The burials can be compared to those at Nazeingbury (Huggins 1978, 53) just to the north, where it was reasoned that the Danish incursions from *c.*870 may represent a hiatus in Christian burial in west Essex. The skeletal remains are discussed in Appendix 13a. Evidence at Site 12 showed that the area was used again for burials, perhaps after the hiatus, into the late 10th century and probably into the early 11th century. However at Site 1 the cemetery had gone out of use. This is seen first by the cutting of nine of the graves by the ditch F9 which contained pottery of *c.*1150-1177; there were some 160 sherds of this date with 2.7 kg of animal bone. Secondly there was a nearby deep pit F24 with 180 sherds of slightly later pottery, *c.*1220-40, and with 5.4 kg of animal bone. The concentration of rubbish in the pit, compared to that in the ditch, was over twice as great for the pottery and four times as great for the animal bone; this may indicate that the pit was intended for rubbish disposal, alternatively it may have been a water hole or latrine pit which was filled up with what was available. Ironwork (App. 9) in the ditch F9 included a prick spur and a fragment of a sickle, and in the pit there was part of a padlock bolt. The evidence as a whole suggests the area of Site 1 had gone out of use as a cemetery, the rubbish in the ditch suggests nearby domestic occupation just prior to the clearance of the site for the start of monastic building in 1177; the rubbish in the pit suggests a continued usage, perhaps by the builders themselves, during the main monastic building period which probably ended *c.*1242.

4.1(b) Buttresses of the south-east transept of the monastic church

The excavations in 1939 by Charlton (Colvin 1963, 89) had established the basic plan of the monastic church of the Augustinian refoundation of 1177. On the southern wall of the south-east transept, three buttresses were postulated on

A

B



C

D (Photos: J.H. Littlefair)

Plate 2 WALTHAM ABBEY, ESSEX, MONASTIC PRECINCT, 1976, SITE 1

A Brick retaining walls built around the three buttresses of the south wall of the south-east transept, the core of the 'tower' buttress rises above the bending figure.

B The 'tower' buttress F21, showing rubble core, weather moulding and foundations. Rods in feet.

C Graves 8, 9 and 10, with 1, on the left, emptied; the bones of individuals 17 and 18 in a pile at the top of the picture by the foundations of the 'tower' buttress. Rod in feet.

D View to the north showing the pre-monastic ditch F9, cut by the 18th-century drain F3; graves 1 and 10 are marked out in the ditch side just below the small measures. Rod in feet.

architectural grounds; these buttresses were found to extend into the area of the excavations (Fig. 3, F21-F23). The middle buttress, with foundation F22, was in line with the row of piers suggested in the transept and presumably defining the entrances into small eastern chapels. The eastern buttress, with foundation F23, was a little narrower (for details see Feature List, Para. 4,1f). A few stones of the lowest ashlar course in Barnack stone remained. The western buttress F21 proved to be a 'tower' or clasping buttress enveloping the whole south-west corner of the transept; the core of this buttress remained (Pl. 2A, B) to a height of 3.8m (12ft 6in) above the lowest ashlar course. The lower courses of the 'tower' buttress were preserved below ground so that the profile of the weather moulding could be established (Fig. 4; Pl. 2B). The lowest ashlar course, of Barnack limestone, lay on foundations of mortared rough-hewn stone; above this was the Reigate stone drip moulding with an ashlar Reigate stone above; the next course was a moulded Caen stone with the topmost remaining ashlar course of Reigate stone. The different colours of the stone used may have been intended to add visual interest. As can be seen from Pl. 2B the Barnack stone was used in relatively small pieces.

The monastic ground surface must have been within the depth of the lowest ashlar course. The foundation for the 'tower' buttress was 1.22m (4ft) deep and was taken down 15cm (6in) into the natural clay. The middle buttress foundation was taken down 2.06m (6ft 9in) to the bottom of the pit F24 and the foundation for the eastern buttress was 1.37m (4ft 6in) deep. The pit F24 was filled before the middle buttress was built; material in the pit is dated *c.*1220-40 and indicates that the south-east transept was built late in the 1177-1242 monastic building campaign.

4.1(c) Architectural note on the 'tower' buttress
by K.N. Bascombe

The upper surviving moulding of the base has near parallels in the quire aisles at Rochester (St. John Hope 1900, 58 and 62); since these are interior features, no drip stone is required. This part of the Rochester church was first used in 1227 and a dedication is recorded in 1240 (*ibid*, 57 and 61). A lesser parallel occurs in the church at Hexham (Bond 1905, 679), which is dated 1215-30 (*ibid*, 646). There are a number of parallels for the drip stone moulding, for example, Hexham, as above, and Rievaulx quire, dated 1226-50 (*ibid*, 116 and 679). There is an apparent parallel for the 'tower' buttress at Rochester cathedral (St. John Hope 1900, Pl. II) where the north-east and south-east butresses of the presbytery are expanded to solid masses of masonry as the Waltham buttress F21; the presbytery is said to have been begun *c.*1200. Harvey (1974, 132) tentatively attributes the design of the east end of Rochester cathedral to one Richard Mason. The same author considers the destruction of the 1177-1242 extensions at Waltham to be probably the greatest loss of medieval architecture in this country (*ibid*, 216) and the importance of discoveries such as this 'tower' buttress is evidently high. Solid far-projecting corner buttresses occur also on the eastern transept, the Chapel of Nine Altars, of Durham cathedral, built in 1242-80, initially under the direction of Richard Farnham; the outer angles of the buttresses are chamfered (Harvey 1974, 224).

4.1(d) Other monastic period features

A deposit F7 of clay, loam and Reigate chippings, filling the top of the ditch F9, contained late 12th/early 13th century pottery, and layers of gravel and stone F5, with pottery of the late 13th century, may represent path deposits (Section A_1A_2, Fig. 4) for an entrance into a door centrally positioned between buttresses F21 and F22. The width of these deposits is at least 1.5m (5ft) and their form is consistent with a repeatedly repaired path. A linear 'wall' F12 (Plan 1, Fig. 3), mainly of Reigate stone, set in clay F13, was found to have been dug into the layers F5; this 'wall' may represent one side of a porch or other insubstantial structure; a few sherds in the clay F13 suggest a 13th or 14th century date. To the east, clay with Reigate chippings F14 (Section C_1C_2, Fig. 4) was laid down after the feature F12 was constructed and contained 16th-century pottery; a coin of Henry III (*c.*1248-55) was found on top of the lower deposit F7 at the level of a mortar and charcoal spread.

The standing eastern boundary wall F33 (Fig. 2) is of better quality than the other garden walls. The foundations F32, of mortared stone were stepped out from the wall (Section B_1B_2, Fig. 4) and a gravel building level F21 was recognised. The foundations were taken down just into the natural clay. There was no helpful dating material, but it is suggested that the wall was of the monastic period being butted up to the 'tower' buttress F21; the continued use of this wall presumably accounts for the survival of the buttress core above ground. The junction with the buttress was much mutilated by the construction of a stokehole for a recent greenhouse, but the foundations were traced to within 70cm of the buttress. The present narrowed length of wall F33, at the junction with the buttress is completely rebuilt and has no real foundations, not even reaching to the robbed foundations F32. These foundations F32 were pierced by the builders of the 18th-century drain F3, and it is assumed that the original wall F33 previously continued up to the buttress. This wall may have resulted from the need to separate the secular graveyard to the west from the monastic area to the east.

4.1(e) Post-medieval features

The standing garden wall F15 on the north side was built over the robbed buttress foundations and was thus of post-Dissolution date; it contains re-used moulded Abbey stone including six nine-inch (23cm) diameter Reigate stone engaged shafts near the buttress F22. The mortar foundations F16 were found not to have been taken down to the undisturbed clay, but had been made to dip slightly into the fill of the ditch F9 (the lowest depth is seen in Section A_1A_2, Fig. 4). The wall F15 continues eastwards for a total length of 91m (299ft) all apparently of similar construction, including the turn northwards at its eastern end. The brick wall F88 butts up to this turn (Fig. 2). Scars suggest the northward turn of F15 continued onwards to meet the standing wall which now extends eastwards from the

Chapter House site (Fig. 1) at position P where there is a change in form of that wall. These walls must have been built by 1626 on the evidence of the de Caus plan (see Para. 2). All these walls must be associated with the gardens of the Abbey House during its occupation *c.* 1590-1770.

An 18th-century drain F3 crossed the site from east to west and was probably the same as that seen at Site 10. It angled to the north where the foundations to wall F33 were cut through for its passage.

4.1(f) Site 1 Feature List

(see Appendix 1 for pottery fabric codes A to N)

F1 Topsoil including garden paths and greenhouse intrusions.

F2 Compacted loam of lower topsoil. *Pottery*: 19th, 18th and at lowest 17th century.

F3 Drain, three courses of mortared bricks, stone base and capping.

F4 Clay + loam + stones, fill of construction trench for F3. *Pottery*: 1st half of 18th century and derived. *Clay pipes*: 18th century. *Jeton*: App. 7/2. *Stone*: App. 3d.

F5 Layers of gravel with Reigate stone chippings; possible path deposits for a door into the south-east transept. *Pottery*: 1 Saxon B, 2D2, 7J2 (Fig. 8/29, 30); late 13th century. *Tiles*: App. 2. *Slate*: App. 3c. *Stone*: App. 3d.

F7 Clay + loam with Reigate chippings under F5, filling depression in top of ditch F9. *Pottery*: 8D2, 18G, 4H, 1J1; late 12th/early 13th century. *Coin*: App. 7/1 on top of level.

F8 Sandy clay layer filling top of ditch F9. *Pottery*: 11D2, 1G, 1J2; 1220-50.

F9 Ditch, loam with Reigate chippings and stone. The ditch cut graves 1, 6, 10, 13-15, 17 and 20. *Pottery*: 2 Saxon B, 14 Saxon C, 124D2, 21G, 8J2, 1H, 7 early H; *c.* 1150-1177 plus derived; Fig. 8/4-16. *Iron*: App. 9/1, 2. *Bones*: App. 12.

F10 Loam of old ground surface probably building up during Saxon and medieval periods, graves dug in early phase of this accumulation. *Pottery*: 1 Much Hadham Roman, 5 Saxon A, 1 Saxon B, 1D1 (Fig. 8/3), 7D2, 3G, 3H; Roman to 12th century.

F11 Sandy loam under F10, graves filled with same material. *Pottery*: 1 Roman red-coated, 7A, 16B (Fig. 8/2), 1A/C; predominantly Middle Saxon, all sherds worn. *Flints*: App. 10.

F12 Foundation, for ? 'wall', of Reigate stone lumps set in F13. *Stone*: App. 3d.

F13 Yellow-brown clay in which F12 was set, later than F5. *Pottery*: 7J2; 13/14th century. *Glass*: App. 5b/2-4. *Tile*: 1 black glazed fragment. *Lead came*: 2 frags. *Bronze*: pin, App. 8. *Gaming piece*: App. 3g and Fig. 14/1.

F14 Clay + Reigate chippings to west of 'wall' F12, laid after 'wall' possibly as floor deposit; mortar + charcoal spread at lowest level, see F7 for coin. *Pottery*: 3D2, 4G, 6J2, 5J1, 1H, 7K, 4M; Fig. 8/31-34; mixed 12th to 16th century. *Bronze*: App. 8/2 also slag and sheet frag. *Lead*: 1 came + offcut. *Glass*: 2 type A. *Oysters*: 36. Finds suggest this was a working floor.

F15 Standing east to west wall on north of area investigated, mortared stone with some flint and considerable areas of brick repair, App. 3f, remaining height about 2.4 m; dog-leg at east of same construction. *Glass*: App. 5b/1.

F16 Stony mortar foundations to wall F15. *Pottery*: 1J2.

F17 Burnt area above fill of ditch F9.

F18 Charcoal patch within fill of ditch F9. *Pottery*: 2D2.

F19 Eight stakeholes seen in clay F8; possibly representing a simple structure erected after ditch F9 was filled.

F20 Two possible scaffold post pits seen in loam F10, fill of stony loam, post possible *c.* 15 cm square.

F21 'Tower' buttress, 2.15 m × 1.91 m, core remained to 3.8 m height; Para. 4.1b.

F22 Middle buttress foundation, mortared flint and stone, 1.47 m wide, two Barnack stones remained of lowest ashlar course.

F23 Eastern buttress foundation, mortared flint and stone, 1.37 m wide.

F24 Pit dug 2.18 m deep from medieval loam level, fill of silty loam with stones and domestic rubbish, 37 cm of silt at bottom. *Pottery*: 31D2 late type, 58G 54G/H, 22 red J2 unglazed, 15J2 glazed; Fig. 8/17-28; *c.* 1220-40. *Iron*: App. 9/3-5. *Bones*: App. 12. Pit pre-dates buttress F22.

F26 Building debris in depression at top of pit F24, presumably to make good after settling. *Pottery*: 18J1 buff, 19J2, 4L, 36K; Fig. 8/35-42; *c.* 1450. *Bone*: App. 11/5. *Glass*: App. 5b/5-7.

F27 Buttress F23 destruction debris. *Pottery*: 1D2, 2M, 1 Frechen stoneware; derived + mid-17th century.

F28 Sandy loam fill to graves. *Pottery*: 1A, 1A/C, 8B, 1 sandy stamped Fig. 8/1, 5 ?Roman; pottery Middle Saxon + derived, similar to that in loam F11 through which graves were dug.

F30 Four post holes, two in a slot, later than the filled ditch F9, 10 to 20 cm deep, possibly associated with stakeholes F19.

F31 Gravel spread by wall F33, probably from wall building period.

F32 Wall F33 construction trench, loose clayey soil with stone chippings.

F33 East wall of mortared flint and stone, some roof tiles as levelling courses, medieval bricks (App. 3f), and conglomerate in upper part. Remains to height of *c.* 3.6 m. Towards buttress F21 the wall had been destroyed and a narrower wall, without foundation, replaced it.

F34 Foundation of mortared stone for wall F33, traced to within 70 cm of buttress F21 although much robbed there.

4.2 Site 2 (Plan and Sections, Fig. 5)

Object: To check the suspected medieval date of the standing wall at the south-east corner of the precinct.

4.2(a) Standing walls at the south-east corner of the monastic precinct

The walling at the south east, when it was part of the outhouses of No. 26 Sun Street, showed that, at the corner, it incorporated side-alternate ashlar Kentish ragstone with dressed flint infill. A single trench, limited by a chestnut tree, was dug to investigate the corner foundations; the section and elevation around the trench (Fig. 5) shows the nature of the wall and its foundations. A deep ditch F73 ran east-west parallel to the south wall and was found to continue eastwards under the east wall roughly towards the south arm of the moat beyond (Fig. 2).

The south wall was laid on a substantial mortared chalk foundation F52, with a construction trench F70, and was set on the southern lip of the steep-sided ditch F73. The ditch had been filled and the area levelled by the deposition of layers F72 and F71 before the construction trench was dug (Fig. 5). A further deposit of clayey loam F68 was laid to cover the foundations. All the deposits, F68 to F73, contained comparable pottery with a date range consistent with the filling of the ditch and the construction of the wall in 1370.

The east wall was constructed over the filled ditch; the mortared chalk foundations F54 mirrored the ditch shape but were not carried down to the bottom. The foundations at the corner had been particularly strengthened by a mortared stone and flint buttress F53, confirming that the corner was of one build. The junction of the walls was judged original for a height of 2.3 m (7 ft 6 in). Part of the east face had been re-faced in brick, that further north being completely so, and an 18th-century drain F56 and a doorway F59 had been cut through it (Fig. 5). The south wall remained only for 1 m before a recent shed door had been cut

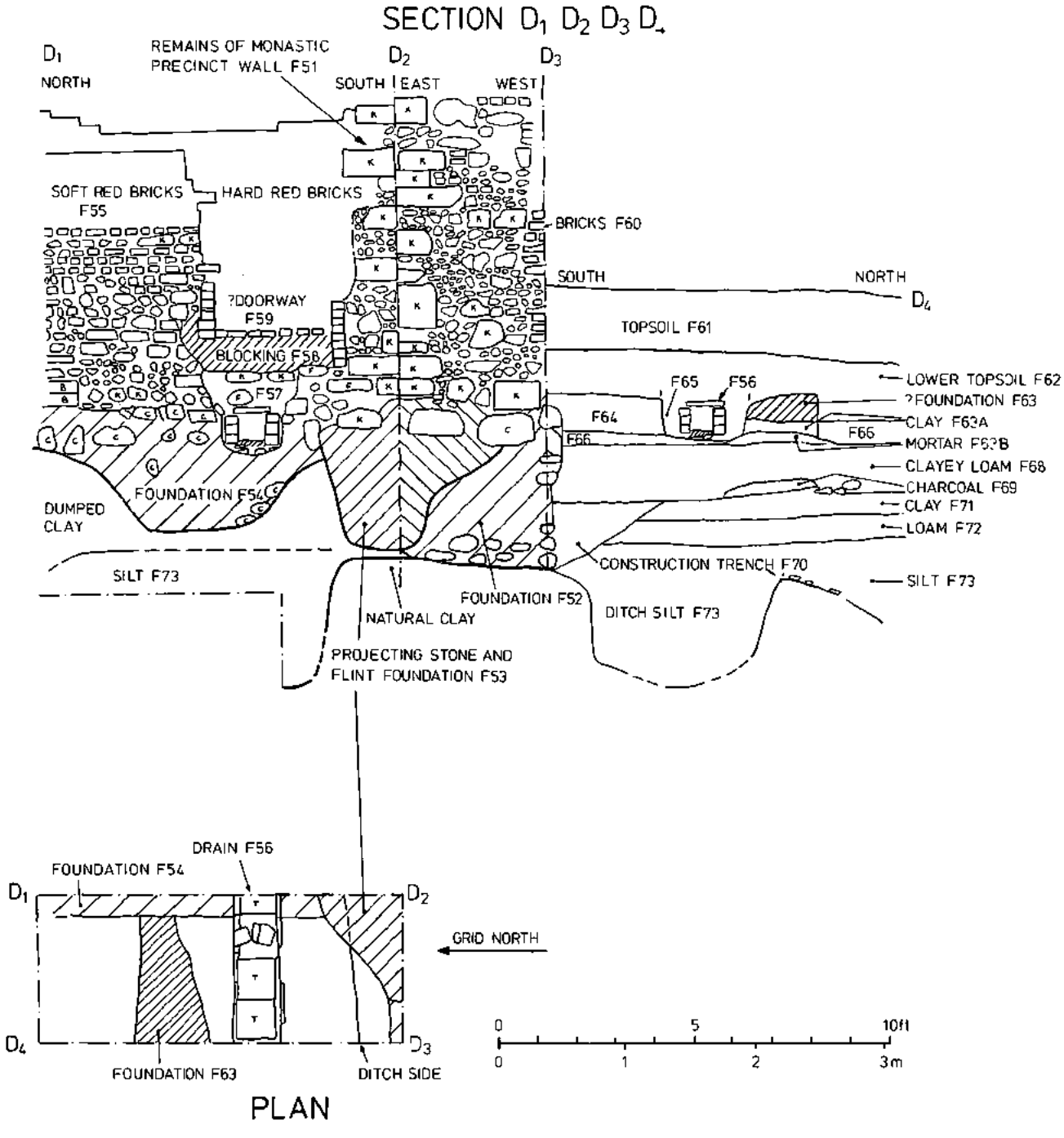


Fig. 5 WALTHAM ABBEY, MONASTIC PRECINCT, 1974
Site 2: plan with section $D_1D_2D_3D_4$ around the trench in the south-east corner of the precinct.

through it, beyond that to the west the lower courses were judged to be medieval for 11 m (36 ft); during the car park works the chalk foundations F52 were verified over this length.

In view of the fact that this standing medieval wall, representing the south-east corner of the monastic precinct, was in good condition, the line of the access road was moved slightly so that it could be retained. The conservation work was undertaken by the Society; this involved stripping off brick facings all round the outside of the wall back to the original chalk core (Pl. 1A) and replacing with stone and flint. From the evidence of this core the south wall probably had an external batter. The foundation of the south wall was 1.2 m (4 ft) wide, and this was presumably the width of the base of the wall at the corner. An external 'corner stone' was seen during conservation and is consistent with a similar width for the east wall; alternatively the projection seen below ground may represent a buttress to the east.

4.2(b) Site 2 Feature List

F51 South-east corner of monastic precinct wall, side-alternate ashlar Kentish ragstone with dressed flint infill.

F52 Foundation to F51 on south side, mortared chalk blocks, built down to natural clay on the south lip of ditch F73.

F53 Corner buttressing foundation to wall F51, mortared flint and stone.

F54 Foundation to F51 on east side, mortared chalk blocks, dipping down into the fill of ditch F73.

F55 Wall repair with soft red bricks, to the north the west side is all of brick, but from the east the original chalk core is evident.

F56 Brick drain with tile capping, cut through wall F51.

F57 Mortared stone infill above F56.

F58 Mortared stone blocking above F57, possibly associated with door F59.

F59 Brick patch in F51, suggestive of a doorway cut through and infilled.

F60 Bricks of south wall resulting from making good after cutting shed doorway through F51.

F61 Topsoil, much 19th-century rubbish.

F62 Lower topsoil with 18th and 19th-century rubbish.

F63 Probable foundations to a flimsy wall, mortared chalk, flints, brick and roof tile, on clay F36A and mortar F36B.

F64 Loam and building stone lumps probably from 18th-century wall repair.

F65 Construction trench for drain F56. *Pottery*: late 18th century.

F66 Loose brown soil under F64. *Pottery*: 2H, 3J2, 1K; 14/15th century.

F67 Base to drain F56, flint and roof tile fragments, some silt thereon.

F68 Clayey loam with mortar and chalk fragments, make-up to cover foundation of wall F51. *Pottery*: 10G, 37H + much of large bowl and small dish, 19J2: Fig. 9/1-3; *c.*1370, see F73. *Glass*: App. 5b/13.

F69 Lens of charcoal, ash, slag and furnace lining from iron smelting.

F70 Loam-filled construction trench for foundations F52. *Pottery*: 1D2, 1G, 1H, 1J2; see F73.

F71 Layer of clay + chalk fragments. *Pottery*: 1D2, 1G, 1H, 1J2; see F73.

F72 Layer of loam + chalk fragments, with F71 this layer was to make good the ground after the ditch F73 was filled before wall construction. *Pottery*: 2G, 3H, 3J2; Fig. 9/4-5; *c.*1370, see F73.

F73 Silt-filled ditch, probably parallel to south wall being part of the earlier boundary; for the east wall, foundations F54 were built down into it; the subsidiary feature with silt F73 to the north (Section D_3D_4) is not understood. *Glass*: App. 5b/12. *Pottery*: 3D2, 4G, 5H + large part of cooking pot, 3J2; Fig. 9/4-5. Sherds fit those in F71 and F72 suggesting ditch was purposely filled; features F68 and F70-73 have comparable pottery probably early in the period 1350-1450 and are thought to be consistent with a *c.*1370 date for the precinct wall construction at this south-east corner as elsewhere.

4.3 Site 3 (Section, Fig. 7)

Object: To date the north wall at the north-east corner of the area investigated.

4.3(a) Standing north wall at the north-east corner

The wall F88, brick above ground, proved to have been built on the northern lip of a ditch F87 (Fig. 7, Section E_1E_2), but the foundations were not carried down deep. The wall is not shown on the de Caus plan and so dates after 1604-26. The ditch was covered by a thick layer of black soil F86 with latest pottery being of the 16th century so the ditch, being earlier, is probably of the monastic period. Mortar F83 and building debris F84 are clearly of the building period and contain a few sherds of the same date, but they must all be dreived from the layers below when the foundation trench was dug. The lower topsoil F82 was deposited over the foundations, this contained only 17th-century sherds at the bottom with later material dug in at the top, so only a 17th-century date can be suggested for the wall; the bricks of the wall, possibly being of a re-build, appear to be of 18th-century date. The wall F88 butts up to the northward turn of wall F15, but the junction has only been seen above ground.

4.3(b) Site 3 Feature List

F80 Topsoil, 19th-century rubbish.

F81 Recent path deposits.

F82 Lower topsoil deposited after wall F88 built. *Pottery*: 18th and 19th century at top, 17th century at bottom.

F83 Mortar in loam, spread out from construction of wall F88. *Pottery*: 1H, 1J2 (Fig. 9/6), 2M; 16th century.

F84 Building debris from construction of wall F88. *Pottery*: 2H, 1K, 1M, 1 possible French import; 16th century.

F85 Clay/loam + some wall debris. *Pottery*: 3H, 6K, 7J2; Fig. 9/7-8; 2nd half 14th century and 15th century.

F86 Black soil over ditch silt. *Pottery*: 8H, 6K, 3L, 4M; 14th to 16th century.

F87 Ditch silt vegetable matter.

F88 Standing north wall at north east of area, today entirely brick. Foundation of mortared stone appears weak, no construction trench seen on south side. Doorway from Abbey Gardens had oak jambs and lintel with simple bead moulding until 1979, now replaced.

4.4 Site 4 (Plans and Sections, Fig. 6)

Object: To see if burials extended as far as this eastern area. Following the discovery of the Madonna statue and 12th-century pottery two further trenches were dug around the first trench.

4.4(a) 12th-century structure and earlier features

A lower loam layer F95, with mixed pottery but including some St. Neots shelly ware probably of the 12th century, lay beneath deposits to be discussed later (see Section $G_1G_2G_3$, Fig. 6). Below this was a man-laid clay layer F105 sealing earlier features and overlying another deposit F117, presumed to be a disturbed natural clay. Stake and post holes F112, F113 and F115, in the natural clay, and the presence of 29 pieces of burnt daub, most with clear wattle impressions, in the loam F95, suggest that we have evidence of a 12th-century or earlier wattle-and-daub structure of circular shape, about 2.5m (8ft) diameter, around a firehole F114.

In the eastern trench at Site 4 the edge of a clay 'platform' F118 was seen with many stakeholes F119 in the edge; this clay is probably the same as F105 mentioned above. The whole represents a definite raised clay area presumably to achieve a dry area for occupation. The south trench at Site 4 showed the clear distinction between the deposited clay 'platform' F105 and F118 and the worm-affected natural clay F117 below, since there were two features, a trench F106 and a pit F107, stratified below; also in the eastern trench a gully F120 was below. These features were unfortunately sterile. However, calcined flints or pot boilers were found in several features; there were 21 in the disturbed natural clay F117, 9 in the clay 'platform' F105 and F118, and 7 in the ditch F96 and F116 to the north of

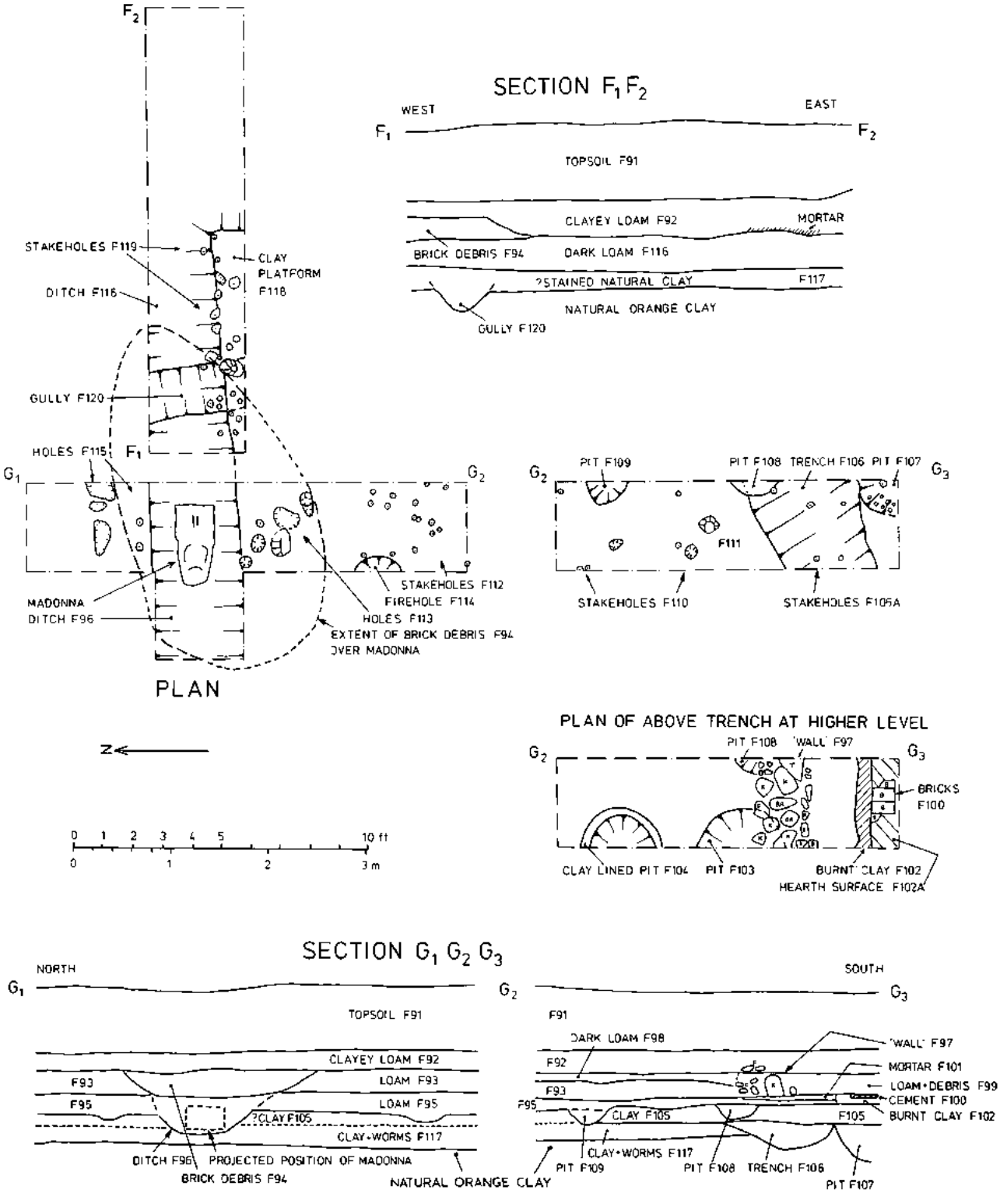


Fig. 6 WALTHAM ABBEY, MONASTIC PRECINCT, 1974
Site 4: plan of excavated features and sections F_1F_2 and $G_1G_2G_3$.

the 'platform'. These and two flint-gritted sherds, one in F117 and one in a stakehole F118, and a Roman sherd in F117, indicate activities before the 'platform' was laid; flint-gritting may indicate a Middle Saxon or Middle Iron Age date. The clay 'platform' and activities thereon are then thought to follow in the 12th century.

4.4(b) 16th-century building

At the south of Site 4 was a north wall F97, of a structure with a hearth F100 of brick (Fig. 6, high level plan). Some pottery of the second half of the 16th century had worked down into the loam layer F93, and there were over 30 sherds of the same date in the dark loam F98 above including fine wares such as Cistercian ware, maiolica and blue Malling-type ware, and may well have derived from occupation of this structure as the loam spreads right up to its wall. The concentration of animal bone in this loam, including ox, pig, sheep, chicken and rabbit (App. 12), as well as oysters, may support the idea of domestic occupation therein. The presence, in the loam F98, of an antler knife handle and a waste piece from the manufacture of such a handle (App. 11/1, 3) may indicate the type of work done there; another partially made handle (App. 11/2) was found in the loam F92 above with a date range extending into the early 17th century. In the loam F92 there were also two strip offcuts of lead and part of a decorative lead fragment (App. 6, Fig. 11/1). Wall plaster with more than three coats of lime wash over red ochre colouring was found in the loams F93 and F98, and may derive from a phase of this structure. The feeling is of light, industrial activity and fairly prosperous occupation in this part of the former monastic precinct following the Dissolution. Such quality of goods can only reasonably be associated with the Denny occupation of the Abbey House *c.*1590.

Two features at Site 4 contained lime and are presumably associated with the lime burning, dated *c.*1450, at nearby Site 4A. These are the pits F103 and F104; the former being stratified under the wall F97 of the above structure.

4.4(c) Discovery of statue of the Waltham Abbey Madonna

No skeletal remains were found but a mutilated stone statue of the Madonna and Child was discovered carefully buried in the ditch F96, with head to the west in Christian fashion (Plan and Section, Fig. 6; Pl. 4). The statue is described fully in Appendix 4. The statue was covered with building debris F94 to the top of the loam level F93. Pottery with the statue in the loam F96 and in the covering debris F94 is of the second half of the 16th century and indicates the post-Reformation date for the burial of a reverred but deliberately mutilated religious relic. Similar pottery in the loam F92 above suggests that there was some soil reinstatement above the building debris.

The ditch, in which the statue was buried, continued to the east as F116 with a few sherds within the range 1250-after 1450 indicating that earlier silting was not cleaned out. The ditch continued eastwards into an area of loam with snails so as to leave the clay F118 as a distinct 'platform'.

4.4(d) Site 4 Feature List

F91 Topsoil with 19th-century rubbish.

F92 Clayey loam under F91. *Pottery*: 6K, 39M, 6N, 1 yellow-glazed buff; second half 16th century/early 17th century. *Antler*: App. 11/2.

F93 Loam of old ground surface when F94 deposited, some lime. *Pottery*: 1H, 2K, 12M, 2 buff; 2nd half 16th century. *Plaster*: App. 3e. *Lead*: App. 6.

F94 Deposit of mortar, roof tile, chalk and brick fragments covering the Madonna burial in F96. *Pottery*: 2H, 1K, 6M; 2nd half 16th century.

F95 Loam below F93, differentiated by presence of earlier sherds with later material. *Pottery*: 3D1 (Fig. 9/9), 1K, 2M; 12th and 16th century. *Daub*: App. 3(b).

F96 Ditch, loam fill, in which Madonna statue was buried; App. 4. *Pottery*: 3K, 1M; 2nd half 16th century.

F97 'Wall' of rough flint and stone set in loam, running east-west: K = Kentish ragstone, R = Reigate stone, BA = Barnack stone, B = brick, T = tile, F = flint. *Pottery*: 2H.

F98 Dark occupation loam with charcoal to north of F97. *Pottery*: 1J2, 28M, 4 blue 'Malling' ware, 1 Cistercian, 1 maiolica; Fig. 9/10-14; 2nd half 16th century. *Plaster*: App. 3e. *Glass*: App. 5b/8. *Lead*: App. 6. *Antler*: App. 11/1, 3. *Bones*: App. 5.

F99 Loam with plaster and mortar of building destruction. *Pottery*: 1H.

F100 Bricks of hearth and mortar base, below F99.

F101 Loose mortar at level of F100 passing under wall F97.

F102 Burnt clay behind bricks F100, with black surface of hearth (F102A) on which bricks were laid. *Pottery*: 1 black medieval sherd.

F103 Pit seen in F95, under wall F97, filled with loam and lime, probably associated with lime burning at Site 4A.

F104 Clay-lined pit seen in F95, filled with loam and lime as F103.

F105 Olive-grey clay deposit sealing earliest features, see F118.

F106 Trench filled with dirty orange clay, stakeholes (F106A), 5-12 cm deep, seen in this clay.

F107 Pit filled with grey silt, many small stakeholes seen therein.

F108 Small pit filled with loam and sand, seen in F105. *Pottery*: 1H, 1L; 14th/15th century.

F109 Small pit filled with loam, seen in F105.

F110 Group of stakeholes, 4-5 cm deep, seen in F117.

F111 Stakehole in natural, 23 cm deep.

F112 Group of stakeholes, 5-30 cm deep, some in pairs, seen in F105. Possibly part of a windbreak around F114 or a wattle and daub structure.

F113 Holes, loam filled, 8-18 cm deep, possibly part of a ring like F112 but holes larger.

F114 Ash filled 'firehole', dug in F95, holes F112 and F113 possibly associated.

F115 Two stakeholes, 5-13 cm deep, and 3 depressions, 2-10 cm deep, loam filled, seen in F105 to north of ditch F96.

F116 Ditch, dark loam + snails, a continuation of F96 to the east, continued further east as a flat open area. *Pottery*: 1H, 3J1, 1J2, 1K; 1250-after 1450. *Bones*: App. 12.

F117 Clay with worm action, probably stained and disturbed natural. *Pottery*: 1 Roman grey, 1 gritty Saxon or prehistoric.

F118 Clay 'platform' covering F120 hence not natural; ? same as F105.

F119 Series of stakeholes, 7-30 cm deep, on top and down side of 'platform' F118. Presumed to represent a fence or structure. *Pottery*: 1 Saxon flint-gritted.

F120 Gully under F118, hard dark grey silt, like F106.

4.4A Site 4A (Section $H_1H_2H_3$, Fig. 7)

Object: To investigate deposits of lime being dug out by machine.

4.4A(a) Lime kiln

Observation during drain trenching showed that seven courses of brick F121 remained with a dump of lime F122

behind. To the east a hearth F123, of square floor tiles, was set on a brick foundation. Here, presumably the chalk was burnt to produce lime; a deposit of lime F124, overlying a band of charcoal F125, stretched to the south showing that the 'kiln' was set in a simple hole in the ground, the earlier soil levels F126 remained to the south. The 'kiln' was only seen in one side of the drain trench. The brick backing F121 could have supported a chimney but the whole seems to have been open to the south.

The finds included sherds, dated *c.*1450, in the lime dump. Iron objects in the lime are illustrated as Fig. 13/6, 7. Many sheep metapodials, representing at least 57 animals, from the lime are thought to be the remains of vellum/parchment manufacture (see App. 12 for full discussion).

4.4A(b) Site 4A Feature List

F121 Brick backing, possibly chimney base for lime 'kiln', seven courses remained. *Bricks*: App. 3f.

F122 Dump of lime with some soil to north of F121. *Pottery*: 1D, 1G, 1IH, 34K; Fig. 9/15-18; *c.*1450. *Iron*: App. 9/6, 7. *Bone*: App. 12.

F123 Hearth of lime 'kiln', tiles set on bricks. *Tiles*: App. 2.

F125 Charcoal layer under F124 defining the shape of the excavation for the operation of the lime 'kiln'.

F126 Deposits of loam and clay dug through for construction of the 'kiln'.

F127 Various deposits filling over the hearth of the 'kiln'.

F128 Soil + chalk, stones and roof tile covering back of lime 'kiln' and dump of lime.

4.5 Site 5 (Section J_1J_2, Fig. 7)

Object: To investigate the provenance of floor tiles found in machine-dug spoil at the back of No. 6 Sun Street.

4.5(a) Discovery of floor-tile waste

An L-shaped trench, not dug to natural, was set out around a machine-dug manhole trench; the north section of the manhole trench is illustrated. The excavation suggested that the fragments of floor tile probably all came from clayey soil F37, containing pottery dated *c.*1270-1300. A layer of cobbles F40A, at the end of the east arm of the excavated trench may be the edge of a working yard. The condition of the tiles suggests they were waste pieces never used in a floor. A few sherds in the cobbles are of 14th-century date and so are a little later than the floor tiles. If the south door to the south-east transept, postulated in Para. 4.1d, is accepted this would give easy access to the church for the paviours working on this site. Fifty fragments were found at Site 5 and six fragments were found in the path deposits at Site 1, it is possible that the tiles represented at Site 1 were being replaced by those found at Site 5 (see App. 2).

4.5(b) Site 5 Feature List

F36 Miscellaneous deposits of sand and clay under topsoil. *Pottery*: 38J2, 1J1, 4H, 14G/L; Fig. 9/19-22; *c.*1270-1300. *Stone*: App. 3d.

F37 Clayey soil + stone + Reigate chippings. *Pottery*: 3D2, 2G/L, 18H, 1J1, 46J2 mostly 1 jug, Fig. 9/23; *c.*1270-1300. *Tiles*: App. 2. *Antler*: App. 11/4.

F38 Clay/loam, with reigate debris + stones, laid on old ground surface.

F39 Pit of mixed soil cutting F36-38. *Pottery*: 17th century.

F40 Disturbed loam of the old ground surface.

F40A Cobbled layer giving way to patches of mortar and Reigate chippings over stones set in clay. Possibly a yard surface at the south end of the west arm of the L-shaped trench, overlaid by F37. *Pottery*: 7H, 1J2, 3L; 14th or 15th century. *Stone*: App. 3d.

4.6 Site 6 (Plan and Section K_1K_2, Fig. 7)

Object: To locate and date the precinct wall at the back of No. 6 Sun Street.

4.6(a) Precinct wall and internal ditch

The precinct wall F42 at Site 6 was somewhat different to that remaining above ground at Site 2; four courses of mortared Kentish ragstone remained. It was narrower at 71cm (2ft 4in), a chalk core was not evident and there was no apparent batter on the outside. The foundations F43 of mortared chalk were carried down to the solid natural clay. The wall was situated at a modern yard boundary and pottery in the robbing deposit F42A, indicated that it may have survived here into the 19th century. A construction trench F44, for the foundations, was dug from the old ground surface F46.

As at Site 2, a deep ditch F47-48, lay to the north of the wall, but here, unlike Site 2, the operation of filling the ditch and building the wall could have been carried out independently. A few sherds in the silt F47 show the ditch to have been open, possibly as the precinct boundary, just following the Augustinian re-foundation of 1177. The top filling F48, of the ditch, is not dated.

By the 17th century, deposits F45 had built up against the wall. Thereafter deposits accumulated to the present level. A cess pit F41A, dug against the wall, contained 17th-century pottery, the drain leading into it being of two phases.

4.6(b) Site 6 Feature List

F41 Two-phase brick drain leading into cess pit F41A. *Pottery*: 2 Delft, 1N; 17th century.

F42 Precinct wall at back of No. 6 Sun Street, 71cm wide, mortared stone, mostly Kentish ragstone.

F42A Robbing pit of wall F42. *Pottery*: 19th century.

F43 Foundations to F42, mortared chalk lumps.

F44 Construction trench for F43, loose loam.

F45 Loam + mortar + stones, built up against F42.

F45A Brown clay deposited after the foundation F43 laid.

F46 Loam of old ground surface when wall F42 built. *Pottery*: 1D2 rim; 12th century.

F47 Ditch with clayey silt + Reigate stone chippings, flints at bottom. *Pottery*: 3D2, 8G, 1J1; late 12th/early 13th century.

F48 Layers of chalk, clay, gravel and Reigate chippings filling ditch top.

F49 Pit, loam fill, cut into natural. *Pottery*: 1 Saxon B.

F50 Modern feature with loose brick rubble, loam at bottom.

4.7 Site 7 (Location, Fig. 2)

The following observations were made during car park construction.

4.7(a) Foundations of precinct wall and internal ditch

As the area was machine scraped the mortared chalk foundations (F52 at Site 2) of the southern precinct wall were established for a distance of 11m (36ft) from the south-east corner. See below for further evidence of the internal ditch.

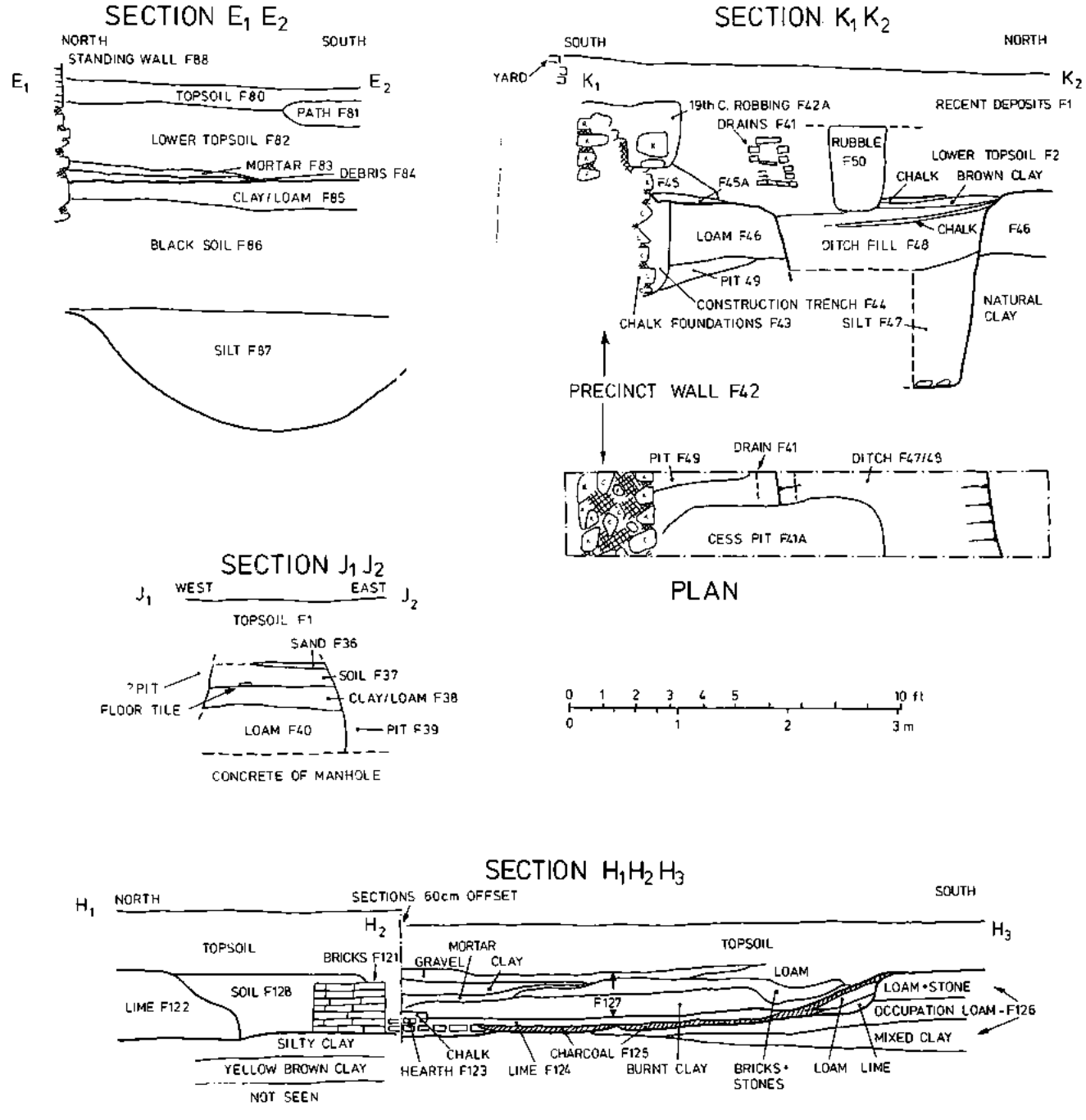


Fig. 7 WALTHAM ABBEY, MONASTIC PRECINCT, 1974-7
Site 3: section E_1E_2; Site 4A: section $H_1H_2H_3$;
Site 5: section J_1J_2; Site 6: section K_1K_2 and plan.

4.7(b) Cess pit and cistern

To the rear of Nos. 24a/26 Sun Street was a brick well or rain water cistern; it was not investigated. Just inside the precinct wall, behind Nos. 22/24 Sun Street, a shaft for cess disposal was seen. Nineteen courses of brick remained to a depth of 1.2m (4ft) with 19th-century rubbish fill, below this was 45cm (18in) of cess deposit and below this was 45cm (18in) of re-deposited clay and silt of the internal ditch; this shows that the ditch F73 continued at least 16m (53ft) westwards from the south-east corner at site 2.

4.8 Sites 8, 8A and 9 (Location, Fig. 2)

Object: To see why the soil level was higher in the gardens than north of the north wall F15.

4.8(a) Cemetery

The Society excavated in the gardens of Nos. 8 and 10 Sun Street in 1954. The following is taken from a note (Anon 1952-4, 212-213), from the 1955 bulletin of Waltham Abbey Historical Society and from a drawing dated June 1954. Seven Christian burials were detected in two trenches

at Site 8, the graves were dug to depths from 1.7m (5ft 6in) to 2.0m (6ft 6in). The bones were studied by G.C. Dunning, Inspector of Ancient Monuments, and the skeletal details were recorded in 1954 (App. 13b). Some burials were noted to be under the north wall and, due to the presence of medieval sherds in the soil over and down to the level of the burials, they were dated 12th and 13th century; however, doubt was expressed (Huggins 1970, 50) about using pottery so positioned to date the burials. At the present time it seems safer to think that these burials are part of the pre-monastic cemetery extending eastwards from Site 1 and extending to Sites 10 and 12. A further burial was found at Site 8A in the garden of No. 10.

The question of the soil level difference was attributed, in 1954, to the burials themselves, but it is likely that they extend to the north of the wall too. Rubbish, seen generally in 1974-77, shows that the build-up in ground level took place in the 17th to 19th centuries probably due to garden manuring (the area is presumed to have been the kitchen garden for the Abbey House at one time) and rubbish disposal and stable clearing when the area became gardens of the Sun Street properties, many of which had carriageways from the street to stables at the rear.

4.8(b) Other features seen in 1954

A drain was seen at Site 8A, this was probably the same brick drain as seen at Site 1. Site 9 lay some distance to the south, its exact position is not known. There, after digging through a ditch, or pit, gravel was struck at a depth of 2.7m (8ft 9in). Traces of a 'wall running east and west' were recorded at a depth of 2.3m (7ft 6in) within the ditch; this is unlikely. The depth of this ditch is comparable with that at Site 6 so it is likely that the same ditch F47-48 follows through to the east as would be expected.

4.9 Sites 10 to 13 (Location, Fig. 2)

Trenches at these sites were dug independently by W.F.G. Walker and P. Penfold in 1974 and 1975.

Burials, discovery of Ringerike-style plate, other minor features

Christian burials were located at Sites 10 and 12. There was one burial at Site 10 at a depth of 1.8m (6ft); just above the burial was a bone toggle (App. 11/5). A Bronze Age flint arrowhead (App. 10) was found in the old ground surface. A stone-capped drain running east to west at Site 10 may be a continuation of that seen at Sites 1 and 8A. Site 11 was abandoned without result due to flooding. At Site 13 a brick 'wall' ran north to south roughly inline with the dog-leg in the standing wall F15; a faint line here is shown on the de Caus plan.

There were four graves at Site 12, with associated Saxo-Norman pottery, one grave contained 12 sherds of shelly ware, including two D1 St. Neots type. The same grave contained a copper-alloy plate immediately above the pelvis, the design on this plate is of late-Viking Ringerike style of the late 10th or early 11th century, it is discussed fully in Appendix 8/1. The pottery itself is less closely dated 10th or 11th century; four rims are illustrated (Fig. 9/24-27). By association with the plate this particular pottery achieves closer dating and, because of its similarity with pottery in the clay floor of a turf-walled building (Huggins 1976) just north of the church, it has been argued (Huggins 1984) that the occupation of that building is also dated to the late 10th or early 11th century. The plate therefore is of great interest.

5 Concluding remarks

The individual aims of the investigation were mostly achieved from the modest-sized trenches planned before the engineering works began. Additionally, features and finds from machine-dug spoil were followed up during the works. Complete excavation of the site would have been an enormous task and would probably not have altered the overall picture of the use of the site. The reader may care to refer back to the General Discussion (Para. 3) at this stage for a review of this picture.

The results of this investigation must be viewed in relation to the many other excavations within the monastic precinct, in the church and in the town. After all these excavations, the most recent being in draft report form, the overall archaeological story of town and monastery is unfolding.

In particular the discovery, in 1985/6, inside the present church, of pre-conquest timber and stone churches has solved a crucial problem of the location of the focus of the ecclesiastic site. The discovery of Saxon graves there, one with a date in the second half of the 7th century, pushes the date back near the beginning of the Conversion of Essex. The recent discovery of the copy document, referring to the grant of land *c.*700, for the setting up of a House of God nearby at Nazeing is confirmation of Conversion by this date. The results reported here show that the Saxon cemetery had extended eastwards from this focus for a distance of at least 140m probably by the early 11th century.

The site of the Saxon vill is assumed to be to the north of the church, where pits, gullies and a storm-water ditch were discovered (Huggins 1976, 83-5). To the south, the original Romano-British ditched enclosure, later known as *eldeworth*, seems to have been ploughed. Since this enclosure was part visible into the 17th century, it must have been a distinct feature throughout the Saxon period. Being the highest part of the town and a prominent feature, as well as the site of the medieval Moot Hall, this enclosure is likely to be the meeting point of the Waltham Hundred moot as discussed elsewhere in this volume.

Some of the finds have been of great intrinsic interest. Earliest is the Bronze Age arrowhead, because of the recent (December 1987) discovery of pottery to the south west of the church with a tentative Bronze Age or early Iron Age date. There was also a bronze carps-tongue sword found in the Cornmill stream, but stolen from the crypt.

The Ringerike-style alloy plate of the late 10th or early 11th century is of great significance. Firstly because of the known presence here, *c.*1020-1030, of Tovi, a chief minister of Cnut. Also because of its association with pottery comparable to that found in the clay floor of a building interpreted as a late-Viking turf-walled hall just to the north of the church; with this pottery achieving a closer date, the in-

ference that the hall was the hunting lodge known to have been built by Tovi, is reinforced.

The stone statue of the Madonna is an important document in its own right, particularly because of the early evidence of functional buttons and of the knowledge of perspective. It is important too for the detail of the late 14th century costume. It was a pleasure to be able to return to the church a much revered relic.

The evidence of the lime kiln and the sheep foot bones for probable vellum and parchment manufacture, give a glimpse of the working life of the monastery within the secure precinct wall of which the south-east corner was established in these excavations.

Appendix 1 Pottery

by Rhona M. Huggins

The small groups of pottery found in the excavations are discussed here. Fabric codes have been repeated as in previous Waltham Abbey reports and are quoted in the Feature Lists together with numbers of sherds, as well as in the catalogue of illustrated pots.

Fabric codes:

A (600-1060) Grass or chaff temper, hand-made, black or grey fabric. Occurs without fabrics D1 and D2 in Middle Saxon context at Nazeingbury (Huggins 1978, 79) terminating *c.*850, but was found with D1 and D2 fabrics and late Saxon imports at Waltham (Huggins 1976, Fig. 36) suggesting a long period of use.

B Grit temper. Fine grits giving a rough surface occur in hand-made black or brownish fabric. This has occurred with fabric A in stratified contexts but never in sufficient quantity to classify with any certainty as Anglo-Saxon. More recent excavations at Waltham have produced Iron Age pottery with heavy flint gritting and a prehistoric origin for this group B must still be possible.

C (Mid and Late Saxon) Fine-sand temper, hand-made, grey or black. Not found at Nazeingbury (see A above) suggesting it is a post-850 fabric. Sherds with both grass and sand temper are designated AC and probably represent a transitional stage.

D1 (850-*c.*1150) Finely-broken shell temper, wheelmade, grey fabric with buff, grey or pink surface. Small pots and inturned bowls of St. Neots type (Huggins and Huggins 1973, Fig. 6).

D2 (850-*c.*1250) Coarsely-broken shell temper, sometimes leached out, grey fabric with black or grey surfaces which became increasingly oxidised red in the later period when wheel-made replaces the earlier hand-made. Sand temper also occurs with small amounts of shell in the later period (see Pit F80-82 below). A peak is reached in the late 11th/12th century when this ware predominates (Huggins and Huggins 1973, Figs. 6 and 7).

E (11th/early 12th century) Fine-sand temper, wheel-made, with tiny white inclusions, distinctive rim forms and often brownish surfaces. Has never occurred in quantity (Huggins and Huggins 1973, Figs. 6 and 7).

G (12th/13th century) Coarse-sand temper, wheel-made, grey fabric sometimes red under a dark surface. This is not a homogeneous group and could be subdivided but for statistical purposes it has been kept as a single group occurring with D2 in 12th-century contexts and gradually replacing it in the 13th century.

H (1250-1500) Sand temper, wheel-made, red fabric sometimes with grey core, occasionally brown or greenish glaze inside base, on rim or outside shoulder of pot, forms other than jugs. Probably locally made as it is homogeneous and occurs in quantity, but no kiln known.

J1 (11th/15th century) Imported jugs from elsewhere in England or abroad. Fabrics described in catalogue.

J2 (late 12th/15th century) Redware similar to H above with fine-sand temper. Decoration in Essex tradition with overall slip under yellow or green speckled glaze, or with white slip linear decoration under yellow glaze giving yellow on brown pattern. Recent work by Museum of London Department of Urban Archaeology (Pearce *et al.* 1982 and Pearce *et al.* 1985) may enable further division, but the bulk is likely to be local.

K (1450-1550) Pink fabric with little temper, mottled green glaze of liquid appearance. Jugs and jars with distinctive stabbing on handles by pointed knife or tool, and sometimes applied stamps. Contemporary with the much rarer Surrey/Hampshire white wares and probably form a local source as yet unlocated.

L (late 15th century) Hard grey ware with sand temper, sometimes decorated with white bands but unglazed (Huggins 1972, Fig. 23/107-108).

M (1500-1640) Fine red ware with little temper, wheel-made, either unglazed or glazed with liquid brown glaze. Local from either Harlow kilns or an as yet untraced Waltham source.

N (1640-recent) Fine red ware continuing tradition of M with distinctive red wash outside some vessels and thick liquid brown glaze on one or both sides. Proportion of glazed to unglazed sherds increases in later periods. Some vessels have white trailed slip decoration in 'Metropolitan' style yellow on brown patterns. Black glazed tygs and jugs in the same fabric (Huggins 1969, Figs. 27-30).

Post-medieval imported wares are described where relevant but are not dealt with in detail here as post-medieval features were of only slight importance.

Discussion and dating:

Middle Saxon pottery fabrics A, B and C or AC (Fig. 8/1-2) were found with Romano-British derived sherds in the grave-fill F28 and the surrounding sandy loam F11. These fabrics also occurred with the later fabrics D1, D2, G and H in the loam F10 which is taken to be the soil build-up during and after the cemetery period and before the monastic building period began in 1177. The sherd with stamp No. 1 can be paralleled elsewhere in eastern England (Myres 1969) on simple biconical pots with a single stamp in panel decoration which are thought to be transitional from Early to Middle Saxon (see also the stamp-decorated pot from the Hamburg area; Ahrens 1978, No. 85, dated 8th century); it alone is not evidence of Pagan Saxon occupation in the complete absence of other Early Saxon material from Waltham.

Late 10th/early 11th century pottery is represented by a small group of sherds from the grave at Site 12 containing the Ringerike-style plate (App. 8/1); all the sherds are of shelly D1 or D2 fabric (Fig. 9/24-27). These four rims have been published previously (Huggins 1984, Fig. 2) because of their similarity with pottery in the clay floor of a building interpreted as a late-Viking turf-walled hall (Huggins 1976, Fig. 37/1-15) and because of their relevance to the more precise dating of the hall. This predominance of shelly wares has been noted previously for 11th-century features under the monastic forge at Waltham (Huggins 1973, 155-166). A rim sherd from Site 4 in the old ground surface F95 (Fig. 9/9) and another from F10 (Fig. 8/3) also belong to this period.

Twelfth-century pottery is stratified in ditch F9 (Fig. 8/4-16) which appears to have been closed at or before the beginning of building work on the monastic church *c.*1177. Shelly D2 ware still predominates but is accompanied by fabric G and a few sherds of a J2 glazed pitcher. The deep boundary ditch F47 at Site 6 has a smaller group of similar proportions of these fabrics which can be dated to the same period.

Thirteenth-century pottery was found in the pit F24 which contained fewer D2 sherds with a higher proportion of fabric G and H as well as J2 glazed jug sherds, the rough finish of which suggests a date *c.*1220-1240 (Fig. 8/17-28).

The Site 5 group from F36 and F37 with paviour's waste (Fig. 9/19-23) includes mainly jugs typical of the later 13th century with a Rouen-type sherd No. 20 and the large piece of base No. 23 of a baluster jug which are possibly from the Mill Green kilns in Essex and dated by London evidence to *c.*1290-1300 (Pearce *et al* 1982, Fig. 7 and 6). This group thus gives a date for the Waltham type 3 tiles being possibly re-laid in the recently built monastic church. The path deposits F5 and floor deposit F14 (Fig. 8/29-31, 33-34) also include Mill Green ware and can be dated to this period, with an intrusive rim No. 32.

Fourteenth-century pottery was found in the features F68, and

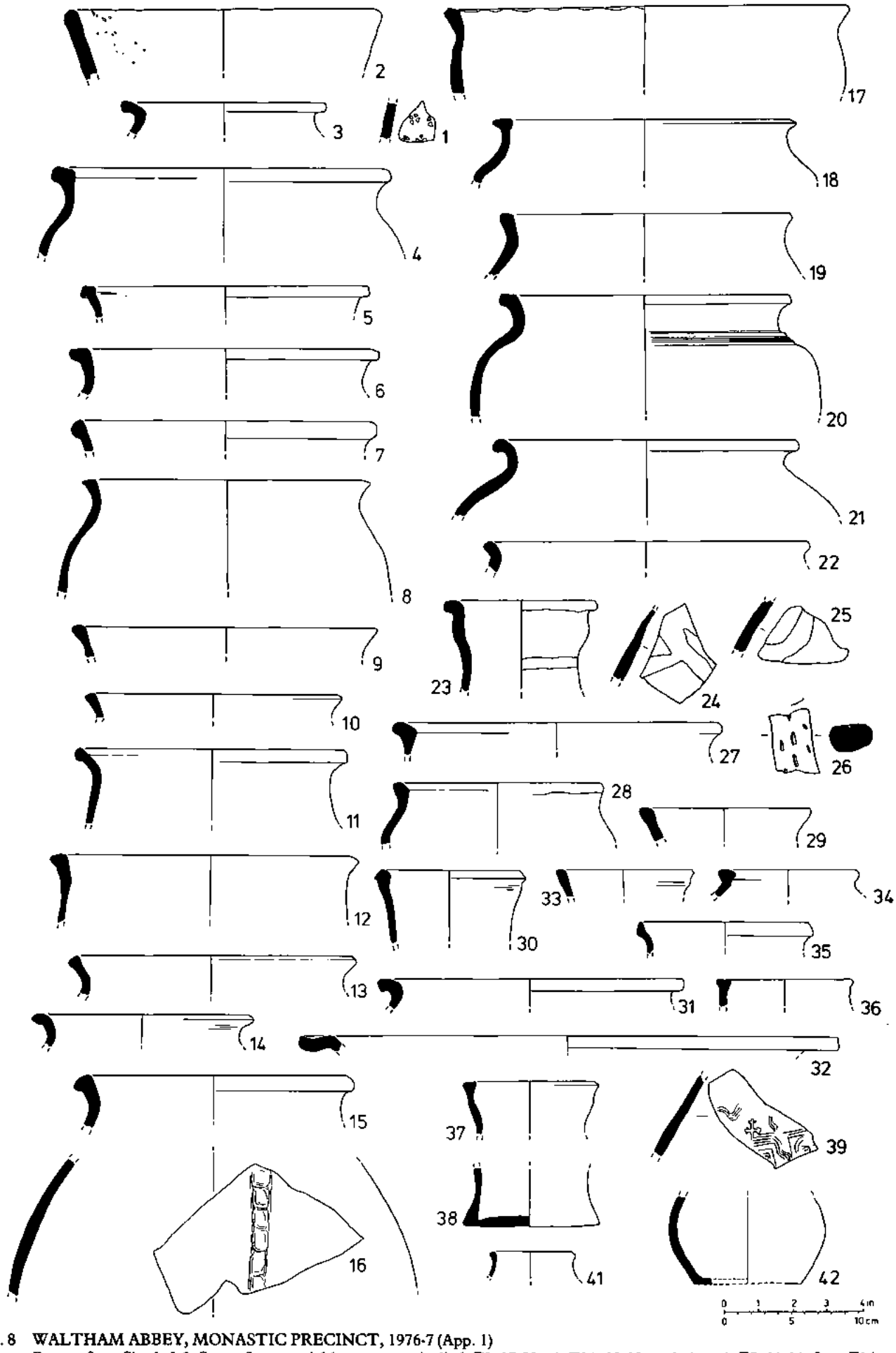


Fig. 8 WALTHAM ABBEY, MONASTIC PRECINCT, 1976-7 (App. 1)
Pottery from Site 1: 1-3, Saxon features; 4-16, pre-monastic ditch F9; 17-28, pit F24; 29-30, path deposit F5; 31-34, floor F14; 35-42, debris F25 over pit F24. Scale 1/4.

F70-73 with similar proportions of the fabrics G, H and J2, with H and J2 predominating (Fig. 9/1-5) and with a little derived D2 ware. These deposits are all probably associated with the building of the precinct wall at Site 2. A date of *c.*1370 is suggested by documentary evidence for the construction of the precinct wall.

Fifteenth-century groups include that from the late medieval make-up F26 (Fig. 8/35-42) filling a depression due to subsidence of pit F24, which has a predominance of fabric K together with imported jugs, all the vessels being of high quality and No. 39 having unusual stamping of religious motifs in fabric K. A date of *c.*1450 is suggested. Pottery from the lime dump F122 (Fig. 9/15-18) at Site 4A included only fabric K, with a few derived sherds, and can be dated *c.* 1450 also, the jug handle No. 16 having typical knife point stabbing in this fabric.

Sixteenth-century pottery is represented in post-monastic wall buildings deposits F83 (Fig. 9/6) and F84 at Site 3 where it is all derived, and in the occupation loam F98 at Site 4 (Fig. 9/10-14). All of these include fabric M. The loam also included a blue tin-glazed maiolica vase No. 14 of 'Malling' type, now considered to be a Netherlands product, and a Cistercian-type cup base No. 13, with the two probable chafing dish fragments Nos. 10 and 12; a post-Dissolution occupation inside the south-east corner of the monastic precinct is suggested here.

Post-medieval pottery was not closely stratified and has not been discussed in this report. It has been extensively discussed elsewhere (see Bibliography).

Fig. 8 Pottery from site 1

From loam F28 filling grave 6

1 Black sherd with sand and grass/chaff temper, AC, stamped with small quartered circle. A common stamp paralleled at Mucking, Hamburg and elsewhere (see discussion above).

From sandy loam F11, through which graves were dug

2 Rim of thick hand-made pot, black fabric B, hard with fine mainly white grits, some of calcined flint. Diameter and angle of rim approximate.

From loam F10, of pre-monastic ground surface

3 Rim, black fabric D1, with fine-shell temper.

From ditch F9, which preceded monastic building

4-13 Rims of cooking pots, fabric D2, grey or black cores with red or grey surfaces sometimes sooted.

14 Rim, fabric G.

15 Rim, fabric H, with coarse-sand temper, grey core, unglazed, possibly a pitcher.

16 Body sherd of pitcher, coarse sandy ware with red surfaces, early J2 fabric, orange/green glaze outside with applied thumbed band.

From pit F24, cut by buttress F22

17 Rim, fabric G.

18 Rim, fabric D2, reddish surfaces.

19 Rim, fabric G, red outer margin.

20 Upper part of pot, fabric G/H, reddish with fine-sand temper, grey surface inside, blackening outside, slight grooved band on shoulder. This large sherd was from bottom of pit.

21/2 Rims, fabric G, blackened by soot.

23 Jug rim, coarse sandy grey ware, coded J1, red surfaces with whitish slip outside and yellowish/green pitted glaze extending partly inside rim, brown band painted round neck.

24/5 Jug sherds of similar fabric to 23, coded J1, with thick white slip overall and brown painted linear decoration under yellowish glaze.

26 Segment of jug handle, similar fabric to 23-25, coded J1, with dark green glaze overall showing lighter green over patches of white slip, stabbed on back.

27 Rim, fabric D2, red surfaces with grey core.

28 Rim, fabric G, with black surfaces.

From the possible path deposite F5

29 Jug rim, grey with red surfaces, pinkish white slip, fabric J2.

30 Jug rim, of similar fabric with red surfaces, creamy slip overall, green glaze remains inside only, fabric J2.

From possible floor deposits F14, of late monastic period

31 Rim, fabric H, grey core, unglazed.

32 Plate rim, fabric M, late 15th/early 16th century.

33 Jug rim, redware with dark inside surface, thick speckled green glaze outside over white slip, with dark band on neck showing through slip; probably Mill Green ware import from Chelmsford area, hence coded J1.

34 Jug rim, pinkish/buff fabric, with fine sand temper, unglazed except for tiny spot of yellowish glaze outside only.

From late monastic make-up F26, filling depression above pit F24

35 Jug rim, with dark surfaces, fabric J2.

36 Jug rim, fabric K, unglazed.

37 Jug rim, fabric J2, unglazed.

38 Jug base, fabric K, green glazed partially outside.

39 Body sherd of jug, fabric K, pattern stamped and inscribed outside under thick dark green glaze. Central design with cross crosslet may be part of crown or crozier, the right hand stamp may represent an apostle's head with left eye and part of nose, inscribed lines are interspersed between and around the stamps. Stamps were pressed on and held by fingers from inside.

40 (not illustrated) Fragment of strap handle with sharp stabbing, fabric K.

41 Jug rim, very fine whitish ware with thick green glaze outside, French or Surrey import, coded J1.

42 Base of small jug, sandy buff ware, speckled green glaze outside, Surrey/Hampshire import, coded J1.

From upper fill F7 of ditch F9

43 (not illustrated) Rim, of fabric G, and bowl rim of fabric H, the large diameter bowl having thumbing on top of rim.

Fig. 9. Pottery from sites 2-5 and 12

Site 2. *From make-up F68, after precinct wall F51 built*

1 Large part of bowl, fabric H, with grey surfaces, unglazed.

2 Jug rim, redware, fabric J2, with white band on neck, no glaze remains.

3 Small skillet or bowl with handle scar, fabric H, brown glaze inside base.

Site 2. *From ditch silt F73, and loam F72 above*

4 Large part of cooking pot, thin redware, fabric H, with brown glaze inside base only, soot blackened under base and on lower side (sherds from F72 and F73 fit).

5 Jug rim, fabric J2, red with white band below rim, trace of pushed-out lip, some glaze outside, red surface inside.

Site 3. *From deposits F83 and F85; derived in wall F88 construction deposits*

6 Jug rim, fine sandy grey ware, fabric J2, with white-painted line outside diagonally.

7 Jug rim and handle, redware, grey core, fabric J2, white slip both sides, handle double thumbed and pierced, possibly Mill Green.

8 Part of small pot, redware with grey core, fabric H, mottled greenish glaze inside only.

Site 4. *From loam F95 of old ground surface*

9 Flanged rim of bowl, fabric D1, pink surfaces, grey core.

Site 4. *From occupation loam F98 probably associated with 'wall' F97*

10 Bowl of chafing dish, fabric M, brown glaze inside and partially outside.

11 Jug or storage jar, with one strap handle remaining, probably one of two, fabric M, unglazed with dark surface, white-painted band on neck and trace of pattern below.

12 Base of chafing dish, fabric M, dark grey surface, traces of glaze inside base, neat thumbing round edge.

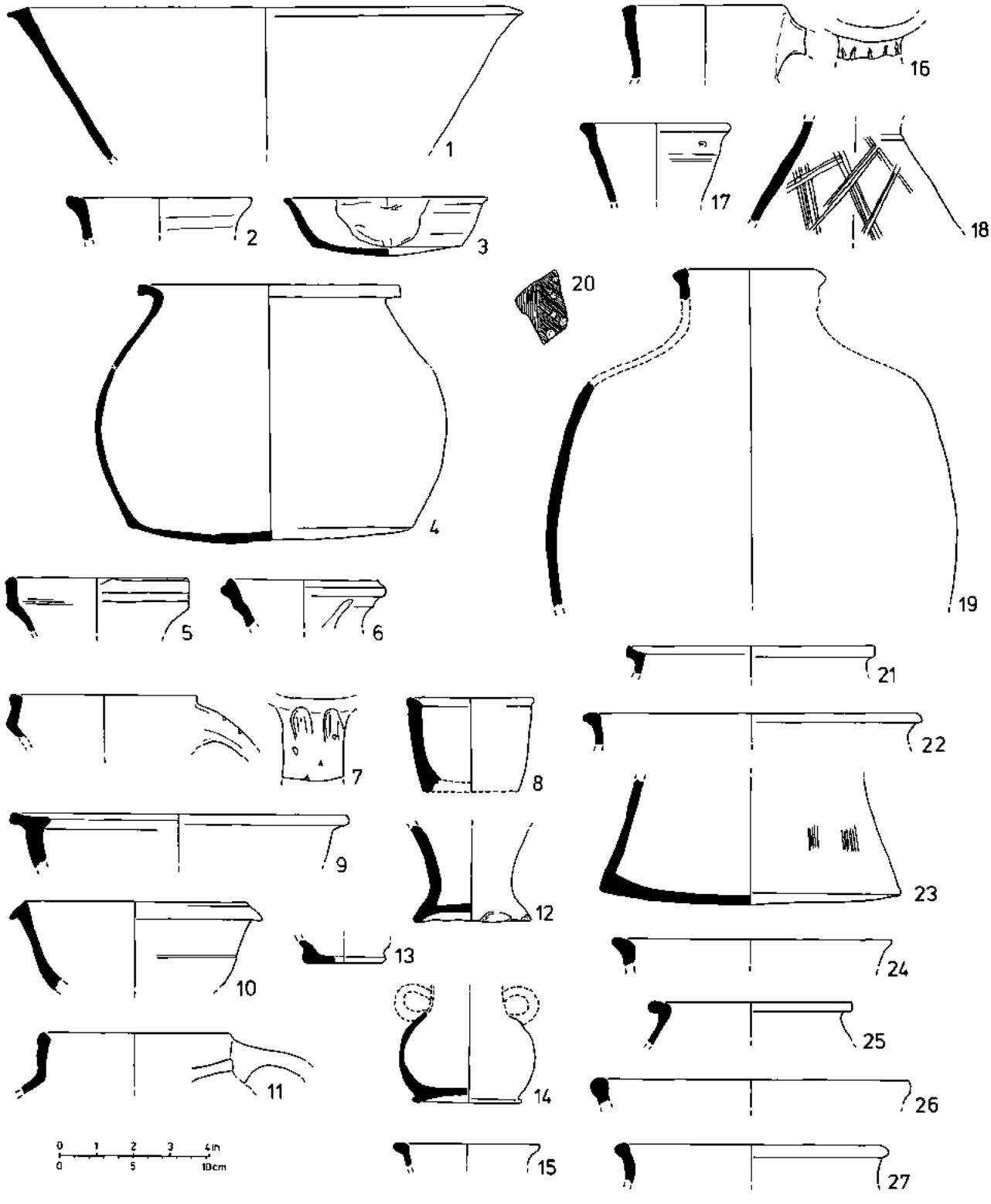


Fig. 9 WALTHAM ABBEY, MONASTIC PRECINCT, 1974-7 (App. 1)
Pottery from Sites 2-5 and 12: 1-5, Site 2; 6-8, Site 3; 9-14, Site 4; 15-18, Site 4A; 19-23, Site 5; 24-27, Site 12. Scale 1/4.

13 Base of cup, Cistercian-type ware, dark red with black core, mottled dark brown/black glaze over both sides except under base which is purplish.

14 Vase base, maiolica, soft buff ware, with dull white glaze inside, blue tin glaze overall except under base. 'Malling' type, Netherlands import.

Site 4A. *From lime dump F122*

15 Jug rim, fabric K, trace of green glaze.

16 Jug rim and handle with stabbing on back, fabric K, thin green glaze outside and over handle.

17 Jug rim, fabric K, thick greenish brown glaze outside over dimple and incised lines round neck.

18 Jug body sherd, fabric K, incised criss-cross pattern under green glaze outside.

Site 5. *From deposits F36 and F37* (see below)

19 Jug rim, fabric J2, rim unglazed with trace of slip outside; found with large body sherd of similar ware, slip coated with patchy yellow glaze with some green, pitted glaze.

20 Jug sherd with polychrome pattern outside, yellow spots on dark brown band, greenish yellow glaze on remainder, fine red ware, probably Mill Green copy of Rouen jug (Pearce *et al* 1982, Pl. 1), coded J1.

21 Rim of fine red ware, greyish unglazed surface, coded J1.

22 Rim of pot, fine red ware, unglazed, edge of pot blackened, coded J1.

Site 5. *From clayey soil F37 with floor tile debris*

23 Base of baluster jug, probably Mill Green, whitish coating inside mottled green glaze with yellow patches over fine combing or brushing vertically outside, coded J1.

Site 12. *From grave fill with Ringerike-style plate*

24/25 Rims, fabric D1, pink/grey surfaces, 25 has some sand temper.

26/27 Rims, fabric D2, grey/black surface.

Appendix 2 Floor tiles

by Rhona M. Huggins

Glazed floor tiles were found at Sites 1, 2, 4, 4A and 5. Those at Site 5 are considered first; they are considered to be paviour's waste. The worn fragments at Site 1 were in the path F5 to the postulated transept door; those at Site 4A were part of a hearth to the lime kiln; those at Sites 2 to 4 were stray finds.

Site 5. Thirty-nine fragments of floor tile including triangles, rectangles and diamonds were found in spoil from the digging of a manhole trench, two more were seen in section in the soil F37 (Fig. 7/J1J2) and nine further fragments were found in the trench excavated around the manhole; all the tiles are taken to be from the same level. Five fragments had recognisable patterns representing four of those previously classified at Waltham as Group 3 designs on five-inch square tiles (Huggins 1970, 43-46). All tiles that could be measured, except the diamonds, were made from five-inch squares. All the tiles had unworn glaze and were not mortared. The patterns were: chequer, Waltham 10, a snapped triangle; a bird, Waltham 11, a snapped triangle; quatrefoil, Waltham 12, a centre fragment halved for snapping; six-petal rosette, Waltham 13, two fragments of snapped triangles. All these pieces had been cut diagonally across squares to half the depth before firing and, except the quatrefoil, had been snapped after firing. This technique of preparation has been noticed previously at Waltham, glaze is often found on the half-cut edge. The remaining fragments are 12 yellow-glazed of which four had been cut, and 32 black-glazed of which six had been cut, and four overfired and distorted pieces. All the tiles, both plain and patterned, were of similar fabric and were about one-inch thick, with slightly bevelled edges. The fabric is red, the underneath being left rough, with a smooth darker red surface on the cut edges. They are better levigated than Group 2 tiles but are not so fine as Penn tiles. The lead glaze on the plain yellow tiles is applied on a cream slip which gives the same colour as the slipped areas of the patterned tiles, with occasional flecks of green. The black glaze is often greenish or, less often, brownish. Generally the fragments seem to be consistent, none of them fitted together, which further suggests they are a waste product. Three triangle sizes were estimated for the cut tiles: 5 × 5 × *c.*7 inch; 3½ × 3½ × 5 inch; 2½ × 2½ × *c.*3½ inch. One black-glazed tile is a 3¼ × 2¼ inch rectangle, and a black and a yellow tile had been cut to give rectangles 1¼ inch wide. One diamond shaped tile has 2½ inch sides with angles of 45 and 135°.

The only dating evidence is the small group of pottery in deposits F36 and F37 of *c.*1270-1300. The smaller Group 2 tiles, see Site 1 below, were dated previously (Huggins 1976, 122) to the early 13th century.

Site 1. Six fragments were found in the path deposits F5. Of these, one had a fleur-de-lys design, Waltham 7, a common pattern of Group 2 tiles, 4½ inch square, and of less well levigated fabric than Group 3. This fragment was in good condition, but the other five were all worn and had traces of mortar, several had been diagonally cut; the fabric suggests they were all Group 2 tiles, no measurements could be taken to confirm this. One fragment was a yellow-glazed diamond smaller than the Site 5 example above; black-glazed fragments were also present.

The pottery with these tiles was of the late 13th century but, as stated above, the tiles have been dated to the early 13th century elsewhere. It seems possible that the Group 2 tiles were being replaced by the Group 3 tiles seen at Site 5. Thus the Group 2 tiles could have been laid as the original floor in the monastic church, which was dedicated in 1242, but were being replaced by the end of the century.

Sites 2-4. Six stray finds of floor tiles included a small yellow-glazed square of 1¼ inch sides apparently snapped from a larger tile along a prepared cut.

Site 4A. The hearth F123 was paved with large glazed tiles, 1¼-1½ inch thick, one was *c.*7¾ inch square. Fragments of three tiles were found, much burnt, with discoloured glaze on the upper surface coated by a whitish deposit; some glaze spilt on the under surface was dark green. Green-glazed tiles of this size have been found elsewhere in the monastic area (Huggins 1970, 259). Pottery in the associated lime deposit F122 at the back of the kiln is dated *c.*1450.

Appendix 3 Building materials

(a) Romano-British. Brick and tile of Romano-British origin is often found in excavations at Waltham; a considerable amount has been found in an 11th-century context (Huggins 1976, 124). In the present excavations some 30 pieces, including eight fragments of *tegula*, were found; 16 pieces were in the ditch fill F9 at Site 1 with 12th-century material.

(b) Daub. Twenty-nine fragments of fire-hardened daub, most with clear wattle impressions, were found in the loam F95 at Site 4. This material could be associated with stake and post holes there and probably derives from some wattle and daub structure of the 12th century or earlier.

(c) Slate. Fragments of slate were found in many deposits of the second half of the 16th century and later. One almost complete slate, *c.*24 × 11 cm, was found in the path deposit F5 at Site 1.

(d) Stone. Reigate stone was found in deposits of the 12th-century onwards. A mutilated octagonal plume or finial (Pl. 3A), 7 inch across flats, with four crockets was found in the 'wall' F12. Dr. K.N. Bascombe believes it probably formed part of a canopied tomb; it is paralleled by that of Bishop Giles of Bridport, d.1262, in Salisbury cathedral. Paris (1889, 178 and 495) records the mid-13th century burials at Waltham of John Neville, high forrester of England, in 1246, and of Robert Passelow, archdeacon of Lewes, in 1252. The Madonna statue, reported in App. 4, is also of Reigate stone.

Other stone included Purbeck marble and Caen stone. Purbeck fragments were found in the path deposit F5 and in loam F36, dated late 13th century, and in deposits F40A of the 14th or 15th century. A chevron arch voussoir in Caen stone, found in the 18th-century drain trench F4, is of the same style as that found in the standing church and could be derived from the demolished east end of this Romanesque building.

A

B

(Photos: J.H. Littlefair)

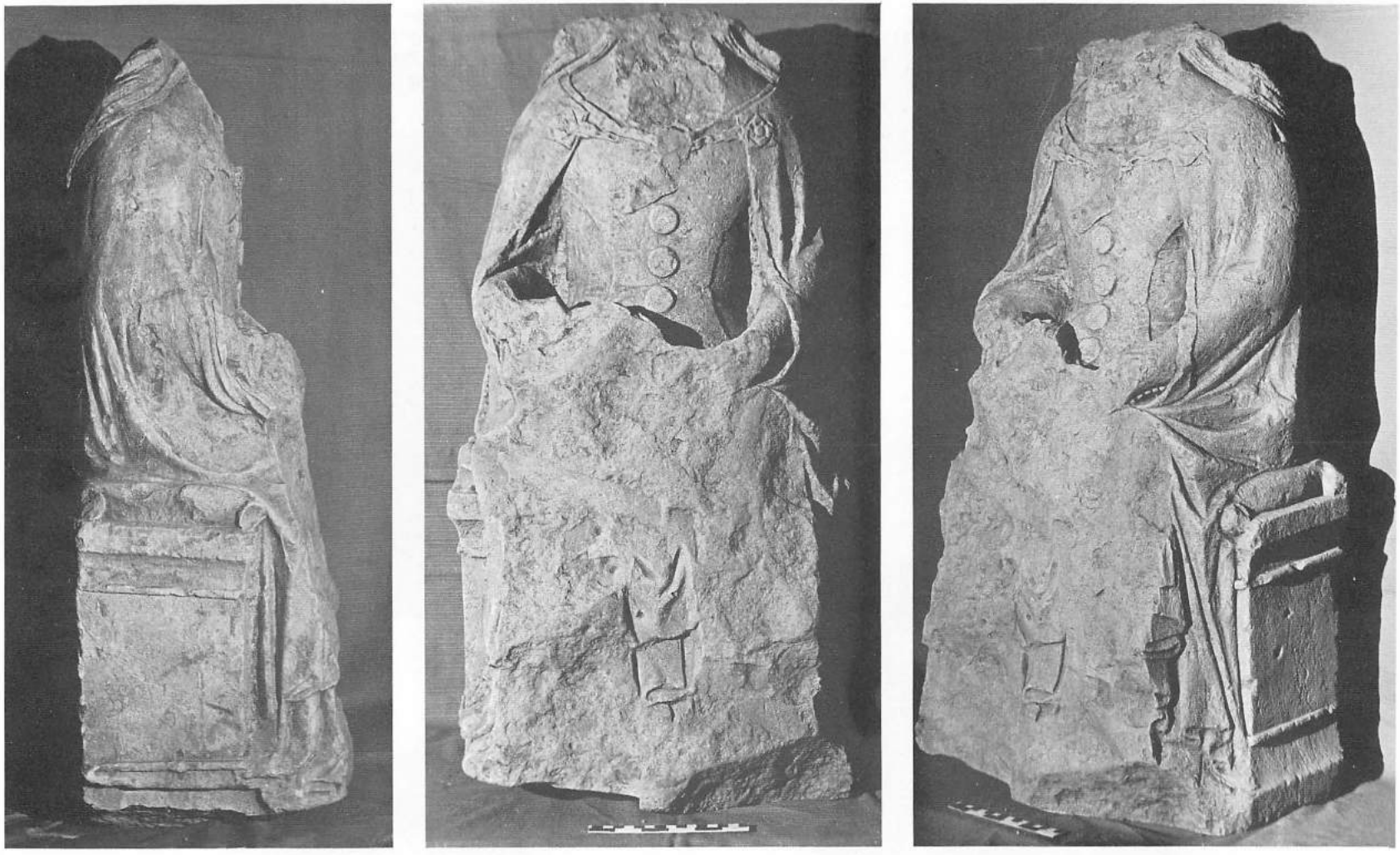
C

Plate 3 WALTHAM ABBEY, ESSEX, MONASTIC PRECINCT, 1976

A Reigate stone finial from 'wall' F12, Site 1 (App. 3d).

B Ringerike-style copper alloy-plate from burial at Site 13; 45.2mm long (see also Fig. 12/1 and App. 8/1).

C Skull of individual 17, Site 1; showing healed lesion on parietal bone (App. 13).



A B C (Photos: J.H. Littlefair)

Plate 4 THE WALTHAM ABBEY MADONNA
Mutilated Reigate-stone statue of the Madonna and Child, 75 cm high, found at Site 4, 1974, buried in the ditch F96.
A View of right-hand side, note the flowing hair and the converging lines of the plinth.
B Front view showing the roseate clasps and chain to hold the cloak, note the remains of the Child's hand grasping the chain.
C Half front view showing the buttons on the left sleeve of the kirtle, and the flowing robes of the missing Child.

(e) Plaster. Plaster with an ochre wash, covered by three coats of limewash, was found to the north of the building at Site 4. There were 12 pieces in loam F93 and four pieces in loam F98 above, these deposits are dated to the second half of the 16th century.

(f) Bricks. Great bricks of medieval type are visible in the standing wall F33, mainly in the upper part of the east face. Twenty-five were measured, generally the width and thickness is visible but two lengths were also exposed: 21 were of group G178 (Huggins 1976, 123) if the width range is increased slightly so that the range becomes $12^{7}/_{8}$-$13^{1}/_{4}$ × $6^{3}/_{8}$-$6^{3}/_{4}$ × 2-$2^{1}/_{8}$ inches. Such bricks were used in a drain F17, in the Vicarage garden, with associated 15th-century pottery. Fourteen Great bricks also occur in the post-medieval wall F15, ten of these fit the group coded G350 (Huggins 1972, 112) if the thickness range is increased to give a range of $14^{1}/_{2}$-15 × $6^{3}/_{4}$-$7^{1}/_{4}$ × 3-$3^{1}/_{2}$ inches.

Flemish-size bricks, of soft red sandy fabric, were found in the backing F121 to the lime kiln at Site 4A. Seven were measured with a range of $9^{1}/_{8}$-$9^{1}/_{4}$ × $4^{1}/_{2}$-$4^{5}/_{8}$ × $1^{7}/_{8}$-$2^{1}/_{8}$ inches. The lime kiln seems to have been in operation *c.*1450.

(g) Roofing tile. Nothing useful can be said of the date of the flat roof tiles. A roughly formed disc made from a flat roof tile, probably a gaming piece, is shown in **Fig. 14/1**; it was found at Site 1 in clay F13, with pottery dated 13th or 14th century.

Appendix 4 The Waltham Abbey Madonna (Pl. 4)

The mutilated stone statue was found at Site 4 (Fig. 6) lying face upwards, with head due west, in loam fill of the ditch F96. It was covered by a deposit of building debris F94 with a few sherds of the second half of the 16th century.

The statue has been described and discussed elsewhere (Huggins, R.M. and Bascombe 1975, 288-289). It clearly represents the Virgin Mary holding the Christ Child on her right knee and seated on a cushioned pedestal. The head of the Virgin and all of the Child had been broken off leaving only a fragment of the child's left hand. The back of the statue is roughly hollowed out to reduce weight. The remains are now 75cm (2ft 6in) high. The whole is carved from a single piece of Reigate stone.

The costume of the Virgin comprises three garments: a cotehardie or sideless gown with a low neckline which could be slipped over the head without fastening but which, nevertheless, has four large buttons, 3cm diameter, remaining down the front; these buttons were probably ornamental. Under the cotehardie was worn a kirtle or underdress also with a low neckline and with long tight sleeves with small buttons at the wrist (seven remain on the left arm, see Pl. 4C). The third garment is a cloak fastened across the chest by a chain with roseate clasps or *fermaille* at the corners of the cloak; the cloak falls in folds to the ground. The style of the costume can be compared to the figure of Joan de la Tour on Edward III's tomb (d.1377) in Westminster Abbey; the central cotehardie buttons on this statue are clearly decorative. Discussion of the use of buttons shows they were a new fashion (Nevinson 1977, 42) so that the Madonna was dressed as a fashionable lady; it is possible she wore a crown as Queen of Heaven.

J.G. Beckwith of the Victoria and Albert Museum dates the statue to *c.*1380 on the basis of the costume. This style was in vogue in the last quarter of the 14th century, being replaced by the high-waisted dresses of the early 15th century. Mr. Beckwith also suggests the statue was made in a London workshop and he states that the standard of workmanship was high.

The hair remains on the shoulders, waving loosely in the manner of an unmarried girl probably to indicate her Virgin status. The Child was evidently positioned on the Virgin's lap, being supported by her right arm. A trace of his left arm can be seen as a scar on the mother's chest with the hand clasping the chain of her cloak. The lower part of the child's loose flowing robe can be seen on the right elbow below the level of the mother's knee.

The upper and lower mouldings of the pedestal are not parallel. Calculations show that the vanishing point is 9ft (2.7m) from the back of the plinth or about 8ft (2.4m) from the original front of the statue. The eye level was intended to be about a third of the way up the pedestal. Hence the statue seems to have been made for resting on a bracket or niche just over 5ft (1.5m) above floor level and the viewer would stand about 8ft away. The statue shows that the rules of perspective were understood by the sculptor.

The Lady Chapel of the now demolished monastic church and the chapel of the Guild of Our Lady, established at Waltham *c.*1350, are both places in which such a statue would be expected. The Guild is known to have possessed an image of Our Lady by 1389 (Oxley 1965, 65). The monastery was dissolved in 1540 but the suppression of the chantries was not effected until 1548. Between these two dates political events resulted in increased desecration. Dr. K.N. Bascombe concludes that the mutilation, and possibly the removal of the Madonna, would have been in accord with the proceedings at the General Visitation of 1547 (Oxley 1965, 150-151); the Guild was dissolved in the following year. The statue's subsequent burial in the south-east corner of the monastic precinct is seen as a pious act following its desecration. The statue, with the co-operation of the Rev. K.H. Pillar, has been placed in the present Lady Chapel in an inner window recess at about the height for which it was designed.

Appendix 5 Glass

(a) Vessel Glass. Only a few indeterminate fragments were found in the medieval levels. Several fragments of large dishes and bowls were found in the 17th to 19th-century levels. From the stokeholes of a recent glasshouse near the 'tower' buttress at Site 1 was found a collection of chemist's jars marked ROBERT WOOD MPS, MARKET SQUARE, WALTHAM ABBEY, 585; Wood's cash Chemists Ltd. was at 2 Market Square in 1933.

(b) Window Glass (Fig. 10). Window glass from Waltham has been classified previously (Huggins 1976, 118); type A: completely devitrified, 1.8 to 5.0mm thick, and type B: a pale green glass with flaking surfaces, 2.1 to 3.2mm thick, but the difference may be a matter of decay rather than manufacture. Besides the pieces illustrated there were 20 plain pieces of type A and six of type B. An unpainted piece of type A was found in deposit F7 dated to the late 12th or early 13th century.

1	Quarry of pale brown glass, 4-6mm thick, dull purple paint; almost pristine condition, but staining at edges shows it had been used; bubbles are elongated in the direction of the arrows so presumably it was cylinder-blown glass. Found at Site 1 between bricks in repairing the wall F15 at the top of the 'tower' buttress F21.
2-4	Fragments of type A glass. Site 1 in clay F13, with 13th or 14th-century pottery.
5-7	Fragments of type B glass. Found at Site 1 in building debris F26, with pottery dated *c.*1450.
8	Fragment of type B glass. Found at Site 4 in loam F98, with pottery of the second half of the 16th century.
9-11	Three specimens of type B glass. Found in the Vicarage garden in 1969 (Huggins 1976, 118) in loam F20, with medieval pottery but not previously illustrated.
12	Quarry of pale blue glass with only slight surface irridescence. From ditch silt F73, with pottery dated *c.*1370.
13	Fragment of type A glass, rounded edge slightly thickened, possibly the edge piece of a flattened cylinder-blown sheet. Found at Site 2 in clayey loam F68, with pottery dated *c.*1370.
14-15	Fragments found in deposit A65 at Sewardstone Street in 1966 (Huggins 1969, 65) dated *c.*1639 and taken as evidence that glass as well as stone was re-used in the town after the Dissolution of the Abbey.

Window glass from the Cloister site and from Site 8 of this report has been described (Huggins 1970, 47) as 'petal or leaf' design on a criss-cross background with thick and thin parallel boundary lines. The whole quarry, No. 1 here, and Nos. 4-6 and 14-15 fall into this category. This is a type quite closely paralleled at Hadleigh Castle, Essex (Drewett 1975, Fig. 24), in a context of *c.*1250-1300. Another style of this purple painted glass tentatively described as 'foliage' pattern, found in the Vicarage garden (Huggins 1976, 117-118) and here illustrated as Nos. 9-11, has characteristic double parallel lines and irregular curving lines, No. 7 may be a further example. As a result of the discovery of a near complete

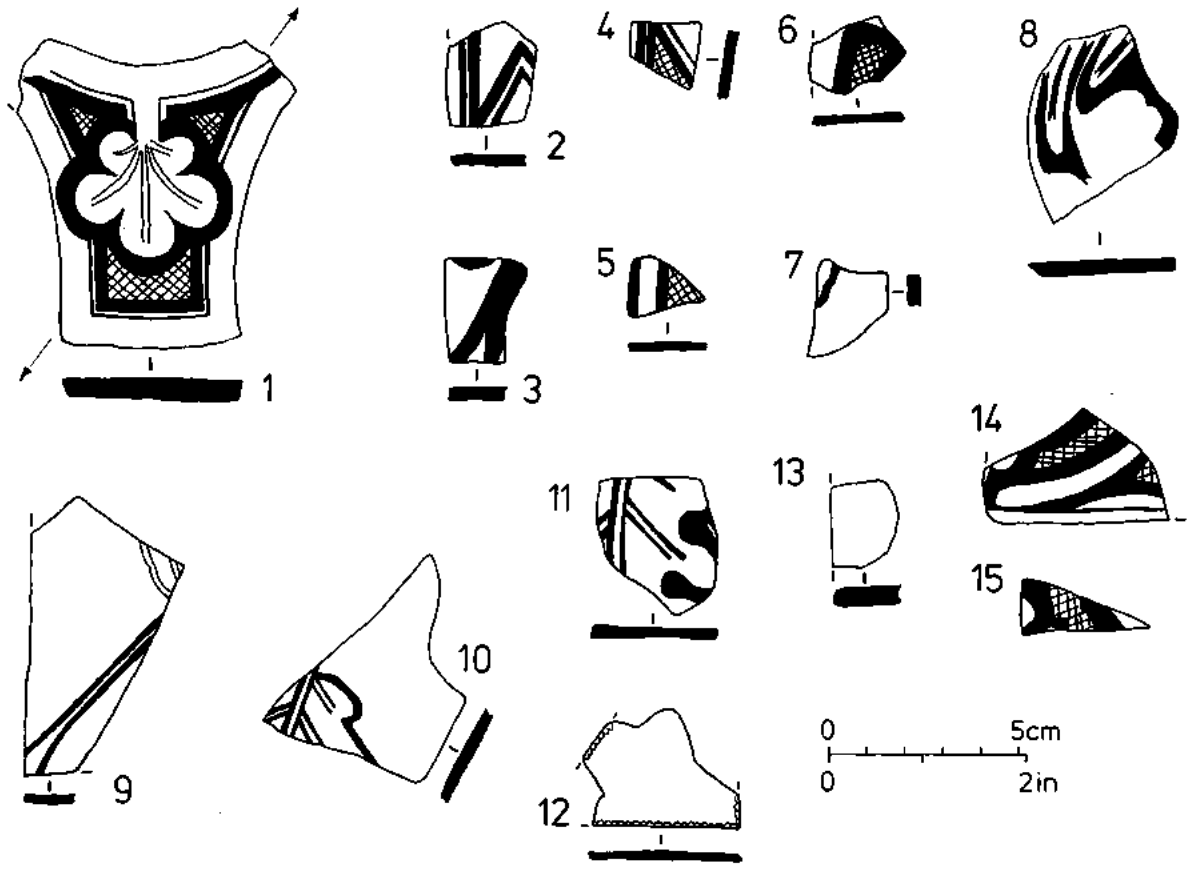


Fig. 10 WALTHAM ABBEY, MONASTIC PRECINCT and TOWN, 1966-76 (App. 5b)
Window glass: 1-7, Site 1; 8, Site 4; 9-11, Vicarage garden, 1969; 12-13, Site 2; 14-15, Sewardstone Street, 1966.

quarry inside the present church in 1985, this latter category can now be better described as 'oak leaf' pattern with the skeleton indicated by the double lines, with the background blocked in and the leaf itself left clear; No. 11 illustrates the design clearly. Nos. 2, 3 and 8 do not seem to fit either category.

Appendix 6 Lead (Fig. 11/1)

A few fragments of window came, sheet offcuts and some solidified waste were found. The only significant group was at Site 4 in the loam F98, and in the loam F93 below. Two sheet offcuts, one solidified lump and a decorative fragment (Fig. 11/1) were in F98 and a sheet 10 × 12cm with two nail holes was in F93. These may indicate light industrial activity in the building at Site 4 in the second half of the 16th century.

Appendix 7 Coin, jeton and lead pieces (Fig. 11/2 and 3)

The late S.E. Rigold supplied information from drawings and rubbings submitted to him, this appendix is based verbatim on his comments.

1 Half silver penny, long cross, Henry III: condition fairly fresh. Nearly all struck between 1248 and *c.*1255. Found at Site 1 on top of the mixed level F7 after clearing the possible floor deposits F14 above. Pottery in F7 is late 12th/early 13th century, that in F14 is mixed 12th to 16th century.

2 Jeton of Edward II, 20mm diameter, pierced at the centre. Lion rampant facing left. Type 4 of Berry (1974, 46); reverse type 5, short cross moline with two pellets in each quarter; border of pellets each side. The combination goes with stirling heads of Fox classes XI-XV, i.e. 1310's-1320's. Found at Site 1 in 18th-century drain construction trench F4.

The opportunity is taken to describe two lead pieces found by W.G.F. Walker and P. Penfold in 1977 in fields to the east of Sewardstone Road opposite Great Cobfield (for location see Huggins, R.M. 1978, Fig. 1):

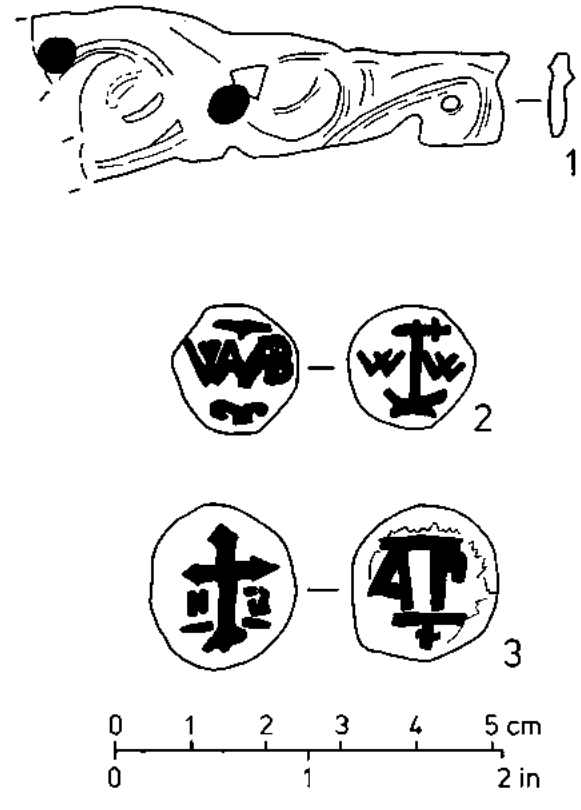


Fig. 11 WALTHAM ABBEY, MONASTIC PRECINCT and SOUTH OF TOWN, 1974-7
Lead objects: 1, Site 4 (App. 6); 2-3, fields by Sewardstone Road (App. 7).

3 (Fig. 11/2) Lead, 16/17mm diameter, *c.*2mm thick. Standing cross with crosslet (?) arms, on base or 'root' of four strokes, WW flanking stem / WA AB, both ligatured, curved ornaments above and below.

4 (Fig. 11/3) Lead, 19/21mm diameter, *c.*1mm thick. Standing cross as No. 3, but with trifoliate arms and 5 strokes to 'root', NB (?) flanking stem / AP (?) on table, small cross below.

The lettering of the lead pieces, Nos. 3 and 4, is fairly good Roman, with W of two overlapping V's and suggests second half of the 16th century rather than later. The cross might represent the rood of Waltham, or a plain outdoor cross (not the Eleanor Cross 2 miles to the west in Hertfordshire) somehow associated with the relic. It represents a time and place not puritanically hostile to crosses as such, and may be within a generation or so of the Dissolution. WW and NB are presumably the initials of the issuing tradesman. WA AB is presumably for Waltham Abbey. AP, if it is a P, open looped, like a Greek or early Roman one, is uncertain.

Appendix 8 Copper alloy (Fig. 12)

1 Trapezoidal plate or mount, 45.2mm long, 27.2 and 33.1mm wide, 2mm thick, the narrow end continues round at right angles to the face as a tongue 8.7mm long and 13.1mm wide. Found in 1976 by P. Penfold and W.G.F. Walker in a private excavation in the back garden of No. 18 Sun Street (Site 12, Fig. 3), 'just above the pelvis' of the burial at the north west of the site; this burial was at a depth of 1.5m (5ft) and also contained sherds of shell-tempered pottery dated late 10th or early 11th century, see Fig. 9/24-7.

The plate has been described briefly elsewhere (Huggins 1984) because the associated pottery was of significance for the closer dating of a building interpreted as a turf-walled hall at waltham. A full description is given here.

The plate has evidence of four fixing holes, staining at two of them suggests iron rivets were used. Probably a cast piece, the holes were apparantly drilled, or enlarged after casting. The face of the plate and the external face of the tongue are smooth, presumably having been so worked after casting; the edges of the face are rounded. The back of the plate and the inside of the tongue have the rough as-cast finish. The small projection on the back of the tongue indicates where a small part of the mould had broken away. There is no evidence to suggest the tongue is the remains of a broken hinge. There are no drilled holes at each end of the tongue as in a 'book clasp' from Moels, Wirral (Bu'llock 1960, Fig. 6a).

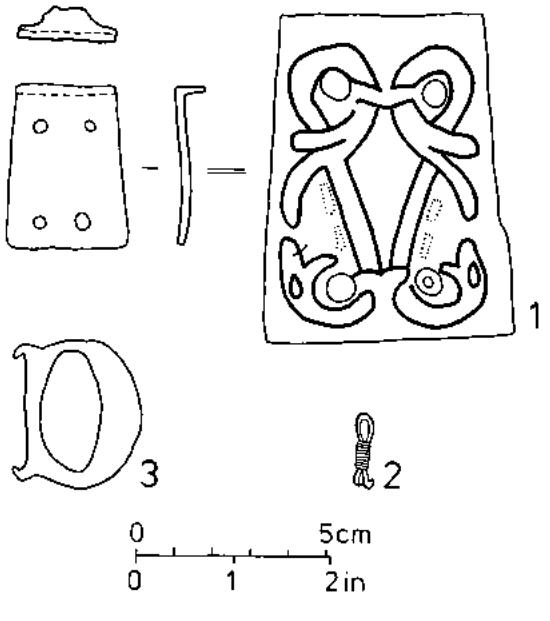


Fig. 12 WALTHAM ABBEY, MONASTIC PRECINCT, 1969 and 1976-7 (App. 8)
Copper alloy objects: 1, Site 12, the incised Ringerike-style design is shown full size; 2, Site 1; 3, Abbey Close 1969.

The roughly incised design is of two addorsed 'snakes', with pointed oval eyes, with open gaping mouths and with evidence of a fang in one mouth; there are bifurcated tails and the bodies are connected by bands. There are four apparent scars of rectangular shape on the face, there are two on each side, facing the open mouths, along the straight sections of the bodies; these are shown by dotted lines in Fig. 12/1. Their purpose is not clear but the feeling is of projections broken off, certainly four runners and vents for the casting would not appear to be necessary but the possibility remains (see below).

White incrustation in part of the incised design was tested on a scanning electron microscope (by Colin Freshwater of Middlesex Polytechnic) for silver content, but no silver was there detected. The machine was a Link Systems 290 energy dispersive X-ray spectrometer with an ISI Super-3 microscope. Elsewhere on the surface the following elements were found present, mostly as impurities: aluminium, calcium, 'chlorides', copper, iron, lead, magnesium, phosphorus, potassium, silicon, silver and zinc. An area scan, including one of the white incisions, showed high copper and lead response. A spot analysis of the white deposit showed a higher lead response, a discrete particle was almost pure lead. A spot test above a rivet hole showed high iron, no doubt being contamination from the rivet. An area analysis away from the design again showed a high lead response. Very little tin was detected and suggests the material was not bronze, similarly zinc was rather too low to indicate brass; however only surface investigation is involved so any surface segregation would confuse this issue. However a leaded copper seems to be indicated with the liklihood that the incisions were filled with lead to imitate the finer silver inlay of the period. Bright and dark areas within the rectangular marks were spot tested; the bright area was particularly high in copper and the dark area was high in magnesium and silicon but very low in copper. The suggestion here is that segregation of the impurities in the form of magnesium silicate has occurred and this possibly supports the idea that the rectangular marks are indeed sprues from the casting process.

The incised design is illustrated full size in Fig. 12/1; this can be compared with Pl. 3B. The design is roughly executed but the overall feel is of a Viking-influenced piece. Animal ornamentation is predominant in Viking art and snakes, often facing or addorsed, are popular elements. The bifurcated tail, the gaping mouth with 'fang' on the upper jaw, the connecting bands and the oval pointed eyes are noteworthy features.

Parallels for the design could be sought from the whole field of stone and metal objects and from manuscripts. For instance the rune stone Andre III, Gotland, Sweden, with two addorsed snake-like animals (illustrated and described by Wilson and Klindt-Jenson 1966, 150 and Pl. 71) has the same basic design as the Waltham plate and shows 'the dead hand of symmetry, which destroyed the Ringerike style'; one of the Andre III animals shows a bifurcated tail. The oval eye and gaping mouth with 'fang' is reminiscent of the design of a manuscript letter D (Camb. Univ. MS.Ff.1.23, illustrated by Foote and Wilson 1970, Pl. 6b); this letter is of Ringerike style and these authors point out (p. 309) that the Ringerike style of Viking art was particularly popular and successful in the British Isles.

In the case of stone, Fuglesang wrote (1978, 213) 'the conclusion would seem to be that the workshops of the British Isles either had Scandinavian craftsmen among them, or were in the possession of very clear models'. The same can be said of this metal piece. Fuglesang places the fully developed phase of the Ringerike style in the second quarter of the 11th century. The plate in question has been confirmed to be of the Ringerike style (J. Graham-Campbell; pers. comm.) and is dated to the late 10th or early 11th century (Prof. D.M. Wilson; pers. comm.). In Cnut's reign, 1016-35, Tovi, the king's standard bearer, had an estate at Waltham. An excavated building (Huggins 1976) was judged to be a turf-walled hall of Norse tradition and pottery found in the grave with the plate (Fig. 9/24-27) can be paralled with that in the clay floor of this building, on the basis of both form and fabric (App. 1 and Huggins 1984, 179). The plate is, therefore, linked in time with the occupation of the hall, which, if it is rightly associated with Tovi, would date *c.*1020 or 1030. It is necessary to point out that the late-Viking attribution of the hall has been disputed (Graham-Campbell 1977, 426-427), but the present author

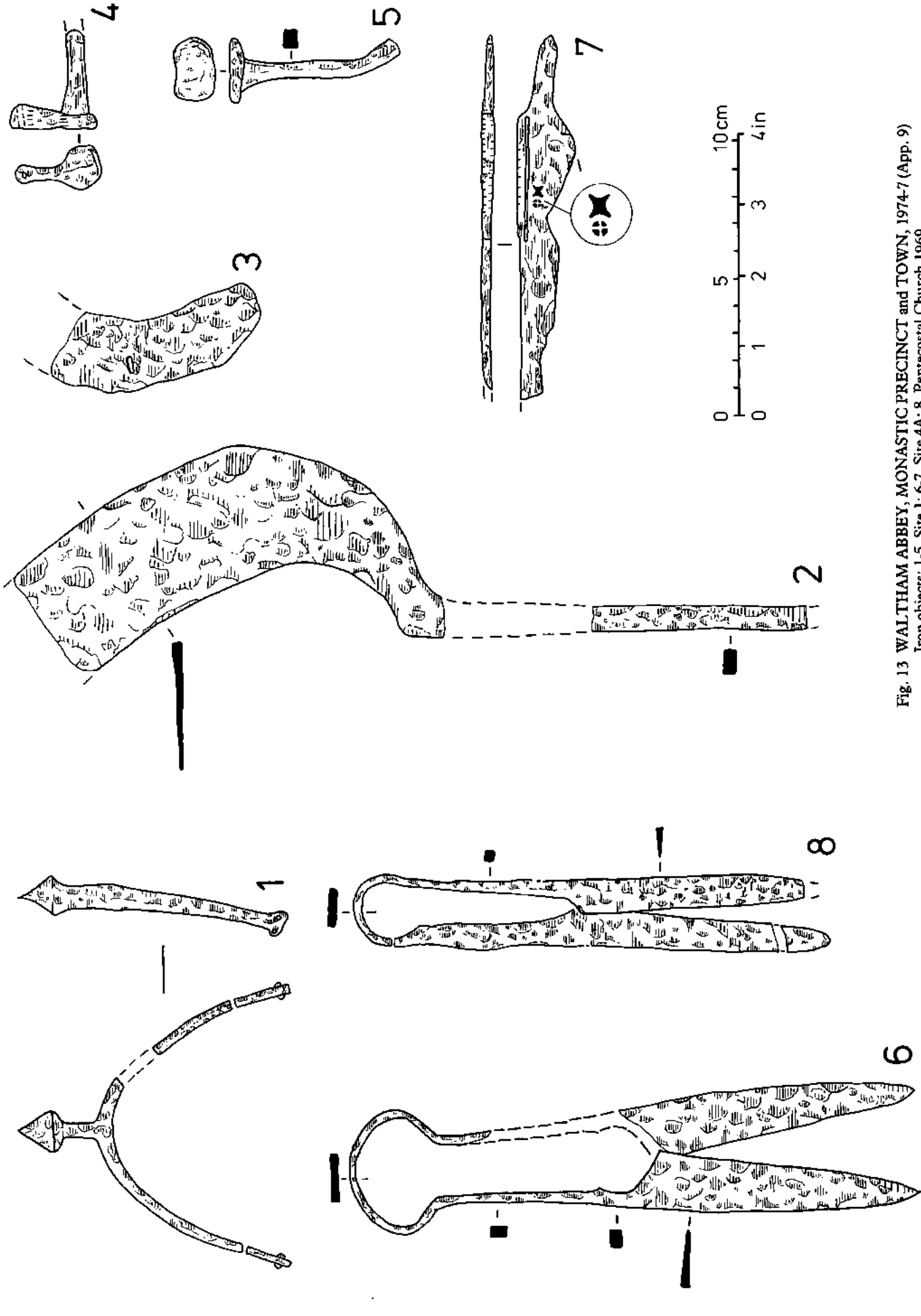


Fig. 13 WALTHAM ABBEY, MONASTIC PRECINCT and TOWN, 1974-7 (App. 9)
Iron objects: 1-5, Site 1; 6-7, Site 4A; 8, Pentecostal Church 1969.

still considers the turf-walled interpretation to suit the evidence best; this matter has been discussed in detail elsewhere (Huggins 1984, 175-181).

The use of the plate is problematical. Objects of iron and bronze which are often trapezoidal in shape, and which may give a clue to the use of the object, are stirrup plates. These are the plates by which the leather strap is attached to the stirrup by means of rivets and probably a back-plate; they have been discussed by Seaby and Woodfield (1980).

There is one example of such a trapezoidal plate from England, it was found in peat at Mottisfont, Hants. The decoration is of two snake-like facing animals with gaping mouths and the tails are said to be divided (Read 1887, 523-533). The Mottisfont stirrup, of bronze, has flanges on the strap plate within which the strap would fit, together with, presumably, a back-plate; the Mottisfont plate is large, being twice the size of the Waltham plate. Another stirrup with a trapezoidal plate is from Merkivoli in Iceland (Eldjárn 1956, Fig. 189), there are facing animals with open mouths and the bodies are joined by bands. This plate too is larger than the Waltham example, being 50% wider and 28% longer. Eldjárn (1956, Fig. 190) illustrates two other integral plates from Iceland, these are not trapezoidal but one from Vidafelli is about the same size as the Waltham plate and the addorsed snakes are again joined by a band. Worsaae (1859, 116) illustrates a further example with facing snakes from Denmark.

Less heavy duty strap fittings would also be needed. For instance strap connectors are required at the reins. Rygh (1885, No. 566) illustrates an example from Ullensaker with four or five rivets but with a hooked projection to connect to the ring of the bit; the size is roughly comparable to the Waltham plate. Since the plate was found 'just above the pelvis' of the burial it is of course possible that it is a personal belt fitting. But whatever use is suggested the projecting tongue is clearly problematical. It is hoped that the publication here will lead to its functional identification.

2. Link, 19 mm long, centre part bound with thin wire. Found at Site 1 in deposit F14 with 12th and 16th-century pottery.
3. The opportunity is taken to include this object previously published (Huggins 1976, Fig. 41/6) but wrongly described. John Blair writes: 'brass Lombardic letter D, 38 mm high, an individual inlaid letter used on gravestones *c.* 1300-1350. Parallels: from Thames at London, 1876, now in British museum; Dean, Beds., slab to Walter de Ireland, 1306'. Found in Abbey Close in 1969, north of the parish church, in a 16th or 17th century robber trench F51 with derived 13th-century pottery.

Appendix 9 Iron (Fig. 13)

1. Prick spur, *c.* 10 cm long, slightly curved arms. Found at Site 1 in ditch F9, with pottery dated *c.* 1150-1177. X-ray (at the D. of E. laboratory) showed little iron remaining. The shape is probably authentic but not the actual metal dimensions. Curved sides, generally only slightly so, first appeared in the 12th century; by the 13th century most spurs had deeply curved sides (Blanche Ellis, pers. comm.).
2. Fragments of sickle. Found as No. 1.
3. Fragment of horseshoe. Found at Site 1, in pit F24, with pottery dated *c.* 1220-1240.
4. Description by Ian Goodall: the bolt from a padlock, the springs and the end of the spine have been lost, but otherwise it resembles the bolt used with padlocks such as that from Goltho, Lincs. (Beresford 1975, 93 and Fig. 44/21). Found as No. 3.
5. Figure-of-eight nail. Found with Nos. 3 and 4.
6. Shears, 21.1 cm long. Found at Site 4A in deposit of lime F122, dated *c.* 1450. The junction of the blade with the handle is classified in LMMC (1954) as a type II junction characterised by a semi-circular recess, examples are dated 13th century; this is clearly a later example.
7. Tanged knife blade, groove along one face with latten inlay remaining, back flattened and with incisions to decorate or roughen. Two cutler's marks detected by X-ray, the fleece shape probably being inlaid, the quadrants being punched only. Found with No. 6.
8. For comparison with No. 6, a pair of shears, 17.7 cm long, found in front of the Pentecostal Church (TL 382005) south east of the Market Place, excavated by T. Turner and R.M. Huggins in 1974, is included here. It was found in a loam level with a St. Neots shelly ware inturned-bowl rim probably of the 11th century (compare Huggins and Huggins 1973, Fig. 6/23). These shears are most closely paralleled by group 1A of LMMC (1954; compare Fig. 8/1, p. 156, dated 12th century). The shears have the simple Viking-type blade and lack the distinct loop of the medieval examples.

Appendix 10 Flints (Fig. 14/2)

Eight humanly struck flints were found in the sandy loam F11, under the old ground surface at Site 1; they presumably worked down due to worm action. Three more were found in grave 6. There was one mesolithic microlith, an obliquely blunted point (type list No. 1A: Jacobi 1978, Fig. 6) from F11. A concentration of mesolithic flints has been reported from the Cloister site (Huggins 1970, 223-228) some 180 ft (55 m) north north west of the north-west corner of the present site, near the mark SN2 on Fig. 1; this material is possibly of the early mesolithic of the 8th millennium b.c. (Jacobi 1980, 17).

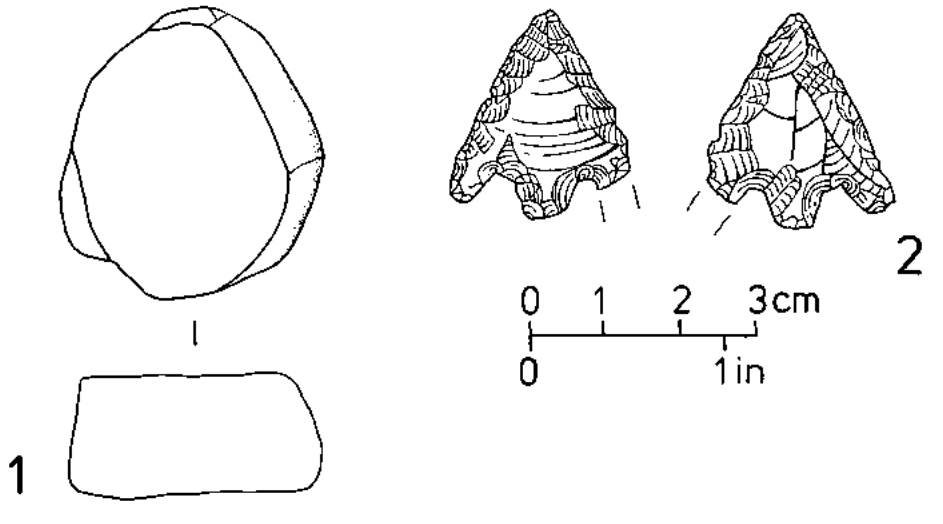


Fig. 14 WALTHAM ABBEY, MONASTIC PRECINCT, 1976
Ceramic gaming piece: 1, Site 1 (App. 3g).
Bronze Age flint arrowhead: 2, Site 10 (App. 10).

A Bronze Age barbed-and-tanged arrowhead (Fig. 14/2) was found at Site 10 in loam of the old ground surface, this compares with another arrowhead found with the Cloister site mesolithic material (Huggins 1970, 222). These flints are of particular interest at the time of re-writing this report (January 1988) because 16 pottery sherds have just been found, of a coarse-flint gritted ware, at No. 6 Church Street, just south west of the present church; this pottery is tentatively dated Bronze Age/Early Iron Age.

Appendix 11 Antler and bone (Fig. 15)

1. Antler knife handle, fragment of iron tang remaining. Found at Site 4 in loam F98, with pottery of the second half of the 16th century.
2. Antler, cut, not smoothed, probably an unfinished knife handle. Found at Site 4, in loam F92, just above Nos. 1 and 3, with pottery of the second half of the 16th century to the early 17th century.
3. End of antler tine. Found as No. 1.
4. Broken point, probably antler. Found at Site 5, in clayey soil F37, with pottery dated *c.*1270-1300.
5. Bone toggle, 35mm long, roughly squared, bored from both ends. Found at Site 10, just above the burial, in private possession.
6. Bone plaque, 24 × 20mm, lightly incised pattern, no fixing holes. Found at Site 1, in debris F26, which pottery dated *c.*1450.

Appendix 12 Animal bones and mollusca

The animal bones are discussed by Site, those at Site 4A are of special interest.

Site 1. 10.5kg of bone, but only two features contained significant remains. Ditch silt F9, with pottery dated *c.*1150-1177, 2.7kg; 3 ox, 2 pig, 2 sheep, 1 fish, 1 chicken, 1 cat, 3 oysters (all minimum number of animals).

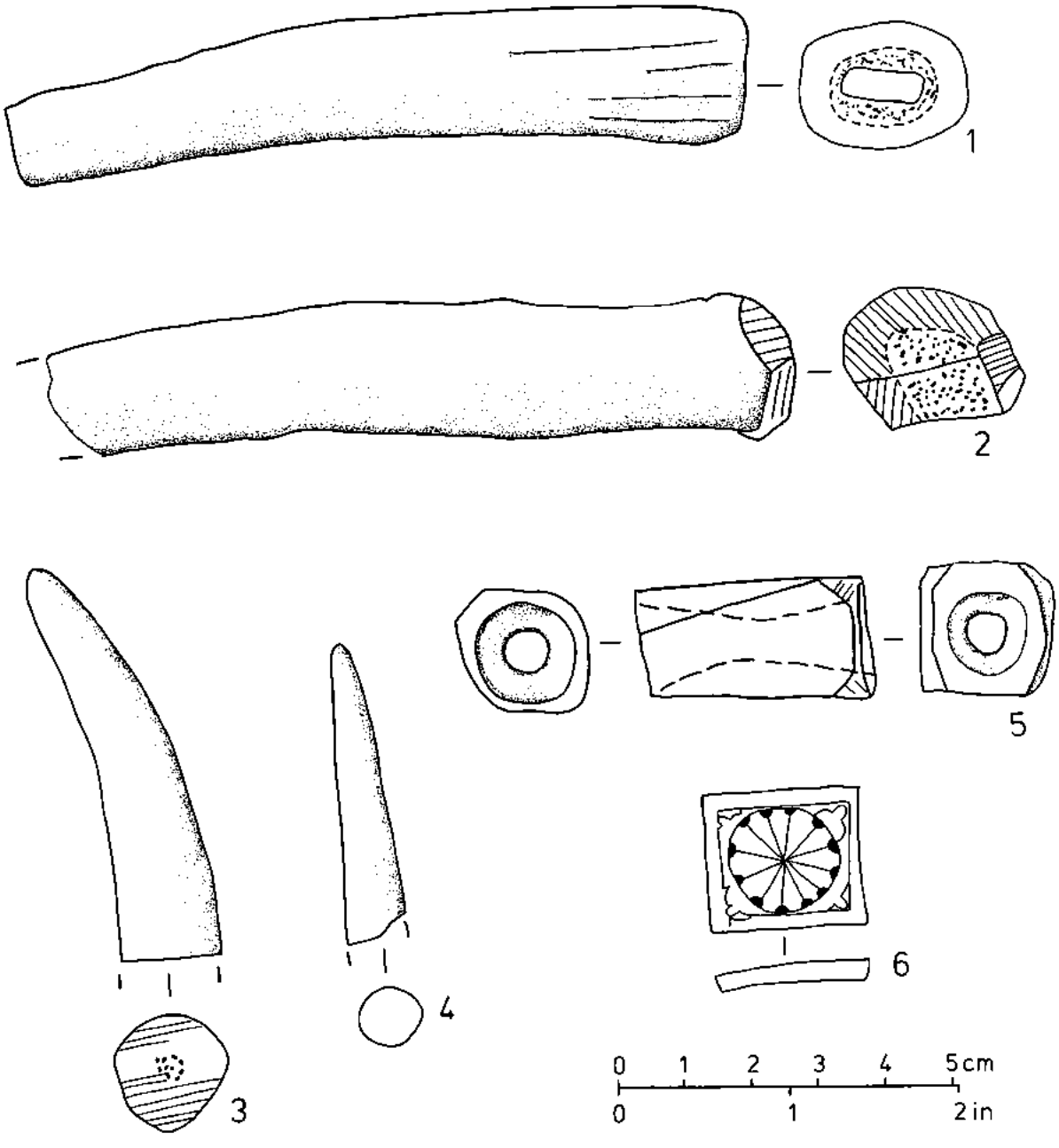


Fig. 15 WALTHAM ABBEY, MONASTIC PRECINCT, 1974-7 (App. 11)
Antler and bone objects: 1-3, Site 4; 4, Site 5; 5, Site 10; 6, Site 1.

Pit fill F24, with pottery dated *c.*1220-1240, 5.2kg, 5 ox, 1 horse, 2 pig, 2 sheep, 1 goat, 1 fish, 1 chicken, 1 goose, 2 oysters, 1 dog, 1 cat, 3 *Helix aspersa*. This group includes a mended fracture of the distal end of the shaft of a dog femur. The lengths of cat bones from the pit (humerus 79mm, femurs 88, 88mm) are smaller than those recorded from Saxon contexts (Clutton-Brock in Wilson 1976, 385).

Site 3. In dark loam F98, with pottery of the second half of the 16th century, 1.7kg; 1 ox, 1 pig, 1 sheep, 1 rabbit, 2 chicken, 116 oysters. Since this was a thin deposit the intensity of rubbish, including pottery and other objects, was quite dense.

Site 4. From the ditch F116, with mixed pottery dated 1250 to after 1450; a dog cranium with a condylobasal length of 181mm

Site 4A. In the dump of lime F122, with shears and knife (Fig. 13/6 and 7), with pottery *c.*1450, 3kg of bones and sheep's feet as follows:

	Fused	Unfused	Incomplete	Total
Left metacarpal	21	7	28	= 56
Right metacarpal	23	3	16	= 42
Left metatarsal	27	14	15	= 56
Right metatarsal	19	8	23	= 50
Phalanges prima				25
Cloven bones				3
			Grand total	232

In the main these bones were collected from the spoil from the machine dug trench and, as a result, the smaller bones may be under represented. There was also 0.5kg of other bones representing 1 calf, 1 pig, 1 dog, 1 goose, 2 oysters. The metapodials showed evidence of sharp knife marks around the proximal end. Since there were most metatarsals, these have been measured, the ranges are as follows:

Length	97-136mm
Minimum shaft depth	7.6-10.4mm
Width or breadth of distal end	20-26mm

For comparison sheep metatarsals from King's Lynn, Periods I to III, dated A.D. 1050-1500 (Noddle in Clarke and Carter 1977, 392) measured: length, 118-123mm; distal breadth, 21-22mm; there were only five bones but they lay within the ranges of the Waltham bones. Some of the post-medieval King's Lynn bones measured up to 147mm long and 27mm distal breadth.

Ryder (1969, Fig. 30) suggests how sheep can be sexed and breeds compared by plotting graphs of length against minimum width. It appeared to the writer, in dealing with Romano-British pig foot bones from Nazeingbury (Huggins 1978, 110-113) that a quantity proportional to volume (and weight) might be a better parameter to help distinguish sex and breed differences. The quantity used, called the *volume index* was the overall length times the square of the minimum lateral width, both in centimetres. Bar charts of this index for the pig bones seemed to separate male and female quite well, but for these sheep, where there is less sexual dimorphism, the bar chart, as above, was not successful.

However, a different *volume index*, the product of the overall length and the square of the minimum shaft depth seemed promising. Two plots of this *volume index* for the metatarsals are included in Fig. 16, one (A) is against the minimum shaft depth, the other (B) is against the width or

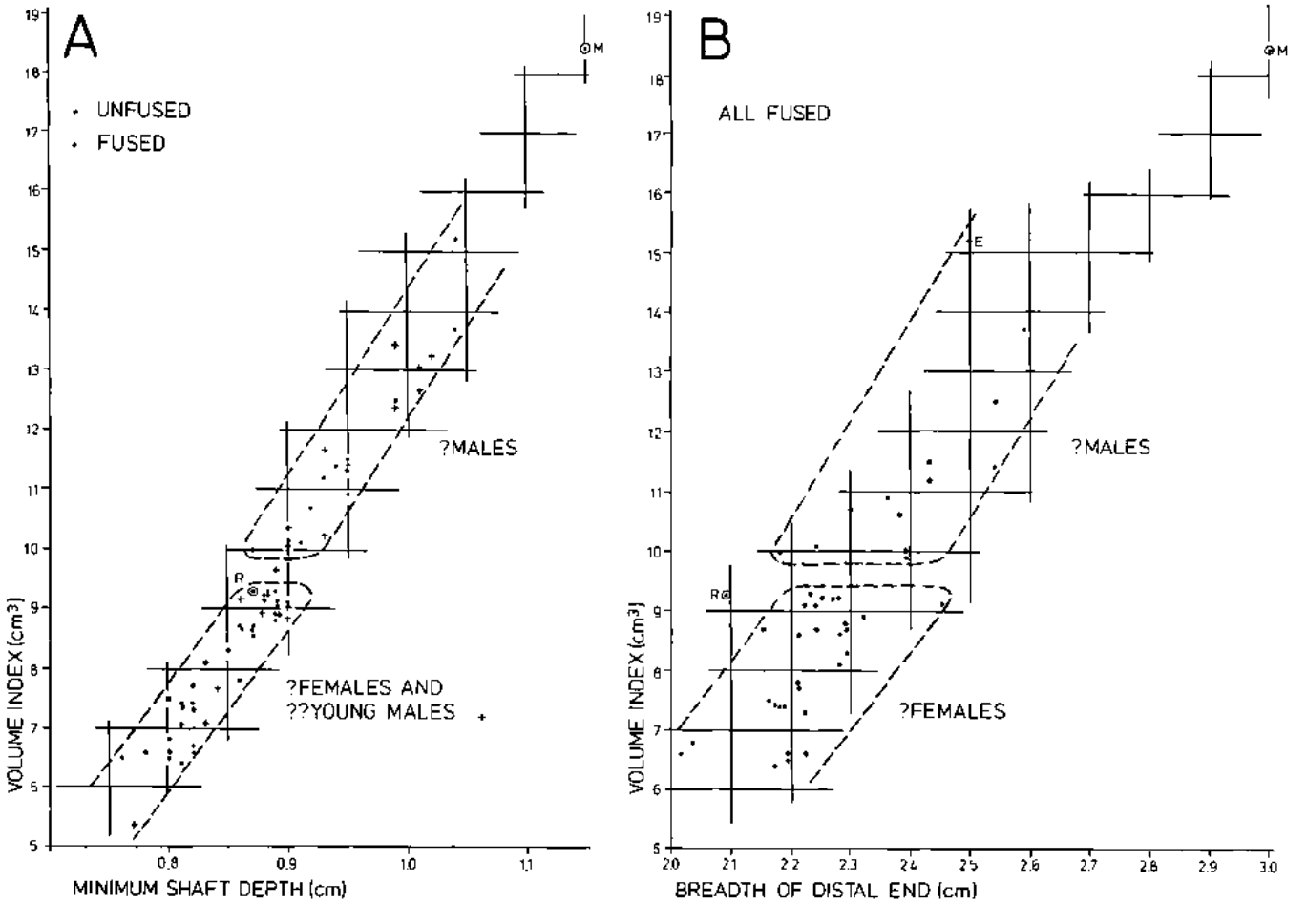


Fig. 16 WALTHAM ABBEY, MONASTIC PRECINCT, 1977 (App. 12)
Data on sheep metatarsals from lime dump F122, Site 4A. Plots of volume index: A, against minimum shaft depth; B, against breadth of distal end (E = estimated).

breadth of the distal end. The first graph allows the bones with the unfused distal epiphysis to be included since a 'corrected' length can be estimated using a factor of 1.126 from one bone for which the epiphysis was present but loose (for a metacarpal the factor was 1.125). Both plots allow the subjectively slender bones to be separated from the less slender into two groups which may represent the sexes; there is no evidence to suggest a difference between whole and castrated males, if both are present.

As to the maturity of the sheep, 90 bones, metatarsals and metacarpals, were fused and 32 were unfused but the sizes are comparable. From Fig. 16A it can be seen, in fact, that the unfused bones are amongst the largest. Hence it is assumed that we have a sample which, in general, has reached physical maturity so that discussion of size differences in sexual terms may be justified. Of the total of 65 measurable bones used in Fig. 16, if the method is valid, 24 or 37% are male and 41 or 63% are female. Of the fused bones, representing the older animals, 13 or 29% are male and 32 or 71% are female; this indicates that 2½ times as many older females are being killed as are older males, this is reasonable since the females will need to be kept longer for breeding and milk production. The younger sheep, with unfused metatarsals, are present in the sample in about equal proportions, eleven male to nine female, but it must be said that some of these nine 'females' might not be fully grown, in which case they may be males; this is indeed likely since it would not be reasonable to kill young females; however this only applies to nine out of 65 or 14% of the total.

There is less meat on sheep's foot bones than on pig's trotters. So the bones are not likely to be food debris. There remain the possibilities of slaughterers waste or waste from some industrial process. In this latter respect the association with the lime deposit F122, is to be remembered and the presence therein of the shears and knife may be significant.

In medieval times the skins of sheep were tawed rather than tanned (Salzman 1964, 245); this was the trade of the whittawer. Although attempts were made to keep the two trades separate, in Northampton the two seem not to have been segregated (Shaw 1987, 47) since sheep foot bones have been found there with cattle horn cores and horse bones. Lime was used to loosen the hairs from the skin. Noddle (in Clarke and Carter 1977, 381) reminds us that a medieval German custom was to sell hides by weight with the feet on; the Northampton evidence of the sheep foot bones confirms this practice in England. No pits which could have been used for soaking the skins was found, but the area uncovered was very limited. However besides leather production there is another attractive possibility, particularly bearing in mind the site is inside the monastic precinct and the date of *c.*1450 is well before the Dissolution. This is the possible production of vellum and parchment. Vellum is a skin which has been treated with lime and stretched and scraped (Middleton 1984, 44). Skins, most commonly sheepskins, can be split into two layers and the surface finished for use as a writing material; this is parchment. Both vellum and parchment would have been in demand in the monastery, so this is the preferred interpretation of the evidence at Waltham. The knife and the shears being tools of the trade, the lime being used in the production process and the foot bones being a waste product.

The Inventory of Abbey goods taken at the Dissolution in 1540 lists 88 sheep and 12 lambs. Sheepcote field, *c.*144 acres, is thought to lie to the south east of the town (Huggins 1972, Fig. 1). In the 13th and 14th centuries the Abbey produced wool in excess of the needs of the community for some was exported to Italy (Cunningham 1910, 640). The excavated bones represent a minimum of 56 animals.

Appendix 13 The skeletal remains

by Glenys Putnam

Bones from the present and the 1954 excavations are described here. Both groups were recorded starting at No. 1, in some cases there were remains of more than one body in a grave and in other cases significant bones were found which were not in a grave. The primary numbering system adopted in this report is of individuals (e.g. IND.4), the original 'grave' numbers have been retained for the 1976 excavation and the 'burial' numbers for the 1954 excavation.

(a) Site 1, 1976 (grave plan, Fig. 3; view, Pl. 2C)

Seventeen graves were detected (Pl. 2/C, D). There were no remains from three of the graves only partially seen (Nos. 16, 22, 23) but there is represented a total burial population of up to 30 people in the area dug, although there may be double counting of fragmentary remains. Ageing is based on the work of Vallois (1937) and Brothwell (1971).

IND.1 Grave 1. Skeleton cut, below top of femurs, by ditch F9. Skull disturbed, presumably by digging of grave 2. Wisdom teeth erupting, no caries. Male, aged 18-20.

IND.2 Also in grave 1 were fragments of skull and mandible presumably backfilled into the grave. Male, aged 25-30.

IND.3 Grave 2. Complete skeleton seen, it overlay graves 2 and 8. Second upper molar has well-defined Carabelli cusp. There is some alveolar recession, some calculus but no caries. An ossicle on the lambdoid suture together with the Carabelli cusp makes this a useful skull to employ in any familial study. Femur length 445 mm. Female, aged 25-40.

IND.4 Also in grave 1 were an intrusive pair of large clavicles. Adult male.

IND.5 No grave. Displaced fragments of skull and humerus between graves 2 and 9. Adult male.

IND.6 Around lower end of grave 2. Fragments of brachycephalic skull and maxilla. Probably one adult female.

IND.7 Around lower end of grave 2. A deciduous upper molar and fragments of unfused leg bones and skull. Female child, 10-12 years.

IND.8 Around lower end of grave 2. Very small unerupted tooth. Probably neo-nate or foetus.

IND.9 Above the pile of bones of individuals 17 and 18. Fragments of skull, radius and clavicle. Adult female.

IND.10 Above the pile of bones of individuals 17 and 18. Humerus. Very large adult male.

IND.11 Grave 6, partly covered by wall F15, overlies grave 10. Right-hand side only seen with pelvis and part of skull. Arthritic lipping on heads of humerus, femur and pelvis. Teeth much worn with calculus, upper teeth small for a male. Femur length, 471 mm. Male, aged 40-50.

IND.12 Grave 7, partially seen, lower part cut by ditch F9. Pelvis and upper part of femurs only. Child, 6-7 years.

IND.13 Grave 8. Complete skeleton, 1.5 kg sent for radio-carbon dating see below. Maxilla shows strong osteoporosis, abscesses and tooth loss, the palate exhibits possible evidence of scurvy. Severe caries in first upper molar and third lower molar. Femur length 436 mm. Female, aged 35-45.

IND.14 Additional in grave 8. Fragments skull and mandible. Child, aged about 12 years.

IND.15 Grave 9. Complete skeleton excavated. Some alveolar recession and a little calculus, caries in third lower molar. Femur length 489 mm. Bones very large and sturdy. Male, aged 35-45.

IND.16 Grave 10, underlying grave 6, protruding from under wall F15, cut by ditch F9. Few pieces of right side of body only. Adult female.

IND.17 and 18 Pile of bones, representing at least two individuals, of burials disturbed and re-positioned during building the 'tower' buttress F21 in the early 13th century. Skull large, brachycephalic. Very protruding occiput and a traumatic lesion on left of saggital suture on parietal bone. This is a definite cut and could have been made with a sword or spear; it is well healed (see Pl. 3C). Femur lengths, 460 mm, male; 480 mm (?) male; both adult. This pile of bones is marked B11 on Fig. 3 and can be seen at the top of Pl. 2C.

IND.19 No grave. Fragments of skull between graves 8 and 9. Adult female.

IND.20 Grave 13, partially seen, cut by ditch F9. Fragments of left arms and feet. Adult.

IND.21 Grave 14, partially seen, cut by ditch F9. Fragments of leg bones. Adult female.

IND.22 Grave 15, partially seen, upper part cut by ditch F9. Fragments of leg and humerus only. Adult female.

IND.23 Grave 16, head of grave only seen east of ditch F9. No bones recovered.

IND.24 Grave 17, partially seen, upper half cut away by ditch F9. Femur shaft only. Adult male.

IND.25 Grave 18, lower end only seen. Fragmentary longbones. Adult female.

IND.26 Grave 19, cut by buttress F21 and under wall F15. Fragments of leg bones and feet only. Adult male.

IND.27 No grave. Re-deposited fragments from building wall F33, marked B20 on Fig. 3.

IND.28 Grave 21. Part skull only.

IND.29 Grave 22, head of grave only seen. No bones recovered.

IND.30 Grave 23, head of grave only seen. No bones recovered.

Odd human teeth and fragments of bones were found in five later features, viz. F3, F4, F8, F11, and F27. The fragments that could be sexed indicated three males but it is not safe to consider these as additional to the burials discussed above.

Statistically the sample, representing 25 mostly partially assessable individuals, is not testable, but the proportions of age and sex show a balanced population with nine males, ten females, three children, one neo-nate or foetus and two other adults. There are no peaks of mortality, unlike the Middle Saxon cemetery at Nazeingbury (Putman in Huggins 1978, 54-63), 6 km to the north of Waltham, which showed decided peaks in childhood and for women aged between 25 and 35; Nazeingbury has been interpreted as a small monastic house caring for the sick and aged with an unusually high proportion of pathological cases. The normality of the Waltham cemetery population, dating to about the same period, lends support to the nunnery hospice theory for Nazeingbury; this is also supported by the discovery of a document concerning the setting up of a House of God, at Nazeing, for the wife of the Essex king Suebred *c.*700 (Bascombe 1987).

The most prevalent disease in the Waltham population is dental caries. There is an interesting possible case of scurvy showing the typical osteoporosis, lost teeth and periodontal abscess in the adult IND.13. A traumatic lesion on the top of the skull of the adult IND.17 is probably the result of a sword cut (Pl. 3C) and matches well with similar wounds on pagan Saxon skulls such as at Westgarth Gardens, Bury St. Edmunds, Suffolk (Putnam unpublished).

Although the sample of this cemetery population is so small, it may begin to show medieval tendencies. The brachycephalic skulls, the caries and possible scurvy are all typical of early urban medieval populations and in this respect the cemetery can be compared with Clopton, Beds., and Cornel Place, Cambridge (B. Denston unpublished). IND.3, a female aged 25-35, shows an interesting hereditary characteristic having a molar with an extra, Carabelli, cusp (Brothwell 1971, 118).

(b) Site 8, 1954 (prepared from reports by the late G.C. Dunning)

Seven burials and the disturbed remains of an eighth were found in 1954 at Site 8. These notes are compiled from two typewritten sheets dated 18 May and 16 June, 1954 and from a drawing of June, 1954 by E.W. Berry. The burials were at an average depth of about 5 ft 6 in (1.7 m) and occurred in layers as if the ground was being used a second time round as at Site 1. The numbering of the individuals is carried on from Site 1; 'burial' numbers are retained as graves were not apparently delineated.

IND.31 Burial 1. Tall, strong and muscular individual. Round skull with flattened vault and broad forehead. Crown of molars worn flat exposing dentine, but all teeth present and healthy. Lipping of lumbar vertebrae indicates arthritis. Femur length 513 mm. Cephalic index 83.1. Male, aged 40-50.

IND.32 Burial 2. Overlying the legs of burial 1. Round skull similar to 1. Crowns of molars worn flat, but all teeth present and healthy. Cephalic index 88.4. Female, aged about 40.

IND.33 Burial 3. Head and trunk only exposed. Skull, short, round and small. Prolonged wear on all teeth, caries and tartar. Cephalic index 81.8. Female, aged 40-50.

IND.34 Scattered bones of left leg only, under wall F15. Femur length 401 mm.

IND.35 Burial 4. Head and trunk only exposed. Skull round and short. Molars deeply worn, much tartar; some teeth lost and sockets absorbed. Cephalic index 83.0. Female, aged 40-50.

IND.36 Burial 5. Skull, thin vault, slight wear on first and second molars, third not yet level. Limb bones slender with slight muscular markings. Femur length 445 mm, epiphyses separate. Female, aged about 20.

IND.37 Burial 6, studied in the ground. Lower third molars missing, sockets absorbed, other molars well worn. Male, aged about 40.

IND.38 Burial 7. Skull only exposed. Molars deeply worn or lost and sockets absorbed. Male, aged 40-45.

These burials at Site 8 are 50 ft (15 m) to the east of those at Site 1. The four skulls measured were all brachycephalic having cranial indices from 82 to 88. It was recorded that 'a number of small pieces of pottery were found in the soil over and down to the level of the burials; these are all coarse medieval sherds ... and belong to the 12th and 13th centuries'. Dunning suggested the pottery in this location was sufficient to give a date to the burials. However the old ground surface, the loam F10 at Site 1, not recognised at Site 8, is well below the present ground surface and the burials at Site 1 would only have been about a foot (30 cm) below the old ground surface; if this is the case at Site 8 too then the pottery is of little use for dating the burials. Rather it is likely that the Site 8 burials are part of the same Saxon cemetery as seen at Site 1 and which by the early 11th century had spread past Site 8 to Site 12 where the Ringerike-style plate (App. 8, No. 1) was found; no bones were recovered from Site 12. It is conceivable that upper burials at Site 8 could be as late as the 12th century but the area of Site 1, then, was cut by a ditch and is hardly consistent with the idea of a cemetery continuing to the 12th century. The two lowest burials at Site 8, burials 3 and 4, appear to be part of a well-ordered row of burials as did graves 8 and 9 at Site 1; the suggestion is of neat rows of primary graves as at Nazeingbury (Huggins 1978, Fig. 6). Of the burials, Dunning concluded that the individuals were tall and round-headed and all belonged to the same ethnic stock.

(c) Discussion of the skeletal material

Of the skulls at Site 1, three were judged to be doliocephalic (two measured by PJH, had cephalic indices of 64 and 66) and two, unmeasurable, were judged to be brachycephalic. At Nazeingbury, to the north, there were six measurable skulls; three were doliocephalic and three were mesocephalic (Putnam in Huggins 1978, Para. 7C); the index ranges are defined by Brothwell (1971, 88). The four skulls measured by Dunning at Waltham Site 8 were all brachycephalic, these included both primary burials and one of 'the second time round'. Site 8 is the furthest east of the burials investigated, and may be the latest; it is interesting that the round-headed stock were not seen at Nazeingbury but were beginning to be seen at Waltham Site 1 and were more common at Site 8.

(d) Dating of the Waltham cemetery

by P.J. Huggins

As a result of excavations inside the church in 1985/6 (Huggins unpublished [1]) it is known that a timber church and an early stone church both stood on the site of the present church. Associated burials were found and one, under the present south aisle, was radio-carbon dated (Scottish Universities Research and Reactor Centre, GU-2143). The raw date of 1390±50 B.P. yields an uncalibrated date of a.d. 560±50, and, using the latest calibration (Stuiver and Pearson 1986) a date range of 590-690 A.D. at the 95% confidence level results. Since the conversion of Essex did not begin until 653 A.D. this leads to a second half of the 7th century date for the establishment of the Middle Saxon cemetery some 80 m to the west-north-west of Site 1.

Individual 13 in grave 8 was also radio-carbon dated (Har-2209); the raw date is 1140±70 B.P. or A.D. 810±70, and using the same calibration, yields a range of 690-1020 A.D. at the 95% confidence level. Thus this date is less precise because of the higher standard deviation and the unpropitious shape of the calibration curve at this point. Because of the presence, in the graves at Site 1, of grass-tempered pottery and because of the absence of shell-tempered ware it was thought that the date of the burials would lie in the range 650-850 A.D. If both these possible date ranges were correct the date would narrow to within the 8th and the first half of the 9th centuries. It would at least suggest a progression eastwards for the cemetery from the area of the first church, following the conversion, to Site 1 and then to Site 12 by the early 11th century.

Additional burials have been reported to the south south west of the area investigated. Some were found in 1867 in digging the cellars of Nos. 2 and 3 Market Place (Winters 1888, 162), see Fig. 2. Others were found just to the west in constructing an air-raid shelter in the cellar of the Welsh Harp public house (Mrs. B. and Mrs R. Edem, pers. comm. to

K.N. Bascombe). The Welsh Harp is thought to be of the 15th century; no dating can be suggested for the burials.

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Author: P.J. Huggins, 27 Grange Court, Waltham Abbey EN9 1RQ.

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Cal. Close = Calendar of Close Rolls, London.
Cal. Pat. = Calendar of Patent Rolls, London.
ERO = Essex Record Office.
NRO = Northampton Record Office.
PRO = Public Record Office.
PRS = Pipe Roll Society.

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The medieval hospitals at East Tilbury and West Tilbury and Henry VIII's forts

by W. Raymond Powell

In the century after the Norman Conquest many hospitals were built. Little is known about most of them. 'The ... hospital of the 12th century,' wrote the late David Knowles, 'was sometimes a hospice, sometimes a hospital; in later times it was often an almshouse, while many were a combination of two or more of these institutes.'[1] It may be worth adding that some 12th-century hospitals, so called, could equally well be styled hermitages, and sometimes indeed they were.

There were about 1,000 medieval hospitals altogether in England and Wales.[2] Most of them seem to have been small and poorly endowed. During the economic slump of the 14th and 15th centuries many of them, lacking the resources to tend the sick and the aged, relieve the poor, or succour travellers, declined into chantry chapels. Most of those were dissolved, with the other chantries, by Henry VIII or Edward VI, but a few survived, and have continued down to our own day. In Essex about a dozen medieval hospitals have been identified.[3] Among the largest were St. Mary, Ilford, originally a leper hospital, and St. Mary Magdalen, Colchester, both of which still exist as almshouses institutions.[4] Of the others only Little Maldon and Newport seem to have been of any size: both were dissolved by Henry VIII.[5]

East Tilbury hospital appears to have been unknown to historians until 1903, when Horace Round drew attention to it in two notes in the *Transactions* of the Essex Archaeological Society.[6] He provided a starting point for R.C. Fowler, who contributed an account of the hospital to the second volume of *V.C.H. Essex*, published in 1907.[7] Fowler was dealing with all the religious houses of Essex, and could devote only a few paragraphs to small ones like East Tilbury, which in any case had left little mark in written records. He followed Round in stating that the hospital was founded by Geoffrey FitzPeter, earl of Essex (d.1213), and he said a little about the endowments, the advowson, and the wardens. He found no reference to it after 1496, but suggested that the hospital was identical with the chantry called Stonehouse in East Tilbury, which was one of those dissolved by Henry VIII. As far as it goes Fowler's account cannot be greatly expanded, but more can be said about the origin and the end of the hospital.

Geoffrey FitzPeter, whom Round identified as the founder of the hospital, acquired an interest in East Tilbury by his marriage to Beatrice de Say, heiress of the Mandevilles, whose great barony of Pleshey included East Tilbury manor. William de Mandeville, earl of Essex, who died in 1189, was the last in the male line, and in the following year FitzPeter obtained the barony of Pleshey in right of Beatrice.[8] During the reigns of Richard I and John, FitzPeter was one of the most powerful men in England, and in 1199 he was created earl of Essex.

By his first wife, Beatrice, Geoffrey FitzPeter had three sons and a daughter. By a second marriage he had a son and two daughters. After his death in 1213 the Mandeville inheritance passed successively to his two elder sons by Beatrice: Geoffrey de Mandeville (d.1216), and William de Mandeville (d.1227), both of whom died childless, and then to their elder sister Maud, who had married first Humphrey de Bohun, earl of Hereford (d.1220), and secondly Roger of Dauntsey. Geoffrey FitzPeter's son by his second marriage, known as John FitzGeoffrey, had no right to the Mandeville lands, but FitzPeter, who was a younger son himself, and knew all about the problems of that position in the 13th century, appears to have settled upon the boy some of the lands which he held in his own right. This later gave rise to disputes, because it was sometimes difficult to distinguish between the lands which had come to FitzPeter through his first wife, and those which he held in his own right. Such disputes are fortunate for the historian, since they leave records behind them; and one such record relates to East Tilbury.

In 1232 Henry de Kemesek, who was tenant-in-demesne of East Tilbury manor, brought a lawsuit against FitzPeter's daughter Maud, and her husband Roger of Dauntsey, for the advowson of East Tilbury church, which they were withholding from him.[9] In 1233 Kemeseck renewed his suit, but this time against John FitzGeoffrey.[10] He claimed that he had been successful against Maud and Roger, but that FitzGeoffrey was now preventing him exercising his rights. FitzGeoffrey replied that East Tilbury church belonged to 'a certain hospital of Tilbury', which his father Geoffrey FitzPeter had acquired, and which had been conceded to FitzGeoffrey by Maud and Roger in a final concord which he produced in court. That final concord was no doubt the one levied in 1230, by which John FitzGeoffrey recognized Maud and Roger's title to certain land formerly held by Geoffrey FitzPeter in his own right, and they in turn recognized his title to the remainder.[11] East Tilbury hospital was not specifically mentioned in that final concord, but if it had belonged to FitzPeter in his own right, then the final concord did, as FitzGeoffrey claimed, confirm his possession of it. In the lawsuit of 1233 FitzGeoffrey was asked how his father had acquired the hospital. He replied that the tenement on which the hospital was built had been occupied by a certain Clement Minster (*de Monasterio*), as a tenant of East Tilbury church. Clement himself deposed in court that Geoffrey FitzPeter

had taken the land from him by force, and said that John FitzGeoffrey knew very well that the advowson of East Tilbury church belonged to Pleshey, i.e. to the ancestral barony of the earls of Essex. Henry de Kemesek, in seeking judgement, also alleged that the church and the hospital belonged to Pleshey, and he won the case, with damages.

Horace Round thought that this case proved that East Tilbury hospital was founded by FitzPeter, who, he pointed out, also founded two hospitals at Berkhamstead in Hertfordshire, and one at Sutton in Yorkshire. But the lawsuits of 1232 and 1233 suggest that what FitzPeter actually did was to appropriate and re-found an existing hospital, previously occupied by Clement Minster as tenant of East Tilbury church. Clement's surname indicates that he was a chaplain or hermit, of a type not uncommon in the 12th century. He stated in 1233 that FitzPeter had evicted him. If so, FitzPeter had acted just like his old master, King Henry II, who in 1177 had evicted the secular canons of Waltham in order to install Augustinian canons regular, for whom the great abbey was built by Henry and his successors.[12]

In spite of the verdict in the case of 1233, John FitzGeoffrey retained control of East Tilbury hospital, and the patronage descended to his heirs. On the death of his grandson, Richard FitzJohn, in 1297, the patronage was assigned to Joan Butler, one of his sisters. Her heirs, the Butler earls of Ormond, held it at least until the end of the 14th century.[13]

The hospital can be clearly traced until 1456.[14] Its dedication, originally to St. Mary, had by the end of the 14th century been changed to St. Margaret. In and after the 14th century the hospital was usually described as a 'chapel' or 'free chapel'.[15] Once, in 1393, it was styled 'the free chapel, otherwise called the hospital or chantry of East Tilbury'.[16] It was probably that reference which led R.C. Fowler to suspect that the hospital might be identical with one of the foundations listed under East Tilbury in the 16th-century chantry certificates. He identified it with Stonehouse chantry, because that chantry, like the hospital, possessed land in Aveley. When one looks again at the chantry certificates, and particularly at the endowments of Stonehouse chantry, Fowler's suggestion is confirmed.

The chantry certificates list two chantries at East Tilbury: Priestwick, and Stonehouse. Priestwick,[17] sometimes known as Gobions or East Lee chapel, cannot be identified with East Tilbury hospital, since it was connected with Gobions manor, whose lords held the advowson. Stonehouse chantry[18] is first described in a certificate of 1546, which states that it had been founded 'to find a priest for ever', but that it had been dissolved and demolished since 4 February 1536 and put to the making of a blockhouse (fort) there; one Parker, servant of Lord Audley, late Lord Chancellor, was receiving the income from the chantry's endowments, valued at £12 5s 4d. a year. Further information about Stonehouse chantry is contained in two certificates of 1548. One of them describes the chantry's endowments as follows. There were 5a. land in East Tilbury, occupied by John Lawrence at a rent of 5s. 4d. There was a tenement called Colewick in West Tilbury, held by Robert Parker on a 20-year lease from 1534, at £8 a year rent. Finally, there was a tenement in Aveley held by Thomas Langham on a 20-year lease from 1535, at £4 a year rent.[19] The other certificate of 1548 relating to Stonehouse chantry confirms the total income from the endowments, adding that Thomas Audley, nephew of Lord Audley, late Lord Chancellor, was receiving the income. Of those endowments the first, in East Tilbury, was obviously the site of the chantry and its successor the blockhouse, since its tenant, John Lawrence, is known from other sources to have been captain of the blockhouse.[20] The second tenement, Colewick, later called Courtwick, was the chantry's main endowment. In 1551 it was given to King Edward VI's new grammar school in Chelmsford.[21] In 1840 it comprised 88a. marsh and saltings, with one cottage, lying between Walton Common and the Thames, near the eastern edge of West Tilbury parish.[22] The chantry's third tenement, in Aveley, has not been identified. Its value suggests that it was much smaller than Courtwick. In 1549 it was granted to Sir Anthony Aucher and Henry Polsted.[23]

When the endowments of Stonehouse chantry are compared with those of East Tilbury hospital it becomes clear that the two institutions were one and the same. The chantry held land in East Tilbury, West Tilbury, and Aveley. So did the hospital; and the size of the hospital's West Tilbury estate was in 1254 stated as 80a.[24] compared with 88a. in 1840: the two figures are too close for pure coincidence, when allowance is made for the difficulty of exact measurement in the 13th century.

Further information relating to East Tilbury hospital comes from the great valuation of church property carried out by the government in 1535.[25] This has entries for two 'free chapels' in East Tilbury, neither of which is given a name. One 'which William Pace formerly held' was valued at 60s. clear. The other, 'which William More formerly held', was valued at 11s. clear. These were undoubtedly Stonehouse and Priestwick chantries. The 1535 valuations were very different from those given in the chantry certificates for the two chantries, but there is no doubt that Stonehouse chantry, which was worth far more than Priestwick, was the chapel formerly held by William Pace, and that he was the last warden or chaplain of East Tilbury hospital. Pace (or Pase), who went to Cambridge University from Durham diocese, graduated as Bachelor of Canon Law in 1497-8.[26] He was vicar of Kelvedon (1504-36), and rector of Doddinghurst (1513-36),[27] so that East Tilbury may not have seen him often.

From what has been said it will be clear that East Tilbury hospital, re-founded by Geoffrey FitzPeter at the end of the 12th century, declined during the later Middle Ages into a free chapel or chantry, was seized by Henry VIII and converted into a fort. It was, in fact, one of five forts on the Thames estuary erected in 1539-40 against the threat of invasion from France or the Low Countries. The whole defensive system has been described by Mr. Andrew Saunders.[28] At least three of Henry's Thames forts were converted chantries: an ingenious and economical way of providing for the defence of the realm. The East Tilbury blockhouse was soon abandoned and became derelict. Its

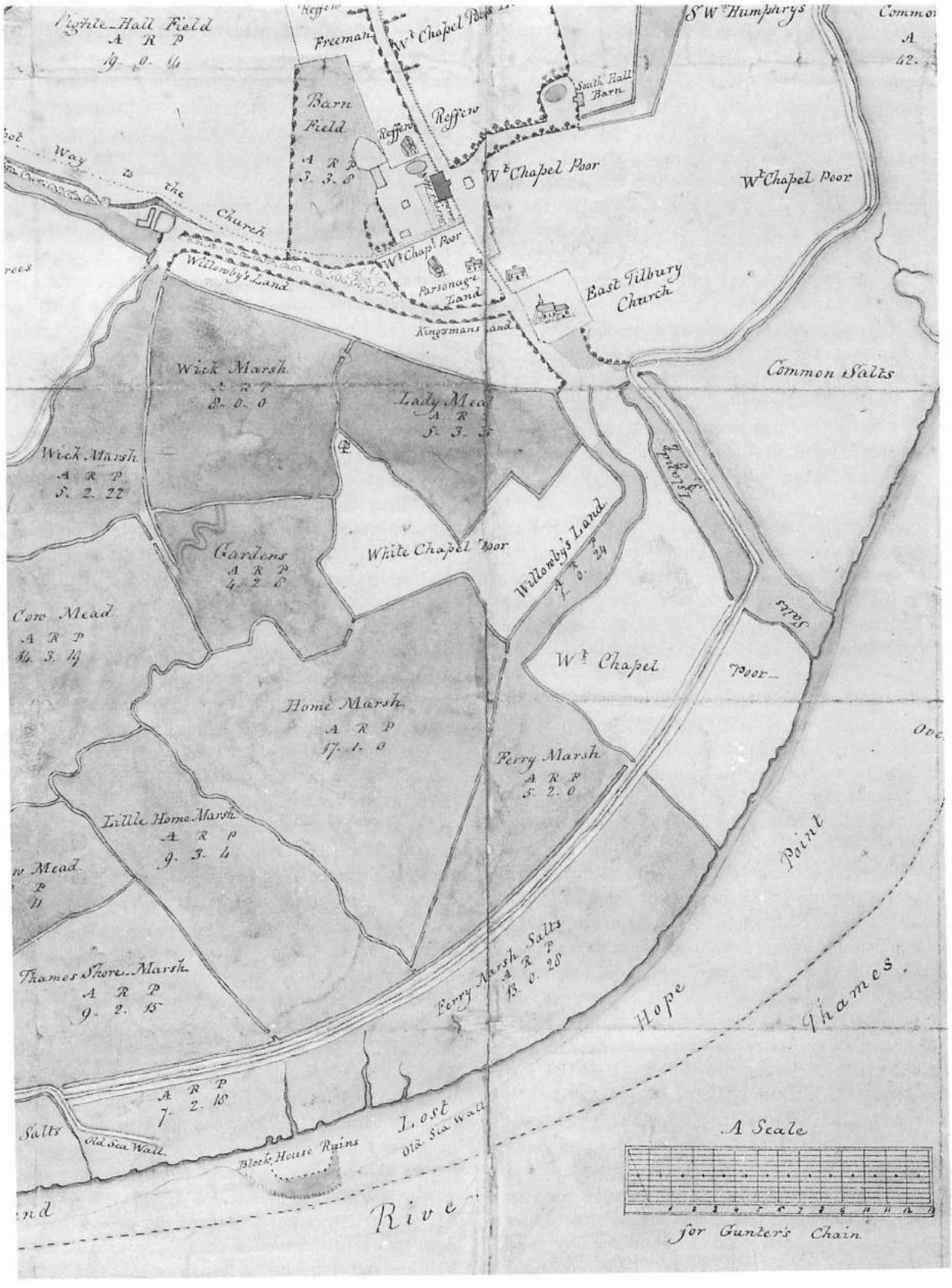

Plate I East Tilbury in 1735, showing the block house ruins (bottom left). Reproduced by kind permission of the County Archivist.

decay was hastened by the removal — apparently by order of Queen Mary I — of a timber wharf protecting it from the Thames.[29] This weakening of the river wall had by the 1570s or earlier resulted in the destruction of much of the blockhouse, and the flooding of 6a. of land at that point.[30] Fears of further flooding led to official enquiries, which were of especial concern to the trustees of Rochester bridge (Kent), who as owners of Southall manor were responsible for maintaining the river wall.[31] Southall, first known by that name in the 15th century, was the main manor in East Tilbury. In the 13th century, as we have seen, it was held in demesne by the Kemesek family. In 1331, on the death of Joan, widow of Edmund de Kemesek, it passed to her grandson William de Welle.[32] Welle (d.1349), was succeeded by his daughter Joan, later wife of Sir Henry de Coggeshall.[33] In 1397 the manor was bought from Sir William de Coggeshall, son of Sir Henry and Joan, by John de Cobham, Lord Cobham, as part of the endowment of Rochester bridge, which was built by Cobham and Sir Robert Knolles.[34] The manor included East Tilbury ferry, which can be traced back to the earlier 13th century, and two ferry boats.[35] In 1588 the maintenance of the river wall was again causing concern. The land adjoining the wall then belonged to Richard Champion, the owner of a 5-acre tenement called Stonehouse, which provides further evidence, if any is needed, that the chantry had been on the same site as the blockhouse.[36]

In spite of the damage already mentioned, East Tilbury Blockhouse was brought into use again during the Armada scare of 1588,[37] but after that it was again allowed to decay. Its exact location is shown on a map of 1735 (Plate I): 'blockhouse ruins' are marked offshore, near the local wharf,[38] that is, at Coalhouse Point [TQ 67/689 763]. Immediately west of the ruins are marked the words 'Land Lost', and east of them 'Old Sea Walls'. There, right on what was once the sea wall, was the medieval hospital, later Henry VIII's blockhouse. The site is about ½ mile south of the modern Coalhouse fort, noted for its association with General Gordon, the defender of Khartoum. Hardly anything is known about the structure of the hospital. Like most medieval Essex churches it was probably made of flint rubble. It had bells, so there must have been a tower or turret. Lead, presumably from the roof, is also mentioned.[39]

The medieval hospital of West Tilbury has so far escaped the notice of historians, probably because it was first recorded under another name. The earliest reference to it is in the pipe roll of the Exchequer for 1156, where the sheriff of Essex is credited with the payment to the hospital of Gravesend of one mark (13s. 4d.), charged on the King's manor of Havering.[40] The entry is repeated in subsequent pipe rolls. In the roll for 1161 — and only there — it is recorded that the King granted the hospital of Gravesend 10s. by the hand of Thomas the Hermit.[41] That the Gravesend mentioned in the pipe rolls was another name for West Tilbury is proved by a pair of entries in the Hundred Rolls. In the Roll for 1273-4 it was stated that 'the King has one mark rent in the vill of Havering, which he gave to the chapel of Gravesend'.[42] In the following year it was stated that 'the rector of the chapel of Tilbury opposite Gravesend holds one mark in the same manor' [i.e. Havering].[43] This identification of Gravesend as an Essex place also illuminates an obscure entry in Domesday Book, in which occurs a small manor of that name, belonging to Count Eustace of Boulogne.[44]

It will be seen that Gravesend *alias* West Tilbury hospital was by the later 13th century being styled a chapel. It was mentioned again in 1285, in one of the Eyre Rolls,[45] where the jury for Becontree hundred stated that the parson of the chapel then held a piece of land worth one mark which he used to hold in chief of the King, but now held in free alms. The parson himself, William Gretton (?) deposed that '[Henry][46] king the Second gave the chapel to the hospital [ ][47] of his grandfather, and he showed the charter of the same king H. which testifies to this.' The parson added that he was the custodian of the same [land][48] belonging to the chapel, and was holding it from the present king.

The 14th-century patent rolls record several appointments of rectors to West Tilbury chapel. One of them, in 1364, describes the chapel as that of St. Mary Magdalen, West Tilbury by Gravesend, and states that the presentation was in the King's gift because the lands and heirs of Thomas Vaughan, tenant-in-chief, were in the King's wardship.[49] Morant, in his account of West Tilbury, tells us that Sir Thomas Vaughan had died in 1362, holding the manor of West Tilbury. Attached to the manor was then the free chapel of St. Mary Magdalen *alias* West Lee chapel, in which, according to Vaughan's inquisition *post mortem*, a chaplain was to officiate for ever, for the souls of the King's predecessors, receiving out of the manor 12s. 8d. rent. This chapel, continues the inquisition, was founded in the time of St. Thomas the Martyr [i.e. St. Thomas Becket (d.1170)].[50] There is no reference in the inquisition to the rent from Havering, but there is little doubt that this had been replaced by the similar rent from West Tilbury manor, which belonged to the royal honour of Rayleigh.

What happened to Gravesend hospital *alias* West Tilbury chapel after the mid-14th century? With the history of East Tilbury hospital in mind it is natural to turn to the chantry certificates, and we do, indeed, find the chapel mentioned in two certificates, both of 1548. One certificate states that the chapel, origin unknown, was a mile from the parish church, and was worth 53s. 4d. a year.[51] The other certificate states that the possessions of the chapel comprised a parcel of land worth 30s., in the tenure of Robert Britton, and another parcel belonging to the blockhouse, let for 23s. 4d.[52] A later amendment to the certificate states that Robert Britton's parcel was valued at 36s. 8d. and two lambs, 'by information of Francis Grant, captain there.' Below these entries is added: 'which Francis Grant, captain ... affirmeth that he holdeth no such land, nor is there any land appertaining to the said chapel other than the ground whereupon the blockhouse is builded ... and a little hoppet in the occupation of the ferryman Grey, worth by the year 2s. 4d.' The Francis Grant here mentioned had been appointed captain of the blockhouse at West

Tilbury in 1540.[53] From other records of the period we know that the West Tilbury blockhouse was also called the Hermitage bulwark.[54] The land formerly belonging to the chapel, and held in 1548 by Robert Britton, was mentioned in 1584 as 'the Queen's land sometime the Hermit's.' It lay on the northern boundary of West Tilbury parish.[55]

Further evidence comes from a court case of 1590. One old inhabitant of West Tilbury deposed that Henry VIII 'did suppress the Hermitage house about 50 years since, and about a year or two after the suppression he caused the blockhouse, now called West Tilbury blockhouse, to be erected in the place thereof and over the highway, which then was turned a great deal more west.'[56] Another witness in the same case mentioned a certain William Hutchin, who had died 8 or 10 years earlier aged 60, and who had once been 'the old hermit's boy that was last in the Hermitage'.[57] It seems therefore, that at the time of its dissolution *c.*1540 West Tilbury chapel, *alias* the Hermitage, was occupied by a hermit, as Gravesend hospital had been in 1161. Can this mean that there had been a succession of hermits saying mass in this remote place from the reign of Henry II to that of Henry VIII? It is not impossible. While the permanent endowment was too small to be attractive in itself, the Hermitage stood close to West Tilbury ferry, and its occupant would have received alms from travellers, some of whom, no doubt, were pilgrims on the way to the shrine of St. Thomas at Canterbury. But even if the predecessors of the 'old hermit' of *c.*1540 were not all residents, there seems little doubt that the 11th-century hospital of Gravesend was identical with the later St. Mary Magdalen or West Lee chapel, and with the Hermitage dissolved by Henry VIII. Nothing now remains above ground of the Hermitage blockhouse of 1540. But that is not quite the end of the story, for on the same site was built, in the 17th century, one of the greatest of Thames-side fortresses, which remained in service until the Second World War: Tilbury fort.

We have seen how two small religious houses survived through four centuries, though altering their names and functions, before being handed over to Henry VIII's military engineers. The story reminds us, as local historians, not to be too ready to assume that a new name must mean a break with the past. For as we survey the history of our Essex fields and buildings, we can sometimes trace behind the changing scene patterns of continuity that may never have been fully perceived before, even by the men who traced those patterns long ago.

Author: W.R. Powell, 2 Glanmead, Brentwood, Essex.

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The fields and pastures of Colchester, 1280-1350

by R.H. Britnell

In the smaller towns of medieval England, amongst which Colchester must be numbered, land was a major component of wealth.[1] The organisation of agriculture accordingly affected the ways in which townsmen co-operated with each other and with their neighbours. In his search for a spirit of corporateness in medieval Cambridge, Maitland examined in detail the divisions of the land there, and argued that, though never a feudal or a manorial unit, Cambridge could not but be to some extent an agrarian one.[2] Topographical evidence from medieval Colchester shows an agrarian organisation very different from that of Cambridge, for the fields there belonged to the type of system associated with the lower Thames Valley and most of Essex, not to the open-field system of the Midlands. Instead of large open fields subdivided into furlongs, Colchester had an unsystematic arrangement of fields large and small, some subdivided and some not, in which holdings were usually made up of compact blocks of land rather than strips.[3] It is natural to suppose that this system permitted more individualism than that of the Midlands, and to some extent this is a defensible view; cropping patterns could be varied more freely in enclosures than they could in open fields. Nevertheless, compact holdings in Colchester existed in conjunction with rights of common pasture and hunting whose value is attested by the many disputes which roused the burgesses to concerted action, sometimes even to violence, during the early fourteenth century. As in Cambridge, therefore, agrarian organisation induced burgesses to co-operate, and rights over territorial resources ranked high amongst the interests which drew them together in collective action.

Fields

The compactness of fields around Colchester was an ancient feature of agriculture, not the result of precocious rationalisation. In the thirteenth and fourteenth centuries there were still to be found traces of hides made up of compact blocks of land; the Essex hide, as Maitland demonstrated, was a unit of 120 acres or so.[4] A hide of land in Ardleigh in 1206 was mostly made up of the land and wood of Crockeresford, lying all together between Ralph Martel's land and the river running from Ardleigh to Crockeresford.[5] This hide must have been just beyond the liberty of Colchester to the east, where its name is preserved in Crockleford Hill and Crockleford Heath. A half hide of land in Layer Marney in 1207 included the whole of an eleven-acre field called Brademed.[6] Another example occurs in the mid thirteenth-century charter whereby Alexander Brichter was enfeoffed with sixteen acres of land out of Ribaudeshid in Elmstead, lying in a piece beside the road from Colchester to St. Osyth.[7] The pattern repeats itself in Wivenhoe, where in the mid thirteenth century the monks of Colchester owned 120 acres called Withemorhad and Nordhei, which on their northern side lay next to the highway leading to Tendring. The monks quitclaimed another 120 acres here to Richard Bataile, probably the land later called Battleswick. The two hides had earlier been given to the monks by Richard's brother, Geoffrey.[8] Traces of compact hides occur within the liberty of Colchester itself. Ellis son of John was prosecuted in 1310 for taking a mare belonging to Hubert Bosse from a field called the Hyde in the suburb of Colchester.[9] In 1288 the lord of Lexden sold the oak saplings round a field called the Hyd, and this field recurs in 1313 as the largest unit of arable on the demesne of Lexden manor, containing 65½ acres.[10] References in St. John's Cartulary to the land called Godithehide in Stanway field and to Hardechin Hide are likely to refer to similar blocks of land.[11]

Within the liberty of Colchester hides do not occur except as an element in field names in sources of the early fourteenth century. No hides or virgates are described as such, chiefly because the buying and selling of land had brought about the disintegration of most of these archaic units of tenure. But from what is known about tenements in the region it appears that any holding of more than a few acres was usually made up of compact parcels. An example is the villein holding called Walscheslond in Greenstead which the Walsche family surrendered to the abbot of Colchester in 1316. It was perhaps an ancient hide, since 120 acres of arable were attached to the messuage besides 40 acres of woodland. Something of the layout of this property is known from a later deed. In 1333, Richard Noreys of Colchester acknowledged by an indenture that he had no rights in a ditch surrounding Walscheslond 'one end of which begins at a hedge and proceeds along it to the said Richard's tenement called the Sschawes lying in Grensted, and from there it stretches along between the said Richard's land on one side and the said monks' land called Walscheslond ... on the other as far as a tenement called Stoureslond, formerly belonging to William of Grenested which lies in the said town of Grenested'. This description not only shows the compact nature of Walscheslond but also suggests that the Sschawes and Stoureslond were compact tenements too.[12] As a consquence of such tenurial organisation, fields and other parcels of land were often named after families who had at one time had them as part of their tenements. A lawhundred jury of 1311 spoke of a footpath leading to Colebayneslond and of a croft near Colebayneslond, showing that this must have been a compact property.[13] In 1320 the abbot of Colchester granted a life lease of the property in Greenstead called Glaswhryteslond,

named from a family still prominent in Colchester at the time; this must have been a compact tenement because the lease describes it as lying towards Daweneldehell.[14] When John of Colchester endowed a chantry in St. Helen's chapel in 1321 he gave twelve acres 'in the field which is called Eydenelonde'.[15] Joseph Elianor in 1341 endowed another chantry in St. Mary at the Walls with 'twenty acres of land called Fremynghosmneslond, lying in the suburb of Colchester between land of John Fitz Walter on the eastern side and land of Ralph Baker on the western side'.[16] This name, like Glaswhryteslond, contains a recognizable family name; there were Freminghams in Colchester still in the early fourteenth century.[17] Another four acres of Elianor's endowment called Godyereslond are described by reference to the bounds to the east and west. Some early examples of this type are known from the cartulary of Colchester Abbey, and they can easily be parallelled from the villages around Colchester.[18]

Not all the fields in medieval Colchester were undivided units of tenure. A well documented example of divided occupation is the field called Munkesdoune. It may once have been monastic property but others had property rights there by the mid thirteenth century. About that time Sayer Haneng of Colchester granted to the almoner of the abbey a rent 'from an acre of arable land which once belonged to Walter the clerk, and it lies in the corner called Waltreshale in the field called Munekesdune'. Then Sayer's son and another member of the Haneng family granted to the almoner 'two acres which lie in the demesne field of the lord abbot on Munekesdune'.[19] The field remained divided between different owners, and a small collection of information concerning it was put together in one of the borough registers during the late fourteenth century. From this it transpires that about a hundred years earlier Agnes daughter of Walter de la Haye of West Mersea had granted to William Sondan and his wife an annuity of which 2s 0d was payable from the field called the Monekedoune out of three properties which had formerly belonged to three different people; one of the three, Sir Andrew of Colchester, presumably a priest, had bought his share from an earlier owner. Free transfer of land in this field is also demonstrated by the will of Alice Loton, proved in 1332, in which she bequeathed 'two acres of land in Monekedoune between land of Warin atte Welle and Juliana Gray his wife on both the east and west sides'. She also bequeathed five acres called Colettelond lying in the same field between land of Warin atte Welle and Juliana Gray on the east side and the lane called Smalelane on the west; this property she had acquired from Matthew Glasswright (*le Verrer*).[20]

This last example is of particular interest in that it shows how a compact tenement with its own tenement name might be part of a larger field, something like a furlong in an open field of the Midland type. There is further evidence to the same effect. The Juliana Gray mentioned in Alice Loton's will herself left a will proved in 1348 by which she bequeathed 'six acres of land called Savareslond lying in the field called Munkesdoune'.[21] This subdivision of fields is parallelled in other parts of the liberty, though no other example is so well documented as Munkesdoune. Numerous parcels which occur in deeds and wills were probably parts of larger fields since they are neither named nor located by reference to named blocks, as when Joseph Elianor granted for his newly founded chantry 'four acres of land ... between Ralph Ode's land on the north side and Henry Josias's land on the south side, and four acres of land ... by Magdauleyne (i.e. the hospital of St. Mary Magdalene) between the road leading to Hythe on the north side and land formerly belonging to Richard Norays on the south side'.[22] J.H. Round, in a brief discussion of Colchester fields, cites later evidence to show the divided ownership of Magdalene Field and of the Borough Field, which lay 'quite outside and to the west of the walls of the borough and south of the Lexden Road'.[23]

Individual tenements were commonly surrounded by some kind of boundary, which was often a ditch. The example of Walscheslond already cited illustrates a large tenement bounded, in part at least, by a ditch and hedge. Another example cited already, that of Edyneslond, was surrounded by a ditch that was reported to need cleaning in a lawhundred report of 1352. A similar report shows that there were ditches around Churchefeld in Mile End.[24] Some careful descriptions of tenements are to be found among leases made by Colchester Abbey. Enclosed lands in Greenstead were leased in 1315 with the proviso that the new life tenant should maintain hedges, banks and ditches at his own cost. By a lease of 1323 a life tenure was created of 'a place of land in the village of Greenstead, taken out of what used to be the Walsche, lying on the heath called Innome, and enclosed by hedges and ditches on all sides'.[25] Where fields were shared between different owners enclosure of the separate parcels was not inevitable, but it was common for some boundary to be constructed. Colchester Abbey received two-thirds of the tithe from a field called Lechelond in Lexden, and it was noted that approximately in the middle of the field there was a piece of meadow enclosed by ditches which owed tithe just the same as the arable around it.[26] A list of rents owed to the community of Colchester from parcels of land in Shrebbefeld shows that two of the properties in question were pightles (Mabeliespightel and Skevelepightel) and that the land of St. Mary Magdalene's hospital there was enclosed.[27]

It is possible to observe enclosure as it still proceeded under the auspices of St. John's Abbey. In 1325 the abbot and convent leased land in Munkesdoune for fifty years to John Edward of Colchester and his son. It was described as a piece containing about eleven acres delimited on all sides by metes and bounds, though the nature of these bounds is not described. The Edwards were required as a condition of their lease to enclose the land at their own expense, and it was further stipulated that they should cut nothing from the bank on the western side of the land. Similar leases relate to a field containing fourteen acres of demesne land called Wodleye in Greenstead, leased in 1315, and to thirteen acres of demesne called Eldapelton in the suburb of Colchester, leased in 1317.[28] The abbot was later reported by lawhundred juries in Colchester both for blocking access to Munkesdoune 'with a wall of earth' and for digging a ditch around Grenstedmeade.[29] The walling and ditching of

parcels separated from larger fields must have caused a gradual increase in the number of fields and crofts in Colchester.

Here, as elsewhere in Essex, small fields and crofts were very numerous in the thirteenth and fourteenth centuries. The properties of most landlords were built up with them at least in part.[30] In the abbot of Colchester's list of tithable lands in Lexden, for example, there were 4½ acres 'in a field called Potterescroft on the northern side of the field', the western part of Brayescroft, five crofts belonging to John Osegoth, two fields both called Cuntynggescroft (one of which contained three acres), three crofts of Alice Dolkyn at Horshethe near Lexden Park, and a field near the postern of St. Mary at the Wall called Edrychescroft.[31] Evidently the terms field and croft overlapped in Colchester. In 1310, to cite another instance, John Edward complained that two oxen had been stolen from 'his field called Duncroft'.[32] Evidence from elsewhere in Essex suggests that the term croft was unlikely to be used for enclosures of over twelve acres, and that most crofts were smaller than this.[33]

Table 1. Cropping on the Demesne of Wivenhoe Manor, 1326-7

	wheat	rye and maslin	barley	oats
	ac.	ac.	ac.	ac.
in Parua Cherchefeld	3	0¼		
in Hungerdoune		12		
in campo versus rectoriam		22¼		
in crofta sub grangia		0¼		
in Cherchpigtel			2	
in Magna Cherchefeld				9
in duabus Melnecroftis				5½
in le Hachpigtel uersus molendinum				2¼
in Sandreslond				17½

Source: E.R.O., T/B 122 (microfilm including the former D/DBm M138d)

An example of cropping from the manor of Wivenhoe, just outside the liberty of Colchester, shows the kind of pattern followed on a demesne with fields of the Essex type (Table 1). In this instance, though wheat and rye were sown side by side in Little Cherchefeld there was a clear separation of winter-sown from spring-sown fields. A similar pattern of field use was known at Langenhoe in 1338/9, when the winter-sown fields, here sown with wheat, were separate from those under spring-sown crops. But it is noteworthy how at Langenhoe even small parcels of land were subdivided between different spring-sown crops. A headland by the barn, for example, was sown with 1½ acres of barley and 1 acre of oats. A larger piece of land was divided between 2 acres of peas 'in parcels' and 13 acres of oats, while Odefeld had 2½ acres of barley and 11¼ acres of oats.[34] Local farmers were not reluctant to sow and harvest tiny acreages of crops side by side, even where they apparently had no overriding need to do so. The same point is illustrated by some details of cropping on the king's demesne lands in Colchester in 1277/8 (Table 2) when all but one of the six fields in cultivation had more than one crop and the larger ones had three. To some extent this pattern, as at Langenhoe, may have arisen because parts of the demesne due to be sown with wheat or rye were considered too poor, so that oats was sown as a second best. This will not explain, however, why Little Scholonde was divided between barley and peas, or why Scholonde was sown with rye and barley as well as oats. Clearly even small compact parcels did not necessarily represent cropping units and often had subdivisions within them.

Table 2. Cropping on the Demesne of the King's Manor, Colchester, 1277-8

	wheat	rye	barley	peas	oats
	ac.	ac.	ac.	ac.	ac.
in campo vocato Walfeld	4¼[a]	5			4
in campo vocato Scholond		28	7		9
in campo vocato Stocmelnelond		11			
in campo de Parua Scholonde			6¼	2½	
in Bochelyfeld			9¼		
in Middelmelnefeld				1½	9[b]
apud le Mere					1
in Sikelbreggeweye					1
in Waldich					1

[a] in campo sub muro ville
[b] in Middelmelnelond

Source: P.R.O., S.C.6/839/18, m. 2d.

For many landowners within the liberty of Colchester the agrarian regime of compact holdings had the implication, considered advantageous, that the land was free of common rights. The monks of Colchester certainly believed at a later date that this was the case with the lands they held 'of the old fundacion' of the abbey,[35] and they seem to have acted upon this assumption in the early fourteenth century. There is nothing to suggest that there were common rights on the demesne lands of Lexden manor. Some individual burgesses, too, had land not subject to common rights; Ellis son of John had his own fold in 1301, for example.[36]

In this landscape one of the most distinctive features was the number of compact farms called wicks which probably originated as appendages to large estates. There were

no common rights on these properties. In the marshlands of the Blackwater estuary wicks were sheep farms separate from the main lands of the hall to which they belonged, often with their own accommodation for shepherds attending the sheep there.[37] The association with livestock is interesting since outside the marshland the main group of Essex wicks was to be found on the glacial sands and loams of the heathlands, a zone of territory particularly suited to pasture farming.[38] Within the liberty of Colchester were Monkswick, named from the monks of Colchester abbey,[39] Battleswick, described in 1295 as the wick of Sir Richard Bataille,[40] Middlewick, between Monkswick and Battleswick, and Canonswick, named from the canons of St. Botolph's Priory.[41] To the north of Colchester was Tubbswick, named from the Tubbe family of Colchester,[42] and Brayeswyck.[43] There were other wicks in the liberty whose location is uncertain. These inland wicks were not usually devoted wholly to pasture; in 1301 the tax assessments of Monkswick, Battleswick and Canonswick all included charges for grain as well as for animals,[44] and in 1348 Tubbswick was described as a messuage in Mile End with eighteen acres of land and two acres of wood all lying together.[45] But in some cases the pastoral associations were still pronounced; Sir William Fraunk, described as a vicar, was taxed in 1301 only on livestock 'in his Donyland wick'; Richard Bygor's movables included a heifer 'in his wick at Donyland ... and various other people are taxed on the other animals there', implying that pasture was probably leased; Adam de Waldyngfeld was taxed on six cows, a bull and some hay at Lexden in Arnodyne's Wick.[46] In 1325 the monks of Colchester leased to John Aylmar 24 cows, 1 bull and 160 ewes to be kept in the monks' pastures of Monkswick and Newelonde.[47]

Rights of commoning and hunting

However, there are other features of the agriculture of Colchester which are more reminiscent of the Midlands, and which demonstrate the limits of individualism and the strong surviving power of communal organisation in the early fourteenth century. The most important of these was the presence of rights of commoning on wastelands and on some arable lands, and the evidence for this deserves to be examined in some detail. But other rights of the burgesses, though not so closely related to agricultural practices, gave them powers over the resources of the liberty which deserve to be considered in this context. In particular, the burgesses claimed the right to hunt on lands in the liberty as part of their chartered liberties, and this contributed powerfully at times to the sense of communal solidarity between them.

It was not unusual even in the enclosed regions of Essex for some woodlands and heathlands to be commoned. In 1254-5 Roger de Gosebec succeeded in establishing before the king's justices at Chelmsford that by virtue of his free tenement he had the right to common with any sort of beasts in 400 acres of heath and woodland in Stanway. And to the south of Colchester Tiptree Heath was subject to common rights by all the surrounding villages.[48] There was plenty of scope for such commoning within the liberty of Colchester because of the large area of heathland and woodland there. Burgesses were able to claim rights of common on some of these lands simply by virtue of their burghal status, even if they held no arable. Lawhundred juries in the 1330s repeatedly reported the names of those who had put cattle and sheep on common lands without the right to do so, not being burgesses.[49] The point is confirmed by the phraseology used in disputes with the monks of Colchester; a document drafted by abbot Walter de Huntyngfeld (1311-26) refers to claims made on behalf of the bailiffs and burgess of Colchester and their heirs and successors.[50] The biggest block of all-year common for the burgesses lay in Mile End to the north of the town. The woodland and heathland of the north-eastern quadrant of the liberty belonged to the royal manor Colchester. The burgesses lost the lease of Kingswood in 1167 or 1168 when the wood was restored to the royal demesne,[51] but they had not forfeited their rights of common there. In accounts of the king's manor from 1278-81 is recorded a variable payment to the king called *communis preda* ('common herd') given annually for animals pasturing on Kingswood Heath. The commoners also paid the king's bailiff for the custody of waifs and strays.[52]

Quite separate were the common rights over woods and heaths in the liberty enjoyed by groups other than the burgesses. Richard Noreys of Colchester dug an unauthorised ditch round a piece of common land beside Crockleford in Greenstead where the abbey's tenants had common rights. In 1314 the abbot forced him to an agreement that he should pay the abbey an extra penny a year rent, but the abbey agreed that this rent should lapse if the enclosure were to be declared unlawful at the next eyre and the land restored to its former status.[53] A later fourteenth-century document from the abbey lists the names of thirteen tenements which the abbot acknowledged to have pasture rights on Parson's Heath and Cross Heath.[54]

Rights of common on arable land were weakly developed in Essex, so that in his *English Fields Systems* Gray mentions only one example of such a thing in the enclosed region of the county.[55] However, around the heathlands of north-eastern Essex such rights over arable were more frequent than this account would suggest.[56] There was no incompatibility between enclosed fields and commoning so long as landowners and tenants were willing to open their gates at appropriate times. When Colchester Abbey requested a licence to acquire land in Feering, Great and Little Tey, Kelvedon and Inworth, a local inquest reported in 1342 that the 122 acres of arable in question were worth only 3d. an acre each year because they were subject to common rights between the harvesting of crops and February 2nd (the feast of the Purification).[57] And there were also common rights of different types on some arable lands within the liberty of Colchester. In 1311 a Colchester leet jury reported that Nicholas le Gros had lands across the Colne on the northern side which were common pasture from August 1st (Lammas Day) until February 2nd, except when they happened to be sown. It had been so time out of mind, and in the days of Nicholas's father and grandfather, but Nicholas had presumed to shut the lands off and

deprive the burgesses of their common rights.[58] These lands are of the type that Morant, four hundred years later, called half-year lands, that is lands subject to commoning for six months when lying idle. In his day half-year lands were said to amount to five hundred acres round the walls of the town.[59] There are other examples of common rights on arable land in the earlier fourteenth century. John Persoun the butcher was amerced in 1311 for shutting off a croft near Colebayneslond and depriving the burgesses of common rights.[60]

In the early fourteenth century rights of common, whether over woods and heaths or over arable lands, were a burning issue for the burgesses of Colchester, who were apparently facing a shortage of pasture more critical than that at any other recorded time during the Middle Ages. Common rights provided a source of supplementary income even to many burgesses without arable lands, and they were a matter of concern to the poorer sections of the urban population. Disputes about common rights in this period are clear-cut evidence of the importance of agrarian organisation for shaping both the common concerns of townsmen and the issues in dispute between them and neighbouring landlords, notably the abbot of Colchester.

Trouble between the burgesses and the abbey over common rights was at its peak between the second and the fourth decades of the century and eased during the fifth. It is in evidence in 1315, when Henry Bosse was required by the abbey to renounce all right and claim to common with his animals on the abbey's lands in Greenstead, West Donyland or the suburb of Colchester. He had proceeded against Walter de Huntyngfeld in the king's courts but had failed to establish his claim to such rights.[61] A number of other documents relate to similar problems in the time of this same abbot. The burgesses claimed rights of common in the abbot's meadow called Coumadwe, in Oliversmad at Old Heath, in a field next to Langestonesweye and in the Sawenwode in Greenstead.[62] Oliversmad had been acquired by the abbey from a burgess, and the dispute perhaps originated there.[63] At some stage Huntyngfeld tried a compromise solution; he would recognise their rights of common pasture in Coumadwe in return for a renunciation of all claims to rights in the abbey's other lands, meadows, pastures and woods in the liberty except Estmad and Saltmed. The compromise was unacceptable to the burgesses, however, and conflict reached its peak in 1328-9, a few years after Huntyngfeld's death. In that year a group of burgesses took possession of the Sawenwode and exercised common rights there. The abbot won his case before the king's justices against sixteen of those accused, and there were no further disputes about this particular portion of the lord's demesnes.[64] After the dispute about Sawenwode the main issue between the burgesses and the abbot was the latter's enclosure of part of Munkesdoune and his exclusion of the burgesses' livestock. Whatever grounds the burgesses had for supposing this to infringe their liberties, they soon had to abandon them. By an indenture drawn up in 1343 the community recognised that the abbey should hold 'the field which is called Monkedoune and Holmerehalle' in severalty at all times of the year, and they simultaneously renounced rights of common in the meadow called Coumad by Hythe and in 'a certain place called Greenstead Street, that is from Taseleresbrok as far as Counterfordebregge'.[65] Neither in the abbey's registers nor in those of the borough is there any record of a *quid pro quo*; the agreement of 1343 represents defeat for the burgesses on a number of long-standing issues. It was probably the price the burgesses had to pay for an alliance with the abbey against the lord of Lexden manor in a dispute which had arisen over hunting rights.

Rights of hunting, though they have little bearing on the understanding of field systems, were in several respects analogous to rights of common. They allowed individual burgesses access to the lands of others, and they had some value, though not a great one, as a source of food. But, more significantly in the present context, they were also a powerful source of collective sentiment and activity in the thirteenth and earlier fourteenth centuries and were the source of bitter disputes between the townsmen and local landlords. The burgesses' rights of hunting were closely circumscribed. Kingswood and Kingswood Heath together with all the town within the walls were subject to Forest Law, as appears from the perambulation of the king's forests made in 1301.[66] Elsewhere in the liberty the burgesses' rights were restricted to inferior game; by their earliest charters they were authorised to hunt the fox, the hare and the polecat within the liberty.[67] And even in these sports they met rival claims from manorial lords who, like lords elsewhere, had emparked poorer soils for their own recreation. The abbot of St. John the Baptist had rights of warren 'in the Donylands' (*in terris suis ... de Dunilandis*) by a charter of Henry I, and in Greenstead and East Donyland by a charter of Henry III.[68] Some compromise had had to be struck between his interests and those of the burgesses, and an agreement had been devised in 1254 whose text is copied into both the Red Paper Book of Colchester and the abbey's cartulary.[69] The two parties had agreed to share the warren of West Donyland, the abbey being free to hunt on the left side of the road leading from Hamo de Campo's former house towards Kotselwode, and the burgesses on the right-hand side. The burgesses had also accepted the abbey's right to its park in Greenstead and any other parkland it wished to enclose up to the road leading to la Bych. This agreement was not one by which subsequent generations of burgesses felt morally bound. The jurors at the Quo Warranto inquest in Colchester in 1274 or 1275 presented that they did not know by what warrant the abbot had newly appropriated to himself chaces and warrens in the towns of Greenstead and West Donyland and had twenty years previously enclosed a park within the liberty of Colchester.[70] This allegation implies, in conjunction with the earlier agreement, that the burgesses were implicated in the very creation of the park. The case against the abbot was dismissed on the evidence of his royal charters,[71] though this was not enough for the matter to be finally abandoned by the burgesses. It was raised again at a lawhundred in 1321-2 that the abbot had assumed rights of warren and had enclosed Greenstead Park.[72]

But the issue which gave rise to most disturbance in the

earlier fourteenth century involved another park at Lexden, part of Lexden manor, belonging to the Fitz Walter family. This park contained at least 150 acres of pasture.[73] Its origins are unknown, and its creation may not have had the burgesses assent. However this may be, the burgesses' claims here caused at least two riots, one in 1312 and the other in 1343. On the former occasion twenty-nine named Colchester men were alleged to have broken into Robert Fitz Walter's park at Lexden and hunted there.[74] In the second and more serious dispute ninety-six named Colchester men were said to have hunted there, fished in the lord's fishponds, poached his deer and felled his trees.[75] In retaliation John Fitz Walter embarked on a feud with the burgesses; he and his men ambushed burgesses, until he was bought off by some of the townsmen, broke the rules of the borough market place, and refused to contribute to a borough subsidy.[76] It was in these circumstances that the burgesses made their agreement with the abbot of St. John's in 1343.

It is of interest that in the early fourteenth century the burgesses of Colchester should appear so frequently acting together to defend their territorial rights. The most bitterly contested causes of conflict between them and their neighbours were not rights of jurisdiction or administration (though there were such issues) but rights over natural resources. Although Colchester was a borough its economic characteristics were very imperfectly urban, and agrarian interests were vital for the incomes and welfare of its inhabitants. And although the layout of the fields was unlike the open field system of the Midlands, the existence of common rights and hunting rights created a strong common interest between the burgesses which conflicted with the interests of neighbouring landlords.

When landlords produced lists of offending townsmen for the king's justices they included the names of prominent townsmen amongst them. The list of ninety-six names collected by Robert Fitz Walter after the Lexden Park riots of 1343 includes virtually the whole of the town's ruling group. It would be a mistake to take such lists at their face value; it was hardly possible for an exact list of offenders to be drawn up, and landlords may have hoped to prevent further incidents more effectively by causing inconvenience to leading townsmen, whether innocent or guilty. In the assizes of 1328-9 concerning the riots in the Sawenwode the bailiffs of Colchester were presented as offenders but acquitted. The invasion of Lexden Park in 1343, if correctly described in the commission of *oyer and terminer* empanelled to investigate it, had more the features of popular spontaneity than those of official policy; it is inconceivable that the burgesses' liberties gave them a right to fish in Lexden manor fish ponds, hunt deer in Lexden Park or fell timber there, and it is hard to suppose that these activities had the blessing of Colchester's legally-minded dignitaries. It is quite possible that disputes about commons and hunting rights were more a source of embarrassment than a point of commitment for Colchester's bailiffs and other wealthier inhabitants; many of them were themselves landlords or the friends and advisers of landlords. If correct, this implies that in the defence of their territorial rights (or supposed rights) Colchester burgesses could act together without the constitutional paraphernalia of 'the community of the borough'. Riots over pastures and hunting rights are rather better evidence for collective enthusiasm than most of the things which pass for communal activity in the life of the medieval town.

Author: R.H. Britnell, Department of History, University of Durham, 43-46 North Bailey, Durham DH1 3EX.

Notes

Colchester Borough records are referred to by the following abbreviations in the notes: OB for Oath Book, RPB for Red Paper Book, CR for court roll, LB for the Leger Book of St. John's Abbey. References to court rolls are given in the form CR1/2, signifying the second membrane (using the medieval numeration of the membranes) of the first court roll.

1. Britnell, 1986, 16-17.
2. Maitland, 1898, 67.
3. Gray, 1915, 387-94; Roden, 1973, 338-45; Britnell, 1983, 37-55.
4. Maitland, 1897, 480-2.
5. Kirk and others, eds., 1899-1964, i, 37.
6. *Ibid.*, i, 38.
7. E[ssex] R[ecord] O[ffice], D/DU 23/24.
8. Moore, ed., 1897, i, 177.
9. CR 1/4r.
10. P[ublic] R[ecord] O[ffice], C.134/31/3; S.C.6/845/13.
11. Moore, ed., 1897, i, 168, 201 and ii, 307, 326.
12. LB, fos. 181v-183v, 198r,v. In the sixteenth century the lands attached to Shawes Farm included three crofts, two fields and a compact 'land': Balliol College Muniments c 23.11. I owe my knowledge of this record (a list of lands paying tithes to St. Botolph's Priory) to Dr. Janet Cooper.
13. CR 2/2r.
14. LB, fo. 101v.
15. OB, fo. 155r.
16. B[ritish] L[ibrary], Stowe MS 841, fo. 35r; cf. Morant, 1748, ii, 47, note P.
17. e.g., John de Fremyngham, CR 1/1d, 7r; CR 2/2d, etc.
18. Moore, ed., 1897, ii, 308 (Alamilande), 324 (Blancheslonde), 500 (Sondislond), 501 (Oldegatyslond *alias* Seyntmarilond), 540-1 (Bramblilonde). Some further local examples of early fourteenth-century date are Knytislond in Layer de la Haye (LB, fo. 155r), Raysoneslond and Revelesland in Tolleshunt Darcy (E.R.O., D/DC 21/12), Kateleneslond and Aleyneslond in Langenhoe (E.R.O., D/DC 2/12, D/DE1 M222), Sandreslond in Wivenhoe (E.R.O., T/B 122).
19. Moore, ed., 1897, i, 281 and ii, p. 323. Sayer Haneng occurs in 1241 and 1254: Kirk and others, eds., 1899-1964, i, 139; RPB, detached folio (formerly fo. xlvii); Moore, ed., 1897, ii, 505.
20. RPB, fo. 109r; CR 9/4r. William Sondan and his wife had property in Layer Breton in 1282: Kirk and others, eds., 1899-1964, ii, 34.
21. RPB, fo. 107v.
22. B.L., Stowe MS 841, fo. 35v.
23. Round, 1926, 38; Round, 1918, 202 and map opposite p. 200.
24. CR 5/1d (Churchefeld); CR 9/6r (Edyneslond).
25. LB, fos. 97v-98v, 104r.
26. *Ibid.*, fo. 210r.
27. OB, fo. 169v.
28. LB, fos. 60v-62r, 97r,v, 100r,v.
29. CR 6/1d, 5d.
30. Britnell, 1983, 38-49.
31. LB, fo. 210r,v.
32. CR 1/4d.
33. Britnell, 1983, 39.
34. E.R.O., D/DC 2/12d.
35. RPB, fo. 211v.
36. *Rot. Parl.*, i, p. 261.

37. E.R.O., D/DK M86, mm. 2d, 3d, 4d; P.R.O., S.C.6/848/13r.
38. Reaney, 1936, 319.
39. *Ibid.*, 379; Morant, 1748, ii, 29.
40. *Rot. Parl.*, i, p. 238.
41. Reaney, 1936, 378; Moore, ed., 1897, ii, 306.
42. Richard Tubbe served as a bailiff of Colchester in the late thirteenth century: RPB, fo. 109r. He occurs in the list of taxpayers of 1301: *Rot Parl.*, i, p. 259.
43. Moore, ed., 1897, i, 59.
44. *Rot. Parl.*, i, pp. 253, 256.
45. B.L., Stowe MS 841, fo. 35r.
46. *Rot. Parl.*, i, pp. 255, 257, 259.
47. LB, fos. 62r-63r.
48. Morant, 1768, ii, 141-3, 193; LB, fo. 17r.
49. CR 3/1d, 3d; CR 4/1d; CR 5/1d, 4d; CR 6/1d.
50. RPB, fo. 40r; Moore, ed., 1897, ii, 508-9.
51. Morant, 1748, i, 46 and iii, 41.
52. P.R.O., S.C.6/839/18, mm. 2r, 3r; S.C.6/839/19, mm. 1r, 2r.
53. Moore, ed., 1897, ii, 612-13.
54. LB, fo. 157v.
55. Gray, 1915, 396.
56. Britnell, 1983, 53.
57. LB, fo. 226v.
58. CR 2/2r.
59. Morant, 1748, i, 88.
60. CR 2/2r.
61. LB, fo. 180r,v.
62. RPB, detached folio (formerly fo. 1v), and fos. 40r,v, 48r,v.
63. RPB, fo. 253v. This meadow was later described as lying between Hythe and the road to Wivenhoe: Balliol College Muniments c 23.11).
64. LB, fos. 26r,v, 40r,v.
65. Moore, ed., 1897, ii, 508-9. The burgesses also undertook not to dig, mow or pasture (*fower, couper ne pestre*) in St. John's Field.
66. Fisher, 1887, 17.
67. Morant, 1748, iii, 35.
68. Moore, ed., 1897, i, 27-8, 55.
69. RPB, detached folio (formerly fo. xlvij); Moore, ed., ii, 505-6.
70. *Rot. Hund.*, i, p. 163.
71. LB, fos. 293v-294v.
72. RPB, detached folio (formerly fo. 1v).
73. P.R.O., C.134/31/3.
74. *Cat. Pat. Rolls, 1307-13*, pp. 530-1.
75. *Cat. Pat. Rolls, 1343-5*, pp. 98-9.
76. Furber, ed., 1953, 62-3.

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Pleshey Castle — the northern bailey: excavations at the village hall site, 1987

by Deborah Priddy

with contributions by Owen Bedwin, Hilary Major, Pat Ryan and Helen Walker

Summary

Trial excavations on Back Lane, the hypothetical line of the castle's northern bailey, revealed a number of medieval pits and ditches. These included a substantial ditch, truncated by later terracing, apparently on the same alignment as Back Lane and partly underlying it, which may represent the northern bailey ditch. Possible medieval cultivation marks were also recorded.

Introduction

The motte and bailey castle at Pleshey with its medieval town enclosure is one of the best preserved examples in the country. Lying at the southern edge of the dissected boulder clay plateau at *c.*28m O.D. (TL 6655 1463), it forms the nucleus of a small agricultural and commuter village, some six miles north-west of Chelmsford (Fig. 1A). The village hall is situated on the south side of Back Lane, to the north of the motte (Fig. 1B). The allotments to the west of the site are *c.*1.5m higher than the village hall site suggesting landscaping of the latter has taken place.

The castle comprises a large, flat-topped motte with a kidney-shaped southern bailey, from which extends a town defence enclosing *c.*0.72ha. Settlement in the village is mostly concentrated along a NE-SW road immediately to the north of the motte and along the semi-circular Back Lane. The latter is of particular interest to the origins and development of the castle since its size, shape and position mirror that of the south bailey and suggest that it preserves the line of a northern bailey (Rahtz 1960, 8).

The documentary history of the castle has been outlined by Williams and Sellers (Williams 1977, 11-14) and does not need to be repeated in detail here. Suffice it to say that the earliest reference to a castle at Pleshey is in the mid-12th century when Geoffrey de Mandeville II was forced to give up his castles, including Pleshey, as a result of his machinations during the reign of Stephen. Fortification by William de Mandeville II is recorded in 1180 and it remained in the de Mandeville family until 1227/8 when it passed to the Bohun family. In 1419 it became part of the Duchy of Lancaster. By the mid-16th century it had become ruinous. There are no extant buildings associated with the castle and the only remaining structure is a late medieval brick bridge. Previous excavations to 1963 are detailed by Frances Williams in her report on Philip Rahtz's work (1977). Subsequently a further programme of work was undertaken between 1973-78 by Stephen Bassett (limited circulation interim reports in the SMR). In the main these excavations have concentrated on recording the archaeological evidence for buildings and extant defences of the castle.

Although a seemingly prosperous medieval town grew up around the castle, commercial success appears to have depended on the occupation of the castle since after its demise the town shrank to a small agricultural village. The castle and much of the land within the town enclosure is scheduled under the Ancient Monuments and Archaeological Areas Act (1979) and forms a Conservation Area. However, the charm of the village and its proximity to Chelmsford has resulted in pressure for extension and development of properties. In view of the extremely well preserved earthworks, below ground archaeology, historic buildings and character of the village, the Chelmsford Local Plan (1987) includes policies for Pleshey which presume against development, other than small extensions to existing properties. Where a case for planning permission, or works affecting the Scheduled Monument, is accepted by the Local Authority or The Historic Buildings and Monuments Commission respectively, the County Council Archaeology Section consider it essential that prior excavation is undertaken and a full watching brief maintained during groundworks. A number of such watching briefs have been carried out since 1972 (Buckley 1976, 176; Turner 1982, in SMR; Clarke 1986, 148 and Godbold 1987, in SMR) and have provided useful opportunities to assess archaeological deposits.

In 1986 the Pleshey Village Hall Committee submitted a planning application for the conversion of the village hall (formerly the village school) in Back Lane into two houses. Excavations were carried out by Essex County Council Archaeology Section, under the direction of the author, in March/April 1987. The work was funded by The Historic Buildings and Monuments Commission.

The documentary evidence

by Pat Ryan

There is a limited amount of documentary evidence which has a bearing on the medieval topography of the town. The information comes from a rental of 1273-4 (Gough, 1803, Appendix XXVIII [transcription]). This and other documents suggest that the street plan of Pleshey in 1274 has changed very little. The road leading into the town from the north and joining Back Lane crossed the 'Post-

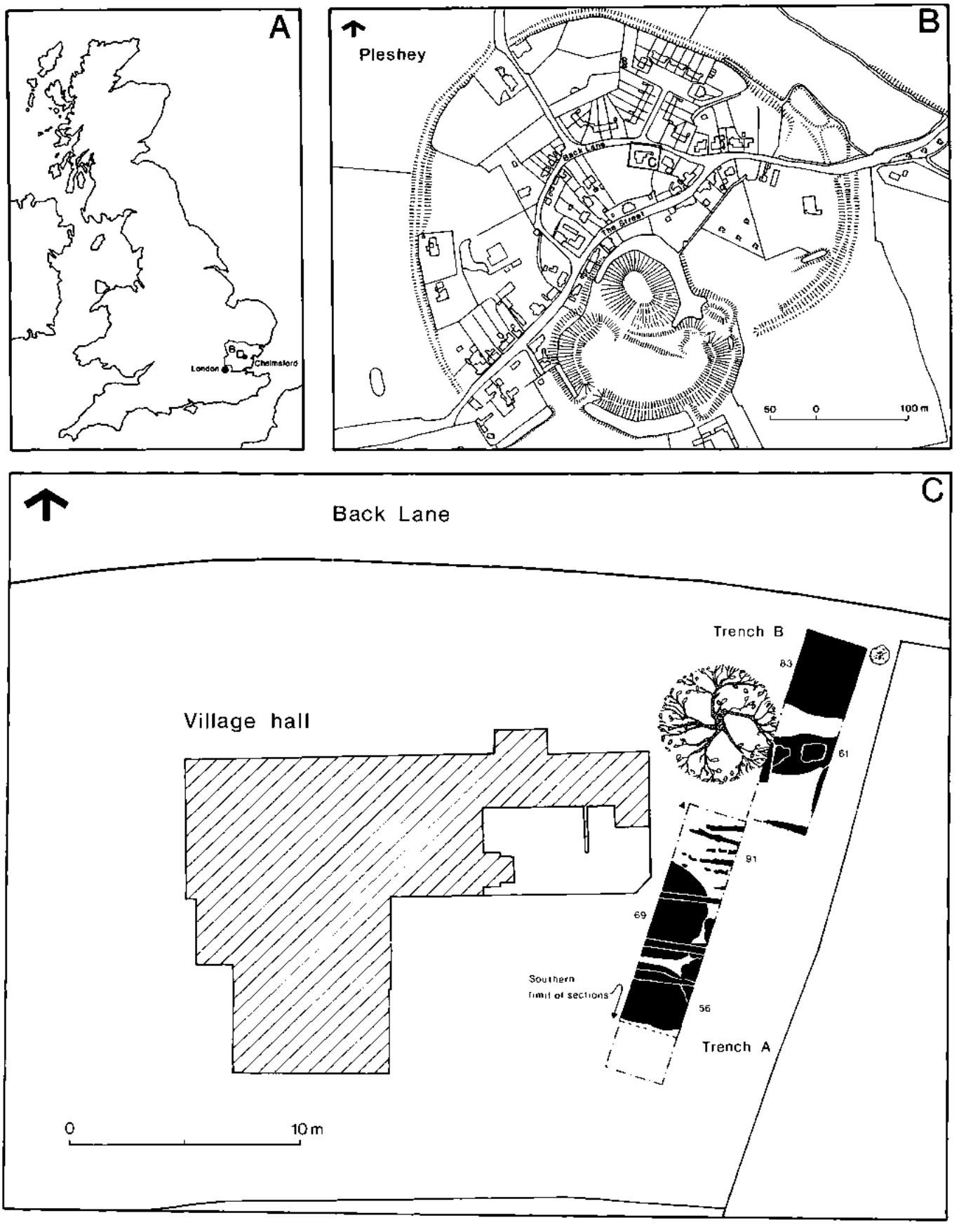

Fig. 1 Pleshey — village hall. Site location.

bridge' (formerly 'Poor' or 'Port' = 'town' bridge) and was called 'New Street' in the 13th century. This identity can be verified from abbutals in 15th-century deeds (ERO D/Dsp T18), taken in conjunction with field and property names on the Tithe map and award (ERO D/CT 275). Back Lane is described in an undated deed, probably 18th-century (ERO D/DSp T19), as 'sometime called Bred Strete now Back Lane'. Bred Strete is very likely to be a scribe's error for Brette Strete which occurs in a number of earlier documents. Both the 1273-4 rental and one of 1517 (Gough 1803, Appendix XXIX [transcription]) refer to a ditch in Brette Strete forming part of a number of properties. Its location is not clear but the fact that it is mentioned suggests it was more than an ordinary boundary ditch.

The 1273-4 rental lists forty-six shops, nine stalls and three workshops. Eight shops are described as being near the castle ditch, one near the castle gate, two in the market and one in the middle of the market. Three stalls and one workshop were also in the market. By 1517 only twelve shops were included in a rental (Gough 1803, Appendix XXIX [transcription]). Seven of these were 'by the castle ditch; four of them had been made into a house'. The undated 18th-century deed refers to 'the market place of Plecy, now called The Green'. This lay to the south of a property, the north head of which abbutted 'on the king's highway called Bred Strete, now Back Lane'. These documents indicate that the market was held on the land enclosed by Back Lane and it is tempting to see the development of the market in this area following the destruction of a northern bailey.

The excavations

The objectives of the excavations were as follows:

(i) To establish the depth and nature of the archaeological deposits in relation to the proposed building works.

(ii) To test the hypothesis advanced by Rahtz (1960, 8) that the line of Back Lane represents the fossilisation of a northern bailey.

(iii) To elucidate medieval and post-medieval activity in this area.

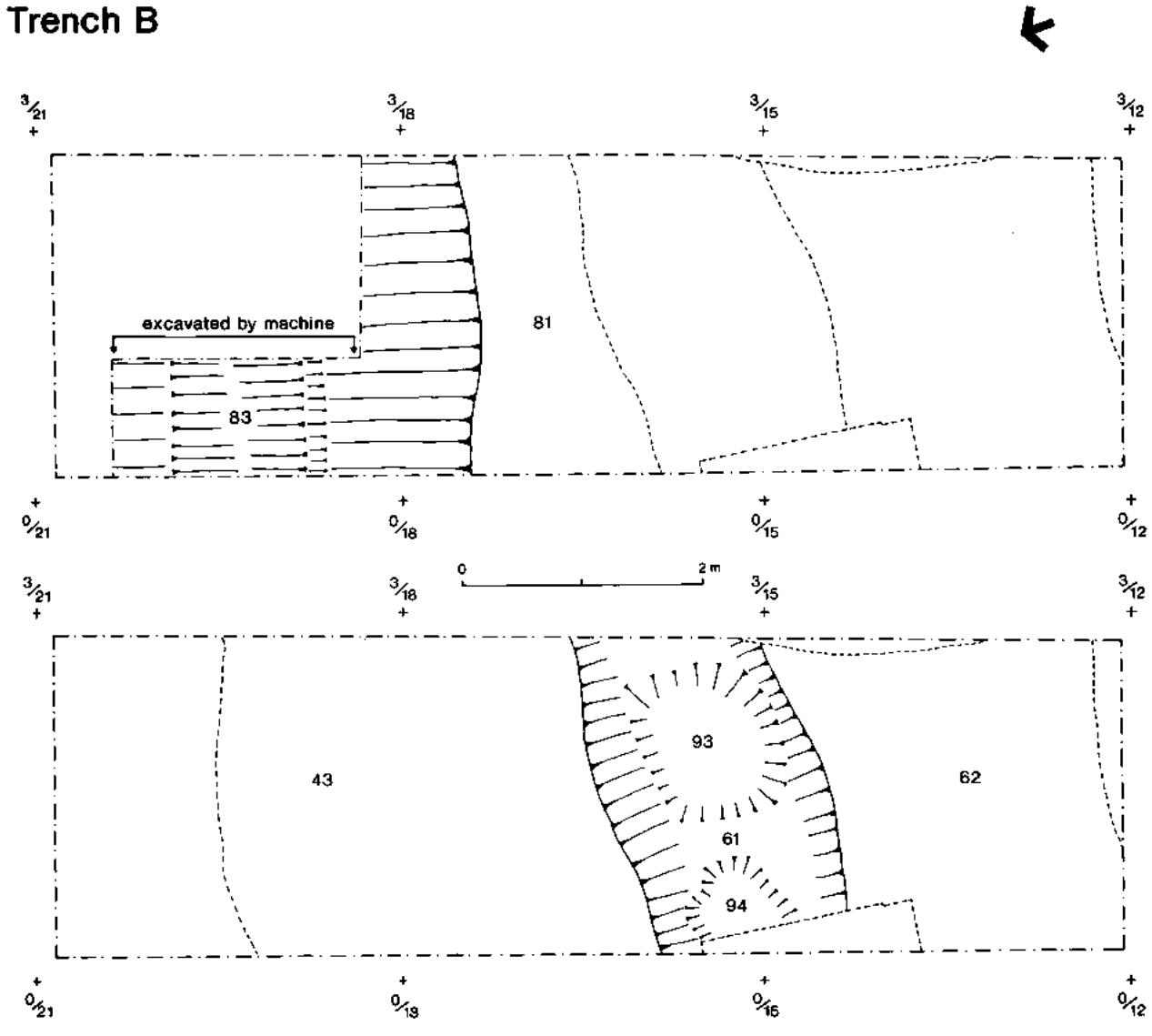

Fig. 2 Pleshey — village hall. Plan of trench B; earliest features in upper plan (refer also to sections in Fig. 4).

(iv) To record any pre-medieval features revealed.

The excavations were sited to the east of the village hall, as close as possible to the proposed groundworks. Unfortunately a tree prevented a single north-south trench being dug from the front to the back of the site, consequently two trenches, *c.*3m wide with a common longitudinal section some 23m long, were dug by hand (Fig. 1C). The recording system used is that developed by the E.C.C. Archaeology Section (E.C.C. 1986, unpub.); copies of the archive are deposited with the National Monuments Record, the Essex County Sites and Monuments Record and with the finds at the Chelmsford and Essex Museum (Accession No. CHMCR 1988: 171) The Archaeology Section is grateful to the Village Hall Committee for their help and co-operation, particularly for the use of the hall during the excavation and to the people of Pleshey for their interest in the work. For their work on a site which alternated between tundra and a quagmire, particular thanks are due to Steve Godbold and Sandy Gray. Figures 5 and 6 were drawn by Sue Holden.

Trench B (Fig. 2; Fig. 4)

A pale, mid-grey/yellow natural chalky boulder clay was exposed at the southern end of the trench (80). To the north, this became more orange in colour with pockets of grey loam (81). Its mixed nature, and presence of occasional artefacts, raised the possibility of redeposition but a machine slot subsequently showed that weathered and disturbed boulder clay was confined to the upper 300mm and co-incided with the area and depth of root disturbance and waterlogging. A clean yellow-orange boulder clay was visible below. Two major features were dug into the natural subsoil. Due to landscaping of the site, presumably associated with the construction of the school in the 19th century, deposits had been truncated and the true dimensions of the features lost.

On the frontage of Back Lane the southern edge of an east-west ditch, partly underlying the road, was revealed (83). Its width was estimated to be *c.*7.50m, whilst its depth was 1.40m with a 'V'-shaped profile. The primary fill was an orange-red/light grey mixed boulder clay with patches of mineralisation (96), above which was a dark grey, organic silt-clay (95) with patches of yellow-green mineralisation and abundant oyster shell. Upper fills were similar silt-clays (92, 82) and mixed boulder clay (88). The latter was sealed by a brown-yellow mixed boulder clay (43).

Two metres to the south a further east-west ditch (61) cut through (43) to the north and a light brown mixed boulder clay (62) to the south. This ditch was *c.*3.50m wide and 0.90m deep with a 'U'-shaped profile. Cut into its base were two pits (93) and (94) with organic grey clay fills (86) and (87). Although their cuts and fills above were only noted after the removal of the lower ditch fill (a mixed grey boulder clay with frequent yellow mottles (66)), it is possible that they were cut from a higher level. The upper fill (65) was similar, but with only occasional mottles.

Infilling of ditch (61) was followed by the build-up of brown loamy clays (42 and 39). The latter was cut by a north-south ditch (18), whose axis underlay the east section and could be seen to survive as an extant boundary ditch to the south of the Village Hall site. Its lower fill (34) was cut by a later east-west water pipe trench (48).

At the southern end of the trench, partly exposed in the western section, was a brick structure (8), whose foundation trench cut (42). Built of hard, dark red bricks, a glazed ceramic water pipe projected from its south-east corner. Also constructed from this level was a brick foundation (7) to the south of (8), exposed in the south section of the trench and almost certainly part of foundation (3) in Trench A. A further water pipe trench (48) ran east from this foundation, cutting the lower fills (19) and (34) of ditch (18). Remains of a gravel surface (17) area between (7) and (8) can perhaps be equated with a similar surface (5) in Trench A.

At the northern end of the site, an east-west roadside ditch (85) had been cut into the upper silts of ditch (83). Its brown-grey organic clay fill (84) was cut by a later field drain (90).

The most recent deposits comprised a dark brown-black silt loam (12) with much gravel, brick, coal and scrap metal covering the trench in a broad north-south band, cut at the north-west corner by a modern sewer trench (10) and demolition rubble (4) from the brick structure (3) and (7).

Trench A (Fig. 3; Fig. 4)

The natural subsoil at the southern end of the trench was a bright orange-yellow chalky boulder clay with patches of ferrugineous gravel (50), becoming more mixed towards the northern end. As in Trench B, it was clear that the site had been terraced, with further levelling to the south of the site exposing cleaner, unweathered boulder clay.

The weathered natural boulder clay at the northern end was cut by a number of shallow parallel gullies (91) 100-150mm wide, up to 50mm deep and *c.*200mm apart, running approximately east-west across the site. Their fills (97) were an orange-brown boulder clay, sealed by light/mid-brown mixed boulder clay (70) and (31).

Two large pit-like features dug into the natural boulder clay were only partially exposed by the excavation. A semi-circular segment of the northernmost pit (69) was *c.*4.20m wide and 1.60m deep with gently sloping, rather irregular sides and a flat bottom; its northern edge cut through (31). Its primary fills, orange-brown, mixed boulder clay (68) and (82) included large flints and chalk lumps. These were sealed by a lighter brown boulder clay (67) containing some pottery, and a dump of large nodular flints and chalk lumps against the eastern side of the pit. This was overlain by a relatively sterile orange-brown boulder clay (52) in contrast to the upper fill; a mid-light brown boulder clay with green-yellow patches of mineralisation (53).

Some 0.40m to the south of (69), part of a second pit (56) was recorded. Of seemingly irregular shape, it was *c.*2.60m wide and *c.*0.80m deep, with near vertical sides and a flat bottom. The lower fill (71) was a grey mixed boulder clay with orange staining; the upper (55) was a more mixed mid-light brown boulder clay with chalk pebbles and pockets of mineralisation.

A number of small, shallow irregular features, (60) and (58) and (59), with fills (51), (57) and (54) respectively, were

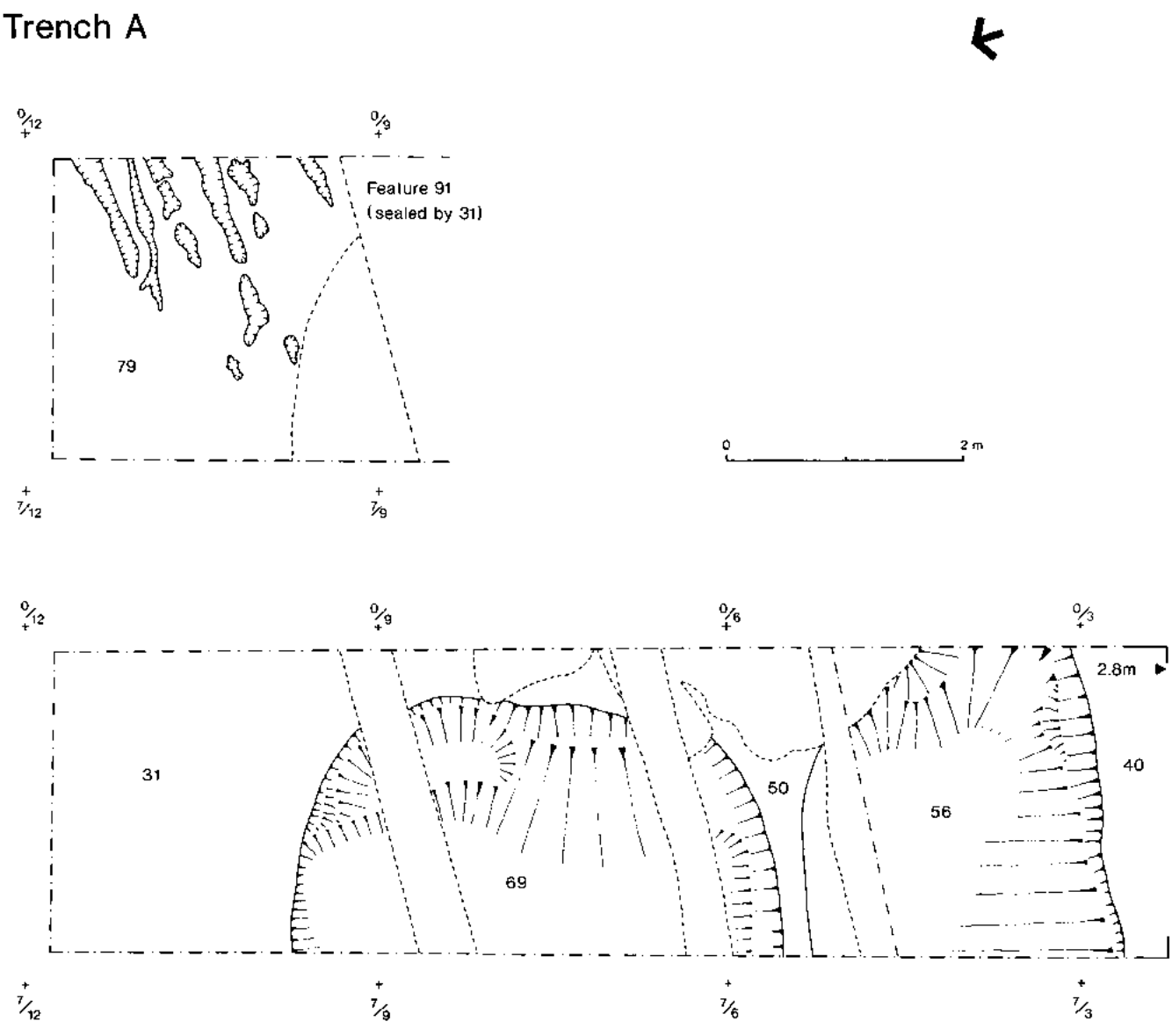

Fig. 3 Pleshey — village hall. Plan of trench A; earliest features in upper plan (refer also to sections in Fig. 4).

visible to the east of pit (69); one oval pit (64), *c.*0.40m in diameter and 80mm deep, with a light brown boulder clay fill (63), cutting (69). All the pits were sealed by a very mixed layer of creamy-yellow/brown boulder clay (38) with patches of ferrugineous gravel. It extended almost to the northern edge of (69) where its northern edge had been destroyed by a modern pit (27).

Successive mixed chalky boulder clay make-up layers (70) and (31) at the northern end of the trench were cut by an east-west slot (74). Its dark brown loamy clay fill (47) was cut by two shallow rectangular features, (73) and (72). The western edge of the latter was cut by a shallow pit (44).

Pit (44) was cut by the foundation trench (20) of a modern brick structure at the northern end of the trench, built from the level of (31). Consisting of a north-south wall of soft, dark red, unfrogged bricks with a hard cream mortar (2), some 3m long, returning at a right angle at the southern end and continuing beyond the northern section, this was abutted to the east by a small rectangular structure (3), of similar construction but using a softer yellow mortar. The northern wall of this structure extended into the north section and almost certainly links with foundation (7) in Trench B.

The area to the east of the brick structures was subsequently covered by a mid-brown clay loam (15) whilst to the south compact gravel surfaces (16) and (5) were interspersed by a series of east-west water pipe trenches (37, 13, 33). At the north end of the site was a demolition layer of brick rubble (4) in a mid-brown clay loam.

The medieval and post-medieval pottery
by Helen Walker

The pottery has been recorded using a system of classification already in use for other post-Roman pottery in Essex (Cunningham 1985, 1-2). Cunningham's fabric numbers are quoted in this report and the fabric types present in sealed features are shown in Table 1. The pottery has been compared to published material from Pleshey castle (Williams 1977). Several forms were paralleled (see archive report), although there seems to be a lower incidence of sand and shell-tempered wares (all illustrated sherds are in Fig. 5).

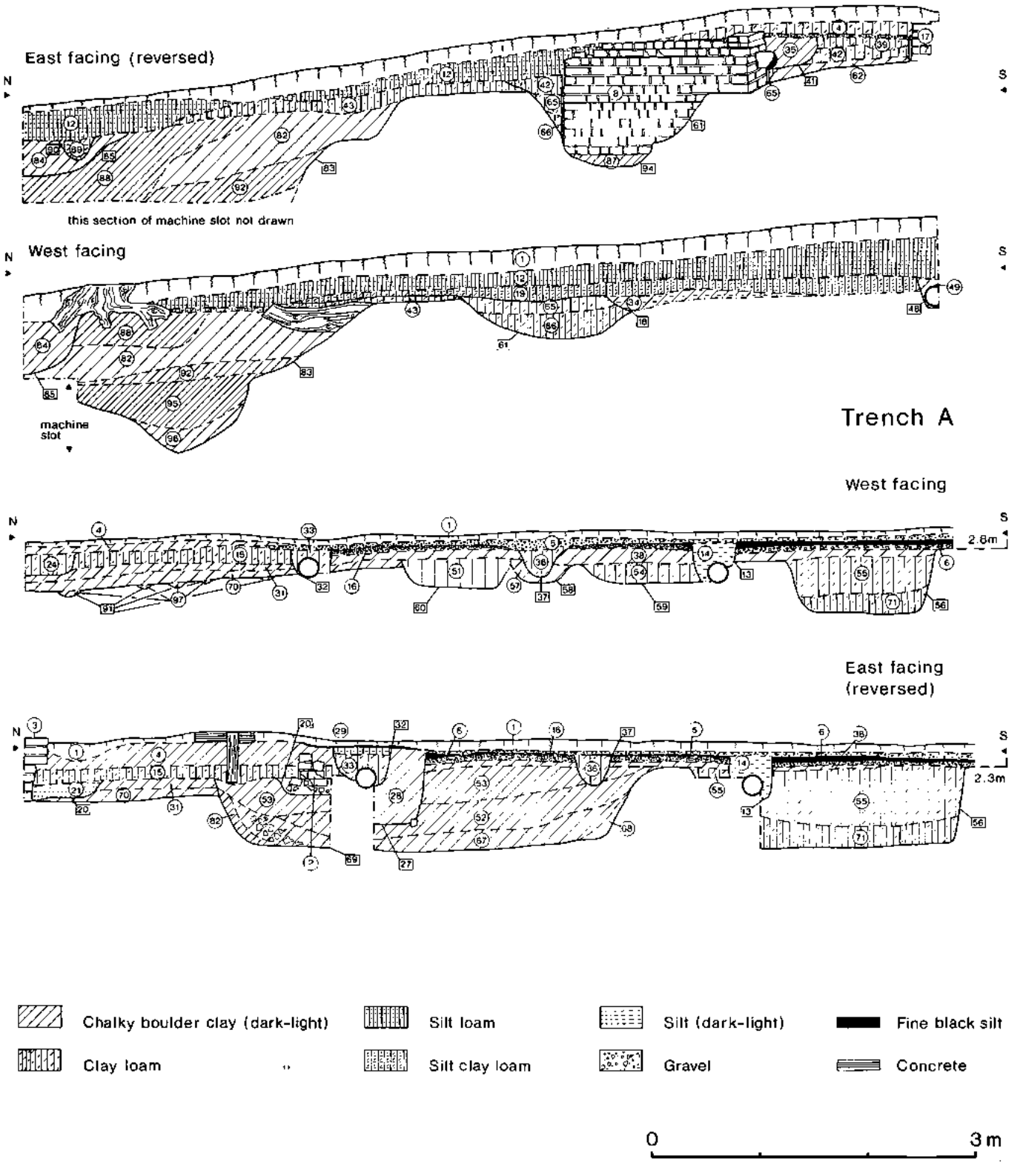

Fig. 4 Pleshey — village hall. Sections of trenches A and B.

Table 1: Quantification of pottery by feature, fabric and sherd count

			FABRIC																	
Trench	Feature type	Fill	12A	12B	12C	13	20	20C	20D	21	22	23A	35	35B	40	45M	47	48AB	48D	Total	Comments
	Drain	75	–	–	–	–	3	–	1	1	1	–	–	–	–	–	–	–	–	6	
	Water pipe trench	33	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	1	
	Slots & pits	28	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	1	
	Make-up	31	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1	2	4	
	Gravel Surface	16	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	1	2	Joins 55
	Make-up	38	1	1	–	–	3	–	–	4	–	–	1	–	–	–	–	–	–	10	
	Pit 60	51	–	–	–	–	1	–	–	–	–	–	3	–	–	–	–	–	–	4	
	Pit or ditch	55	1	5	–	6	9	22	7	–	5	3	14	–	–	–	–	–	–	72	Joins 71, same vessel in 12
A	56	71	–	–	–	–	7	15	3	–	1	3	8	–	–	–	–	–	–	37	Same vessel in 67
		76	–	–	–	–	1	1	1	–	–	–	–	–	–	–	–	–	–	3	
	Pit 69	53	–	–	–	–	7	2	–	–	–	–	–	–	–	–	–	–	–	9	
		77	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	1	
		52	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	1	
		78	–	–	–	–	2	–	2	–	–	–	–	–	–	–	–	–	–	4	
		67	–	–	1	–	13	3	–	–	–	–	–	–	–	–	–	–	–	17	
		68	–	–	–	–	13	–	1	1	2	–	–	–	–	–	–	–	–	17	
	Make-up	70	–	–	–	–	5	–	–	1	–	–	–	–	1	–	–	–	–	7	Same vessel in 39 and 4
	Make-up	12	1	–	1	–	1	–	1	–	–	–	1	–	2	5	–	–	–	12	Joins 43 same vessel in 95 & 55
	Drainage trench	84	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	1	
	N-S boundary	19	–	–	–	–	–	3	–	–	–	–	–	–	2	3	–	1	16	25	Joins 34
	Ditch	34	–	–	–	–	–	–	–	–	–	–	–	–	1	6	–	–	1	8	
	Make-up	35	–	–	1	–	2	–	–	–	–	–	–	–	2	–	–	–	6	11	
B	Make-up	39	–	1	–	–	3	–	2	–	–	–	–	–	4	–	–	1	1	12	
		42	–	–	–	–	3	1	5	3	–	–	–	–	1	–	–	–	–	13	Same vessel in 66
	61 ditch	65	–	–	1	–	3	1	5	5	1	–	–	–	–	–	–	–	–	16	
		66	–	–	5	2	6	2	8	2	–	–	1	–	–	–	–	–	–	26	Same vessel in 42
		86	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	1	
	Weathered natural?	43	–	–	1	–	1	–	1	2	–	–	–	–	2	1	–	–	12	20	Contaminated with 12
		62	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–	–	–	2	
		80	–	–	–	–	1	–	–	–	–	–	1	–	–	–	–	–	–	2	
	83 ditch	88	–	–	–	–	–	–	2	–	–	–	–	–	–	–	–	–	–	2	
	Bailey ditch?	82	1	–	–	–	6	1	11	3	–	–	2	–	–	–	–	–	–	24	Joins 95 same vessel in 92
		92	5	–	–	–	3	–	6	2	–	–	4	–	–	–	–	–	–	20	Same vessel in 95
		95	3	–	–	–	4	3	8	1	–	–	–	1	–	–	–	–	–	20	
		96	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	1	
A	Topsoil	1	–	–	–	–	1	–	–	–	–	–	–	–	2	1	–	1	–	5	
& B	Demolition layer	4	–	–	–	–	–	–	–	–	–	–	–	–	3	1	1	–	35	40	
	TOTALS		12	7	10	10	100	58	65	25	11	6	35	1	20	18	1	4	74	457	

Fabrics

Fabric 12: Early medieval sand and shell-tempered ware — The suggested date range for this fabric in central Essex is the early 11th and 12th centuries, most sherds are oxidised. *12A:* shell-tempered; *12B:* shell with sand; *12C:* sand-tempered with sparse crushed shell, usually superficial. One cooking pot rim is present (context 35), similar in form to No. 6.

Fabric 13: Early Medieval ware — The suggested date range for this fabric in central Essex is the early 11th century to *c.*1200. Two cooking pot rims are present (Nos 6 and 16) and one jug handle (No. 7).

Fabric 20: Medieval coarse ware — late 12th to 14th centuries. Forms comprise two cooking pots (Nos. 8 and 14); a ?bowl (No. 17); a jug rim (No. 3) and a jug handle (No. 2). Also present is a fragment from a ?curfew (context 55) with a thumbed, applied strip around the top of the vessel.

Fabric 20C: Mill Green coarse ware — late 13th to mid/late 14th century (Pearce *et al.* 1982, 289). Forms comprise two cooking pots (Nos. 11 and 15), a bowl (No. 10) and a glazed jug handle (No. 9). Six other sherds have a partial green or clear external glaze and one is slip-painted and glazed. Such surface treatment is more typical of the fine ware.

Fabric 20D: Hedingham coarse ware — ?late 12th to end of the 13th century, tempered with moderate, angular, white, colourless and grey sands with sparse rust coloured oxides. Grey sherds are the most frequent,

sometimes with red margins, buff and red-brown sherds also occur. Forms comprise three cooking pot rims, all with flat or slightly everted tops above a short, upright neck (No. 4) and bowl rim (No. 5).

Fabric 21: Sandy orange wares — 13th-16th centuries. Forms comprise of jugs (No. 1) and a post-medieval jar rim (No. 18). Most sherds are glazed with a green or clear glaze. Six sherds have a coating of cream slip beneath a green glaze and one sherd is slipped but without a glaze. Only No. 1 is slip painted.

Fabric 22: Hedingham fine ware — Plate 12th to end of the 13th century. No forms were identified, but all the sherds except one are glazed with a clear, pale green or mottled green glaze. Five sherds are decorated with applied strips, in one example the clay used for the strip is lighter than that used for the body. One sherd has applied pellet decoration and one ?strap handle fragment (context 75) is decorated with a slashed herring-bone pattern (cf. Williams 1977, fig. 33.40).

Fabric 23A: Medieval Surrey white wares — mid-13th to 15th centuries (Vince 1985, 46-57). A white-firing, sand-tempered ware which could not be attributed to either Cheam or Kingston. No forms were identified, sherds are unglazed, and probably from the same vessel.

Fabric 35: Mill Green fine ware — late 13th to mid-14th centuries (Pearce *et al.* 1982, 277-79). Forms comprise jugs (No. 12) and a jar rim (No. 13). Three sherds have a cream slip coating beneath a mottled green glaze, two sherds are slip-painted, one under a clear glaze, the other under a partial pale green glaze.

Fabric 35B: Mill Green-type ware — the fabric is visually indistinguishable from that of Mill Green ware but the forms, methods of decoration etc. are untypical. One body sherd is present, probably from a jug. It is thick-walled and decorated with two parallel red slip stripes overlying a coating of cream slip. It is covered by a mottled green glaze.

Fabric 40: Post-medieval red earthenwares — from the 16th century onwards. One sherd was found in make-up level 70, stratigraphically below the medieval pits and must be a contaminant. Sherds from the same vessel were found in contexts 4 and 39. Forms comprise a pad base (contexts 4, 39 and 70) with an overall internal dark green glaze. Internal glazes become current from the later 16th and 17th centuries at Chelmsford (Cunningham 1985, 2). Other forms are likely to be modern.

Fabric 45M: Modern stoneware.

Fabric 47: Staffordshire salt-glazed white ware.

Fabric 48AB: Porcelain.

Fabric 48D: Staffordshire ironstone types.

Fabrics 12, 13, 20, 21 and 22 are fully discussed by Drury (forthcoming). Fabrics 45M-48D are 18th-20th century types and are discussed in the archive.

Pottery from ditch 83 (Fig. 5)

1. Jug rim: Fabric 21; cream slip painting beneath partial greenish glaze, slip also on the inside (Contexts 82 and 95).
2. Handle from squat or rounded jug: Fabric 20; grey-buff surfaces and red-brown margins (context 95).
3. ?Jug rim: Fabric 20 (context 82).
4. Cooking pot: Fabric 20D; red-brown margins (context 95).
5. Bowl rim: Fabric 20D; red-brown, closely resembles an early fabric from the Sible Hedingham group (Walker in prep.) (context 88).

Nearly 1 kg of medieval pottery was excavated from the ditch fills. Fragments from the same vessels occur in contexts 82, 92 and 95, indicating that at least part of the ditch was infilled at the same time. Sherds of shell-tempered ware (Fabric 12A) may have been current with the first phase of occupation at Pleshey castle *c.* 1140. However, cooking pot (No.

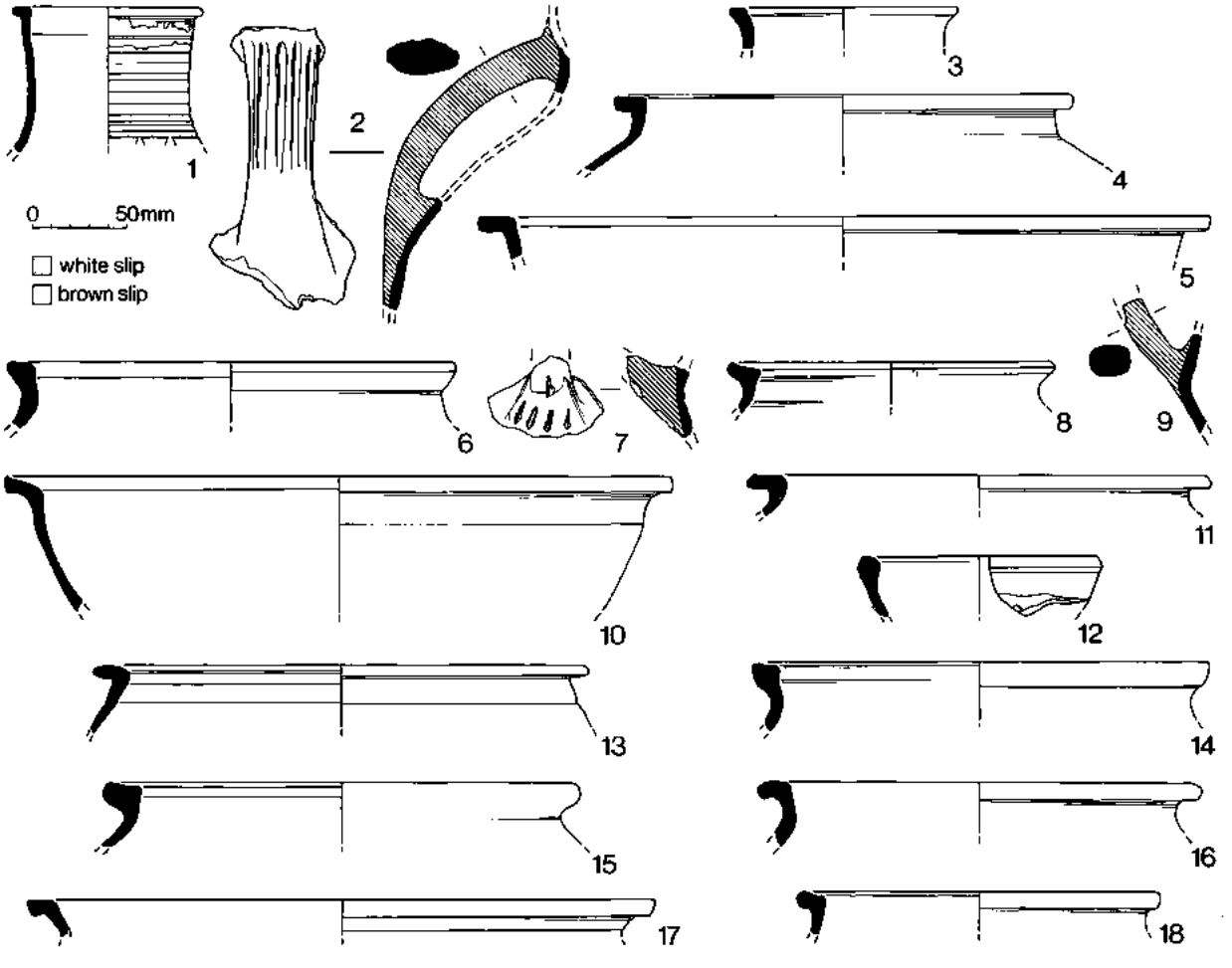

Fig. 5 Pleshey — village hall. Medieval pottery.

4) has a 13th-century rim type and all other forms date from the 13th century. The presence of Mill Green fine wares provides the most accurate date of late 13th to mid-14th century. The presence of earlier pottery indicates that a late 13th-century date is more likely.

Pottery from pits 56 and 69 (Fig. 5)
Numbers 6-13 are from pit 56; numbers 14-15 are from pit 69.

6. Cooking pot rim: Fabric 13; orange surfaces, thick grey core (context 55).
7. Jug handle: Fabric 13; light brown surfaces with thick grey core; stabbed decoration (context 55).
8. Cooking pot rim: Fabric 20; red-brown margins (context 71).
9. Handle and lower part of a jug: Fabric 20C; abraded but traces of a cream slip beneath a partial mottled green glaze remain; a rare form as Mill Green jugs are almost always fine ware, although handles sometimes have a sand temper for added strength (contexts 55 and 71).
10. Bowl: Fabric 20C; pale orange, grey core (context 71).
11. Cooking pot rim: Fabric 20C; pale orange, grey core (context 71).
12. Jug rim: Fabric 35; buff external surface, otherwise pale grey, partial brown slip; applied pellet; splashes of pale green glaze (context 55).
13. Jar or cooking pot rim: Fabric 35; pale orange, thick grey core; normally a coarse ware form (context 55).
14. Cooking pot rim: Fabric 20; brown-grey (context 68).
15. Cooking pot rim: Fabric 20C; buff surface, red-brown margins, brown core (context 76).

Approximately 1.5 kg of medieval pottery was excavated from pits 56 and 69. Fragments from the same vessel occurring in fills 67 and 71 indicate that the two pits were contemporary, whilst cross-fits between fills 71 and 55 indicate the contemporaneity of the fills. The date and fabric range is similar to that of ditch 83. The exception is the presence of Surrey white ware in pit 56; although this ware was produced until the 15th century it must be of a similar date to the rest of the group. A late 13th (to mid-14th) century date is possible as Surrey white ware had become common by then (Vince 1985, 50) and it would have been contemporary with the sherds of Mill Green ware also present.

Pottery from ditch 61 (Fig. 5)

16. Cooking pot rim: Fabric 13; orange surfaces, thick grey core (context 66).
17. ?Bowl rim: Fabric 20 (context 66).
18. ?Jar: Fabric 21; clear external glaze with splashes on the rim; post-medieval form (context 65).

About 0.5 kg of medieval pottery was excavated, similar to that found in the other medieval features. The early medieval cooking pot rim (No. 16) is the earliest form. Later pottery includes an unglazed sandy orange ware thumbed base (context 66). The fabric is very hard and it may be from one of the large jugs/cisterns of the 15th-16th century. Jar rim No. 18 may belong to the 16th century.

Pottery from other features
Pottery derived from medieval features occurs in later levels, e.g. there are cross-fits between medieval pit fill 55 and the gravel surface 16; and between the fill 66 of ditch 61 and make-up layer 42. However, most of the pottery from the upper levels is modern, the majority dating from the late 19th and 20th centuries. There is little evidence of activity between the 16th and 19th centuries.

The animal bone
by Owen Bedwin
The assemblage consisted of 117 fragments of bone and teeth, of which 109 were identified. The material was in good condition; breaks and external surfaces were unabraded.

Of the 109 fragments identified, 95 were from medieval contexts, dated by pottery to between the 12th and the late 13th or 14th century (the remaining 14 fragments were from modern contexts). The medieval fragments were divided between 5 species as follows: *Bos* 48; *Ovis* 32; *Sus* 13; *Equus* 1; *Cervus elaphus* (red deer) 1.

The assemblage probably represents food debris, and implies a predominance of beef over other forms of meat. The assemblage is not, however, large enough to justify generalisations about the medieval diet or economy. The only other published animal bone from medieval Pleshey (Williams 1977, 200-1) is not directly comparable. This material came from a single late 14th-century deposit in the upper bailey (which may or may not be truly representative of that period), and is thus rather later than the village hall assemblage.

Shell
A small quantity of shell was found in a number of medieval contexts, and is listed in the archive report.

Other finds
by Hilary Major

Slag
A small quantity of slag was recovered from contexts 38, 39, 55, 71 and 92.

Clay Pipe (context 19)
Bowl; J ?H on either side of the spur; cross keys in relief on either side of the bowl, with stylised leaves on front and back (Fig. 6). Stylistically probably *c.* 1810-40 (Oswald 1977, type G4). The cross-keys motif suggests it may have been made for a public house of that name.

Other than small amounts of daub, brick, stone and tile, all other finds were modern and derived from late 19th or 20th-century contexts. They are described in the archive report.

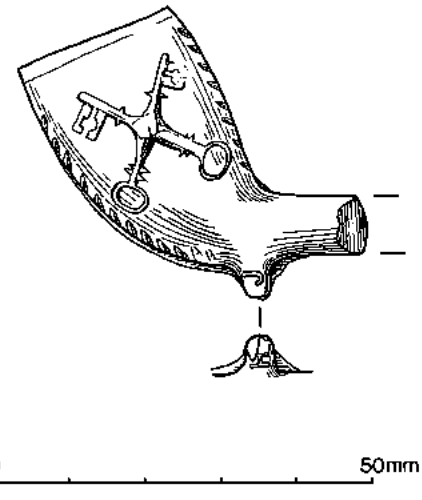

Fig. 6 Pleshey — village hall. Decorated clay-pipe bowl.

Discussion

The results of the excavation can be summarised as follows:

The position of the east-west ditch (83), partly underlying Back Lane, is consistent with the hypothetical line of a northern bailey. A watching brief at Compton Fold and Mount Bridge (TL 66501450) revealed the edge of a ditch, at least 19.50m wide, interpreted as that of the northern bailey, mirroring Back Lane as suggested by Rahtz in 1960 (Couchman 1976, 176-7). More recently, recording of foundation trenches of a garage at Woolmers Mead, almost opposite the village hall on the north side of Back Lane, revealed an east-west ditch *c.*4m wide (Clarke 1986, 148). The excavator considered this an unlikely candidate for the bailey ditch and suggested it was either unfinished, lay under, or to the south of Back Lane.

The basic objection to the interpretation of ditch (83) as that of the northern bailey is that its dimensions, as ex-

cavated, do not approach those recorded at the west end of Back Lane nor those of the extant ditch of the south bailey. However, north-south profiles of the site and the adjacent allotments suggest that at least 1.5m of deposits have been removed from the northern part (Trench B) of the village hall site. The true dimensions of ditch (83) could therefore be some 8-10m wide and 4m deep; more in line with the dimensions of the south bailey and the ditch observed at Compton Fold. The earliest pottery from (83) dates from the 12th century although its backfilling is most likely to have occurred in the 13th century, sometime after the (re) fortification of the castle by William de Mandeville II in 1180.

The linear, parallel gullies in Trench A (91), although producing no datable finds appear, stratigraphically, to be among the earliest features on the site. Although individually their irregular and discontinuous nature might suggest tree-root holes, collectively their size and spacing suggests medieval cultivation marks, perhaps relating to horticultural use of the north bailey, before the growth of the market here.

The pottery from ditch 61 and the two pits (69) and (56) in Trench A dates to between the 12th-14th centuries, although the ditch includes some early post-medieval material. Its interpretation is most likely to be that of a medieval property boundary, set back from ditch 83. The relatively sterile fills of the two pits are not consistent with domestic rubbish pits. A dump of flint and chalk lumps against the side of (69) suggests a quarry for flint, but it seems unlikely that there would be sufficient flint and chalk in the chalky boulder clay to make this worthwhile. The steep, relatively unweathered profile, depth and the nature of the fills suggests they were backfilled quite soon after excavation and they may have had a relatively short-lived industrial or craft function. The presence of slag may indicate metallurgical processes in the vicinity.

A number of other small pits and possible postholes were identified in Trench A, but none with any certainty of dating or function. A series of water pipes ran across both trenches and appear to be associated with the standing building. Foundations of a brick-built, outside toilet block (2, 3, 7) were recorded at the northern end of Trench A, as were external gravelled surfaces (5 and 16), presumably the playground. In Trench B the use of the site frontage as a hard standing for parking and access to a past garage at the rear of the site had resulted in the dumping of much 20th-century rubbish and clinker as hardcore for a drive.

Author: Deborah Priddy, Essex County Council Archaeology Section, Globe House, New Street, Chelmsford CM1 1LF.

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Maidens Tye: a moated site at High Easter

by Elizabeth Sellers, Patricia M. Ryan and Helen Walker

Summary

A deserted moated site at Maidens Tye was cleared of scrub and levelled in the spring of 1965. This report gives an account of exploratory excavations in 1957-9, the excavation of a large pit in 1960 and of further work in 1965. The pit produced a notable group of pottery which is fully illustrated, described and analysed. The survival of relevant documents has made an account of the history of the area possible.

Introduction

Trial trenching of a deserted moated site at Maidens Tye, High Easter was begun by J.G. Blyther in 1957 and continued until 1959. In 1960, following his death, Elizabeth and John Sellers completed the excavation of a large pit encountered in one of his trenches, at the suggestion of John Hurst and Philip Rahtz. Subsequently the site became overgrown and the landowner decided to clear and level the site for cultivation. This was done in April 1965. Lack of resources, and the presence of hives of bees in the early spring, meant that it was not possible to do much more archaeological investigation beforehand. The site was cleared in four days, using a bulldozer; during this time it was possible to salvage material uncovered and to record and make limited excavation of features encountered. The work in 1965 was supported by the then Ministry of Public Building and Works.

The site (Fig. 1; A, B), at N.G. TL 639165, lies in the north-east of High Easter Parish, 105 metres south-west of the parish boundary and about 2.5 kilometres north-east of the church. This area is, locally, the highest part of the chalky boulder clay plateau, just below 90 metres above Ordnance Datum, sloping slightly to the south but, for agricultural purposes, flat and poorly drained.

The soil here is derived from a pale yellow chalky boulder clay with many chalk fragments. As seen in excavation and during bulldozing, this is covered by *c.*30cm of plastic orange-brown clay and *c.*15cm of black, relatively stone-free, topsoil. Despite the presence of 40-55% of calcium carbonate in the unweathered clay, the soil is slightly acid especially under grass or woodland.

The main moated island was approximately 54 by 38 metres with a moat averaging 5 metres wide. Apart from a small central area of close cropped turf, the island and moat banks were covered by dense blackthorn scrub with occasional trees, including crab, field maple and yew. There did not appear to be any significant differences in ground levels inside and outside the moat.

The site archive and finds are deposited at the Chelmsford and Essex Museum, Accession number 1985:89. Another copy of the archive is with the County Archaeological Section's SMR at County Hall, Chelmsford; the SMR number is TL 61/55. A copy of the historical research file is with the Essex Record Office.

The archaeology

Excavations 1957-9 (Fig. 2)

The excavator's records comprise maps and plans showing the grids, derived from the National Grid, on which the recording system is based and sheets of graph paper used to record those trial trenches where features were encountered. These sheets carry diagrammatic scale plans and sections, with some dimensions and brief descriptions of soil and finds written alongside or within the layers. A key sheet defines the cross hatchings used for universal layers.

The basic stratification on which the records are based consists of turf and stone-free black topsoil 15cm; grey-brown clayey soil, often flecked with chalk, burnt clay and charcoal 30cm; red-brown clay, almost stoneless and free from chalk 30-35cm; chalky boulder clay, depth undefined and described as moat upcast. Total depth, from ground level, was typically 1.15m. In most of the trenches excavated chalky boulder clay occurs at about 70cm below ground level, none were dug to below 85cm except in Q18. The sections here suggest undisturbed chalky boulder clay down to 1.45m and in consequence it seems unlikely that this clay is upcast from the moat.

All the trenches were 61cm by 245cm (2′ × 8′). Working from north to south, the features shown in these plans and sections are as follows:

MN.Q12	North end of trench — eight flints 50cm down.
MN.Q13	Sections cut a deep feature 50cm down; nothing on plan.
MN.Q14	Slot. 20cm wide, 15cm deep and 1.68m from north-east to south-west. To the north a post hole 28cm by 23cm and 46cm deep; at the south another, 28cm by 23cm and 48cm deep, apparently cuts the slot. Neither of these post holes are aligned on the slot or on each other.
MN.P15	Small pit *c.*38cm deep in south-west corner; oyster shell in top of fill. Sections show this to be larger than planned, extending *c.*92cm to the north.
MN.Q15	Area of cob 55cm by 70cm towards south end of trench. A V-shaped feature *c.*61cm down, in the centre of the east section and filled with red-brown clay, demonstrates that this clay is not undisturbed natural.

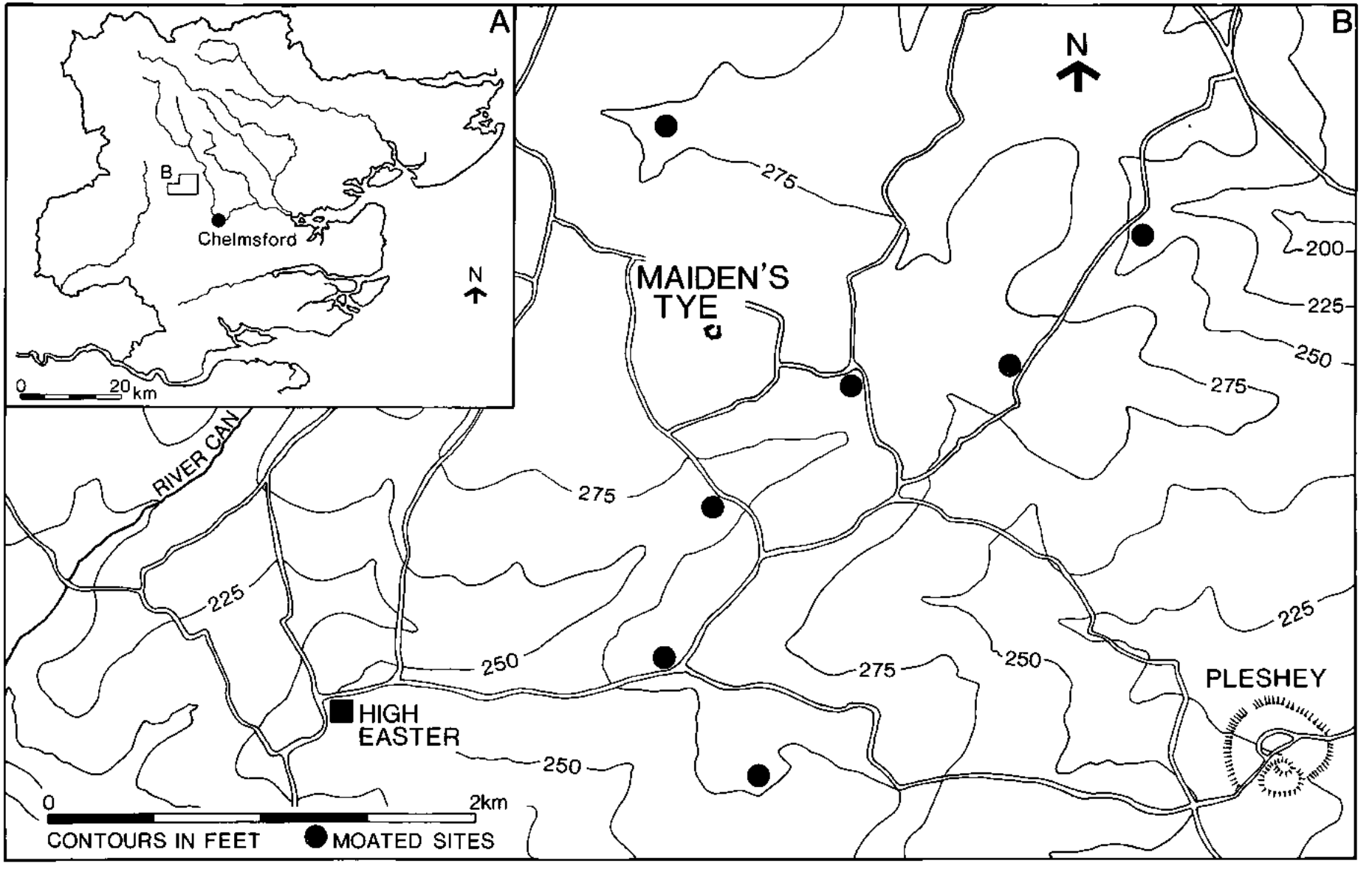


Fig. 1 Maiden's Tye. General site location. Contours in feet.

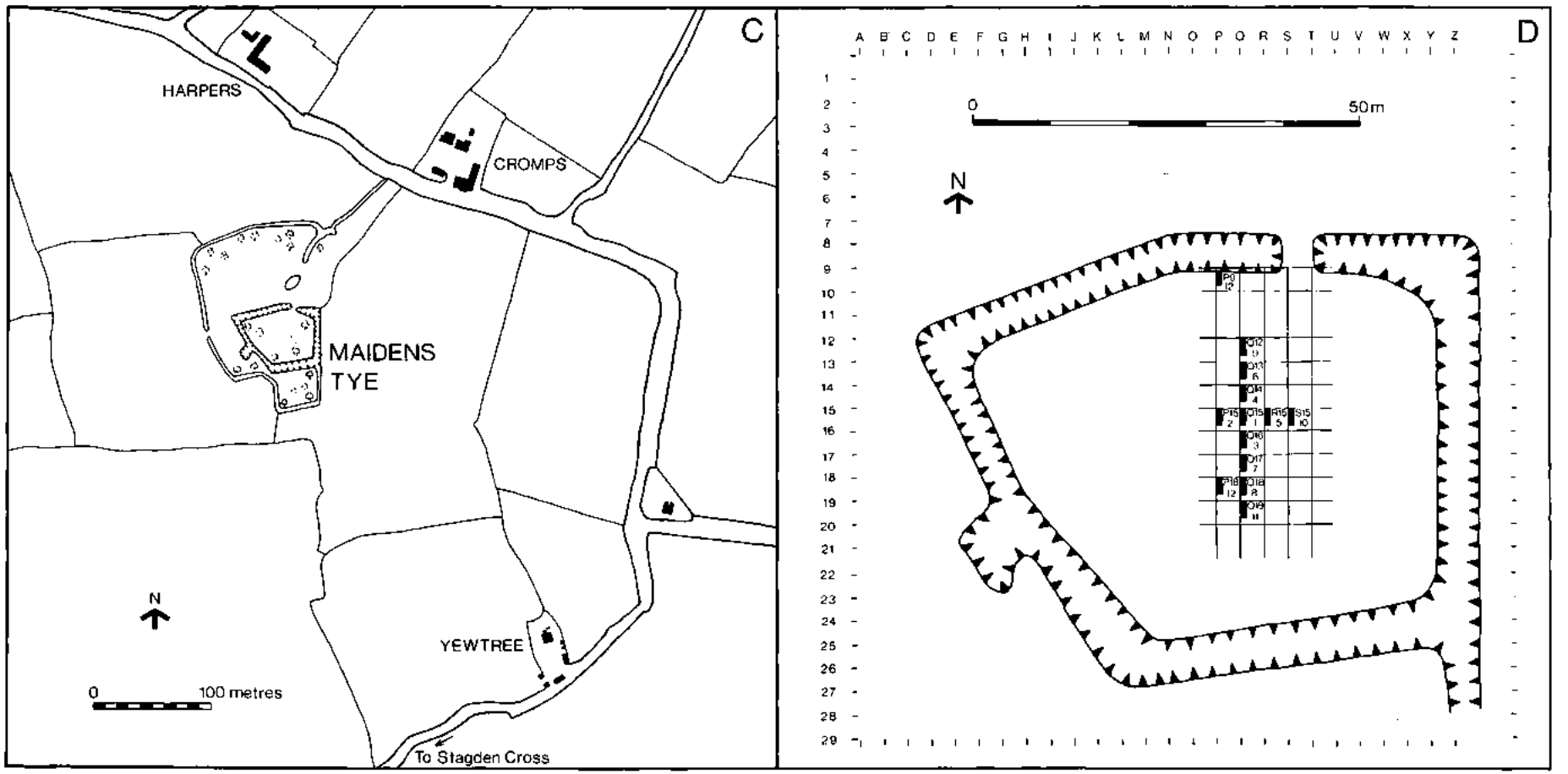


Fig. 2 Maiden's Tye. (c) The site in its local setting.
(d) Plan of the moated enclosure with the 1957-59 grid.

MN.R15 Plan shows a layer of flints sealed by a layer of cob and, to the north, a 46cm diameter hollow filled by 5cm of charcoal-flecked filling and two large flints. The sections show deeper features, and if the one in the east side of the trench is a ditch, and not a pit, then it must be turning towards the north-west at this point.

MN.S15 The edge of a shallow cut-away area crosses the trench from north-west to south-east; the sections show that the area, *c.*25cm deep, extends south beyond the end of the trench.

MN.Q16 An area cobbled with large stones occupies the whole area.

MN.Q17 A stony area extends 92cm from the north end of the trench with large flints along the west section. The north edge of the rubbish pit in Q18 is cut by the south end of the trench.

MN.Q18 Trench cuts through a large pit just east of its greatest depth. See *Excavation 1960* for a full description.

Trenches were also excavated in squares P9 and P18. The trench in P19 was apparently not completed.

Excavation 1960 (Figs. 2 and 3)

The major part of the pit MN.Q18, which was discovered in June 1959, was excavated and re-filled in four days during Easter 1960. Excavation of adjacent areas was carried out in July.

As recorded in 1959 the pit was seen to be *c.*4m from north to south, the greater part of the floor lying at 1.45m to 1.05m below ground level and sloping up gently from north to south. In section the north face of the pit was almost vertical. The upper fill, up to 70cm deep was stoneless black soil with large pot sherds, bone, shell, burnt daub and ash. Below this was 30 to 90cm buff-brown, chalk, stoneless soil with large sherds, bone, charcoal and duck-egg shells. To the north these layers were separated by a thick lens of wood ash.

When fully excavated the pit was found to be sub-rectangular in shape, *c.*4.0m from north to south and 5.2m from east to west. The greatest depth, below the almost vertical north side, was 1.25m below old ground level, with the floor sloping gently up for 3.0m towards the south where the depth was 75cm. Around the south-west, south and south-east sides the sides sloped more gently in contrast with the steep north-west, north and north-east sides. The layers of filling excavated in 1960 were found to correspond with those found in 1959, with the addition of a thin layer of black soil with charcoal and sherds at the base of the north side of the pit. Unfortunately, no drawn section of this pit exists. Finds from the excavated layers also included roof tile fragments and burnt daub from all levels, a piece of brick measuring 17 × 10 × 6cm from the bottom of the pit, oyster and mussel shells and objects of copper, lead and iron.

Excavations 1964-5 and the watching brief (Fig. 3)

Section AB across the west arm of the moat. In June 1964 Elizabeth Sellers and Gareth Davies crawled through the undergrowth with a post hole borer to investigate the moat filling. At the centre of the section the lower fill of the moat appeared to merge with natural at about 2.5 metres below general ground level. At this point the fill was *c.*80cm deep-15cm of dead leaves and rotten twigs; 18cm wet black soil; 45cm of soft, pale blue-grey clay with darker streaks.

Cuttings A, B, C and D. These were dug early in 1965 to investigate the entrance and the area of the earlier excavations. The principal features encountered were:

MT 65/A3 A single layer of flints, with brick and tile fragments and some bone and iron, under 12cm of turf, and lying on natural, extended over most of the area and included eighteenth-century sherds.

MT 65/B1 ?A slot 35 to 45cm wide and *c.*10cm deep, running along two adjacent sides of this area. Fill light brown soil with small chalk lumps, charcoal flecks, fragments of brick and tile, bone and medieval and later pottery.

MT 65/C2/3 Occupation level of dark soil with charcoal, oyster shell and bone lying on a cobbled level of flints and chalk lumps.

Areas 1 to 8. These are features observed when the site was bulldozed.

MT 65/1 Beam slot. Cut into natural. 45cm wide, 28cm deep and 1.15m deep. Filled with dark brown soil with sherds and much charcoal and burnt daub. Late twelfth to early thirteenth century. Fig. 4.13, 14, 15.

MT 65/2 Pottery from surface of natural at south of 65/1.

MT 65/3 Ditch. Traced for 8.5m. Initially a short length was excavated at the position shown in Fig. 3. 90cm wide at the top, 45cm wide at the bottom and *c.*60cm deep. Further excavation then enabled the fill to be separated into the following layers:

- 3A Drab brown-buff sticky soil, daub flecked, with whelk and oyster shell and some stones.
- 3B Black-brown soil, less sticky then 3A, with much charcoal, a few large flints and some flecks of daub. Sherds, oyster, whelk and mussel shells and bone.
- 3C Discontinuous layer of yellow clay at base of 3B.
- 3D Grey ashy clay flecked with daub and charcoal.

(Medieval pottery from this ditch is shown in Fig. 4.1-12).

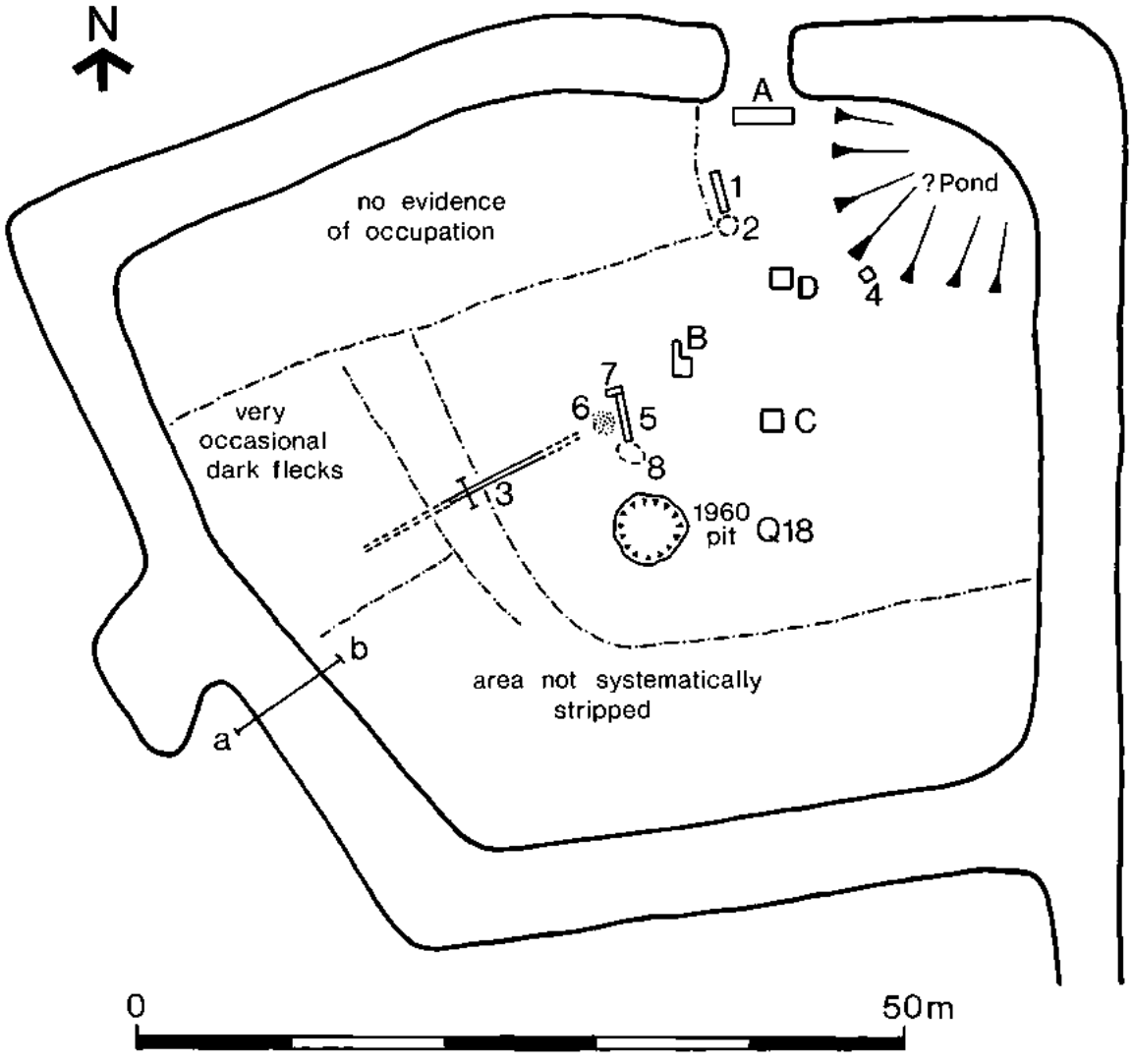


Fig. 3 Maiden's Tye. Plan of the moated enclosure with the 1960 and 1965 investigations. Pit Q18 was fully excavated in 1960. Cuttings A-D were made in 1965. Features 1-8 were observed during a watching brief in 1965.

MT 65/4 Trial hole cut in edge of the hollow in the north-east corner of the island. Below *c.*17cm of topsoil, *c.*45cm of sticky light brown clay with charcoal and daub flecks, some larger pieces of charcoal, chalk pebbles and large sherds of eighteenth-century pottery.

MT 65/5 Slot, east of 65/3. 4.80m long north/south, 60cm wide and *c.*25cm deep. Filled with grey-brown sticky soil with charcoal, oyster shell and some daub. Fig. 4.16.

MT 65/6 Spread of buff-brown clay, extending *c.*1.85m west of 65/5, with sherds and many oyster shells.

MT 65/7 Slot, not fully defined. At 90° to the north end of 65/5, 60cm wide and 120cm long, filled with pale brown sticky clay with chalk pebbles and flecks of charcoal and daub.

MT 65/8 Oyster shells lying on an undefined scatter of flints. One thirteenth-century sherd, Fig. 4.17.

Finds

The site archive lists all finds in detail. The pottery is notable for the comparative completeness of many vessels. The site produced relatively little building material, suggesting systematic demolition and the removal of all reusable material from the site.

The pottery

by Helen Walker

Summary

The greatest amount of pottery was found in a large rubbish pit, MN.Q18, containing mainly local domestic wares of the 14th-16th century. There was also a ditch containing 13th-14th century material and a beam slot containing Early Medieval ware cooking pots and bowls. Other deposits/features revealed pottery dating up to the 18th century.

Although excavations yielded little in the way of structural evidence about the site, the pottery has been considered in detail because so few moated sites in Essex have been published, and because there is such a varied collection of largely reconstructable vessels.

Method

The pottery was recorded using a system of classification already in use for other post-Roman pottery in Essex (Cunningham 1985a, 1-2). Cunn-

ingham's fabric numbers are quoted in this report. The material has been dealt with in three sections; the pottery from the 1965 excavations, the pottery from the large pit dug in 1959 and 1960 and finally the pottery from the 1957-9 excavations not including that found in the large pit. As none of the features were datable and there was no distinct stratification the pottery has been dated by finding parallels from securely dated contexts found elsewhere in Essex. Three methods of quantification have been used — weight, sherd count and Estimated Vessel Equivalent (EVEs). (EVEs is calculated by measuring the percentage of vessel rim present and simply adding together all the rim percentages in a particular category to give the total estimated vessel equivalent). Where appropriate the quantities have been summarised in the form of tables and bar charts.

The Fabrics

Fabric 13 — Early Medieval ware. Very sandy with quite large grits, vessels usually have red brown surfaces with grey cores. It dates from the ?11th to *c.*1200.

Fabric 20 — The medieval coarse wares, these are hard, usually grey and tempered with varying amounts of sand. They derive from a variety of sources and date from the late 12th to 14th centuries.

Fabric 20C — Mill Green coarse ware. This ware is described in detail by Pearce *et al.* (1982, 289). It is micaceous, sandy and usually orange-brown with grey cores and dates from the late 13th to the mid 14th or perhaps to the end of the 14th century.

Fabric 21 — Sandy orange wares. These are hard, orange or light brown, sometimes with a grey core or margins and usually locally made. At the extremes of its range Fabric 21 overlaps with the medieval coarse wares (Fabric 20) and the post-medieval earthenwares (Fabric 40).

Fabric 21D — A variant of Fabric 21 is present at Maidens Tye. It is dull orangey-brown sometimes with a paler creamy-orange core. Alternatively the core is grey with pale creamy orange margins. It is tempered with abundant, ill-sorted usually fine sands. The sands are subangular, subrounded and can be colourless or grey but red-amber predominates. In common with other local wares there are sparse inclusions of red oxides and mica. Some examples also contain chalk flecks. The ware has a hackly (jagged) fracture, the feel is rough and pimply, and the hardness varies. Fabric-wise it is not unlike Colchester ware (Cunningham 1982, 365), but lacks Colchester ware's characteristic white quartz.

This fabric or something very similar to it, has turned up in quantity at several sites in the Harlow area i.e. Canes Lane, Eastwick and Market Square, Harlow (all unpublished, information from W. Davey). No kiln has been discovered but Harlow was a major pottery manufacturing centre in post-medieval times. Therefore, at least for the purposes of this report, the fabric has been referred to as Harlow ware. The date range is unknown but it is likely to be contemporary with Colchester ware and Mill Green ware.

Fabric 22 — Hedingham ware. A fine, soft very micaceous fabric, generally orange-brown or pinky buff. It contains abundant sub-angular pale coloured quartz and usually has a deep green mottled glaze. It is often highly decorated and dates from the late 12th century to the end of the 13th century.

Fabric 23D — Kingston-type ware. This has been described elsewhere (Hinton 1980, 380 and Vince 1985, 34). Sherds found at Maidens Tye have a distinct pinky-buff tinge and contain abundant angular sands, mainly orange and pink in colour. They have a speckled green glaze. Kingston-type ware from Thames waterfront excavations is found in contexts dating from the mid 13th to the end of the 14th century but is commonest in late 13th century deposits.

Fabric 23E — Cheam ware. Sherds found have a brownish tinge and contain moderate, colourless, grey pink and brown sands. It is thicker walled than Kingston-type ware and is unglazed. This ware is fully described by Orton (1982, 77) and dates from the late 14th and 15th centuries.

Fabric 31 — Low Countries red ware. A fine red fabric, visually similar to post-medieval earthenwares but can be recognised where distinctive forms are present. It dates to the later 14th and 15th centuries.

Fabric 34 — Unclassified buff wares.

Fabric 35 — Mill Green fine ware. The fabric dates from the late 13th to mid 14th century and is described in detail in Pearce *et al.* (1982, 277-9). It is hard, fine and micaceous, colour is usually brick red with grey cores, although this can vary.

Fabric 36 — London-type ware. Again this fabric is fully discussed elsewhere (Pearce *et al.* 1985, 2-3). Only one, unstratified sherd was recovered, probably dating to the 13th century, it is pale orange-brown with a grey core and contains fine, angular, colourless and grey quartz. Its lack of mica sets it apart from Essex wares.

Fabric 40 — Post-medieval earthenware. This is thought to have superseded Fabric 21 sometime in the 16th century (Cunningham 1982, 373). It is hard, smooth and generally has a very fine sand tempering.

Fabric 47 — Staffordshire salt-glazed white ware *c.*1720 to 1770.

Fabric 48 — Porcelain etc.

Fabric 50 — Staffordshire-type slip wares, late 17th and 18th century.

Fabrics 13, 20, 21 and *22* are fully described by Drury (forthcoming).

The assemblages are dealt with in the reverse order from which they were excavated. In this way, the more important and better stratified material is considered first.

Maidens Tye 1965

Ditch MT65/3

About 3.8kg of pottery was excavated (summarised in Table 1) a small proportion of which was stratified in layers A to D. However when the stratified material was examined there was no evidence to suggest any great interval of time between the deposition of the four layers, and therefore the pottery has been considered as one group.

Table 1 Quantification of fabrics by sherd count for ditch MT65/3

Fabrics									Total
13	20	20C	21	21D	22	23D	34	35	sherds
1	267	3	10	24	8	18	3	30	364

Fig. 4.1 ?Jug rim; Fabric 20
Fig. 4.2-5 Cooking pot rims; Fabric 20
Fig. 4.6-8 Bowls, Fabric 20
Fig. 4.9 Cooking pot rim in a different type of coarse ware, possibly Hertfordshire grey ware.
Fig. 4.10 Harlow ware jar rim; Fabric 21D, splashes of glaze internally, sooting on rim edge.
Fig. 4.11 Hedingham ware jug sherd; Fabric 22, decayed glaze, decorated with applied strips and ring and dot stamps
Fig. 4.12 Kingston-type ware jug handle; Fabric 23D, speckled green glaze.

Discussion of Ditch MT65/3

From Table 1 it can be seen that by far the most common fabric is Fabric 20, medieval coarse ware. Much of this material is similar, tempered with abundant subrounded sands, sparse mica and iron oxides. The surface of the pottery is usually grey with pink or buff-coloured margins, although quite often the surfaces themselves are pink or buff. The forms represented are cooking pots and bowls (four rims) with a rim sherd of a possible jug (Fig. 4.1). The cooking pots fall into two different categories. The first type have flat tops and well defined vertical necks (Fig. 4.2) and are paralleled at Mile End (Drury and Petchey 1975, fig. 6.23). These rims

are typical of the early to mid 13th century and similar types were being made at Mile End early in the 13th century (Drury 1976, 270). This type is represented by four rim sherds. The second type represents a typologically later form where the neck is beginning to flare out below the rim (Fig. 4.3, 4 and 5). This type is found at Hadleigh Castle, group E (Drewett 1975), there dated to *c.*1230-1260. There were ten sherds in this form. The ultimate development of this form, where the body flares outwards below the rim and there is no intervening neck, does not occur in ditch MT 65/3.

The maximum date range for the cooking pots is therefore from the beginning of the 13th century until *c.*1260. The earlier 'vertical necked type' could be residual but as the quality of the fabrics is the same and the shape of the flange identical there is no reason why both types could not be contemporary.

The bowls (Fig. 4.6, 7 and 8) have rounded flanges and can be given a 13th-century date.

One sherd of coarse ware has a coating of cream slip with a sparse mottled green glaze. It is possible that the fabric is a reduced form of Colchester ware (Cunningham 1982, 365) perhaps from a louver. It fits with a sherd from MT 57 Q15.2.

Harlow lies 17 km south-west of Maidens Tye. The illustrated Harlow ware vessel, No. 10, is similar to jars found at Eastwick, Herts, just outside Harlow (unpublished). Other sherds are slip-painted with a partial clear glaze and have been wiped to give a smoother feel, possibly in an attempt to mimic Mill Green products.

The Hedingham industry was based at Sible Hedingham in northern Essex (23 km north-east of Maidens Tye). Hedingham products are found mainly in the northern half of the county, although it occurs as far south as Canvey Island (E. Sellers pers. comm.). At Chelmsford, in central Essex, it is thought that Hedingham ware was superseded by Mill Green ware in the later 13th century (Drury forthcoming).

The Mill Green ware kiln(s) are located near Ingatestone, 13 km south of Maidens Tye. No Mill Green fine ware rims were found but there are several bases, all continuously thumbed. One sherd shows combed decoration and three are slip painted, both typical of Mill Green products. Mill Green coarse ware is represented by three sherds, two of which are base sherds of a cooking pot probably from the same vessel. There are patches of clear glaze on the inside of the base and sooting can be seen on the outside. The main market for Mill Green products was south and central Essex. It has been securely dated from deposits associated with successive Thames waterfronts (see under fabrics) and there is documentary evidence that potters held land at Mill Green in 1275 (Sellers 1968, 207). Jugs found during excavations in the area of the kilns are paralleled at King John's Hunting Lodge, Writtle and are datable to before 1306 (Sellers 1968, 207).

Kingston-type ware is one of the less familiar wares to be found at Maidens Tye as it is usually found on sites along the Thames and was most probably transported by river.

Conclusions — ditch MT65/3

A *terminus post quem* is provided by Kingston-type and Mill Green wares both datable to the second half of the 13th-14th centuries. The later cooking pots are datable to the mid 13th century and in fact all the wares could have been in production in the second half of the 13th century making this a likely date for deposition.

Other features

A further 3 kg of pottery was found in various other features and deposits excavated in 1965, the fabrics present are summarised in Table 2.

Fig. 4.13 Cooking pot rim. Red-brown, with a grey core and tempered with abundant ill-sorted coarse sands and sparse shell, probably late 12th century. It is paralleled at Pleshey Castle (Williams 1977, fig. 31.9) attributed to period 1C — the late 12th-early 13th century. *MT65/1 (beam slot)*

Fig. 4.14 Bowl, very similar in fabric to No. 13. *MT65/1 (beam slot)*

Fig. 4.15 Cooking pot in a finer more compact, shell-less version of Early Medieval ware and with a typologically later rim. *MT65/1 (beam slot)*

Fig. 4.16 Cooking pot rim, Fabric 20. *MT65/5 (slot)*

Fig. 4.17 Cooking pot rim, Fabric 20 with buff surfaces, pinky margins and a grey core. *MT65/8 (occupation level)*

Fig. 4.18 Strap handle in Early Medieval ware with stabbed decoration. Found in top soil in 1967, and worth illustrating as one of the earliest sherds from the site.

Table 2 Quantification of fabrics from 1965 excavations by sherd count (excluding MT65/3)

Feature/ Deposit	Type/ Description	Fabric 13	20	20C	21	35	40	47	50	Total Sherds	Date Range	Comments
MT65/1	beam slot	31	1	—	—	—	—	—	—	32	late 12th to early 13th C	Illustrated, Nos 13, 14 and 15
MT65/2	natural at S. end of MT61/1	—	1	—	—	—	5	—	—	6		
MT65/4	from trial hole	—	1	—	2	2	44	—	—	49	17th to 18th C	forms; 2 bowl rims and 2 jar rims
MT65/5	slot	—	15	—	—	—	—	—	—	15	13th C	No. 16
MT65/6	Scatter W. of MT65/5	—	3	—	—	4	—	—	—	7	late 13th to mid 14th C	Mill Green ware sherds have a partial mottled green glaze over a cream slip coating
MT65/8	Scatter S. of MT65/5	—	4	—	—	—	—	—	—	4	13th C.	No. 17
MT65/A3	Layer	—	—	—	—	1	15	—	1	17	17th to 18th C.	forms; hollow pedestal base? from a chafing dish, bowl, fragment of a slip ware dish. Much of the pottery is broken up and abraded
MT65/B1	?slot	—	3	—	—	—	1	—	—	4		
MT65/C2	Occupation level	—	2	1	1	1	5	1	—	11	13th-18th C	latest material is mid 18th century

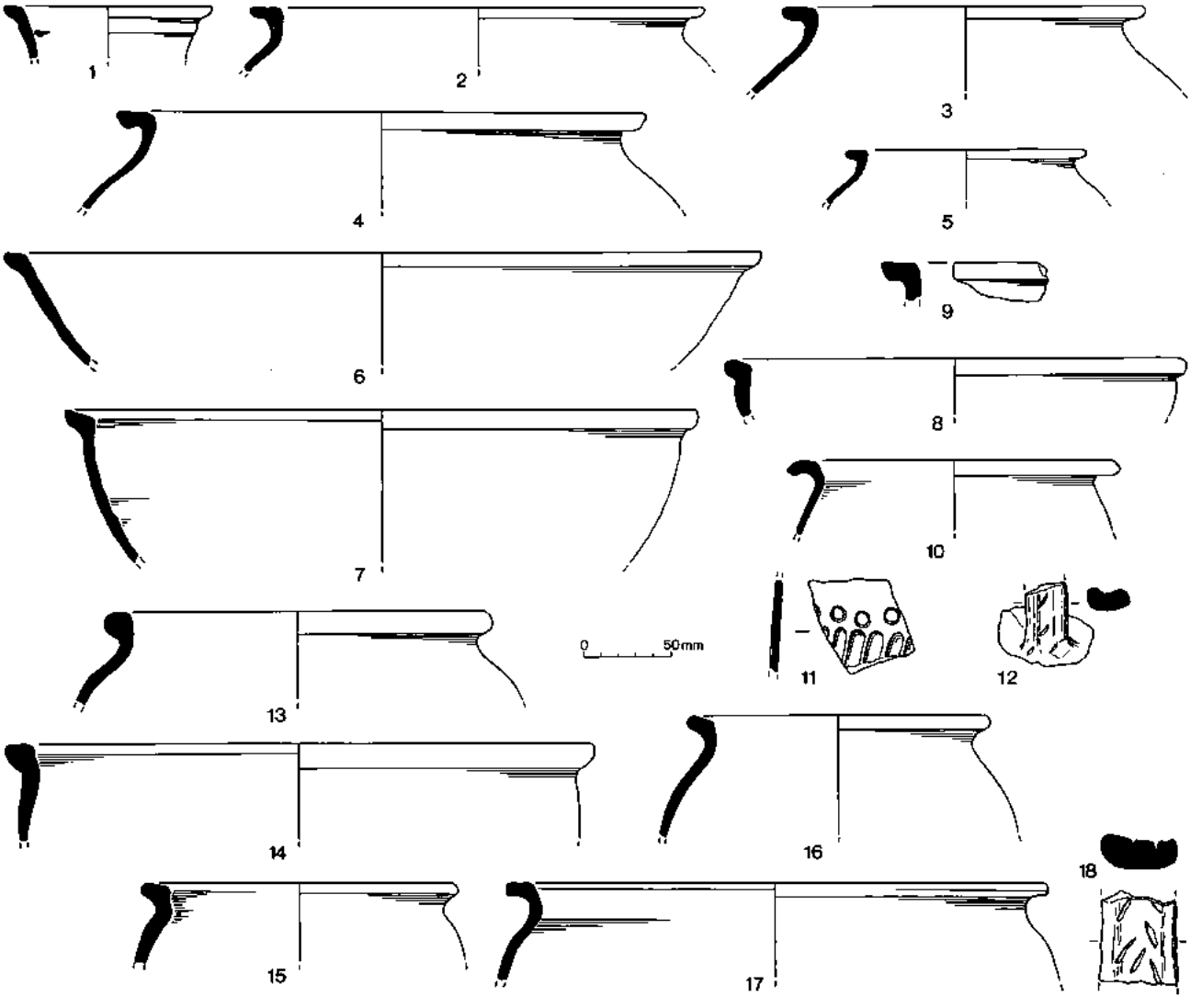


Fig. 4 Maiden's Tye. Medieval pottery from ditch MT 65/3 (Nos 1-12), and from other features excavated in 1965.

The large pit MT59 and 60

As there were so many external fits between the pit layers and a lot of the sherds had been conflated, the material has been considered as a whole group. A total of 18kg of pottery was recovered from the pit, excluding that from the surface layer. There were many partially complete vessels and it has been possible to estimate the numbers of vessels excavated, this is shown in the form of a bar chart (Fig. 5). The fabrics present have also been quantified by means of a bar chart (Fig. 6).

Fabric 13

One sherd only; a cooking pot fragment with a simple everted rim, 11th or early 12th century (not illustrated).

Fabric 20

Fig. 7.19 Cooking pot in smooth grey fabric.

Fig. 7.20 Cooking pot rim, hard grey fabric with pronounced pinky margins.

Fig. 7.21 Cooking pot rim of the blocked neckless type as found at Danbury tile factory (Drury and Pratt 1975, 128), late 13th to early 14th century.

Fig. 7.22 Cooking pot rim in micaceous brown-grey fabric, neckless type also late 13th/early 14th century.

Fig. 7.23 Cooking pot rim in hard pale grey fabric comparable to material from the kiln site at Great Horkesley (Drury and Petchey 1975, 58), thought to be early 14th century.

Fig. 7.24 Base and sides of cooking pot, the fabric is grey with a red-brown core and is tempered with chalk as well as sands. The inside is encrusted with limescale.

Fabric 20C Mill Green coarse ware

Fig. 7.25 Cooking pot rim, buff surfaces.

Fabric 21

Fig. 7.26 Jug or jar with pulled lip. Fine pale grey fabric with buff core, unglazed.

Fig. 7.27 Jug rim with pulled lip. The fabric is fine, micaceous and pale grey with a pinky buff core. There is a cream slip band below the rim and traces of pink slip on the inside, unglazed.

Fig. 7.28 Rim of large jar. The outside surface is buff coloured while the core and interior surface are pinky brown, unglazed. Reduced versions of the same form also occur.

Fig. 7.29 Handle very similar in colour and fabric to No. 28.

Fig. 7.30 Jar very similar to No. 28 except the interior and the top half of the outside are covered in limescale.

Fig. 7.31 Jug with girth grooves, unglazed apart from splashes beneath the base. Dull red-brown fabric with darker patches. Comparable to fig. 55.63 from King John's Hunting Lodge, Writtle (Rahtz 1969) period III *c.*1425-1521.

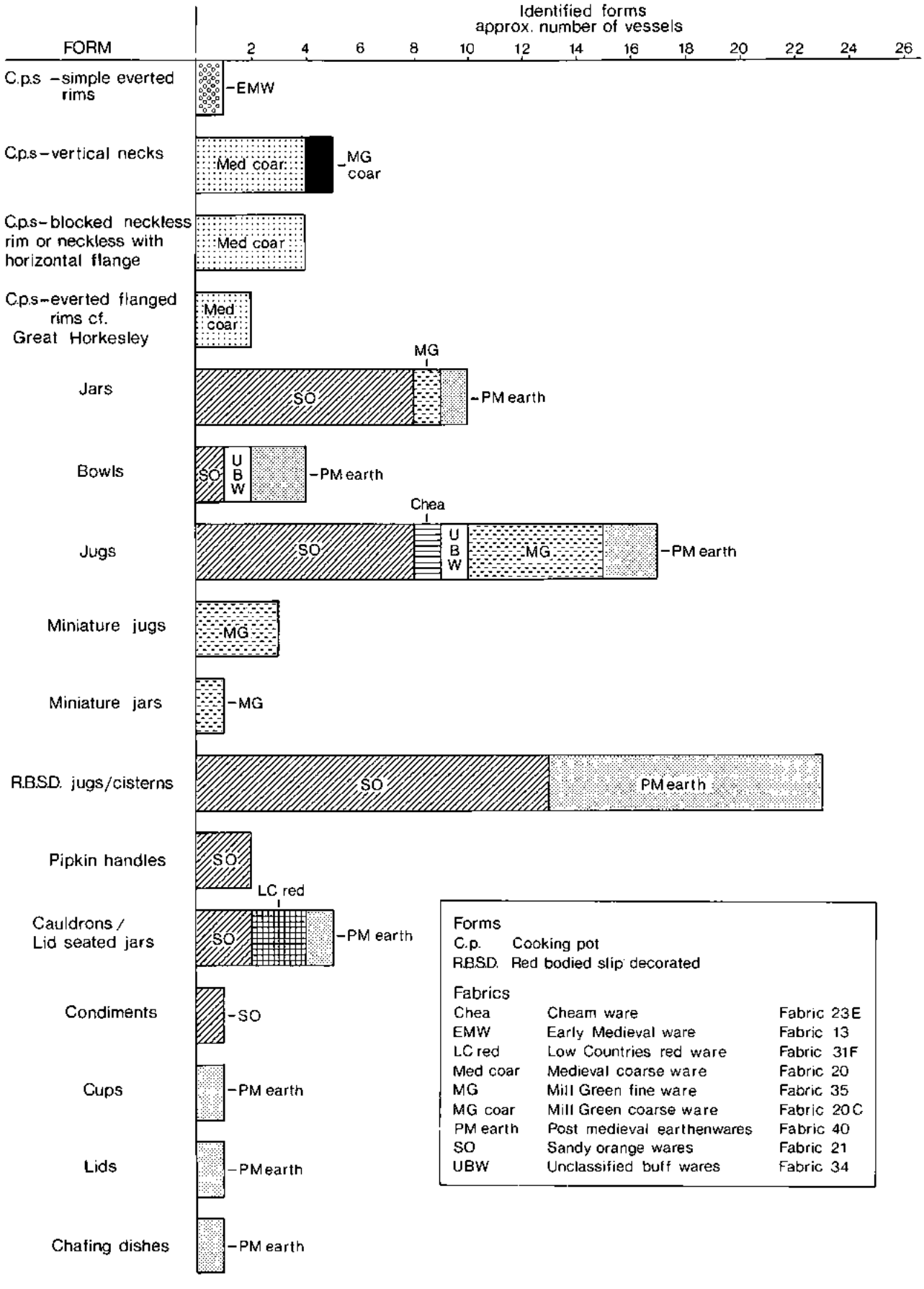


Fig. 5 Maiden's Tye. Bar chart to show vessel forms in large pit MT 59 and 60.

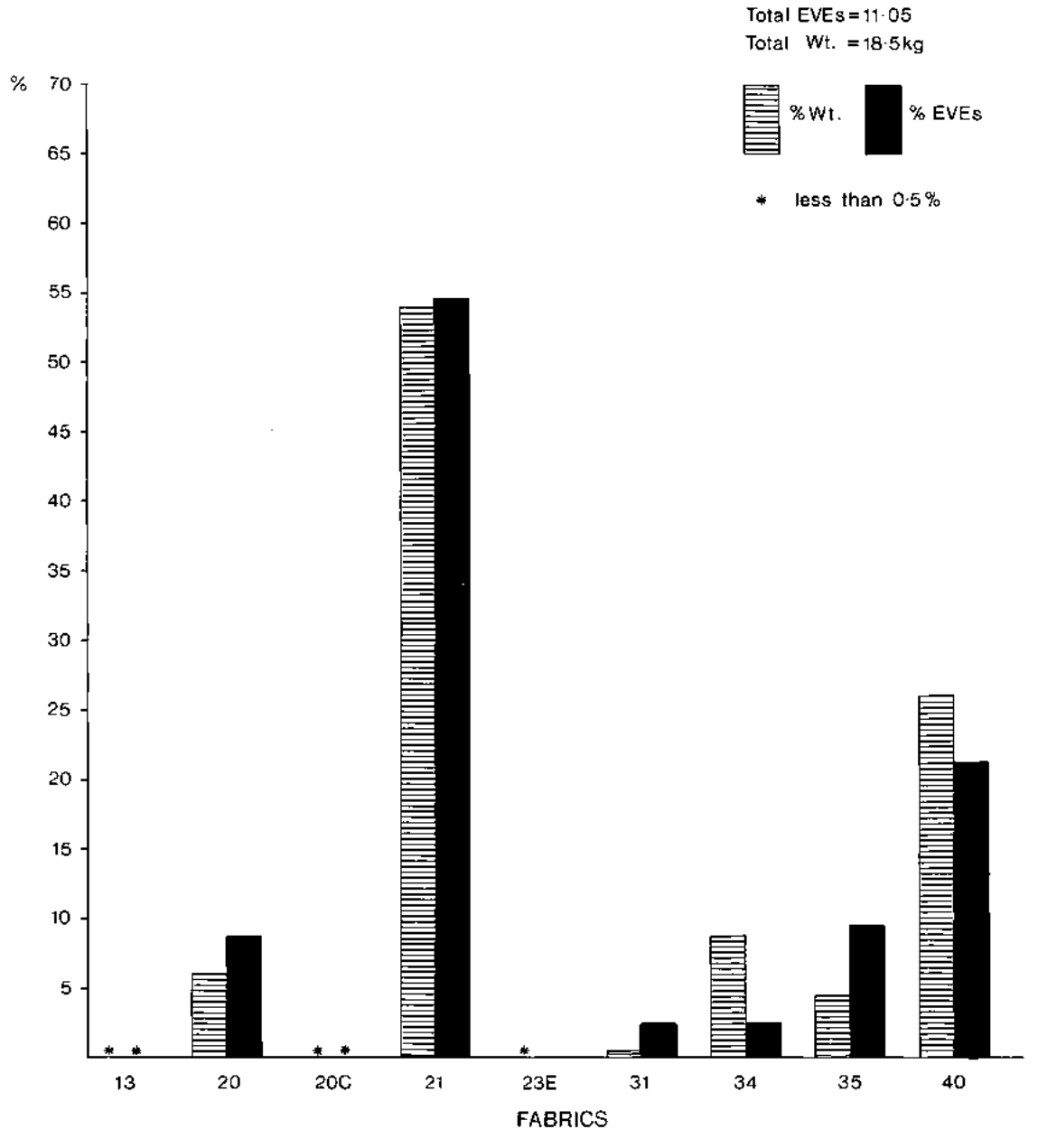


Fig. 6 Maiden's Tye. Bar chart to show relative amounts of pottery in MT 59 and 60 by weight and EVEs, expressed as a percentage. (The way of calculating EVEs is described in the text under 'Method'.)

Fig. 7.32 Base of jug very similar to No. 31 except that the fabric is paler and there is a vertical streak of finger-applied slip running down one side.

Fig. 7.33 Jar, hard brick-red fabric with grey core. The inside of the rim has a partial clear glaze with splashes inside the pot. Lid-seated rims became current during the 15th century (Hurst 1961, 274).

Fig. 7.34 Jar with lip, brick-red fabric reduced in patches. It is glazed on the inside of the base and on the rim with occasional splashes on the outside.

Fig. 7.35 Unglazed jug rim, orange-brown, probably locally made.

Fig. 7.36 Probably part of a tripod cauldron with two handles, unglazed. Moulsham Street type C13 (Cunningham 1985, fig. 5.34).

Fig. 7.37 ?jug handle, ungazed except for a single splash of clear glaze.

Fig. 7.38 Pipkin handle, red-brown, unglazed except for a single splash of clear glaze.

Fig. 7.39 Pipkin handle, brick-red, abraded.

Fig. 7.40 Neck and shoulders of jug in a fine fabric, grey, with an orange exterior surface. It has a partial clear glaze and the inside is heavily encrusted with limescale; possibly Dutch.

Fig. 7.41 Bung hole. The fabric is very friable and has laminated in places, the colour is patchy varying from brown to grey.

Fig. 7.42 Possibly a condiment, crudely made and unglazed. A similar form occurs in London ware (Pearce *et al.* 1985, fig. 72.398). Alternatively it may be from a culinary mould similar to those found at Moulsham Street, Chelmsford (Drury 1985, fig. 48.5 and 6).

Red-bodied slip-decorated wares — all Fabric 21 unless otherwise stated

Fig. 8.43 Part of a large jug or cistern with splashes of clear glaze.

Fig. 8.44 From a ?two-handled cistern, undecorated, with single splash of clear glaze.

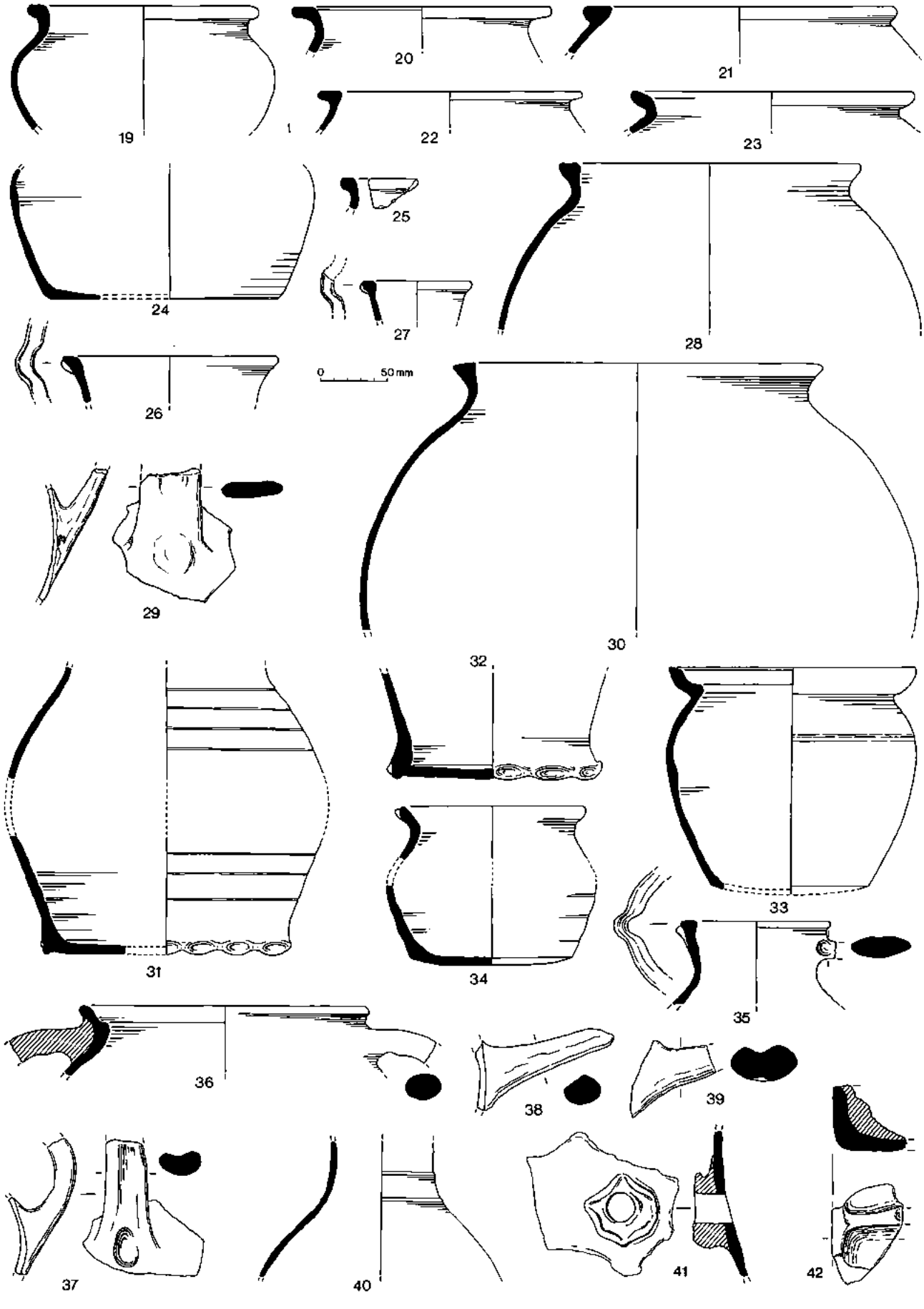


Fig. 7 Maiden's Tye. Medieval pottery from large pit MT 59 and 60.

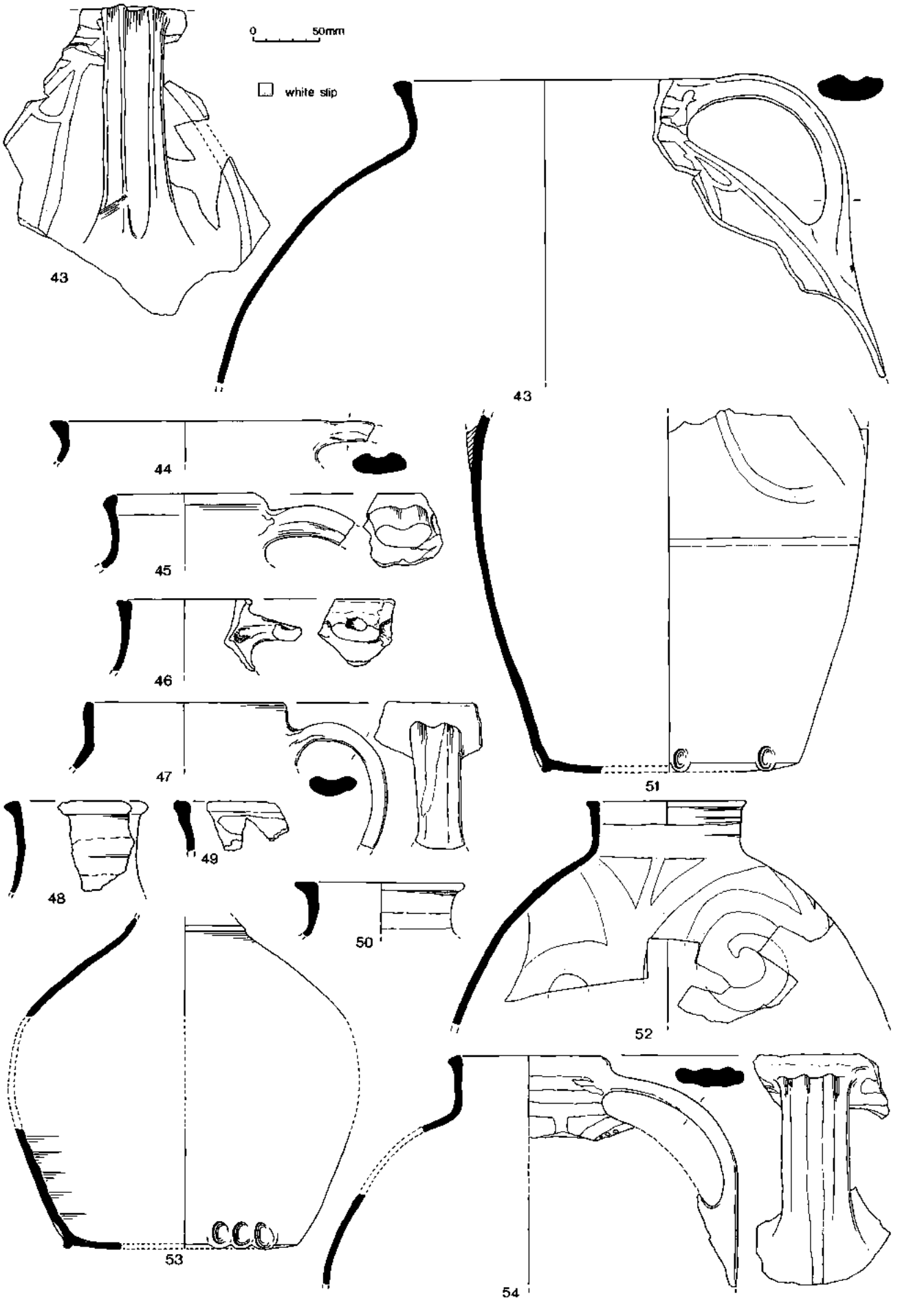


Fig. 8 Maiden's Tye. Red-bodied slip-decorated wares from large pit MT 59 and 60.

Fig. 8.45 Probably part of a two-handled cistern, fabric contains chalk. Comparable to fig. 21.185 from Hadleigh castle group S, dated *c.*1475-1525. (Drewett 1975)
Fig. 8.46 ?Jug rim.
Fig. 8.47 ?Jug or two-handled vessel, similar to Nos. 45 and 46 but fabric contains no sand therefore it is Fabric 40. It has a dark grey 'skin'.
Fig. 8.48 Jug rim with external splashes of glaze.
Fig. 8.49 Jug rim with partial clear glaze.
Fig. 8.50 Jug rim, grey surfaces.
Fig. 8.51 Base and sides of cistern in a very friable fabric, patches of clear glaze over the slip decoration. A handle attachment scar can be seen on the upper part of the body.
Fig. 8.52 Large jug or cistern in Fabric 40, buff coloured rather than red, partial clear glaze.
Fig. 8.53 Part of ?jug with only traces of slip. The top half has a clear glaze. Fabric 40.
Fig. 8.54 One handled cistern or spoutless jug, Fabric 40. Buff coloured with a grey core it has a partial green glaze.
Fig. 9.55 Rim, Fabric 40, brick-red with thick grey core. Unglazed except for a single splash, handle attachment scar is shown.
Fig. 9.56 Bung hole from a cistern in Fabric 40, unglazed. It has a grey core, orange margins and a grey surface.
Fig. 9.57 Part of jug or cistern, partial green glaze on top half, Fabric 40 but with grey interior and orange-buff external surface.
Fig. 9.58 Similar to above.
Fig. 9.59 Base possibly of large jug or cistern, unglazed. Fabric 40 but with thick grey core and pale grey 'skin' on external surface.

Fabric 23E Cheam ware

Two unglazed body sherds of Cheam ware were found (not illustrated) probably from a drinking jug dated late 14th-mid 15th century (A. Vince pers. comm.).

Fabric 31 Low Countries red wares

Fig. 9.60 Cauldron, probably Dutch, brown surfaces with an orange core and a partial clear glaze.
Fig. 9.61 Dutch-type base in a soft orange fabric, there are splashes of glaze on the inside surface. Late 14th-15th century.

Fabric 34 Unclassified buff ware

Fig. 9.62 Rim, buff surfaces, pinky margins and brown core, unglazed. From jug or two-handled vessel.

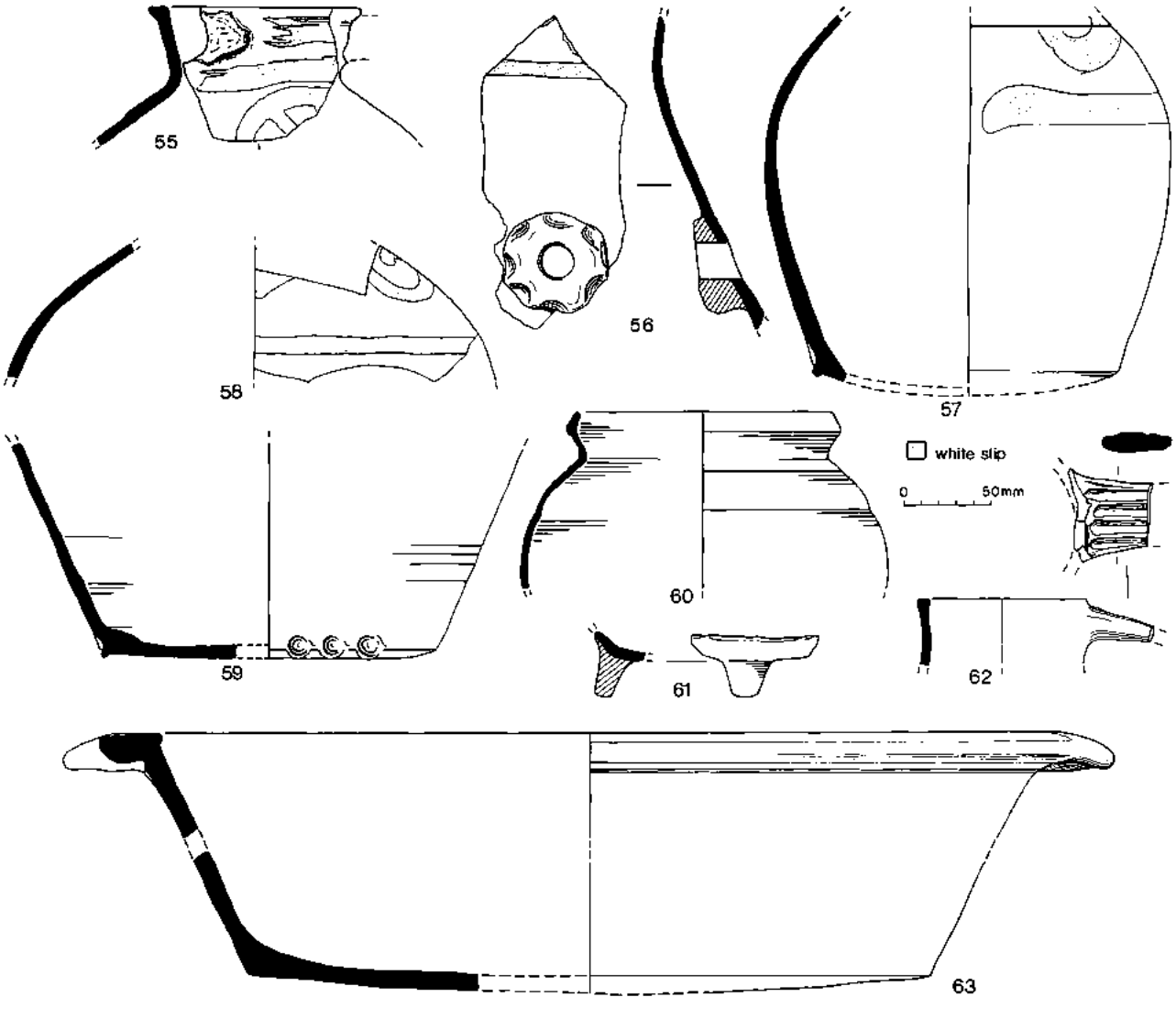


Fig. 9 Maiden's Tye. Medieval pottery from large pit MT 59 and 60.

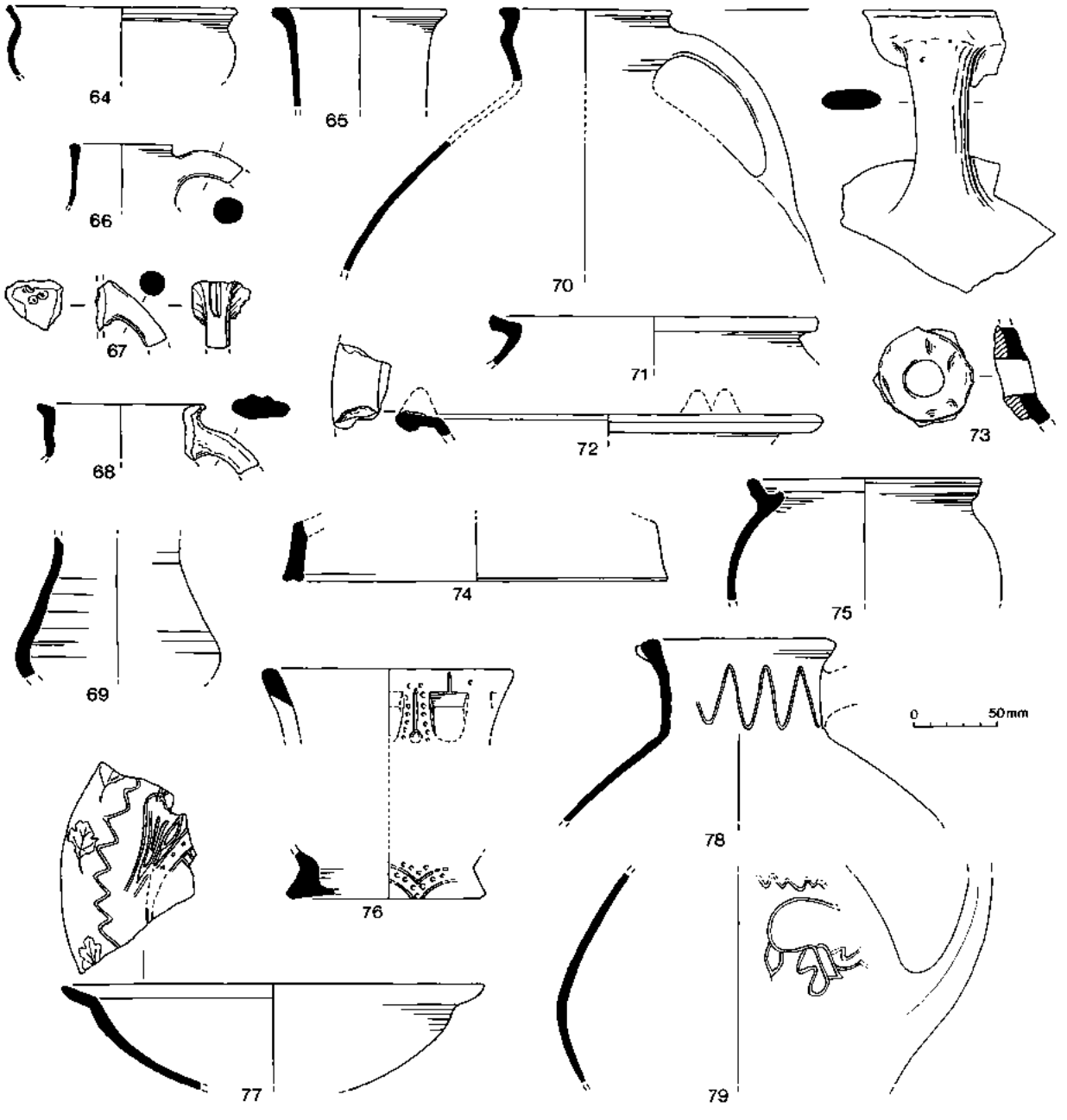


Fig. 10 Maiden's Tye. Medieval pottery from large pit MT 59 and 60. Nos. 76-79 are sgraffito ware.

Fig. 9.63 Large shallow bowl tempered with abundant fine, grey and colourless sands with occasional large flints, in places the outside surface has flaked off. There is a white residue on the inside and part of the outside surface. Probably late medieval.

Fabric 35 Mill Green Ware

Fig. 10.64 Small jar, all over slip-coating under green glaze, finely potted.

Fig. 10.65 Jug rim, slipped with partial uneven green glaze. Neat edge of slip on the inside of the rim indicates that the slip was applied by dipping rather than by hand, the usual method of application (Vince 1983, 331).

Fig. 10.66 and 67 Miniature drinking jugs, slipped but not glazed. No. 66 has also been dipped in slip (see No. 65). No. 67 shows stab marks on the inside of the rim where the handle joins, a typical method of Mill Green handle attachment (Pearce 1984, 21).

Fig. 10.68 Jug rim, all over slip and partial green glaze.

Fig. 10.69 Body of baluster jug, no slip, partial green glaze. It has been knife trimmed and may have been burnt.

Fig. 10.70 Part of squat jug, no slip, partial green glaze. Stab marks on handle.

Fig. 10.71 Unglazed jar.

Fabric 40 (other than those in slip-decorated section)

Fig. 10.72 Rim of chafing dish ?17th century.

Fig. 10.73 Thumbed bung hole, unglazed.

Fig. 10.74 Lid, unglazed.

Fig. 10.75 Jar with lid seating, unglazed.

Sgraffito ware

In addition to the above material there were several Sgraffito ware vessels which have unfortunately been lost, although the drawings remain (Nos. 76, 77, 78 and 79). Similar wares were found at Writtle; these are hard red wares, cream slipped with all-over glaze and complex sgraffito decoration.

They were found in 14th-century contexts and are thought to have come from Cambridgeshire (Rahtz 1969, 106), although it is possible that these examples have a different source (E. Sellers pers. comm.).

(Note that these sherds not sent for drawing in the 1960s remain with the finds, these sherds derive from 18 vessels. These were mainly jugs but included the chafing dish (No. 72) and the dish (No. 77). Although the dish may be unique in form, the leaf pattern on the rim is known from other pottery (personal communication, Stephen Moorhouse to Elizabeth Sellers). This was produced by pressing hawthorn leaves onto the damp clay before the surface was coated with cream slip. The leaves were then removed leaving brown leaf shapes on a cream background with the leaf veins impressed into the clay. This technique is still used today by studio potters).

Discussion

The oldest material to be deposited is the Early Medieval ware rim (Fabric 13) dating to the 11th or early 12th century; it is likely to be residual. The 13th and 14th centuries are represented by the medieval coarse wares (Fabric 20) and Mill Green Ware (Fabric 35). The smaller Fabric 21 slip-decorated jugs (nos. 48-50) may also belong to the 14th century.

From the bar chart, Fig. 5, it can be seen that the commonest forms are the red-bodied freely slip-decorated jugs/cisterns. The cisterns correspond to type C15 at Moulsham Street, Chelmsford as described by Cunningham (1985a and b, 3, 4, 14 and 70). They date from the 15th and 16th centuries. Jugs/cisterns have been found at Hadleigh Castle in group S *c.*1475-1525 (Drewett 1975, figs. 20.179 and 21.183) and at Writtle period III *c.*1425-1521 (Rahtz 1969, fig. 56.74-9). Nos. 52.54-9 have been classified as post-medieval earthenwares but they closely resemble pots from a suspected kiln site at Rayleigh. (This is an unpublished site excavated by D.G. Macleod in 1958 and 1974. The pottery consists of a waster dump made up of decorated fine ware jugs with some coarse wares, perhaps dating to the 14th and 15th centuries. The fabric appears to be transitional between Mill Green fine wares and the post-medieval earthenwares). The cauldrons/lid-seated jars, dairy bowl and the cup (rim fragment only with an all over dark green glaze) are probably contemporary with the cisterns.

The chafing dish (No. 72) and the lid (No. 74) are probably 17th century and represent the latest material to have been deposited.

The date range of the pottery is therefore 11/12th century to the 17th century. The pottery could have been redeposited but as there are many partially complete vessels perhaps a more likely explanation is that the pit layers started to sink, so that refuse was continually dumped in, in order to fill it. The subsequent distortion of the layers would explain how pottery from different periods became mixed.

Cooking pot No. 24, jug No. 40 and bowl No. 63 have particularly thick deposits and were sent to John Evans and P.M. Dayton for residue analysis (see archive report). Their conclusions are as follows: the cooking pot and jug have a build up of cold water deposited limescale, therefore the vessels would have been used as (hard) water containers rather than for boiling water. Traces of triglycerides and fatty acids on the bowl are indicative of milk products, the shape of the bowl suggests that it would have been used for cooling milk or possibly cream. There was also a limescale deposit containing traces of common salt on the bowl surface.

Maidens Tye 57-9

A total of 3.9kg of pottery was excavated during these years excluding that found in the large pit (see above). Only pottery that has been assigned a trench number (e.g. Q14.2) has been considered, although it is not possible to tell which feature the pottery came from if there is more than one feature per trench. The fabrics present have been tabulated (Table 3) to give some idea of the range and location of the pottery. Vessels of intrinsic interest have been illustrated.

Fig. 11.80 Cooking pot rim, Fabric 20, early to mid 13th century type (see under MT65/3), grooving around rim. *Q14.2*

Fig. 11.81 Cooking pot rim, Fabric 20C, early to mid 13th century type. *Q14.1*

Fig. 11.82 Rim of small cooking pot, Early Medieval ware similar in form and fabric to Nos 13 and 14 from MT65/1. *Q15.3*

Fig. 11.83 Bowl rim, Fabric 20, grooving around rim. *Q15.2*

Fig. 11.84 a and b Sherds of Hedingham ware, Fabric 22 decorated with applied pellets and strips, green glazed. It is possibly from the Starlings Hill kilns, another of the Sible Hedingham group (E. Sellers pers. comm.) and may be a copy of the highly decorated Rouen jugs, imported from France in the early 13th century. *Q15.2*

Fig. 11.85 Early Medieval ware jug, Fabric 13. The handle edges have been thumbed and there is impressed zig-zag decoration along the length of the handle. The colour is grey throughout and it is *c.*1200 or earlier in date. *Q16.2*

Fig. 11.86 Rim of ?Kingston ware jug with partial green glaze. *Q16.1*

Fig. 11.87 Mill Green ware jug, Fabric 35, with traces of green glaze. The upper handle attachment is poorly finished. According to Blyther's notes, it was found 4 inches (100mm) above No. 85. *Q16.1*

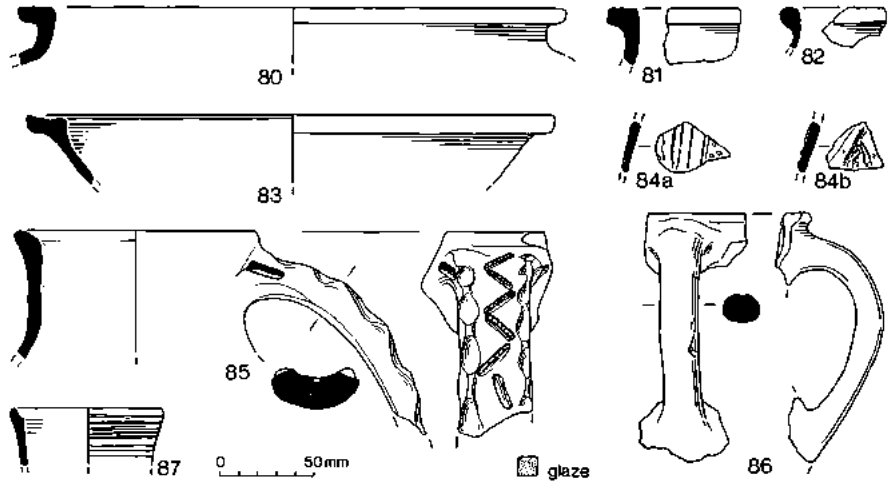


Fig. 11 Maiden's Tye. Miscellaneous medieval pottery from 1957-59 excavations.

Table 3. Quantification of fabrics from 1957-9 excavations by sherd count

Trench and layer number	Feature(s) in Trench	Fabric 13	20	20C	21	22	23D	35	40	48	Total sherds	Comments
Q13.1		—	3	1	1	—	—	1	8	—	14	
Q13.2		—	—	—	1	—	—	—	—	—	1	
Q14.1	2 post holes and a beam slot	—	—	1	—	—	—	1	4	—	6	Illustrated No. 81
Q14.2		—	1	—	—	—	—	—	—	—	1	No. 80
P15.1	Pit	—	1	—	3	—	—	—	1	—	5	
P15.2		—	2	—	—	—	—	—	—	—	2	
Q15.1	Cob footing and V-shaped feature	—	6	1	2	—	—	1	—	1	11	Joins with Q16.1 and Q16.2
Q15.2		—	29	1	—	2	—	3	1	1	37	No. 38, 84
Q15.3		1	—	—	—	—	—	—	—	—	1	No. 82
R15.1	Layer of cob, layer of flint, and hollow	—	3	—	1	—	—	—	—	—	4	
Q16.1	Cobbling	—	4	—	2	1	1	5	5	—	18	No. 86, 87
Q16.2		3	4	—	—	—	—	—	—	—	7	No. 85

Discussion (all years)

The medieval pottery is concentrated at the centre of the enclosure (in large pit Q18, in MT65/3, 5, 6 and 8, MT57-9 P15, Q13, 14, 15 and 16, R15). Early Medieval ware dating mainly to *c.*1200 was found in a beam slot (MT65/1) close to the moat entrance and at the centre in the lower levels of Q15 and 16. Early medieval ware sherds found in the large pit and the ditch MT65/3 are probably residual. Post-medieval wares of the 17th/18th centuries are found in the NE sector and in top soil layers.

An external fit between sherds from ditch MT65/3 and trench MT57-9 Q15.2 indicates that Q15 contains features related to the ditch or even that the ditch continued across the site.

The pottery excavated indicates that settlement was continuous over several centuries. Occupation seems to have been of a domestic nature, although the presence of a dairy is likely (evidence from bowl No. 63). The absence of imports suggests it was not a site of high status. Perhaps a modest farmstead was in existence at Maidens Tye.

Acknowledgements

I would like to thank Carol Cunningham for her comments on the pottery and report. I would also like to thank Alan Vince for helping to identify the pottery and Walter Davey for letting me examine the pottery groups from Harlow. Thanks are also due to Mark Redknap for letting me examine the material from Canes Lane and Ken Crowe for letting me examine the ?kiln material from Rayleigh.

Miscellaneous ceramics

by Helen Walker

Fig. 12.1 Fragment of culinary stamp, orange-brown fabric, micaceous with abundant sand tempering, unglazed. Incised pattern in counter relief. From large pit Q18.2.

Culinary stamps were probably used for printing on butter and confections as described by Drury (1985, 80). This example may be a product of the Mill Green kilns, several such stamps having been found during excavations in the area of the kilns (Sellers 1968, 207) perhaps dating to the late 13th or 14th century. However culinary stamps were also produced in post-medieval times (Drury 1985, 80).

Fig. 12.2 Pargetting stamp, orange-brown fabric, partial grey core, micaceous, with moderate sand tempering, traces of decayed glaze, incised pattern. From large pit Q18. Ceramic pargetting stamps are unusual (D. Stenning, pers. comm.).

Copper alloy

by Hilary Major

A total of 10 copper alloy objects were found. All were fragmentary or modern. None is worth discussion or illustration.

Iron objects

by Hilary Major

A total of 30 pieces of ironwork were recovered. Most were fragmentary and/or badly corroded. A number of the latter were X-rayed. Most were fragments of nail, horseshoe, strip, or plate. None is worth further discussion or illustration.

Stone

by Hilary Major

A fragment of lava quern (lower stone) came from context MT 65/1. The maximum surviving thickness was 32mm; the stone had a flat grinding surface and a rough under-surface.

Building materials

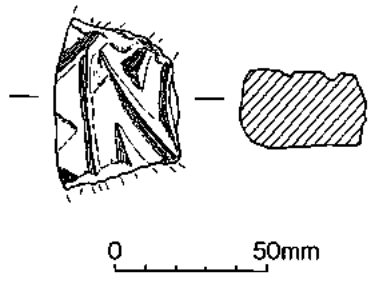
by M.C. Wadhams

A few pieces of brick, floor tile, and roofing tile were found. The material is so fragmentary that no real conclusions can be reached. The datable material runs from 15th century to the 19th century.

Animal bone

by Owen Bedwin

The following species were identified: *Ovis, Bos, Sus* and *Gallus*. However, the sample (48 fragments) was too small for any conclusions to be drawn about the site's economy or its occupants' diet.



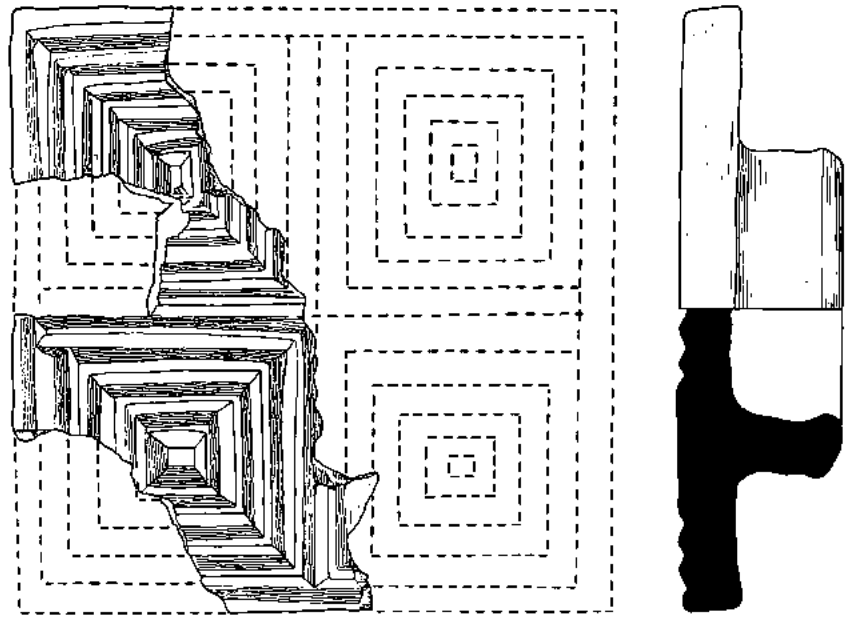


Fig. 12 Maiden's Tye. (1) Culinary stamp.
(2) Pargetting stamp.

Historical background

by Patricia M. Ryan

In 1256-7 Ralph de Heyron leased three messuages, sixty-one acres of land, six acres of meadow and two acres of pasture in 'la Wodeland' of High Easter to John de Chysell. It was agreed if John spent more than one hundred shillings on the construction of buildings and Ralph or his heirs refused to re-imburse him he could remove the buildings if he wished.[1] It is possible this was the property later known as Chissels alias Maidens Tye for the most likely location of 'la Wodeland' is in the northern part of the parish. Part of Pleshey Great Park, three fields called Woodwick, four called Kings Trees and five fields called Woodland are shown in the area on the map of the parish drawn by Coffyn and Byrd in 1654.[2]

The settlement pattern in the seventeenth century reflects to some extent the location of the common fields and demesne lands of the principal manor of High Easter and the submanors of Garnets, Belhouse and Heyrons for few houses had been built in these areas. Elsewhere houses were distributed fairly evenly on the yardland, half-yardland and quarter-yardland holdings, many of which have the names of thirteenth or fourteenth century tenants. Whilst the majority of the surviving timber-framed houses are of sixteenth and seventeenth century date, six have been dated to the fourteenth century or earlier (pers. comm. D. Stenning). The moat-building period is generally considered to have been between the mid twelfth to late fifteenth century. Moats have been recorded at the manorial sites of Garnets and Heyrons and the freeholdings of Crippings, Maidens Tye alias Chissels, Pentlowend, Cromps and Harpers. Moat Field, north of Stagden Cross Farm is proof that this customary farm was moated.[3] Sawkyns, Sallets, Loftye Green Farm, Motts, Stubbards and Whites are also customary holdings which may have been moated. Partial infilling or complete ploughing-out has obscured the evidence in many cases (Hedges 1978). The nineteenth-century Ordnance surveys are of dubious assistance in resolving the problem because of the difficulty of distinguishing between ponds, drainage ditches and partially filled-in moats. The overflowing ponds and ditches seen on a visit to the parish in March 1985 demonstrated the importance of some form of drainage in winter and probable complementary requirement of water storage in summer. Relatively few hedges remain in High Easter, but those that do contain a large number of species including hazel and

maple which suggests the field boundaries are of considerable age.

This documentary, place name and physical evidence all point to the antiquity of the landscape pattern of High Easter.

An almost unbroken series of court rolls exists for the manor from 1327 to 1704 and it should be possible to reconstruct the evolution of many of the land units. The Black Death may have caused a significant alteration, for an unusually large number of changes in ownership was enrolled at that time due to the deaths of tenants.[4] A further reorganisation of some holdings may have been recorded during the reign of Henry VII when part of the demesne lands were parcelled out as copyholds. When the manor was surveyed in 1569, many of the original land holdings had been broken up. Chissels and Tanners, a typical yeoman's holding, was reduced to 44 acres, and the remaining 16½ acres was divided amongst five other tenants.[5] Whilst quite a number of the mid-sixteenth century holdings were too small to maintain a household, the majority were large enough to support commercial farming enterprises. Most of the fields shown on the 1654 map are relatively small; few exceed eight acres and many are much less. They provided both arable and pasture in each field suggesting a mixed farming economy, that included stock as well as crops. The land described as Chissels had shrunk to thirty-two acres but twenty-two additional acres had brought the total holding to fifty-four acres.[6] Some idea of the size of the farmhouse can be had from the entry in the 1662 Hearth Tax, when William Smith, tenant of Chissels, was assessed on five hearths.[7]

In the early eighteenth century, Timothy Brand of Ingatestone began accumulating property in and around High Easter. In 1720 he bought Maidens Farm then in the occupation of William Chalk. When the lease was renewed three years later five and a half acres formerly owned by Samuel Neville and a house previously Samuel Everett's were added to the farm. In 1727 Timothy Brand bought Chissels and ten acres from Richard Reve of Bocking. By 1765 Philemon Chalk was renting both Maidens Farm and Chissels, a total of eighty-two acres. Twenty-three years later the Chalk family doubled the size of their farming operation by leasing Folkes and Crowes Farm from Thomas Brand, son of Timothy. Chissels may have been used to house farm workers or sub-tenants after 1727. However by 1805 all the buildings on the site, except for one barn, had been demolished.[8]

Discussion

The interpretation of the results of the work done in 1957-9 is hampered by the narrowness of the trenches and by the excavator's attempt to impose uniform references across the site. At this time medieval archaeologists were becoming aware of the unsatisfactoriness of imposing rigid grids on their sites and were about to abandon regular networks of standing sections. Surveying was impeded by the dense scrub surrounding the central island and, in 1965, the writer formed the impression that the recording grid might not have been correctly related to surrounding features.

The earliest pottery provides evidence for occupation in the twelfth century and it is suggested that, if the thirteenth century documentary evidence relates to this site, the moats, and those features which contain thirteenth-fourteenth century pottery, date from this period. It is possible that the very chalky clay upcast from the moat may have been used to marl the land.

The mid-seventeenth century map[9] does not show the moats nor do the three buildings shown in elevation within the outline of the outer moated area seem to be realistically located. Two of these buildings appear to have crosswings at either end, the third is a barn with three porches. Subsequently, as farms increased in size, the buildings within the inner moat probably fell into disrepair. They had been demolished by 1805 when an estate map[10] shows a single building outside the inner moat and just west of the entrance causeway. The site now lies on the eastern edge of a large modern arable field, merged with land which was, within living memory, ploughed by a team of two horses (personal information from Mr. Derek Bircher of High Easter).

Central west Essex has a greater concentration of farms with moated houses than any other part of Essex (Hedges 1978, fig. 21); the parish of High Easter lies on the eastern edge of this area. In Essex many of these farms are sited near parish boundaries. This, taken with minor place-name evidence, suggests that they were, broadly speaking, created *c.*1150-1300, bringing into cultivation land which may have been, up to that time, under wood-pasture. Maidens Tye, in its location, conforms to this pattern and the documentary evidence, if applicable, helps to confirm this theory.

There is an unresolved conflict of opinion over whether moats were purely practical or if they were also status symbols. It is suggested that, as far as this area of Essex is concerned, water supply and security were the principal factors involved. On the 2½" Ordnance Survey map of the area it can be seen that few moats are supplied by streams, that few sites are feeders of small streams and that many appear to depend on surface water. Even a small farm with, say, two horses and two cows or their equivalent, and some other stock, would need 40 to 50 gallons of water each day apart from domestic requirements for cooking, baking and brewing. It appears that the homestead enclosures of many moated sites in the area are of fairly uniform size. This suggests the possibility that it is the area enclosed which is significant and not the size or status of the farmhouse. A medieval farming family would need to protect their hard-won assets — harvested crops, stock, poultry, firewood, vegetables and freshly washed linen from predatory animals, dishonest servants and resident or vagrant poor. For this purpose a permanently wet ditch *c.*3 metres wide with a bridge, or with a causeway with a secure gate, would certainly be more effective than any fence or hedge.

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Authors: Elizabeth Sellers, 1 Chignall Road, Chelmsford.
Patricia M. Ryan, 60 Maldon Road, Danbury CM3 4QL.
Helen Walker, Essex County Council Archaeology Section, Globe House, New Street, Chelmsford CM1 1LF.

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Notes

1. Feet of fines for Essex, I, 220 (Essex Archaeological Society Publication, 1928).
2,3 Essex Record Office (hereafter ERO) D/DWv P2. Unfortunately names of contemporary tenants were not included amongst the information given on the maps.
4. Public Record Office (hereafter PRO) DL 30/64/806.
5. PRO DL 44/191.
6. As 2, 3.
7. ERO D/DDs P1.
8. ERO Q/RTh 1; will of William Smyth, yeoman, 1669 ERO D/ABR 8/356.
9. As 2, 3.
10. As 7.

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Excavations in the Market Place, Waltham Abbey, Essex, 1981: The Moot Hall and Romano-British occupation

by P.J. Huggins

with contributions by K.N. Bascombe and R.M. Huggins

Summary

A small excavation was undertaken by Waltham Abbey Historical Society prior to the re-surfacing of the Market Place. The remains of the Market House, demolished in 1852, were ephemeral. A flint-and-stone walled building with an undercroft, designed 20 by 10ft internally, is interpreted as the Moot Hall; it was probably built after 1250 A.D. and stood until c.1670-80. A documentary survey is included.

A deep loam layer and a re-cut ditch contained Romano-British pottery, including Much Hadham ware of c.360 onwards. Six other sites around the Market Place, where Romano-British pottery has been found, are compared. A probable boundary ditch, filled in the first half of the second century A.D., is mentioned as it may represent one side of 'eldeworth', the old enclosure. This enclosure surrounds the Market Place and may have been the boundary of the Romano-British rural settlement. Its subsequent use for the possible meeting of the Hundred Moot is discussed.

A small amount of prehistoric pottery is described: the finds of Much Hadham ware in the lower Lea Valley are surveyed. A gazetteer of Roman coins found at Waltham is included.

1 Introduction

In 1983 the Market Place and Sun Street were pedestrianised and the area was re-surfaced in brick. Prior to these works, a small excavation was planned (TL 38170057), by Waltham Abbey Historical Society, to locate the remains of the Market House, demolished in 1852, so that its position could be indicated in the paving. This building had no worthwhile remains and was shown to be a relatively late, post *c.*1670-80 structure. Interest therefore centred on an earlier flint-and-stone walled building with an undercroft; it is this building, interpreted as the Moot Hall which has

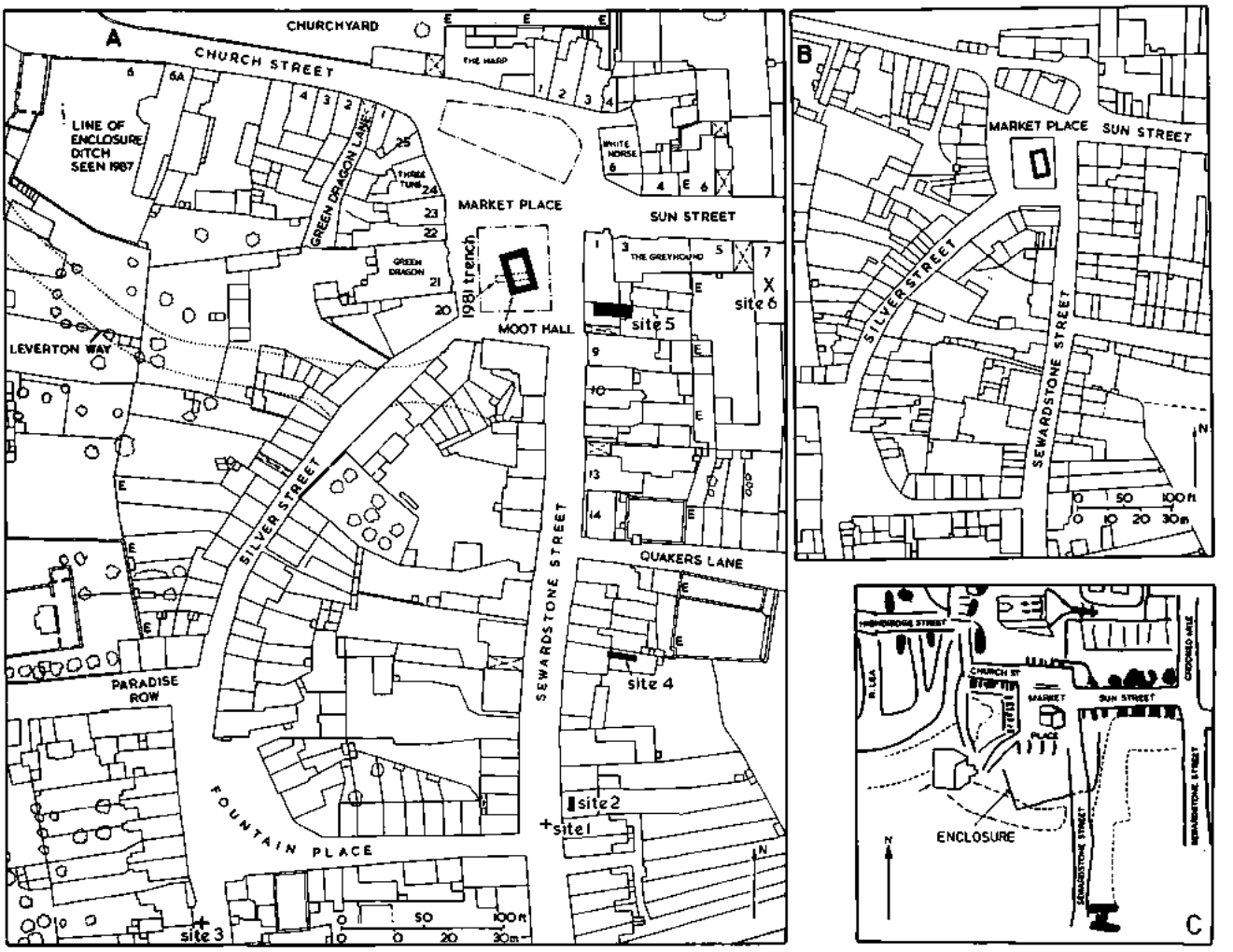


Fig. 1 Market Place, Waltham Abbey, 1981. Site maps.

A Based on 1:500 O.S. maps of 1879, surveyed 1870. The 1981 trench, the walls of the Moot Hall and the outlines of the Market House and the five cottages to the north are added; also showing additional sites 1 to 6 where Romano-British material has been found. Part of the possible boundary of *Eldeworth*, the 'old enclosure', is marked E...E, compare with C below.

B Based on the 1825 Crawter map of Waltham Abbey, showing the Market House and the five cottages to the north. The Moot Hall is added.

C Interpretation copy of the centre of the *c.*1600 map (doc. ref. 2), all names added. The Moot Hall is clearly shown in the Market place. Buildings are shown with reddish-brown roofs; the enclosure is marked in brown, the areas between the dashed lines are painted dark green.

been indicated in the new brick surface. The excavation was carried out by hand but additional walls were located by machine.

Small quantities of Romano-British pottery have been recorded since 1958 in service trenches and excavations around the Market Place to give the impression that this was the centre of Roman occupation. An important secondary object, therefore, was to establish the nature and date of any such occupation. The opportunity has been taken to gather together all the existing Romano-British evidence from sites around the Market Place.

2 Documentary Survey

by K.N. Bascombe

The place-name Waltham derives from *wealdhām* (*weald*, high forest and *hām*, administrative centre) and has recently been suggested (Huggins, R.M. 1975) to belong to the Anglo-Saxon group of sites, all with the name *wealdhām*, founded between *c.*450-500 A.D. as royal estates administering forest areas, and often giving their names to a Hundred. At Waltham Holy Cross the royal connection, documented in the 11th century, has been strengthened for earlier periods by the recent discovery of a charter of *c.*700[1] by the Essex king Suebred (Swaefred), founding a house of God (*domu' dei*) at Nazeing just to the north of Waltham and in the Hundred; this is considered to refer to the postulated nunnery recently excavated at Nazeing (Huggins 1978).

The Hundred as an organised unit is first mentioned in the reign of Edmund, 939-946 (Jewell 1972, 48), and Sayles (1966, 183) considered that before the Hundred was instituted local government was controlled from royal *tuns* or vills. Waltham Holy Cross may have contained such a royal

tun within the larger area of *civitas* which, in the Old English translation of Bede, is equated with *hām* (Sawyer 1974, 116).

An attempt to identify the sites of the Essex Hundred-moots failed to locate the site of the Waltham meeting place (Christy 1926, 192-193). It is claimed (*ibid*, 172) that the moot took place in the open air usually on some convenient hill or hillock, natural or artificial, and it seems reasonable to suggest that the raised area of the Market Place was already used for this purpose before the erection of the Moot Hall after 1250. Such a position, close to the edge of the floodplain of the River Lea where it is crossed by a causeway, would be a convenient centre, whether the small hundred of Waltham (at 60 hides often called a half-Hundred) originally included parts or the whole of Hertford Hundred and Edmonton Hundred on the opposite, western, bank of the Lea, as suggested by Christy (1926, 193) or whether it has always been its present size, as considered probable by Fisher (VCH 1966, 93). Five Essex Hundreds, Uttlesford, Hinckford, Chafford, Chelmsford and Rochford are named from fords (VCH 1903, 406) and with these, as with e.g. Becontree (VCH 1966, 181), there is no reason to suppose any building was required for the moot when the Hundred was first established.

It is noteworthy also that the Moot Hall is situated within an enclosure which can be detected on a map[2] of *c.*1600 (Fig. 1C) and which is tentatively identified with *Eldeworth*, a name recorded first[3] *c.*1235 and thereafter at intervals with *strete, strett, weye, lane* and *feld* apparantly until at least 1431 (Winters 1877, 34; and 1888, xii-xiii; and doc. ref. 4). In a rental[5] of *c.*1320 it appears as an area apparently lying between *Weststrate* (Highbridge Street) and *Eststrete* (Sun Street seemingly including the Market Place). The name *Eldeworth* means 'the old enclosure', evidently indicating an enclosure already old in 1235.

The half-Hundred of Waltham was granted to the Abbey of Waltham Holy Cross by Richard I in 1189 in terms, not uncommon at this period (Cam 1944, 66-67), which suggest it was virtually an appanage of the capital manor of Waltham, granted with its market in the same charter (Dugdale 1830, 66). It seems likely that the Moot Hall housed the manorial courts as well as the Hundred courts from early times. Its date of erection is unknown. The Colchester Moot Hall was built by about 1160, as an expression of civic pride (Crummy 1981, 60-65). But this was evidently exceptional, and although there seems to have been some development of local community sense in Waltham soon after this period (VCH 1966, 157), in the absence of a charter, the construction of a substantial, if small, Moot Hall at Waltham much before 1200 is considered unlikely. The Abbey Church, begun in 1177, was still under construction in the second quarter of the 13th century (Huggins 1988), and the erection of a strong stone building outside the precinct may well have had to await the completion of the church, which was consecrated in 1242 (VCH 1966, 172).

The only known medieval mention[6] of the Moot Hall is in the Waltham law Hundred roll of 1456. By this time the Hundred court had lost virtually all its judicial functions to the county sheriff and his court, and the business was largely confined to property transactions. Mention is made of two shops with lofts (*solar*) next to the Moot Hall between a *curindum* called the Cage on the one hand and a shop of Thomas Poole on the other. This suggests proximity between the Moot Hall and the Cage, presumably the Abbot's prison to which many references are known. In 1227 the Abbot was fined 10 marks at Essex assizes following the escape of several thieves from his prison (Waller 1889-1900, Pt. 1, 80). In 1236 the Abbot was ordered to transfer four prisoners from his prison to Newgate prison in London.[7] From 1299 gaol deliveries were made at Waltham by the Justices Itinerant (*ibid*, 80), and examples, involving persons from Loughton, were recorded in 1302, 1307, 1388 and 1372 (*ibid*, 82-83). Another reference is to John Reynolds of Hertford, who was a prisoner in the gaol on 3 May 1377.[8] In 1403 John Wodrove and his wife Joan of Waltham Holy Cross granted 'lands and tenements' as surety for three bonds of £24 to the Abbot, entered into by six citizens of Waltham for John's good performance as keeper of the Abbot's gaol.[9] The record of 1456 mentioned above is the latest so far traced.

The first mention of the Market Place itself is apparently in a rental of *c.*1235;[3] Michael *de Foro* pays 20d (pence). A damaged but more detailed rental of *c.*1320[5] records a *schoppe* at the corner of East Street (now Sun Street) and the Market Place, and another at the eastern end of West Street (now Highbridge Street), i.e. close to the parish church, and eight others in a group, no doubt in and/or around the Market Place. Later documents[10] refer respectively to a messuage called *le Cage* (perhaps the gaoler's house, and adjacent to the *curindum* mentioned above) in the fishmarket (1456), a messuage in the corn market (1525) and a shop in the butcher's quarter or shambles (*bocheria*, 1363). A shop in *le butcherye* is again mentioned in 1548 (Winters 1888, 142).

From some unknown date before the dissolution of the Abbey in March 1540, the manorial officials included a portreeve. In 1527 Robert Fuller, the last Abbot of Waltham, in return for services rendered, made William Corbett *prepositus videlicet le portreve* of the Abbey's manor of Waltham Holy Cross for life, with the market, fairs and other rights and emoluments pertaining to the office.[11] His will, dated 3 October 1540, is extant.[12] The Abbey had in 1538 placed control[13] of all its manors, lands and possessions in the hands of two stewards, Sir Humfrey Browne and Jerome Shelton, gentlemen, and these continued under Henry VIII's seal to run Waltham affairs after the Abbey's rights and priveleges had passed to the Crown. In 1553, however, the manor of Waltham with all appurtances, together with other properties including a cottage and garden opposite the Moot Hall, was granted to Lady Joan Denny, widow of Sir Anthony Denny of Cheshunt.[14] She died the same year leaving her elder son as heir, Henry, a boy of thirteen: his estates were administered by the Court of Wards and Liveries on behalf of the Crown. In terms of Richard I's charter of 1189, the market and the Hundred were regarded as among the appurtances of the manor, and this led to a confrontation in 1555 between one John Tam-

worth acting on behalf of the Court of Wards and Liveries and John Androse, portreeve, who was dining in his house with the members of his courts, which had been held *tyme out of minde* for settling the prices of *grayne and victualle*. Tamworth then locked and nailed up the doors of the Moot Hall to prevent the court from resuming its session.[15] The verdict on the subsequent case in Star Chamber is lost, but there seems to be no subsequent mention of a portreeve in Waltham, and the market descended with the lordship of the manor for the next three centuries. In spite of this some community sense remained. In 1560 Henry Denny was granted, at the suit of the townspeople and their neighbours, licence to hold the market every Tuesday instead of Sunday as previously; the inhabitants were said to be impoverished, partly because of the dissolution of the Abbey and partly because, with the change in religion, most people refrained from travelling and from worldly affairs on Sunday.[16] This reflects what is known of Henry Denny's own religious sentiments (Denny 1906, 214). In 1567, Robert Cheneye, a prosperous yeoman, left *£2 towards the mendings of the Mote Hall when so they be mynded to rease and sette yt uppe*, adding cautiously however *orells this gifte to be voide.*[17]

The Moot Hall is depicted on the map of *c.*1600[2] as a gabled building in the Market Place; no detail is shown (Fig. 1C). The alignment of the western side of the Market Place, which appears to represent an Elizabethan reduction in size, seems to respect the line of the Moot Hall and may be dated by a reference[18] to new shops in course of erection in Waltham Abbey in 1570. By 1594 the Hundreds of Ongar, Harlow and Waltham were all stated to 'repair' to Waltham (Norden 1840, 10) and this may account for the retention of the building, whose last known mention,[19] however, in 1637, refers to the manorial court being held in it; from the evidence of the excavation it could have lasted to *c.*1670-80.

No record has been found either of the demolition of the Moot Hall or of the erection of the Market House on its site. Following the death of James Hay, second earl of Carlisle, great grandson of Henry Denny, in 1660, his executors, to pay off debts, sold off portions of his estates including a moiety of the market dues.[20] It would clearly have been in the interests of all parties to make the market more attractive; Fuller, writing about 1655, commented that plenty of flesh, but little corn, was marketed there, adding that 'the golden market of Leadenhall makes leaden markets in all the towns thereabouts' (Fuller 1840, 262). In addition, Epping market, an obvious rival, acquired a cattle market by charter in 1671 (VCH 1966, 129). On the death of the earl of Carlisle's widow in 1676, the remaining Waltham estates, including the manor, devolved however to four sisters, his second cousins, and were not reassembled till 1689, nor apparantly out of the hands of lawyers till ten years later;[21] so it is unlikely that improvements would have been carried out during that period.

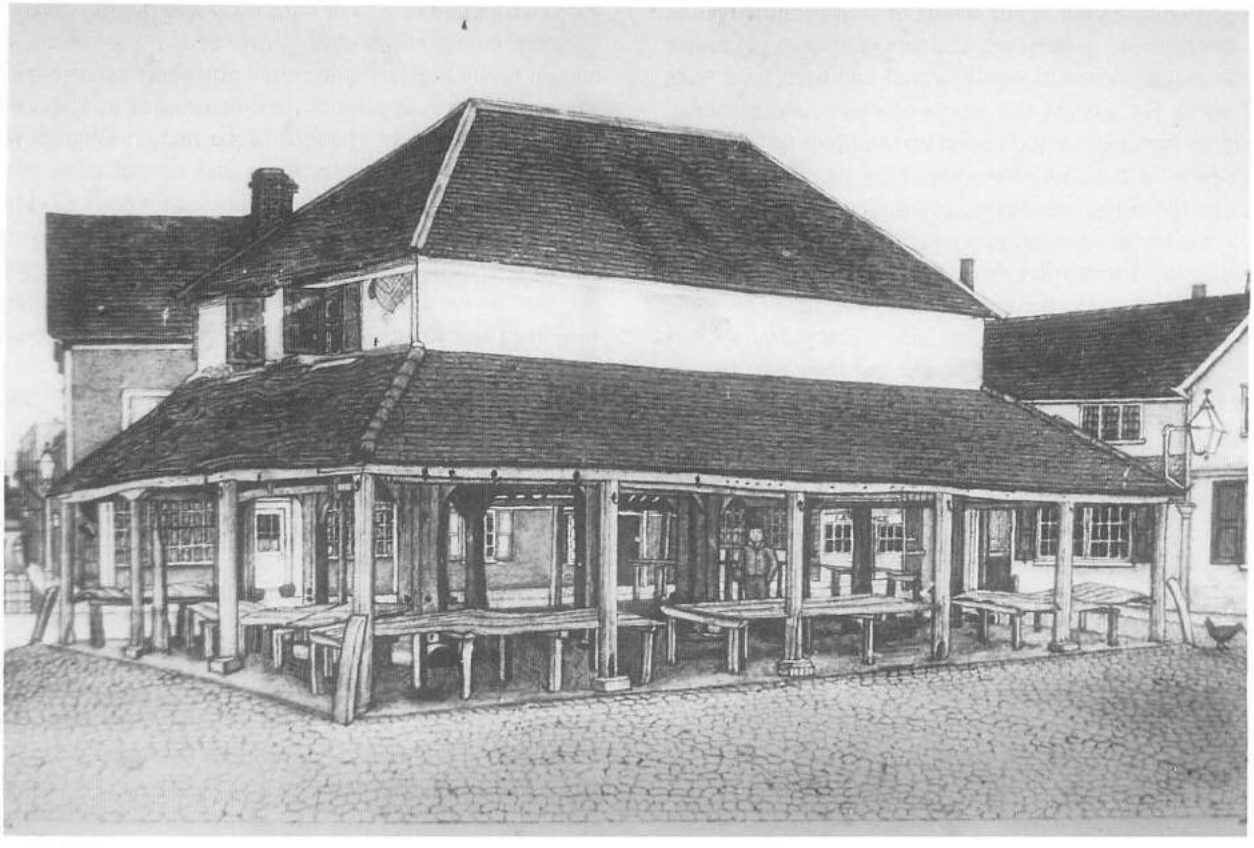
A row of five small tenements was built at some time or times in the northern part of the Market Place (Fig. 1B). A copyhold house in Waltham Market Place is mentioned in 1656;[22] extant title deeds[23] of a freehold one begin in 1708.

Farmer (1735, 70) records that the market was well provided with grain as well as with meat and poultry and 'most Country commodities' but much of the provisions were bought up by higglers who resold elsewhere at a profit. The Market House is apparently first mentioned in 1741, when £37 13s was spent by the lord of the manor, Charles Wake Jones, on carpenters' work there and several other places, including building a stable; in the same year[24] £7 11s 2d was laid out on 'the Goal House, Turnpike and Churchyard'. The lord of the manor expected to pay land tax for the gaol house at 8s per annum[24] which indicates that the gaol itself was still an appurtance of the manor, or, possibly, of the Hundred.

The Market house appears on maps of 1776,[25] 1825[26] (Fig. 1B) and 1826[23] and the survey associated with the latter[27] indicates the lord of the manor, Sir William Wake, as owner. In 1815 Sir William had been cited to appear at Quarter Sessions for failing to keep 'the parish cage' in repair (VCH 1966, 169). This 'cage' does not appear on the 1826 map or survey, but its site appears to be located by Winters (1888, 66) 'in the Green Dragon gateway, Church Street, approximating the rear of the Three Tuns Inn' (now 24 Market Square) 'and adjoining the premises of Mr. J. Upton, bootmaker' (now 25 Market Square). This is only 30m from the excavated walls interpreted as part of the Moot Hall, and since the range of buildings separating the two was probably erected only in the late 16th century, continuity of site for the cage from 1465 is quite possible.

The Market House is a principal feature in Thomas Rowlandson's watercolour[28] 'Market Day at Waltham Abbey, in 1816' (reproduced in VCH 1966, f.p. 165). The building was drawn from memory in 1872 by Joseph Upton (Pl. 1A). In 1851 it was described as very delapidated,[29] and in 1852 it was demolished. A sale catalogue[30] of re-useable building materials, however, runs to 81 lots, including 30 pieces of seasoned tulip wood plank and board, stated to have come from the tulip tree mentioned by Farmer (1735, 160) as growing in the Abbey House gardens; also the parish stocks and pillory which are now in the care of the Epping Forest District Museum. Maynard (1865, 97) gives another reason for its demolition: "The old market-house pulled down 16 December 1852, was a square building of wood, having a large room at the top, supported upon strong pillars of oak, and which appears to have been used in olden times as a corn mart; and was entered by trap doors from the under part which was furnished with scales, weights, and measures for the market use. Beyond the pillars which supported this room, smaller pillars were erected to bear up the semi, or half roof, under the inner part of the market-house, for the accommodation of those persons who took a stall at this market. This unsightly building was pulled down by the request of the inhabitants, as it had become a nuisance, on account of its affording shelter for idle boys, and worse characters, both by night and by day. On the north, just under the shelter of the old market-house (which had a road, or a cart way all round it), stood the stocks, which were ornamented with carved work and having a date 1598 carved in raised figures upon the front."

A livelier account is given by another local worthy,



Pl. 1A Market Place, Waltham Abbey, 1872.
The Market House, drawn from memory by Joseph Upton from the direction of Upton's shoe shop, No. 25 Market Place. Compared to Rowlandson's painting (doc. ref. 28), the belfry and two windows on the near side are not shown.

William Roberts Clark, writing[31] in 1866: "... I remember the Market Place Standing with the Shambles round the Market then was thought a very great deal of the Farmers bought and Sold no thing but at the Market we used to have butchers attend with their meat from North Weald Epping Chinkford and the neighbourhood all round the Market House used to be hung all round with it a great quantity of Poultry used then to Come the Calves and Pigs used to be Sold in the Public House yards the Ship and Sun were great places for it. The Market House was like a large Shed that Stood on Wooden Posts about 8 feet high and the Shambles was under and all round and was a great place when not in use for all the idle and disolute of the Town the Upper Part was like a large Room were the Stalls and different things used for the market was Kept and Stocks was under one part of it and the Pillowry was over the Beams allso the Fire Hooks."

It is possible that the establishment of the Waltham Abbey Local Board of Health in 1850 had an influence on the removal of the Market House, and also on the development of the Romeland as a cattle market which seems, according to Maynard (1865, 98) to have taken place in the 1850s: "The cattle market of this town, forty years ago, was scattered chiefly among the public houses in Sun Street whose yards were thrown open to receive pigs, sheep, calves and cattle of every description. The higglers had their respective houses and places where they waited to receive eggs, fowls, butter, etc., brought to the market for sale."

Maynard continued: "Some few years since, the Romeland was converted into a cattle market, furnished with pens for pigs, calves, and sheep; and strongly railed round for the purpose of having somewhere to fasten horses, etc.; by which arrangement the focus of the cattle market was brought into a more immediate view, and the town much relieved of the bustle and confusion caused by the driving of all sorts of cattle in and out of the yards and gateways of the various inns." In 1849 a report[32] stated that the market was attended by great numbers of farmers, dealers, etc., of whom 80 to 90 dined and about 150 'partook of refreshment' in the town's hostelries.

Clark[33] and Maynard (1865, 96) also recorded the demolition of the houses in the north part of the Market Place (Fig. 1B), four in 1864, the other in 1865, following the purchase by the parish for this purpose. During sewerage operations in the Market Place in 1870, two parallel stone foundations were discovered,[34] each 12ft 6in (3.8m) deep, 4ft (1.2m) wide at the top, thickening towards the base, and 11ft 6in (3.5m) apart; these must have been the east and west walls of the Moot Hall, only the latter dimension was in error (Para. 9). Winters (1888, 61-62) saw these foundations and mused that he saw the walls of a subterranean passage from the Abbey into the town towards Sewardstone Street.

The market was bought by the Local Board of Health in 1888 from the lord of the manor, Sir Hereward Wake, for £2500 (VCH 1966, 165); in the previous 30 years or so it

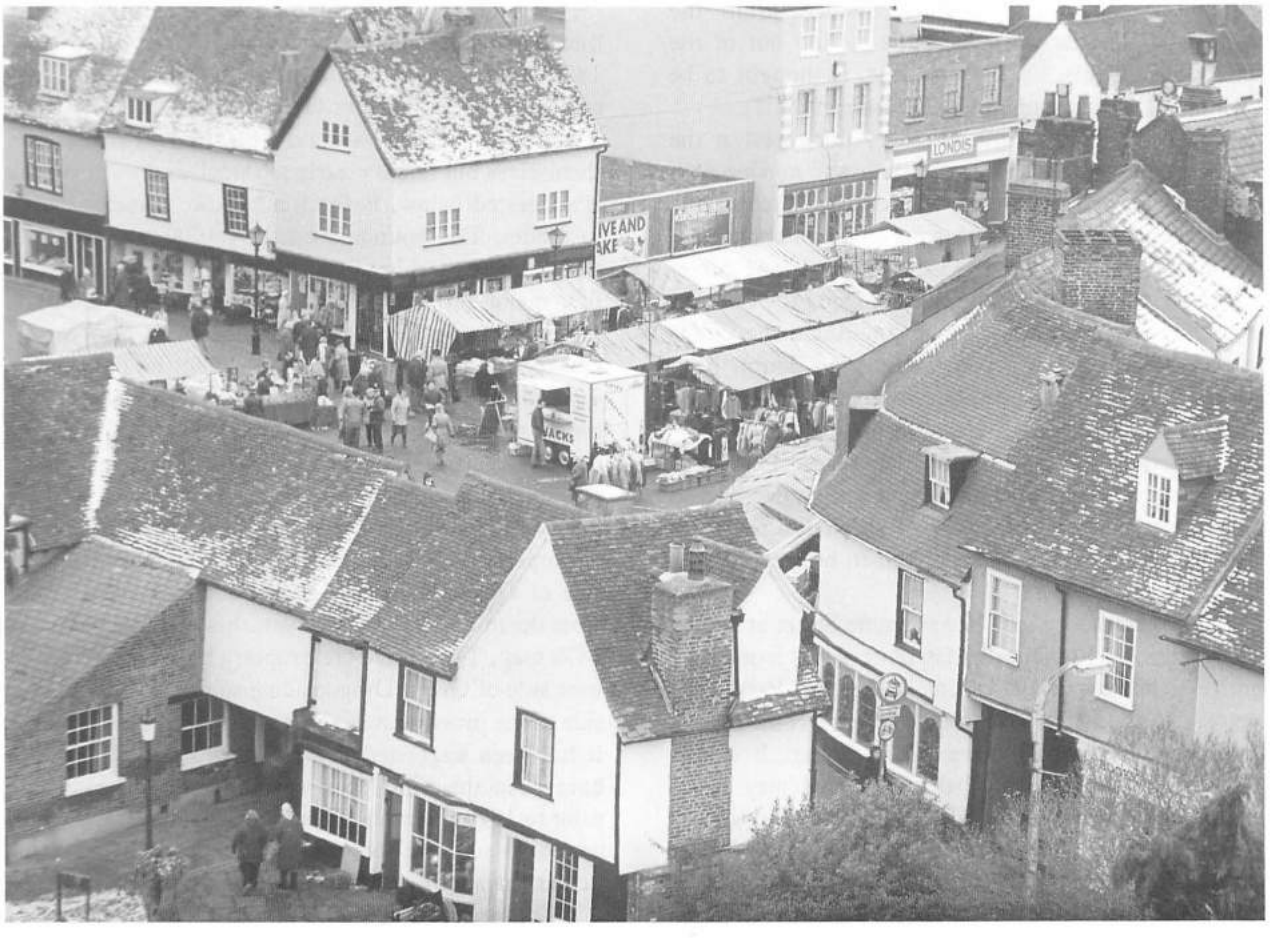
had been considerably expanded. The market passed in 1894 to the Waltham Holy Cross Urban District Council, who extended the Market Square (*sic*) southwards in 1960 and soon afterwards opened a Saturday market in addition to the Tuesday one. The Waltham Abbey Town Council took over in 1974. In November 1981, following the excavation, most of the Market Square area was pedestrianised, and in 1983 formally laid out, with the outline of the Moot Hall walls marked and the Moot Hall and Market House commemorated by a plaque on the wall of the Green Dragon public house.

3 Topographical evidence and discussion

The 1:500 O.S. map of Waltham (Fig. 1A), surveyed in 1870, shows the Market Place, by then free of buildings, to measure, on medial lines, about 155ft (47m) north to south and 85ft (26m) east to west. The smaller scale 1825 Crawter map (doc. ref. 26; Fig. 1B here) indicates roughly similar dimensions; it also shows the outline of the Market House with a group of five cottages in the northern part of the Market Place. On the 1825 map, the area of the Market House is given as 9 square poles (160 square poles equals 1 acre; 2.47 acres equals 1 hectare) and its dimensions are about 55 by 45ft (16.7 by 13.7m); these measurements give an area of 9.1 square poles and are therefore reliable. The outline of the Market House, and the five cottages to the north, are here added to the 1879 map so that the Moot Hall can be shown in relation; it is seen to lie completely within the outline of the Market House and at an angle of some 14° to it.

The water colour map of Waltham of *c.*1600 (doc. ref. 2) shows the town centre in useful detail. The map was apparently produced to define the boundary of New Lodge Half Walk, a forest division; its accuracy with regard to Waltham has been established during monastic grange excavations when the part depicting the town and grange was published in monochrome (Huggins 1972, 90 and Pl. 1A). An enlargement of part of this map is redrawn with modern names added as Fig. 1C.

The little gabled building in the Market Place, here interpreted as the Moot Hall, is clearly indicated with a reddish-brown roof. Sun Street runs off to the east; reddish-brown marks, six on the north and seven on the south, are taken to represent the tiled roofs of detached properties set end on to the street. To the south, Sewardstone Street leads off to a gate or stile and continues, on a map of 1776 (doc. ref. 25), as a path to Sewardstone hamlet. Houses are probably indicated in Sewardstone Street but not very distinctly, but none seem to be shown on the east side of the



Pl. 1B Market Place, Waltham Abbey, 1985.
View from the Church tower on market day; Sun Street runs off eastwards at the top left, Church Street is at the bottom right. Green Dragon Lane runs off Church Street through the dark archway behind the street light (Photos: J.H. Littlefair).

Market Place. Silver Street runs to the south west and four brown marks are thought to represent properties between there and Sewardstone Street so as to form the south side of Market Place. Along the west side of Market Place there are seven red marks probably indicating tiled roofs of a continuous row of properties; some of these remain, such as Nos. 20 and 25 (Fig. 1A). Down Church Street perhaps nine properties are indicated with some suggestion of tiled roofs; of these Nos. 1 to 3 Church Street probably remain (Fig. 1A) and may include the shops being erected in 1570 (Para. 2). The front and rear of these properties along Church Street and the west side of Market Place are specially delineated, perhaps because, *c.*1600, they were recently and regularly built. On the north side of Market Place perhaps six buildings are shown faintly in brown. To the west Highbridge Street runs into Hertfordshire, and four, of a total of at least 28 detached properties there, are included on Fig. 1C. Thus both Highbridge Street, formerly West Street, and Sun Street, formerly East Street, seem to have contained prominent detached buildings set end on to the streets.

A clear line in brown is drawn, on the *c.*1600 map (doc. ref. 2), around about two thirds of the Market Place area. It is not a fence as one is indicated elsewhere by small vertical lines. It is not a hedge as these seem to be painted green. Thus it is thought to represent a bank or ditch not completely silted or both. So it seems to be some sort of enclosure, sub-rectangular in shape, which, from the outline (Fig. 1C), clearly predates the setting out of the Market Place and this, on the east side, is thought to be about 1200 A.D. (Bascombe in Dickenson 1982, 7).

This postulated enclosure boundary is clearest at the south-west angle, from there it follows north-north-westwards towards Silver Street, where it had presumably been obliterated. From the south-west angle, of about 95°, it follows east-north-eastwards to cut Sewardstone Street before turning north and curving slightly along the east side of the Market Place towards Sun Street. Again the line is lost in the region of Sun Street, having, no doubt, been obliterated there by subsequent development, but it is seen to continue north and curve westwards just behind the properties on the north side of the Market Place. Thereafter the line is not recorded, but that which can be deciphered presents a very convincing picture of an enclosure earlier than 1200 A.D. and prominent enough to be a significant feature *c.*1600.

The above boundary cuts Sewardstone Street at a position where Period 1 Romano-British pottery was found during service trenching in 1974 (Site 1, Fig. 1A; Para. 7.2). The pottery (App. 1B(a)) was judged to have come from a silted ditch which crossed Sewardstone Street. It is this discovery which indicates that the enclosure may be of Romano-British origin. Romano-British pottery and tile has been found inside the boundary at Sites 2, 4 and 5 and in the Market Place itself in 1981. No Romano-British pottery was found in excavations 200ft (60m) to the south (Huggins 1969) and well outside the boundary discussed above; similarly only stray sherds have been found in many excavations to the north beyond the enclosure.

If the boundary is accepted as an enclosure it would measure nearly 500ft (152m) north to south and average about 370ft (110m) east to west and would enclose an area of about 4 acres or 1.6 hectares. It is well known that earthworks, once stabilised with a turf covering, can last for thousands of years. Even enclosure and field boundaries can survive for a long time. Just to the north of Waltham at Nazeingbury, Romano-British field ditches survived to become the boundary of a middle Saxon cemetery (Huggins 1978, 47) and so lasted, in some form, for over 800 years.

The size of the above enclosure is relatively small. It hardly compares with the *c.*8 to 20 hectares of a Roman small town (Drury and Rodwell 1980, 65). It is probably best classified as a small rural settlement or farmstead worked by an extended family. It is however much larger than the simple farm enclosure, of a third of an acre (an eighth of an hectare), excavated at Nazeingbury, of the first half of the first century A.D. (Huggins 1978, 35); at Nazeingbury an external bank was postulated so that the central area could be drained into the ditch. Whether this was the case at Waltham or whether an external 'defensive' ditch was provided is not known.

It is tempting to identify this postulated enclosure with *Eldeworth*, the 'old enclosure', this possible identification coupled with an analysis of the *c.*1320 rental (doc. ref. 5) will be reported by K.N. Bascombe, at a later date. The identification is likely to be positive.

Whatever the merits of the above identification it is pertinent to see if there are any boundaries on the 1879 and 1825 maps which could have survived from such an enclosure; possible lines are marked E..E..E on Fig. 1A. Two such circuits around the Market Place suggest themselves but one is clearly too small and another meaning is suggested below. Both circuits have common north and east sides. The boundary on the *c.*1600 map passes to the east of the east side of the Market Place (Fig. 1C), so the first major property division, between Nos. 3 and 5 Sun Street, running almost straight between Sun Street and Quakers Lane (Figs. 1A and B) cannot be far wrong. The east side must continue north across Sun Street to curve round westwards at the back of The Harp public house, now the Welsh Harp, and the other properties on the north side of the Market Place.

Based on the above east and north sides an inner circuit of property boundaries can be traced. In line with the south side of Quakers Lane, a clear boundary curves round to cross the middle of Silver Street, this is more obvious on the 1879 map. Then there are property boundaries forming the west side of Green Dragon Lane so as to delineate the west side of the inner circuit; these are clearest on the 1825 map. It has been suggested, by J.T.A. Burton, that these may have been the south and west sides of the Market Place prior to 1570 (Para. 2). This inner circuit is not the one suggested to suit the indications of the *c.*1600 map; in particular the south-west corner is wrong.

The larger and preferred system for the south and west sides of the postulated enclosure is based on the ditch crossing Sewardstone Street at Site 1 (Fig. 1A). This would pin the south side to run westwards along the road called Foun-

tain Place. On the far west side there is an old boundary running northwards from near Paradise Row for about 100ft (30m). This particular line (marked E..E..E.. on Fig. 1A) then angles slightly to pass, with a slight hiccup, behind No. 6A Church Street; this is a line which is not now preferred because a ditch has recently been seen about 65ft (20m) to the west, at No. 6 Church Street; the line from E..E..E near Paradise Row would continue nicely, just to the west of north, to meet this newly discovered ditch which is about 8ft (2.4m) wide by 4ft (1.2m) deep. There is just enough dating material in this lately discovered ditch to confirm the Romano-British date for this enclosure ditch. The junction of the above south and west sides of the postulated enclosure can meet at the angle indicated on Fig. 1C by drawing across the 'square' of Fountain Place roughly parallel with the angled properties on the east side of the Place. Silver Street, once called School Street and Dunghill Street, could have joined up with Town Mead Road, then the boundary could be said to cross Silver Street, as suggested by the *c.*1600 map, with the formation of a suitable south-west corner. Evidence of the south-east corner is mostly lost.

If property or other boundaries are dependent on an ancient bank or ditch they may, of course, follow one or other side of the ditch or bank or somewhere in between. Thus boundaries can be roughly parallel but out of line and still retain fossilised evidence of the same ancient feature. The line suggested across the 'square' at Fountain Place is parallel to the angled frontages and may illustrate this point.

The 1879 map shows the height of the Market Place to be 73ft (22.2m) OD, this is the highest part of the town. This map shows that the land falls away as follows: northwards to the site of the monastic church, 4ft (1.2m); westwards along Church Street, 9ft (2.7m); westwards along the recently made Leverton Way, 11ft (3.4m); southwestwards along Silver Street, 8ft (2.4m); southwards along Sewardstone Street, 10ft (3.0m); and eastwards along Sun Street, 5ft (1.5m). The river lies some 900ft (270m) to the west.

Measurements from several excavations show the undisturbed natural clay to be at a height of about 65ft (20m) OD at the Abbey Church, at No. 8 Market Place (Site 5, Fig. 1A), at Essex House (Site 4) and along Sun Street. There is a fall away to the west and south as suggested by the fall in the ground surface towards the river Lea and Cobbins Brook respectively. The differences in surface level, as listed above, are brought about partly by the considerable build up of loam, in and around the Market Place, from Romano-British to early medieval times. At all these town sites there are post 13th-century deposits as well, at the Market Place they are 4ft 5in (1.35m) deep which is at least twice the depth of such deposits at sites just beyond the Market Place.

4 The excavations

A single trench some 22ft (6.7m) long by 4ft (1.2m) wide was dug, by hand, in ten days in July and August 1981. Substantial remains were recognised as the side walls of a medieval building and, in June 1983, during the pedestrianisation work, two trenches were dug by machine to locate the end walls. The undercroft of this building, now interpreted as the Moot Hall, was designed 20 by 10ft (6.1 by 33.0m) internally. The excavation was consolidated with pneumatic ram and the trench topped with one metre thick lean-mix concrete before tarmacing; all work was carried out by Waltham Abbey Historical Society.

5 Feature list

All the excavated features, or contexts, have been given Feature Numbers, F1 to F58. These features are listed below and are described and interpreted as far as possible. The pottery sherd count of Waltham codes is included and finds of building debris, glass and clay pipes are referenced; pottery fabric codes are given elsewhere in this volume (Huggins 1988, App. 1). The Romano-British and possible earlier levels are represented by numbers F1 to F7 and the period of the Moot Hall by numbers F10 to F41; only F56 and F57 are features of the 17th-century Market House.

F1 Grey silt of Phase 1 Romano-British or earlier ditch, sloping sides, flat bottom.

F2 Re-cutting of F1, silt indistinguishable.

F3 Thin layer of brown silt at top of F1.

F4 Grey silt above F3.

F5 Phase 2 ditch bank, re-formed by deposit of orange sandy clay.

F6 Equilibrium line within the newly formed Phase 2 ditch, with fragments of roofing tile and bone (finds in F7 above).

F7 Accumulation of grey-green sandy loam above the Phase 2 ditch equilibrium line, some of this may be taken as ditch fill, the upper part from soil accumulation or deposition. *Pottery:* (a) Romano-British Period II, 12 sherds red Hadham ware (Fig. 3/1-4), 16 grey, 7 buff, 2 samian, 6 shelly, 2 Oxfordshire, 1 Northamptonshire. (b) 3 flint-gritted 'prehistoric', 4 Middle Iron Age. *Brick/tile:* Romano-British, 163 pieces including 15 *tegula*, 9 *imbrex*, App. 2. *Animal bone:* App. 5.

F8 Greenish-grey sandy loam, with leached horizon under, representing a stabilised ground surface. *Pottery:* 1R-B, 1G. *Brick/tile:* 16 pieces Romano-British including 1 *tegula*, App. 2. *Animal bone:* App. 5. *Human bone:* App. 6.

F9 Dirty stony clay above F8, probably a moot hall building deposit. *Pottery:* 1G, 1J1; *c.*1200. *Brick/tile:* App. 2. *Animal bone:* App. 5.

F10 Rough-hewn Kentish ragstone, set in grey ballast, lowest foundations of west wall of moot hall.

F11 Flint, stone and roof tile in stony mortar, lowest part of west wall of moot hall, about 5ft (1.5m) thick.

F12 Coursed flint and stone in stony mortar, west wall of moot hall set back 14in (36cm) from F11.

F13 Coursed flint of highest remaining part of west wall of moot hall, probably designed 3ft 6in (1.07m) wide.

F14 Grey ballast, backfilled against the outside of F12 and F13.

F15 Lens of clean orange sandy clay.

F16 Stony clay and loam mixture, probably part of ground reinstatement against the newly-built wall F13. *Pottery:* 1J2; 13th-century.

F17 Slot cut in F16, across trench, filled with Reigate stone dust.

F18 Line of reddened clay against the slot F17.

F19 Two stake holes in F18, 5 and 8cm deep.

F20 Line of iron slag, associated with F17 and F19. *Pottery:* 1H, 13th to 15th century.

F20A Layer of mud and burnt clay, 2cm thick, around F21.

F21 Reddened soil of hearth.

F22 Compacted gravel over hearth features F20, 20A and 21.

F23 Mixture of Reigate stone dust and clean gravel covering hearth features F17 and F18 and deposits F16 and F22, probably resulting from the construction period of the moot hall.

F24 Lowest of three gravel deposits probably to clean up the area round the moot hall. *Pottery:* 1K, 1475-1500.

F25 Loam of ground surface built up to the west of the moot hall, an equilibrium level during the use of the building. *Pottery:* 2J2, 3K, 4H, 3 buff green glazed; late 15th century. *Animal bones:* App. 5. *Small find:* piece of slate hone.

F26 The second gravel deposit, like F24, deposited over F25. *Pottery:* 2J2, derived.

F27 Pit of loose black soil and charcoal, cut through F26. *Pottery:* 2H, 1J2: probably 16th century. *Animal bone:* App. 5.

F28 Loam of another stabilised ground surface, over F26. *Pottery:* 9M, late 16th/early 17th century. *Animal bone:* App. 5.

F29 Gravelly soil over F28, layer of peg tile fragments therein, the last deposit before the moot hall wall was robbed. *Pottery:* 3J2 (derived), 4M unglazed, 1 Frechen stoneware, 1N brown glazed; late 16th/early 17th century. *Animal bone:* App. 5.

F30 Kentish ragstone in grey ballast, the foundation of the east wall of the moot hall.

F31 Clay laid as sealing deposit inside undercroft. *Pottery:* 1J2, late 13th/early 14th century.

F32 Spread of grey ballast from laying F30.

F33 Single foundation course of rough-hewn Kentish ragstone set in clay, above F31.

F34 Clay with roof tile fragments, a further sealing deposit inside the moot hall.

F35 Layer, 5cm thick, of mortar and Reigate stone dust from the construction of the moot hall walls. This is the most likely original floor level, covering uncertain.

F36 East wall of moot hall, coursed and mortared flints inside, probably originally plastered, face of top course was hacked off, to reveal a flint-and-stone core. Remained to a height of 6ft 4in (1.93m).

F37 Thin layer of clay adhering to the bottom courses of F36, presumably intended to seal against damp.

F38 Layer of silt, inside the moot hall. *Pottery:* 4M; first half of 16th century, presumably the floor level was being raised at the time. *Animal bone:* App. 5.

F39 Layer of mortar above F38.

F40 Layer of silt and flints above F38.

F41 Roof tiles, peg and lug types, crudely mortared to the inside of the east wall of the moot hall, F36. Bottom of each tile was sloped in relative to the top, seen down to level of F39 which may result from this attempt to seal against damp.

F42 Layer of mortar within undercroft, probably deriving from its demolition.

F43 Rotting timber laying near bottom of undercroft fill F44, possibly a joist resulting from moot hall demolition; not on plans or section.

F44 Clay with flints, ash and mortary soil, fill of undercroft. *Pottery:* 60N black glazed, 56N brown glazed, 8N slip decorated, 18N unglazed, 2 buff, 9 white delft, 1 blue delft, 28 Frechen (min. 6 bottles), 6 English brown glazed stoneware, 2 intrusive Victorian; *c.*1670-80. *Glass:* App. 4. *Animal bone:* App. 5. *Clay pipes:* App. 3, indicate *c.*1660-80.

F45 Loose ashy soil, upper fill to undercroft, dated *c.*1670-80 as F44 with some intrusive material. *Pottery:* 3N black glazed, 3N brown glazed, 1 white delft, 4 blue dec. delft, 3 stoneware, 1 Staffs slipware, 5 Victorian. *Clay pipes:* App. 3.

F46 Dirty sandy soil above undercroft fill. *Pottery:* Victorian.

F47 Pit of loose soil cutting into undercroft fill. *Pottery:* Victorian.

F48 Loose flints and mortary soil, backfilled with robbing debris from wall F13. *Pottery:* 1N black glazed, 2N brown glazed slip decorated, 2 Frechen, 2 white delft. *Clay pipes:* App. 3. Overall date *c.*1670-80, material indistinguishable from undercroft fill F44.

F49 Mixed soil, backfill of 1870 sewer trench, material derived from F7, F44 and F48. *Pottery:* 3N black glazed, 7N brown glazed, 3 Frechen; derived *c.*1670-80 material. *Clay pipes:* App. 3. *Brick/tile:* App. 2.

F50 Pit of loose mortary fill dug from level of F51. *Pottery:* 2N; early 18th century.

F51 Mortar and gravel layer probably partly deriving from the robbing F48 of the wall F13, cut by F50.

F52 Deposit of stones in sandy clay with some gravel, presumably of the market period.

F53 Compacted stones in sandy clay, a Market Place surface.

F54 Tarred limestone and blast furnace slag, sub-base to F55.

F55 Tarmac of Market Place surface.

F56 Post hole, 15cm deep, seen in F29, probably to support a bench of the Market House building.

F57 Mortar pad, 5cm thick, on top of F28 as base to post in F56.

F58 Post hole, 25cm dia., dark soil fill, 18cm deep, and 3 stake holes, 10 to 30cm deep, all seen in loam F8, thus of the moot hall construction period or earlier.

6 Prehistoric evidence

A mesolithic flint-working area was found in the cloisters of the later Abbey (Huggins 1970, 223-228). Fragments of two neolithic bowls of Peterborough ware, decorated in Ebbsfleet style, and tempered with crushed flint, were found in the same location some 400ft (120m) north of the present Market Place excavations. Stray finds of worn flint-tempered sherds have been found in the lowest levels of excavations in the town centre. In 1984 an assessment of this material, including some sherds from the south aisle of the church, suggested an Iron Age date. A recent excavation at No. 6 Church Street (Fig. 1A) has produced further sherds of flint-tempered ware mixed with Romano-British evidence. Three of these flint-tempered sherds have been found in the loam F7 with four other sherds considered to be of Middle Iron Age date. Details of this material are given in App. 1.

The univallate Iron Age camp of Ambresbury Banks lies some 3½ miles (5½km) to the east in Epping forest (Alexander *et al.* 1978) and a Belgic farmstead was excavated 4 miles (6km) to the north near the river Lea (Huggins 1978). No Belgic pottery has been found at Waltham.

7 Romano-British occupation

One of the main objects of the excavation was to investigate the suspected Romano-British occupation in the Market Place. Pottery and tile of this period have often been found in excavations and service trenches around the Market Place. Besides describing the evidence from the 1981 excavation, the opportunity is taken to summarise the other Romano-British evidence at Waltham; six additional sites are mentioned (Fig. 1A). A list of the coins found over the years is included as App. 7.

7.1 Market Place, 1981

Pre-Moot Hall levels only remained intact at the west end of the trench in an area 6ft by 4ft (1.8 by 1.2m). Nevertheless it was possible to distinguish two distinct ditch arrangements. The Phase 1 ditch was flat bottomed and ran roughly east to west (Fig. 2, section and plan 1); the profile showed it had been re-cut. There was a grey primary silt F1 in the bottom and a distinct band of brown silt F3 above, the latter being consistent with the silting of newly deposited natural clay on the bank following the re-cutting F2. After

further silting F4, the system seems to have been re-formed and a Phase 2 deposit of clean clay F5 is identified as the side of a new ditch running to the south west towards Silver Street.

In the new ditch, a clear equilibrium surface F6 was established, with a line of fragments of Roman brick and tile and animal bone. There was no dating material at all in the silts F1, F3 and F4 below. The top of the Phase 2 ditch bank was not seen so it is not clear whether all of the sandy loam F7 should be considered as ditch silting or whether some derives from later soil deposition. In F7 there were 53 sherds of which 46 were judged to be of Romano-British origin; this left seven sherds identified as 'prehistoric' and Middle pre-Roman Iron Age (App. 1A). Six of these latter sherds were in the upper part of F7, perhaps suggesting that they had been so elevated by ditch digging or other re-deposition. In this latter respect, soil, with the pottery therein, could have been brought to the site to construct a postulated mound, if one were needed, on which to hold the meeting of the Hundred Moot (Para. 8). However at No. 6 Church Street, outside the enclosure, there is considerable deposition of a post-Roman sandy loam above a long-established old ground surface.

The Romano-British pottery is discussed in App. 1B. A Period II date of '*c.*360 A.D. onwards' is given for the material in the sandy loam F7. The brick and tile is discussed in App. 2.

7.2 Sewardstone Street, 1974 (Site 1, Fig. 1A)
Pottery was collected by T. Turner from the spoil of a service trench and it appeared to derive from a ditch running east to west across the street. Since redevelopment some twenty five years ago, the ditch is inline with the present north pavement of the road called Fountain Place. The pottery was coated with a soil concretion consistent with a ditch deposit. The pottery is dated to the first half of the second century A.D. (App. 1B(a)); this defines the end of Period II in this report.

7.3 Pentecostal Church, 1974 (Site 2, Fig. 1A)
by R.M. Huggins
A small trench was excavated, by T. Turner and R.M. Huggins, in the front court of the Pentecostal Church in Sewardstone Street, this being the nearest available area to the probable ditch mentioned above.

At a depth of 20in (50cm) below the surface, a gravelly layer, 4in (10cm) thick, was spread over the whole trench and contained 16th-century pottery and three derived sherds of early medieval date. Below this there were three distinct layers of loam. The upper loam layer with some gravel, 12in (30cm) thick, contained early medieval pottery with 19 sherds of D2 shelly ware, of 11th or 12th century date, in its lowest part. The intermediate loam layer, 8in (20cm) thick, was fine and black and was demarcated by a hard upper surface with charcoal specks. This intermediate layer contained 24 medieval sherds, 14 probable Saxon sherds with sand and grit temper and 12 Romano-British sherds; of the former, 16 were D2 shelly ware (for pottery codes see Huggins 1988, App. 1) and there was one rim of a D1 St. Neots inturned bowl which was found with a pair of iron shears (illustrated as Fig. 13, No. 8, Huggins 1988), both the rim and shears are dated to the late 10th or early 11th century and were found in the upper part of this layer. The lowest of the three loam layers, 16in (42cm) thick, reached the natural clay at a depth of 60in (1.5m) from the ground surface; at this depth a hard surface covered the trench and immediately below it there were shallow features, pits and gullies, cut into the natural, including one with hard packed black burnt soil. Only a few scraps of pottery were found in these features but the loam layer contained only Romano-British pottery with four derived prehistoric sherds.

The excavators concluded that the lowest features had been dug during Period I of the Romano-British occupation with a black loam accumulation later, the top defined by a hard-packed surface. There was then a further black loam layer accumulated with mixed Saxon and early medieval pottery formed perhaps by manuring and digging. The layer appeared to be too thick for an uncultivated waste area. After the 12th century, brown loam deposits occurred which contained gravel possibly from a nearby road surface. If the ditch at Site 1 is correctly interpreted as part of the enclosure, the Pentecostal Church, Site 2, would lie just within its boundary.

7.4 Town Mead Road (Site 3, Fig. 1A)
In 1958 pottery was collected by F.W. Greenslade from a service trench at the north end of Town Mead Road, formerly Black Boy Alley. It was found at between 1ft 6in and 2ft (45 to 60cm) above natural which itself was recorded at a depth of 3ft (90cm). Two, fitting, grey ware base sherds are all that can now be found of this collection (App. 1B(c)). The precise location of this find is in doubt.

7.5 Essex House, 1977 (Site 4, Fig. 1A)
A small excavation was undertaken at the back of Essex House, Sewardstone Street. Loam layers 2ft 2in (66cm) thick were seen on natural clay which was 4ft 9in (1.45m) from the surface. Some 18 Romano-British sherds were found in the lowest 1ft 8in (51cm) of this loam and derived in a pit which cut through it. Most of the pottery is of Period II (App. 1B(d)) and was found throughout the depth of the lowest loam; plough marks, east to west, were seen in the natural clay and may show how the Period II pottery was mixed up. The absence of later pottery may suggest this was Period II ploughing. This site would be just inside the enclosure discussed in Para. 3.

7.6 No. 8 Market Place, 1975 (Site 5, Fig. 1A)
An excavation was carried out on a vacant plot on the east side of the Market Place at the back of Nos. 1 and 3 Sun Street (behind the advertising hoarding on Pl. 1B). Nearest to the Market Place, seen at the back of a cellar wall but not excavated, were layers of loam with a thin layer of sandy clay from a depth of 4ft (1.2m) to 8ft (2.4m) below the 1981 Market Place surface. Some 20ft (6.1m) back from the Market Place, Romano-British evidence was found at a depth of about 7ft (2.1m) to 9ft (2.7m). A shallow north-

south gully was bordered on one side by a pile of four large pieces of *tegulae* and an *imbrex* (App. 2). The gully and the loam above contained a total of 13 Romano-British sherds; no later pottery was found in these strata. These sherds were mainly of fine vessels (App. 1B(e)) and appear to be of Period II with earlier derived material of Period I. This site would be just inside the enclosure discussed in Para. 3.

7.7 Nos. 7 and 9 Sun Street, 1975 (Site 6, Fig. 1A) During piling operations on this site, some 110 to 160ft (33 to 49m) from the east side of the Market Place, K.N. Bascombe collected pottery from the upcast. Nine of 26 sherds were Romano-British (App. 1B(f)). This site would be just outside the enclosure discussed in Para. 3. In excavations further down Sun Street only a little Romano-British material has been found.

8 Saxon occupation

Occupation of the Middle and Late Saxon periods has been attested in the Abbey Close, just north of the present church (Huggins 1976). Graves of a Middle and Late Saxon cemetery were excavated to the north east of the Market Place behind the properties on the north side of Sun Street (Huggins 1988). In 1985 burials were found under the present church floor, one of which has a radiocarbon date in the 7th century (Huggins unpublished [1]). Burials recorded by Winters (1888, 162), when Nos. 2 and 3 Market Place were being built in 1867, some 120ft (37m) from the present excavation, may have been part of the same large cemetery; a 'curved dagger blade' was recorded found there at a depth of 7ft (2.1m). A silver sceatta of *c.*715 A.D. was found at No. 6 Church Street in 1976 (Clarke and Huggins unpublished), some 280ft (85m) west north west of the excavations. Fragments of human bone (App. 6) were found in the loam F8 of an old ground surface; it is possible that these bones derived from the burials mentioned above.

An interesting idea, suggested by K.N. Bascombe, follows from the fact that the Market Place was the site of the medieval Moot Hall. This might be the traditional site for the meeting of the Hundred Moot (see also Paras. 2 and 3), in which case a mound may well have been desirable or already extant. Such a postulated earthen mound could account for part of the thick loam accumulation seen in excavations in and around the Market Place; some of the pottery found in the loam could have been transported here in the soil for the mound. It is not possible that this could account for all of the early evidence discussed in this report, but it must be noted that the top of the sandy loam with the derived 'prehistoric' and Iron Age sherds (App. 1A) could have been so introduced. As discussions have developed during the original writing of this report, in 1983 and since, it seems very likely that the original Hundred Moot met within the area of the 'old enclosure', which itself may have been a sufficiently notable feature for this purpose.

9 The Moot Hall

The single trench was laid out to part section the old Market House. It was fortunate therefore that it was also so positioned to yield sufficient evidence of the substantial flint-and-stone walled building, interpreted as the Moot Hall, for its construction to be understood. The outside of the west wall and the inside of the east wall and their foundations were seen (Fig. 2).

The foundations were carried down to a depth of 9ft (2.7m) below the medieval ground surface F8 and 13ft (4.0m) below the 1981 surface. The first material laid was a layer of sealing clay F31 inside the undercroft, the lowest stones F30 were set in grey ballast F32 which spread up over F31. Above was a course of stones F33 set in clay and a further layer of clay F34 in the undercroft which partly overlaid the stones. The walls were probably built from this level. The layer of mortar F39 in the undercroft may have been the base to a stone or tiled floor, a thin face of clay F37, against the inside of the east wall F36 could be explained as formed against a stone floor some 10in (25cm) thick but this seems excessive. The east wall F36 was of coursed flint and stone set in a lime mortar. Water inside the undercroft seems to have been a problem as evidenced by the two layers of silt F38 and F40, the former with early 16th-century sherds. An attempt seems to have been made to waterproof the wall by mortaring on roof tiles F41. The mortar F39 may result from this operation. The floor level may have been raised to the mortar deposit F42 or this could have resulted from the demolition of the building *c.*1670. The outside of the west wall was seen; it is described under feature numbers F11, 12 and 13 being designed 3ft 6in (1.07m) thick above ground. There were two external offsets to reach a maximum thickness of 5ft (1.52m); the ballast F14 was backfilled against the two offsets. The wall robbing and the undercroft fill are discussed below.

The ground surface when building began is probably represented by the sandy loam F8. The thin clay layer F9 above is then seen as a Moot Hall building spread deriving from foundation digging. Three sherds, dated to *c.*1200, were found in these levels. A posthole F58, seen in F8, may be of the Moot Hall construction period. The ground level was then raised by the deposition of the clay and loam mixture F16. Also various hearth and associated features, F17 to F22, are likely to be of the construction period; there was a 13th-century sherd in F16 and, in F20, one of 13th-century or later date. It is probable that the mixed level F23, of Reigate stone dust and clean gravel, covering the above features was the last of the deposits of the construction period of the Moot Hall.

Three times during the period of use of the Moot Hall the need arose to clean or level up the ground by spreading layers of clean gravel. The deposit F24, with one sherd of 1475-1500, was the first of these, after which a typical black occupation loam F25 accumulated with pottery also of late 15th-century date. The second gravel layer F26 had two sherds loosely dated 14th or 15th century. The pit F27 was cut through the gravel F26 and had 16th-century pottery. The second occupation loam F28 had pottery dated late 16th or early 17th century; the third gravel layer F29 had pottery of the same date and was the last of this succession of deposits. The width of the undercroft of the Moot Hall

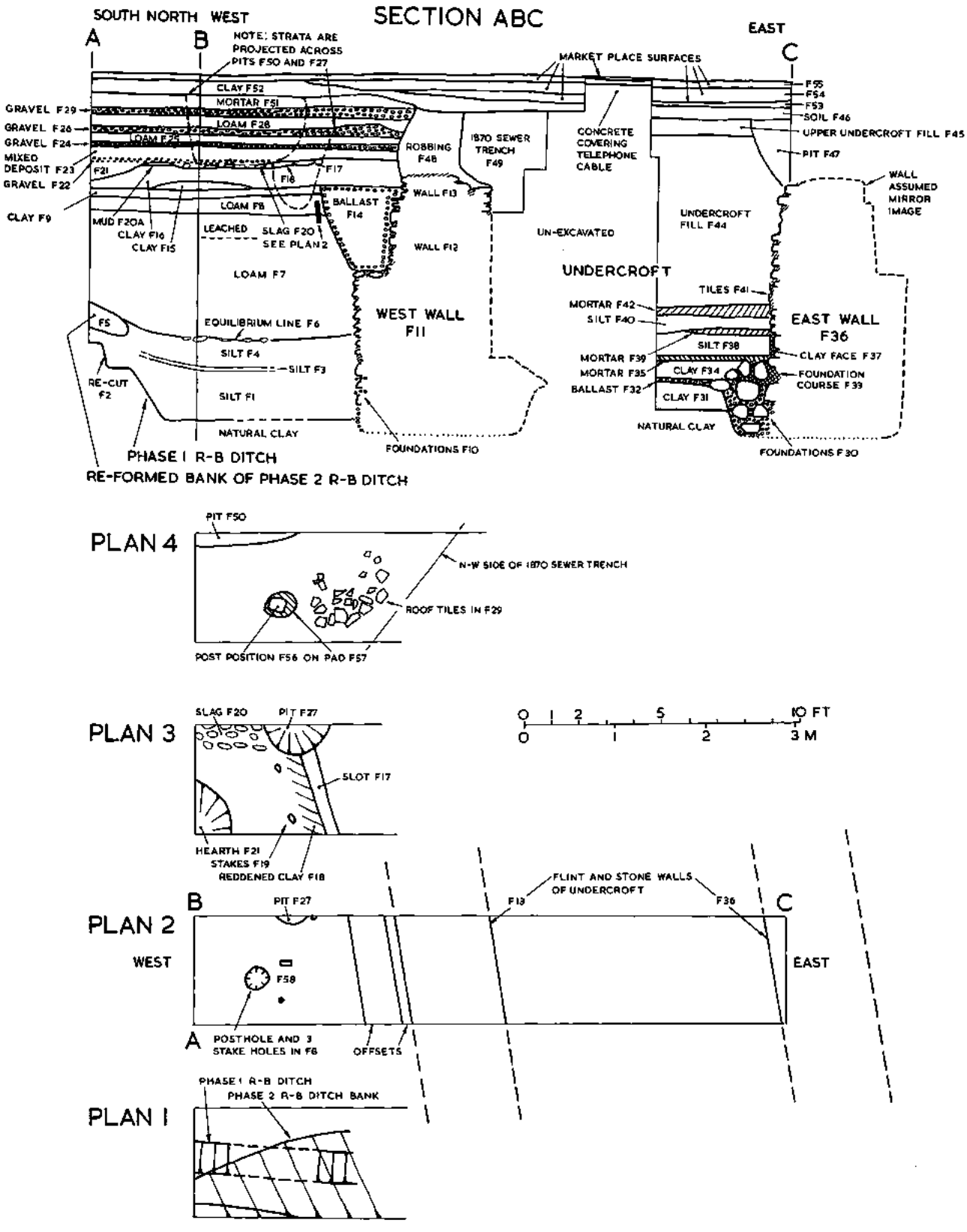


Fig. 2 Market Place, Waltham Abbey, 1981. Plans and sections.
Plan 1 is the earliest; section AB is of the west end of the trench.

was very narrow, being designed 10ft (3.05m) internally and 17ft (5.18m) externally. Probing from the undercroft fill failed to detect either of the end walls but these were found by narrow machine trenching in 1983 during the pedestrianisation works; the length was designed 20ft (6.1m) internally and 27ft (8.23m) externally.

The date of the construction of the Moot Hall depends on the single 13th-century sherd in the construction deposit F16 and on another single sherd in the sealing clay F31, inside the building; this latter sherd is dated 'after 1250'. This is consistent with its construction following the completion of monastic church building in 1242. The setting out of Sun Street into 4-pole and 5-pole plots has been suggested to have followed the Abbey foundation (Bascombe in Dickenson 1982, 7). The Moot Hall is on a slightly different alignment to Sun Street and most of these plot boundaries which include the east side Market Place boundary (Fig. 1A). Thus the Moot Hall might be expected to be earlier. It is interesting that the monastic precinct boundary on the north side of Sun Street (see Huggins 1988, Fig. 1) is also out of line, in the same sense, with Sun Street and its properties. Thus it can be suggested that the Moot Hall was aligned on this precinct boundary, at that time being represented by a deep ditch and possibly a wooden fence. In this case it would appear that Sun Street property boundaries were laid out or re-aligned following the construction of the Moot Hall. It is also conceivable that the alignment of the Moot Hall might have been determined by that of a timber predecessor built soon after the grant of the manor and market to the Abbey in 1189 but before Sun Street and the Market Place were established in their present form.

The end of the life of the Moot Hall, based on material in the undercroft fill F44 and in the wall robbing F49, is *c.*1670-80. Thus the building could have had a total life of perhaps just over 400 years, perhaps less. The possibility that the original stone Moot Hall may have been larger than the undercroft described in this report cannot be ruled out since the corners of the building were not seen; however the foundations seen are consistent with the representation on the *c.*1600 map (Fig. 1C).

10 The Market House

The Market House building (Pl. 1A) is described in Para. 2. It must have been built after the demolition of the Moot Hall and this is dated *c.*1670-80; it was itself demolished in 1852. The first documentary reference is in 1741.

No substantial remains of the Market House were seen in the excavation, in fact probably none exist. The post hole F56 for a post sitting on a mortar pad F57 (Fig. 2, plan 4) are the only features seen of the building; they seem to represent one of the posts supporting the market benches around the central structure. The deposit of stones in sandy clay F52, which covered the Moot Hall wall robber trench,

Pl. 2A Market Place, Waltham Abbey, 1985.
View from the south east after pedestrianisation. The darker paving represents the walls of the Moot Hall. (Photo: J.H. Littlefair).

and the compacted stone layer F53 must have been the first surfaces of this era. They and the subsequent surfaces, F54 and F55, have been left intact in the pedestrianisation scheme, they have been covered with bricks set in sand.

11 Conclusions

The investigation began with a search for the remains of the old Market House so that its position could be indicated as a point of interest in the town centre pedestrianisation scheme. The discovery of a substantial earlier building was an unexpected bonus. The walls had been seen in 1870 but Winters thought they were of a subterranean passage. With hindsight it is strange that the realisation did not come sooner that the little building, important enough to be shown clearly on the *c.*1600 map, was the Moot Hall. The excavation gave impetus to the appreciation of the significance of the documentary record and to the identification.

The probable identification of *eldeworth*, the old enclosure, with an outline shown on the *c.*1600 map has followed during the post-excavation study. The opinion is growing that the enclosure is of Romano-British origin and was the site of the meeting of the Hundred Moot. Two periods of Romano-British occupation are indicated. The end of Period I, as evidenced by the Site 1 pottery from Sewardstone Street, seems to be in the first half of the second century, A few sherds from Site 2, two stray coins and small derived fragments of samian ware from several sites, suggest that the Period I settlement began in the second half of the first century; this could be extended back to the Claudian invasion but not beyond. At Nazeingbury, to the north, the Romano-British farm (Phase 5) was thought to end by 160 A.D.; thus the settlements there and at Waltham could be roughly contemporary.

To the south of Waltham, evidence at Upper Cobfield and at Sewardstone Hamlet is dated more broadly to the 4th century than the Period II pottery from Waltham which is dated '*c.*360 onwards', meaning perhaps to a decade or more between *c.*360 and 400 A.D. However coins from Waltham suggest that Period II may cover more of the 4th century than the pottery so far indicates. In the 4th century at Nazeingbury the fields seem to have been given over to pasture. Further discoveries at Waltham can be expected to broaden the length of the occupation so far substantiated.

The few Middle pre-Roman Iron Age sherds are the first of that period to be identified at Waltham.

Appendix 1 Pottery

This account of the pottery found in the 1981 excavations, and of additional Romano-British and prehistoric material, is based on the advice of Rhona Huggins; she has written the account of the medieval and post-medieval material. The help of Paul Drury is specifically acknowledged.

A Prehistoric

As mentioned in Para. 6 the only prehistoric pottery previously reported from the town is 30 sherds from two bowls of Peterborough neolithic ware in Ebbsfleet style (Huggins 1970, Fig. 8). This is a hand-made pottery of grey, black or pinkish fabric, often with pinkish surfaces, containing some sand and a characteristic tempering of crushed calcined flint which often protrudes through the surfaces, and it has distinctive herring-bone cord-impressed decoration.

More recently, prehistoric pottery has been found as follows:

1974 Pentecostal Church: four small eroded sherds with crushed-flint temper, in the lowest loam (Site 2, Para. 7.3).

1981 Market Place: three smallish sherds with crushed-flint temper and four other larger sherds, all from loam F7.

1984 South aisle of the present church: eight sherds, some of moderate size and fresh, with crushed-flint temper, one other prehistoric sherd (details below).

The four 'other' sherds from the 1981 excavations have been identified as Middle pre-Roman Iron Age by P.J. Drury on comparison with the material from Little Waltham, north of Chelmsford (Drury 1978, 58). Two sherds compare with Little Waltham fabric G (fine dark grey-black fabric tempered with vegetable material, and occasionally a little sand), and one with fabric H (dark grey to black fabric tempered to varying degrees with sand, and occasionally a little vegetable material). The fourth sherd had vegetable temper with a little sand so the distinction between the sherds, without much material to study, is not very marked. These seven sherds from the 1981 excavations were all found in the thick loam F7 mixed up with Period II Romano-British material and were therefore all residual, perhaps being introduced from elsewhere or re-deposited from pit or ditch digging.

In 1984 ten sherds were found during salvage work in the south aisle of the present church when new steps were built down to the crypt; they were found backfilled into a presumed Middle Saxon grave (Huggins, R.M. in Huggins unpublished [1], F58, Burial 16). Seven of these were of dark grey to black fabric with crushed calcined-flint tempering; one was in a fine fabric with sand and flint temper and had a red core and black surfaces. The ninth sherd had sand and vegetable temper. The tenth sherd in the grave is considered to be Middle Saxon.

The crushed-flint tempered sherds found in the south aisle of the church were large enough to suggest they came from straight-sided vessels, as opposed to the neolithic bowls, and the likelihood is that some at least of these sherds are also of the Middle pre-Roman Iron Age. It is of interest that fabric J at Little Waltham (Drury 1978, 58) contained some crushed flint as did pottery type 1 at Ambresbury Banks (Alexander *et al.* 1978, 203); in the latter case the pottery is judged to be pre-Belgic and probably of the Middle pre-Roman Iron Age.

At little Waltham, the fabrics referred to above are found in contexts from the mid-3rd century to the first quarter of the 1st century B.C. A similar date is therefore suggested for the above pottery from Waltham Abbey.

B Romano-British

Besides the 46 Romano-British sherds found in the present excavations in the Market Place, the opportunity is takena to describe the pottery discovered at six nearby sites and previously unpublished. The material appears at present to divide into two distinct periods:

Period I Second half of 1st century to first half of second century A.D.

Period II *c.*360 onwards (possibly only a decade or two between *c.*360 to 400 A.D.

Period I is best exemplified by salvaged pottery from Sewardstone Street (additional Site 1, Fig. 1A) and Period II from the present 1981 Market Place excavations. The material from the additional sites will be discussed first.

(a) Sewardstone Street, 1971 (Site 1, Fig. 1A, Para. 7.2)

Some 56 sherds were recovered from the presumed ditch crossing Sewardstone Street, these were of moderate size and of fresh appearance; 48 were grey wares, 5 buff and 3 of coarse shelly fabric. Four grey-ware rims can be compared with illustrated pots from Nazeingbury (Huggins, R.M. in Huggins 1978, Figs. 13, 17 and 18) some 4 miles (6 km) north of Waltham. One coarse grey sherd with sand temper is like No. 24 there (from Pit 1 at Nazeingbury with samian pottery dated *c.*120-145 A.D.); one fine grey is like No. 171 and another like No. 167 (both from ditch 5, of the first half of the 2nd century); the fourth rim, of coarse shelly ware, is like No. 58 in form and decoration but not fabric (from ditch 1/2 of *c.*75-150 A.D.). Thus if the Sewardstone Street group is considered as a whole, a date in

the first half of the second century seems probable for the filling of what may be the southern boundary ditch of the postulated Romano-British enclosure and thus for the end of the Period I occupation.

(b) Pentecostal Church, 1974 (Site 2, Fig. 1A, Para. 7.3)
The lowest loam and a possible gully contained 15 Period I Romano-British sherds, two were of indeterminate rough pinkish fabric and the other 13 were of grey wares; three were of moderate size and fresh, the others being small and somewhat battered. Four rims were included in this group: the only large rim is of a narrow-necked jar like No. 145 at Nazeingbury (Huggins, R.M. in Huggins 1978, Fig. 16; in ditch 6E there, dated before 160 A.D.) and is not inconsistent with a Period I date of the first half of the 2nd century A.D. The other three small pieces of rim are from small pots including one black burnished; without clear parallels these could date to the second half of the 1st century A.D. In the intermediate loam layer, there were 12 Romano-British sherds of Period II mixed with Saxon and medieval pottery; eight of the Romano-British sherds were of indeterminate grey wares, one was shell tempered, one was a fragment of black-coated buff fabric and two sherds, a rim (Fig. 3, No. 5) and a base, were in Much Hadham red ware clearly of Period II.

If the Site 1 ditch-fill pottery dates the end of the Period I Romano-British occupation, the evidence here may extend this early occupation back into the second half of the 1st century A.D., with Period II loam deposited or forming over the Period I features.

(c) Town Mead Road, 1958 (Site 3, Fig. 1A, Para. 7.4)
The two fitting grey ware sherds have been identified by P.J. Drury and C.J. Going as Much Hadham pottery of Period II; this is the first such grey ware recognised here. The sherds are from the base of a flagon (Fig. 3, No. 9).

(d) Essex House, 1977 (Site 4, Fig. 1A, Para. 7.5)
Sixteen Romano-British sherds were found here. Eight were of Much Hadham red ware, including two rims (Fig. 3, Nos. 7 and 8), there was one other red ware sherd, two chocolate-brown colour-coated buff ware, four grey ware and one samian fragment; the Much Hadham pottery of Period II was found throughout the depth of the lowest loam and was not mixed up with later pottery. This site would be just inside the eastern boundary of the postulated Romano-British enclosure.

(e) No. 8 Market Place, 1975 (Site 5, Fig. 1A, Para. 7.6)
A total of 13 Romano-British sherds were recognised. In a shallow gully, was found a worn red-painted red ware sherd, with grey core, of a hemispherical flanged cup of samian form 38; the fabric is micaceous and has the apparently typical Much Hadham ironstone inclusions. In the loam above the gully there were a further nine Romano-British sherds, one was of buff ware, one was the rim and neck of a beaker of chocolate-coated red ware like Colchester form 409 (Hull 1963, Fig. 107), there were also two fragments of samian rims and five Much Hadham red ware sherds; one of these latter was a part rim, like Colchester form 317 (*ibid*, Fig. 105), probably copied from samian forms and, at Colchester, dated to the 4th century. Another three sherds were residual in a medieval pit, two of these were samian fragments but the other was a Much Hadham rim (Fig. 3, No. 6) of a flanged dish with upturned rim.

This group of 13 sherds contains eight probably of Period II and four small derived Period I samian fragments; the high survival rate of samian sherds as residual material has been noted elsewhere (Frere 1972, 263). The group has a high proportion of table wares. Like Site 4 this site is just inside the eastern boundary of the postulated Romano-British enclosure.

(f) Nos. 7 and 9 Sun Street (Site 6, Fig. 1A, Para. 7.7)
This small unstratified collection of eight Romano-British sherds consisted of five grey wares including one rim, two orange/pink possible amphora sherds and one chocolate colour-coated red ware; the latter may be a Colchester product. This site would be just outside the eastern boundary of the enclosure.

(g) Market Place, 1981 (Para. 7.1)
In the loam F7 a total of 46 Romano-British sherds were recovered: 12 Much Hadham red ware sherds including four rims (Fig. 3, Nos. 1-4), an Oxfordshire white-slipped mortaria rim and a base, a Northamptonshire mortaria base with characteristic ironstone grit, 16 grey ware including eight rims, seven buff ware including three rims, six shelly ware including one rim and two small samian rims. Unlike much of the pottery discussed earlier, the sherds of this group were in general larger and the edges of sharp appearance. P.J. Drury examined the group and identified the Oxfordshire and Northamptonshire sherds and suggested the date of 'c.360 onwards'; he considers the shelly ware sherds are of 4th century date too.

The above material is not apparently ditch-fill pottery, at least not completely so, and does not date the end of an occupation. It occurred throughout the loam F7 and dates a limited occupation perhaps only a decade or two within Period II *c.*360-400 A.D.

C Survey of Much Hadham Pottery
Two Much Hadham ware kilns, at Bromley Hall Farm, Much Hadham, Hertfordshire, some 13 miles (21 km) north of Waltham, were excavated in 1964 and 1967 by Bernard Barr of Enfield; the material is deposited in Hertford Museum (information from two typewritten sheets, 1967 or soon after). Since the kiln material remains unpublished and is an important pottery hereabouts the opportunity is taken to survey material from the lower Lea Valley.

Besides the four rims from the present excavations, five other pots from Waltham are included in Fig. 3. These Much Hadham sherds contain a little mica and some quartz grains, and, most characteristically perhaps, specks of black, identified in Blurton (1977, 37), as iron ore.

D Medieval and post-medieval
by R.M. Huggins
Pottery of the post-Roman period included; a few medieval sherds in a layer pre-dating the Moot Hall and in layers associated with the construction of the Hall; small groups from layers built up outside the Moot Hall during its use; larger groups from the fill of the undercroft and from reinstatement after wall robbing. Numbers of sherds and fabric codes are given in the Feature List; the fabrics are described elsewhere in this volume (Huggins, R.M. in Huggins 1988, App. 1).

One sherd was found in the ground surface F8 and two in the clay F9 which resulted from the digging of the foundations. They included two grey ware sherds (G) and one grey unglazed base sherd of a jug (J1), all of which could date to *c.*1200. A fragment of red sandy ware jug handle with traces of glaze, and tiny white particles in the fabric, of 13th century date, was found, in worn condition, in the clay F16 which was no doubt laid down to raise the ground level before building finished. Another sherd, of a finer red ware jug with white slip vertical stripes painted outside, was found in clay F31, a sealing deposit inside the undercroft, this fresher jug sherd cannot date before 1250. The practice of decorating with white stripes is common, in the Waltham area, until the 15th century; the earliest examples, however, appear to be finer and more carefully decorated so that a late 13th or early 14th century date is most likely for this sherd. Thus the construction of the Moot Hall appears to date after 1250.

The build-up layers, F24-26, F28 and F29, outside the Moot Hall contained sherds of fabrics H, J2, K, M and N, and indicate a period of use into the 17th century. The loam F25 contained the most pottery including three sherds of a fine buff ware bowl with mottled green glaze on both sides, of the late 15th century. The highest layers F28 and F29 contained unglazed and glazed wares of fabric M and N dating to the late 16th and early 17th centuries. All the groups were small.

The silt layer F38, inside the undercroft, below the later fill, contained a fragment of a red ware glazed bunghole cistern with two brown-glazed red ware sherds of type M and a green-glazed red ware dish rim, all probably of the 16th century. Presumably the floor level was being raised above this deposit.

The undercroft fill F44 contained the largest group of pottery all dated to *c.*1670-80. 'Metropolitan' ware type N formed the largest proportion of this group; represented were a minimum of 11 undecorated brown-glazed vessels including a small jug, two white tin-glazed delft ware vessels and one with blue decoration, three Rhenish stoneware bottles with facemasks and three unglazed red ware jugs. There were also six English brown-glazed stoneware sherds and two intrusive Victorian white ware sherds. The fill F48 over the robbed walls and the sewer trench

backfill F49 contained pottery similar to that described above. The style of the Rhenish stoneware facemasks is similar to some found, with sherds dated 1675 and 1676, at the Fulham factory site of John Dwight after 1672 (Christophers *et al.* 1977, 4). This stoneware together with the Metropolitan slipwares, suggests a date of *c.*1670-80 for infilling of the undercroft and the robbing of the walls.

Fig. 3 Much Hadham pottery from Waltham; 1-8 red wares, 9 grey wares

1. Jar, red-painted, burnished. Loam F7, Market Place, 1981.
2. Jar, red-painted, burnished. Loam F7, Market Place, 1981.
3. Jar, red-painted, grey core. Loam F7, Market Place, 1981. The rim of this jar is paralleled at Angel Court, Walbrook (Blurton 1977, Fig. 9, No. 244) in Much Hadham ware; its context seems not to be given.
4. Part of a funnel (suggestion by P.J. Drury), red-painted, burnished, grey core, cord-like impressions on rim. Loam F7, Market Place, 1981.
5. Jar, red-painted, tooled on outside. Intermediate loam, Pentecostal Church, 1974 (Site 2). Like Nos. 21 and 53 from Sewardstone (Huggins, R.M. 1978, Figs. 4 and 5).
6. Flanged dish or bowl with upturned rim, red-painted, burnished, worn, impressed decoration (arrowed) remaining in three places, cord-like under rim, pellet-like on top. Residual in medieval pit, No. 8 Market Place, 1975 (Site 5). There are two illustrated Much Hadham flanged dishes of this sort from Enfield (Gentry *et al.* 1977, Figs. 22 and 24), shown there as Nos. 15 and 23 but they are drawn with the upturn closer to the plane of the top of the dish.
7. Jar, rough surface, some evidence of possible burnishing. Romano-British loam level, Essex House, 1977 (Site 4).
8. Jar, rough surface, some evidence of possible burnishing, form like No. 2. Romano-British loam level, Essex House, 1977 (Site 4).
9. Base of flagon in Much Hadham, grey ware, carefully burnished outside. Salvaged from Town Mead Road, 1958 (Site 3).

One other Much Hadham rim from Waltham has been illustrated (Huggins 1973, Fig. 6, No. 25) and a ring base is remembered from 1972 Chapter House excavations by A. Havercroft. From Sewardstone Hamlet, some 1¾ miles (2.8km) south of Waltham, is the largest Much Hadham group published; this includes 19 rims and bases (Huggins, R.M. 1978, Figs. 4-6, Nos. 2, 7, 12, 21-23, 52, 53, 56, 58, 66, 68, 86, 87, 89-91). Bowls, jars, a beaker and a mortaria are represented (at Much Hadham itself, cooking pots, flanged dishes and flagons were also recorded). The Sewardstone site was abandoned towards the end of the 4th century.

Further south at Leyton, some 8½ miles (14km) from Waltham, seven Much Hadham pots have been published (Greenwood 1979, Figs. 12-14, Nos. 6, 41-43, 68, 69, 112); this site is dated to 'the 4th century, particularly the later part'. At Old Ford, 10½ miles (17km) south of Waltham, where the London-Colchester road crosses the Lea, a further four sherds have been illustrated (McIsaac *et al.* 1979, Figs. 19-22, Nos. 128, 169, 209, 238) from 4th century contexts. On the west side of the Lea at Enfield, four miles (6km) south west of Waltham, four more Much Hadham sherds have been published (Gentry *et al.* 1977, Figs. 22-24, Nos. 15, 21.14, 21.16, 23) including flanged dishes with an upturned rim (like Fig. 3, No. 6 at Waltham); at Enfield the site lasts to the end of the 4th century.

The rough distribution of Much Hadham products has been shown by Fulford (1975, Fig. 61) to be in East Hertfordshire, Essex and Suffolk. It is also found in London, for example at Walbrook from which four sherds have been illustrated (Blurton 1977, Fig. 9, Nos. 243, 244, 246, 247) where the fabric variation is discussed.

Victorian pottery includes English brown stonewares and blue-printed white wares from the latest activities F46 and 47 and suggest these took place after the demolition of the Market House in 1852.

Appendix 2 Brick and tile

Hard-fired Romano-British brick and roof tile was found in four features of the 1981 excavations. There were 163 pieces in the sandy loam F7, 16 in Loam F8 above, two in clay F9 and 15 pieces in the 1870 sewer trench F49, having been dug out of the above layers and backfilled over the sewer. The material included 20 pieces of *tegula* and 15 of *imbrex*, in two fabrics, one ochre and the other orange in colour. See Feature List for details of this material.

Romano-British brick and roof tile is often found in excavations at Waltham. Just north of the church, in late Saxon contexts, some 260 pieces including 18 *tegula* and two flue tiles were noted (Huggins 1976, 124-5). During 1984-7 excavations outside the east end of the church and therefore about 230ft (70m) north of the Market Place another 113 pieces were found including 12 *tegula*, one *imbrex* and six flue tiles (Huggins 1988, App. 4). A few further pieces were found in excavations inside the church in 1985/6.

At the Pentecostal Church, Site 2, there were six pieces including three *tegula*, one *imbrex*, and one flue tile. At Essex House, Site 4, there were 11 pieces including one *tegula* and one flue tile. At No. 8 Market Place, Site 5, four large pieces of *tegula* and an *imbrex* were found together by the side of a shallow gully. At Church Street (Clarke and Huggins unpublished) there were 53 pieces including six *tegula*, one *imbrex* and one flue tile. In Romeland, west of the church there were 19 pieces. The indications are that there was a source of supply of Romano-British building debris into the 11th century at least and that it was 'quarried' as rubble.

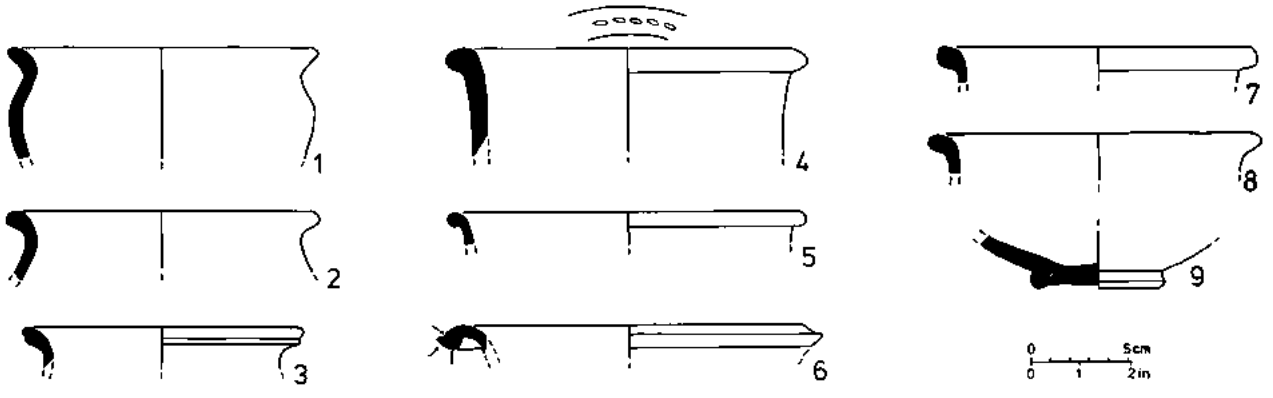


Fig. 3 Market Place, Waltham Abbey. Roman pottery discovered 1958-1981.
Much Hadham red ware: 1-4; Market Place, 1981.
5 ; Pentecostal Church, 1974.
6 ; No. 8, Market Place, 1975.
7-8; Essex House, 1977.
Much Hadham grey ware: 9 ; Town Mead Road, 1958.

The precise source of this material is not known but with the presence of roof and flue tiles a nearby substantial building is to be expected.

Medieval roof tiles F41, mortared on the side of the undercroft wall F36, were of the lug type. Those in the undercroft fill F44 included both lug and peg types. There were no whole specimens.

Appendix 3 Clay pipes

In the undercroft fill F44 some 40 pipe bowls were recovered (ref: Oswald 1975, Figs. 3, 4 and 7):

10 pipes: Oswald, 5, 1640-60
13 pipes: Oswald, 6, 1660-80
12 pipes: Oswald, 17, 1640-70
5 pipes: Oswald 2b, *c.*1660-80

The latter is a Broseley type with Sam Decon on the bowl, presumably Samuel Deacon, *c.*1650-80 (Oswald 1975, 180). In the upper fill F45 to the undercroft there were nine additional pipes: three of Oswald 5, four of Oswald 6, one of Oswald 8 and one of Oswald 17. In the wall robbing F48 there were two of Oswald 6 and one of Oswald Broseley 2b of Sam Decon. In the 1870 sewer trench F49, which cut through F48 and F44 above, there were four of Oswald 5 or 6 and two of Oswald 17. Based on this evidence and the pottery, a date of *c.*1670-80 is given for the demolition of the Moot Hall as represented by the filling of the undercroft and the wall robbing.

Appendix 4 Glass

Some 20 fragments each of bottle and window glass were found in the undercroft fill **F44**; there was one fragment of lead came. None is considered worth illustrating.

Appendix 5 Animal bone

Animal bones were found in nine features. The total dry weight was 64lb (29kg). The contexts ranged from the Romano-British to the 17th century. The details are as follows (the figures are the minimal number of animals):

F7 Romano-British soil accumulation: 3.8lb (1.7kg), two horse, two ox, one sheep, one pig. There were only ten identifiable bones. One horse was very arthritic with the cuneiforms, the navicular and the cuboid all fused solid with the proximal end of the metatarsal. The other horse was under 3½ years on the evidence of an unfused tibia. A complete ox radius measured 314mm overall, the other ox was under 1½ to 2 years old on the evidence of an unfused metacarpal. The single pig tibia was unfused. A sheep/goat femur was similarly unfused. A few longbone fragments suggested they were purposely fractured to extract marrow.

F8 Soil of old ground surface: 0.4lb (0.2kg), one pig.

F9 Dirty clay, Moot Hall building deposit: 0.7lb (0.3kg), one ox, one sheep, one pig.

F25 Occupation loam, late 15th century: 4.5lb (2.0kg), two ox, two sheep.

F27 Pit, probably 16th century: 2.0lb (0.9kg), one ox, two sheep, one pig, two deer (on tibias).

F28 Occupation loam, 16th century: 1.0lb (0.5kg), one ox, two sheep.

F29 Gravel spread: 1.0lb (0.5kg), one ox, two sheep, one pig.

F38 Silt, first half of 16th century: 4.0lb (1.8kg), two ox, three sheep, one pig, one chicken, one duck, one goose.

F44 Undercroft fill, *c.*1670-80: 47lb (21kg), seven ox, 14 sheep, one dog, one rabbit, two chicken, one pigeon. The ox vertebrae had axial cuts showing the carcase had been cut in two, long bones had been hacked to extract marrow. The sheep were identified from the horn cores. Skull fragments show the sheep had not been pole axed, the skull had been cut down the centre. The proximal ends of the six sheep cannon bones suggest the feet had been cut off perhaps with the fleece.

Appendix 6 Human bones

Fragments only of human bones were found in the sandy loam F8 of the old ground surface; there was one piece of skull and two fragments of pelvis. The nearest burials recorded are to the north under Nos. 2 and 3 Market Place (Winters, 1888, 162-3); a little further to the north east, burials have been shown to be Middle and Late Saxon (Huggins, 1988, App. 13). The fragments found could have derived from this cemetery.

Appendix 7 Roman coin gazetteer

Over the years coins have been recorded as follows:

1. Claudius 41-54 A.D., north-west side of Market Place, found during public works, *c.*1970.
2. Vespasian 69-79, in the old River Lea (Winters 1888, 184).
3. Caracalla 198-217, 16 Rochford Avenue (found *c.*1980), well out of town to the east.
4. Victorinus 269-70, Abbey Close excavations, very worn (Huggins 1976, 125), found with other derived Romano-British material.
5. Maximianus 286-310, Cloisters (letter from British museum, 1955).
6. Maximianus 296-305, Highbridge Street, under pavement near White Metal smelting works, *c.*1935, recorded by K.N. Bascombe 1966.
7. Licinius 308-24, in Waltham Abbey (Winters 1888, 184).
8. Constantine? 307-37, Abbey site, south west of Cloisters (VCH 1963, 197).
9. Constantine 307-37, Sewardstone Road outside fire station, reported 1970.
10. Constantine 307-37, Mr. Wakefield possessed several coins (Littler 1863, 54).

Ten coins south of the town in Upper Cobfield, near a postulated route between Waltham town and Sewardstone Hamlet, have been recorded (Huggins, R.M. 1978, 186): two are of Faustina 145-175; five are of the late 3rd century (265-296) including Claudius II, Tetricus I, Carausius and Allectus; three are of 4th-century date, Licinius II 317-324, Constantine II 317-340 (British copy), Constantius I 354-61. The Cobfield identifications are by Peter Penfold who found the coins. Pottery was picked up with the coins from Cobfield and nine rims were paralleled with 4th-century examples from Sewardstone Hamlet, less than a mile (1½km) further south (Huggins, R.M. 1978).

As to the evidence at Waltham, the coins of Constantine and Licinius and possibly Maximianus, to a total of perhaps eight coins or more, suggest activity earlier in the 4th century than the 1981 Market Place pottery of '*c.*360 onwards'. The two coins of the 1st century may support the limited evidence from Site 2, the Pentecostal Church, of some occupation in the second half of the 1st century. The only other coin from the town centre is the very worn Victorinus.

Acknowledgements

The excavation, in the centre of a working market, was an engineering undertaking. The Waltham Abbey Town Council coupled with the name of David Berry, Clerk to the Council, are especially thanked for moving the Market to an alternative site on four market days. The Epping Forest District Council are thanked for permission to excavate and for providing fencing; the on-site help of Bill Gordon and Steve Watson was much appreciated. The EFDC also allowed the mechanical digger to be used in 1983 to locate the end walls of the Moot Hall.

The help of local organisations is much appreciated. Abbey Plant Co. Ltd. lent a compressor and pneumatic rams for consolidating the backfill; Mr. G.E. Bridger lent skips and removed excess soil; Scaffolding (Great Britain) Ltd. provided poling boards and trench struts. Mr. Roy Ackrill provided storage in his shop for tools; the Thames Water Authority, Eastern Electricity, British Gas and British Telecom are thanked for providing plans of their services.

The excavation was carried out by Waltham Abbey Historical Society and friends from the West Essex Archaeological Group and the Enfield Archaeological Society. The trench was filled with one metre thick lean-mix concrete and tarmacced; WAHS paid for these materials. Dinah Dean was Secretary, Ron Gray was Treasurer, Jack Littlefair was photographer and dealt with the many visitors, Mary Salton was assistant Director. Rhona Huggins and Paul Drury gave advice on the pottery. Ken Bascombe has carried out documentary study. Mr. and Mrs. Green provided services at the Green Dragon; 'Pats Antiques' provided refreshment. All are warmly thanked for their contributions.

Dave Buckley, Essex County Archaeologist, and Owen Bedwin have encouraged and helped with this publication. The report has been written for several years and has been updated to the beginning of 1988.

Author: Peter Huggins, 27 Grange Court, Waltham Abbey EN9 1RQ.

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2 Hatfield House: Cecil Papers Maps and charts II f.23n; copy in British Library, maps, 186.h.2 (f.23).
3 BL Cott.Tib.C. ix. f.232. The earliest attribution to *temp.* Henry II (1154-89) by Reaney (1935, 30) is due to an error by Winters. The document in question (BL Harl.391 f.196) is of *c.*1255.
4 ERO T/A 202/9.
5 PRO SC 12/7/60.
6 ERO D/DP M1154 m.2r.
7 Cal. Close 1234-7, 235, 268.
8 Cal. Pat. 1381-5, 568.
9 ERO D/DJg T54.
10 ERO D/DP M1154 m.1; E.R.O. D/DJg T12/73; E.R.O. D/DJg T12/17.
11 PRO E303/3/Essex No. 231.
12 ERO D/ABW 8/59.
13 PRO E303/3/Essex No. 232.
14 Cal. Pat. 1553, 58-59.
15 PRO STAC 4 (Philip and Mary Bundles 6/23 and 10.17).
16 Cal. Pat. 1558-60, 350.
17 GL MS 9171/15 f.296b. This behest is contemporary with the construction of the new court-house/market-house at Barking, jointly by the Crown, as lord of the manor, and the local inhabitants (VCH 1966, 218). Possibly there was a move at Waltham towards a similar arrangement with Henry Denny.
18 ERO D/Dg L10.
19 ERO T/A499/4.
20 NRO W(C) 262.
21 NRO W/C 239, 240, 242, 246, 248, 253-260.
22 GL MS 9171/14 f.238.
23 Waltham Abbey Historical Society Collection.
24 NRO Acc. 1965/129.
25 ERO D/DHt P58.
26 1825 Crawter map of the town of Waltham Abbey, owned by Jessop and Gough, Solicitors, Highbridge Street, Waltham Abbey.
27 NRO W(C) Box No. 4a/1.
28 Original in the National Art Gallery of Victoria, Melbourne, Australia. This painting is not accurate in detail, but it does show, in a gable on the roof, a bell which was recovered from Scotland some years ago, and is now in the Epping Forest District Museum, Waltham Abbey.
29 NRO Box X2734 (presented at manor court 9 June, 1851).
30 Copy in Waltham Abbey Historical Society Collection.
31 In his commonplace book, p.196 (Waltham Abbey Historical Society Collection).
32 ERO D/DJg 013.
33 As ref. 31, p. 308.
34 As ref. 31, p. 304.

BL = British Library.
Cal. Close = Calendar of close Rolls, London.
Cal. Pat. = Calendar of patent Rolls, London.
ERO = Essex Record Office.
NRO = Northampton Record Office.
PRO = Public Record Office.
GL = Guildhall Library, London.

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Essex Archaeology and History **19** (1988), 215-222

A timber-framed building at Bocking (nos. 178-196 Church Street)

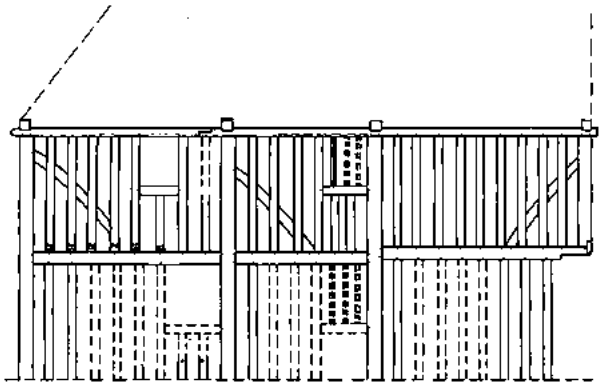
by David Andrews and Brenda Watkin

Introduction

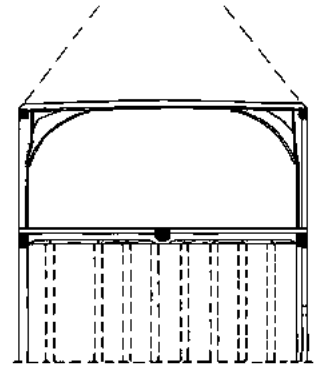
At the second of the bends where Bocking Church Street crosses the river Pant or Blackwater and joins Church Lane, there is an attractive group of cottages formed through the subdivision of a substantial timber-framed building dating mainly from the 16th century. The cottages had been completely refurbished in the 19th century, being replastered and equipped with uniform doors, windows and fascia boards. For at least ten years, they had lain empty and derelict before being restored in 1986-87. The frame of the earlier building was in the process entirely exposed (plate 1), and the opportunity taken to record it and to excavate a trial hole inside it.[1]

The timber-framed building consisted of three units: a cross-wing at right angles to Church Street, a wing to the south of this parallel to Church Street, and an extension to the rear (or east) of the cross-wing. The south wing originally had a porch, a smoke bay at its south end, and an outshot to the rear, now all demolished. Of these units, it was clear that the extension behind the cross-wing was the latest, as it has a gambrel roof, but the chronological relationship between the two wings was not immediately apparent. As the survey proceeded, it became clear that the cross-wing was the older, and that the south wing was a replacement of an earlier structure, presumably a hall which had originally abutted and no doubt preceded the cross-wing. The reasons for thinking this are as follows. The two wings are framed separately, not sharing structural members. The plates and girts of the north wing are at a lower level than those of the south one. The moulded fascias of the jetties (now underbuilt) and the mouldings of the principal internal joists are different in each wing. On its south side, the cross-wing was jettied for 1⅓ bays, at which point there is a jowled storey post. To the rear, or east, of this post, the frame is devoid of infill studs at both ground and first floor. In other words, the cross-wing had always had another unit adjacent to it in this position. But that a shallow housing, clearly a secondary feature, has been cut into the jowled storey post to receive the oversailing bressumer of the south wing indicates that the latter was not the building that originally stood in this position when the cross-wing was built.

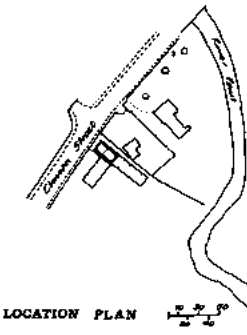
Plate 1 The timber frame exposed during reconstruction.



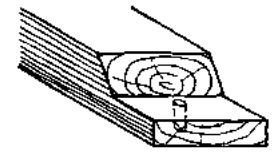
SIDE ELEVATION (north)



SECTION A-A'

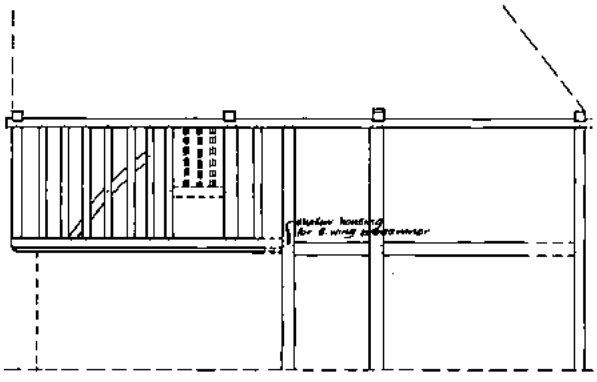


LOCATION PLAN

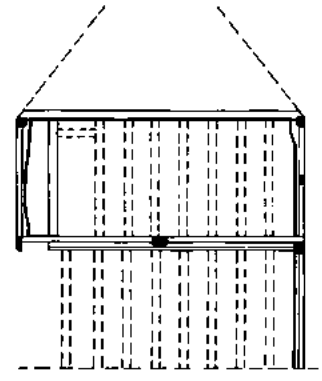


TYPICAL FLOOR JOIST JOINT

BRESSUMER MOULDING

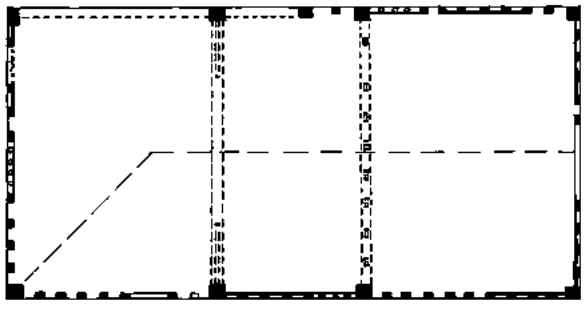


SIDE ELEVATION (south)

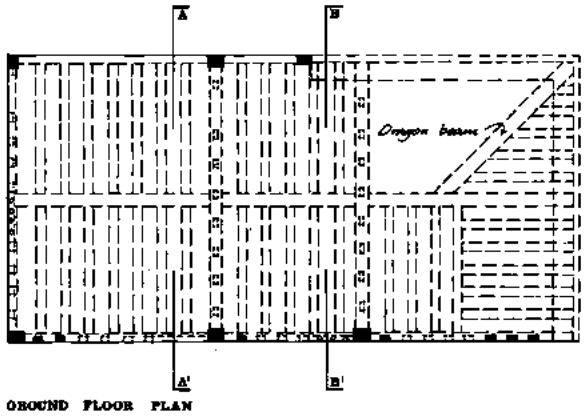


SECTION B-B'

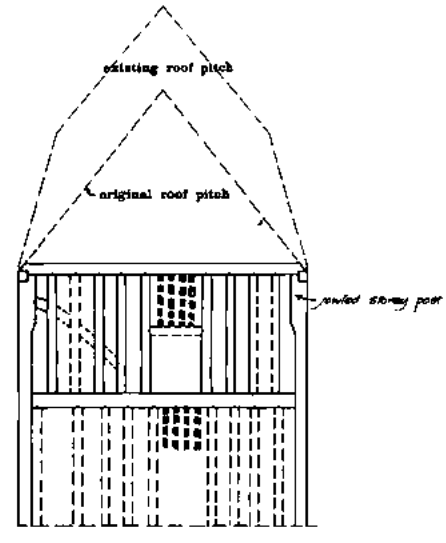
0 5 Feet



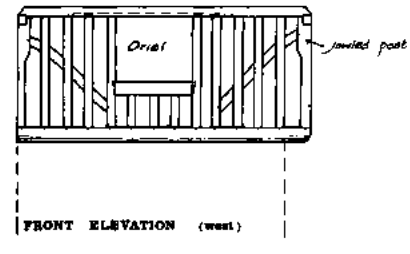
FIRST FLOOR PLAN



GROUND FLOOR PLAN

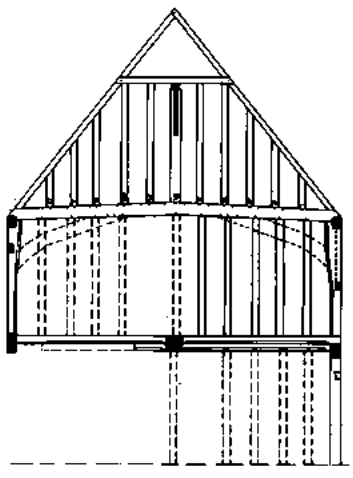


REAR ELEVATION (east)

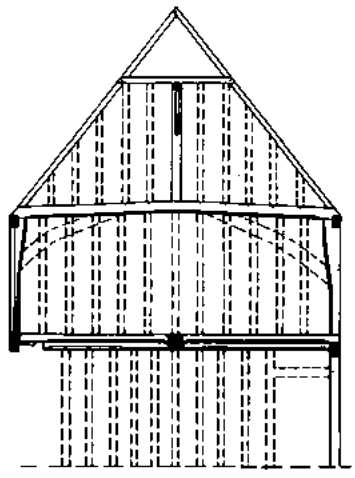


FRONT ELEVATION (west)

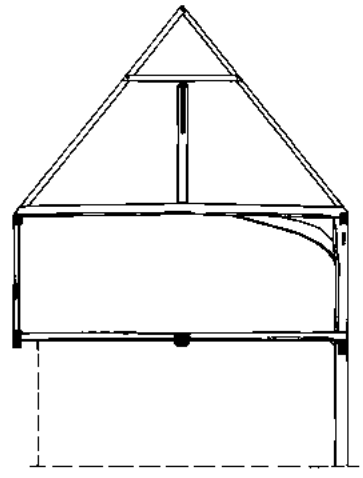
Fig. 1 The cross-wing.



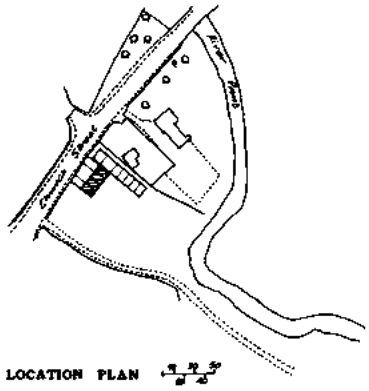
SECTION B-B'



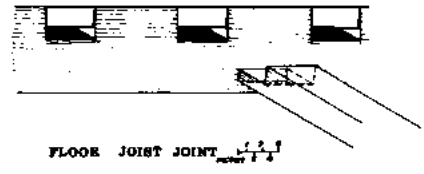
SECTION C-C'



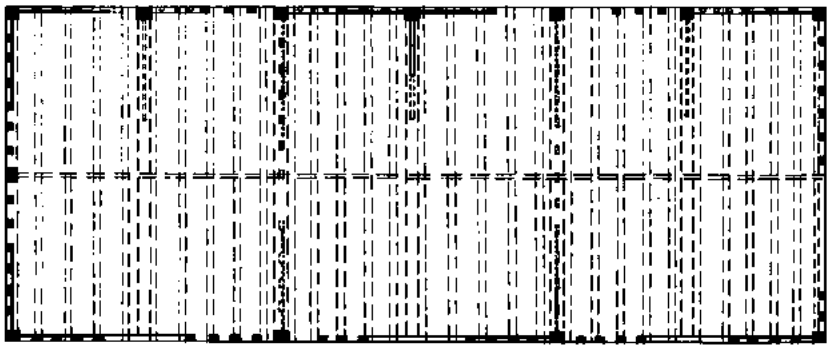
SECTION D-D'



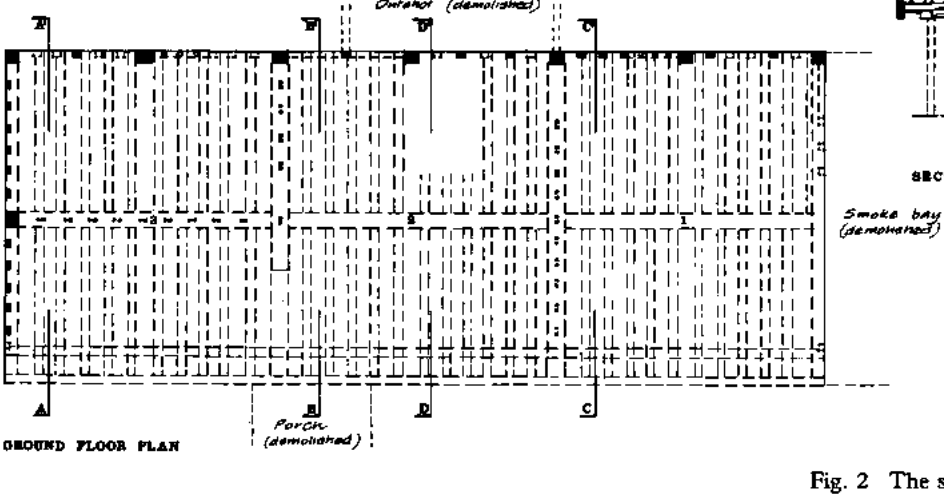
LOCATION PLAN



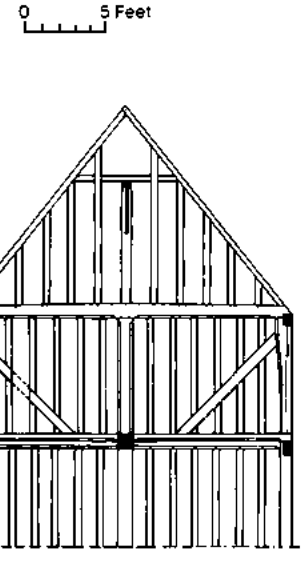
FLOOR JOIST JOINT



FIRST FLOOR PLAN



GROUND FLOOR PLAN



SECTION A-A'

Fig. 2 The south wing with the long wall jetty.

Building description

The cross-wing (Fig. 1)
This is of three bays, built of oak timbers substantial in section, and traditionally framed with close studding fully pegged. It was jettied on the west and part of the south sides, with a dragon beam at the south-west corner. A moulded bressumer has been underbuilt, destroying the evidence for the ground floor wall structure.

The storey posts are jowled with braces to the tie beam lightly curved on the underside with cranked tops. Internal serpentine bracing trenched into the studs occurs on the first floor front elevation. All other bracing is also internal, trenched and lightly curved. The bridging joists are chamfered with stepped run out stops. The joists and storey posts are also chamfered. The floor joists are almost square in section, and jointed into the chamfered bridging joists and dragon beam by soffit tenons with diminished haunches.

The cross-wing originally had a crown post roof gabled to the front and hipped to the rear. Rafter seatings for the hip rafters were evident along the wall plate. This roof was later replaced with the existing gambrel roof matching that of the extension to the east, which allowed the insertion of an extra storey.

Wattle and daub infill was of traditional Essex style, with oak laths sprung horizontally in grooves in the studs, and vertical hazel rods tied with withies to the laths prior to being covered with daub infilling. A key was formed in the daub by impressed fingers for the final plaster coat.

Evidence of diamond mullioned windows with shutter grooves was found in all but the west wall. The first floor window in the jettied front (west) wall was originally an oriel.

An external door opening was located in the rear (east) wall. Stud spacing clearly indicated a door between the ground floor rear and central rooms, but no evidence was found to establish the position of a door between the central and front rooms. A single surviving stud gave evidence for a pegged door head between the two first floor rooms.

The south wing (Fig. 2 & 3)
This is a long wall jettied building of six bays, divided into four rooms at the ground floor and three at the first floor. It is also built of oak of substantial section and traditionally framed, the carpentry details being similar to those of the cross-wing. The deeply moulded bressumer has been underbuilt destroying evidence of the front ground floor wall. Much of the original wattle and daub infill has been replaced with brick nogging. Where the original daub survived, it had been scribed with a diamond pattern to key the final plaster coat. The crown post roof remains virtually intact. The crown posts are undecorated, square in section, with thin lightly curved bracing to the collar purlin.

Mortises in the bressumer and wall plate indicate the former position of the front porch. An arched headed door at first floor level communicated between the porch and the main body of the building. Pegged mortises to the southern storey posts below plate and girt height suggest the position of a framed smoke bay. This is consistent with sections of wall that lack studs and are therefore likely to have been fireplace openings. Remnants of paint, absence of weathering, and pegged mortises are evidence for a rear outshot that covered the access to the ground floor, and the stairs to the first floor chambers. A pair of arched headed doors from the ground floor central room led directly outside and into the outshot. At the first floor, another pair of doors gave access to a self-contained chamber at the southern end, and to the central chamber which connected with the northern chamber. That the four ground floor rooms were interconnecting was evident from stud spacing or mortises for doorheads.

In the central and northern rooms, the bridging joists have double hollow chamfers, and the floor joists have hollow chamfers. The floor joists in the two northern rooms have plain chamfers, whilst the bridging joist has double roll moulded chamfers. All the chamfers have plain run-out stops. No moulding occurs on the bressumer where the porch would have obscured it. In the central room, no moulding occurs to the back of the bressumer unlike the adjacent rooms.

The scarf joint, of which there are four in the wall plate, is not a normal edge-halved and bridled type, but a composite — perhaps transitional — between the edge-halved and face-halved types. Instead of a central bridle, it is made with half blades typical of the later face-halved joints (*cf.* Hewett 1980, 269, fig. 270). There appears to be no reason for this but it is worth noting that on the edge-halved and bridled scarves of the cross-wing, the bridles are positioned in a $\frac{1}{3}$ to $\frac{2}{3}$ ratio, and not central as usual.

The gambrel-roofed addition (Fig. 4)
This is built in oak with storey posts, girts and wall plates of substantial section. The storey posts are not jowled, and the primary braced infill is of scant section. The carpenters' marks are chiselled not scribed as in the earlier builds. The gambrel roof is framed in oak with the side purlins housed into collars which are halved and pegged into every fourth rafter pair.

Dating evidence
Both of the two buildings contain features datable to the first half of the 16th century. The bowtell moulding on the cross-wing bressumer was popular in the reign of Henry VII. The soffit tenons with diminished haunches became widespread from about the second decade of the 16th century (Hewett 1980, 281-2). Until further evidence is forthcoming, a date in the first quarter of the century may be suggested for the cross-wing, and in the second quarter for the long wall jetty range. The final build has few precise dating features. Whilst the main frame is good quality oak, framing of this type was still being used in the early 19th century, as was evident at the now demolished Straits Mill, Bocking (Mercer 1975, 154, plate 87). The gambrel roof and comparatively long straight bridling scarf are consistent with a date in the 18th century.

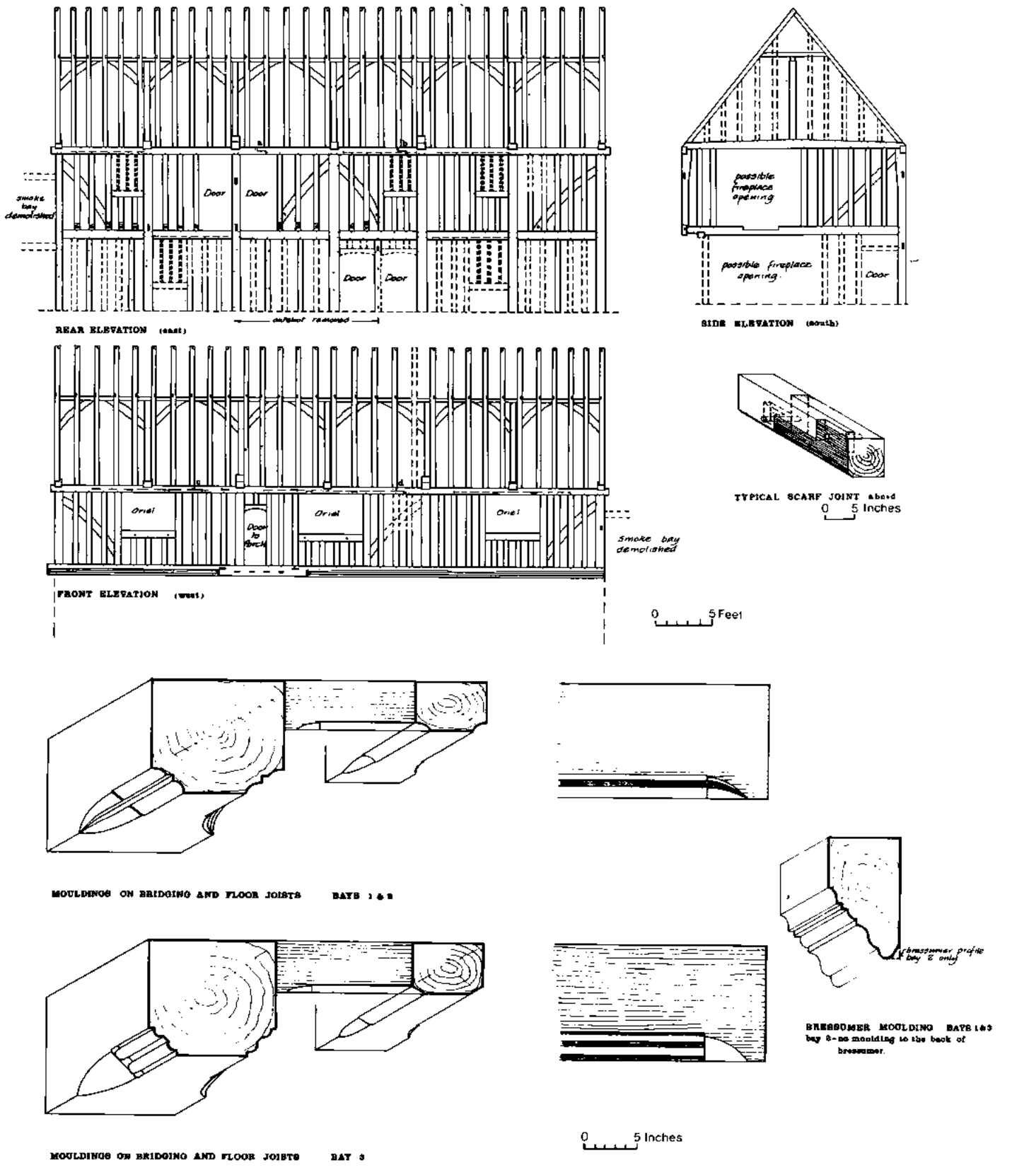


Fig. 3 The south wing with the long wall jetty; and mouldings from the south wing.

The excavation

Introduction

A trial trench measuring 1.0 by 1.2m was dug in the front room of the most southerly cottage of the south wing to see if there was a stratigraphic sequence associated with the existing building, and more particularly to check for evidence of an earlier building on the site. The trench was only excavated to a depth of 0.7m. At this level, it became apparent that there was a reasonable depth of archaeological deposit, perhaps up to 1m or more and representing a situation of some complexity. Since a small trench was thought unlikely to do more than establish this, and could well merely raise more questions than it could possibly answer, and because the site was not threatened, the excavation ceased at this level.

The sequence

The following sequence was revealed:

I. The layer exposed and left unexcavated on the bottom of the trench had pebbles, tile and bone pressed into the top of it. It looked like the patchy remains of external surfacing earlier than the standing building.

II. Dumped deposits of sandy silty loam containing tile and oyster and mussel shells, probably laid down to raise the level prior to the construction of the existing building. (The buildings are what could be uncomfortably close to the river). From these layers were recovered some small fragments of red earthenware datable to the 15th or 16th centuries.

III. At least three phases of flooring associated with the standing building. Floors of earth or brick or tile had been succeeded by ones in timber. From the earliest was recovered a Braintree trade token of the mid-17th century. The existing floor, dating probably from the 19th century refurbishment, consisted of paving bricks (234 by 115 by 49mm) in a pale yellowish to pinkish fabric laid herringbone-wise.

The presence of occupation debris in the dumped levelling layers suggests the existence of earlier buildings in the vicinity and raises the possibility that the existing buildings were not the first to stand on the site. An inspection of foundation trenches for a range of new houses to the south of the timber-framed buildings did not however reveal any evident traces of structures in this area.

The trade token (Fig. 6)

This is a farthing token of Joseph Bott (Williamson 1889-91, vol. I, 211, no. 34; Judson 1987, 19).

Some observations

The existence of this imposing building in what today is a relatively isolated position raises a number of questions. With its oriel windows and moulded bressumers, it could compare with any of the houses in Bradford Street, where most of the timber-framed buildings that now survive in Bocking are concentrated. The modern distribution of timber-framed houses is not, however, a reliable guide to the original settlement pattern, and both Church Street and Church Lane were more densely occupied in the Middle Ages than appears to be the case today.[2] What the surviving timber buildings do represent is the distribution of higher status houses, those so well built that they have withstood the ravages of time or been thought worth preserving. Bradford Street was where the merchants engaged in the well-known Bocking cloth industry chose to live, presumably because of its position close to the London-Bury St. Edmunds road and the Braintree market. The Church Street buildings look like a merchant's house, perhaps with a wool hall where cloth would have been sold on a regular basis. It may be distant from Bradford Street, but it is close to the

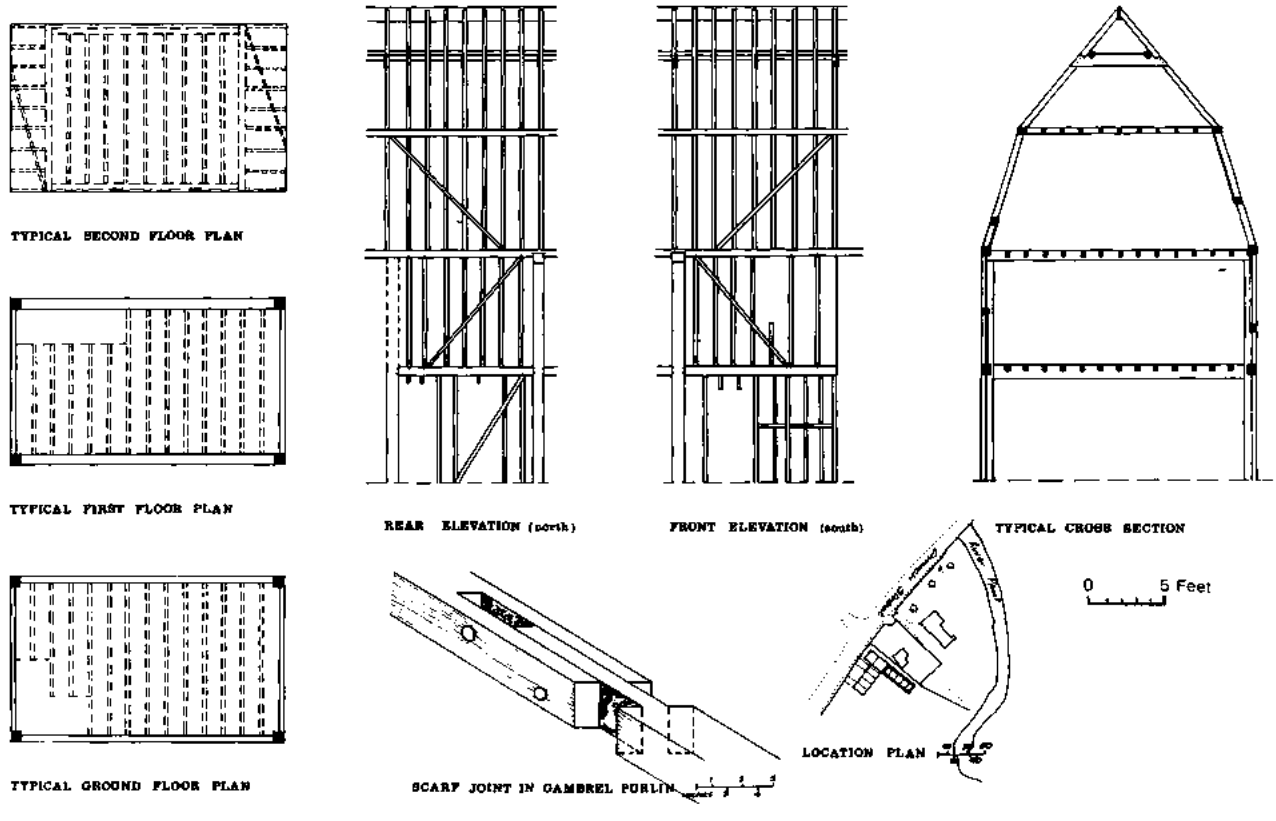


Fig. 4 The gambrel-roofed extension to the cross-wing.

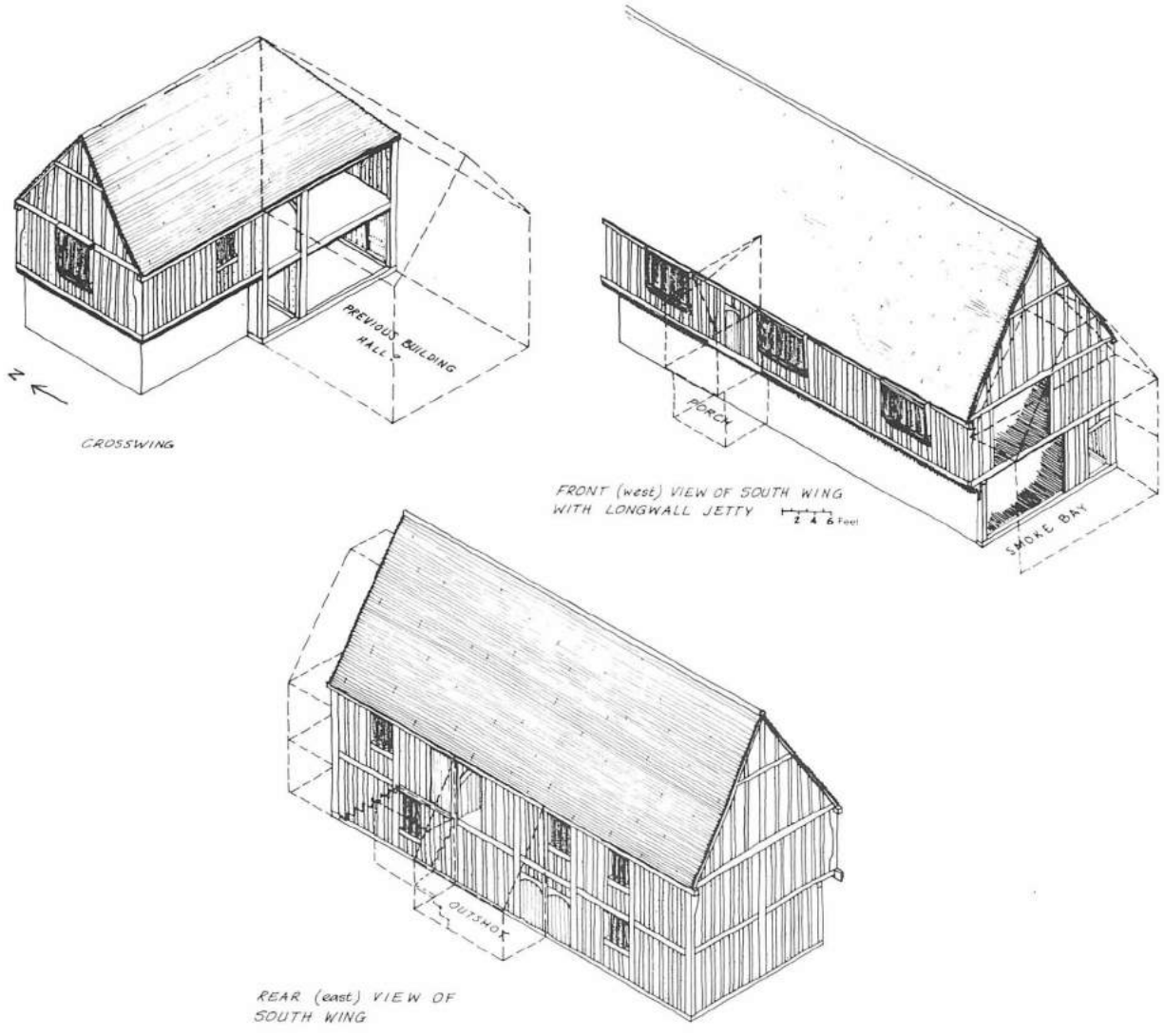


Fig. 5 Isometric reconstructions of the cross-wing and the south wing.

crossing of the Pant, where mills stood long before the erection of Samuel Courtauld's premises (demolished 1986-87). The building is large enough to have accommodated storage and a wool hall, and could have been used by more than one occupant, but there is nothing about its internal divisions that gives any very decisive indication as to the precise function of the rooms. According to Canon Brownrigg, Dean of Bocking, writing in 1911, the site was known as King's Corner and once belonged to the King family who were originally engaged in the cloth trade.[3] In the 18th and 19th centuries, it was the workhouse, which doubtless explains the gambrel-roofed addition.[4] By 1911, it was no longer put to this use, but was instead rented out by the Bocking United Charities.[5]

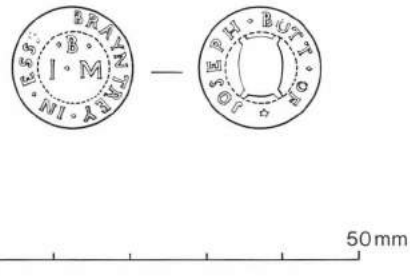


Fig. 6 The trade token.

Authors: David Andrews and Brenda Watkin, ECC Planning Department, Globe House, New Street, Chelmsford CM1 1LF.

Notes

1. The frame was recorded by Brenda and Elphin Watkin of the Essex Historic Buildings Group. The drawings of the building are by Brenda Watkin. The drawing of the Braintree token is by Alison McGhie (Essex County Council Archaeology Section). The trial trench was dug by David Andrews (ECC Archaeology Section). That part of the text relating to the building is by Brenda Watkin, whilst that concerning the excavation is by David Andrews. The restoration was carried out by Mark Brand of Braintree, whose active co-operation we gratefully acknowledge.

2. For instance, the 19th century cottages at nos. 59-63 Church Lane replaced much earlier buildings, as is evident from maps and the fact that the leases on them dated from 1589. Whether there was anything approaching continuous ribbon development along Church Lane linking Church Street to Bradford Street is another matter.
3. See the boxed pamphlet in Essex Record Office entitled "The Dean recalls an interesting past", reprinted from the *Essex Herald* of May 16th, 1911: "... King's Corner ... the name comes from Christopher King (clothier) ... in 1617 (he) devised the messuage and four closes to John King of Ridgewell, draper, his son. From John it went to Thomas, who sold it in 1666 to Lot King, Brickmaker. Then the King family ran out and Lot left it to Thomas Twitchett, his nephew, and in 1680 it came to certain persons in Trust for the poor. A perfunctory search in the Record Office (many thanks to June Beardsley for assistance with this) did not succeed in confirming the details of this account apart from locating the will of Lot King (D/DOT 121) which refers simply to 'my house and lands in Bocking'.
4. See the 1803 map of Bocking in Essex Record Office, D/DO P2. The 1793 census of Bocking records 63 inmates (D/P 268/18/2), and that of 1807 (D/P 268/18/1) 44 inmates.
5. See boxed pamphlet in Essex Record Office.

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The Eighteenth-Century Attorney as political broker: The Case of Francis Smythies

by Shani D'Cruze

Although the Election at COLCHESTER was tolerably productive of CRIMINATION and ANSWER, the expense of WIT was very trifling. The only successful attempt in the poetic way was the subsequent PARODY, or rather IMITATION of the PLOUGH BOY.

A flaxen headed WRITER,
As sneaking as might be
And next a SAUCY CLERK, Sir,
I scribbled o'er your plea;
But now a bold ATTORNEY,
I'll start all courts' disgrace,
When soon I'll rise a TOWN CLERK,
And sport my brazen face.

RECORDER if promoted,
I'll freemen make at will,
All offices appoint to,
My pockets thus to fill;
With all my TOOLS around me,
So great a KNAVE I'll be,
You'll forget the SAUCY CLERK, Sir,
That scribbled o'er your plea.[1]

Francis Smythies rose to local power in Colchester from the mid 1770s. Varied characteristics, trends and opportunities guided his success. From the mid eighteenth century economic growth favoured the trading and professional group in English towns. The professions, including the law, increased in numbers and status. These professionals adapted the combination of private action (occupational and as head of household) with public (political or office holding) life already established amongst middling traders and manufacturers. For a lawyer, in particular, whose occupation was often the management of public affairs, occupational and political concerns could become closely intertwined.

In Colchester a broader middling sort established itself as the wool trade declined. National politics saw the intensification of party division and a newly invigorated toryism from the mid 1780s. In Colchester these developments produced more contested elections and outsider or radical candidates. This situation re-emphasised the role of political broker — the local manager who worked up a voting 'interest' and nursed blocs of votes to be bargained with prospective candidates. Aside from his personal abilities and a lively and irascible personality, these changes aided Smythies' success. He emerged from a favourable social background and profession to establish a local power base through political broker methods and thus gain for himself and his descendants both afluence and town gentry status.

The components of a successful career often, when seen with the benefit of historical perspective, embody not only personal attributes and individual talent but also depend closely on prevailing social and historical trends. The attorneys of the eighteenth century had just such changes operating in their favour. That century several professions moved towards more 'modern' forms. For example, medicine established professional societies and the seniority of physicians over surgeons, apothecaries and midwives. Robert Robson has charted comparable changes in the legal profession. The first professional associations were founded and numbers and status of attorneys grew. Humble scriveners (legal clerks) found new outlets for their talents, conveyancing, drawing up bills of exchange, wills etc. Attorneys distinguished themselves from barristers, instituting their own provincial legal societies and methods of training.

Despite a bad press, the attorney was increasingly in demand, often 'at the centre of affairs in many localities'.[2] A successful legal career could establish gentry status for subsequent generations. Economic growth was generating more property and commercial transactions which required legal documentation. Changes in local government and estate management opened many areas where a legally competent individual was required; as land agent, or collecting taxes and duties. Lawyers also cornered the market in older offices such as clerk of the peace, town clerk, or manorial steward. Enclosures, turnpikes, navigation schemes, guilds and charities, prosecution or other associations all required secretaries, agents or treasurers.[3] Some attorneys became the clearing house for Quarter Sessions, preparing cases and documentation.

The growth of trade and industry meant not only an increase in bankruptcies and compositions with creditors but also generated surplus investment funds in the hands of many provincial middling families. The local attorney was often the broker matching surplus cash to suitable investments, generally mortgages on real estate. There was an important role in property development and speculation.[4] They also drew up the wills and marriage settlements which secured that capital to the next generation.

Attorneys made careers in all areas of finance, law and administration. They were also well placed to participate in politics and public life. In Helston, Cornwall intermarried families of attornies monopolised local offices and formed a

'lesser gentry'.[5] Many ambitious attorneys gained office through election or patronage and became actors in the public political world. They could thereby acquire political status. Francis Smythies (1742-98) of Colchester used his legal training to make a political career and establish his family as town gentry. He became Town Clerk, Recorder for several years and finally Alderman. This paper discusses the political dimension of his success.

My interest in Smythies developed from a study of the town's society and politics in the later eighteenth century.[6] His name was to be found everywhere in the sources and his recorded actions occasionally verged on the spectacular. The more I studied the town as a whole and wider contemporary trends in English society, it became increasingly clear that outside of any personal ability, he was well placed to make a successful career socially, professionally and politically.

In 1760, aged 18, he was apprenticed to Samuel Ennew, attorney at the high fee of £160. The late age and steep premium show that Smythies was not a lowly clerk but trainee junior partner.[7] Samuel Ennew was no small town lawyer. Practising from before 1740, he acted as steward for the gentry Rebow family, agent for Lord Hardwicke and became Clerk of the Peace for Essex in 1759. He was a Colchester alderman from 1764 and twice mayor. Through him Frank gained a thorough grounding in both Borough and County affairs. Smythies replaced Ennew as Town Clerk in 1767 during the latter's mayoralty. Ennew clearly expected his protege to guard his borough interests while he dealt with wider affairs. In April 1772 there were widespread food riots. Ennew was at Bath and so Smythies (not the mayor) reported back to the Lord Lieutenant, that he and a Corporation delegation had read the riot act and quelled the disturbance.[8]

Smythies' social group, as well as his profession, was growing in importance. The middling sort were crucial in prevailing social and economic change as the industrial revolution advanced. These trading, manufacturing and professional families held a strategic position in eighteenth century towns. Demographic and economic growth from the 1740s multiplied their numbers and importance. The growth of the professions expanded and diversified the urban middling group. By the 1830s these trends were to generate a distinctive middle class culture and consciousness. By the 1760s there was a distinctive genteel style to urban life, forged by the prospering middling sort and resident or visiting gentry and present in the dullest southern market town as well as dynamic northern industrial centres. Theatres, assemblies, entertainments, libraries, bowling greens and flower gardens proliferated. New urban affluence allowed building improvements of distinctive Georgian architecture and fostered consumption of fashionable items in dress, furniture and entertainment.[9]

In Colchester specifically a more diverse and numerous trading and professional group emerged to replace the clothier elite as the manufacture of woollen cloth declined.[10] By the 1820s and 30s when Colchester had completed its transition from an industrial to a market town, servicing the needs of the prosperous grain trade, the town elite were gentry and substantial farmers. Remaining successful baymakers (or their sons) retired to a rural, gentrified lifestyle. Over this transition, successful town tradespeople, not wealthy enough to live as gentry, were yet anxious to enhance their social status to match their prosperity. It was they who found the offices of borough government attractive and amongst them Frank Smythies made his mark.

He was born on 21st August, 1742, of a well established ecclesiastical family. His father, Rev. Palmer Smythies, Rector of St. Michael Mile End and St. Mary Magdalen, Colchester, was Master of Colchester Free School (1727-1776). In 1771 Frank married Jane Strange Norfolk, an advantageous match.[11] His sister Elizabeth married Rev. Thomas Twining of the tea dealing family, scholar, musician and Rector of St. Mary at Wall, Colchester. Through his father at the Free School he benefitted from the rudiments of a classical education. Either from preference or because the 'family' livings were all bespoke to his brothers, he was the only son to follow a secular career.

The 1760s and 70s were a period of relative political stability in the town under the august Compromise MPs Charles Gray (tory) and Isaac Rebow (whig) who had regained Colchester its borough charter, lost due to corruption and incompetence twenty years before. As the borough returned two Members of Parliament, each burgess having two votes, election expenses could be much reduced if opposing parties agreed to put up one candidate each and campaign together. The Gray/Rebow Compromise effectively monopolised local politics for some twenty years. They were both Colchester residents and interested themselves in local affairs.[12] Under this regime Frank's old master, Ennew came to prominence and Smythies' career began. By the mid 1770s Smythies was an influential figure in the town. He and his wife moved in the same social circles as Mrs. Rebow and other town gentry. Correspondence with Rebow shows him as a force to reckon with in the local establishment. In the Free School Elections of January 1779 he led the triumphant progress around Colchester of the winning Church of England contingent.[13]

Correspondence of 1780 from Rev. Nathaniel Forster, to the whig MP demonstrates the extent of Smythies' political hold. The issue was a new Act to raise money for street lighting and paving, for which Forster had made proposals:

> "I have done with them", he wrote. "Finding that no good was to be done, that Frank was sure to carry his point, that scarce a gentleman attended and that the rest were to a man either devoted to, or duped by him, I have taken the magnanimous resolution of seceding. Nor do I ever intend to get another head ach (sic) at a meeting of the Commissioners of Channel duties. Honest Frank and his reverend master (the Mayor?) gained yesterday, as I hear, an easy victory."[14]

At about his time Smythies took on a farm of the Stamp Duties with capital and assistance from Rev. Nicholas Corsellis, the landed rector of Wivenhoe. The venture realised at least £5000 by 1795. Corsellis, however, was denied his

share of the profit and the matter ended in Chancery. Frank lost support from several local grandees over this issue. The 'vile non-settlement of accounts' was blamed for much bad feeling. Smythies could however replace whig grandee support through the borough corporation structure and by husbanding a constituency amongst the rising middling sort.[15]

During the 1780s and 90s Smythies was able to take advantage of the prevailing direction of change and take firm control of the borough, while lavishly feathering his own nest.[16] The impression is, that by the time of his comparatively early demise, scarce a mouse stirred in the town without Frank Smythies say so.

The resignation of Charles Gray, the elderly tory MP in 1780 and the changing national political climate, had disrupted the calm of the Compromise period. Gray's successor was the radical whig, Sir Robert Smyth. Isaac Martin Rebow also died in 1781 and Richard Rigby of Mistley Hall, the only other gentry figure to interest himself much in borough affairs, was heading towards retirement.[17] In general other Essex gentry steered clear of this unruly and expensive popular borough. The declining interests of such political figures made the reconfiguration of local political power not only possible but essential.

In 1784, the national political temperature was high. The Fox North Coalition had lost office through bungling the American Wars and particularly its ill conceived East India Bill. A new ministry was formed under the young William Pitt. Pitt needed a large majority in the 1784 election if he was to revive the nation's dented post-war fortunes and morale. His early support for parliamentary reform chimed with a national mood disgruntled with the Old Corps whigs who seemed set on imposing legal sanction on their jobbery of East India spoils. The political nation was to reward Pitt with substantial support at the polls.[18]

These transformations had sharpened the articulacy of party and deepened the differences between whig and tory. With the accession of George III (1760) Church and King toryism, freed from the taint of Jacobitism, became a newly viable political credo alongside the variants on mid century whiggery. The strong nonconformist element in Colchester dictated the tone of political opposition which in the early 1780s developed strength and coherrence by reference to wider campaigns for parliamentary reform.[19] At the same time, the anglican contingent of the rising urban middling sort, once liberated from the high tory paternalism of Gray, sought alternative expression. It was this group which by 1790 was to find a rationale in the Younger Pitt's renovated toryism and local leadership in the person of Frank Smythies.

Eighteenth century election politics depended on 'interests' husbanded by local political managers, who by persuasion, patronage, or bribery could offer blocs of guaranteed votes to prospective candidates. Networks of political interest spread through the community, a master able to deliver the votes of his ex-apprentices, a baymaker of his weavers, a father of his son, a creditor of his debtor. These linkages could ally neighbours, fellow vestrymen or nonconformists. And as fleas upon the backs of fleas, the major brokers would exchange patronage for deference with middle sized brokers, who would do likewise to those with still less influence and so on.

The elections of the 1780s saw a succession of maverick, or radical candidates who sought political opportunity in this open, popular borough. The end of the Compromise left no obvious patron. The interests of political brokers became negotiable property when the prospective candidate, and his bankroll, came looking for election. The terms of trade favoured local brokers whose own power and prestige was thus enhanced. It was by precisely this process that Smythies advanced his political career. He secured a growing interest amongst the anglican tory middling tradespeople and broke with his old patron, whig Samuel Ennew, by supporting a maverick candidate in the 1784 General Election.

Local interests based themselves at one of the town's inns. Early in 1785 a satirical advertisement in the Ipswich Journal depicts the Committee in support of the outsider candidate meeting at the 'Neptunes Nag' (The Sea Horse Inn, All Saints). The Seahorse group are all tory/anglican middling tradespeople and not from Colchesters gentry or merchant elites. Apart from one mortality and a defection they all gained civic office as part of Smythies' party, who in August 1785 mounted a takeover of the Corporation, voting on their supporters over the heads of the whigs.[20]

All these new aldermen took a turn as mayor. Their new affluence allowed them to bear the expense. Smythies himself was shrewd enough to remain holding the reins of power more cheaply as town clerk. A wise choice if he had mayors in office that he could control. The fact that these were tradesmen not liberally educated professionals or gentry made them more attracted to borough office and perhaps consequently more malleable. As a contemporary noted, "the ignorant magistrate ... not infrequently degenerated into a passive and mischievous instrument in the hands of a rapacious attorney."[21]

Smythies actively opposed the radical whig MP Sir Robert Smyth, and by the mid 1780s Smyth and Smythies are acknowledged leaders of the rival opposition/whig and corporation/tory parties in the town. The tory MP Admiral Affleck was often away on naval service allowing Smythies more scope. From autumn 1784 local opposition to Robert Smyth grew, clearly mirrored by his increasing radicalism. Borough records show a series of calculated insults, such as ordering a royal petition to be presented by the tory MP and borough recorder rather than both MPs.[22]

By 1787 The Smythies faction were in the ascendancy. In November the Borough Recorder died and the 'Saucy Clerk' was controversially elected in his place. In the opinion of Frank's ex patron, this time he had gone too far. The office was above his social station. It was Smythies' bid for the Recordership above all that led both town and county to form parties for or against him. Rev. Henry Bate Dudley of Bradwell Juxta Mare and even Lord Hardwicke took some interest. Anyway, the dying Recorder had nominated an heir, John Grimwood, who promptly went to law. The litigation lasted until 1790. Meanwhile, of course, Frank acted as Recorder.[23]

The final compromise left Grimwood as Recorder and Frank, by then an Alderman and with his party consolidated in power, as Town Clerk. His legal expenses were largely paid by the corporation and the whigs were cheated of their real object — to see the back of him altogether. By 1790 there were clear parties established amongst Colchester's middling sort with the tory corporation party around Frank Smythies ahead by a clear margin, its power consolidated by the 1788 and 1790 parliamentary elections.

A broker's power network stretched extensively yet tenuously into the community, and depended on myriad connections requiring constant servicing, by flattery, favour, bribery or bullying. Only by having a finger in every pie, by wringing the maximum political potential from every situation could the network strengthen. Sir Robert Walpole, the hungriest broker of them all, had long proved that. Any opportunity missed gave opponents a platform for their own interests. Even the minutiae of borough politics were always worth the battle. Smythies galvanised the somnolent Admiralty Courts which supervised local oyster fisheries apparently to the detriment of the large scale, mostly whiggish, oyster dredgers.[24]

In July 1788, a riot took place in the Moot Hall over elections for minor borough officials. Whig votes were disallowed and Smythies, "... so far forgot his dignity as to jump off the bench and sieze one or more of (the freeburgesses) by the collar."[25] Arrests were made. One constable's wig was torn from his head. A petty sessions was immediately convened before two pro Smythies town justices. The Acting Recorder himself took the depositions in his own hand. The flexible institution of petty sessions used the law to defeat the protesting whigs, one of whom remarked that Smythies; "... deserved hanging more than ever Dr. Dodd* did" (*the notorious forger). The rioters clearly knew who to blame for their grievance.[26]

November 1788 bought a by election almost before the tory MP was cold in his grave. Eighteenth century electioneering was no overnight phenomenon. It took time to deploy patronage and work up an interest. The parliamentary candidate may well only experience a lightening and highly expensive visit to a constituency, shaking unsavory hands, and pouring liquor into unmannerly voters.[27] Nevertheless, the backstage political management was a much more extended affair. The local parties must have carefully prepared the groundwork over that year. Attention to the political brokers and their networks gives the Georgian borough voter credit for more sustained interest than a sporadic vote, primed with a guinea at the hustings. At the polls it was a close run thing between the candidate introduced by Smythies (George Jackson, a pro Pitt tory) and the radical, George Tierney.

Feelings in the town ran high. The election involved not only voters but all who had a political axe to grind. One need not vote oneself to command an interest. A wide range of the middling sort including merchants, bankers and the 'Methodistical' clergyman of St. Peters, Rev. Robert Storry all participated in the wheeling and dealing. Neither was this behind the scenes politicking strictly a male affair. Mrs. Jane Smythies, for example, voiced clear political opinions. She disapproved of Rev. Bate Dudley and his 'Foxity attachment'. A contemporary political broadsheet on the Recordership controversy describes in biblical parody how Frank was controlled by two women in his house, one his 'helpmeet', who planned to advance his interests by forging a letter. His helpmeet (wife), "well skilled in cunning and learning, and the hand-writing of any man could well adopt", had used her talents more than once in Frank's cause. Whether or not the allegations are true, the satire could have no bite unless the portrait of Jane Smythies as a backstage political manager was recognisable to contemporaries.[28]

Local political consciousness had been sharpened by the recent banditry of the Smythies group and by wider events. Nationally, a campaign was being waged to free dissenters from their legal and political disadvantages, the country was gripped by crisis over the Regency as George III's insanity first showed itself. In France the ancien regime was beginning to crumble. The Colchester candidates were '... most warmly supported by their respective friends ...'. Polling lasted four days with the disorder around the hustings periodically approaching riot proportions. The election was assiduously managed by Smythies and his supportive Returning Officer, the mayor, who created new burgesses ad hoc to increase their vote, and finally closed the poll when the votes were 640 apiece. The mayor returned BOTH candidates, hoping to secure the result on petition. Tierney's supporters celebrated that night. They were sure he would have won outright if not for tory duplicity. And they were right. Without the final bout of freeburgess creations Tierney would have won by 2 votes. "Its all Dirty, dirty work", grumbled Thomas Twining.[29]

A House of Commons Committee decided for Tierney. On May 1st 1789 he made a triumphal entry into Colchester with the sitting whig Sir Robert Smyth, in a phaeton drawn by four white horses. That summer France erupted in revolution. However, Frank and the tories were far from beaten. In July Smythies saw off a crowd of grain rioters by mounting the waggons and laying about him with his whip.[30]

The 1790 general election brought better fortune and Smythies' candidate came top of the poll. The opposition was divided by a third candidate, the evangelical tory Robert Thornton.[31] Events in France and the reform question at home had alienated the more fainthearted from the outspoken radical Tierney. Evangelicalism, both in the anglican church and nonconformity, was the coming form of middle class religious expression. 'Serious religion' formed a vital part in the developing distinctive middle class culture. In those anxious, inflationary, unstable, wartime years, evangelicalism together with Pittite toryism, formed a coherrent expression for many of the middling sort.[32]

The Terror in France and the onset of war (Feb 1793) reinforced the success of Smythies' party. The Pittite administration was energetic in measures to stamp out radicalism as a potential revolutionary threat. The mere fact of war made any political opposition appear treasonable, as the pro reform yet peaceable Baptists found:

"We have been keeping a national fast. ... Some churches on account of the nature of the times, had only a short service ... but our friends were enabled to pray as that, *had Informers been there* (their emphasis), they must have gone away without their errands."[33]

Pitt's administration suspended the Habeas Corpus Act, issued orders against seditious literature and (unsuccessfully) tried four prominent radicals for high treason. In Colchester, Smythies handled the prosecution of Richard Patmore, nonconformist radical baymaker for publishing Tom Paine's Second part of the Rights of Man and other seditious literature in 1793.[34] Although the prosecution failed, (lost on a technicality), it clearly left is mark. Five years later it could be referred to as a triumph for patriotism which deterred any subsequent radical outbreaks. In 1795 Smythies and Thomas Twining opposed a motion for peace proposed by Colchester's leading reformers and won by 105 votes to 36.[35]

In wartime tory patriotism became attractive. The country as a whole turned away from radicalism. In an east coast port and garrison town, such as Colchester, fear of invasion was real. The inspiration of defending the constitution of freeborn Englishmen against hordes of marauding, starving, wooden-shod French, exercised a potent effect on the hearts and minds of the Colchester middling sort.[36] Allegience to Pitt and Patriotism became the order of the day. Celebrations of victories, royal birthdays etc, illuminations, and parades became commonplace. The Colchester Loyal Volunteers were formed in 1797 and in 1798 many townspeople of all sorts contributed to the Fund for Defence of the Country.[37]

During the 1790s a local political elite attached to such policies and ideas would clearly gain support. Smythies had not become a tory by luck, or by design. He had grown into a situation where that was the most appropriate political position. Indeed toryism itself had changed from his fathers and grandfather's day when Jacobitism was a threat and professed tories were proscribed from political office.[39] Had the current of change run differently he would not have made the gains he did. However, the final outcome was that during the 1790s he was backing the right political and historical horse.

Smythies' private lifestyle grew to reflect his public consequence. In 1783 he acquired Headgate House, the largest mansion in Head Street. His position as family lawyer to the previous owner, Henry Osborne, enabled him to purchase the house from the heir of the estate, then living abroad and clearly in need of funds. Smythies paid just over a quarter of the original £4000 cost of extensive renovation and refronting carried out in the 1760s.[39]

Frank and Jane Smythies had two sons, Francis II and William, and four daughters. It was virtually inevitable that Francis II should follow in his father's footsteps and secure to himself many civic honours as well as his share in political controversy.[40] Two of the Miss Smythies' married well with dowries rumoured to be in the region of £20,000 and two remained single.[41]

Smythies died middle aged in 1798. He made only the briefest of wills — covering his tracks to the last — leaving all his estate to his wife.[42] Her will reveals the true extent of their property. Although Smythies had received some capital from his parents, amongst so many siblings this was clearly not substantial. The estate his widow left to her children and grandchildren, includes the mansion and other houses in Head Street, another on the corner of Culver Street and Lion Walk (probably occupied by Francis II), much farming land in Essex and Suffolk, development property of 16 leasehold messuages in Barrack Square, St. Mary Magdalen parish, as well as some £8,000 in securities, a life insurance worth £1000, together with an unspecified residue.[43]

From worthy middling origins, Frank Smythies had succeeded in establishing himself as *the* leading figure in Colchester. The development of the professions added a new cohort to the middling sort, which could occupy a flexible middle ground between the trading and commercial classes and the local gentry. The growth in the economy proliferated the occasions when an attorney's skill was called for and multiplied the opportunity for their critical role as credit brokers and administrators for the middle classes and gentry.

Smythies had followed the profession which above all other would give him access to political power without the need for substantial merchant or landed capital. His influence extended outside his immediate locality through Colchester's status as a parliamentary borough and was felt by the county grandees and in parliamentary politics. An attorney's training entered many aspiring sons of the eighteenth century middling sort into a successful career, of which politics was just one option. The position of the attorney in the public world involved politics as well as professionalism. The rounded public man necessarily had a political dimension and could thus obtain political power either as the agent of a noble family,[44] or, like Smythies, by utilizing the rather rickety structures of a borough corporation.

Smythies was a man of his times, and not only in his use of power and patronage. He had profited from wider historical change, not least the spread of patriotic toryism during the French Wars. This, added to his own piratical style and a desire for power enabled him to corner the local political market. Not a unique achievement for an eighteenth century attorney, but no mean feat nevertheless. Other successful Colchester lawyers commonly played some role in public life, but none to the same extent. Smythies was unscrupulous, hectoring, self confident, calculating and devious. He bore all before him because he dared do what others only contemplated. He had a precise and intelligent understanding of the uses of power and political networks which enabled him to secure power, not only to himself, but for many of that middling group in Colchester which was coming to occupy a strategic economic position as the bay trade foundered.

Dissent had long been an effective rationale for many of the towns middling sort. For the rest, Church and King toryism kept a low profile during proscription and remain-

ed quiescent in the political and social stability at mid century. Pitt and patriotism as espoused by the Smythies corporation gave a new rallying cry to the anglican middling sort, energised by evangelicalism and robbed support from rational dissenting reformers in the wartime crisis. To the extent that dissenters embraced serious religion and love of country their opposition was consequently muted.

The workings of eighteenth century politics and the husbanding of voting 'interests' made the role of local political brokers critical, especially in an open borough such as Colchester in the 1780s. A successful broker must have all round public status in profession or trade, in borough government as well as the maintenance of a suitably affluent life style. In the zero sum game of power and influence every office, every issue was important in extending the web of connection and interest and denying opportunity to ones opponents. It also required the participation, judgement and common sense of a reliable wife, to maintain one's cause in the salon.

Frank Smythies' influence over the town and its institutions became so extensive that he could hand it as a legacy to his eldest son, during whose lifetime the dignity and gentry status of the family was assured. Frank had founded a dynasty of Smythies' involved in Colchester's local government, which in later generations, by all accounts, were far more scrupulous in their public life than their ancestor the 'Saucy Clerk'.

Author: Shani D'Cruze, History Department, University of Essex.

Notes

Unless otherwise noted all primary sources are located in the Essex Record Office, either at Chelmsford or Colchester Branch.

Abbreviations:

ERO	Essex Record Office
CRO	Colchester Branch Office, ERO
CPL	Colchester Public Library
PRO	Public Record Office
DNB	Dictionary of National Biography
IpsJ	Ipswich Journal
ChCh	Chelmsford Chronicle

1. Rebow Scrapbook in CPL fol. 32.
2. R. Robson, *The Attorney in Eighteenth Century England* CUP 1959.
3. In Colchester cf. William Mason, (his accounts ERO D/DE1 B4-18, discussed in Robson op. cit. p.78 et. seq. for his local offices cf e.g. IpsJ 25.5.77, 28.3.78). Other local attorneys include William Francis, Thomas Maberley, James Waynman or Peter Daniell (whose descendants are still Colchester solicitors).
4. M. Miles, The Money Market in the Early Industrial Revolution; the Evidence from West Riding Attorneys. c.1750-1800 *Business History* xxiii 1981. V. Belcher, A London Attorney of the Eighteenth Century: Robert Andrews, *London Journal* 12 (1), 1986.
5. Robson op. cit. p.73. See also Belcher op. cit. For the involvement of the legal fraternity in radicalism see e.g. J. Brewer, The Wilkites and the Law, 1763-74, in Brewer & Styles eds. *A Ungovernable People*, Hutchinson, London 1980, esp. p.131.
6. S. D'Cruze, *The Society Now Surrounding Us, Colchester and its Middling Sort, 1780-1800*, unpub. dissertation for University of Essex, MA Social History, 1985.
7. Apprenticeships in general began at around age 14. Colchester evidence shows attorneys taking two types of apprentices. Scriveners or clerks began at around 14 for little or no fee, attorneys were apprenticed at a later age and for a higher fee. Smythies himself had two such, J. Foakes (1766) and Edward Thripp (1794) who were both scriveners paying no fee (Colchester Index of Apprenticeship Indentures in CRO). Richard Dunthorne began working for William Mason, another local attorney in 1779. He first witnesses the will of Charles Tillett, glover and breechesmaker, that year (ERO 545BR27 made 25.7.79, proved 16.8.85) along with his master and one Mark Keymer (brasier cf. IpsJ 30.6.88). Judging by Lion Walk Independent Registers, (microfilm, reel 5, in ERO) which show his baptism in 1765, he was only 14 at the time. Contrast Francis Tillett Abell, another Smythies apprentice of 1785 (Colchester Index of Apprenticeship Indentures, CRO — entry later struck out), later a successful attorney, who was apprenticed at the late age of 21 for £210. (ob. 25th May 1838 at 74, All Saints, Colchester registers in CRO). Samuel Ennew himself, of an earlier generation, had been apprenticed attorney aged 16, to Samuel Carter jun. of Gt. Coggeshall in 1733 for the then large fee of £55. (Index to Register of Apprenticeships, PRO, Kew, IR17/40. Ennew was buried age 78 at Lexden 14th December, 1795, Registers at CRO).

   A useful indicator of the extent and nature of an attorney's practice are the local wills they drew up and witnessed. Ennew and Smythies together witness 6 Colchester wills in the Bensusan Butt Collection between 1760 and 1770. Not a large number, but all for very respectable testators. After 1770 Frank witnessed only a further five wills in that Collection, all prestigious. He was by then very much occupied in other directions.
8. Namier & Brooke, *The House of Commons* 1754-1790 four vols.; HMSO 1964 — entry on Essex. Colchester Assembly Book in CRO. Hardwicke Correspondence, in the British Library, Add. Mss. 36,349 — 36,278. (cf. Note 29 below). County Quarter Sessions papers (ERO Q/SB[b] 240/1 esp. 240/9) have examples of his clerk's hand in correspondence and bills from Ennew. For example a request from Ennew for two contractors to repay monies overpaid for the rebuilding of Gt. Bardfield Bridge has a note on the reverse "sent to J. Hodes by F. Smythies". Ass. Bk. 29.9.67. For the attorney's role as Clerk of the Peace see Robson op. cit. pp.104-8. S. & B. Webb, *English Local Government: The Parish and the County*, London, 1906, remains the most substantial treatment of the subject. Re food riots PRO SP37/6/75 Smythies to Rochford 13.4.72. Chelmsford correspondence on this occasion was handled by the Rev. John Tindall, Rector of Chelmsford between 1739-74, (a prestigious living in this one-parish county town) and a Clerical Justice of Essex (English Local Government 1697-1787 by T.M.H. *Essex Review* xxxi p.223. cf. DNB entry for his father Nicholas Tindall 1687-1774, Rector of G. Waltham and historical writer, also article with full family tree in *Essex Review* ii p.174).
9. Peter Borsay; The English Urban Renaissance; Development of a Provincial Urban Culture, 1680-1760; *Social History* 31.10.76. For millinery trades in Colchester and womens fashion see S. D'Cruze, 'To acquaint the Ladies', *Local Historian*, August, 1986. For increasing numbers of attorneys in Essex see A.F.J. Brown *Essex At Work*, Essex County Council. Chelmsford, 1969 p.114, 116, 122, 160. For the growing importance of the provinces vis a vis the capital in the eighteenth century see D. Read, *The English Provinces c.1760-1960. A study in influence* Edward Arnold, London 1964.
10. Brown op. cit. and his *Colchester in the Eighteenth Century* Colchester, 1969.
11. R.H.R. Smythies, *Records of the Smythies Family*, London 1912 (Copy in CPL). Members of the family also held livings at Alphamstone and St. James' Colchester. Wm. Norfolk later became an Alderman of Cambridge. Another daughter Bridget married Rev. Charles Lidgould of Holy Trinity, Colchester and was later next door neighbour to the Smythies in Head Street. Lidgould had connections to other wealthy families. (Details from J. Bensusan Butt Collection).
12. For loss of charter see S. D'Cruze, *The Eighteenth Century Middling Sort, Politics and Social Relations — A Study of Colchester* PhD Thesis, University of Essex, forthcoming 1988. For recovery see J. Bensusan Butt, *A Friend to his Country*. Colchester 1978.
13. John Johnstone ed., *Works of Samuel Parr LLD* Vol. VIII, London, Longman, 1828. Rev. Thomas Twining to Parr, Jan 1779. IpsJ

22.1.1779. Also cf. collection of misc. pamphlets re the election in Library of Essex Society for Archaeology and History, Hollytrees Museum. Letters to Rebow in CRO Rebow papers Box 2. For Smythies social circle, A.F.J. Brown, *Essex People 1750-1900*, Essex Record Office, Chelmsford, 1972, p.66.

14. Collection of correspondence CRO D/Dfg/21, Forster to Smyth, April 1780. Nathaniel Forster was rector of All Saints, one of the town's smartest parishes. The harbour commissioners had responsibility for paving and lighting and hence a new Channel Act was obtained that year.
15. ERO D/DHt E24 correspondence regarding Stamp Duty farm. Smythies farmed in Wivenhoe on land rented from Corsellis sold up in 1789, doubtless due to this disagreement. IpsJ 10.10.89. Wivenhoe Land Tax 1788 (ERO Q/RP1/587): Smythies occupied Corsellis owned land rated at £119 p.a. — the highest rating in the parish except for Corsellis' own estates. T. Twining to R. Twining 16.4.90 — photocopy in possession of John Bensusan Butt of a transcript by Professor R. Walker. Microfilms of Prof. Walker's transcriptions are in the Manuscript room of Cambridge University Library. By the late 1780s Corsellis was openly opposing Smythies politically and in 1789 fought a duel with the town's High Steward over some apparently political abuse. IpsJ 4.7.1789.
16. For example he invested in speculative building development. After his death a string of properties newly erected by himself and a timber merchant were sold off. He also held the Corporation lease on Hythe quay. IpsJ 16.3.99, ChCh 15.3.99.
17. The opposition party did put up a third candidate in the 1768 election, the banker Alexander Fordyce, who drew considerable support. However, no identifiable connection with the Wilkites as such survives, though the nature of voters rights was an election issue. (D'Cruze, *"The Society"* p.95/6). Local magnate Richard Rigby hampered Wilkite support in Essex. For Richard Rigby, including his loss of face over repayment of state monies held as paymaster of the forces in 1784 and retirement to Bath in 1785, see Namier & Brooke op. cit. (cf. Note 8) also article on Rigby in *Dictionary of National Biography* Oxon 1959, for his power base in Colchester at the Kings Head dining club, see Brown op. cit., *Essex People* p.61.
18. A Briggs *The Age of Improvement*, London 1959 p.82/3.
19. For a general discussion of these issues see, C. Black *The Association* Harvard UP, 1963, J. Brewer, *Party Ideology and Popular Politics at the Ascension of George III* Cambridge UP, 1976, A. Goodwin *The Friends of Liberty* Hutchinson, London, 1979.
20. D'Cruze *"The Society"* Ch. VIII, re clubs at inns. IpsJ 26.2.85: The committee included a scrivener, a currier, a brewer and a taylor. Cf. N. Rogers, Aristocratic Clientage, Trade & Independency: Popular politics in Pre Radical Westminster, *Past & Present*, 1973 for similar pattern in London & Westminster, also Linda Colley Eighteenth Century English Radicalism before Wilkes, *Trans. Royal Hist. Soc.* 5th Ser., 31 p.1-19. Ass Bk + IpsJ 3.9.85: The Aldermen were Phillip Affleck, brother and agent to the Tory MP; Samul Tyssen a rogue candidate put up by the Smythies group in the 1784 election to allow grounds for petition; Edmund Lilley, baymaker, William Argent, baymaker, Edward Capstack, currier (one of the Potter Committee); William Swinborne, tanner, Bezaliel Angier, baymaker. In line with the decline of the trade, the baymakers had all either retired into gentlemen's status or become bankrupt by the end of the century. They were a group who had come into the trade with its partial revival after the end of the Seven Years War and were enjoying temporary good fortune as the American Wars ended.
21. H.D. Bland *Colchester Anecdotes*, unpub., manuscript copy in possession of J. Bensusan Butt. An anecdote re Smythies and mayor Bezaliel Angier (cf. note 20) in London to be presented to the King. Smythies suggested that mopping the brow was appropriate protocol. He hid a pork chop wrapped in the mayors handkerchief in his pocket. Of course, when the latter reached for the handkerchief the chop plopped out onto the steps of the throne. Robson op. cit. p.108 quoting T. Gisborne (the elder, Divine, 1758-1846, cf. article in DNB) *'Enquiry into the Duties of Man'*, 1794, p.288.
22. D'Cruze *'The Society'* p.98. Smyth was a confirmed reformer and a member of the St. Albans Tavern Group. He supported Pitt's reform efforts in association with Wyvill and was rewarded by Pitt with £2000 from Secret Service Funds in 1784. (Namier & Brooke op. cit.). That same year he was amongst those supporting the Society for Constitutional Information's candidate in Westminster against Charles James Fox. He nevertheless continued a correspondence with Fox (ERO D/Dfg/21. Black op. cit., p.113). During the early 1790s he was connected through Charles Grey (Later Lord Grey) and George Tierney with the Society of Friends of the People. By 1793 Smyth was resident in Paris as one of the exiled group of English republicans (Goodwin op. cit. p.249), and became a close friend of Tom Paine. He was imprisoned during the Terror and released with Paine's help. He died in Paris in 1802. Assembly Book. ERO D/Dfg/21 cf. also note 24 below for his action against the corporation re the fisheries. Ass. Bk. 2.12.87 for case against him by Smythies.
23. D'Cruze *'The Society'* p.102-3. T. Twining to R. Twining 6.3.90. cf. article in DNB for Rev. Sir Henry Bate Dudley, the Fighting Parson, 1745-1824. Hardwicke correspondence op. cit., Ennew to Hardwicke 15.10.87 cf. also letters of 12.10.87 and 28.11.87. The dying Recorder was William Mayhew jun. (cf. his letters to Isaac Martin Rebow, Box 2, Rebow papers in CRO). John Matthew Grimwood was a barrister of Grays Inn. ob. 2nd December 1832 (Essex Standard 8th December 1832) aged 78 'at his residence in Bloomsbury Place'. His country residence, Boxted House, a 'Genteel Villa Residence ... erected within fifty years' was offered for sale on 29th May 1835 (Essex Standard). Buried at Boxted where a wall tablet records he was also Lord Treasurer's Remembrancer of the Court of Exchequer and Registrar of the Corporation of the Sons of the Clergy. Tablet also commemorates his wife Elizabeth, daughter of Rev. Robert Cooke, the vicar of Boxted parish. She died 14th November 1825 at 68.
24. ChCh 4.9.89 also Admiralty Court Books in CRO. See also Hervey Benham *Once Upon a Tide* Colchester, 1955, p.134 et. seq. P.J.R. King *Crime, Law & Society in Essex, 1740-1820* PhD Cambs. unpub. 1984 p.224-7 for Robert Smyth's action see note 22.
25. Rebow Scrapbook, CPL. These were officials who controlled valuable grazing rights over the towns half year lands. In 1753 Morant describes the administration of these lands as a lucrative racket run for the benefit of the treasurers and their political friends. There is no reason to imagine that virtue and efficiency had come to reign over the matter in the intervening 25 years. Morant Papers CRO D/Y/2/2 p.355/8.
26. CRO P/COR/12 entries for 28.7.88.
27. cf. M.D. George *England in Johnson's Day*, Methuen, London, 1928.
28. Twining to R. Twining 14.12.88. *The Acts* Vol. 1 Collection of Local Materials (Elections) J.B. Harvey comp. E.Col. 1 324.28 in CPL. Probably of 1790. The identity of the second woman is not so clear. She is accused of having a foul and vicious tongue and hence nicknamed Betty Flounder (fishwife). She is clearly close to Smythies and very probably related to Jane Smythies, probably her sister Susan Norfolk who lived with them.
29. IpsJ 6.12.88. D'Cruze *The Society* Ch. VIII.
30. IpsJ 1.8.89. *House of Commons Journals*. Vol. 44 p.125, 1789. IpsJ 31.7.89.
31. Robt. Thornton was son of John Thornton the wealthy merchant at the centre of the Clapham Group of evangelicals which included Wilberforce. cf. Namier & Brooke and DNB entries for Robert's father and brothers. Robert Smyth did not contest the seat, his revolutionary sympathies by then having taken him to Paris.
32. D'Cruze *The Society*. L. Davidoff and C. Hall, *Family Fortunes*, Hutchinson, 1987.
33. Goodwin op. cit.; re habeas corpus, treason trials etc. L. Spurrier, *Memorials of the Baptist Church of Colchester*, Colchester 1889 p.39. 19.4.1793.
34. PRO TS/11/854/2910. He also administered other such cases in Saffron Walden and Chelmsford.
35. PRO HO42/231 Eliz Manning to Freeling Apr. 1798. IpsJ 2.2.95.
36. Josiah Gilbert ed., *Autobiography and other Memorials of Mrs. Gilbert* 2nd edn., London 1876. For the national situation see e.g. E.P. Thompson, *The Making of the English Working Class* Penguin, Har-

mondsworth, 1963, A. Goodwin, *The Friends of Liberty* Hutchinson, 1969.

37. IpsJ 5.1.93, 12.1.93, 19.1.93, 26.1.93, 18.6.97, 17.8.93, 13.12.94, 9.11.93, 31.3.98, etc. etc.
38. For a more detailed discussion of this point see D'Cruze *'The Society'*. For exposition of eighteenth century toryism see i.a. Linda Colley *In Defiance of Oligarchy, The Tory Party 1714-60,* CUP 1982; Ian R. Christie *Stress & Stability in Late Eighteenth Century Britain* Oxon 1985, or more controversially, J.C.D. Clarke *English Society 1688-1832* CUP 1985.
39. The building of Headgate House survived substantially until recently as Tesco's old supermarket. Now only the frontage of the upper stories remains to be amalgamated into the new town square development. Notes on Deeds of Headgate House JBB collection, Ref. Boggis II.
40. M.E. Speight *Politics in the Borough of Colchester 1812-1847.* Thesis for University of London, 1969. Copy deposited at ERO.
41. Jane Smythies became second wife to Gilbert Affleck of Cavendish Hall, Lt. Col. in Suffolk Militia. Mary Ann married Sackville Henry Frederick Gwynne Esq., a Lieutenant in the North Yorks militia in 1796. R.H.R. Smythies op. cit. cf. also Will Harriet Smythies ERO 493BR30, 1812. For anecdote regarding the Miss Smythies' dowries see G.O. Rickwood writing in the Essex County Standard 24.2.1934. Microfilm in CPL.
42. PRO, PCC will PROB 11 1313/619 made 24.6.97/proved 17.9.98.
43. PRO, PCC will PROB 11 1689/491 made 14.8.1823/proved 19.8.1824. The tenament property in St. Mary Magdalen is evidence of the growth in the town during the French Wars.
44. cf. Note 4 above.

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Local Government Planning Papers as sources for the local historian: an Essex survey

by Shirley Durgan

Introduction

Rapid population and industrial growth in the 19th century caused congestion in towns and, later, particularly in the 20th century, suburban sprawl. Public health legislation increasingly addressed itself to housing problems, but it was only from the first Housing and Town Planning Act 1909 (9 Edw. VII, c.44), which granted permissive powers to local authorities, that the need for town and country planning was officially recognised. Such powers have been gradually amended and extended in further Town and Country Planning Acts since then. Six planning committees for Essex were set up under the 1932 Act (22 Geo. V, c.49), but Essex County Council took over from these when it was made statutorily responsible for planning by the 1947 Act (10 & 11 Geo. IV, c.51). The New Towns Act 1946 (9 & 10 Geo. IV, c.68) and the Town Development Act 1952 (15 & 16 Geo. VI, 1 Eliz. II, c.54) were measures for dealing with London overspill population; the new towns of Harlow and Basildon resulted from the former, and the expansion of Witham from the latter. Increasing public demand for greater action led to the Civic Amenities Act 1967, the Countryside Act 1968, and to completely revised planning Acts. The 1971 Town and Country Planning Act is the principal planning Act now and regulates county structure planning.

The following give useful summaries of planning and development in England and Wales:

(i) Historical —
W. Ashworth, *The Genesis of Modern British Town Planning*, 1954.
G. Cherry, *The Evolution of British Town Planning*, 1974.
D. McKay & A. Cox, *The Politics of Urban Change*, 1979.

(ii) Contemporary —
P. G. Hall, *Urban and Regional Planning*, 1982.
J. B. Cullingworth, *Town and Country Planning in Britain*, 9th edn., 1985.

Planning in Essex before 1945

Particular problems included increased motor traffic, ribbon development, and lack of utilities, including water, in some areas. Some farmland was in poor condition and out of use because of agricultural depression. After the 1932 Town and Country Planning Act, Essex County Council formed 6 planning regions: north west, north east, west, mid, south west, and south. Each had its own planning committee, comprised of equal numbers of county councillors and of representatives from the urban district, rural district, and borough councils. Plans were prepared for specific areas, with land zoned for road widening, new roads, and open spaces (both public and private, and allotments). Standards were prescribed, especially regarding housing, and standards of road width were specified for different zones. Land liable to flood was defined. Advice was given on applications for planning permission. Planners tried to prevent the worst house designs from being approved, but their powers were limited; and power lines and large public authority developments were beyond their control. There was no statutory provision for agricultural zones; the county council used the term 'agricultural land', but the government preferred to describe such areas as 'white land'. Planning work gradually came to an end in 1937/8, and building ceased during the war, 1939-45.

Planning theory was already developing. The *Report of the Greater London Regional Planning Committee*, 1929, incorporated some of the theories, advanced for their time, of Raymond Unwin. He drew attention to the need for open spaces and to the problems caused by ribbon development and sporadic building, and pressed for additional planning powers. The *Second Report*, 1933, dealt also with housing requirements, industrial and commercial developments, road traffic, and the interdependence of central and regional planning. The London and Home Counties Green Belt Act 1938 showed the need to contain London. Patrick Abercrombie took up ideas such as a London Green Belt, satellite towns, and ways of countering the magnetism of London, in *The Greater London Plan*, 1944, but the scale of future traffic problems in particular was not foreseen.

Sources

Pre war local planning documents are scarce and always worth searching. *The South Essex Regional Planning Scheme*, 1931, by Professor S. D. Adshead discussed the urbanisation of Essex and the development of the port of London, as well as providing much detailed information on transport and industry. *The West Essex Regional Planning Scheme*, 1933, also by Adshead, mentioned that the need for a green belt round London had been 'universally accepted' (p. 8) though no specific areas had been designated. Both of these documents include a large number of topographical sketches by Adshead and maps. An early document relating to a particular town was *Chelmsford Planning Survey*, 1945, a survey and plan for Chelmsford Borough and Rural District sponsored by the Chelmsford Area Planning Group and directed by Anthony Minoprio.

Post-war planning in Essex

A useful brief summary is given in: Essex County Council, *Twenty five years of planning in Essex, 1947-72*. The key regional planning influences on Essex are:

(i) P. Abercrombie, *The Greater London Plan*, 1944.
(ii) H.M.S.O. (Min. of Housing and Local Govt.), *The South East Study 1961-81*, 1964.
(iii) Report by the South East Joint Planning Team, *Strategic Plan for the South East*, 1970 (authors were representatives from local and central government).

The experience of war highlighted the interdependence of town and countryside and the need to plan in larger units. Abercrombie's regional plan, linked with his plan for the county of London, considered problems of the distribution of population, housing and employment for the whole London region, and he was thus able to include his scheme for new towns.

There are two main types of planning. Firstly, there is county strategic planning, whereby broad policies for the whole county are set out, general patterns of development defined, and population estimates provided. Maps are drawn on a 1″ to the mile (or, from the early 1970s, 1:50,000) scale. Secondly, there is planning at town level, with maps drawn on a scale of 6″ to the mile (or, later, 1:10,000) for individual towns. In addition there is development control where individual applications for development are assessed in the light of local plans.

After local government reorganisation in 1974 the county council retained responsibility for county statutory planning, while district councils became responsible for preparing local plans; and also for development control, in consultation with the county planners where appropriate. So, for example, after 1974 Essex County Council in its Structure Plan would specify the number of houses to be built in a district, and the district council would decide where within the district they should be built. The development control process does not produce reports but decisions, e.g. on car parking. An example of local district development control is the development of Chelmer Village by Chelmsford District Council. A local historian researching a particular place might in the first instance consult the appropriate district planning department to see what documents are available for study. He or she might later need to look at files on individual development decisions, but the chief executive of the county should be consulted first, as recent legislation has classified some documents as confidential. There are a few important exceptions to the division of responsibility between county and district authorities. Essex County Council retains complete control of minerals; and also exercises sole responsibility for plans on some particular subjects where planning may cut across several districts. In its *Essex Coast Protection Subject Plan*, 1984, for example, the county council stresses the importance of the conservation of wildlife and of the natural landscape in development along the coast. Other matters may arise where the higher and lower tier authorities share power, as in the proposed development at Tillingham Hall in Thurrock borough. The development of South Woodham Ferrers as a new town has been co-ordinated by Essex County Council; the county produced development briefs and Chelmsford Borough Council was invited to comment on them.

Planning in Essex at county level

The *Essex County Development Plan* was initiated in 1952 and approved in 1957. It was reviewed in 1964-76, and again in 1979-82. Structure plans, as county plans are now called, take account of potential resources and of national and regional considerations. They include measures for improving the physical environment and for traffic management; and indicate in general terms the 'action areas' where major changes will be made. Each of the three phases of the Essex plan created a series of documents which follow a common pattern, being amended as they progress by changes in needs and ideas, and by the influence of public opinion. The main framework of administrative documents is:

(i) Report of survey, which gives a detailed account of the county at a certain date.
(ii) Intermediate documents, usually called draft, and submitted, plans (where the plan submitted to central government may be a slightly amended version of an earlier draft plan).
(iii) Approved plan, which is the official plan approved by central government.

The report of survey is the key document of each phase, and usually appears in many component parts. Such documents are extremely useful to the local historian interested in a particular place, for they provide much detailed information under such headings as population; employment; housing; industry and commerce; transportation; shopping; education and other social and community services; recreation and leisure; conservation, townscape and landscape; and utility services. The bibliographical details are:

1. Essex County Council, *County of Essex Development Plan*.
(i) *Report of Survey*, 1952.
(ii) *Written statement*, 1953 (submitted plan).
(iii) *Approved written statement*, 1957.
2. Essex County Council, *County of Essex Development Plan, First Review*.
(i) *Report on the First Review*, 1964.
(ii) *Written statement*, 1964 (submitted plan).
(iii) *Approved written statement*, 1976.
3. Essex County Council, *Essex Structure Plan* (note that this is the second review of the Essex Development Plan).
(i) *Report of Survey*, 1979.
(ii) *Written statement (draft)*, 1978 (note that this preceded the issuing of the report stage).
Written statement (submitted), 1979.
(iii) *Approved written statement*, 1982.

A special document produced by the county planning department in connection with the county development plan was the *Survey of Plotlands in South East Essex*, 1959, to consider whether greater use could be made of plotland areas to meet the housing needs of metropolitan Essex. It

6.0 THE TOWNS

6.1 BILLERICAY

Basildon District

Situation

Billericay lies on a north-south ridge of London Clay capped by gravel, at the point where it is crossed by the road running from London to Rayleigh and Rochford, and by that from Chelmsford to the Thames.

Prehistoric and Roman (Fig. 13.1)

In the Billericay area, there are two settlement foci in the late Iron Age and the Roman period. One was to the north of the present town centre and west of Norsey Wood, whilst the other, south of the town centre, lies beneath what is now Billericay School. At the former, finds of neolithic implements and Bronze Age burials represent earlier prehistoric settlement before the establishment of a farmstead in the late Iron Age and early Roman period. On the site of Billericay School, the settlement seems to have been more extensive. It probably originated as a ditched enclosure of the late Iron Age, and grew into a small town during the Roman occupation, centred around the point where an east-west Roman road crossed the ridge. The settlement's cemeteries were to the south and east, and there was at least one masonry building, discovered in the nineteenth century during the construction of the gas works.

Medieval History and Topography (Figs. 13.2 and 13.3)

Until the nineteenth century, Billericay was an integral part of Great Burstead parish, and the town grew up as a secondary settlement. The name Billericay is not recorded until 1291, but it is most likely that the market granted to the Abbey of Stratford Langthorne in 1253 in Great Burstead was, in fact, held at Billericay. The town is typical of that type of medieval new town where organic growth due to the stimulus of trade was a more important cause of urban development than encouragement by a patron. It lies on the parish boundary, occupying waste land, and was in several manors. Indeed, it would seem that until 1345 the west side of the High Street was in Mountnessing parish. In that year a chapel was built in Billericay itself, and it became usual for the inhabitants of the town to attend it with the result that the west side of the town was transferred, for a fee, to Great Burstead parish.

This parochial division provides a clue to the town's topography. The medieval town occupies the area between the junction of Western Road and Norsey Road with the High Street and the curve in the High Street opposite the Red Lion Inn. Two distinct morphological units can be identified; to the east, between Chapel Street and the southern end of the medieval town, is a series of plots backing onto Chapel Street, which forms a tangential back lane. Western Road (formerly Back Street) forms a similar tangential back lane to the plots on the western side of the High Street. The former unit is probably earlier, representing the original settlement associated with the grant of a market in 1253, and shows an element of planning in the organisation of regular strips of varying sizes. It resembled Epping and Brentwood in lying on one side only of its main street. The west side is apparently a later development.

The Chapel at Billericay was founded as a chantry to Great Burstead's parish church. The fifteenth-century brick facade still survives, though the rest of the chapel is eighteenth century.

Billericay possessed both a wooden market cross and a market house. The town made a brief appearance in national history when in 1381 the few remaining participants in the Peasants' Revolt took refuge in Norsey Wood, just to the north of the town, and surrendered there.

Excavation History

The Billericay Archaeological and Historical Society has carried out a number of excavations on the Roman settlement over the past six years, recently in association with the Archaeology Section of Essex County Council's Planning Department. In the medieval town, however, there have been no excavations despite extensive redevelopment in the last two decades, though watching briefs have been undertaken.

Planning

Billericay town centre is a designated Conservation Area.

The Approved Review Development Plan (ARDP) provided for the doubling of population in the Billericay/Wickford area between 1961 and 1981. Although much of this growth has been achieved, the Queens Park area in particular has still to be completed.

The Essex Structure Plan (ESP) defines Billericay as a minor district shopping centre. No further residential development is proposed other than that for which land was available in 1977. ESP provides for a substantial increase in office space in the Billericay/Wickford area. The western part of the town abuts the Approved Metropolitan Green Belt. ESP also makes provision for a Green Belt to be maintained to the east of the town—the precise boundaries to be defined by Local Plans.

Basildon District Council are preparing a Local Plan for Billericay, in order to provide a detailed set of policies and proposals for the medium and long term future within the framework of ESP, and *inter alia* to re-examine the pressures for change in the town centre (following the 1974 Town Centre appraisal) and, where appropriate, to provide for the enhancement of the town centre's commercial and social functions by environmental improvement and planned redevelopment of redundant buildings and derelict land.

Previous proposals for an inner relief road have been delayed and scaled down on cost and environmental grounds, but relief of the town centre is considered by ESP to be essential.

Norsey Wood near the town is scheduled as an Ancient Monument.

Appendix II: Example B — Essex County Council, *Historic towns in Essex*, 1983, p. 19.

included much descriptive material on roads, dwellings and other buildings, mineral workings, agricultural land, woodlands and scrubland, and derelict and other unused land, and also many maps and tables. It should be noted that there was an initial structure plan in south Essex, 1972-3, which preceded the Essex Structure Plan, and several reports were produced. This seemed necessary at the time because of the proposed third London airport at Maplin, but when the airport scheme was dropped the south Essex plan was superseded by the structure plan for the whole county. Aspects of planning of particular importance in Essex are minerals, the coast, tree planting, and sand, gravel and waste disposal.

As well as the statutory documents listed above, other informal papers are produced. The researcher may find 'land use and transportation studies' relating to different towns; these documents were produced as a result of the central government report on planning for traffic: C. Buchanan, *Traffic in Towns*, 1963 (H.M.S.O.). (See Appendix II, example A).

Essex County Council has been influential in neighbourhood design through two publications: *Design Guide for Residential Areas*, 1973, and, *Design Guide for Residential Areas — Highway Standards*, 1980. These documents advocate variations in the style of building, for example, through the use of varied elevations and pitched roofs; the need for privacy is acknowledged through careful consideration of factors such as window shapes and sizes.

Many documents on archaeology, historic buildings and conservation can be found in the list of publications for sale of Essex County Council planning department, Globe House, New Street, Chelmsford, and copies are held in the planning library there. Many of these items are held by county libraries or the Essex Record Office. Two of particular interest are: Essex County Council, *Historic Towns in Essex, an archaeological survey of Saxon and medieval towns, with guidance for their future planning*, 1983, (see Appendix II, example B), and, Essex County Council, *Colchester: an historic townscape*, 1967, (see Appendix II, example C). Both show the response of Essex planners to increased public concern about the conservation of historical aspects of the environment, and provide much material of interest to the local historian.

Planning in Essex at district level

Before 1974, although the county was responsible for all aspects of planning, lower tier authorities sometimes produced booklets examining a topic or area in more detail than in the county plan. Such items were likely to go through similar stages to the county plans, of survey, analysis, plan; for example: *Clacton Town Centre appraisal report*, 1971.
Clacton Town Centre consultation plan, 1973.
Clacton Town Centre plan, 1973.
The documents produced were usually coloured in (traffic light sequence) red, orange and green. (See, H.M.S.O., *Development plans, a manual on form and content*, 1970).

Maps defined existing boundaries of settlement, and if any growth was proposed a plan would be necessary. 'Village envelopes' were limits set informally by lower tier authorities around settlements to contain development, and they usually date from the 1960s. Limits might be set, for example, if the water authority felt that the existing sewerage system would be unable to support an increase in population. In this way lower tier authorities translated general policies into local terms.

Since 1974 district councils have produced their own official local plans, following the same three main stages, namely, report of survey, draft and submitted statements, and adopted (approved) plans. The terminology may vary slightly from one district to another, and in some cases two stages have been merged into one. Maldon District Council, for example, usually combines the first two stages in one document. The report of survey may include a number of reports on particular topics, such as shops, offices, transport; and the visual impact of a proposed plan is another important factor to be taken into account. (See Appendix II, example D). An interim stage of a plan may be referred to as a consultation document, and plans are usually placed 'on deposit' at certain advertised locations to enable the public to comment. Plans often arouse a good deal of public reaction which results in modifications. District councils usually produce plans covering the entire district first (see Appendix II, example E), then plans for particular settlements (see Appendix II, example F), followed by plans for the remaining parts of the district. In rural plans a distinction is usually made between a settlement and a group of houses. Action area plans deal with areas in the structure plan where large-scale development, redevelopment or improvement is likely to start within ten years. They might, typically, cover the part of a town centre which is to be redeveloped. The Colchester Borough Council, *Stanway/Birch Action Area Plan*, 1984, is an example which deals with the restoration of mineral workings. Subject plans set out in detail the authority's proposals for a particular type of development or use of land, for example, the policy for villages. Many district councils have lists of their own publications, and some have produced their own planning handbooks which summarise many other planning documents.

Planning in Greater London

Plans for Greater London followed similar stages to those for Essex. The key documents are:
Greater London Council, *Greater London Development Plan*,
(i) *Report of studies*, 1969, (with revisions, 1972).
(ii) *Written statement*, 1969.
Report of panel of inquiry, 1973 (a further intermediate stage necessitated by long time lapse).
(iii) *Adopted plan*, 1976.
Greater London Council, *Alterations to the Greater London Development Plan*, 1984 (consultation document).

Docklands

The competing interests of different political parties and groups is particularly pronounced in the planning of the

VICTORIAN EXPANSION

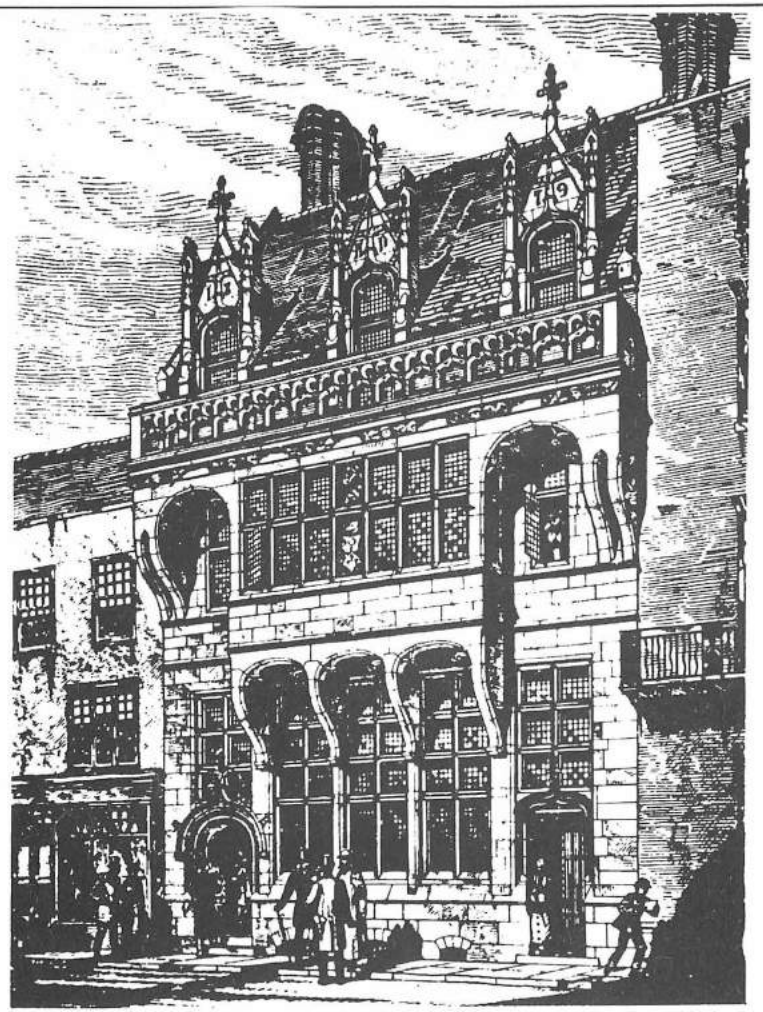
Throughout the nineteenth century Colchester continued to function as a market town, but following the arrival of the railway in 1843, came the industries which were to encourage the development of a balanced and diverse employment structure locally and provide the impetus for rapid change. As with the Abbey, the railway stimulated house building between it and the town centre and induced a north-south elongation of the town.

That Colchester was beginning to expand had been evident earlier in the century when business and professional men had begun to seek new homes in the suburbs and ended the tradition of having home and office or workshop under the same roof, which had been common in earlier times. This tendency enabled those businesses in the town centre to expand, e. g. when the Georgian vicarage of St. Peter's was destroyed by fire in 1843, the site was used to relieve pressure in the Corn Exchange next door, which had been built on the site of the old Dutch Hall. Commercial pressures were gradually developing and altering the nature of the centre, a change emphasised by the removal of the old cattle market to Middleborough in 1862 and the demolition of Middle Row and St. Runwald's in the High Street in 1878. Improvements were also being made in street lighting, paving and shop fronts. The Town Hall had twice been rebuilt in this period; in 1845 when the old Moot Hall was demolished, and again in 1898, whereas "Jumbo" now formed a massive closure on the High Street in which the flamboyance of Victorian architecture found expression as in Round, Green and Company's Bank seen across which stood on the site of the present Barclays Bank and was one of those amalgamated in 1896 to form Barclays Bank.

The movement away from the town centre was manifested in Colchester's residential expansion after the 1880's, and especially in the south-eastern sector of the town. The rate and scale of urban development here was not matched elsewhere mainly because of the unsuitability of the Colne Valley for housing, and the high value of land north and west of the river, whereas the large area occupied by the garrison which has been expanded since its inception in the 1840's and 50's, precluded residential development here.

By 1900 expansion in all directions had changed the town centre radically, but nowhere was this more evident than in the High Street which was largely rebuilt in the nineteenth century. This result of commercial pressure was nevertheless of sufficiently high a standard as to enhance the form and character of the High Street, notwithstanding the loss of St. Runwald's and Middle Row.

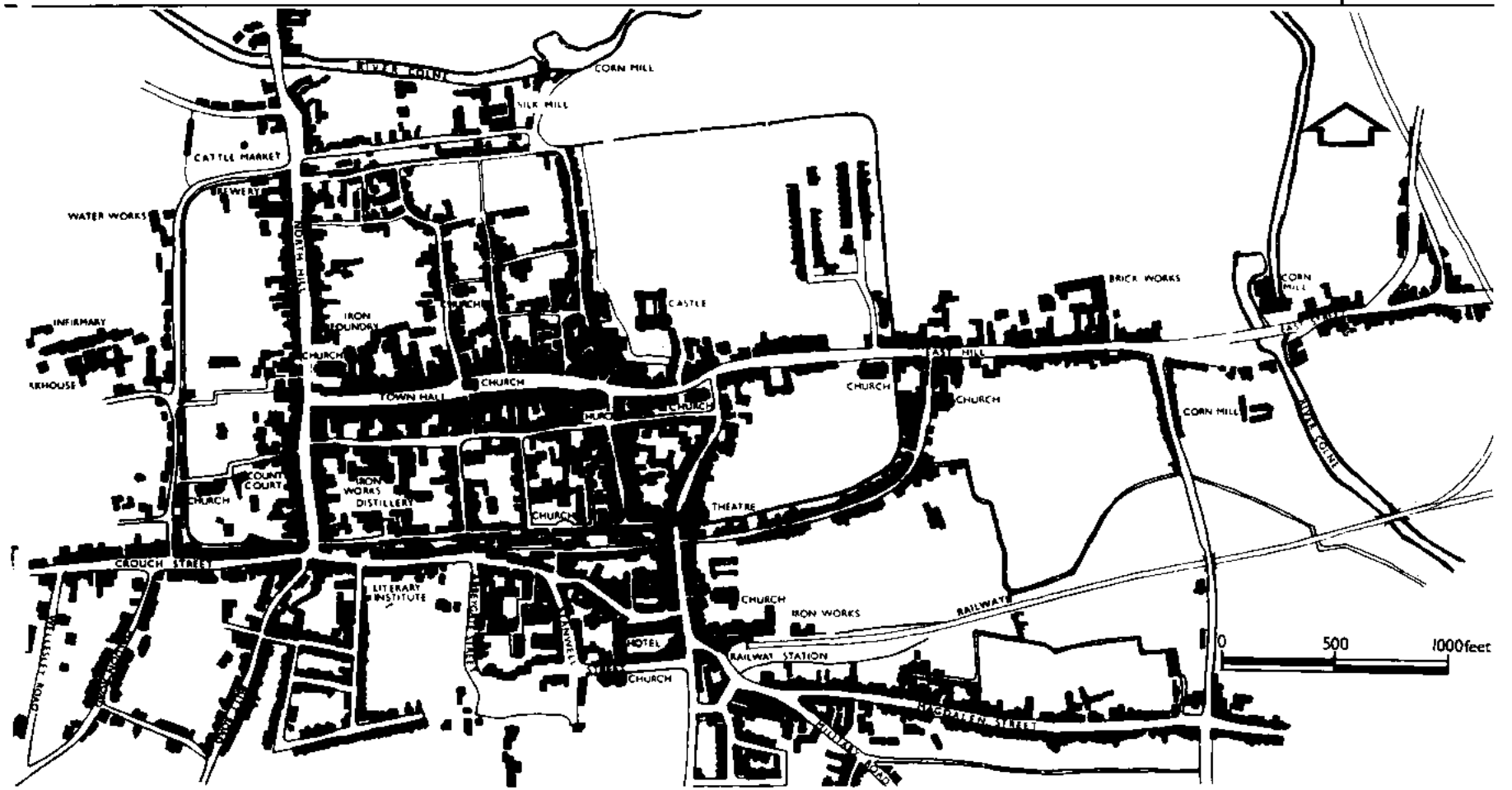
The Napoleonic war scare in 1801 saw the development of a barracks at the northern end of a parade field which stretched from Magdalen Street to the Old Heath Road. Part of this is now the Recreation Ground and the Government Cottage is a relic of the first barracks. The Crimean War brought a new camp between the Old Heath and Mersea Roads in 1854-56 and later over Abbey Fields;



the Garrison Chapel still remains. In 1864 an exercise ground was established at Middlewick, Old Heath, and a cavalry camp alongside Butt Road. The garrison brought stability to the town's economy, especially in times of agricultural depression. In terms of town form it has created a wedge in the centre of Colchester and encouraged development to the south-east and south-west

Appendix II: Example C — Essex County Council, *Colchester; an historic townscape*, 1967, p. 18-19.

VICTORIAN PLAN



This map taken from an Ordnance Survey map of 1875 shows how Colchester's expansion was at first concentrated along the main roads out of the town. The areas between these corridors of development have since been filled in and produced Colchester's characteristic shape - a circle imposed upon the ancient grid iron of the town centre core. Note should be made of the number of industrial undertakings found within the town; silk and corn mills beside the river, iron works logically near St. Botolph's Station with others on North Hill and in Culver Street. Such undertakings indicate the diversity of the town's economy and with other specialist buildings such as the theatre, literary institute and infirmary, foreshadow the town's development as a sub-regional focus.

Appendix II: Example C.

London docklands. The publications listed illustrate different views and policies, as well as giving information on the areas concerned.

Following the development of St. Katherine's Dock for alternative uses, the Conservative Government appointed the consultants, Travers Morgan, to draw up alternative proposals for the docklands area: *Docklands: redevelopment proposals for East London*, 1973. Although there were key differences between the five Travers Morgan options, they were all seen as favouring a fundamental change of use for the area, 'bringing the West End to the East End'.

Local opposition to the Travers Morgan proposals resulted in the formation of the Docklands Joint Committee, a consortium based on representatives of the five London borough councils and of the Greater London Council. The Docklands Joint Committee had its own team of planners who drew up: *London's Docklands: a strategic plan*, which was approved by the Greater London Council and the five constituent London boroughs, following public consultation in 1976, as representing the views of local people. (It was not a statutory plan as it was not approved by the Government).

After its return to power in 1979 the Conservative Government appointed the London Docklands Development Corporation which took over all planning, land ownership and development, and compulsory purchase powers for the area. This body was directly appointed by the government. Whilst in theory the Docklands Strategic Plan remained in force, new policy initiatives, such as an enterprise zone on the Isle of Dogs, marked a significant shift in planning emphasis. Annual reports were produced from 1981/2 which summarise the policies and achievements of the London Docklands Development Corporation.

A Docklands Consultative Committee was formed in 1982 of delegates from the London borough and Greater London councils. Their views are generally opposed to those of the London Docklands Development Corporation and are summarised in: Greater London Council, *The Docklands Consultative Committee 1985, four year review of the LDDC.*

Newham Greater London Borough Council's plans for Docklands are contained in:

(i) *South Docklands Local Plan*, report of survey, 1984.
(ii) *Beckton Local Plan, the area surveyed*, 1976, adopted plan, 1980 (under review).

The counter view to Newham Council's plans is expressed in the following document: London Docklands Development Corporation, *Royal Docks, a draft development framework for the royal docks area*, 1984.

Conclusion

This paper was originally prepared in connection with the *Victoria County History of Essex, Bibliography Supplement*, published December 1987. For sources in addition to those mentioned above, see *Bibliography Supplement* Part I (nos. 1579-1633), and under Individual Places, especially towns, in Part III. Appendix I to this paper lists those places whose entries include planning references.

Local government planning sources necessarily reflect official policies. Other influences can be seen through the way that plans have often been modified after pressure from local interest groups or individuals. Many discussion papers have been produced from all viewpoints on policies of central government, but comparatively little on Essex local planning. However, council minutes, local newspapers, and the periodicals and other publications of local interest groups, would repay detailed study by the researcher interested in alternative aspects of local planning.

The preparation of this paper was suggested by Mr. W. R. Powell, editor till his retirement in 1986 of the Victoria County History of Essex, to whom I am most grateful for his comments. My thanks for kind help are also due to the Planning Departments of Essex County Council, the Essex District Councils, and the London Borough Councils, especially to Essex County Council and to Maldon District Planning Departments for permission to reproduce extracts from their documents, and to Mr. D. Glading (Essex) and Mr. A. Dyer (Chelmsford); also to Mrs. A. Ridgewell of Essex County Council Planning Department library, Mr. T. Henderson, Mr. J. Gyford, and Mrs. J. Gyford.

Author: Shirley Durgan, c/o VCH Essex, 17 Arbour Lane, Chelmsford CM1 5RG.

Appendix I

List of all places with planning items in Part III of *V.C.H. Essex Bibliography Supplement*.

Abbreviations

Brackets denote administrative units abolished in 1974.
(CB) = County Borough,
(MB) = Municipal Borough,
(RD) = Rural District,
(UC) = Urban District,
(D) = District,
(LB) = London Borough.

Alresford
Althorne
Ardleigh
Arkesden
Ashdon

Baddow, Great
Baddow, Little
Bardfield, Great
Barking (MB)
Barking & Dagenham LB
Basildon district
Beaumont-cum-Moze
Belchamp Otton
Belchamp St. Paul
Belchamp Walter
Bentley, Great
Bentley, Little
Berden
Billericay
Birch
Birchanger
Birdbrook
Boreham
Bradfield
Braintree
Braintree D
Brentwood (UD)
Brentwood D
Brightlingsea (UD)
Bromley, Great
Bromley, Little
Bumpstead, Helion
Bumpstead, Steeple

Canvey Island (UD)
Chelmsford (MB)
Chelmsford borough/district
Chesterford, Great
Chrishall
Clacton, Little
Clacton (UD)
Clavering
Coggeshall, Great
Colchester (MB)
Colchester borough/district
Corringham

Dedham
Donyland, East
Dunmow, Great

Elmdon
Elmstead
Elsenham

Epping (UD)
Epping Forest D
Epping & Ongar (RD)

Farnham
Felsted
Foxearth
Frating
Frinton (UD)

Hadleigh
Hallingbury, Great
Hallingbury, Little
Halstead (UD)
Ham, East (CB)
Ham, West (CB)
Harlow D
Harwich (MB)
Hatfield Broad Oak
Hatfield Peverel
Havering LB
Henham
Holland, Great
Hornchurch (UD)
Horndon-on-the-Hill

Ilford, Great (MB)

Kelvedon
Kirby-le-Soken

Langley
Lawford
Littlebury

Maldon (MB)
Maldon D
Manningtree
Manuden
Mersea Island
Mistley

Nazeing
Newham LB
Newport
Norton, Cold

Oakley, Great
Oakley, Little
Ongar, Chipping
Orsett (RD)

Quendon

Rainham
Ramsey
Rayleigh (UD)
Redbridge LB
Rochford
Rochford D
Roding, Leaden
Romford (MB)
Roydon

St. Osyth
Saling, Great
Southend-on-Sea borough/district
Southminster
Springfield
Stanford-le-Hope
Stansted Mountfichet
Stanway
Stebbing
Sturmer

Takeley
Tendring
Tendring District
Thaxted
Thorpe-le-Saxon
Thorrington
Thurrock borough/district
Tollesbury
Totham, Great

Uttlesford D

Walden, Saffron (MB)
Waltham Forest (LB)
Waltham Holy Cross (UD)
Walton-on-the-Naze
Weeley
Wendens Ambo
Wickford
Widdington
Witham (UD)
Wix
Woodham Ferrers
Wrabness

Appendix II
Example A
Maldon Town Design Group, *Maldon, a comparative study*, 1966, vol. i, p. 17.
Employment: summary

53. That 4,800 persons resident in Maldon in 1965 were employed persons. That 1,900 persons come into Maldon daily to work. That 1,600 go out of Maldon daily to work. Of those going out of Maldon daily to work, 44 per cent go to Chelmsford, 6 per cent to Witham, and 3 per cent to London.
54. That there is a considerable imbalance between job-availability in Maldon and the type of persons resident there.
55. All trends indicate that this imbalance is very likely to increase considerably by 1981.
56. Of the newcomers to Maldon since 1959, only 9 per cent work in the town and 91 per cent 'commute' to employment elsewhere.
57. That almost all of the vacant industrial land is in the ownership of one firm, and unless the land allocated for industry is made more generally available and steps taken to ensure its development it is not likely that sufficient job potential will be provided by 1981.

Appendix II
Example D
Maldon District Council, *Althorne Plan, consultation*, 1977, p. 3-4.
Visual Appraisal

Appendix II: Example D — Maldon District Council, *Althorne Plan, consultation*, 1977, facing p. 4.

Historically, Althorne can be divided into two distinct settlements; one centres around the Black Lion public house, known as Lower Althorne, and the other, known as Upper Althorne, around the junction of Summerhill, Burnham Road and Fambridge Road. Neither of these settlements could be considered to have the traditional intimate village characteristics associated with the nucleated Essex village, rather they were loosely knit linear settlements. Over recent years consolidation has taken place within the linear form of the village together with a tendency for the two settlements to coalesce. A limited amount of estate development has also taken place over recent years marking a departure from the previous linear form.

Architecturally the village of Althorne displays a considerable variety of forms; however, the range of materials used is more limited than in many other settlements in the District, which brings a degree of continuity into the appearance of the village.

Along Fambridge Road sporadic developments have taken place for almost a mile from its junction with Summerhill. Around Althorne Station is a small cluster of houses built originally at the end of the 19th century by the railway company for their employees. Further south along Bridgemarsh Lane lie a number of chalets and caravans, including the Smugglers Club Ground.

The Parish Church of St. Andrew is the most important building in the parish and also the only one qualifying for inclusion on the Statutory List of Buildings of Special Architectural or Historic Interest. Approached by a short lane from Fambridge Road, it stands in an isolated position.

In Lower Althorne there is an attractive group of buildings which includes the Black Lion Public House. Visually, these buildings are important as they help to terminate the view when approaching the bend in the road from both the Maldon and Burnham-on-Crouch directions. The only other architecturally significant building in Althorne is Mansion House in Burnham Road which dates from the 18th century or earlier, although it was refronted during the 19th century with a brick parapet facade.

Throughout the village there are a considerable number of trees which enhance the area and help link the development together.

Appendix II

Example E

Maldon District Council, *Maldon District Study, Aspect Paper 2: Housing*, 1977, paragraphs 2.6.1-3.

Housing Market

In November 1974 Essex County Council produced an internal research paper considering house prices throughout Essex. The survey was based primarily upon newspaper advertisements over a number of weeks. In some cases insufficient properties were on sale for comparison purposes. Additionally, various problems of double-counting were inevitable. However, the results were sufficiently meaningful to be presented below. Although the economic depression may have reduced the numbers of dwellings for sale since 1974, it is unlikely to have affected the relative values of different areas.

So far as supply is concerned, in 1974 there was no shortage of houses for sale in Maldon District in either urban or rural areas. However, relatively few houses were available in the Dengie Peninsula.

Prices generally reflect distance from London and the desirability of the area. Epping Forest prices were highest, since as well as being a suitable place from which to commute it is surrounded by attractive Green Belt countryside. Access to London by rail seemed less influential than distance by car. Maldon's prices were about average for Essex, marginally below Chelmsford District prices for some classes of property, about the same as average prices in Braintree District, and generally higher than prices in Rochford, Colchester or Tendring Districts.

Appendix II

Example F

Maldon District Council, *Althorne Plan, Consultation*, 1977, p. 16.

Health and Social Services

The Althorne parish comes within the Chelmsford District of the Essex Area Health Authority. This is a largely rural district in which the resources are already stretched and unable to keep up with the growth of the population.

Hospital care is very largely centred in Chelmsford where hospitals are equipped to deal with casualty, surgical and clinical cases. St. Peter's Hospital in Maldon is largely devoted to geriatric care, although there are maternity and some clinical facilities.

Some maternity cases are currently dealt with in a small maternity home in Burnham. For reasons of efficiency and economy, the area health authority are currently considering the closure of this establishment.

The more day-to-day health needs of the community are catered for by a part-time doctor and a monthly infants' clinic in the village hall. The nearest dispensing chemist is in Burnham.

The population figures show that the village has a far higher proportion of aged people than is average for the District. Although the W.R.V.S. provide 'meals on wheels' for some elderly people in the village, the present health and social service facilities cannot be considered entirely satisfactory for a sizeable aged population.

Essex Archaeology and History **19** (1988), 240-259

The work of the Essex County Council Archaeology Section, 1987

Edited by Deborah Priddy

This annual report enables the Section to publish notes on a number of watching briefs and chance finds made during the year, as well as final reports on a number of smaller excavations. Summaries of the larger excavations can be found elsewhere in this volume (p. 260-271).

Reports are arranged in chronological order or, in the case of multi-period sites, under the principal period represented. The Section is grateful to all who have undertaken work on its behalf, especially those providing specialist reports, and to individuals and museums who have allowed finds to be published here. The illustrations are by the following: Barry Crouch (Figs. 13A, 14), Steve Godbold (Figs. 3, 20), Sue Holden (Figs. 1, 2, 5, 13C, 7-12), Roger Massey-Ryan (Figs. 4, 15, 16, 19), Alison McGhie (Figs. 17, 18), Ruth Parkin (Fig. 13B) and David Schofield (Fig. 6). All other illustrations are by the individual authors. Full details of all sites can be found in the County Sites and Monuments Record.

Stebbing (TL 62-118)

Nigel Brown and Chris Going

An Early Bronze Age beaker (Fig. 1) was recovered during road improvements by Essex County Council in 1965 (S.W.M. Acc. No. 1963.47). Although no details of the discovery are known, it is likely that the operations disturbed a burial. No indication or tradition of a burial mound in this area survives (Messrs. Haig and Leeder, pers. comm.); although the location, on the false crest of a ridge, makes the presence of a barrow very probable. The vessel was acquired by Miss A. Ness of Saffron Walden, and was lent for study by Saffron Walden Museum.

Most of the lower half of the beaker survives, partly restored with plaster (Plate 1). The fabric contains sparse, small grog inclusions and occasional flint. Surfaces are red/brown, the interior somewhat abraded, core black. There are traces of a black deposit on the inside of the base. It has a footring base with a slightly protruding foot. Decoration consists of horizontal lines above a 25mm wide blank zone around the base. The lowest line is simply composed of a row of slanted finger-nail impressions. The lines above are more complex, consisting of grooves, either pecked out in a series of interlocking horizontal nail impressions, or incised. These horizontal lines are sometimes cut through (Fig. 1A), and sometimes cut by, groups of slanting finger nail impressions (Fig. 1B). At first glance, this complex decorative scheme resembles cord impressions.

The use of fingertip and nail decoration is common on East Anglian-style Beakers. The complex decorative technique used on this example emphasises the unorthodox decoration which Lanting and Van der Waals (1972) see as

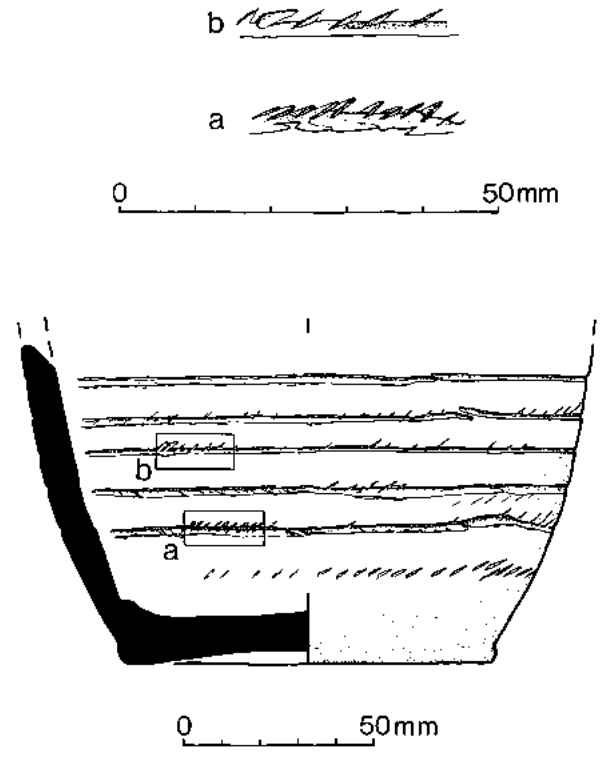


Fig. 1 Early Bronze Age beaker from Stebbing.

characteristic of East Anglian Beakers, and has similarities with complex finger nail decoration on Peterborough pottery from the Springfield cursus (Brown, in prep.). This Beaker belongs to the East Anglian style and would be appropriate to Case's Middle phase (Case 1977), dating to the second half of the third millenium B.C.

Finds: S.W.M.

Alresford, Bluegates Farm Quarry (TM 02-152)

Deborah Priddy and Nigel Brown

Following the removal of topsoil, a number of features were recorded, although their identification and excavation was impeded by uneven machine clearance. Cropmark features previously noted in this area comprised trackways, ditches and pits. Seven features were recorded: pits (7, 12, 16), ditches/gullies (1, 5, 9) and a possible post-hole (14). Pottery was recovered from two features: A possible gully (9) *c.*1.10m wide and 0.3m deep, and a pit (16): 0.6m in diameter and 0.3m deep. Both features had sandy silt fills.

Three small chips of pottery came from (16), whilst 28 sherds, (weight: 201g) were recovered from (9). All were in a coarse flint-tempered fabric. The latter may all be from a

Plate I Early Bronze Age beaker from Stebbing.

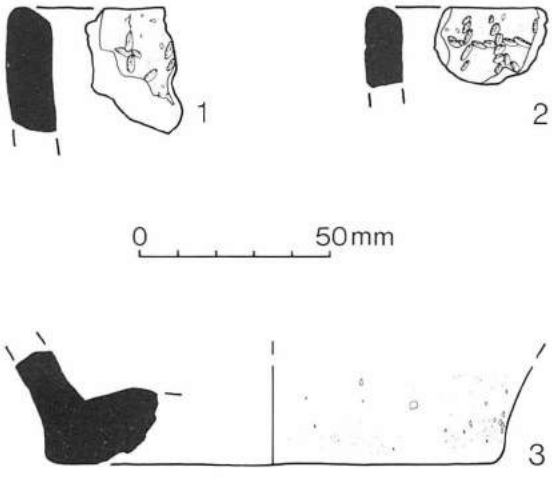


Fig. 2 Early Bronze Age pottery from Alresford.

single vessel, although there are few joining sherds. They included two rim sherds and two sherds of a thick, flat base (Fig. 2), with slight internal bevel and cord impressions on the exterior. They are likely to derive from an Early or Middle Bronze Age urn, whose type cannot be specified. In view of the general absence of cord decoration on Essex Deverel-Rimbury pottery, an Early Bronze Age date seems likely.

Finds: E.C.C.; to go to C.E.M.

Harlow, Holbrooks (TL 41-14)
Nigel Brown

An Early Bronze Age miniature axe (Fig. 3) was recovered as an unstratified find during rescue recording of this Roman site (Conlan 1973).

Weight: 8g, maximum surviving length: 34mm; it is poorly preserved and pitted with corrosion. The butt is broken off and the axe is bent out of shape, the faces tapering slightly from the butt end, before turning sharply out to give a widely splayed blade. One face is flat, the other appears to have slight flanges.

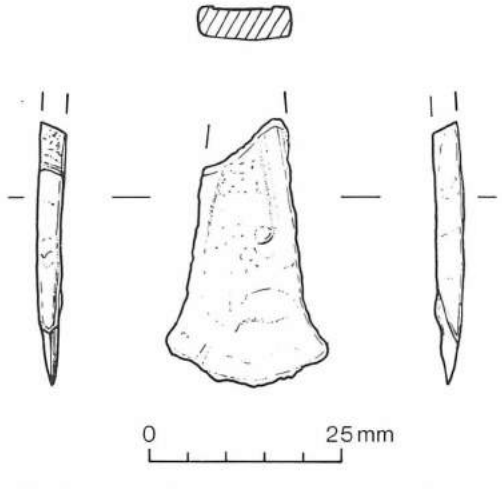


Fig. 3 Bronze Age miniature axe from Harlow.

The Holbrooks site lies close to the Harlow Temple and a number of votive objects have been recovered. However, this axe bears no resemblance to the two typical Roman miniature axes from the site (Conlan 1973, fig. 4b), and its occurrence here may indicate reuse in the Roman period.

Finds: H.M.

Hatfield Broad Oak (unprovenanced)
Nigel Brown

The tip of a copper alloy spearhead was lent to the Section for recording (Fig. 4).

Weight 13g; surviving length 50mm; there is some damage to the blade edges and corrosion pitting on the surfaces. The faces descend in steps from a pronounced midrib to the blade edges. Such stepped blade spearheads are characteristic of the Wilburton tradition of the Late Bronze Age (Burgess 1968). The object is of some interest since Wilburton metalwork is rare in Essex, compared to that of the succeeding Ewart Park phase.

Finds: private possession.

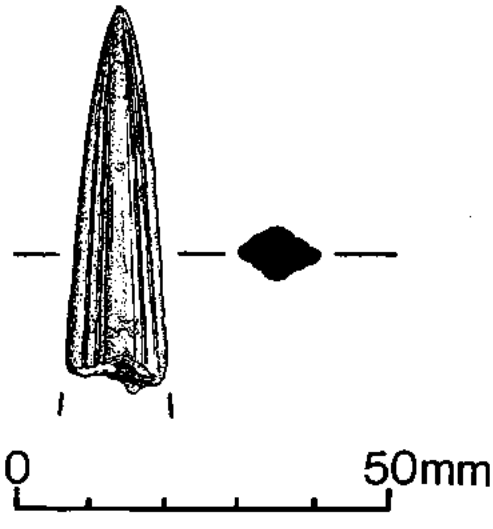


Fig. 4 Bronze Age spearhead from Hatfield Broad Oak.

Wickford, Memorial Park (TQ 79-116)
Nigel Brown

During 1986 a survey of a pipeline route by the Thurrock Artefact Recovery Society produced two bronze objects in close proximity (Fig. 5).

1. Tip of socketed axe (Fig. 6.1), weight: 39g. The surviving lower sides curve slightly to a moderately expanded, heavily damaged cutting edge. There are no traces of any casting seams. The surfaces have a dark green/brown patina, pitted with corrosion. There is slight recent damage to one face and to the broken edges of the socket. This fragment probably derives from a south-eastern type axe (Butler 1963) of the Late Bronze Age.
2. Half of a roughly circular, convex disc (Fig. 6.2), weight: 136g, maximum diameter 70mm; roughly conical central perforation, upper maximum diameter 32mm, lower maximum diameter 28mm. There is a low flange around the outer edge of the upper surface. The upper surface is smooth, with a very dark, almost black, patina. There is a series of cracks in the upper surface, running from the central perforation towards the outer edge; the lower surface is rough with a green patina.

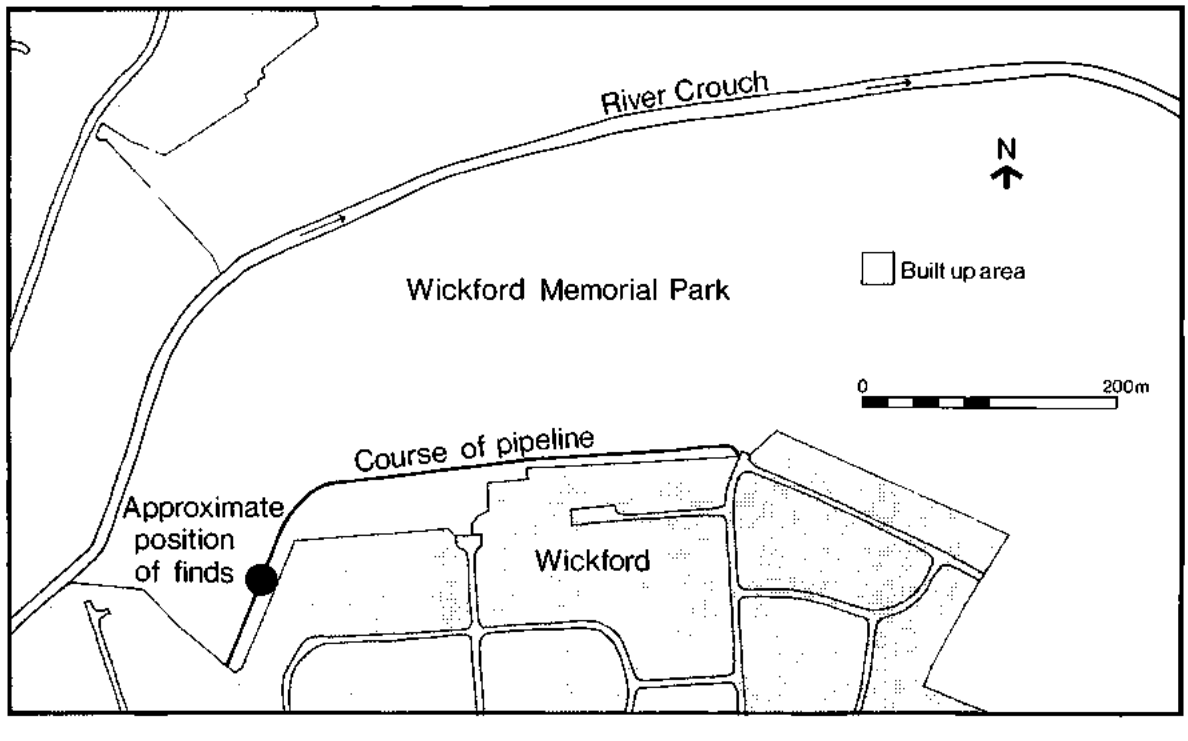


Fig. 5 Wickford — location of Bronze Age finds.

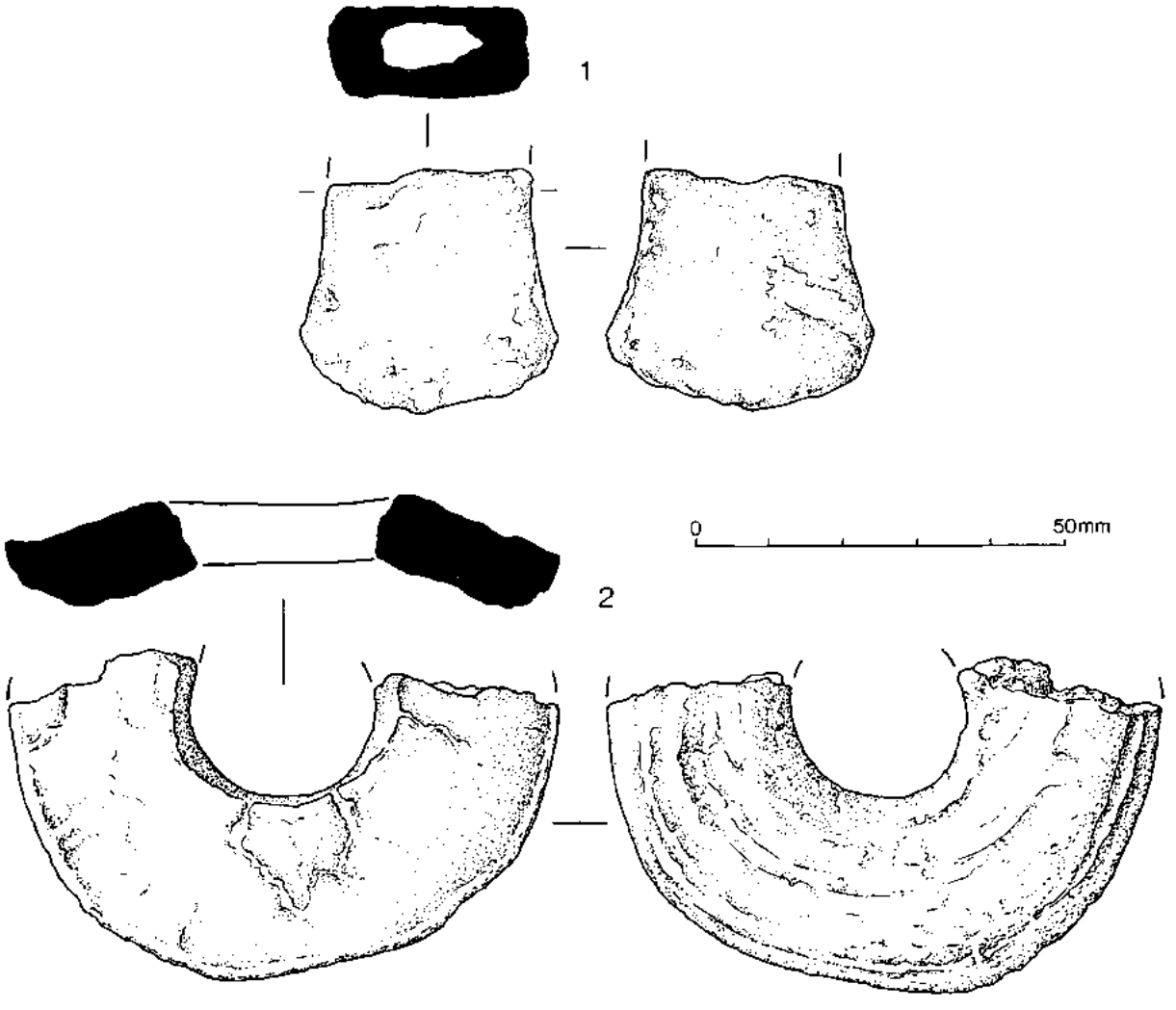


Fig. 6 Wickford — Bronze Age finds.

This disc may belong to an enigmatic group of objects which occur in the Ewart Park phase hoards of the Late Bronze Age (O'Connor 1980, 181). Their function is obscure. O'Connor notes the limited variation in the dimensions of these objects; the Wickford example falls at the larger end of the size range and is considerably thicker than the other objects.

The two finds were made *c.*750m to the north-west of the Roman settlement at Beauchamps. This site also produced traces of earlier pits and ditches, together with a quantity of Late Bronze Age pottery and a perforated clay slab fragment. A fragment of socketed axe was apparently incorporated in domestic rubbish. The bronze fragments from the pipeline might be similarly derived, in which case they may indicate a settlement in the vicinity. However, given the close proximity of their find spots, they may represent part of a dispersed hoard. In either case, they are an addition to the growing catalogue of Late Bronze Age finds from the Wickford area, further emphasising its concentration in this area (Couchman 1980).

Finds: private possession.

Heybridge, Blackwater Sailing Club (TL 80-128)
Nigel Brown and Pat Adkins

Prior to the formation of a training lake, a watching brief was maintained by Pat Adkins in Autumn 1985 (Fig. 7A). The site was adjacent to an upstanding mound (S.A.M. 112) and proved to contain a number of prehistoric features, recorded under difficult conditions. The gravel was capped by a clay layer, up to 1m depth towards the estuary. This may reflect a post Bronze Age marine transgression. Figure 8 shows the clay in schematic section based on information observed in the section of a pipe trench.

A large, irregular feature curved across the site; when sectioned it revealed a series of clay fills to a depth of 1.2m. It appeared to represent a silted up water course, but unfortunately no dating material was recovered.

Numerous features cut into the gravel were recorded. Figure 7B is a simplified plan of all major features. All features were given a number, however one group of features (60) were individually identified by alphabetic suffixes. Fills were separately numbered for each feature begining with (1) for the top fill. Dating was dependent on artefacts, mainly pottery and flintwork. Only 17 features

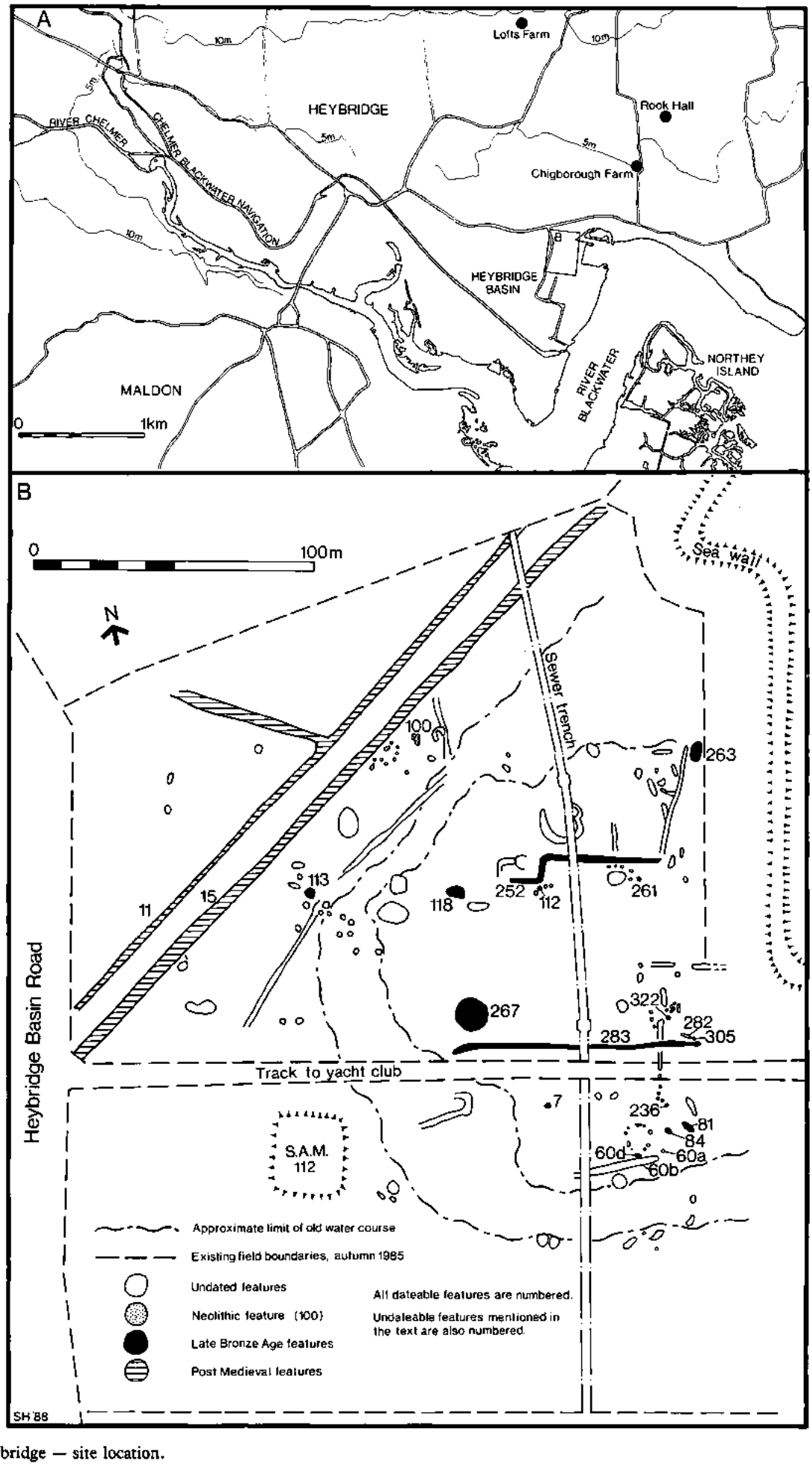


Fig. 7 Heybridge — site location.

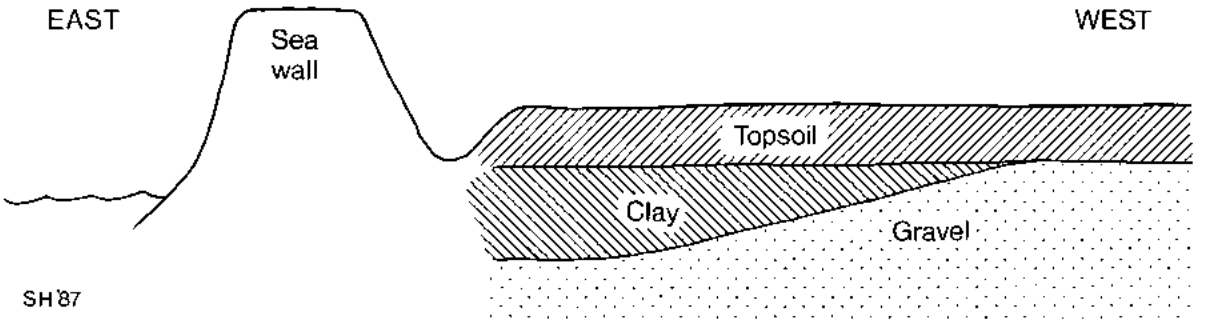


Fig. 8 Heybridge — schematic section.

could be dated: one earlier Neolithic (100), 14 Late Bronze Age (7, 60D, 81, 84, 112, 113, 118, 252, 261, 263, 267, 283, 305, 322) and 2 post-medieval (11, 15).

Neolithic features

F100 irregular shallow pit, with deeper central depression (Fig. 9). Fills: grey silt loam (1), yellow clay (2). Finds: Neolithic pottery (Fig. 11.1) and flint.

Late Bronze Age features

F7 oval pit 2m × 1m, depth and fill not recorded. Finds: Late Bronze Age pottery and perforated clay slab (Fig. 11.12).

F60D oval, shallow, flat-bottomed pit (Figs. 9-10) with sub-circular deeper area in its base. This is sealed by the lower fill (2) and may represent the fill of an earlier post-hole. Fill: dark grey silt loam (1), dark grey-green clay silt (2) and dark grey silt loam (3). Finds: Late Bronze Age pottery and burnt flint.

F81 short length of gully 5m × 1.2m, depth and fill not recorded. Finds: ?Late Bronze Age pottery.

F84 oval pit 2m × 1m, depth and fill not recorded. Finds: ?Late Bronze Age pottery.

F112 sub-circular feature 0.9m in diameter, depth and fill not recorded. Finds: Late Bronze Age pottery and flint.

F113 ?well, large, steep-sided, sub-circular pit, 4m in diameter, depth and fill not recorded. Waterlogged lower fills preserved the sharpened tip of an oak stake. Finds: Late Bronze Age pottery (Fig. 11.7).

F118 ?well, large, irregular, oval pit, 6m × 3m, depth and fill not recorded. Finds: Late Bronze Age pottery and flint.

F252 ditch running east-west, recorded length 55m, width 1.2m; depth and fill not recorded. Finds: ?Late Bronze Age pottery.

F261 sub-circular feature 0.9m in diameter; depth and fill not recorded. Finds: Late Bronze Age pottery (Fig. 11.5) and fired clay.

F263 well (Fig. 9): large oval pit 6m × 4m, 1.7m deep. Fill: topsoil and subsoil removed by machine (1, 2), light brown clay silt (3), light grey sandy silt with frequent pebbles (4), dark grey waterlogged sandy clay (5), dark grey/black waterlogged clay silt with frequent fragments of wood, bone and pottery (6), grey waterlogged sandy silt (7), light grey brown waterlogged silt (8), grey/black waterlogged silt with frequent pebbles (9). Finds; wood, bone and Late Bronze Age pottery (Fig. 11.10).

F267 well (Fig. 9): large, sub-circular feature, 11m in diameter and 2.5m deep. Fill: (1) and (2) as for (263), light brown sandy clay (3), mineral concretion (4), dark grey clay silt (5), dark grey/black waterlogged sandy loam (6), dark grey waterlogged clay silt (7), dark grey waterlogged sandy loam (8), grey/black waterlogged silt with frequent pebbles (9). Finds: Late Bronze Age pottery (Fig. 11.3, 4, 6, 9), clay weight (Fig. 11.11), quern fragments, bone and wood.

F283 ditch (Fig. 9): orientated east-west, at least 10m long, 1-2m wide and 0.3-0.5m deep. Possibly recut, a large gravelly deposit in the upper fill might indicate the presence of a bank on the south side which had either eroded or been levelled. Fill: blue grey clay (1), grey-brown sandy loam with frequent stones (2), black waterlogged humic silt with pebbles and wood fragments (5). Finds: Late Bronze Age pottery.

F305 oval fragments 0.7 × 1m, *c.*0.15m deep. Fill: grey-brown clay (1), yellow-brown sandy loam with frequent pebbles (2). Finds: Late Bronze Age pottery, fired clay. This feature appears to be a continuation of the undated feature (282). The profile and fills are similar. The gap between the two may be due to the removal of a shallow stretch by machine. If this is so (282) and (305) represent a shallow gully 5.5m in length.

F322 sub-circular feature, diameter 0.8m; depth and fill not recorded. Finds: Late Bronze Age pottery (Fig. 11.2, 8) and flint, fired clay.

In addition the above features, part of the group of features numbered (60), appear to define a circular structure, 7-8m in diameter with a possible porch (Fig. 10). No dating evidence was obtained from any of these features, however, their size and arrangement is comparable to known Late Bronze Age structures in Essex (Bond, forthcoming; Brown, forthcoming) and elsewhere (Bradley *et al.* 1980, 231). The features are rather large (up to 1m in diameter) for the post-holes of such a structure and a north-facing porch is unusual although not unknown, and may reflect local topography. A south-east facing porch would have opened onto the wide expanse of the Blackwater estuary, exposing it to bitter easterly winds. A south or south-west facing porch would have opened directly onto ditch (60B), presumed to be contemporary. A single unurned cremation (60A) was situated 5m 'behind' this structure.

Post-medieval features

F11 and 15 parallel ditches orientated south-east/north-west were recorded over some 270m, 3-3.5m wide and 10m apart. Depth and fill not recorded. Finds comprised post-medieval tile and brick and modern rubbish. One (15) is marked on the 1959 1:10,560 O.S. map.

Pottery

Nigel Brown

A small quantity of prehistoric pottery (2.66kg; 299 sherds) was recorded using a system devised for a number of prehistoric assemblages in the county (see archive for details). The rolled rim of an earlier Neolithic bowl (Fig. 11.1) came from (100). The rest of the pottery comprised a range of fine and coarse bowls and jars typical of Late Bronze Age assemblages (Barrett 1980).

Rims of coarse jars are flat-topped and expanded (Fig. 11.2, 3), rounded (Fig. 11.4, 5) or hooked (Fig. 11.6). Fragments of a jug or strap-handle were recovered from (263). Bases, where they occur, are flat. One (Fig. 11.10) had impressions on the bottom, suggesting it had been standing on grass or straw stems while drying. Sooting on the external walls suggests its use as a cooking pot.

Finer vessels are represented by occasional thin-walled body sherds with smooth or burnished surfaces, by the rim of a round-shouldered fine jar (Fig. 11.8) and a large part of a fine bowl (Fig. 11.9). A patch of heavy abrasion on a slightly flattened area of the exterior indicates re-use of the latter as a shallow dish. All of this pottery is in flint-tempered fabrics, and

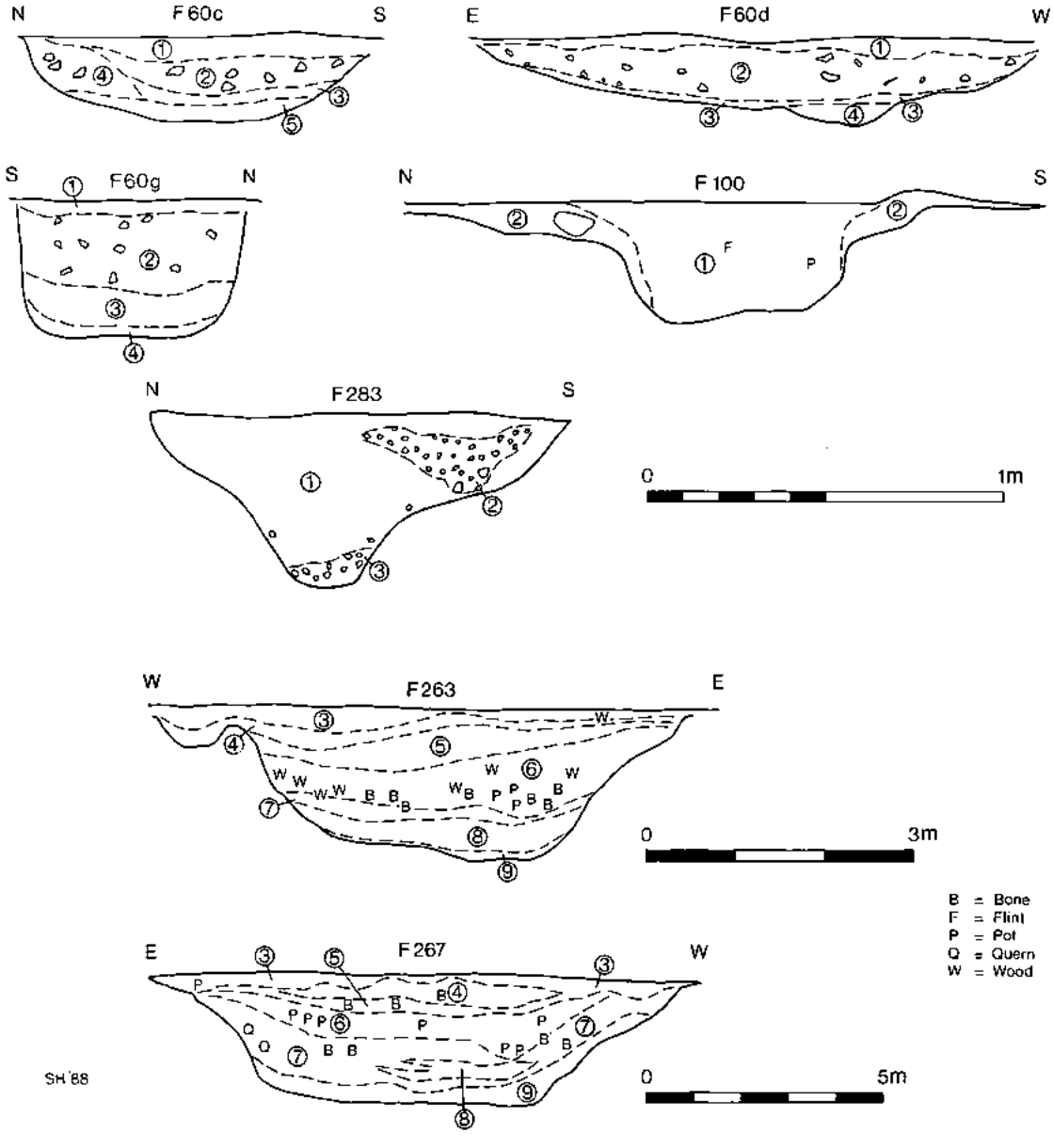


Fig. 9 Heybridge — sections.

undecorated, although the coarse wares sometimes show finger-wiping/smearing of the surfaces and the fine wares are often burnished. It appears to comprise a plain ware assemblage (Barrett 1980) and a date in the 10th-9th centuries would seem likely.

The pottery from (113) includes some sandy fabrics and a shoulder sherd with finger nail decoration (Fig. 11.7). Pottery from a number of Essex sites shows a tendency towards sandy fabrics at the end of the Late Bronze Age/Early Iron Age (Brown forthcoming), whilst increased use of decoration characterises later assemblages (Barrett 1980). It may, therefore, be slightly later in date than that from (263), perhaps 8th-6th centuries B.C.

Fired clay

Nigel Brown

Two fired clay objects were recovered: a fragment of perforated clay slab (7), (Fig. 11.12), and a large, roughly-made object (267), (Fig. 11.11). The perforated slab is in a flint-tempered fabric, the two surviving edges are grooved. Such objects are typical of Late Bronze Age sites along the Thames Valley (Champion 1980) and are widespread in Essex. Locally they occur at Loft's Farm (Brown forthcoming), Heybridge (Wickenden 1987) and Mundon. Their function is uncertain. The large number of small, closely spaced perforations in the Heybridge Basin example is unusual.

The large object from (267) has little visible temper and is poorly fired. There are rough finger and thumb impressions on the exterior as a result of the manufacture. It may be an unperforated clay weight, although there are no signs of wear, such as might be expected if so lightly fired an object had been attached to a rope. Comparison may be made with the cylindrical or hour-glass shaped objects from Early Iron Age contexts in south Essex at Mucking (Jones 1975), North Shoebury (Barford forthcoming) and Great Wakering (Crowe, pers. comm.). These objects, however, are normally slightly better finished and have a more definite shape.

Five other features produced small amounts of fired clay, possibly derived from oven superstructures (details in archive).

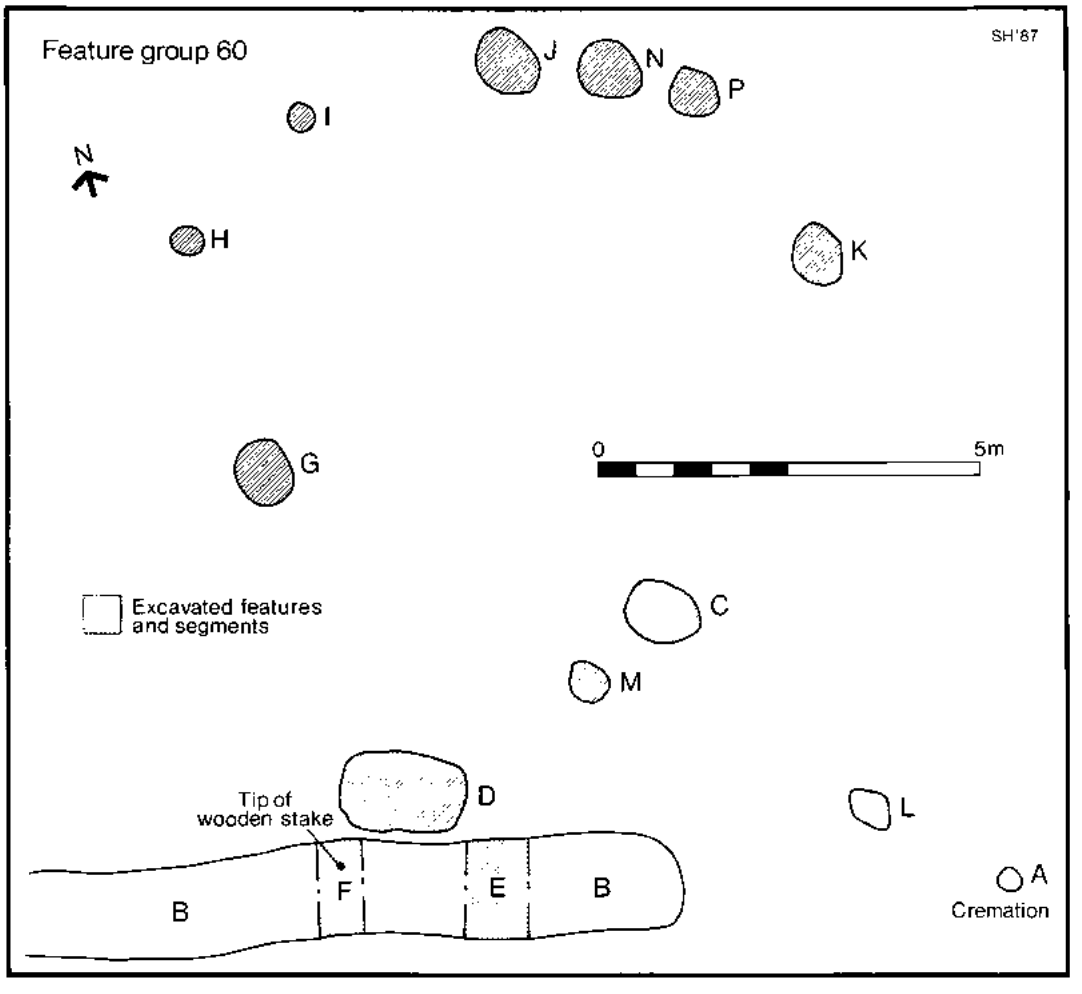


Fig. 10 Heybridge — plan of feature group 60.

Flint

Hazel Martingell

A total of 88 flints were recovered and are detailed in the archive. The material is predominantly derived from river gravels and stained a peaty brown. The flintwork from (100) is Neolithic in character and a few unstratified pieces are also likely to date to this period. However, the majority displays characteristics typical of later prehistoric flintwork.

Stone

Hilary Major

Eight pieces of stone from (267) were examined, one of which was a sarsen pebble, probably an erratic, possibly used as a pounder. The rest of the stone was sandstone from the Folkstone Beds (identified by C. Ingle, Southampton University). Five fragments of saddle quern were present, of variable grain size. However, since grain size was variable within single pieces of the stone, the group may represent fewer than five individual querns. A thicker fragment with irregular surfaces suggests that the stone was brought to the site in an unworked state.

Saddle querns from dated contexts are rare in Essex. Nearly two-thirds come from Mucking and although dating is not yet available, some are undoubtedly of a similar date to the present group.

The lack of indigenous stone in Essex makes querns a valuable means of studying trading patterns. However, unlike rotary querns which were probably made exclusively from non-local stone, saddle querns were frequently made from glacial erratics, the most common of which, in Essex, is sarsen. Other erratics may occur, as at Little Waltham where Iron Age saddle querns, including sandstone, may have derived entirely from erratics (Drury 1978, 110-12).

The Heybridge group is particularly useful, since it contains stone which is clearly not derived from erratics, and demonstrates links south of the Thames. Saddle querns of similar date, and possibly source, were recovered at North Shoebury (Buckley and Major forthcoming), while some of the Greensand querns from Mucking may also come from the Folkstone Beds. Further discussion on the implications of stone from this source is premature, and must await dating of the Mucking querns.

Bone

Owen Bedwin

The predominantly acid gravels were not conducive to bone survival. However localised calcereous conditions in two wells (263, 267), preserved some bone (details in the archive). All the identifiable fragments were from cattle.

Wood

Nigel Brown

The waterlogged lower fills of a number of features produced fragments of wood. Unfortunately, by the time these were examined, most were too badly decayed, distorted and fragmented for identification. However, the tip of a substantial oak stake, from (113) was identified. The tip of a smaller stake, surviving length 140 mm, of oval section, was set vertically into the base of (60B). A straight length of ?hazel rod, 0.7 m long was recovered from well (267). Part of its bark still remained and it showed small scars where twigs had been removed. One end was cut square, the other cut diagonally to form a point (Fig. 12).

Discussion

The presence of Neolithic pottery and flintwork in (100) is further evidence of the widespread nature of the early Neolithic activity on the gravel terraces north of the

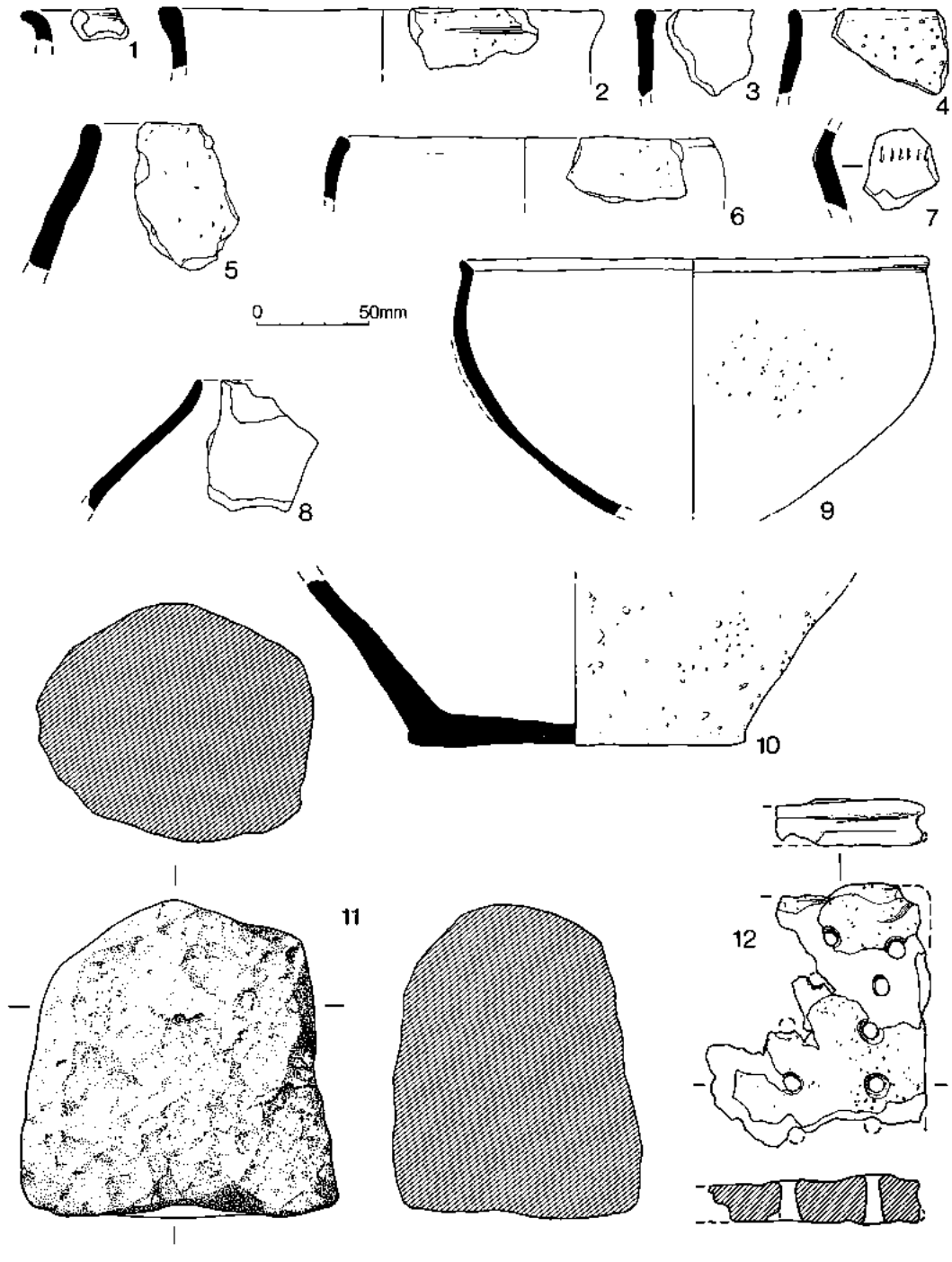


Fig. 11 Heybridge — 1-10 prehistoric pottery; 11, 12 fired clay objects.

Blackwater Estuary (Adkins and Adkins 1985; Priddy 1986; Brown forthcoming).

There is considerable evidence for intensive Late Bronze Age settlement around the head of the estuary. Numerous finds of metalwork (Buckley, Brown and Greenwood 1987; Adkins and Adkins 1985) are complemented by a series of settlement sites at Loft's Farm (Brown 1985; forthcoming), Rook Hall (Priddy (ed.) 1987, Chigborough Farm and Heybridge (Wickenden 1987).

The Heybridge Basin site appears to represent an unenclosed settlement. The small ceramic assemblage recovered seems to indicate a range of domestic activities. The wells are similar to those known from Loft's Farm and Rook Hall. Ditches (252) and (253) appear to represent a system of east-west land divisions, which ditch (60B) may also belong to. The dating of these ditches rests upon a few body sherds; if they are indeed contemporary with the Late Bronze Age settlement, they are of some interest. Large areas of cropmark field systems and trackways are known in the area (Wickenden 1987, fig. 2). However, wherever these have been examined they have proved to be post-Bronze Age, and an environment of open pasture land has been postulated for the Late Bronze Age (Brown forthcoming).

Finds: E.C.C.

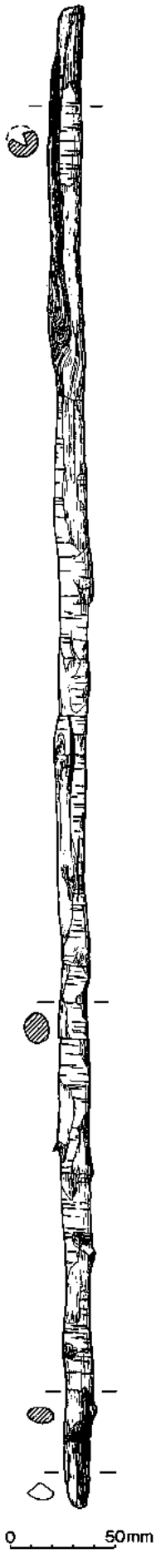


Fig. 12 Heybridge — waterlogged wooden stake.

Sutton, Temple Farm (TQ 88-113)
Nigel Brown

The site is on the northern outsksirts of Southend on Sea, on a brickearth covered gravel terrace, where the terrace slopes away into the shallow valley of the Prittle Brook, a tributary of the River Roach (Fig. 13A).

Following excavation by Southend Museum and the South-East Essex Archaeological Society in 1985, which revealed Late Iron Age, Roman and Saxon occupation (Arscott in prep.), an area to the west was examined, prior to further industrial development (Fig. 13B). This note forms a final report on the work carried out by the County Council.

Three trenches (X, Y, Z, Fig. 13C) produced a scatter of features, many of recent or natural origin (full details in archive). There were sparse indications of earlier prehistoric occupation in the form of abraded flint-gritted sherds and occasional flintwork, but little sign that the settlement revealed to the east extended into the area. Trench Z was extended across the south ditch of Temple Lane in an attempt to recover dating evidence. However, the ditch had been completely recut and an agricultural drain inserted at its base, removing any earlier deposits.

The lack of Late Iron Age, Roman and Saxon occupation is striking. Given the plentiful evidence east of Chandler's way, it seems unlikely that this site would remain unused. It is possible that the topography may have encouraged permanent pasture. The proximity of the Prittle Brook would have provided an adequate water supply for livestock. Furthermore, until extensive drainage works were undertaken to carry off excess rainwater to prevent flooding in Southend, the stream flooded quite regularly. This may well have discouraged occupation and cultivation of the adjacent land, whilst improving its quality as pasture.

Finds: S.M.

Felsted and Coggeshall (1. TL 61-147; 2-3 unprovenanced)
Hilary Major

Three quernstones were kindly lent for study by the finder, Mr. N. Saunders.

1. The most remarkable is the upper stone of a beehive quern (Fig. 14.1), now in the Colchester and Essex Museum (Acc. No. 33.1987). Found in a field ditch, it had presumably been ploughed up and discarded, since it was overgrown and moss-covered when discovered. There are no records of other finds in the vicinity, although there are cropmarks of trackways and linear features in adjacent fields (TL 61-126; TL 61-121).

   The quern is weathered and has slight damage to the top and edge. It is flat topped, with a cupped hopper and an asymmetric feed pipe. The handle hole has an oval section and perforates the hopper. At the bottom of the hopper, below the handle hole, is a small hollow. This is a common feature in querns of this type and may be connected with the handle. The grinding surface is convex, with two concentric grooves round

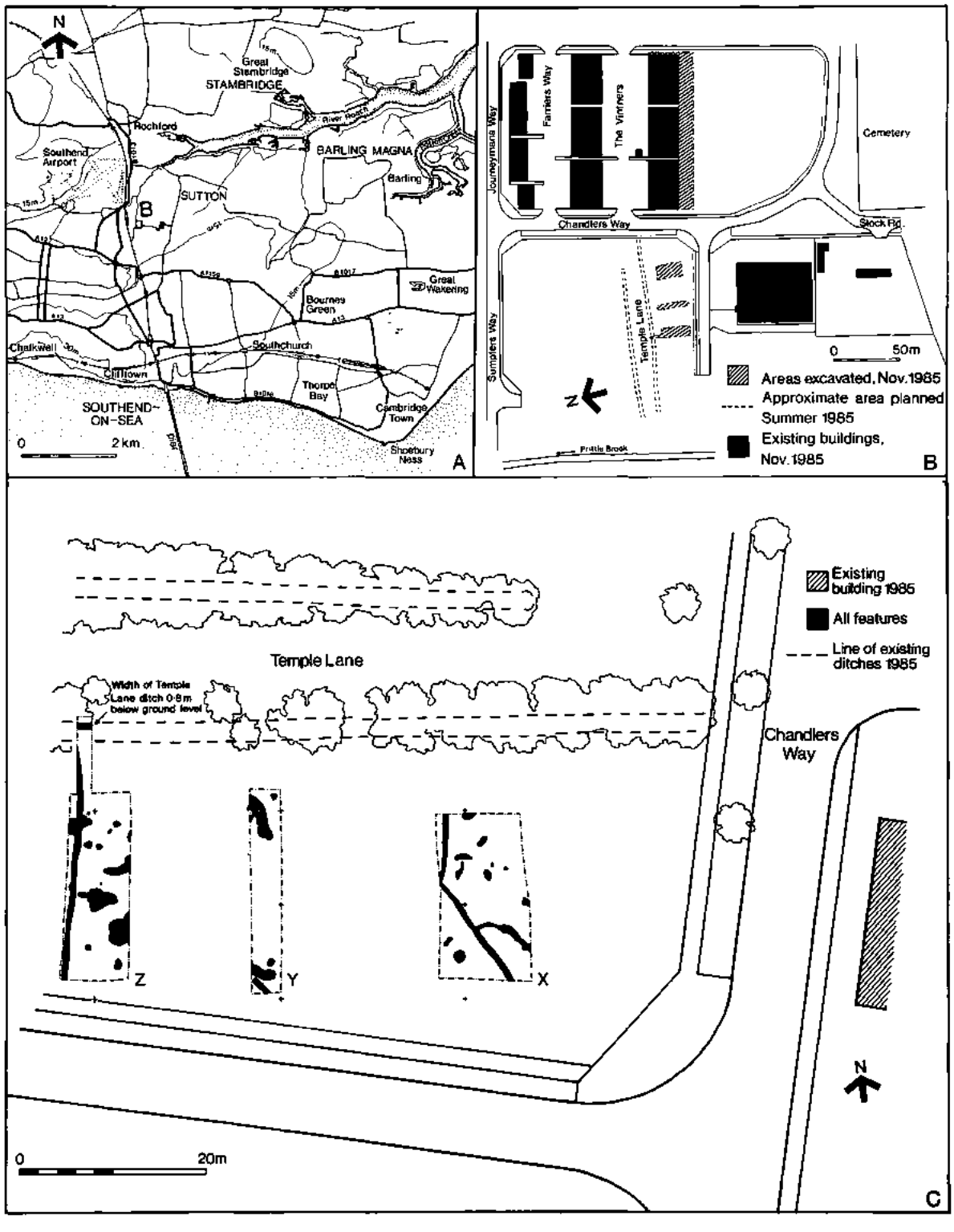


Fig. 13 Sutton — Temple Farm site.

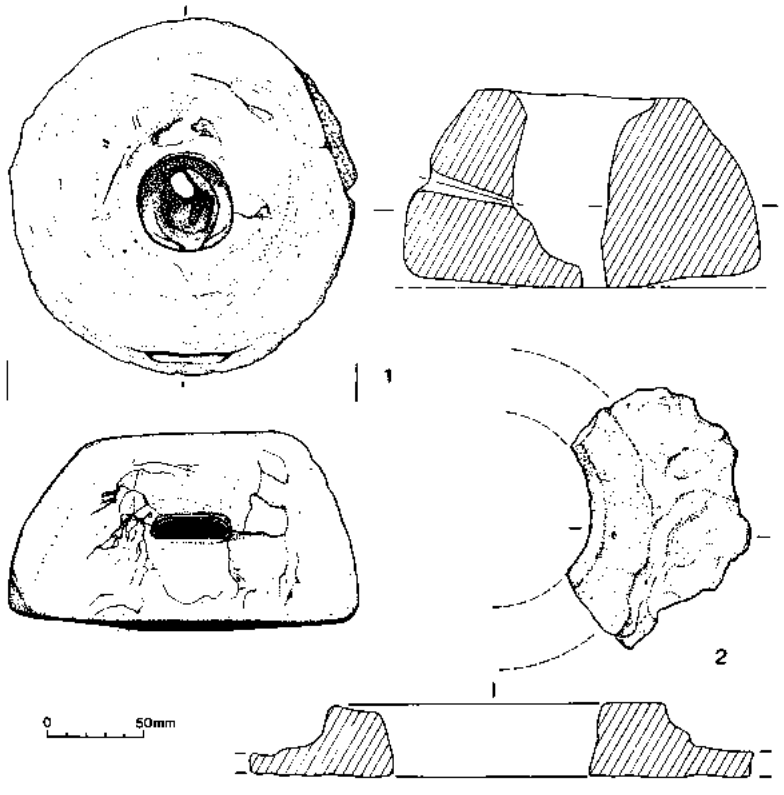


Fig. 14 1. Upper stone of beehive quern.
2. Quern fragment.

the bottom of the feed pipe. The stone is slightly oval, *c.*372 × 362mm, and 210mm high.

This quern is of the 'Hunsbury' type (Curwen 1941, 16-20) and is the first example to have definitely come from Essex. A similar, but smaller, quernstone in Saffron Walden Museum (Acc. No. 1893.15) is unprovenanced, and may have come from outside the county. Hunsbury querns are widespread in the Midlands; their distribution spreads into Hertfordshire and, therefore, it would not be surprising to find isolated examples in Essex. The type originated in the Late Iron Age, but survived, for at least some time, into the Roman period.

The stone is a fine-grained, carboniferous sandstone (identified by C. Ingle, Southampton University), similar to some of the querns from Hunsbury itself. The majority of the Hunsbury querns were of gritstone (Philips 1950), but this quern was probably made from a glacial erratic.

There are few rotary querns from dated Late Iron Age contexts in Essex, and it is not clear what forms were in use. Two querns in the Colchester and Essex Museum are clearly derived from the Wessex type, but neither are from stratified deposits and may be early Roman. The bun-shaped Puddingstone querns common in Essex (Rudge 1965) have been frequently described as Iron Age, but there is no firm evidence for their use before the Roman conquest.

2. Quern fragment, found near Coggeshall: part of an upper stone from a later saxon quern, made from Niedermendig lava from the Rhineland (Fig. 14.2). The type is characterised by the collar round the hopper. A similar stone from the saxon settlement at Springfield (Buckley and Hedges 1988, 29-30) was thought to have possibly derived from a mechanical mill. The present fragment has a hopper of similar size, but the stone is less than half the thickness of that from Springfield. In the absence of the complete diameter and details of the handle fitting, it is not possible to say whether it was manually or mechanically driven.
3. Fragment of a small, flat lava quern 195mm in diameter and 45mm thick (not illustrated), also found near Coggeshall. The type is early post-medieval.

Finds: 1: C.E.M.; 2 and 3: private possession.

Springfield (TL 70-163)

Hilary Major

Two copper-alloy objects were lent for study.

1. Leaf-shaped object with knobbed terminal (Fig. 15): slight damage to edges, loop missing; decorated with notches round the edge and four central ring and dots, outlined by running curves. There is a small copper-alloy rivet or plug, just above the knob, flush with the surface on both sides (but possibly broken off). The back is plain but has a white metal coating surviving on the top *c.*5mm.

In the absence of a loop at the top, it cannot be

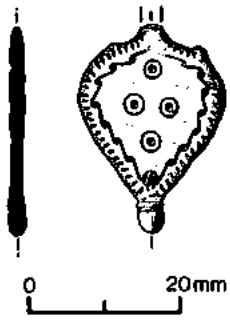


Fig. 15 ?Harness pendant from Springfield.

positively identified. It is probably a pendant, and the possible rivet above the knob suggests that it came from a piece of horse harness, rather than being a military apron pendant, which normally hangs loose (Webster 1981, 180). It is, however, rather small for a harness pendant, and unusually well decorated. An alternative interpretation is a seal-box lid, the rivet forming the locating pin to guide the lid onto the base. Its shape would place it in Crummy's type 4b (Crummy 1983, 104). The hinge loop of these boxes usually projects slightly under the body of the lid, but this is not invariably so. Decoration normally consists of enamelled panels, but examples with chased and punched decoration occur in 1st century A.D. contexts (e.g. Wheeler 1943, 286, no. 9). Flat, leaf-shaped seal-box lids are, however, more likely to be of 2nd century date, or later. On balance it seems more likely that this object represents a harness pendant rather than a seal-box lid.

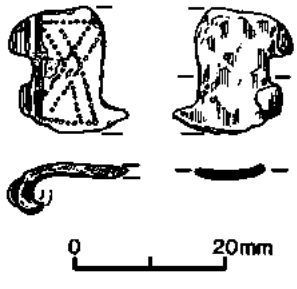


Fig. 16 Buckle-plate fragment from Springfield.

2. Buckle plate fragment (Fig. 16): the upper surface decorated with punched dots in the form of a double cross. This is probably Roman, although its incompleteness prevents closer dating.

Finds: in private possession.

Springfield, (TL 70-128)

Hilary Major

A brooch in the form of a sitting duck (Fig. 17) was lent for study. The tail and attachment for the pin are missing, the catch plate is broken and there is slight damage to the head and edges (length: 31 mm). The duck is crudely modelled, with no indication of detail on the head or attempt to model the wings. The back is decorated with three double chevrons, probably incised. The body is triangular in section and is asymmetrical and the head is asymmetrically placed. This may be due to damage around the edges.

This class of brooch is not particularly common. Others of the type include sitting cocks, hens and doves; cocks probably being the most common. The brooches are often enamelled and usually have hinged pins, although examples with spring pins are known. They are possibly continental, as implied by Collingwood and Richmond (1969, 300), although they may only be referring to geometric plate brooches. In any case, the crudeness of the Springfield brooch suggests this was a local copy. It is probably of 2nd-century date since there is little evidence that such brooches are other than 2nd century (Crummy 1983, 15). Of the few dated examples, those from *Verulamium* (Frere 1972, 118, nos. 21 and 22 are both from the mid 2nd century. One of the *Verulamium* ducks is unenamelled.

Finds: private possession.

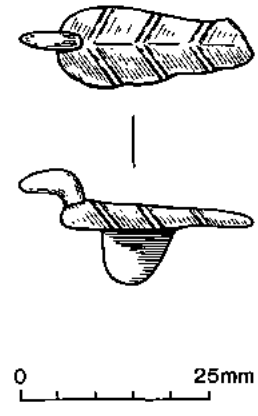


Fig. 17 Roman brooch from Springfield.

Writtle (unprovenanced)

Hilary Major

A small plate brooch (Fig. 18) was lent for study. The head and pin were missing and there was some edge damage. The body is rectangular, with a rectangular recess in the centre which probably held enamel. This is framed by knurled ridges. The foot has a low moulded knob and the catch plate is incomplete.

This example is paralleled by a slightly less elaborate brooch from Colchester (Crummy 1983, 18 no. 90) and by brooches from Nor'nour, Isles of Scilly (Hull 1968, Type 33), which date to the 2nd century A.D.

Finds: private possession.

Chelmsford, Mildmay Road (TL 70-1)

Steve Wallis

A construction trench at the rear of the Woolpack Public House was inspected for traces of the Roman road, running east from *Caesaromagus*. No archaeological deposits were present; *c.* 1 m of modern topsoil overlay the natural subsoil.

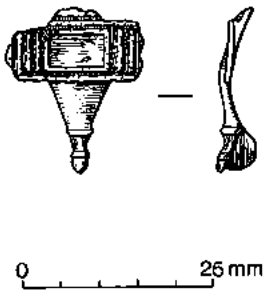


Fig. 18 Roman brooch from Writtle.

Bardfield Saling, Church of SS Peter and Paul (TL 62-18)
David Andrews

Archaeological recording of drainage trenches dug to the south and east of the church provided an opportunity to record the foundations of the standing building, as well as revealing features now demolished. The principal discovery was the foundation for the easternmost bay of the chancel, probably demolished in the 17th century. The foundations of the north wall of the tower and west wall of the nave were constructed of 20th-century frogged bricks, presumably representing an underpinning; close to the latter, was a modern brick foundation which probably represents a coal store or boiler house. On the north side of the nave, there appeared to be a brick and flint rubble foundation, resting on unmortared flints, set within a trench dug into the natural clay. At the north-east corner of the chancel the base of a buttress was exposed; a rubble core, face by blocks of oolitic limestone. These were chamfered for a plinth and show that the ground level has risen by some 150-200mm.

Liston, Parish Church (TL 84-30)
Deborah Priddy

A flint rubble foundation at the south-east corner of the chancel was revealed during the excavation of a drainage trench. It extended at least 1.5m to the east, at a slight angle to the east wall; its full extent was unknown due to the presence of gravestones. Since no corresponding foundation or straight-joint was visible at the north-west corner, its most likely interpretation is a buttress.

Peldon, Church of St. Mary (TL 91-54)
Deborah Priddy

A number of features were recorded when shallow drainage trenches were dug around the church. A brick foundation, sealed by a buttress to the east of the south door, may represent an earlier buttress; perhaps associated with the elaborate 16th-century buttress which now forms the west wall of the south porch. At the east end, the top of the foundations of the chancel (rebuilt in 1859 on old foundations; easternmost bay demolished 1953 [Rodwell 1977, 116]) were visible.

Saffron Walden, The Old Rectory (TL 53-10)
Deborah Priddy

Demolition of a retaining wall fronting Castle Street exposed chalk bedrock immediately to the north of the house. Major post-medieval landscaping and disturbance had taken place and removed any medieval deposits which might have been present. Two shallow pits/gullies cut into the chalk were exposed, but no medieval material was recovered from their fills.

Saffron Walden, 35 King Street (TL 53-10)
David Andrews

Total development of this shop site provided an opportunity to investigate an area of the town where hitherto there had been no excavations. The street frontage proved to be occupied by a cellar which had been infilled in the 19th century. Its back wall was built of flint, with levelling courses of roof tile, and is provisionally dated to the 15th/16th centuries. The rear of the site was occupied by extensive barrel-vaulted cellars.

Chipping Ongar, The Pleasance (TL 50-2)
Roland Flook

Two trial trenches were dug prior to the extension of the public carpark in the High Street (Fig. 19). Although a backland site, its proximity to the junction between the bank of the town enclosure and the earthworks of the 12th-century castle was of interest. The depth of excavation was limited to that required for the new surfacing (0.5m).

Topsoil and modern levelling layers (removed by machine) accounted for almost the entire permitted depth of excavation. However, a number of small test pits, dug to a greater depth, produced no medieval features. The earliest deposit uncovered in both trenches was a bright orange gravelly medium sand. In Trench 1 it appeared that terracing was responsible for truncation of deposits, and that the site had subsequently been levelled by a series of dumps of very gritty sandy clay. These sealed? a 17th/18th century pit. Cut into the dump layers were a series of shallow lozenge shaped features *c.*1.5m long and 0.40m wide. They were aligned east-west, in two rows. Together with other shallow (*c.*200mm) features, it seems likely that they represent horticultural buildings, associated with the gardens called 'The Wilderness' in the 19th century; an interpretation which would also explain the extensive landscaping. The 17th/18th-century pit suggests that other earlier features survived truncation of the stratigraphy, but were at a greater depth than the bottom of the excavation. A number of medieval pottery sherds were recovered in residual contexts.

Finds: E.C.C.; to go to E.F.D.C.

Witham, Coleman's Farm (TL 81-138)
Helen Walker

During the excavation of a prehistoric oblong enclosure

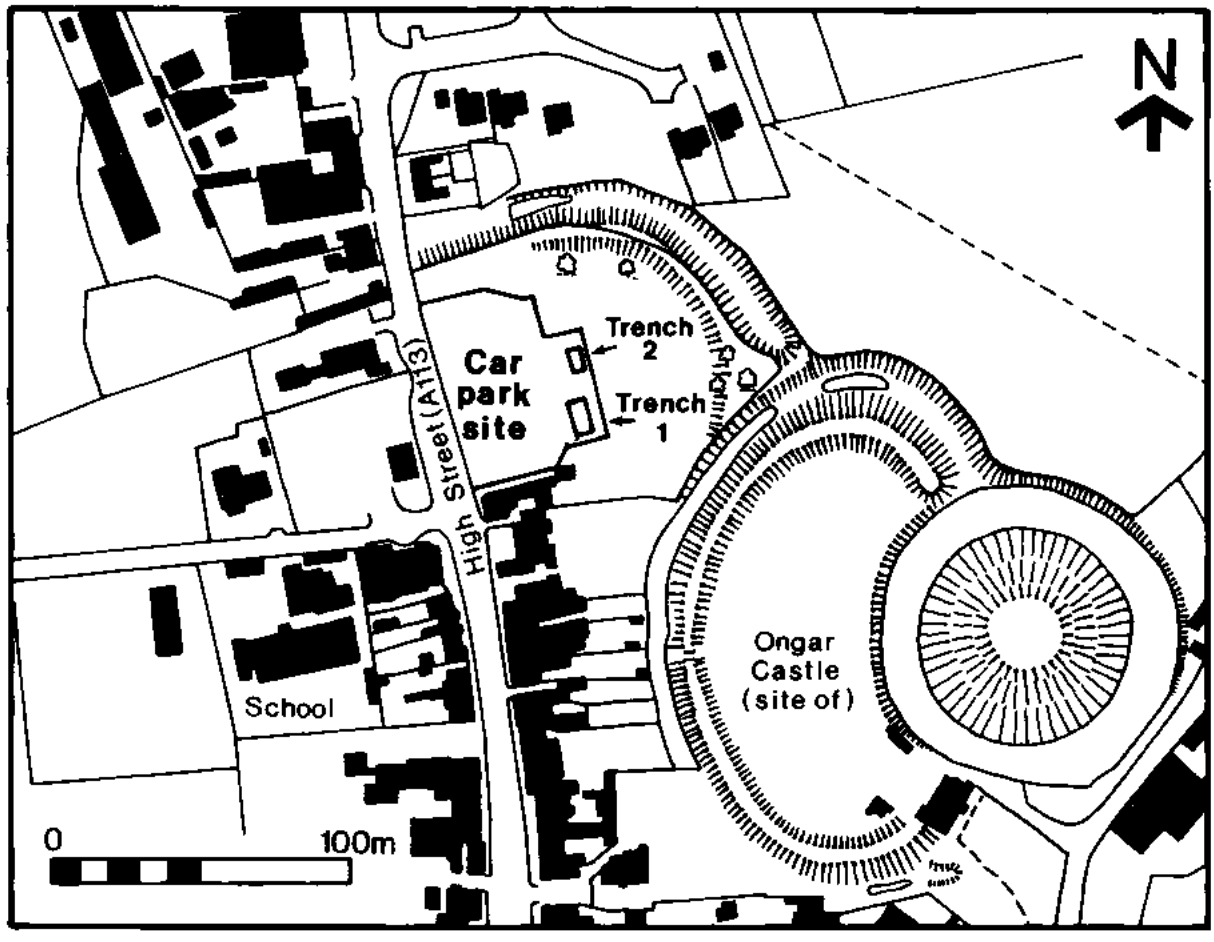


Fig. 19 Excavations at the Pleasance, Chipping Ongar — location plan.

(Buckley *et al.* forthcoming), 13 sherds of medieval and later pottery were recovered from top and sub-soil contexts, although there was no evidence for medieval occupation. Using Cunningham's typology for Essex pottery (Cunningham 1985, 1-2), examples of Fabrics 12B, 20, 21, 21C, 40 and 45M were present, giving a date range from the 11th-19th century. Of particular interest is part of a sgraffito ware jug (Fig. 20) in a red sandy fabric. The pattern is incised through the coating of thick white slip to reveal the colour of the pot body beneath; the slip also extends inside the neck. Splashes of clear glaze occur on the exterior. Sgraffito ware has been found during other excavations at Rivenhall (Drury forthcoming) and at King John's Hunting Lodge, Writtle (Rahtz 1969, fig. 54, 42-48). It is thought to have been made in Cambridgeshire and dates to the 14th and early 15th century.

Finds: E.C.C.; to go to C.E.M.

Aerial survey 1987

Susan Tyler

The programme of aerial reconnaissance in central and north-west Essex continued with six flights during May-July. Despite the unfavourable weather, some new features were observed; one of the more interesting new cropmark complexes is described here, as are several 1979/80 photographs, only recently accessioned to the SMR.

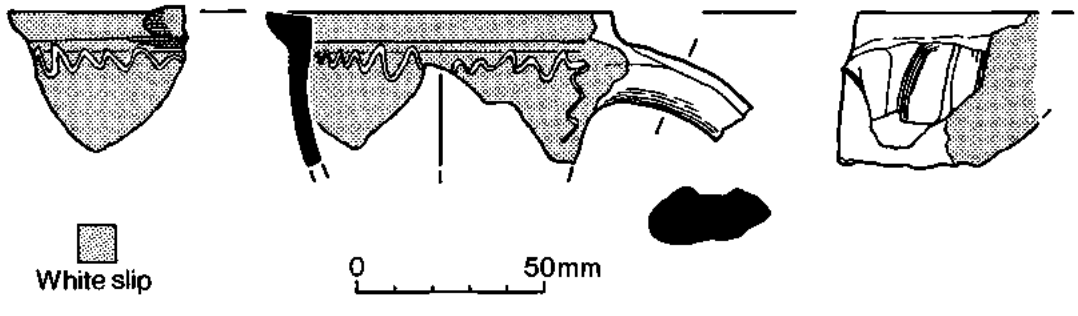


Fig. 20 Medieval pottery from Coleman's Farm, Witham.

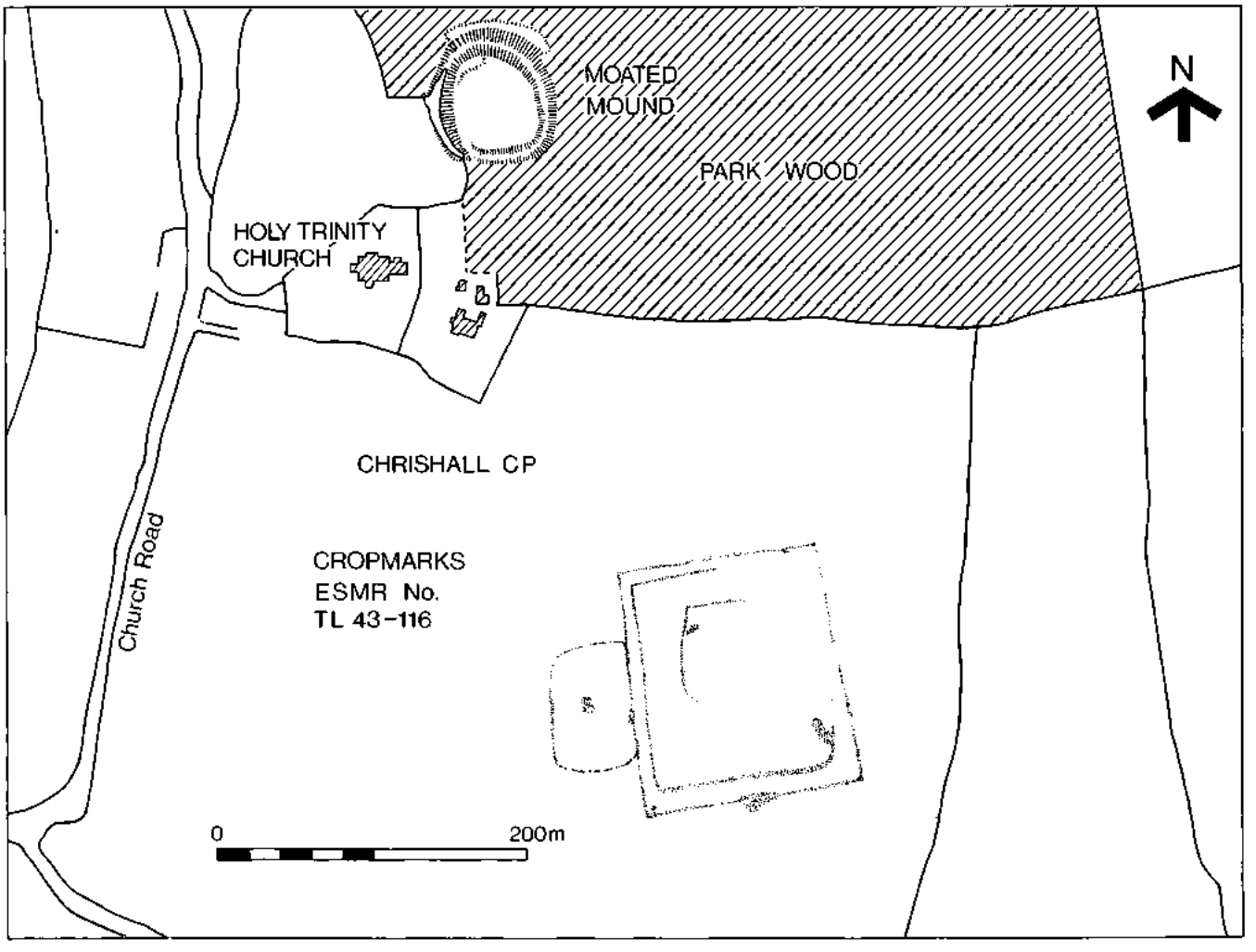


Fig. 21 Cropmark enclosure at Chrishall.

Chrisall (TL 43-133)
Susan Tyler
Two conjoined enclosures (Fig. 21): one double-ditched with internal features comprising a faint linear feature and several large 'block marks' (the latter possibly geological in origin). An apparent entrance is visible in the eastern side of the outer ditch. A second, smaller, sub-rectangular enclosure, with an entrance in its southern side, appears to abutt its western ditch.

Few cropmarks are known from this area because the surface geology is substantially chalky boulder clay. However, this site demonstrates that cropmarks appear where the chalk outcrops.

Middleton (TL 84-24)
Deborah Priddy
This site lies on the floodplain of the River Stour, to the south of Sudbury. It appears to show part of a narrow (*c.*35m wide) rectangular enclosure, parallel to the river (Fig. 22.1). Its length is not clear since the enclosure cropmark is much fainter to the north of the field boundary, where a pair of small ring ditches straddle the ditches. A faint curvilinear feature is visible at its south end. The faintness of the cropmark, its position so close to the river and the pair of small ring ditches make its interpretation difficult. It may only represent the position of 20th-century wartime defences. However, the presence of at least four other ring ditches in the field to the west may be significant. Although the possibility of another Neolithic cursus is slight on the present evidence, the site would repay further reconnaissance.

Aerial Photograph: NMR TL 8840/1/94 (1979).

Toppesfield (TL 73-119)
Deborah Priddy
Cropmark complexes such as this (Fig. 22.2), comprising rectilinear enclosures and ring ditches, are a widespread element in the prehistoric/Roman landscapes of the Thames Terrace and other river valleys. The reason for drawing attention to this particular site is that, like Chrishall above (Fig. 21), it is situated on the chalky boulder clay plateau of north-west Essex. Aerial reconnaissance in this region has the reputation for being unproductive, given the inability of overlying soils to cropmark formation, and localised glacial deposits may account for sites such as this. However, the limited cropmark evidence is to some extent being complemented by the results of fieldwork in the Stansted Area

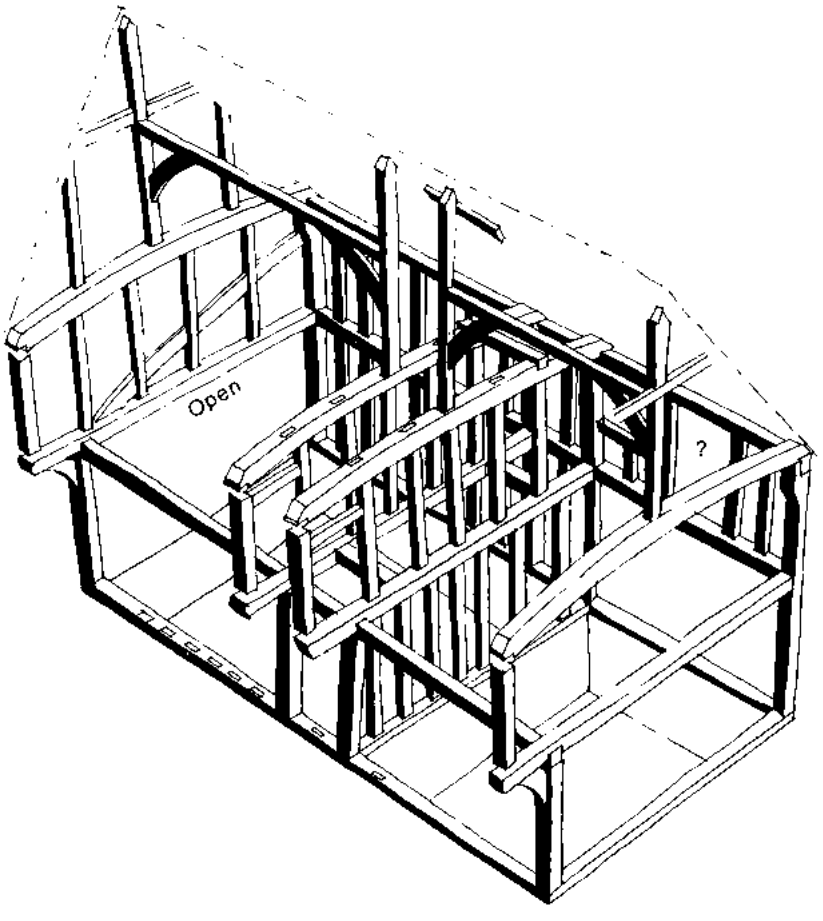
Fig. 22 Cropmark sites at Middleton (1), Toppesfield (2), and Belchamp Otten (3).

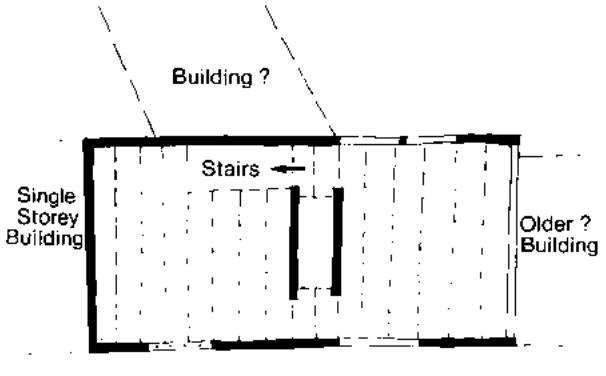
of the boulder clay plateau. This work shows that regular reconnaissance, backed up by fieldwork, though less 'rewarding' than the lighter soils in terms of the number of sites identified, has the potential for significantly changing our perception of prehistoric and later settlement in Essex.

Aerial Photograph: NMR TL 7338/1/72 (1980).

Belchamp St. Ethelbert (TL 84-16)
Deborah Priddy

The masonry foundations of a chapel (now in Belchamp Otten parish), clearly showed as a cropmark in 1980 (Fig. 22.3). The field is called Chapel Yard on the Tithe Map and a scatter of building debris was recorded by the O.S. in 1976. This photograph shows a small, two cell building; the nave *c.* 10 × 5m and a smaller chancel. The form of the





BUILDING BEHIND BUTCHERS SHOP
6/6A EAST STREET
COGGESHALL

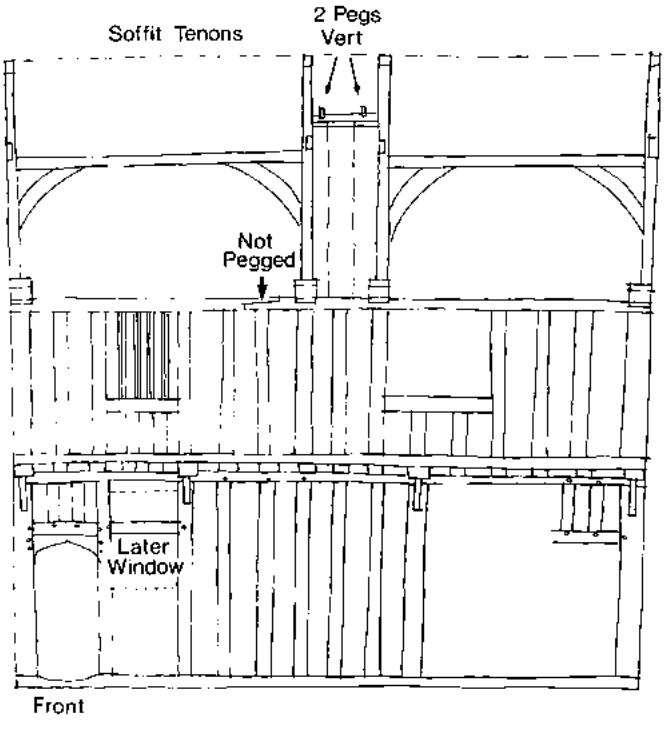


Fig. 23 Medieval building in Coggeshall.

east end is not clear, although the O.S. report for 1950 says an air photograph showed it to be apsidal. Faint suggestions of ditches suggest it was enclosed, and a number of large disturbances are visible in the small field to the north-west. An important opportunity was missed when a sewage works was built in this field.

Pat Ryan and Elizabeth Sellers have provided the following documentary evidence. The site is referred to as a chapelry in the documents, which seems to have had tithes awarded to it. That it went out of use during the medieval period is apparent from a 1705 copy of a document in 22 Henry VIII (1530/31). This records arbitration between the parsons of Ovington and Belchamp Otten over the division of its tithes (ERO D/DU 441/96), and the argument suggests the original arrangement had been made some time previously; Newport's Reportorum (1710, 457) suggests it had gone out of use by 1473. A dedication to St. Albright is recorded in a 16th-century terrier (now in C.E.M.).

Aerial Photograph: NMR TL 8043/1/367 (1980).

Historic Buildings
Dave Stenning

Coggeshall, rear of 6/6A East Street

Number 6/6A East Street is a former hall house with a service cross wing at its west end. To the rear is a long range of outbuildings, fronting a yard, with probable access from the former cross passage. The first of these is of particular interest, being a small timber framed structure of the 15th century (Fig. 23). It is of two storeys, with a semi-basement and a long wall jetty facing the yard. The ground floor/basement is divided into two unequal parts, with traces of the original door and window openings. From the larger unit, a stair gained access to the upper floor, which is again subdivided into two rooms. The principal feature of interest is a central timber smoke bay which separated these rooms. This served a hearth in the larger of the ground floor rooms, directing smoke to a louvre in the roof (Fig. 24). Access to the smaller first floor room was by small galleries

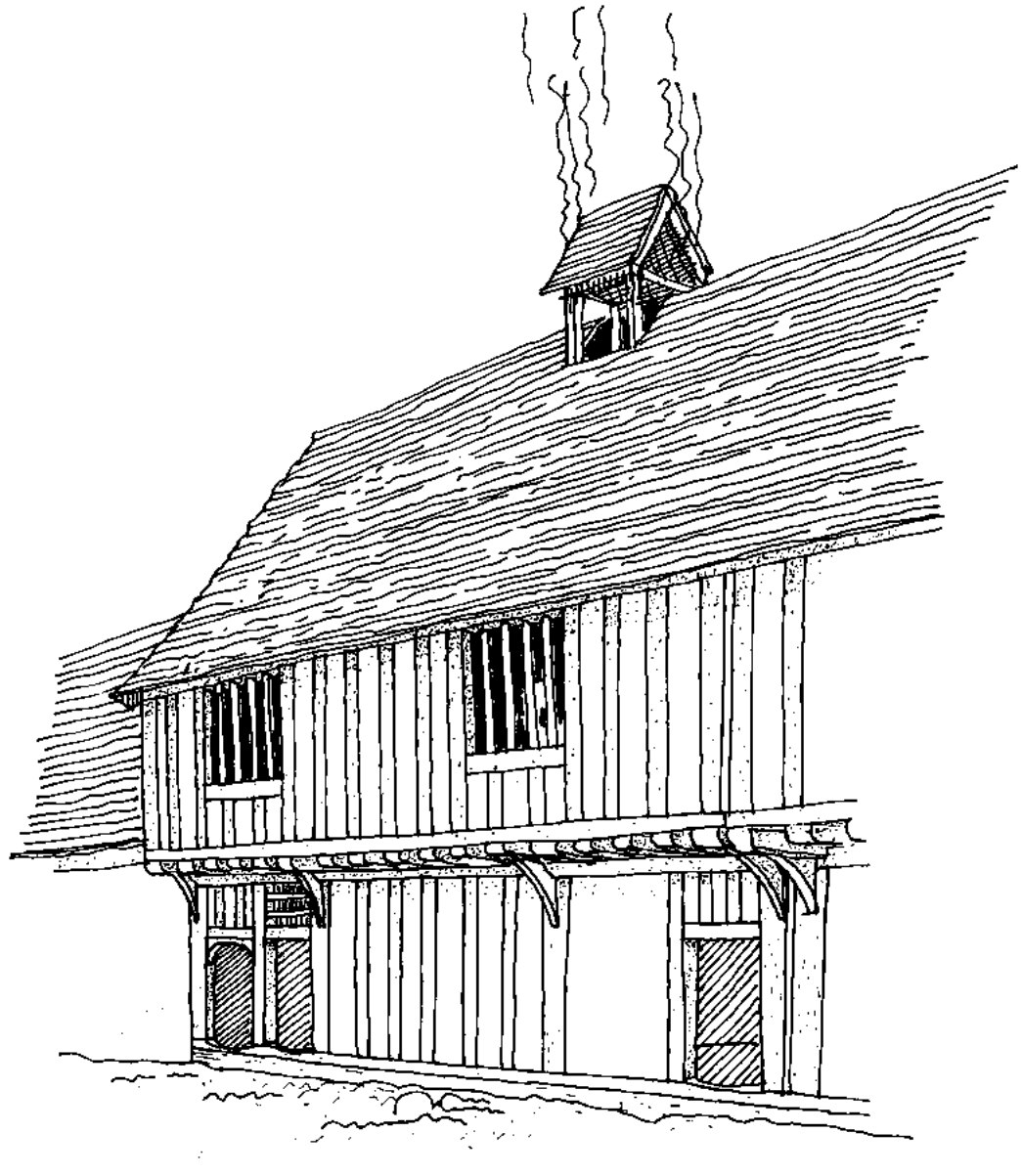


Fig. 24 Reconstruction of medieval building, Coggeshall (not to scale).

to the front and back of this timber flue. The collar purlin of the crown post room is stopped either side of the flue, and pegs in the rafters indicate the mounting of the louvre. It may be that this building is a former domestic kitchen, but other uses are possible; since the ground floor openings suggest two small units, a pair of workshops seems the most probable function.

Abbreviations see p. 271.

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Excavations in Essex 1987

Edited by Deborah Priddy

This annual report, prepared at the request of the Advisory Committee for Archaeological Excavation in Essex, comprises summaries of archaeological excavation and fieldwork carried out during the year. The longevity of many projects often results in a lengthy post-excavation and publication process. The publication of these summaries therefore provides a useful guide to current archaeological research, and the opportunity to take an overview of significant advances. This year 45 projects were reported to the County Archaeology Section (Fig. 1).

Sites are listed alphabetically by parish; the directors of excavations, organisations involved and information regarding the location of finds and place of final report are listed, where known. Excavations continuing from previous years are indicated by reference to the relevant 'Excavations in Essex 19 '.

Contributors are once again warmly thanked for providing information. The original reports have been added to the County Sites and Monuments Record held by the Archaeology Section at Globe House, Chelmsford. For details of sites in the London Boroughs contact the Passmore Edwards Museum, Stratford.

Progress in Essex archaeology 1987

Trends in level and patterns of archaeological fieldwork have continued very much as reviewed last year, and continue to follow closely national, regional and local research priorities within a rescue context. The number of projects (45) has risen by over 25% on 1986 (37), but this can be primarily attributed to the large number of excavations undertaken by the County Council in response to the development of Stansted Airport (32-41). Although not specifically reviewed below, the fieldwalking programme in the airport land-take area has, as predicted, revealed a large number of new sites (nine out of the ten excavated in 1987).

The county's archaeological societies continue to make a considerable contribution to excavation and fieldwork. It is particularly encouraging to see an increasing number of joint ventures between full-time archaeological agencies and local societies, notably in Billericay (3), Maldon (25, 26) and Waltham Abbey (44). Likewise, in past years, a number of excavations have been undertaken with teams funded by the Manpower Services Commission: Barking (2), Braintree (4, 6), Chelmsford (8, 9, 10), Rayne (29), Stansted (32-41), and this has helped the professional agencies to respond to the very high level of threat in the county, both in rural and urban contexts.

Redevelopment continues to be the single greatest cause of site destruction, although encompassing a wide range of works. Sites are, for the most part, in and around centres of population (with the notable exception of Stansted); as are road schemes, this year concentrated in Braintree and environs (4-5, 29). In contrast, it is rural sites which continue to be threatened by the national appetite for mineral resources. Work at Little Totham (24) and Great Wakering (20) has been on a small scale. Vagaries of the English climate and the uncertain progress of working on several sites created problems of access and funding. In particular, the speed at which the quarry face is approaching the important complex of Late Iron Age/Roman cropmark enclosures at Stanway (42) gives great cause for concern.

Archaeological assessment is an essential first stage in any project: e.g. Chipping Ongar (11), Clacton (12), Colchester (17), for which funding *ought* to be a prerequisite for development. Such exercises are also an important part of preparing management plan/restoration schemes, as at Brentwood (7), Colchester (14, 15) Saffron Walden (30) and East Tilbury (18). Although often limited in their ability to provide a 'global' interpretation of a site, they are a crucial and cost effective first step in such projects.

Useful environmental data for the Palaeolithic was recovered at Clacton (12) although no cultural material was recovered. For the Neolithic, work on the Hullbridge Survey (21) continued to produce exciting results, as well as taxing the 'Heath Robinson' instincts of the excavators, working in an 'in-water' rather than 'under-water' environment. More Neolithic material was recovered from Little Totham (24), whilst the presence of a substantial pit and pottery/flint scatter from Springfield (31) suggests the presence of domestic activity. These three projects also produced Bronze Age features as did salvage recording at Braintree (5). Stansted (39) is an important new addition to the distribution of sites. In this and later periods, it seems likely that work, concentrated on the relatively undisturbed, boulder clay plateau, will redress the imbalance of sites, more readily located (and more frequently disturbed) on the lighter soils in the eastern part of the county.

New Early Iron Age settlements were located in Maldon (26) Stansted (39) and possibly Rayne (29). The excavation of Middle Iron Age contexts within an 'Essex' hillfort at Ilford (22), few of which have been systematically excavated, is of particular interest. Further occupation was recorded at Abridge (1), Latton (23) and Little Totham (24).

For the Late Iron Age/early Roman period, the likely destruction to the 1st-century A.D. deposits at Sheepen (17), and the state of preservation of a stretch of the Lexden Dyke (14) were usefully assessed. A small military structure was identified within the hillfort at Ilford (22). The enclosed rural settlement at Stansted was completed (32) and further potential sites identified (39) and (41). A further area of

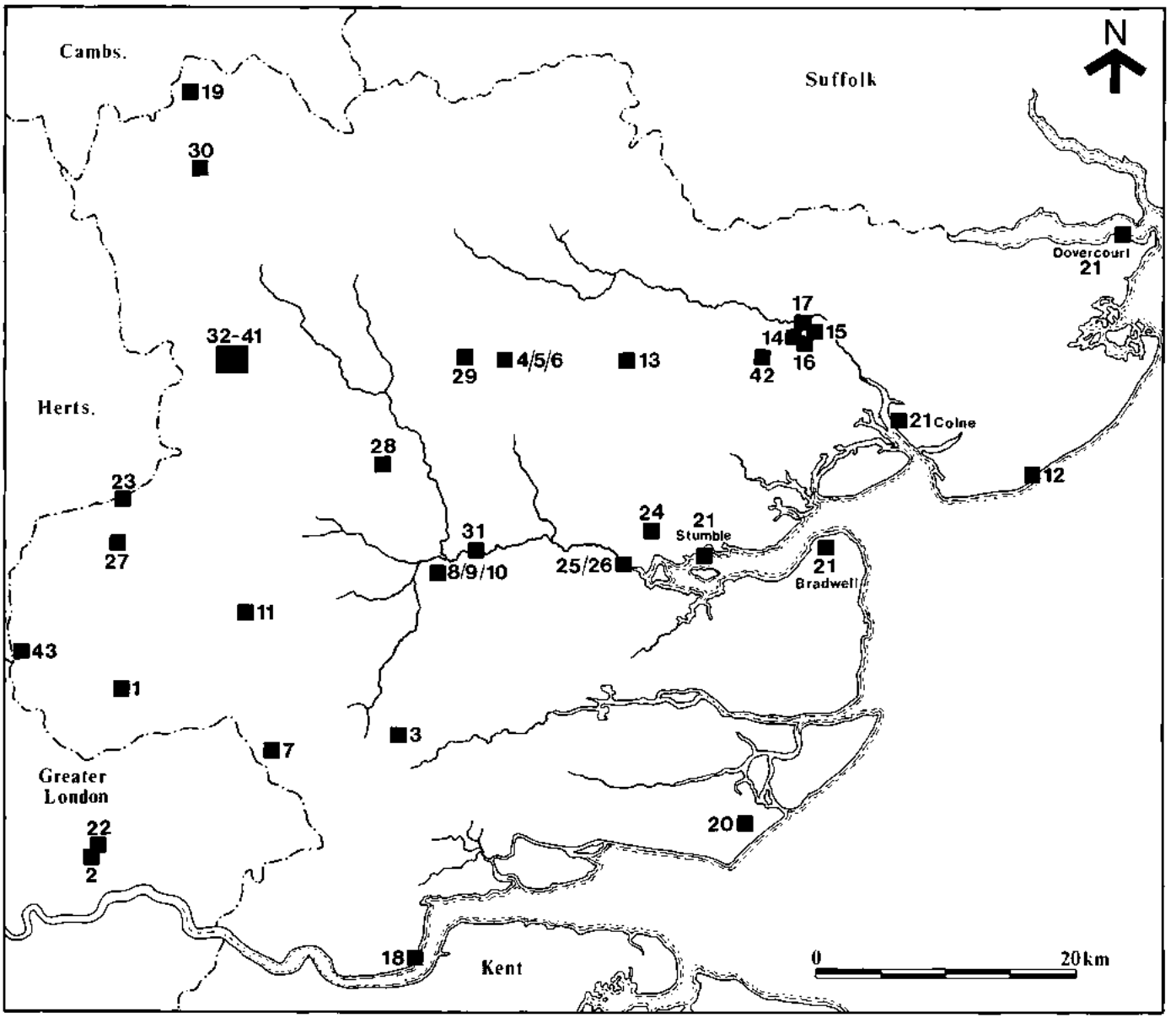

Fig. 1 Location of excavations in Essex 1987.

the Butt Road inhumation cemetery (16) was examined, while cremation burials were recorded at Billericay (3) and Stansted (38-9) and (41). Trial work was undertaken on the enclosure complex at Stanway (42), whose importance has already been stressed above, and further elucidation of the temples at Latton (23) and Great Chesterford (19) continues. Settlement at Coggeshall (13) increasingly appears to be that of a villa estate and would repay further work; as would excavation to enable the character of the Roman settlement at Billericay (3) to be better understood. Recording the extent and layout of the small town at Braintree (4-6) has continued, whilst Chelmsford (8-10) has seen a concerted programme of excavation. Both towns have been affected by large scale redevelopment and current work has built on the foundations laid by Drury's work in the 1970s.

There have been few opportunities for developments in early medieval studies in 1987, although the potential saxon features identified at Stansted (39) will hopefully be a valuable addition to settlements of the period. The precise line of the Maldon burh (26) is gradually being pinned down, as is the extent of the saxon settlement at Springfield (31), although the cemetery here defies attempts to delimit it. Further evidence of saxon metallurgy was recovered at Little Totham (24); evidence which needs to be set in its settlement and landscape context.

Medieval sites have been small scale, but useful in terms of adding to the results of previous work. Assessment of the survival of monastic deposits at St. Botolph's, Colchester (15) and, particularly the careful recording of the stratigraphy relating to Walden Abbey (30), during excavation of an 19th-century parterre, have added useful evidence. Excavation in Maldon High Street (25) confirmed the expectation of late saxon/medieval deposits, but also extensive destruction by basements. A backland site off Chipping Ongar High Street (11) proved negative. The identification of a possible medieval wharf at Waltham Abbey (43) is an

important element in the topography of the medieval town, and, given the importance of riverine and coastal trade, one we know little about in archaeological terms. It is to be hoped that proposed redevelopment in towns like Chelmsford and Colchester will provide the much needed opportunities to examine waterfront sites. Ephemeral rural settlements continue to be an exciting element in the Stansted area (34-6). The definition of moats at Stansted (33, 37) met with limited success and at Pleshey (28) the ditch of the northern bailey may have been located. No structural features were revealed in trial excavations within the medieval barn at Netteswell (27), whereas a similar exercise at Brentwood (7) has added to our understanding of the standing building.

Valuable work has continued on two very different post-medieval projects; namely Coalhouse Fort (18) and the 19th-century formal garden at Audley End (30).

1. **Abridge**, Piggots Farm (TQ 462973)

F.R. Clark, W.E.A.G.

Limited excavation to determine the date and nature of cropmarks surveyed in 1986 suggests a Middle Iron Age farmstead. Roman pottery was recovered from the uppermost silts of the ditches. Further work is planned.

Previous summaries: Priddy (ed.) 1983, 163; 1987, 104.

2. **Barking**, Waterfront (TQ 439846)

K. MacGowan, P.E.M.

Prior to office redevelopment, two trenches were excavated in an area of 18th-century reclamation. A map of 1653 shows an island in the River Roding. The area between its eastern bank and that of the river was backfilled and subsequently cut through to provide dry docks for fishing smacks, wharves and a quay.

The first trench, aligned north-south along Abbey Road, produced features dating from the 16th century. A building with chalk and flint footings, and clay floors, was adjacent to a road/courtyard surface, paved with reused stone (probably dating to the dissolution of Barking Abbey). A considerable quantity of rake-out material from a hearth hints at an industrial function. The road/courtyard was cut by a 19th-century well.

A second trench, aligned east-west, revealed a mortar surface, edged by large post-holes. A wooden anvil, carrying a metal plate, was set into this floor which was covered by scraps of iron and ships' nails and a blacksmith's shop seems a probable interpretation. This structure was abutted by a substantial metalled surface, possibly a roadway. A sequence of posts and planks running parallel, and at right angles, to it included a 5m section of wooden drain. The latter was held in position by wooden stakes which may have formed part of an 18th-century pier. The same trench produced a barrel-lined well and a wood-lined cesspit, dating to the 17th-18th centuries.

Finds: P.E.M.
Final Report: P.E.M. Monograph.

3. **Billericay**, Billericay School (TQ 676938)

D. Rudling, E.C.C.

Excavations in advance of a new classroom block revealed a number of Roman features. These included a few cremation burials in vessels of early Roman (or possibly Late Iron Age) date. There were also a number of shallow ditches, pits and at least two wells. Much Late Iron Age and Roman pottery was recovered, together with animal bone, tile, several 4th-century coins and some prehistoric flintwork.

During this work the opportunity was taken to re-expose part of the base of a Roman pottery kiln, first recorded in 1977, and an archaeomagnetic date was obtained from the heavily fired clay base. The date obtained was "CAL A.D. 43 -100 at the 68% confidence level, the upper limit extending to *c.*A.D. 150 at the 95% confidence level. This result should be regarded as tentative" (Clarke 1987).

Previous Summaries: Couchman (ed.) 1978, 240.
Finds: E.C.C.; to go to Bas. D.C.
Final Report: Essex Archaeol. Hist.

4. **Braintree**, College House (TL 756229)

J.C. Bakewell, B.D.C.

A second Roman well produced waterlogged timber, including an iron-bound wooden bucket. The fills dated to the 2nd-3rd centuries A.D.

Previous Summaries: Priddy (ed.) 1984-5, 125; 1986, 158; 1987, 106.
Finds: B.D.C.
Final Report: Essex Archaeol. Hist.

5. **Braintree**, London Road (TL 754228)

J.H. Hope, B.V.A.S.

Works on the line of the Link-Road were completed. These confirm and complement work reported in earlier summaries. The earliest features contained Bronze Age pottery. These were sealed by an Iron Age floor surface, containing a Celtic coin. Two ditches of the 1st century A.D. were relocated and at least five phases of domestic building, ranging from the 1st-4th centuries were examined. Traces of the Roman precursor of London Road and a road-side smithy were also found.

Previous Summaries: Priddy (ed.) 1984-5, 125; 1986, 158.
Finds: B.T.H.C.
Final Report: Essex Archaeol. Hist.

6. **Braintree**, Sandpit Road (TL 756232)

M.D. Smoothy, B.D.C.

Four trenches were excavated in order to elucidate Roman settlement in this area. Trench A produced a single 3rd-century A.D. rubbish pit while Trench D produced a sequence of pits dating to the 2nd-4th centuries. In particular, a large gravel pit produced a consistent coin series indicating its filling in the late 4th/early 5th century (coin of Honorius). This pit also produced Romano-saxon pottery

and a large amount of cattle bone representing butchery waste.

A 13th-century ditch parallel to Sandpit Lane (Trench B) was the only medieval feature recorded, while early post-medieval pits and a ditch were present in Trench D. All areas were heavily disturbed by 19th and 20th century structures and pits. Work to the west of Sandpit Lane is planned for 1988.

Previous Summaries: Priddy (ed.) 1984-5, 125; 1987, 106.
Finds: B.D.C.
Final Report: Essex Archaeol. Hist.

7. **Brentwood**, The Golden Fleece (TQ 57779292)
B.H. Milton, E.C.C.

Wall plaster was removed from a large area of the interior and the timbers recorded. Service and foundation trenches were examined. It was found that the 14th-century western cross-wing had originally formed the eastern wing of a 14th-century hall, since demolished. The surviving wing had been extended at the rear and incorporated into the present building of *c.*1520. The first floor of the central hall was shown to be an insertion and a number of blocked doorways and windows were uncovered.

Final Report: Essex Archaeol. Hist.

8. **Chelmsford**, Mildmay Road (TL 70920621)
M. Adams and P. Allen, E.C.C.

The site incorporates the hot rooms of the baths on the east side of the early 2nd-century *mansio*. First recorded in 1849, rooms at the north end were excavated in 1947 (V.C.H. 1963, 67) and 1975 (Drury 1975). These excavations showed that the bath house was constructed in the mid-2nd century, soon after the *mansio*; but that its initial phase, comprising a circular *laconicum*, pre-dated the *mansio*.

The full extent of the suite of hot rooms to the south has been exposed. One room with an adjacent cold plunge bath has been fully excavated and work is currently in progress on the *praefurnium*, or furnace area. To the south, external courtyard areas appear to comprise several phases of rough surfacing, overlain by occupation deposits; whilst two linear features, pre-dating the main construction phase of the bath house, were revealed at the north end of the site. Work is still in progress so that although the structural sequence is well understood, precise dates cannot be given until the spot-dating has been completed.

Finds: E.C.C.; to go to Ch.E.M.
Final Report: Essex Archaeol. Hist.

9. **Chelmsford**, Godfrey's Yard (TL 70750618)
P. Allen, E.C.C.

Excavation prior to redevelopment complements earlier work carried out in the area of the Roman street frontage (Drury 1975), on the east side of Moulsham Street.

Further evidence was obtained for an earthwork dating to *c.*A.D. 60-70, probably representing a temporary military camp established in the aftermath of the Boudican revolt. No internal features survived, nor was any evidence recovered for the postulated early Flavian fort, probably as a result of truncation. However, the rear ditch of the late Flavian road station identified by Drury was located, together with a series of ovens and hearths.

In *c.*A.D. 120 the road station was levelled and replaced by timber-framed strip buildings fronting onto the street, the rear of which were found during current work. A ditch at the rear of the building plot defined the precinct boundary of the early 2nd-century *mansio*. Both the strip-buildings and the *mansio* were sealed by the late 2nd-century town defences. These took the form of a turf-faced earthen bank, protected by a 3m deep 'V'-shaped ditch. Two further ditches, 2.5 and 2m wide respectively, were recorded in front of the first. Their butt-ends at the eastern limit of the site suggest they were localised to the area of the south gateway.

In the early 3rd century, after only a very short interval, the rampart was deliberately levelled off, backfilling the ditches. Properties relating to the Roman fore-runner of Moulsham Street were then laid out, as before, through the cutting of a boundary ditch. One of the timber buildings overlying the defensive ditches was destroyed by fire in *c.*A.D. 270. The fire debris contained well preserved detail of collapsed timber-framing, wattle and daub, painted wall plaster and window glass. An iron-working furnace was recorded in the yard to the rear.

The latest Roman evidence was truncated, but a sequence of boundary ditches suggests that the strip-building plots continued until the end of the 4th century when they were replaced by a small timber stockade along the road frontage. This contained a building and two pottery kilns recorded in 1972-3.

To the rear of the building plots, a series of drains channelled surface water from the *mansio* yard into soakaways, cut into the former defensive ditches. Two isolated late Roman burials, one in a sandstone coffin, were recorded.

Post-Roman development of the site was represented by a medieval ploughsoil and post-medieval orchard soil. Sequences of boundary ditches and rubbish pits represent yard areas behind post-medieval buildings fronting Moulsham Street.

Finds: E.C.C.; to go to Ch.E.M.
Final Report: Essex Archaeol. Hist.

10. **Chelmsford**, Last's Garage (TL 70550609)
S. Wallis, E.C.C.

See this volume p. 40-46.

11. **Chipping Ongar**, The Pleasance (TL 553032)
R. Flook, E.C.C.

See this volume p. 253.

12. Clacton, Former Butlin's Holiday Camp (TM 166138)
J. Wymer and D. Bridgland, E.C.C.
Following bore hole survey, three small machine-dug trenches proved to be unproductive in terms of providing information on the Clacton channel sediments. However, an extensive watching brief on a sewer trench enabled vertical profiles to be sampled. Although little new information was forthcoming regarding the Lower Palaeolithic archaeology of the site *sensu stricto*, the opportunity to monitor and sample the deposits over the long stretches in the sewer trenches is likely to advance our knowledge of the contemporary environment.

Finds: C.E.M.
Final Report: Proc. Geol. Ass.

13. Coggeshall, St. Peter's Road (TL 84572300)
R. Flook, E.C.C.
Final Report: Essex Archaeol. Hist.

14. Colchester, Bluebottle Grove (TL 974256)
G. Carter, C.A.T.
The earthwork at Bluebottle Grove forms part of the Lexden Dyke. The ditch and part of the bank were sectioned, at the request of HBMC, to provide information for a management plan. The ditch proved to be 4m deep and 10.5m wide. The bank survived to a height of 1.5m.

Final Report: Colchester Archaeol. Rep.

15. Colchester, St. Botolph's Priory (TM 000249)
G. Carter, C.A.T.
Exploratory trenches were dug in part of the Britannia Works site which lies outside the scheduled area. This was done to determine whether remains of the monastic buildings extended outside the scheduled area, and if these, or any other features, would be damaged by redevelopment. Two foundations with adjacent floors, presumably belonging to the priory, were located immediately to the south of the scheduled area at a depth of *c.*1-1.4m. In the same area, waterlogged remains were also observed at a depth of 2m. No other archaeological features were found, due to the substantial depth of topsoil and the presence of underground chambers forming part of the Britannia works.

Previous Summaries: Priddy (ed.) 1987, 106.
Finds: C.A.T.; to go to C.E.M.

16. Colchester, Butt Road (TL 99282484)
D. Shimmin, C.A.T.
Work in advance of redevelopment for a Police Station revealed a further 42 inhumations belonging to the late Roman cemetery. Almost all the graves had nailed, wooden coffins and all except one were oriented with the feet to the east. Grave-goods continued to be sparse, but included several complete pottery vessels, shale and copper alloy bracelets and hobnails. The burials probably date to the 4th century. The apse of the cemetery ?church was relocated, and the area immediately to the east found to be free of burials. Two further graves recorded during a subsequent watching brief bring the total number of burials to 741.

Previous Summaries: Couchman (ed.) 1977, 89; 1978, 241-2; Eddy (ed.) 1979, 102; 1980, 40.
Finds: C.A.T.
Final Report: Colchester Archaeological Rep.

17. Colchester, St. Helena's School (TL 98852580)
G. Carter, C.A.T.
A small exploratory trench revealed gravel surfaces which formed the surface of the walled precinct around Temple 2 at Sheepen. Finds consisted almost entirely of pottery and glass fragments, dating to the middle years of the 1st century A.D. The material is associated with pre-Boudican activity, predating the temple and its precinct.

Finds: C.A.T.; to go to C.E.M.

18. East Tilbury, Coalhouse Fort (TQ 691768)
J.P.J. Catton, T.B.C./Coalhouse Fort Project
Excavation formed part of the Phase I restoration of the curtain wall dry ditch, the defensive system of the 1874 armoured casement construction. A possible 1st/2nd World War concrete hardstanding for light field guns was located at a high level, the main ditch fill consisting of river marsh clays, probably representing a backfill associated with the 1903 updating and repair of the fort.

One caponier had been destroyed, as evidenced by a roof scar on the facing of the curtain wall.

Much late 19th and early 20th-century pottery, glass and other finds have been recovered, including the fuses for rifled muzzle loading guns (indicating that these were used for test and drill purposes). An 1874 Hong Kong one per cent bronze coin might suggest at least one of the gunners had seen foreign service.

Previous Summaries: Priddy (ed.) 1986, 160.
Finds: T.M.

19. Great Chesterford, Roman Temple Precinct (TL 515436)
T.E. Miller, G.C.A.G.
Previous excavation in 1984 failed to locate the boundary ditch in the area outside the gateway in the eastern wall. Work to the north revealed that the ditch was not continuous along the eastern side. A butt-end was found in front of the gateway in its northern section. This had been deliberately backfilled and sealed by a path leading to the gate. Excavation north of the gate produced further evidence of an earlier palisade on the same alignment as the precinct wall. It seems likely that the palisade and ditch are contemporary and belong to the 1st-2nd centuries. When

the 3rd-century masonry wall was erected the entrance was repositioned (and possibly doubled), thereby necessitating the backfilling of part of the ditch.

Previous Summaries: Eddy (ed.) 1979, 103-4; 1980, 42-3; Priddy (ed.) 1984-5, 127-8.
Finds: with Director.

20. Great Wakering, Crouchman's Farm (TQ 944872)
R. Jefferies, S.E.E.A.S.
No details provided.

Previous Summaries: Priddy (ed.) 1984-5, 129; 1986, 160.
Finds: with excavator.

21. Hullbridge Project (Essex Coastal Survey)
T.J. Wilkinson, E.C.C.
Archaeological recording of test pits, dug by Nirex at Bradwell on Sea power station, located a red hill and a number of minor sites of prehistoric and later date. More significantly, the numerous trial pits and bore holes provided a wealth of information on palaeoenvironments which can be used to place a wide range of local archaeological sites in their environmental context.

Fieldwork also continued with the reconnaissance of the foreshore around Dovercourt, the south shore of the Stour Estuary and the northern shore of the Colne. Although traces of the Lyonesse surface and associated archaeological material were recorded, no major sites were evident. The most noteworthy discovery was a series of wooden waterfront structures, one of which had a fine tenon and mortice joint, still in position. They were located *c.* 300 m SW of a Roman villa and radiocarbon samples were taken to determine whether they relate to this occupation.

On the Blackwater Estuary, a number of wooden structures, including hurdles, were recorded and sampled by Peter Murphy.

Excavation at the Neolithic site at the Stumble continued in three areas; Area A/B produced shallow irregular pits, post-holes and stake-holes. No ground-plans of early Neolithic buildings were identified, but the flint and pottery density (up to 70 artefacts per m^2) suggests the presence of middens in this area. Area C also produced early Neolithic occupation. Although artefacts were abundant, a number of technical problems relating to the site's drainage made excavation virtually impossible. In Area D a series of shallow pits contained abundant burnt flints. The presence of Grooved Ware and Beaker sherds, together with the fills, suggests a parallel with the cooking holes recorded by Hazzeldine Warren near Jaywick in the 1930s.

Previous Summaries: Priddy (ed.) 1983, 167; 1984-5, 129-30; 1986, 161; 1987, 107.
Finds: E.C.C.
Final Report: East Anglian Archaeol.

22. Ilford (London Borough of Newham), Uphall Camp (TQ 43808500)
P.A. Greenwood, P.E.M.
Further excavation dated this single rampart and ditch fortified enclosure (Wilkinson 1978) to the later Middle Iron Age (3rd-2nd centuries B.C.). Evidence for occupation of several phases had been previously recorded. A larger area was opened and produced further occupation; two round houses, a domestic/agricultural building with penannular gully and a rectangular post-hole building. At least four 'four-post' structures were associated with these buildings and a quantity of environmental evidence was recovered. There are also indications of a ditch system, from which a Class I potin coin was recovered (two further examples came from the subsoil overlying Iron Age features).

There is no evidence for Late Iron Age activity to date, but during the 3rd-4th century A.D. a small Roman military structure was built. On present evidence, this appears to have been square or rectangular, with a relatively deep 'V'-shaped ditch, and may have been a signal station or a watch tower. There are also two later medieval/early post-medieval field ditches crossing the site.

Previous Summaries: Priddy (ed.) 1984-5, 128.

23. Latton, Harlow Temple (TL 468123)
R.W. Bartlett, H.M.
Excavation of the Middle Iron Age circular gully found in 1986 was completed, and some trenches excavated by W.E.A.G. (France and Gobel 1985) were re-excavated. The gully represents a structure, orientated north-south. Considerable amounts of Mid-Late Iron Age pottery and metalwork including Celtic coins, knives and sword scabbard binding were recovered from its fill. A number of post-holes to the north may represent a 1st-century A.D. structure.

The external wall of Room J, in the courtyard, was re-excavated in order to check the true position of this building (misaligned in the laying out of the site). The wall was very well preserved and stood to a height of *c.* 1 m in places. In addition to the material recovered from the ring-ditch, considerable quantities of Celtic and Roman coins, many in mint condition, fragments of highly carved stone (including part of an inscription) came from building debris. A bronze leaf and a coin of Honorius came from one of the re-excavated trenches.

Previous Summaries: France and Gobel 1985 (1962-71 excavations); Priddy (ed.) 1986, 161; 1987, 107.
Finds: H.M.
Final Report: Essex Archaeol. Hist.

24. Little Totham, Rook Hall Farm (TL 878093)
P.A. Adkins
Work in advance of mineral extraction continued to produce a large number of features spanning the period from the Mesolithic to the early medieval period. Evidence of Bronze Age and Early Iron Age occupation was widespread

in contrast to the virtual absence of Roman material. Further features relating to early saxon metallurgy were recorded.

Previous Summaries: Priddy (ed.) 1983, 167; 1984-5, 131; 1986, 160; 1987, 107-8.
Finds: with excavator.

25. Maldon, The Chequers (TL 85050701)
D.D. Andrews, E.C.C.

Excavation took place after the recording and demolition of a 17th-century timber-framed building, incorporating remnants of a ?15th-century structure. The presence of a large cellar left two small areas near the frontage for excavation.

The earliest features were timber slots and a probable roadside ditch of 11th/12th-century date. Although there was evidence for several building phases, the fragmentary nature of the areas available for excavation made meaningful interpretation difficult. A gravel spread on the east side of the site may represent a trackway from the High Street to the Carmelite Friary, founded in 1293. In the 14th/15th century the level across the site was raised and a substantial building, occupying the entire frontage, was constructed. It is possible that elements of this building are those incorporated into the framing of The Chequers.

Finds: E.C.C.; to go to C.E.M.
Final Report: Essex Archaeol. Hist.

26. Maldon, Elmcroft (TL 844070)
O. Bedwin, E.C.C./M.A.G.

Redevelopment revealed the northern edge of an Early Iron Age settlement, situated on a hilltop overlooking the River Chelmer. Evidence of settlement took the form of two scoops; one *c.*9m across and 0.7m deep, the other 3 × 4m and 0.4m deep. Both fills were prolific in Darmsden-Linton pottery and charcoal. Post-holes and a palisade trench, traceable for 55m across the site, were also recorded. The latter cut both scoops, implying that the settlement was originally open.

To the north-east of the excavated area, a substantial ditch up to 1.5m deep was recorded in the footings. Its line corresponds with that postulated for the saxon *burh* and a sherd of grass-tempered pottery, possibly of 10th-century date, came from its fill.

Finds: E.C.C.; to go to C.E.M.
Final Report: Essex Archaeol. Hist.

27. Netteswell, Netteswellbury (TL 456095)
R.W. Bartlett, H.M.

Twelve trenches were cut inside the barn, including eight to expose the footings. Two ditches of presumed medieval date were found on the north side, but dating evidence was confined to a few sherds of ?12th-century pottery. Elsewhere a 19th-century clay floor had been laid directly over natural gravel.

Previous Summaries: Priddy (ed.) 1987, 108.
Finds: H.M.
Final Report: Essex Archaeol. Hist.

28. Pleshey, Village Hall (TL 66551463)
D. Priddy, E.C.C.

See this volume p. 166-175.

29. Rayne, Braintree By-Pass (TL 713223)
M.D. Smoothy and B. Milton, B.D.C./E.C.C.

Traces of a Romano-British rural settlement were found just to the south of Stane Street. It appeared to be of at least three phases, spanning the Flavian period to the early 4th century. Traces of buildings were ephemeral. However, one post-built rectangular structure was superseded by a curvilinear ditch filled in the early 4th century. A possible round-house gully dated to the 2nd century.

The majority of the features consisted of stratigraphically isolated pits and ditches/gullies. Three 'grave-like' pits, one containing a large fragment of human skull, are difficult to interpret in view of the almost complete absence of human bone. They date to the 1st century and may have had a ?ritual function. The finds from the site are unexceptional, but the faunal assemblage contains a higher than usual proportion of horse bones and a quantity of worked red and roe deer antler. A large quantity of roller-stamped flue tile from a rubble make-up layer suggests the presence of a substantial (?villa) building in the vicinity.

A sparse scatter of Late Bronze Age/Early Iron Age pottery may indicate a prehistoric site nearby.

Finds: B.D.C.
Final Report: Essex Archaeol. Hist.

30. Saffron Walden, Audley End (TL 524382)
C.M. Cunningham, Ch.A.T.

Continued excavation in 1986/7 showed that any attempt to restore an historic garden would involve archaeological destruction. It was therefore decided that restoration of the 19th-century landscape around the house would be preceded by total excavation of the affected area. The focal point of the garden was a parterre of 1832, an ornamental arrangement of 160 flower beds in the courtyard (Fig. 2) and to the east of the house, which was later abandoned and grassed over.

Each flowerbed was located and carefully investigated. The original plan of the garden was recovered in total, allowing a completely accurate reconstruction to take place. Many soil samples were taken in the hope that seed and pollen analysis would provide information for the new planting scheme.

In the courtyard three concentric rings were identified, around a central hollow which would have held an ornamental pond or similar feature, with gravel paths to the north and south of the courtyard. Many of the beds were over 1m deep and had elaborate provision for drainage. Excavation to the east showed that the fountain, which had

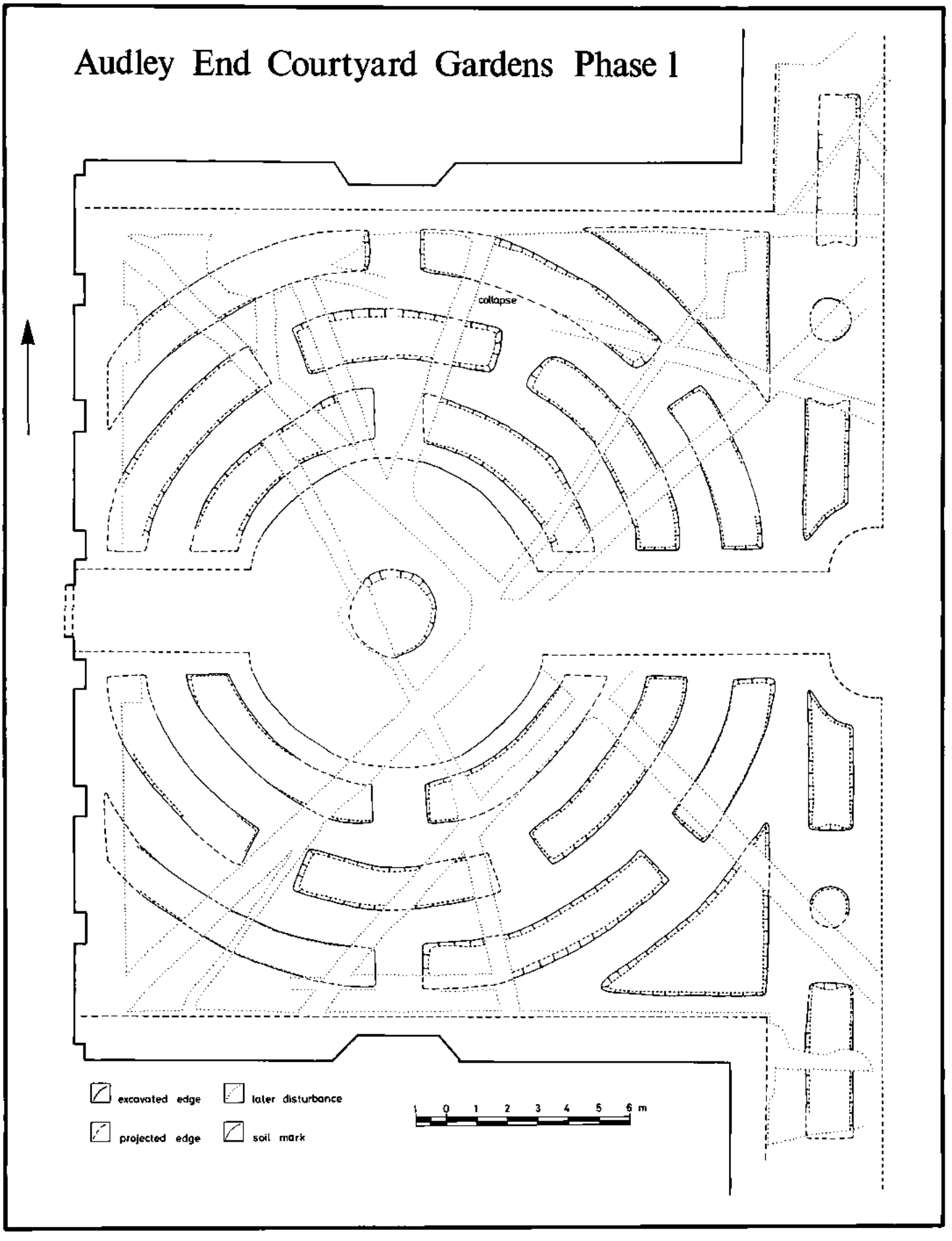

Fig. 2 Saffron Walden — Audley End. Plan of flower beds.

appeared to be secondary, pre-dated the garden and had been retained, contrary to the designer's intention.

Abundant evidence for earlier use of the site was seen in the sides and the bottoms of the flowerbeds and later service trenches. This was examined and recorded in detail, although none of the stratigraphy revealed by the removal of the 19th-century soil was excavated.

The cloister of the Benedictine Abbey of Walden, which underlies the courtyard garden, had painted clunch vaulting, carried on a partly glazed, traceried and buttressed arcade. This mid-14th century cloister reused some late 12th-century elements. Part of the tiled floor of the nave survives *in situ*, as do the lower walls of the east processional doorway, the south transept, the chapter house and other buildings of the east range. Foundations of the chancel (more than 28m long) were observed, and the cemetery which lay to the south-east included re-internments of individuals in small pits as well as in normal inhumations.

The post-dissolution house retained the cloister with alterations, but the east wall of the east range was substantially rebuilt. The later Jacobean house rose from the foundations of its predecessor, but the cloister was permanently abandoned. The east range was demolished in the 18th century. The remaining three ranges will provide an appropriate context for the restored garden.

Previous Summaries: Priddy (ed.) 1983, 168; 1984-5, 133; 1986, 162.
Finds: DOE Store, Audley End.

31. **Springfield**, Springfield Lyons (TL 736082)

D.G. Buckley, E.C.C.

Features outside the main entrance causeway of the Late Bronze Age enclosure revealed a deep pit (1.8m), containing Mildenhall-style pottery, set within an oval pit. The latter was cut by slots containing Beaker and Grooved Ware sherds. A substantial scatter of Middle-Late Neolithic pottery and flintwork was recovered to the east. Further features remain to be excavated.

An area to the south of the main site revealed few features and it is likely that the later saxon settlement has been delimited. In contrast, further excavation on the west side showed the early saxon cemetery to continue. Eighteen cremations bring the total to *c.*130 (+*c.*120 inhumations). Several Late Bronze Age features suggest the settlement extended outside the enclosure.

Previous Summaries: Priddy (ed.) 1982, 142; 1983, 168; 1984-5, 134; 1986, 163; 1987, 108.
Finds: E.C.C.; to go to B.M.
Final Report: East Anglian Archaeol.

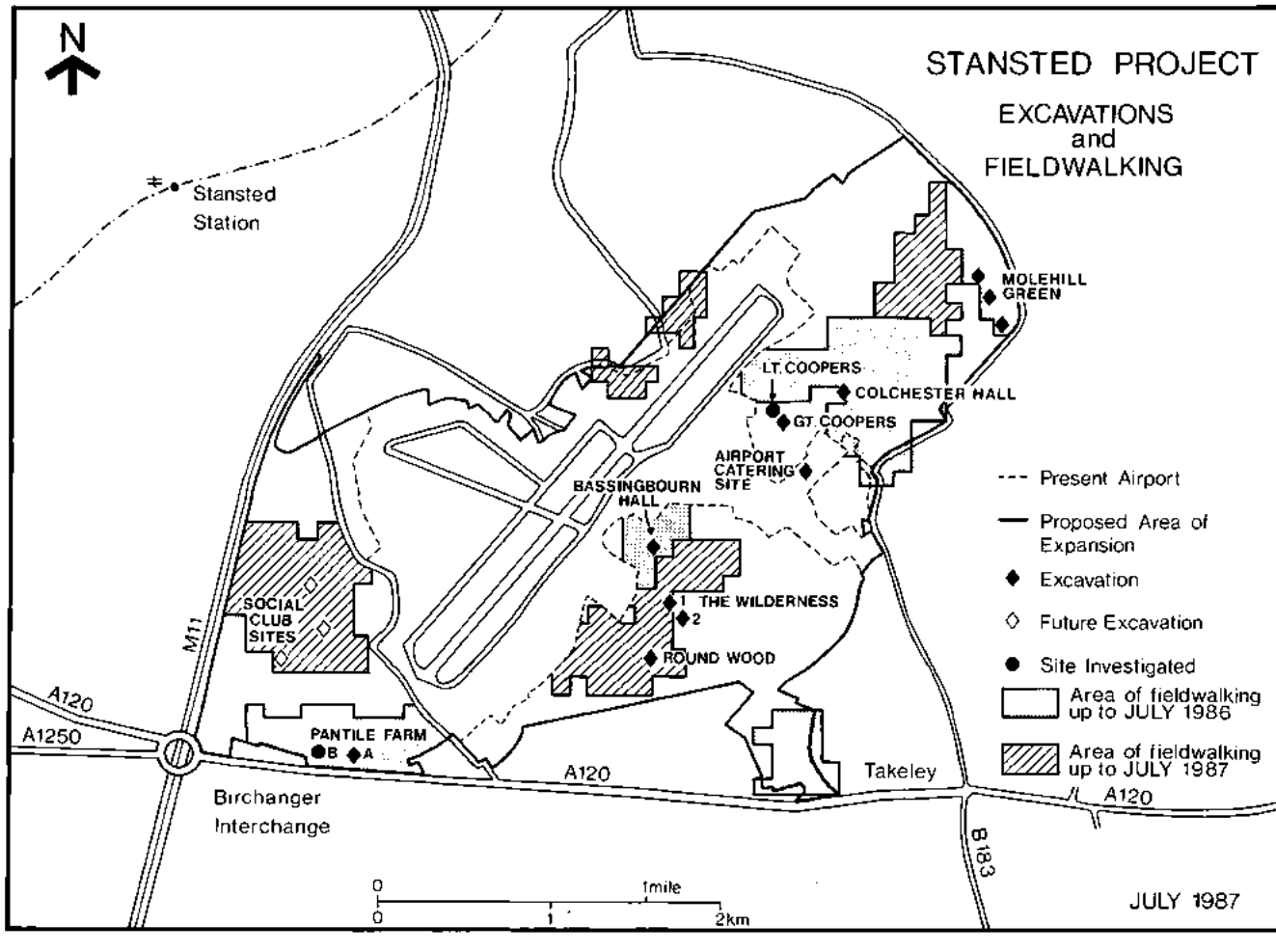

Fig. 3 Stansted Airport. Location of sites.

Stansted Airport project (Fig. 3)
Howard Brooks, E.C.C.

32. Takeley, Airport Catering Site (TL 551232)
Work was hampered by an overburden of up to 3m of dumped clay, but it was possible to expose an enclosed Late Iron Age/early Roman settlement (Fig. 4).

No causeway for an entrance was apparent, unless in the unexcavated SW corner of the enclosure. Up to 16 round-house gullies were recorded inside, the largest being over 15m in diameter (average 10-11.5m diameter). Placed centrally within the enclosure was a rectangular structure, tentatively interpreted as a shrine. Another group of features on the northern edge of the site may represent a 4 or 6-post granary. Initial study of the pottery indicates a main period of occupation *c.*70-10 B.C., then a lull until *c.*A.D. 40, followed by a period of renewed activity until *c.*A.D. 60 or slightly later. Among the finds was a hoard of 50 potin coins, recovered from one of the round-house gullies.

Previous Summaries: Priddy (ed.) 1987, 109-110.

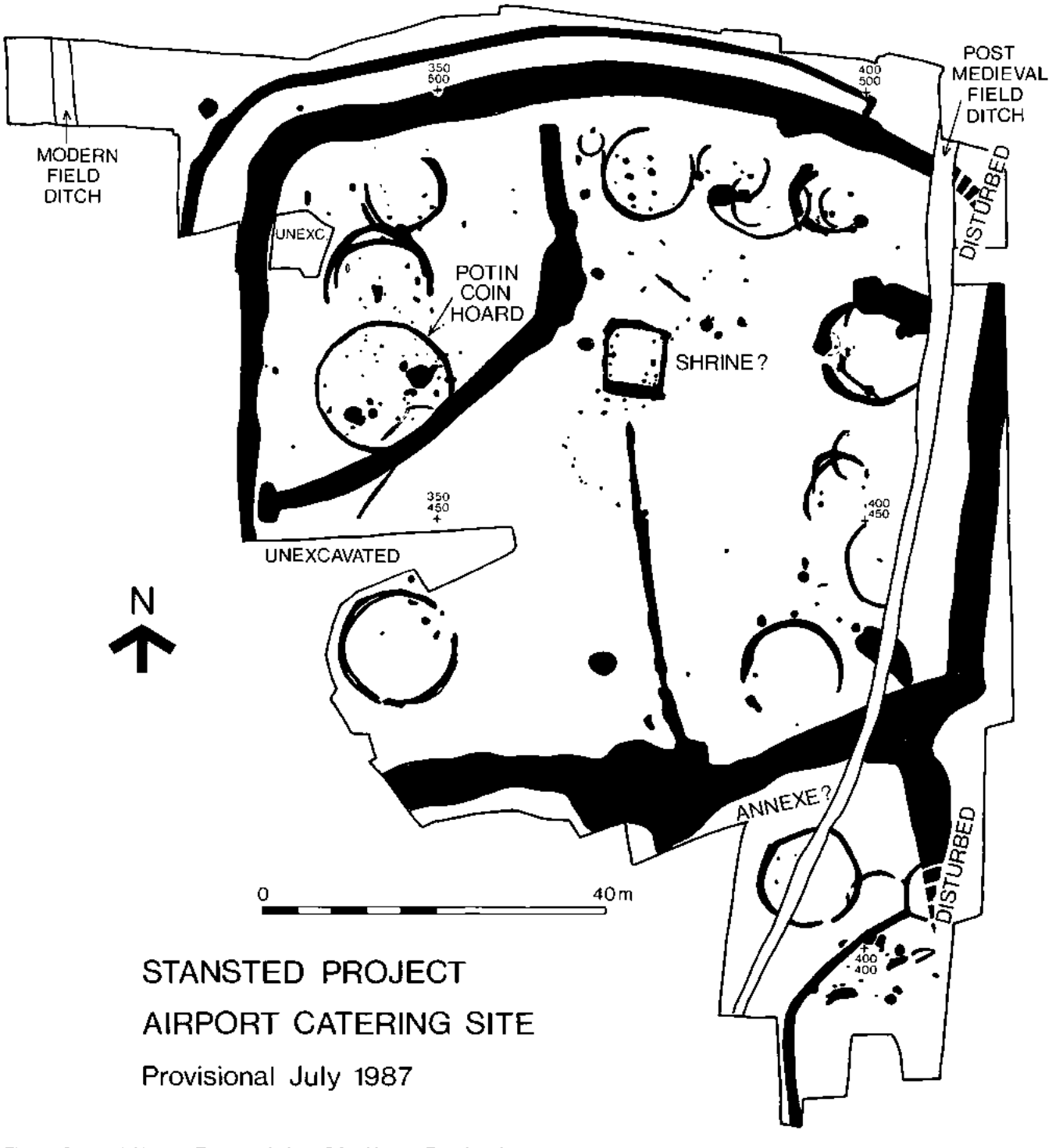

Fig. 4 Stansted Airport. Excavated plan of the Airport Catering site.

33. Takeley, Bassingbourn Hall (TL 545227)
A large semi-circular earthwork was interpreted as part of a possible 12th-century circular moat, belonging to a manorial site. Fieldwalking revealed virtually no medieval material, although a scatter of brick confirmed the existence of a building there. Excavation showed this house to date to the 15th/16th century, with associated ponds and drains. The 'moat' did not have any medieval associations and may have been a quarry ditch for infilling deep features after the demolition of the house.

34. Takeley, The Wilderness 1 (TL 544225)
Surface finds of medieval pottery (largely 12th/13th-century) indicated a potential occupation site. Pits and gullies containing pottery of a similar date range did not form any observable pattern, suggesting they were peripheral to the main focus.

35. Takeley, The Wilderness 2 (TL 544224)
A similar pottery scatter to that at (34) produced no recognisable features on excavation.

36. Takeley, Round Wood (TL 543221)
Discovered by fieldwalking, this site has produced three medieval timber buildings to date; one post-built, one trench-built and the third combining the two. A number of boundary ditches demarcate these buildings. A central concentration of pits produced finer quality pottery than has been usual in the area and this, together with the structural evidence, suggests a higher status site.

37. Takeley, Little Cooper's Cottage (TL 551235)
The surviving moat was surveyed and limited excavation undertaken after the dismantling of the house for re-erection on a different site. Finds and features were sparse and did not suggest occupation pre-dating the post-medieval house. However, one feature produced fragments of at least two mid-Roman vessels, suggesting a site in the vicinity.

38. Stansted, Costain's Compound (TL 538223)
A Roman cremation burial, containing three pots, and two short lengths of ditch were revealed.

39. Stansted, Airport Social Club (TL 523224)
Fieldwalking produced a number of Late Bronze Age/Early Iron Age, Late Iron Age, Roman and Anglo-Saxon features which are currently under excavation. A double-ditched trackway and cremations date to the Late Bronze Age/Early Iron Age, whilst two major ditches produced Late Iron Age/Roman finds. Roman cremations have also been recovered and one pit produced saxon pottery. A number of features still remain to be excavated. The overall impression is of a large area of multi-period occupation.

40. Stansted, Bury Lodge Lane (TL 523226)
Excavation confirmed an occupation site located by surface scatters of Roman pottery and tile. The site has been stripped and a number of features are visible though no excavation has yet taken place. Two large ?enclosure ditches, linear and penannular gullies suggest a site comparable with (32). The surface finds, including box flue-tile, hint at a building nearby.

41. Stansted, Duckend Farm Site (TL 521221)
As with (40) above this Roman settlement was located by fieldwalking, and has yet to be excavated. Visible features include a large ?enclosure ditch, ?timber building slots, areas of gravel surfaces and possible cremation burials.

Finds: E.C.C.; to go to S.W.M.
Final Report: East Anglian Archaeol.

42. Stanway, Bellhouse Quarry (TL 957226)
G. Carter, C.A.T.
An exploratory trench to locate a series of large enclosures to the west of Gryme's Dyke suggests they probably belong to the first half of the 1st century A.D.

Finds: C.A.T.; to go to C.E.M.

43. Waltham Holy Cross, Church Street/ Leverton Way (TL 381006)
M. Gardiner, E.C.C.
Excavation was contiguous to a trench dug by W.A.H.S. in 1976, which had revealed a series of ovens, possibly of the manorial bakery. One of these ovens was again cleared for archaeomagnetic samples.

The site lies near the Cornmill Stream, a tributary of the River Lea. The earliest activity was represented by a few worked flints and prehistoric sherds, provisionally identified as Bronze Age. A scatter of residual Roman pottery and *tegulae* suggest a settlement nearby.

In the late 12th/early 13th century, the ground level, where it sloped down towards the stream, was made up with a dark soil containing occupation debris. A number of features cut this, including a series of rubbish pits, one of which contained a carved bone object dating to the 13th/14th century. This was probably a decorative mount from an altar, and may have come from the abbey church, immediately opposite the site.

A single beam-slot running parallel to the street frontage, also cut these dumped deposits. Nearer the stream, thick, battered walls of chalk blocks were found. Only two sides of the structure had been built, but its size and the depth of the foundations suggest it was a substantial work. The fill retained by the chalk wall contained a number of finds, including fragments of a mortar. It seems most likely that the walls were built in the 14th century as a wharf to serve boats coming up the River Lea to the town of Waltham Abbey.

A number of post-medieval rubbish pits were also found and a further area of the 16th-century hearth, noted in 1976, was excavated.

Finds: E.C.C.; to go to E.F.D.M.
Final Report: Essex Archaeol. Hist.

44. **Waltham Holy Cross**, 41 Sun Street (TL 384006)

K.N. Bascombe, W.A.H.S.

Repairs showed that the 18th-century garden front concealed two doorways in the timber frame of *c.*1520. The foundation trench for a ground wall, 3m to the east and parallel to it, cut layers containing 12th/13th-century pottery. A cobbled yard to the east dated to the 17th century. The ground wall extended south from Sun Street, its southern end destroyed by gardening operations. The intervening space is interpreted as a wagon way from the street to the outbuildings and yard at the rear of the property. The wall abutted a semi-circular stone (?gate post support) at its north end and during its lifetime appears to have been converted to a wagon shelter. Both doors (which give access to two sides of an internal partition), lead into this area. At least one room probably existed over the wagon way.

There is no evidence for building along the Sun Street frontage east of the wagon way, but a thin tile spread may represent the lowest course of an ?outbuilding/boundary wall.

Finds: to go to E.F.D.M.
Final Report: to be decided.

45. **Wanstead**, Wanstead Park (TQ 416873)

F. Clark, W.E.A.G.

Ditches and pits were sectioned but no trace of the Roman villa has yet been located.

Previous Summaries: Priddy (ed.) 1986, 164.

Abbreviations

Bas.D.C.	Basildon District Council
B.D.C.	Braintree District Council
B.T.H.C.	Braintree Town Hall Centre
B.V.A.S.	Brain Valley Archaeological Society
B.M.	British Museum
C.A.G.	Colchester Archaeology Group
C.A.T.	Colchester Archaeological Trust
C.E.M.	Colchester and Essex Museum
Ch.A.T.	Chelmsford Archaeological Trust
Ch.E.M.	Chelmsford and Essex Museum
E.C.C.	Essex County Council
E.F.D.M.	Epping Forest District Museum
G.C.A.G.	Great Chesterford Archaeological Group
H.M.	Harlow Museum
P.E.M.	Passmore Edwards Museum
S.E.E.A.S.	South-East Essex Archaeological Society
S.M.	Southend Museum
S.W.M.	Saffron Walden Museum
T.B.C.	Thurrock Borough Council
W.A.H.S.	Waltham Abbey Historical Society
W.E.A.G.	West Essex Archaeological Group

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Essex Archaeology and History 19 (1988), 272-277

Archaeological Notes

An enamelled Roman plate brooch from Chelmsford

by N.P. Wickenden

In 1985, an enamelled copper alloy plate brooch (Fig. 1) was brought into Chelmsford and Essex Museum for identification and was passed on to the writer. It was found by Mr. T. Roe in topsoil in his back garden in Baddow Road, Chelmsford, some 3km outside the enclosed area of the Roman town. Baddow Road preserves the line of the Roman Road leading towards the Roman port at Heybridge.

The brooch has a large central cell with a raised border, and six smaller raised circles of copper alloy in the outer field, each containing a central raised pellet, also of copper alloy. The small circles, the background, and the central cell would all have been enamelled in different colours; the enamelling survives in the small circles, and looks to be green, although this is often the colour to which red turns when it deteriorates.

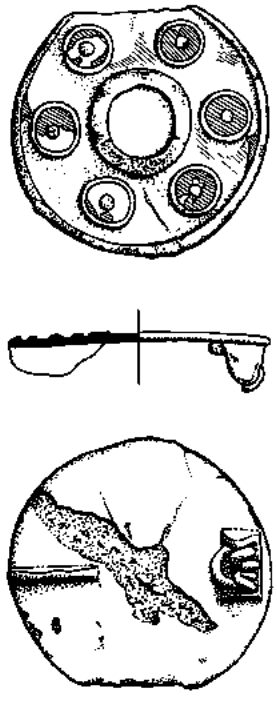

Fig. 1 Copper alloy enamelled plate brooch from Chelmsford. Scale 1:1.

On the underside is the copper alloy spring, consisting of wound wire which would have continued as the pin (missing), held in place on the hinge by a small iron rod. The catchplate to hold the pin is broken and worn.

About a dozen specimens of this variety of brooch are known from this country; none are closely dated, though the type is usually 2nd century A.D. References are listed in Allason-Jones & Miket 1984 (p. 120; no. 151), and include Richborough, Kent; Gadebridge Park, Hertfordshire; London; and Hockwold, Norfolk. Whilst one has been found on the Continent at Zugmantel, it is likely that all were made in Britain, probably in the south or east of the country. The type is Bateson's Group 5 of disc brooch in his study of enamelled objects (1981, fig. 5 and p. 38-9).

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The old St. Peter's school site, Coggeshall; excavations 1987

by Roland Flook

Excavation

In December 1987 excavation was carried out (Fig. 1) prior to development at the corner of St. Peter's Road and Church Green in Coggeshall and to the north of excavations carried out in 1984 by Philip Clarke for Essex County Council on the site of the new St. Peter's Primary School. The school site had produced evidence for a large Roman enclosure and the St. Peter's Rd. development offered the opportunity to investigate its north-eastern corner. The 1987 excavation was therefore concentrated at the west edge of the development site (centred on TL 8547 2301).

The site is crossed by a narrow band of clay head soils which results in considerable variation in the character of the natural subsoil, the level of which varied from 129.09m OD in the NW to 127.64m OD in the SE. In the west of the site there was a mottled stiff bright yellow clay with moderate small chalk and flint fragments and in the east, a mottled reddish-orange slightly silty clay.

Two trenches were excavated; topsoil was removed by machine followed by cleaning and hand excavation of features. The position and shape of the trenches was largely determined by the presence of trees.

The features became discernible generally only where they cut the natural subsoil. The earliest features uncovered (Fig. 2) were three shallow gulleys. Two were roughly parallel running north-south; (34) in the extreme south-east corner of the site and (44/54) cutting through the centre of both trench 2 and trench 1 and eventually truncated in the

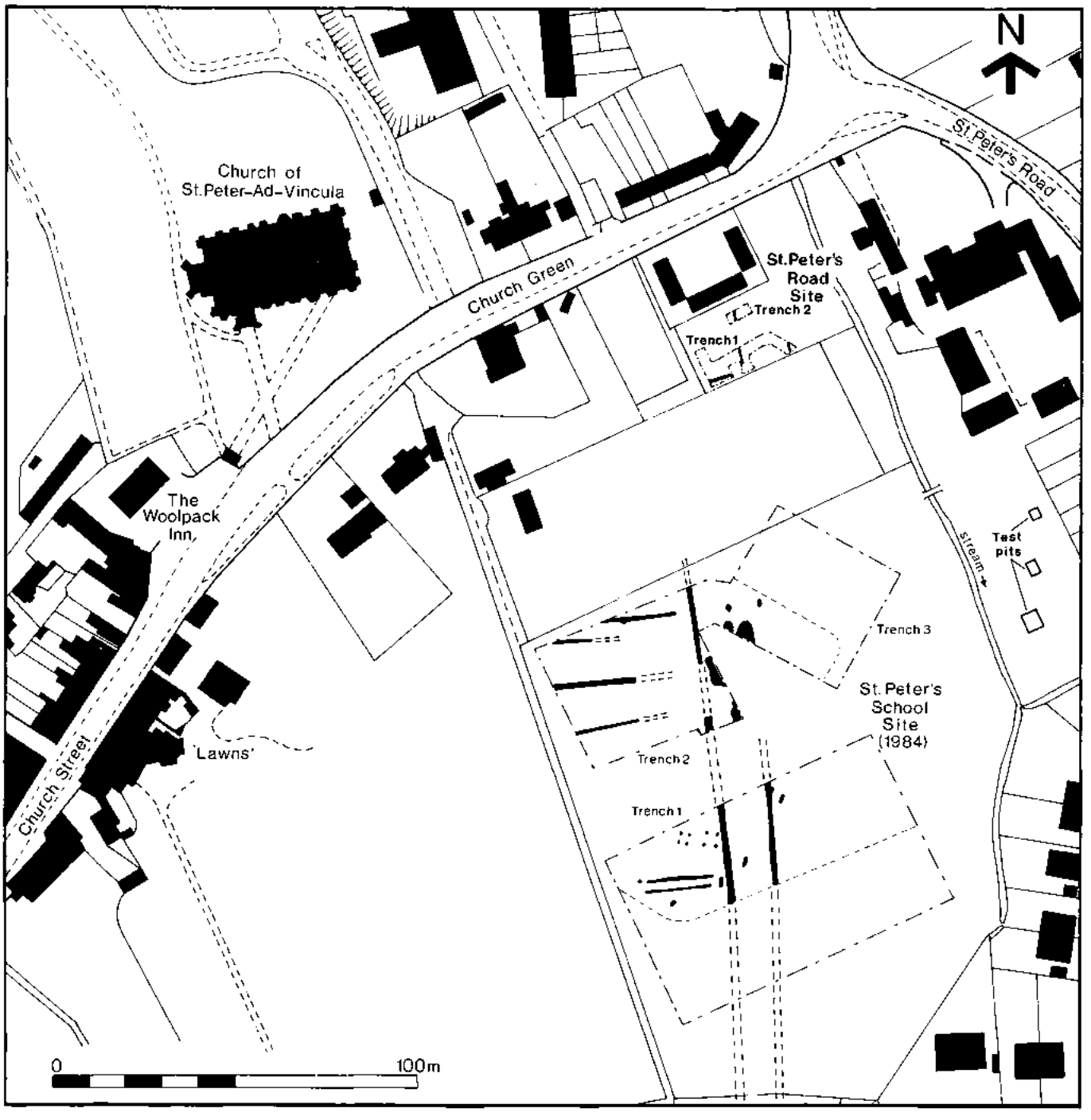

Fig. 1 Location map.

centre of trench 1 by a later ditch cut. The third (36) ran east-west through the western half of trench 1. The two north-south gulleys were very shallow, 0.12m-0.14m deep with rounded bottoms. The eastern one was 0.60m wide, while the other (44/54) was 0.40-0.50m wide. Gulley 44/54 sloped down gently north-south while 34 was almost level. The fill of 34 was a medium brown, clay silt containing occasional flecks of charcoal, one piece of slag, one piece of bone and several potsherds. Context 44/54 was filled by a mid-brownish-grey, slightly silty clay which in 44 contained one piece of pottery and two cattle jaws; no finds were recovered from the fill of 54. The east-west gulley (36) was considerably larger than the two north-south gulleys, measuring 0.60-0.90m wide and 0.20-0.30m deep with a rounded bottom, with its larger dimensions to the west, though it was almost level. Gulley 36 continued beyond the west limit of excavation and its eastern end continued into a baulk left in to protect a tree in trench 1. It did not appear on the other side of this baulk probably because it did not survive here as the level of the natural dropped away considerably. The fill of 36 comprised a mid browny-grey, slightly silty clay with moderate orangey brickearth mottles and contained a few potsherds and tile fragments. It should also be noted that as 36 entered the east baulk it appeared to cut another gulley which ran off at right angles from it to the south. This feature (76) measured 0.20m deep with a

rounded bottom and its fill was very similar to that of 36, comprising a grey brown clay with moderate mottles of orange brickearth and grey silty clay. No finds were recovered from it.

Excavation of a section investigating a possible feature in the centre of Trench 1 to the west of the end of 36 uncovered what appeared to be a surface (59) in the south limit of excavation (Fig. 2). Most of this feature lay beyond the limit of excavation but a small keyhole was excavated measuring 0.80m by 1.0m to investigate its nature. The feature comprised two layers of small flint cobbles altogether 0.11m thick. The layer over-lying it contained only Roman pottery so that the feature is assumed to be of Roman date but too little was exposed in plan to hazard any other conclusions about it.

Once the excavation of the main trenches was complete, three small test pits were machine-excavated in the development area immediately to the east of Clarke's trenches beyond the stream (Fig. 1). The pits revealed no features of any kind.

Discussion

Gulleys 34 and 36 produced several sherds of pottery each, which all proved to be of 2nd century date (Note 2). Gulley 44/54 produced only one sherd of pottery which was Roman but not more precisely dateable. However, the similarity of its profile, dimensions and alignment (parallel to 34, at right angles to 36) imply that it too is Roman, though whether exactly contemporary or not cannot be decided.

The location of the east-west gulley (36) is in the position postulated by Clarke for one of his boundary ditches enclosing the Roman settlement (Clarke, this volume, Fig. 00) and the identification of 36 with this boundary is certainly tempting. The dimensions of 36 would seem to be similar to those given for F4, the outer boundary gulley; 0.50m-1.35m wide as opposed to 0.60-0.90m wide for 36, with a variable profile. However, 36 is somewhat shallower at 0.20-0.30m as opposed to 0.35m-0.53m for F4. The pottery from F4 (1st or early 2nd century) too is not contradicted by the evidence from 36 (2nd century). No evidence that 36

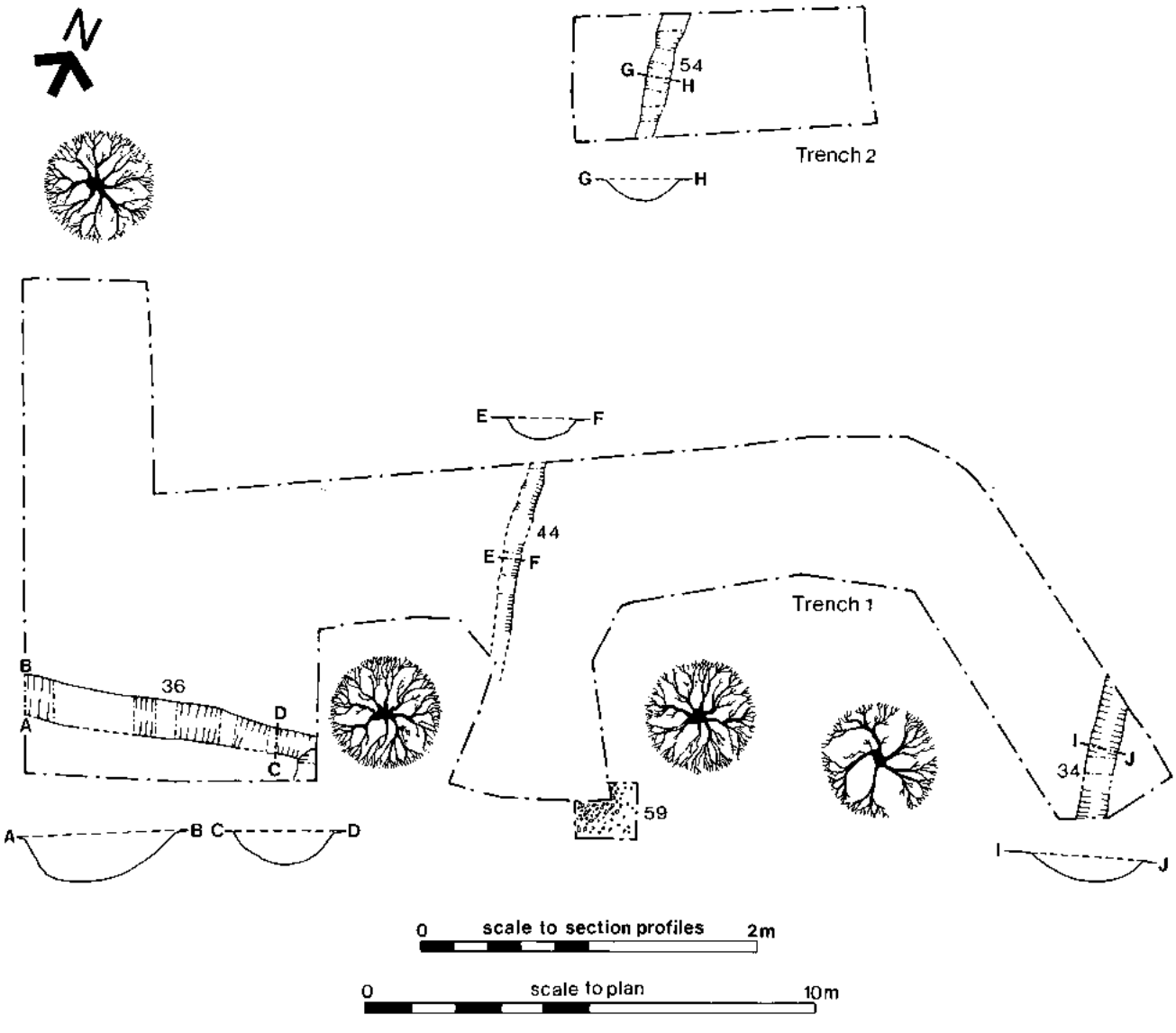

Fig. 2 Plan of excavated trenches showing Roman features and principal sections.

turned to the south was uncovered but there was also no evidence that it did not, and the fact that 76 formed a corner with 36 at this point (though its relationship was not clear), is suggestive. Furthermore, if the line of the truncated gulley 44 is projected south, this too would form a corner at this point.

Against this argument, it may be objected that this fails to explain the function of the two north-south gulleys 34 and 44/54 which would now be left outside the area of the settlement enclosure. Perhaps the neatest explanation for the existence of all three gulleys which also generally respects the evidence uncovered by Clarke is to see 44/54 and 34 as continuations of his main eastern boundary ditches F10 and F4, and 36 as similar to one of his internal east to west gulleys, F14, F30, F51, F52 and F60 (Clarke, this volume, Fig. 00). Support for this may be drawn from the fact that 44/54 and 34 are parallel and that the distance between them (*c.*13.5m) is comparable to that between F10 and F4 (just under 13m). Also, the dimensions of 36 are broadly comparable to Clarke's east-west gulleys and the fact that 36 appears to stop short of the north to south projection of 44 (Fig. 2) in the manner of Clarke's gulleys with respect to F10 (Clarke, this volume, Fig. 00) is further weight to the argument though, as stated above, this could also be the coincidental result of truncation.

One objection to this interpretation is the shallowness and narrowness of the north to south gulleys 44/54 and 34 when compared to F10 and F4. However, this can perhaps be explained as a result of truncation of features in the area for which there is some evidence both in this excavation and in the 1984 work (Clarke, this volume, p. 00). Also, the obvious misalignment of the gulleys (Fig. 1) may merely be the result of inaccuracies in surveying under very difficult conditions which over a long distance (*c.*60m) could make for considerable deviation. It is also quite possible that the alignment of the ditches alters for some reason as yet undiscovered between the two sets of excavations.

In summary then, the dating of the features would suggest that the two systems could have been in operation simultaneously in the 2nd century and if they were, it would appear to be the latter interpretation offered that ties all three gulleys together broadly consistent with the evidence uncovered by Clarke. If this interpretation is accepted, it means that the east side of the enclosure continued further to the north before turning west than postulated by Clarke and it may have continued so far as to enclose the high ground upon which the present church of St. Peter-ad-Vincula is situated.

No medieval features were uncovered anywhere on the site. However, nearly 30 cut features varying from small stake holes to large pits and a ditch were revealed dating from the 17th century or later.

The complete lack of any medieval features coupled with the almost total lack of medieval pottery indicates that between the Roman and early post-medieval periods, this area was not intensively utilised except perhaps for agriculture.

Acknowledgements

The excavation was made possible through a generous grant from the developers Croudace Limited. The work was also supported by Essex County Council and carried out with the help of the Braintree MSC Project.

Thanks are due to Steve Godbold, to Roger Massey-Ryan who produced the drawings, to Helen Walker who dated the post Roman pottery and to Colin Wallace who dated the Roman pottery.

Notes

1. This article is derived from an archive report held, together with the finds, at Colchester City Museum.
2. Roman pottery dated by Colin Wallace, Essex County Council Archaeology Section.

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Façon de Venise glass from Coggeshall and Harlow

by David Andrews

A fragment of filigree glass (*vetro a filigrana*) was found at Coggeshall in the top fill (101) of a well (501) which also contained pottery datable to the late 16th to early 17th centuries (Clarke 1986). The decoration is of a type known as *a fili*, in other words characterized by parallel canes or rods of different coloured glass. Typically such decoration comprises alternating bands of colourless and opaque white (*lattimo*) glass. In this case, there are four bands of opaque white glass followed by one of pale blue glass, these bands being separated by narrow strips of colourless glass.

The fragment measures about 35 by 12mm, and is 2.5mm thick. The canes or rods have been attached to a gathering of colourless glass and marvered or worked into its surface. Examination of the fragment in section shows the canes to consist of a core of colourless glass with a layer of *lattimo* and then a third outer layer of colourless glass. The blue canes are made in the same way except that the third outer layer is of blue glass. The technical expertise required for the manufacture of such canes of glass had originally been developed by the Venetians for making beads.

Filigree glass (which is characterized by the use of *lattimo* canes, though the repertoire of decorative techniques is very varied) was made at Venice from some time near the beginning of the 16th century. It was soon made elsewhere, both in Italy and Northern Europe. It is always difficult to distinguish Venetian products, whether of filigree or colourless (*cristallo*) glass, from their imitations and those made by emigrant Venetian craftsmen. Hence the widespread use of the term *façon de Venise*, both by contemporaries and today to gloss over the resulting difficulty in attributing a provenance to glass vessels. It has not been possible to find Italian parallels for the Coggeshall piece, but it does closely resemble two vessels, one in the British Museum and the other in the Victoria and Albert Museum.

Both are tall cylindrical vessels decorated with bands of opaque white glass separated at intervals by one of blue glass. The British Museum specimen has five white canes to one of blue, and is attributed to Venice or the Southern Netherlands and the 16th century (Tait 1979, 82 and plate 12). The Victoria and Albert Museum vessel is a tankard with an attached metal lid, has eight white canes to one of blue, and is attributed to Germany or the Netherlands and the 16th century (Honey 1946, plate 31B). Another parallel is illustrated by Barrington Haynes (1948, plate 25b). This is a beaker attributed to Liege and dated *c.*1650. Like the Coggeshall fragment, there are generally four white canes to every blue one. The attribution in all cases to the Netherlands (or Germany) is interesting, as it is intrinsically more probable that a vessel found in Essex should have come from that part of Europe rather than Venice.

Filigree glass was always a luxury item, and the discovery of the Coggeshall fragment is of some interest. The only other excavated example of *façon de Venise* glass known to me from Essex is in the Harlow Museum. It is a two-handled vase or cup, with a single knop on the stem, which was found in a well at Mark Hall, Harlow, by the Harlow Tunnel Group in 1960, together with numerous items datable to the late 17th and early 18th centuries.[1] This has what is known as *a retorti* decoration, in which glass canes with threads of *lattimo* or opaque white glass are twisted to form an interlacing pattern. These typically, as in this example, alternate with plain *lattimo* canes, and are supported on a backing of colourless glass. The vessel is about 165mm tall, and the thickness of the glass about 0.8mm. The bowl, knop and base are all made separately. The edge of the foot is thickened through the application of an extra thickness of colourless glass, rather than being folded over as is more usually the case in Italian glass. Exact parallels for the form are difficult to find, but, without the knop, it does occur amongst drawings of vessels ordered from Venice by the merchant John Greene of London in 1667-72.[2] The order was for such a vessel in 'chalcedony' glass, or glass made

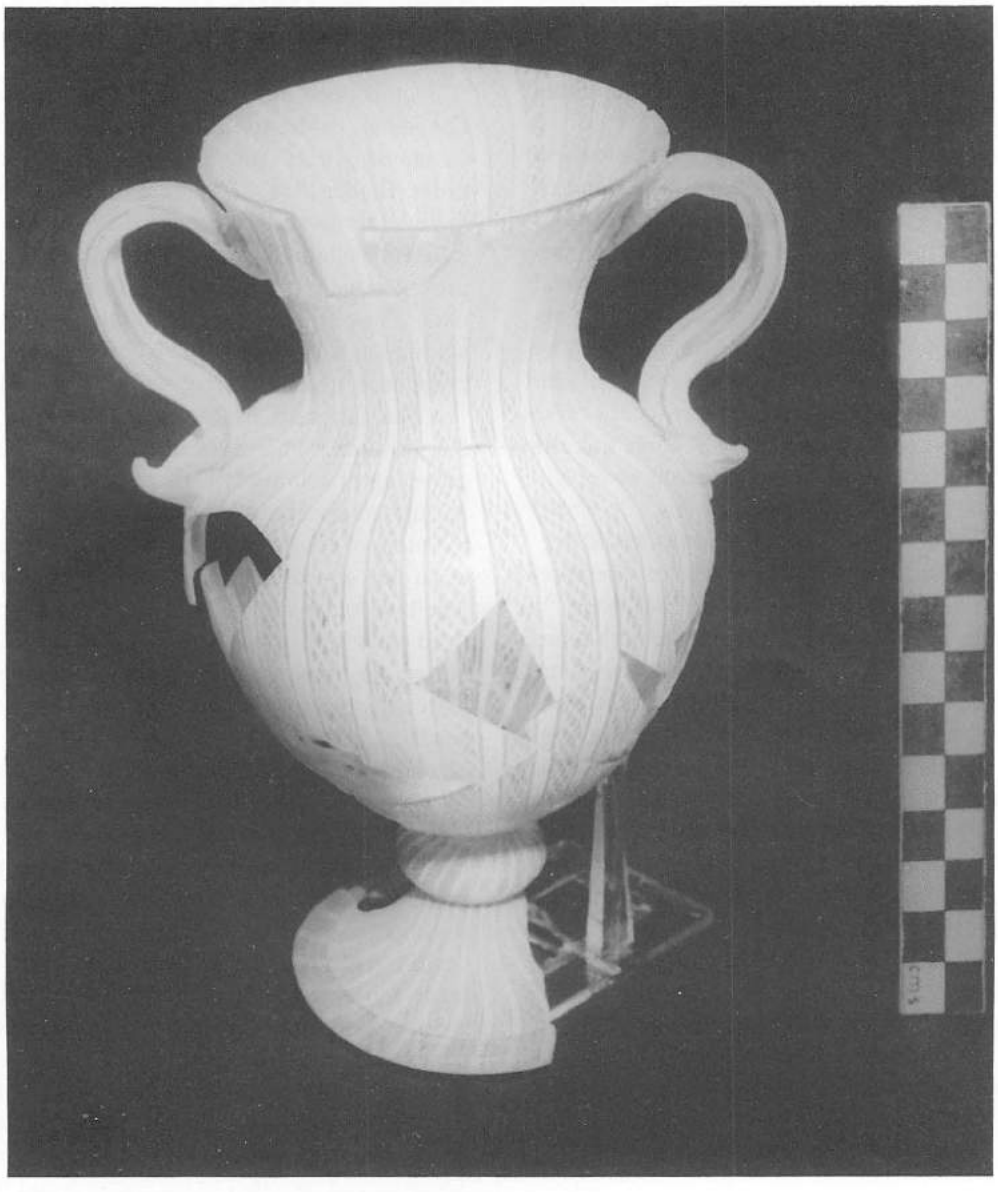

Plate 1 Façon de Venise glass vessel from Mark Hall, Harlow.

with marbled colouring, in 'all white' or *lattimo* glass, and in 'speckled enamel' glass. There seems however to be no specific reference in Greene's correspondence to filigree glass. Again, as with the Coggeshall piece, this vessel might equally well have been made in the Low Countries rather than at Venice.

Notes

1. I am grateful to Ian Jones and Richard Bartlett of the Harlow Museum for showing me this piece and allowing me to study it. For an account of Mark Hall which refers to the excavation of the well, see the pamphlet on Mark Hall published by the Harlow Museum Education Service.
2. Illustrated in Tait 1979, figs. 6 & 7, from British Library Sloane MS 857, f33v.

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Book Reviews

An Essex tribute, essays presented to Frederick G. Emmison as a tribute to his life and work for Essex history and archives, edited by Kenneth Neale. Pp. 268 + xv, 13 illustrations, maps and tabulations (available from Essex Record Office and selected bookshops), £9.95.

If anyone deserved a volume of 'commemorative essays' it is Dr. Frederick G. Emmison. Derick Emmison's unique contribution to preserving and popularising the use of local archives has been wide-ranging, as archivist, teacher, and through his own many and varied publications. Essex people and institutions have come together to finance and to contribute essays to a memorable volume in honour of a remarkable man. Praise of Essex is interwoven with praise of Emmison. Sir William Addison's 'The Making of the Essex Landscape' introduces the visual delights of the county, which Kenneth Neale, the editor, takes up in an afterward, 'Essex: An Appreciation': this 'county of contrasts ... serenely beautiful in some areas ... is a working county'. It is 'full of profitable thinges' as is this book. Neale, in 'Frederick G. Emmison: Archivist and Scholar', and V.W. Gray, in 'The County Record Office: the unfolding of an idea', tell of the growth of archive collections and of local history, putting Emmison in an honoured place while contributing to historiography.

No single reviewer could possibly make a scholarly critique of the thirteen essays in Essex history, which range from the technicalities of Saxon records to the computer analysis of election material. This reviewer, chosen he believes for the very reason that he is *not* an Essex local historian, dares not find fault, if faults there are, with local details. He can say, however, that anyone interested in Essex history and many other historians would be foolish not to possess this volume, to tap its riches and for the lessons in approach and technique which it contains.

G.H. Martin's 'Essex Boroughs and their Records' is a useful and comprehensive summary of borough history from Saxon times to the twentieth century, focussed naturally on Essex boroughs but also an invaluable outline for anyone attempting a similar study elsewhere. Andrew Phillips has used computer programmes for an imaginative analysis of the 3,716 electors involved in the 'Four Colchester Elections' of 1865, 1867, 1868 and 1870, the last before the secret ballot. A surprising consistency in voting behaviour emerges from the relative influences of occupation, social position, family tradition and religion. 'Essex and the 1871 Fairs Act' by John Boyes records how local people successfully opposed the efforts of the respectable 'establishment' to close fairs because they 'led to drunkenness, riot and immorality'. In such exceptional places the police sometimes reported there was no 'disorder or immorality'.

Fascinating pieces of history emerge from the imaginative investigation of a group of documents. Kenneth Bascombe used the discovery of 'Two Charters of King Suebred of Essex', in a sixteenth century manuscript, to establish the boundaries of the estate of Nazeing nunnery, the site of which was excavated in 1975-6. This kind of topographical detective work is always exciting. 'Two letters from the First Carlist War', now in the Passmore Edwards Museum, led Ian Robertson to explore the lives of ex-serviceman and volunteer in Spain, George McKay, and his Maldon wife, 'Dear Betsey'. A superb piece of postal and social history emerged. William Liddell's 'The Bounds of the Forest of Essex' and Alan Dibben's 'Blackchapel, Great Waltham' illustrate how careful study of a limited topic can develop a healthy scepticism about sources. The first shows that changes in the area under forest law were more complex than the 'traditional' story suggests. Historians failed to realise that oral evidence, recorded in the middle ages, tells 'us about the desires of those making (the records), not what existed'. The second is a remarkably well documented study of a chapel, 'a "peculiar" of a very unusual nature', in which Dibben reveals that 'clerical directories are woefully inaccurate ... the *Clergy List* often speaks with different voices in its separate lists of clergy and benefices'. Exaggerated scepticism is Julian Cornwall's target in 'The Letter of the Law', in which he shows the reader how to interpret the 1524-5 subsidies, using Hatfield Peverel as his example: 'the only mysteries are those we create ourselves in ... jumping to the conclusion that (the documents) misrepresent the facts'. This informative article is marred by more than its fair share of misprints; there are at least six.

There is impeccable scholarship in 'The Earldom of Essex' by Cyril Hart, well known for his editions of early charters, and in Jennifer Ward's 'South Essex in the Middle Ages *c.*1066-*c.*1350'. The 'sheep on the marshes', grain, production for the London and continental market, and population growth in this 'time of vital and major change' are all dealt with. Marjorie McIntosh has shown how, in the years that followed, 'New College, Oxford (lost effective control of) Its Hornchurch Estate'. Between 1391 and 1675 income stagnated, tenants evaded their responsibilities, and ecclesiastical control lessened. The progress notes of Michael Woodward, Warden 1659-75, bring alive the bare bones of the story. A careful study of the family and patronage links of 'Those Greedy Hunters after Concealed Lands' by Herbert Hope Lockwood gives an insight into the local land market between 1560 and 1624. New light is cast on the contemporary concern for deeds of title. Felix Hull's 'Aspects of Local Cartography in Kent and Essex 1585-1700' investigates the surveyors, mainly local men who did not even cross the Thames, and reveals that Essex maps were for larger areas and used a smaller scale than Kentish ones.

An Essex Tribute has a substantial index and notes and references to the fourteen articles which require them. In one remarkable example 13½ pages of text have 13¾ pages of notes and references, but they include innumerable jewels, of which 'The Bishop of London's Secretary called

(the vicar of Great Waltham 1797-1837) insane "because he does not think as most Churchmen do, and gives utterance to his thoughts" might serve as a modern text. Kenneth Neale argues that 'History ... should be devoted to the exploration and understanding of the condition and circumstances of people in relation to (events or chronology)'. For this reviewer Essex has become 'a fair field full of folk' thanks to Neale's editorship.

Lionel M. Munby

Excavations of a Cropmark Enclosure at Woodham Walter, Essex, 1976 by David G. Buckley & John D. Hedges, and an **Assessment of Excavated Enclosures in Essex**, by Deborah Priddy & David G. Buckley, East Anglian Archaeology, **33**, 1987, £10.

This volume, attractively and well produced in the colourful, glossy-covered East Anglian Archaeology Series, is only the second Essex volume to appear in the twelve years of E.A.A. Reports, though many more are in the pipeline. As such, it is wholeheartedly welcomed. Like many of the early Norfolk volumes, it is a vehicle used to publish more than one small paper, which may not have seen the light of day individually: in this case, a 47-page report on trial trenching in a cropmark enclosure complex, and a 29-page survey/-categorisation of Essex enclosures. Unexcavated cropmark sites are taken into account as well as excavated examples, though this is only conveyed in a sub-title of the volume. Unlike those early Norfolk volumes, the two subjects here marry well together. There is a joint bibliography.

Most possible criticisms of the volume have been anticipted in a frontispiece editorial by John Hedges, formerly the County Archaeologist. The Sites and Monuments Record has accumulated a vast collection of air photographic data since 1972, now transferred onto 1:10560 scale map overlays, with cropmarks forming 'the largest source of unpublished archaeological evidence in Essex'. A policy of selective excavation of these cropmarks is pursued, so that now some 5% have been sampled, of which Woodham Walter presumably provides a good example. Hence its place in the volume. What, however, is its value *per se*? The second paper (which arose out of an undergraduate dissertation) is an assessment in the form of a subjective grouping of a selected 87 enclosures (some excavated, others cropmarks) into broad morphological types, ordered by size and shape. Such a classification is acknowledged to be 'fraught with difficulties' (not least chronological ones), but, as Hedges points out, 'a start must be made somewhere'. The question here is, then, is this the right start, and of what real value is the assessment?

Firstly then the excavation text. This is a decent piece of work, reporting on 4 trenches excavated in 1976 to determine the preservation of a cropmark complex in the wake of continuous ploughing, and as a result of which the site was scheduled. What is brought home is the fact that only excavation can provide a detailed chronology of a site, complete with different recuts of features etc, and the dating evidence to back up the phasing, which a glance at a mere cropmark plan can never produce. Thus the complex can now be seen to comprise a small Middle Pre-Roman Iron Age sub-rectangular enclosure, giving way to a larger rectangular enclosure in the Late Pre-Roman Iron Age and early Roman period, with an intriguing group of small linked Roman enclosures, possibly paddocks or stockyards. The attempt to continue the chronology further into the Roman period is confused and based on inadequate dating evidence. There is a useful lesson to be learnt from the excavation that multiple parallel ditches need not represent necessarily an embellished form of defence, but can simply be recuts of one single-ditched enclosure. Further, only a study of excavated finds could suggest a possible industrial use (? copper alloy, glass or enamel working) for the first phase, or a 'calamity' between A.D. 40-60 (based on the pottery in ditch fills). The pottery report by Warwick Rodwell includes five main groups of prehistoric and Belgo-Roman pottery. It was written in 1978, and it is a pity that the opportunity was not given, or taken, to update the text to include, for instance, Thompson's *corpus* (1982). The small report on the fired clay by Hilary Major is interesting in raising the problem of identification: house-building daub or oven-type lining? In summary then, the report yields no major problems of interpretation, but simultaneously no major regional advances, and *could* have stood happily as a paper in *Essex Archaeology and History*.

The assessment that follows categorises a selected 87 enclosures into circular, curvilinear, sub-rectangular <0.25 ha, rectilinear <1 ha, rectilinear 1-4 ha, and rectilinear >4 ha. Such categories are of course subjective — *all* typologies are, but here it works well enough. The stated aim is to see how far the excavated sites can aid the interpretation of unexcavated cropmarks. The difficulty arises in trying to say meaningful things about sites (largely unexcavated) which are grouped together simply because of their approximate morphological similarities. It is rather like a blind man in a supermarket trying to guess the contents and sell-by date of a packet on the basis of its shape and feel. The actual grouping together of like with like, nevertheless, is a useful exercise in itself, and the report is a wholly worthwhile reference work.

The limitations of such a categorised assessment have already been alluded to. Let us take the recently excavated Late Iron Age Catering Site at Stansted as one example. This can now presumably be classified as a Type D rectilinear enclosure <1 ha, and can be compared with thirteen excavated examples and twelve cropmarks; however, the former group includes a late Bronze Age domestic enclosure, Middle, Late Iron Age and Roman sites, *and* two Romano-Celtic temenei (Gosbecks and Great Chesterford) — clearly a variety of dates and functions. The two religious sites seem rather uneasy sitting amongst more amorphous settlements, and so too does the Chignall St. James enclosure; they might have been omitted perhaps, along with several other groups, including the *cursus*, the hillfort and field systems (though see Nos. 54 and 87). Moreover, the Stansted site *has* been excavated, and its date established — a comparison of unexcavated cropmarks must leave even more imponderables.

Problems there may be, duly acknowledged, but the synthetic discussion at the end leaves one on an optimistic note. The circular enclosures in particular are readily classifiable, spanning the Neolithic to Late Bronze Age (moated medieval mill mounds aside). Though speculative, correlations can be found. However, the present writer remains unconvinced that there is any viable alternative to excavation (albeit an impossible task given financial and manpower restraints), if we are to attain the stated objectives of understanding the landscape and settlement history of the county.

In conclusion, a great deal of hard work is being put into the Sites and Monuments Record, which is now a crucial research tool of inestimable value. Its computerisation should allow even more results to emerge. These are only the first provisional steps, identifying enclosure 'types' and individual sites which would repay preservation and excavation (already recommendations for scheduling have been put to the H.B.M.C.), and the authors are to be congratulated on their efforts and publication.

Nick Wickenden

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1 Contributions should be sent to the Editor, c/o Archaeology Section, Planning Department, Essex County Council, Globe House, New Street, Chelmsford, Essex, CM1 1LF.

2 The closing date for the receipt of material is 1 July. Publication date is 1 December.

3 The text should be typed double-spaced on A4 paper, on one side only, with at least a 3 cm. margin all round and 4 cm. at the top. The pages must be numbered.

4 Footnotes should also be typed double-spaced and submitted collectively.

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(Hawkes and Hull, 1947, fig. 33 and p.201).

(Hewett, 1962, 241).

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(*Essex*, **iii**, 171).

The expanded bibliography should appear at the end of the text, arranged in alphabetical order:

Hawkes, C.F.C., and Hull, M.R., *Camulodunum*, Society of Antiquaries (1947).

Hewett, C.A., 'The Timber Belfries of Essex', *Archaeol. Journ.*, **cxix** (1982), 225.

Victoria County History, *Essex*, **iii** (1963).

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Cover illustration: Tilbury Fort from the Thames: an early 18th-century engraving by Johannes Kip (1653-1722). 1988 marks the 300th anniversary of the accession of William III. Kip's engraving reflects the complexities of Anglo-Dutch relationships: an English military installation, built in response to Dutch raids up the Thames, to the designs of a Dutchman, Sir Bernard de Gomme, and depicted here by a Dutch engraver who had settled in Westminster (reproduced by kind permission of the County Archivist).